NORTH SEA LANDFILL
1370 MAJORS PATH
SOUTHAMPTON, NEW YORK

1st - Semi-Annual Post-Closure Groundwater Monitoring Report 2017

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1.0 INTRODUCTION

1.1 Purpose and Scope

P.W. Grosser Consulting Inc. (PWGC) has prepared the following post-closure groundwater monitoring report for the North Sea Landfill, Southampton, NY. This report is intended to satisfy the New York State Department of Environmental Conservation (NYSDEC) requirements for post-closure monitoring at the North Sea Landfill. The landfill is currently in post-closure and was removed from the United States Environmental Protection Agency (USEPA) Superfund National Priorities List (NPL) in 2005. The report provides a summary of the groundwater monitoring and results of groundwater and leachate samples collected during the First Half of 2017.

1.2 Site Location and Description

North Sea Landfill (the Landfill) was initially constructed in 1963 for the disposal of solid waste, refuse and septic system waste. The Landfill consisted of three cells (Cell No. 1, Cell No. 2 and Cell No. 3), sludge lagoons, a leachate collection system and a gas monitoring system. Cell No. 1 is an inactive, unlined landfill that has been capped and closed. Cell No. 2 is an inactive, lined landfill with a leachate collection system that was capped and closed in 1990. Cell No. 3 is a 6.6 acre, inactive, lined landfill with a leachate collection system that was capped and closed in 1997. The sludge lagoons were decommissioned in 1986.

2.0 GROUNDWATER MONITORING PLAN

Groundwater monitoring and sampling is performed in accordance with the USEPA approved Operation and Maintenance (O&M) Manual dated November 1994.

The groundwater monitoring plan for the site calls for the monitoring of both leachate and groundwater to confirm that the historic operation of the facility has not adversely impacted groundwater quality. The groundwater well network currently utilized for monitoring purposes at the Landfill consists of 20 groundwater monitoring wells that were installed as a part of the Remedial Investigation / Feasibility Study, the Cell No. 3 landfill expansion hydrogeologic investigation, and earlier monitoring activities.

2.1 Sampling Frequency

In accordance with the O&M Manual, groundwater monitoring well sampling was performed on a quarterly basis. In 2005, the USEPA and NYSDEC approved a reduction of the number of wells sampled and sampling frequency to semi-annual as detailed in the table below:

1st Half Semi-Annual Sampling (April)		**2nd Half Semi-Annual Sampling (October)**	
Analysis	**Sample Locations**	**Analysis**	**Sample Locations**
Baseline Parameters (6 NYCRR Part 360-2.11 (d)(6)	1A, 1B, 1C, 3A, 3B, 3C, 4A, 4B, 4C, 11A, 11B, 12A, & 12B	Routine Parameters (6 NYCRR Part 360-2.11 (d)(6)	1A, 1B, 1C, 3A, 3B, 3C, 4A, 4B, 4C, 6AR, 6B, 8, 9, 11A, 11B, 12A, 12B
		Baseline Parameters (6 NYCRR Part 360-2.11 (d)(6) Metals Only	6AR, 6B, 11A, & 11B
Routine Parameters + Arsenic (6 NYCRR Part 360-2.11 (d)(6) Minus VOC Analysis	LEA-Primary & LEA-Secondary	Baseline Parameters (6 NYCRR Part 360-2.11 (d)(6) VOCs Only	11A & 11B
		Routine Parameters + Arsenic (6 NYCRR Part 360-2.11 (d)(6) Minus VOC Analysis	LEA-Primary & LEA-Secondary

Note: Filtered metals analysis run on samples with turbidity in excess of 50 nephelometric turbidity units (NTUs).

Appendix D includes list of analytes for 6 New York Codes, Rules and Regulations (NYCRR) Part 360-2.11 (d) (6)

2.2 Leachate Monitoring

The objectives of the leachate monitoring program are to adequately characterize and monitor the composition of:

1. Leachate in the primary leachate collection systems;
2. Liquids detected in the secondary liquids collection systems, prior to off-site treatment and disposal.

The Town of Southampton monitors the leachate storage system and submits monthly status reports, which includes the monthly summary tables of leachate volumes consisting of the amount of leachate trucked, storage tank levels and the volume of leachate removed from the storage tank. Leachate quantity removals and allowable leakage rate (ALR) calculations will be discussed in the Annual Report.

2.3 Groundwater Monitoring

The groundwater monitoring well network for the Landfill consists of nine groundwater monitoring locations (MW-1A, B, C, MW-3A, B, C, MW-4A, B, C, MW-6A, B, MW-7, MW-8, MW-9, MW-11A, B, and MW-12A, B) which are currently in use. Several of these locations are constructed with multiple wells which are screened at varying depths throughout the aquifer (A=shallow, B=intermediate, C=deep).

Thirteen groundwater monitoring wells, as well as the primary and secondary leachate collection systems were sampled on April 19 and 20, 2017 as part of the First Half 2017 sampling event. Samples collected as part of the First Half 2017 sampling event were delivered to Pace Analytical Laboratories of Melville, New York and analyzed for the baseline parameters. Turbid groundwater samples were also analyzed for filtered metals. The data collected in the field and laboratory are summarized on **Tables 1** through **4** and the laboratory reports are attached in **Appendix A**. Depth to water and groundwater elevation data are summarized on **Table 4** and a water table flow map is shown on **Figure 1**.

Analytical results from each monitoring well were compared to applicable standards and guidance values, as well as analytical results from the previous years. Compounds that exceed current NYSDEC groundwater standards or guidance values are indicated by shading on **Tables 1** through **3** and are discussed in the water quality section of this report.

2.4 Well Condition Report

During the First Half 2017 sampling event, PWGC conducted an assessment of the monitoring wells. Well assessment checklists (**Appendix B**) were filled out appropriately in the field during the sampling event. The assessment checklist included well headspace readings, well conditions, and recommendations. The hill around the MW-1 cluster of wells was observed to be eroded. The lock for the protective cover was observed to be missing from MW-7A. Headspace readings were collected utilizing a photoionization detector (PID). No PID responses were observed. No other deficiencies with the well conditions were noted.

2.5 Sample Collection Procedures

Prior to collection of each sample, a minimum of three casing volumes were evacuated (purged) from the well using a Grundfos, submersible pump and temperature, specific conductivity, pH, dissolved oxygen, oxygen reduction potential (ORP) and turbidity measurements were collected and recorded. Groundwater sampling logs are included in **Appendix C**. Groundwater samples were collected using disposable polyethylene bailers and a dedicated polyethylene line. Primary and secondary leachate collection systems were also sampled using disposable polyethylene bailers and a dedicated polyethylene line.

Additional sample volume was collected from groundwater monitoring wells where turbidity could not be reduced below 50 NTUs for laboratory filtering of metals. This included groundwater monitoring wells MW-3A, MW-11A, MW-11B, and MW-12A.

2.6 Decontamination and Quality Assurance Quality Control Procedures

All non-disposable sampling equipment (i.e. submersible pump) were decontaminated prior to and between each well by using a distilled water and non-phosphate detergent wash followed by a distilled water rinse.

2.7 Groundwater Quality

During the First Half 2017 (April) groundwater sampling event, samples from thirteen groundwater monitoring wells were collected and submitted for analysis of baseline parameters. The inorganic portion of the analysis includes metals, nutrients, and the physical properties of the sample. Specific conductivity, temperature, turbidity, and pH values were reported from field measurements. However, they are listed in **Table 1** and discussed in the inorganic water quality section below. The list of organic groundwater quality results (**Table 2**) is comprised of volatile organic compounds (VOCs).

Groundwater quality as it relates to inorganic metal concentrations is evaluated at looking at the total metal concentrations for samples with turbidity values below 50 NTUs and dissolved metal concentrations with turbidity values above 50 NTUs.

The laboratory results are compared to NYSDEC's Class GA Groundwater Standards, 6NYCRR Part 703. Analytical results are discussed below. The locations of groundwater monitoring wells are illustrated on **Figure 1**. The wells are grouped into clusters consisting of varying depths (A=shallow, B=intermediate, C=deep).

2.7.1 Inorganic Water Quality Results – April 2017

Long Island groundwater generally has a low pH and is typically measured below the NYSDEC standard range of 6.5 to 8.5. Ten of the thirteen samples had a measured pH level below 6.5. pH concentrations ranged from 4.93 (MW-4A) to 6.84 (MW-4C).

Chromium was detected above method detection limits in seven of the thirteen groundwater samples. Chromium concentrations ranged from less than 0.01 mg/L to 0.300 mg/L (MW-4C). Chromium was detected in one of the thirteen groundwater samples (MW-4C) at a concentration exceeding the NYSDEC groundwater standard (0.05 mg/L). Hexavalent chromium, the toxic form of chromium, was not detected above method detection limits in the thirteen groundwater samples.

Iron was detected above method detection limits in seven of the thirteen groundwater samples. Iron concentrations ranged from less than 0.1 mg/L to 12.1 mg/L (MW-3B). Iron was detected in four of

the thirteen groundwater samples (MW-1A, MW-3B, MW-4B, and MW-4C) at a concentration exceeding the NYSDEC groundwater standard (0.3 mg/L).

Manganese was detected above method detection limits in each of the thirteen groundwater samples. Manganese concentrations ranged from 0.00079 mg/L to 3.79 mg/L (MW-3B). Manganese was detected in three of the thirteen groundwater samples (MW-3B, MW-4B, and MW-12A) at a concentration exceeding the NYSDEC groundwater standard (0.3 mg/L).

Nickel was detected above method detection limits in each of the thirteen groundwater samples. Nickel concentrations ranged from 0.0031 mg/L to 0.426 mg/L (MW-4C). Nickel was detected in one of the thirteen groundwater samples (MW-4C) at a concentration exceeding the NYSDEC groundwater standard (0.1 mg/L).

Sodium was detected above method detection limits in each of the thirteen groundwater samples. Sodium concentrations ranged from 7.63 mg/L (MW-11B) to 70.2 mg/L (MW-3A). Sodium was detected in three of the thirteen groundwater samples (MW-3A, MW-4A, and MW-4C) at a concentration exceeding the NYSDEC groundwater standard (20 mg/L).

2.7.2 Organic Water Quality Results – April 2017

Groundwater samples collected from the wells were analyzed for VOCs as part of the First Half 2017 sampling program. Analytical results indicate that no VOCs were detected in the samples collected at concentrations exceeding the laboratory detection limits with the exception of acetone, chloroform, and/or 1,4-dichlorobenzene which were qualified as (J) estimated (**Table 2**).

2.7.3 Well Cluster 4 & 11 Analysis

Monitoring wells MW-4A, MW-4B, and MW-4C are located down-gradient of the Landfill along the edge of Fish Cove Pond. These wells represent the farthest down-gradient wells that are used to monitor the Landfill. Historical monitoring has shown that the leading edge of the leachate plume is migrating into Fish Cove Pond. In addition, there is an upward groundwater flow gradient from MW-4c to MW-4B. Conductivity, total dissolved solids, and chloride have been trending upwards in MW-4C. These increasing trends are not coupled with any significant increases in iron and manganese which would indicate the presence of leachate that is being broken down. Iron and manganese are

prevalent in MW-4B where the plume has been documented. Iron and manganese levels in MW-4C are at background levels when compared to MW-4B.

Monitoring wells MW-11A and MW-11B are located down-gradient of Cell 3. These wells have been under close observation since March 1993. A graph of several leachate indicators detected in samples collected from monitoring wells MW-11A and MW-11B since 1997 are shown on **Figures 2** and **3**. Detected concentrations of certain constituents were noted in MW-11A and MW-11B during this sampling event. A review of the trends shows that concentrations have generally decreased over time indicating that the plume continues to degrade over time. Slightly elevated concentrations of iron, manganese, and lead are still detected in these wells.

2.8 Groundwater Flow & Migration of Leachate Plume

Groundwater elevation data and laboratory analytical results are utilized to determine groundwater flow and to map the horizontal and vertical migration of the leachate plume. Depth to water and groundwater elevation data are shown on **Table 4**.

A groundwater contour map for April 2017 (**Figure 1**) was created with groundwater elevation data from eight water table monitoring wells (MW-1A, MW-3A, MW-4A, MW-6AR, MW-7A, MW-8, MW-9, MW-11A, and MW-12A). An evaluation of the water table elevation data indicates that groundwater flows from the landfill towards Fish Cove Pond. At Fish Cove Pond, an upward vertical flow component has been observed based upon head differential observed in the groundwater monitoring wells indicating groundwater is discharging into the pond.

Based upon historical groundwater sampling results and previous remedial investigations, the leachate plume migrates from the landfill, specifically Cell No. 1, and travels horizontally towards the northwest and discharges into Fish Cove Pond. The plume has been observed at its deepest point vertically at the MW-3B depth interval.

2.9 Leachate Quality

The April 2017 analytical data indicate that contaminant concentrations in the leachate detection system (secondary) are similar when compared to those of the leachate collection system (primary). Concentrations observed in both the primary and secondary leachate are lower when compared to

concentrations detected during the October 2016 sampling event. Total precipitation was higher during the First Half of 2016 (22.21 inches) when compared to the Second Half of 2016 (16.68 inches). The analytical results for the primary and secondary leachate are shown on **Table 3** and the laboratory report is attached as part of **Appendix A**.

3.0 DATA VALIDATION AND USABILITY REPORT

3.1 Data Validation

In accordance with the contract, five percent of the groundwater analytical results were validated by Premier Environmental Services, Merrick, New York. As part of the data validation process, all quality control (QC) issues were reviewed. A copy of the data validation and usability report is included in **Appendix A**. Compliance chart, re-submission communications, and the NYSDEC laboratory sample preparation and analysis summary forms are also included.

In summary, sample processing was primarily conducted with compliance to protocol requirements and adherence to quality criteria. Sample results are usable as reported or usable with minor qualification as estimated or edited to non-detection. These issues are discussed in the following analytical section. Although only 5% of the samples underwent full validation review, recommended qualifications below are stated to include all project samples as pertains to general quality issues, and where otherwise evident.

Data Completeness

Data packages were complete as received: no additional documentation was required.

3.1.1 Metals Analyses

Review was conducted for method compliance, holding times, calibration analysis, ICP CRDL standard, ICP interference check standard, matrix spike analysis, post digestion spike analysis, duplicate sample analysis, ICP serial dilution, blanks, laboratory control sample analysis, instrument QC data, compound identification, field duplicate sample analysis, and system performance and overall assessment to each procedure. All were found acceptable for the validated samples, unless noted specifically within this text.

The Field Blank was free from contamination of the select list of metals that were analyzed except for Manganese (4.0 J ug/L). The concentration of Manganese detected in the sample chosen for review was higher than that which can be attributed to the Field Blank sample. Sample data has not been based on the results pf the Field Blank sample.

3.1.2 Wet Chemistry Analyses

Review was conducted for method compliance, holding times, calibration analysis, matrix spike analysis, duplicate sample analysis, blanks, laboratory control sample analysis, compound identification, field duplicate sample analysis, and system performance and overall assessment to each procedure. All were found acceptable for the validated samples, unless noted specifically within this text.

The Field Blank sample was free from contamination of the target analytes reported in this data set with the exception of Alkalinity (0.60 J mg/L), Biological Oxygen Demand (BOD) (1.0 J mg/L), Chloride (0.35 J mg/L), Phenol (25.0 mg/L), Ammonia (0.2 mg/L), and TOC (0.36 J mg/L). When detected in the sample chosen for review and the concentration can be attributed to the Field Blank, the analyte has been negated "U" qualified.

3.1.3 VOC Analyses

Review was conducted for method compliance, holding times, surrogates, matrix spike/spike duplicate analysis, blank spike analysis, blank contamination, GC/MS calibration, GC/MS mass spectrometer tuning, field duplicate analysis, compound identification and overall assessment. All were found acceptable for the validated samples, unless noted specifically within this text.

The laboratory control sample (LCS) was fortified with the complete list of target analytes. In-house spike recovery limits were reported for each of the target analytes. Percent recovery met QC limits with the exception of the following: 1,1-DCA, 1,2-DCA, 1,2-Dibromoethane (EDB), 2-Butanone, 2-Hexanone, 4-Methyl-2-pentanone, Acetone, Acrylonitrile, Carbon Tetrachloride, DBCM, Tetrachloroethene. There target analytes have been estimated "J"/"UJ" in the sample chosen for review (MW-1A).

The Field Blank sample reported Acetone (5.3 ug/L) and Methylene Chloride (3.3 ug/L). Acetone and/or Methylene Chloride when detected in associated samples have been negated "U" qualified due to the field blank sample.

Two Trip Blank samples are associated with this data set. Each of the Trip Blank samples is free from contamination of the target analytes with the exception of the following: Trip Blank 4/19/17- Acetone (3.6 J ug/l) and Methylene Chloride (1.8 J ug/L) and Trip Blank 4/20/17- Acetone (6.5 ug/L) and

Methylene Chloride (2.1 ug/L). Methylene Chloride was detected in sample MW-1A (2.1 J ug/L). Methylene Chloride has been negated "U" qualified in sample MW-1A.

The Storage Blank sample associated with this data set is free from contamination of target analytes with the exception of Acetone and Methylene Chloride. Acetone was previously qualified due to Trip Blank contamination; therefore no further action was taken.

All target analyte percent relative standard deviation (%RSD) criteria were met in the initial calibration curve analysis associated with this data set with the exception of 2-Butanone (24.1%), Tetrachloroethene (20.87%), and Vinyl Acetate (24.46%). These target compounds have been estimated "J"/"UJ" qualified in the sample chosen for data review.

The GC/MS calibration identified the % difference of all target compounds met QC criteria in this continuing calibration standard with the exception of the following:

Analytes	% Difference
• Acetone	27.76
• Acrylonitrile	22.28
• 2-Butanone	23.27
• Carbon Tetrachloride	27.11
• Dibromochloromethane	38.65
• 1,2-Dibromoethane (EDB)	27.27
• 2-Hexanone	24.27
• 4-methyl-2-pentanone	22.54
• Tetrachloroethane	21.07

These target analytes have been estimated "J"/"UJ" qualified in sample MW-1A.

3.2 Data Usability Report

According to the Data Usability report, the analytical data were compliant with established protocols and met the project data quality objectives (DQO) and are usable, with the appropriate qualifiers, to

determine the presence, absence, and magnitude of environmental contamination in the samples collected from the site. A copy of the Data Usability report is included in **Appendix A**.

4.0 SUMMARY

Review of the data for the First Half 2017 indicates that previously implemented remedial actions continue to be effective at minimizing potential site impacts. In brief, the leachate quality has remained similar and the groundwater quality with regards to the inorganic constituents has improved when compared to the previous reporting periods. The groundwater quality with regards to the organic constituents has improved when compared to the previous reporting periods as organic constituents were detected at estimated concentrations but below groundwater standards in several of the samples collected. Several inorganic compounds are sporadically detected in wells MW-1A, 3A, 3B, 3C, 4A, 4B, 4C, 11A, 11B, 12A, and 12B. Contaminants detected in wells MW-3A, 3B, 3C, 4A, 4B, and 4C may be due to the expansion of the recharge basin, which is now located up-gradient of these wells.

5.0 RECOMENDATIONS

PWGC recommends that the Post-closure monitoring and maintenance operations program be continued and the groundwater and leachate sampling program be continued on a semi-annual basis.

TABLES

TOWN OF SOUTHAMPTON
NORTH SEA LANDFILL
TABLE 1
INORGANIC GROUNDWATER QUALITY RESULTS
APRIL 2017

ANALYTICAL PARAMETERS	UNITS	GW STND*	MW-1A																	
			April 2012		Oct. 2012		April 2013		Oct. 2013		April 2014		Oct. 2014		April 2015		Oct. 2015		April 2016		Oct. 2016		April 2017	
Aluminum as Al	mg/L	NA	0.174	B	PNA		0.0129	B	PNA		0.00336	B	PNA		0.0059	U	PNA		0.2	U	PNA		0.0576	J
Antimony as Sb	mg/L	0.003 #	0.0085	B	PNA		0.0012	U	PNA		0.0019	U	PNA		0.003	U	PNA		0.06	U	PNA		0.0600	U
Arsenic as As	mg/L	0.025	0.0221	U	PNA		0.0028	U	PNA		0.0011	U	PNA		0.0033	U	PNA		0.01	U	PNA		0.0100	U
Barium	mg/L	1	0.062	B	PNA		0.0058	B	PNA		0.0202	B	PNA		0.0768	B	PNA		0.0246	J	PNA		0.0239	J
Beryllium as Be	mg/L	0.003	0.00062	U	PNA		0.0001	U	PNA		0.00014	U	PNA		0.0001	U	PNA		0.005	U	PNA		0.0050	U
Boron as B	mg/L	1.0	0.263	B	PNA		0.0248	B	PNA		0.027	B	PNA		0.074	B	PNA		0.0291	J	PNA		0.0178	J
Cadmium as Cd	mg/L	0.005	0.00089	U	0.000087	U	0.0001	U	0.00015	U	0.00011	U	0.0003	U	0.0002	U	0.0001	U	0.0025	U	0.0025	U	0.0025	U
Calcium as Ca	mg/L	NA	182		66.8		14.1		59.9		18.2		63.5		51.8		76.6		18.2		60.5		8.440	
Chromium as Cr	mg/L	0.05	0.013	B	PNA		0.0016	B	PNA		0.0031	B	PNA		0.0011	U	PNA		0.01	U	PNA		0.0082	J
Cobalt	mg/L	NA	0.0026	U	PNA		0.0004	U	PNA		0.00019	U	PNA		0.0006	U	PNA		0.05	U	PNA		0.0021	J
Copper as Cu	mg/L	0.2	0.0045	B	PNA		0.0004	U	PNA		0.00076	U	PNA		0.0027	B	PNA		0.0019	J	PNA		0.0048	J
Cyanide as CN	mg/L	0.20	0.01	U	PNA		0.01	U	PNA		0.01	U	PNA		0.01	U	PNA		0.01	U	PNA		0.0100	U
Iron as Fe	mg/L	0.3	0.254	B	0.176		0.0124	B	0.228		0.0297	B	0.163		0.0371	B	0.0928	B	0.0645	J	**0.399**		**0.527**	
Lead as Pb	mg/L	0.025	0.0247		0.001	B	0.0045		0.0057		0.0052		0.0013	U	0.0022	U	0.0023	B	0.0027	J	0.005	U	0.0015	J
Magnesium	mg/L	35 #	**82.7**		26.5		6.28		26		7.54		25.4		25.4		32.9		7.73		23.8		3.280	
Manganese as Mn	mg/L	0.3	0.0665	B	0.0771		0.0023	B	0.0456		0.0099	B	0.0218		0.0075	B	0.008	B	0.055		0.258		0.290	
Mercury as Hg	mg/L	0.0007	0.0001	U	PNA		0.0001	U	PNA		0.0001	U	PNA		0.0001	U	PNA		0.0002	U	PNA		0.00020	U
Nickel as Ni	mg/L	0.1	0.005	B	PNA		0.0012	B	PNA		0.0012	B	PNA		0.0009	B	PNA		0.04	U	PNA		0.0042	J
Potassium	mg/L	NA	53.3		17.2		4.68	B	13.7		5.17		14.1		6.62		21.7		4.79	J	14.8		2.930	J
Selenium as Se	mg/L	0.01	**0.0242**	**B**	PNA		0.0025	B	PNA		0.0011	U	PNA		0.0038	U	PNA		0.01	U	PNA		0.0100	U
Silver as Ag	mg/L	0.05	0.0089	B	PNA		0.0002	U	PNA		0.00043	U	PNA		0.0022	U	PNA		0.01	U	PNA		0.0100	U
Sodium as Na	mg/L	20	**68.6**		16.8		7.87		16.9		11.2		14.7		**20.4**		17.4		10.7		15.2		8.470	
Thallium as Tl	mg/L	0.0005 #	0.0159	U	PNA		0.0019	U	PNA		0.0013	U	PNA		0.0038	U	PNA		0.01	U	PNA		0.0100	U
Vanadium	mg/L	NA	0.0015	B	PNA		0.0003	U	PNA		0.00039	U	PNA		0.0009	B	PNA		0.05	U	PNA		0.0500	U
Zinc as Zn	mg/L	2 #	0.0022	U	PNA		0.0084	B	PNA		0.0162	B	PNA		0.0121	B	PNA		0.02	U	PNA		0.0200	U
Alkalinity tot CaCo3	mg/L	NA	69	D	150	D	31		125	D	27.1		119	D	60.4		131	H	34.6		115		23.2	
Chloride as Cl	mg/L	250.0	17.8		29.6		13.1		27.7		21.5		27.4		46.9	D	30.6		21.9		25		14.0	
Sulfate as SO4	mg/L	250.0	63.7	D	128	D	25.7		123	D	41.3		119	D	139	D	193	D	35.4		100		8.9	
Bromide	mg/L	2 #	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.50	U
BOD5	mg/L	NA	2	U	2	UJ	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	1.0	U
COD	mg/L	NA	10	U	20		10	U	10	U	18.4		10	U	17.4		10	U	10	U	10	U	10.0	U
Color	units	NA	5	U	PNA		5	U	PNA		5	U	PNA		10		PNA		5	U	PNA		20.0	
Chromium hex as Cr	mg/L	0.05	0.02	U	PNA		0.02	U	PNA		0.02	U	PNA		0.02	U	PNA		0.02	U	PNA		0.020	U
Hardness as CaC03	mg/L	NA	152	D	260	D	62		350	D	76	D	270	D	500	D	260	D	76		212		40.0	
Ammonia as N	mg/L	2.0	0.1	U	0.1	U	0.1	U	0.1	U	0.11		0.1	U	0.18	U	0.1		0.33		0.1	U	0.040	U
Nitrite as N	mg/L	NA	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.050	U
Nitrate as N	mg/L	10	4.07	D	6.32	D	2.09	D	6.65	D	3.09	D	6.15	D	6.95	D	8.33	U	2.82	D	6.9		1.3	
Phenols as Phenol	mg/L	0.001	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U	**0.0062**		**0.0127**		0.005	U	**0.0564**	
Tot Dissolved Solids	mg/L	NA	245		501		98		427		107		369		377		457		125		328		73.0	J
Tot. Kjeldahl Nitrogen	mg/L	NA	0.1	U	0.95		0.1	U	0.11		0.23		0.1	U	0.94		0.1	U	0.1	U	0.1	U	0.16	
Tot Organic Carbon	mg/L	NA	2.8		4.8		9.4		6.2		1.7		32.8		5.3		5.21		1.6		3.40		0.82	J
Turbidity	NTU	NA	1.4		0		0		8.9		0		0		0		1.04		10.9		30		0.0	
Temperature	deg.C	NA	12.98		12.31		12.57		13.35		11.08		12.57		11.58		12.51		11.79		16.07		12.00	
pH	units	6.5-8.5	**5.74**		6.56		7.4		**6.21**		**5.77**		**6.14**		**6.08**		**6.24**		**5.93**		**6.16**		**5.90**	
Spec. Cond	umho/cm	NA	410		690		212		615		253		735		655		741		231		554		138	

NOTES:

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6 NYCRR Part 703

= Guidance value, no standard exists.

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PNA = parameter not analyzed for.

B - This flag is used when the analyte is found in the associated blank as in the sample.

D - Dilution

E - This flag identified compunds whose concentrations exceed the calibration range of the GC/MS instrument for that specific analysis.

F - This flag indicates the results of a filtered metal analysis.

H - Received / analyzed outside of analytical holding time

J - The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

U -The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

UJ - The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

R - The sample results are unreliable/unusable. The presence or absence of the analyte cannot be verified.

1.0 = Compound exceeded standard.

1.0 = Compound at standard.

NM = Not Monitored

TOWN OF SOUTHAMPTON
NORTH SEA LANDFILL
TABLE 1
INORGANIC GROUNDWATER QUALITY RESULTS
APRIL 2017

ANALYTICAL PARAMETERS	UNITS	GW STND*	MW-1B																	
			April 2012		Oct. 2012		April 2013		Oct. 2013		April 2014		Oct. 2014		April 2015		Oct. 2015		April 2016		Oct. 2016		April 2017	
Aluminum as Al	mg/L	NA	0.0334	BJ	PNA		0.0438	B	PNA		0.0283	B	PNA		0.0059	U	PNA		0.0906	J	PNA		0.200	U
Antimony as Sb	mg/L	0.003 #	0.0018	B	PNA		0.0012	U	PNA		0.0019	U	PNA		0.003	U	PNA		0.06	U	PNA		0.0600	U
Arsenic as As	mg/L	0.025	0.0044	U	PNA		0.0028	U	PNA		0.0011	U	PNA		0.0033	U	PNA		0.01	U	PNA		0.0100	U
Barium	mg/L	1	0.012	B	PNA		0.0098	B	PNA		0.0103	B	PNA		0.0102	B	PNA		0.2	U	PNA		0.0097	J
Beryllium as Be	mg/L	0.003	0.00012	U	PNA		0.0001	U	PNA		0.00014	U	PNA		0.0001	U	PNA		0.0002	U	PNA		0.0050	U
Boron as B	mg/L	1.0	0.0068	B	PNA		0.0129	B	PNA		0.0072	B	PNA		0.0081	B	PNA		0.0089	J	PNA		0.010	J
Cadmium as Cd	mg/L	0.005	0.00018	U	0.000087	U	0.0001	U	0.00015	U	0.00011	U	0.0003	U	0.0002	U	0.0001	U	0.0002	J	0.0025	U	0.0025	U
Calcium as Ca	mg/L	NA	4.29	BJ	4.26	B	4.31	B	4.66	B	4.07	B	4.37	B	3.77	B	4.45	B	3.93		4.62		3.970	
Chromium as Cr	mg/L	0.05	0.0062	BJ	PNA		0.0131		PNA		0.0053	B	PNA		0.0038	B	PNA		0.0078	J	PNA		0.0029	J
Cobalt	mg/L	NA	0.00052	U	PNA		0.0004	U	PNA		0.00019	U	PNA		0.0006	U	PNA		0.05	U	PNA		0.0500	U
Copper as Cu	mg/L	0.2	0.0017	B	PNA		0.0053	B	PNA		0.001	B	PNA		0.0012	B	PNA		0.0035	J	PNA		0.0026	J
Cyanide as CN	mg/L	0.20	0.01	U	PNA		0.01	U	PNA		0.01	U	PNA		0.01	U	PNA		0.01	U	PNA		0.0100	U
Iron as Fe	mg/L	0.3	0.0337	BJ	0.0767	B	0.177		0.0751	B	0.0261	B	0.0658	B	0.0223	E	0.0268	U	0.0488	J	0.1	U	0.100	U
Lead as Pb	mg/L	0.025	0.0069		0.00096	U	0.0052		0.0071		0.0051		0.0018	B	0.0022	U	0.0034		0.0023	J	0.005	U	0.0050	U
Magnesium	mg/L	35 #	2	BJ	1.99	B	1.95	B	2.06	B	1.74	B	1.83	B	1.6	B	1.99	B	1.68		2.04		1.830	
Manganese as Mn	mg/L	0.3	0.0012	BJ	0.0021	B	0.0041	B	0.0049	B	0.0049	B	0.0029	B	0.0024	B	0.0016	BE	0.015	U	0.01	U	0.0013	J
Mercury as Hg	mg/L	0.0007	0.00025		PNA		0.0001	U	PNA		0.0001	U	PNA		0.0001	U	PNA		0.0002	U	PNA		0.00020	U
Nickel as Ni	mg/L	0.1	0.0114	B	PNA		0.0095	B	PNA		0.0117	B	PNA		0.0102	B	PNA		0.0147	J	PNA		0.010	J
Potassium	mg/L	NA	0.961	BJ	0.775	B	0.613	B	1.64	B	0.954	B	2.19	B	1.89	B	0.898	B	0.615	J	5	U	5.000	U
Selenium as Se	mg/L	0.01	0.0028	U	PNA		0.0023	U	PNA		0.0011	U	PNA		0.0038	U	PNA		0.01	U	PNA		0.0100	U
Silver as Ag	mg/L	0.05	0.0024	B	PNA		0.0002	U	PNA		0.00043	U	PNA		0.0022	U	PNA		0.01	U	PNA		0.0100	U
Sodium as Na	mg/L	20	7.04	J	7.16		6.28		8.31		7.5		7.71		8.54		9.32		7.78		8.53		7.860	
Thallium as Tl	mg/L	0.0005 #	0.0032	U	PNA		0.0019	U	PNA		0.0013	U	PNA		0.0038	U	PNA		0.01	U	PNA		0.0100	U
Vanadium	mg/L	NA	0.00023	U	PNA		0.0003	B	PNA		0.00039	U	PNA		0.0007	U	PNA		0.05	U	PNA		0.0500	U
Zinc as Zn	mg/L	2 #	0.00044	U	PNA		0.013	B	PNA		0.0232		PNA		0.0047	B	PNA		0.02	U	PNA		0.0200	U
Alkalinity tot CaCo3	mg/L	NA	12.9	D	11.5		11		12.2		10.4		12.1		971	D	12.5	H	10.4		12.5		10.6	
Chloride as Cl	mg/L	250.0	9.89		10.8		8.72		10.6		9.99		10.5		11.4		9.54		9.68		12.8		8.8	
Sulfate as SO4	mg/L	250.0	6.58		8.09		7.62		8.67		7.21		7.53		8.03		8.2		7.25		6.9		7.5	
Bromide	mg/L	2 #	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.50	U
BOD5	mg/L	NA	2	U	2	U	2	UJ	2	U	2	U	2	U	2	U	2	U	2	U	2	U	1.0	J
COD	mg/L	NA	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10.0	U
Color	units	NA	5		PNA		5	U	PNA		5	U	PNA		10		PNA		5	U	PNA		5.0	
Chromium hex as Cr	mg/L	0.05	0.02	U	PNA		0.02	U	PNA		0.02	U	PNA		0.02	U	PNA		0.02	U	PNA		0.020	U
Hardness as CaC03	mg/L	NA	22		17		16		20		18		20	D	20	D	22	D	19		17		18.0	
Ammonia as N	mg/L	2.0	0.1	U	0.1		0.1	U	0.1	U	0.12	U	0.1	U	0.1	U	0.1	U	0.17		0.2		0.088	J
Nitrite as N	mg/L	NA	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.050	U
Nitrate as N	mg/L	10	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.05	U	0.024	J
Phenols as Phenol	mg/L	0.001	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U	**0.0079**		0.005	U	**0.0094**		**0.0783**	
Tot Dissolved Solids	mg/L	NA	53		59		41		62		48		39		54		52		38		67		42.0	
Tot. Kjeldahl Nitrogen	mg/L	NA	0.1	U	0.1	U	0.1	U	0.27		0.37		0.1	U	0.18		0.1	U	0.1	U	0.36		0.10	U
Tot Organic Carbon	mg/L	NA	1.3		1	U	3.4		1.7		1	U	3.8		1	U	0.5	U	1	U	1.00	U	0.18	J
Turbidity	NTU	NA	3.5		0.6		1.24		5		1.1		0		0		0.32		3.22		0.0		0.0	
Temperature	deg.C	NA	12.55		11.4		12.39		12.42		11.21		11.59		10.69		11.51		11.27		12.89		12.50	
pH	units	6.5-8.5	**5.75**		**6.39**		8.12		6.63		**6.46**		**6.26**		**6.05**		**5.95**		6.56		**6.43**		**6.18**	
Spec. Cond	umho/cm	NA	91		84		1		92		70		92		70		86		80		91		80	

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TOWN OF SOUTHAMPTON
NORTH SEA LANDFILL
TABLE 1
INORGANIC GROUNDWATER QUALITY RESULTS
APRIL 2017

ANALYTICAL PARAMETERS	UNITS	GW STND*	MW-1C																	
			April 2012		Oct. 2012		April 2013		Oct. 2013		April 2014		Oct. 2014		April 2015		Oct. 2015		April 2016		Oct. 2016		April 2017	
Aluminum as Al	mg/L	NA	0.644		PNA		0.0173	B	PNA		0.0358	B	PNA		0.0059	U	PNA		0.2	U	PNA		0.200	U
Antimony as Sb	mg/L	0.003 #	0.0011	U	PNA		0.0012	U	PNA		0.0019	U	PNA		0.003	U	PNA		0.06	U	PNA		0.0600	U
Arsenic as As	mg/L	0.025	0.0044	U	PNA		0.0028	U	PNA		0.0011	U	PNA		0.0033	U	PNA		0.01	U	PNA		0.0100	U
Barium	mg/L	1	0.0139	B	PNA		0.009	B	PNA		0.01	B	PNA		0.0112	B	PNA		0.2	U	PNA		0.0092	J
Beryllium as Be	mg/L	0.003	0.00012	U	PNA		0.0001	U	PNA		0.00014	U	PNA		0.0001	U	PNA		0.005	U	PNA		0.0050	U
Boron as B	mg/L	1.0	0.0065	B	PNA		0.0128	B	PNA		0.0072	B	PNA		0.0081	B	PNA		0.0097	J	PNA		0.0115	J
Cadmium as Cd	mg/L	0.005	0.00018	U	0.000087	U	0.0001	U	0.00015	U	0.00011	U	0.0003	U	0.0002	U	0.0001	U	0.0025	U	0.0025	U	0.0025	U
Calcium as Ca	mg/L	NA	3.89	B	4.98	B	4.49	B	4.46	B	4.61	B	5.15		4.87	B	4.7	B	4.45		4.62		4.440	
Chromium as Cr	mg/L	0.05	0.035		PNA		0.0037	B	PNA		0.0049	B	PNA		0.0012	B	PNA		0.01	U	PNA		0.0041	J
Cobalt	mg/L	NA	0.0009	B	PNA		0.0004	U	PNA		0.00019	U	PNA		0.0006	U	PNA		0.05	U	PNA		0.0500	U
Copper as Cu	mg/L	0.2	0.0084	B	PNA		0.0013	B	PNA		0.0008	B	PNA		0.0005	B	PNA		0.0022	J	PNA		0.0250	U
Cyanide as CN	mg/L	0.20	0.01	U	PNA		0.01	U	PNA		0.01	U	PNA		0.01	U	PNA		0.01	U	PNA		0.0100	U
Iron as Fe	mg/L	0.3	**1.25**		0.0389	B	0.0684	B	0.0619	U	0.0492	B	**0.998**		0.0086	UE	0.0268	U	0.1	U	0.1	U	0.100	U
Lead as Pb	mg/L	0.025	0.0125		0.0011	B	0.0052		0.0055	J	0.0042	B	0.0021	B	0.0022	U	0.0037		0.0028	J	0.005	U	0.0050	U
Magnesium	mg/L	35 #	2.06	B	2.45	N	2.23	B	2.22	BJ	2.28	B	2.58	B	2.43	B	2.32	B	2.21		2.39		2.380	
Manganese as Mn	mg/L	0.3	0.0424		0.0013	B	0.0026	B	0.0024	B	0.0033	B	0.0263		0.0005	B	0.0008	BE	0.015	U	0.01	U	0.00079	J
Mercury as Hg	mg/L	0.0007	0.0001	U	PNA		0.0001	U	PNA		0.0001	U	PNA		0.0001	U	PNA		0.0002	U	PNA		0.00020	U
Nickel as Ni	mg/L	0.1	0.0162	B	PNA		0.009	B	PNA		0.0107	B	PNA		0.0048	B	PNA		0.0153	J	PNA		0.0248	J
Potassium	mg/L	NA	1.12	B	0.751	B	0.702	B	1.38	B	0.978	B	2.14	B	0.472	U	0.828	B	5	U	5	U	5.000	U
Selenium as Se	mg/L	0.01	0.0028	U	PNA		0.0023	U	PNA		0.0013	B	PNA		0.0038	U	PNA		0.01	U	PNA		0.0100	U
Silver as Ag	mg/L	0.05	0.003	B	PNA		0.0002	U	PNA		0.00043	U	PNA		0.0022	U	PNA		0.01	U	PNA		0.0100	U
Sodium as Na	mg/L	20	7.77		9.07		7.77		9.02		8.24		8.31		8.34		8.78		7.99		7.27		7.770	
Thallium as Tl	mg/L	0.0005 #	0.0032	U	PNA		0.0019	U	PNA		0.0013	U	PNA		0.0038	U	PNA		0.01	U	PNA		0.0100	U
Vanadium	mg/L	NA	0.0012	B	PNA		0.0004	B	PNA		0.00039	U	PNA		0.0007	U	PNA		0.05	U	PNA		0.0500	U
Zinc as Zn	mg/L	2 #	0.0129	B	PNA		0.0092	B	PNA		0.0256		PNA		0.0038	B	PNA		0.02	U	PNA		0.0200	U
Alkalinity tot CaCo3	mg/L	NA	10.8	D	12		12.6		12.9		12.5		13.7		12.9		12.9	H	12.7		12		10.8	
Chloride as Cl	mg/L	250.0	9.85		11.5		9.47		11.2		214	D	11.6		12.3		9.42		10		11		9.0	
Sulfate as SO4	mg/L	250.0	7.23		8.21		7.61		8.86		152	D	8.62		10.5		8.35		8.34		8.4		8.2	
Bromide	mg/L	2 #	0.5	U	0.5	U	0.5	U	0.5	U	10	UD	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.50	U
BOD5	mg/L	NA	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2.6		1.0	J
COD	mg/L	NA	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	33.8		10.0	U
Color	units	NA	20		PNA		5	U	PNA		5	U	PNA		10	U	PNA		5	U	PNA		5.0	
Chromium hex as Cr	mg/L	0.05	0.02	U	PNA		0.02	U	PNA		0.02	U	PNA		0.02	U	PNA		0.02	U	PNA		0.020	U
Hardness as CaC03	mg/L	NA	19		19		18		20		18		48	D	44	D	24	D	25		19		22.0	
Ammonia as N	mg/L	2.0	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.11		0.1	U	0.14		**22.9**		0.046	J
Nitrite as N	mg/L	NA	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.050	U
Nitrate as N	mg/L	10	0.11		0.27		0.29		0.3		0.35		0.43		0.42		0.33		0.24		0.22		0.19	
Phenols as Phenol	mg/L	0.001	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U	**0.013**		**0.0162**		**0.0396**	
Tot Dissolved Solids	mg/L	NA	61		56		56		64		31		36		53		49		45		63		50.0	
Tot. Kjeldahl Nitrogen	mg/L	NA	0.1	U	0.1	U	0.1	U	0.15		0.26		0.1	U	0.2		0.1	U	0.1	U	18.7		0.10	U
Tot Organic Carbon	mg/L	NA	1	U	1	U	3.8		1.1		1	U	3.8		1	U	0.5	U	1	U	1.00	U	0.16	J
Turbidity	NTU	NA	22.10		0.00		0.6		0.50		0.30		18.60		0.00		0.57		6.37		0		0.0	
Temperature	deg.C	NA	15.74		11.36		12.56		12.18		10.12		11.59		10.45		11.35		11.24		11.65		12.24	
pH	units	6.5-8.5	**6.05**		**6.27**		7.24		6.97		**6.15**		**6.14**		**5.97**		**6.18**		6.52		**6.26**		**6.07**	
Spec. Cond	umho/cm	NA	841		870		79		98		89		106		98		91		90		91		86	

NOTES:

* = NYSDEC, Class GA Groundwater Standards
6 NYCRR Part 703

= Guidance value, no standard exists.

NA = Not available.

PNA = parameter not analyzed for.

B = This flag is used when the analyte is found in the associated blank as in the sample.

D - Dilution

E - This flag identified compunds whose concentrations exceed the calibration range of the GC/MS instrument for that specific analysis.

F - This flag indicates the results of a filtered metal analysis.

H - Received / analyzed outside of analytical holding time

J - The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

U -The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

UJ - The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

R - The sample results are unreliable/unusable. The presence or absence of the analyte cannot be verified.

1.0 = Compound exceeded standard.

1.0 = Compound at standard.

NM = Not Monitored

TOWN OF SOUTHAMPTON
NORTH SEA LANDFILL
TABLE 1
INORGANIC GROUNDWATER QUALITY RESULTS
APRIL 2017

ANALYTICAL PARAMETERS	UNITS	GW STND*	MW-3A																	
			April 2012	Oct. 2012		April 2013	Oct. 2013	April 2014	Oct. 2014	April 2015	Oct. 2015	Apr-16		Oct-16		Apr-17	
				Unfiltered	Filtered							Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered
Aluminum as Al	mg/L	NA	0.0311 B	PNA	PNA	0.0108 B	PNA	0.0391 U	PNA	0.0059 U	PNA	0.2 U	0.2 U	PNA	PNA	0.0220 J	0.200 U
Antimony as Sb	mg/L	0.003 #	0.0011 U	PNA	PNA	0.0012 U	PNA	0.0019 U	PNA	0.0077 B	PNA	0.06 U	0.06 U	PNA	PNA	0.0600 U	0.0600 U
Arsenic as As	mg/L	0.025	0.0044 U	PNA	0.0015 U	0.0028 U	PNA	0.0011 U	PNA	0.0033 U	PNA	0.0038 J	0.01 U	PNA	PNA	0.0100 U	0.0100 U
Barium	mg/L	1	0.0344 B	PNA	PNA	0.0382 B	PNA	0.055 B	PNA	0.0509 B	PNA	0.048 J	0.0377 J	PNA	PNA	0.0744 J	0.0579 J
Beryllium as Be	mg/L	0.003	0.00012 U	PNA	PNA	0.0001 U	PNA	0.00014 U	PNA	0.0001 U	PNA	0.005 U	0.005 U	PNA	PNA	0.0050 U	0.0050 U
Boron as B	mg/L	1.0	0.0274 B	PNA	PNA	0.0257 B	PNA	0.0291 B	PNA	0.0202 B	PNA	0.0366 J	0.0348 J	PNA	PNA	0.0211 J	0.0253 J
Cadmium as Cd	mg/L	0.005	0.00018 U	0.000087 U	0.000087 U	0.0001 U	0.00015 U	0.00011 U	0.0003 U	0.0002 U	0.0001 U	0.0002 U	0.005 U	0.0025 U	0.0025 U	0.00027 J	0.00096 J
Calcium as Ca	mg/L	NA	15.5	9.77	8.98	18	13.2	19.1	18	19.9	22.9	13.8	12.9	22	19.1	20.800	18.000
Chromium as Cr	mg/L	0.05	**0.126**	PNA	PNA	**0.104**	PNA	**0.595**	PNA	**0.786**	PNA	**0.825**	0.0063 J	PNA	PNA	**1.660**	0.0141
Cobalt	mg/L	NA	0.0008 B	PNA	PNA	0.0013 B	PNA	0.0024 B	PNA	0.0029 B	PNA	0.0015 J	0.05 U	PNA	PNA	0.0049 J	0.0500 U
Copper as Cu	mg/L	0.2	0.0058 B	PNA	PNA	0.0059 B	PNA	0.0164 B	PNA	0.0196 B	PNA	0.0225 J	0.0322	PNA	PNA	0.0240 J	0.0078 J
Cyanide as CN	mg/L	0.20	0.01 U	PNA	PNA	0.01 U	PNA	0.01 U	PNA	0.01 U	PNA	0.01 U	0.1 U	PNA	PNA	0.0100 U	PNA
Iron as Fe	mg/L	0.3	**0.509**	**8.2**	0.164	**0.441**	**0.412**	**2.28**	**3.78**	**2.95 E**	**2.27**	**2.92**	0.1 U	**4.66**	0.1 U	**6.520**	0.100 U
Lead as Pb	mg/L	0.025	0.0055	0.00096 U	0.00096 U	0.0033	0.0048	0.0053	0.0013 U	0.0022 U	0.0024 B	0.001 J	0.002 J	0.005 U	0.005 U	0.0050 U	0.0050 U
Magnesium	mg/L	35 #	3.74 B	2.24 B	2.09 B	4.1 B	3.55 B	4.74 B	4.57 B	5.06	6.42	3.68	3.44	6.34	5.53	5.510	5.010
Manganese as Mn	mg/L	0.3	0.103	**2.6**	0.0225	0.0866	0.0273	0.255	0.2	0.211	0.113 E	0.144	0.0585	0.286	0.0611	**0.359**	0.0518
Mercury as Hg	mg/L	0.0007	0.0001 U	PNA	PNA	0.0001 U	PNA	0.0001 U	PNA	0.0001 U	PNA	0.0002 U	0.0002 U	PNA	PNA	0.00020 U	0.00020 U
Nickel as Ni	mg/L	0.1	0.0351 B	PNA	PNA	0.0408	PNA	0.0735	PNA	0.0962	PNA	**0.114**	0.08	PNA	PNA	**0.132**	0.0893
Potassium	mg/L	NA	3.64 B	4.41 B	4.14 B	2.72 B	4.47 B	6.58 J	6.99	4.4 B	6.67	5.21	4.5 J	6.46	5.29	5.830	4.880 J
Selenium as Se	mg/L	0.01	0.0028 U	PNA	PNA	0.0023 U	PNA	0.0016 B	PNA	0.0038 U	PNA	0.01 U	0.01 U	PNA	PNA	0.0100 U	0.0100 U
Silver as Ag	mg/L	0.05	0.00032 U	PNA	PNA	0.0002 U	PNA	0.00043 UJ	PNA	0.0022 U	PNA	0.01 U	0.01 U	PNA	PNA	0.0100 U	0.0100 U
Sodium as Na	mg/L	20	8.94	7.8	7.4	16.9	18.8	**33.6**	18.9	**37.6**	**43.8**	**22.5**	**21**	**25**	**21**	**82.900**	**70.200**
Thallium as Tl	mg/L	0.0005 #	0.0032 U	PNA	PNA	0.0019 U	PNA	0.0013 U	PNA	0.0038 U	PNA	0.01 U	0.01 U	PNA	PNA	0.0100 U	0.0100 U
Vanadium	mg/L	NA	0.0003 B	PNA	PNA	0.0003 U	PNA	0.0019 B	PNA	0.0007 U	PNA	0.05 U	0.05 U	PNA	PNA	0.0023 J	0.0500 U
Zinc as Zn	mg/L	2 #	0.0083 B	PNA	PNA	0.008 B	PNA	0.0267	PNA	0.0154 B	PNA	0.02 U	0.02 U	PNA	PNA	0.0200 U	0.0107 J
Alkalinity tot CaCo3	mg/L	NA	47.8 D	29.5	PNA	28.3	46.4 D	41	61.3	38.5	61.7	52	PNA	75.6	PNA	34.2	PNA
Chloride as Cl	mg/L	250.0	10.6	11.3	PNA	49.1	31.5	72.6 D	30.1	84.2 D	70.9	24	PNA	40.8	PNA	154	PNA
Sulfate as SO4	mg/L	250.0	5.77	7.43	PNA	5.84	5 U	5.58	10.7	5 U	73.7	7.5	PNA	12.6	PNA	8.7	PNA
Bromide	mg/L	2 #	0.5 U	0.5 U	PNA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.02 J	PNA	0.5 U	PNA	0.50 U	PNA
BOD5	mg/L	NA	2 U	2 U	PNA	2 U	2 U	2 U	2 U	2 U	2 U	2 U	PNA	2 U	PNA	1.0 J	PNA
COD	mg/L	NA	10 U	10 U	PNA	10 U	10 U	12.7	12.7	10 U	10 U	10 U	PNA	23.4	PNA	13.0	PNA
Color	units	NA	10	PNA	PNA	5	PNA	30	PNA	25	PNA	10	PNA	PNA	PNA	5.0	PNA
Chromium hex as Cr	mg/L	0.05	0.02 U	PNA	PNA	0.02 U	PNA	0.02 U	PNA	0.02 U	PNA	0.02 U	PNA	PNA	PNA	0.0098 J	PNA
Hardness as CaC03	mg/L	NA	62 D	38 D	PNA	62 D	60 D	68 D	100 D	75 D	75	48	PNA	80	PNA	80.0	PNA
Ammonia as N	mg/L	2.0	0.17	0.46	PNA	0.28	0.1 U	0.22	0.1 U	0.31	0.1 U	0.29	PNA	0.24	PNA	0.10	PNA
Nitrite as N	mg/L	NA	0.1 U	0.1 U	PNA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	PNA	0.1 U	PNA	0.050 U	PNA
Nitrate as N	mg/L	10	1.01	0.2	PNA	0.54	0.2	1.05	0.21	0.29	0.25	1.45	PNA	0.26	PNA	1.8	PNA
Phenols as Phenol	mg/L	0.001	0.005 U	0.005 U	PNA	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	**0.0087**	0.005 U	PNA	**0.0088**	PNA	**0.0026 J**	PNA
Tot Dissolved Solids	mg/L	NA	87	85	PNA	145	114	158	100	174	195	106	PNA	152	PNA	317	PNA
Tot. Kjeldahl Nitrogen	mg/L	NA	0.41 U	0.71	PNA	0.32	0.39	0.67	0.1 U	0.54	0.13	0.5	PNA	0.26	PNA	0.34	PNA
Tot Organic Carbon	mg/L	NA	1.9	1 U	PNA	10.3	3.3	2.7	12.7	2.4	2.5	2.9	PNA	3.29	PNA	2.6 J	PNA
Turbidity	NTU	NA	6.6	148	PNA	1.6	2.4	11.5	26.8	11.5	38.5	24	PNA	117	PNA	105	PNA
Temperature	deg.C	NA	12.95	13.07	PNA	13.18	10.82	12.62	11.23	11.06	8.18	12.07	PNA	10.25	PNA	12.57	PNA
pH	units	6.5-8.5	**6.26**	6.85	PNA	7.1	**6.39**	**6.28**	**6.49**	**6.16**	**6.09**	**6.44**	PNA	**6.27**	PNA	**6.09**	PNA
Spec. Cond	umho/cm	NA	166	121	PNA	258	211	349	269	390	401	209	PNA	304	PNA	700	PNA

NOTES:

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6 NYCRR Part 703

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TOWN OF SOUTHAMPTON
NORTH SEA LANDFILL
TABLE 1
INORGANIC GROUNDWATER QUALITY RESULTS
APRIL 2017

ANALYTICAL PARAMETERS	UNITS	GW STND*	MW-3B																	
			April 2012	Oct. 2012	April 2013	Oct. 2013	April 2014	Oct. 2014	April 2015	Oct. 2015	April 2016	Oct. 2016	April 2017
Aluminum as Al	mg/L	NA	0.0354 B	PNA	0.0123 B	PNA	0.0294 B	PNA	0.0059 U	PNA	0.2 U	PNA	0.200 U
Antimony as Sb	mg/L	0.003 #	0.0011 U	PNA	0.0012 U	PNA	0.0019 U	PNA	0.003 U	PNA	0.06 U	PNA	0.0600 U
Arsenic as As	mg/L	0.025	0.0063 B	PNA	0.0125	PNA	0.0058 B	PNA	0.0106	PNA	0.0082 J	PNA	0.0100 U
Barium	mg/L	1	0.0319 B	PNA	0.291 B	PNA	0.039 B	PNA	0.043 B	PNA	0.0507 J	PNA	0.0347 J
Beryllium as Be	mg/L	0.003	0.00012 U	PNA	0.0001 U	PNA	0.00014 U	PNA	0.0001 U	PNA	0.005 U	PNA	0.0050 U
Boron as B	mg/L	1.0	0.0502 B	PNA	0.0402 B	PNA	0.042 B	PNA	0.0409 B	PNA	0.0587 J	PNA	0.0409 J
Cadmium as Cd	mg/L	0.005	0.00018 U	0.000087 U	0.0001 U	0.00015 U	0.00011 U	0.0008 B	0.0002 U	0.0001 U	0.0007 J	0.0025 U	0.00029 J
Calcium as Ca	mg/L	NA	7.79	6.35	9.03	10.4	11.8	9.43	12.3	15	14.4	12.6	12.900
Chromium as Cr	mg/L	0.05	0.0081 B	PNA	0.0035 B	PNA	0.0025 B	PNA	0.0055 B	PNA	0.01 U	PNA	0.0100 U
Cobalt	mg/L	NA	0.0041 B	PNA	0.0047 B	PNA	0.0056 B	PNA	0.0084 B	PNA	0.0076 J	PNA	0.0055 J
Copper as Cu	mg/L	0.2	0.0007 U	PNA	0.0011 B	PNA	0.003 B	PNA	0.0086 B	PNA	0.0029 J	PNA	0.0250 U
Cyanide as CN	mg/L	0.20	0.01 U	PNA	0.01 U	PNA	0.01 U	PNA	0.01 U	PNA	0.01 U	PNA	0.0100 U
Iron as Fe	mg/L	0.3	**11.2**	**10.8**	**12.1**	**14**	**14.3**	**16.2**	**18.1 E**	**18.8**	**16.9**	**11.8**	**12.100**
Lead as Pb	mg/L	0.025	0.0038	0.00096 U	0.0029 B	0.00072 U	0.0023 B	0.013 U	0.0022 U	0.004	0.00091 J	0.005 U	0.0050 U
Magnesium	mg/L	35 #	2.51 B	1.9 B	2.96 B	3.54 B	4.1 B	3.33 B	4.32 B	5.78	5.25	4.34	4.310
Manganese as Mn	mg/L	0.3	**2.34**	**3.54**	**3.4**	**3.59**	**4.15**	**4.89**	**4.56**	**5.01 E**	**3.41**	**3**	**3.790**
Mercury as Hg	mg/L	0.0007	0.0001 U	PNA	0.0001 U	PNA	0.0001 U	PNA	0.0001 U	PNA	0.0002 U	PNA	0.00020 U
Nickel as Ni	mg/L	0.1	0.002 B	PNA	0.0022 B	PNA	0.003 B	PNA	0.003 B	PNA	0.0031 J	PNA	0.0031 J
Potassium	mg/L	NA	4.86 B	2.59 B	3.72 B	4.93 B	4.23 B	4.81 B	3.02 B	3.45 B	5.28	5 U	4.200 J
Selenium as Se	mg/L	0.01	0.0028 U	PNA	0.0023 U	PNA	0.0011 U	PNA	0.0038 U	PNA	0.01 U	PNA	0.0100 U
Silver as Ag	mg/L	0.05	0.00032 U	PNA	0.0002 U	PNA	0.00043 U	PNA	0.0027 B	PNA	0.01 U	PNA	0.0100 U
Sodium as Na	mg/L	20	11.5	8.8	9.98	10.6	13	11.7	13.9	19.6	15.3	17.3	16.900
Thallium as Tl	mg/L	0.0005 #	0.0032 U	PNA	0.0019 U	PNA	0.0013 U	PNA	0.0038 U	PNA	**0.0039 J**	PNA	0.0100 U
Vanadium	mg/L	NA	0.00023 U	PNA	0.0003 U	PNA	0.00039 U	PNA	0.0007 U	PNA	0.05 U	PNA	0.0500 U
Zinc as Zn	mg/L	2 #	0.00044 U	PNA	0.0115 B	PNA	0.0087 B	PNA	0.0047 B	PNA	0.02 U	PNA	0.0023 J
Alkalinity tot CaCo3	mg/L	NA	63 D	29.9	46.3 D	57.1 D	55.5	61.2	55	74.8	76.5	55.6	44.4
Chloride as Cl	mg/L	250.0	13.1	12	13.5	17.8	17.1	19	22.5	27.8	19.9	26.9	14.7
Sulfate as SO4	mg/L	250.0	8.61	10.5	11.2	10.9	9.82	7.96	15.9	10.1	11.5	10.8	13.8
Bromide	mg/L	2 #	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.13 J	0.5 U	0.067 J
BOD5	mg/L	NA	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	1.0 J
COD	mg/L	NA	10 U	10 U	10 U	10 U	12.1	10.2	10 U	11.6	10 U	25.5	10.9
Color	units	NA	200 D	PNA	125 D	PNA	55	PNA	100 D	PNA	45	PNA	5.0
Chromium hex as Cr	mg/L	0.05	0.02 U	PNA	0.0001 UD	PNA	0.02 U	PNA	0.02 U	PNA	0.02 U	PNA	0.020 U
Hardness as CaC03	mg/L	NA	41	37	84 D	68 D	72 D	76 D	100 D	92	68	50	40.0
Ammonia as N	mg/L	2.0	**4.21 D**	**2.07**	**2.82 D**	**3.22 D**	**2.54 D**	**5.98 D**	**2.54**	1.7	**2.78**	**2.8**	0.65
Nitrite as N	mg/L	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.031 J
Nitrate as N	mg/L	10	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.05 U	0.050 U
Phenols as Phenol	mg/L	0.001	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	**0.0051**	0.005 U	0.005 U	**0.0021 J**
Tot Dissolved Solids	mg/L	NA	85	82	75	102	76	83	110	114	105	106	102
Tot. Kjeldahl Nitrogen	mg/L	NA	8.44 D	3.16	3.05	3.62	3.11	6.2 D	2.52	1.73	2.01	2.4	1.4
Tot Organic Carbon	mg/L	NA	1 U	1 U	14.2	2.6	2	14.3	1.8	3.39	1.9	2.33	1.8 J
Turbidity	NTU	NA	2.2	0	0	4.1	0	0	0	1.53	0	1.7	0.0
Temperature	deg.C	NA	14.22	12.79	12.58	10.56	11.36	10.92	11.44	9.54	11.46	11.23	12.85
pH	units	6.5-8.5	**6.49**	6.95	**6.44**	**6.00**	**6.39**	6.56	**6.14**	**6.05**	6.58	**6.31**	**5.96**
Spec. Cond	umho/cm	NA	245	165	231	256	244	308	262	277	276	261	220

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APRIL 2017

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			April 2012		Oct. 2012		April 2013		Oct. 2013		Oct. 2014		April 2015		Oct. 2015		April 2016		Oct. 2016		April 2017	
Aluminum as Al	mg/L	NA	0.0369	B	PNA		0.0095	U	PNA		PNA		0.0059	U	PNA		0.2	U	PNA		0.200	U
Antimony as Sb	mg/L	0.003 #	0.0011	U	PNA		0.0036	B	PNA		PNA		0.003	U	PNA		0.06	U	PNA		0.0600	U
Arsenic as As	mg/L	0.025	0.0044	U	PNA		0.0028	U	PNA		PNA		0.0033	U	PNA		0.01	U	PNA		0.0100	U
Barium	mg/L	1	0.04	B	PNA		0.0248	B	PNA		PNA		0.0228	B	PNA		0.0201	J	PNA		0.0183	J
Beryllium as Be	mg/L	0.003	0.00012	U	PNA		0.0001	U	PNA		PNA		0.0001	U	PNA		0.005	U	PNA		0.0050	U
Boron as B	mg/L	1.0	0.0113	B	PNA		0.0175	B	PNA		PNA		0.0104	B	PNA		0.0128	J	PNA		0.0055	J
Cadmium as Cd	mg/L	0.005	0.00018	U	0.000087	U	0.0001	U	0.00015	U	0.0003	U	0.0002	U	0.0001	U	0.0025	U	0.0025	U	0.0025	U
Calcium as Ca	mg/L	NA	13.8		14.1		12		11		10.1		10.2		9.36		9.11		8.31		8.630	
Chromium as Cr	mg/L	0.05	0.0254		PNA		0.0029	B	PNA		PNA		0.0031	B	PNA		0.0058	J	PNA		0.0048	J
Cobalt	mg/L	NA	0.00052	U	PNA		0.0004	U	PNA		PNA		0.0006	U	PNA		0.05	U	PNA		0.0500	U
Copper as Cu	mg/L	0.2	0.0024	B	PNA		0.0004	U	PNA		PNA		0.0007	B	PNA		0.0021	J	PNA		0.0250	U
Cyanide as CN	mg/L	0.20	0.01	U	PNA		0.01	U	PNA		PNA		0.01	U	PNA		0.01	U	PNA		0.0100	U
Iron as Fe	mg/L	0.3	0.115		0.171		0.0185	B	0.0619	U	0.0978	B	0.0295	BE	0.0268	U	0.1	U	0.1	U	0.0385	J
Lead as Pb	mg/L	0.025	0.0118		0.0012	B	0.0084		0.0167		0.0014	B	0.0022	U	0.0055		0.004	J	0.005	U	0.0050	U
Magnesium	mg/L	35 #	6.48		6.35		5.66		5.08		4.63	B	4.6	B	4.38	B	4.14		3.88		3.740	
Manganese as Mn	mg/L	0.3	0.0517		0.053		0.0406		0.0488		0.0153		0.01	B	0.0067	BE	0.0034	J	0.01	U	0.0039	J
Mercury as Hg	mg/L	0.0007	0.00011	B	PNA		0.0001	U	PNA		PNA		0.0001	U	PNA		0.0002	U	PNA		0.00020	U
Nickel as Ni	mg/L	0.1	0.0056	B	PNA		0.0044	B	PNA		PNA		0.0027	B	PNA		0.04	U	PNA		0.0068	J
Potassium	mg/L	NA	1.32	B	1.01	B	1.03	B	1.56	B	1.32	B	0.472	U	0.937	B	0.786	J	5	U	0.874	J
Selenium as Se	mg/L	0.01	0.0028	U	PNA		0.0023	U	PNA		PNA		0.0038	U	PNA		0.01	U	PNA		0.0100	U
Silver as Ag	mg/L	0.05	0.00032	U	PNA		0.0002	U	PNA		PNA		0.0022	U	PNA		0.01	U	PNA		0.0100	U
Sodium as Na	mg/L	20	17		15.7		13.2		12.4		13.5		12.2		14.2		13.2		11.7		13.900	
Thallium as Tl	mg/L	0.0005 #	0.0032	U	PNA		0.0019	U	PNA		PNA		0.0038	U	PNA		0.01	U	PNA		0.0100	U
Vanadium	mg/L	NA	0.0004	B	PNA		0.0004	B	PNA		PNA		0.0007	U	PNA		0.05	U	PNA		0.0500	U
Zinc as Zn	mg/L	2 #	0.00044	U	PNA		0.0076	B	PNA		PNA		0.0048	B	PNA		0.02	U	PNA		0.0200	U
Alkalinity tot CaCo3	mg/L	NA	70.4	D	61.9	D	56.1		54.2	D	49.8		45.1		44		40		41.8		38.0	
Chloride as Cl	mg/L	250.0	16.7		16.1		13.2		13.7		13.8		15.4		13.4		11.9		12.7		10.6	
Sulfate as SO4	mg/L	250.0	5	U	5	U	5	U	5	U	5	U	5	U	5	U	3.24	J	5	U	3.0	J
Bromide	mg/L	2 #	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.05	J	0.5	U	0.062	J
BOD5	mg/L	NA	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	1.0	J
COD	mg/L	NA	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	19.2		6.8	J
Color	units	NA	5		PNA		5	U	PNA		PNA		5		PNA		5	U	PNA		5.0	U
Chromium hex as Cr	mg/L	0.05	0.02	U	PNA		0.02	U	PNA		PNA		0.02	U	PNA		0.02	U	PNA		0.020	U
Hardness as CaC03	mg/L	NA	64	D	60	D	53		60	D	100	D	40	D	40		38		35		35.0	
Ammonia as N	mg/L	2.0	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.16	
Nitrite as N	mg/L	NA	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.050	U
Nitrate as N	mg/L	10	0.1	U	0.1		0.1		0.12		0.1	U	0.16		0.18		0.17		0.17		0.20	
Phenols as Phenol	mg/L	0.001	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U	**0.0058**		0.005	U	**0.0428**		0.0050	U
Tot Dissolved Solids	mg/L	NA	120		123		97		97		75		71		81		61		135		63.0	
Tot. Kjeldahl Nitrogen	mg/L	NA	0.1	U	0.1	U	0.1	U	0.21		0.1	U	0.2		1	U	0.1	U	0.12		0.046	J
Tot Organic Carbon	mg/L	NA	1	U	1	U	15.9		1	U	11.6		1	U	0.509		1	U	1.10		0.36	J
Turbidity	NTU	NA	0.0		0.0		0		2.2		0.0		0.0		0.8		2.2		0.1		0.0	
Temperature	deg.C	NA	16.55		12.71		12.57		11.87		12.04		11.35		11.4		11.77		11.98		12.75	
pH	units	6.5-8.5	**6.23**		6.98		7.15		6.62		6.66		**6.32**		**6.37**		6.82		**6.36**		6.75	
Spec. Cond	umho/cm	NA	210		197		191		181		176		137		133		130		133		130	

NOTES:

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6 NYCRR Part 703

= Guidance value, no standard exists.

NA = Not available.

PNA = parameter not analyzed for.

B = This flag is used when the analyte is found in the associated blank as in the sample.

D - Dilution

E - This flag identified compunds whose concentrations exceed the calibration range of the GC/MS instrument for that specific analysis.

F - This flag indicates the results of a filtered metal analysis.

J - The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

U -The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

UJ - The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

R - The sample results are unreliable/unusable. The presence or absence of the analyte cannot be verified.

1.0 = Compound exceeded standard.

1.0 = Compound at standard.

NM = Not Monitored

TOWN OF SOUTHAMPTON
NORTH SEA LANDFILL
TABLE 1
INORGANIC GROUNDWATER QUALITY RESULTS
APRIL 2017

ANALYTICAL PARAMETERS	UNITS	GW STND*	MW-4A															
			April 2012	Oct. 2012	April 2013	Oct. 2013	April 2014	Oct. 2014		April 2015		Oct. 2015		April 2016	Oct. 2016	Apr-17
								Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered			
Aluminum as Al	mg/L	NA	0.146 B	PNA	0.243	PNA	0.253	PNA	PNA	0.271	0.211	PNA	PNA	0.219	PNA	0.242
Antimony as Sb	mg/L	0.003 #	0.0011 U	PNA	0.0012 U	PNA	0.0019 U	PNA	PNA	0.003 U	0.003 U	PNA	PNA	0.06 U	PNA	0.0600 U
Arsenic as As	mg/L	0.025	0.0044 U	PNA	0.0028 U	PNA	0.0011 U	PNA	PNA	0.0033 U	0.0033 U	PNA	PNA	0.01 U	PNA	0.0100 U
Barium	mg/L	1	0.12 B	PNA	0.206	PNA	0.183 B	PNA	PNA	0.158 B	0.144 B	PNA	PNA	0.17 J	PNA	0.128 J
Beryllium as Be	mg/L	0.003	0.0002 B	PNA	0.0002 B	PNA	0.0006 B	PNA	PNA	0.0003 B	0.0004 B	PNA	PNA	0.0004 J	PNA	0.0050 U
Boron as B	mg/L	1.0	0.0241 B	PNA	0.0212 B	PNA	0.0271 B	PNA	PNA	0.0273 B	0.0268 B	PNA	PNA	0.0315 J	PNA	0.0402 J
Cadmium as Cd	mg/L	0.005	0.00018 U	0.0004 B	0.0003 B	0.00015 U	0.0002 B	0.0003 U	0.0003 U	0.0002 U	0.0002 U	0.0002 B	0.0005 B	0.0004 J	0.0025 U	0.00036 J
Calcium as Ca	mg/L	NA	8.36	23.5	13.9	10.3	11.3	11.6	12.2	10.6	10.7 J	14.3	13.3	11.7	12.5	10.100
Chromium as Cr	mg/L	0.05	0.0041 B	PNA	0.0046 B	PNA	0.0042 B	PNA	PNA	0.0218	0.001 U	PNA	PNA	0.01 U	PNA	0.0067 J
Cobalt	mg/L	NA	0.00052 U	PNA	0.0004 U	PNA	0.00019 U	PNA	PNA	0.0006 U	0.0006 U	PNA	PNA	0.05 U	PNA	0.0500 U
Copper as Cu	mg/L	0.2	0.0007 U	PNA	0.0004 U	PNA	0.00076 U	PNA	PNA	0.0022 B	0.0014 B	PNA	PNA	0.0023 J	PNA	0.0250 U
Cyanide as CN	mg/L	0.20	0.01 U	PNA	0.01 U	PNA	0.01 U	PNA	PNA	0.01 U	PNA	PNA	PNA	0.01 U	PNA	0.0100 U
Iron as Fe	mg/L	0.3	0.0571 B	**2.2**	0.0631 B	0.124	0.0796 B	0.127	0.0714 B	0.257 E	0.018 J	0.0268 U	0.0268 U	0.1 U	0.112	0.129
Lead as Pb	mg/L	0.025	0.0057	0.0034	0.0063	0.0105	0.0038 B	0.002 B	0.0016 B	0.0022 U	0.0022 U	0.0044	0.0044 N	0.0028 J	0.005 U	0.0050 U
Magnesium	mg/L	35 #	3.11 B	8.53	4.57 B	3.34 B	3.87 B	3.76 B	3.81 B	3.61 B	3.66 J	4.58 B	4.34 BE	3.85	4.46	3.600
Manganese as Mn	mg/L	0.3	0.0709	**0.33**	0.133	0.0853	0.113	0.086	0.0846	0.122	0.104 J	0.119 E	0.101	0.142	0.105	0.128
Mercury as Hg	mg/L	0.0007	0.0001 U	PNA	0.0001 U	PNA	0.0001 U	PNA	PNA	0.0001 U	0.0001 U	PNA	PNA	0.0002 U	PNA	0.00020 U
Nickel as Ni	mg/L	0.1	0.0038 B	PNA	0.0056 B	PNA	0.0051 B	PNA	PNA	0.0044 B	0.0035 B	PNA	PNA	0.005 J	PNA	0.0040 J
Potassium	mg/L	NA	3.56 B	6.69	4.36 B	4.11 B	3.87 B	4.44 B	4.75 B	3.04 B	2.66 B	3.89 B	2.75 B	4.01 J	5 U	3.340 J
Selenium as Se	mg/L	0.01	0.0028 U	PNA	0.0023 U	PNA	0.0011 U	PNA	PNA	0.0038 U	0.0038 UJ	PNA	PNA	0.01 U	PNA	0.0100 U
Silver as Ag	mg/L	0.05	0.00032 U	PNA	0.0002 U	PNA	0.00043 U	PNA	PNA	0.0022 U	0.0022 U	PNA	PNA	0.01 U	PNA	0.0100 U
Sodium as Na	mg/L	20	15.1	**37.5**	18.3	15.2	**23**	19.3	**20.7**	**25.4**	**26.3 J**	**23.7**	**22.8**	**27**	**22.1**	**31.600**
Thallium as Tl	mg/L	0.0005 #	0.0032 U	PNA	0.0019 U	PNA	0.0013 U	PNA	PNA	0.0038 U	0.0038 U	PNA	PNA	0.01 U	PNA	0.0100 U
Vanadium	mg/L	NA	0.00023 U	PNA	0.0003 U	PNA	0.00039 U	PNA	PNA	0.0007 U	0.0007 U	PNA	PNA	0.05 U	PNA	0.0500 U
Zinc as Zn	mg/L	2 #	0.0005 B	PNA	0.0125 B	PNA	0.017 B	PNA	PNA	0.0118 B	0.0132 U	PNA	PNA	0.0069 J	PNA	0.0052 J
Alkalinity tot CaCo3	mg/L	NA	6.55	8.2	2.2	4.85	6.5	18.4	PNA	6.4	PNA	8.55	PNA	3.5	4.9	4.0
Chloride as Cl	mg/L	250.0	25.3	36	31.5	29.8	41.5	33	PNA	49.1	PNA	44.5	PNA	46.5	41.3	47.0
Sulfate as SO4	mg/L	250.0	12.3	14.4	12	14.9	11.1	14.7	PNA	17.8	PNA	10.5	PNA	13.7	12.2	16.6
Bromide	mg/L	2 #	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	PNA	0.5 U	PNA	0.5 U	PNA	0.02 J	0.5 U	0.030 J
BOD5	mg/L	NA	2 U	2 U	2 U	2 U	2 U	2 U	PNA	2 U	PNA	2 U	PNA	2 U	2 U	1.0 J
COD	mg/L	NA	10 U	10 U	10 U	10 U	10 U	10 U	PNA	10 U	PNA	10 U	PNA	10 U	10 U	10.0 U
Color	units	NA	5 U	PNA	5 U	PNA	5 U	PNA	PNA	5 U	PNA	PNA	PNA	5 U	PNA	5.0
Chromium hex as Cr	mg/L	0.05	0.02 U	PNA	0.02 U	PNA	0.02 U	PNA	PNA	0.02 U	PNA	PNA	PNA	0.02 U	PNA	0.020 U
Hardness as CaC03	mg/L	NA	35	45	52 D	48 D	40 D	64 D	PNA	40 D	PNA	56	PNA	42	45	40.0
Ammonia as N	mg/L	2.0	0.1 U	0.1 U	0.1 U	0.1 U	0.1	0.1 U	PNA	0.1 U	PNA	0.1 U	PNA	0.2	0.1 U	0.099 J
Nitrite as N	mg/L	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	PNA	0.1 U	PNA	0.1 U	PNA	0.1 U	0.05 U	0.050 U
Nitrate as N	mg/L	10	4.3 D	7.03 D	12.2 D	5.57 D	8.25 D	4.72 D	PNA	4.6 D	PNA	9.05	PNA	7.53 D	8.9	5.6
Phenols as Phenol	mg/L	0.001	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	PNA	0.005 U	PNA	**0.008**	PNA	0.005 U	**0.0068**	0.0050 U
Tot Dissolved Solids	mg/L	NA	103	153	175	124	142	121	PNA	115	PNA	146	PNA	128	127	137
Tot. Kjeldahl Nitrogen	mg/L	NA	0.1 U	0.1 U	0.1 U	0.14	0.18	0.1 U	PNA	0.1 U	PNA	1 U	PNA	0.1 U	0.1 U	0.10 U
Tot Organic Carbon	mg/L	NA	1 U	1 U	1.9	1.6	1 U	5.3	PNA	0.1 U	PNA	0.958	PNA	1 U	1.00 U	0.84 J
Turbidity	NTU	NA	0.4	13.2	0.1	3.8	1.1	0	PNA	0	PNA	0.29	PNA	2.14	0.2	0.0
Temperature	deg.C	NA	11.85	13.3	11.17	13.66	10.41	12.88	PNA	10.57	PNA	12.97	PNA	12.34	13.46	11.63
pH	units	6.5-8.5	**5.42**	**5.71**	**6.04**	**5.35**	**5.61**	**5.54**	PNA	**5.07**	PNA	**5.32**	PNA	**4.86**	**5.16**	**4.93**
Spec. Cond	umho/cm	NA	186	231	268	205	244	255	PNA	221	PNA	230	PNA	257	251	270

NOTES:

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6 NYCRR Part 703

= Guidance value, no standard exists.

NA = Not available.

PNA = parameter not analyzed for.

B = This flag is used when the analyte is found in the associated blank as in the sample.

D - Dilution

E - This flag identified compunds whose concentrations exceed the calibration range of the GC/MS instrument for that specific analysis.

F - This flag indicates the results of a filtered metal analysis.

J - The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

N - Matrix spike sample recovery not within control limits.

U -The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

UJ - The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

R - The sample results are unreliable/unusable. The presence or absence of the analyte cannot be verified.

1.0 = Compound exceeded standard.

1.0 = Compound at standard.

NM = Not Monitored

TOWN OF SOUTHAMPTON
NORTH SEA LANDFILL
TABLE 1
INORGANIC GROUNDWATER QUALITY RESULTS
APRIL 2017

ANALYTICAL PARAMETERS	UNITS	GW STND*	MW-4B																	
			April 2012	Oct. 2012	April 2013	Oct. 2013	April 2014	Oct. 2014		April 2015		Oct. 2015		April 2016	Oct. 2016	Apr-17				
								Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered							
Aluminum as Al	mg/L	NA	0.0287 B	PNA	0.0095 U	PNA	0.0511 B	PNA	PNA	0.0059 U	0.024 B	PNA	PNA	0.2 U	PNA	0.200 U				
Antimony as Sb	mg/L	0.003 #	0.0011 U	PNA	0.0012 U	PNA	0.0019 U	PNA	PNA	0.003 U	0.003 U	PNA	PNA	0.06 U	PNA	0.0600 U				
Arsenic as As	mg/L	0.025	0.0044 U	PNA	0.0028 U	PNA	0.0024 B	PNA	PNA	0.0049 B	0.0034 B	PNA	PNA	0.01 U	PNA	0.0100 U				
Barium	mg/L	1	0.0921 B	PNA	0.0662 B	PNA	0.0921 B	PNA	PNA	0.0728 B	0.0595 B	PNA	PNA	0.0578 J	PNA	0.0403 J				
Beryllium as Be	mg/L	0.003	0.00012 U	PNA	0.0001 U	PNA	0.00014 U	PNA	PNA	0.001 U	0.0002 B	PNA	PNA	0.005 U	PNA	0.0050 U				
Boron as B	mg/L	1.0	0.0749 B	PNA	0.0761 B	PNA	0.0779 B	PNA	PNA	0.0714 B	0.0634 B	PNA	PNA	0.0703 J	PNA	0.0582				
Cadmium as Cd	mg/L	0.005	0.00018 U	0.000087 U	0.0001 U	0.00015 U	0.0002 B	0.0003 U	0.0003 U	0.0002 U	0.0002 U	0.0001 U	0.0001 U	0.0004 J	0.0025 U	0.00013 J				
Calcium as Ca	mg/L	NA	19	36.2	21.4	21.4	19.8	20.7	22	20.9	18.8	21.7	19.8	20.8	19.6	18.700				
Chromium as Cr	mg/L	0.05	0.0051 B	PNA	0.003 B	PNA	0.0254	PNA	PNA	0.0021 B	0.0011 U	PNA	PNA	0.01 UJ	PNA	0.0100 U				
Cobalt	mg/L	NA	0.0029 B	PNA	0.0029 B	PNA	0.0041 B	PNA	PNA	0.0037 B	0.0034 B	PNA	PNA	0.0041 J	PNA	0.0024 J				
Copper as Cu	mg/L	0.2	0.0016 B	PNA	0.0004 U	PNA	0.0037 B	PNA	PNA	0.0046 B	0.0016 B	PNA	PNA	0.0021 U	PNA	0.0250 U				
Cyanide as CN	mg/L	0.20	0.01 U	PNA	0.01 U	PNA	0.01 U	PNA	PNA	0.01 U	PNA	PNA	PNA	0.01 U	PNA	0.0100 U				
Iron as Fe	mg/L	0.3	**4.94**	**11.7**	**4.1**	**0.854**	**11.5**	0.133	0.0432 B	**8.06**	**1.29**	**8.37**	**1.05**	**7.67**	**7.66**	**1.280**				
Lead as Pb	mg/L	0.025	0.0099	0.0013 B	0.007	0.0131	0.0028 B	0.0014 B	0.0021 B	0.0022 U	0.0022 U	0.0055	0.0042 N	0.0029 J	0.005 U	0.0050 U				
Magnesium	mg/L	35 #	9.7	17.9	11.2	11.3	9.62	10.7	11	10.3	9.49	11.2	10.3 E	10.3	9.83	9.470				
Manganese as Mn	mg/L	0.3	**0.87**	**2.11**	**0.815**	0.212	**1.64**	0.215	0.204	**1.45**	**1.22**	**1.62**	**1.34**	**1.14**	**1.19**	**0.343**				
Mercury as Hg	mg/L	0.0007	0.0001 U	PNA	0.0001 U	PNA	0.0001 U	PNA	PNA	0.0001 U	0.0001 U	PNA	PNA	0.0002 U	PNA	0.00020 U				
Nickel as Ni	mg/L	0.1	0.0045 B	PNA	0.0057 B	PNA	0.0052 B	PNA	PNA	0.0037 B	0.0035 B	PNA	PNA	0.0033 J	PNA	0.0041 J				
Potassium	mg/L	NA	6.3	8.53	4.83 B	2.78 B	5.97	1.88 B	1.73 B	3.91 B	3.19 B	3.98 B	2.69 B	3.25 J	5 U	2.040 J				
Selenium as Se	mg/L	0.01	0.0028 U	PNA	0.0031 B	PNA	0.0011 U	PNA	PNA	0.0038 U	0.0038 U	PNA	PNA	0.01 U	PNA	0.0100 U				
Silver as Ag	mg/L	0.05	0.00032 U	PNA	0.0002 U	PNA	0.00043 U	PNA	PNA	0.0022 U	0.0022 U	PNA	PNA	0.01 U	PNA	0.0100 U				
Sodium as Na	mg/L	20	**20.9**	**35**	**21.3**	18.7	**21.6**	19.5	**21.5**	**20.4**	18.9	**21.9**	**21.7**	19.8 J	18.3	18.100				
Thallium as Tl	mg/L	0.0005 #	0.0032 U	PNA	0.0019 U	PNA	0.0014 B	PNA	PNA	0.0038 U	0.0038 U	PNA	PNA	0.01 U	PNA	0.0100 U				
Vanadium	mg/L	NA	0.0005 B	PNA	0.0003 U	PNA	0.0017 B	PNA	PNA	0.0007 U	0.0007 U	PNA	PNA	0.05 U	PNA	0.0500 U				
Zinc as Zn	mg/L	2 #	0.00044 U	PNA	0.0073 B	PNA	0.0174 B	PNA	PNA	0.006 B	0.123 B	PNA	PNA	0.02 U	PNA	0.0200 U				
Alkalinity tot CaCo3	mg/L	NA	119 D	92.2 D	110 D	111 D	107	106 D	PNA	93.6 D	PNA	92.6	PNA	101	93	72.4				
Chloride as Cl	mg/L	250.0	20.4	19.6	26.2	22	23	20.7	PNA	28.3	PNA	35.5	PNA	21.1	27.3	15.2				
Sulfate as SO4	mg/L	250.0	9.25	10.3	8.34	7.45	11.3	6.76	PNA	12.7	PNA	10.4	PNA	11.1 J	10.7	9.9				
Bromide	mg/L	2 #	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	PNA	0.5 U	PNA	0.5 U	PNA	0.1 J	0.5 U	0.077 J				
BOD5	mg/L	NA	2 U	2 U	2 U	2 U	2 U	2 U	PNA	2 U	PNA	2 U	PNA	2 U	2 U	1.0 J				
COD	mg/L	NA	10 U	10 U	10 U	10 U	11.4	10 U	PNA	10 U	PNA	10 U	PNA	10 U	10.9	8.8 J				
Color	units	NA	90 D	PNA	70 D	PNA	100 D	PNA	PNA	75	PNA	PNA	PNA	15	PNA	25.0				
Chromium hex as Cr	mg/L	0.05	0.02 U	PNA	0.02 U	PNA	0.02 U	PNA	PNA	0.02 U	PNA	PNA	PNA	0.02 UJ	PNA	0.020 U				
Hardness as CaC03	mg/L	NA	104 D	94 D	112 D	130 D	92 D	100 D	PNA	140 D	PNA	120	PNA	86 D	86	85.0				
Ammonia as N	mg/L	2.0	**2.84 D**	**2.82**	**3.95 D**	0.1 U	**5.32 D**	0.1 U	PNA	**2.98**	PNA	1.92	PNA	1.7	**2.1**	0.34				
Nitrite as N	mg/L	NA	0.1 U	0.1 U	0.1 U	0.10 U	0.10 U	0.1 U	PNA	0.1 U	PNA	0.1 U	PNA	0.1 U	0.05 U	0.050 U				
Nitrate as N	mg/L	10	0.1 U	0.1 U	0.14	0.49	0.11	0.22	PNA	0.1 U	PNA	0.1 U	PNA	0.1 U	0.052	0.11				
Phenols as Phenol	mg/L	0.001	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	PNA	0.005 U	PNA	**0.0059**	PNA	0.005 U	**0.0115**	0.0050 U				
Tot Dissolved Solids	mg/L	NA	149	147	159	156	154	133	PNA	140	PNA	144	PNA	144	152	133				
Tot. Kjeldahl Nitrogen	mg/L	NA	6.3 D	3.39 D	5.94 D	0.32	5.95 D	0.1 U	PNA	3.05	PNA	1.64	PNA	1.27 J	1.7	0.83				
Tot Organic Carbon	mg/L	NA	2.1	1.8	31.1	2.4	3	25.7	PNA	2.1	PNA	2.01	PNA	1.8	1.87	1.3				
Turbidity	NTU	NA	0	22.4	0	1.8	0	0	PNA	0	PNA	0.37	PNA	8.37	0	0.0				
Temperature	deg.C	NA	12.65	13.4	13.19	13.41	11.86	12.95	PNA	12.14	PNA	12.91	PNA	14.34	13.02	12.75				
pH	units	6.5-8.5	6.5	6.59	7.36	**6.37**	6.6	6.55	PNA	**6.19**	PNA	6.66	PNA	**6.32**	6.6	6.51				
Spec. Cond	umho/cm	NA	354	316	362	314	359	314	PNA	292	PNA	310	PNA	290	314	250				

NOTES:

* = NYSDEC, Class GA Groundwater Standards
6 NYCRR Part 703

= Guidance value, no standard exists.

NA = Not available.

PNA = parameter not analyzed for.

B = This flag is used when the analyte is found in the associated blank as in the sample.

D - Dilution

E - This flag identified compunds whose concentrations exceed the calibration range of the GC/MS instrument for that specific analysis.

F - This flag indicates the results of a filtered metal analysis.

J - The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

N - Matrix spike sample recovery not within control limits.

U -The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

UJ - The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

R - The sample results are unreliable/unusable. The presence or absence of the analyte cannot be verified.

1.0 = Compound exceeded standard.

1.0 = Compound at standard.

NM = Not Monitored

TOWN OF SOUTHAMPTON
NORTH SEA LANDFILL
TABLE 1
INORGANIC GROUNDWATER QUALITY RESULTS
APRIL 2017

ANALYTICAL PARAMETERS	UNITS	GW STND*	MW-4C															
			April 2012	Oct. 2012	April 2013	Oct. 2013	April 2014	Oct. 2014		April 2015		Oct. 2015		April 2016	Oct. 2016	Apr-17
								Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered			
Aluminum as Al	mg/L	NA	0.0267 B	PNA	0.0126 B	PNA	0.0354 B	PNA	PNA	0.0059 U	0.132	PNA	PNA	0.2 U	PNA	0.200 U
Antimony as Sb	mg/L	0.003 #	0.0011 U	PNA	0.0012 U	PNA	0.0019 U	PNA	PNA	0.0069 B	0.003 U	PNA	PNA	0.06 U	PNA	0.0600 U
Arsenic as As	mg/L	0.025	0.0044 U	PNA	0.0028 U	PNA	0.0046 B	PNA	PNA	0.0033 U	0.0033 U	PNA	PNA	0.01 U	PNA	0.0100 U
Barium	mg/L	1	0.0393 B	PNA	0.0391 B	PNA	0.0504 B	PNA	PNA	0.0468 B	0.0424 B	PNA	PNA	0.0519 J	PNA	0.0532 J
Beryllium as Be	mg/L	0.003	0.00012 U	PNA	0.0001 U	PNA	0.00014 U	PNA	PNA	0.0001 U	0.0001 U	PNA	PNA	0.005 U	PNA	0.0050 U
Boron as B	mg/L	1.0	0.0072 B	PNA	0.0108 B	PNA	0.0083 B	PNA	PNA	0.0069 B	0.0077 B	PNA	PNA	0.0116 J	PNA	0.0500 U
Cadmium as Cd	mg/L	0.005	0.00018 U	0.000087 U	0.0001 U	0.00015 U	0.00011 U	0.0003 U	0.0003 U	0.0002 U	0.0002 U	0.0001 U	0.0001 U	0.0025 U	0.0025 U	0.0025 U
Calcium as Ca	mg/L	NA	21.4	30.6	23.2	22.5	26.2	30.1	31.9 J	27	25	29.1	27.8	29.7	30.4	28.000
Chromium as Cr	mg/L	0.05	**0.258**	PNA	**0.187**	PNA	**1.31**	PNA	PNA	**0.184**	0.0018 B	PNA	PNA	**0.396**	PNA	**0.300**
Cobalt	mg/L	NA	0.0057 B	PNA	0.005 B	PNA	0.0228 B	PNA	PNA	0.0049 B	0.0016 B	PNA	PNA	0.0077 J	PNA	0.0122 J
Copper as Cu	mg/L	0.2	0.0058 B	PNA	0.0043 B	PNA	0.0225 B	PNA	PNA	0.0027 B	0.0004 U	PNA	PNA	0.0053 J	PNA	0.0250 U
Cyanide as CN	mg/L	0.20	0.01 U	PNA	0.01 U	PNA	0.01 U	PNA	PNA	0.01 U	PNA	PNA	PNA	0.01 U	PNA	0.0100 U
Iron as Fe	mg/L	0.3	**0.809**	**1.92**	**0.77**	0.184	**3.97**	**0.873**	0.0853 BJ	**0.715**	0.0423 B	**1.5**	0.0268 U	**1.68**	**0.734**	**1.500**
Lead as Pb	mg/L	0.025	0.0123	0.00096 U	0.008	0.0129	0.0097	0.0016 BJ	0.0024 B	0.0022 U	0.0022 B	0.0054	0.0049 N	0.0036 J	0.005 U	0.0050 U
Magnesium	mg/L	35 #	9.85	13.7	10.6	10.6	11.9	13.4	14.1 J	11.9	11.5	13.3	12.8 E	13.3	13.8	12.500
Manganese as Mn	mg/L	0.3	0.0444	0.0778	0.0381	0.0048 B	0.154	0.0436	0.0362 J	0.0407	0.0336	0.0662 E	0.0307	0.0561	0.0368	0.0789
Mercury as Hg	mg/L	0.0007	0.0001 U	PNA	0.0001 U	PNA	0.0001 U	PNA	PNA	0.0001 U	0.0001 U	PNA	PNA	0.0002 U	PNA	0.00020 U
Nickel as Ni	mg/L	0.1	**0.206**	PNA	**0.344**	PNA	**0.359**	PNA	PNA	**0.273**	**0.233**	PNA	PNA	**0.349**	PNA	**0.426**
Potassium	mg/L	NA	1.53 B	1.56 B	1.33 B	1.92 B	1.6 B	1.95 B	1.96 B	1.09 B	0.691 B	1.5 B	0.562 B	1.4 J	5 U	1.750 J
Selenium as Se	mg/L	0.01	0.0028 U	PNA	0.0023 U	PNA	0.0011 U	PNA	PNA	0.0038 U	0.0038 U	PNA	PNA	0.01 U	PNA	0.0100 U
Silver as Ag	mg/L	0.05	0.00032 U	PNA	0.0002 U	PNA	0.00043 U	PNA	PNA	0.0022 U	0.0022 U	PNA	PNA	0.01 U	PNA	0.0100 U
Sodium as Na	mg/L	20	**22**	**30.8**	**24.9**	**23.7**	**28.7**	**36.1**	**37.3 J**	**28.8**	**27.3**	**32.7**	**32.9**	**34.2**	**39.3**	**39.300**
Thallium as Tl	mg/L	0.0005 #	0.0032 U	PNA	0.0019 U	PNA	0.0013 U	PNA	PNA	0.0038 U	0.0038 U	PNA	PNA	0.01 U	PNA	0.0100 U
Vanadium	mg/L	NA	0.0003 B	PNA	0.0003 U	PNA	0.0033 B	PNA	PNA	0.0007 U	0.0007 U	PNA	PNA	0.05 U	PNA	0.00083 J
Zinc as Zn	mg/L	2 #	0.00044 U	PNA	0.0129 B	PNA	0.0178 B	PNA	PNA	0.0057 B	0.0139 B	PNA	PNA	0.02 U	PNA	0.0200 U
Alkalinity tot CaCo3	mg/L	NA	36.1 D	35.2 D	33.2	36.9	33.9	38	PNA	38.5	PNA	45	PNA	41.9	44	34.2
Chloride as Cl	mg/L	250.0	72 D	94 D	82.6 D	85.7 D	100 D	135 D	PNA	107 D	PNA	113	PNA	99 D	140	106
Sulfate as SO4	mg/L	250.0	5 U	5 U	5 U	5 U	5 U	5 U	PNA	5 U	PNA	67.6	PNA	3.67 J	5 U	4.2 J
Bromide	mg/L	2 #	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	PNA	0.5 U	PNA	0.5 U	PNA	0.08 J	0.5 U	0.075 J
BOD5	mg/L	NA	2 U	2 U	2 U	2 U	2 U	2 U	PNA	2 U	PNA	2 U	PNA	2 U	2 U	1.0 J
COD	mg/L	NA	10 U	10 U	10 U	10 U	10 U	10 U	PNA	10 U	PNA	10 U	PNA	10 U	19.2	21.3
Color	units	NA	10	PNA	15	PNA	5 U	PNA	PNA	15	PNA	PNA	PNA	5	PNA	25.0
Chromium hex as Cr	mg/L	0.05	0.02 U	PNA	0.02 U	PNA	0.02 U	PNA	PNA	0.02 U	PNA	PNA	PNA	0.02 U	PNA	0.0200 U
Hardness as CaC03	mg/L	NA	102 D	106 D	116 D	130 D	108 D	160 D	PNA	120	PNA	120 D	PNA	114 D	120	170
Ammonia as N	mg/L	2.0	0.1 U	0.1 U	0.1 U	0.1 U	0.15	0.1 U	PNA	0.1 U	PNA	0.1 U	PNA	0.12	0.1	0.13
Nitrite as N	mg/L	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	PNA	0.1 U	PNA	0.1 U	PNA	0.1 U	0.05 U	0.0500 U
Nitrate as N	mg/L	10	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	PNA	0.1 U	PNA	0.1 U	PNA	0.1 U	0.05 U	0.044 J
Phenols as Phenol	mg/L	0.001	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	PNA	0.005 U	PNA	0.005 U	PNA	0.005 U	**0.0088**	0.0010 J
Tot Dissolved Solids	mg/L	NA	223	268	250	234	298	337	PNA	258	PNA	227	PNA	239	305	309
Tot. Kjeldahl Nitrogen	mg/L	NA	0.1 U	0.1 U	0.1 U	0.2	0.29	0.1 U	PNA	0.18	PNA	0.1 U	PNA	0.1 U	0.1 U	0.13
Tot Organic Carbon	mg/L	NA	3.2	1 U	9.9	1 U	1 U	9.6	PNA	1 U	PNA	0.5 U	PNA	1 1	1.00 U	0.25 J
Turbidity	NTU	NA	7.1	48.5	1.4	1.3	1.5	0	PNA	0	PNA	10.1	PNA	13.6	0.8	0.0
Temperature	deg.C	NA	12.55	13.04	12.85	13.27	11.54	12.73	PNA	11.88	PNA	12.68	PNA	14.7	12.97	13.61
pH	units	6.5-8.5	6.71	6.7	8.08	6.7	7.95	6.97	PNA	6.57	PNA	6.59	PNA	7.01	6.94	6.84
Spec. Cond	umho/cm	NA	354	414	391	381	311	1	PNA	383	PNA	430	PNA	408	546	479

NOTES:

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6 NYCRR Part 703

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TOWN OF SOUTHAMPTON
NORTH SEA LANDFILL
TABLE 1
INORGANIC GROUNDWATER QUALITY RESULTS
APRIL 2017

ANALYTICAL	UNITS	GW	MW-11A																					
			April 2012		Oct. 2012		April 2013		Oct. 2013		April 2014		Oct. 2014		April 2015		Oct. 2015		April 2016			April 2017	
PARAMETERS		STND*	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered	Oct. 2016	Unfiltered	Filtered
Aluminum as Al	mg/L	NA	0.0865 B	0.0308 B	0.133 B	0.0253 B	0.0179 B	0.0308 B	0.0049 U	0.0049 U	0.0329 B	0.0224 U	0.153 B	0.0276 B	0.0059 U	0.0952 B	0.0179 B	0.0145 B	0.2 U	0.2000 U	0.200 U	1.010	0.200 U
Antimony as Sb	mg/L	0.003 #	0.0011 U	0.0011 U	0.007 B	0.0044 B	0.0016 B	0.0013 BJ	0.002 U	0.0020 U	0.0019 U	0.0019 U	0.001 U	0.0010 U	0.003 U	0.003 U	**0.0059 B**	0.0006 U	0.06 U	0.060 U	0.0600 U	0.0600 U	0.0600 U
Arsenic as As	mg/L	0.025	0.0121	0.0044 U	**0.0299**	0.0015 U	0.0044 B	0.0028 U	0.0038 B	0.0010 U	0.0021 B	0.0011 U	0.0568	0.0009 U	0.0079 B	0.0033 U	0.0022 U	0.0022 U	0.01 U	0.0100 U	0.0115	**0.0759**	0.0100 U
Barium	mg/L	1	0.212	0.1570 B	0.497	0.1470 B	0.164 B	0.1410 B	0.16 B	0.0784 B	0.089 B	0.0714 B	1.77	0.0767 B	0.267	0.0686 B	0.236	0.1340 B	0.24	0.0694 J	0.301	**1.100**	0.0416 J
Beryllium as Be	mg/L	0.003	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.0001 U	0.00090 B	0.00022 U	0.00022 U	0.00014 U	0.00014 U	0.0002 U	0.00020 U	0.0001 U	0.0005 B	0.0002 U	0.00050 B	0.005 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
Boron as B	mg/L	1.0	0.0194 B	0.0342 B	0.0639 B	0.0319 B	0.0419 BR	0.0508 BR	0.0041 U	0.0041 U	0.0304 B	0.0360 B	0.0495 B	0.0404 B	0.0323 B	0.0399 B	0.0376 B	0.0387 B	0.0512 J	0.0551 J	0.0500 U	0.0387 J	0.0378 J
Cadmium as Cd	mg/L	0.005	0.0004 B	0.00020 B	0.000087 U	0.00009 U	0.0001 U	0.00080 B	0.00015 U	0.00015 U	0.0004 B	0.00020 B	0.113	0.00030 U	0.0025 B	0.0005 B	0.0001 U	0.00060 B	0.0035	0.0002 J	0.0025 U	**0.0278**	0.000063 J
Calcium as Ca	mg/L	NA	30.7	27.5	97.2	30.6	42.6	41.2	28.8	26.1	25.6	24.4	66.1	57.4	37.5	36.6 E	44.6	41.4	47.7	46.5	54.500	56.600	35.500
Chromium as Cr	mg/L	0.05	0.0283	0.0053 B	0.0149 E	0.0039 B	0.0046 B	0.0033 B	0.0056 B	0.0006 B	0.002 B	0.0011 U	**0.103**	0.0027 B	0.0411	0.0011 U	**0.0091 B**	0.0005 U	0.01 U	0.01 U	0.0100 U	0.0418 J	0.0100 U
Cobalt	mg/L	NA	0.0166 B	0.0132 B	0.0532	0.0159 B	0.0107 B	0.0113 B	0.025 B	0.0151 B	0.0384 B	0.0338 B	0.0312 B	0.0011 B	0.0234 B	0.0119 B	0.0144 B	0.0099 B	0.0127 J	0.0058 J	0.0500 U	0.0183 J	0.0500 U
Copper as Cu	mg/L	0.2	0.0034 B	0.0007 U	0.00052 U	0.0005 U	0.0004 U	0.0016 B	0.0007 U	0.0007 U	0.0052 B	0.0014 B	0.069	0.0039 B	0.0562	0.0019 B	0.0253	0.0528 *	0.0317	0.0203 J	0.0532	0.0707	0.0179 J
Cyanide as CN	mg/L	0.20	0.01 U	PNA	PNA	PNA	0.01 U	PNA	PNA	PNA	0.01 U	PNA	PNA	PNA	0.01 U	PNA	PNA	PNA	0.01 U	PNA	PNA	0.0100 U	PNA
Iron as Fe	mg/L	0.3	**46.1**	**7.68**	**120**	**5.59**	**22.4**	**4.54**	**38.1**	0.0619 U	**13.4**	0.1460	**1,020**	**2.4**	**117 E**	0.0508 B	**54.1**	0.0268 U	**63**	0.0747 J	**96.500**	**775.000**	0.100 U
Lead as Pb	mg/L	0.025	0.0132	0.0069	0.00096 U	0.00096 U	0.0049	0.0064	0.00072 U	0.0024 BJ	0.0041 B	0.0149	0.13 U	0.0013 U	0.0022 U	0.0033	0.0065	0.0040 N	0.0017 J	0.0029 J	0.0050 U	0.0193	0.0050 U
Magnesium	mg/L	35 #	12.3	11.40	33.6	10.6	15.8	15.00	10.5	9.70	9.44	9.03	14.5	15.20	10.5	11.4 E	16.9	16.00 E	15.7	16.0	19.000	11.200	9.920
Manganese as Mn	mg/L	0.3	**2.56**	**2.15**	**7.33**	**2.27**	**2.02**	**1.83**	**1.85**	**0.974**	**1.08**	**0.871**	**70.9**	**1.13**	**5.14**	**1.32 E**	**3.98 E**	**2.49**	**4.12**	**2.13**	**3.550**	**35.900**	0.0346
Mercury as Hg	mg/L	0.0007	0.0001 B	0.0001 U	0.0001 U	0.0001 U	0.0001 U	0.0001 U	0.0001 U	0.0001 U	0.0001 U	0.0001 U	0.0001 U	0.0001 U	0.0001 U	0.0001 U	0.0001 U	0.0001 UN	0.0002 U	0.0002 U	0.00020 U	0.00020 U	0.00020 U
Nickel as Ni	mg/L	0.1	0.0107 B	0.0073 B	0.0118 B	0.0056 B	0.0045 B	0.0056 B	0.0181 B	0.0150 B	0.0198 B	0.0215 B	0.0138 B	0.0038 B	0.0038 B	0.008 B	0.0051 B	0.0079 B	0.0036 J	0.0066 J	0.0400 U	0.0400 U	0.0070 J
Potassium	mg/L	NA	6.25	5.97	11.2	3.74 B	5.05 J	5.10 J	4.83 B	4.29 B	3.67 B	3.85 B	5.5	4.88 B	4.12 B	3.71 B	6.43	5.10	4.95 J	4.37 J	7.060	14.300	3.480 J
Selenium as Se	mg/L	0.01	0.0028 U	0.0028 U	0.0022 B	0.0021 U	0.0023 UJ	0.0023 U	0.0034 B	0.0018 U	0.0011 U	0.0026 B	**0.32 B**	0.0014 B	0.0038 U	0.0038 U	0.0022 U	0.0022 UN	0.01 U	0.0072 J	0.0100 U	0.0085 J	0.0100 U
Silver as Ag	mg/L	0.05	0.00032 U	0.00032 U	0.00098 B	0.00029 U	0.0002 U	0.00045 B	0.0023 B	0.00043 U	0.00043 U	0.00043 U	0.0151	0.00070 U	0.0137	0.0022 U	0.0104	0.00200 BN	0.0064 J	0.01 U	0.0100 U	0.0100 U	0.0100 U
Sodium as Na	mg/L	20	12.1	11.5	**40.5**	12.8	13.9	12.9	7.79	8.26	8.54	8.34	9.16	9.25	10.8	11.4 E	10.3	9.29	13.9	13.7	12.200	18.700	9.950
Thallium as Tl	mg/L	0.0005 #	0.0032 U	0.0032 U	0.0029 U	0.0029 U	0.0019 U	0.0019 U	0.0047 B	0.0042 BJ	0.0013 U	0.0013 U	**0.0252**	0.0010 U	0.0038 U	0.0038 U	**0.0149**	**0.0086 B**	**0.0053 J**	0.01 U	0.0100 U	**0.0438 J**	0.0100 U
Vanadium	mg/L	NA	0.0008 B	0.00023 U	0.0005 B	0.00018 U	0.0003 U	0.00030 U	0.00028 U	0.00028 U	0.00039 U	0.00039 U	0.0007 U	0.0007 U	0.0007 U	0.0007 U	0.0028 U	0.0028 U	0.05 U	0.05 U	0.0500 U	0.0206 J	0.0500 U
Zinc as Zn	mg/L	2 #	0.0171 B	0.0069 B	0.0614	0.0163 B	0.0103 B	0.0129 B	0.0299	0.0188 BJ	0.0217	0.0117 B	0.178	0.0498	0.0463	0.0172 E	0.0497	0.0391 *	0.023	0.0065 J	0.0250	0.0664	0.0508
Alkalinity tot CaCo3	mg/L	NA	118 D	PNA	111 D	PNA	174 D	PNA	104 D	PNA	96.8	PNA	234 D	PNA	120 D	PNA	170 DH	PNA	168 D	PNA	205	135	PNA
Chloride as Cl	mg/L	250.0	16.4	PNA	27.3	PNA	14.8	PNA	11.8	PNA	12.4	PNA	13.5	PNA	14.5	PNA	11.2	PNA	13.8	PNA	12.1	14.2	PNA
Sulfate as SO4	mg/L	250.0	21.6	PNA	32.9	PNA	23.1	PNA	18	PNA	7.03	PNA	27.2	PNA	10.3	PNA	6.1	PNA	18.5	PNA	5.2	12.2	PNA
Bromide	mg/L	2 #	0.5 U	PNA	0.5 U	PNA	0.5 U	PNA	0.5 U	PNA	0.5 U	PNA	0.5 U	PNA	0.5 U	PNA	0.5 U	PNA	0.5 U	PNA	0.5 U	0.037 J	PNA
BOD5	mg/L	NA	2 U	PNA	2 U	PNA	2 U	PNA	2 U	PNA	8 S	PNA	13	PNA	2 U	PNA	2 U	PNA	4 U	PNA	2 U	2.3 J	PNA
COD	mg/L	NA	10 U	PNA	10 U	PNA	10 U	PNA	10 U	PNA	10 U	PNA	24.2	PNA	10 U	PNA	10 U	PNA	10 U	PNA	17.2	85.8	PNA
Color	units	NA	20	PNA	PNA	PNA	50 D	PNA	PNA	PNA	10	PNA	PNA	PNA	45	PNA	PNA	PNA	5 U	PNA	PNA	300	PNA
Chromium hex as Cr	mg/L	0.05	0.02 U	PNA	PNA	PNA	0.02 U	PNA	PNA	PNA	0.02 U	PNA	PNA	PNA	0.02 U	PNA	PNA	PNA	0.2 UD	PNA	PNA	0.020 U	PNA
Hardness as CaC03	mg/L	NA	144 D	PNA	164 D	PNA	190 D	PNA	132 D	PNA	164 D	PNA	500 D	PNA	150 D	PNA	60 DH	PNA	136 D	PNA	240	150	PNA
Ammonia as N	mg/L	2.0	0.3	PNA	0.55	PNA	0.32	PNA	0.15	PNA	0.23	PNA	0.53	PNA	0.25	PNA	0.97	PNA	0.71	PNA	0.39	0.54	PNA
Nitrite as N	mg/L	NA	0.1 U	PNA	0.1 U	PNA	0.1 U	PNA	0.1 U	PNA	0.1 U	PNA	0.1 U	PNA	0.1 U	PNA	0.1 U	PNA	0.1 U	PNA	0.1 U	0.050 U	PNA
Nitrate as N	mg/L	10	0.16	PNA	0.28	PNA	0.1 U	PNA	0.18	PNA	0.11	PNA	0.19	PNA	0.24	PNA	0.1	PNA	0.25	PNA	1.1	0.50	PNA
Phenols as Phenol	mg/L	0.001	0.005 U	PNA	0.005 U	PNA	0.005 U	PNA	0.005 U	PNA	0.005 U	PNA	0.005 U	PNA	0.005 U	PNA	0.005 U	PNA	0.005 U	PNA	**0.0057**	**0.0062 J**	PNA
Tot Dissolved Solids	mg/L	NA	177	PNA	213	PNA	232	PNA	166	PNA	137	PNA	170	PNA	167	PNA	215	PNA	224	PNA	210	186	PNA
Tot. Kjeldahl Nitrogen	mg/L	NA	0.64	PNA	0.97	PNA	0.44	PNA	0.7	PNA	0.63	PNA	1.18	PNA	0.62	PNA	0.85	PNA	0.73	PNA	0.64	2.7	PNA
Tot Organic Carbon	mg/L	NA	1.5	PNA	2.1	PNA	45.4	PNA	2.5	PNA	1.4	PNA	39.8	PNA	3.8	PNA	3.36	PNA	6.3	PNA	3.81	13.8	PNA
Turbidity	NTU	NA	172	PNA	44.8	PNA	79.9	PNA	292	PNA	23.6	PNA	>1,000	PNA	541	PNA	935	PNA	1000	PNA	1000	>1,000	PNA
Temperature	deg.C	NA	13.94	PNA	13.79	PNA	13.86	PNA	14.24	PNA	12.39	PNA	13.55	PNA	12.66	PNA	13.73	PNA	13.11	PNA	13.63	13.76	PNA
pH	units	6.5-8.5	**6.01**	PNA	**6.19**	PNA	6.7	PNA	**6.19**	PNA	**5.94**	PNA	**6.04**	PNA	**6.27**	PNA	**6.11**	PNA	6.62	PNA	**6.33**	**6.47**	PNA
Spec. Cond	umho/cm	NA	385	PNA	406	PNA	469	PNA	316	PNA	279	PNA	398	PNA	329	PNA	420	PNA	447	PNA	489	325	PNA

NOTES:

* = NYSDEC, Class GA Groundwater Standards

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= Guidance value, no standard exists.

NA = Not available.

PNA = parameter not analyzed for.

* - Duplicate analysis is not within control limits

B = This flag is used when the analyte is found in the associated blank as in the sample.

D - Dilution

E - This flag identified compunds whose concentrations exceed the calibration range of the GC/MS instrument for that specific analysis.

F - This flag indicates the results of a filtered metal analysis.

H - Received / analyzed outside of analytical holding time

J - The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

N - Matrix spike sample recovery not within control limits

U -The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

UJ - The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

R - The sample results are unreliable/unusable. The presence or absence of the analyte cannot be verified.

S - Recovery exceeded control limits for this analyte.

1.0 = Compound exceeded standard.

1.0 = Compound at standard.

NM = Not Monitored

TOWN OF SOUTHAMPTON
NORTH SEA LANDFILL
TABLE 1
INORGANIC GROUNDWATER QUALITY RESULTS
APRIL 2017

ANALYTICAL PARAMETERS	UNITS	GW STND*	MW-11B																	
			April 2012		Oct. 2012		April 2013		Oct. 2013		April 2014	October 2014	April 2015	October 2015		April 2016	Oct. 2016	April 2017	
			Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered				Unfiltered	Filtered			Unfiltered	Filtered
Aluminum as Al	mg/L	NA	2.22	0.0457 B	7.48	0.077 B	2.15	0.0095 U	0.797	0.0049 U	0.0339	1.11	0.425	0.466	0.0057 U	0.253	0.575	0.902	0.200 U
Antimony as Sb	mg/L	0.003 #	0.0016 B	0.0052 B	**0.0041 B**	0.0018 U	0.0012 U	0.0109 B	0..002 U	0.002 U	0.0019 U	**0.0033 B**	0.003 U	0.0006 U	0.002 B	0.06 U	0.0600 U	0.0600 U	0.0600 U
Arsenic as As	mg/L	0.025	0.0044 U	0.0044 U	0.0116	0.0015 U	0.0052 B	0.0028 B	0.001 U	0.0015 B	0.0011 U	0.0009 U	0.0033 U	0.0022 U	0.0022 U	0.01 U	0.0100 U	0.0100 U	0.0100 U
Barium	mg/L	1	0.0297 B	0.0084 B	0.0944 B	0.012 B	0.0293 B	0.0096 B	0.0302 B	0.0137 B	0.026 B	0.019 B	0.0157 B	0.0183 B	0.0125 B	0.0169 J	0.200 U	0.0260 J	0.0078 J
Beryllium as Be	mg/L	0.003	0.00012 U	0.00012 U	0.0002 B	0.00012 U	0.0001 U	0.0001 U	0.00022 U	0.00022 U	0.00014 U	0.0002 U	0.0001 U	0.0002 U	0.0002 U	0.005 U	0.0050 U	0.0050 U	0.0050 U
Boron as B	mg/L	1.0	0.0083 B	0.0113 B	0.0301 B	0.0161 B	0.0151 B	0.0192 B	0.0048 B	0.0041 U	0.0101 B	0.0128 B	0.0117 B	0.0137 B	0.012 B	0.0125 J	0.0500 U	0.0186 J	0.0198 J
Cadmium as Cd	mg/L	0.005	0.00018 U	0.00018 U	0.000087 U	0.000087 U	0.0001 U	0.0002 B	0.00015 U	0.00015 U	0.00011 U	0.0003 U	0.0002 U	0.0001 U	0.0001 U	0.0002 J	0.0025 U	0.000099 J	0.000081 J
Calcium as Ca	mg/L	NA	5.48	4.69 U	21.5	6.44	14.9	14.2	10.1	10.4	11.1	7.87	8.61	10.1	9.27	7.23	16.800	13.600	10.000
Chromium as Cr	mg/L	0.05	0.0186	0.0017 B	**0.074 E**	0.0041 B	0.0313	0.0023 B	0.0108	0.002 B	0.0069 B	0.0134	0.0076 B	0.0092 B	0.0006 B	0.0046 J	0.0160	0.0170 U	0.0100 U
Cobalt	mg/L	NA	0.0011 B	0.00052 U	0.0053 B	0.00028 U	0.0014 B	0.0004 U	0.0009 B	0.0007 B	0.0002 B	0.0004 B	0.0006 U	0.0004 B	0.0003 B	0.0004 J	0.0500 U	0.00088 J	0.0500 U
Copper as Cu	mg/L	0.2	0.008 B	0.0027 B	0.0365	0.0034 B	0.009 B	0.0004 U	0.007 B	0.0007 U	0.0045 B	0.0052 B	0.0055 B	0.0052 BJ	0.026 *J	0.0051 J	0.0250 U	0.0073 J	0.0040 J
Cyanide as CN	mg/L	0.20	0.01 U	PNA	PNA	PNA	0.01 U	PNA	PNA	PNA	0.01 U	PNA	0.01 U	PNA	PNA	0.01 U	PNA	0.0100 U	PNA
Iron as Fe	mg/L	0.3	**5.01**	0.107	**36.2**	0.176	**12.7**	0.0487 B	**6.54**	0.0619 U	**3.65**	**5.53**	**3.97 E**	**3.98**	0.0268 U	**1.96**	**10.200**	**9.950**	0.100 U
Lead as Pb	mg/L	0.025	**0.0275**	0.0077	**0.0525**	0.00096 U	**0.0254**	0.0031	0.018	0.0064	0.0072	0.0034	0.005	0.0091	0.0032 NJ	0.0048 J	0.0050 U	0.0063	0.0050 U
Magnesium	mg/L	35 #	2.46 B	1.64 B	8.71	2.18 B	4.49 B	3.8 B	3.75 B	3.58 B	4.46 B	3.22 B	3.08 B	4.04 B	3.58 EJ	3.02	5.230	4.640	3.420
Manganese as Mn	mg/L	0.3	0.0953	0.0298	**0.774**	0.0265	0.273	0.0276	0.281	0.0211	0.156	0.167	0.131	0.125 EJ	0.0275 J	0.0414	0.271	**0.345**	0.0076 J
Mercury as Hg	mg/L	0.0007	0.00014 B	0.0001 U	0.0001 U	0.0001 U	0.0001 U	0.0001 U	0.0001 U	0.0001 U	0.0001 U	0.0001 U	0.0001 U	0.0001 U	0.0001 UNJ	0.0002 U	0.00020 U	0.00020 U	0.00020 U
Nickel as Ni	mg/L	0.1	0.0055 B	0.0007 B	0.031 B	0.0022 B	0.0081 B	0.0046 B	0.0078 B	0.0042 B	0.0034 B	0.005 B	0.0031 B	0.0049 B	0.0076 B	0.04 U	0.0400 U	0.0099 J	0.0019 J
Potassium	mg/L	NA	1.62 B	1.41 B	3.96 B	1.36 B	2.12 B	2.05 B	2.53 B	2.34 B	1.71 B	2.37 B	0.874 B	1.57 B	0.417 B	1.09 J	5.000 U	1.650 J	1.240 J
Selenium as Se	mg/L	0.01	0.0028 U	0.0035 B	0.0027 B	0.0021 U	0.0023 U	0.0153	0.0018 U	0.0018 U	0.0011 U	0.0014 U	0.0038 U	0.0022 U	0.0022 UNJ	0.01 U	0.0100 U	0.0100 U	0.0100 U
Silver as Ag	mg/L	0.05	0.00032 U	0.00032 U	0.00034 B	0.00029 U	0.0002 U	0.0002 U	0.0054 B	0.00043 U	0.00043 U	0.0007 U	0.0022 U	0.0033 B	0.0011 BNJ	0.01 U	0.0100 U	0.0100 U	0.0100 U
Sodium as Na	mg/L	20	8.33	7.82	**24.4**	7.62	7.07	7.42	7.57	9.44	11.5	8.78	7.89	10.2	9.04	8.74	12.300	8.300	7.630
Thallium as Tl	mg/L	0.0005 #	0.0032 U	0.0032 U	0.0029 U	0.0029 U	0.0019 U	0.0019 U	0.0019 U	0.0045 B	0.0013 U	0.001 U	0.0038 U	0.0019 U	0.0019 U	0.01 U	0.0100 U	0.0100 U	0.0100 U
Vanadium	mg/L	NA	0.0052 B	0.0004 B	0.0211 B	0.00018 U	0.006 B	0.0009 B	0.0019 B	0.00028 U	0.0017 B	0.0027 B	0.0012 B	0.0028 U	0.0028 U	0.05 U	0.0500 U	0.0023 J	0.0500 U
Zinc as Zn	mg/L	2 #	0.0257	0.0029 B	0.124	0.017 B	0.0293	0.0091 B	0.0444	0.0347	0.0218	0.0177 B	0.0102 B	0.0111 B	0.0107 B*J	0.005 J	0.0200 U	0.0089 J	0.0200 U
Alkalinity tot CaCo3	mg/L	NA	12.8	PNA	16.5	PNA	47 D	PNA	35	PNA	30.8	22.3	23.2	31.4 HJ	PNA	18.2	60.9	43.6	PNA
Chloride as Cl	mg/L	250.0	10.4	PNA	11.6	PNA	10.5	PNA	11.7	PNA	12.8	11.3	12.2	9.87	PNA	11	10.9	9.3	PNA
Sulfate as SO4	mg/L	250.0	7.7	PNA	9.13	PNA	6.66	PNA	13.4	PNA	14.9	12.7	9.39	9.44	PNA	9.27	6.5	7.1	PNA
Bromide	mg/L	2 #	0.5 U	PNA	0.5 U	PNA	0.5 U	PNA	0.5 U	PNA	0.5 U	0.5 U	0.5 U	0.5 U	PNA	0.03 J	0.5 U	0.029 J	PNA
BOD5	mg/L	NA	2 U	PNA	2 U	PNA	2 U	PNA	2 U	PNA	2 U	2 U	2 U	2 U	PNA	2 U	2 U	4.0 U	PNA
COD	mg/L	NA	10 U	PNA	10 U	PNA	10 U	PNA	10 U	PNA	10 U	10 U	10 U	10 U	PNA	10 U	10 U	8.8 J	PNA
Color	units	NA	35	PNA	PNA	PNA	75 D	PNA	PNA	PNA	10	PNA	35	PNA	PNA	5	PNA	50.0	PNA
Chromium hex as Cr	mg/L	0.05	0.02 U	PNA	PNA	PNA	0.02 U	PNA	PNA	PNA	0.02 U	PNA	0.02 U	PNA	PNA	0.02 U	PNA	0.020 U	PNA
Hardness as CaC03	mg/L	NA	30	PNA	34	PNA	68 D	PNA	88 D	PNA	48 D	84 D	48 D	48 D	PNA	31	64	58.0	PNA
Ammonia as N	mg/L	2.0	0.1 U	PNA	0.1 U	PNA	0.1 U	PNA	0.1 U	PNA	0.13	0.1 U	0.1 U	0.1 U	PNA	0.1 U	0.1 U	0.14	PNA
Nitrite as N	mg/L	NA	0.1 U	PNA	0.1 U	PNA	0.1 U	PNA	0.1 U	PNA	0.1 U	0.1 U	0.1 U	0.1 UJ	PNA	0.1 U	0.05 U	0.050 U	PNA
Nitrate as N	mg/L	10	0.17	PNA	0.23	PNA	0.51	PNA	0.44	PNA	0.43	0.25	0.25	0.44	PNA	0.19	0.82	0.41	PNA
Phenols as Phenol	mg/L	0.001	0.005 U	PNA	0.005 U	PNA	0.005 U	PNA	0.005 U	PNA	0.005 U	0.005 U	0.005 U	0.005 U	PNA	0.005 U	**0.0099**	**0.0135**	PNA
Tot Dissolved Solids	mg/L	NA	56	PNA	58	PNA	89	PNA	94	PNA	86	30	73	81	PNA	47	108	75.0	PNA
Tot. Kjeldahl Nitrogen	mg/L	NA	0.44	PNA	0.74	PNA	0.65	PNA	0.67	PNA	0.57	0.23	0.26	0.1 UJ	PNA	0.1 U	0.32	0.41	PNA
Tot Organic Carbon	mg/L	NA	1 U	PNA	1 U	PNA	14.4	PNA	1.3	PNA	1 U	5.9	0.1 U	0.927	PNA	1 U	1.92	1.7 J	PNA
Turbidity	NTU	NA	60.2	PNA	61	PNA	126	PNA	122	PNA	19.5	34.3	11.1	42.8	PNA	40.6	41.3	136	PNA
Temperature	deg.C	NA	13.84	PNA	13.57	PNA	13.35	PNA	13.58	PNA	11.5	12.7	11.85	12.94	PNA	13.22	13.1	13.42	PNA
pH	units	6.5-8.5	**6.02**	PNA	6.51	PNA	7.52	PNA	**6.25**	PNA	**6.28**	**6.24**	**6.25**	**6.25**	PNA	**6.19**	**6.24**	**6.20**	PNA
Spec. Cond	umho/cm	NA	95	PNA	112	PNA	167	PNA	176	PNA	191	128	123	140	PNA	101	220	160	PNA

NOTES:

* = NYSDEC, Class GA Groundwater Standards
6 NYCRR Part 703

= Guidance value, no standard exists.

NA = Not available.

PNA = parameter not analyzed for.

* - Duplicate analysis is not within control limits

B - This flag is used when the analyte is found in the associated blank as in the sample.

D - Dilution

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F - This flag indicates the results of a filtered metal analysis.

H - Received / analyzed outside of analytical holding time

J - The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

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U -The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

UJ - The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

R - The sample results are unreliable/unusable. The presence or absence of the analyte cannot be verified.

1.0 = Compound exceeded standard.

1.0 = Compound at standard.

NM = Not Monitored

TOWN OF SOUTHAMPTON
NORTH SEA LANDFILL
TABLE 1
INORGANIC GROUNDWATER QUALITY RESULTS
APRIL 2017

ANALYTICAL PARAMETERS	UNITS	GW STND*	MW-12A																	
			April 2012		Oct. 2012	April 2013		Oct. 2013	April 2014	Oct. 2014	April 2015	Oct. 2015	April 2016	Oct. 2016	April 2017	
			Unfiltered	Filtered		Unfiltered	Filtered								Unfiltered	Filtered
Aluminum as Al	mg/L	NA	0.0548 B	0.0391 B	PNA	0.09 B	0.0214 B	PNA	0.0616 B	PNA	0.369	PNA	0.022 J	PNA	0.0449 J	0.200 U
Antimony as Sb	mg/L	0.003 #	0.0011 U	0.0013 B	PNA	0.0012 U	0.0012 U	PNA	0.0019 U	PNA	0.003 U	PNA	0.06 U	PNA	0.0600 U	0.0600 U
Arsenic as As	mg/L	0.025	0.0044 U	0.0044 U	PNA	0.0064 B	0.0028 U	PNA	0.0011 U	PNA	0.0097 B	PNA	0.01 U	PNA	0.0100 U	0.0100 U
Barium	mg/L	1	0.0535 B	0.0475 B	PNA	0.0465 B	0.0421 B	PNA	0.0432 B	PNA	0.0514 B	PNA	0.0522 J	PNA	0.0290 J	0.0238 J
Beryllium as Be	mg/L	0.003	0.00012 U	0.00012 U	PNA	0.0001 U	0.0001 U	PNA	0.00014 U	PNA	0.0001 U	PNA	0.005 U	PNA	0.0050 U	0.0050 U
Boron as B	mg/L	1.0	0.0695 B	0.0692 B	PNA	0.0479 B	0.0491 B	PNA	0.0539 B	PNA	0.0488 B	PNA	0.0776 J	PNA	0.0407 J	0.0389 J
Cadmium as Cd	mg/L	0.005	0.00018 U	0.00018 U	0.000087 U	0.0001 U	0.0001 U	0.00015 U	0.0002 B	0.0004 B	0.0003 B	0.0002 B	0.0002 J	0.0025 U	0.0025 U	0.00064 J
Calcium as Ca	mg/L	NA	26.3	24.3	46.4	25.1	25.1	30.5	24.4	15.5	21.1	32	30.4	13	15.100	13.800
Chromium as Cr	mg/L	0.05	0.0038 B	0.0014 B	PNA	0.0063 B	0.0018 B	PNA	0.0047 B	PNA	0.0092 B	PNA	0.01 U	PNA	0.0021 J	0.0100 U
Cobalt	mg/L	NA	0.0062 B	0.0051 B	PNA	0.0043 B	0.0036 B	PNA	0.0064 B	PNA	0.0062 B	PNA	0.0046 J	PNA	0.0046 J	0.0025 J
Copper as Cu	mg/L	0.2	0.0016 B	0.0009 B	PNA	0.0025 B	0.0025 B	PNA	0.0026 B	PNA	0.0098 B	PNA	0.0035 J	PNA	0.0027 J	0.0078 J
Cyanide as CN	mg/L	0.20	0.01 U	PNA	PNA	0.01 U	PNA	PNA	0.01 U	PNA	0.01 U	PNA	0.01 U	PNA	0.0100 U	PNA
Iron as Fe	mg/L	0.3	**2.08**	0.134	**10.3**	**6.78**	0.236	**5.28**	**3.26**	**9.63**	**8.95 E**	**3.06**	**0.769**	**5.83**	**1.560**	0.100 U
Lead as Pb	mg/L	0.025	0.0046	0.0056	0.00096 U	0.0042	0.0056	0.0057	0.0024 B	0.0013 U	0.0022 U	0.0038	0.0024 J	0.005 U	0.0050 U	0.0050 U
Magnesium	mg/L	35 #	7.27	6.8	12.5	6.79	6.73	8.5	6.18	4.18 B	5.69	9	8.45	3.4	4.240	3.680
Manganese as Mn	mg/L	0.3	**4.3**	**3.86**	**5.93**	**3.72**	**3.61**	**3.78**	**4.16**	**1.22**	**2.69**	**3.06 E**	**3.51**	**1.76**	**2.690**	**2.230**
Mercury as Hg	mg/L	0.0007	0.0001 U	0.00017 B	PNA	0.0001 U	0.0001 U	PNA	0.0001 U	PNA	0.0001 U	PNA	0.0002 U	PNA	0.00020 U	0.00020 U
Nickel as Ni	mg/L	0.1	0.0084 B	0.0071 B	PNA	0.0105 B	0.0066 B	PNA	0.0104 B	PNA	0.0139 B	PNA	0.0065 J	PNA	0.0055 J	0.0071 J
Potassium	mg/L	NA	8.16	7.58	8.7	6.34	6.28	7.27	5.8	5.39	5.25	7.56	7.44	5 U	3.980 J	3.800 J
Selenium as Se	mg/L	0.01	0.0028 U	0.0028 U	PNA	0.0023 U	0.0023 U	PNA	0.0011 U	PNA	0.0038 U	PNA	0.01 U	PNA	0.0100 U	0.0100 U
Silver as Ag	mg/L	0.05	0.0005 B	0.00037 B	PNA	0.00022 B	0.00045 B	PNA	0.00043 U	PNA	0.0022 U	PNA	0.01 U	PNA	0.0100 U	0.0100 U
Sodium as Na	mg/L	20	12.8	11.8	**21**	9.97	9.7	11.9	11.3	8.43	9.47	15.3	12.4	8.2	8.650	8.250
Thallium as Tl	mg/L	0.0005 #	0.0032 U	0.0032 U	PNA	0.0019 B	0.0019 U	PNA	0.0014 B	PNA	0.0038 U	PNA	**0.0048 J**	PNA	**0.0041 J**	0.0100 U
Vanadium	mg/L	NA	0.0016 B	0.00023 U	PNA	0.0033 B	0.0003 U	PNA	0.0029 B	PNA	0.0092 B	PNA	0.05 U	PNA	0.0013 J	0.0500 U
Zinc as Zn	mg/L	2 #	0.0016 B	0.0071 B	PNA	0.0172 B	0.0104 B	PNA	0.0329	PNA	0.0107 B	PNA	0.0038 J	PNA	0.0012 J	0.0083 J
Alkalinity tot CaCo3	mg/L	NA	97 D	PNA	67.8 D	85.4 D	PNA	101 D	76	45.8	60.7	106 H	104	44.5	47.0	PNA
Chloride as Cl	mg/L	250.0	36.6	PNA	11.7	11.9	PNA	16.4	13.9	12	14.1	15.1	15.1	11.2	11.0	PNA
Sulfate as SO4	mg/L	250.0	19	PNA	20.1	19.4	PNA	27.4	20.7	14.5	22.4	23.3	22.2	11.2	14.5	PNA
Bromide	mg/L	2 #	0.5 U	PNA	0.5 U	0.5 U	PNA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.057 J	PNA
BOD5	mg/L	NA	2 U	PNA	2 U	2 U	PNA	2 U	2 U	2 U	2 U	2 U	2 U	2 U	1.0 J	PNA
COD	mg/L	NA	10 U	PNA	10 U	10 U	PNA	10 U	10 U	10 U	10 U	10 U	10 U	10 U	8.8 J	PNA
Color	units	NA	20	PNA	PNA	75 D	PNA	PNA	10	PNA	65	PNA	10	PNA	125	PNA
Chromium hex as Cr	mg/L	0.05	0.02 U	PNA	PNA	0.02 U	PNA	PNA	0.02 U	PNA	0.02 U	PNA	0.02 U	PNA	0.020 U	PNA
Hardness as CaC03	mg/L	NA	104 D	PNA	88 D	116 D	PNA	132 D	100 D	130 D	110 D	180 D	108 D	54	66.0	PNA
Ammonia as N	mg/L	2.0	1.82	PNA	0.94	1.56	PNA	1.31	1.24	1.63	**2.73**	**3.43**	**4.18**	1.7	0.31	PNA
Nitrite as N	mg/L	NA	0.1 U	PNA	0.1 U	0.1 U	PNA	0.1 U	0.1 U	0.1 U	0.1	0.1 U	0.1 U	0.1 U	0.050 U	PNA
Nitrate as N	mg/L	10	0.74	PNA	0.84	0.34	PNA	1	0.72	1.93 D	0.5	0.97	0.81	0.6	0.52	PNA
Phenols as Phenol	mg/L	0.001	0.005 U	PNA	0.005 U	0.005 U	PNA	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	**0.0111**	**0.0057**	**0.0135**	PNA
Tot Dissolved Solids	mg/L	NA	144	PNA	125	140	PNA	176	141	105	132	168	157	95	93.0	PNA
Tot. Kjeldahl Nitrogen	mg/L	NA	3.38	PNA	1.42	1.89	PNA	1.82	1.84	2.45	2.73	3.41	3.4	1.4	0.93	PNA
Tot Organic Carbon	mg/L	NA	1 U	PNA	1.2	22.3	PNA	2.7	1.7	10.5	1.9	2	2.4	1.16	1.2 J	PNA
Turbidity	NTU	NA	60.5	PNA	36.1	81.5	PNA	29.6	16.9	40.3	47.2	44.3	5.12	38.9	571	PNA
Temperature	deg.C	NA	13.05	PNA	12.76	12.86	PNA	13.23	11.17	12.7	11.83	12.5	12.12	12.7	9.48	PNA
pH	units	6.5-8.5	**6.12**	PNA	**6.43**	7.53	PNA	**6.11**	**6.03**	**6.04**	**6.13**	**5.81**	**6.3**	**6.17**	**5.55**	PNA
Spec. Cond	umho/cm	NA	325	PNA	241	286	PNA	328	263	201	268	342	329	170	200	PNA

NOTES:

* = NYSDEC, Class GA Groundwater Standards
6 NYCRR Part 703

= Guidance value, no standard exists.

NA = Not available.

PNA = parameter not analyzed for.

B = This flag is used when the analyte is found in the associated blank as in the sample.

D - Dilution

E - This flag identified compunds whose concentrations exceed the calibration range of the GC/MS instrument for that specific analysis.

F - This flag indicates the results of a filtered metal analysis.

H - Received / analyzed outside of analytical holding time

J - The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

U -The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

UJ - The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

R - The sample results are unreliable/unusable. The presence or absence of the analyte cannot be verified.

1.0 = Compound exceeded standard.

1.0 = Compound at standard.

NM = Not Monitored

TOWN OF SOUTHAMPTON
NORTH SEA LANDFILL
TABLE 1
INORGANIC GROUNDWATER QUALITY RESULTS
APRIL 2017

ANALYTICAL PARAMETERS	UNITS	GW STND*	MW-12B																			
			April 2012 Unfiltered		April 2012 Filtered		Oct. 2012		April 2013		Oct. 2013		April 2014		Oct. 2014		April 2015		Oct. 2015		April 2016		Oct. 2016		Apr-17	
Aluminum as Al	mg/L	NA	1.61		0.0362	B	PNA		0.0161	B	PNA		0.0402	B	PNA		0.0059	U	PNA		0.2	U	PNA		0.0136	J
Antimony as Sb	mg/L	0.003 #	0.0015	B	0.0011	U	PNA		0.0018	B	PNA		0.0019	U	PNA		0.003	U	PNA		0.06	U	PNA		0.0600	U
Arsenic as As	mg/L	0.025	0.0044	U	0.0044	U	PNA		0.0028	U	PNA		0.0011	U	PNA		0.0033	U	PNA		0.01	U	PNA		0.0100	U
Barium	mg/L	1	0.16	B	0.137	B	PNA		0.0977	B	PNA		0.0694	B	PNA		0.0482	B	PNA		0.0582	J	PNA		0.0170	J
Beryllium as Be	mg/L	0.003	0.00012	U	0.00012	U	PNA		0.0001	U	PNA		0.00014	U	PNA		0.0001	U	PNA		0.005	U	PNA		0.0050	U
Boron as B	mg/L	1.0	0.103		0.101		PNA		0.0743	B	PNA		0.0689	B	PNA		0.0725	B	PNA		0.0863	J	PNA		0.0328	J
Cadmium as Cd	mg/L	0.005	0.00018	U	0.00018	U	0.000087	U	0.0001	U	0.00015	U	0.00011	U	0.0003	U	0.0002	U	0.0001	U	0.0002	J	0.0025	U	0.0025	U
Calcium as Ca	mg/L	NA	41.6		39.2		25.1		25.2		30.6		28.5		30.6		20.2		22.4		34.9		27.4		11.300	
Chromium as Cr	mg/L	0.05	0.0397		0.0013	B	PNA		0.0014	B	PNA		0.0017	B	PNA		0.0011	U	PNA		0.01	U	PNA		0.0100	U
Cobalt	mg/L	NA	0.0033	B	0.0007	B	PNA		0.0004	U	PNA		0.0006	B	PNA		0.0006	U	PNA		0.05	U	PNA		0.0500	U
Copper as Cu	mg/L	0.2	0.0109	B	0.002	B	PNA		0.0016	B	PNA		0.0021	B	PNA		0.0026	B	PNA		0.0027	J	PNA		0.0250	U
Cyanide as CN	mg/L	0.20	0.01	U	PNA		PNA		0.01	U	PNA		0.01	U	PNA		0.01	U	PNA		0.01	U	PNA		0.0100	U
Iron as Fe	mg/L	0.3	**4.91**		0.027	B	0.103		0.0274	B	0.0776	B	0.0922	B	0.177		0.0856	BE	0.0268	U	0.1	U	0.1	U	0.0393	J
Lead as Pb	mg/L	0.025	0.0144		0.0078		0.0011	B	0.0055		0.0094		0.0036	B	0.0013	U	0.0022	U	0.0041		0.0033	J	0.005	U	0.0050	U
Magnesium	mg/L	35 #	12.3		11.6		8.33		7.03		8.71		8.86		8.38		5.85		6.32		10.6		8.06		3.920	
Manganese as Mn	mg/L	0.3	**0.92**		**0.818**		0.112		0.124		**0.4**		**0.981**		**1.68**		**0.934**		**0.872**	E	0.235		**0.675**		0.0937	
Mercury as Hg	mg/L	0.0007	0.0001	U	0.0001	U	PNA		0.0001	U	PNA		0.0001	U	PNA		0.0001	U	PNA		0.0002	U	PNA		0.00020	U
Nickel as Ni	mg/L	0.1	0.0386	B	0.0181	B	PNA		0.0085	B	PNA		0.0146	B	PNA		0.0105	B	PNA		0.0099	J	PNA		0.0026	J
Potassium	mg/L	NA	10.7		10.1		6.64		10	U	12.9		6.37		10.3		4.7	B	9.54		4.93	J	8.27		2.620	J
Selenium as Se	mg/L	0.01	0.0028	U	0.0031	BJ	PNA		0.0023	U	PNA		0.0011	U	PNA		0.0038	U	PNA		0.01	U	PNA		0.0100	U
Silver as Ag	mg/L	0.05	0.00032	U	0.00032	U	PNA		0.00023	B	PNA		0.00043	U	PNA		0.0022	U	PNA		0.01	U	PNA		0.0100	U
Sodium as Na	mg/L	20	19.2		19.9		13.4		11	U	15.1		13.5		12.9		11.1		14.3		18.1		15		8.930	
Thallium as Tl	mg/L	0.0005 #	0.0032	U	0.0032	U	PNA		0.0019	U	PNA		0.0001	U	PNA		0.0038	U	PNA		0.01	U	PNA		0.0100	U
Vanadium	mg/L	NA	0.0096	B	0.0008	B	PNA		0.0012	B	PNA		0.0013	B	PNA		0.0007	U	PNA		0.05	U	PNA		0.0500	U
Zinc as Zn	mg/L	2 #	0.0109	B	0.0035	B	PNA		0.0073	B	PNA		0.0176	B	PNA		0.0083	B	PNA		0.02	U	PNA		0.0200	U
Alkalinity tot CaCo3	mg/L	NA	147	D	PNA		50.1	D	82.6	D	107	D	78.9		103	D	50.7		65.4	H	92.6		88.2		24.6	
Chloride as Cl	mg/L	250.0	24.1		PNA		10.9		14.7		20		17.5		16.8		16.5		15.3		22		20.5		11.3	
Sulfate as SO4	mg/L	250.0	47.2		PNA		20.1		29.3		45.5		36		32.5		29		28.5		44.5		39.2		14.0	
Bromide	mg/L	2 #	0.5	U	PNA		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.050	J
BOD5	mg/L	NA	2	U	PNA		2	U	2	U	2	U	2	UJ	2	U	2	U	2	U	2	U	2	U	1.0	J
COD	mg/L	NA	10	U	PNA		10	U	10	U	10	U	10.8		10	U	10	U	10	U	10	U	10	U	8.8	J
Color	units	NA	20		PNA		PNA		5	U	PNA		5	U	PNA		10		PNA		5	U	PNA		10.0	
Chromium hex as Cr	mg/L	0.05	0.02	U	PNA		PNA		0.02	U	PNA		0.02	U	PNA		0.02	U	PNA		0.02	U	PNA		0.020	U
Hardness as CaC03	mg/L	NA	158	D	PNA		68	D	94	D	116	D	100	D	200	D	110	D	85		121		92		45.0	
Ammonia as N	mg/L	2.0	**2.52**		PNA		1.15		**2.44**		1.08		1		**3.16**		1.47		**2.19**		0.3		**4.8**		0.063	J
Nitrite as N	mg/L	NA	0.1	U	PNA		0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.050	U
Nitrate as N	mg/L	10	0.1	U	PNA		2.07	D	1.17		0.1	U	0.89		0.8		2.09	D	1.0		0.27		0.06		1.2	
Phenols as Phenol	mg/L	0.001	0.005	U	PNA		0.005	U	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U	**0.0067**		**0.0099**		**0.0375**	
Tot Dissolved Solids	mg/L	NA	246		PNA		117		164		192		173		161		142		142		189		157		86.0	
Tot. Kjeldahl Nitrogen	mg/L	NA	4.6		PNA		1.32	D	3.99		6	D	1.46		3.24		2.32		2.1		0.26		2.1		0.10	U
Tot Organic Carbon	mg/L	NA	2.4		PNA		1	U	20.6		3.3		1.7		26.8		1.3		1.48		2.8		2.04		0.54	J
Turbidity	NTU	NA	100		PNA		0		1.32		0.2		0.4		1.4		0		0.13		0		0		0.0	
Temperature	deg.C	NA	14.05		PNA		12.45		13.85		13.02		10.9		12.16		11.54		12.17		12		12.4		12.87	
pH	units	6.5-8.5	**6.12**		PNA		6.58		7.67		**6.17**		**6.24**		**6.2**		**6.27**		**5.64**		**6.24**		**6.04**		**5.76**	
Spec. Cond	umho/cm	NA	455		PNA		226		2		386		312		381		264		280		370		332		129	

NOTES:

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6 NYCRR Part 703

= Guidance value, no standard exists.

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E - This flag identified compunds whose concentrations exceed the calibration range of the GC/MS instrument for that specific analysis.

F - This flag indicates the results of a filtered metal analysis.

H - Received / analyzed outside of analytical holding time

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R - The sample results are unreliable/unusable. The presence or absence of the analyte cannot be verified.

1.0 = Compound exceeded standard.

1.0 = Compound at standard.

NM = Not Monitored

TOWN OF SOUTHAMPTON
NORTH SEA LANDFILL
TABLE 2
ORGANIC GROUNDWATER QUALITY RESULTS
APRIL 2017

Parameters	Units	GW Standard*	MW-1A		MW-1B		MW-1C		MW-3A		MW-3B		MW-3C		MW-4A		MW-4B		MW-4C		MW-11A		MW-11B		MW 12A		MW 12B	
1,1,1,2-Tetrachloroethane	mg/L	0.005	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U
1,1,1-Trichloroethane	mg/L	0.005	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U
1,1,2,2-Tetrachloroethane	mg/L	0.005	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U
1,1,2-Trichloroethane	mg/L	0.001	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U
1,1-Dichloroethane	mg/L	0.005	0.0050	UJ	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U
1,1-Dichloroethene	mg/L	0.005	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U
1,2-Dibromo-3-chloropropane	mg/L	0.0004	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U
1,2-Dibromoethane	mg/L	NA	0.0050	UJ	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U
1,2-Dichlorobenzene	mg/L	0.003	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U
1,2-Dichloroethane	mg/L	0.005	0.0050	UJ	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U
1,2-Dichloropropane	mg/L	0.001	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U
1,4-Dichlorobenzene	mg/L	0.003	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0012	J	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U
2-Butanone	mg/L	0.005	0.0050	UJ	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U
2-Hexanone	mg/L	NA	0.0050	UJ	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U
4-Methyl-2-pentanone	mg/L	0.005	0.0050	UJ	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U
Acetone	mg/L	NA	0.0021	UJ	0.0034	J	0.0045	J	0.0038	J	0.0022	J	0.0024	J	0.0046	J	0.0024	J	0.0028	J	0.0043	J	0.0048	J	0.0039	J	0.0042	J
Acrylonitrile	mg/L	0.005	0.0050	UJ	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U
Benzene	mg/L	0.001	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U
Bromochloromethane	mg/L	0.005	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U
Bromodichloromethane	mg/L	NA	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U
Bromoform	mg/L	NA	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U
Bromomethane	mg/L	0.005	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U
Carbon disulfide	mg/L	NA	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U
Carbon tetrachloride	mg/L	0.005	0.0050	UJ	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U
Chlorobenzene	mg/L	0.005	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U
Chloroethane	mg/L	0.005	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U
Chloroform	mg/L	0.007	0.0050	U	0.0027	J	0.0023	J	0.0050	U	0.0050	U	0.0050	U	0.0042	J	0.0050	U	0.0050	U	0.0050	U	0.0020	J	0.0050	U	0.0012	J
Chloromethane	mg/L	NA	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U
cis-1,2-Dichloroethene	mg/L	0.005	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U
cis-1,3-Dichloropropene	mg/L	0.0004	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U
Dibromochloromethane	mg/L	0.005	0.0050	UJ	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U
Dibromomethane	mg/L	0.005	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U
Ethylbenzene	mg/L	0.005	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U
Iodomethane	mg/L	NA	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U
Methylene chloride	mg/L	0.005	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U
Styrene	mg/L	0.005	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U
Tetrachloroethene	mg/L	0.005	0.0050	UJ	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U
Toluene	mg/L	0.005	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U
trans-1,2-Dichloroethene	mg/L	0.005	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U
trans-1,3-Dichloropropene	mg/L	0.0004	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U
trans-1,4-Dichloro-2-butene	mg/L	0.005	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U
Trichloroethene	mg/L	0.005	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U
Trichlorofluoromethane	mg/L	0.005	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U
Vinyl acetate	mg/L	0.005	0.0050	UJ	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U
Vinyl chloride	mg/L	0.002	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U
Xylene (total)	mg/L	0.005	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U	0.0050	U

NOTES:

@ = A compound is presented if it has been detected in one or more locations.

* = New York State Department of Environmental Conservation, Class GA Groundwater Standards, 6 NYCRR Part 703

^ Standard was taken for total phenols

U - the analyte was analyzed for, but was not detected above the reported sample quantitation limit.

UJ - The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

J - The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

Indicates compound is at the standard

Indicates compound exceeds the standard

= Guidance Value, no standard exists

NM = Not Monitored

TOWN OF SOUTHAMPTON

NORTH SEA LANDFILL

TABLE 3

LEACHATE QUALITY RESULTS

APRIL 2017

Analytical Parameter	Leachate Collection (Primary)											
Units mg/L	April 2005	April 2012	October 2012	April 2013	October 2013	April 2014	October 2014	April 2015	October 2015	April 2016	October 2016	April 2017
Arsenic as As	NA	< 0.0044	0.0048 B	<0.0028	0.0052 B	0<0.0011	0.134 B	<0.0033	<.0022	<0.010	0.0144	<0.0100
Cadmium as Cd	<0.025	0.0002 B	<0.000087	<0.0001	<0.00015	<0.00011	0.252	<0.00020	<.0001	0.00090 J	0.0025 U	0.00021 J
Calcium as Ca	82	72	100	71.6	111	52.6	374	54.1	73.8	51	106	60.200
Iron as Fe	39	36.1	25.7	13.6	10.5	13.8	6.260	12.6 E	171	12.8	45.1	29.900
Lead as Pb	<0.025	0.0089	<0.00096	0.0058	0.0072	<0.0019	<1.3	<0.0022	0.0194	0.0019 J	0.005 U	0.0014 J
Magnesium as Mg	22	17	33.7	21.4	21	10.2	41.5 B	11.3	14.1	10.6	36.3	8.930
Manganese as Mn	3.4	2.94	2.59	2.06	2.89	1.26	23.2	2.27	3.15 E	1.82	2.23	2.200
Potassium as K	85	67.7	160	86.1	105	29.8	152	34.2	45.2	34.1	180	18.000
Sodium as Na	180	148	419	186	236	58.6	397	81	104	77.7	472	37.900
Alkalinity total CaCO3	1100	808 D	1,860 D	948 D	1,100 D	380 D	1,740 D	409 D	490 DH	428 D	1,250	231
BOD5	NA	< 2	31	21	20	13 S	127	<2	15	11	23.1	5.0
COD	180	141	382 D	148 D	261 D	33	522 D	68	180 D	66.2	510	60.9
Chloride as Cl	210	193 D	475 D	207 D	284 D	78.4 D	495 D	90 D	92.1	78 D	609	42.5
Hardness as CaCO3	300	272 D	450 D	360 D	500 D	310 D	1,800 D	240 D	250 D	160 D	410	204
Ammonia as N	140	75.3 D	164 D	145 D	180 D	60.7 D	315 D	69.2 D	82.1 D	67.7 D	394	9.5
Nitrite as N	NA	< 0.10	< 0.10	< 0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.16	<0.050
Nitrate as N	<0.5	0.23	0.11	0.41	<1.00 D	0.38	<0.10	0.59	0.47	0.97	12.3	0.036 J
Bromide	NA	0.71	3.33 D	0.91	1.74	<0.50	2.44	<0.50	<0.50	<0.50	3	0.18 J
Total Recoverable Phenolics	NA	< 0.005	0.0056	0.0077	0.0051	0.0055	0.0076	0.0101	0.0151	0.0167	0.0183	0.0282
Sulfate as SO4	35	7.64	20.3	10.5	46.8	12.8	44.3	11.1	11.6	12.3	45.6	52.2
Total Dissolved Solids	930	782 D	2,050 D	948 D	1,380 D	400	1,770	424	542	396	1,970	363
Total Organic Carbon	66	51.4	104 D	246 D	16.6	37.3 D	530 DJ	23.9	36.9	22.3	146	12.2
Total Kjeldahl Nitorgen	NA	137 D	328 D	171 D	206 D	60.5 D	340 D	63.9 D	75.7	54.1 D	323	23.6
Turbidity NTU	6.5	244	187	104	57.6	50.5	>1,000	14.4	186	152	>50	88.5

Analytical Parameter	Leachate Detection (Secondary)											
Units mg/L	April 2005	April 2012	October 2012	April 2013	October 2013	April 2014	October 2014	April 2015	October 2015	April 2016	October 2016	April 2017
Arsenic as As	NA	< 0.0044	0.0074 B	0.0035 B	<0.001	0.0013 B	< 0.00090	0.0034 B	<0.0022	<0.010	0.010 U	<0.0100
Cadmium as Cd	<0.005	< 0.00018	<0.000087	<0.0001	<0.00015	<0.00011	<0.00030	<0.00020	<0.0001	<0.0025	0.0025 U	0.00022 J
Calcium as Ca	83	74.6	150	68.8	71.4	63.6	98.9	56.2	92	57.3	118	73.000
Iron as Fe	0.25	0.147	5.41	14.2	26.7	2.32	0.351	0.424 E	1.53	0.829	1.300	32.400
Lead as Pb	<0.005	0.0108	0.0024 B	0.0033	<0.00072	0.0104	<0.0013	0.0058	0.0443	0.0025 J	0.005 U	0.0015 J
Magnesium as Mg	14	10.7	25.9	8.08	17.2	9	11.7	9.94	15	10.1	29.2	12.600
Manganese as Mn	3.5	0.163	2.33	5.71	2.32	1.22	0.261	0.322	0.588 E	0.164	0.765	8.160
Potassium as K	58	22.4	109	134 E	65.9	22	29.6	35.6	48.8	33.8	151	31.900
Sodium as Na	94	21.2	283	176	151	14.6	33.2	87.1	90.2	76.3	380	62.200
Alkalinity total CaCO3	570	204 D	986 D	236 D	815 D	164 D	259 D	199 D	389 DH	209 D	930	381
BOD5	NA	< 2	47	< 2	15	7 S	22	44	12	8	14.7	11.6
COD	120	35.7	181 D	31.1	142	97.2	94.7	61.7	93.5	48.4	281	117
Chloride as Cl	100	33.1	288 D	29.8	206 D	33.4	57.9 D	98.8 D	94.2 D	73.8 D	350	71.7
Hardness as CaCO3	260	260 D	460 D	250 D	280 D	200 D	750 D	220 D	400 D	172 D	420	320
Ammonia as N	58	2.08 D	77.8 D	12.9 D	136 D	0.8	15.9 D	42 D	28.2 D	14.6 D	94.1	16.0
Nitrite as N	NA	0.19	0.2	< 0.10	<0.10	<0.10	0.14	0.63	0.22	1.27	0.05 U	0.0058 J
Nitrate as N	<0.5	5.73 D	10.6 D	< 0.10	<0.10	0.58	3.97 D	9.18 D	4.55 D	13.3 D	0.05 U	0.066
Bromide	NA	< 0.50	1.06	< 0.50	1.2	<0.50	<0.50	<0.50	0.56	<0.50	2.3	0.32 J
Total Recoverable Phenolics	NA	< 0.005	0.0052	< 0.005	<0.005	0.0087	0.0066	0.0085	0.0115	<0.005	0.0308	0.0135
Sulfate as SO4	<25	15.9	44.7	10.8	14.1	16.8	26.1	14.7	30.4	11.5	34.3	6.4
Total Dissolved Solids	610	357	1,550 D	292	904 D	299	474	476	627	442	1,510	472
Total Organic Carbon	27	14.1	63.3 D	67.1 D	11.9	47.6 D	36.3 D	28,5	33.5	23.2	79.6	30.0
Total Kjeldahl Nitorgen	NA	5.67 D	128 D	13.6	138 D	3.30 D	17.9 D	42.5 D	26.7 D	14.1 D	95.6	40.6
Turbidity NTU	5.9	20.8	5.2	21.1	104	34.4	6.4	0	43.5	237	>50	28.6

NOTES:

B - This flag is used when the analyte is found in the associated blank as in the sample.

E - This flag identified compunds whose concentrations exceed the calibration range of the GC/MS instrument for that specific analysis.

F - This flag indicates the results of a filtered metal analysis.

J - The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

U -The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

UJ - The analyte was not detected above the reported sample wuantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to acc

S - Recovery exceeded control limits for this analyte.

TOWN OF SOUTHAMPTON
NORTH SEA LANDFILL

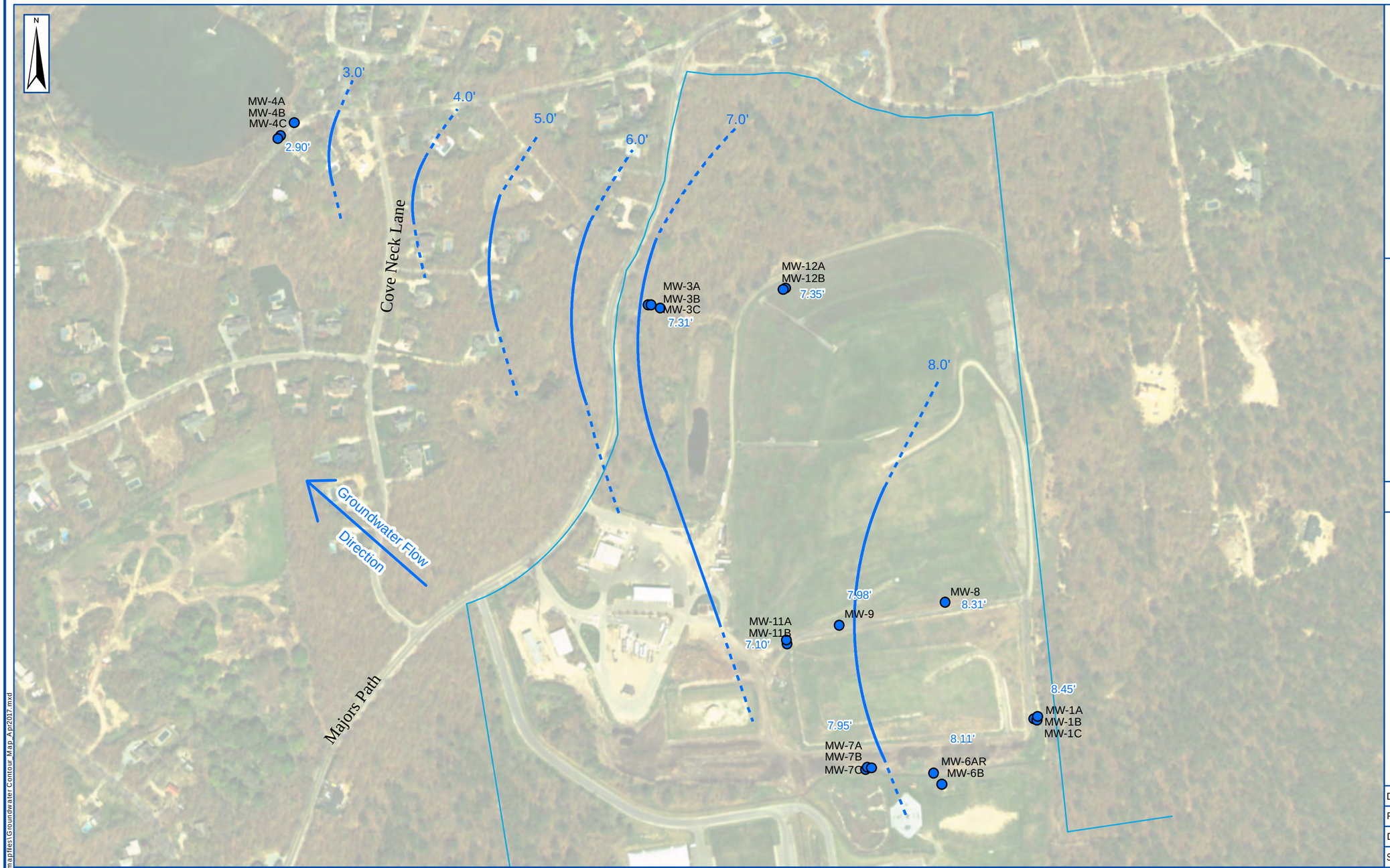
TABLE 4

GROUNDWATER ELEVATIONS
APRIL 2017

Monitoring Well Number	* Casing Elevation	April 2012		October 2012		April 2013		October 2013		April 2014		October 2014		April 2015		October 2015		April 2016		October 2016		April 2017	
		DTW	GWE	DTW	GWE	DTW	GWE	DTW	GWE	DTW	GWE	DTW	GWE	DTW	GWE	DTW	GWE	DTW	GWE	DTW	GWE	DTW	GWE
MW-1A	113.87	104.12	9.75	104.12	9.75	104.53	9.75	104.80	9.07	104.58	9.29	105.50	8.37	104.10	9.77	105.12	8.75	104.79	9.08	105.28	8.59	105.42	8.45
MW-1B	115.09	105.30	9.79	105.30	9.79	105.77	9.79	105.69	9.40	105.78	9.31	106.50	8.59	105.32	9.77	106.10	8.99	106.02	9.07	106.70	8.39	106.60	8.49
MW-1C	114.99	106.15	8.84	106.15	8.84	106.44	8.84	106.60	8.39	106.36	8.63	106.91	8.08	105.92	9.07	107.00	7.99	106.56	8.43	107.43	7.56	106.95	8.04
MW-2	74.8	NM	--	NM	--	NM	--	NM	--	NM	--	NM	--	NM	--	NM	--	NM	--	NM	--	NM	--
MW-3A	55.3	47.96	7.34	47.96	7.34	47.93	7.37	48.19	7.11	47.51	7.79	48.67	6.63	49.20	6.10	48.49	6.81	47.96	7.34	48.93	6.37	47.99	7.31
MW-3B	51.9	44.66	7.24	44.66	7.24	44.62	7.28	44.88	7.02	44.25	7.65	45.15	6.75	44.23	7.67	45.20	6.70	44.68	7.22	46.02	5.88	45.03	6.87
MW-3C	51.4	44.23	7.17	44.23	7.17	44.22	7.18	44.50	6.90	NM	--	44.88	6.52	43.98	7.42	44.85	6.55	44.24	7.16	45.17	6.23	44.46	6.94
MW-4A	16	13.66	2.34	13.87	2.13	13.80	2.20	13.34	2.66	13.31	2.69	13.34	2.66	13.81	2.19	13.28	2.72	13.74	2.26	13.75	2.25	13.04	2.96
MW-4B	16.1	13.73	2.37	14.50	1.60	13.89	2.21	13.64	2.46	13.45	2.65	13.57	2.53	14.00	2.10	13.57	2.53	13.36	2.74	14.09	2.01	13.40	2.70
MW-4C	16	9.48	6.52	10.25	5.75	9.40	6.60	9.79	6.21	9.31	6.69	9.73	6.27	9.29	6.71	9.90	6.10	9.89	6.11	10.24	5.76	9.68	6.32
MW-5A	74.27	NM	--	NM	--	NM	--	NM	--	NM	--	NM	--	NM	--	NM	--	NM	--	NM	--	NM	--
MW-5B	75.25	NM	--	NM	--	NM	--	NM	--	NM	--	NM	--	NM	--	NM	--	NM	--	NM	--	NM	--
MW-5C	74.33	NM	--	NM	--	NM	--	NM	--	NM	--	NM	--	NM	--	NM	--	NM	--	NM	--	NM	--
MW-6A	NS	NM	--	NM	--	NM	--	NM	--	NM	--	NM	--	NM	--	NM	--	NM	--	NM	--	NM	--
MW-6AR	100.72	91.58	9.14	92.62	8.10	91.99	8.73	92.11	8.83	89.89	10.83	92.37	8.35	91.65	9.07	93.81	6.91	92.16	8.56	92.26	8.46	92.61	8.11
MW-6B	103.46	93.97	9.49	94.94	8.52	94.32	9.14	94.40	9.06	94.29	9.17	94.52	8.94	93.93	9.53	94.79	8.67	93.72	9.74	95.80	7.66	94.99	8.47
MW-7A	92.83	83.60	9.23	84.61	8.22	83.69	9.14	83.76	9.07	83.89	8.94	84.25	8.58	83.99	8.84	83.92	8.91	83.63	9.20	84.40	8.43	84.88	7.95
MW-7B	92.72	83.50	9.22	84.52	8.20	83.82	8.90	83.93	8.79	83.83	8.89	85.14	7.58	83.40	9.32	84.21	8.51	83.76	8.96	84.91	7.81	84.45	8.27
MW-7C	93.31	85.12	8.19	86.10	7.21	85.03	8.28	85.52	7.79	83.61	9.70	84.96	8.35	85.01	8.30	86.00	7.31	85.13	8.18	88.33	4.98	85.64	7.67
MW-8	86.02	76.68	9.34	77.65	8.37	76.91	9.11	77.06	8.96	76.88	9.14	78.00	8.02	76.98	9.04	77.38	8.64	77.18	8.84	77.99	8.03	77.71	8.31
MW-9	82.56	73.69	8.87	74.63	7.93	73.81	8.75	74.05	8.51	73.79	8.77	74.96	7.60	74.10	8.46	74.41	8.15	74.04	8.52	74.89	7.67	74.58	7.98
MW-11A	80.78	72.06	8.72	72.98	7.80	73.59	7.19	72.66	8.12	72.75	8.03	73.41	7.37	72.77	8.01	73.84	6.94	73.50	7.28	73.38	7.40	73.68	7.10
MW-11B	78.32	69.61	8.71	74.43	7.89	73.59	4.73	73.92	4.40	73.51	4.81	74.12	4.20	73.27	5.05	74.25	4.07	73.84	4.48	74.84	3.48	74.35	3.97
MW-12A	87.95	79.96	7.99	80.75	7.20	79.96	7.99	80.24	7.71	79.73	8.22	80.58	7.37	80.66	7.29	80.54	7.41	80.21	7.74	81.12	6.83	80.60	7.35
MW-12B	88.28	80.80	7.48	81.30	6.98	80.57	7.71	80.81	7.47	80.34	7.94	81.17	7.11	80.22	8.06	81.14	7.14	80.81	7.47	81.64	6.64	81.21	7.07

NOTES:
* = SURVEYED TO MEAN SEA LEVEL
GWE = GROUNDWATER ELEVATION
DTW = DEPTH TO WATER
NM = NOT MONITORED
NS = NOT SURVEYED

FIGURES



Groundwater Monitoring Well
Groundwater Contour
Inferred Groundwater Contour
Landfill Boundary
Cells

SITE PLAN - APRIL 2017

NORTH SEA LANDFILL
SOUTHAMPTON, NY

0 500 1,000 1,500 2,000 Feet

PWGC
Strategic Environmental and Engineering Solutions
P.W. GROSSER CONSULTING, INC.
630 Johnson Avenue. • Suite 7
Bohemia • NY • 11716-2618
Phone: (631) 589-6353 • Fax: (631) 589-8705
E-mail: INFO@PWGROSSER.COM

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TOWN OF SOUTHAMPTON
1370 MAJORS PATH
SOUTHAMPTON, NY 11968
APRIL 2017

DRAWING INFORMATION:

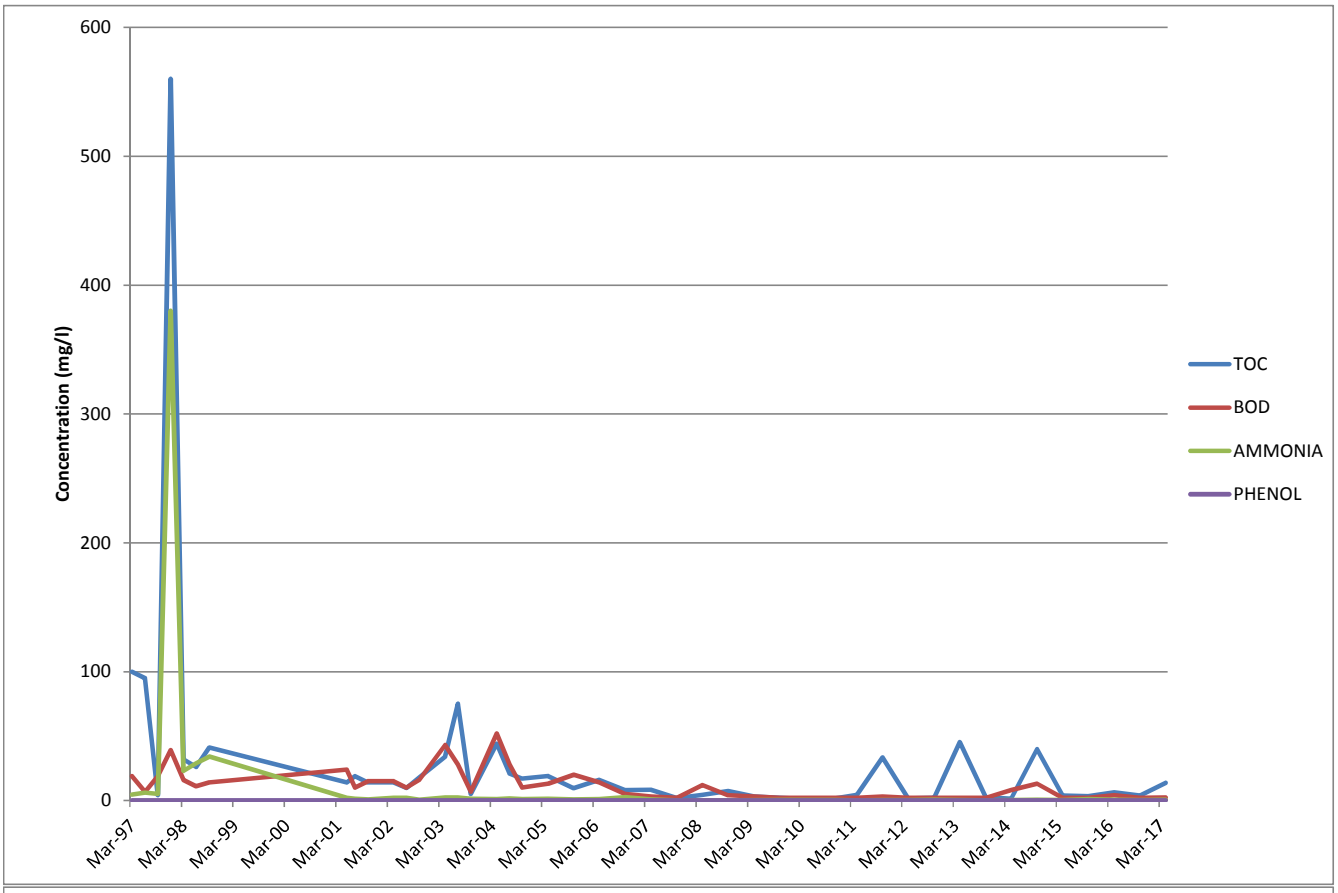
Project:	SHP1701	Designed by:	ICB
Date:	5/2/2017	Drawn by:	JCG
Scale:	AS SHOWN	Approved by:	DE

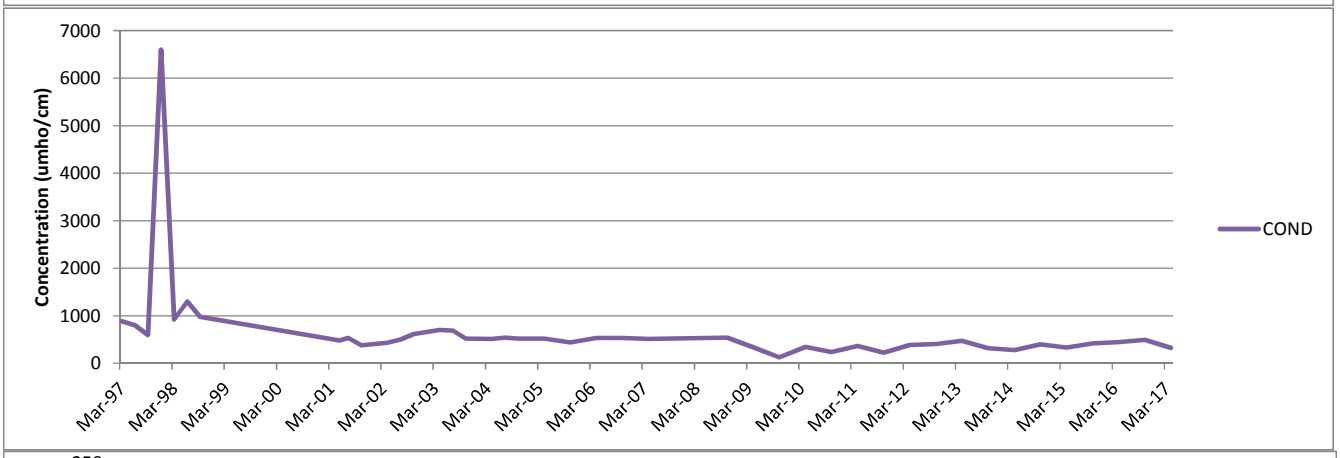
FIGURE NO:

1

Document Path: G:\Projects\S-Z\SHP1701\mapfiles\Groundwater Contour Map Apr2017.mxd

Figure 2
Monitoring Well 11A
(1997 - 2017)





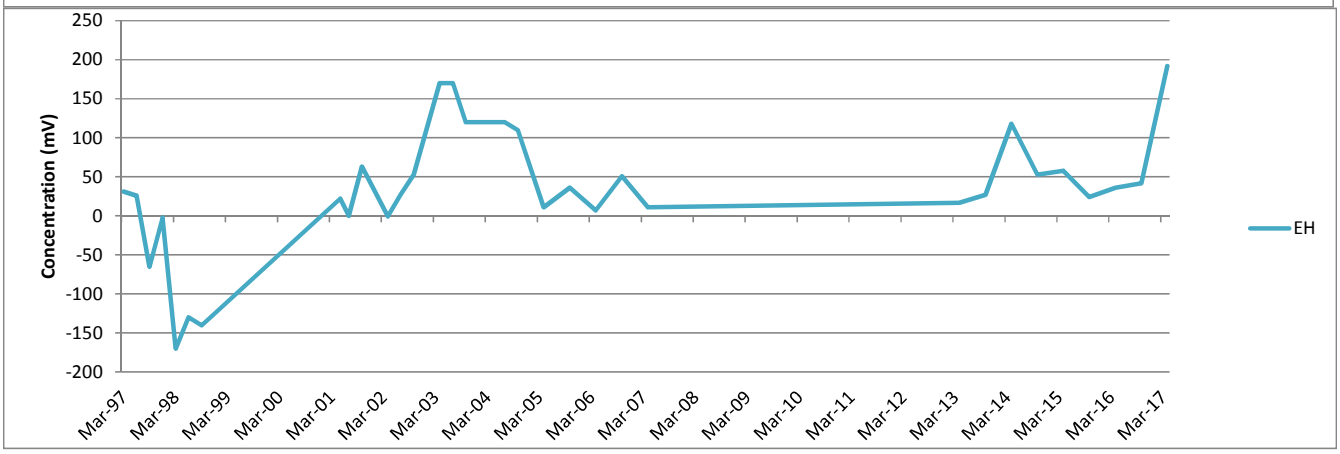
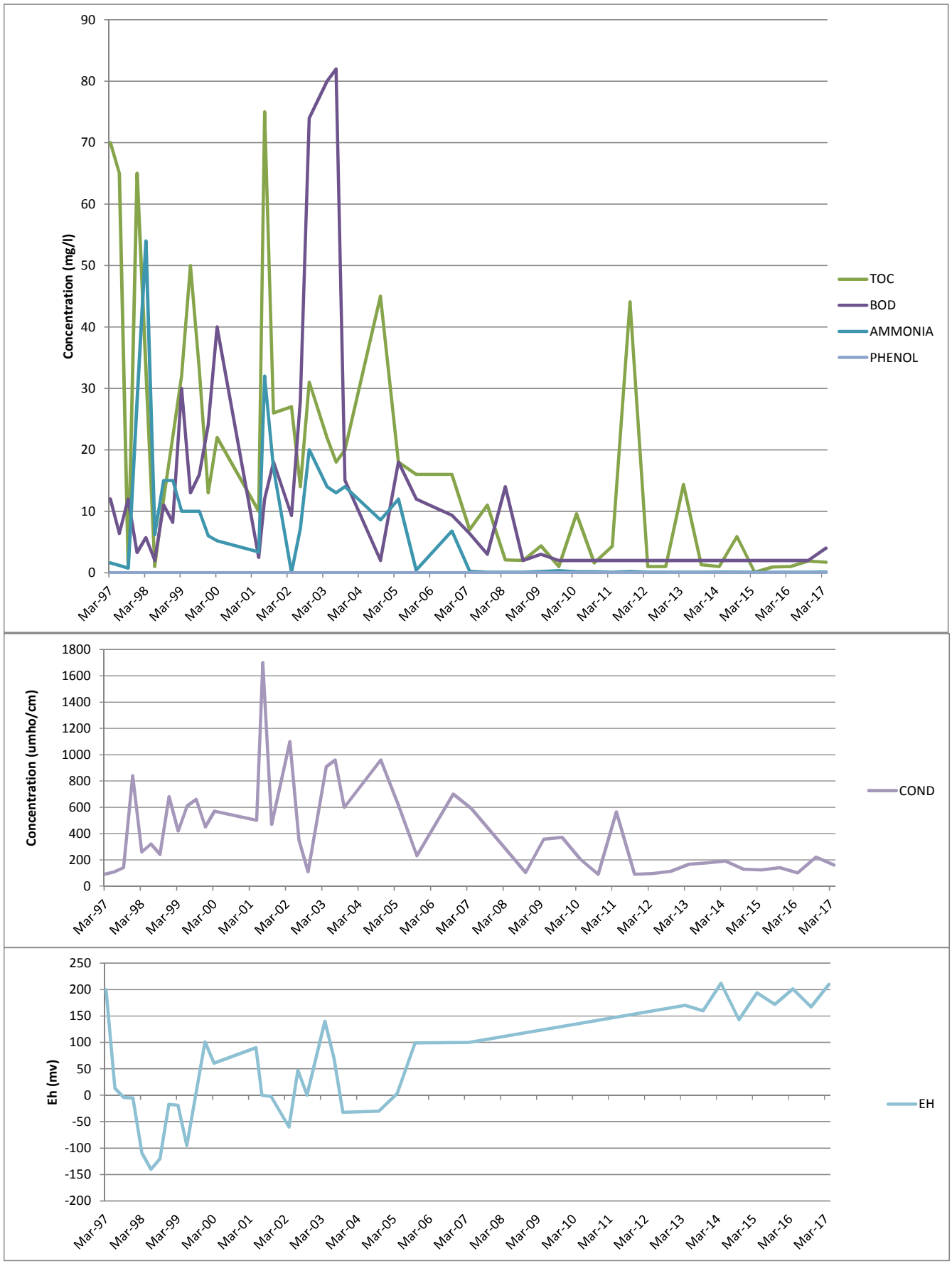


Figure 3
Monitoring Well 11B
(1997 - 2017)



APPENDIX A

LABORATORY ANAYTICAL REPORTS / DATA VALIDATION & USABILITY REPORT

Analytical Data Package

Prepared by:

Pace Analytical Services

Pace Project No.: 7016438

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Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

June 14, 2017

Christine Fetten
Town of Southampton
Waste Management Division
Southampton, NY 11968

RE: Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

Dear Christine Fetten:
Enclosed are the analytical results for sample(s) received by the laboratory between April 20, 2017 and April 21, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

REVISION 1: Report reissued on 6/14/17 to report "J" values and to add qualifiers to VOA data.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jennifer Aracri
jennifer.aracri@pacelabs.com
(631)694-3040
Project Manager

Enclosures

cc: Derek Ersbak, P.W. Grosser Consulting

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

CERTIFICATIONS

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
L-A-B DOD-ELAP Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification
Connecticut Certification #: PH-0694
Delaware Certification
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: 90133
Louisiana DHH/TNI Certification #: LA140008
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: PA00091
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification
Missouri Certification #: 235
Montana Certification #: Cert 0082
Nebraska Certification #: NE-05-29-14
Nevada Certification #: PA014572015-1
New Hampshire/TNI Certification #: 2976
New Jersey/TNI Certification #: PA 051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Oregon/TNI Certification #: PA200002
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: TN2867
Texas/TNI Certification #: T104704188-14-8
Utah/TNI Certification #: PA014572015-5
USDA Soil Permit #: P330-14-00213
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Certification
Wyoming Certification #: 8TMS-L

Long Island Certification IDs

575 Broad Hollow Rd, Melville, NY 11747
New York Certification #: 10478 Primary Accrediting Body
New Jersey Certification #: NY158
Pennsylvania Certification #: 68-00350
Connecticut Certification #: PH-0435
Maryland Certification #: 208
Rhode Island Certification #: LAO00340
Massachusetts Certification #: M-NY026
New Hampshire Certification #: 2987

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575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

SAMPLE ANALYTE COUNT

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
7016438001	**MW-1A**	EPA 6010C	AKS	23	PACE-MV
		EPA 7470A	JLN	1	PACE-MV
		EPA 8260C/5030C	KGG	50	PACE-MV
		SM22 2120B	SK1	2	PACE-MV
		SM22 2320B	TR1	1	PACE-MV
		SM22 2340C	STH	1	PACE-MV
		SM22 2540C	STH	1	PACE-MV
		SM22 3500-Cr B	JNL	1	PACE-MV
		EPA 410.4	JCA	1	PACE-MV
		SM22 5210B	VNS	1	PACE-MV
		EPA 300.0	BNK	3	PACE-MV
		EPA 351.2	SDO	1	PACE-MV
		EPA 353.2	SDO	2	PACE-MV
		EPA 353.2	SDO	1	PACE-MV
		EPA 420.1	STH	1	PACE-MV
		SM22 4500 NH3 H	BNK	1	PACE-MV
		EPA 9014 Total Cyanide	JAD	1	PACE-MV
		EPA 9060A	LEP	5	PASI-PA
7016438002	**MW-1B**	EPA 6010C	AKS	23	PACE-MV
		EPA 7470A	JLN	1	PACE-MV
		EPA 8260C/5030C	KGG	50	PACE-MV
		SM22 2120B	SK1	2	PACE-MV
		SM22 2320B	TR1	1	PACE-MV
		SM22 2340C	STH	1	PACE-MV
		SM22 2540C	STH	1	PACE-MV
		SM22 3500-Cr B	JNL	1	PACE-MV
		EPA 410.4	JCA	1	PACE-MV
		SM22 5210B	VNS	1	PACE-MV
		EPA 300.0	BNK	3	PACE-MV
		EPA 351.2	SDO	1	PACE-MV
		EPA 353.2	SDO	2	PACE-MV
		EPA 353.2	SDO	1	PACE-MV
		EPA 420.1	STH	1	PACE-MV
		SM22 4500 NH3 H	BNK	1	PACE-MV
		EPA 9014 Total Cyanide	JAD	1	PACE-MV
		EPA 9060A	LEP	5	PASI-PA
7016438003	**MW-1C**	EPA 6010C	AKS	23	PACE-MV

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SAMPLE ANALYTE COUNT

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 7470A	JLN	1	PACE-MV
		EPA 8260C/5030C	KGG	50	PACE-MV
		SM22 2120B	SK1	2	PACE-MV
		SM22 2320B	TR1	1	PACE-MV
		SM22 2340C	STH	1	PACE-MV
		SM22 2540C	STH	1	PACE-MV
		SM22 3500-Cr B	JNL	1	PACE-MV
		EPA 410.4	JCA	1	PACE-MV
		SM22 5210B	VNS	1	PACE-MV
		EPA 300.0	BNK	3	PACE-MV
		EPA 351.2	SDO	1	PACE-MV
		EPA 353.2	SDO	2	PACE-MV
		EPA 353.2	SDO	1	PACE-MV
		EPA 420.1	STH	1	PACE-MV
		SM22 4500 NH3 H	BNK	1	PACE-MV
		EPA 9014 Total Cyanide	JAD	1	PACE-MV
		EPA 9060A	LEP	5	PASI-PA
7016438005	**MW-11B**	EPA 6010C	AKS	23	PACE-MV
		EPA 6010C	AKS	23	PACE-MV
		EPA 7470A	JLN	1	PACE-MV
		EPA 7470A	JLN	1	PACE-MV
		EPA 8260C/5030C	KGG	50	PACE-MV
		SM22 2120B	SK1	2	PACE-MV
		SM22 2320B	TR1	1	PACE-MV
		SM22 2340C	STH	1	PACE-MV
		SM22 2540C	STH	1	PACE-MV
		SM22 3500-Cr B	JNL	1	PACE-MV
		EPA 410.4	JCA	1	PACE-MV
		SM22 5210B	VNS	1	PACE-MV
		EPA 300.0	BNK	3	PACE-MV
		EPA 351.2	SDO	1	PACE-MV
		EPA 353.2	SDO	2	PACE-MV
		EPA 353.2	SDO	1	PACE-MV
		EPA 420.1	STH	1	PACE-MV
		SM22 4500 NH3 H	BNK	1	PACE-MV
		EPA 9014 Total Cyanide	JAD	1	PACE-MV
		EPA 9060A	LEP	5	PASI-PA

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SAMPLE ANALYTE COUNT

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
7016438006	**MW-12A**	EPA 6010C	AKS	23	PACE-MV
		EPA 6010C	AKS	23	PACE-MV
		EPA 7470A	JLN	1	PACE-MV
		EPA 7470A	JLN	1	PACE-MV
		EPA 8260C/5030C	KGG	50	PACE-MV
		SM22 2120B	SK1	2	PACE-MV
		SM22 2320B	TR1	1	PACE-MV
		SM22 2340C	STH	1	PACE-MV
		SM22 2540C	STH	1	PACE-MV
		SM22 3500-Cr B	JNL	1	PACE-MV
		EPA 410.4	JCA	1	PACE-MV
		SM22 5210B	VNS	1	PACE-MV
		EPA 300.0	BNK	3	PACE-MV
		EPA 351.2	SDO	1	PACE-MV
		EPA 353.2	SDO	1	PACE-MV
		EPA 353.2	SDO	1	PACE-MV
		EPA 420.1	STH	1	PACE-MV
		SM22 4500 NH3 H	BNK	1	PACE-MV
		EPA 9014 Total Cyanide	JAD	1	PACE-MV
		EPA 9060A	LEP	5	PASI-PA
7016438007	**MW-12B**	EPA 6010C	AKS	23	PACE-MV
		EPA 7470A	JLN	1	PACE-MV
		EPA 8260C/5030C	KGG	50	PACE-MV
		SM22 2120B	SK1	2	PACE-MV
		SM22 2320B	TR1	1	PACE-MV
		SM22 2340C	STH	1	PACE-MV
		SM22 2540C	STH	1	PACE-MV
		SM22 3500-Cr B	JNL	1	PACE-MV
		EPA 410.4	JCA	1	PACE-MV
		SM22 5210B	VNS	1	PACE-MV
		EPA 300.0	BNK	3	PACE-MV
		EPA 351.2	SDO	1	PACE-MV
		EPA 353.2	SDO	1	PACE-MV
		EPA 353.2	SDO	1	PACE-MV
		EPA 420.1	STH	1	PACE-MV
		SM22 4500 NH3 H	BNK	1	PACE-MV
		EPA 9014 Total Cyanide	JAD	1	PACE-MV

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SAMPLE ANALYTE COUNT

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 9060A	LEP	5	PASI-PA
7016438008	**DUP001**	EPA 6010C	AKS	23	PACE-MV
		EPA 7470A	JLN	1	PACE-MV
		EPA 8260C/5030C	KGG	50	PACE-MV
		SM22 2120B	SK1	2	PACE-MV
		SM22 2320B	TR1	1	PACE-MV
		SM22 2340C	STH	1	PACE-MV
		SM22 2540C	STH	1	PACE-MV
		SM22 3500-Cr B	JNL	1	PACE-MV
		EPA 410.4	JCA	1	PACE-MV
		SM22 5210B	VNS	1	PACE-MV
		EPA 300.0	BNK	3	PACE-MV
		EPA 351.2	SDO	1	PACE-MV
		EPA 353.2	SDO	1	PACE-MV
		EPA 353.2	SDO	1	PACE-MV
		EPA 420.1	STH	1	PACE-MV
		SM22 4500 NH3 H	BNK	1	PACE-MV
		EPA 9014 Total Cyanide	JAD	1	PACE-MV
		EPA 9060A	LEP	5	PASI-PA
7016438009	**FB**	EPA 6010C	AKS	23	PACE-MV
		EPA 7470A	JLN	1	PACE-MV
		EPA 8260C/5030C	KGG	50	PACE-MV
		SM22 2120B	SK1	2	PACE-MV
		SM22 2320B	TR1	1	PACE-MV
		SM22 2340C	STH	1	PACE-MV
		SM22 2540C	STH	1	PACE-MV
		SM22 3500-Cr B	JNL	1	PACE-MV
		EPA 410.4	JCA	1	PACE-MV
		SM22 5210B	VNS	1	PACE-MV
		EPA 300.0	BNK	3	PACE-MV
		EPA 351.2	SDO	1	PACE-MV
		EPA 353.2	SDO	2	PACE-MV
		EPA 353.2	SDO	1	PACE-MV
		EPA 420.1	STH	1	PACE-MV
		SM22 4500 NH3 H	BNK	1	PACE-MV
		EPA 9014 Total Cyanide	JAD	1	PACE-MV
		EPA 9060A	LEP	5	PASI-PA

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Melville, NY 11747
(631)694-3040

SAMPLE ANALYTE COUNT

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
7016438010	**LEA-PRI**	EPA 6010C	AKS	8	PACE-MV
		SM22 2320B	TR1	1	PACE-MV
		SM22 2340C	STH	1	PACE-MV
		SM22 2540C	STH	1	PACE-MV
		EPA 410.4	JCA	1	PACE-MV
		SM22 5210B	VNS	1	PACE-MV
		EPA 300.0	BNK	3	PACE-MV
		EPA 351.2	SDO	1	PACE-MV
		EPA 353.2	SDO	2	PACE-MV
		EPA 353.2	SDO	1	PACE-MV
		EPA 420.1	STH	1	PACE-MV
		SM22 4500 NH3 H	BNK	1	PACE-MV
		SM5310C-00	LEP	1	PASI-PA
7016438011	**LEA-SEC**	EPA 6010C	AKS	8	PACE-MV
		SM22 2320B	TR1	1	PACE-MV
		SM22 2340C	STH	1	PACE-MV
		SM22 2540C	STH	1	PACE-MV
		EPA 410.4	JCA	1	PACE-MV
		SM22 5210B	VNS	1	PACE-MV
		EPA 300.0	BNK	3	PACE-MV
		EPA 351.2	SDO	1	PACE-MV
		EPA 353.2	SDO	2	PACE-MV
		EPA 353.2	SDO	1	PACE-MV
		EPA 420.1	STH	1	PACE-MV
		SM22 4500 NH3 H	BNK	1	PACE-MV
		SM5310C-00	LEP	1	PASI-PA
7016438012	**TRIP BLANK**	EPA 8260C/5030C	KGG	50	PACE-MV
7016438013	**STORAGE BLANK**	EPA 8260C/5030C	KGG	50	PACE-MV
7016438014	**MW-11A**	EPA 6010C	AKS	23	PACE-MV
		EPA 6010C	AKS	23	PACE-MV
		EPA 7470A	JLN	1	PACE-MV
		EPA 7470A	JLN	1	PACE-MV
		EPA 8260C/5030C	KGG	50	PACE-MV
		SM22 2120B	SK1	2	PACE-MV
		SM22 2320B	TR1	1	PACE-MV
		SM22 2340C	STH	1	PACE-MV
		SM22 2540C	STH	1	PACE-MV

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SAMPLE ANALYTE COUNT

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		SM22 3500-Cr B	JNL	1	PACE-MV
		EPA 410.4	JCA	1	PACE-MV
		SM22 5210B	VNS	1	PACE-MV
		EPA 300.0	BNK	3	PACE-MV
		EPA 351.2	SDO	1	PACE-MV
		EPA 353.2	SDO	2	PACE-MV
		EPA 353.2	SDO	1	PACE-MV
		EPA 420.1	STH	1	PACE-MV
		SM22 4500 NH3 H	BNK	1	PACE-MV
		EPA 9014 Total Cyanide	JAD	1	PACE-MV
		EPA 9060A	LEP	5	PASI-PA
7016438015	**MW-3A**	EPA 6010C	AKS	23	PACE-MV
		EPA 6010C	AKS	23	PACE-MV
		EPA 7470A	JLN	1	PACE-MV
		EPA 7470A	JLN	1	PACE-MV
		EPA 8260C/5030C	KGG	50	PACE-MV
		SM22 2120B	ML	2	PACE-MV
		SM22 2320B	TR1	1	PACE-MV
		SM22 2340C	STH	1	PACE-MV
		SM22 2540C	STH	1	PACE-MV
		SM22 3500-Cr B	JNL	1	PACE-MV
		EPA 410.4	JCA	1	PACE-MV
		SM22 5210B	VNS	1	PACE-MV
		EPA 300.0	BNK	3	PACE-MV
		EPA 351.2	SDO	1	PACE-MV
		EPA 353.2	SDO	1	PACE-MV
		EPA 353.2	SDO	1	PACE-MV
		EPA 420.1	STH	1	PACE-MV
		SM22 4500 NH3 H	BNK	1	PACE-MV
		EPA 9014 Total Cyanide	JAD	1	PACE-MV
		EPA 9060A	LEP	5	PASI-PA
7016438016	**MW-3B**	EPA 6010C	AKS	23	PACE-MV
		EPA 7470A	JLN	1	PACE-MV
		EPA 8260C/5030C	KGG	50	PACE-MV
		SM22 2120B	ML	2	PACE-MV
		SM22 2320B	TR1	1	PACE-MV
		SM22 2340C	STH	1	PACE-MV

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SAMPLE ANALYTE COUNT

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		SM22 2540C	STH	1	PACE-MV
		SM22 3500-Cr B	JNL	1	PACE-MV
		EPA 410.4	JCA	1	PACE-MV
		SM22 5210B	VNS	1	PACE-MV
		EPA 300.0	BNK	3	PACE-MV
		EPA 351.2	SDO	1	PACE-MV
		EPA 353.2	SDO	1	PACE-MV
		EPA 353.2	SDO	1	PACE-MV
		EPA 420.1	STH	1	PACE-MV
		SM22 4500 NH3 H	BNK	1	PACE-MV
		EPA 9014 Total Cyanide	JAD	1	PACE-MV
		EPA 9060A	LEP	5	PASI-PA
7016438017	**MW-3C**	EPA 6010C	AKS	23	PACE-MV
		EPA 7470A	JLN	1	PACE-MV
		EPA 8260C/5030C	KGG	50	PACE-MV
		SM22 2120B	ML	2	PACE-MV
		SM22 2320B	TR1	1	PACE-MV
		SM22 2340C	STH	1	PACE-MV
		SM22 2540C	STH	1	PACE-MV
		SM22 3500-Cr B	JNL	1	PACE-MV
		EPA 410.4	JCA	1	PACE-MV
		SM22 5210B	VNS	1	PACE-MV
		EPA 300.0	BNK	3	PACE-MV
		EPA 351.2	SDO	1	PACE-MV
		EPA 353.2	SDO	1	PACE-MV
		EPA 353.2	SDO	1	PACE-MV
		EPA 420.1	STH	1	PACE-MV
		SM22 4500 NH3 H	BNK	1	PACE-MV
		EPA 9014 Total Cyanide	JAD	1	PACE-MV
		EPA 9060A	LEP	5	PASI-PA
7016438018	**MW-4A**	EPA 6010C	AKS	23	PACE-MV
		EPA 7470A	JLN	1	PACE-MV
		EPA 8260C/5030C	KGG	50	PACE-MV
		SM22 2120B	ML	2	PACE-MV
		SM22 2320B	TR1	1	PACE-MV
		SM22 2340C	STH	1	PACE-MV
		SM22 2540C	STH	1	PACE-MV

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SAMPLE ANALYTE COUNT

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		SM22 3500-Cr B	JNL	1	PACE-MV
		EPA 410.4	JCA	1	PACE-MV
		SM22 5210B	VNS	1	PACE-MV
		EPA 300.0	BNK	3	PACE-MV
		EPA 351.2	SDO	1	PACE-MV
		EPA 353.2	SDO	1	PACE-MV
		EPA 353.2	SDO	1	PACE-MV
		EPA 420.1	STH	1	PACE-MV
		SM22 4500 NH3 H	BNK	1	PACE-MV
		EPA 9014 Total Cyanide	JAD	1	PACE-MV
		EPA 9060A	LEP	5	PASI-PA
7016438019	**MW-4B**	EPA 6010C	AKS	23	PACE-MV
		EPA 7470A	JLN	1	PACE-MV
		EPA 8260C/5030C	KGG	50	PACE-MV
		SM22 2120B	ML	2	PACE-MV
		SM22 2320B	TR1	1	PACE-MV
		SM22 2340C	STH	1	PACE-MV
		SM22 2540C	STH	1	PACE-MV
		SM22 3500-Cr B	JNL	1	PACE-MV
		EPA 410.4	JCA	1	PACE-MV
		SM22 5210B	VNS	1	PACE-MV
		EPA 300.0	BNK	3	PACE-MV
		EPA 351.2	SDO	1	PACE-MV
		EPA 353.2	SDO	1	PACE-MV
		EPA 353.2	SDO	1	PACE-MV
		EPA 420.1	STH	1	PACE-MV
		SM22 4500 NH3 H	BNK	1	PACE-MV
		EPA 9014 Total Cyanide	JAD	1	PACE-MV
		EPA 9060A	LEP	5	PASI-PA
7016438020	**MW-4C**	EPA 6010C	AKS	23	PACE-MV
		EPA 7470A	JLN	1	PACE-MV
		EPA 8260C/5030C	KGG	50	PACE-MV
		SM22 2120B	ML	2	PACE-MV
		SM22 2320B	TR1	1	PACE-MV
		SM22 2340C	STH	1	PACE-MV
		SM22 2540C	STH	1	PACE-MV
		SM22 3500-Cr B	JNL	1	PACE-MV

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SAMPLE ANALYTE COUNT

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 410.4	JCA	1	PACE-MV
		SM22 5210B	VNS	1	PACE-MV
		EPA 300.0	BNK	3	PACE-MV
		EPA 351.2	SDO	1	PACE-MV
		EPA 353.2	SDO	1	PACE-MV
		EPA 353.2	SDO	1	PACE-MV
		EPA 420.1	STH	1	PACE-MV
		SM22 4500 NH3 H	BNK	1	PACE-MV
		EPA 9014 Total Cyanide	JAD	1	PACE-MV
		EPA 9060A	LEP	5	PASI-PA
7016438021	**TRIP BLANK**	EPA 8260C/5030C	KGG	50	PACE-MV

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PROJECT NARRATIVE

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

Method: **EPA 6010C**
Description: 6010 MET ICP
Client: Town of Southampton
Date: June 14, 2017

General Information:
17 samples were analyzed for EPA 6010C. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3005A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

QC Batch: 21872

B: Analyte was detected in the associated method blank.
- BLANK for HBN 21872 [MPRP/2063 (Lab ID: 103457)
  - Boron
  - Manganese

QC Batch: 21998

B: Analyte was detected in the associated method blank.
- BLANK for HBN 21998 [MPRP/2076 (Lab ID: 103951)
  - Aluminum

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 21872

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 7016368002

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
- MS (Lab ID: 103460)
  - Silver

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PROJECT NARRATIVE

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

Method: **EPA 6010C**
Description: 6010 MET ICP
Client: Town of Southampton
Date: June 14, 2017

QC Batch: 21873

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 7016438014

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 103464)
  - Chromium
  - Silver

QC Batch: 21998

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 7016438017

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 103954)
  - Silver

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

QC Batch: 21873

D6: The precision between the sample and sample duplicate exceeded laboratory control limits.

- DUP (Lab ID: 103463)
  - Zinc

QC Batch: 21998

D6: The precision between the sample and sample duplicate exceeded laboratory control limits.

- DUP (Lab ID: 103953)
  - Sodium

Additional Comments:

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PROJECT NARRATIVE

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

Method: **EPA 6010C**
Description: 6010 MET ICP, Dissolved
Client: Town of Southampton
Date: June 14, 2017

General Information:
4 samples were analyzed for EPA 6010C. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

QC Batch: 22039

B: Analyte was detected in the associated method blank.

- BLANK for HBN 22039 [ICP/2617] (Lab ID: 104205)
  - Boron, Dissolved

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 22039

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 7016438005

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 104209)
  - Silver, Dissolved
  - Sodium, Dissolved

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

Method: **EPA 7470A**
Description: 7470 Mercury
Client: Town of Southampton
Date: June 14, 2017

General Information:
15 samples were analyzed for EPA 7470A. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 7470A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

Method: **EPA 7470A**
Description: 7470 Mercury, Dissolved
Client: Town of Southampton
Date: June 14, 2017

General Information:
4 samples were analyzed for EPA 7470A. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 7470A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

Method: **EPA 8260C/5030C**
Description: 8260C Volatile Organics
Client: Town of Southampton
Date: June 14, 2017

General Information:
18 samples were analyzed for EPA 8260C/5030C. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

QC Batch: 21790

CC: The continuing calibration for this compound is outside of method control limits. The result is estimated.

- BLANK (Lab ID: 103008)
  - 2-Butanone (MEK)
  - 2-Hexanone
  - 4-Methyl-2-pentanone (MIBK)
  - Acetone
  - Acrylonitrile
- DUP001 (Lab ID: 7016438008)
  - 2-Butanone (MEK)
  - 2-Hexanone
  - 4-Methyl-2-pentanone (MIBK)
  - Acetone
  - Acrylonitrile
- FB (Lab ID: 7016438009)
  - 2-Butanone (MEK)
  - 2-Hexanone
  - 4-Methyl-2-pentanone (MIBK)
  - Acetone
  - Acrylonitrile
- LCS (Lab ID: 103009)
  - 1,2-Dibromoethane (EDB)
  - 2-Butanone (MEK)
  - 2-Hexanone
  - 4-Methyl-2-pentanone (MIBK)
  - Acetone
  - Acrylonitrile
  - Carbon tetrachloride
  - Dibromochloromethane
  - Tetrachloroethene
- MS (Lab ID: 103081)
  - 1,2-Dibromoethane (EDB)

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PROJECT NARRATIVE

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

Method: **EPA 8260C/5030C**
Description: 8260C Volatile Organics
Client: Town of Southampton
Date: June 14, 2017

QC Batch: 21790

CC: The continuing calibration for this compound is outside of method control limits. The result is estimated.

- 2-Butanone (MEK)
- 2-Hexanone
- 4-Methyl-2-pentanone (MIBK)
- Acetone
- Acrylonitrile
- Carbon tetrachloride
- Dibromochloromethane
- Tetrachloroethene

- MSD (Lab ID: 103082)
  - 1,2-Dibromoethane (EDB)
  - 2-Butanone (MEK)
  - 2-Hexanone
  - 4-Methyl-2-pentanone (MIBK)
  - Acetone
  - Acrylonitrile
  - Carbon tetrachloride
  - Dibromochloromethane
  - Tetrachloroethene
- MW-11A (Lab ID: 7016438014)
  - 2-Butanone (MEK)
  - 2-Hexanone
  - 4-Methyl-2-pentanone (MIBK)
  - Acetone
  - Acrylonitrile
- MW-11B (Lab ID: 7016438005)
  - 2-Butanone (MEK)
  - 2-Hexanone
  - 4-Methyl-2-pentanone (MIBK)
  - Acetone
  - Acrylonitrile
- MW-12A (Lab ID: 7016438006)
  - 2-Butanone (MEK)
  - 2-Hexanone
  - 4-Methyl-2-pentanone (MIBK)
  - Acetone
  - Acrylonitrile
- MW-12B (Lab ID: 7016438007)
  - 2-Butanone (MEK)
  - 2-Hexanone
  - 4-Methyl-2-pentanone (MIBK)
  - Acetone
  - Acrylonitrile
- MW-1A (Lab ID: 7016438001)
  - 2-Butanone (MEK)

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PROJECT NARRATIVE

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

Method: **EPA 8260C/5030C**
Description: 8260C Volatile Organics
Client: Town of Southampton
Date: June 14, 2017

QC Batch: 21790

CC: The continuing calibration for this compound is outside of method control limits. The result is estimated.

- 2-Hexanone
- 4-Methyl-2-pentanone (MIBK)
- Acetone
- Acrylonitrile

- MW-1B (Lab ID: 7016438002)
  - 2-Butanone (MEK)
  - 2-Hexanone
  - 4-Methyl-2-pentanone (MIBK)
  - Acetone
  - Acrylonitrile
- MW-1C (Lab ID: 7016438003)
  - 2-Butanone (MEK)
  - 2-Hexanone
  - 4-Methyl-2-pentanone (MIBK)
  - Acetone
  - Acrylonitrile
- MW-3A (Lab ID: 7016438015)
  - 2-Butanone (MEK)
  - 2-Hexanone
  - 4-Methyl-2-pentanone (MIBK)
  - Acetone
  - Acrylonitrile
- MW-3B (Lab ID: 7016438016)
  - 2-Butanone (MEK)
  - 2-Hexanone
  - 4-Methyl-2-pentanone (MIBK)
  - Acetone
  - Acrylonitrile
- MW-3C (Lab ID: 7016438017)
  - 2-Butanone (MEK)
  - 2-Hexanone
  - 4-Methyl-2-pentanone (MIBK)
  - Acetone
  - Acrylonitrile
- MW-4A (Lab ID: 7016438018)
  - 2-Butanone (MEK)
  - 2-Hexanone
  - 4-Methyl-2-pentanone (MIBK)
  - Acetone
  - Acrylonitrile
- MW-4B (Lab ID: 7016438019)
  - 2-Butanone (MEK)
  - 2-Hexanone
  - 4-Methyl-2-pentanone (MIBK)

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PROJECT NARRATIVE

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

Method: **EPA 8260C/5030C**
Description: 8260C Volatile Organics
Client: Town of Southampton
Date: June 14, 2017

QC Batch: 21790

CC: The continuing calibration for this compound is outside of method control limits. The result is estimated.

- Acetone
- Acrylonitrile

- MW-4C (Lab ID: 7016438020)
  - 2-Butanone (MEK)
  - 2-Hexanone
  - 4-Methyl-2-pentanone (MIBK)
  - Acetone
  - Acrylonitrile
- STORAGE BLANK (Lab ID: 7016438013)
  - 2-Butanone (MEK)
  - 2-Hexanone
  - 4-Methyl-2-pentanone (MIBK)
  - Acetone
  - Acrylonitrile
- TRIP BLANK (Lab ID: 7016438012)
  - 2-Butanone (MEK)
  - 2-Hexanone
  - 4-Methyl-2-pentanone (MIBK)
  - Acetone
  - Acrylonitrile
- TRIP BLANK (Lab ID: 7016438021)
  - 2-Butanone (MEK)
  - 2-Hexanone
  - 4-Methyl-2-pentanone (MIBK)
  - Acetone
  - Acrylonitrile

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

QC Batch: 21790

L1: Analyte recovery in the laboratory control sample (LCS) was above QC limits. Results for this analyte in associated samples may be biased high.

- LCS (Lab ID: 103009)
  - Dibromochloromethane

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PROJECT NARRATIVE

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

Method: **EPA 8260C/5030C**
Description: 8260C Volatile Organics
Client: Town of Southampton
Date: June 14, 2017

QC Batch: 21790

L2: Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results for this analyte in associated samples may be biased low.

- LCS (Lab ID: 103009)
  - 1,1-Dichloroethane
  - 1,2-Dichloroethane
  - 4-Methyl-2-pentanone (MIBK)

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 21790

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 7016438017

M0: Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

- MS (Lab ID: 103081)
  - 4-Methyl-2-pentanone (MIBK)
- MSD (Lab ID: 103082)
  - Dibromochloromethane

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 103081)
  - trans-1,4-Dichloro-2-butene
- MSD (Lab ID: 103082)
  - 1,2-Dibromoethane (EDB)
  - Carbon tetrachloride

Additional Comments:

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PROJECT NARRATIVE

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

Method: **SM22 2120B**
Description: 2120B W Apparent Color
Client: Town of Southampton
Date: June 14, 2017

General Information:
15 samples were analyzed for SM22 2120B. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

Method: **SM22 2320B**
Description: 2320B Alkalinity
Client: Town of Southampton
Date: June 14, 2017

General Information:
17 samples were analyzed for SM22 2320B. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

QC Batch: 22096

B: Analyte was detected in the associated method blank.
- BLANK for HBN 22096 [WET/5531] (Lab ID: 104379)
  - Alkalinity, Total as CaCO3

QC Batch: 22183

B: Analyte was detected in the associated method blank.
- BLANK for HBN 22183 [WET/5549] (Lab ID: 104705)
  - Alkalinity, Total as CaCO3

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 22096

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 7016846001

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
- MS (Lab ID: 104382)
  - Alkalinity, Total as CaCO3

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

Method: **SM22 2340C**
Description: 2340C Hardness, Total
Client: Town of Southampton
Date: June 14, 2017

General Information:
17 samples were analyzed for SM22 2340C. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

Method: **SM22 2540C**
Description: 2540C Total Dissolved Solids
Client: Town of Southampton
Date: June 14, 2017

General Information:
17 samples were analyzed for SM22 2540C. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

H1: Analysis conducted outside the EPA method holding time.
- DUP001 (Lab ID: 7016438008)
- FB (Lab ID: 7016438009)
- LEA-PRI (Lab ID: 7016438010)
- LEA-SEC (Lab ID: 7016438011)
- MW-11A (Lab ID: 7016438014)
- MW-11B (Lab ID: 7016438005)
- MW-12A (Lab ID: 7016438006)
- MW-12B (Lab ID: 7016438007)
- MW-1A (Lab ID: 7016438001)
- MW-1B (Lab ID: 7016438002)
- MW-1C (Lab ID: 7016438003)

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

Method: **SM22 3500-Cr B**
Description: Chromium, Hexavalent
Client: Town of Southampton
Date: June 14, 2017

General Information:
15 samples were analyzed for SM22 3500-Cr B. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

H1: Analysis conducted outside the EPA method holding time.
- MW-4A (Lab ID: 7016438018)
- MW-4B (Lab ID: 7016438019)
- MW-4C (Lab ID: 7016438020)

H3: Sample was received or analysis requested beyond the recognized method holding time.
- DUP001 (Lab ID: 7016438008)
- FB (Lab ID: 7016438009)
- MW-11A (Lab ID: 7016438014)
- MW-11B (Lab ID: 7016438005)
- MW-12A (Lab ID: 7016438006)
- MW-12B (Lab ID: 7016438007)
- MW-1A (Lab ID: 7016438001)
- MW-1B (Lab ID: 7016438002)
- MW-1C (Lab ID: 7016438003)
- MW-3A (Lab ID: 7016438015)
- MW-3B (Lab ID: 7016438016)
- MW-3C (Lab ID: 7016438017)

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

Method: **EPA 410.4**
Description: 410.4 COD
Client: Town of Southampton
Date: June 14, 2017

General Information:
17 samples were analyzed for EPA 410.4. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 410.4 with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

Method: **SM22 5210B**
Description: 5210B BOD, 5 day
Client: Town of Southampton
Date: June 14, 2017

General Information:
17 samples were analyzed for SM22 5210B. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with SM22 5210B with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

Method: **EPA 300.0**
Description: 300.0 IC Anions 28 Days
Client: Town of Southampton
Date: June 14, 2017

General Information:
17 samples were analyzed for EPA 300.0. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

Method: **EPA 351.2**
Description: 351.2 Total Kjeldahl Nitrogen
Client: Town of Southampton
Date: June 14, 2017

General Information:
17 samples were analyzed for EPA 351.2. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 351.2 with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 22567

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 7016438017,7017067002

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 106434)
  - Nitrogen, Kjeldahl, Total

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

Method: **EPA 353.2**
Description: 353.2 Nitrogen, NO2/NO3 unpres
Client: Town of Southampton
Date: June 14, 2017

General Information:
8 samples were analyzed for EPA 353.2. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

H1: Analysis conducted outside the EPA method holding time.
- FB (Lab ID: 7016438009)

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

QC Batch: 21365

B: Analyte was detected in the associated method blank.
- BLANK for HBN 21365 [WETA/4088 (Lab ID: 101302)
  - Nitrate-Nitrite (as N)

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

Method: **EPA 353.2**
Description: 353.2 Nitrogen, NO2/NO3 pres.
Client: Town of Southampton
Date: June 14, 2017

General Information:
9 samples were analyzed for EPA 353.2. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

Method: **EPA 353.2**
Description: 353.2 Nitrogen, NO2
Client: Town of Southampton
Date: June 14, 2017

General Information:
17 samples were analyzed for EPA 353.2. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

H1: Analysis conducted outside the EPA method holding time.
- DUP001 (Lab ID: 7016438008)

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 21360

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 7016438007

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
- MS (Lab ID: 101294)
  - Nitrite as N

QC Batch: 21361

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 7016453002,7016501001

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
- MS (Lab ID: 101298)
  - Nitrite as N
- MS (Lab ID: 101300)
  - Nitrite as N

QC Batch: 21500

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 7016438017,7016613001

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
- MS (Lab ID: 101918)
  - Nitrite as N
- MS (Lab ID: 101920)
  - Nitrite as N

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

Method: **EPA 420.1**
Description: Phenolics, Total Recoverable
Client: Town of Southampton
Date: June 14, 2017

General Information:
17 samples were analyzed for EPA 420.1. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 420.1 with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 22664

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 7016438001,7016438010

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 106769)
  - Phenolics, Total Recoverable

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

Method: **SM22 4500 NH3 H**
Description: 4500 Ammonia Water
Client: Town of Southampton
Date: June 14, 2017

General Information:
17 samples were analyzed for SM22 4500 NH3 H. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

Method: **SM5310C-00**
Description: 5310C TOC
Client: Town of Southampton
Date: June 14, 2017

General Information:
2 samples were analyzed for SM5310C-00. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

Method: **EPA 9014 Total Cyanide**
Description: 9014 Cyanide, Total
Client: Town of Southampton
Date: June 14, 2017

General Information:
15 samples were analyzed for EPA 9014 Total Cyanide. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 9010C with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

Method: **EPA 9060A**
Description: 9060A Total Organic Carbon
Client: Town of Southampton
Date: June 14, 2017

General Information:
15 samples were analyzed for EPA 9060A. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

QC Batch: 257289

B: Analyte was detected in the associated method blank.

- BLANK for HBN 257289 [WETA/280 (Lab ID: 1267273)
  - Total Organic Carbon

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

Sample: MW-1A **Lab ID: 7016438001** Collected: 04/19/17 10:30 Received: 04/20/17 12:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010C Preparation Method: EPA 3005A							
Aluminum	**57.6J**	ug/L	200	1	04/25/17 10:52	05/03/17 15:31	7429-90-5	
Antimony	**<60.0**	ug/L	60.0	1	04/25/17 10:52	05/03/17 15:31	7440-36-0	
Arsenic	**<10.0**	ug/L	10.0	1	04/25/17 10:52	05/03/17 15:31	7440-38-2	
Barium	**23.9J**	ug/L	200	1	04/25/17 10:52	05/03/17 15:31	7440-39-3	
Beryllium	**<5.0**	ug/L	5.0	1	04/25/17 10:52	05/03/17 15:31	7440-41-7	
Boron	**17.8J**	ug/L	50.0	1	04/25/17 10:52	05/03/17 15:31	7440-42-8	B
Cadmium	**<2.5**	ug/L	2.5	1	04/25/17 10:52	05/03/17 15:31	7440-43-9	
Calcium	**8440**	ug/L	200	1	04/25/17 10:52	05/03/17 15:31	7440-70-2	
Chromium	**8.2J**	ug/L	10.0	1	04/25/17 10:52	05/03/17 15:31	7440-47-3	
Cobalt	**2.1J**	ug/L	50.0	1	04/25/17 10:52	05/03/17 15:31	7440-48-4	
Copper	**4.8J**	ug/L	25.0	1	04/25/17 10:52	05/03/17 15:31	7440-50-8	
Iron	**527**	ug/L	100	1	04/25/17 10:52	05/03/17 15:31	7439-89-6	
Lead	**1.5J**	ug/L	5.0	1	04/25/17 10:52	05/03/17 15:31	7439-92-1	
Magnesium	**3280**	ug/L	200	1	04/25/17 10:52	05/03/17 15:31	7439-95-4	
Manganese	**290**	ug/L	10.0	1	04/25/17 10:52	05/03/17 15:31	7439-96-5	
Nickel	**4.2J**	ug/L	40.0	1	04/25/17 10:52	05/03/17 15:31	7440-02-0	
Potassium	**2930J**	ug/L	5000	1	04/25/17 10:52	05/03/17 15:31	7440-09-7	
Selenium	**<10.0**	ug/L	10.0	1	04/25/17 10:52	05/03/17 15:31	7782-49-2	
Silver	**<10.0**	ug/L	10.0	1	04/25/17 10:52	05/03/17 15:31	7440-22-4	
Sodium	**8470**	ug/L	5000	1	04/25/17 10:52	05/03/17 15:31	7440-23-5	
Thallium	**<10.0**	ug/L	10.0	1	04/25/17 10:52	05/03/17 15:31	7440-28-0	
Vanadium	**<50.0**	ug/L	50.0	1	04/25/17 10:52	05/03/17 15:31	7440-62-2	
Zinc	**<20.0**	ug/L	20.0	1	04/25/17 10:52	05/03/17 15:31	7440-66-6	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A							
Mercury	**<0.20**	ug/L	0.20	1	04/25/17 12:55	05/02/17 14:44	7439-97-6	
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C							
Acetone	**2.1J**	ug/L	5.0	1		04/25/17 15:15	67-64-1	CC
Acrylonitrile	**<5.0**	ug/L	5.0	1		04/25/17 15:15	107-13-1	CC
Benzene	**<5.0**	ug/L	5.0	1		04/25/17 15:15	71-43-2	
Bromochloromethane	**<5.0**	ug/L	5.0	1		04/25/17 15:15	74-97-5	
Bromodichloromethane	**<5.0**	ug/L	5.0	1		04/25/17 15:15	75-27-4	
Bromoform	**<5.0**	ug/L	5.0	1		04/25/17 15:15	75-25-2	
Bromomethane	**<5.0**	ug/L	5.0	1		04/25/17 15:15	74-83-9	
2-Butanone (MEK)	**<5.0**	ug/L	5.0	1		04/25/17 15:15	78-93-3	CC
Carbon disulfide	**<5.0**	ug/L	5.0	1		04/25/17 15:15	75-15-0	
Carbon tetrachloride	**<5.0**	ug/L	5.0	1		04/25/17 15:15	56-23-5	
Chlorobenzene	**<5.0**	ug/L	5.0	1		04/25/17 15:15	108-90-7	
Chloroethane	**<5.0**	ug/L	5.0	1		04/25/17 15:15	75-00-3	
Chloroform	**<5.0**	ug/L	5.0	1		04/25/17 15:15	67-66-3	
Chloromethane	**<5.0**	ug/L	5.0	1		04/25/17 15:15	74-87-3	
1,2-Dibromo-3-chloropropane	**<5.0**	ug/L	5.0	1		04/25/17 15:15	96-12-8	
Dibromochloromethane	**<5.0**	ug/L	5.0	1		04/25/17 15:15	124-48-1	L1
1,2-Dibromoethane (EDB)	**<5.0**	ug/L	5.0	1		04/25/17 15:15	106-93-4	
Dibromomethane	**<5.0**	ug/L	5.0	1		04/25/17 15:15	74-95-3	

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Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

Sample: MW-1A **Lab ID: 7016438001** Collected: 04/19/17 10:30 Received: 04/20/17 12:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C							
1,2-Dichlorobenzene	**<5.0**	ug/L	5.0	1		04/25/17 15:15	95-50-1	
1,4-Dichlorobenzene	**<5.0**	ug/L	5.0	1		04/25/17 15:15	106-46-7	
trans-1,4-Dichloro-2-butene	**<5.0**	ug/L	5.0	1		04/25/17 15:15	110-57-6	
1,1-Dichloroethane	**<5.0**	ug/L	5.0	1		04/25/17 15:15	75-34-3	L2
1,2-Dichloroethane	**<5.0**	ug/L	5.0	1		04/25/17 15:15	107-06-2	L2
1,1-Dichloroethene	**<5.0**	ug/L	5.0	1		04/25/17 15:15	75-35-4	
cis-1,2-Dichloroethene	**<5.0**	ug/L	5.0	1		04/25/17 15:15	156-59-2	
trans-1,2-Dichloroethene	**<5.0**	ug/L	5.0	1		04/25/17 15:15	156-60-5	
1,2-Dichloropropane	**<5.0**	ug/L	5.0	1		04/25/17 15:15	78-87-5	
cis-1,3-Dichloropropene	**<5.0**	ug/L	5.0	1		04/25/17 15:15	10061-01-5	
trans-1,3-Dichloropropene	**<5.0**	ug/L	5.0	1		04/25/17 15:15	10061-02-6	
Ethylbenzene	**<5.0**	ug/L	5.0	1		04/25/17 15:15	100-41-4	
2-Hexanone	**<5.0**	ug/L	5.0	1		04/25/17 15:15	591-78-6	CC
Iodomethane	**<5.0**	ug/L	5.0	1		04/25/17 15:15	74-88-4	
Methylene Chloride	**<5.0**	ug/L	5.0	1		04/25/17 15:15	75-09-2	
4-Methyl-2-pentanone (MIBK)	**<5.0**	ug/L	5.0	1		04/25/17 15:15	108-10-1	CC,L2
Styrene	**<5.0**	ug/L	5.0	1		04/25/17 15:15	100-42-5	
1,1,1,2-Tetrachloroethane	**<5.0**	ug/L	5.0	1		04/25/17 15:15	630-20-6	
1,1,2,2-Tetrachloroethane	**<5.0**	ug/L	5.0	1		04/25/17 15:15	79-34-5	
Tetrachloroethene	**<5.0**	ug/L	5.0	1		04/25/17 15:15	127-18-4	
Toluene	**<5.0**	ug/L	5.0	1		04/25/17 15:15	108-88-3	
1,1,1-Trichloroethane	**<5.0**	ug/L	5.0	1		04/25/17 15:15	71-55-6	
1,1,2-Trichloroethane	**<5.0**	ug/L	5.0	1		04/25/17 15:15	79-00-5	
Trichloroethene	**<5.0**	ug/L	5.0	1		04/25/17 15:15	79-01-6	
Trichlorofluoromethane	**<5.0**	ug/L	5.0	1		04/25/17 15:15	75-69-4	
1,2,3-Trichloropropane	**<5.0**	ug/L	5.0	1		04/25/17 15:15	96-18-4	
Vinyl acetate	**<5.0**	ug/L	5.0	1		04/25/17 15:15	108-05-4	
Vinyl chloride	**<5.0**	ug/L	5.0	1		04/25/17 15:15	75-01-4	
Xylene (Total)	**<5.0**	ug/L	5.0	1		04/25/17 15:15	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	90	%.	68-153	1		04/25/17 15:15	17060-07-0	
4-Bromofluorobenzene (S)	119	%.	79-124	1		04/25/17 15:15	460-00-4	
Toluene-d8 (S)	117	%.	69-124	1		04/25/17 15:15	2037-26-5	
2120B W Apparent Color	Analytical Method: SM22 2120B							
Apparent Color	**20.0**	units	5.0	1		04/20/17 14:51		
pH	**6.0**	Std. Units	0.10	1		04/20/17 14:51		
2320B Alkalinity	Analytical Method: SM22 2320B							
Alkalinity, Total as CaCO3	**23.2**	mg/L	1.0	1		04/27/17 13:09		
2340C Hardness, Total	Analytical Method: SM22 2340C							
Total Hardness	**40.0**	mg/L	5.0	1		05/03/17 14:08		
2540C Total Dissolved Solids	Analytical Method: SM22 2540C							
Total Dissolved Solids	**73.0**	mg/L	10.0	1		04/27/17 14:06		H1

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(631)694-3040

ANALYTICAL RESULTS

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

Sample: MW-1A **Lab ID: 7016438001** Collected: 04/19/17 10:30 Received: 04/20/17 12:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Chromium, Hexavalent	Analytical Method: SM22 3500-Cr B							
Chromium, Hexavalent	**<0.020**	mg/L	0.020	1		04/21/17 01:10	18540-29-9	H3
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4							
Chemical Oxygen Demand	**<10.0**	mg/L	10.0	1	04/28/17 11:33	04/28/17 14:24		
5210B BOD, 5 day	Analytical Method: SM22 5210B Preparation Method: SM22 5210B							
BOD, 5 day	**1.0J**	mg/L	2.0	1	04/20/17 18:41	04/25/17 13:19		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0							
Bromide	**<0.50**	mg/L	0.50	1		05/08/17 18:51	24959-67-9	
Chloride	**14.0**	mg/L	2.0	1		05/08/17 18:51	16887-00-6	
Sulfate	**8.9**	mg/L	5.0	1		05/08/17 18:51	14808-79-8	
351.2 Total Kjeldahl Nitrogen	Analytical Method: EPA 351.2 Preparation Method: EPA 351.2							
Nitrogen, Kjeldahl, Total	**0.16**	mg/L	0.10	1	05/02/17 06:55	05/02/17 13:15	7727-37-9	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2							
Nitrate as N	**1.3**	mg/L	0.050	1		04/21/17 08:06	14797-55-8	
Nitrate-Nitrite (as N)	**1.3**	mg/L	0.050	1		04/21/17 08:06	7727-37-9	
353.2 Nitrogen, NO2	Analytical Method: EPA 353.2							
Nitrite as N	**<0.050**	mg/L	0.050	1		04/21/17 04:08	14797-65-0	
Phenolics, Total Recoverable	Analytical Method: EPA 420.1 Preparation Method: EPA 420.1							
Phenolics, Total Recoverable	**56.4**	ug/L	10.0	2	05/02/17 12:00	05/02/17 18:06		M1
4500 Ammonia Water	Analytical Method: SM22 4500 NH3 H							
Nitrogen, Ammonia	**0.040J**	mg/L	0.10	1		05/08/17 13:08	7664-41-7	
9014 Cyanide, Total	Analytical Method: EPA 9014 Total Cyanide Preparation Method: EPA 9010C							
Cyanide	**<10.0**	ug/L	10.0	1	05/02/17 09:52	05/02/17 17:26	57-12-5	
9060A Total Organic Carbon	Analytical Method: EPA 9060A							
Total Organic Carbon	**0.94J**	mg/L	1.0	1		05/03/17 22:07	7440-44-0	
Total Organic Carbon	**0.81J**	mg/L	1.0	1		05/03/17 22:07	7440-44-0	
Total Organic Carbon	**0.75J**	mg/L	1.0	1		05/03/17 22:07	7440-44-0	
Total Organic Carbon	**0.76J**	mg/L	1.0	1		05/03/17 22:07	7440-44-0	
Mean Total Organic Carbon	**0.82J**	mg/L	1.0	1		05/03/17 22:07	7440-44-0	

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ANALYTICAL RESULTS

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

Sample: MW-1B **Lab ID: 7016438002** Collected: 04/19/17 10:05 Received: 04/20/17 12:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010C Preparation Method: EPA 3005A							
Aluminum	**<200**	ug/L	200	1	04/25/17 10:52	05/03/17 15:36	7429-90-5	
Antimony	**<60.0**	ug/L	60.0	1	04/25/17 10:52	05/03/17 15:36	7440-36-0	
Arsenic	**<10.0**	ug/L	10.0	1	04/25/17 10:52	05/03/17 15:36	7440-38-2	
Barium	**9.7J**	ug/L	200	1	04/25/17 10:52	05/03/17 15:36	7440-39-3	
Beryllium	**<5.0**	ug/L	5.0	1	04/25/17 10:52	05/03/17 15:36	7440-41-7	
Boron	**10J**	ug/L	50.0	1	04/25/17 10:52	05/03/17 15:36	7440-42-8	B
Cadmium	**<2.5**	ug/L	2.5	1	04/25/17 10:52	05/03/17 15:36	7440-43-9	
Calcium	**3970**	ug/L	200	1	04/25/17 10:52	05/03/17 15:36	7440-70-2	
Chromium	**2.9J**	ug/L	10.0	1	04/25/17 10:52	05/03/17 15:36	7440-47-3	
Cobalt	**<50.0**	ug/L	50.0	1	04/25/17 10:52	05/03/17 15:36	7440-48-4	
Copper	**2.6J**	ug/L	25.0	1	04/25/17 10:52	05/03/17 15:36	7440-50-8	
Iron	**<100**	ug/L	100	1	04/25/17 10:52	05/03/17 15:36	7439-89-6	
Lead	**<5.0**	ug/L	5.0	1	04/25/17 10:52	05/03/17 15:36	7439-92-1	
Magnesium	**1830**	ug/L	200	1	04/25/17 10:52	05/03/17 15:36	7439-95-4	
Manganese	**1.3J**	ug/L	10.0	1	04/25/17 10:52	05/03/17 15:36	7439-96-5	B
Nickel	**10J**	ug/L	40.0	1	04/25/17 10:52	05/03/17 15:36	7440-02-0	
Potassium	**<5000**	ug/L	5000	1	04/25/17 10:52	05/03/17 15:36	7440-09-7	
Selenium	**<10.0**	ug/L	10.0	1	04/25/17 10:52	05/03/17 15:36	7782-49-2	
Silver	**<10.0**	ug/L	10.0	1	04/25/17 10:52	05/03/17 15:36	7440-22-4	
Sodium	**7860**	ug/L	5000	1	04/25/17 10:52	05/03/17 15:36	7440-23-5	
Thallium	**<10.0**	ug/L	10.0	1	04/25/17 10:52	05/03/17 15:36	7440-28-0	
Vanadium	**<50.0**	ug/L	50.0	1	04/25/17 10:52	05/03/17 15:36	7440-62-2	
Zinc	**<20.0**	ug/L	20.0	1	04/25/17 10:52	05/03/17 15:36	7440-66-6	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A							
Mercury	**<0.20**	ug/L	0.20	1	04/25/17 12:55	05/02/17 14:46	7439-97-6	
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C							
Acetone	**3.4J**	ug/L	5.0	1		04/25/17 15:33	67-64-1	CC
Acrylonitrile	**<5.0**	ug/L	5.0	1		04/25/17 15:33	107-13-1	CC
Benzene	**<5.0**	ug/L	5.0	1		04/25/17 15:33	71-43-2	
Bromochloromethane	**<5.0**	ug/L	5.0	1		04/25/17 15:33	74-97-5	
Bromodichloromethane	**<5.0**	ug/L	5.0	1		04/25/17 15:33	75-27-4	
Bromoform	**<5.0**	ug/L	5.0	1		04/25/17 15:33	75-25-2	
Bromomethane	**<5.0**	ug/L	5.0	1		04/25/17 15:33	74-83-9	
2-Butanone (MEK)	**<5.0**	ug/L	5.0	1		04/25/17 15:33	78-93-3	CC
Carbon disulfide	**<5.0**	ug/L	5.0	1		04/25/17 15:33	75-15-0	
Carbon tetrachloride	**<5.0**	ug/L	5.0	1		04/25/17 15:33	56-23-5	
Chlorobenzene	**<5.0**	ug/L	5.0	1		04/25/17 15:33	108-90-7	
Chloroethane	**<5.0**	ug/L	5.0	1		04/25/17 15:33	75-00-3	
Chloroform	**2.7J**	ug/L	5.0	1		04/25/17 15:33	67-66-3	
Chloromethane	**<5.0**	ug/L	5.0	1		04/25/17 15:33	74-87-3	
1,2-Dibromo-3-chloropropane	**<5.0**	ug/L	5.0	1		04/25/17 15:33	96-12-8	
Dibromochloromethane	**<5.0**	ug/L	5.0	1		04/25/17 15:33	124-48-1	L1
1,2-Dibromoethane (EDB)	**<5.0**	ug/L	5.0	1		04/25/17 15:33	106-93-4	
Dibromomethane	**<5.0**	ug/L	5.0	1		04/25/17 15:33	74-95-3	

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ANALYTICAL RESULTS

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

Sample: MW-1B **Lab ID: 7016438002** Collected: 04/19/17 10:05 Received: 04/20/17 12:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C							
1,2-Dichlorobenzene	**<5.0**	ug/L	5.0	1		04/25/17 15:33	95-50-1	
1,4-Dichlorobenzene	**<5.0**	ug/L	5.0	1		04/25/17 15:33	106-46-7	
trans-1,4-Dichloro-2-butene	**<5.0**	ug/L	5.0	1		04/25/17 15:33	110-57-6	
1,1-Dichloroethane	**<5.0**	ug/L	5.0	1		04/25/17 15:33	75-34-3	L2
1,2-Dichloroethane	**<5.0**	ug/L	5.0	1		04/25/17 15:33	107-06-2	L2
1,1-Dichloroethene	**<5.0**	ug/L	5.0	1		04/25/17 15:33	75-35-4	
cis-1,2-Dichloroethene	**<5.0**	ug/L	5.0	1		04/25/17 15:33	156-59-2	
trans-1,2-Dichloroethene	**<5.0**	ug/L	5.0	1		04/25/17 15:33	156-60-5	
1,2-Dichloropropane	**<5.0**	ug/L	5.0	1		04/25/17 15:33	78-87-5	
cis-1,3-Dichloropropene	**<5.0**	ug/L	5.0	1		04/25/17 15:33	10061-01-5	
trans-1,3-Dichloropropene	**<5.0**	ug/L	5.0	1		04/25/17 15:33	10061-02-6	
Ethylbenzene	**<5.0**	ug/L	5.0	1		04/25/17 15:33	100-41-4	
2-Hexanone	**<5.0**	ug/L	5.0	1		04/25/17 15:33	591-78-6	CC
Iodomethane	**<5.0**	ug/L	5.0	1		04/25/17 15:33	74-88-4	
Methylene Chloride	**<5.0**	ug/L	5.0	1		04/25/17 15:33	75-09-2	
4-Methyl-2-pentanone (MIBK)	**<5.0**	ug/L	5.0	1		04/25/17 15:33	108-10-1	CC,L2
Styrene	**<5.0**	ug/L	5.0	1		04/25/17 15:33	100-42-5	
1,1,1,2-Tetrachloroethane	**<5.0**	ug/L	5.0	1		04/25/17 15:33	630-20-6	
1,1,2,2-Tetrachloroethane	**<5.0**	ug/L	5.0	1		04/25/17 15:33	79-34-5	
Tetrachloroethene	**<5.0**	ug/L	5.0	1		04/25/17 15:33	127-18-4	
Toluene	**<5.0**	ug/L	5.0	1		04/25/17 15:33	108-88-3	
1,1,1-Trichloroethane	**<5.0**	ug/L	5.0	1		04/25/17 15:33	71-55-6	
1,1,2-Trichloroethane	**<5.0**	ug/L	5.0	1		04/25/17 15:33	79-00-5	
Trichloroethene	**<5.0**	ug/L	5.0	1		04/25/17 15:33	79-01-6	
Trichlorofluoromethane	**<5.0**	ug/L	5.0	1		04/25/17 15:33	75-69-4	
1,2,3-Trichloropropane	**<5.0**	ug/L	5.0	1		04/25/17 15:33	96-18-4	
Vinyl acetate	**<5.0**	ug/L	5.0	1		04/25/17 15:33	108-05-4	
Vinyl chloride	**<5.0**	ug/L	5.0	1		04/25/17 15:33	75-01-4	
Xylene (Total)	**<5.0**	ug/L	5.0	1		04/25/17 15:33	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	90	%.	68-153	1		04/25/17 15:33	17060-07-0	
4-Bromofluorobenzene (S)	118	%.	79-124	1		04/25/17 15:33	460-00-4	
Toluene-d8 (S)	112	%.	69-124	1		04/25/17 15:33	2037-26-5	
2120B W Apparent Color	Analytical Method: SM22 2120B							
Apparent Color	**5.0**	units	5.0	1		04/20/17 14:53		
pH	**6.0**	Std. Units	0.10	1		04/20/17 14:53		
2320B Alkalinity	Analytical Method: SM22 2320B							
Alkalinity, Total as CaCO3	**10.6**	mg/L	1.0	1		04/27/17 13:15		
2340C Hardness, Total	Analytical Method: SM22 2340C							
Total Hardness	**18.0**	mg/L	5.0	1		05/03/17 14:10		
2540C Total Dissolved Solids	Analytical Method: SM22 2540C							
Total Dissolved Solids	**42.0**	mg/L	10.0	1		04/27/17 14:07		H1

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(631)694-3040

ANALYTICAL RESULTS

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

Sample: MW-1B **Lab ID: 7016438002** Collected: 04/19/17 10:05 Received: 04/20/17 12:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Chromium, Hexavalent	Analytical Method: SM22 3500-Cr B							
Chromium, Hexavalent	**<0.020**	mg/L	0.020	1		04/21/17 01:09	18540-29-9	H3
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4							
Chemical Oxygen Demand	**<10.0**	mg/L	10.0	1	04/28/17 11:33	04/28/17 14:24		
5210B BOD, 5 day	Analytical Method: SM22 5210B Preparation Method: SM22 5210B							
BOD, 5 day	**1.0J**	mg/L	2.0	1	04/20/17 18:41	04/25/17 13:22		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0							
Bromide	**<0.50**	mg/L	0.50	1		05/08/17 19:18	24959-67-9	
Chloride	**8.8**	mg/L	2.0	1		05/08/17 19:18	16887-00-6	
Sulfate	**7.5**	mg/L	5.0	1		05/08/17 19:18	14808-79-8	
351.2 Total Kjeldahl Nitrogen	Analytical Method: EPA 351.2 Preparation Method: EPA 351.2							
Nitrogen, Kjeldahl, Total	**<0.10**	mg/L	0.10	1	05/02/17 06:55	05/02/17 13:16	7727-37-9	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2							
Nitrate as N	**0.024J**	mg/L	0.050	1		04/21/17 08:08	14797-55-8	
Nitrate-Nitrite (as N)	**0.024J**	mg/L	0.050	1		04/21/17 08:08	7727-37-9	
353.2 Nitrogen, NO2	Analytical Method: EPA 353.2							
Nitrite as N	**<0.050**	mg/L	0.050	1		04/21/17 04:12	14797-65-0	
Phenolics, Total Recoverable	Analytical Method: EPA 420.1 Preparation Method: EPA 420.1							
Phenolics, Total Recoverable	**78.3**	ug/L	10.0	2	05/02/17 12:00	05/02/17 18:10		
4500 Ammonia Water	Analytical Method: SM22 4500 NH3 H							
Nitrogen, Ammonia	**0.088J**	mg/L	0.10	1		05/08/17 13:09	7664-41-7	
9014 Cyanide, Total	Analytical Method: EPA 9014 Total Cyanide Preparation Method: EPA 9010C							
Cyanide	**<10.0**	ug/L	10.0	1	05/02/17 09:52	05/02/17 17:26	57-12-5	
9060A Total Organic Carbon	Analytical Method: EPA 9060A							
Total Organic Carbon	**0.22J**	mg/L	1.0	1		05/03/17 23:14	7440-44-0	
Total Organic Carbon	**0.17J**	mg/L	1.0	1		05/03/17 23:14	7440-44-0	
Total Organic Carbon	**0.15J**	mg/L	1.0	1		05/03/17 23:14	7440-44-0	
Total Organic Carbon	**0.16J**	mg/L	1.0	1		05/03/17 23:14	7440-44-0	
Mean Total Organic Carbon	**0.18J**	mg/L	1.0	1		05/03/17 23:14	7440-44-0	

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ANALYTICAL RESULTS

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

Sample: MW-1C **Lab ID: 7016438003** Collected: 04/19/17 09:20 Received: 04/20/17 12:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010C Preparation Method: EPA 3005A							
Aluminum	**<200**	ug/L	200	1	04/25/17 10:52	05/03/17 15:41	7429-90-5	
Antimony	**<60.0**	ug/L	60.0	1	04/25/17 10:52	05/03/17 15:41	7440-36-0	
Arsenic	**<10.0**	ug/L	10.0	1	04/25/17 10:52	05/03/17 15:41	7440-38-2	
Barium	**9.2J**	ug/L	200	1	04/25/17 10:52	05/03/17 15:41	7440-39-3	
Beryllium	**<5.0**	ug/L	5.0	1	04/25/17 10:52	05/03/17 15:41	7440-41-7	
Boron	**11.5J**	ug/L	50.0	1	04/25/17 10:52	05/03/17 15:41	7440-42-8	B
Cadmium	**<2.5**	ug/L	2.5	1	04/25/17 10:52	05/03/17 15:41	7440-43-9	
Calcium	**4440**	ug/L	200	1	04/25/17 10:52	05/03/17 15:41	7440-70-2	
Chromium	**4.1J**	ug/L	10.0	1	04/25/17 10:52	05/03/17 15:41	7440-47-3	
Cobalt	**<50.0**	ug/L	50.0	1	04/25/17 10:52	05/03/17 15:41	7440-48-4	
Copper	**<25.0**	ug/L	25.0	1	04/25/17 10:52	05/03/17 15:41	7440-50-8	
Iron	**<100**	ug/L	100	1	04/25/17 10:52	05/03/17 15:41	7439-89-6	
Lead	**<5.0**	ug/L	5.0	1	04/25/17 10:52	05/03/17 15:41	7439-92-1	
Magnesium	**2380**	ug/L	200	1	04/25/17 10:52	05/03/17 15:41	7439-95-4	
Manganese	**0.79J**	ug/L	10.0	1	04/25/17 10:52	05/03/17 15:41	7439-96-5	B
Nickel	**24.8J**	ug/L	40.0	1	04/25/17 10:52	05/03/17 15:41	7440-02-0	
Potassium	**<5000**	ug/L	5000	1	04/25/17 10:52	05/03/17 15:41	7440-09-7	
Selenium	**<10.0**	ug/L	10.0	1	04/25/17 10:52	05/03/17 15:41	7782-49-2	
Silver	**<10.0**	ug/L	10.0	1	04/25/17 10:52	05/03/17 15:41	7440-22-4	
Sodium	**7770**	ug/L	5000	1	04/25/17 10:52	05/03/17 15:41	7440-23-5	
Thallium	**<10.0**	ug/L	10.0	1	04/25/17 10:52	05/03/17 15:41	7440-28-0	
Vanadium	**<50.0**	ug/L	50.0	1	04/25/17 10:52	05/03/17 15:41	7440-62-2	
Zinc	**<20.0**	ug/L	20.0	1	04/25/17 10:52	05/03/17 15:41	7440-66-6	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A							
Mercury	**<0.20**	ug/L	0.20	1	04/25/17 12:55	05/02/17 14:47	7439-97-6	
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C							
Acetone	**4.5J**	ug/L	5.0	1		04/25/17 15:50	67-64-1	CC
Acrylonitrile	**<5.0**	ug/L	5.0	1		04/25/17 15:50	107-13-1	CC
Benzene	**<5.0**	ug/L	5.0	1		04/25/17 15:50	71-43-2	
Bromochloromethane	**<5.0**	ug/L	5.0	1		04/25/17 15:50	74-97-5	
Bromodichloromethane	**<5.0**	ug/L	5.0	1		04/25/17 15:50	75-27-4	
Bromoform	**<5.0**	ug/L	5.0	1		04/25/17 15:50	75-25-2	
Bromomethane	**<5.0**	ug/L	5.0	1		04/25/17 15:50	74-83-9	
2-Butanone (MEK)	**<5.0**	ug/L	5.0	1		04/25/17 15:50	78-93-3	CC
Carbon disulfide	**<5.0**	ug/L	5.0	1		04/25/17 15:50	75-15-0	
Carbon tetrachloride	**<5.0**	ug/L	5.0	1		04/25/17 15:50	56-23-5	
Chlorobenzene	**<5.0**	ug/L	5.0	1		04/25/17 15:50	108-90-7	
Chloroethane	**<5.0**	ug/L	5.0	1		04/25/17 15:50	75-00-3	
Chloroform	**2.3J**	ug/L	5.0	1		04/25/17 15:50	67-66-3	
Chloromethane	**<5.0**	ug/L	5.0	1		04/25/17 15:50	74-87-3	
1,2-Dibromo-3-chloropropane	**<5.0**	ug/L	5.0	1		04/25/17 15:50	96-12-8	
Dibromochloromethane	**<5.0**	ug/L	5.0	1		04/25/17 15:50	124-48-1	L1
1,2-Dibromoethane (EDB)	**<5.0**	ug/L	5.0	1		04/25/17 15:50	106-93-4	
Dibromomethane	**<5.0**	ug/L	5.0	1		04/25/17 15:50	74-95-3	

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ANALYTICAL RESULTS

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

Sample: MW-1C **Lab ID: 7016438003** Collected: 04/19/17 09:20 Received: 04/20/17 12:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C							
1,2-Dichlorobenzene	**<5.0**	ug/L	5.0	1		04/25/17 15:50	95-50-1	
1,4-Dichlorobenzene	**<5.0**	ug/L	5.0	1		04/25/17 15:50	106-46-7	
trans-1,4-Dichloro-2-butene	**<5.0**	ug/L	5.0	1		04/25/17 15:50	110-57-6	
1,1-Dichloroethane	**<5.0**	ug/L	5.0	1		04/25/17 15:50	75-34-3	L2
1,2-Dichloroethane	**<5.0**	ug/L	5.0	1		04/25/17 15:50	107-06-2	L2
1,1-Dichloroethene	**<5.0**	ug/L	5.0	1		04/25/17 15:50	75-35-4	
cis-1,2-Dichloroethene	**<5.0**	ug/L	5.0	1		04/25/17 15:50	156-59-2	
trans-1,2-Dichloroethene	**<5.0**	ug/L	5.0	1		04/25/17 15:50	156-60-5	
1,2-Dichloropropane	**<5.0**	ug/L	5.0	1		04/25/17 15:50	78-87-5	
cis-1,3-Dichloropropene	**<5.0**	ug/L	5.0	1		04/25/17 15:50	10061-01-5	
trans-1,3-Dichloropropene	**<5.0**	ug/L	5.0	1		04/25/17 15:50	10061-02-6	
Ethylbenzene	**<5.0**	ug/L	5.0	1		04/25/17 15:50	100-41-4	
2-Hexanone	**<5.0**	ug/L	5.0	1		04/25/17 15:50	591-78-6	CC
Iodomethane	**<5.0**	ug/L	5.0	1		04/25/17 15:50	74-88-4	
Methylene Chloride	**<5.0**	ug/L	5.0	1		04/25/17 15:50	75-09-2	
4-Methyl-2-pentanone (MIBK)	**<5.0**	ug/L	5.0	1		04/25/17 15:50	108-10-1	CC,L2
Styrene	**<5.0**	ug/L	5.0	1		04/25/17 15:50	100-42-5	
1,1,1,2-Tetrachloroethane	**<5.0**	ug/L	5.0	1		04/25/17 15:50	630-20-6	
1,1,2,2-Tetrachloroethane	**<5.0**	ug/L	5.0	1		04/25/17 15:50	79-34-5	
Tetrachloroethene	**<5.0**	ug/L	5.0	1		04/25/17 15:50	127-18-4	
Toluene	**<5.0**	ug/L	5.0	1		04/25/17 15:50	108-88-3	
1,1,1-Trichloroethane	**<5.0**	ug/L	5.0	1		04/25/17 15:50	71-55-6	
1,1,2-Trichloroethane	**<5.0**	ug/L	5.0	1		04/25/17 15:50	79-00-5	
Trichloroethene	**<5.0**	ug/L	5.0	1		04/25/17 15:50	79-01-6	
Trichlorofluoromethane	**<5.0**	ug/L	5.0	1		04/25/17 15:50	75-69-4	
1,2,3-Trichloropropane	**<5.0**	ug/L	5.0	1		04/25/17 15:50	96-18-4	
Vinyl acetate	**<5.0**	ug/L	5.0	1		04/25/17 15:50	108-05-4	
Vinyl chloride	**<5.0**	ug/L	5.0	1		04/25/17 15:50	75-01-4	
Xylene (Total)	**<5.0**	ug/L	5.0	1		04/25/17 15:50	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	89	%.	68-153	1		04/25/17 15:50	17060-07-0	
4-Bromofluorobenzene (S)	120	%.	79-124	1		04/25/17 15:50	460-00-4	
Toluene-d8 (S)	115	%.	69-124	1		04/25/17 15:50	2037-26-5	
2120B W Apparent Color	Analytical Method: SM22 2120B							
Apparent Color	**5.0**	units	5.0	1		04/20/17 14:51		
pH	**6.0**	Std. Units	0.10	1		04/20/17 14:51		
2320B Alkalinity	Analytical Method: SM22 2320B							
Alkalinity, Total as CaCO3	**10.8**	mg/L	1.0	1		04/27/17 13:42		
2340C Hardness, Total	Analytical Method: SM22 2340C							
Total Hardness	**22.0**	mg/L	5.0	1		05/03/17 14:11		
2540C Total Dissolved Solids	Analytical Method: SM22 2540C							
Total Dissolved Solids	**50.0**	mg/L	10.0	1		04/27/17 14:08		H1

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ANALYTICAL RESULTS

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

Sample: MW-1C **Lab ID: 7016438003** Collected: 04/19/17 09:20 Received: 04/20/17 12:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Chromium, Hexavalent	Analytical Method: SM22 3500-Cr B							
Chromium, Hexavalent	**<0.020**	mg/L	0.020	1		04/21/17 01:09	18540-29-9	H3
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4							
Chemical Oxygen Demand	**<10.0**	mg/L	10.0	1	04/28/17 11:33	04/28/17 14:25		
5210B BOD, 5 day	Analytical Method: SM22 5210B Preparation Method: SM22 5210B							
BOD, 5 day	**1.0J**	mg/L	2.0	1	04/20/17 18:41	04/25/17 13:26		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0							
Bromide	**<0.50**	mg/L	0.50	1		05/08/17 19:31	24959-67-9	
Chloride	**9.0**	mg/L	2.0	1		05/08/17 19:31	16887-00-6	
Sulfate	**8.2**	mg/L	5.0	1		05/08/17 19:31	14808-79-8	
351.2 Total Kjeldahl Nitrogen	Analytical Method: EPA 351.2 Preparation Method: EPA 351.2							
Nitrogen, Kjeldahl, Total	**<0.10**	mg/L	0.10	1	05/02/17 06:55	05/02/17 13:16	7727-37-9	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2							
Nitrate as N	**0.19**	mg/L	0.050	1		04/21/17 08:09	14797-55-8	
Nitrate-Nitrite (as N)	**0.19**	mg/L	0.050	1		04/21/17 08:09	7727-37-9	
353.2 Nitrogen, NO2	Analytical Method: EPA 353.2							
Nitrite as N	**<0.050**	mg/L	0.050	1		04/21/17 04:13	14797-65-0	
Phenolics, Total Recoverable	Analytical Method: EPA 420.1 Preparation Method: EPA 420.1							
Phenolics, Total Recoverable	**39.6**	ug/L	10.0	2	05/02/17 12:00	05/02/17 18:10		
4500 Ammonia Water	Analytical Method: SM22 4500 NH3 H							
Nitrogen, Ammonia	**0.046J**	mg/L	0.10	1		05/08/17 13:10	7664-41-7	
9014 Cyanide, Total	Analytical Method: EPA 9014 Total Cyanide Preparation Method: EPA 9010C							
Cyanide	**<10.0**	ug/L	10.0	1	05/02/17 09:52	05/02/17 17:26	57-12-5	
9060A Total Organic Carbon	Analytical Method: EPA 9060A							
Total Organic Carbon	**0.19J**	mg/L	1.0	1		05/03/17 23:49	7440-44-0	
Total Organic Carbon	**0.16J**	mg/L	1.0	1		05/03/17 23:49	7440-44-0	
Total Organic Carbon	**0.13J**	mg/L	1.0	1		05/03/17 23:49	7440-44-0	
Total Organic Carbon	**0.14J**	mg/L	1.0	1		05/03/17 23:49	7440-44-0	
Mean Total Organic Carbon	**0.16J**	mg/L	1.0	1		05/03/17 23:49	7440-44-0	

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ANALYTICAL RESULTS

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

Sample: MW-11B **Lab ID: 7016438005** Collected: 04/19/17 12:00 Received: 04/20/17 12:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010C Preparation Method: EPA 3005A							
Aluminum	**902**	ug/L	200	1	04/25/17 10:52	05/03/17 15:46	7429-90-5	
Antimony	**<60.0**	ug/L	60.0	1	04/25/17 10:52	05/03/17 15:46	7440-36-0	
Arsenic	**<10.0**	ug/L	10.0	1	04/25/17 10:52	05/03/17 15:46	7440-38-2	
Barium	**26.0J**	ug/L	200	1	04/25/17 10:52	05/03/17 15:46	7440-39-3	
Beryllium	**<5.0**	ug/L	5.0	1	04/25/17 10:52	05/03/17 15:46	7440-41-7	
Boron	**18.6J**	ug/L	50.0	1	04/25/17 10:52	05/03/17 15:46	7440-42-8	B
Cadmium	**0.099J**	ug/L	2.5	1	04/25/17 10:52	05/03/17 15:46	7440-43-9	
Calcium	**13600**	ug/L	200	1	04/25/17 10:52	05/03/17 15:46	7440-70-2	
Chromium	**17.0**	ug/L	10.0	1	04/25/17 10:52	05/03/17 15:46	7440-47-3	
Cobalt	**0.88J**	ug/L	50.0	1	04/25/17 10:52	05/03/17 15:46	7440-48-4	
Copper	**7.3J**	ug/L	25.0	1	04/25/17 10:52	05/03/17 15:46	7440-50-8	
Iron	**9950**	ug/L	100	1	04/25/17 10:52	05/03/17 15:46	7439-89-6	
Lead	**6.3**	ug/L	5.0	1	04/25/17 10:52	05/03/17 15:46	7439-92-1	
Magnesium	**4640**	ug/L	200	1	04/25/17 10:52	05/03/17 15:46	7439-95-4	
Manganese	**345**	ug/L	10.0	1	04/25/17 10:52	05/03/17 15:46	7439-96-5	
Nickel	**9.9J**	ug/L	40.0	1	04/25/17 10:52	05/03/17 15:46	7440-02-0	
Potassium	**1650J**	ug/L	5000	1	04/25/17 10:52	05/03/17 15:46	7440-09-7	
Selenium	**<10.0**	ug/L	10.0	1	04/25/17 10:52	05/03/17 15:46	7782-49-2	
Silver	**<10.0**	ug/L	10.0	1	04/25/17 10:52	05/03/17 15:46	7440-22-4	
Sodium	**8300**	ug/L	5000	1	04/25/17 10:52	05/03/17 15:46	7440-23-5	
Thallium	**<10.0**	ug/L	10.0	1	04/25/17 10:52	05/03/17 15:46	7440-28-0	
Vanadium	**2.3J**	ug/L	50.0	1	04/25/17 10:52	05/03/17 15:46	7440-62-2	
Zinc	**8.9J**	ug/L	20.0	1	04/25/17 10:52	05/03/17 15:46	7440-66-6	
6010 MET ICP, Dissolved	Analytical Method: EPA 6010C							
Aluminum, Dissolved	**<200**	ug/L	200	1		05/03/17 20:47	7429-90-5	
Antimony, Dissolved	**<60.0**	ug/L	60.0	1		05/03/17 20:47	7440-36-0	
Arsenic, Dissolved	**<10.0**	ug/L	10.0	1		05/03/17 20:47	7440-38-2	
Barium, Dissolved	**7.8J**	ug/L	200	1		05/03/17 20:47	7440-39-3	
Beryllium, Dissolved	**<5.0**	ug/L	5.0	1		05/03/17 20:47	7440-41-7	
Boron, Dissolved	**19.8J**	ug/L	50.0	1		05/03/17 20:47	7440-42-8	B
Cadmium, Dissolved	**0.081J**	ug/L	2.5	1		05/03/17 20:47	7440-43-9	
Calcium, Dissolved	**10000**	ug/L	200	1		05/03/17 20:47	7440-70-2	
Chromium, Dissolved	**<10.0**	ug/L	10.0	1		05/03/17 20:47	7440-47-3	
Cobalt, Dissolved	**<50.0**	ug/L	50.0	1		05/03/17 20:47	7440-48-4	
Copper, Dissolved	**4.0J**	ug/L	25.0	1		05/03/17 20:47	7440-50-8	
Iron, Dissolved	**<100**	ug/L	100	1		05/03/17 20:47	7439-89-6	
Lead, Dissolved	**<5.0**	ug/L	5.0	1		05/03/17 20:47	7439-92-1	
Magnesium, Dissolved	**3420**	ug/L	200	1		05/03/17 20:47	7439-95-4	
Manganese, Dissolved	**7.6J**	ug/L	10.0	1		05/03/17 20:47	7439-96-5	
Nickel, Dissolved	**1.9J**	ug/L	40.0	1		05/03/17 20:47	7440-02-0	
Potassium, Dissolved	**1240J**	ug/L	5000	1		05/03/17 20:47	7440-09-7	
Selenium, Dissolved	**<10.0**	ug/L	10.0	1		05/03/17 20:47	7782-49-2	
Silver, Dissolved	**<10.0**	ug/L	10.0	1		05/03/17 20:47	7440-22-4	M1
Sodium, Dissolved	**7630**	ug/L	5000	1		05/03/17 20:47	7440-23-5	M1
Thallium, Dissolved	**<10.0**	ug/L	10.0	1		05/03/17 20:47	7440-28-0	
Vanadium, Dissolved	**<50.0**	ug/L	50.0	1		05/03/17 20:47	7440-62-2	

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Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

Sample: MW-11B **Lab ID: 7016438005** Collected: 04/19/17 12:00 Received: 04/20/17 12:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA 6010C							
Zinc, Dissolved	**<20.0**	ug/L	20.0	1		05/03/17 20:47	7440-66-6	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A							
Mercury	**<0.20**	ug/L	0.20	1	04/25/17 12:55	05/02/17 14:49	7439-97-6	
7470 Mercury, Dissolved	Analytical Method: EPA 7470A Preparation Method: EPA 7470A							
Mercury, Dissolved	**<0.20**	ug/L	0.20	1	04/28/17 10:41	05/02/17 15:45	7439-97-6	
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C							
Acetone	**4.8J**	ug/L	5.0	1		04/25/17 16:08	67-64-1	CC
Acrylonitrile	**<5.0**	ug/L	5.0	1		04/25/17 16:08	107-13-1	CC
Benzene	**<5.0**	ug/L	5.0	1		04/25/17 16:08	71-43-2	
Bromochloromethane	**<5.0**	ug/L	5.0	1		04/25/17 16:08	74-97-5	
Bromodichloromethane	**<5.0**	ug/L	5.0	1		04/25/17 16:08	75-27-4	
Bromoform	**<5.0**	ug/L	5.0	1		04/25/17 16:08	75-25-2	
Bromomethane	**<5.0**	ug/L	5.0	1		04/25/17 16:08	74-83-9	
2-Butanone (MEK)	**<5.0**	ug/L	5.0	1		04/25/17 16:08	78-93-3	CC
Carbon disulfide	**<5.0**	ug/L	5.0	1		04/25/17 16:08	75-15-0	
Carbon tetrachloride	**<5.0**	ug/L	5.0	1		04/25/17 16:08	56-23-5	
Chlorobenzene	**<5.0**	ug/L	5.0	1		04/25/17 16:08	108-90-7	
Chloroethane	**<5.0**	ug/L	5.0	1		04/25/17 16:08	75-00-3	
Chloroform	**2.0J**	ug/L	5.0	1		04/25/17 16:08	67-66-3	
Chloromethane	**<5.0**	ug/L	5.0	1		04/25/17 16:08	74-87-3	
1,2-Dibromo-3-chloropropane	**<5.0**	ug/L	5.0	1		04/25/17 16:08	96-12-8	
Dibromochloromethane	**<5.0**	ug/L	5.0	1		04/25/17 16:08	124-48-1	L1
1,2-Dibromoethane (EDB)	**<5.0**	ug/L	5.0	1		04/25/17 16:08	106-93-4	
Dibromomethane	**<5.0**	ug/L	5.0	1		04/25/17 16:08	74-95-3	
1,2-Dichlorobenzene	**<5.0**	ug/L	5.0	1		04/25/17 16:08	95-50-1	
1,4-Dichlorobenzene	**<5.0**	ug/L	5.0	1		04/25/17 16:08	106-46-7	
trans-1,4-Dichloro-2-butene	**<5.0**	ug/L	5.0	1		04/25/17 16:08	110-57-6	
1,1-Dichloroethane	**<5.0**	ug/L	5.0	1		04/25/17 16:08	75-34-3	L2
1,2-Dichloroethane	**<5.0**	ug/L	5.0	1		04/25/17 16:08	107-06-2	L2
1,1-Dichloroethene	**<5.0**	ug/L	5.0	1		04/25/17 16:08	75-35-4	
cis-1,2-Dichloroethene	**<5.0**	ug/L	5.0	1		04/25/17 16:08	156-59-2	
trans-1,2-Dichloroethene	**<5.0**	ug/L	5.0	1		04/25/17 16:08	156-60-5	
1,2-Dichloropropane	**<5.0**	ug/L	5.0	1		04/25/17 16:08	78-87-5	
cis-1,3-Dichloropropene	**<5.0**	ug/L	5.0	1		04/25/17 16:08	10061-01-5	
trans-1,3-Dichloropropene	**<5.0**	ug/L	5.0	1		04/25/17 16:08	10061-02-6	
Ethylbenzene	**<5.0**	ug/L	5.0	1		04/25/17 16:08	100-41-4	
2-Hexanone	**<5.0**	ug/L	5.0	1		04/25/17 16:08	591-78-6	CC
Iodomethane	**<5.0**	ug/L	5.0	1		04/25/17 16:08	74-88-4	
Methylene Chloride	**<5.0**	ug/L	5.0	1		04/25/17 16:08	75-09-2	
4-Methyl-2-pentanone (MIBK)	**<5.0**	ug/L	5.0	1		04/25/17 16:08	108-10-1	CC,L2
Styrene	**<5.0**	ug/L	5.0	1		04/25/17 16:08	100-42-5	
1,1,1,2-Tetrachloroethane	**<5.0**	ug/L	5.0	1		04/25/17 16:08	630-20-6	
1,1,2,2-Tetrachloroethane	**<5.0**	ug/L	5.0	1		04/25/17 16:08	79-34-5	

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Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

Sample: MW-11B **Lab ID: 7016438005** Collected: 04/19/17 12:00 Received: 04/20/17 12:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C							
Tetrachloroethene	**<5.0**	ug/L	5.0	1		04/25/17 16:08	127-18-4	
Toluene	**<5.0**	ug/L	5.0	1		04/25/17 16:08	108-88-3	
1,1,1-Trichloroethane	**<5.0**	ug/L	5.0	1		04/25/17 16:08	71-55-6	
1,1,2-Trichloroethane	**<5.0**	ug/L	5.0	1		04/25/17 16:08	79-00-5	
Trichloroethene	**<5.0**	ug/L	5.0	1		04/25/17 16:08	79-01-6	
Trichlorofluoromethane	**<5.0**	ug/L	5.0	1		04/25/17 16:08	75-69-4	
1,2,3-Trichloropropane	**<5.0**	ug/L	5.0	1		04/25/17 16:08	96-18-4	
Vinyl acetate	**<5.0**	ug/L	5.0	1		04/25/17 16:08	108-05-4	
Vinyl chloride	**<5.0**	ug/L	5.0	1		04/25/17 16:08	75-01-4	
Xylene (Total)	**<5.0**	ug/L	5.0	1		04/25/17 16:08	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	90	%.	68-153	1		04/25/17 16:08	17060-07-0	
4-Bromofluorobenzene (S)	118	%.	79-124	1		04/25/17 16:08	460-00-4	
Toluene-d8 (S)	113	%.	69-124	1		04/25/17 16:08	2037-26-5	
2120B W Apparent Color	Analytical Method: SM22 2120B							
Apparent Color	**50.0**	units	10.0	2		04/20/17 15:08		
pH	**6.0**	Std. Units	0.10	2		04/20/17 15:08		
2320B Alkalinity	Analytical Method: SM22 2320B							
Alkalinity, Total as CaCO3	**43.6**	mg/L	1.0	1		04/27/17 13:47		
2340C Hardness, Total	Analytical Method: SM22 2340C							
Total Hardness	**58.0**	mg/L	5.0	1		05/03/17 14:13		
2540C Total Dissolved Solids	Analytical Method: SM22 2540C							
Total Dissolved Solids	**75.0**	mg/L	10.0	1		04/27/17 14:08		H1
Chromium, Hexavalent	Analytical Method: SM22 3500-Cr B							
Chromium, Hexavalent	**<0.020**	mg/L	0.020	1		04/21/17 01:11	18540-29-9	H3
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4							
Chemical Oxygen Demand	**8.8J**	mg/L	10.0	1	04/28/17 11:33	04/28/17 14:26		
5210B BOD, 5 day	Analytical Method: SM22 5210B Preparation Method: SM22 5210B							
BOD, 5 day	**<4.0**	mg/L	4.0	2	04/21/17 09:33	04/26/17 10:42		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0							
Bromide	**0.029J**	mg/L	0.50	1		05/08/17 19:45	24959-67-9	
Chloride	**9.3**	mg/L	2.0	1		05/08/17 19:45	16887-00-6	
Sulfate	**7.1**	mg/L	5.0	1		05/08/17 19:45	14808-79-8	
351.2 Total Kjeldahl Nitrogen	Analytical Method: EPA 351.2 Preparation Method: EPA 351.2							
Nitrogen, Kjeldahl, Total	**0.41**	mg/L	0.10	1	05/02/17 06:55	05/02/17 13:17	7727-37-9	

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(631)694-3040

ANALYTICAL RESULTS

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

Sample: MW-11B **Lab ID: 7016438005** Collected: 04/19/17 12:00 Received: 04/20/17 12:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2							
Nitrate as N	**0.41**	mg/L	0.050	1		04/21/17 09:03	14797-55-8	
Nitrate-Nitrite (as N)	**0.41**	mg/L	0.050	1		04/21/17 09:03	7727-37-9	
353.2 Nitrogen, NO2	Analytical Method: EPA 353.2							
Nitrite as N	**<0.050**	mg/L	0.050	1		04/21/17 04:14	14797-65-0	
Phenolics, Total Recoverable	Analytical Method: EPA 420.1 Preparation Method: EPA 420.1							
Phenolics, Total Recoverable	**13.5**	ug/L	5.0	1	05/02/17 12:00	05/02/17 18:17		
4500 Ammonia Water	Analytical Method: SM22 4500 NH3 H							
Nitrogen, Ammonia	**0.14**	mg/L	0.10	1		05/08/17 13:11	7664-41-7	
9014 Cyanide, Total	Analytical Method: EPA 9014 Total Cyanide Preparation Method: EPA 9010C							
Cyanide	**<10.0**	ug/L	10.0	1	05/02/17 09:52	05/02/17 17:26	57-12-5	
9060A Total Organic Carbon	Analytical Method: EPA 9060A							
Total Organic Carbon	**2.0J**	mg/L	5.0	5		05/04/17 00:24	7440-44-0	
Total Organic Carbon	**1.6J**	mg/L	5.0	5		05/04/17 00:24	7440-44-0	
Total Organic Carbon	**1.6J**	mg/L	5.0	5		05/04/17 00:24	7440-44-0	
Total Organic Carbon	**1.6J**	mg/L	5.0	5		05/04/17 00:24	7440-44-0	
Mean Total Organic Carbon	**1.7J**	mg/L	5.0	5		05/04/17 00:24	7440-44-0	

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ANALYTICAL RESULTS

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

Sample: MW-12A **Lab ID: 7016438006** Collected: 04/19/17 07:30 Received: 04/20/17 12:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010C Preparation Method: EPA 3005A							
Aluminum	**44.9J**	ug/L	200	1	04/25/17 10:52	05/03/17 16:01	7429-90-5	
Antimony	**<60.0**	ug/L	60.0	1	04/25/17 10:52	05/03/17 16:01	7440-36-0	
Arsenic	**<10.0**	ug/L	10.0	1	04/25/17 10:52	05/03/17 16:01	7440-38-2	
Barium	**29.0J**	ug/L	200	1	04/25/17 10:52	05/03/17 16:01	7440-39-3	
Beryllium	**<5.0**	ug/L	5.0	1	04/25/17 10:52	05/03/17 16:01	7440-41-7	
Boron	**40.7J**	ug/L	50.0	1	04/25/17 10:52	05/03/17 16:01	7440-42-8	
Cadmium	**<2.5**	ug/L	2.5	1	04/25/17 10:52	05/03/17 16:01	7440-43-9	
Calcium	**15100**	ug/L	200	1	04/25/17 10:52	05/03/17 16:01	7440-70-2	
Chromium	**2.1J**	ug/L	10.0	1	04/25/17 10:52	05/03/17 16:01	7440-47-3	
Cobalt	**4.6J**	ug/L	50.0	1	04/25/17 10:52	05/03/17 16:01	7440-48-4	
Copper	**2.7J**	ug/L	25.0	1	04/25/17 10:52	05/03/17 16:01	7440-50-8	
Iron	**1560**	ug/L	100	1	04/25/17 10:52	05/03/17 16:01	7439-89-6	
Lead	**<5.0**	ug/L	5.0	1	04/25/17 10:52	05/03/17 16:01	7439-92-1	
Magnesium	**4240**	ug/L	200	1	04/25/17 10:52	05/03/17 16:01	7439-95-4	
Manganese	**2690**	ug/L	10.0	1	04/25/17 10:52	05/03/17 16:01	7439-96-5	
Nickel	**5.5J**	ug/L	40.0	1	04/25/17 10:52	05/03/17 16:01	7440-02-0	
Potassium	**3980J**	ug/L	5000	1	04/25/17 10:52	05/03/17 16:01	7440-09-7	
Selenium	**<10.0**	ug/L	10.0	1	04/25/17 10:52	05/03/17 16:01	7782-49-2	
Silver	**<10.0**	ug/L	10.0	1	04/25/17 10:52	05/03/17 16:01	7440-22-4	
Sodium	**8650**	ug/L	5000	1	04/25/17 10:52	05/03/17 16:01	7440-23-5	
Thallium	**4.1J**	ug/L	10.0	1	04/25/17 10:52	05/03/17 16:01	7440-28-0	
Vanadium	**1.3J**	ug/L	50.0	1	04/25/17 10:52	05/03/17 16:01	7440-62-2	
Zinc	**1.2J**	ug/L	20.0	1	04/25/17 10:52	05/03/17 16:01	7440-66-6	
6010 MET ICP, Dissolved	Analytical Method: EPA 6010C							
Aluminum, Dissolved	**<200**	ug/L	200	1		05/03/17 21:07	7429-90-5	
Antimony, Dissolved	**<60.0**	ug/L	60.0	1		05/03/17 21:07	7440-36-0	
Arsenic, Dissolved	**<10.0**	ug/L	10.0	1		05/03/17 21:07	7440-38-2	
Barium, Dissolved	**23.8J**	ug/L	200	1		05/03/17 21:07	7440-39-3	
Beryllium, Dissolved	**<5.0**	ug/L	5.0	1		05/03/17 21:07	7440-41-7	
Boron, Dissolved	**38.9J**	ug/L	50.0	1		05/03/17 21:07	7440-42-8	B
Cadmium, Dissolved	**0.64J**	ug/L	2.5	1		05/03/17 21:07	7440-43-9	
Calcium, Dissolved	**13800**	ug/L	200	1		05/03/17 21:07	7440-70-2	
Chromium, Dissolved	**<10.0**	ug/L	10.0	1		05/03/17 21:07	7440-47-3	
Cobalt, Dissolved	**2.5J**	ug/L	50.0	1		05/03/17 21:07	7440-48-4	
Copper, Dissolved	**7.8J**	ug/L	25.0	1		05/03/17 21:07	7440-50-8	
Iron, Dissolved	**<100**	ug/L	100	1		05/03/17 21:07	7439-89-6	
Lead, Dissolved	**<5.0**	ug/L	5.0	1		05/03/17 21:07	7439-92-1	
Magnesium, Dissolved	**3680**	ug/L	200	1		05/03/17 21:07	7439-95-4	
Manganese, Dissolved	**2230**	ug/L	10.0	1		05/03/17 21:07	7439-96-5	
Nickel, Dissolved	**7.1J**	ug/L	40.0	1		05/03/17 21:07	7440-02-0	
Potassium, Dissolved	**3800J**	ug/L	5000	1		05/03/17 21:07	7440-09-7	
Selenium, Dissolved	**<10.0**	ug/L	10.0	1		05/03/17 21:07	7782-49-2	
Silver, Dissolved	**<10.0**	ug/L	10.0	1		05/03/17 21:07	7440-22-4	
Sodium, Dissolved	**8250**	ug/L	5000	1		05/03/17 21:07	7440-23-5	
Thallium, Dissolved	**<10.0**	ug/L	10.0	1		05/03/17 21:07	7440-28-0	
Vanadium, Dissolved	**<50.0**	ug/L	50.0	1		05/03/17 21:07	7440-62-2	

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(631)694-3040

ANALYTICAL RESULTS

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

Sample: MW-12A **Lab ID: 7016438006** Collected: 04/19/17 07:30 Received: 04/20/17 12:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA 6010C							
Zinc, Dissolved	**8.3J**	ug/L	20.0	1		05/03/17 21:07	7440-66-6	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A							
Mercury	**<0.20**	ug/L	0.20	1	04/25/17 12:55	05/02/17 14:55	7439-97-6	
7470 Mercury, Dissolved	Analytical Method: EPA 7470A Preparation Method: EPA 7470A							
Mercury, Dissolved	**<0.20**	ug/L	0.20	1	04/28/17 10:41	05/02/17 15:48	7439-97-6	
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C							
Acetone	**3.9J**	ug/L	5.0	1		04/25/17 16:26	67-64-1	CC
Acrylonitrile	**<5.0**	ug/L	5.0	1		04/25/17 16:26	107-13-1	CC
Benzene	**<5.0**	ug/L	5.0	1		04/25/17 16:26	71-43-2	
Bromochloromethane	**<5.0**	ug/L	5.0	1		04/25/17 16:26	74-97-5	
Bromodichloromethane	**<5.0**	ug/L	5.0	1		04/25/17 16:26	75-27-4	
Bromoform	**<5.0**	ug/L	5.0	1		04/25/17 16:26	75-25-2	
Bromomethane	**<5.0**	ug/L	5.0	1		04/25/17 16:26	74-83-9	
2-Butanone (MEK)	**<5.0**	ug/L	5.0	1		04/25/17 16:26	78-93-3	CC
Carbon disulfide	**<5.0**	ug/L	5.0	1		04/25/17 16:26	75-15-0	
Carbon tetrachloride	**<5.0**	ug/L	5.0	1		04/25/17 16:26	56-23-5	
Chlorobenzene	**<5.0**	ug/L	5.0	1		04/25/17 16:26	108-90-7	
Chloroethane	**<5.0**	ug/L	5.0	1		04/25/17 16:26	75-00-3	
Chloroform	**<5.0**	ug/L	5.0	1		04/25/17 16:26	67-66-3	
Chloromethane	**<5.0**	ug/L	5.0	1		04/25/17 16:26	74-87-3	
1,2-Dibromo-3-chloropropane	**<5.0**	ug/L	5.0	1		04/25/17 16:26	96-12-8	
Dibromochloromethane	**<5.0**	ug/L	5.0	1		04/25/17 16:26	124-48-1	L1
1,2-Dibromoethane (EDB)	**<5.0**	ug/L	5.0	1		04/25/17 16:26	106-93-4	
Dibromomethane	**<5.0**	ug/L	5.0	1		04/25/17 16:26	74-95-3	
1,2-Dichlorobenzene	**<5.0**	ug/L	5.0	1		04/25/17 16:26	95-50-1	
1,4-Dichlorobenzene	**<5.0**	ug/L	5.0	1		04/25/17 16:26	106-46-7	
trans-1,4-Dichloro-2-butene	**<5.0**	ug/L	5.0	1		04/25/17 16:26	110-57-6	
1,1-Dichloroethane	**<5.0**	ug/L	5.0	1		04/25/17 16:26	75-34-3	L2
1,2-Dichloroethane	**<5.0**	ug/L	5.0	1		04/25/17 16:26	107-06-2	L2
1,1-Dichloroethene	**<5.0**	ug/L	5.0	1		04/25/17 16:26	75-35-4	
cis-1,2-Dichloroethene	**<5.0**	ug/L	5.0	1		04/25/17 16:26	156-59-2	
trans-1,2-Dichloroethene	**<5.0**	ug/L	5.0	1		04/25/17 16:26	156-60-5	
1,2-Dichloropropane	**<5.0**	ug/L	5.0	1		04/25/17 16:26	78-87-5	
cis-1,3-Dichloropropene	**<5.0**	ug/L	5.0	1		04/25/17 16:26	10061-01-5	
trans-1,3-Dichloropropene	**<5.0**	ug/L	5.0	1		04/25/17 16:26	10061-02-6	
Ethylbenzene	**<5.0**	ug/L	5.0	1		04/25/17 16:26	100-41-4	
2-Hexanone	**<5.0**	ug/L	5.0	1		04/25/17 16:26	591-78-6	CC
Iodomethane	**<5.0**	ug/L	5.0	1		04/25/17 16:26	74-88-4	
Methylene Chloride	**<5.0**	ug/L	5.0	1		04/25/17 16:26	75-09-2	
4-Methyl-2-pentanone (MIBK)	**<5.0**	ug/L	5.0	1		04/25/17 16:26	108-10-1	CC,L2
Styrene	**<5.0**	ug/L	5.0	1		04/25/17 16:26	100-42-5	
1,1,1,2-Tetrachloroethane	**<5.0**	ug/L	5.0	1		04/25/17 16:26	630-20-6	
1,1,2,2-Tetrachloroethane	**<5.0**	ug/L	5.0	1		04/25/17 16:26	79-34-5	

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575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

Sample: MW-12A **Lab ID: 7016438006** Collected: 04/19/17 07:30 Received: 04/20/17 12:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C							
Tetrachloroethene	**<5.0**	ug/L	5.0	1		04/25/17 16:26	127-18-4	
Toluene	**<5.0**	ug/L	5.0	1		04/25/17 16:26	108-88-3	
1,1,1-Trichloroethane	**<5.0**	ug/L	5.0	1		04/25/17 16:26	71-55-6	
1,1,2-Trichloroethane	**<5.0**	ug/L	5.0	1		04/25/17 16:26	79-00-5	
Trichloroethene	**<5.0**	ug/L	5.0	1		04/25/17 16:26	79-01-6	
Trichlorofluoromethane	**<5.0**	ug/L	5.0	1		04/25/17 16:26	75-69-4	
1,2,3-Trichloropropane	**<5.0**	ug/L	5.0	1		04/25/17 16:26	96-18-4	
Vinyl acetate	**<5.0**	ug/L	5.0	1		04/25/17 16:26	108-05-4	
Vinyl chloride	**<5.0**	ug/L	5.0	1		04/25/17 16:26	75-01-4	
Xylene (Total)	**<5.0**	ug/L	5.0	1		04/25/17 16:26	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	90	%.	68-153	1		04/25/17 16:26	17060-07-0	
4-Bromofluorobenzene (S)	119	%.	79-124	1		04/25/17 16:26	460-00-4	
Toluene-d8 (S)	114	%.	69-124	1		04/25/17 16:26	2037-26-5	
2120B W Apparent Color	Analytical Method: SM22 2120B							
Apparent Color	**125**	units	12.5	2.5		04/20/17 14:47		
pH	**7.0**	Std. Units	0.10	2.5		04/20/17 14:47		
2320B Alkalinity	Analytical Method: SM22 2320B							
Alkalinity, Total as CaCO3	**47.0**	mg/L	1.0	1		04/27/17 13:54		
2340C Hardness, Total	Analytical Method: SM22 2340C							
Total Hardness	**66.0**	mg/L	5.0	1		05/03/17 14:14		
2540C Total Dissolved Solids	Analytical Method: SM22 2540C							
Total Dissolved Solids	**93.0**	mg/L	10.0	1		04/27/17 14:08		H1
Chromium, Hexavalent	Analytical Method: SM22 3500-Cr B							
Chromium, Hexavalent	**<0.020**	mg/L	0.020	1		04/21/17 01:07	18540-29-9	H3
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4							
Chemical Oxygen Demand	**8.8J**	mg/L	10.0	1	04/28/17 11:33	04/28/17 14:26		
5210B BOD, 5 day	Analytical Method: SM22 5210B Preparation Method: SM22 5210B							
BOD, 5 day	**1.0J**	mg/L	2.0	1	04/20/17 18:40	04/25/17 13:29		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0							
Bromide	**0.057J**	mg/L	0.50	1		05/08/17 19:58	24959-67-9	
Chloride	**11.0**	mg/L	2.0	1		05/08/17 19:58	16887-00-6	
Sulfate	**14.5**	mg/L	5.0	1		05/08/17 19:58	14808-79-8	
351.2 Total Kjeldahl Nitrogen	Analytical Method: EPA 351.2 Preparation Method: EPA 351.2							
Nitrogen, Kjeldahl, Total	**0.93**	mg/L	0.10	1	05/02/17 06:55	05/02/17 13:20	7727-37-9	

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Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

Sample: MW-12A **Lab ID: 7016438006** Collected: 04/19/17 07:30 Received: 04/20/17 12:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2							
Nitrate-Nitrite (as N)	**0.52**	mg/L	0.050	1		04/27/17 11:06	7727-37-9	
353.2 Nitrogen, NO2	Analytical Method: EPA 353.2							
Nitrite as N	**<0.050**	mg/L	0.050	1		04/21/17 04:16	14797-65-0	
Phenolics, Total Recoverable	Analytical Method: EPA 420.1 Preparation Method: EPA 420.1							
Phenolics, Total Recoverable	**13.5**	ug/L	5.0	1	05/02/17 12:00	05/02/17 18:17		
4500 Ammonia Water	Analytical Method: SM22 4500 NH3 H							
Nitrogen, Ammonia	**0.31**	mg/L	0.10	1		05/08/17 13:13	7664-41-7	
9014 Cyanide, Total	Analytical Method: EPA 9014 Total Cyanide Preparation Method: EPA 9010C							
Cyanide	**<10.0**	ug/L	10.0	1	05/02/17 09:52	05/02/17 17:27	57-12-5	
9060A Total Organic Carbon	Analytical Method: EPA 9060A							
Total Organic Carbon	**1.3J**	mg/L	5.0	5		05/04/17 00:59	7440-44-0	
Total Organic Carbon	**1.2J**	mg/L	5.0	5		05/04/17 00:59	7440-44-0	
Total Organic Carbon	**1.1J**	mg/L	5.0	5		05/04/17 00:59	7440-44-0	
Total Organic Carbon	**1.2J**	mg/L	5.0	5		05/04/17 00:59	7440-44-0	
Mean Total Organic Carbon	**1.2J**	mg/L	5.0	5		05/04/17 00:59	7440-44-0	

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ANALYTICAL RESULTS

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

Sample: MW-12B **Lab ID: 7016438007** Collected: 04/19/17 08:00 Received: 04/20/17 12:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010C Preparation Method: EPA 3005A							
Aluminum	**13.6J**	ug/L	200	1	04/25/17 10:52	05/03/17 16:06	7429-90-5	
Antimony	**<60.0**	ug/L	60.0	1	04/25/17 10:52	05/03/17 16:06	7440-36-0	
Arsenic	**<10.0**	ug/L	10.0	1	04/25/17 10:52	05/03/17 16:06	7440-38-2	
Barium	**17.0J**	ug/L	200	1	04/25/17 10:52	05/03/17 16:06	7440-39-3	
Beryllium	**<5.0**	ug/L	5.0	1	04/25/17 10:52	05/03/17 16:06	7440-41-7	
Boron	**32.8J**	ug/L	50.0	1	04/25/17 10:52	05/03/17 16:06	7440-42-8	B
Cadmium	**<2.5**	ug/L	2.5	1	04/25/17 10:52	05/03/17 16:06	7440-43-9	
Calcium	**11300**	ug/L	200	1	04/25/17 10:52	05/03/17 16:06	7440-70-2	
Chromium	**<10.0**	ug/L	10.0	1	04/25/17 10:52	05/03/17 16:06	7440-47-3	
Cobalt	**<50.0**	ug/L	50.0	1	04/25/17 10:52	05/03/17 16:06	7440-48-4	
Copper	**<25.0**	ug/L	25.0	1	04/25/17 10:52	05/03/17 16:06	7440-50-8	
Iron	**39.3J**	ug/L	100	1	04/25/17 10:52	05/03/17 16:06	7439-89-6	
Lead	**<5.0**	ug/L	5.0	1	04/25/17 10:52	05/03/17 16:06	7439-92-1	
Magnesium	**3920**	ug/L	200	1	04/25/17 10:52	05/03/17 16:06	7439-95-4	
Manganese	**93.7**	ug/L	10.0	1	04/25/17 10:52	05/03/17 16:06	7439-96-5	
Nickel	**2.6J**	ug/L	40.0	1	04/25/17 10:52	05/03/17 16:06	7440-02-0	
Potassium	**2620J**	ug/L	5000	1	04/25/17 10:52	05/03/17 16:06	7440-09-7	
Selenium	**<10.0**	ug/L	10.0	1	04/25/17 10:52	05/03/17 16:06	7782-49-2	
Silver	**<10.0**	ug/L	10.0	1	04/25/17 10:52	05/03/17 16:06	7440-22-4	
Sodium	**8930**	ug/L	5000	1	04/25/17 10:52	05/03/17 16:06	7440-23-5	
Thallium	**<10.0**	ug/L	10.0	1	04/25/17 10:52	05/03/17 16:06	7440-28-0	
Vanadium	**<50.0**	ug/L	50.0	1	04/25/17 10:52	05/03/17 16:06	7440-62-2	
Zinc	**<20.0**	ug/L	20.0	1	04/25/17 10:52	05/03/17 16:06	7440-66-6	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A							
Mercury	**<0.20**	ug/L	0.20	1	04/25/17 12:55	05/02/17 14:56	7439-97-6	
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C							
Acetone	**4.2J**	ug/L	5.0	1		04/25/17 16:44	67-64-1	CC
Acrylonitrile	**<5.0**	ug/L	5.0	1		04/25/17 16:44	107-13-1	CC
Benzene	**<5.0**	ug/L	5.0	1		04/25/17 16:44	71-43-2	
Bromochloromethane	**<5.0**	ug/L	5.0	1		04/25/17 16:44	74-97-5	
Bromodichloromethane	**<5.0**	ug/L	5.0	1		04/25/17 16:44	75-27-4	
Bromoform	**<5.0**	ug/L	5.0	1		04/25/17 16:44	75-25-2	
Bromomethane	**<5.0**	ug/L	5.0	1		04/25/17 16:44	74-83-9	
2-Butanone (MEK)	**<5.0**	ug/L	5.0	1		04/25/17 16:44	78-93-3	CC
Carbon disulfide	**<5.0**	ug/L	5.0	1		04/25/17 16:44	75-15-0	
Carbon tetrachloride	**<5.0**	ug/L	5.0	1		04/25/17 16:44	56-23-5	
Chlorobenzene	**<5.0**	ug/L	5.0	1		04/25/17 16:44	108-90-7	
Chloroethane	**<5.0**	ug/L	5.0	1		04/25/17 16:44	75-00-3	
Chloroform	**1.2J**	ug/L	5.0	1		04/25/17 16:44	67-66-3	
Chloromethane	**<5.0**	ug/L	5.0	1		04/25/17 16:44	74-87-3	
1,2-Dibromo-3-chloropropane	**<5.0**	ug/L	5.0	1		04/25/17 16:44	96-12-8	
Dibromochloromethane	**<5.0**	ug/L	5.0	1		04/25/17 16:44	124-48-1	L1
1,2-Dibromoethane (EDB)	**<5.0**	ug/L	5.0	1		04/25/17 16:44	106-93-4	
Dibromomethane	**<5.0**	ug/L	5.0	1		04/25/17 16:44	74-95-3	

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ANALYTICAL RESULTS

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

Sample: MW-12B **Lab ID: 7016438007** Collected: 04/19/17 08:00 Received: 04/20/17 12:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C							
1,2-Dichlorobenzene	**<5.0**	ug/L	5.0	1		04/25/17 16:44	95-50-1	
1,4-Dichlorobenzene	**<5.0**	ug/L	5.0	1		04/25/17 16:44	106-46-7	
trans-1,4-Dichloro-2-butene	**<5.0**	ug/L	5.0	1		04/25/17 16:44	110-57-6	
1,1-Dichloroethane	**<5.0**	ug/L	5.0	1		04/25/17 16:44	75-34-3	L2
1,2-Dichloroethane	**<5.0**	ug/L	5.0	1		04/25/17 16:44	107-06-2	L2
1,1-Dichloroethene	**<5.0**	ug/L	5.0	1		04/25/17 16:44	75-35-4	
cis-1,2-Dichloroethene	**<5.0**	ug/L	5.0	1		04/25/17 16:44	156-59-2	
trans-1,2-Dichloroethene	**<5.0**	ug/L	5.0	1		04/25/17 16:44	156-60-5	
1,2-Dichloropropane	**<5.0**	ug/L	5.0	1		04/25/17 16:44	78-87-5	
cis-1,3-Dichloropropene	**<5.0**	ug/L	5.0	1		04/25/17 16:44	10061-01-5	
trans-1,3-Dichloropropene	**<5.0**	ug/L	5.0	1		04/25/17 16:44	10061-02-6	
Ethylbenzene	**<5.0**	ug/L	5.0	1		04/25/17 16:44	100-41-4	
2-Hexanone	**<5.0**	ug/L	5.0	1		04/25/17 16:44	591-78-6	CC
Iodomethane	**<5.0**	ug/L	5.0	1		04/25/17 16:44	74-88-4	
Methylene Chloride	**<5.0**	ug/L	5.0	1		04/25/17 16:44	75-09-2	
4-Methyl-2-pentanone (MIBK)	**<5.0**	ug/L	5.0	1		04/25/17 16:44	108-10-1	CC,L2
Styrene	**<5.0**	ug/L	5.0	1		04/25/17 16:44	100-42-5	
1,1,1,2-Tetrachloroethane	**<5.0**	ug/L	5.0	1		04/25/17 16:44	630-20-6	
1,1,2,2-Tetrachloroethane	**<5.0**	ug/L	5.0	1		04/25/17 16:44	79-34-5	
Tetrachloroethene	**<5.0**	ug/L	5.0	1		04/25/17 16:44	127-18-4	
Toluene	**<5.0**	ug/L	5.0	1		04/25/17 16:44	108-88-3	
1,1,1-Trichloroethane	**<5.0**	ug/L	5.0	1		04/25/17 16:44	71-55-6	
1,1,2-Trichloroethane	**<5.0**	ug/L	5.0	1		04/25/17 16:44	79-00-5	
Trichloroethene	**<5.0**	ug/L	5.0	1		04/25/17 16:44	79-01-6	
Trichlorofluoromethane	**<5.0**	ug/L	5.0	1		04/25/17 16:44	75-69-4	
1,2,3-Trichloropropane	**<5.0**	ug/L	5.0	1		04/25/17 16:44	96-18-4	
Vinyl acetate	**<5.0**	ug/L	5.0	1		04/25/17 16:44	108-05-4	
Vinyl chloride	**<5.0**	ug/L	5.0	1		04/25/17 16:44	75-01-4	
Xylene (Total)	**<5.0**	ug/L	5.0	1		04/25/17 16:44	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	90	%.	68-153	1		04/25/17 16:44	17060-07-0	
4-Bromofluorobenzene (S)	119	%.	79-124	1		04/25/17 16:44	460-00-4	
Toluene-d8 (S)	113	%.	69-124	1		04/25/17 16:44	2037-26-5	
2120B W Apparent Color	Analytical Method: SM22 2120B							
Apparent Color	**10.0**	units	5.0	1		04/20/17 14:48		
pH	**6.0**	Std. Units	0.10	1		04/20/17 14:48		
2320B Alkalinity	Analytical Method: SM22 2320B							
Alkalinity, Total as CaCO3	**24.6**	mg/L	1.0	1		04/27/17 14:00		
2340C Hardness, Total	Analytical Method: SM22 2340C							
Total Hardness	**45.0**	mg/L	5.0	1		05/03/17 14:16		
2540C Total Dissolved Solids	Analytical Method: SM22 2540C							
Total Dissolved Solids	**86.0**	mg/L	10.0	1		04/27/17 14:09		H1

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ANALYTICAL RESULTS

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

Sample: MW-12B **Lab ID: 7016438007** Collected: 04/19/17 08:00 Received: 04/20/17 12:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Chromium, Hexavalent	Analytical Method: SM22 3500-Cr B							
Chromium, Hexavalent	**<0.020**	mg/L	0.020	1		04/21/17 01:08	18540-29-9	H3
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4							
Chemical Oxygen Demand	**8.8J**	mg/L	10.0	1	04/28/17 11:33	04/28/17 14:26		
5210B BOD, 5 day	Analytical Method: SM22 5210B Preparation Method: SM22 5210B							
BOD, 5 day	**1.0J**	mg/L	2.0	1	04/20/17 18:40	04/25/17 13:31		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0							
Bromide	**0.050J**	mg/L	0.50	1		05/08/17 20:12	24959-67-9	
Chloride	**11.3**	mg/L	2.0	1		05/08/17 20:12	16887-00-6	
Sulfate	**14.0**	mg/L	5.0	1		05/08/17 20:12	14808-79-8	
351.2 Total Kjeldahl Nitrogen	Analytical Method: EPA 351.2 Preparation Method: EPA 351.2							
Nitrogen, Kjeldahl, Total	**<0.10**	mg/L	0.10	1	05/02/17 06:55	05/02/17 13:21	7727-37-9	
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2							
Nitrate-Nitrite (as N)	**1.2**	mg/L	0.050	1		04/27/17 11:07	7727-37-9	
353.2 Nitrogen, NO2	Analytical Method: EPA 353.2							
Nitrite as N	**<0.050**	mg/L	0.050	1		04/21/17 04:19	14797-65-0	M1
Phenolics, Total Recoverable	Analytical Method: EPA 420.1 Preparation Method: EPA 420.1							
Phenolics, Total Recoverable	**37.5**	ug/L	10.0	2	05/02/17 12:00	05/02/17 18:18		
4500 Ammonia Water	Analytical Method: SM22 4500 NH3 H							
Nitrogen, Ammonia	**0.063J**	mg/L	0.10	1		05/08/17 13:14	7664-41-7	
9014 Cyanide, Total	Analytical Method: EPA 9014 Total Cyanide Preparation Method: EPA 9010C							
Cyanide	**<10.0**	ug/L	10.0	1	05/02/17 09:52	05/02/17 17:27	57-12-5	
9060A Total Organic Carbon	Analytical Method: EPA 9060A							
Total Organic Carbon	**0.60J**	mg/L	1.0	1		05/04/17 01:33	7440-44-0	
Total Organic Carbon	**0.54J**	mg/L	1.0	1		05/04/17 01:33	7440-44-0	
Total Organic Carbon	**0.53J**	mg/L	1.0	1		05/04/17 01:33	7440-44-0	
Total Organic Carbon	**0.49J**	mg/L	1.0	1		05/04/17 01:33	7440-44-0	
Mean Total Organic Carbon	**0.54J**	mg/L	1.0	1		05/04/17 01:33	7440-44-0	

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Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

Sample: DUP001 **Lab ID: 7016438008** Collected: 04/19/17 00:00 Received: 04/20/17 12:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010C Preparation Method: EPA 3005A							
Aluminum	**<200**	ug/L	200	1	04/25/17 10:52	05/03/17 16:11	7429-90-5	
Antimony	**<60.0**	ug/L	60.0	1	04/25/17 10:52	05/03/17 16:11	7440-36-0	
Arsenic	**<10.0**	ug/L	10.0	1	04/25/17 10:52	05/03/17 16:11	7440-38-2	
Barium	**8.9J**	ug/L	200	1	04/25/17 10:52	05/03/17 16:11	7440-39-3	
Beryllium	**<5.0**	ug/L	5.0	1	04/25/17 10:52	05/03/17 16:11	7440-41-7	
Boron	**11.0J**	ug/L	50.0	1	04/25/17 10:52	05/03/17 16:11	7440-42-8	B
Cadmium	**<2.5**	ug/L	2.5	1	04/25/17 10:52	05/03/17 16:11	7440-43-9	
Calcium	**4320**	ug/L	200	1	04/25/17 10:52	05/03/17 16:11	7440-70-2	
Chromium	**6.3J**	ug/L	10.0	1	04/25/17 10:52	05/03/17 16:11	7440-47-3	
Cobalt	**<50.0**	ug/L	50.0	1	04/25/17 10:52	05/03/17 16:11	7440-48-4	
Copper	**<25.0**	ug/L	25.0	1	04/25/17 10:52	05/03/17 16:11	7440-50-8	
Iron	**14.2J**	ug/L	100	1	04/25/17 10:52	05/03/17 16:11	7439-89-6	
Lead	**1.5J**	ug/L	5.0	1	04/25/17 10:52	05/03/17 16:11	7439-92-1	
Magnesium	**2240**	ug/L	200	1	04/25/17 10:52	05/03/17 16:11	7439-95-4	
Manganese	**1.4J**	ug/L	10.0	1	04/25/17 10:52	05/03/17 16:11	7439-96-5	B
Nickel	**22.9J**	ug/L	40.0	1	04/25/17 10:52	05/03/17 16:11	7440-02-0	
Potassium	**<5000**	ug/L	5000	1	04/25/17 10:52	05/03/17 16:11	7440-09-7	
Selenium	**<10.0**	ug/L	10.0	1	04/25/17 10:52	05/03/17 16:11	7782-49-2	
Silver	**<10.0**	ug/L	10.0	1	04/25/17 10:52	05/03/17 16:11	7440-22-4	
Sodium	**7510**	ug/L	5000	1	04/25/17 10:52	05/03/17 16:11	7440-23-5	
Thallium	**<10.0**	ug/L	10.0	1	04/25/17 10:52	05/03/17 16:11	7440-28-0	
Vanadium	**<50.0**	ug/L	50.0	1	04/25/17 10:52	05/03/17 16:11	7440-62-2	
Zinc	**<20.0**	ug/L	20.0	1	04/25/17 10:52	05/03/17 16:11	7440-66-6	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A							
Mercury	**<0.20**	ug/L	0.20	1	04/25/17 12:55	05/02/17 14:58	7439-97-6	
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C							
Acetone	**2.2J**	ug/L	5.0	1		04/25/17 17:02	67-64-1	CC
Acrylonitrile	**<5.0**	ug/L	5.0	1		04/25/17 17:02	107-13-1	CC
Benzene	**<5.0**	ug/L	5.0	1		04/25/17 17:02	71-43-2	
Bromochloromethane	**<5.0**	ug/L	5.0	1		04/25/17 17:02	74-97-5	
Bromodichloromethane	**<5.0**	ug/L	5.0	1		04/25/17 17:02	75-27-4	
Bromoform	**<5.0**	ug/L	5.0	1		04/25/17 17:02	75-25-2	
Bromomethane	**<5.0**	ug/L	5.0	1		04/25/17 17:02	74-83-9	
2-Butanone (MEK)	**<5.0**	ug/L	5.0	1		04/25/17 17:02	78-93-3	CC
Carbon disulfide	**<5.0**	ug/L	5.0	1		04/25/17 17:02	75-15-0	
Carbon tetrachloride	**<5.0**	ug/L	5.0	1		04/25/17 17:02	56-23-5	
Chlorobenzene	**<5.0**	ug/L	5.0	1		04/25/17 17:02	108-90-7	
Chloroethane	**<5.0**	ug/L	5.0	1		04/25/17 17:02	75-00-3	
Chloroform	**2.3J**	ug/L	5.0	1		04/25/17 17:02	67-66-3	
Chloromethane	**<5.0**	ug/L	5.0	1		04/25/17 17:02	74-87-3	
1,2-Dibromo-3-chloropropane	**<5.0**	ug/L	5.0	1		04/25/17 17:02	96-12-8	
Dibromochloromethane	**<5.0**	ug/L	5.0	1		04/25/17 17:02	124-48-1	L1
1,2-Dibromoethane (EDB)	**<5.0**	ug/L	5.0	1		04/25/17 17:02	106-93-4	
Dibromomethane	**<5.0**	ug/L	5.0	1		04/25/17 17:02	74-95-3	

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575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

Sample: DUP001 **Lab ID: 7016438008** Collected: 04/19/17 00:00 Received: 04/20/17 12:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C							
1,2-Dichlorobenzene	**<5.0**	ug/L	5.0	1		04/25/17 17:02	95-50-1	
1,4-Dichlorobenzene	**<5.0**	ug/L	5.0	1		04/25/17 17:02	106-46-7	
trans-1,4-Dichloro-2-butene	**<5.0**	ug/L	5.0	1		04/25/17 17:02	110-57-6	
1,1-Dichloroethane	**<5.0**	ug/L	5.0	1		04/25/17 17:02	75-34-3	L2
1,2-Dichloroethane	**<5.0**	ug/L	5.0	1		04/25/17 17:02	107-06-2	L2
1,1-Dichloroethene	**<5.0**	ug/L	5.0	1		04/25/17 17:02	75-35-4	
cis-1,2-Dichloroethene	**<5.0**	ug/L	5.0	1		04/25/17 17:02	156-59-2	
trans-1,2-Dichloroethene	**<5.0**	ug/L	5.0	1		04/25/17 17:02	156-60-5	
1,2-Dichloropropane	**<5.0**	ug/L	5.0	1		04/25/17 17:02	78-87-5	
cis-1,3-Dichloropropene	**<5.0**	ug/L	5.0	1		04/25/17 17:02	10061-01-5	
trans-1,3-Dichloropropene	**<5.0**	ug/L	5.0	1		04/25/17 17:02	10061-02-6	
Ethylbenzene	**<5.0**	ug/L	5.0	1		04/25/17 17:02	100-41-4	
2-Hexanone	**<5.0**	ug/L	5.0	1		04/25/17 17:02	591-78-6	CC
Iodomethane	**<5.0**	ug/L	5.0	1		04/25/17 17:02	74-88-4	
Methylene Chloride	**<5.0**	ug/L	5.0	1		04/25/17 17:02	75-09-2	
4-Methyl-2-pentanone (MIBK)	**<5.0**	ug/L	5.0	1		04/25/17 17:02	108-10-1	CC,L2
Styrene	**<5.0**	ug/L	5.0	1		04/25/17 17:02	100-42-5	
1,1,1,2-Tetrachloroethane	**<5.0**	ug/L	5.0	1		04/25/17 17:02	630-20-6	
1,1,2,2-Tetrachloroethane	**<5.0**	ug/L	5.0	1		04/25/17 17:02	79-34-5	
Tetrachloroethene	**<5.0**	ug/L	5.0	1		04/25/17 17:02	127-18-4	
Toluene	**<5.0**	ug/L	5.0	1		04/25/17 17:02	108-88-3	
1,1,1-Trichloroethane	**<5.0**	ug/L	5.0	1		04/25/17 17:02	71-55-6	
1,1,2-Trichloroethane	**<5.0**	ug/L	5.0	1		04/25/17 17:02	79-00-5	
Trichloroethene	**<5.0**	ug/L	5.0	1		04/25/17 17:02	79-01-6	
Trichlorofluoromethane	**<5.0**	ug/L	5.0	1		04/25/17 17:02	75-69-4	
1,2,3-Trichloropropane	**<5.0**	ug/L	5.0	1		04/25/17 17:02	96-18-4	
Vinyl acetate	**<5.0**	ug/L	5.0	1		04/25/17 17:02	108-05-4	
Vinyl chloride	**<5.0**	ug/L	5.0	1		04/25/17 17:02	75-01-4	
Xylene (Total)	**<5.0**	ug/L	5.0	1		04/25/17 17:02	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	91	%.	68-153	1		04/25/17 17:02	17060-07-0	
4-Bromofluorobenzene (S)	118	%.	79-124	1		04/25/17 17:02	460-00-4	
Toluene-d8 (S)	111	%.	69-124	1		04/25/17 17:02	2037-26-5	
2120B W Apparent Color	Analytical Method: SM22 2120B							
Apparent Color	**5.0**	units	5.0	1		04/20/17 14:44		
pH	**6.0**	Std. Units	0.10	1		04/20/17 14:44		
2320B Alkalinity	Analytical Method: SM22 2320B							
Alkalinity, Total as CaCO3	**10.4**	mg/L	1.0	1		04/27/17 14:06		
2340C Hardness, Total	Analytical Method: SM22 2340C							
Total Hardness	**23.0**	mg/L	5.0	1		05/03/17 14:17		
2540C Total Dissolved Solids	Analytical Method: SM22 2540C							
Total Dissolved Solids	**48.0**	mg/L	10.0	1		04/27/17 14:09		H1

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575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

Sample: DUP001 **Lab ID: 7016438008** Collected: 04/19/17 00:00 Received: 04/20/17 12:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Chromium, Hexavalent	Analytical Method: SM22 3500-Cr B							
Chromium, Hexavalent	**<0.020**	mg/L	0.020	1		04/21/17 01:05	18540-29-9	H3
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4							
Chemical Oxygen Demand	**<10.0**	mg/L	10.0	1	04/28/17 11:33	04/28/17 14:26		
5210B BOD, 5 day	Analytical Method: SM22 5210B Preparation Method: SM22 5210B							
BOD, 5 day	**1.0J**	mg/L	2.0	1	04/20/17 18:40	04/25/17 13:33		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0							
Bromide	**0.030J**	mg/L	0.50	1		05/08/17 20:52	24959-67-9	
Chloride	**9.1**	mg/L	2.0	1		05/08/17 20:52	16887-00-6	
Sulfate	**8.3**	mg/L	5.0	1		05/08/17 20:52	14808-79-8	
351.2 Total Kjeldahl Nitrogen	Analytical Method: EPA 351.2 Preparation Method: EPA 351.2							
Nitrogen, Kjeldahl, Total	**0.098J**	mg/L	0.10	1	05/02/17 06:55	05/02/17 13:22	7727-37-9	
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2							
Nitrate-Nitrite (as N)	**0.22**	mg/L	0.050	1		04/27/17 11:08	7727-37-9	
353.2 Nitrogen, NO2	Analytical Method: EPA 353.2							
Nitrite as N	**<0.050**	mg/L	0.050	1		04/21/17 04:23	14797-65-0	H1
Phenolics, Total Recoverable	Analytical Method: EPA 420.1 Preparation Method: EPA 420.1							
Phenolics, Total Recoverable	**33.9**	ug/L	5.0	1	05/02/17 12:00	05/02/17 18:18		
4500 Ammonia Water	Analytical Method: SM22 4500 NH3 H							
Nitrogen, Ammonia	**0.21**	mg/L	0.10	1		05/08/17 13:15	7664-41-7	
9014 Cyanide, Total	Analytical Method: EPA 9014 Total Cyanide Preparation Method: EPA 9010C							
Cyanide	**<10.0**	ug/L	10.0	1	05/02/17 09:52	05/02/17 17:27	57-12-5	
9060A Total Organic Carbon	Analytical Method: EPA 9060A							
Total Organic Carbon	**0.28J**	mg/L	1.0	1		05/04/17 02:07	7440-44-0	
Total Organic Carbon	**0.25J**	mg/L	1.0	1		05/04/17 02:07	7440-44-0	
Total Organic Carbon	**0.24J**	mg/L	1.0	1		05/04/17 02:07	7440-44-0	
Total Organic Carbon	**0.25J**	mg/L	1.0	1		05/04/17 02:07	7440-44-0	
Mean Total Organic Carbon	**0.25J**	mg/L	1.0	1		05/04/17 02:07	7440-44-0	

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575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

Sample: FB **Lab ID: 7016438009** Collected: 04/19/17 09:00 Received: 04/20/17 12:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010C Preparation Method: EPA 3005A							
Aluminum	**<200**	ug/L	200	1	04/25/17 10:52	05/03/17 16:16	7429-90-5	
Antimony	**<60.0**	ug/L	60.0	1	04/25/17 10:52	05/03/17 16:16	7440-36-0	
Arsenic	**<10.0**	ug/L	10.0	1	04/25/17 10:52	05/03/17 16:16	7440-38-2	
Barium	**<200**	ug/L	200	1	04/25/17 10:52	05/03/17 16:16	7440-39-3	
Beryllium	**<5.0**	ug/L	5.0	1	04/25/17 10:52	05/03/17 16:16	7440-41-7	
Boron	**<50.0**	ug/L	50.0	1	04/25/17 10:52	05/03/17 16:16	7440-42-8	
Cadmium	**<2.5**	ug/L	2.5	1	04/25/17 10:52	05/03/17 16:16	7440-43-9	
Calcium	**<200**	ug/L	200	1	04/25/17 10:52	05/03/17 16:16	7440-70-2	
Chromium	**<10.0**	ug/L	10.0	1	04/25/17 10:52	05/03/17 16:16	7440-47-3	
Cobalt	**<50.0**	ug/L	50.0	1	04/25/17 10:52	05/03/17 16:16	7440-48-4	
Copper	**<25.0**	ug/L	25.0	1	04/25/17 10:52	05/03/17 16:16	7440-50-8	
Iron	**<100**	ug/L	100	1	04/25/17 10:52	05/03/17 16:16	7439-89-6	
Lead	**<5.0**	ug/L	5.0	1	04/25/17 10:52	05/03/17 16:16	7439-92-1	
Magnesium	**<200**	ug/L	200	1	04/25/17 10:52	05/03/17 16:16	7439-95-4	
Manganese	**4.0J**	ug/L	10.0	1	04/25/17 10:52	05/03/17 16:16	7439-96-5	B
Nickel	**<40.0**	ug/L	40.0	1	04/25/17 10:52	05/03/17 16:16	7440-02-0	
Potassium	**<5000**	ug/L	5000	1	04/25/17 10:52	05/03/17 16:16	7440-09-7	
Selenium	**<10.0**	ug/L	10.0	1	04/25/17 10:52	05/03/17 16:16	7782-49-2	
Silver	**<10.0**	ug/L	10.0	1	04/25/17 10:52	05/03/17 16:16	7440-22-4	
Sodium	**<5000**	ug/L	5000	1	04/25/17 10:52	05/03/17 16:16	7440-23-5	
Thallium	**<10.0**	ug/L	10.0	1	04/25/17 10:52	05/03/17 16:16	7440-28-0	
Vanadium	**<50.0**	ug/L	50.0	1	04/25/17 10:52	05/03/17 16:16	7440-62-2	
Zinc	**<20.0**	ug/L	20.0	1	04/25/17 10:52	05/03/17 16:16	7440-66-6	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A							
Mercury	**<0.20**	ug/L	0.20	1	04/25/17 12:55	05/02/17 15:00	7439-97-6	
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C							
Acetone	**5.3**	ug/L	5.0	1		04/25/17 14:21	67-64-1	CC
Acrylonitrile	**<5.0**	ug/L	5.0	1		04/25/17 14:21	107-13-1	CC
Benzene	**<5.0**	ug/L	5.0	1		04/25/17 14:21	71-43-2	
Bromochloromethane	**<5.0**	ug/L	5.0	1		04/25/17 14:21	74-97-5	
Bromodichloromethane	**<5.0**	ug/L	5.0	1		04/25/17 14:21	75-27-4	
Bromoform	**<5.0**	ug/L	5.0	1		04/25/17 14:21	75-25-2	
Bromomethane	**<5.0**	ug/L	5.0	1		04/25/17 14:21	74-83-9	
2-Butanone (MEK)	**<5.0**	ug/L	5.0	1		04/25/17 14:21	78-93-3	CC
Carbon disulfide	**<5.0**	ug/L	5.0	1		04/25/17 14:21	75-15-0	
Carbon tetrachloride	**<5.0**	ug/L	5.0	1		04/25/17 14:21	56-23-5	
Chlorobenzene	**<5.0**	ug/L	5.0	1		04/25/17 14:21	108-90-7	
Chloroethane	**<5.0**	ug/L	5.0	1		04/25/17 14:21	75-00-3	
Chloroform	**<5.0**	ug/L	5.0	1		04/25/17 14:21	67-66-3	
Chloromethane	**<5.0**	ug/L	5.0	1		04/25/17 14:21	74-87-3	
1,2-Dibromo-3-chloropropane	**<5.0**	ug/L	5.0	1		04/25/17 14:21	96-12-8	
Dibromochloromethane	**<5.0**	ug/L	5.0	1		04/25/17 14:21	124-48-1	L1
1,2-Dibromoethane (EDB)	**<5.0**	ug/L	5.0	1		04/25/17 14:21	106-93-4	
Dibromomethane	**<5.0**	ug/L	5.0	1		04/25/17 14:21	74-95-3	

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ANALYTICAL RESULTS

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

Sample: FB **Lab ID: 7016438009** Collected: 04/19/17 09:00 Received: 04/20/17 12:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C							
1,2-Dichlorobenzene	**<5.0**	ug/L	5.0	1		04/25/17 14:21	95-50-1	
1,4-Dichlorobenzene	**<5.0**	ug/L	5.0	1		04/25/17 14:21	106-46-7	
trans-1,4-Dichloro-2-butene	**<5.0**	ug/L	5.0	1		04/25/17 14:21	110-57-6	
1,1-Dichloroethane	**<5.0**	ug/L	5.0	1		04/25/17 14:21	75-34-3	L2
1,2-Dichloroethane	**<5.0**	ug/L	5.0	1		04/25/17 14:21	107-06-2	L2
1,1-Dichloroethene	**<5.0**	ug/L	5.0	1		04/25/17 14:21	75-35-4	
cis-1,2-Dichloroethene	**<5.0**	ug/L	5.0	1		04/25/17 14:21	156-59-2	
trans-1,2-Dichloroethene	**<5.0**	ug/L	5.0	1		04/25/17 14:21	156-60-5	
1,2-Dichloropropane	**<5.0**	ug/L	5.0	1		04/25/17 14:21	78-87-5	
cis-1,3-Dichloropropene	**<5.0**	ug/L	5.0	1		04/25/17 14:21	10061-01-5	
trans-1,3-Dichloropropene	**<5.0**	ug/L	5.0	1		04/25/17 14:21	10061-02-6	
Ethylbenzene	**<5.0**	ug/L	5.0	1		04/25/17 14:21	100-41-4	
2-Hexanone	**<5.0**	ug/L	5.0	1		04/25/17 14:21	591-78-6	CC
Iodomethane	**<5.0**	ug/L	5.0	1		04/25/17 14:21	74-88-4	
Methylene Chloride	**3.3J**	ug/L	5.0	1		04/25/17 14:21	75-09-2	
4-Methyl-2-pentanone (MIBK)	**<5.0**	ug/L	5.0	1		04/25/17 14:21	108-10-1	CC,L2
Styrene	**<5.0**	ug/L	5.0	1		04/25/17 14:21	100-42-5	
1,1,1,2-Tetrachloroethane	**<5.0**	ug/L	5.0	1		04/25/17 14:21	630-20-6	
1,1,2,2-Tetrachloroethane	**<5.0**	ug/L	5.0	1		04/25/17 14:21	79-34-5	
Tetrachloroethene	**<5.0**	ug/L	5.0	1		04/25/17 14:21	127-18-4	
Toluene	**<5.0**	ug/L	5.0	1		04/25/17 14:21	108-88-3	
1,1,1-Trichloroethane	**<5.0**	ug/L	5.0	1		04/25/17 14:21	71-55-6	
1,1,2-Trichloroethane	**<5.0**	ug/L	5.0	1		04/25/17 14:21	79-00-5	
Trichloroethene	**<5.0**	ug/L	5.0	1		04/25/17 14:21	79-01-6	
Trichlorofluoromethane	**<5.0**	ug/L	5.0	1		04/25/17 14:21	75-69-4	
1,2,3-Trichloropropane	**<5.0**	ug/L	5.0	1		04/25/17 14:21	96-18-4	
Vinyl acetate	**<5.0**	ug/L	5.0	1		04/25/17 14:21	108-05-4	
Vinyl chloride	**<5.0**	ug/L	5.0	1		04/25/17 14:21	75-01-4	
Xylene (Total)	**<5.0**	ug/L	5.0	1		04/25/17 14:21	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	90	%.	68-153	1		04/25/17 14:21	17060-07-0	
4-Bromofluorobenzene (S)	118	%.	79-124	1		04/25/17 14:21	460-00-4	
Toluene-d8 (S)	113	%.	69-124	1		04/25/17 14:21	2037-26-5	
2120B W Apparent Color	Analytical Method: SM22 2120B							
Apparent Color	**5.0**	units	5.0	1		04/20/17 14:49		
pH	**6.0**	Std. Units	0.10	1		04/20/17 14:49		
2320B Alkalinity	Analytical Method: SM22 2320B							
Alkalinity, Total as CaCO3	**0.60J**	mg/L	1.0	1		04/27/17 14:12		B
2340C Hardness, Total	Analytical Method: SM22 2340C							
Total Hardness	**<5.0**	mg/L	5.0	1		05/03/17 14:18		
2540C Total Dissolved Solids	Analytical Method: SM22 2540C							
Total Dissolved Solids	**<10.0**	mg/L	10.0	1		04/27/17 14:09		H1

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(631)694-3040

ANALYTICAL RESULTS

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

Sample: FB **Lab ID: 7016438009** Collected: 04/19/17 09:00 Received: 04/20/17 12:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Chromium, Hexavalent	Analytical Method: SM22 3500-Cr B							
Chromium, Hexavalent	**<0.020**	mg/L	0.020	1		04/21/17 01:08	18540-29-9	H3
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4							
Chemical Oxygen Demand	**<10.0**	mg/L	10.0	1	04/28/17 11:33	04/28/17 14:27		
5210B BOD, 5 day	Analytical Method: SM22 5210B Preparation Method: SM22 5210B							
BOD, 5 day	**1.0J**	mg/L	2.0	1	04/20/17 18:41	04/25/17 13:36		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0							
Bromide	**<0.50**	mg/L	0.50	1		05/08/17 21:06	24959-67-9	
Chloride	**0.35J**	mg/L	2.0	1		05/08/17 21:06	16887-00-6	
Sulfate	**<5.0**	mg/L	5.0	1		05/08/17 21:06	14808-79-8	
351.2 Total Kjeldahl Nitrogen	Analytical Method: EPA 351.2 Preparation Method: EPA 351.2							
Nitrogen, Kjeldahl, Total	**<0.10**	mg/L	0.10	1	05/02/17 06:55	05/02/17 13:22	7727-37-9	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2							
Nitrate as N	**<0.050**	mg/L	0.050	1		04/21/17 09:10	14797-55-8	
Nitrate-Nitrite (as N)	**<0.050**	mg/L	0.050	1		04/21/17 09:10	7727-37-9	H1
353.2 Nitrogen, NO2	Analytical Method: EPA 353.2							
Nitrite as N	**<0.050**	mg/L	0.050	1		04/21/17 04:26	14797-65-0	
Phenolics, Total Recoverable	Analytical Method: EPA 420.1 Preparation Method: EPA 420.1							
Phenolics, Total Recoverable	**25.0**	ug/L	5.0	1	05/02/17 12:00	05/02/17 18:19		
4500 Ammonia Water	Analytical Method: SM22 4500 NH3 H							
Nitrogen, Ammonia	**0.20**	mg/L	0.10	1		05/08/17 13:16	7664-41-7	
9014 Cyanide, Total	Analytical Method: EPA 9014 Total Cyanide Preparation Method: EPA 9010C							
Cyanide	**<10.0**	ug/L	10.0	1	05/03/17 09:42	05/03/17 17:12	57-12-5	
9060A Total Organic Carbon	Analytical Method: EPA 9060A							
Total Organic Carbon	**0.36J**	mg/L	5.0	5		05/04/17 02:43	7440-44-0	
Total Organic Carbon	**<5.0**	mg/L	5.0	5		05/04/17 02:43	7440-44-0	
Total Organic Carbon	**<5.0**	mg/L	5.0	5		05/04/17 02:43	7440-44-0	
Total Organic Carbon	**<5.0**	mg/L	5.0	5		05/04/17 02:43	7440-44-0	
Mean Total Organic Carbon	**<5.0**	mg/L	5.0	5		05/04/17 02:43	7440-44-0	

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ANALYTICAL RESULTS

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

Sample: LEA-PRI **Lab ID: 7016438010** Collected: 04/19/17 13:00 Received: 04/20/17 12:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010C Preparation Method: EPA 3005A							
Cadmium	**0.21J**	ug/L	2.5	1	04/25/17 10:52	05/03/17 16:21	7440-43-9	
Calcium	**60200**	ug/L	200	1	04/25/17 10:52	05/03/17 16:21	7440-70-2	
Iron	**29900**	ug/L	100	1	04/25/17 10:52	05/03/17 16:21	7439-89-6	
Lead	**1.4J**	ug/L	5.0	1	04/25/17 10:52	05/03/17 16:21	7439-92-1	
Magnesium	**8930**	ug/L	200	1	04/25/17 10:52	05/03/17 16:21	7439-95-4	
Manganese	**2200**	ug/L	10.0	1	04/25/17 10:52	05/03/17 16:21	7439-96-5	
Potassium	**18000**	ug/L	5000	1	04/25/17 10:52	05/03/17 16:21	7440-09-7	
Sodium	**37900**	ug/L	5000	1	04/25/17 10:52	05/03/17 16:21	7440-23-5	
2320B Alkalinity	Analytical Method: SM22 2320B							
Alkalinity, Total as CaCO3	**231**	mg/L	1.0	1		04/27/17 14:15		
2340C Hardness, Total	Analytical Method: SM22 2340C							
Total Hardness	**204**	mg/L	5.0	1		05/03/17 14:19		
2540C Total Dissolved Solids	Analytical Method: SM22 2540C							
Total Dissolved Solids	**363**	mg/L	10.0	1		04/27/17 14:10		H1
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4							
Chemical Oxygen Demand	**60.9**	mg/L	10.0	1	04/28/17 11:33	04/28/17 14:27		
5210B BOD, 5 day	Analytical Method: SM22 5210B Preparation Method: SM22 5210B							
BOD, 5 day	**5.0**	mg/L	4.0	2	04/21/17 09:33	04/26/17 10:44		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0							
Bromide	**0.18J**	mg/L	0.50	1		05/08/17 21:19	24959-67-9	
Chloride	**42.5**	mg/L	2.0	1		05/08/17 21:19	16887-00-6	
Sulfate	**52.2**	mg/L	25.0	5		05/09/17 10:50	14808-79-8	
351.2 Total Kjeldahl Nitrogen	Analytical Method: EPA 351.2 Preparation Method: EPA 351.2							
Nitrogen, Kjeldahl, Total	**23.6**	mg/L	1.0	10	05/02/17 06:55	05/02/17 14:01	7727-37-9	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2							
Nitrate as N	**0.036J**	mg/L	0.050	1		04/21/17 09:11	14797-55-8	
Nitrate-Nitrite (as N)	**0.036J**	mg/L	0.050	1		04/21/17 09:11	7727-37-9	B
353.2 Nitrogen, NO2	Analytical Method: EPA 353.2							
Nitrite as N	**<0.050**	mg/L	0.050	1		04/21/17 04:28	14797-65-0	
Phenolics, Total Recoverable	Analytical Method: EPA 420.1 Preparation Method: EPA 420.1							
Phenolics, Total Recoverable	**28.2**	ug/L	5.0	1	05/02/17 12:00	05/02/17 18:19		
4500 Ammonia Water	Analytical Method: SM22 4500 NH3 H							
Nitrogen, Ammonia	**9.5**	mg/L	1.0	10		05/08/17 13:17	7664-41-7	

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ANALYTICAL RESULTS

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

Sample: LEA-PRI **Lab ID: 7016438010** Collected: 04/19/17 13:00 Received: 04/20/17 12:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
5310C TOC	Analytical Method: SM5310C-00							
Total Organic Carbon	**12.2**	mg/L	2.0	2		05/03/17 14:25	7440-44-0	

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ANALYTICAL RESULTS

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

Sample: LEA-SEC **Lab ID: 7016438011** Collected: 04/19/17 13:15 Received: 04/20/17 12:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010C Preparation Method: EPA 3005A							
Cadmium	**0.22J**	ug/L	2.5	1	04/25/17 10:52	05/03/17 16:26	7440-43-9	
Calcium	**73000**	ug/L	200	1	04/25/17 10:52	05/03/17 16:26	7440-70-2	
Iron	**32400**	ug/L	100	1	04/25/17 10:52	05/03/17 16:26	7439-89-6	
Lead	**1.5J**	ug/L	5.0	1	04/25/17 10:52	05/03/17 16:26	7439-92-1	
Magnesium	**12600**	ug/L	200	1	04/25/17 10:52	05/03/17 16:26	7439-95-4	
Manganese	**8160**	ug/L	10.0	1	04/25/17 10:52	05/03/17 16:26	7439-96-5	
Potassium	**31900**	ug/L	5000	1	04/25/17 10:52	05/03/17 16:26	7440-09-7	
Sodium	**62200**	ug/L	5000	1	04/25/17 10:52	05/03/17 16:26	7440-23-5	
2320B Alkalinity	Analytical Method: SM22 2320B							
Alkalinity, Total as CaCO3	**381**	mg/L	1.0	1		04/27/17 14:22		
2340C Hardness, Total	Analytical Method: SM22 2340C							
Total Hardness	**320**	mg/L	5.0	1		05/03/17 14:21		
2540C Total Dissolved Solids	Analytical Method: SM22 2540C							
Total Dissolved Solids	**472**	mg/L	10.0	1		04/27/17 14:10		H1
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4							
Chemical Oxygen Demand	**117**	mg/L	10.0	1	04/28/17 11:33	04/28/17 14:27		
5210B BOD, 5 day	Analytical Method: SM22 5210B Preparation Method: SM22 5210B							
BOD, 5 day	**11.6**	mg/L	4.0	2	04/21/17 09:33	04/26/17 10:46		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0							
Bromide	**0.32J**	mg/L	0.50	1		05/08/17 21:33	24959-67-9	
Chloride	**71.7**	mg/L	10.0	5		05/09/17 11:03	16887-00-6	
Sulfate	**6.4**	mg/L	5.0	1		05/08/17 21:33	14808-79-8	
351.2 Total Kjeldahl Nitrogen	Analytical Method: EPA 351.2 Preparation Method: EPA 351.2							
Nitrogen, Kjeldahl, Total	**40.6**	mg/L	2.0	20	05/02/17 06:55	05/02/17 14:02	7727-37-9	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2							
Nitrate as N	**0.066**	mg/L	0.050	1		04/21/17 09:12	14797-55-8	
Nitrate-Nitrite (as N)	**0.072**	mg/L	0.050	1		04/21/17 09:12	7727-37-9	B
353.2 Nitrogen, NO2	Analytical Method: EPA 353.2							
Nitrite as N	**0.0058J**	mg/L	0.050	1		04/21/17 04:29	14797-65-0	
Phenolics, Total Recoverable	Analytical Method: EPA 420.1 Preparation Method: EPA 420.1							
Phenolics, Total Recoverable	**13.5**	ug/L	5.0	1	05/03/17 12:00	05/03/17 17:07		
4500 Ammonia Water	Analytical Method: SM22 4500 NH3 H							
Nitrogen, Ammonia	**16.0**	mg/L	1.0	10		05/08/17 13:18	7664-41-7	

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ANALYTICAL RESULTS

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

Sample: LEA-SEC **Lab ID: 7016438011** Collected: 04/19/17 13:15 Received: 04/20/17 12:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
5310C TOC	Analytical Method: SM5310C-00							
Total Organic Carbon	**30.0**	mg/L	2.0	2		05/03/17 14:46	7440-44-0	

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ANALYTICAL RESULTS

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

Sample: TRIP BLANK **Lab ID: 7016438012** Collected: 04/19/17 00:00 Received: 04/20/17 12:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C							
Acetone	**3.6J**	ug/L	5.0	1		04/25/17 13:46	67-64-1	CC
Acrylonitrile	**<5.0**	ug/L	5.0	1		04/25/17 13:46	107-13-1	CC
Benzene	**<5.0**	ug/L	5.0	1		04/25/17 13:46	71-43-2	
Bromochloromethane	**<5.0**	ug/L	5.0	1		04/25/17 13:46	74-97-5	
Bromodichloromethane	**<5.0**	ug/L	5.0	1		04/25/17 13:46	75-27-4	
Bromoform	**<5.0**	ug/L	5.0	1		04/25/17 13:46	75-25-2	
Bromomethane	**<5.0**	ug/L	5.0	1		04/25/17 13:46	74-83-9	
2-Butanone (MEK)	**<5.0**	ug/L	5.0	1		04/25/17 13:46	78-93-3	CC
Carbon disulfide	**<5.0**	ug/L	5.0	1		04/25/17 13:46	75-15-0	
Carbon tetrachloride	**<5.0**	ug/L	5.0	1		04/25/17 13:46	56-23-5	
Chlorobenzene	**<5.0**	ug/L	5.0	1		04/25/17 13:46	108-90-7	
Chloroethane	**<5.0**	ug/L	5.0	1		04/25/17 13:46	75-00-3	
Chloroform	**<5.0**	ug/L	5.0	1		04/25/17 13:46	67-66-3	
Chloromethane	**<5.0**	ug/L	5.0	1		04/25/17 13:46	74-87-3	
1,2-Dibromo-3-chloropropane	**<5.0**	ug/L	5.0	1		04/25/17 13:46	96-12-8	
Dibromochloromethane	**<5.0**	ug/L	5.0	1		04/25/17 13:46	124-48-1	L1
1,2-Dibromoethane (EDB)	**<5.0**	ug/L	5.0	1		04/25/17 13:46	106-93-4	
Dibromomethane	**<5.0**	ug/L	5.0	1		04/25/17 13:46	74-95-3	
1,2-Dichlorobenzene	**<5.0**	ug/L	5.0	1		04/25/17 13:46	95-50-1	
1,4-Dichlorobenzene	**<5.0**	ug/L	5.0	1		04/25/17 13:46	106-46-7	
trans-1,4-Dichloro-2-butene	**<5.0**	ug/L	5.0	1		04/25/17 13:46	110-57-6	
1,1-Dichloroethane	**<5.0**	ug/L	5.0	1		04/25/17 13:46	75-34-3	L2
1,2-Dichloroethane	**<5.0**	ug/L	5.0	1		04/25/17 13:46	107-06-2	L2
1,1-Dichloroethene	**<5.0**	ug/L	5.0	1		04/25/17 13:46	75-35-4	
cis-1,2-Dichloroethene	**<5.0**	ug/L	5.0	1		04/25/17 13:46	156-59-2	
trans-1,2-Dichloroethene	**<5.0**	ug/L	5.0	1		04/25/17 13:46	156-60-5	
1,2-Dichloropropane	**<5.0**	ug/L	5.0	1		04/25/17 13:46	78-87-5	
cis-1,3-Dichloropropene	**<5.0**	ug/L	5.0	1		04/25/17 13:46	10061-01-5	
trans-1,3-Dichloropropene	**<5.0**	ug/L	5.0	1		04/25/17 13:46	10061-02-6	
Ethylbenzene	**<5.0**	ug/L	5.0	1		04/25/17 13:46	100-41-4	
2-Hexanone	**<5.0**	ug/L	5.0	1		04/25/17 13:46	591-78-6	CC
Iodomethane	**<5.0**	ug/L	5.0	1		04/25/17 13:46	74-88-4	
Methylene Chloride	**1.8J**	ug/L	5.0	1		04/25/17 13:46	75-09-2	
4-Methyl-2-pentanone (MIBK)	**<5.0**	ug/L	5.0	1		04/25/17 13:46	108-10-1	CC,L2
Styrene	**<5.0**	ug/L	5.0	1		04/25/17 13:46	100-42-5	
1,1,1,2-Tetrachloroethane	**<5.0**	ug/L	5.0	1		04/25/17 13:46	630-20-6	
1,1,2,2-Tetrachloroethane	**<5.0**	ug/L	5.0	1		04/25/17 13:46	79-34-5	
Tetrachloroethene	**<5.0**	ug/L	5.0	1		04/25/17 13:46	127-18-4	
Toluene	**<5.0**	ug/L	5.0	1		04/25/17 13:46	108-88-3	
1,1,1-Trichloroethane	**<5.0**	ug/L	5.0	1		04/25/17 13:46	71-55-6	
1,1,2-Trichloroethane	**<5.0**	ug/L	5.0	1		04/25/17 13:46	79-00-5	
Trichloroethene	**<5.0**	ug/L	5.0	1		04/25/17 13:46	79-01-6	
Trichlorofluoromethane	**<5.0**	ug/L	5.0	1		04/25/17 13:46	75-69-4	
1,2,3-Trichloropropane	**<5.0**	ug/L	5.0	1		04/25/17 13:46	96-18-4	
Vinyl acetate	**<5.0**	ug/L	5.0	1		04/25/17 13:46	108-05-4	
Vinyl chloride	**<5.0**	ug/L	5.0	1		04/25/17 13:46	75-01-4	
Xylene (Total)	**<5.0**	ug/L	5.0	1		04/25/17 13:46	1330-20-7	

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

Sample: TRIP BLANK **Lab ID: 7016438012** Collected: 04/19/17 00:00 Received: 04/20/17 12:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C							
Surrogates								
1,2-Dichloroethane-d4 (S)	89	%.	68-153	1		04/25/17 13:46	17060-07-0	
4-Bromofluorobenzene (S)	115	%.	79-124	1		04/25/17 13:46	460-00-4	
Toluene-d8 (S)	119	%.	69-124	1		04/25/17 13:46	2037-26-5	

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ANALYTICAL RESULTS

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

Sample: STORAGE BLANK **Lab ID: 7016438013** Collected: 04/19/17 00:00 Received: 04/20/17 12:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C							
Acetone	**1.6J**	ug/L	5.0	1		04/25/17 14:03	67-64-1	CC
Acrylonitrile	**<5.0**	ug/L	5.0	1		04/25/17 14:03	107-13-1	CC
Benzene	**<5.0**	ug/L	5.0	1		04/25/17 14:03	71-43-2	
Bromochloromethane	**<5.0**	ug/L	5.0	1		04/25/17 14:03	74-97-5	
Bromodichloromethane	**<5.0**	ug/L	5.0	1		04/25/17 14:03	75-27-4	
Bromoform	**<5.0**	ug/L	5.0	1		04/25/17 14:03	75-25-2	
Bromomethane	**<5.0**	ug/L	5.0	1		04/25/17 14:03	74-83-9	
2-Butanone (MEK)	**<5.0**	ug/L	5.0	1		04/25/17 14:03	78-93-3	CC
Carbon disulfide	**<5.0**	ug/L	5.0	1		04/25/17 14:03	75-15-0	
Carbon tetrachloride	**<5.0**	ug/L	5.0	1		04/25/17 14:03	56-23-5	
Chlorobenzene	**<5.0**	ug/L	5.0	1		04/25/17 14:03	108-90-7	
Chloroethane	**<5.0**	ug/L	5.0	1		04/25/17 14:03	75-00-3	
Chloroform	**<5.0**	ug/L	5.0	1		04/25/17 14:03	67-66-3	
Chloromethane	**<5.0**	ug/L	5.0	1		04/25/17 14:03	74-87-3	
1,2-Dibromo-3-chloropropane	**<5.0**	ug/L	5.0	1		04/25/17 14:03	96-12-8	
Dibromochloromethane	**<5.0**	ug/L	5.0	1		04/25/17 14:03	124-48-1	L1
1,2-Dibromoethane (EDB)	**<5.0**	ug/L	5.0	1		04/25/17 14:03	106-93-4	
Dibromomethane	**<5.0**	ug/L	5.0	1		04/25/17 14:03	74-95-3	
1,2-Dichlorobenzene	**<5.0**	ug/L	5.0	1		04/25/17 14:03	95-50-1	
1,4-Dichlorobenzene	**<5.0**	ug/L	5.0	1		04/25/17 14:03	106-46-7	
trans-1,4-Dichloro-2-butene	**<5.0**	ug/L	5.0	1		04/25/17 14:03	110-57-6	
1,1-Dichloroethane	**<5.0**	ug/L	5.0	1		04/25/17 14:03	75-34-3	L2
1,2-Dichloroethane	**<5.0**	ug/L	5.0	1		04/25/17 14:03	107-06-2	L2
1,1-Dichloroethene	**<5.0**	ug/L	5.0	1		04/25/17 14:03	75-35-4	
cis-1,2-Dichloroethene	**<5.0**	ug/L	5.0	1		04/25/17 14:03	156-59-2	
trans-1,2-Dichloroethene	**<5.0**	ug/L	5.0	1		04/25/17 14:03	156-60-5	
1,2-Dichloropropane	**<5.0**	ug/L	5.0	1		04/25/17 14:03	78-87-5	
cis-1,3-Dichloropropene	**<5.0**	ug/L	5.0	1		04/25/17 14:03	10061-01-5	
trans-1,3-Dichloropropene	**<5.0**	ug/L	5.0	1		04/25/17 14:03	10061-02-6	
Ethylbenzene	**<5.0**	ug/L	5.0	1		04/25/17 14:03	100-41-4	
2-Hexanone	**<5.0**	ug/L	5.0	1		04/25/17 14:03	591-78-6	CC
Iodomethane	**<5.0**	ug/L	5.0	1		04/25/17 14:03	74-88-4	
Methylene Chloride	**4.5J**	ug/L	5.0	1		04/25/17 14:03	75-09-2	
4-Methyl-2-pentanone (MIBK)	**<5.0**	ug/L	5.0	1		04/25/17 14:03	108-10-1	CC,L2
Styrene	**<5.0**	ug/L	5.0	1		04/25/17 14:03	100-42-5	
1,1,1,2-Tetrachloroethane	**<5.0**	ug/L	5.0	1		04/25/17 14:03	630-20-6	
1,1,2,2-Tetrachloroethane	**<5.0**	ug/L	5.0	1		04/25/17 14:03	79-34-5	
Tetrachloroethene	**<5.0**	ug/L	5.0	1		04/25/17 14:03	127-18-4	
Toluene	**<5.0**	ug/L	5.0	1		04/25/17 14:03	108-88-3	
1,1,1-Trichloroethane	**<5.0**	ug/L	5.0	1		04/25/17 14:03	71-55-6	
1,1,2-Trichloroethane	**<5.0**	ug/L	5.0	1		04/25/17 14:03	79-00-5	
Trichloroethene	**<5.0**	ug/L	5.0	1		04/25/17 14:03	79-01-6	
Trichlorofluoromethane	**<5.0**	ug/L	5.0	1		04/25/17 14:03	75-69-4	
1,2,3-Trichloropropane	**<5.0**	ug/L	5.0	1		04/25/17 14:03	96-18-4	
Vinyl acetate	**<5.0**	ug/L	5.0	1		04/25/17 14:03	108-05-4	
Vinyl chloride	**<5.0**	ug/L	5.0	1		04/25/17 14:03	75-01-4	
Xylene (Total)	**<5.0**	ug/L	5.0	1		04/25/17 14:03	1330-20-7	

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575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

Sample: STORAGE BLANK **Lab ID: 7016438013** Collected: 04/19/17 00:00 Received: 04/20/17 12:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C							
Surrogates								
1,2-Dichloroethane-d4 (S)	89	%.	68-153	1		04/25/17 14:03	17060-07-0	
4-Bromofluorobenzene (S)	111	%.	79-124	1		04/25/17 14:03	460-00-4	
Toluene-d8 (S)	113	%.	69-124	1		04/25/17 14:03	2037-26-5	

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ANALYTICAL RESULTS

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

Sample: MW-11A **Lab ID: 7016438014** Collected: 04/19/17 12:15 Received: 04/20/17 12:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010C Preparation Method: EPA 3005A							
Aluminum	**1010**	ug/L	200	1	04/25/17 10:53	05/03/17 01:46	7429-90-5	
Antimony	**<60.0**	ug/L	60.0	1	04/25/17 10:53	05/03/17 01:46	7440-36-0	
Arsenic	**75.9**	ug/L	10.0	1	04/25/17 10:53	05/03/17 01:46	7440-38-2	
Barium	**1100**	ug/L	200	1	04/25/17 10:53	05/03/17 01:46	7440-39-3	
Beryllium	**<5.0**	ug/L	5.0	1	04/25/17 10:53	05/03/17 01:46	7440-41-7	
Boron	**38.7J**	ug/L	50.0	1	04/25/17 10:53	05/03/17 01:46	7440-42-8	
Cadmium	**27.8**	ug/L	2.5	1	04/25/17 10:53	05/03/17 01:46	7440-43-9	
Calcium	**56600**	ug/L	200	1	04/25/17 10:53	05/03/17 01:46	7440-70-2	
Chromium	**41.8J**	ug/L	100	10	04/25/17 10:53	05/04/17 16:21	7440-47-3	M1
Cobalt	**18.3J**	ug/L	50.0	1	04/25/17 10:53	05/03/17 01:46	7440-48-4	
Copper	**70.7**	ug/L	25.0	1	04/25/17 10:53	05/03/17 01:46	7440-50-8	
Iron	**775000**	ug/L	1000	10	04/25/17 10:53	05/04/17 16:21	7439-89-6	M6
Lead	**19.3**	ug/L	5.0	1	04/25/17 10:53	05/03/17 01:46	7439-92-1	
Magnesium	**11200**	ug/L	200	1	04/25/17 10:53	05/03/17 01:46	7439-95-4	
Manganese	**35900**	ug/L	100	10	04/25/17 10:53	05/04/17 16:21	7439-96-5	M6
Nickel	**<40.0**	ug/L	40.0	1	04/25/17 10:53	05/03/17 01:46	7440-02-0	
Potassium	**14300**	ug/L	5000	1	04/25/17 10:53	05/03/17 01:46	7440-09-7	
Selenium	**8.5J**	ug/L	10.0	1	04/25/17 10:53	05/03/17 01:46	7782-49-2	
Silver	**<10.0**	ug/L	10.0	1	04/25/17 10:53	05/03/17 01:46	7440-22-4	M1
Sodium	**18700**	ug/L	5000	1	04/25/17 10:53	05/03/17 01:46	7440-23-5	
Thallium	**43.8J**	ug/L	100	10	04/25/17 10:53	05/04/17 16:21	7440-28-0	
Vanadium	**20.6J**	ug/L	50.0	1	04/25/17 10:53	05/03/17 01:46	7440-62-2	
Zinc	**66.4**	ug/L	20.0	1	04/25/17 10:53	05/03/17 01:46	7440-66-6	D6
6010 MET ICP, Dissolved	Analytical Method: EPA 6010C							
Aluminum, Dissolved	**<200**	ug/L	200	1		05/03/17 21:12	7429-90-5	
Antimony, Dissolved	**<60.0**	ug/L	60.0	1		05/03/17 21:12	7440-36-0	
Arsenic, Dissolved	**<10.0**	ug/L	10.0	1		05/03/17 21:12	7440-38-2	
Barium, Dissolved	**41.6J**	ug/L	200	1		05/03/17 21:12	7440-39-3	
Beryllium, Dissolved	**<5.0**	ug/L	5.0	1		05/03/17 21:12	7440-41-7	
Boron, Dissolved	**37.8J**	ug/L	50.0	1		05/03/17 21:12	7440-42-8	B
Cadmium, Dissolved	**0.063J**	ug/L	2.5	1		05/03/17 21:12	7440-43-9	
Calcium, Dissolved	**35500**	ug/L	200	1		05/03/17 21:12	7440-70-2	
Chromium, Dissolved	**<10.0**	ug/L	10.0	1		05/03/17 21:12	7440-47-3	
Cobalt, Dissolved	**<50.0**	ug/L	50.0	1		05/03/17 21:12	7440-48-4	
Copper, Dissolved	**17.9J**	ug/L	25.0	1		05/03/17 21:12	7440-50-8	
Iron, Dissolved	**<100**	ug/L	100	1		05/03/17 21:12	7439-89-6	
Lead, Dissolved	**<5.0**	ug/L	5.0	1		05/03/17 21:12	7439-92-1	
Magnesium, Dissolved	**9920**	ug/L	200	1		05/03/17 21:12	7439-95-4	
Manganese, Dissolved	**34.6**	ug/L	10.0	1		05/03/17 21:12	7439-96-5	
Nickel, Dissolved	**7.0J**	ug/L	40.0	1		05/03/17 21:12	7440-02-0	
Potassium, Dissolved	**3480J**	ug/L	5000	1		05/03/17 21:12	7440-09-7	
Selenium, Dissolved	**<10.0**	ug/L	10.0	1		05/03/17 21:12	7782-49-2	
Silver, Dissolved	**<10.0**	ug/L	10.0	1		05/03/17 21:12	7440-22-4	
Sodium, Dissolved	**9950**	ug/L	5000	1		05/03/17 21:12	7440-23-5	
Thallium, Dissolved	**<10.0**	ug/L	10.0	1		05/03/17 21:12	7440-28-0	
Vanadium, Dissolved	**<50.0**	ug/L	50.0	1		05/03/17 21:12	7440-62-2	

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ANALYTICAL RESULTS

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

Sample: MW-11A **Lab ID: 7016438014** Collected: 04/19/17 12:15 Received: 04/20/17 12:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA 6010C							
Zinc, Dissolved	**50.8**	ug/L	20.0	1		05/03/17 21:12	7440-66-6	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A							
Mercury	**<4.0**	ug/L	4.0	1	04/25/17 12:55	05/02/17 15:01	7439-97-6	
7470 Mercury, Dissolved	Analytical Method: EPA 7470A Preparation Method: EPA 7470A							
Mercury, Dissolved	**<0.20**	ug/L	0.20	1	04/28/17 10:41	05/02/17 15:49	7439-97-6	
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C							
Acetone	**4.3J**	ug/L	5.0	1		04/25/17 14:57	67-64-1	CC
Acrylonitrile	**<5.0**	ug/L	5.0	1		04/25/17 14:57	107-13-1	CC
Benzene	**<5.0**	ug/L	5.0	1		04/25/17 14:57	71-43-2	
Bromochloromethane	**<5.0**	ug/L	5.0	1		04/25/17 14:57	74-97-5	
Bromodichloromethane	**<5.0**	ug/L	5.0	1		04/25/17 14:57	75-27-4	
Bromoform	**<5.0**	ug/L	5.0	1		04/25/17 14:57	75-25-2	
Bromomethane	**<5.0**	ug/L	5.0	1		04/25/17 14:57	74-83-9	
2-Butanone (MEK)	**<5.0**	ug/L	5.0	1		04/25/17 14:57	78-93-3	CC
Carbon disulfide	**<5.0**	ug/L	5.0	1		04/25/17 14:57	75-15-0	
Carbon tetrachloride	**<5.0**	ug/L	5.0	1		04/25/17 14:57	56-23-5	
Chlorobenzene	**<5.0**	ug/L	5.0	1		04/25/17 14:57	108-90-7	
Chloroethane	**<5.0**	ug/L	5.0	1		04/25/17 14:57	75-00-3	
Chloroform	**<5.0**	ug/L	5.0	1		04/25/17 14:57	67-66-3	
Chloromethane	**<5.0**	ug/L	5.0	1		04/25/17 14:57	74-87-3	
1,2-Dibromo-3-chloropropane	**<5.0**	ug/L	5.0	1		04/25/17 14:57	96-12-8	
Dibromochloromethane	**<5.0**	ug/L	5.0	1		04/25/17 14:57	124-48-1	L1
1,2-Dibromoethane (EDB)	**<5.0**	ug/L	5.0	1		04/25/17 14:57	106-93-4	
Dibromomethane	**<5.0**	ug/L	5.0	1		04/25/17 14:57	74-95-3	
1,2-Dichlorobenzene	**<5.0**	ug/L	5.0	1		04/25/17 14:57	95-50-1	
1,4-Dichlorobenzene	**<5.0**	ug/L	5.0	1		04/25/17 14:57	106-46-7	
trans-1,4-Dichloro-2-butene	**<5.0**	ug/L	5.0	1		04/25/17 14:57	110-57-6	
1,1-Dichloroethane	**<5.0**	ug/L	5.0	1		04/25/17 14:57	75-34-3	L2
1,2-Dichloroethane	**<5.0**	ug/L	5.0	1		04/25/17 14:57	107-06-2	L2
1,1-Dichloroethene	**<5.0**	ug/L	5.0	1		04/25/17 14:57	75-35-4	
cis-1,2-Dichloroethene	**<5.0**	ug/L	5.0	1		04/25/17 14:57	156-59-2	
trans-1,2-Dichloroethene	**<5.0**	ug/L	5.0	1		04/25/17 14:57	156-60-5	
1,2-Dichloropropane	**<5.0**	ug/L	5.0	1		04/25/17 14:57	78-87-5	
cis-1,3-Dichloropropene	**<5.0**	ug/L	5.0	1		04/25/17 14:57	10061-01-5	
trans-1,3-Dichloropropene	**<5.0**	ug/L	5.0	1		04/25/17 14:57	10061-02-6	
Ethylbenzene	**<5.0**	ug/L	5.0	1		04/25/17 14:57	100-41-4	
2-Hexanone	**<5.0**	ug/L	5.0	1		04/25/17 14:57	591-78-6	CC
Iodomethane	**<5.0**	ug/L	5.0	1		04/25/17 14:57	74-88-4	
Methylene Chloride	**<5.0**	ug/L	5.0	1		04/25/17 14:57	75-09-2	
4-Methyl-2-pentanone (MIBK)	**<5.0**	ug/L	5.0	1		04/25/17 14:57	108-10-1	CC,L2
Styrene	**<5.0**	ug/L	5.0	1		04/25/17 14:57	100-42-5	
1,1,1,2-Tetrachloroethane	**<5.0**	ug/L	5.0	1		04/25/17 14:57	630-20-6	
1,1,2,2-Tetrachloroethane	**<5.0**	ug/L	5.0	1		04/25/17 14:57	79-34-5	

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ANALYTICAL RESULTS

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

Sample: MW-11A **Lab ID: 7016438014** Collected: 04/19/17 12:15 Received: 04/20/17 12:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C							
Tetrachloroethene	**<5.0**	ug/L	5.0	1		04/25/17 14:57	127-18-4	
Toluene	**<5.0**	ug/L	5.0	1		04/25/17 14:57	108-88-3	
1,1,1-Trichloroethane	**<5.0**	ug/L	5.0	1		04/25/17 14:57	71-55-6	
1,1,2-Trichloroethane	**<5.0**	ug/L	5.0	1		04/25/17 14:57	79-00-5	
Trichloroethene	**<5.0**	ug/L	5.0	1		04/25/17 14:57	79-01-6	
Trichlorofluoromethane	**<5.0**	ug/L	5.0	1		04/25/17 14:57	75-69-4	
1,2,3-Trichloropropane	**<5.0**	ug/L	5.0	1		04/25/17 14:57	96-18-4	
Vinyl acetate	**<5.0**	ug/L	5.0	1		04/25/17 14:57	108-05-4	
Vinyl chloride	**<5.0**	ug/L	5.0	1		04/25/17 14:57	75-01-4	
Xylene (Total)	**<5.0**	ug/L	5.0	1		04/25/17 14:57	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	91	%.	68-153	1		04/25/17 14:57	17060-07-0	
4-Bromofluorobenzene (S)	119	%.	79-124	1		04/25/17 14:57	460-00-4	
Toluene-d8 (S)	108	%.	69-124	1		04/25/17 14:57	2037-26-5	
2120B W Apparent Color	Analytical Method: SM22 2120B							
Apparent Color	**300**	units	50.0	10		04/20/17 15:14		
pH	**6.0**	Std. Units	0.10	10		04/20/17 15:14		
2320B Alkalinity	Analytical Method: SM22 2320B							
Alkalinity, Total as CaCO3	**135**	mg/L	1.0	1		04/27/17 14:30		
2340C Hardness, Total	Analytical Method: SM22 2340C							
Total Hardness	**150**	mg/L	5.0	1		05/03/17 14:22		
2540C Total Dissolved Solids	Analytical Method: SM22 2540C							
Total Dissolved Solids	**186**	mg/L	10.0	1		04/27/17 14:11		H1
Chromium, Hexavalent	Analytical Method: SM22 3500-Cr B							
Chromium, Hexavalent	**<0.020**	mg/L	0.020	1		04/21/17 01:11	18540-29-9	H3
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4							
Chemical Oxygen Demand	**85.8**	mg/L	10.0	1	04/28/17 11:33	04/28/17 14:28		
5210B BOD, 5 day	Analytical Method: SM22 5210B Preparation Method: SM22 5210B							
BOD, 5 day	**2.3J**	mg/L	4.0	2	04/21/17 09:33	04/26/17 10:48		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0							
Bromide	**0.037J**	mg/L	0.50	1		05/08/17 21:46	24959-67-9	
Chloride	**14.2**	mg/L	2.0	1		05/08/17 21:46	16887-00-6	
Sulfate	**12.2**	mg/L	5.0	1		05/08/17 21:46	14808-79-8	
351.2 Total Kjeldahl Nitrogen	Analytical Method: EPA 351.2 Preparation Method: EPA 351.2							
Nitrogen, Kjeldahl, Total	**2.7**	mg/L	0.10	1	05/02/17 06:55	05/02/17 13:25	7727-37-9	

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(631)694-3040

ANALYTICAL RESULTS

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

Sample: MW-11A **Lab ID: 7016438014** Collected: 04/19/17 12:15 Received: 04/20/17 12:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2							
Nitrate as N	**0.50**	mg/L	0.050	1		04/21/17 09:14	14797-55-8	
Nitrate-Nitrite (as N)	**0.50**	mg/L	0.050	1		04/21/17 09:14	7727-37-9	
353.2 Nitrogen, NO2	Analytical Method: EPA 353.2							
Nitrite as N	**<0.050**	mg/L	0.050	1		04/21/17 04:30	14797-65-0	
Phenolics, Total Recoverable	Analytical Method: EPA 420.1 Preparation Method: EPA 420.1							
Phenolics, Total Recoverable	**6.2J**	ug/L	10.0	1	05/03/17 12:00	05/03/17 17:08		
4500 Ammonia Water	Analytical Method: SM22 4500 NH3 H							
Nitrogen, Ammonia	**0.54**	mg/L	0.10	1		05/08/17 13:22	7664-41-7	
9014 Cyanide, Total	Analytical Method: EPA 9014 Total Cyanide Preparation Method: EPA 9010C							
Cyanide	**<10.0**	ug/L	10.0	1	05/03/17 09:42	05/03/17 17:12	57-12-5	
9060A Total Organic Carbon	Analytical Method: EPA 9060A							
Total Organic Carbon	**13.9**	mg/L	10.0	10		05/04/17 03:20	7440-44-0	
Total Organic Carbon	**13.4**	mg/L	10.0	10		05/04/17 03:20	7440-44-0	
Total Organic Carbon	**13.9**	mg/L	10.0	10		05/04/17 03:20	7440-44-0	
Total Organic Carbon	**14.0**	mg/L	10.0	10		05/04/17 03:20	7440-44-0	
Mean Total Organic Carbon	**13.8**	mg/L	10.0	10		05/04/17 03:20	7440-44-0	

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ANALYTICAL RESULTS

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

Sample: MW-3A **Lab ID: 7016438015** Collected: 04/20/17 09:55 Received: 04/21/17 11:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010C Preparation Method: EPA 3005A							
Aluminum	**22.0J**	ug/L	200	1	04/26/17 10:18	05/05/17 14:05	7429-90-5	B
Antimony	**<60.0**	ug/L	60.0	1	04/26/17 10:18	05/05/17 14:05	7440-36-0	
Arsenic	**<10.0**	ug/L	10.0	1	04/26/17 10:18	05/05/17 14:05	7440-38-2	
Barium	**74.4J**	ug/L	200	1	04/26/17 10:18	05/05/17 14:05	7440-39-3	
Beryllium	**<5.0**	ug/L	5.0	1	04/26/17 10:18	05/05/17 14:05	7440-41-7	
Boron	**21.1J**	ug/L	50.0	1	04/26/17 10:18	05/05/17 14:05	7440-42-8	
Cadmium	**0.27J**	ug/L	2.5	1	04/26/17 10:18	05/05/17 14:05	7440-43-9	
Calcium	**20800**	ug/L	200	1	04/26/17 10:18	05/05/17 14:05	7440-70-2	
Chromium	**1660**	ug/L	10.0	1	04/26/17 10:18	05/05/17 14:05	7440-47-3	
Cobalt	**4.9J**	ug/L	50.0	1	04/26/17 10:18	05/05/17 14:05	7440-48-4	
Copper	**24.0J**	ug/L	25.0	1	04/26/17 10:18	05/05/17 14:05	7440-50-8	
Iron	**6520**	ug/L	100	1	04/26/17 10:18	05/05/17 14:05	7439-89-6	
Lead	**<5.0**	ug/L	5.0	1	04/26/17 10:18	05/05/17 14:05	7439-92-1	
Magnesium	**5510**	ug/L	200	1	04/26/17 10:18	05/05/17 14:05	7439-95-4	
Manganese	**359**	ug/L	10.0	1	04/26/17 10:18	05/05/17 14:05	7439-96-5	
Nickel	**132**	ug/L	40.0	1	04/26/17 10:18	05/05/17 14:05	7440-02-0	
Potassium	**5830**	ug/L	5000	1	04/26/17 10:18	05/05/17 14:05	7440-09-7	
Selenium	**<10.0**	ug/L	10.0	1	04/26/17 10:18	05/05/17 14:05	7782-49-2	
Silver	**<10.0**	ug/L	10.0	1	04/26/17 10:18	05/05/17 14:05	7440-22-4	
Sodium	**82900**	ug/L	5000	1	04/26/17 10:18	05/05/17 14:05	7440-23-5	
Thallium	**<10.0**	ug/L	10.0	1	04/26/17 10:18	05/05/17 14:05	7440-28-0	
Vanadium	**2.3J**	ug/L	50.0	1	04/26/17 10:18	05/05/17 14:05	7440-62-2	
Zinc	**<20.0**	ug/L	20.0	1	04/26/17 10:18	05/05/17 14:05	7440-66-6	
6010 MET ICP, Dissolved	Analytical Method: EPA 6010C							
Aluminum, Dissolved	**<200**	ug/L	200	1		05/03/17 21:27	7429-90-5	
Antimony, Dissolved	**<60.0**	ug/L	60.0	1		05/03/17 21:27	7440-36-0	
Arsenic, Dissolved	**<10.0**	ug/L	10.0	1		05/03/17 21:27	7440-38-2	
Barium, Dissolved	**57.9J**	ug/L	200	1		05/03/17 21:27	7440-39-3	
Beryllium, Dissolved	**<5.0**	ug/L	5.0	1		05/03/17 21:27	7440-41-7	
Boron, Dissolved	**25.3J**	ug/L	50.0	1		05/03/17 21:27	7440-42-8	B
Cadmium, Dissolved	**0.096J**	ug/L	2.5	1		05/03/17 21:27	7440-43-9	
Calcium, Dissolved	**18000**	ug/L	200	1		05/03/17 21:27	7440-70-2	
Chromium, Dissolved	**14.1**	ug/L	10.0	1		05/03/17 21:27	7440-47-3	
Cobalt, Dissolved	**<50.0**	ug/L	50.0	1		05/03/17 21:27	7440-48-4	
Copper, Dissolved	**7.8J**	ug/L	25.0	1		05/03/17 21:27	7440-50-8	
Iron, Dissolved	**<100**	ug/L	100	1		05/03/17 21:27	7439-89-6	
Lead, Dissolved	**<5.0**	ug/L	5.0	1		05/03/17 21:27	7439-92-1	
Magnesium, Dissolved	**5010**	ug/L	200	1		05/03/17 21:27	7439-95-4	
Manganese, Dissolved	**51.8**	ug/L	10.0	1		05/03/17 21:27	7439-96-5	
Nickel, Dissolved	**89.3**	ug/L	40.0	1		05/03/17 21:27	7440-02-0	
Potassium, Dissolved	**4880J**	ug/L	5000	1		05/03/17 21:27	7440-09-7	
Selenium, Dissolved	**<10.0**	ug/L	10.0	1		05/03/17 21:27	7782-49-2	
Silver, Dissolved	**<10.0**	ug/L	10.0	1		05/03/17 21:27	7440-22-4	
Sodium, Dissolved	**70200**	ug/L	5000	1		05/03/17 21:27	7440-23-5	
Thallium, Dissolved	**<10.0**	ug/L	10.0	1		05/03/17 21:27	7440-28-0	
Vanadium, Dissolved	**<50.0**	ug/L	50.0	1		05/03/17 21:27	7440-62-2	

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ANALYTICAL RESULTS

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

Sample: MW-3A **Lab ID: 7016438015** Collected: 04/20/17 09:55 Received: 04/21/17 11:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA 6010C							
Zinc, Dissolved	**10.7J**	ug/L	20.0	1		05/03/17 21:27	7440-66-6	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A							
Mercury	**<0.20**	ug/L	0.20	1	04/25/17 12:55	05/02/17 15:06	7439-97-6	
7470 Mercury, Dissolved	Analytical Method: EPA 7470A Preparation Method: EPA 7470A							
Mercury, Dissolved	**<0.20**	ug/L	0.20	1	04/28/17 10:41	05/02/17 15:51	7439-97-6	
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C							
Acetone	**3.8J**	ug/L	5.0	1		04/25/17 17:20	67-64-1	CC
Acrylonitrile	**<5.0**	ug/L	5.0	1		04/25/17 17:20	107-13-1	CC
Benzene	**<5.0**	ug/L	5.0	1		04/25/17 17:20	71-43-2	
Bromochloromethane	**<5.0**	ug/L	5.0	1		04/25/17 17:20	74-97-5	
Bromodichloromethane	**<5.0**	ug/L	5.0	1		04/25/17 17:20	75-27-4	
Bromoform	**<5.0**	ug/L	5.0	1		04/25/17 17:20	75-25-2	
Bromomethane	**<5.0**	ug/L	5.0	1		04/25/17 17:20	74-83-9	
2-Butanone (MEK)	**<5.0**	ug/L	5.0	1		04/25/17 17:20	78-93-3	CC
Carbon disulfide	**<5.0**	ug/L	5.0	1		04/25/17 17:20	75-15-0	
Carbon tetrachloride	**<5.0**	ug/L	5.0	1		04/25/17 17:20	56-23-5	
Chlorobenzene	**<5.0**	ug/L	5.0	1		04/25/17 17:20	108-90-7	
Chloroethane	**<5.0**	ug/L	5.0	1		04/25/17 17:20	75-00-3	
Chloroform	**<5.0**	ug/L	5.0	1		04/25/17 17:20	67-66-3	
Chloromethane	**<5.0**	ug/L	5.0	1		04/25/17 17:20	74-87-3	
1,2-Dibromo-3-chloropropane	**<5.0**	ug/L	5.0	1		04/25/17 17:20	96-12-8	
Dibromochloromethane	**<5.0**	ug/L	5.0	1		04/25/17 17:20	124-48-1	L1
1,2-Dibromoethane (EDB)	**<5.0**	ug/L	5.0	1		04/25/17 17:20	106-93-4	
Dibromomethane	**<5.0**	ug/L	5.0	1		04/25/17 17:20	74-95-3	
1,2-Dichlorobenzene	**<5.0**	ug/L	5.0	1		04/25/17 17:20	95-50-1	
1,4-Dichlorobenzene	**<5.0**	ug/L	5.0	1		04/25/17 17:20	106-46-7	
trans-1,4-Dichloro-2-butene	**<5.0**	ug/L	5.0	1		04/25/17 17:20	110-57-6	
1,1-Dichloroethane	**<5.0**	ug/L	5.0	1		04/25/17 17:20	75-34-3	L2
1,2-Dichloroethane	**<5.0**	ug/L	5.0	1		04/25/17 17:20	107-06-2	L2
1,1-Dichloroethene	**<5.0**	ug/L	5.0	1		04/25/17 17:20	75-35-4	
cis-1,2-Dichloroethene	**<5.0**	ug/L	5.0	1		04/25/17 17:20	156-59-2	
trans-1,2-Dichloroethene	**<5.0**	ug/L	5.0	1		04/25/17 17:20	156-60-5	
1,2-Dichloropropane	**<5.0**	ug/L	5.0	1		04/25/17 17:20	78-87-5	
cis-1,3-Dichloropropene	**<5.0**	ug/L	5.0	1		04/25/17 17:20	10061-01-5	
trans-1,3-Dichloropropene	**<5.0**	ug/L	5.0	1		04/25/17 17:20	10061-02-6	
Ethylbenzene	**<5.0**	ug/L	5.0	1		04/25/17 17:20	100-41-4	
2-Hexanone	**<5.0**	ug/L	5.0	1		04/25/17 17:20	591-78-6	CC
Iodomethane	**<5.0**	ug/L	5.0	1		04/25/17 17:20	74-88-4	
Methylene Chloride	**<5.0**	ug/L	5.0	1		04/25/17 17:20	75-09-2	
4-Methyl-2-pentanone (MIBK)	**<5.0**	ug/L	5.0	1		04/25/17 17:20	108-10-1	CC,L2
Styrene	**<5.0**	ug/L	5.0	1		04/25/17 17:20	100-42-5	
1,1,1,2-Tetrachloroethane	**<5.0**	ug/L	5.0	1		04/25/17 17:20	630-20-6	
1,1,2,2-Tetrachloroethane	**<5.0**	ug/L	5.0	1		04/25/17 17:20	79-34-5	

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ANALYTICAL RESULTS

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

Sample: MW-3A **Lab ID: 7016438015** Collected: 04/20/17 09:55 Received: 04/21/17 11:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C							
Tetrachloroethene	**<5.0**	ug/L	5.0	1		04/25/17 17:20	127-18-4	
Toluene	**<5.0**	ug/L	5.0	1		04/25/17 17:20	108-88-3	
1,1,1-Trichloroethane	**<5.0**	ug/L	5.0	1		04/25/17 17:20	71-55-6	
1,1,2-Trichloroethane	**<5.0**	ug/L	5.0	1		04/25/17 17:20	79-00-5	
Trichloroethene	**<5.0**	ug/L	5.0	1		04/25/17 17:20	79-01-6	
Trichlorofluoromethane	**<5.0**	ug/L	5.0	1		04/25/17 17:20	75-69-4	
1,2,3-Trichloropropane	**<5.0**	ug/L	5.0	1		04/25/17 17:20	96-18-4	
Vinyl acetate	**<5.0**	ug/L	5.0	1		04/25/17 17:20	108-05-4	
Vinyl chloride	**<5.0**	ug/L	5.0	1		04/25/17 17:20	75-01-4	
Xylene (Total)	**<5.0**	ug/L	5.0	1		04/25/17 17:20	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	91	%.	68-153	1		04/25/17 17:20	17060-07-0	
4-Bromofluorobenzene (S)	122	%.	79-124	1		04/25/17 17:20	460-00-4	
Toluene-d8 (S)	114	%.	69-124	1		04/25/17 17:20	2037-26-5	
2120B W Apparent Color	Analytical Method: SM22 2120B							
Apparent Color	**5.0**	units	5.0	1		04/22/17 06:37		
pH	**6.0**	Std. Units	0.10	1		04/22/17 06:37		
2320B Alkalinity	Analytical Method: SM22 2320B							
Alkalinity, Total as CaCO3	**34.2**	mg/L	1.0	1		04/28/17 10:30		
2340C Hardness, Total	Analytical Method: SM22 2340C							
Total Hardness	**80.0**	mg/L	5.0	1		05/03/17 14:26		
2540C Total Dissolved Solids	Analytical Method: SM22 2540C							
Total Dissolved Solids	**317**	mg/L	10.0	1		04/27/17 14:15		
Chromium, Hexavalent	Analytical Method: SM22 3500-Cr B							
Chromium, Hexavalent	**0.0098J**	mg/L	0.020	1		04/22/17 00:35	18540-29-9	H3
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4							
Chemical Oxygen Demand	**13.0**	mg/L	10.0	1	04/28/17 11:33	04/28/17 14:28		
5210B BOD, 5 day	Analytical Method: SM22 5210B Preparation Method: SM22 5210B							
BOD, 5 day	**1.0J**	mg/L	2.0	1	04/21/17 17:15	04/26/17 12:19		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0							
Bromide	**<0.50**	mg/L	0.50	1		05/08/17 22:00	24959-67-9	
Chloride	**154**	mg/L	10.0	5		05/09/17 11:17	16887-00-6	
Sulfate	**8.7**	mg/L	5.0	1		05/08/17 22:00	14808-79-8	
351.2 Total Kjeldahl Nitrogen	Analytical Method: EPA 351.2 Preparation Method: EPA 351.2							
Nitrogen, Kjeldahl, Total	**0.34**	mg/L	0.10	1	05/02/17 06:55	05/02/17 13:26	7727-37-9	

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ANALYTICAL RESULTS

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

Sample: MW-3A **Lab ID: 7016438015** Collected: 04/20/17 09:55 Received: 04/21/17 11:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2							
Nitrate-Nitrite (as N)	**1.8**	mg/L	0.25	5		04/27/17 11:09	7727-37-9	
353.2 Nitrogen, NO2	Analytical Method: EPA 353.2							
Nitrite as N	**<0.050**	mg/L	0.050	1		04/21/17 23:30	14797-65-0	
Phenolics, Total Recoverable	Analytical Method: EPA 420.1 Preparation Method: EPA 420.1							
Phenolics, Total Recoverable	**2.6J**	ug/L	5.0	1	05/03/17 12:00	05/03/17 17:10		
4500 Ammonia Water	Analytical Method: SM22 4500 NH3 H							
Nitrogen, Ammonia	**0.10**	mg/L	0.10	1		05/08/17 13:23	7664-41-7	
9014 Cyanide, Total	Analytical Method: EPA 9014 Total Cyanide Preparation Method: EPA 9010C							
Cyanide	**<10.0**	ug/L	10.0	1	05/03/17 09:42	05/03/17 17:12	57-12-5	
9060A Total Organic Carbon	Analytical Method: EPA 9060A							
Total Organic Carbon	**2.8J**	mg/L	10.0	10		05/04/17 08:02	7440-44-0	B
Total Organic Carbon	**2.5J**	mg/L	10.0	10		05/04/17 08:02	7440-44-0	
Total Organic Carbon	**2.6J**	mg/L	10.0	10		05/04/17 08:02	7440-44-0	
Total Organic Carbon	**2.6J**	mg/L	10.0	10		05/04/17 08:02	7440-44-0	
Mean Total Organic Carbon	**2.6J**	mg/L	10.0	10		05/04/17 08:02	7440-44-0	

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ANALYTICAL RESULTS

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

Sample: MW-3B **Lab ID: 7016438016** Collected: 04/20/17 09:40 Received: 04/21/17 11:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010C Preparation Method: EPA 3005A							
Aluminum	**<200**	ug/L	200	1	04/26/17 10:18	05/05/17 14:10	7429-90-5	
Antimony	**<60.0**	ug/L	60.0	1	04/26/17 10:18	05/05/17 14:10	7440-36-0	
Arsenic	**<10.0**	ug/L	10.0	1	04/26/17 10:18	05/05/17 14:10	7440-38-2	
Barium	**34.7J**	ug/L	200	1	04/26/17 10:18	05/05/17 14:10	7440-39-3	
Beryllium	**<5.0**	ug/L	5.0	1	04/26/17 10:18	05/05/17 14:10	7440-41-7	
Boron	**40.9J**	ug/L	50.0	1	04/26/17 10:18	05/05/17 14:10	7440-42-8	
Cadmium	**0.29J**	ug/L	2.5	1	04/26/17 10:18	05/05/17 14:10	7440-43-9	
Calcium	**12900**	ug/L	200	1	04/26/17 10:18	05/05/17 14:10	7440-70-2	
Chromium	**<10.0**	ug/L	10.0	1	04/26/17 10:18	05/05/17 14:10	7440-47-3	
Cobalt	**5.5J**	ug/L	50.0	1	04/26/17 10:18	05/05/17 14:10	7440-48-4	
Copper	**<25.0**	ug/L	25.0	1	04/26/17 10:18	05/05/17 14:10	7440-50-8	
Iron	**12100**	ug/L	100	1	04/26/17 10:18	05/05/17 14:10	7439-89-6	
Lead	**<5.0**	ug/L	5.0	1	04/26/17 10:18	05/05/17 14:10	7439-92-1	
Magnesium	**4310**	ug/L	200	1	04/26/17 10:18	05/05/17 14:10	7439-95-4	
Manganese	**3790**	ug/L	10.0	1	04/26/17 10:18	05/05/17 14:10	7439-96-5	
Nickel	**3.1J**	ug/L	40.0	1	04/26/17 10:18	05/05/17 14:10	7440-02-0	
Potassium	**4200J**	ug/L	5000	1	04/26/17 10:18	05/05/17 14:10	7440-09-7	
Selenium	**<10.0**	ug/L	10.0	1	04/26/17 10:18	05/05/17 14:10	7782-49-2	
Silver	**<10.0**	ug/L	10.0	1	04/26/17 10:18	05/05/17 14:10	7440-22-4	
Sodium	**16900**	ug/L	5000	1	04/26/17 10:18	05/05/17 14:10	7440-23-5	
Thallium	**<10.0**	ug/L	10.0	1	04/26/17 10:18	05/05/17 14:10	7440-28-0	
Vanadium	**<50.0**	ug/L	50.0	1	04/26/17 10:18	05/05/17 14:10	7440-62-2	
Zinc	**2.3J**	ug/L	20.0	1	04/26/17 10:18	05/05/17 14:10	7440-66-6	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A							
Mercury	**<0.20**	ug/L	0.20	1	04/25/17 12:55	05/02/17 15:08	7439-97-6	
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C							
Acetone	**2.2J**	ug/L	5.0	1		04/25/17 17:37	67-64-1	CC
Acrylonitrile	**<5.0**	ug/L	5.0	1		04/25/17 17:37	107-13-1	CC
Benzene	**<5.0**	ug/L	5.0	1		04/25/17 17:37	71-43-2	
Bromochloromethane	**<5.0**	ug/L	5.0	1		04/25/17 17:37	74-97-5	
Bromodichloromethane	**<5.0**	ug/L	5.0	1		04/25/17 17:37	75-27-4	
Bromoform	**<5.0**	ug/L	5.0	1		04/25/17 17:37	75-25-2	
Bromomethane	**<5.0**	ug/L	5.0	1		04/25/17 17:37	74-83-9	
2-Butanone (MEK)	**<5.0**	ug/L	5.0	1		04/25/17 17:37	78-93-3	CC
Carbon disulfide	**<5.0**	ug/L	5.0	1		04/25/17 17:37	75-15-0	
Carbon tetrachloride	**<5.0**	ug/L	5.0	1		04/25/17 17:37	56-23-5	
Chlorobenzene	**<5.0**	ug/L	5.0	1		04/25/17 17:37	108-90-7	
Chloroethane	**<5.0**	ug/L	5.0	1		04/25/17 17:37	75-00-3	
Chloroform	**<5.0**	ug/L	5.0	1		04/25/17 17:37	67-66-3	
Chloromethane	**<5.0**	ug/L	5.0	1		04/25/17 17:37	74-87-3	
1,2-Dibromo-3-chloropropane	**<5.0**	ug/L	5.0	1		04/25/17 17:37	96-12-8	
Dibromochloromethane	**<5.0**	ug/L	5.0	1		04/25/17 17:37	124-48-1	L1
1,2-Dibromoethane (EDB)	**<5.0**	ug/L	5.0	1		04/25/17 17:37	106-93-4	
Dibromomethane	**<5.0**	ug/L	5.0	1		04/25/17 17:37	74-95-3	

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575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

Sample: MW-3B **Lab ID: 7016438016** Collected: 04/20/17 09:40 Received: 04/21/17 11:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C							
1,2-Dichlorobenzene	**<5.0**	ug/L	5.0	1		04/25/17 17:37	95-50-1	
1,4-Dichlorobenzene	**<5.0**	ug/L	5.0	1		04/25/17 17:37	106-46-7	
trans-1,4-Dichloro-2-butene	**<5.0**	ug/L	5.0	1		04/25/17 17:37	110-57-6	
1,1-Dichloroethane	**<5.0**	ug/L	5.0	1		04/25/17 17:37	75-34-3	L2
1,2-Dichloroethane	**<5.0**	ug/L	5.0	1		04/25/17 17:37	107-06-2	L2
1,1-Dichloroethene	**<5.0**	ug/L	5.0	1		04/25/17 17:37	75-35-4	
cis-1,2-Dichloroethene	**<5.0**	ug/L	5.0	1		04/25/17 17:37	156-59-2	
trans-1,2-Dichloroethene	**<5.0**	ug/L	5.0	1		04/25/17 17:37	156-60-5	
1,2-Dichloropropane	**<5.0**	ug/L	5.0	1		04/25/17 17:37	78-87-5	
cis-1,3-Dichloropropene	**<5.0**	ug/L	5.0	1		04/25/17 17:37	10061-01-5	
trans-1,3-Dichloropropene	**<5.0**	ug/L	5.0	1		04/25/17 17:37	10061-02-6	
Ethylbenzene	**<5.0**	ug/L	5.0	1		04/25/17 17:37	100-41-4	
2-Hexanone	**<5.0**	ug/L	5.0	1		04/25/17 17:37	591-78-6	CC
Iodomethane	**<5.0**	ug/L	5.0	1		04/25/17 17:37	74-88-4	
Methylene Chloride	**<5.0**	ug/L	5.0	1		04/25/17 17:37	75-09-2	
4-Methyl-2-pentanone (MIBK)	**<5.0**	ug/L	5.0	1		04/25/17 17:37	108-10-1	CC,L2
Styrene	**<5.0**	ug/L	5.0	1		04/25/17 17:37	100-42-5	
1,1,1,2-Tetrachloroethane	**<5.0**	ug/L	5.0	1		04/25/17 17:37	630-20-6	
1,1,2,2-Tetrachloroethane	**<5.0**	ug/L	5.0	1		04/25/17 17:37	79-34-5	
Tetrachloroethene	**<5.0**	ug/L	5.0	1		04/25/17 17:37	127-18-4	
Toluene	**<5.0**	ug/L	5.0	1		04/25/17 17:37	108-88-3	
1,1,1-Trichloroethane	**<5.0**	ug/L	5.0	1		04/25/17 17:37	71-55-6	
1,1,2-Trichloroethane	**<5.0**	ug/L	5.0	1		04/25/17 17:37	79-00-5	
Trichloroethene	**<5.0**	ug/L	5.0	1		04/25/17 17:37	79-01-6	
Trichlorofluoromethane	**<5.0**	ug/L	5.0	1		04/25/17 17:37	75-69-4	
1,2,3-Trichloropropane	**<5.0**	ug/L	5.0	1		04/25/17 17:37	96-18-4	
Vinyl acetate	**<5.0**	ug/L	5.0	1		04/25/17 17:37	108-05-4	
Vinyl chloride	**<5.0**	ug/L	5.0	1		04/25/17 17:37	75-01-4	
Xylene (Total)	**<5.0**	ug/L	5.0	1		04/25/17 17:37	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	91	%.	68-153	1		04/25/17 17:37	17060-07-0	
4-Bromofluorobenzene (S)	116	%.	79-124	1		04/25/17 17:37	460-00-4	
Toluene-d8 (S)	113	%.	69-124	1		04/25/17 17:37	2037-26-5	
2120B W Apparent Color	Analytical Method: SM22 2120B							
Apparent Color	**5.0**	units	5.0	1		04/22/17 06:41		
pH	**6.0**	Std. Units	0.10	1		04/22/17 06:41		
2320B Alkalinity	Analytical Method: SM22 2320B							
Alkalinity, Total as CaCO3	**44.4**	mg/L	1.0	1		04/28/17 10:37		
2340C Hardness, Total	Analytical Method: SM22 2340C							
Total Hardness	**40.0**	mg/L	5.0	1		05/03/17 14:38		
2540C Total Dissolved Solids	Analytical Method: SM22 2540C							
Total Dissolved Solids	**102**	mg/L	10.0	1		04/27/17 14:15		

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575 Broad Hollow Road
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(631)694-3040

ANALYTICAL RESULTS

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

Sample: MW-3B **Lab ID: 7016438016** Collected: 04/20/17 09:40 Received: 04/21/17 11:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Chromium, Hexavalent	Analytical Method: SM22 3500-Cr B							
Chromium, Hexavalent	**<0.020**	mg/L	0.020	1		04/22/17 00:30	18540-29-9	H3
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4							
Chemical Oxygen Demand	**10.9**	mg/L	10.0	1	04/28/17 11:33	04/28/17 14:28		
5210B BOD, 5 day	Analytical Method: SM22 5210B Preparation Method: SM22 5210B							
BOD, 5 day	**1.0J**	mg/L	2.0	1	04/21/17 17:15	04/26/17 12:21		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0							
Bromide	**0.067J**	mg/L	0.50	1		05/08/17 22:13	24959-67-9	
Chloride	**14.7**	mg/L	2.0	1		05/08/17 22:13	16887-00-6	
Sulfate	**13.8**	mg/L	5.0	1		05/08/17 22:13	14808-79-8	
351.2 Total Kjeldahl Nitrogen	Analytical Method: EPA 351.2 Preparation Method: EPA 351.2							
Nitrogen, Kjeldahl, Total	**1.4**	mg/L	0.10	1	05/02/17 06:55	05/02/17 13:27	7727-37-9	
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2							
Nitrate-Nitrite (as N)	**<0.050**	mg/L	0.050	1		04/27/17 11:13	7727-37-9	
353.2 Nitrogen, NO2	Analytical Method: EPA 353.2							
Nitrite as N	**0.031J**	mg/L	0.050	1		04/21/17 23:31	14797-65-0	
Phenolics, Total Recoverable	Analytical Method: EPA 420.1 Preparation Method: EPA 420.1							
Phenolics, Total Recoverable	**2.1J**	ug/L	5.0	1	05/03/17 12:00	05/03/17 17:20		
4500 Ammonia Water	Analytical Method: SM22 4500 NH3 H							
Nitrogen, Ammonia	**0.65**	mg/L	0.10	1		05/08/17 13:24	7664-41-7	
9014 Cyanide, Total	Analytical Method: EPA 9014 Total Cyanide Preparation Method: EPA 9010C							
Cyanide	**<10.0**	ug/L	10.0	1	05/03/17 09:42	05/03/17 17:13	57-12-5	
9060A Total Organic Carbon	Analytical Method: EPA 9060A							
Total Organic Carbon	**2.0J**	mg/L	10.0	10		05/04/17 08:38	7440-44-0	B
Total Organic Carbon	**1.6J**	mg/L	10.0	10		05/04/17 08:38	7440-44-0	
Total Organic Carbon	**1.6J**	mg/L	10.0	10		05/04/17 08:38	7440-44-0	
Total Organic Carbon	**1.8J**	mg/L	10.0	10		05/04/17 08:38	7440-44-0	
Mean Total Organic Carbon	**1.8J**	mg/L	10.0	10		05/04/17 08:38	7440-44-0	

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ANALYTICAL RESULTS

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

Sample: MW-3C **Lab ID: 7016438017** Collected: 04/20/17 08:50 Received: 04/21/17 11:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010C Preparation Method: EPA 3005A							
Aluminum	**<200**	ug/L	200	1	04/26/17 10:18	05/05/17 14:15	7429-90-5	
Antimony	**<60.0**	ug/L	60.0	1	04/26/17 10:18	05/05/17 14:15	7440-36-0	
Arsenic	**<10.0**	ug/L	10.0	1	04/26/17 10:18	05/05/17 14:15	7440-38-2	
Barium	**18.3J**	ug/L	200	1	04/26/17 10:18	05/05/17 14:15	7440-39-3	
Beryllium	**<5.0**	ug/L	5.0	1	04/26/17 10:18	05/05/17 14:15	7440-41-7	
Boron	**5.5J**	ug/L	50.0	1	04/26/17 10:18	05/05/17 14:15	7440-42-8	
Cadmium	**<2.5**	ug/L	2.5	1	04/26/17 10:18	05/05/17 14:15	7440-43-9	
Calcium	**8630**	ug/L	200	1	04/26/17 10:18	05/05/17 14:15	7440-70-2	
Chromium	**4.8J**	ug/L	10.0	1	04/26/17 10:18	05/05/17 14:15	7440-47-3	
Cobalt	**<50.0**	ug/L	50.0	1	04/26/17 10:18	05/05/17 14:15	7440-48-4	
Copper	**<25.0**	ug/L	25.0	1	04/26/17 10:18	05/05/17 14:15	7440-50-8	
Iron	**38.5J**	ug/L	100	1	04/26/17 10:18	05/05/17 14:15	7439-89-6	
Lead	**<5.0**	ug/L	5.0	1	04/26/17 10:18	05/05/17 14:15	7439-92-1	
Magnesium	**3740**	ug/L	200	1	04/26/17 10:18	05/05/17 14:15	7439-95-4	
Manganese	**3.9J**	ug/L	10.0	1	04/26/17 10:18	05/05/17 14:15	7439-96-5	
Nickel	**6.8J**	ug/L	40.0	1	04/26/17 10:18	05/05/17 14:15	7440-02-0	
Potassium	**874J**	ug/L	5000	1	04/26/17 10:18	05/05/17 14:15	7440-09-7	
Selenium	**<10.0**	ug/L	10.0	1	04/26/17 10:18	05/05/17 14:15	7782-49-2	
Silver	**<10.0**	ug/L	10.0	1	04/26/17 10:18	05/05/17 14:15	7440-22-4	M1
Sodium	**13900**	ug/L	5000	1	04/26/17 10:18	05/05/17 14:15	7440-23-5	D6
Thallium	**<10.0**	ug/L	10.0	1	04/26/17 10:18	05/05/17 14:15	7440-28-0	
Vanadium	**<50.0**	ug/L	50.0	1	04/26/17 10:18	05/05/17 14:15	7440-62-2	
Zinc	**<20.0**	ug/L	20.0	1	04/26/17 10:18	05/05/17 14:15	7440-66-6	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A							
Mercury	**<0.20**	ug/L	0.20	1	04/25/17 12:55	05/02/17 15:10	7439-97-6	
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C							
Acetone	**2.4J**	ug/L	5.0	1		04/25/17 17:55	67-64-1	CC
Acrylonitrile	**<5.0**	ug/L	5.0	1		04/25/17 17:55	107-13-1	CC
Benzene	**<5.0**	ug/L	5.0	1		04/25/17 17:55	71-43-2	
Bromochloromethane	**<5.0**	ug/L	5.0	1		04/25/17 17:55	74-97-5	
Bromodichloromethane	**<5.0**	ug/L	5.0	1		04/25/17 17:55	75-27-4	
Bromoform	**<5.0**	ug/L	5.0	1		04/25/17 17:55	75-25-2	
Bromomethane	**<5.0**	ug/L	5.0	1		04/25/17 17:55	74-83-9	
2-Butanone (MEK)	**<5.0**	ug/L	5.0	1		04/25/17 17:55	78-93-3	CC
Carbon disulfide	**<5.0**	ug/L	5.0	1		04/25/17 17:55	75-15-0	
Carbon tetrachloride	**<5.0**	ug/L	5.0	1		04/25/17 17:55	56-23-5	M1
Chlorobenzene	**<5.0**	ug/L	5.0	1		04/25/17 17:55	108-90-7	
Chloroethane	**<5.0**	ug/L	5.0	1		04/25/17 17:55	75-00-3	
Chloroform	**<5.0**	ug/L	5.0	1		04/25/17 17:55	67-66-3	
Chloromethane	**<5.0**	ug/L	5.0	1		04/25/17 17:55	74-87-3	
1,2-Dibromo-3-chloropropane	**<5.0**	ug/L	5.0	1		04/25/17 17:55	96-12-8	
Dibromochloromethane	**<5.0**	ug/L	5.0	1		04/25/17 17:55	124-48-1	L1,M0
1,2-Dibromoethane (EDB)	**<5.0**	ug/L	5.0	1		04/25/17 17:55	106-93-4	M1
Dibromomethane	**<5.0**	ug/L	5.0	1		04/25/17 17:55	74-95-3	

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ANALYTICAL RESULTS

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

Sample: MW-3C **Lab ID: 7016438017** Collected: 04/20/17 08:50 Received: 04/21/17 11:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C							
1,2-Dichlorobenzene	**<5.0**	ug/L	5.0	1		04/25/17 17:55	95-50-1	
1,4-Dichlorobenzene	**<5.0**	ug/L	5.0	1		04/25/17 17:55	106-46-7	
trans-1,4-Dichloro-2-butene	**<5.0**	ug/L	5.0	1		04/25/17 17:55	110-57-6	M1
1,1-Dichloroethane	**<5.0**	ug/L	5.0	1		04/25/17 17:55	75-34-3	L2
1,2-Dichloroethane	**<5.0**	ug/L	5.0	1		04/25/17 17:55	107-06-2	L2
1,1-Dichloroethene	**<5.0**	ug/L	5.0	1		04/25/17 17:55	75-35-4	
cis-1,2-Dichloroethene	**<5.0**	ug/L	5.0	1		04/25/17 17:55	156-59-2	
trans-1,2-Dichloroethene	**<5.0**	ug/L	5.0	1		04/25/17 17:55	156-60-5	
1,2-Dichloropropane	**<5.0**	ug/L	5.0	1		04/25/17 17:55	78-87-5	
cis-1,3-Dichloropropene	**<5.0**	ug/L	5.0	1		04/25/17 17:55	10061-01-5	
trans-1,3-Dichloropropene	**<5.0**	ug/L	5.0	1		04/25/17 17:55	10061-02-6	
Ethylbenzene	**<5.0**	ug/L	5.0	1		04/25/17 17:55	100-41-4	
2-Hexanone	**<5.0**	ug/L	5.0	1		04/25/17 17:55	591-78-6	CC
Iodomethane	**<5.0**	ug/L	5.0	1		04/25/17 17:55	74-88-4	
Methylene Chloride	**<5.0**	ug/L	5.0	1		04/25/17 17:55	75-09-2	
4-Methyl-2-pentanone (MIBK)	**<5.0**	ug/L	5.0	1		04/25/17 17:55	108-10-1	CC,L2, M0
Styrene	**<5.0**	ug/L	5.0	1		04/25/17 17:55	100-42-5	
1,1,1,2-Tetrachloroethane	**<5.0**	ug/L	5.0	1		04/25/17 17:55	630-20-6	
1,1,2,2-Tetrachloroethane	**<5.0**	ug/L	5.0	1		04/25/17 17:55	79-34-5	
Tetrachloroethene	**<5.0**	ug/L	5.0	1		04/25/17 17:55	127-18-4	
Toluene	**<5.0**	ug/L	5.0	1		04/25/17 17:55	108-88-3	
1,1,1-Trichloroethane	**<5.0**	ug/L	5.0	1		04/25/17 17:55	71-55-6	
1,1,2-Trichloroethane	**<5.0**	ug/L	5.0	1		04/25/17 17:55	79-00-5	
Trichloroethene	**<5.0**	ug/L	5.0	1		04/25/17 17:55	79-01-6	
Trichlorofluoromethane	**<5.0**	ug/L	5.0	1		04/25/17 17:55	75-69-4	
1,2,3-Trichloropropane	**<5.0**	ug/L	5.0	1		04/25/17 17:55	96-18-4	
Vinyl acetate	**<5.0**	ug/L	5.0	1		04/25/17 17:55	108-05-4	
Vinyl chloride	**<5.0**	ug/L	5.0	1		04/25/17 17:55	75-01-4	
Xylene (Total)	**<5.0**	ug/L	5.0	1		04/25/17 17:55	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	90	%.	68-153	1		04/25/17 17:55	17060-07-0	
4-Bromofluorobenzene (S)	119	%.	79-124	1		04/25/17 17:55	460-00-4	
Toluene-d8 (S)	113	%.	69-124	1		04/25/17 17:55	2037-26-5	
2120B W Apparent Color	Analytical Method: SM22 2120B							
Apparent Color	**<5.0**	units	5.0	1		04/22/17 06:42		
pH	**6.0**	Std. Units	0.10	1		04/22/17 06:42		
2320B Alkalinity	Analytical Method: SM22 2320B							
Alkalinity, Total as CaCO3	**38.0**	mg/L	1.0	1		04/28/17 10:43		
2340C Hardness, Total	Analytical Method: SM22 2340C							
Total Hardness	**35.0**	mg/L	5.0	1		05/03/17 14:39		

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575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

Sample: MW-3C **Lab ID: 7016438017** Collected: 04/20/17 08:50 Received: 04/21/17 11:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
2540C Total Dissolved Solids	Analytical Method: SM22 2540C							
Total Dissolved Solids	**63.0**	mg/L	10.0	1		04/27/17 14:16		
Chromium, Hexavalent	Analytical Method: SM22 3500-Cr B							
Chromium, Hexavalent	**<0.020**	mg/L	0.020	1		04/22/17 00:28	18540-29-9	H3
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4							
Chemical Oxygen Demand	**6.8J**	mg/L	10.0	1	04/28/17 12:28	04/28/17 16:41		
5210B BOD, 5 day	Analytical Method: SM22 5210B Preparation Method: SM22 5210B							
BOD, 5 day	**1.0J**	mg/L	2.0	1	04/21/17 17:15	04/26/17 12:23		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0							
Bromide	**0.062J**	mg/L	0.50	1		05/08/17 22:27	24959-67-9	
Chloride	**10.6**	mg/L	2.0	1		05/08/17 22:27	16887-00-6	
Sulfate	**3.0J**	mg/L	5.0	1		05/08/17 22:27	14808-79-8	
351.2 Total Kjeldahl Nitrogen	Analytical Method: EPA 351.2 Preparation Method: EPA 351.2							
Nitrogen, Kjeldahl, Total	**0.046J**	mg/L	0.10	1	05/02/17 06:55	05/02/17 13:28	7727-37-9	
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2							
Nitrate-Nitrite (as N)	**0.20**	mg/L	0.050	1		04/27/17 11:14	7727-37-9	
353.2 Nitrogen, NO2	Analytical Method: EPA 353.2							
Nitrite as N	**<0.050**	mg/L	0.050	1		04/21/17 23:32	14797-65-0	M1
Phenolics, Total Recoverable	Analytical Method: EPA 420.1 Preparation Method: EPA 420.1							
Phenolics, Total Recoverable	**<5.0**	ug/L	5.0	1	05/03/17 12:00	05/03/17 17:21		
4500 Ammonia Water	Analytical Method: SM22 4500 NH3 H							
Nitrogen, Ammonia	**0.16**	mg/L	0.10	1		05/09/17 16:44	7664-41-7	
9014 Cyanide, Total	Analytical Method: EPA 9014 Total Cyanide Preparation Method: EPA 9010C							
Cyanide	**<10.0**	ug/L	10.0	1	05/03/17 09:42	05/03/17 17:13	57-12-5	
9060A Total Organic Carbon	Analytical Method: EPA 9060A							
Total Organic Carbon	**0.36J**	mg/L	1.0	1		05/04/17 06:18	7440-44-0	B
Total Organic Carbon	**0.36J**	mg/L	1.0	1		05/04/17 06:18	7440-44-0	
Total Organic Carbon	**0.37J**	mg/L	1.0	1		05/04/17 06:18	7440-44-0	
Total Organic Carbon	**0.36J**	mg/L	1.0	1		05/04/17 06:18	7440-44-0	
Mean Total Organic Carbon	**0.36J**	mg/L	1.0	1		05/04/17 06:18	7440-44-0	

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ANALYTICAL RESULTS

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

Sample: MW-4A **Lab ID: 7016438018** Collected: 04/20/17 12:30 Received: 04/21/17 11:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010C Preparation Method: EPA 3005A							
Aluminum	**242**	ug/L	200	1	04/26/17 10:18	05/05/17 14:51	7429-90-5	
Antimony	**<60.0**	ug/L	60.0	1	04/26/17 10:18	05/05/17 14:51	7440-36-0	
Arsenic	**<10.0**	ug/L	10.0	1	04/26/17 10:18	05/05/17 14:51	7440-38-2	
Barium	**128J**	ug/L	200	1	04/26/17 10:18	05/05/17 14:51	7440-39-3	
Beryllium	**<5.0**	ug/L	5.0	1	04/26/17 10:18	05/05/17 14:51	7440-41-7	
Boron	**40.2J**	ug/L	50.0	1	04/26/17 10:18	05/05/17 14:51	7440-42-8	
Cadmium	**0.36J**	ug/L	2.5	1	04/26/17 10:18	05/05/17 14:51	7440-43-9	
Calcium	**10100**	ug/L	200	1	04/26/17 10:18	05/05/17 14:51	7440-70-2	
Chromium	**6.7J**	ug/L	10.0	1	04/26/17 10:18	05/05/17 14:51	7440-47-3	
Cobalt	**<50.0**	ug/L	50.0	1	04/26/17 10:18	05/05/17 14:51	7440-48-4	
Copper	**<25.0**	ug/L	25.0	1	04/26/17 10:18	05/05/17 14:51	7440-50-8	
Iron	**129**	ug/L	100	1	04/26/17 10:18	05/05/17 14:51	7439-89-6	
Lead	**<5.0**	ug/L	5.0	1	04/26/17 10:18	05/05/17 14:51	7439-92-1	
Magnesium	**3600**	ug/L	200	1	04/26/17 10:18	05/05/17 14:51	7439-95-4	
Manganese	**128**	ug/L	10.0	1	04/26/17 10:18	05/05/17 14:51	7439-96-5	
Nickel	**4.0J**	ug/L	40.0	1	04/26/17 10:18	05/05/17 14:51	7440-02-0	
Potassium	**3340J**	ug/L	5000	1	04/26/17 10:18	05/05/17 14:51	7440-09-7	
Selenium	**<10.0**	ug/L	10.0	1	04/26/17 10:18	05/05/17 14:51	7782-49-2	
Silver	**<10.0**	ug/L	10.0	1	04/26/17 10:18	05/05/17 14:51	7440-22-4	
Sodium	**31600**	ug/L	5000	1	04/26/17 10:18	05/05/17 14:51	7440-23-5	
Thallium	**<10.0**	ug/L	10.0	1	04/26/17 10:18	05/05/17 14:51	7440-28-0	
Vanadium	**<50.0**	ug/L	50.0	1	04/26/17 10:18	05/05/17 14:51	7440-62-2	
Zinc	**5.2J**	ug/L	20.0	1	04/26/17 10:18	05/05/17 14:51	7440-66-6	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A							
Mercury	**<0.20**	ug/L	0.20	1	04/25/17 12:55	05/02/17 15:19	7439-97-6	
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C							
Acetone	**4.6J**	ug/L	5.0	1		04/25/17 18:13	67-64-1	CC
Acrylonitrile	**<5.0**	ug/L	5.0	1		04/25/17 18:13	107-13-1	CC
Benzene	**<5.0**	ug/L	5.0	1		04/25/17 18:13	71-43-2	
Bromochloromethane	**<5.0**	ug/L	5.0	1		04/25/17 18:13	74-97-5	
Bromodichloromethane	**<5.0**	ug/L	5.0	1		04/25/17 18:13	75-27-4	
Bromoform	**<5.0**	ug/L	5.0	1		04/25/17 18:13	75-25-2	
Bromomethane	**<5.0**	ug/L	5.0	1		04/25/17 18:13	74-83-9	
2-Butanone (MEK)	**<5.0**	ug/L	5.0	1		04/25/17 18:13	78-93-3	CC
Carbon disulfide	**<5.0**	ug/L	5.0	1		04/25/17 18:13	75-15-0	
Carbon tetrachloride	**<5.0**	ug/L	5.0	1		04/25/17 18:13	56-23-5	
Chlorobenzene	**<5.0**	ug/L	5.0	1		04/25/17 18:13	108-90-7	
Chloroethane	**<5.0**	ug/L	5.0	1		04/25/17 18:13	75-00-3	
Chloroform	**4.2J**	ug/L	5.0	1		04/25/17 18:13	67-66-3	
Chloromethane	**<5.0**	ug/L	5.0	1		04/25/17 18:13	74-87-3	
1,2-Dibromo-3-chloropropane	**<5.0**	ug/L	5.0	1		04/25/17 18:13	96-12-8	
Dibromochloromethane	**<5.0**	ug/L	5.0	1		04/25/17 18:13	124-48-1	L1
1,2-Dibromoethane (EDB)	**<5.0**	ug/L	5.0	1		04/25/17 18:13	106-93-4	
Dibromomethane	**<5.0**	ug/L	5.0	1		04/25/17 18:13	74-95-3	

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ANALYTICAL RESULTS

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

Sample: MW-4A **Lab ID: 7016438018** Collected: 04/20/17 12:30 Received: 04/21/17 11:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C							
1,2-Dichlorobenzene	**<5.0**	ug/L	5.0	1		04/25/17 18:13	95-50-1	
1,4-Dichlorobenzene	**<5.0**	ug/L	5.0	1		04/25/17 18:13	106-46-7	
trans-1,4-Dichloro-2-butene	**<5.0**	ug/L	5.0	1		04/25/17 18:13	110-57-6	
1,1-Dichloroethane	**<5.0**	ug/L	5.0	1		04/25/17 18:13	75-34-3	L2
1,2-Dichloroethane	**<5.0**	ug/L	5.0	1		04/25/17 18:13	107-06-2	L2
1,1-Dichloroethene	**<5.0**	ug/L	5.0	1		04/25/17 18:13	75-35-4	
cis-1,2-Dichloroethene	**<5.0**	ug/L	5.0	1		04/25/17 18:13	156-59-2	
trans-1,2-Dichloroethene	**<5.0**	ug/L	5.0	1		04/25/17 18:13	156-60-5	
1,2-Dichloropropane	**<5.0**	ug/L	5.0	1		04/25/17 18:13	78-87-5	
cis-1,3-Dichloropropene	**<5.0**	ug/L	5.0	1		04/25/17 18:13	10061-01-5	
trans-1,3-Dichloropropene	**<5.0**	ug/L	5.0	1		04/25/17 18:13	10061-02-6	
Ethylbenzene	**<5.0**	ug/L	5.0	1		04/25/17 18:13	100-41-4	
2-Hexanone	**<5.0**	ug/L	5.0	1		04/25/17 18:13	591-78-6	CC
Iodomethane	**<5.0**	ug/L	5.0	1		04/25/17 18:13	74-88-4	
Methylene Chloride	**<5.0**	ug/L	5.0	1		04/25/17 18:13	75-09-2	
4-Methyl-2-pentanone (MIBK)	**<5.0**	ug/L	5.0	1		04/25/17 18:13	108-10-1	CC,L2
Styrene	**<5.0**	ug/L	5.0	1		04/25/17 18:13	100-42-5	
1,1,1,2-Tetrachloroethane	**<5.0**	ug/L	5.0	1		04/25/17 18:13	630-20-6	
1,1,2,2-Tetrachloroethane	**<5.0**	ug/L	5.0	1		04/25/17 18:13	79-34-5	
Tetrachloroethene	**<5.0**	ug/L	5.0	1		04/25/17 18:13	127-18-4	
Toluene	**<5.0**	ug/L	5.0	1		04/25/17 18:13	108-88-3	
1,1,1-Trichloroethane	**<5.0**	ug/L	5.0	1		04/25/17 18:13	71-55-6	
1,1,2-Trichloroethane	**<5.0**	ug/L	5.0	1		04/25/17 18:13	79-00-5	
Trichloroethene	**<5.0**	ug/L	5.0	1		04/25/17 18:13	79-01-6	
Trichlorofluoromethane	**<5.0**	ug/L	5.0	1		04/25/17 18:13	75-69-4	
1,2,3-Trichloropropane	**<5.0**	ug/L	5.0	1		04/25/17 18:13	96-18-4	
Vinyl acetate	**<5.0**	ug/L	5.0	1		04/25/17 18:13	108-05-4	
Vinyl chloride	**<5.0**	ug/L	5.0	1		04/25/17 18:13	75-01-4	
Xylene (Total)	**<5.0**	ug/L	5.0	1		04/25/17 18:13	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	92	%.	68-153	1		04/25/17 18:13	17060-07-0	
4-Bromofluorobenzene (S)	117	%.	79-124	1		04/25/17 18:13	460-00-4	
Toluene-d8 (S)	111	%.	69-124	1		04/25/17 18:13	2037-26-5	
2120B W Apparent Color	Analytical Method: SM22 2120B							
Apparent Color	**5.0**	units	5.0	1		04/22/17 06:44		
pH	**5.5**	Std. Units	0.10	1		04/22/17 06:44		
2320B Alkalinity	Analytical Method: SM22 2320B							
Alkalinity, Total as CaCO3	**4.0**	mg/L	1.0	1		04/28/17 11:04		B
2340C Hardness, Total	Analytical Method: SM22 2340C							
Total Hardness	**40.0**	mg/L	5.0	1		05/03/17 14:42		
2540C Total Dissolved Solids	Analytical Method: SM22 2540C							
Total Dissolved Solids	**137**	mg/L	10.0	1		04/27/17 14:18		

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ANALYTICAL RESULTS

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

Sample: MW-4A **Lab ID: 7016438018** Collected: 04/20/17 12:30 Received: 04/21/17 11:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Chromium, Hexavalent	Analytical Method: SM22 3500-Cr B							
Chromium, Hexavalent	**<0.020**	mg/L	0.020	1		04/22/17 00:37	18540-29-9	H1
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4							
Chemical Oxygen Demand	**<10.0**	mg/L	10.0	1	04/28/17 12:28	04/28/17 16:42		
5210B BOD, 5 day	Analytical Method: SM22 5210B Preparation Method: SM22 5210B							
BOD, 5 day	**1.0J**	mg/L	2.0	1	04/21/17 17:16	04/26/17 12:28		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0							
Bromide	**0.030J**	mg/L	0.50	1		05/08/17 23:34	24959-67-9	
Chloride	**47.0**	mg/L	2.0	1		05/08/17 23:34	16887-00-6	
Sulfate	**16.6**	mg/L	5.0	1		05/08/17 23:34	14808-79-8	
351.2 Total Kjeldahl Nitrogen	Analytical Method: EPA 351.2 Preparation Method: EPA 351.2							
Nitrogen, Kjeldahl, Total	**<0.10**	mg/L	0.10	1	05/02/17 06:55	05/02/17 13:32	7727-37-9	
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2							
Nitrate-Nitrite (as N)	**5.6**	mg/L	0.50	10		04/27/17 11:18	7727-37-9	
353.2 Nitrogen, NO2	Analytical Method: EPA 353.2							
Nitrite as N	**<0.050**	mg/L	0.050	1		04/21/17 23:36	14797-65-0	
Phenolics, Total Recoverable	Analytical Method: EPA 420.1 Preparation Method: EPA 420.1							
Phenolics, Total Recoverable	**<5.0**	ug/L	5.0	1	05/03/17 12:00	05/03/17 17:23		
4500 Ammonia Water	Analytical Method: SM22 4500 NH3 H							
Nitrogen, Ammonia	**0.099J**	mg/L	0.10	1		05/08/17 13:29	7664-41-7	
9014 Cyanide, Total	Analytical Method: EPA 9014 Total Cyanide Preparation Method: EPA 9010C							
Cyanide	**<10.0**	ug/L	10.0	1	05/03/17 09:42	05/03/17 17:15	57-12-5	
9060A Total Organic Carbon	Analytical Method: EPA 9060A							
Total Organic Carbon	**0.87J**	mg/L	1.0	1		05/04/17 09:13	7440-44-0	
Total Organic Carbon	**0.82J**	mg/L	1.0	1		05/04/17 09:13	7440-44-0	
Total Organic Carbon	**0.82J**	mg/L	1.0	1		05/04/17 09:13	7440-44-0	
Total Organic Carbon	**0.83J**	mg/L	1.0	1		05/04/17 09:13	7440-44-0	
Mean Total Organic Carbon	**0.84J**	mg/L	1.0	1		05/04/17 09:13	7440-44-0	

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ANALYTICAL RESULTS

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

Sample: MW-4B **Lab ID: 7016438019** Collected: 04/20/17 12:05 Received: 04/21/17 11:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010C Preparation Method: EPA 3005A							
Aluminum	**<200**	ug/L	200	1	04/26/17 10:18	05/05/17 14:56	7429-90-5	
Antimony	**<60.0**	ug/L	60.0	1	04/26/17 10:18	05/05/17 14:56	7440-36-0	
Arsenic	**<10.0**	ug/L	10.0	1	04/26/17 10:18	05/05/17 14:56	7440-38-2	
Barium	**40.3J**	ug/L	200	1	04/26/17 10:18	05/05/17 14:56	7440-39-3	
Beryllium	**<5.0**	ug/L	5.0	1	04/26/17 10:18	05/05/17 14:56	7440-41-7	
Boron	**58.2**	ug/L	50.0	1	04/26/17 10:18	05/05/17 14:56	7440-42-8	
Cadmium	**0.13J**	ug/L	2.5	1	04/26/17 10:18	05/05/17 14:56	7440-43-9	
Calcium	**18700**	ug/L	200	1	04/26/17 10:18	05/05/17 14:56	7440-70-2	
Chromium	**<10.0**	ug/L	10.0	1	04/26/17 10:18	05/05/17 14:56	7440-47-3	
Cobalt	**2.4J**	ug/L	50.0	1	04/26/17 10:18	05/05/17 14:56	7440-48-4	
Copper	**<25.0**	ug/L	25.0	1	04/26/17 10:18	05/05/17 14:56	7440-50-8	
Iron	**1280**	ug/L	100	1	04/26/17 10:18	05/05/17 14:56	7439-89-6	
Lead	**<5.0**	ug/L	5.0	1	04/26/17 10:18	05/05/17 14:56	7439-92-1	
Magnesium	**9470**	ug/L	200	1	04/26/17 10:18	05/05/17 14:56	7439-95-4	
Manganese	**343**	ug/L	10.0	1	04/26/17 10:18	05/05/17 14:56	7439-96-5	
Nickel	**4.1J**	ug/L	40.0	1	04/26/17 10:18	05/05/17 14:56	7440-02-0	
Potassium	**2040J**	ug/L	5000	1	04/26/17 10:18	05/05/17 14:56	7440-09-7	
Selenium	**<10.0**	ug/L	10.0	1	04/26/17 10:18	05/05/17 14:56	7782-49-2	
Silver	**<10.0**	ug/L	10.0	1	04/26/17 10:18	05/05/17 14:56	7440-22-4	
Sodium	**18100**	ug/L	5000	1	04/26/17 10:18	05/05/17 14:56	7440-23-5	
Thallium	**<10.0**	ug/L	10.0	1	04/26/17 10:18	05/05/17 14:56	7440-28-0	
Vanadium	**<50.0**	ug/L	50.0	1	04/26/17 10:18	05/05/17 14:56	7440-62-2	
Zinc	**<20.0**	ug/L	20.0	1	04/26/17 10:18	05/05/17 14:56	7440-66-6	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A							
Mercury	**<0.20**	ug/L	0.20	1	04/25/17 12:55	05/02/17 15:21	7439-97-6	
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C							
Acetone	**2.4J**	ug/L	5.0	1		04/25/17 18:31	67-64-1	CC
Acrylonitrile	**<5.0**	ug/L	5.0	1		04/25/17 18:31	107-13-1	CC
Benzene	**<5.0**	ug/L	5.0	1		04/25/17 18:31	71-43-2	
Bromochloromethane	**<5.0**	ug/L	5.0	1		04/25/17 18:31	74-97-5	
Bromodichloromethane	**<5.0**	ug/L	5.0	1		04/25/17 18:31	75-27-4	
Bromoform	**<5.0**	ug/L	5.0	1		04/25/17 18:31	75-25-2	
Bromomethane	**<5.0**	ug/L	5.0	1		04/25/17 18:31	74-83-9	
2-Butanone (MEK)	**<5.0**	ug/L	5.0	1		04/25/17 18:31	78-93-3	CC
Carbon disulfide	**<5.0**	ug/L	5.0	1		04/25/17 18:31	75-15-0	
Carbon tetrachloride	**<5.0**	ug/L	5.0	1		04/25/17 18:31	56-23-5	
Chlorobenzene	**<5.0**	ug/L	5.0	1		04/25/17 18:31	108-90-7	
Chloroethane	**<5.0**	ug/L	5.0	1		04/25/17 18:31	75-00-3	
Chloroform	**<5.0**	ug/L	5.0	1		04/25/17 18:31	67-66-3	
Chloromethane	**<5.0**	ug/L	5.0	1		04/25/17 18:31	74-87-3	
1,2-Dibromo-3-chloropropane	**<5.0**	ug/L	5.0	1		04/25/17 18:31	96-12-8	
Dibromochloromethane	**<5.0**	ug/L	5.0	1		04/25/17 18:31	124-48-1	L1
1,2-Dibromoethane (EDB)	**<5.0**	ug/L	5.0	1		04/25/17 18:31	106-93-4	
Dibromomethane	**<5.0**	ug/L	5.0	1		04/25/17 18:31	74-95-3	

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575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

Sample: MW-4B **Lab ID: 7016438019** Collected: 04/20/17 12:05 Received: 04/21/17 11:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C							
1,2-Dichlorobenzene	**<5.0**	ug/L	5.0	1		04/25/17 18:31	95-50-1	
1,4-Dichlorobenzene	**1.2J**	ug/L	5.0	1		04/25/17 18:31	106-46-7	
trans-1,4-Dichloro-2-butene	**<5.0**	ug/L	5.0	1		04/25/17 18:31	110-57-6	
1,1-Dichloroethane	**<5.0**	ug/L	5.0	1		04/25/17 18:31	75-34-3	L2
1,2-Dichloroethane	**<5.0**	ug/L	5.0	1		04/25/17 18:31	107-06-2	L2
1,1-Dichloroethene	**<5.0**	ug/L	5.0	1		04/25/17 18:31	75-35-4	
cis-1,2-Dichloroethene	**<5.0**	ug/L	5.0	1		04/25/17 18:31	156-59-2	
trans-1,2-Dichloroethene	**<5.0**	ug/L	5.0	1		04/25/17 18:31	156-60-5	
1,2-Dichloropropane	**<5.0**	ug/L	5.0	1		04/25/17 18:31	78-87-5	
cis-1,3-Dichloropropene	**<5.0**	ug/L	5.0	1		04/25/17 18:31	10061-01-5	
trans-1,3-Dichloropropene	**<5.0**	ug/L	5.0	1		04/25/17 18:31	10061-02-6	
Ethylbenzene	**<5.0**	ug/L	5.0	1		04/25/17 18:31	100-41-4	
2-Hexanone	**<5.0**	ug/L	5.0	1		04/25/17 18:31	591-78-6	CC
Iodomethane	**<5.0**	ug/L	5.0	1		04/25/17 18:31	74-88-4	
Methylene Chloride	**<5.0**	ug/L	5.0	1		04/25/17 18:31	75-09-2	
4-Methyl-2-pentanone (MIBK)	**<5.0**	ug/L	5.0	1		04/25/17 18:31	108-10-1	CC,L2
Styrene	**<5.0**	ug/L	5.0	1		04/25/17 18:31	100-42-5	
1,1,1,2-Tetrachloroethane	**<5.0**	ug/L	5.0	1		04/25/17 18:31	630-20-6	
1,1,2,2-Tetrachloroethane	**<5.0**	ug/L	5.0	1		04/25/17 18:31	79-34-5	
Tetrachloroethene	**<5.0**	ug/L	5.0	1		04/25/17 18:31	127-18-4	
Toluene	**<5.0**	ug/L	5.0	1		04/25/17 18:31	108-88-3	
1,1,1-Trichloroethane	**<5.0**	ug/L	5.0	1		04/25/17 18:31	71-55-6	
1,1,2-Trichloroethane	**<5.0**	ug/L	5.0	1		04/25/17 18:31	79-00-5	
Trichloroethene	**<5.0**	ug/L	5.0	1		04/25/17 18:31	79-01-6	
Trichlorofluoromethane	**<5.0**	ug/L	5.0	1		04/25/17 18:31	75-69-4	
1,2,3-Trichloropropane	**<5.0**	ug/L	5.0	1		04/25/17 18:31	96-18-4	
Vinyl acetate	**<5.0**	ug/L	5.0	1		04/25/17 18:31	108-05-4	
Vinyl chloride	**<5.0**	ug/L	5.0	1		04/25/17 18:31	75-01-4	
Xylene (Total)	**<5.0**	ug/L	5.0	1		04/25/17 18:31	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	91	%.	68-153	1		04/25/17 18:31	17060-07-0	
4-Bromofluorobenzene (S)	119	%.	79-124	1		04/25/17 18:31	460-00-4	
Toluene-d8 (S)	112	%.	69-124	1		04/25/17 18:31	2037-26-5	
2120B W Apparent Color	Analytical Method: SM22 2120B							
Apparent Color	**25.0**	units	5.0	1		04/22/17 06:48		
pH	**7.0**	Std. Units	0.10	1		04/22/17 06:48		
2320B Alkalinity	Analytical Method: SM22 2320B							
Alkalinity, Total as CaCO3	**72.4**	mg/L	1.0	1		04/28/17 11:09		
2340C Hardness, Total	Analytical Method: SM22 2340C							
Total Hardness	**85.0**	mg/L	5.0	1		05/03/17 14:44		
2540C Total Dissolved Solids	Analytical Method: SM22 2540C							
Total Dissolved Solids	**133**	mg/L	10.0	1		04/27/17 14:19		

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Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

Sample: MW-4B **Lab ID: 7016438019** Collected: 04/20/17 12:05 Received: 04/21/17 11:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Chromium, Hexavalent	Analytical Method: SM22 3500-Cr B							
Chromium, Hexavalent	**<0.020**	mg/L	0.020	1		04/22/17 00:37	18540-29-9	H1
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4							
Chemical Oxygen Demand	**8.8J**	mg/L	10.0	1	04/28/17 12:28	04/28/17 16:42		
5210B BOD, 5 day	Analytical Method: SM22 5210B Preparation Method: SM22 5210B							
BOD, 5 day	**1.0J**	mg/L	2.0	1	04/21/17 17:17	04/26/17 12:30		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0							
Bromide	**0.077J**	mg/L	0.50	1		05/08/17 23:48	24959-67-9	
Chloride	**15.2**	mg/L	2.0	1		05/08/17 23:48	16887-00-6	
Sulfate	**9.9**	mg/L	5.0	1		05/08/17 23:48	14808-79-8	
351.2 Total Kjeldahl Nitrogen	Analytical Method: EPA 351.2 Preparation Method: EPA 351.2							
Nitrogen, Kjeldahl, Total	**0.83**	mg/L	0.10	1	05/02/17 06:55	05/02/17 13:33	7727-37-9	
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2							
Nitrate-Nitrite (as N)	**0.11**	mg/L	0.050	1		04/27/17 11:19	7727-37-9	
353.2 Nitrogen, NO2	Analytical Method: EPA 353.2							
Nitrite as N	**<0.050**	mg/L	0.050	1		04/21/17 23:37	14797-65-0	
Phenolics, Total Recoverable	Analytical Method: EPA 420.1 Preparation Method: EPA 420.1							
Phenolics, Total Recoverable	**<5.0**	ug/L	5.0	1	05/03/17 12:00	05/03/17 17:31		
4500 Ammonia Water	Analytical Method: SM22 4500 NH3 H							
Nitrogen, Ammonia	**0.34**	mg/L	0.10	1		05/08/17 13:30	7664-41-7	
9014 Cyanide, Total	Analytical Method: EPA 9014 Total Cyanide Preparation Method: EPA 9010C							
Cyanide	**<10.0**	ug/L	10.0	1	05/03/17 09:42	05/03/17 17:15	57-12-5	
9060A Total Organic Carbon	Analytical Method: EPA 9060A							
Total Organic Carbon	**1.3**	mg/L	1.0	1		05/04/17 09:47	7440-44-0	
Total Organic Carbon	**1.3**	mg/L	1.0	1		05/04/17 09:47	7440-44-0	
Total Organic Carbon	**1.3**	mg/L	1.0	1		05/04/17 09:47	7440-44-0	
Total Organic Carbon	**1.3**	mg/L	1.0	1		05/04/17 09:47	7440-44-0	
Mean Total Organic Carbon	**1.3**	mg/L	1.0	1		05/04/17 09:47	7440-44-0	

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ANALYTICAL RESULTS

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

Sample: MW-4C **Lab ID: 7016438020** Collected: 04/20/17 11:15 Received: 04/21/17 11:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010C Preparation Method: EPA 3005A							
Aluminum	**<200**	ug/L	200	1	04/26/17 10:18	05/05/17 15:01	7429-90-5	
Antimony	**<60.0**	ug/L	60.0	1	04/26/17 10:18	05/05/17 15:01	7440-36-0	
Arsenic	**<10.0**	ug/L	10.0	1	04/26/17 10:18	05/05/17 15:01	7440-38-2	
Barium	**53.2J**	ug/L	200	1	04/26/17 10:18	05/05/17 15:01	7440-39-3	
Beryllium	**<5.0**	ug/L	5.0	1	04/26/17 10:18	05/05/17 15:01	7440-41-7	
Boron	**<50.0**	ug/L	50.0	1	04/26/17 10:18	05/05/17 15:01	7440-42-8	
Cadmium	**<2.5**	ug/L	2.5	1	04/26/17 10:18	05/05/17 15:01	7440-43-9	
Calcium	**28000**	ug/L	200	1	04/26/17 10:18	05/05/17 15:01	7440-70-2	
Chromium	**300**	ug/L	10.0	1	04/26/17 10:18	05/05/17 15:01	7440-47-3	
Cobalt	**12.2J**	ug/L	50.0	1	04/26/17 10:18	05/05/17 15:01	7440-48-4	
Copper	**<25.0**	ug/L	25.0	1	04/26/17 10:18	05/05/17 15:01	7440-50-8	
Iron	**1500**	ug/L	100	1	04/26/17 10:18	05/05/17 15:01	7439-89-6	
Lead	**<5.0**	ug/L	5.0	1	04/26/17 10:18	05/05/17 15:01	7439-92-1	
Magnesium	**12500**	ug/L	200	1	04/26/17 10:18	05/05/17 15:01	7439-95-4	
Manganese	**78.9**	ug/L	10.0	1	04/26/17 10:18	05/05/17 15:01	7439-96-5	
Nickel	**426**	ug/L	40.0	1	04/26/17 10:18	05/05/17 15:01	7440-02-0	
Potassium	**1750J**	ug/L	5000	1	04/26/17 10:18	05/05/17 15:01	7440-09-7	
Selenium	**<10.0**	ug/L	10.0	1	04/26/17 10:18	05/05/17 15:01	7782-49-2	
Silver	**<10.0**	ug/L	10.0	1	04/26/17 10:18	05/05/17 15:01	7440-22-4	
Sodium	**39300**	ug/L	5000	1	04/26/17 10:18	05/05/17 15:01	7440-23-5	
Thallium	**<10.0**	ug/L	10.0	1	04/26/17 10:18	05/05/17 15:01	7440-28-0	
Vanadium	**0.83J**	ug/L	50.0	1	04/26/17 10:18	05/05/17 15:01	7440-62-2	
Zinc	**<20.0**	ug/L	20.0	1	04/26/17 10:18	05/05/17 15:01	7440-66-6	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A							
Mercury	**<0.20**	ug/L	0.20	1	04/25/17 12:55	05/02/17 15:22	7439-97-6	
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C							
Acetone	**2.8J**	ug/L	5.0	1		04/25/17 18:49	67-64-1	CC
Acrylonitrile	**<5.0**	ug/L	5.0	1		04/25/17 18:49	107-13-1	CC
Benzene	**<5.0**	ug/L	5.0	1		04/25/17 18:49	71-43-2	
Bromochloromethane	**<5.0**	ug/L	5.0	1		04/25/17 18:49	74-97-5	
Bromodichloromethane	**<5.0**	ug/L	5.0	1		04/25/17 18:49	75-27-4	
Bromoform	**<5.0**	ug/L	5.0	1		04/25/17 18:49	75-25-2	
Bromomethane	**<5.0**	ug/L	5.0	1		04/25/17 18:49	74-83-9	
2-Butanone (MEK)	**<5.0**	ug/L	5.0	1		04/25/17 18:49	78-93-3	CC
Carbon disulfide	**<5.0**	ug/L	5.0	1		04/25/17 18:49	75-15-0	
Carbon tetrachloride	**<5.0**	ug/L	5.0	1		04/25/17 18:49	56-23-5	
Chlorobenzene	**<5.0**	ug/L	5.0	1		04/25/17 18:49	108-90-7	
Chloroethane	**<5.0**	ug/L	5.0	1		04/25/17 18:49	75-00-3	
Chloroform	**<5.0**	ug/L	5.0	1		04/25/17 18:49	67-66-3	
Chloromethane	**<5.0**	ug/L	5.0	1		04/25/17 18:49	74-87-3	
1,2-Dibromo-3-chloropropane	**<5.0**	ug/L	5.0	1		04/25/17 18:49	96-12-8	
Dibromochloromethane	**<5.0**	ug/L	5.0	1		04/25/17 18:49	124-48-1	L1
1,2-Dibromoethane (EDB)	**<5.0**	ug/L	5.0	1		04/25/17 18:49	106-93-4	
Dibromomethane	**<5.0**	ug/L	5.0	1		04/25/17 18:49	74-95-3	

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ANALYTICAL RESULTS

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

Sample: MW-4C **Lab ID: 7016438020** Collected: 04/20/17 11:15 Received: 04/21/17 11:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C							
1,2-Dichlorobenzene	**<5.0**	ug/L	5.0	1		04/25/17 18:49	95-50-1	
1,4-Dichlorobenzene	**<5.0**	ug/L	5.0	1		04/25/17 18:49	106-46-7	
trans-1,4-Dichloro-2-butene	**<5.0**	ug/L	5.0	1		04/25/17 18:49	110-57-6	
1,1-Dichloroethane	**<5.0**	ug/L	5.0	1		04/25/17 18:49	75-34-3	L2
1,2-Dichloroethane	**<5.0**	ug/L	5.0	1		04/25/17 18:49	107-06-2	L2
1,1-Dichloroethene	**<5.0**	ug/L	5.0	1		04/25/17 18:49	75-35-4	
cis-1,2-Dichloroethene	**<5.0**	ug/L	5.0	1		04/25/17 18:49	156-59-2	
trans-1,2-Dichloroethene	**<5.0**	ug/L	5.0	1		04/25/17 18:49	156-60-5	
1,2-Dichloropropane	**<5.0**	ug/L	5.0	1		04/25/17 18:49	78-87-5	
cis-1,3-Dichloropropene	**<5.0**	ug/L	5.0	1		04/25/17 18:49	10061-01-5	
trans-1,3-Dichloropropene	**<5.0**	ug/L	5.0	1		04/25/17 18:49	10061-02-6	
Ethylbenzene	**<5.0**	ug/L	5.0	1		04/25/17 18:49	100-41-4	
2-Hexanone	**<5.0**	ug/L	5.0	1		04/25/17 18:49	591-78-6	CC
Iodomethane	**<5.0**	ug/L	5.0	1		04/25/17 18:49	74-88-4	
Methylene Chloride	**<5.0**	ug/L	5.0	1		04/25/17 18:49	75-09-2	
4-Methyl-2-pentanone (MIBK)	**<5.0**	ug/L	5.0	1		04/25/17 18:49	108-10-1	CC,L2
Styrene	**<5.0**	ug/L	5.0	1		04/25/17 18:49	100-42-5	
1,1,1,2-Tetrachloroethane	**<5.0**	ug/L	5.0	1		04/25/17 18:49	630-20-6	
1,1,2,2-Tetrachloroethane	**<5.0**	ug/L	5.0	1		04/25/17 18:49	79-34-5	
Tetrachloroethene	**<5.0**	ug/L	5.0	1		04/25/17 18:49	127-18-4	
Toluene	**<5.0**	ug/L	5.0	1		04/25/17 18:49	108-88-3	
1,1,1-Trichloroethane	**<5.0**	ug/L	5.0	1		04/25/17 18:49	71-55-6	
1,1,2-Trichloroethane	**<5.0**	ug/L	5.0	1		04/25/17 18:49	79-00-5	
Trichloroethene	**<5.0**	ug/L	5.0	1		04/25/17 18:49	79-01-6	
Trichlorofluoromethane	**<5.0**	ug/L	5.0	1		04/25/17 18:49	75-69-4	
1,2,3-Trichloropropane	**<5.0**	ug/L	5.0	1		04/25/17 18:49	96-18-4	
Vinyl acetate	**<5.0**	ug/L	5.0	1		04/25/17 18:49	108-05-4	
Vinyl chloride	**<5.0**	ug/L	5.0	1		04/25/17 18:49	75-01-4	
Xylene (Total)	**<5.0**	ug/L	5.0	1		04/25/17 18:49	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	90	%.	68-153	1		04/25/17 18:49	17060-07-0	
4-Bromofluorobenzene (S)	118	%.	79-124	1		04/25/17 18:49	460-00-4	
Toluene-d8 (S)	112	%.	69-124	1		04/25/17 18:49	2037-26-5	
2120B W Apparent Color	Analytical Method: SM22 2120B							
Apparent Color	**25.0**	units	5.0	1		04/22/17 06:50		
pH	**7.0**	Std. Units	0.10	1		04/22/17 06:50		
2320B Alkalinity	Analytical Method: SM22 2320B							
Alkalinity, Total as CaCO3	**34.2**	mg/L	1.0	1		04/28/17 11:30		
2340C Hardness, Total	Analytical Method: SM22 2340C							
Total Hardness	**170**	mg/L	5.0	1		05/03/17 14:46		
2540C Total Dissolved Solids	Analytical Method: SM22 2540C							
Total Dissolved Solids	**309**	mg/L	10.0	1		04/27/17 14:19		

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ANALYTICAL RESULTS

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

Sample: MW-4C **Lab ID: 7016438020** Collected: 04/20/17 11:15 Received: 04/21/17 11:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Chromium, Hexavalent	Analytical Method: SM22 3500-Cr B							
Chromium, Hexavalent	**<0.020**	mg/L	0.020	1		04/22/17 00:36	18540-29-9	H1
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4							
Chemical Oxygen Demand	**21.3**	mg/L	10.0	1	04/28/17 12:28	04/28/17 16:42		
5210B BOD, 5 day	Analytical Method: SM22 5210B Preparation Method: SM22 5210B							
BOD, 5 day	**1.0J**	mg/L	2.0	1	04/21/17 17:17	04/26/17 12:33		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0							
Bromide	**0.075J**	mg/L	0.50	1		05/09/17 00:01	24959-67-9	
Chloride	**106**	mg/L	10.0	5		05/09/17 11:30	16887-00-6	
Sulfate	**4.2J**	mg/L	5.0	1		05/09/17 00:01	14808-79-8	
351.2 Total Kjeldahl Nitrogen	Analytical Method: EPA 351.2 Preparation Method: EPA 351.2							
Nitrogen, Kjeldahl, Total	**0.13**	mg/L	0.10	1	05/02/17 06:55	05/02/17 13:35	7727-37-9	
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2							
Nitrate-Nitrite (as N)	**0.044J**	mg/L	0.050	1		04/27/17 11:20	7727-37-9	
353.2 Nitrogen, NO2	Analytical Method: EPA 353.2							
Nitrite as N	**<0.050**	mg/L	0.050	1		04/21/17 23:40	14797-65-0	
Phenolics, Total Recoverable	Analytical Method: EPA 420.1 Preparation Method: EPA 420.1							
Phenolics, Total Recoverable	**1.0J**	ug/L	5.0	1	05/03/17 12:00	05/03/17 17:31		
4500 Ammonia Water	Analytical Method: SM22 4500 NH3 H							
Nitrogen, Ammonia	**0.13**	mg/L	0.10	1		05/08/17 13:32	7664-41-7	
9014 Cyanide, Total	Analytical Method: EPA 9014 Total Cyanide Preparation Method: EPA 9010C							
Cyanide	**<10.0**	ug/L	10.0	1	05/03/17 09:42	05/03/17 17:15	57-12-5	
9060A Total Organic Carbon	Analytical Method: EPA 9060A							
Total Organic Carbon	**0.27J**	mg/L	1.0	1		05/04/17 10:21	7440-44-0	B
Total Organic Carbon	**0.25J**	mg/L	1.0	1		05/04/17 10:21	7440-44-0	
Total Organic Carbon	**0.25J**	mg/L	1.0	1		05/04/17 10:21	7440-44-0	
Total Organic Carbon	**0.24J**	mg/L	1.0	1		05/04/17 10:21	7440-44-0	
Mean Total Organic Carbon	**0.25J**	mg/L	1.0	1		05/04/17 10:21	7440-44-0	

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ANALYTICAL RESULTS

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

Sample: TRIP BLANK **Lab ID: 7016438021** Collected: 04/20/17 00:00 Received: 04/21/17 11:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C							
Acetone	**6.5**	ug/L	5.0	1		04/25/17 14:39	67-64-1	CC
Acrylonitrile	**<5.0**	ug/L	5.0	1		04/25/17 14:39	107-13-1	CC
Benzene	**<5.0**	ug/L	5.0	1		04/25/17 14:39	71-43-2	
Bromochloromethane	**<5.0**	ug/L	5.0	1		04/25/17 14:39	74-97-5	
Bromodichloromethane	**<5.0**	ug/L	5.0	1		04/25/17 14:39	75-27-4	
Bromoform	**<5.0**	ug/L	5.0	1		04/25/17 14:39	75-25-2	
Bromomethane	**<5.0**	ug/L	5.0	1		04/25/17 14:39	74-83-9	
2-Butanone (MEK)	**<5.0**	ug/L	5.0	1		04/25/17 14:39	78-93-3	CC
Carbon disulfide	**<5.0**	ug/L	5.0	1		04/25/17 14:39	75-15-0	
Carbon tetrachloride	**<5.0**	ug/L	5.0	1		04/25/17 14:39	56-23-5	
Chlorobenzene	**<5.0**	ug/L	5.0	1		04/25/17 14:39	108-90-7	
Chloroethane	**<5.0**	ug/L	5.0	1		04/25/17 14:39	75-00-3	
Chloroform	**<5.0**	ug/L	5.0	1		04/25/17 14:39	67-66-3	
Chloromethane	**<5.0**	ug/L	5.0	1		04/25/17 14:39	74-87-3	
1,2-Dibromo-3-chloropropane	**<5.0**	ug/L	5.0	1		04/25/17 14:39	96-12-8	
Dibromochloromethane	**<5.0**	ug/L	5.0	1		04/25/17 14:39	124-48-1	L1
1,2-Dibromoethane (EDB)	**<5.0**	ug/L	5.0	1		04/25/17 14:39	106-93-4	
Dibromomethane	**<5.0**	ug/L	5.0	1		04/25/17 14:39	74-95-3	
1,2-Dichlorobenzene	**<5.0**	ug/L	5.0	1		04/25/17 14:39	95-50-1	
1,4-Dichlorobenzene	**<5.0**	ug/L	5.0	1		04/25/17 14:39	106-46-7	
trans-1,4-Dichloro-2-butene	**<5.0**	ug/L	5.0	1		04/25/17 14:39	110-57-6	
1,1-Dichloroethane	**<5.0**	ug/L	5.0	1		04/25/17 14:39	75-34-3	L2
1,2-Dichloroethane	**<5.0**	ug/L	5.0	1		04/25/17 14:39	107-06-2	L2
1,1-Dichloroethene	**<5.0**	ug/L	5.0	1		04/25/17 14:39	75-35-4	
cis-1,2-Dichloroethene	**<5.0**	ug/L	5.0	1		04/25/17 14:39	156-59-2	
trans-1,2-Dichloroethene	**<5.0**	ug/L	5.0	1		04/25/17 14:39	156-60-5	
1,2-Dichloropropane	**<5.0**	ug/L	5.0	1		04/25/17 14:39	78-87-5	
cis-1,3-Dichloropropene	**<5.0**	ug/L	5.0	1		04/25/17 14:39	10061-01-5	
trans-1,3-Dichloropropene	**<5.0**	ug/L	5.0	1		04/25/17 14:39	10061-02-6	
Ethylbenzene	**<5.0**	ug/L	5.0	1		04/25/17 14:39	100-41-4	
2-Hexanone	**<5.0**	ug/L	5.0	1		04/25/17 14:39	591-78-6	CC
Iodomethane	**<5.0**	ug/L	5.0	1		04/25/17 14:39	74-88-4	
Methylene Chloride	**2.1J**	ug/L	5.0	1		04/25/17 14:39	75-09-2	
4-Methyl-2-pentanone (MIBK)	**<5.0**	ug/L	5.0	1		04/25/17 14:39	108-10-1	CC,L2
Styrene	**<5.0**	ug/L	5.0	1		04/25/17 14:39	100-42-5	
1,1,1,2-Tetrachloroethane	**<5.0**	ug/L	5.0	1		04/25/17 14:39	630-20-6	
1,1,2,2-Tetrachloroethane	**<5.0**	ug/L	5.0	1		04/25/17 14:39	79-34-5	
Tetrachloroethene	**<5.0**	ug/L	5.0	1		04/25/17 14:39	127-18-4	
Toluene	**<5.0**	ug/L	5.0	1		04/25/17 14:39	108-88-3	
1,1,1-Trichloroethane	**<5.0**	ug/L	5.0	1		04/25/17 14:39	71-55-6	
1,1,2-Trichloroethane	**<5.0**	ug/L	5.0	1		04/25/17 14:39	79-00-5	
Trichloroethene	**<5.0**	ug/L	5.0	1		04/25/17 14:39	79-01-6	
Trichlorofluoromethane	**<5.0**	ug/L	5.0	1		04/25/17 14:39	75-69-4	
1,2,3-Trichloropropane	**<5.0**	ug/L	5.0	1		04/25/17 14:39	96-18-4	
Vinyl acetate	**<5.0**	ug/L	5.0	1		04/25/17 14:39	108-05-4	
Vinyl chloride	**<5.0**	ug/L	5.0	1		04/25/17 14:39	75-01-4	
Xylene (Total)	**<5.0**	ug/L	5.0	1		04/25/17 14:39	1330-20-7	

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(631)694-3040

ANALYTICAL RESULTS

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

Sample: TRIP BLANK **Lab ID: 7016438021** Collected: 04/20/17 00:00 Received: 04/21/17 11:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C							
Surrogates								
1,2-Dichloroethane-d4 (S)	90	%.	68-153	1		04/25/17 14:39	17060-07-0	
4-Bromofluorobenzene (S)	122	%.	79-124	1		04/25/17 14:39	460-00-4	
Toluene-d8 (S)	115	%.	69-124	1		04/25/17 14:39	2037-26-5	

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QUALITY CONTROL DATA

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

QC Batch: 22039 Analysis Method: EPA 6010C
QC Batch Method: EPA 6010C Analysis Description: 6010 MET Dissolved
Associated Lab Samples: 7016438005, 7016438006, 7016438014, 7016438015

METHOD BLANK: 104205 Matrix: Water
Associated Lab Samples: 7016438005, 7016438006, 7016438014, 7016438015

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Aluminum, Dissolved	ug/L	<200	200	05/03/17 20:27	
Antimony, Dissolved	ug/L	<60.0	60.0	05/03/17 20:27	
Arsenic, Dissolved	ug/L	<10.0	10.0	05/03/17 20:27	
Barium, Dissolved	ug/L	<200	200	05/03/17 20:27	
Beryllium, Dissolved	ug/L	<5.0	5.0	05/03/17 20:27	
Boron, Dissolved	ug/L	5.0J	50.0	05/03/17 20:27	
Cadmium, Dissolved	ug/L	<2.5	2.5	05/03/17 20:27	
Calcium, Dissolved	ug/L	<200	200	05/03/17 20:27	
Chromium, Dissolved	ug/L	<10.0	10.0	05/03/17 20:27	
Cobalt, Dissolved	ug/L	<50.0	50.0	05/03/17 20:27	
Copper, Dissolved	ug/L	<25.0	25.0	05/03/17 20:27	
Iron, Dissolved	ug/L	<100	100	05/03/17 20:27	
Lead, Dissolved	ug/L	<5.0	5.0	05/03/17 20:27	
Magnesium, Dissolved	ug/L	<200	200	05/03/17 20:27	
Manganese, Dissolved	ug/L	<10.0	10.0	05/03/17 20:27	
Nickel, Dissolved	ug/L	<40.0	40.0	05/03/17 20:27	
Potassium, Dissolved	ug/L	<5000	5000	05/03/17 20:27	
Selenium, Dissolved	ug/L	<10.0	10.0	05/03/17 20:27	
Silver, Dissolved	ug/L	<10.0	10.0	05/03/17 20:27	
Sodium, Dissolved	ug/L	<5000	5000	05/03/17 20:27	
Thallium, Dissolved	ug/L	<10.0	10.0	05/03/17 20:27	
Vanadium, Dissolved	ug/L	<50.0	50.0	05/03/17 20:27	
Zinc, Dissolved	ug/L	<20.0	20.0	05/03/17 20:27	

LABORATORY CONTROL SAMPLE: 104206

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Aluminum, Dissolved	ug/L	5000	4890	98	80-120	
Antimony, Dissolved	ug/L	750	725	97	80-120	
Arsenic, Dissolved	ug/L	500	476	95	80-120	
Barium, Dissolved	ug/L	500	489	98	80-120	
Beryllium, Dissolved	ug/L	50	47.4	95	80-120	
Boron, Dissolved	ug/L	2500	2400	96	80-120	
Cadmium, Dissolved	ug/L	50	48.2	96	80-120	
Calcium, Dissolved	ug/L	25000	24200	97	80-120	
Chromium, Dissolved	ug/L	250	247	99	80-120	
Cobalt, Dissolved	ug/L	500	486	97	80-120	
Copper, Dissolved	ug/L	250	244	97	80-120	
Iron, Dissolved	ug/L	2000	1940	97	80-120	
Lead, Dissolved	ug/L	500	481	96	80-120	

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QUALITY CONTROL DATA

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

LABORATORY CONTROL SAMPLE: 104206

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Magnesium, Dissolved	ug/L	25000	23800	95	80-120	
Manganese, Dissolved	ug/L	250	241	96	80-120	
Nickel, Dissolved	ug/L	250	245	98	80-120	
Potassium, Dissolved	ug/L	50000	47700	95	80-120	
Selenium, Dissolved	ug/L	750	737	98	80-120	
Silver, Dissolved	ug/L	250	243	97	80-120	
Sodium, Dissolved	ug/L	50000	49700	99	80-120	
Thallium, Dissolved	ug/L	750	736	98	80-120	
Vanadium, Dissolved	ug/L	500	491	98	80-120	
Zinc, Dissolved	ug/L	1000	962	96	80-120	

MATRIX SPIKE SAMPLE: 104209

Parameter	Units	7016438005 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Aluminum, Dissolved	ug/L	<200	5000	5730	115	75-125	
Antimony, Dissolved	ug/L	<60.0	750	808	108	75-125	
Arsenic, Dissolved	ug/L	<10.0	500	532	106	75-125	
Barium, Dissolved	ug/L	7.8J	500	552	109	75-125	
Beryllium, Dissolved	ug/L	<5.0	50	60.3	121	75-125	
Boron, Dissolved	ug/L	19.8J	2500	2710	108	75-125	
Cadmium, Dissolved	ug/L	0.081J	50	54.1	108	75-125	
Calcium, Dissolved	ug/L	10000	25000	40100	120	75-125	
Chromium, Dissolved	ug/L	<10.0	250	289	115	75-125	
Cobalt, Dissolved	ug/L	<50.0	500	544	109	75-125	
Copper, Dissolved	ug/L	4.0J	250	275	108	75-125	
Iron, Dissolved	ug/L	<100	2000	2450	122	75-125	
Lead, Dissolved	ug/L	<5.0	500	546	109	75-125	
Magnesium, Dissolved	ug/L	3420	25000	33700	121	75-125	
Manganese, Dissolved	ug/L	7.6J	250	294	115	75-125	
Nickel, Dissolved	ug/L	1.9J	250	274	109	75-125	
Potassium, Dissolved	ug/L	1240J	50000	57000	112	75-125	
Selenium, Dissolved	ug/L	<10.0	750	808	108	75-125	
Silver, Dissolved	ug/L	<10.0	250	75.7	30	75-125	M1
Sodium, Dissolved	ug/L	7630	50000	70600	126	75-125	M1
Thallium, Dissolved	ug/L	<10.0	750	826	110	75-125	
Vanadium, Dissolved	ug/L	<50.0	500	569	114	75-125	
Zinc, Dissolved	ug/L	<20.0	1000	1080	108	75-125	

SAMPLE DUPLICATE: 104208

Parameter	Units	7016438005 Result	Dup Result	RPD	Qualifiers
Aluminum, Dissolved	ug/L	<200	<200		
Antimony, Dissolved	ug/L	<60.0	<60.0		
Arsenic, Dissolved	ug/L	<10.0	<10.0		

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QUALITY CONTROL DATA

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

SAMPLE DUPLICATE: 104208

Parameter	Units	7016438005 Result	Dup Result	RPD	Qualifiers
Barium, Dissolved	ug/L	7.8J	7.7J		
Beryllium, Dissolved	ug/L	<5.0	<5.0		
Boron, Dissolved	ug/L	19.8J	16.6J		
Cadmium, Dissolved	ug/L	0.081J	<2.5		
Calcium, Dissolved	ug/L	10000	9920	1	
Chromium, Dissolved	ug/L	<10.0	<10.0		
Cobalt, Dissolved	ug/L	<50.0	<50.0		
Copper, Dissolved	ug/L	4.0J	3.3J		
Iron, Dissolved	ug/L	<100	<100		
Lead, Dissolved	ug/L	<5.0	<5.0		
Magnesium, Dissolved	ug/L	3420	3360	2	
Manganese, Dissolved	ug/L	7.6J	7.6J		
Nickel, Dissolved	ug/L	1.9J	2.6J		
Potassium, Dissolved	ug/L	1240J	974J		
Selenium, Dissolved	ug/L	<10.0	<10.0		
Silver, Dissolved	ug/L	<10.0	<10.0		
Sodium, Dissolved	ug/L	7630	7490	2	
Thallium, Dissolved	ug/L	<10.0	<10.0		
Vanadium, Dissolved	ug/L	<50.0	<50.0		
Zinc, Dissolved	ug/L	<20.0	<20.0		

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QUALITY CONTROL DATA

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

QC Batch: 21875 Analysis Method: EPA 7470A
QC Batch Method: EPA 7470A Analysis Description: 7470 Mercury
Associated Lab Samples: 7016438001, 7016438002, 7016438003, 7016438005, 7016438006, 7016438007, 7016438008, 7016438009, 7016438014, 7016438015, 7016438016, 7016438017, 7016438018, 7016438019, 7016438020

METHOD BLANK: 103470 Matrix: Water
Associated Lab Samples: 7016438001, 7016438002, 7016438003, 7016438005, 7016438006, 7016438007, 7016438008, 7016438009, 7016438014, 7016438015, 7016438016, 7016438017, 7016438018, 7016438019, 7016438020

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	ug/L	<0.20	0.20	05/02/17 14:40	

LABORATORY CONTROL SAMPLE: 103471

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	1	0.96	96	80-120	

MATRIX SPIKE SAMPLE: 103472

Parameter	Units	7016438017 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	<0.20	1	0.86	86	75-125	

SAMPLE DUPLICATE: 103473

Parameter	Units	7016438017 Result	Dup Result	RPD	Qualifiers
Mercury	ug/L	<0.20	<0.20		

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QUALITY CONTROL DATA

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

QC Batch: 22314 Analysis Method: EPA 7470A
QC Batch Method: EPA 7470A Analysis Description: 7470 Mercury Dissolved
Associated Lab Samples: 7016438005, 7016438006, 7016438014, 7016438015

METHOD BLANK: 105222 Matrix: Water
Associated Lab Samples: 7016438005, 7016438006, 7016438014, 7016438015

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury, Dissolved	ug/L	<0.20	0.20	05/02/17 15:42	

LABORATORY CONTROL SAMPLE: 105223

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury, Dissolved	ug/L	1	0.94	94	80-120	

MATRIX SPIKE SAMPLE: 105224

Parameter	Units	7016438015 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury, Dissolved	ug/L	<0.20	1	0.94	94	75-125	

SAMPLE DUPLICATE: 105225

Parameter	Units	7016438015 Result	Dup Result	RPD	Qualifiers
Mercury, Dissolved	ug/L	<0.20	<0.20		

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QUALITY CONTROL DATA

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

QC Batch: 21872 Analysis Method: EPA 6010C
QC Batch Method: EPA 3005A Analysis Description: 6010 MET Water
Associated Lab Samples: 7016438001, 7016438002, 7016438003, 7016438005, 7016438006, 7016438007, 7016438008, 7016438009, 7016438010, 7016438011

METHOD BLANK: 103457 Matrix: Water
Associated Lab Samples: 7016438001, 7016438002, 7016438003, 7016438005, 7016438006, 7016438007, 7016438008, 7016438009, 7016438010, 7016438011

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Aluminum	ug/L	<200	200	05/03/17 14:02	
Antimony	ug/L	<60.0	60.0	05/03/17 14:02	
Arsenic	ug/L	<10.0	10.0	05/03/17 14:02	
Barium	ug/L	<200	200	05/03/17 14:02	
Beryllium	ug/L	<5.0	5.0	05/03/17 14:02	
Boron	ug/L	4.0J	50.0	05/03/17 14:02	
Cadmium	ug/L	<2.5	2.5	05/03/17 14:02	
Calcium	ug/L	<200	200	05/03/17 14:02	
Chromium	ug/L	<10.0	10.0	05/03/17 14:02	
Cobalt	ug/L	<50.0	50.0	05/03/17 14:02	
Copper	ug/L	<25.0	25.0	05/03/17 14:02	
Iron	ug/L	<100	100	05/03/17 14:02	
Lead	ug/L	<5.0	5.0	05/03/17 14:02	
Magnesium	ug/L	<200	200	05/03/17 14:02	
Manganese	ug/L	1.3J	10.0	05/03/17 14:02	
Nickel	ug/L	<40.0	40.0	05/03/17 14:02	
Potassium	ug/L	<5000	5000	05/03/17 14:02	
Selenium	ug/L	<10.0	10.0	05/03/17 14:02	
Silver	ug/L	<10.0	10.0	05/03/17 14:02	
Sodium	ug/L	<5000	5000	05/03/17 14:02	
Thallium	ug/L	<10.0	10.0	05/03/17 14:02	
Vanadium	ug/L	<50.0	50.0	05/03/17 14:02	
Zinc	ug/L	<20.0	20.0	05/03/17 14:02	

LABORATORY CONTROL SAMPLE: 103458

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Aluminum	ug/L	5000	4660	93	80-120	
Antimony	ug/L	750	724	96	80-120	
Arsenic	ug/L	500	476	95	80-120	
Barium	ug/L	500	480	96	80-120	
Beryllium	ug/L	50	47.3	95	80-120	
Boron	ug/L	2500	2380	95	80-120	
Cadmium	ug/L	50	48.5	97	80-120	
Calcium	ug/L	25000	23600	95	80-120	
Chromium	ug/L	250	254	101	80-120	
Cobalt	ug/L	500	478	96	80-120	
Copper	ug/L	250	234	94	80-120	

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QUALITY CONTROL DATA

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

LABORATORY CONTROL SAMPLE: 103458

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Iron	ug/L	2000	1840	92	80-120	
Lead	ug/L	500	474	95	80-120	
Magnesium	ug/L	25000	23800	95	80-120	
Manganese	ug/L	250	230	92	80-120	
Nickel	ug/L	250	243	97	80-120	
Potassium	ug/L	50000	44900	90	80-120	
Selenium	ug/L	750	732	98	80-120	
Silver	ug/L	250	224	90	80-120	
Sodium	ug/L	50000	48800	98	80-120	
Thallium	ug/L	750	725	97	80-120	
Vanadium	ug/L	500	466	93	80-120	
Zinc	ug/L	1000	961	96	80-120	

MATRIX SPIKE SAMPLE: 103460

Parameter	Units	7016368002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Aluminum	ug/L	<200	5000	5170	103	75-125	
Antimony	ug/L	<60.0	750	795	106	75-125	
Arsenic	ug/L	<10.0	500	521	104	75-125	
Barium	ug/L	<200	500	590	104	75-125	
Beryllium	ug/L	<5.0	50	51.9	104	75-125	
Boron	ug/L	85.2	2500	2680	104	75-125	
Cadmium	ug/L	<2.5	50	52.5	105	75-125	
Calcium	ug/L	60800	25000	86400	103	75-125	
Chromium	ug/L	<10.0	250	273	109	75-125	
Cobalt	ug/L	<50.0	500	520	104	75-125	
Copper	ug/L	<25.0	250	258	102	75-125	
Iron	ug/L	<100	2000	2050	102	75-125	
Lead	ug/L	<5.0	500	513	102	75-125	
Magnesium	ug/L	3690	25000	29600	104	75-125	
Manganese	ug/L	<10.0	250	251	100	75-125	
Nickel	ug/L	<40.0	250	264	106	75-125	
Potassium	ug/L	18400	50000	66300	96	75-125	
Selenium	ug/L	<10.0	750	815	109	75-125	
Silver	ug/L	<10.0	250	379	152	75-125	M1
Sodium	ug/L	49600	50000	105000	110	75-125	
Thallium	ug/L	<10.0	750	783	104	75-125	
Vanadium	ug/L	<50.0	500	509	102	75-125	
Zinc	ug/L	<20.0	1000	1060	105	75-125	

SAMPLE DUPLICATE: 103459

Parameter	Units	7016368002 Result	Dup Result	RPD	Qualifiers
Aluminum	ug/L	<200	<200		

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QUALITY CONTROL DATA

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

SAMPLE DUPLICATE: 103459

Parameter	Units	7016368002 Result	Dup Result	RPD	Qualifiers
Antimony	ug/L	<60.0	<60.0		
Arsenic	ug/L	<10.0	<10.0		
Barium	ug/L	<200	70.0J		
Beryllium	ug/L	<5.0	<5.0		
Boron	ug/L	85.2	85.8	1	
Cadmium	ug/L	<2.5	<2.5		
Calcium	ug/L	60800	60800	0	
Chromium	ug/L	<10.0	<10.0		
Cobalt	ug/L	<50.0	<50.0		
Copper	ug/L	<25.0	3.5J		
Iron	ug/L	<100	20.6J		
Lead	ug/L	<5.0	<5.0		
Magnesium	ug/L	3690	3650	1	
Manganese	ug/L	<10.0	<10.0		
Nickel	ug/L	<40.0	<40.0		
Potassium	ug/L	18400	18500	0	
Selenium	ug/L	<10.0	<10.0		
Silver	ug/L	<10.0	<10.0		
Sodium	ug/L	49600	50600	2	
Thallium	ug/L	<10.0	<10.0		
Vanadium	ug/L	<50.0	<50.0		
Zinc	ug/L	<20.0	<20.0		

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QUALITY CONTROL DATA

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

QC Batch: 21873
QC Batch Method: EPA 3005A
Analysis Method: EPA 6010C
Analysis Description: 6010 MET Water
Associated Lab Samples: 7016438014

METHOD BLANK: 103461
Matrix: Water
Associated Lab Samples: 7016438014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Aluminum	ug/L	<200	200	05/03/17 01:36	
Antimony	ug/L	<60.0	60.0	05/03/17 01:36	
Arsenic	ug/L	<10.0	10.0	05/03/17 01:36	
Barium	ug/L	<200	200	05/03/17 01:36	
Beryllium	ug/L	<5.0	5.0	05/03/17 01:36	
Boron	ug/L	<50.0	50.0	05/03/17 01:36	
Cadmium	ug/L	<2.5	2.5	05/03/17 01:36	
Calcium	ug/L	<200	200	05/03/17 01:36	
Chromium	ug/L	<10.0	10.0	05/03/17 01:36	
Cobalt	ug/L	<50.0	50.0	05/03/17 01:36	
Copper	ug/L	<25.0	25.0	05/03/17 01:36	
Iron	ug/L	<100	100	05/03/17 01:36	
Lead	ug/L	<5.0	5.0	05/03/17 01:36	
Magnesium	ug/L	<200	200	05/03/17 01:36	
Manganese	ug/L	0.94J	10.0	05/03/17 01:36	
Nickel	ug/L	<40.0	40.0	05/03/17 01:36	
Potassium	ug/L	<5000	5000	05/03/17 01:36	
Selenium	ug/L	<10.0	10.0	05/03/17 01:36	
Silver	ug/L	<10.0	10.0	05/03/17 01:36	
Sodium	ug/L	1180J	5000	05/03/17 01:36	
Thallium	ug/L	<10.0	10.0	05/03/17 01:36	
Vanadium	ug/L	<50.0	50.0	05/03/17 01:36	
Zinc	ug/L	<20.0	20.0	05/03/17 01:36	

LABORATORY CONTROL SAMPLE: 103462

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Aluminum	ug/L	5000	4940	99	80-120	
Antimony	ug/L	750	736	98	80-120	
Arsenic	ug/L	500	479	96	80-120	
Barium	ug/L	500	501	100	80-120	
Beryllium	ug/L	50	50.0	100	80-120	
Boron	ug/L	2500	2440	98	80-120	
Cadmium	ug/L	50	49.0	98	80-120	
Calcium	ug/L	25000	24600	98	80-120	
Chromium	ug/L	250	250	100	80-120	
Cobalt	ug/L	500	499	100	80-120	
Copper	ug/L	250	252	101	80-120	
Iron	ug/L	2000	1990	99	80-120	
Lead	ug/L	500	493	99	80-120	

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QUALITY CONTROL DATA

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

LABORATORY CONTROL SAMPLE: 103462

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Magnesium	ug/L	25000	23800	95	80-120	
Manganese	ug/L	250	249	100	80-120	
Nickel	ug/L	250	247	99	80-120	
Potassium	ug/L	50000	49300	99	80-120	
Selenium	ug/L	750	722	96	80-120	
Silver	ug/L	250	240	96	80-120	
Sodium	ug/L	50000	55100	110	80-120	
Thallium	ug/L	750	749	100	80-120	
Vanadium	ug/L	500	487	97	80-120	
Zinc	ug/L	1000	976	98	80-120	

MATRIX SPIKE SAMPLE: 103464

Parameter	Units	7016438014 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Aluminum	ug/L	1010	5000	5840	97	75-125	
Antimony	ug/L	<60.0	750	743	99	75-125	
Arsenic	ug/L	75.9	500	588	102	75-125	
Barium	ug/L	1100	500	1600	100	75-125	
Beryllium	ug/L	<5.0	50	52.6	105	75-125	
Boron	ug/L	38.7J	2500	2580	102	75-125	
Cadmium	ug/L	27.8	50	78.8	102	75-125	
Calcium	ug/L	56600	25000	82300	102	75-125	
Chromium	ug/L	41.8J	250	<10.0	-17	75-125	M1
Cobalt	ug/L	18.3J	500	547	106	75-125	
Copper	ug/L	70.7	250	343	109	75-125	
Iron	ug/L	775000	2000	827000	2580	75-125	M6
Lead	ug/L	19.3	500	526	101	75-125	
Magnesium	ug/L	11200	25000	36100	100	75-125	
Manganese	ug/L	35900	250	37700	748	75-125	M6
Nickel	ug/L	<40.0	250	249	99	75-125	
Potassium	ug/L	14300	50000	62300	96	75-125	
Selenium	ug/L	8.5J	750	776	102	75-125	
Silver	ug/L	<10.0	250	388	155	75-125	M1
Sodium	ug/L	18700	50000	70900	104	75-125	
Thallium	ug/L	43.8J	750	713	89	75-125	
Vanadium	ug/L	20.6J	500	553	107	75-125	
Zinc	ug/L	66.4	1000	1060	99	75-125	

SAMPLE DUPLICATE: 103463

Parameter	Units	7016438014 Result	Dup Result	RPD	Qualifiers
Aluminum	ug/L	1010	88.8J		
Antimony	ug/L	<60.0	<60.0		
Arsenic	ug/L	75.9	77.0	1	

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QUALITY CONTROL DATA

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

SAMPLE DUPLICATE: 103463

Parameter	Units	7016438014 Result	Dup Result	RPD	Qualifiers
Barium	ug/L	1100	1090	1	
Beryllium	ug/L	<5.0	<5.0		
Boron	ug/L	38.7J	37.3J		
Cadmium	ug/L	27.8	27.6	1	
Calcium	ug/L	56600	56700	0	
Chromium	ug/L	41.8J	36.3J		
Cobalt	ug/L	18.3J	17.9J		
Copper	ug/L	70.7	60.8	15	
Iron	ug/L	775000	834000	7	
Lead	ug/L	19.3	17.2	12	
Magnesium	ug/L	11200	11200	0	
Manganese	ug/L	35900	38900	8	
Nickel	ug/L	<40.0	<40.0		
Potassium	ug/L	14300	14100	1	
Selenium	ug/L	8.5J	<10.0		
Silver	ug/L	<10.0	<10.0		
Sodium	ug/L	18700	18400	2	
Thallium	ug/L	43.8J	36.4J		
Vanadium	ug/L	20.6J	20.4J		
Zinc	ug/L	66.4	48.3	32	D6

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QUALITY CONTROL DATA

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

QC Batch: 21998 Analysis Method: EPA 6010C
QC Batch Method: EPA 3005A Analysis Description: 6010 MET Water
Associated Lab Samples: 7016438015, 7016438016, 7016438017, 7016438018, 7016438019, 7016438020

METHOD BLANK: 103951 Matrix: Water
Associated Lab Samples: 7016438015, 7016438016, 7016438017, 7016438018, 7016438019, 7016438020

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Aluminum	ug/L	19.1J	200	05/05/17 13:44	
Antimony	ug/L	<60.0	60.0	05/05/17 13:44	
Arsenic	ug/L	<10.0	10.0	05/05/17 13:44	
Barium	ug/L	<200	200	05/05/17 13:44	
Beryllium	ug/L	<5.0	5.0	05/05/17 13:44	
Boron	ug/L	<50.0	50.0	05/05/17 13:44	
Cadmium	ug/L	<2.5	2.5	05/05/17 13:44	
Calcium	ug/L	<200	200	05/05/17 13:44	
Chromium	ug/L	<10.0	10.0	05/05/17 13:44	
Cobalt	ug/L	<50.0	50.0	05/05/17 13:44	
Copper	ug/L	<25.0	25.0	05/05/17 13:44	
Iron	ug/L	<100	100	05/05/17 13:44	
Lead	ug/L	<5.0	5.0	05/05/17 13:44	
Magnesium	ug/L	<200	200	05/05/17 13:44	
Manganese	ug/L	<10.0	10.0	05/05/17 13:44	
Nickel	ug/L	<40.0	40.0	05/05/17 13:44	
Potassium	ug/L	<5000	5000	05/05/17 13:44	
Selenium	ug/L	<10.0	10.0	05/05/17 13:44	
Silver	ug/L	<10.0	10.0	05/05/17 13:44	
Sodium	ug/L	1190J	5000	05/05/17 13:44	
Thallium	ug/L	<10.0	10.0	05/05/17 13:44	
Vanadium	ug/L	<50.0	50.0	05/05/17 13:44	
Zinc	ug/L	<20.0	20.0	05/05/17 13:44	

LABORATORY CONTROL SAMPLE: 103952

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Aluminum	ug/L	5000	5160	103	80-120	
Antimony	ug/L	750	782	104	80-120	
Arsenic	ug/L	500	523	105	80-120	
Barium	ug/L	500	522	104	80-120	
Beryllium	ug/L	50	54.0	108	80-120	
Boron	ug/L	2500	2640	105	80-120	
Cadmium	ug/L	50	52.7	105	80-120	
Calcium	ug/L	25000	27500	110	80-120	
Chromium	ug/L	250	253	101	80-120	
Cobalt	ug/L	500	516	103	80-120	
Copper	ug/L	250	256	103	80-120	
Iron	ug/L	2000	2170	108	80-120	
Lead	ug/L	500	568	114	80-120	

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QUALITY CONTROL DATA

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

LABORATORY CONTROL SAMPLE: 103952

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Magnesium	ug/L	25000	26200	105	80-120	
Manganese	ug/L	250	278	111	80-120	
Nickel	ug/L	250	262	105	80-120	
Potassium	ug/L	50000	48100	96	80-120	
Selenium	ug/L	750	777	104	80-120	
Silver	ug/L	250	261	104	80-120	
Sodium	ug/L	50000	50000	100	80-120	
Thallium	ug/L	750	788	105	80-120	
Vanadium	ug/L	500	560	112	80-120	
Zinc	ug/L	1000	1100	110	80-120	

MATRIX SPIKE SAMPLE: 103954

Parameter	Units	7016438017 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Aluminum	ug/L	<200	5000	5440	109	75-125	
Antimony	ug/L	<60.0	750	805	107	75-125	
Arsenic	ug/L	<10.0	500	530	106	75-125	
Barium	ug/L	18.3J	500	562	109	75-125	
Beryllium	ug/L	<5.0	50	56.3	113	75-125	
Boron	ug/L	5.5J	2500	2700	108	75-125	
Cadmium	ug/L	<2.5	50	54.2	108	75-125	
Calcium	ug/L	8630	25000	36000	110	75-125	
Chromium	ug/L	4.8J	250	271	107	75-125	
Cobalt	ug/L	<50.0	500	533	107	75-125	
Copper	ug/L	<25.0	250	264	105	75-125	
Iron	ug/L	38.5J	2000	2300	113	75-125	
Lead	ug/L	<5.0	500	572	114	75-125	
Magnesium	ug/L	3740	25000	30400	107	75-125	
Manganese	ug/L	3.9J	250	282	111	75-125	
Nickel	ug/L	6.8J	250	275	107	75-125	
Potassium	ug/L	874J	50000	48800	96	75-125	
Selenium	ug/L	<10.0	750	776	103	75-125	
Silver	ug/L	<10.0	250	486	194	75-125	M1
Sodium	ug/L	13900	50000	67800	108	75-125	
Thallium	ug/L	<10.0	750	813	108	75-125	
Vanadium	ug/L	<50.0	500	563	113	75-125	
Zinc	ug/L	<20.0	1000	1120	112	75-125	

SAMPLE DUPLICATE: 103953

Parameter	Units	7016438017 Result	Dup Result	RPD	Qualifiers
Aluminum	ug/L	<200	31.3J		
Antimony	ug/L	<60.0	<60.0		
Arsenic	ug/L	<10.0	<10.0		

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QUALITY CONTROL DATA

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

SAMPLE DUPLICATE: 103953

Parameter	Units	7016438017 Result	Dup Result	RPD	Qualifiers
Barium	ug/L	18.3J	18.2J		
Beryllium	ug/L	<5.0	<5.0		
Boron	ug/L	5.5J	4.6J		
Cadmium	ug/L	<2.5	<2.5		
Calcium	ug/L	8630	8390	3	
Chromium	ug/L	4.8J	5.7J		
Cobalt	ug/L	<50.0	<50.0		
Copper	ug/L	<25.0	<25.0		
Iron	ug/L	38.5J	37.2J		
Lead	ug/L	<5.0	<5.0		
Magnesium	ug/L	3740	3680	2	
Manganese	ug/L	3.9J	4.2J		
Nickel	ug/L	6.8J	7.1J		
Potassium	ug/L	874J	1030J		
Selenium	ug/L	<10.0	<10.0		
Silver	ug/L	<10.0	<10.0		
Sodium	ug/L	13900	7680	58	D6
Thallium	ug/L	<10.0	<10.0		
Vanadium	ug/L	<50.0	<50.0		
Zinc	ug/L	<20.0	<20.0		

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QUALITY CONTROL DATA

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

QC Batch: 21790 Analysis Method: EPA 8260C/5030C
QC Batch Method: EPA 8260C/5030C Analysis Description: 8260 MSV
Associated Lab Samples: 7016438001, 7016438002, 7016438003, 7016438005, 7016438006, 7016438007, 7016438008, 7016438009, 7016438012, 7016438013, 7016438014, 7016438015, 7016438016, 7016438017, 7016438018, 7016438019, 7016438020, 7016438021

METHOD BLANK: 103008 Matrix: Water
Associated Lab Samples: 7016438001, 7016438002, 7016438003, 7016438005, 7016438006, 7016438007, 7016438008, 7016438009, 7016438012, 7016438013, 7016438014, 7016438015, 7016438016, 7016438017, 7016438018, 7016438019, 7016438020, 7016438021

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	<5.0	5.0	04/25/17 13:06	
1,1,1-Trichloroethane	ug/L	<5.0	5.0	04/25/17 13:06	
1,1,2,2-Tetrachloroethane	ug/L	<5.0	5.0	04/25/17 13:06	
1,1,2-Trichloroethane	ug/L	<5.0	5.0	04/25/17 13:06	
1,1-Dichloroethane	ug/L	<5.0	5.0	04/25/17 13:06	
1,1-Dichloroethene	ug/L	<5.0	5.0	04/25/17 13:06	
1,2,3-Trichloropropane	ug/L	<5.0	5.0	04/25/17 13:06	
1,2-Dibromo-3-chloropropane	ug/L	<5.0	5.0	04/25/17 13:06	
1,2-Dibromoethane (EDB)	ug/L	<5.0	5.0	04/25/17 13:06	
1,2-Dichlorobenzene	ug/L	<5.0	5.0	04/25/17 13:06	
1,2-Dichloroethane	ug/L	<5.0	5.0	04/25/17 13:06	
1,2-Dichloropropane	ug/L	<5.0	5.0	04/25/17 13:06	
1,4-Dichlorobenzene	ug/L	<5.0	5.0	04/25/17 13:06	
2-Butanone (MEK)	ug/L	<5.0	5.0	04/25/17 13:06	CC
2-Hexanone	ug/L	<5.0	5.0	04/25/17 13:06	CC
4-Methyl-2-pentanone (MIBK)	ug/L	<5.0	5.0	04/25/17 13:06	CC
Acetone	ug/L	<5.0	5.0	04/25/17 13:06	CC
Acrylonitrile	ug/L	<5.0	5.0	04/25/17 13:06	CC
Benzene	ug/L	<5.0	5.0	04/25/17 13:06	
Bromochloromethane	ug/L	<5.0	5.0	04/25/17 13:06	
Bromodichloromethane	ug/L	<5.0	5.0	04/25/17 13:06	
Bromoform	ug/L	<5.0	5.0	04/25/17 13:06	
Bromomethane	ug/L	<5.0	5.0	04/25/17 13:06	
Carbon disulfide	ug/L	<5.0	5.0	04/25/17 13:06	
Carbon tetrachloride	ug/L	<5.0	5.0	04/25/17 13:06	
Chlorobenzene	ug/L	<5.0	5.0	04/25/17 13:06	
Chloroethane	ug/L	<5.0	5.0	04/25/17 13:06	
Chloroform	ug/L	<5.0	5.0	04/25/17 13:06	
Chloromethane	ug/L	<5.0	5.0	04/25/17 13:06	
cis-1,2-Dichloroethene	ug/L	<5.0	5.0	04/25/17 13:06	
cis-1,3-Dichloropropene	ug/L	<5.0	5.0	04/25/17 13:06	
Dibromochloromethane	ug/L	<5.0	5.0	04/25/17 13:06	
Dibromomethane	ug/L	<5.0	5.0	04/25/17 13:06	
Ethylbenzene	ug/L	<5.0	5.0	04/25/17 13:06	
Iodomethane	ug/L	<5.0	5.0	04/25/17 13:06	
Methylene Chloride	ug/L	<5.0	5.0	04/25/17 13:06	
Styrene	ug/L	<5.0	5.0	04/25/17 13:06	
Tetrachloroethene	ug/L	<5.0	5.0	04/25/17 13:06	

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(631)694-3040

QUALITY CONTROL DATA

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

METHOD BLANK: 103008 Matrix: Water

Associated Lab Samples: 7016438001, 7016438002, 7016438003, 7016438005, 7016438006, 7016438007, 7016438008, 7016438009, 7016438012, 7016438013, 7016438014, 7016438015, 7016438016, 7016438017, 7016438018, 7016438019, 7016438020, 7016438021

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Toluene	ug/L	<5.0	5.0	04/25/17 13:06	
trans-1,2-Dichloroethene	ug/L	<5.0	5.0	04/25/17 13:06	
trans-1,3-Dichloropropene	ug/L	<5.0	5.0	04/25/17 13:06	
trans-1,4-Dichloro-2-butene	ug/L	<5.0	5.0	04/25/17 13:06	
Trichloroethene	ug/L	<5.0	5.0	04/25/17 13:06	
Trichlorofluoromethane	ug/L	<5.0	5.0	04/25/17 13:06	
Vinyl acetate	ug/L	<5.0	5.0	04/25/17 13:06	
Vinyl chloride	ug/L	<5.0	5.0	04/25/17 13:06	
Xylene (Total)	ug/L	<5.0	5.0	04/25/17 13:06	
1,2-Dichloroethane-d4 (S)	%.	90	68-153	04/25/17 13:06	
4-Bromofluorobenzene (S)	%.	119	79-124	04/25/17 13:06	
Toluene-d8 (S)	%.	112	69-124	04/25/17 13:06	

LABORATORY CONTROL SAMPLE: 103009

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	50	51.1	102	74-113	
1,1,1-Trichloroethane	ug/L	50	44.0	88	65-118	
1,1,2,2-Tetrachloroethane	ug/L	50	38.5	77	74-121	
1,1,2-Trichloroethane	ug/L	50	44.0	88	80-117	
1,1-Dichloroethane	ug/L	50	37.1	74	83-151	L2
1,1-Dichloroethene	ug/L	50	40.9	82	45-146	
1,2,3-Trichloropropane	ug/L	50	40.2	80	71-123	
1,2-Dibromo-3-chloropropane	ug/L	50	41.3	83	74-119	
1,2-Dibromoethane (EDB)	ug/L	50	55.8	112	83-115	CC
1,2-Dichlorobenzene	ug/L	50	44.4	89	74-113	
1,2-Dichloroethane	ug/L	50	35.0	70	74-129	L2
1,2-Dichloropropane	ug/L	50	38.7	77	75-117	
1,4-Dichlorobenzene	ug/L	50	43.9	88	71-113	
2-Butanone (MEK)	ug/L	50	38.9	78	44-162	CC
2-Hexanone	ug/L	50	42.2	84	32-183	CC
4-Methyl-2-pentanone (MIBK)	ug/L	50	34.1	68	69-132	CC,L2
Acetone	ug/L	50	50.6	101	23-188	CC
Acrylonitrile	ug/L	50	33.4	67	59-148	CC
Benzene	ug/L	50	42.3	85	73-119	
Bromochloromethane	ug/L	50	43.9	88	81-116	
Bromodichloromethane	ug/L	50	47.8	96	78-117	
Bromoform	ug/L	50	50.2	100	65-122	
Bromomethane	ug/L	50	30.4	61	52-147	
Carbon disulfide	ug/L	50	38.9	78	41-144	
Carbon tetrachloride	ug/L	50	52.5	105	59-120	CC
Chlorobenzene	ug/L	50	47.2	94	75-113	

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(631)694-3040

QUALITY CONTROL DATA

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

LABORATORY CONTROL SAMPLE: 103009

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloroethane	ug/L	50	36.5	73	49-151	
Chloroform	ug/L	50	40.0	80	72-122	
Chloromethane	ug/L	50	29.3	59	46-144	
cis-1,2-Dichloroethene	ug/L	50	42.8	86	72-121	
cis-1,3-Dichloropropene	ug/L	50	48.2	96	78-116	
Dibromochloromethane	ug/L	50	61.7	123	70-120	CC,L1
Dibromomethane	ug/L	50	42.4	85	75-125	
Ethylbenzene	ug/L	50	47.1	94	70-113	
Iodomethane	ug/L	50	35.8	72	61-144	
Methylene Chloride	ug/L	50	43.4	87	61-142	
Styrene	ug/L	50	45.7	91	72-118	
Tetrachloroethene	ug/L	50	50.3	101	60-128	CC
Toluene	ug/L	50	43.1	86	72-119	
trans-1,2-Dichloroethene	ug/L	50	42.6	85	56-142	
trans-1,3-Dichloropropene	ug/L	50	42.8	86	79-116	
trans-1,4-Dichloro-2-butene	ug/L	50	36.3	73	71-121	
Trichloroethene	ug/L	50	43.7	87	69-117	
Trichlorofluoromethane	ug/L	50	37.4	75	27-173	
Vinyl acetate	ug/L	50	43.6	87	20-158	
Vinyl chloride	ug/L	50	35.5	71	43-143	
Xylene (Total)	ug/L	150	140	93	71-109	
1,2-Dichloroethane-d4 (S)	%.			88	68-153	
4-Bromofluorobenzene (S)	%.			116	79-124	
Toluene-d8 (S)	%.			115	69-124	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 103081 103082

Parameter	Units	7016438017 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
1,1,1,2-Tetrachloroethane	ug/L	<5.0	50	50	48.8	55.2	98	110	74-113	12	
1,1,1-Trichloroethane	ug/L	<5.0	50	50	48.2	53.7	96	107	65-118	11	
1,1,2,2-Tetrachloroethane	ug/L	<5.0	50	50	38.3	43.6	77	87	74-121	13	
1,1,2-Trichloroethane	ug/L	<5.0	50	50	44.5	47.9	89	96	80-117	7	
1,1-Dichloroethane	ug/L	<5.0	50	50	41.3	44.6	83	89	83-151	8	
1,1-Dichloroethene	ug/L	<5.0	50	50	52.6	59.1	105	118	45-146	12	
1,2,3-Trichloropropane	ug/L	<5.0	50	50	40.4	45.9	81	92	71-123	13	
1,2-Dibromo-3-chloropropane	ug/L	<5.0	50	50	38.9	42.4	78	85	74-119	9	
1,2-Dibromoethane (EDB)	ug/L	<5.0	50	50	56.9	61.5	114	123	83-115	8	CC,M1
1,2-Dichlorobenzene	ug/L	<5.0	50	50	44.7	46.2	89	92	74-113	3	
1,2-Dichloroethane	ug/L	<5.0	50	50	37.5	40.1	75	80	74-129	7	
1,2-Dichloropropane	ug/L	<5.0	50	50	39.8	43.0	80	86	75-117	8	
1,4-Dichlorobenzene	ug/L	<5.0	50	50	43.4	48.7	87	97	71-113	12	
2-Butanone (MEK)	ug/L	<5.0	50	50	33.9	34.2	68	68	44-162	1	CC
2-Hexanone	ug/L	<5.0	50	50	30.3	33.0	61	66	32-183	9	CC
4-Methyl-2-pentanone (MIBK)	ug/L	<5.0	50	50	33.9	35.7	68	71	69-132	5	CC,M0

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QUALITY CONTROL DATA

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 103081 103082

Parameter	Units	7016438017 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Acetone	ug/L	2.4J	50	50	31.5	32.6	58	60	23-188	3	CC
Acrylonitrile	ug/L	<5.0	50	50	35.6	37.9	71	76	59-148	6	CC
Benzene	ug/L	<5.0	50	50	44.9	49.1	90	98	73-119	9	
Bromochloromethane	ug/L	<5.0	50	50	45.8	48.9	92	98	81-116	6	
Bromodichloromethane	ug/L	<5.0	50	50	46.2	52.2	92	104	78-117	12	
Bromoform	ug/L	<5.0	50	50	46.6	53.2	93	106	65-122	13	
Bromomethane	ug/L	<5.0	50	50	39.3	46.0	79	92	52-147	16	
Carbon disulfide	ug/L	<5.0	50	50	49.7	49.3	99	99	41-144	1	
Carbon tetrachloride	ug/L	<5.0	50	50	57.0	67.0	114	134	59-120	16	CC,M1
Chlorobenzene	ug/L	<5.0	50	50	47.4	53.0	95	106	75-113	11	
Chloroethane	ug/L	<5.0	50	50	46.7	50.0	93	100	49-151	7	
Chloroform	ug/L	<5.0	50	50	43.7	46.7	87	93	72-122	7	
Chloromethane	ug/L	<5.0	50	50	43.3	45.4	87	91	46-144	5	
cis-1,2-Dichloroethene	ug/L	<5.0	50	50	46.2	50.4	92	101	72-121	9	
cis-1,3-Dichloropropene	ug/L	<5.0	50	50	46.5	52.4	93	105	78-116	12	
Dibromochloromethane	ug/L	<5.0	50	50	56.3	65.1	113	130	70-120	15	CC,M0
Dibromomethane	ug/L	<5.0	50	50	42.7	46.6	85	93	75-125	9	
Ethylbenzene	ug/L	<5.0	50	50	49.3	54.7	99	109	70-113	11	
Iodomethane	ug/L	<5.0	50	50	42.2	44.1	84	88	61-144	5	
Methylene Chloride	ug/L	<5.0	50	50	47.0	48.4	94	97	61-142	3	
Styrene	ug/L	<5.0	50	50	48.0	53.5	96	107	72-118	11	
Tetrachloroethene	ug/L	<5.0	50	50	54.3	61.2	109	122	60-128	12	CC
Toluene	ug/L	<5.0	50	50	45.6	49.8	91	100	72-119	9	
trans-1,2-Dichloroethene	ug/L	<5.0	50	50	48.1	52.7	96	105	56-142	9	
trans-1,3-Dichloropropene	ug/L	<5.0	50	50	41.2	46.3	82	93	79-116	12	
trans-1,4-Dichloro-2-butene	ug/L	<5.0	50	50	34.8	39.8	70	80	71-121	13	M1
Trichloroethene	ug/L	<5.0	50	50	47.3	52.1	95	104	69-117	10	
Trichlorofluoromethane	ug/L	<5.0	50	50	49.8	54.1	100	108	27-173	8	
Vinyl acetate	ug/L	<5.0	50	50	43.4	52.5	87	105	20-158	19	
Vinyl chloride	ug/L	<5.0	50	50	50.8	54.1	102	108	43-143	6	
Xylene (Total)	ug/L	<5.0	150	150	146	162	97	108	71-109	11	
1,2-Dichloroethane-d4 (S)	%.						91	89	68-153		
4-Bromofluorobenzene (S)	%.						118	119	79-124		
Toluene-d8 (S)	%.						112	112	69-124		

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QUALITY CONTROL DATA

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

QC Batch: 21284 Analysis Method: SM22 2120B
QC Batch Method: SM22 2120B Analysis Description: 2120B Color
Associated Lab Samples: 7016438001, 7016438002, 7016438003, 7016438005, 7016438006, 7016438007, 7016438008, 7016438009, 7016438014

METHOD BLANK: 101000 Matrix: Water
Associated Lab Samples: 7016438001, 7016438002, 7016438003, 7016438005, 7016438006, 7016438007, 7016438008, 7016438009, 7016438014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Apparent Color	units	<5.0	5.0	04/20/17 14:43	

LABORATORY CONTROL SAMPLE: 101001

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Apparent Color	units	40	40.0	100	90-110	

SAMPLE DUPLICATE: 101002

Parameter	Units	7016438008 Result	Dup Result	RPD	Qualifiers
Apparent Color	units	5.0	5.0	0	
pH	Std. Units	6.0	6.0	0	

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QUALITY CONTROL DATA

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

QC Batch: 21510 Analysis Method: SM22 2120B
QC Batch Method: SM22 2120B Analysis Description: 2120B Color
Associated Lab Samples: 7016438015, 7016438016, 7016438017, 7016438018, 7016438019, 7016438020

METHOD BLANK: 101934 Matrix: Water
Associated Lab Samples: 7016438015, 7016438016, 7016438017, 7016438018, 7016438019, 7016438020

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Apparent Color	units	<5.0	5.0	04/22/17 06:29	

LABORATORY CONTROL SAMPLE: 101935

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Apparent Color	units	40	40.0	100	90-110	

SAMPLE DUPLICATE: 101936

Parameter	Units	7016438017 Result	Dup Result	RPD	Qualifiers
Apparent Color	units	<5.0	<5.0		
pH	Std. Units	6.0	6.0	0	

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QUALITY CONTROL DATA

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

QC Batch: 22096 Analysis Method: SM22 2320B
QC Batch Method: SM22 2320B Analysis Description: 2320B Alkalinity
Associated Lab Samples: 7016438001, 7016438002, 7016438003, 7016438005, 7016438006, 7016438007, 7016438008, 7016438009, 7016438010, 7016438011, 7016438014

METHOD BLANK: 104379 Matrix: Water
Associated Lab Samples: 7016438001, 7016438002, 7016438003, 7016438005, 7016438006, 7016438007, 7016438008, 7016438009, 7016438010, 7016438011, 7016438014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	0.50J	1.0	04/27/17 11:56	

LABORATORY CONTROL SAMPLE: 104380

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	25	23.0	92	80-120	

MATRIX SPIKE SAMPLE: 104382

Parameter	Units	7016846001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	43.2	50	160	233	75-125	M1

SAMPLE DUPLICATE: 104381

Parameter	Units	7016846001 Result	Dup Result	RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	43.2	40.4	7	

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QUALITY CONTROL DATA

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

QC Batch: 22183 Analysis Method: SM22 2320B
QC Batch Method: SM22 2320B Analysis Description: 2320B Alkalinity
Associated Lab Samples: 7016438015, 7016438016, 7016438017, 7016438018, 7016438019, 7016438020

METHOD BLANK: 104705 Matrix: Water
Associated Lab Samples: 7016438015, 7016438016, 7016438017, 7016438018, 7016438019, 7016438020

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	0.80J	1.0	04/28/17 08:22	

LABORATORY CONTROL SAMPLE: 104706

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	25	26.2	105	80-120	

MATRIX SPIKE SAMPLE: 104708

Parameter	Units	7016438017 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	38.0	50	87.0	98	75-125	

SAMPLE DUPLICATE: 104707

Parameter	Units	7016438017 Result	Dup Result	RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	38.0	38.8	2	

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QUALITY CONTROL DATA

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

QC Batch: 22769 Analysis Method: SM22 2340C
QC Batch Method: SM22 2340C Analysis Description: 2340C Hardness, Total
Associated Lab Samples: 7016438001, 7016438002, 7016438003, 7016438005, 7016438006, 7016438007, 7016438008, 7016438009, 7016438010, 7016438011, 7016438014, 7016438015, 7016438016, 7016438017, 7016438018, 7016438019, 7016438020

METHOD BLANK: 107335 Matrix: Water
Associated Lab Samples: 7016438001, 7016438002, 7016438003, 7016438005, 7016438006, 7016438007, 7016438008, 7016438009, 7016438010, 7016438011, 7016438014, 7016438015, 7016438016, 7016438017, 7016438018, 7016438019, 7016438020

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Hardness	mg/L	<5.0	5.0	05/03/17 14:04	

LABORATORY CONTROL SAMPLE: 107336

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Hardness	mg/L	1000	1050	105	90-110	

MATRIX SPIKE SAMPLE: 107337

Parameter	Units	7016438017 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Total Hardness	mg/L	35.0	100	138	103	75-125	

SAMPLE DUPLICATE: 107338

Parameter	Units	7016438017 Result	Dup Result	RPD	Qualifiers
Total Hardness	mg/L	35.0	35.0	0	

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QUALITY CONTROL DATA

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

QC Batch: 22149 Analysis Method: SM22 2540C
QC Batch Method: SM22 2540C Analysis Description: 2540C Total Dissolved Solids
Associated Lab Samples: 7016438001, 7016438002, 7016438003, 7016438005, 7016438006, 7016438007, 7016438008, 7016438009, 7016438010, 7016438011, 7016438014, 7016438015, 7016438016, 7016438017

METHOD BLANK: 104616 Matrix: Water
Associated Lab Samples: 7016438001, 7016438002, 7016438003, 7016438005, 7016438006, 7016438007, 7016438008, 7016438009, 7016438010, 7016438011, 7016438014, 7016438015, 7016438016, 7016438017

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	<10.0	10.0	04/27/17 14:05	

LABORATORY CONTROL SAMPLE: 104617

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	500	480	96	85-115	

MATRIX SPIKE SAMPLE: 104619

Parameter	Units	7016438001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	73.0	300	379	102	75-125	H1

MATRIX SPIKE SAMPLE: 104621

Parameter	Units	7016438017 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	63.0	300	387	108	75-125	

SAMPLE DUPLICATE: 104618

Parameter	Units	7016438001 Result	Dup Result	RPD	Qualifiers
Total Dissolved Solids	mg/L	73.0	70.0	4	H1

SAMPLE DUPLICATE: 104620

Parameter	Units	7016438017 Result	Dup Result	RPD	Qualifiers
Total Dissolved Solids	mg/L	63.0	74.0	16	

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QUALITY CONTROL DATA

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

QC Batch: 22150 Analysis Method: SM22 2540C
QC Batch Method: SM22 2540C Analysis Description: 2540C Total Dissolved Solids
Associated Lab Samples: 7016438018, 7016438019, 7016438020

METHOD BLANK: 104623 Matrix: Water
Associated Lab Samples: 7016438018, 7016438019, 7016438020

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	<10.0	10.0	04/27/17 14:17	

LABORATORY CONTROL SAMPLE: 104624

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	500	502	100	85-115	

MATRIX SPIKE SAMPLE: 104626

Parameter	Units	7016438018 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	137	300	442	102	75-125	

SAMPLE DUPLICATE: 104625

Parameter	Units	7016438018 Result	Dup Result	RPD	Qualifiers
Total Dissolved Solids	mg/L	137	144	5	

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QUALITY CONTROL DATA

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

QC Batch: 21357 Analysis Method: SM22 3500-Cr B
QC Batch Method: SM22 3500-Cr B Analysis Description: Chromium, Hexavalent by 3500
Associated Lab Samples: 7016438001, 7016438002, 7016438003, 7016438005, 7016438006, 7016438007, 7016438008, 7016438009, 7016438014

METHOD BLANK: 101284 Matrix: Water
Associated Lab Samples: 7016438001, 7016438002, 7016438003, 7016438005, 7016438006, 7016438007, 7016438008, 7016438009, 7016438014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chromium, Hexavalent	mg/L	<0.020	0.020	04/21/17 01:04	

LABORATORY CONTROL SAMPLE: 101285

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chromium, Hexavalent	mg/L	.2	0.21	104	85-115	

MATRIX SPIKE SAMPLE: 101286

Parameter	Units	7016438008 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chromium, Hexavalent	mg/L	<0.020	.2	0.21	106	75-125	H3

SAMPLE DUPLICATE: 101287

Parameter	Units	7016438008 Result	Dup Result	RPD	Qualifiers
Chromium, Hexavalent	mg/L	<0.020	<0.020		H3

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QUALITY CONTROL DATA

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

QC Batch: 21499 Analysis Method: SM22 3500-Cr B
QC Batch Method: SM22 3500-Cr B Analysis Description: Chromium, Hexavalent by 3500
Associated Lab Samples: 7016438015, 7016438016, 7016438017, 7016438018, 7016438019, 7016438020

METHOD BLANK: 101910 Matrix: Water
Associated Lab Samples: 7016438015, 7016438016, 7016438017, 7016438018, 7016438019, 7016438020

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chromium, Hexavalent	mg/L	<0.020	0.020	04/22/17 00:26	

LABORATORY CONTROL SAMPLE: 101911

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chromium, Hexavalent	mg/L	.2	0.21	104	85-115	

MATRIX SPIKE SAMPLE: 101912

Parameter	Units	7016438017 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chromium, Hexavalent	mg/L	<0.020	.2	0.21	104	75-125	H3

SAMPLE DUPLICATE: 101913

Parameter	Units	7016438017 Result	Dup Result	RPD	Qualifiers
Chromium, Hexavalent	mg/L	<0.020	<0.020		H3

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QUALITY CONTROL DATA

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

QC Batch: 22293 Analysis Method: EPA 410.4
QC Batch Method: EPA 410.4 Analysis Description: 410.4 COD
Associated Lab Samples: 7016438001, 7016438002, 7016438003, 7016438005, 7016438006, 7016438007, 7016438008, 7016438009, 7016438010, 7016438011, 7016438014, 7016438015, 7016438016

METHOD BLANK: 105063 Matrix: Water
Associated Lab Samples: 7016438001, 7016438002, 7016438003, 7016438005, 7016438006, 7016438007, 7016438008, 7016438009, 7016438010, 7016438011, 7016438014, 7016438015, 7016438016

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chemical Oxygen Demand	mg/L	<10.0	10.0	04/28/17 14:21	

LABORATORY CONTROL SAMPLE: 105064

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chemical Oxygen Demand	mg/L	500	514	103	90-110	

MATRIX SPIKE SAMPLE: 105065

Parameter	Units	7016438002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chemical Oxygen Demand	mg/L	<10.0	1000	1020	101	90-110	

SAMPLE DUPLICATE: 105066

Parameter	Units	7016438002 Result	Dup Result	RPD	Qualifiers
Chemical Oxygen Demand	mg/L	<10.0	<10.0		

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QUALITY CONTROL DATA

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

QC Batch: 22298 Analysis Method: EPA 410.4
QC Batch Method: EPA 410.4 Analysis Description: 410.4 COD
Associated Lab Samples: 7016438017, 7016438018, 7016438019, 7016438020

METHOD BLANK: 105108 Matrix: Water
Associated Lab Samples: 7016438017, 7016438018, 7016438019, 7016438020

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chemical Oxygen Demand	mg/L	<10.0	10.0	04/28/17 16:41	

LABORATORY CONTROL SAMPLE: 105109

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chemical Oxygen Demand	mg/L	500	537	107	90-110	

MATRIX SPIKE SAMPLE: 105110

Parameter	Units	7016438017 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chemical Oxygen Demand	mg/L	6.8J	1000	1060	105	90-110	

SAMPLE DUPLICATE: 105111

Parameter	Units	7016438017 Result	Dup Result	RPD	Qualifiers
Chemical Oxygen Demand	mg/L	6.8J	<10.0		

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QUALITY CONTROL DATA

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

QC Batch: 21351 Analysis Method: SM22 5210B
QC Batch Method: SM22 5210B Analysis Description: 5210B BOD, 5 day
Associated Lab Samples: 7016438001, 7016438002, 7016438003, 7016438006, 7016438007, 7016438008, 7016438009

METHOD BLANK: 101264 Matrix: Water
Associated Lab Samples: 7016438001, 7016438002, 7016438003, 7016438006, 7016438007, 7016438008, 7016438009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
BOD, 5 day	mg/L	<2.0	2.0	04/25/17 13:41	

LABORATORY CONTROL SAMPLE: 101265

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
BOD, 5 day	mg/L	198	211	107	84.5-115.4	

SAMPLE DUPLICATE: 101266

Parameter	Units	7016424001 Result	Dup Result	RPD	Qualifiers
BOD, 5 day	mg/L	78.8	78.5	0	

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QUALITY CONTROL DATA

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

QC Batch: 21381 Analysis Method: SM22 5210B
QC Batch Method: SM22 5210B Analysis Description: 5210B BOD, 5 day
Associated Lab Samples: 7016438005, 7016438010, 7016438011, 7016438014

METHOD BLANK: 101334 Matrix: Water
Associated Lab Samples: 7016438005, 7016438010, 7016438011, 7016438014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
BOD, 5 day	mg/L	<2.0	2.0	04/26/17 09:47	

LABORATORY CONTROL SAMPLE: 101335

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
BOD, 5 day	mg/L	198	204	103	84.5-115.4	

SAMPLE DUPLICATE: 101337

Parameter	Units	7016476001 Result	Dup Result	RPD	Qualifiers
BOD, 5 day	mg/L	118	126	7	

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QUALITY CONTROL DATA

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

QC Batch: 21476 Analysis Method: SM22 5210B
QC Batch Method: SM22 5210B Analysis Description: 5210B BOD, 5 day
Associated Lab Samples: 7016438015, 7016438016, 7016438017, 7016438018, 7016438019, 7016438020

METHOD BLANK: 101738 Matrix: Water
Associated Lab Samples: 7016438015, 7016438016, 7016438017, 7016438018, 7016438019, 7016438020

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
BOD, 5 day	mg/L	<2.0	2.0	04/26/17 12:42	

LABORATORY CONTROL SAMPLE: 101739

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
BOD, 5 day	mg/L	198	182	92	84.5-115.4	

SAMPLE DUPLICATE: 101740

Parameter	Units	7016438017 Result	Dup Result	RPD	Qualifiers
BOD, 5 day	mg/L	1.0J	1.0J		

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QUALITY CONTROL DATA

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

QC Batch: 23352 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions
Associated Lab Samples: 7016438001, 7016438002, 7016438003, 7016438005, 7016438006, 7016438007, 7016438008, 7016438009, 7016438010, 7016438011, 7016438014, 7016438015, 7016438016, 7016438017, 7016438018, 7016438019, 7016438020

METHOD BLANK: 109785 Matrix: Water
Associated Lab Samples: 7016438001, 7016438002, 7016438003, 7016438005, 7016438006, 7016438007, 7016438008, 7016438009, 7016438010, 7016438011, 7016438014, 7016438015, 7016438016, 7016438017, 7016438018, 7016438019, 7016438020

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Bromide	mg/L	<0.50	0.50	05/08/17 18:37	
Chloride	mg/L	<2.0	2.0	05/08/17 18:37	
Sulfate	mg/L	<5.0	5.0	05/08/17 18:37	

LABORATORY CONTROL SAMPLE: 109786

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Bromide	mg/L	1	0.99	99	90-110	
Chloride	mg/L	10	9.4	94	90-110	
Sulfate	mg/L	10	9.7	97	90-110	

MATRIX SPIKE SAMPLE: 109787

Parameter	Units	7016438017 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Bromide	mg/L	0.062J	1	1.0	94	80-120	
Chloride	mg/L	10.6	10	21.2	106	80-120	
Sulfate	mg/L	3.0J	10	12.7	97	80-120	

MATRIX SPIKE SAMPLE: 109789

Parameter	Units	7017537001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Bromide	mg/L	0.78	1	1.7	95	80-120	
Chloride	mg/L	354	250	624	108	80-120	
Sulfate	mg/L	414	250	687	109	80-120	

SAMPLE DUPLICATE: 109788

Parameter	Units	7016438017 Result	Dup Result	RPD	Qualifiers
Bromide	mg/L	0.062J	0.060J		
Chloride	mg/L	10.6	10.5	2	
Sulfate	mg/L	3.0J	3.0J		

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QUALITY CONTROL DATA

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

SAMPLE DUPLICATE: 109790

Parameter	Units	7017537001 Result	Dup Result	RPD	Qualifiers
Bromide	mg/L	0.78	0.77	1	
Chloride	mg/L	354	354	0	
Sulfate	mg/L	414	<5.0		

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QUALITY CONTROL DATA

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

QC Batch: 22567 Analysis Method: EPA 351.2
QC Batch Method: EPA 351.2 Analysis Description: 351.2 TKN
Associated Lab Samples: 7016438001, 7016438002, 7016438003, 7016438005, 7016438006, 7016438007, 7016438008, 7016438009, 7016438010, 7016438011, 7016438014, 7016438015, 7016438016, 7016438017, 7016438018, 7016438019

METHOD BLANK: 106432 Matrix: Water
Associated Lab Samples: 7016438001, 7016438002, 7016438003, 7016438005, 7016438006, 7016438007, 7016438008, 7016438009, 7016438010, 7016438011, 7016438014, 7016438015, 7016438016, 7016438017, 7016438018, 7016438019

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, Kjeldahl, Total	mg/L	<0.10	0.10	05/02/17 13:08	

LABORATORY CONTROL SAMPLE: 106433

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Kjeldahl, Total	mg/L	4	4.1	103	90-110	

MATRIX SPIKE SAMPLE: 106434

Parameter	Units	7017067002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Kjeldahl, Total	mg/L	2.2	4	5.3	77	90-110	M1

MATRIX SPIKE SAMPLE: 106436

Parameter	Units	7016438017 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Kjeldahl, Total	mg/L	0.046J	4	4.3	105	90-110	

SAMPLE DUPLICATE: 106435

Parameter	Units	7017067002 Result	Dup Result	RPD	Qualifiers
Nitrogen, Kjeldahl, Total	mg/L	2.2	2.3	6	

SAMPLE DUPLICATE: 106437

Parameter	Units	7016438017 Result	Dup Result	RPD	Qualifiers
Nitrogen, Kjeldahl, Total	mg/L	0.046J	<0.10		

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QUALITY CONTROL DATA

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

QC Batch: 22568 Analysis Method: EPA 351.2
QC Batch Method: EPA 351.2 Analysis Description: 351.2 TKN
Associated Lab Samples: 7016438020

METHOD BLANK: 106438 Matrix: Water
Associated Lab Samples: 7016438020

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, Kjeldahl, Total	mg/L	<0.10	0.10	05/02/17 13:34	

LABORATORY CONTROL SAMPLE: 106439

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Kjeldahl, Total	mg/L	4	4.3	108	90-110	

MATRIX SPIKE SAMPLE: 106440

Parameter	Units	7017154002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Kjeldahl, Total	mg/L	1.1	4	5.0	98	90-110	

MATRIX SPIKE SAMPLE: 106442

Parameter	Units	7017137002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Kjeldahl, Total	mg/L	1.2	4	5.3	103	90-110	

SAMPLE DUPLICATE: 106441

Parameter	Units	7017154002 Result	Dup Result	RPD	Qualifiers
Nitrogen, Kjeldahl, Total	mg/L	1.1	1.1	1	

SAMPLE DUPLICATE: 106443

Parameter	Units	7017137002 Result	Dup Result	RPD	Qualifiers
Nitrogen, Kjeldahl, Total	mg/L	1.2	1.2	1	

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QUALITY CONTROL DATA

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

QC Batch: 21360 Analysis Method: EPA 353.2
QC Batch Method: EPA 353.2 Analysis Description: 353.2 Nitrite, Unpres.
Associated Lab Samples: 7016438007, 7016438008, 7016438009, 7016438010, 7016438011, 7016438014

METHOD BLANK: 101292 Matrix: Water
Associated Lab Samples: 7016438007, 7016438008, 7016438009, 7016438010, 7016438011, 7016438014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrite as N	mg/L	<0.050	0.050	04/21/17 04:18	

LABORATORY CONTROL SAMPLE: 101293

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrite as N	mg/L	1	1.1	108	90-110	

MATRIX SPIKE SAMPLE: 101294

Parameter	Units	7016438007 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrite as N	mg/L	<0.050	.5	0.56	112	90-110	M1

SAMPLE DUPLICATE: 101295

Parameter	Units	7016438007 Result	Dup Result	RPD	Qualifiers
Nitrite as N	mg/L	<0.050	<0.050		

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QUALITY CONTROL DATA

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

QC Batch: 21361 Analysis Method: EPA 353.2
QC Batch Method: EPA 353.2 Analysis Description: 353.2 Nitrite, Unpres.
Associated Lab Samples: 7016438001, 7016438002, 7016438003, 7016438005, 7016438006

METHOD BLANK: 101296 Matrix: Water
Associated Lab Samples: 7016438001, 7016438002, 7016438003, 7016438005, 7016438006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrite as N	mg/L	<0.050	0.050	04/21/17 03:42	

LABORATORY CONTROL SAMPLE: 101297

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrite as N	mg/L	1	1.1	107	90-110	

MATRIX SPIKE SAMPLE: 101298

Parameter	Units	7016453002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrite as N	mg/L	<0.050	.5	0.59	116	90-110	M1

MATRIX SPIKE SAMPLE: 101300

Parameter	Units	7016501001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrite as N	mg/L	<0.050	.5	0.57	114	90-110	M1

SAMPLE DUPLICATE: 101299

Parameter	Units	7016453002 Result	Dup Result	RPD	Qualifiers
Nitrite as N	mg/L	<0.050	0.015J		

SAMPLE DUPLICATE: 101301

Parameter	Units	7016501001 Result	Dup Result	RPD	Qualifiers
Nitrite as N	mg/L	<0.050	<0.050		

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QUALITY CONTROL DATA

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

QC Batch: 21500 Analysis Method: EPA 353.2
QC Batch Method: EPA 353.2 Analysis Description: 353.2 Nitrite, Unpres.
Associated Lab Samples: 7016438015, 7016438016, 7016438017, 7016438018, 7016438019, 7016438020

METHOD BLANK: 101916 Matrix: Water
Associated Lab Samples: 7016438015, 7016438016, 7016438017, 7016438018, 7016438019, 7016438020

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrite as N	mg/L	<0.050	0.050	04/21/17 23:11	

LABORATORY CONTROL SAMPLE: 101917

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrite as N	mg/L	1	1.1	107	90-110	

MATRIX SPIKE SAMPLE: 101918

Parameter	Units	7016438017 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrite as N	mg/L	<0.050	.5	0.57	114	90-110	M1

MATRIX SPIKE SAMPLE: 101920

Parameter	Units	7016613001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrite as N	mg/L	<0.050	.5	0.56	112	90-110	M1

SAMPLE DUPLICATE: 101919

Parameter	Units	7016438017 Result	Dup Result	RPD	Qualifiers
Nitrite as N	mg/L	<0.050	<0.050		

SAMPLE DUPLICATE: 101921

Parameter	Units	7016613001 Result	Dup Result	RPD	Qualifiers
Nitrite as N	mg/L	<0.050	<0.050		

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QUALITY CONTROL DATA

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

QC Batch: 22106 Analysis Method: EPA 353.2
QC Batch Method: EPA 353.2 Analysis Description: 353.2 Nitrate + Nitrite, preserved
Associated Lab Samples: 7016438006, 7016438007, 7016438008, 7016438015, 7016438016, 7016438017, 7016438018, 7016438019, 7016438020

METHOD BLANK: 104409 Matrix: Water
Associated Lab Samples: 7016438006, 7016438007, 7016438008, 7016438015, 7016438016, 7016438017, 7016438018, 7016438019, 7016438020

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrate-Nitrite (as N)	mg/L	<0.050	0.050	04/27/17 11:00	

LABORATORY CONTROL SAMPLE: 104410

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrate-Nitrite (as N)	mg/L	1	1.1	106	90-110	

MATRIX SPIKE SAMPLE: 104411

Parameter	Units	7016544002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrate-Nitrite (as N)	mg/L	4.5	5	9.9	107	90-110	

MATRIX SPIKE SAMPLE: 104413

Parameter	Units	7016438017 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrate-Nitrite (as N)	mg/L	0.20	.5	0.74	108	90-110	

SAMPLE DUPLICATE: 104412

Parameter	Units	7016544002 Result	Dup Result	RPD	Qualifiers
Nitrate-Nitrite (as N)	mg/L	4.5	4.4	2	

SAMPLE DUPLICATE: 104414

Parameter	Units	7016438017 Result	Dup Result	RPD	Qualifiers
Nitrate-Nitrite (as N)	mg/L	0.20	0.20	0	

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QUALITY CONTROL DATA

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

QC Batch: 21365 Analysis Method: EPA 353.2
QC Batch Method: EPA 353.2 Analysis Description: 353.2 Nitrate, Unpres.
Associated Lab Samples: 7016438009, 7016438010, 7016438011, 7016438014

METHOD BLANK: 101302 Matrix: Water
Associated Lab Samples: 7016438009, 7016438010, 7016438011, 7016438014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrate-Nitrite (as N)	mg/L	0.024J	0.050	04/21/17 09:09	

LABORATORY CONTROL SAMPLE: 101303

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrate-Nitrite (as N)	mg/L	1	0.90	90	90-110	

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QUALITY CONTROL DATA

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

QC Batch: 21366 Analysis Method: EPA 353.2
QC Batch Method: EPA 353.2 Analysis Description: 353.2 Nitrate, Unpres.
Associated Lab Samples: 7016438001, 7016438002, 7016438003, 7016438005

METHOD BLANK: 101306 Matrix: Water
Associated Lab Samples: 7016438001, 7016438002, 7016438003, 7016438005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrate-Nitrite (as N)	mg/L	<0.050	0.050	04/21/17 07:43	

LABORATORY CONTROL SAMPLE: 101307

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrate-Nitrite (as N)	mg/L	1	0.90	90	90-110	

MATRIX SPIKE SAMPLE: 101310

Parameter	Units	7016495001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrate-Nitrite (as N)	mg/L	2.7	2.5	5.1	99	90-110	

MATRIX SPIKE SAMPLE: 101312

Parameter	Units	7016488002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrate-Nitrite (as N)	mg/L	1.3	2.5	3.7	96	90-110	

SAMPLE DUPLICATE: 101311

Parameter	Units	7016495001 Result	Dup Result	RPD	Qualifiers
Nitrate-Nitrite (as N)	mg/L	2.7	2.6	1	

SAMPLE DUPLICATE: 101313

Parameter	Units	7016488002 Result	Dup Result	RPD	Qualifiers
Nitrate-Nitrite (as N)	mg/L	1.3	1.3	1	

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QUALITY CONTROL DATA

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

QC Batch: 22664 Analysis Method: EPA 420.1
QC Batch Method: EPA 420.1 Analysis Description: 420.1 Phenolics Macro
Associated Lab Samples: 7016438001, 7016438002, 7016438003, 7016438005, 7016438006, 7016438007, 7016438008, 7016438009, 7016438010

METHOD BLANK: 106767 Matrix: Water
Associated Lab Samples: 7016438001, 7016438002, 7016438003, 7016438005, 7016438006, 7016438007, 7016438008, 7016438009, 7016438010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Phenolics, Total Recoverable	ug/L	<5.0	5.0	05/02/17 17:51	

LABORATORY CONTROL SAMPLE: 106768

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Phenolics, Total Recoverable	ug/L	30	28.7	96	90-110	

MATRIX SPIKE SAMPLE: 106769

Parameter	Units	7016438001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Phenolics, Total Recoverable	ug/L	56.4	20	58.5	10	75-125	M1

MATRIX SPIKE SAMPLE: 106771

Parameter	Units	7016438010 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Phenolics, Total Recoverable	ug/L	28.2	20	44.9	84	75-125	

SAMPLE DUPLICATE: 106770

Parameter	Units	7016438001 Result	Dup Result	RPD	Qualifiers
Phenolics, Total Recoverable	ug/L	56.4	52.2	8	

SAMPLE DUPLICATE: 106772

Parameter	Units	7016438010 Result	Dup Result	RPD	Qualifiers
Phenolics, Total Recoverable	ug/L	28.2	25.6	10	

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QUALITY CONTROL DATA

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

QC Batch: 22770 Analysis Method: EPA 420.1
QC Batch Method: EPA 420.1 Analysis Description: 420.1 Phenolics Macro
Associated Lab Samples: 7016438011, 7016438014, 7016438015, 7016438016, 7016438017, 7016438018, 7016438019, 7016438020

METHOD BLANK: 107339 Matrix: Water
Associated Lab Samples: 7016438011, 7016438014, 7016438015, 7016438016, 7016438017, 7016438018, 7016438019, 7016438020

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Phenolics, Total Recoverable	ug/L	<5.0	5.0	05/03/17 17:06	

LABORATORY CONTROL SAMPLE: 107340

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Phenolics, Total Recoverable	ug/L	30	30.8	103	90-110	

MATRIX SPIKE SAMPLE: 107341

Parameter	Units	7016438017 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Phenolics, Total Recoverable	ug/L	<5.0	20	21.9	110	75-125	

MATRIX SPIKE SAMPLE: 107509

Parameter	Units	7016743003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Phenolics, Total Recoverable	ug/L	<5.0	20	20.3	99	75-125	

SAMPLE DUPLICATE: 107342

Parameter	Units	7016438017 Result	Dup Result	RPD	Qualifiers
Phenolics, Total Recoverable	ug/L	<5.0	<5.0		

SAMPLE DUPLICATE: 107510

Parameter	Units	7016743003 Result	Dup Result	RPD	Qualifiers
Phenolics, Total Recoverable	ug/L	<5.0	<5.0		

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QUALITY CONTROL DATA

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

QC Batch: 23117 Analysis Method: SM22 4500 NH3 H
QC Batch Method: SM22 4500 NH3 H Analysis Description: 4500 Ammonia
Associated Lab Samples: 7016438001, 7016438002, 7016438003, 7016438005, 7016438006, 7016438007, 7016438008, 7016438009, 7016438010, 7016438011, 7016438014, 7016438015, 7016438016, 7016438018, 7016438019, 7016438020

METHOD BLANK: 108924 Matrix: Water
Associated Lab Samples: 7016438001, 7016438002, 7016438003, 7016438005, 7016438006, 7016438007, 7016438008, 7016438009, 7016438010, 7016438011, 7016438014, 7016438015, 7016438016, 7016438018, 7016438019, 7016438020

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, Ammonia	mg/L	<0.10	0.10	05/08/17 13:05	

LABORATORY CONTROL SAMPLE: 108925

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	1	0.99	99	90-110	

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QUALITY CONTROL DATA

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

QC Batch: 23489
QC Batch Method: SM22 4500 NH3 H
Analysis Method: SM22 4500 NH3 H
Analysis Description: 4500 Ammonia
Associated Lab Samples: 7016438017

METHOD BLANK: 110243
Matrix: Water
Associated Lab Samples: 7016438017

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, Ammonia	mg/L	<0.10	0.10	05/09/17 16:42	

LABORATORY CONTROL SAMPLE: 110244

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	1	0.98	98	90-110	

MATRIX SPIKE SAMPLE: 108926

Parameter	Units	7016438017 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	0.16	1	1.0	87	75-125	

SAMPLE DUPLICATE: 108927

Parameter	Units	7016438017 Result	Dup Result	RPD	Qualifiers
Nitrogen, Ammonia	mg/L	0.16	0.15	5	

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QUALITY CONTROL DATA

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

QC Batch: 257000 Analysis Method: SM5310C-00
QC Batch Method: SM5310C-00 Analysis Description: 5310C Total Organic Carbon
Associated Lab Samples: 7016438010, 7016438011

METHOD BLANK: 1266155 Matrix: Water
Associated Lab Samples: 7016438010, 7016438011

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Organic Carbon	mg/L	<1.0	1.0	05/01/17 21:06	

LABORATORY CONTROL SAMPLE: 1266156

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Organic Carbon	mg/L	10	10.1	101	85-115	

MATRIX SPIKE SAMPLE: 1266157

Parameter	Units	30216137001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Total Organic Carbon	mg/L	146	10	151	52	85-115	ML

SAMPLE DUPLICATE: 1266158

Parameter	Units	30216391001 Result	Dup Result	RPD	Qualifiers
Total Organic Carbon	mg/L	3.1	2.6	20	

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QUALITY CONTROL DATA

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

QC Batch: 22588 Analysis Method: EPA 9014 Total Cyanide
QC Batch Method: EPA 9010C Analysis Description: 9014 Cyanide, Total
Associated Lab Samples: 7016438001, 7016438002, 7016438003, 7016438005, 7016438006, 7016438007, 7016438008

METHOD BLANK: 106484 Matrix: Water
Associated Lab Samples: 7016438001, 7016438002, 7016438003, 7016438005, 7016438006, 7016438007, 7016438008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Cyanide	ug/L	<10.0	10.0	05/02/17 17:20	

LABORATORY CONTROL SAMPLE: 106485

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide	ug/L	75	78.4	104	85-115	

MATRIX SPIKE SAMPLE: 106486

Parameter	Units	7016438008 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Cyanide	ug/L	<10.0	100	101	101	75-125	

SAMPLE DUPLICATE: 106487

Parameter	Units	7016438008 Result	Dup Result	RPD	Qualifiers
Cyanide	ug/L	<10.0	<10.0		

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QUALITY CONTROL DATA

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

QC Batch: 22749 Analysis Method: EPA 9014 Total Cyanide
QC Batch Method: EPA 9010C Analysis Description: 9014 Cyanide, Total
Associated Lab Samples: 7016438009, 7016438014, 7016438015, 7016438016, 7016438017, 7016438018, 7016438019, 7016438020

METHOD BLANK: 107303 Matrix: Water
Associated Lab Samples: 7016438009, 7016438014, 7016438015, 7016438016, 7016438017, 7016438018, 7016438019, 7016438020

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Cyanide	ug/L	<10.0	10.0	05/03/17 17:10	

LABORATORY CONTROL SAMPLE: 107304

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide	ug/L	75	68.4	91	85-115	

MATRIX SPIKE SAMPLE: 107305

Parameter	Units	7016438017 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Cyanide	ug/L	<10.0	100	95.1	95	75-125	

SAMPLE DUPLICATE: 107306

Parameter	Units	7016438017 Result	Dup Result	RPD	Qualifiers
Cyanide	ug/L	<10.0	<10.0		

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QUALITY CONTROL DATA

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

QC Batch: 257288 Analysis Method: EPA 9060A
QC Batch Method: EPA 9060A Analysis Description: 9060A TOC
Associated Lab Samples: 7016438001, 7016438002, 7016438003, 7016438005, 7016438006, 7016438007, 7016438008, 7016438009, 7016438014

METHOD BLANK: 1267269 Matrix: Water
Associated Lab Samples: 7016438001, 7016438002, 7016438003, 7016438005, 7016438006, 7016438007, 7016438008, 7016438009, 7016438014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mean Total Organic Carbon	mg/L	<1.0	1.0	05/03/17 19:47	
Total Organic Carbon	mg/L	<1.0	1.0	05/03/17 19:47	
Total Organic Carbon	mg/L	<1.0	1.0	05/03/17 19:47	
Total Organic Carbon	mg/L	<1.0	1.0	05/03/17 19:47	
Total Organic Carbon	mg/L	<1.0	1.0	05/03/17 19:47	

LABORATORY CONTROL SAMPLE: 1267270

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mean Total Organic Carbon	mg/L	10	9.7	97	85-115	
Total Organic Carbon	mg/L	10	9.6	96	85-115	
Total Organic Carbon	mg/L	10	9.7	97	85-115	
Total Organic Carbon	mg/L	10	9.7	97	85-115	
Total Organic Carbon	mg/L	10	9.8	98	85-115	

MATRIX SPIKE SAMPLE: 1267271

Parameter	Units	7016360002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mean Total Organic Carbon	mg/L	7.0	10	15.2	82	85-115	ML
Total Organic Carbon	mg/L	6.9	10	14.9	81	85-115	ML
Total Organic Carbon	mg/L	7.0	10	14.9	79	85-115	ML
Total Organic Carbon	mg/L	7.0	10	15.5	85	85-115	
Total Organic Carbon	mg/L	6.9	10	15.4	84	85-115	ML

SAMPLE DUPLICATE: 1267277

Parameter	Units	7016438001 Result	Dup Result	RPD	Qualifiers
Mean Total Organic Carbon	mg/L	0.82J	0.77J		
Total Organic Carbon	mg/L	0.94J	0.83J		
Total Organic Carbon	mg/L	0.81J	0.74J		
Total Organic Carbon	mg/L	0.75J	0.78J		
Total Organic Carbon	mg/L	0.76J	0.74J		

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QUALITY CONTROL DATA

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

QC Batch: 257289 Analysis Method: EPA 9060A
QC Batch Method: EPA 9060A Analysis Description: 9060A TOC
Associated Lab Samples: 7016438015, 7016438016, 7016438017, 7016438018, 7016438019, 7016438020

METHOD BLANK: 1267273 Matrix: Water
Associated Lab Samples: 7016438015, 7016438016, 7016438017, 7016438018, 7016438019, 7016438020

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mean Total Organic Carbon	mg/L	<1.0	1.0	05/04/17 05:08	
Total Organic Carbon	mg/L	<1.0	1.0	05/04/17 05:08	
Total Organic Carbon	mg/L	<1.0	1.0	05/04/17 05:08	
Total Organic Carbon	mg/L	0.066J	1.0	05/04/17 05:08	
Total Organic Carbon	mg/L	<1.0	1.0	05/04/17 05:08	

LABORATORY CONTROL SAMPLE: 1267274

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mean Total Organic Carbon	mg/L	10	9.9	99	85-115	
Total Organic Carbon	mg/L	10	9.9	99	85-115	
Total Organic Carbon	mg/L	10	9.8	98	85-115	
Total Organic Carbon	mg/L	10	9.9	99	85-115	
Total Organic Carbon	mg/L	10	9.9	99	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1267275 1267276

Parameter	Units	7016438017 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Mean Total Organic Carbon	mg/L	0.36J	10	10	9.3	9.2	90	88	85-115	1	
Total Organic Carbon	mg/L	0.36J	10	10	9.4	9.3	91	90	85-115	1	
Total Organic Carbon	mg/L	0.36J	10	10	9.2	9.1	89	87	85-115	2	
Total Organic Carbon	mg/L	0.36J	10	10	9.4	9.3	90	89	85-115	1	
Total Organic Carbon	mg/L	0.37J	10	10	9.3	9.1	89	88	85-115	1	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

QUALIFIERS

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PACE-MV	Pace Analytical Services - Melville
PASI-PA	Pace Analytical Services - Greensburg

ANALYTE QUALIFIERS

B	Analyte was detected in the associated method blank.
CC	The continuing calibration for this compound is outside of method control limits. The result is estimated.
D6	The precision between the sample and sample duplicate exceeded laboratory control limits.
H1	Analysis conducted outside the EPA method holding time.
H3	Sample was received or analysis requested beyond the recognized method holding time.
L1	Analyte recovery in the laboratory control sample (LCS) was above QC limits. Results for this analyte in associated samples may be biased high.
L2	Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results for this analyte in associated samples may be biased low.
M0	Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
M6	Matrix spike and Matrix spike duplicate recovery not evaluated against control limits due to sample dilution.
ML	Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
7016438001	MW-1A	EPA 3005A	21872	EPA 6010C	21882
7016438002	MW-1B	EPA 3005A	21872	EPA 6010C	21882
7016438003	MW-1C	EPA 3005A	21872	EPA 6010C	21882
7016438005	MW-11B	EPA 3005A	21872	EPA 6010C	21882
7016438006	MW-12A	EPA 3005A	21872	EPA 6010C	21882
7016438007	MW-12B	EPA 3005A	21872	EPA 6010C	21882
7016438008	DUP001	EPA 3005A	21872	EPA 6010C	21882
7016438009	FB	EPA 3005A	21872	EPA 6010C	21882
7016438010	LEA-PRI	EPA 3005A	21872	EPA 6010C	21882
7016438011	LEA-SEC	EPA 3005A	21872	EPA 6010C	21882
7016438014	MW-11A	EPA 3005A	21873	EPA 6010C	21884
7016438015	MW-3A	EPA 3005A	21998	EPA 6010C	22012
7016438016	MW-3B	EPA 3005A	21998	EPA 6010C	22012
7016438017	MW-3C	EPA 3005A	21998	EPA 6010C	22012
7016438018	MW-4A	EPA 3005A	21998	EPA 6010C	22012
7016438019	MW-4B	EPA 3005A	21998	EPA 6010C	22012
7016438020	MW-4C	EPA 3005A	21998	EPA 6010C	22012
7016438005	MW-11B	EPA 6010C	22039		
7016438006	MW-12A	EPA 6010C	22039		
7016438014	MW-11A	EPA 6010C	22039		
7016438015	MW-3A	EPA 6010C	22039		
7016438001	MW-1A	EPA 7470A	21875	EPA 7470A	21886
7016438002	MW-1B	EPA 7470A	21875	EPA 7470A	21886
7016438003	MW-1C	EPA 7470A	21875	EPA 7470A	21886
7016438005	MW-11B	EPA 7470A	21875	EPA 7470A	21886
7016438006	MW-12A	EPA 7470A	21875	EPA 7470A	21886
7016438007	MW-12B	EPA 7470A	21875	EPA 7470A	21886
7016438008	DUP001	EPA 7470A	21875	EPA 7470A	21886
7016438009	FB	EPA 7470A	21875	EPA 7470A	21886
7016438014	MW-11A	EPA 7470A	21875	EPA 7470A	21886
7016438015	MW-3A	EPA 7470A	21875	EPA 7470A	21886
7016438016	MW-3B	EPA 7470A	21875	EPA 7470A	21886
7016438017	MW-3C	EPA 7470A	21875	EPA 7470A	21886
7016438018	MW-4A	EPA 7470A	21875	EPA 7470A	21886
7016438019	MW-4B	EPA 7470A	21875	EPA 7470A	21886
7016438020	MW-4C	EPA 7470A	21875	EPA 7470A	21886
7016438005	MW-11B	EPA 7470A	22314	EPA 7470A	22322
7016438006	MW-12A	EPA 7470A	22314	EPA 7470A	22322
7016438014	MW-11A	EPA 7470A	22314	EPA 7470A	22322
7016438015	MW-3A	EPA 7470A	22314	EPA 7470A	22322
7016438001	MW-1A	EPA 8260C/5030C	21790		
7016438002	MW-1B	EPA 8260C/5030C	21790		
7016438003	MW-1C	EPA 8260C/5030C	21790		
7016438005	MW-11B	EPA 8260C/5030C	21790		
7016438006	MW-12A	EPA 8260C/5030C	21790		
7016438007	MW-12B	EPA 8260C/5030C	21790		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
7016438008	DUP001	EPA 8260C/5030C	21790		
7016438009	FB	EPA 8260C/5030C	21790		
7016438012	TRIP BLANK	EPA 8260C/5030C	21790		
7016438013	STORAGE BLANK	EPA 8260C/5030C	21790		
7016438014	MW-11A	EPA 8260C/5030C	21790		
7016438015	MW-3A	EPA 8260C/5030C	21790		
7016438016	MW-3B	EPA 8260C/5030C	21790		
7016438017	MW-3C	EPA 8260C/5030C	21790		
7016438018	MW-4A	EPA 8260C/5030C	21790		
7016438019	MW-4B	EPA 8260C/5030C	21790		
7016438020	MW-4C	EPA 8260C/5030C	21790		
7016438021	TRIP BLANK	EPA 8260C/5030C	21790		
7016438001	MW-1A	SM22 2120B	21284		
7016438002	MW-1B	SM22 2120B	21284		
7016438003	MW-1C	SM22 2120B	21284		
7016438005	MW-11B	SM22 2120B	21284		
7016438006	MW-12A	SM22 2120B	21284		
7016438007	MW-12B	SM22 2120B	21284		
7016438008	DUP001	SM22 2120B	21284		
7016438009	FB	SM22 2120B	21284		
7016438014	MW-11A	SM22 2120B	21284		
7016438015	MW-3A	SM22 2120B	21510		
7016438016	MW-3B	SM22 2120B	21510		
7016438017	MW-3C	SM22 2120B	21510		
7016438018	MW-4A	SM22 2120B	21510		
7016438019	MW-4B	SM22 2120B	21510		
7016438020	MW-4C	SM22 2120B	21510		
7016438001	MW-1A	SM22 2320B	22096		
7016438002	MW-1B	SM22 2320B	22096		
7016438003	MW-1C	SM22 2320B	22096		
7016438005	MW-11B	SM22 2320B	22096		
7016438006	MW-12A	SM22 2320B	22096		
7016438007	MW-12B	SM22 2320B	22096		
7016438008	DUP001	SM22 2320B	22096		
7016438009	FB	SM22 2320B	22096		
7016438010	LEA-PRI	SM22 2320B	22096		
7016438011	LEA-SEC	SM22 2320B	22096		
7016438014	MW-11A	SM22 2320B	22096		
7016438015	MW-3A	SM22 2320B	22183		
7016438016	MW-3B	SM22 2320B	22183		
7016438017	MW-3C	SM22 2320B	22183		
7016438018	MW-4A	SM22 2320B	22183		
7016438019	MW-4B	SM22 2320B	22183		
7016438020	MW-4C	SM22 2320B	22183		
7016438001	MW-1A	SM22 2340C	22769		
7016438002	MW-1B	SM22 2340C	22769		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
7016438003	MW-1C	SM22 2340C	22769		
7016438005	MW-11B	SM22 2340C	22769		
7016438006	MW-12A	SM22 2340C	22769		
7016438007	MW-12B	SM22 2340C	22769		
7016438008	DUP001	SM22 2340C	22769		
7016438009	FB	SM22 2340C	22769		
7016438010	LEA-PRI	SM22 2340C	22769		
7016438011	LEA-SEC	SM22 2340C	22769		
7016438014	MW-11A	SM22 2340C	22769		
7016438015	MW-3A	SM22 2340C	22769		
7016438016	MW-3B	SM22 2340C	22769		
7016438017	MW-3C	SM22 2340C	22769		
7016438018	MW-4A	SM22 2340C	22769		
7016438019	MW-4B	SM22 2340C	22769		
7016438020	MW-4C	SM22 2340C	22769		
7016438001	MW-1A	SM22 2540C	22149		
7016438002	MW-1B	SM22 2540C	22149		
7016438003	MW-1C	SM22 2540C	22149		
7016438005	MW-11B	SM22 2540C	22149		
7016438006	MW-12A	SM22 2540C	22149		
7016438007	MW-12B	SM22 2540C	22149		
7016438008	DUP001	SM22 2540C	22149		
7016438009	FB	SM22 2540C	22149		
7016438010	LEA-PRI	SM22 2540C	22149		
7016438011	LEA-SEC	SM22 2540C	22149		
7016438014	MW-11A	SM22 2540C	22149		
7016438015	MW-3A	SM22 2540C	22149		
7016438016	MW-3B	SM22 2540C	22149		
7016438017	MW-3C	SM22 2540C	22149		
7016438018	MW-4A	SM22 2540C	22150		
7016438019	MW-4B	SM22 2540C	22150		
7016438020	MW-4C	SM22 2540C	22150		
7016438001	MW-1A	SM22 3500-Cr B	21357		
7016438002	MW-1B	SM22 3500-Cr B	21357		
7016438003	MW-1C	SM22 3500-Cr B	21357		
7016438005	MW-11B	SM22 3500-Cr B	21357		
7016438006	MW-12A	SM22 3500-Cr B	21357		
7016438007	MW-12B	SM22 3500-Cr B	21357		
7016438008	DUP001	SM22 3500-Cr B	21357		
7016438009	FB	SM22 3500-Cr B	21357		
7016438014	MW-11A	SM22 3500-Cr B	21357		
7016438015	MW-3A	SM22 3500-Cr B	21499		
7016438016	MW-3B	SM22 3500-Cr B	21499		
7016438017	MW-3C	SM22 3500-Cr B	21499		
7016438018	MW-4A	SM22 3500-Cr B	21499		
7016438019	MW-4B	SM22 3500-Cr B	21499		
7016438020	MW-4C	SM22 3500-Cr B	21499		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
7016438001	MW-1A	EPA 410.4	22293	EPA 410.4	22328
7016438002	MW-1B	EPA 410.4	22293	EPA 410.4	22328
7016438003	MW-1C	EPA 410.4	22293	EPA 410.4	22328
7016438005	MW-11B	EPA 410.4	22293	EPA 410.4	22328
7016438006	MW-12A	EPA 410.4	22293	EPA 410.4	22328
7016438007	MW-12B	EPA 410.4	22293	EPA 410.4	22328
7016438008	DUP001	EPA 410.4	22293	EPA 410.4	22328
7016438009	FB	EPA 410.4	22293	EPA 410.4	22328
7016438010	LEA-PRI	EPA 410.4	22293	EPA 410.4	22328
7016438011	LEA-SEC	EPA 410.4	22293	EPA 410.4	22328
7016438014	MW-11A	EPA 410.4	22293	EPA 410.4	22328
7016438015	MW-3A	EPA 410.4	22293	EPA 410.4	22328
7016438016	MW-3B	EPA 410.4	22293	EPA 410.4	22328
7016438017	MW-3C	EPA 410.4	22298	EPA 410.4	22355
7016438018	MW-4A	EPA 410.4	22298	EPA 410.4	22355
7016438019	MW-4B	EPA 410.4	22298	EPA 410.4	22355
7016438020	MW-4C	EPA 410.4	22298	EPA 410.4	22355
7016438001	MW-1A	SM22 5210B	21351	SM22 5210B	21944
7016438002	MW-1B	SM22 5210B	21351	SM22 5210B	21944
7016438003	MW-1C	SM22 5210B	21351	SM22 5210B	21944
7016438005	MW-11B	SM22 5210B	21381	SM22 5210B	22185
7016438006	MW-12A	SM22 5210B	21351	SM22 5210B	21944
7016438007	MW-12B	SM22 5210B	21351	SM22 5210B	21944
7016438008	DUP001	SM22 5210B	21351	SM22 5210B	21944
7016438009	FB	SM22 5210B	21351	SM22 5210B	21944
7016438010	LEA-PRI	SM22 5210B	21381	SM22 5210B	22185
7016438011	LEA-SEC	SM22 5210B	21381	SM22 5210B	22185
7016438014	MW-11A	SM22 5210B	21381	SM22 5210B	22185
7016438015	MW-3A	SM22 5210B	21476	SM22 5210B	22187
7016438016	MW-3B	SM22 5210B	21476	SM22 5210B	22187
7016438017	MW-3C	SM22 5210B	21476	SM22 5210B	22187
7016438018	MW-4A	SM22 5210B	21476	SM22 5210B	22187
7016438019	MW-4B	SM22 5210B	21476	SM22 5210B	22187
7016438020	MW-4C	SM22 5210B	21476	SM22 5210B	22187
7016438001	MW-1A	EPA 300.0	23352		
7016438002	MW-1B	EPA 300.0	23352		
7016438003	MW-1C	EPA 300.0	23352		
7016438005	MW-11B	EPA 300.0	23352		
7016438006	MW-12A	EPA 300.0	23352		
7016438007	MW-12B	EPA 300.0	23352		
7016438008	DUP001	EPA 300.0	23352		
7016438009	FB	EPA 300.0	23352		
7016438010	LEA-PRI	EPA 300.0	23352		
7016438011	LEA-SEC	EPA 300.0	23352		
7016438014	MW-11A	EPA 300.0	23352		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
7016438015	MW-3A	EPA 300.0	23352		
7016438016	MW-3B	EPA 300.0	23352		
7016438017	MW-3C	EPA 300.0	23352		
7016438018	MW-4A	EPA 300.0	23352		
7016438019	MW-4B	EPA 300.0	23352		
7016438020	MW-4C	EPA 300.0	23352		
7016438001	MW-1A	EPA 351.2	22567	EPA 351.2	22604
7016438002	MW-1B	EPA 351.2	22567	EPA 351.2	22604
7016438003	MW-1C	EPA 351.2	22567	EPA 351.2	22604
7016438005	MW-11B	EPA 351.2	22567	EPA 351.2	22604
7016438006	MW-12A	EPA 351.2	22567	EPA 351.2	22604
7016438007	MW-12B	EPA 351.2	22567	EPA 351.2	22604
7016438008	DUP001	EPA 351.2	22567	EPA 351.2	22604
7016438009	FB	EPA 351.2	22567	EPA 351.2	22604
7016438010	LEA-PRI	EPA 351.2	22567	EPA 351.2	22604
7016438011	LEA-SEC	EPA 351.2	22567	EPA 351.2	22604
7016438014	MW-11A	EPA 351.2	22567	EPA 351.2	22604
7016438015	MW-3A	EPA 351.2	22567	EPA 351.2	22604
7016438016	MW-3B	EPA 351.2	22567	EPA 351.2	22604
7016438017	MW-3C	EPA 351.2	22567	EPA 351.2	22604
7016438018	MW-4A	EPA 351.2	22567	EPA 351.2	22604
7016438019	MW-4B	EPA 351.2	22567	EPA 351.2	22604
7016438020	MW-4C	EPA 351.2	22568	EPA 351.2	22605
7016438001	MW-1A	EPA 353.2	21366		
7016438002	MW-1B	EPA 353.2	21366		
7016438003	MW-1C	EPA 353.2	21366		
7016438005	MW-11B	EPA 353.2	21366		
7016438009	FB	EPA 353.2	21365		
7016438010	LEA-PRI	EPA 353.2	21365		
7016438011	LEA-SEC	EPA 353.2	21365		
7016438014	MW-11A	EPA 353.2	21365		
7016438006	MW-12A	EPA 353.2	22106		
7016438007	MW-12B	EPA 353.2	22106		
7016438008	DUP001	EPA 353.2	22106		
7016438015	MW-3A	EPA 353.2	22106		
7016438016	MW-3B	EPA 353.2	22106		
7016438017	MW-3C	EPA 353.2	22106		
7016438018	MW-4A	EPA 353.2	22106		
7016438019	MW-4B	EPA 353.2	22106		
7016438020	MW-4C	EPA 353.2	22106		
7016438001	MW-1A	EPA 353.2	21361		
7016438002	MW-1B	EPA 353.2	21361		
7016438003	MW-1C	EPA 353.2	21361		
7016438005	MW-11B	EPA 353.2	21361		
7016438006	MW-12A	EPA 353.2	21361		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
7016438007	MW-12B	EPA 353.2	21360		
7016438008	DUP001	EPA 353.2	21360		
7016438009	FB	EPA 353.2	21360		
7016438010	LEA-PRI	EPA 353.2	21360		
7016438011	LEA-SEC	EPA 353.2	21360		
7016438014	MW-11A	EPA 353.2	21360		
7016438015	MW-3A	EPA 353.2	21500		
7016438016	MW-3B	EPA 353.2	21500		
7016438017	MW-3C	EPA 353.2	21500		
7016438018	MW-4A	EPA 353.2	21500		
7016438019	MW-4B	EPA 353.2	21500		
7016438020	MW-4C	EPA 353.2	21500		
7016438001	MW-1A	EPA 420.1	22664	EPA 420.1	22684
7016438002	MW-1B	EPA 420.1	22664	EPA 420.1	22684
7016438003	MW-1C	EPA 420.1	22664	EPA 420.1	22684
7016438005	MW-11B	EPA 420.1	22664	EPA 420.1	22684
7016438006	MW-12A	EPA 420.1	22664	EPA 420.1	22684
7016438007	MW-12B	EPA 420.1	22664	EPA 420.1	22684
7016438008	DUP001	EPA 420.1	22664	EPA 420.1	22684
7016438009	FB	EPA 420.1	22664	EPA 420.1	22684
7016438010	LEA-PRI	EPA 420.1	22664	EPA 420.1	22684
7016438011	LEA-SEC	EPA 420.1	22770	EPA 420.1	22830
7016438014	MW-11A	EPA 420.1	22770	EPA 420.1	22830
7016438015	MW-3A	EPA 420.1	22770	EPA 420.1	22830
7016438016	MW-3B	EPA 420.1	22770	EPA 420.1	22830
7016438017	MW-3C	EPA 420.1	22770	EPA 420.1	22830
7016438018	MW-4A	EPA 420.1	22770	EPA 420.1	22830
7016438019	MW-4B	EPA 420.1	22770	EPA 420.1	22830
7016438020	MW-4C	EPA 420.1	22770	EPA 420.1	22830
7016438001	MW-1A	SM22 4500 NH3 H	23117		
7016438002	MW-1B	SM22 4500 NH3 H	23117		
7016438003	MW-1C	SM22 4500 NH3 H	23117		
7016438005	MW-11B	SM22 4500 NH3 H	23117		
7016438006	MW-12A	SM22 4500 NH3 H	23117		
7016438007	MW-12B	SM22 4500 NH3 H	23117		
7016438008	DUP001	SM22 4500 NH3 H	23117		
7016438009	FB	SM22 4500 NH3 H	23117		
7016438010	LEA-PRI	SM22 4500 NH3 H	23117		
7016438011	LEA-SEC	SM22 4500 NH3 H	23117		
7016438014	MW-11A	SM22 4500 NH3 H	23117		
7016438015	MW-3A	SM22 4500 NH3 H	23117		
7016438016	MW-3B	SM22 4500 NH3 H	23117		
7016438017	MW-3C	SM22 4500 NH3 H	23489		
7016438018	MW-4A	SM22 4500 NH3 H	23117		
7016438019	MW-4B	SM22 4500 NH3 H	23117		
7016438020	MW-4C	SM22 4500 NH3 H	23117		

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Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
7016438010	**LEA-PRI**	SM5310C-00	257000		
7016438011	**LEA-SEC**	SM5310C-00	257000		
7016438001	**MW-1A**	EPA 9010C	22588	EPA 9014 Total Cyanide	22629
7016438002	**MW-1B**	EPA 9010C	22588	EPA 9014 Total Cyanide	22629
7016438003	**MW-1C**	EPA 9010C	22588	EPA 9014 Total Cyanide	22629
7016438005	**MW-11B**	EPA 9010C	22588	EPA 9014 Total Cyanide	22629
7016438006	**MW-12A**	EPA 9010C	22588	EPA 9014 Total Cyanide	22629
7016438007	**MW-12B**	EPA 9010C	22588	EPA 9014 Total Cyanide	22629
7016438008	**DUP001**	EPA 9010C	22588	EPA 9014 Total Cyanide	22629
7016438009	**FB**	EPA 9010C	22749	EPA 9014 Total Cyanide	22800
7016438014	**MW-11A**	EPA 9010C	22749	EPA 9014 Total Cyanide	22800
7016438015	**MW-3A**	EPA 9010C	22749	EPA 9014 Total Cyanide	22800
7016438016	**MW-3B**	EPA 9010C	22749	EPA 9014 Total Cyanide	22800
7016438017	**MW-3C**	EPA 9010C	22749	EPA 9014 Total Cyanide	22800
7016438018	**MW-4A**	EPA 9010C	22749	EPA 9014 Total Cyanide	22800
7016438019	**MW-4B**	EPA 9010C	22749	EPA 9014 Total Cyanide	22800
7016438020	**MW-4C**	EPA 9010C	22749	EPA 9014 Total Cyanide	22800
7016438001	**MW-1A**	EPA 9060A	257288		
7016438002	**MW-1B**	EPA 9060A	257288		
7016438003	**MW-1C**	EPA 9060A	257288		
7016438005	**MW-11B**	EPA 9060A	257288		
7016438006	**MW-12A**	EPA 9060A	257288		
7016438007	**MW-12B**	EPA 9060A	257288		
7016438008	**DUP001**	EPA 9060A	257288		
7016438009	**FB**	EPA 9060A	257288		
7016438014	**MW-11A**	EPA 9060A	257288		
7016438015	**MW-3A**	EPA 9060A	257289		
7016438016	**MW-3B**	EPA 9060A	257289		
7016438017	**MW-3C**	EPA 9060A	257289		
7016438018	**MW-4A**	EPA 9060A	257289		
7016438019	**MW-4B**	EPA 9060A	257289		
7016438020	**MW-4C**	EPA 9060A	257289		

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Pace Analytical
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed ac

WO#: 7016438

7016438

Section A Required Client Information:

Company: PW Grosser Consulting
Address: 630 Johnson Ave
Bohemia, NY 11716
Email To: dereke@pwgrosser.com
Phone: 631-589-6353 Fax:
Requested Due Date/TAT:

Section B Required Project Information:

Report To: Derek Ersbak
Copy To:
Purchase Order No.:
Project Name: North Sea Landfill
Project Number: NSH1701

Section C Invoice Information:

Attention: Same as Client
Company Name:
Address:
Pace Quote Reference:
Pace Project Manager:
Pace Profile #:

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER

Site Location STATE:

Section D Required Client Information

SAMPLE ID
(A-Z, 0-9 / ,-)
Sample IDs MUST BE UNIQUE

Matrix Codes — MATRIX / CODE
Drinking Water DW
Water WT
Waste Water WW
Product P
Soil/Solid SL
Oil OL
Wipe WP
Air AR
Tissue TS
Other OT

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	Baseline Parameters	Filtered Metals	Routine Parameters	Arsenic	Baseline VOC	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	MW-1A	WT	G			4-19-17	1030		9	X	X	X	X	X					X						-001
2	MW-1B						1005		9	X	X	X	X	X					X						-002
3	MW-1C						0920		9	X	X	X	X	X					X						-003
4	MW-11A						1215		10	X	X	X	X	X					X	X					~~-004~~ -014
5	MW-11B						1200		9	X	X	X	X	X					X						-005
6	MW-12A						0730		10	X	X	X	X	X					X	X					-006
7	MW-12B						0800		9	X	X	X	X	X					X						-007
8	LEA-PRI						1300		7	X	X	X		X							X	X			-010
9	LEA-SEC						1315		7	X	X	X		X							X	X			-011
10	DUP001						XX		9	X	X	X	X	X					X						-008
11	(LC) ~~Field Blank~~ FB					↓	0900		9	X	X	X	X	X					X					(LC)	-009
12	TRIP BLANK	↓	↓			↓	XX		2				X						X						-012

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
ASP B Category B Deliverables	BBK	4/20/17	1140	Mary D'Amore	4-20-17	1140				
	Mary D'Amore	4-20-17	1220		4/20/17	1220	6.0	Y	Y	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Kaitlyn Crosby
SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 04/19/17

Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

ORIGINAL

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

F-ALL-Q-020rev.07, 15-May-2007

Pace Analytical

Sample Condition Upon Rece

WO#: 7016438

PM: JSA Due Date: 05/04/17
CLIENT: TOS

Client Name: Pw Grosset

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☐ Other _____

Optional
Proj. Due Date:
Proj. Name:

Tracking #: _____

Custody Seal on Cooler/Box Present: ☐ yes ☐ no Seals intact: ☐ yes ☐ no

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☐ None ☐ Other _____

Thermometer Used: ~~TH077~~ ~~TH078~~ Type of Ice: Wet Blue None ☐ Samples on ice, cooling process has begun

Cooler Temperature: 6-0 TH092

Date and Initials of person examining contents: _____

Temp should be above freezing to 6°C

		Comments:
Chain of Custody Present:	☐Yes ☐No ☐N/A	1.
Chain of Custody Filled Out:	☐Yes ☐No ☐N/A	2.
Chain of Custody Relinquished:	☐Yes ☐No ☐N/A	3.
Sampler Name & Signature on COC:	☐Yes ☐No ☐N/A	4.
Samples Arrived within Hold Time:	☐Yes ☐No ☐N/A	5.
Short Hold Time Analysis (<72hr):	☐Yes ☐No ☐N/A	6.
Rush Turn Around Time Requested:	☐Yes ☐No ☐N/A	7.
Sufficient Volume:	☐Yes ☐No ☐N/A	8. 1250 unpreserved
Correct Containers Used:	☐Yes ☐No ☐N/A	9. Client provided one extra bottle for sample
-Pace Containers Used:	☐Yes ☐No ☐N/A	"MW-11B", this sample was logged for
Containers Intact:	☐Yes ☐No ☐N/A	10. diss metals out of this container although
Filtered volume received for Dissolved tests	☐Yes ☐No ☐N/A	11. this analysis is not requested on the COC.
Sample Labels match COC:	☐Yes ☐No ☐N/A	12. Client also provided a 1L bottle for sample
-Includes date/time/ID/Analysis Matrix SL WT OIL		LEA-PET + LEA-SEC. Samples not logged
All containers needing preservation have been checked.	☐Yes ☐No ☐N/A	13. for 1L but the NAOH bottle was added
All containers needing preservation are found to be in compliance with EPA recommendation.	☐Yes ☐No ☐N/A	Initial when completed: to the SY Lot # of added preservative:
Exceptions: VOA, micro, TOC, O&G		Date and Time preservative added:
Samples checked for dechlorination:	☐Yes ☐No ☐N/A	14.
Headspace in VOA Vials (>6mm):	☐Yes ☐No ☐N/A	15.
Trip Blank Present:	☐Yes ☐No ☐N/A	16.
Trip Blank Custody Seals Present	☐Yes ☐No ☐N/A	
Pace Trip Blank Lot # (if purchased): _____		

Client Notification/ Resolution: Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

* PM (Project Manager) review is documented electronically in LIMS.

F-LI-C-002-rev.00

Pace Analytical
www.pacelabs.com

CHAIN-OF-CUSTOD

The Chain-of-Custody is a LEGAL D

WO#: 7016438

PM: JSA Due Date: 05/04/17

CLIENT: TOS

2137886

Section A Required Client Information:

Company: PWGC
Address: 630 Johnson Ave
Bohemia, NY 11716
Email To: dereke@pwgrosser.com
Phone: 631-589-6353 Fax:
Requested Due Date/TAT: Standard

Section B Required Project Information:

Report To: Derek Ersbak
Copy To:
Purchase Order No.:
Project Name: North Sea Landfill
Project Number: SHP 1701

Section C Invoice Info.

Attention: Same as Client
Company Name:
Address:
Pace Quote Reference:
Pace Project Manager:
Pace Profile #:

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER _____

Site Location STATE: _____

Section D Required Client Information

SAMPLE ID
(A-Z, 0-9 / ,-)
Sample IDs MUST BE UNIQUE

Matrix Codes — MATRIX / CODE
Drinking Water DW
Water WT
Waste Water WW
Product P
Soil/Solid SL
Oil OL
Wipe WP
Air AR
Tissue TS
Other OT

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED: COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N: Baseline Parameters	Filtered Metals	Baseline VOCs	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	MW-3A	WT	G			4-20-17	0955		10	X	X	X	X	X				X	X			015
2	MW-3B						0940		9													016
3	MW-3C						0850		9													017
4	MW-3C/MS						0850		9													
5	MW-3C/MSD						0850		9													
6	MW-4A						1230		9													018
7	MW-4B						1205		9													019
8	MW-4C						1115		9													020
9	TRIP BLANK					XX	XX		2				X							X		021
10																						
11																						
12																						

Requested Analysis Filtered (Y/N)

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
	Kaitlyn Crosby	4-21-17	10:23		4-21-17	10:23				
		4-21-17	11:00		4/21/17	1100	1.0	Y	Y	Y

ORIGINAL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Kaitlyn Crosby

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 04/20/17

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

WO#:7016438

PM: JSA Due Date: 05/04/17
CLIENT: TOS

Pace Analytical

Sample Condition Upon Receipt

Client Name: PW Grosser

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☑ Pace ☐ Other _____

Optional
Proj. Due Date:
Proj. Name:

Tracking #: _____

Custody Seal on Cooler/Box Present: ☑ yes ☐ no Seals intact: ☑ yes ☐ no

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☑ None ☐ Other _____

Thermometer Used: ~~TH077~~ ~~TH078~~ Type of Ice: ☑ Wet ☐ Blue ☐ None ☐ Samples on ice, cooling process has begun

Cooler Temperature: 1.0 TH092

Date and Initials of person examining contents: CT 4/21/17

Temp should be above freezing to 6°C

		Comments:
Chain of Custody Present:	☑Yes ☐No ☐N/A	1.
Chain of Custody Filled Out:	☑Yes ☐No ☐N/A	2.
Chain of Custody Relinquished:	☑Yes ☐No ☐N/A	3.
Sampler Name & Signature on COC:	☑Yes ☐No ☐N/A	4.
Samples Arrived within Hold Time:	☑Yes ☐No ☐N/A	5.
Short Hold Time Analysis (<72hr):	☑Yes ☐No ☐N/A	6.
Rush Turn Around Time Requested:	☐Yes ☑No ☐N/A	7.
Sufficient Volume:	☑Yes ☐No ☐N/A	8.
Correct Containers Used:	☑Yes ☐No ☐N/A	9.
-Pace Containers Used:	☑Yes ☐No ☐N/A	
Containers Intact:	☑Yes ☐No ☐N/A	10.
Filtered volume received for Dissolved tests	☑Yes ☐No ☐N/A	11.
Sample Labels match COC:	☑Yes ☐No ☐N/A	12.
-Includes date/time/ID/Analysis Matrix SL WT OIL		
All containers needing preservation have been checked.	☑Yes ☐No ☐N/A	13. Sample MW-4C, bottle AG3S
All containers needing preservation are found to be in compliance with EPA recommendation.	☐Yes ☑No ☐N/A	Initial when completed: NC; Lot # of added preservative: S22 67 1 mL H_2SO_4; Date and Time preservative added: 4/21/17 12:47
Exceptions: VOA, micro, TOC, O&G		
Samples checked for dechlorination:	☐Yes ☐No ☑N/A	14.
Headspace in VOA Vials (>6mm):	☐Yes ☑No ☐N/A	15.
Trip Blank Present:	☑Yes ☐No ☐N/A	16.
Trip Blank Custody Seals Present	☑Yes ☐No ☐N/A	
Pace Trip Blank Lot # (if purchased): _____		

Client Notification/ Resolution: Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

* PM (Project Manager) review is documented electronically in LIMS.

F-LI-C-002-rev.00

MSV - FORM II VOA-1
WATER VOLATILE SURROGATE RECOVERY

Lab Name: Pace Analytical - New York SDG No.: 7016438 Contract: NORTH SEA LANDFILL

Instrument ID: 70MSV6

LAB SAMPLE ID	SAMPLE NAME	12D4	BFB	TOL8
103008	103008BLANK	90	119	112
103009	103009LCS	88	116	115
103081	103081MS	91	118	112
103082	103082MSD	89	119	112
7016438001	MW-1A	90	119	117
7016438002	MW-1B	90	118	112
7016438003	MW-1C	89	120	115
7016438005	MW-11B	90	118	113
7016438006	MW-12A	90	119	114
7016438007	MW-12B	90	119	113
7016438008	DUP001	91	118	111
7016438009	FB	90	118	113
7016438012	TRIP BLANK	89	115	119
7016438013	STORAGE BLANK	89	111	113
7016438014	MW-11A	91	119	108
7016438015	MW-3A	91	122	114
7016438016	MW-3B	91	116	113
7016438017	MW-3C	90	119	113
7016438018	MW-4A	92	117	111
7016438019	MW-4B	91	119	112
7016438020	MW-4C	90	118	112
7016438021	TRIP BLANK	90	122	115

	QC LIMITS
(12D4) = 1,2-Dichloroethane-d4 (S)	(68-153)
(BFB) = 4-Bromofluorobenzene (S)	(79-124)
(TOL8) = Toluene-d8 (S)	(69-124)

* Values outside of QC Limits

MSV - FORM III VOA-1

WATER LABORATORY CONTROL SAMPLE RECOVERY

Lab Name: Pace Analytical - New York
Lab Sample ID: 103009LCS
Date Extracted: 04/25/2017
Date Analyzed (1): 04/25/2017
Instrument: 70MSV6
LCS Lot No: 15067
Lab File ID: 042517.B\J34398.D
SDG No.: 7016438

COMPOUND	AMOUNT ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS %REC	QC LIMITS REC.
Acetone	50.0	50.6	101	23-188
Acrylonitrile	50.0	33.4	67	59-148
Benzene	50.0	42.3	85	73-119
Bromochloromethane	50.0	43.9	88	81-116
Bromodichloromethane	50.0	47.8	96	78-117
Bromoform	50.0	50.2	100	65-122
Bromomethane	50.0	30.4	61	52-147
2-Butanone (MEK)	50.0	38.9	78	44-162
Carbon disulfide	50.0	38.9	78	41-144
Carbon tetrachloride	50.0	52.5	105	59-120
Chlorobenzene	50.0	47.2	94	75-113
Chloroethane	50.0	36.5	73	49-151
Chloroform	50.0	40.0	80	72-122
Chloromethane	50.0	29.3	59	46-144
1,2-Dibromo-3-chloropropane	50.0	41.3	83	74-119
Dibromochloromethane	50.0	61.7	123	70-120
1,2-Dibromoethane (EDB)	50.0	55.8	112	83-115
Dibromomethane	50.0	42.4	85	75-125
1,2-Dichlorobenzene	50.0	44.4	89	74-113
1,4-Dichlorobenzene	50.0	43.9	88	71-113
trans-1,4-Dichloro-2-butene	50.0	36.3	73	71-121
1,1-Dichloroethane	50.0	37.1	74	83-151
1,2-Dichloroethane	50.0	35.0	70	74-129
1,1-Dichloroethene	50.0	40.9	82	45-146
cis-1,2-Dichloroethene	50.0	42.8	86	72-121
trans-1,2-Dichloroethene	50.0	42.6	85	56-142
1,2-Dichloropropane	50.0	38.7	77	75-117
cis-1,3-Dichloropropene	50.0	48.2	96	78-116
trans-1,3-Dichloropropene	50.0	42.8	86	79-116
Ethylbenzene	50.0	47.1	94	70-113
2-Hexanone	50.0	42.2	84	32-183
Iodomethane	50.0	35.8	72	61-144
Methylene Chloride	50.0	43.4	87	61-142
4-Methyl-2-pentanone (MIBK)	50.0	34.1	68	69-132
Styrene	50.0	45.7	91	72-118
1,1,1,2-Tetrachloroethane	50.0	51.1	102	74-113
1,1,2,2-Tetrachloroethane	50.0	38.5	77	74-121
Tetrachloroethene	50.0	50.3	101	60-128
Toluene	50.0	43.1	86	72-119
1,1,1-Trichloroethane	50.0	44.0	88	65-118
1,1,2-Trichloroethane	50.0	44.0	88	80-117
Trichloroethene	50.0	43.7	87	69-117
Trichlorofluoromethane	50.0	37.4	75	27-173
1,2,3-Trichloropropane	50.0	40.2	80	71-123
Vinyl acetate	50.0	43.6	87	20-158
Vinyl chloride	50.0	35.5	71	43-143
Xylene (Total)	150	140	93	71-109

MSV - FORM III VOA-2

WATER LABORATORY CONTROL SAMPLE RECOVERY

Lab Name: Pace Analytical - New York
Lab Sample ID: 103009LCS
Date Extracted: 04/25/2017
Date Analyzed (1): 04/25/2017
Instrument: 70MSV6
LCS Lot No: 15067
Lab File ID: 042517.B\J34398.D
SDG No.: 7016438

COMPOUND	AMOUNT ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS %REC	QC LIMITS REC.

Spike Recovery: 4 out of 47 outside limits.

MSV - FORM III VOA-1

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Pace Analytical - New York | Matrix Spike - Sample No: 103081MS

Date Extracted: 04/25/2017 | Date Analyzed (1): 04/25/2017

Instrument: 70MSV6 | Lab File ID: 042517.B\J34417.D

Parent Sample ID: MW-3C | SDG No.: 7016438

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS %REC	QC LIMITS REC.
1,1,1,2-Tetrachloroethane	50.0	<5.0	48.8	98	74-113
1,1,1-Trichloroethane	50.0	<5.0	48.2	96	65-118
1,1,2,2-Tetrachloroethane	50.0	<5.0	38.3	77	74-121
1,1,2-Trichloroethane	50.0	<5.0	44.5	89	80-117
1,1-Dichloroethane	50.0	<5.0	41.3	83	83-151
1,1-Dichloroethene	50.0	<5.0	52.6	105	45-146
1,2,3-Trichloropropane	50.0	<5.0	40.4	81	71-123
1,2-Dibromo-3-chloropropane	50.0	<5.0	38.9	78	74-119
1,2-Dibromoethane (EDB)	50.0	<5.0	56.9	114	83-115
1,2-Dichlorobenzene	50.0	<5.0	44.7	89	74-113
1,2-Dichloroethane	50.0	<5.0	37.5	75	74-129
1,2-Dichloropropane	50.0	<5.0	39.8	80	75-117
1,4-Dichlorobenzene	50.0	<5.0	43.4	87	71-113
2-Butanone (MEK)	50.0	<5.0	33.9	68	44-162
2-Hexanone	50.0	<5.0	30.3	61	32-183
4-Methyl-2-pentanone (MIBK)	50.0	<5.0	33.9	68	69-132
Acetone	50.0	2.4J	31.5	58	23-188
Acrylonitrile	50.0	<5.0	35.6	71	59-148
Benzene	50.0	<5.0	44.9	90	73-119
Bromochloromethane	50.0	<5.0	45.8	92	81-116
Bromodichloromethane	50.0	<5.0	46.2	92	78-117
Bromoform	50.0	<5.0	46.6	93	65-122
Bromomethane	50.0	<5.0	39.3	79	52-147
Carbon disulfide	50.0	<5.0	49.7	99	41-144
Carbon tetrachloride	50.0	<5.0	57.0	114	59-120
Chlorobenzene	50.0	<5.0	47.4	95	75-113
Chloroethane	50.0	<5.0	46.7	93	49-151
Chloroform	50.0	<5.0	43.7	87	72-122
Chloromethane	50.0	<5.0	43.3	87	46-144
Dibromochloromethane	50.0	<5.0	56.3	113	70-120
Dibromomethane	50.0	<5.0	42.7	85	75-125
Ethylbenzene	50.0	<5.0	49.3	99	70-113
Iodomethane	50.0	<5.0	42.2	84	61-144
Methylene Chloride	50.0	<5.0	47.0	94	61-142
Styrene	50.0	<5.0	48.0	96	72-118
Tetrachloroethene	50.0	<5.0	54.3	109	60-128
Toluene	50.0	<5.0	45.6	91	72-119
Trichloroethene	50.0	<5.0	47.3	95	69-117
Trichlorofluoromethane	50.0	<5.0	49.8	100	27-173
Vinyl acetate	50.0	<5.0	43.4	87	20-158
Vinyl chloride	50.0	<5.0	50.8	102	43-143
Xylene (Total)	150	<5.0	146	97	71-109
cis-1,2-Dichloroethene	50.0	<5.0	46.2	92	72-121
cis-1,3-Dichloropropene	50.0	<5.0	46.5	93	78-116
trans-1,2-Dichloroethene	50.0	<5.0	48.1	96	56-142
trans-1,3-Dichloropropene	50.0	<5.0	41.2	82	79-116
trans-1,4-Dichloro-2-butene	50.0	<5.0	34.8	70	71-121

MSV - FORM III VOA-2

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Pace Analytical - New York
Matrix Spike - Sample No: 103081MS

Date Extracted: 04/25/2017
Date Analyzed (1): 04/25/2017

Instrument: 70MSV6
Lab File ID: 042517.B\J34417.D

Parent Sample ID: MW-3C
SDG No.: 7016438

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS %REC	QC LIMITS REC.

Spike Recovery: 2 out of 47 outside limits.

MSV - FORM III VOA-3

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Instrument (2): 70MSV6 Matrix Spike Duplicate - Sample No: 103082MSD

Lab File ID (2): 042517.B\J34418.D Date Analyzed (2): 04/25/2017

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD %REC	%RPD	QC LIMITS	
					RPD	REC.
1,1,1,2-Tetrachloroethane	50.0	55.2	110	12	0-20	74-113
1,1,1-Trichloroethane	50.0	53.7	107	11	0-20	65-118
1,1,2,2-Tetrachloroethane	50.0	43.6	87	13	0-20	74-121
1,1,2-Trichloroethane	50.0	47.9	96	7	0-20	80-117
1,1-Dichloroethane	50.0	44.6	89	8	0-20	83-151
1,1-Dichloroethene	50.0	59.1	118	12	0-20	45-146
1,2,3-Trichloropropane	50.0	45.9	92	13	0-20	71-123
1,2-Dibromo-3-chloropropane	50.0	42.4	85	9	0-20	74-119
1,2-Dibromoethane (EDB)	50.0	61.5	123	8	0-20	83-115
1,2-Dichlorobenzene	50.0	46.2	92	3	0-20	74-113
1,2-Dichloroethane	50.0	40.1	80	7	0-20	74-129
1,2-Dichloropropane	50.0	43.0	86	8	0-20	75-117
1,4-Dichlorobenzene	50.0	48.7	97	12	0-20	71-113
2-Butanone (MEK)	50.0	34.2	68	1	0-20	44-162
2-Hexanone	50.0	33.0	66	9	0-20	32-183
4-Methyl-2-pentanone (MIBK)	50.0	35.7	71	5	0-20	69-132
Acetone	50.0	32.6	60	3	0-20	23-188
Acrylonitrile	50.0	37.9	76	6	0-20	59-148
Benzene	50.0	49.1	98	9	0-20	73-119
Bromochloromethane	50.0	48.9	98	6	0-20	81-116
Bromodichloromethane	50.0	52.2	104	12	0-20	78-117
Bromoform	50.0	53.2	106	13	0-20	65-122
Bromomethane	50.0	46.0	92	16	0-20	52-147
Carbon disulfide	50.0	49.3	99	1	0-20	41-144
Carbon tetrachloride	50.0	67.0	134	16	0-20	59-120
Chlorobenzene	50.0	53.0	106	11	0-20	75-113
Chloroethane	50.0	50.0	100	7	0-20	49-151
Chloroform	50.0	46.7	93	7	0-20	72-122
Chloromethane	50.0	45.4	91	5	0-20	46-144
Dibromochloromethane	50.0	65.1	130	15	0-20	70-120
Dibromomethane	50.0	46.6	93	9	0-20	75-125
Ethylbenzene	50.0	54.7	109	11	0-20	70-113
Iodomethane	50.0	44.1	88	5	0-20	61-144
Methylene Chloride	50.0	48.4	97	3	0-20	61-142
Styrene	50.0	53.5	107	11	0-20	72-118
Tetrachloroethene	50.0	61.2	122	12	0-20	60-128
Toluene	50.0	49.8	100	9	0-20	72-119
Trichloroethene	50.0	52.1	104	10	0-20	69-117
Trichlorofluoromethane	50.0	54.1	108	8	0-20	27-173
Vinyl acetate	50.0	52.5	105	19	0-20	20-158
Vinyl chloride	50.0	54.1	108	6	0-20	43-143
Xylene (Total)	150	162	108	11	0-20	71-109
cis-1,2-Dichloroethene	50.0	50.4	101	9	0-20	72-121
cis-1,3-Dichloropropene	50.0	52.4	105	12	0-20	78-116
trans-1,2-Dichloroethene	50.0	52.7	105	9	0-20	56-142
trans-1,3-Dichloropropene	50.0	46.3	93	12	0-20	79-116
trans-1,4-Dichloro-2-butene	50.0	39.8	80	13	0-20	71-121

MSV - FORM III VOA-4

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Instrument (2): 70MSV6 Matrix Spike Duplicate - Sample No: 103082MSD

Lab File ID (2): 042517.B\J34418.D Date Analyzed (2): 04/25/2017

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD %REC	%RPD	QC LIMITS	
					RPD	REC.

RPD: 0 out of 47 outside limits.

Spike Recovery: 3 out of 47 outside limits.

SAMPLE NO.

103008BLANK

MSV - FORM IV VOA-1
VOLATILE METHOD BLANK SUMMARY

Lab Name: Pace Analytical - New York SDG No.: 7016438 Contract: NORTH SEA LANDFILL

Instrument ID: 70MSV6 Matrix: Water Lab Sample ID: 103008

Lab File ID: 042517.B\J34397.D Date Analyzed: 04/25/2017 Time: 13:06

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	ANALYZED
103009LCS	103009	042517.B\J34398.D	04/25/2017 13:27
TRIP BLANK	7016438012	042517.B\J34399.D	04/25/2017 13:46
STORAGE BLANK	7016438013	042517.B\J34400.D	04/25/2017 14:03
FB	7016438009	042517.B\J34401.D	04/25/2017 14:21
TRIP BLANK	7016438021	042517.B\J34402.D	04/25/2017 14:39
MW-11A	7016438014	042517.B\J34403.D	04/25/2017 14:57
MW-1A	7016438001	042517.B\J34404.D	04/25/2017 15:15
MW-1B	7016438002	042517.B\J34405.D	04/25/2017 15:33
MW-1C	7016438003	042517.B\J34406.D	04/25/2017 15:50
MW-11B	7016438005	042517.B\J34407.D	04/25/2017 16:08
MW-12A	7016438006	042517.B\J34408.D	04/25/2017 16:26
MW-12B	7016438007	042517.B\J34409.D	04/25/2017 16:44
DUP001	7016438008	042517.B\J34410.D	04/25/2017 17:02
MW-3A	7016438015	042517.B\J34411.D	04/25/2017 17:20
MW-3B	7016438016	042517.B\J34412.D	04/25/2017 17:37
MW-3C	7016438017	042517.B\J34413.D	04/25/2017 17:55
MW-4A	7016438018	042517.B\J34414.D	04/25/2017 18:13
MW-4B	7016438019	042517.B\J34415.D	04/25/2017 18:31
MW-4C	7016438020	042517.B\J34416.D	04/25/2017 18:49
103081MS	103081	042517.B\J34417.D	04/25/2017 19:07
103082MSD	103082	042517.B\J34418.D	04/25/2017 19:25

MSV - FORM V VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET
PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Pace Analytical - New York SDG No.: 7016438 Contract: NORTH SEA LANDFILL
Lab File ID: 032717.B\J33242A.D BFB Injection Date: 03/27/2017
Instrument ID: 70MSV6 BFB Injection Time: 17:19

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.00 - 40.00% of mass 95	23.72	
75	30.00 - 60.00% of mass 95	53.35	
95	Base Peak, 100.00% relative abundance	100.00	
96	5.00 - 9.00% of mass 95	6.78	
173	Less than 2.00% of mass 174	0.89	(1.27)[1]
174	50.00 - 100.00% of mass 95	70.39	
175	5.00 - 9.00% of mass 174	5.88	(8.35)[1]
176	95.00 - 101.00% of mass 174	68.27	(96.98)[1]
177	5.00 - 9.00% of mass 176	4.87	(7.13)[2]

1 - Value is % mass 174 2 - Value is % mass 176

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
8655968CAL1	8655968CAL1	032717.B\J33243.D	03/27/2017	18:07
8655964CAL2	8655964CAL2	032717.B\J33244.D	03/27/2017	18:25
8655971CAL3	8655971CAL3	032717.B\J33245.D	03/27/2017	18:42
8655970CAL4	8655970CAL4	032717.B\J33246.D	03/27/2017	19:00
8655967CAL5	8655967CAL5	032717.B\J33247.D	03/27/2017	19:18
8655965CAL6	8655965CAL6	032717.B\J33248.D	03/27/2017	19:36
8655973CAL7	8655973CAL7	032717.B\J33249.D	03/27/2017	19:54
8655969CAL8	8655969CAL8	032717.B\J33250.D	03/27/2017	20:12
8793336ICV	8793336ICV	032717.B\J33253.D	03/27/2017	21:57

MSV - FORM V VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

PERFORMANCE CHECK

BROMOFLUOROBENZENE (BFB)

Lab Name: Pace Analytical - New York SDG No.: 7016438 Contract: NORTH SEA LANDFILL

Lab File ID: 042517.B\J34393.D BFB Injection Date: 04/25/2017

Instrument ID: 70MSV6 BFB Injection Time: 07:23

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.00 - 40.00% of mass 95	17.49	
75	30.00 - 60.00% of mass 95	46.96	
95	Base Peak, 100.00% relative abundance	100.00	
96	5.00 - 9.00% of mass 95	6.45	
173	Less than 2.00% of mass 174	0.89	(1.14)[1]
174	50.00 - 100.00% of mass 95	78.01	
175	5.00 - 9.00% of mass 174	6.02	(7.71)[1]
176	95.00 - 101.00% of mass 174	75.64	(96.97)[1]
177	5.00 - 9.00% of mass 176	4.86	(6.43)[2]

1 - Value is % mass 174 2 - Value is % mass 176

MSV - FORM V VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET
PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Pace Analytical - New York SDG No.: 7016438 Contract: NORTH SEA LANDFILL
Lab File ID: 042517.B\J34394A.D BFB Injection Date: 04/25/2017
Instrument ID: 70MSV6 BFB Injection Time: 07:59

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.00 - 40.00% of mass 95	18.63	
75	30.00 - 60.00% of mass 95	47.26	
95	Base Peak, 100.00% relative abundance	100.00	
96	5.00 - 9.00% of mass 95	6.51	
173	Less than 2.00% of mass 174	0.87	(1.20)[1]
174	50.00 - 100.00% of mass 95	72.38	
175	5.00 - 9.00% of mass 174	5.69	(7.86)[1]
176	95.00 - 101.00% of mass 174	69.96	(96.66)[1]
177	5.00 - 9.00% of mass 176	4.98	(7.11)[2]

1 - Value is % mass 174 2 - Value is % mass 176

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
8774811CCV	8774811CCV	042517.B\J34394.D	04/25/2017	07:59
8761662CCV	8761662CCV	042517.B\J34396.D	04/25/2017	12:13
103008BLANK	103008BLANK	042517.B\J34397.D	04/25/2017	13:06
103009LCS	103009LCS	042517.B\J34398.D	04/25/2017	13:27
TRIP BLANK	7016438012	042517.B\J34399.D	04/25/2017	13:46
STORAGE BLANK	7016438013	042517.B\J34400.D	04/25/2017	14:03
FB	7016438009	042517.B\J34401.D	04/25/2017	14:21
TRIP BLANK	7016438021	042517.B\J34402.D	04/25/2017	14:39
MW-11A	7016438014	042517.B\J34403.D	04/25/2017	14:57
MW-1A	7016438001	042517.B\J34404.D	04/25/2017	15:15
MW-1B	7016438002	042517.B\J34405.D	04/25/2017	15:33
MW-1C	7016438003	042517.B\J34406.D	04/25/2017	15:50
MW-11B	7016438005	042517.B\J34407.D	04/25/2017	16:08
MW-12A	7016438006	042517.B\J34408.D	04/25/2017	16:26
MW-12B	7016438007	042517.B\J34409.D	04/25/2017	16:44
DUP001	7016438008	042517.B\J34410.D	04/25/2017	17:02
MW-3A	7016438015	042517.B\J34411.D	04/25/2017	17:20
MW-3B	7016438016	042517.B\J34412.D	04/25/2017	17:37
MW-3C	7016438017	042517.B\J34413.D	04/25/2017	17:55
MW-4A	7016438018	042517.B\J34414.D	04/25/2017	18:13
MW-4B	7016438019	042517.B\J34415.D	04/25/2017	18:31
MW-4C	7016438020	042517.B\J34416.D	04/25/2017	18:49
103081MS	103081MS	042517.B\J34417.D	04/25/2017	19:07

MSV - FORM V VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

PERFORMANCE CHECK

BROMOFLUOROBENZENE (BFB)

Lab Name: Pace Analytical - New York SDG No.: 7016438 Contract: NORTH SEA LANDFILL

Lab File ID: 042517.B\J34394A.D BFB Injection Date: 04/25/2017

Instrument ID: 70MSV6 BFB Injection Time: 07:59

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
103082MSD	103082MSD	042517.B\J34418.D	04/25/2017	19:25

MSV - FORM VIII VOA-1
MSV INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Pace Analytical - New York SDG No.: 7016438 Contract: NORTH SEA LANDFILL

Sample ID : 8761662CCV Date Analyzed: 04/25/2017

Instrument ID: 70MSV6 GC Column: Col 1 Time Analyzed: 12:13

Lab File ID: 042517.B\J34396.D

		AREA CBZ	RT	AREA DCB	RT	AREA DFB	RT	AREA PFB	RT
12 HOUR STD		241830	5.811	189605	7.549	448962	3.909	260334	3.477
UPPER LIMIT		483660	6.311	379210	8.049	897924	4.409	520668	3.977
LOWER LIMIT		120915	5.311	94802.5	7.049	224481	3.409	130167	2.977
LAB SAMPLE ID	SAMPLE NO.								
103008	103008BLANK	237225	5.812	198068	7.549	436334	3.91	257223	3.477
103009	103009LCS	235819	5.811	202237	7.549	435954	3.909	258916	3.477
103081	103081MS	222646	5.812	185365	7.549	401040	3.909	230301	3.477
103082	103082MSD	223336	5.811	181617	7.549	405579	3.909	234516	3.476
7016438001	MW-1A	216354	5.812	176899	7.549	413937	3.91	239069	3.477
7016438002	MW-1B	224416	5.811	187061	7.549	414893	3.909	238926	3.477
7016438003	MW-1C	220984	5.811	184769	7.549	411014	3.909	235988	3.477
7016438005	MW-11B	219534	5.811	183695	7.549	405672	3.909	235494	3.477
7016438006	MW-12A	223240	5.811	178233	7.549	414473	3.909	236803	3.476
7016438007	MW-12B	226448	5.812	187186	7.549	415436	3.91	237620	3.477
7016438008	DUP001	223584	5.811	172219	7.549	406725	3.909	233689	3.477
7016438009	FB	224640	5.812	186351	7.549	413403	3.91	242302	3.477
7016438012	TRIP BLANK	219631	5.812	189651	7.549	424712	3.91	251050	3.477
7016438013	STORAGE BLANK	217679	5.812	171239	7.549	412917	3.91	240785	3.477
7016438014	MW-11A	226569	5.812	187164	7.549	412811	3.91	240067	3.477
7016438015	MW-3A	220523	5.811	185224	7.549	412406	3.909	236486	3.477
7016438016	MW-3B	222168	5.812	182901	7.549	406510	3.91	235431	3.477
7016438017	MW-3C	219760	5.811	170938	7.549	409659	3.909	231230	3.476
7016438018	MW-4A	225018	5.811	183998	7.549	408477	3.909	232856	3.476
7016438019	MW-4B	222531	5.811	182643	7.549	403888	3.909	234226	3.477
7016438020	MW-4C	225275	5.811	185277	7.549	411656	3.909	236721	3.477
7016438021	TRIP BLANK	217979	5.811	185567	7.549	412889	3.909	238763	3.477

CBZ = Chlorobenzene-D5 (IS)
DCB = 1,4-Dichlorobenzene-d4 (IS)
DFB = 1,4-Difluorobenzene (IS)
PFB = Pentafluorobenzene (IS)

AREA UPPER LIMIT = 200% of Internal Standard Area
AREA LOWER LIMIT = 50% of Internal Standard Area
RT UPPER LIMIT = +0.50 minutes of Internal Standard RT
RT LOWER LIMIT = -0.50 minutes of Internal Standard RT

* Values outside of QC Limits

SAMPLE NO.

MW-1A

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York Contract: NORTH SEA LANDFILL

Date Received: 04/20/2017 12:20 Matrix: Water SDG No.: 7016438

Date Extracted: 04/25/2017 15:15 Lab Sample ID: 7016438001

Date Analyzed: 04/25/2017 15:15 Lab File ID: 042517.B\J34404.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1 Instrument: 70MSV6 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	2.1	J
107-13-1	Acrylonitrile	<5.0	U
71-43-2	Benzene	<5.0	U
74-97-5	Bromochloromethane	<5.0	U
75-27-4	Bromodichloromethane	<5.0	U
75-25-2	Bromoform	<5.0	U
74-83-9	Bromomethane	<5.0	U
78-93-3	2-Butanone (MEK)	<5.0	U
75-15-0	Carbon disulfide	<5.0	U
56-23-5	Carbon tetrachloride	<5.0	U
108-90-7	Chlorobenzene	<5.0	U
75-00-3	Chloroethane	<5.0	U
67-66-3	Chloroform	<5.0	U
74-87-3	Chloromethane	<5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	<5.0	U
124-48-1	Dibromochloromethane	<5.0	U
106-93-4	1,2-Dibromoethane (EDB)	<5.0	U
74-95-3	Dibromomethane	<5.0	U
95-50-1	1,2-Dichlorobenzene	<5.0	U
106-46-7	1,4-Dichlorobenzene	<5.0	U
110-57-6	trans-1,4-Dichloro-2-butene	<5.0	U
75-34-3	1,1-Dichloroethane	<5.0	U
107-06-2	1,2-Dichloroethane	<5.0	U
75-35-4	1,1-Dichloroethene	<5.0	U
156-59-2	cis-1,2-Dichloroethene	<5.0	U
156-60-5	trans-1,2-Dichloroethene	<5.0	U
78-87-5	1,2-Dichloropropane	<5.0	U
10061-01-5	cis-1,3-Dichloropropene	<5.0	U
10061-02-6	trans-1,3-Dichloropropene	<5.0	U
100-41-4	Ethylbenzene	<5.0	U
591-78-6	2-Hexanone	<5.0	U
74-88-4	Iodomethane	<5.0	U
75-09-2	Methylene Chloride	<5.0	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<5.0	U
100-42-5	Styrene	<5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	<5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	<5.0	U

SAMPLE NO.

MW-1A

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York Contract: NORTH SEA LANDFILL

Date Received: 04/20/2017 12:20 Matrix: Water SDG No.: 7016438

Date Extracted: 04/25/2017 15:15 Lab Sample ID: 7016438001

Date Analyzed: 04/25/2017 15:15 Lab File ID: 042517.B\J34404.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1 Instrument: 70MSV6 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
127-18-4	Tetrachloroethene	<5.0	U
108-88-3	Toluene	<5.0	U
71-55-6	1,1,1-Trichloroethane	<5.0	U
79-00-5	1,1,2-Trichloroethane	<5.0	U
79-01-6	Trichloroethene	<5.0	U
75-69-4	Trichlorofluoromethane	<5.0	U
96-18-4	1,2,3-Trichloropropane	<5.0	U
108-05-4	Vinyl acetate	<5.0	U
75-01-4	Vinyl chloride	<5.0	U
1330-20-7	Xylene (Total)	<5.0	U

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34404.D
Report Date: 29-Apr-2017 22:54

Pace Analytical Services, Inc.

SW846-8260C/EPA 624

Data file : \\v70wintarget\chem\70msv6.i\042517.b\J34404.D
Lab Smp Id: 7016438001 Client Smp ID: MW-1A
Inj Date : 25-APR-2017 15:15 MS Autotune Date: 17-MAR-2017 06:2
Operator : KGG Inst ID: 70msv6.i
Smp Info : 7016438001,
Misc Info : 2005,
Comment :
Method : \\v70wintarget\chem\70msv6.i\042517.b\032717_8260W.m
Meth Date : 29-Apr-2017 22:43 blagula Quant Type: ISTD
Cal Date : 27-MAR-2017 18:25 Cal File: J33244.D
Als bottle: 10
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A
Processing Host: 70MSV4WS10B6

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)	REVIEW C
1 Chlorodifluoromethane	51	Compound Not Detected.						
2 Dichlorotetrafluoroethane	135	Compound Not Detected.						
3 Dichlorodifluoromethane	85	Compound Not Detected.						
4 Chloromethane	50	Compound Not Detected.						
5 Vinyl chloride	62	Compound Not Detected.						
6 1,3-Butadiene	54	Compound Not Detected.						
7 Acetaldehyde	44	Compound Not Detected.						
8 Bromomethane	94	Compound Not Detected.						
9 Chloroethane	64	Compound Not Detected.						
10 Dichlorofluoromethane	67	Compound Not Detected.						
11 Trichlorofluoromethane	101	Compound Not Detected.						
12 Ethanol	45	Compound Not Detected.						
13 Diethyl ether (Ethyl ether)	59	Compound Not Detected.						
16 1,1,2-Trichlorotrifluoroethane	101	Compound Not Detected.						
14 Acrolein	56	Compound Not Detected.						
15 1,1-Dichloroethene	96	Compound Not Detected.						
17 Acetone	43	2.245	2.245	(0.646)	2937	2.07782	2.08	
18 Iodomethane	142	Compound Not Detected.						
19 2-Propanol	45	Compound Not Detected.						(D)
20 Carbon disulfide	76	Compound Not Detected.						
21 Allyl chloride	76	Compound Not Detected.						
22 Acetonitrile	41	Compound Not Detected.						

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34404.D
Report Date: 29-Apr-2017 22:54

			QUANT SIG					CONCENTRATIONS ON-COLUMN	FINAL		
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)		REVIEW C
	23	Methyl acetate	43	Compound Not Detected.							
	24	Methylene Chloride	84	Compound Not Detected.							
	25	tert-Butyl Alcohol	59	Compound Not Detected.							
	28	Methyl-tert-butyl ether	73	Compound Not Detected.							
	27	trans-1,2-Dichloroethene	96	Compound Not Detected.							
	26	Acrylonitrile	53	Compound Not Detected.							
	30	n-Hexane	57	Compound Not Detected.							
	29	Diisopropyl ether	45	Compound Not Detected.							
	32	Vinyl acetate	43	Compound Not Detected.							
	31	1,1-Dichloroethane	63	Compound Not Detected.							
	33	Chloroprene	53	Compound Not Detected.							
	34	Ethyl-tert-butyl ether	59	Compound Not Detected.							
	36	2,2-Dichloropropane	77	Compound Not Detected.							
	35	cis-1,2-Dichloroethene	96	Compound Not Detected.							
	39	Ethyl acetate	61	Compound Not Detected.							
	37	2-Butanone (MEK)	43	Compound Not Detected.							
	41	Bromochloromethane	128	Compound Not Detected.							
	42	Tetrahydrofuran	42	Compound Not Detected.							
	43	Chloroform	83	Compound Not Detected.							
	38	Propionitrile	54	Compound Not Detected.							
	46	Cyclohexane	56	Compound Not Detected.							
	45	1,1,1-Trichloroethane	97	Compound Not Detected.							
*	44	Pentafluorobenzene (IS)	168	3.476	3.476	(1.000)	239069	50.0000		(Q)	
	48	Carbon tetrachloride	117	Compound Not Detected.							(D)
	47	1,1-Dichloropropene	75	Compound Not Detected.							(D)
	55	2,2,4-Trimethylpentane	57	Compound Not Detected.							
	51	Benzene	78	Compound Not Detected.							
	40	Methacrylonitrile	67	Compound Not Detected.							
$	50	1,2-Dichloroethane-d4 (S)	65	3.677	3.677	(0.941)	132075	44.7974	44.8		
	56	tert-Amylmethyl ether	73	Compound Not Detected.							
	52	1,2-Dichloroethane	62	Compound Not Detected.							
	57	n-Heptane	43	Compound Not Detected.							
*	58	1,4-Difluorobenzene (IS)	114	3.909	3.909	(1.000)	413937	50.0000			
	59	Trichloroethene	95	Compound Not Detected.							
	60	Methylcyclohexane	83	Compound Not Detected.							
	49	Isobutanol	43	Compound Not Detected.							
	53	tert-Amyl Alcohol	59	Compound Not Detected.							
	54	tert-Amyl ethyl ether	59	Compound Not Detected.							
	61	1,2-Dichloropropane	63	Compound Not Detected.							
	63	Methyl methacrylate	69	Compound Not Detected.							
	64	1,4-Dioxane (p-Dioxane)	88	Compound Not Detected.							
	62	Dibromomethane	93	Compound Not Detected.							
	65	Bromodichloromethane	83	Compound Not Detected.							
	66	2-Nitropropane	43	Compound Not Detected.							
	67	2-Chloroethylvinyl ether	63	Compound Not Detected.							
	68	cis-1,3-Dichloropropene	75	Compound Not Detected.							
	69	4-Methyl-2-pentanone (MIBK)	43	Compound Not Detected.							
$	70	Toluene-d8 (S)	98	4.811	4.811	(0.828)	481791	58.4583	58.4		
	71	Toluene	91	Compound Not Detected.							
	72	Methyl isothiocyanate	73	Compound Not Detected.							
	74	trans-1,3-Dichloropropene	75	Compound Not Detected.							
	75	Ethyl methacrylate	69	Compound Not Detected.							(D)
	76	1,1,2-Trichloroethane	83	Compound Not Detected.							
	77	Tetrachloroethene	166	Compound Not Detected.							

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34404.D
Report Date: 29-Apr-2017 22:54

							CONCENTRATIONS		
		QUANT SIG					ON-COLUMN	FINAL	
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)	REVIEW C
	78 1,3-Dichloropropane	76	Compound Not Detected.						
	79 2-Hexanone	43	Compound Not Detected.						
	73 n-Octane	43	Compound Not Detected.						
	81 n-Butyl acetate	43	Compound Not Detected.						
	80 Dibromochloromethane	129	Compound Not Detected.						
	82 1,2-Dibromoethane (EDB)	107	Compound Not Detected.						
*	83 Chlorobenzene-d5 (IS)	82	5.811	5.811	(1.000)	216354	50.0000		
	84 Chlorobenzene	112	Compound Not Detected.						
	86 Ethylbenzene	106	Compound Not Detected.						
	85 1,1,1,2-Tetrachloroethane	131	Compound Not Detected.						
	88 n-Nonane	43	Compound Not Detected.						(D)
	87 m&p-Xylene	106	Compound Not Detected.						
	89 o-Xylene	106	Compound Not Detected.						
	90 Styrene	104	Compound Not Detected.						
	91 Bromoform	173	Compound Not Detected.						
	92 Isopropylbenzene (Cumene)	105	Compound Not Detected.						
$	93 4-Bromofluorobenzene (S)	95	6.671	6.671	(1.148)	174333	59.3627	59.4	
	94 Bromobenzene	156	Compound Not Detected.						
	95 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.						
	98 n-Propylbenzene	91	Compound Not Detected.						
	96 1,2,3-Trichloropropane	110	Compound Not Detected.						
	97 trans-1,4-Dichloro-2-butene	53	Compound Not Detected.						
	103 n-Decane	43	Compound Not Detected.						
	99 2-Chlorotoluene	91	Compound Not Detected.						
	100 4-Ethyltoluene	105	Compound Not Detected.						
	101 1,3,5-Trimethylbenzene	105	Compound Not Detected.						
	102 4-Chlorotoluene	91	Compound Not Detected.						
	104 tert-Butylbenzene	119	Compound Not Detected.						
	105 Pentachloroethane	167	Compound Not Detected.						
	106 1,2,4-Trimethylbenzene	105	Compound Not Detected.						
	107 sec-Butylbenzene	105	Compound Not Detected.						
	109 d-Limonene	136	Compound Not Detected.						
	110 p-Isopropyltoluene	119	Compound Not Detected.						
	108 1,3-Dichlorobenzene	146	Compound Not Detected.						
*	111 1,4-Dichlorobenzene-d4 (IS)	152	7.549	7.549	(1.000)	176899	50.0000		
	112 1,4-Dichlorobenzene	146	Compound Not Detected.						
	113 1,2,3-Trimethylbenzene	105	Compound Not Detected.						
	114 Benzyl chloride	91	Compound Not Detected.						
	115 trans-Decalin	138	Compound Not Detected.						
	116 1,4-Diethylbenzene	119	Compound Not Detected.						
	117 n-Butylbenzene	91	Compound Not Detected.						
	119 n-Undecane	43	Compound Not Detected.						(D)
	118 1,2-Dichlorobenzene	146	Compound Not Detected.						
	120 cis-Decalin	138	Compound Not Detected.						
	121 1,2,4,5-tetramethylbenzene	119	Compound Not Detected.						
	122 1,2-Dibromo-3-chloropropane	75	Compound Not Detected.						
	123 n-Dodecane	43	Compound Not Detected.						(D)
	124 1,2,4-Trichlorobenzene	180	Compound Not Detected.						
	125 Hexachloro-1,3-butadiene	225	Compound Not Detected.						
	126 Naphthalene	128	Compound Not Detected.						
	127 1,2,3-Trichlorobenzene	180	Compound Not Detected.						

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34404.D
Report Date: 29-Apr-2017 22:54

QC Flag Legend

Q - Qualifier signal failed the ratio test.
D - User disabled compound identification.

Review Codes Legend

:

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34404.D
Report Date: 29-Apr-2017 22:54

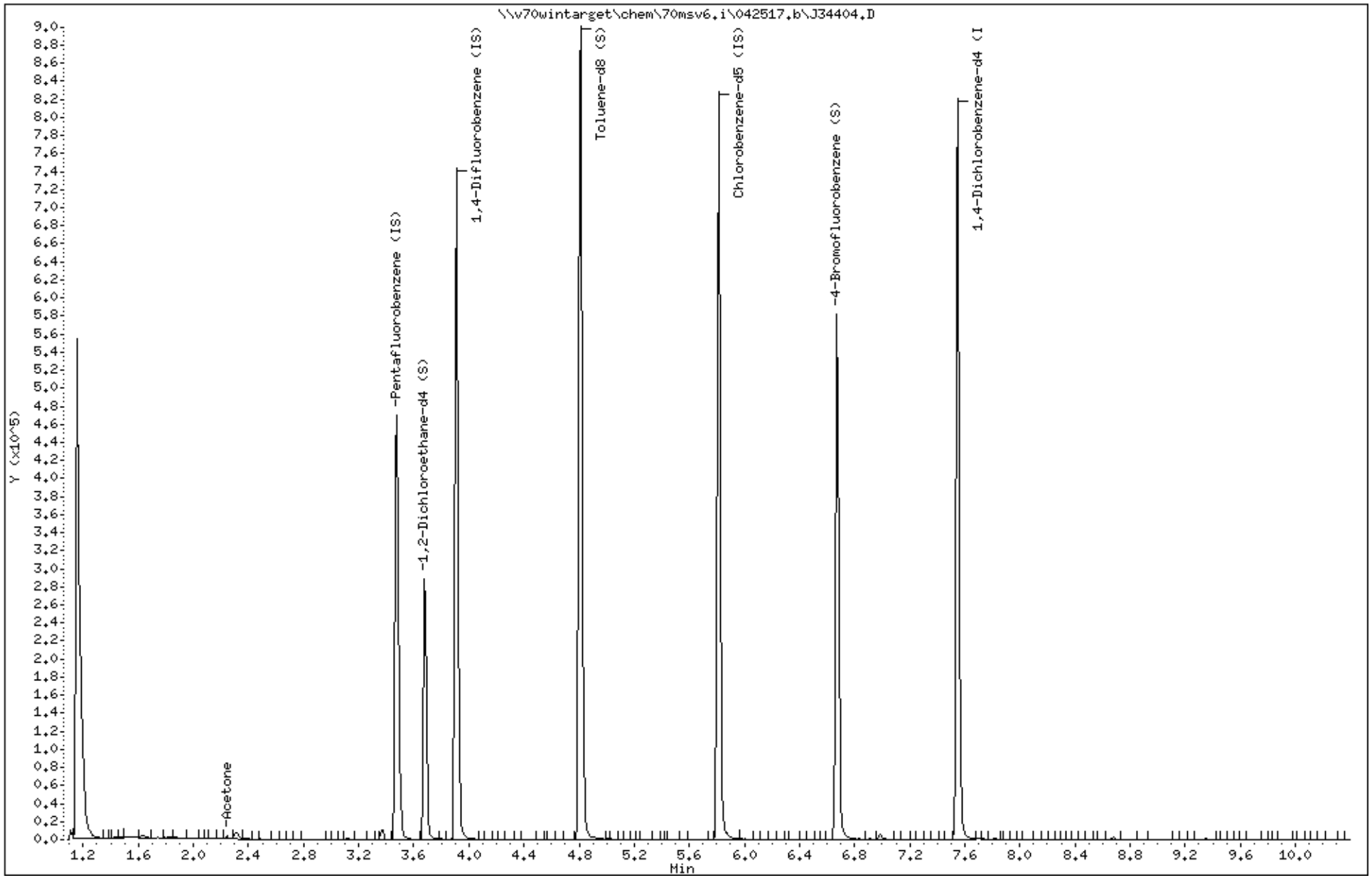
Pace Analytical Services, Inc.

SW846-8260C/EPA 624

Data file : \\v70wintarget\chem\70msv6.i\042517.b\J34404.D
Lab Smp Id: 7016438001 Client Smp ID: MW-1A
Inj Date : 25-APR-2017 15:15 MS Autotune Date: 17-MAR-2017 06:2
Operator : KGG Inst ID: 70msv6.i
Smp Info : 7016438001,
Misc Info : 2005,
Comment :
Method : \\v70wintarget\chem\70msv6.i\042517.b\032717_8260W.m
Meth Date : 29-Apr-2017 22:43 blagula Quant Type: ISTD
Cal Date : 27-MAR-2017 18:25 Cal File: J33244.D
Als bottle: 10
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A
Processing Host: 70MSV4WS10B6

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34404.D
Date : 25-APR-2017 15:15
Client ID: MW-1A
Instrument: 70msv6.i
Sample Info: 7016438001,
Purge Volume: 5.0
Operator: KGG
Column phase: RTX-624
Column diameter: 0.18



Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34404.D

Date : 25-APR-2017 15:15

Client ID: MW-1A

Instrument: 70msv6.i

Sample Info: 7016438001,

Purge Volume: 5.0

Operator: KGG

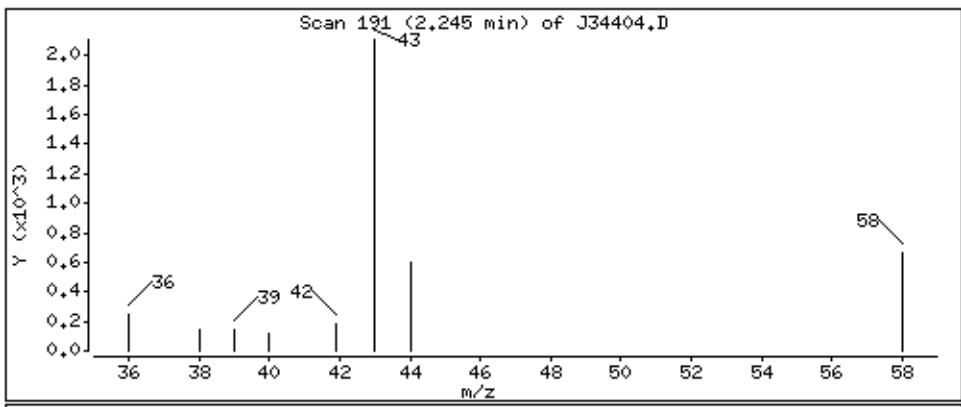
Column phase: RTX-624

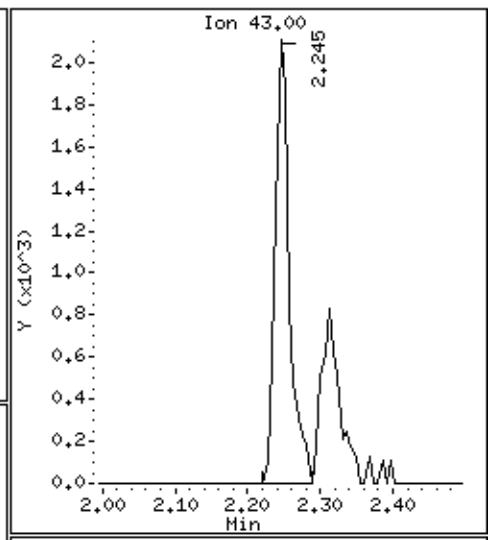
Column diameter: 0.18

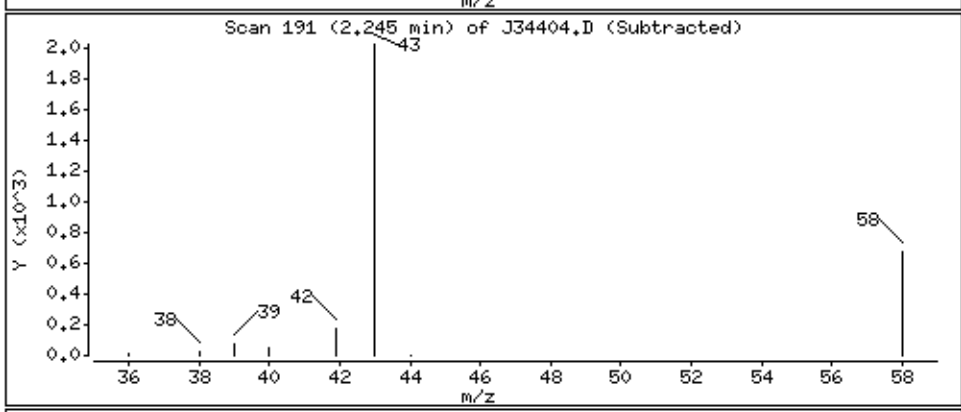
17 Acetone

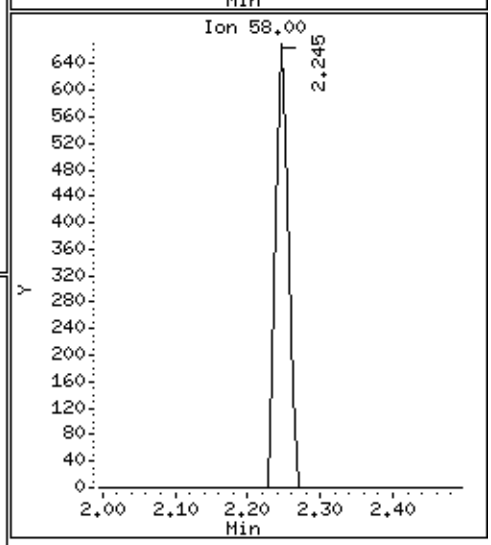
Concentration: 2.08 ug/L

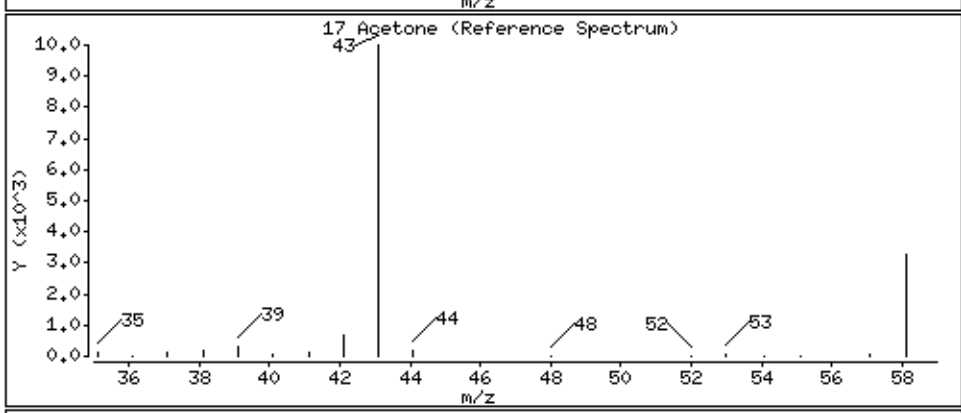
Review Code:

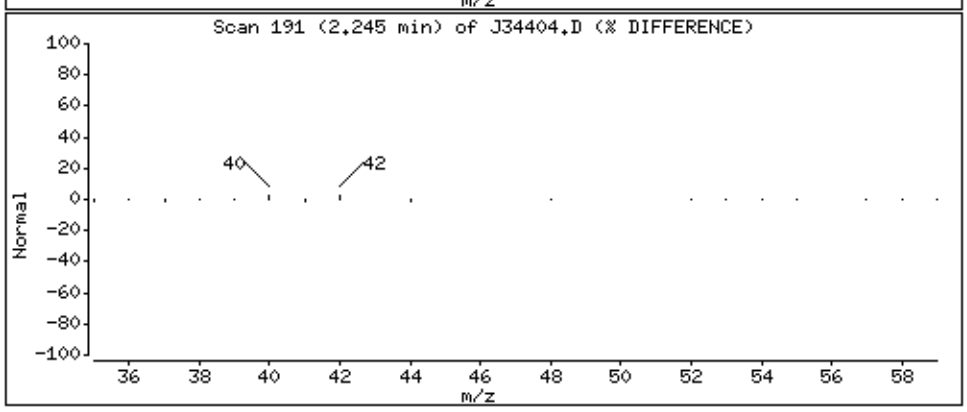












Data File: \\v70wintarget\chem\70msv6.i\042517.b/J34404.D
Injection Date: 25-APR-2017 15:15
Instrument: 70msv6.i
Lab Sample ID: 7016438001
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

SAMPLE NO.

MW-1B

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York Contract: NORTH SEA LANDFILL

Date Received: 04/20/2017 12:20 Matrix: Water SDG No.: 7016438

Date Extracted: 04/25/2017 15:33 Lab Sample ID: 7016438002

Date Analyzed: 04/25/2017 15:33 Lab File ID: 042517.B\J34405.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1 Instrument: 70MSV6 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	3.4	J
107-13-1	Acrylonitrile	<5.0	U
71-43-2	Benzene	<5.0	U
74-97-5	Bromochloromethane	<5.0	U
75-27-4	Bromodichloromethane	<5.0	U
75-25-2	Bromoform	<5.0	U
74-83-9	Bromomethane	<5.0	U
78-93-3	2-Butanone (MEK)	<5.0	U
75-15-0	Carbon disulfide	<5.0	U
56-23-5	Carbon tetrachloride	<5.0	U
108-90-7	Chlorobenzene	<5.0	U
75-00-3	Chloroethane	<5.0	U
67-66-3	Chloroform	2.7	J
74-87-3	Chloromethane	<5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	<5.0	U
124-48-1	Dibromochloromethane	<5.0	U
106-93-4	1,2-Dibromoethane (EDB)	<5.0	U
74-95-3	Dibromomethane	<5.0	U
95-50-1	1,2-Dichlorobenzene	<5.0	U
106-46-7	1,4-Dichlorobenzene	<5.0	U
110-57-6	trans-1,4-Dichloro-2-butene	<5.0	U
75-34-3	1,1-Dichloroethane	<5.0	U
107-06-2	1,2-Dichloroethane	<5.0	U
75-35-4	1,1-Dichloroethene	<5.0	U
156-59-2	cis-1,2-Dichloroethene	<5.0	U
156-60-5	trans-1,2-Dichloroethene	<5.0	U
78-87-5	1,2-Dichloropropane	<5.0	U
10061-01-5	cis-1,3-Dichloropropene	<5.0	U
10061-02-6	trans-1,3-Dichloropropene	<5.0	U
100-41-4	Ethylbenzene	<5.0	U
591-78-6	2-Hexanone	<5.0	U
74-88-4	Iodomethane	<5.0	U
75-09-2	Methylene Chloride	<5.0	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<5.0	U
100-42-5	Styrene	<5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	<5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	<5.0	U

SAMPLE NO.

MW-1B

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York Contract: NORTH SEA LANDFILL

Date Received: 04/20/2017 12:20 Matrix: Water SDG No.: 7016438

Date Extracted: 04/25/2017 15:33 Lab Sample ID: 7016438002

Date Analyzed: 04/25/2017 15:33 Lab File ID: 042517.B\J34405.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1 Instrument: 70MSV6 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
127-18-4	Tetrachloroethene	<5.0	U
108-88-3	Toluene	<5.0	U
71-55-6	1,1,1-Trichloroethane	<5.0	U
79-00-5	1,1,2-Trichloroethane	<5.0	U
79-01-6	Trichloroethene	<5.0	U
75-69-4	Trichlorofluoromethane	<5.0	U
96-18-4	1,2,3-Trichloropropane	<5.0	U
108-05-4	Vinyl acetate	<5.0	U
75-01-4	Vinyl chloride	<5.0	U
1330-20-7	Xylene (Total)	<5.0	U

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34405.D
Report Date: 29-Apr-2017 22:54

Pace Analytical Services, Inc.

SW846-8260C/EPA 624

Data file : \\v70wintarget\chem\70msv6.i\042517.b\J34405.D
Lab Smp Id: 7016438002 Client Smp ID: MW-1B
Inj Date : 25-APR-2017 15:33 MS Autotune Date: 17-MAR-2017 06:2
Operator : KGG Inst ID: 70msv6.i
Smp Info : 7016438002,
Misc Info : 2005,
Comment :
Method : \\v70wintarget\chem\70msv6.i\042517.b\032717_8260W.m
Meth Date : 29-Apr-2017 22:43 blagula Quant Type: ISTD
Cal Date : 27-MAR-2017 18:25 Cal File: J33244.D
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A
Processing Host: 70MSV4WS10B6

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)	REVIEW C
1 Chlorodifluoromethane	51	Compound Not Detected.						
2 Dichlorotetrafluoroethane	135	Compound Not Detected.						
3 Dichlorodifluoromethane	85	Compound Not Detected.						
4 Chloromethane	50	Compound Not Detected.						
5 Vinyl chloride	62	Compound Not Detected.						
6 1,3-Butadiene	54	Compound Not Detected.						
7 Acetaldehyde	44	Compound Not Detected.						
8 Bromomethane	94	Compound Not Detected.						
9 Chloroethane	64	Compound Not Detected.						
10 Dichlorofluoromethane	67	Compound Not Detected.						
11 Trichlorofluoromethane	101	Compound Not Detected.						
12 Ethanol	45	Compound Not Detected.						
13 Diethyl ether (Ethyl ether)	59	Compound Not Detected.						
16 1,1,2-Trichlorotrifluoroethane	101	Compound Not Detected.						
14 Acrolein	56	Compound Not Detected.						
15 1,1-Dichloroethene	96	Compound Not Detected.						
17 Acetone	43	2.245	2.245	(0.646)	4749	3.36176	3.36	
18 Iodomethane	142	Compound Not Detected.						
19 2-Propanol	45	Compound Not Detected.						(D)
20 Carbon disulfide	76	Compound Not Detected.						
21 Allyl chloride	76	Compound Not Detected.						
22 Acetonitrile	41	Compound Not Detected.						

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34405.D
Report Date: 29-Apr-2017 22:54

		QUANT SIG					CONCENTRATIONS ON-COLUMN	FINAL	
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)	REVIEW C
	23 Methyl acetate	43	Compound Not Detected.						
	24 Methylene Chloride	84	Compound Not Detected.						
	25 tert-Butyl Alcohol	59	Compound Not Detected.						
	28 Methyl-tert-butyl ether	73	Compound Not Detected.						
	27 trans-1,2-Dichloroethene	96	Compound Not Detected.						
	26 Acrylonitrile	53	Compound Not Detected.						
	30 n-Hexane	57	Compound Not Detected.						
	29 Diisopropyl ether	45	Compound Not Detected.						
	32 Vinyl acetate	43	Compound Not Detected.						
	31 1,1-Dichloroethane	63	Compound Not Detected.						
	33 Chloroprene	53	Compound Not Detected.						
	34 Ethyl-tert-butyl ether	59	Compound Not Detected.						
	36 2,2-Dichloropropane	77	Compound Not Detected.						
	35 cis-1,2-Dichloroethene	96	Compound Not Detected.						
	39 Ethyl acetate	61	Compound Not Detected.						
	37 2-Butanone (MEK)	43	Compound Not Detected.						
	41 Bromochloromethane	128	Compound Not Detected.						
	42 Tetrahydrofuran	42	Compound Not Detected.						
	43 Chloroform	83	3.366	3.366	(0.968)	18184	2.65197	2.65	
	38 Propionitrile	54	Compound Not Detected.						
	46 Cyclohexane	56	Compound Not Detected.						
	45 1,1,1-Trichloroethane	97	Compound Not Detected.						
*	44 Pentafluorobenzene (IS)	168	3.476	3.476	(1.000)	238926	50.0000	(Q)	
	48 Carbon tetrachloride	117	Compound Not Detected.						(D)
	47 1,1-Dichloropropene	75	Compound Not Detected.						(D)
	55 2,2,4-Trimethylpentane	57	Compound Not Detected.						
	51 Benzene	78	Compound Not Detected.						
	40 Methacrylonitrile	67	Compound Not Detected.						
$	50 1,2-Dichloroethane-d4 (S)	65	3.677	3.677	(0.941)	133119	45.0474	45.0	
	56 tert-Amylmethyl ether	73	Compound Not Detected.						
	52 1,2-Dichloroethane	62	Compound Not Detected.						
	57 n-Heptane	43	Compound Not Detected.						
*	58 1,4-Difluorobenzene (IS)	114	3.909	3.909	(1.000)	414893	50.0000		
	59 Trichloroethene	95	Compound Not Detected.						
	60 Methylcyclohexane	83	Compound Not Detected.						
	49 Isobutanol	43	Compound Not Detected.						
	53 tert-Amyl Alcohol	59	Compound Not Detected.						
	54 tert-Amyl ethyl ether	59	Compound Not Detected.						
	61 1,2-Dichloropropane	63	Compound Not Detected.						
	63 Methyl methacrylate	69	Compound Not Detected.						
	64 1,4-Dioxane (p-Dioxane)	88	Compound Not Detected.						
	62 Dibromomethane	93	Compound Not Detected.						
	65 Bromodichloromethane	83	Compound Not Detected.						
	66 2-Nitropropane	43	Compound Not Detected.						
	67 2-Chloroethylvinyl ether	63	Compound Not Detected.						
	68 cis-1,3-Dichloropropene	75	Compound Not Detected.						
	69 4-Methyl-2-pentanone (MIBK)	43	Compound Not Detected.						
$	70 Toluene-d8 (S)	98	4.811	4.811	(0.828)	479727	56.1168	56.1	
	71 Toluene	91	Compound Not Detected.						
	72 Methyl isothiocyanate	73	Compound Not Detected.						
	74 trans-1,3-Dichloropropene	75	Compound Not Detected.						
	75 Ethyl methacrylate	69	Compound Not Detected.						(D)
	76 1,1,2-Trichloroethane	83	Compound Not Detected.						
	77 Tetrachloroethene	166	Compound Not Detected.						

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34405.D
Report Date: 29-Apr-2017 22:54

							CONCENTRATIONS		
		QUANT SIG					ON-COLUMN	FINAL	
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)	REVIEW C
	78 1,3-Dichloropropane	76	Compound Not Detected.						
	79 2-Hexanone	43	Compound Not Detected.						
	73 n-Octane	43	Compound Not Detected.						
	81 n-Butyl acetate	43	Compound Not Detected.						
	80 Dibromochloromethane	129	Compound Not Detected.						
	82 1,2-Dibromoethane (EDB)	107	Compound Not Detected.						
*	83 Chlorobenzene-d5 (IS)	82	5.811	5.811	(1.000)	224416	50.0000		
	84 Chlorobenzene	112	Compound Not Detected.						
	86 Ethylbenzene	106	Compound Not Detected.						
	85 1,1,1,2-Tetrachloroethane	131	Compound Not Detected.						
	88 n-Nonane	43	Compound Not Detected.						(D)
	87 m&p-Xylene	106	Compound Not Detected.						
	89 o-Xylene	106	Compound Not Detected.						
	90 Styrene	104	Compound Not Detected.						
	91 Bromoform	173	Compound Not Detected.						
	92 Isopropylbenzene (Cumene)	105	Compound Not Detected.						
$	93 4-Bromofluorobenzene (S)	95	6.671	6.671	(1.148)	180186	59.1515	59.2	
	94 Bromobenzene	156	Compound Not Detected.						
	95 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.						
	98 n-Propylbenzene	91	Compound Not Detected.						
	96 1,2,3-Trichloropropane	110	Compound Not Detected.						
	97 trans-1,4-Dichloro-2-butene	53	Compound Not Detected.						
	103 n-Decane	43	Compound Not Detected.						
	99 2-Chlorotoluene	91	Compound Not Detected.						
	100 4-Ethyltoluene	105	Compound Not Detected.						
	101 1,3,5-Trimethylbenzene	105	Compound Not Detected.						
	102 4-Chlorotoluene	91	Compound Not Detected.						
	104 tert-Butylbenzene	119	Compound Not Detected.						
	105 Pentachloroethane	167	Compound Not Detected.						
	106 1,2,4-Trimethylbenzene	105	Compound Not Detected.						
	107 sec-Butylbenzene	105	Compound Not Detected.						
	109 d-Limonene	136	Compound Not Detected.						
	110 p-Isopropyltoluene	119	Compound Not Detected.						
	108 1,3-Dichlorobenzene	146	Compound Not Detected.						
*	111 1,4-Dichlorobenzene-d4 (IS)	152	7.548	7.549	(1.000)	187061	50.0000		
	112 1,4-Dichlorobenzene	146	Compound Not Detected.						
	113 1,2,3-Trimethylbenzene	105	Compound Not Detected.						
	114 Benzyl chloride	91	Compound Not Detected.						
	115 trans-Decalin	138	Compound Not Detected.						
	116 1,4-Diethylbenzene	119	Compound Not Detected.						
	117 n-Butylbenzene	91	Compound Not Detected.						
	119 n-Undecane	43	Compound Not Detected.						(D)
	118 1,2-Dichlorobenzene	146	Compound Not Detected.						
	120 cis-Decalin	138	Compound Not Detected.						
	121 1,2,4,5-tetramethylbenzene	119	Compound Not Detected.						
	122 1,2-Dibromo-3-chloropropane	75	Compound Not Detected.						
	123 n-Dodecane	43	Compound Not Detected.						(D)
	124 1,2,4-Trichlorobenzene	180	Compound Not Detected.						
	125 Hexachloro-1,3-butadiene	225	Compound Not Detected.						
	126 Naphthalene	128	Compound Not Detected.						
	127 1,2,3-Trichlorobenzene	180	Compound Not Detected.						

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34405.D
Report Date: 29-Apr-2017 22:54

QC Flag Legend

Q - Qualifier signal failed the ratio test.
D - User disabled compound identification.

Review Codes Legend

:

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34405.D
Report Date: 29-Apr-2017 22:54

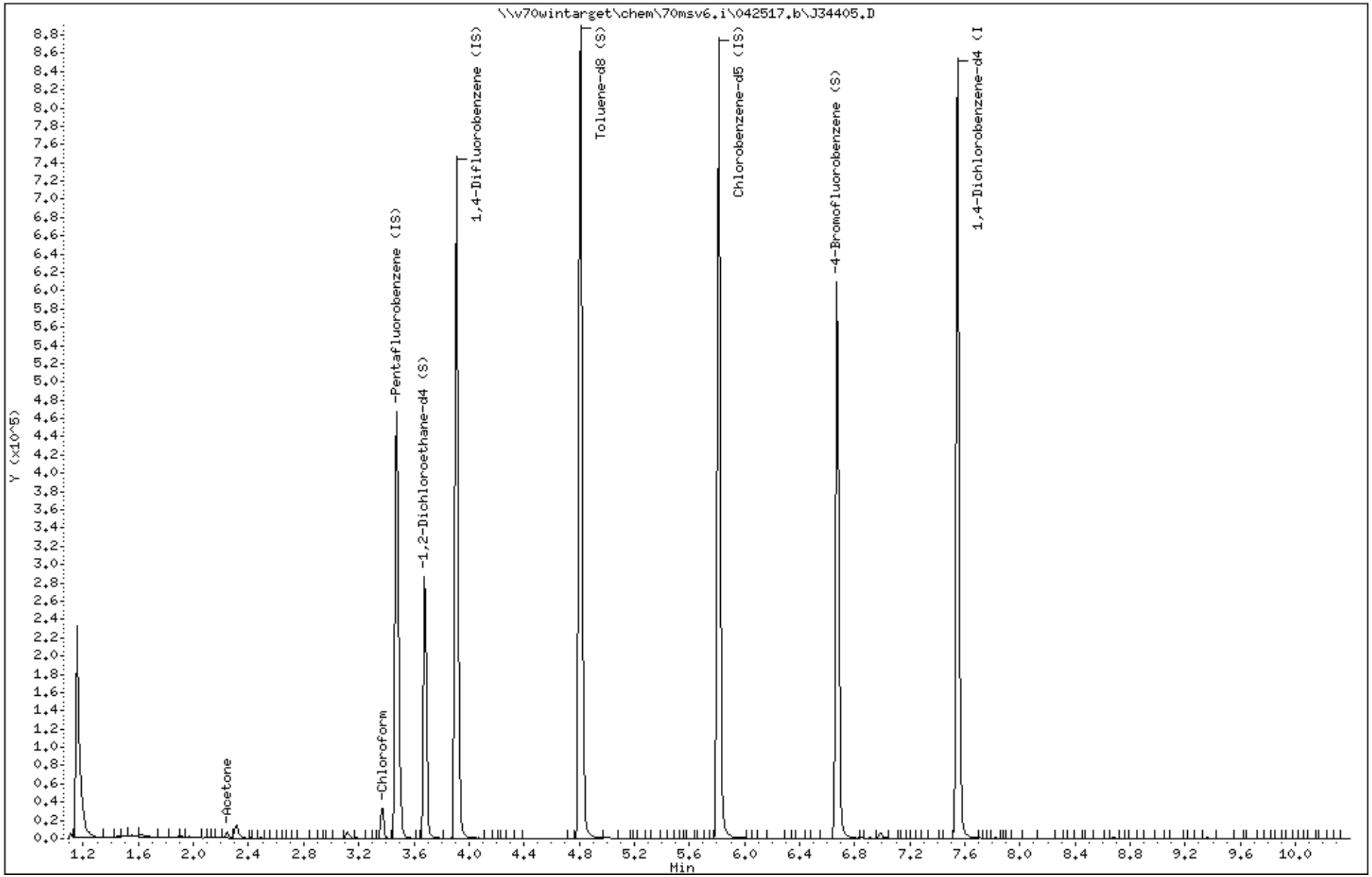
Pace Analytical Services, Inc.

SW846-8260C/EPA 624

Data file : \\v70wintarget\chem\70msv6.i\042517.b\J34405.D
Lab Smp Id: 7016438002 Client Smp ID: MW-1B
Inj Date : 25-APR-2017 15:33 MS Autotune Date: 17-MAR-2017 06:2
Operator : KGG Inst ID: 70msv6.i
Smp Info : 7016438002,
Misc Info : 2005,
Comment :
Method : \\v70wintarget\chem\70msv6.i\042517.b\032717_8260W.m
Meth Date : 29-Apr-2017 22:43 blagula Quant Type: ISTD
Cal Date : 27-MAR-2017 18:25 Cal File: J33244.D
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A
Processing Host: 70MSV4WS10B6

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34405.D
Date : 25-APR-2017 15:33
Client ID: MW-1B
Instrument: 70msv6.i
Sample Info: 7016438002,
Purge Volume: 5.0
Operator: KGG
Column phase: RTX-624
Column diameter: 0.18



Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34405.D

Date : 25-APR-2017 15:33

Client ID: MW-1B

Instrument: 70msv6.i

Sample Info: 7016438002,

Purge Volume: 5.0

Operator: KGG

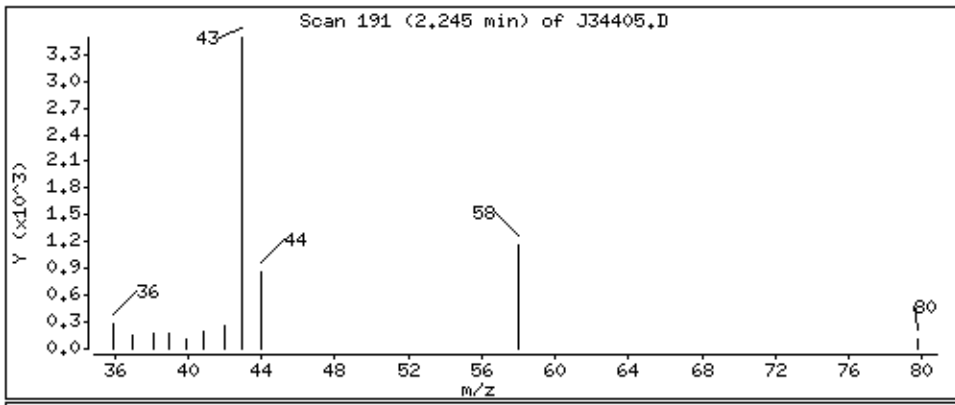
Column phase: RTX-624

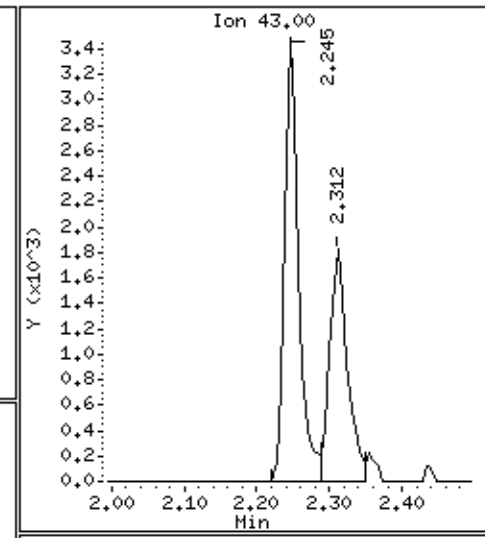
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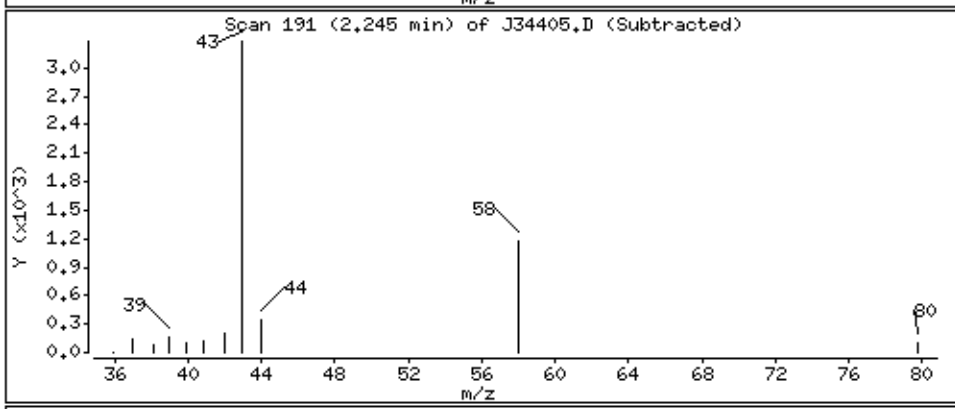
17 Acetone

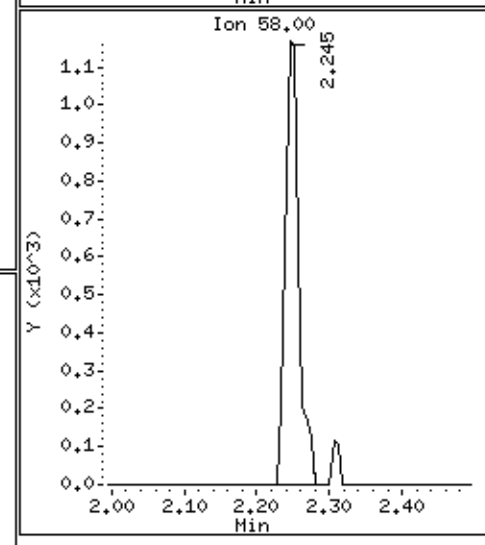
Concentration: 3.36 ug/L

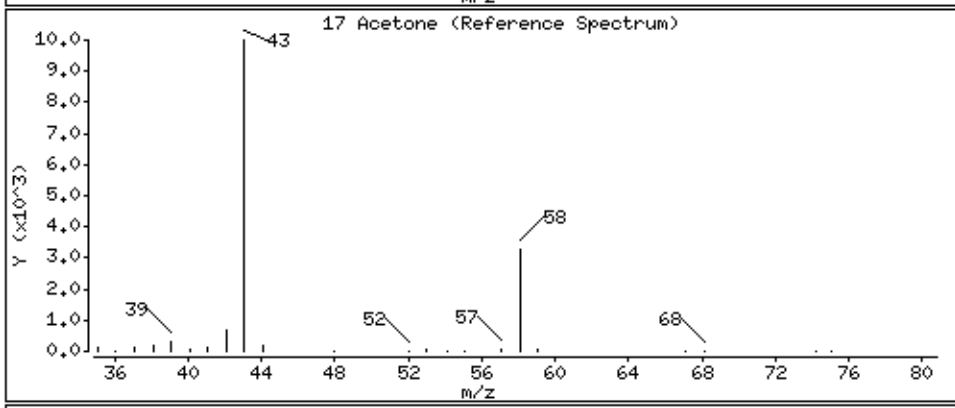
Review Code:

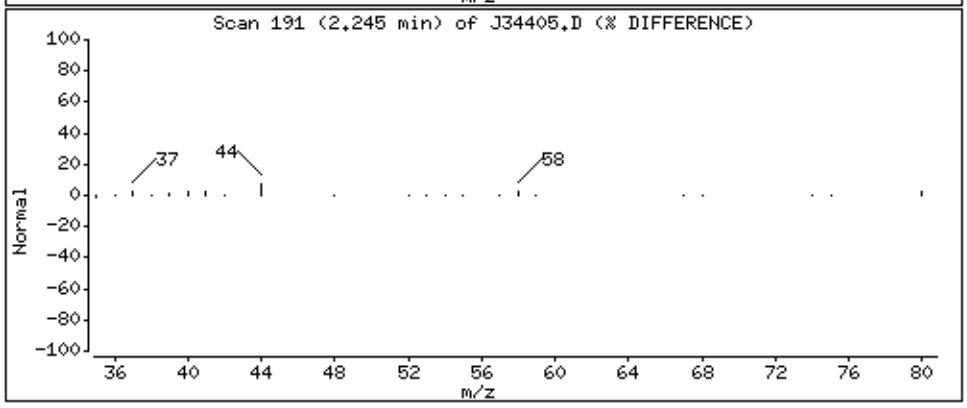












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34405.D

Date : 25-APR-2017 15:33

Client ID: MW-1B

Instrument: 70msv6.i

Sample Info: 7016438002,

Purge Volume: 5.0

Operator: KGG

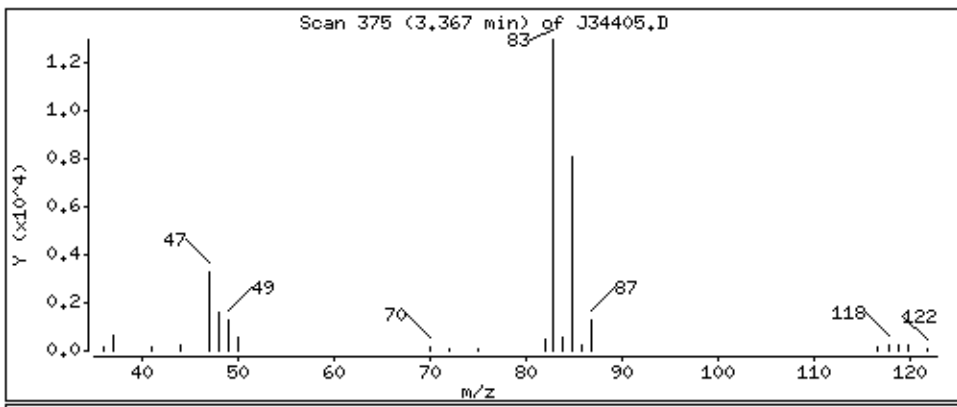
Column phase: RTX-624

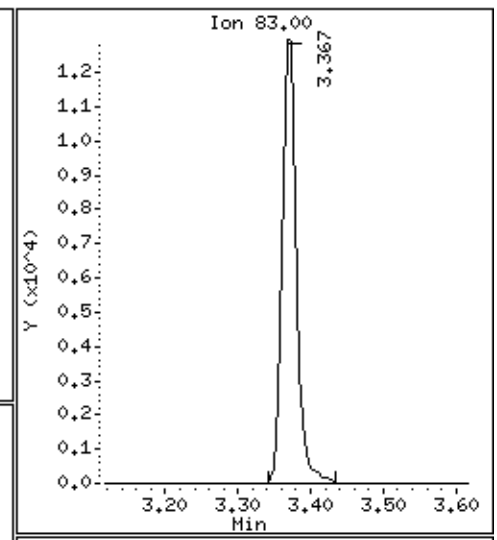
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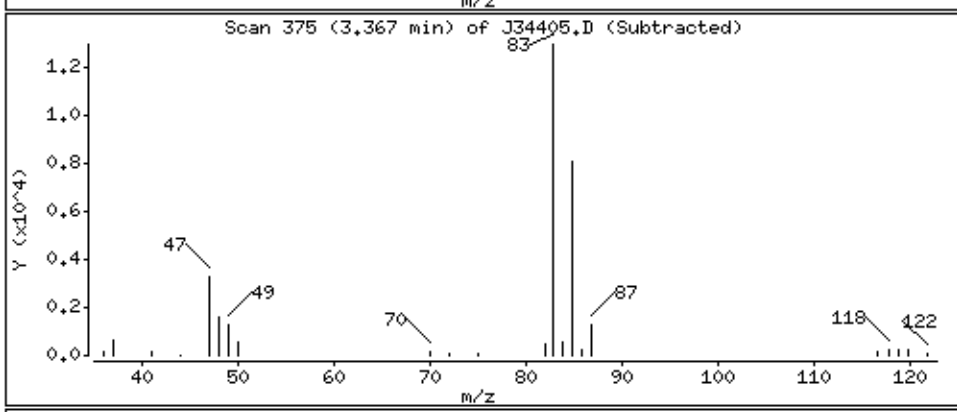
43 Chloroform

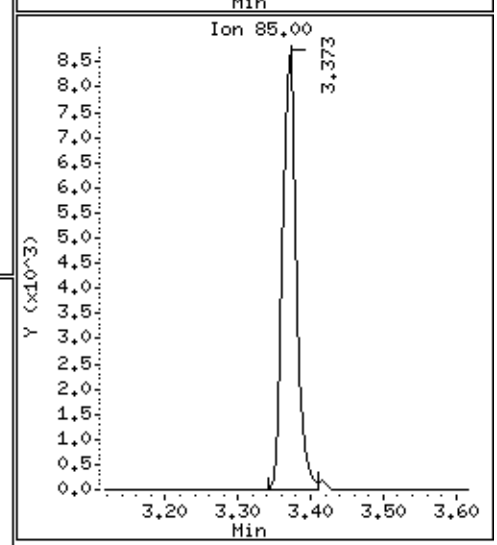
Concentration: 2.65 ug/L

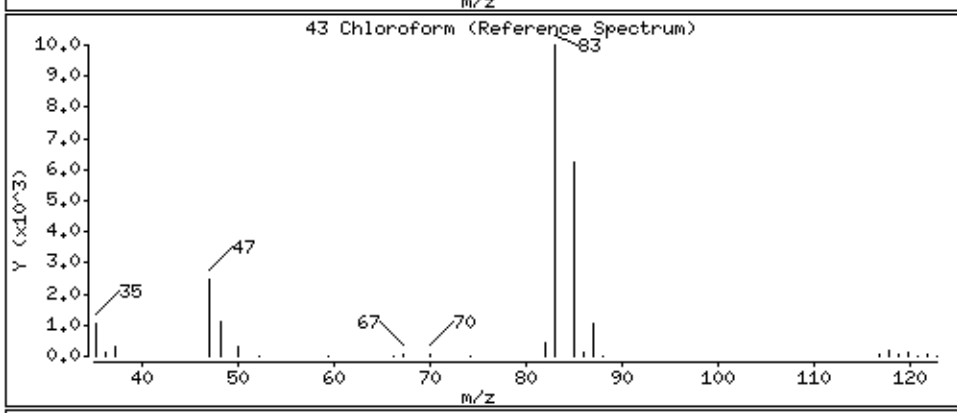
Review Code:

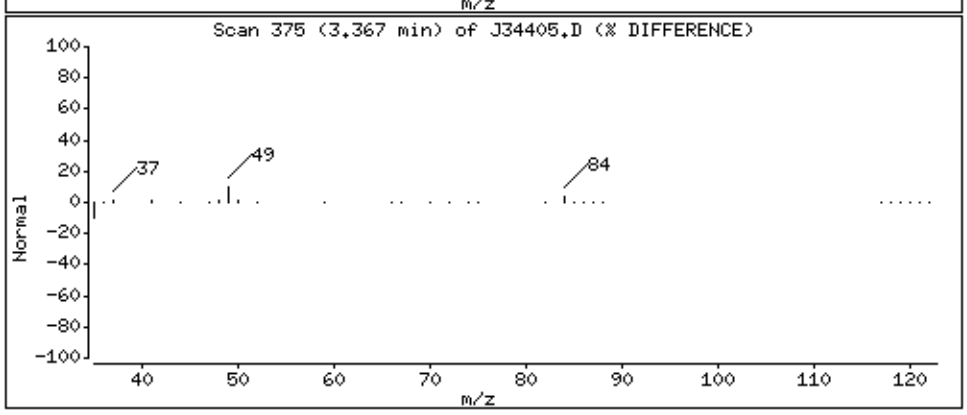












Data File: \\v70wintarget\chem\70msv6.i\042517.b/J34405.D
Injection Date: 25-APR-2017 15:33
Instrument: 70msv6.i
Lab Sample ID: 7016438002
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

SAMPLE NO.

MW-1C

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York Contract: NORTH SEA LANDFILL

Date Received: 04/20/2017 12:20 Matrix: Water SDG No.: 7016438

Date Extracted: 04/25/2017 15:50 Lab Sample ID: 7016438003

Date Analyzed: 04/25/2017 15:50 Lab File ID: 042517.B\J34406.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1 Instrument: 70MSV6 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	4.5	J
107-13-1	Acrylonitrile	<5.0	U
71-43-2	Benzene	<5.0	U
74-97-5	Bromochloromethane	<5.0	U
75-27-4	Bromodichloromethane	<5.0	U
75-25-2	Bromoform	<5.0	U
74-83-9	Bromomethane	<5.0	U
78-93-3	2-Butanone (MEK)	<5.0	U
75-15-0	Carbon disulfide	<5.0	U
56-23-5	Carbon tetrachloride	<5.0	U
108-90-7	Chlorobenzene	<5.0	U
75-00-3	Chloroethane	<5.0	U
67-66-3	Chloroform	2.3	J
74-87-3	Chloromethane	<5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	<5.0	U
124-48-1	Dibromochloromethane	<5.0	U
106-93-4	1,2-Dibromoethane (EDB)	<5.0	U
74-95-3	Dibromomethane	<5.0	U
95-50-1	1,2-Dichlorobenzene	<5.0	U
106-46-7	1,4-Dichlorobenzene	<5.0	U
110-57-6	trans-1,4-Dichloro-2-butene	<5.0	U
75-34-3	1,1-Dichloroethane	<5.0	U
107-06-2	1,2-Dichloroethane	<5.0	U
75-35-4	1,1-Dichloroethene	<5.0	U
156-59-2	cis-1,2-Dichloroethene	<5.0	U
156-60-5	trans-1,2-Dichloroethene	<5.0	U
78-87-5	1,2-Dichloropropane	<5.0	U
10061-01-5	cis-1,3-Dichloropropene	<5.0	U
10061-02-6	trans-1,3-Dichloropropene	<5.0	U
100-41-4	Ethylbenzene	<5.0	U
591-78-6	2-Hexanone	<5.0	U
74-88-4	Iodomethane	<5.0	U
75-09-2	Methylene Chloride	<5.0	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<5.0	U
100-42-5	Styrene	<5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	<5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	<5.0	U

SAMPLE NO.

MW-1C

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York Contract: NORTH SEA LANDFILL

Date Received: 04/20/2017 12:20 Matrix: Water SDG No.: 7016438

Date Extracted: 04/25/2017 15:50 Lab Sample ID: 7016438003

Date Analyzed: 04/25/2017 15:50 Lab File ID: 042517.B\J34406.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1 Instrument: 70MSV6 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
127-18-4	Tetrachloroethene	<5.0	U
108-88-3	Toluene	<5.0	U
71-55-6	1,1,1-Trichloroethane	<5.0	U
79-00-5	1,1,2-Trichloroethane	<5.0	U
79-01-6	Trichloroethene	<5.0	U
75-69-4	Trichlorofluoromethane	<5.0	U
96-18-4	1,2,3-Trichloropropane	<5.0	U
108-05-4	Vinyl acetate	<5.0	U
75-01-4	Vinyl chloride	<5.0	U
1330-20-7	Xylene (Total)	<5.0	U

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34406.D
Report Date: 29-Apr-2017 22:54

Pace Analytical Services, Inc.

SW846-8260C/EPA 624

Data file : \\v70wintarget\chem\70msv6.i\042517.b\J34406.D
Lab Smp Id: 7016438003 Client Smp ID: MW-1C
Inj Date : 25-APR-2017 15:50 MS Autotune Date: 17-MAR-2017 06:2
Operator : KGG Inst ID: 70msv6.i
Smp Info : 7016438003,
Misc Info : 2005,
Comment :
Method : \\v70wintarget\chem\70msv6.i\042517.b\032717_8260W.m
Meth Date : 29-Apr-2017 22:43 blagula Quant Type: ISTD
Cal Date : 27-MAR-2017 18:25 Cal File: J33244.D
Als bottle: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A
Processing Host: 70MSV4WS10B6

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)	REVIEW C
1 Chlorodifluoromethane	51	Compound Not Detected.						
2 Dichlorotetrafluoroethane	135	Compound Not Detected.						
3 Dichlorodifluoromethane	85	Compound Not Detected.						
4 Chloromethane	50	Compound Not Detected.						
5 Vinyl chloride	62	Compound Not Detected.						
6 1,3-Butadiene	54	Compound Not Detected.						
7 Acetaldehyde	44	Compound Not Detected.						
8 Bromomethane	94	Compound Not Detected.						
9 Chloroethane	64	Compound Not Detected.						
10 Dichlorofluoromethane	67	Compound Not Detected.						
11 Trichlorofluoromethane	101	Compound Not Detected.						
12 Ethanol	45	Compound Not Detected.						
13 Diethyl ether (Ethyl ether)	59	Compound Not Detected.						
16 1,1,2-Trichlorotrifluoroethane	101	Compound Not Detected.						
14 Acrolein	56	Compound Not Detected.						
15 1,1-Dichloroethene	96	Compound Not Detected.						
17 Acetone	43	2.245	2.245	(0.646)	6324	4.53241	4.53	
18 Iodomethane	142	Compound Not Detected.						
19 2-Propanol	45	Compound Not Detected.						(D)
20 Carbon disulfide	76	Compound Not Detected.						
21 Allyl chloride	76	Compound Not Detected.						
22 Acetonitrile	41	Compound Not Detected.						

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34406.D
Report Date: 29-Apr-2017 22:54

			QUANT SIG					CONCENTRATIONS ON-COLUMN	CONCENTRATIONS FINAL	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)	REVIEW C
	23	Methyl acetate	43	Compound Not Detected.						
	24	Methylene Chloride	84	Compound Not Detected.						
	25	tert-Butyl Alcohol	59	Compound Not Detected.						
	28	Methyl-tert-butyl ether	73	Compound Not Detected.						
	27	trans-1,2-Dichloroethene	96	Compound Not Detected.						
	26	Acrylonitrile	53	Compound Not Detected.						
	30	n-Hexane	57	Compound Not Detected.						
	29	Diisopropyl ether	45	Compound Not Detected.						
	32	Vinyl acetate	43	Compound Not Detected.						
	31	1,1-Dichloroethane	63	Compound Not Detected.						
	33	Chloroprene	53	Compound Not Detected.						
	34	Ethyl-tert-butyl ether	59	Compound Not Detected.						
	36	2,2-Dichloropropane	77	Compound Not Detected.						
	35	cis-1,2-Dichloroethene	96	Compound Not Detected.						
	39	Ethyl acetate	61	Compound Not Detected.						
	37	2-Butanone (MEK)	43	Compound Not Detected.						
	41	Bromochloromethane	128	Compound Not Detected.						
	42	Tetrahydrofuran	42	Compound Not Detected.						
	43	Chloroform	83	3.372	3.366	(0.970)	15403	2.27436	2.27	
	38	Propionitrile	54	Compound Not Detected.						
	46	Cyclohexane	56	Compound Not Detected.						
	45	1,1,1-Trichloroethane	97	Compound Not Detected.						
*	44	Pentafluorobenzene (IS)	168	3.476	3.476	(1.000)	235988	50.0000	(Q)	
	48	Carbon tetrachloride	117	Compound Not Detected.						(D)
	47	1,1-Dichloropropene	75	Compound Not Detected.						(D)
	55	2,2,4-Trimethylpentane	57	Compound Not Detected.						
	51	Benzene	78	Compound Not Detected.						
	40	Methacrylonitrile	67	Compound Not Detected.						
$	50	1,2-Dichloroethane-d4 (S)	65	3.677	3.677	(0.941)	130947	44.7306	44.7	
	56	tert-Amylmethyl ether	73	Compound Not Detected.						
	52	1,2-Dichloroethane	62	Compound Not Detected.						
	57	n-Heptane	43	Compound Not Detected.						
*	58	1,4-Difluorobenzene (IS)	114	3.909	3.909	(1.000)	411014	50.0000		
	59	Trichloroethene	95	Compound Not Detected.						
	60	Methylcyclohexane	83	Compound Not Detected.						
	49	Isobutanol	43	Compound Not Detected.						
	53	tert-Amyl Alcohol	59	Compound Not Detected.						
	54	tert-Amyl ethyl ether	59	Compound Not Detected.						
	61	1,2-Dichloropropane	63	Compound Not Detected.						
	63	Methyl methacrylate	69	Compound Not Detected.						
	64	1,4-Dioxane (p-Dioxane)	88	Compound Not Detected.						
	62	Dibromomethane	93	Compound Not Detected.						
	65	Bromodichloromethane	83	Compound Not Detected.						
	66	2-Nitropropane	43	Compound Not Detected.						
	67	2-Chloroethylvinyl ether	63	Compound Not Detected.						
	68	cis-1,3-Dichloropropene	75	Compound Not Detected.						
	69	4-Methyl-2-pentanone (MIBK)	43	Compound Not Detected.						
$	70	Toluene-d8 (S)	98	4.811	4.811	(0.828)	483262	57.4082	57.4	
	71	Toluene	91	Compound Not Detected.						
	72	Methyl isothiocyanate	73	Compound Not Detected.						
	74	trans-1,3-Dichloropropene	75	Compound Not Detected.						
	75	Ethyl methacrylate	69	Compound Not Detected.						(D)
	76	1,1,2-Trichloroethane	83	Compound Not Detected.						
	77	Tetrachloroethene	166	Compound Not Detected.						

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34406.D
Report Date: 29-Apr-2017 22:54

							CONCENTRATIONS		
		QUANT SIG					ON-COLUMN	FINAL	
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)	REVIEW C
	78 1,3-Dichloropropane	76	Compound Not Detected.						
	79 2-Hexanone	43	Compound Not Detected.						
	73 n-Octane	43	Compound Not Detected.						
	81 n-Butyl acetate	43	Compound Not Detected.						
	80 Dibromochloromethane	129	Compound Not Detected.						
	82 1,2-Dibromoethane (EDB)	107	Compound Not Detected.						
*	83 Chlorobenzene-d5 (IS)	82	5.811	5.811	(1.000)	220984	50.0000		
	84 Chlorobenzene	112	Compound Not Detected.						
	86 Ethylbenzene	106	Compound Not Detected.						
	85 1,1,1,2-Tetrachloroethane	131	Compound Not Detected.						
	88 n-Nonane	43	Compound Not Detected.						(D)
	87 m&p-Xylene	106	Compound Not Detected.						
	89 o-Xylene	106	Compound Not Detected.						
	90 Styrene	104	Compound Not Detected.						
	91 Bromoform	173	Compound Not Detected.						
	92 Isopropylbenzene (Cumene)	105	Compound Not Detected.						
$	93 4-Bromofluorobenzene (S)	95	6.671	6.671	(1.148)	180063	60.0292	60.0	
	94 Bromobenzene	156	Compound Not Detected.						
	95 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.						
	98 n-Propylbenzene	91	Compound Not Detected.						
	96 1,2,3-Trichloropropane	110	Compound Not Detected.						
	97 trans-1,4-Dichloro-2-butene	53	Compound Not Detected.						
	103 n-Decane	43	Compound Not Detected.						
	99 2-Chlorotoluene	91	Compound Not Detected.						
	100 4-Ethyltoluene	105	Compound Not Detected.						
	101 1,3,5-Trimethylbenzene	105	Compound Not Detected.						
	102 4-Chlorotoluene	91	Compound Not Detected.						
	104 tert-Butylbenzene	119	Compound Not Detected.						
	105 Pentachloroethane	167	Compound Not Detected.						
	106 1,2,4-Trimethylbenzene	105	Compound Not Detected.						
	107 sec-Butylbenzene	105	Compound Not Detected.						
	109 d-Limonene	136	Compound Not Detected.						
	110 p-Isopropyltoluene	119	Compound Not Detected.						
	108 1,3-Dichlorobenzene	146	Compound Not Detected.						
*	111 1,4-Dichlorobenzene-d4 (IS)	152	7.548	7.549	(1.000)	184769	50.0000		
	112 1,4-Dichlorobenzene	146	Compound Not Detected.						
	113 1,2,3-Trimethylbenzene	105	Compound Not Detected.						
	114 Benzyl chloride	91	Compound Not Detected.						
	115 trans-Decalin	138	Compound Not Detected.						
	116 1,4-Diethylbenzene	119	Compound Not Detected.						
	117 n-Butylbenzene	91	Compound Not Detected.						
	119 n-Undecane	43	Compound Not Detected.						(D)
	118 1,2-Dichlorobenzene	146	Compound Not Detected.						
	120 cis-Decalin	138	Compound Not Detected.						
	121 1,2,4,5-tetramethylbenzene	119	Compound Not Detected.						
	122 1,2-Dibromo-3-chloropropane	75	Compound Not Detected.						
	123 n-Dodecane	43	Compound Not Detected.						(D)
	124 1,2,4-Trichlorobenzene	180	Compound Not Detected.						
	125 Hexachloro-1,3-butadiene	225	Compound Not Detected.						
	126 Naphthalene	128	Compound Not Detected.						
	127 1,2,3-Trichlorobenzene	180	Compound Not Detected.						

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34406.D
Report Date: 29-Apr-2017 22:54

QC Flag Legend

Q - Qualifier signal failed the ratio test.
D - User disabled compound identification.

Review Codes Legend

:

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34406.D
Report Date: 29-Apr-2017 22:54

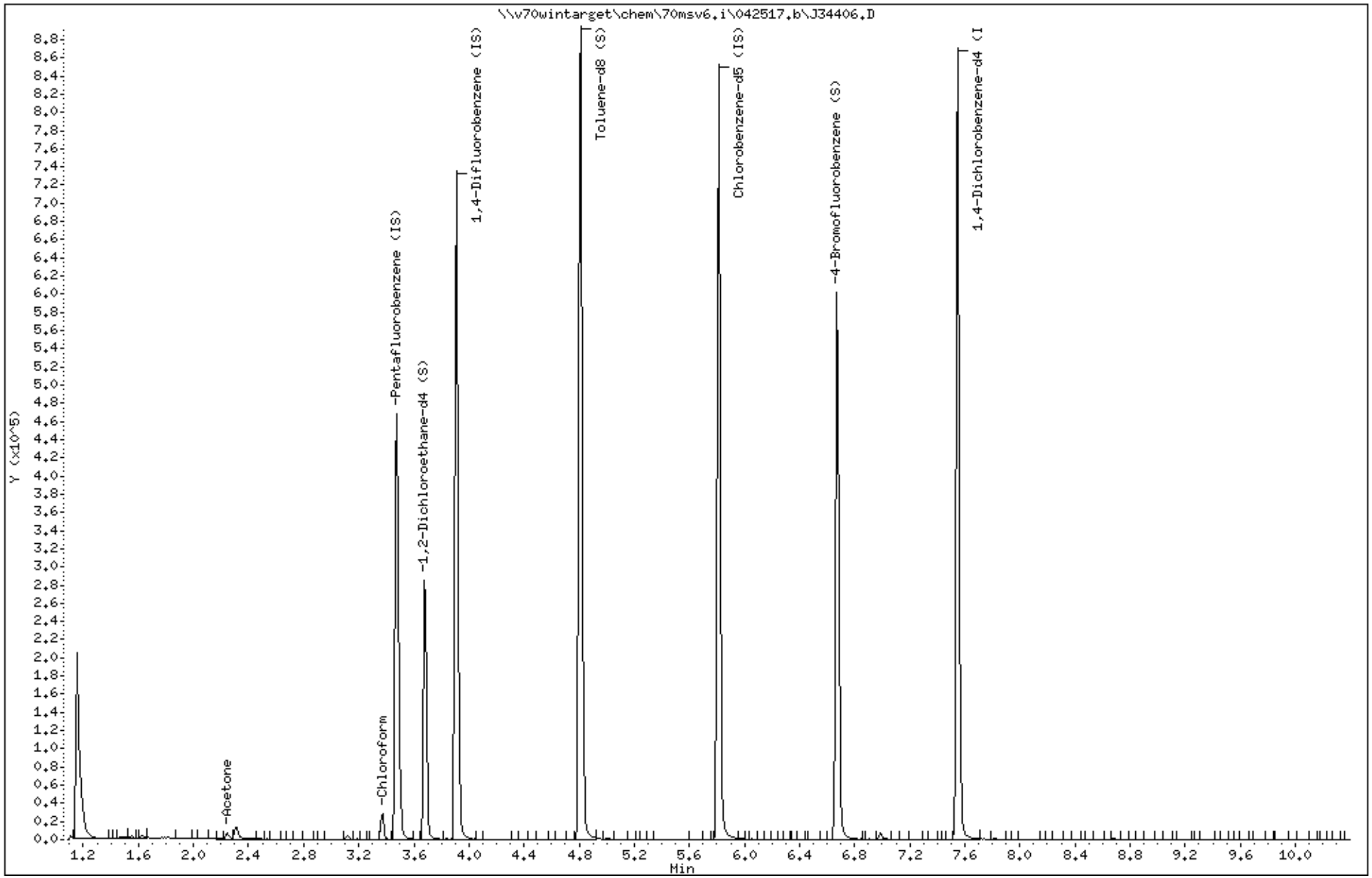
Pace Analytical Services, Inc.

SW846-8260C/EPA 624

Data file : \\v70wintarget\chem\70msv6.i\042517.b\J34406.D
Lab Smp Id: 7016438003 Client Smp ID: MW-1C
Inj Date : 25-APR-2017 15:50 MS Autotune Date: 17-MAR-2017 06:2
Operator : KGG Inst ID: 70msv6.i
Smp Info : 7016438003,
Misc Info : 2005,
Comment :
Method : \\v70wintarget\chem\70msv6.i\042517.b\032717_8260W.m
Meth Date : 29-Apr-2017 22:43 blagula Quant Type: ISTD
Cal Date : 27-MAR-2017 18:25 Cal File: J33244.D
Als bottle: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A
Processing Host: 70MSV4WS10B6

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34406.D
Date : 25-APR-2017 15:50
Client ID: MW-1C
Instrument: 70msv6.i
Sample Info: 7016438003,
Purge Volume: 5.0
Operator: KGG
Column phase: RTX-624
Column diameter: 0.18



Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34406.D

Date : 25-APR-2017 15:50

Client ID: MW-1C

Instrument: 70msv6.i

Sample Info: 7016438003,

Purge Volume: 5.0

Operator: KGG

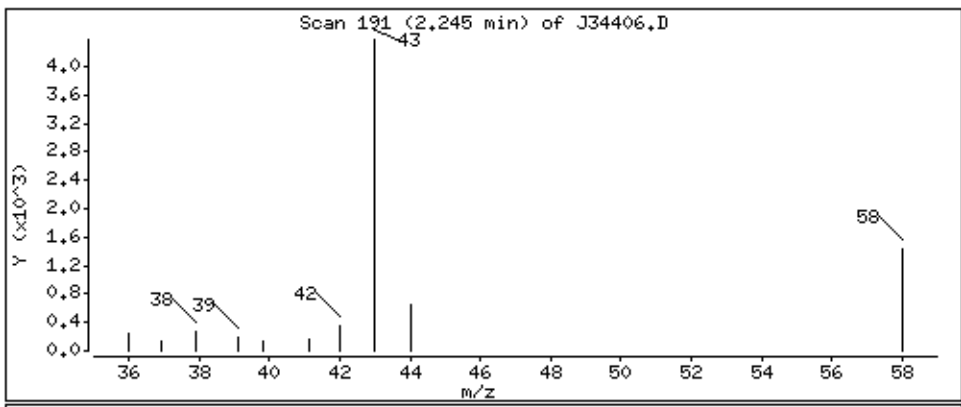
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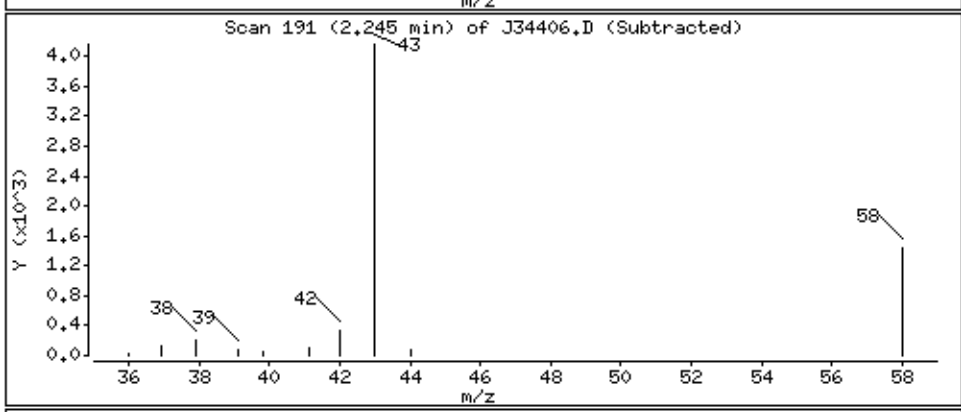
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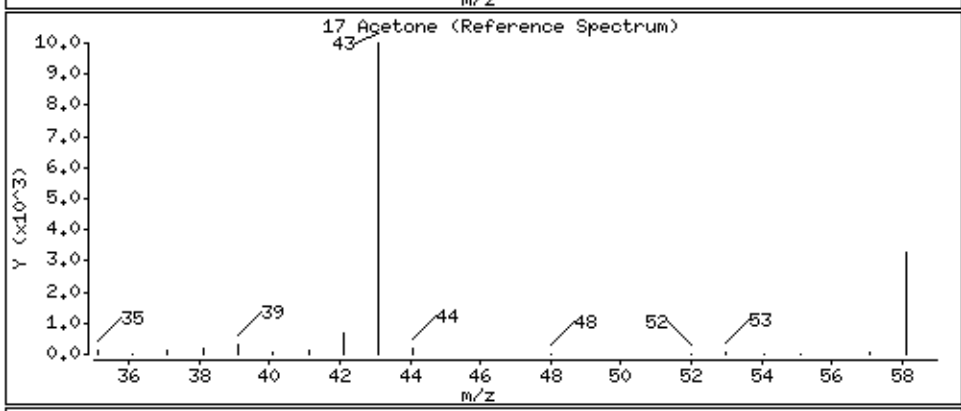
17 Acetone

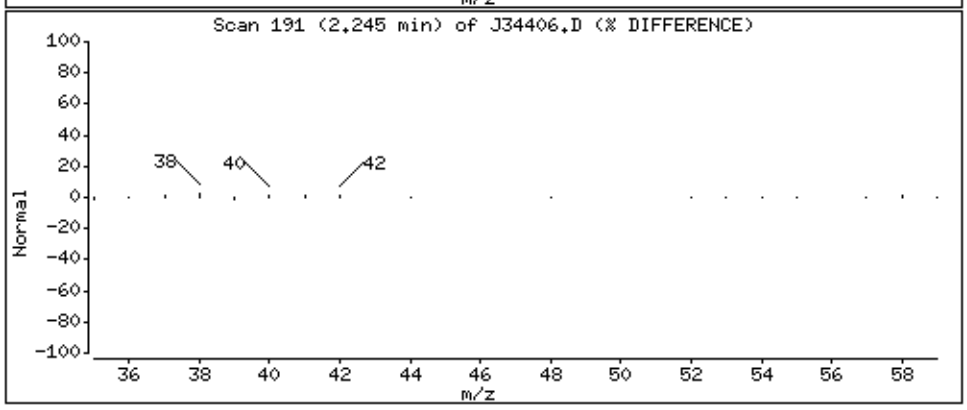
Concentration: 4.53 ug/L

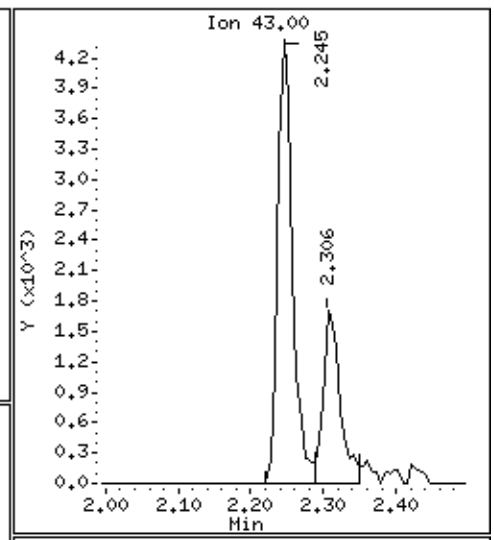
Review Code:

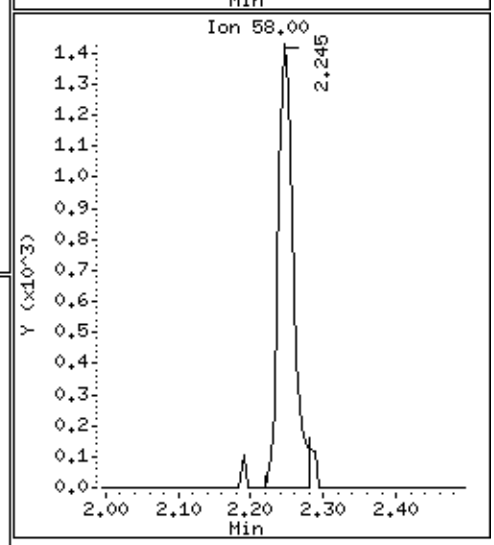












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34406.D

Date : 25-APR-2017 15:50

Client ID: MW-1C

Instrument: 70msv6.i

Sample Info: 7016438003,

Purge Volume: 5.0

Operator: KGG

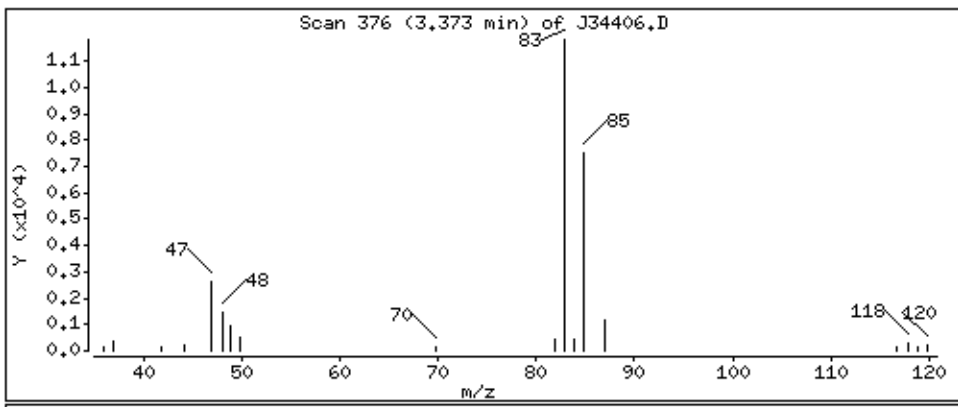
Column phase: RTX-624

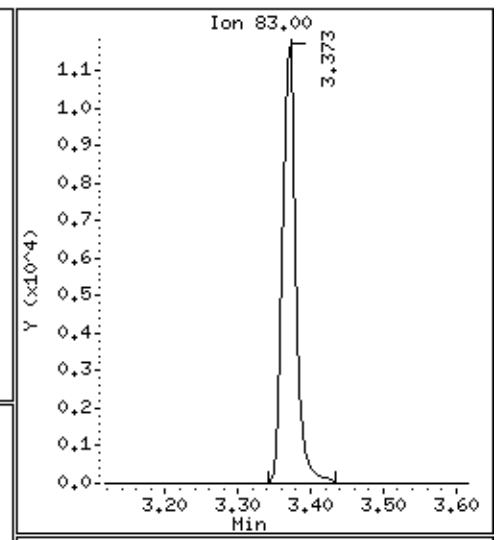
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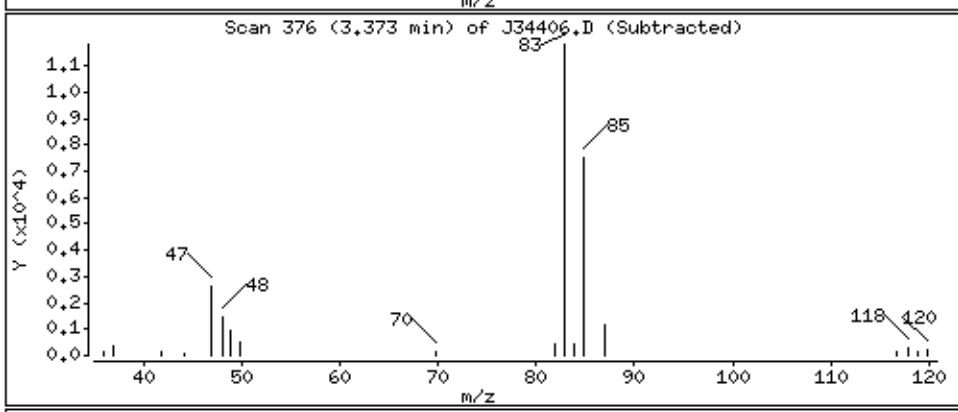
43 Chloroform

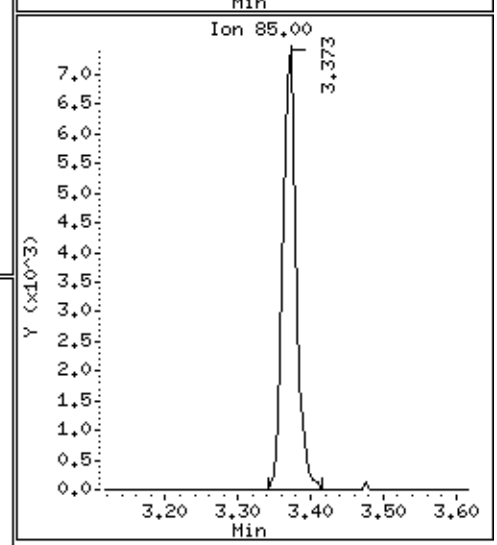
Concentration: 2.27 ug/L

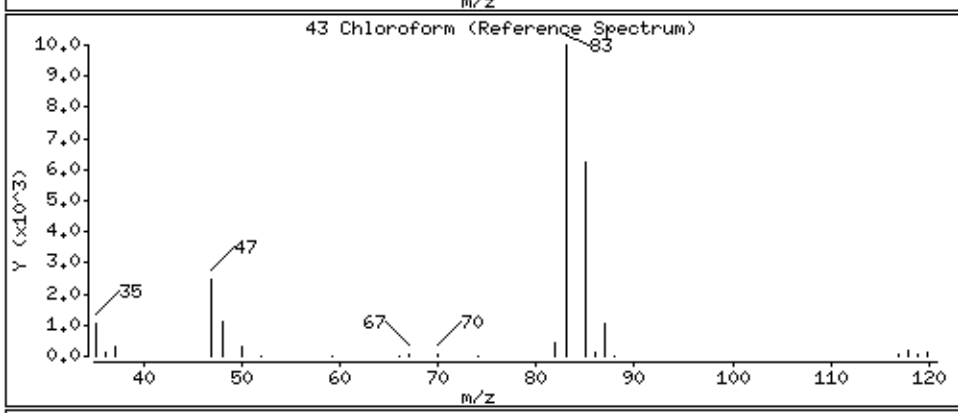
Review Code:

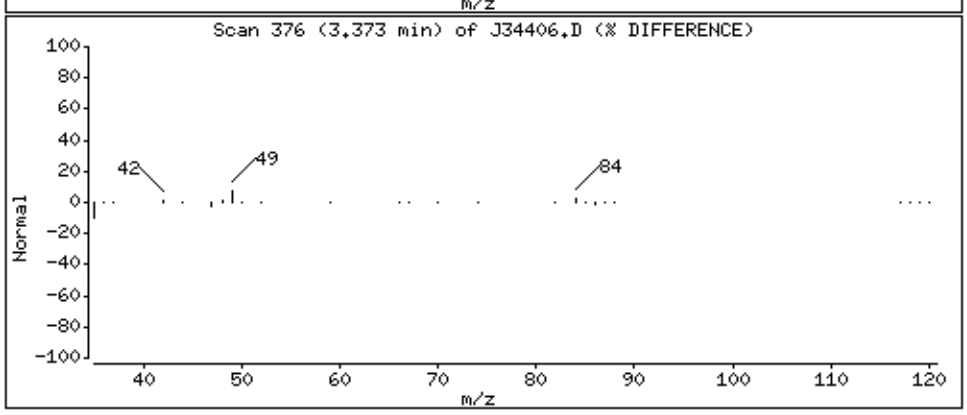












Data File: \\v70wintarget\chem\70msv6.i\042517.b/J34406.D
Injection Date: 25-APR-2017 15:50
Instrument: 70msv6.i
Lab Sample ID: 7016438003
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

SAMPLE NO.

MW-11B

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York Contract: NORTH SEA LANDFILL

Date Received: 04/20/2017 12:20 Matrix: Water SDG No.: 7016438

Date Extracted: 04/25/2017 16:08 Lab Sample ID: 7016438005

Date Analyzed: 04/25/2017 16:08 Lab File ID: 042517.B\J34407.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1 Instrument: 70MSV6 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	4.8	J
107-13-1	Acrylonitrile	<5.0	U
71-43-2	Benzene	<5.0	U
74-97-5	Bromochloromethane	<5.0	U
75-27-4	Bromodichloromethane	<5.0	U
75-25-2	Bromoform	<5.0	U
74-83-9	Bromomethane	<5.0	U
78-93-3	2-Butanone (MEK)	<5.0	U
75-15-0	Carbon disulfide	<5.0	U
56-23-5	Carbon tetrachloride	<5.0	U
108-90-7	Chlorobenzene	<5.0	U
75-00-3	Chloroethane	<5.0	U
67-66-3	Chloroform	2.0	J
74-87-3	Chloromethane	<5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	<5.0	U
124-48-1	Dibromochloromethane	<5.0	U
106-93-4	1,2-Dibromoethane (EDB)	<5.0	U
74-95-3	Dibromomethane	<5.0	U
95-50-1	1,2-Dichlorobenzene	<5.0	U
106-46-7	1,4-Dichlorobenzene	<5.0	U
110-57-6	trans-1,4-Dichloro-2-butene	<5.0	U
75-34-3	1,1-Dichloroethane	<5.0	U
107-06-2	1,2-Dichloroethane	<5.0	U
75-35-4	1,1-Dichloroethene	<5.0	U
156-59-2	cis-1,2-Dichloroethene	<5.0	U
156-60-5	trans-1,2-Dichloroethene	<5.0	U
78-87-5	1,2-Dichloropropane	<5.0	U
10061-01-5	cis-1,3-Dichloropropene	<5.0	U
10061-02-6	trans-1,3-Dichloropropene	<5.0	U
100-41-4	Ethylbenzene	<5.0	U
591-78-6	2-Hexanone	<5.0	U
74-88-4	Iodomethane	<5.0	U
75-09-2	Methylene Chloride	<5.0	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<5.0	U
100-42-5	Styrene	<5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	<5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	<5.0	U

SAMPLE NO.

MW-11B

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York Contract: NORTH SEA LANDFILL

Date Received: 04/20/2017 12:20 Matrix: Water SDG No.: 7016438

Date Extracted: 04/25/2017 16:08 Lab Sample ID: 7016438005

Date Analyzed: 04/25/2017 16:08 Lab File ID: 042517.B\J34407.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1 Instrument: 70MSV6 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
127-18-4	Tetrachloroethene	<5.0	U
108-88-3	Toluene	<5.0	U
71-55-6	1,1,1-Trichloroethane	<5.0	U
79-00-5	1,1,2-Trichloroethane	<5.0	U
79-01-6	Trichloroethene	<5.0	U
75-69-4	Trichlorofluoromethane	<5.0	U
96-18-4	1,2,3-Trichloropropane	<5.0	U
108-05-4	Vinyl acetate	<5.0	U
75-01-4	Vinyl chloride	<5.0	U
1330-20-7	Xylene (Total)	<5.0	U

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34407.D
Report Date: 29-Apr-2017 22:54

Pace Analytical Services, Inc.

SW846-8260C/EPA 624

Data file : \\v70wintarget\chem\70msv6.i\042517.b\J34407.D
Lab Smp Id: 7016438005 Client Smp ID: MW-11B
Inj Date : 25-APR-2017 16:08 MS Autotune Date: 17-MAR-2017 06:2
Operator : KGG Inst ID: 70msv6.i
Smp Info : 7016438005,
Misc Info : 2005,
Comment :
Method : \\v70wintarget\chem\70msv6.i\042517.b\032717_8260W.m
Meth Date : 29-Apr-2017 22:43 blagula Quant Type: ISTD
Cal Date : 27-MAR-2017 18:25 Cal File: J33244.D
Als bottle: 13
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A
Processing Host: 70MSV4WS10B6

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)	REVIEW C
1 Chlorodifluoromethane	51	Compound Not Detected.						
2 Dichlorotetrafluoroethane	135	Compound Not Detected.						
3 Dichlorodifluoromethane	85	Compound Not Detected.						
4 Chloromethane	50	Compound Not Detected.						
5 Vinyl chloride	62	Compound Not Detected.						
6 1,3-Butadiene	54	Compound Not Detected.						
7 Acetaldehyde	44	Compound Not Detected.						
8 Bromomethane	94	Compound Not Detected.						
9 Chloroethane	64	Compound Not Detected.						
10 Dichlorofluoromethane	67	Compound Not Detected.						
11 Trichlorofluoromethane	101	Compound Not Detected.						
12 Ethanol	45	Compound Not Detected.						
13 Diethyl ether (Ethyl ether)	59	Compound Not Detected.						
16 1,1,2-Trichlorotrifluoroethane	101	Compound Not Detected.						
14 Acrolein	56	Compound Not Detected.						
15 1,1-Dichloroethene	96	Compound Not Detected.						
17 Acetone	43	2.245	2.245	(0.646)	6689	4.80406	4.80	
18 Iodomethane	142	Compound Not Detected.						
19 2-Propanol	45	Compound Not Detected.						(D)
20 Carbon disulfide	76	Compound Not Detected.						
21 Allyl chloride	76	Compound Not Detected.						
22 Acetonitrile	41	Compound Not Detected.						

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34407.D
Report Date: 29-Apr-2017 22:54

			QUANT SIG					CONCENTRATIONS ON-COLUMN	CONCENTRATIONS FINAL	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)	REVIEW C
	23	Methyl acetate	43	Compound Not Detected.						
	24	Methylene Chloride	84	Compound Not Detected.						
	25	tert-Butyl Alcohol	59	Compound Not Detected.						
	28	Methyl-tert-butyl ether	73	Compound Not Detected.						
	27	trans-1,2-Dichloroethene	96	Compound Not Detected.						
	26	Acrylonitrile	53	Compound Not Detected.						
	30	n-Hexane	57	Compound Not Detected.						
	29	Diisopropyl ether	45	Compound Not Detected.						
	32	Vinyl acetate	43	Compound Not Detected.						
	31	1,1-Dichloroethane	63	Compound Not Detected.						
	33	Chloroprene	53	Compound Not Detected.						
	34	Ethyl-tert-butyl ether	59	Compound Not Detected.						
	36	2,2-Dichloropropane	77	Compound Not Detected.						
	35	cis-1,2-Dichloroethene	96	Compound Not Detected.						
	39	Ethyl acetate	61	Compound Not Detected.						
	37	2-Butanone (MEK)	43	Compound Not Detected.						
	41	Bromochloromethane	128	Compound Not Detected.						
	42	Tetrahydrofuran	42	Compound Not Detected.						
	43	Chloroform	83	3.372	3.366	(0.970)	13410	1.98423	1.98	
	38	Propionitrile	54	Compound Not Detected.						
	46	Cyclohexane	56	Compound Not Detected.						
	45	1,1,1-Trichloroethane	97	Compound Not Detected.						
*	44	Pentafluorobenzene (IS)	168	3.476	3.476	(1.000)	235494	50.0000	(Q)	
	48	Carbon tetrachloride	117	Compound Not Detected.						(D)
	47	1,1-Dichloropropene	75	Compound Not Detected.						(D)
	55	2,2,4-Trimethylpentane	57	Compound Not Detected.						
	51	Benzene	78	Compound Not Detected.						
	40	Methacrylonitrile	67	Compound Not Detected.						
$	50	1,2-Dichloroethane-d4 (S)	65	3.677	3.677	(0.941)	130533	45.1764	45.2	
	56	tert-Amylmethyl ether	73	Compound Not Detected.						
	52	1,2-Dichloroethane	62	Compound Not Detected.						
	57	n-Heptane	43	Compound Not Detected.						
*	58	1,4-Difluorobenzene (IS)	114	3.909	3.909	(1.000)	405672	50.0000		
	59	Trichloroethene	95	Compound Not Detected.						
	60	Methylcyclohexane	83	Compound Not Detected.						
	49	Isobutanol	43	Compound Not Detected.						
	53	tert-Amyl Alcohol	59	Compound Not Detected.						
	54	tert-Amyl ethyl ether	59	Compound Not Detected.						
	61	1,2-Dichloropropane	63	Compound Not Detected.						
	63	Methyl methacrylate	69	Compound Not Detected.						
	64	1,4-Dioxane (p-Dioxane)	88	Compound Not Detected.						
	62	Dibromomethane	93	Compound Not Detected.						
	65	Bromodichloromethane	83	Compound Not Detected.						
	66	2-Nitropropane	43	Compound Not Detected.						
	67	2-Chloroethylvinyl ether	63	Compound Not Detected.						
	68	cis-1,3-Dichloropropene	75	Compound Not Detected.						
	69	4-Methyl-2-pentanone (MIBK)	43	Compound Not Detected.						
$	70	Toluene-d8 (S)	98	4.811	4.811	(0.828)	473863	56.6635	56.7	
	71	Toluene	91	Compound Not Detected.						
	72	Methyl isothiocyanate	73	Compound Not Detected.						
	74	trans-1,3-Dichloropropene	75	Compound Not Detected.						
	75	Ethyl methacrylate	69	Compound Not Detected.						(D)
	76	1,1,2-Trichloroethane	83	Compound Not Detected.						
	77	Tetrachloroethene	166	Compound Not Detected.						

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34407.D
Report Date: 29-Apr-2017 22:54

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)	REVIEW C
78	1,3-Dichloropropane	76	Compound Not Detected.						
79	2-Hexanone	43	Compound Not Detected.						
73	n-Octane	43	Compound Not Detected.						
81	n-Butyl acetate	43	Compound Not Detected.						
80	Dibromochloromethane	129	Compound Not Detected.						
82	1,2-Dibromoethane (EDB)	107	Compound Not Detected.						
* 83	Chlorobenzene-d5 (IS)	82	5.811	5.811	(1.000)	219534	50.0000		
84	Chlorobenzene	112	Compound Not Detected.						
86	Ethylbenzene	106	Compound Not Detected.						
85	1,1,1,2-Tetrachloroethane	131	Compound Not Detected.						
88	n-Nonane	43	Compound Not Detected.						
87	m&p-Xylene	106	Compound Not Detected.						
89	o-Xylene	106	Compound Not Detected.						
90	Styrene	104	Compound Not Detected.						
91	Bromoform	173	Compound Not Detected.						
92	Isopropylbenzene (Cumene)	105	Compound Not Detected.						
$ 93	4-Bromofluorobenzene (S)	95	6.671	6.671	(1.148)	176193	59.1270	59.1	
94	Bromobenzene	156	Compound Not Detected.						
95	1,1,2,2-Tetrachloroethane	83	Compound Not Detected.						
98	n-Propylbenzene	91	Compound Not Detected.						
96	1,2,3-Trichloropropane	110	Compound Not Detected.						
97	trans-1,4-Dichloro-2-butene	53	Compound Not Detected.						
103	n-Decane	43	Compound Not Detected.						
99	2-Chlorotoluene	91	Compound Not Detected.						
100	4-Ethyltoluene	105	Compound Not Detected.						
101	1,3,5-Trimethylbenzene	105	Compound Not Detected.						
102	4-Chlorotoluene	91	Compound Not Detected.						
104	tert-Butylbenzene	119	Compound Not Detected.						
105	Pentachloroethane	167	Compound Not Detected.						
106	1,2,4-Trimethylbenzene	105	Compound Not Detected.						
107	sec-Butylbenzene	105	Compound Not Detected.						
109	d-Limonene	136	Compound Not Detected.						
110	p-Isopropyltoluene	119	Compound Not Detected.						
108	1,3-Dichlorobenzene	146	Compound Not Detected.						
* 111	1,4-Dichlorobenzene-d4 (IS)	152	7.548	7.549	(1.000)	183695	50.0000		
112	1,4-Dichlorobenzene	146	Compound Not Detected.						
113	1,2,3-Trimethylbenzene	105	Compound Not Detected.						
114	Benzyl chloride	91	Compound Not Detected.						
115	trans-Decalin	138	Compound Not Detected.						
116	1,4-Diethylbenzene	119	Compound Not Detected.						
117	n-Butylbenzene	91	Compound Not Detected.						
119	n-Undecane	43	Compound Not Detected.						(D)
118	1,2-Dichlorobenzene	146	Compound Not Detected.						
120	cis-Decalin	138	Compound Not Detected.						
121	1,2,4,5-tetramethylbenzene	119	Compound Not Detected.						
122	1,2-Dibromo-3-chloropropane	75	Compound Not Detected.						
123	n-Dodecane	43	Compound Not Detected.						(D)
124	1,2,4-Trichlorobenzene	180	Compound Not Detected.						
125	Hexachloro-1,3-butadiene	225	Compound Not Detected.						
126	Naphthalene	128	Compound Not Detected.						
127	1,2,3-Trichlorobenzene	180	Compound Not Detected.						

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34407.D
Report Date: 29-Apr-2017 22:54

QC Flag Legend

Q - Qualifier signal failed the ratio test.
D - User disabled compound identification.

Review Codes Legend

:

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34407.D
Report Date: 29-Apr-2017 22:54

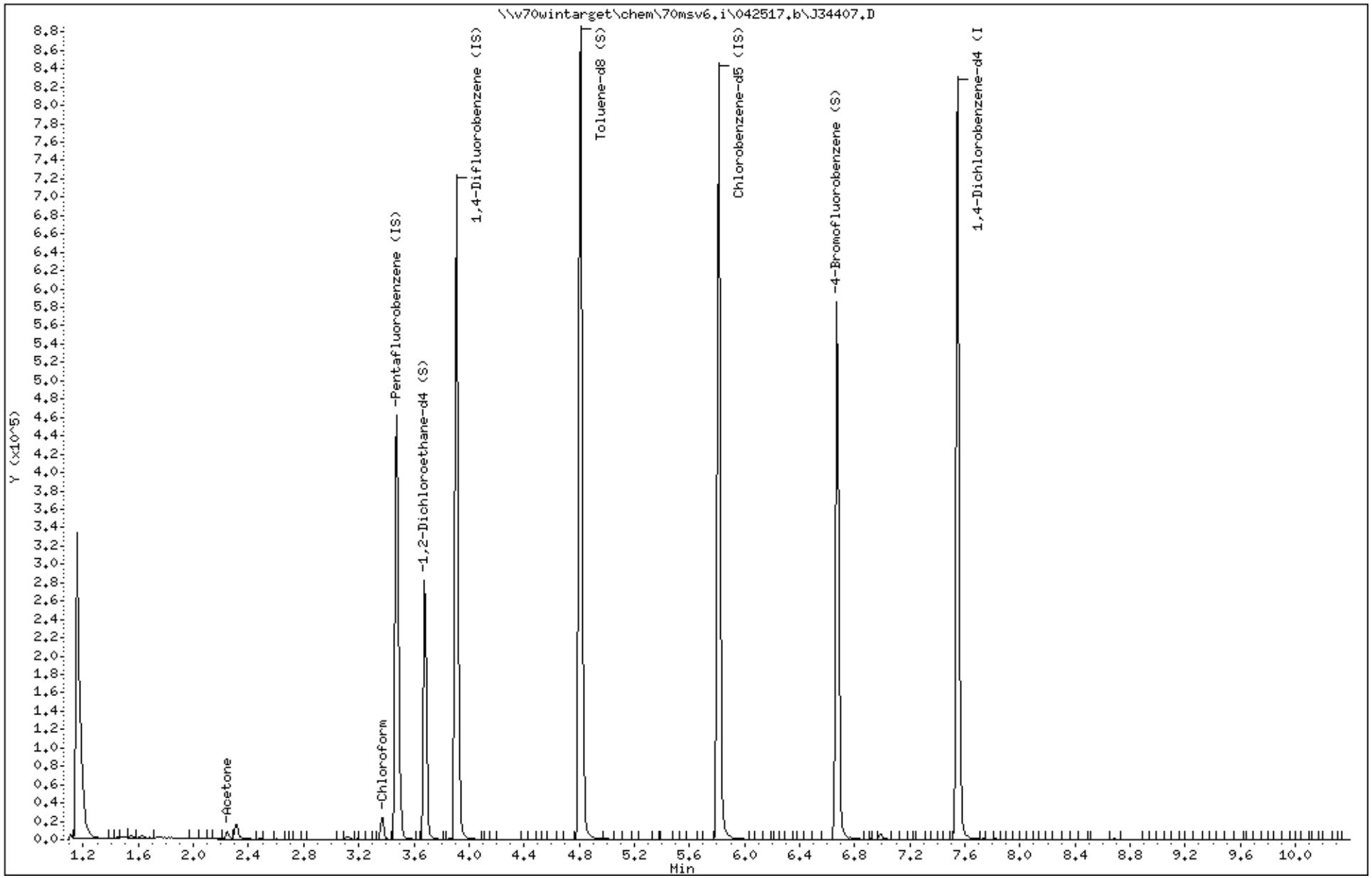
Pace Analytical Services, Inc.

SW846-8260C/EPA 624

Data file : \\v70wintarget\chem\70msv6.i\042517.b\J34407.D
Lab Smp Id: 7016438005 Client Smp ID: MW-11B
Inj Date : 25-APR-2017 16:08 MS Autotune Date: 17-MAR-2017 06:2
Operator : KGG Inst ID: 70msv6.i
Smp Info : 7016438005,
Misc Info : 2005,
Comment :
Method : \\v70wintarget\chem\70msv6.i\042517.b\032717_8260W.m
Meth Date : 29-Apr-2017 22:43 blagula Quant Type: ISTD
Cal Date : 27-MAR-2017 18:25 Cal File: J33244.D
Als bottle: 13
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A
Processing Host: 70MSV4WS10B6

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34407.D
Date : 25-APR-2017 16:08
Client ID: MW-11B
Instrument: 70msv6.i
Sample Info: 7016438005,
Purge Volume: 5.0
Operator: KGG
Column phase: RTX-624
Column diameter: 0.18



Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34407.D

Date : 25-APR-2017 16:08

Client ID: MW-11B

Instrument: 70msv6.i

Sample Info: 7016438005,

Purge Volume: 5.0

Operator: KGG

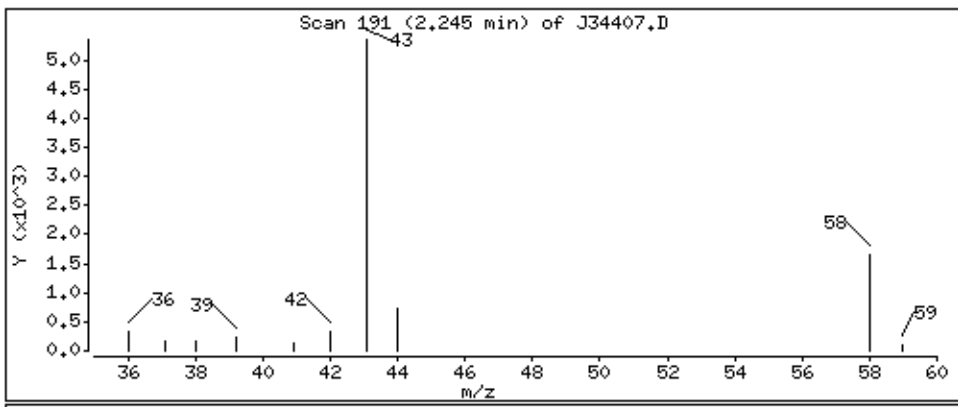
Column phase: RTX-624

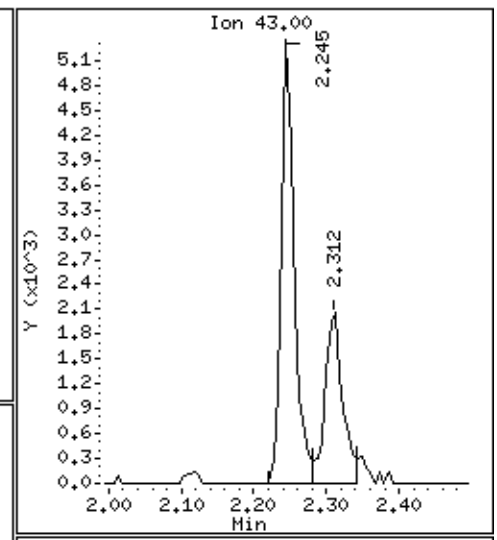
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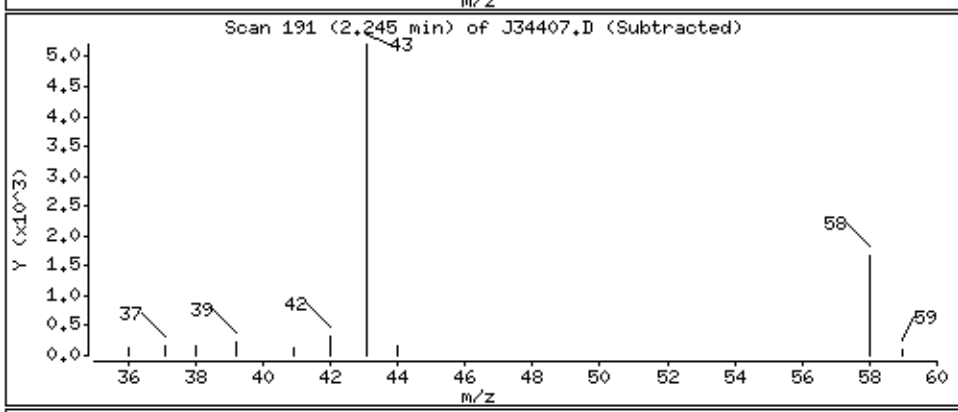
17 Acetone

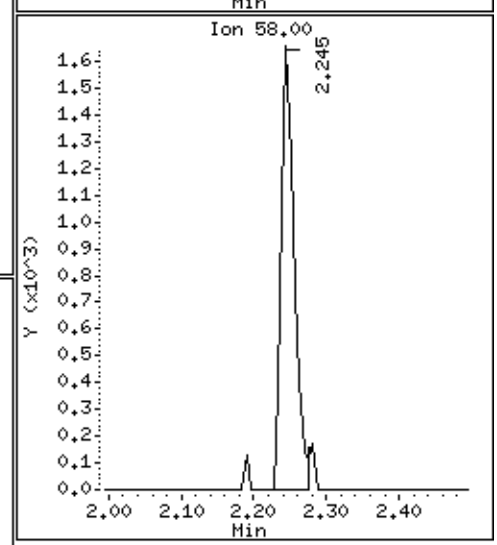
Concentration: 4.80 ug/L

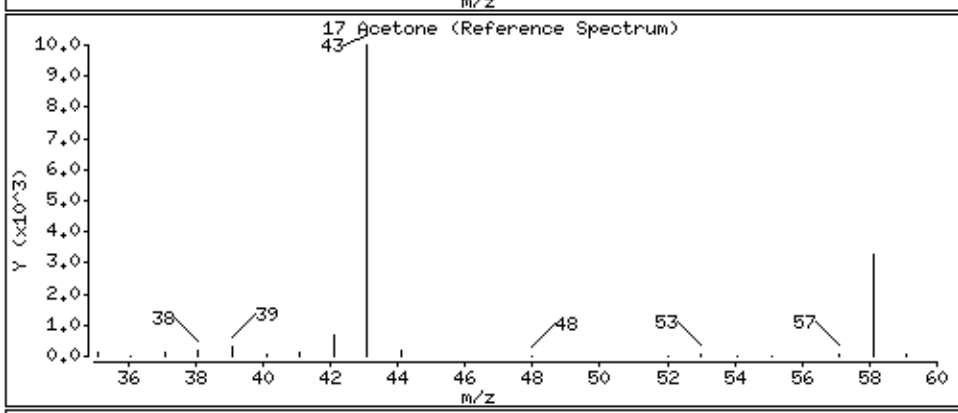
Review Code:

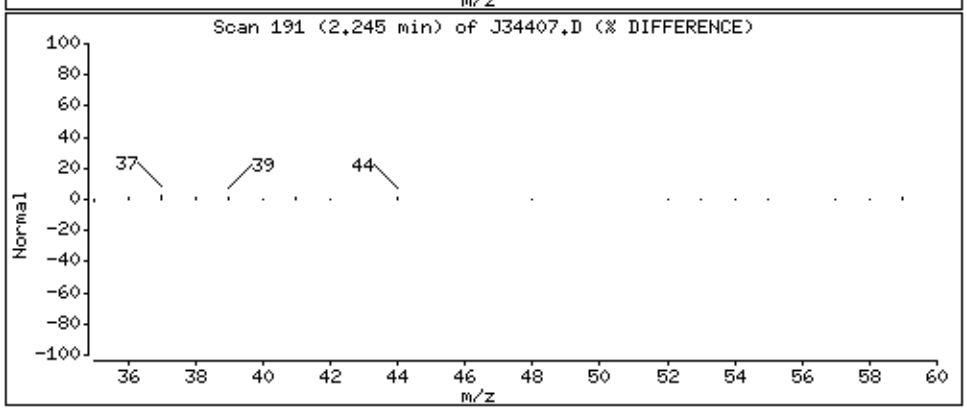












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34407.D

Date : 25-APR-2017 16:08

Client ID: MW-11B

Instrument: 70msv6.i

Sample Info: 7016438005,

Purge Volume: 5.0

Operator: KGG

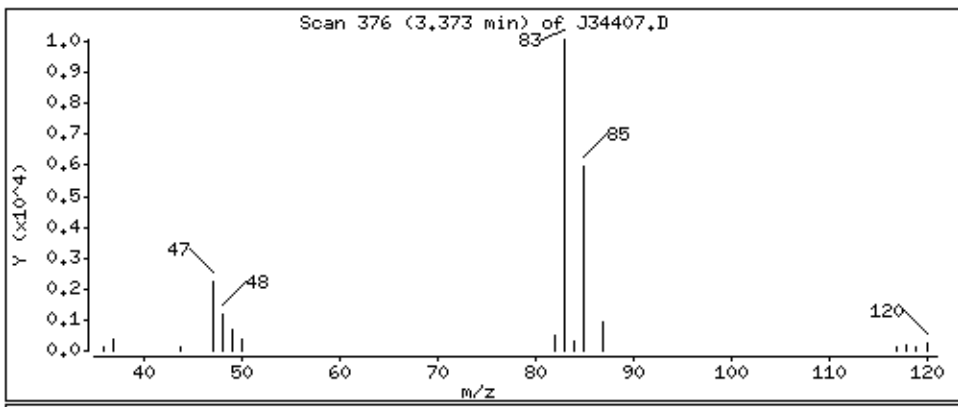
Column phase: RTX-624

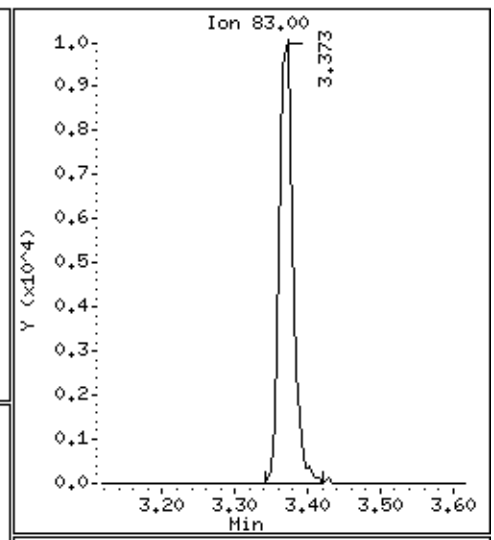
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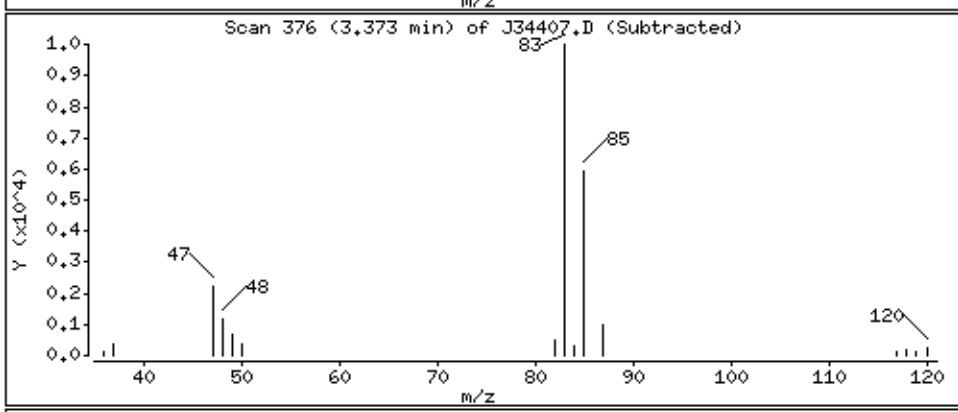
43 Chloroform

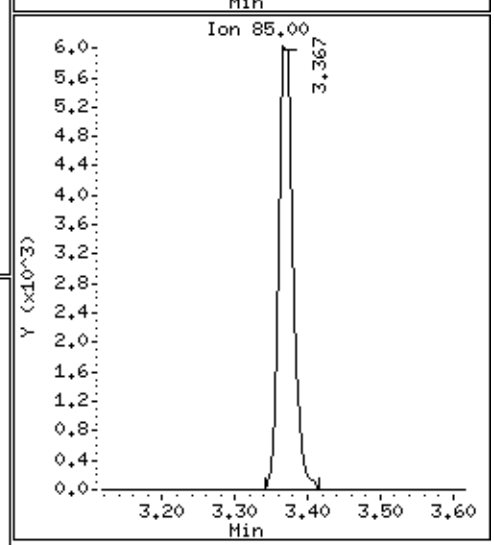
Concentration: 1.98 ug/L

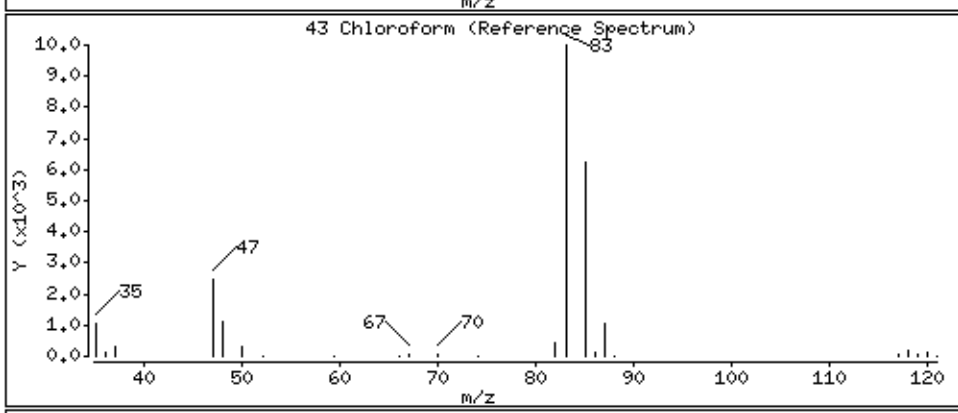
Review Code:

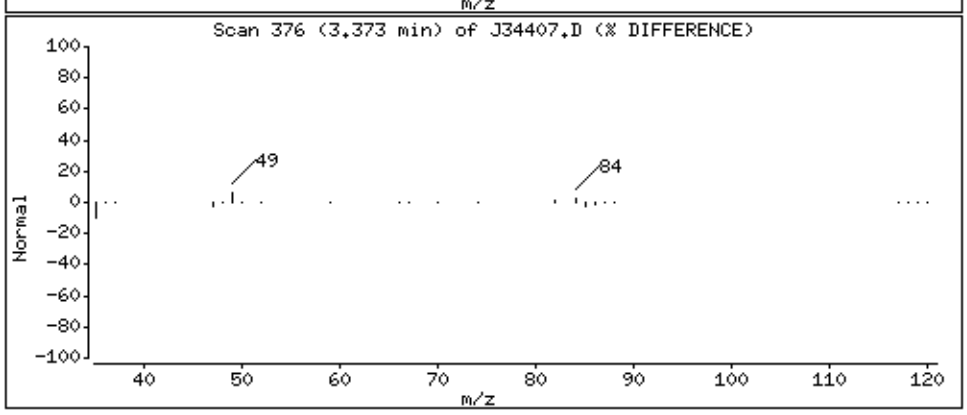












Data File: \\v70wintarget\chem\70msv6.i\042517.b/J34407.D
Injection Date: 25-APR-2017 16:08
Instrument: 70msv6.i
Lab Sample ID: 7016438005
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

SAMPLE NO.

MW-12A

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York Contract: NORTH SEA LANDFILL

Date Received: 04/20/2017 12:20 Matrix: Water SDG No.: 7016438

Date Extracted: 04/25/2017 16:26 Lab Sample ID: 7016438006

Date Analyzed: 04/25/2017 16:26 Lab File ID: 042517.B\J34408.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1 Instrument: 70MSV6 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	3.9	J
107-13-1	Acrylonitrile	<5.0	U
71-43-2	Benzene	<5.0	U
74-97-5	Bromochloromethane	<5.0	U
75-27-4	Bromodichloromethane	<5.0	U
75-25-2	Bromoform	<5.0	U
74-83-9	Bromomethane	<5.0	U
78-93-3	2-Butanone (MEK)	<5.0	U
75-15-0	Carbon disulfide	<5.0	U
56-23-5	Carbon tetrachloride	<5.0	U
108-90-7	Chlorobenzene	<5.0	U
75-00-3	Chloroethane	<5.0	U
67-66-3	Chloroform	<5.0	U
74-87-3	Chloromethane	<5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	<5.0	U
124-48-1	Dibromochloromethane	<5.0	U
106-93-4	1,2-Dibromoethane (EDB)	<5.0	U
74-95-3	Dibromomethane	<5.0	U
95-50-1	1,2-Dichlorobenzene	<5.0	U
106-46-7	1,4-Dichlorobenzene	<5.0	U
110-57-6	trans-1,4-Dichloro-2-butene	<5.0	U
75-34-3	1,1-Dichloroethane	<5.0	U
107-06-2	1,2-Dichloroethane	<5.0	U
75-35-4	1,1-Dichloroethene	<5.0	U
156-59-2	cis-1,2-Dichloroethene	<5.0	U
156-60-5	trans-1,2-Dichloroethene	<5.0	U
78-87-5	1,2-Dichloropropane	<5.0	U
10061-01-5	cis-1,3-Dichloropropene	<5.0	U
10061-02-6	trans-1,3-Dichloropropene	<5.0	U
100-41-4	Ethylbenzene	<5.0	U
591-78-6	2-Hexanone	<5.0	U
74-88-4	Iodomethane	<5.0	U
75-09-2	Methylene Chloride	<5.0	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<5.0	U
100-42-5	Styrene	<5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	<5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	<5.0	U

SAMPLE NO.

MW-12A

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York Contract: NORTH SEA LANDFILL

Date Received: 04/20/2017 12:20 Matrix: Water SDG No.: 7016438

Date Extracted: 04/25/2017 16:26 Lab Sample ID: 7016438006

Date Analyzed: 04/25/2017 16:26 Lab File ID: 042517.B\J34408.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1 Instrument: 70MSV6 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
127-18-4	Tetrachloroethene	<5.0	U
108-88-3	Toluene	<5.0	U
71-55-6	1,1,1-Trichloroethane	<5.0	U
79-00-5	1,1,2-Trichloroethane	<5.0	U
79-01-6	Trichloroethene	<5.0	U
75-69-4	Trichlorofluoromethane	<5.0	U
96-18-4	1,2,3-Trichloropropane	<5.0	U
108-05-4	Vinyl acetate	<5.0	U
75-01-4	Vinyl chloride	<5.0	U
1330-20-7	Xylene (Total)	<5.0	U

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34408.D
Report Date: 29-Apr-2017 22:54

Pace Analytical Services, Inc.

SW846-8260C/EPA 624

Data file : \\v70wintarget\chem\70msv6.i\042517.b\J34408.D
Lab Smp Id: 7016438006 Client Smp ID: MW-12A
Inj Date : 25-APR-2017 16:26 MS Autotune Date: 17-MAR-2017 06:2
Operator : KGG Inst ID: 70msv6.i
Smp Info : 7016438006,
Misc Info : 2005,
Comment :
Method : \\v70wintarget\chem\70msv6.i\042517.b\032717_8260W.m
Meth Date : 29-Apr-2017 22:43 blagula Quant Type: ISTD
Cal Date : 27-MAR-2017 18:25 Cal File: J33244.D
Als bottle: 14
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A
Processing Host: 70MSV4WS10B6

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)	REVIEW C
1 Chlorodifluoromethane	51	Compound Not Detected.						
2 Dichlorotetrafluoroethane	135	Compound Not Detected.						
3 Dichlorodifluoromethane	85	Compound Not Detected.						
4 Chloromethane	50	Compound Not Detected.						
5 Vinyl chloride	62	Compound Not Detected.						
6 1,3-Butadiene	54	Compound Not Detected.						
7 Acetaldehyde	44	Compound Not Detected.						
8 Bromomethane	94	Compound Not Detected.						
9 Chloroethane	64	Compound Not Detected.						
10 Dichlorofluoromethane	67	Compound Not Detected.						
11 Trichlorofluoromethane	101	Compound Not Detected.						
12 Ethanol	45	Compound Not Detected.						
13 Diethyl ether (Ethyl ether)	59	Compound Not Detected.						
16 1,1,2-Trichlorotrifluoroethane	101	Compound Not Detected.						
14 Acrolein	56	Compound Not Detected.						
15 1,1-Dichloroethene	96	Compound Not Detected.						
17 Acetone	43	2.245	2.245	(0.646)	5448	3.89114	3.89	
18 Iodomethane	142	Compound Not Detected.						
19 2-Propanol	45	Compound Not Detected.						(D)
20 Carbon disulfide	76	Compound Not Detected.						
21 Allyl chloride	76	Compound Not Detected.						
22 Acetonitrile	41	Compound Not Detected.						

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34408.D
Report Date: 29-Apr-2017 22:54

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)		REVIEW C
	23 Methyl acetate	43	Compound Not Detected.							
	24 Methylene Chloride	84	Compound Not Detected.							
	25 tert-Butyl Alcohol	59	Compound Not Detected.							
	28 Methyl-tert-butyl ether	73	Compound Not Detected.							
	27 trans-1,2-Dichloroethene	96	Compound Not Detected.							
	26 Acrylonitrile	53	Compound Not Detected.							
	30 n-Hexane	57	Compound Not Detected.							
	29 Diisopropyl ether	45	Compound Not Detected.							
	32 Vinyl acetate	43	Compound Not Detected.							
	31 1,1-Dichloroethane	63	Compound Not Detected.							
	33 Chloroprene	53	Compound Not Detected.							
	34 Ethyl-tert-butyl ether	59	Compound Not Detected.							
	36 2,2-Dichloropropane	77	Compound Not Detected.							
	35 cis-1,2-Dichloroethene	96	Compound Not Detected.							
	39 Ethyl acetate	61	Compound Not Detected.							
	37 2-Butanone (MEK)	43	Compound Not Detected.							
	41 Bromochloromethane	128	Compound Not Detected.							
	42 Tetrahydrofuran	42	Compound Not Detected.							
	43 Chloroform	83	Compound Not Detected.							
	38 Propionitrile	54	Compound Not Detected.							
	46 Cyclohexane	56	Compound Not Detected.							
	45 1,1,1-Trichloroethane	97	Compound Not Detected.							
*	44 Pentafluorobenzene (IS)	168	3.476	3.476	(1.000)	236803	50.0000		(Q)	
	48 Carbon tetrachloride	117	Compound Not Detected.							(D)
	47 1,1-Dichloropropene	75	Compound Not Detected.							(D)
	55 2,2,4-Trimethylpentane	57	Compound Not Detected.							
	51 Benzene	78	Compound Not Detected.							
	40 Methacrylonitrile	67	Compound Not Detected.							
$	50 1,2-Dichloroethane-d4 (S)	65	3.677	3.677	(0.941)	132772	44.9756	45.0		
	56 tert-Amylmethyl ether	73	Compound Not Detected.							
	52 1,2-Dichloroethane	62	Compound Not Detected.							
	57 n-Heptane	43	Compound Not Detected.							
*	58 1,4-Difluorobenzene (IS)	114	3.909	3.909	(1.000)	414473	50.0000			
	59 Trichloroethene	95	Compound Not Detected.							
	60 Methylcyclohexane	83	Compound Not Detected.							
	49 Isobutanol	43	Compound Not Detected.							
	53 tert-Amyl Alcohol	59	Compound Not Detected.							
	54 tert-Amyl ethyl ether	59	Compound Not Detected.							
	61 1,2-Dichloropropane	63	Compound Not Detected.							
	63 Methyl methacrylate	69	Compound Not Detected.							
	64 1,4-Dioxane (p-Dioxane)	88	Compound Not Detected.							
	62 Dibromomethane	93	Compound Not Detected.							
	65 Bromodichloromethane	83	Compound Not Detected.							
	66 2-Nitropropane	43	Compound Not Detected.							
	67 2-Chloroethylvinyl ether	63	Compound Not Detected.							
	68 cis-1,3-Dichloropropene	75	Compound Not Detected.							
	69 4-Methyl-2-pentanone (MIBK)	43	Compound Not Detected.							
$	70 Toluene-d8 (S)	98	4.811	4.811	(0.828)	484771	57.0055	57.0		
	71 Toluene	91	Compound Not Detected.							
	72 Methyl isothiocyanate	73	Compound Not Detected.							
	74 trans-1,3-Dichloropropene	75	Compound Not Detected.							
	75 Ethyl methacrylate	69	Compound Not Detected.							(D)
	76 1,1,2-Trichloroethane	83	Compound Not Detected.							
	77 Tetrachloroethene	166	Compound Not Detected.							

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34408.D
Report Date: 29-Apr-2017 22:54

							CONCENTRATIONS		
		QUANT SIG					ON-COLUMN	FINAL	
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)	REVIEW C
	78 1,3-Dichloropropane	76	Compound Not Detected.						
	79 2-Hexanone	43	Compound Not Detected.						
	73 n-Octane	43	Compound Not Detected.						
	81 n-Butyl acetate	43	Compound Not Detected.						
	80 Dibromochloromethane	129	Compound Not Detected.						
	82 1,2-Dibromoethane (EDB)	107	Compound Not Detected.						
*	83 Chlorobenzene-d5 (IS)	82	5.811	5.811	(1.000)	223240	50.0000		
	84 Chlorobenzene	112	Compound Not Detected.						
	86 Ethylbenzene	106	Compound Not Detected.						
	85 1,1,1,2-Tetrachloroethane	131	Compound Not Detected.						
	88 n-Nonane	43	Compound Not Detected.						(D)
	87 m&p-Xylene	106	Compound Not Detected.						
	89 o-Xylene	106	Compound Not Detected.						
	90 Styrene	104	Compound Not Detected.						
	91 Bromoform	173	Compound Not Detected.						
	92 Isopropylbenzene (Cumene)	105	Compound Not Detected.						
$	93 4-Bromofluorobenzene (S)	95	6.670	6.671	(1.148)	180918	59.7047	59.7	
	94 Bromobenzene	156	Compound Not Detected.						
	95 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.						
	98 n-Propylbenzene	91	Compound Not Detected.						
	96 1,2,3-Trichloropropane	110	Compound Not Detected.						
	97 trans-1,4-Dichloro-2-butene	53	Compound Not Detected.						
	103 n-Decane	43	Compound Not Detected.						
	99 2-Chlorotoluene	91	Compound Not Detected.						
	100 4-Ethyltoluene	105	Compound Not Detected.						
	101 1,3,5-Trimethylbenzene	105	Compound Not Detected.						
	102 4-Chlorotoluene	91	Compound Not Detected.						
	104 tert-Butylbenzene	119	Compound Not Detected.						
	105 Pentachloroethane	167	Compound Not Detected.						
	106 1,2,4-Trimethylbenzene	105	Compound Not Detected.						
	107 sec-Butylbenzene	105	Compound Not Detected.						
	109 d-Limonene	136	Compound Not Detected.						
	110 p-Isopropyltoluene	119	Compound Not Detected.						
	108 1,3-Dichlorobenzene	146	Compound Not Detected.						
*	111 1,4-Dichlorobenzene-d4 (IS)	152	7.548	7.549	(1.000)	178233	50.0000		
	112 1,4-Dichlorobenzene	146	Compound Not Detected.						
	113 1,2,3-Trimethylbenzene	105	Compound Not Detected.						
	114 Benzyl chloride	91	Compound Not Detected.						
	115 trans-Decalin	138	Compound Not Detected.						
	116 1,4-Diethylbenzene	119	Compound Not Detected.						
	117 n-Butylbenzene	91	Compound Not Detected.						
	119 n-Undecane	43	Compound Not Detected.						(D)
	118 1,2-Dichlorobenzene	146	Compound Not Detected.						
	120 cis-Decalin	138	Compound Not Detected.						
	121 1,2,4,5-tetramethylbenzene	119	Compound Not Detected.						
	122 1,2-Dibromo-3-chloropropane	75	Compound Not Detected.						
	123 n-Dodecane	43	Compound Not Detected.						(D)
	124 1,2,4-Trichlorobenzene	180	Compound Not Detected.						
	125 Hexachloro-1,3-butadiene	225	Compound Not Detected.						
	126 Naphthalene	128	Compound Not Detected.						
	127 1,2,3-Trichlorobenzene	180	Compound Not Detected.						

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34408.D
Report Date: 29-Apr-2017 22:54

QC Flag Legend

Q - Qualifier signal failed the ratio test.
D - User disabled compound identification.

Review Codes Legend

:

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34408.D
Report Date: 29-Apr-2017 22:54

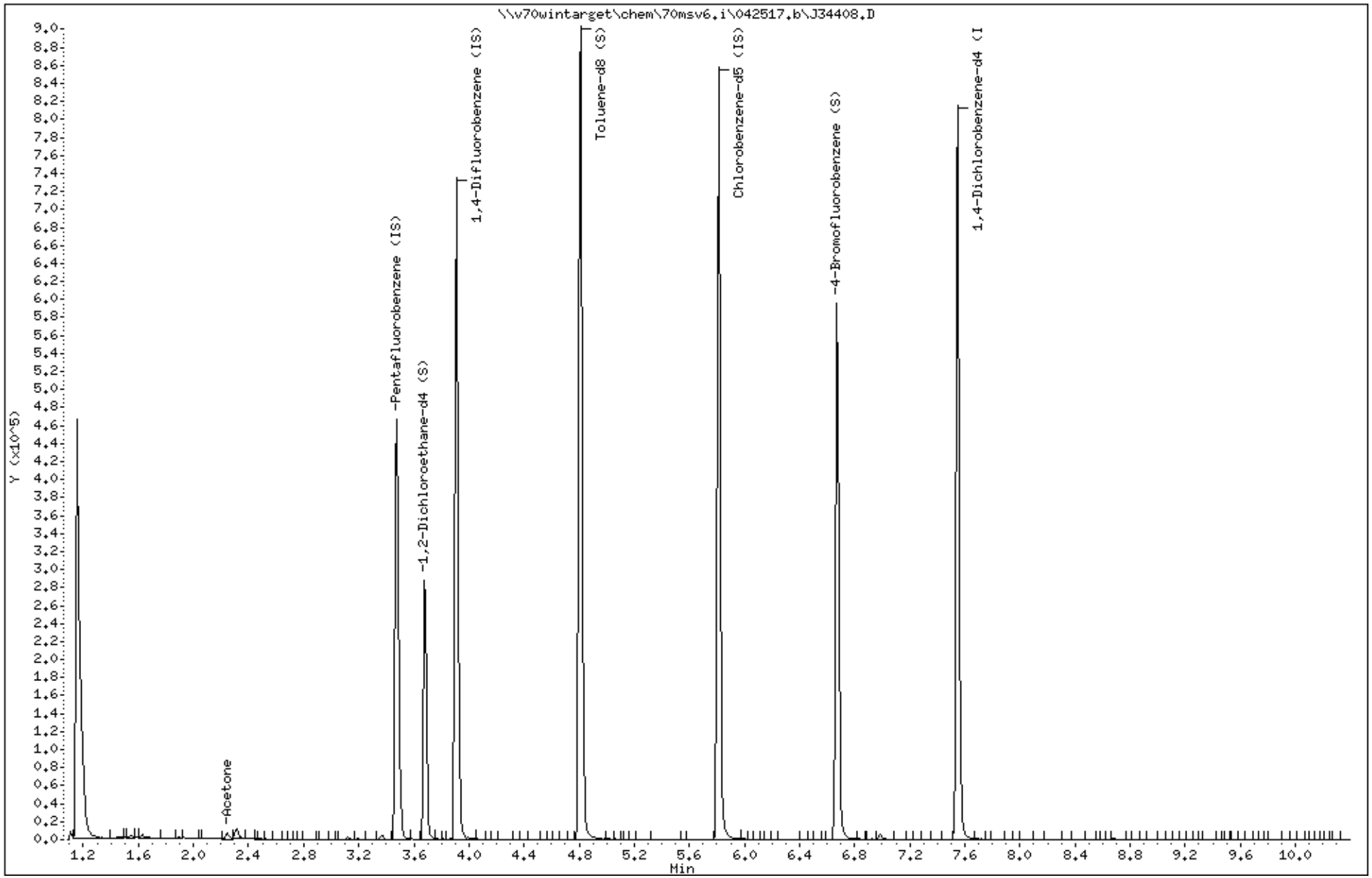
Pace Analytical Services, Inc.

SW846-8260C/EPA 624

Data file : \\v70wintarget\chem\70msv6.i\042517.b\J34408.D
Lab Smp Id: 7016438006 Client Smp ID: MW-12A
Inj Date : 25-APR-2017 16:26 MS Autotune Date: 17-MAR-2017 06:2
Operator : KGG Inst ID: 70msv6.i
Smp Info : 7016438006,
Misc Info : 2005,
Comment :
Method : \\v70wintarget\chem\70msv6.i\042517.b\032717_8260W.m
Meth Date : 29-Apr-2017 22:43 blagula Quant Type: ISTD
Cal Date : 27-MAR-2017 18:25 Cal File: J33244.D
Als bottle: 14
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A
Processing Host: 70MSV4WS10B6

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34408.D
Date : 25-APR-2017 16:26
Client ID: MW-12A
Instrument: 70msv6.i
Sample Info: 7016438006,
Purge Volume: 5.0
Operator: KGG
Column phase: RTX-624
Column diameter: 0.18



Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34408.D

Date : 25-APR-2017 16:26

Client ID: MW-12A

Instrument: 70msv6.i

Sample Info: 7016438006,

Purge Volume: 5.0

Operator: KGG

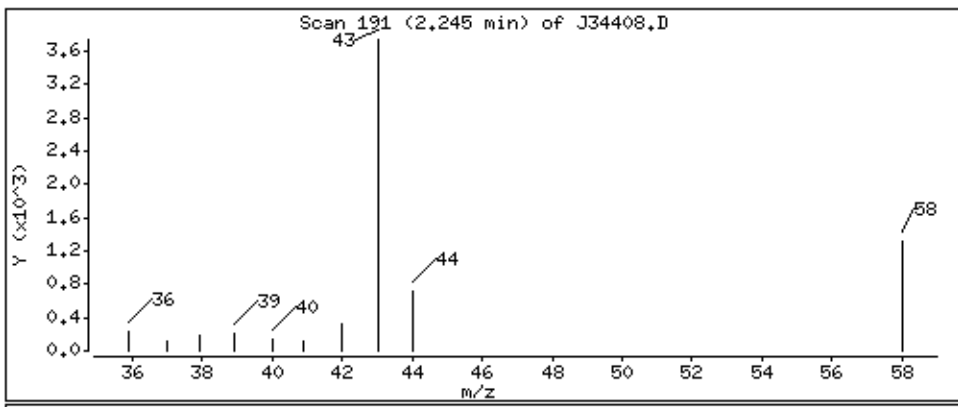
Column phase: RTX-624

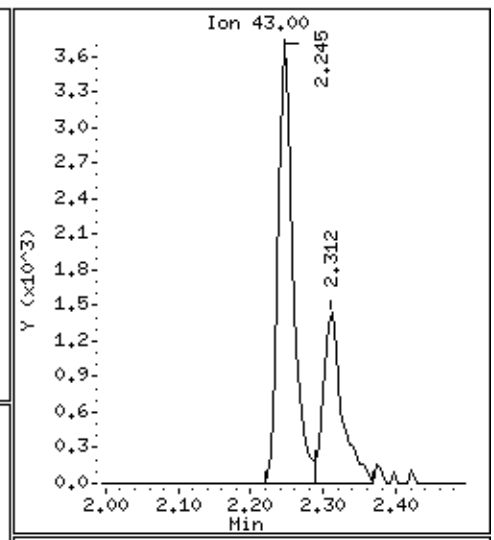
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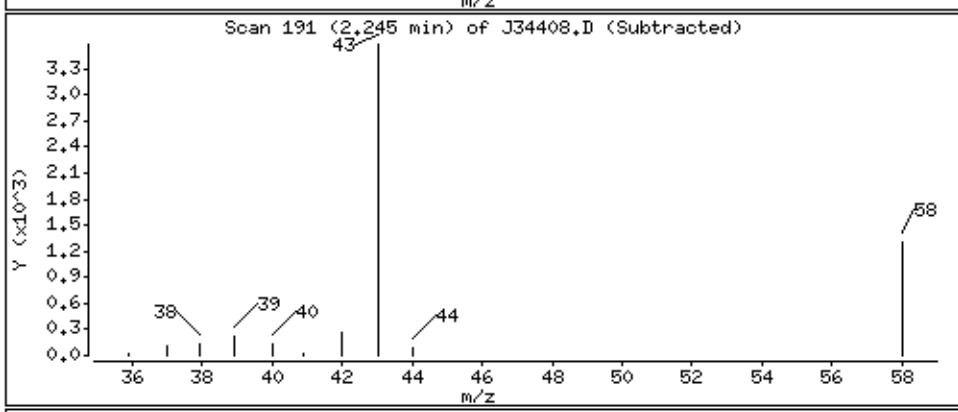
17 Acetone

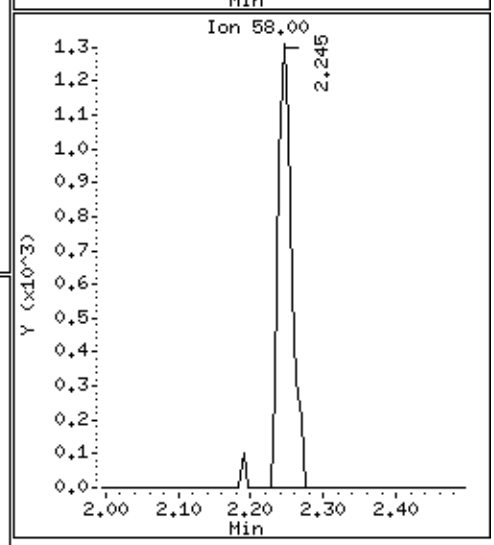
Concentration: 3.89 ug/L

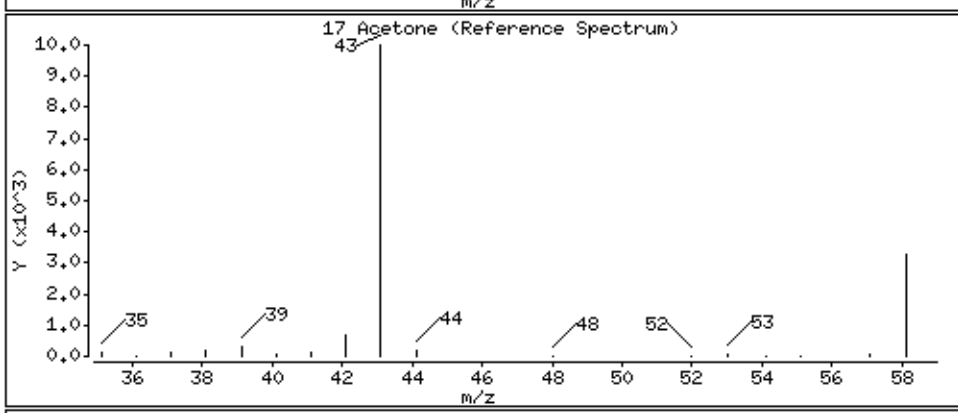
Review Code:

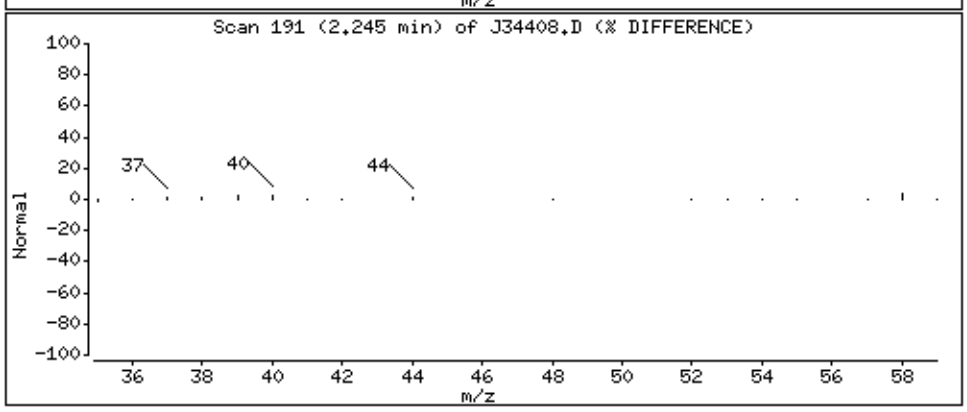












Data File: \\v70wintarget\chem\70msv6.i\042517.b/J34408.D
Injection Date: 25-APR-2017 16:26
Instrument: 70msv6.i
Lab Sample ID: 7016438006
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

SAMPLE NO.

MW-12B

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York Contract: NORTH SEA LANDFILL

Date Received: 04/20/2017 12:20 Matrix: Water SDG No.: 7016438

Date Extracted: 04/25/2017 16:44 Lab Sample ID: 7016438007

Date Analyzed: 04/25/2017 16:44 Lab File ID: 042517.B\J34409.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1 Instrument: 70MSV6 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	4.2	J
107-13-1	Acrylonitrile	<5.0	U
71-43-2	Benzene	<5.0	U
74-97-5	Bromochloromethane	<5.0	U
75-27-4	Bromodichloromethane	<5.0	U
75-25-2	Bromoform	<5.0	U
74-83-9	Bromomethane	<5.0	U
78-93-3	2-Butanone (MEK)	<5.0	U
75-15-0	Carbon disulfide	<5.0	U
56-23-5	Carbon tetrachloride	<5.0	U
108-90-7	Chlorobenzene	<5.0	U
75-00-3	Chloroethane	<5.0	U
67-66-3	Chloroform	1.2	J
74-87-3	Chloromethane	<5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	<5.0	U
124-48-1	Dibromochloromethane	<5.0	U
106-93-4	1,2-Dibromoethane (EDB)	<5.0	U
74-95-3	Dibromomethane	<5.0	U
95-50-1	1,2-Dichlorobenzene	<5.0	U
106-46-7	1,4-Dichlorobenzene	<5.0	U
110-57-6	trans-1,4-Dichloro-2-butene	<5.0	U
75-34-3	1,1-Dichloroethane	<5.0	U
107-06-2	1,2-Dichloroethane	<5.0	U
75-35-4	1,1-Dichloroethene	<5.0	U
156-59-2	cis-1,2-Dichloroethene	<5.0	U
156-60-5	trans-1,2-Dichloroethene	<5.0	U
78-87-5	1,2-Dichloropropane	<5.0	U
10061-01-5	cis-1,3-Dichloropropene	<5.0	U
10061-02-6	trans-1,3-Dichloropropene	<5.0	U
100-41-4	Ethylbenzene	<5.0	U
591-78-6	2-Hexanone	<5.0	U
74-88-4	Iodomethane	<5.0	U
75-09-2	Methylene Chloride	<5.0	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<5.0	U
100-42-5	Styrene	<5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	<5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	<5.0	U

SAMPLE NO.

MW-12B

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York Contract: NORTH SEA LANDFILL

Date Received: 04/20/2017 12:20 Matrix: Water SDG No.: 7016438

Date Extracted: 04/25/2017 16:44 Lab Sample ID: 7016438007

Date Analyzed: 04/25/2017 16:44 Lab File ID: 042517.B\J34409.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1 Instrument: 70MSV6 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
127-18-4	Tetrachloroethene	<5.0	U
108-88-3	Toluene	<5.0	U
71-55-6	1,1,1-Trichloroethane	<5.0	U
79-00-5	1,1,2-Trichloroethane	<5.0	U
79-01-6	Trichloroethene	<5.0	U
75-69-4	Trichlorofluoromethane	<5.0	U
96-18-4	1,2,3-Trichloropropane	<5.0	U
108-05-4	Vinyl acetate	<5.0	U
75-01-4	Vinyl chloride	<5.0	U
1330-20-7	Xylene (Total)	<5.0	U

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34409.D
Report Date: 29-Apr-2017 22:54

Pace Analytical Services, Inc.

SW846-8260C/EPA 624

Data file : \\v70wintarget\chem\70msv6.i\042517.b\J34409.D
Lab Smp Id: 7016438007 Client Smp ID: MW-12B
Inj Date : 25-APR-2017 16:44 MS Autotune Date: 17-MAR-2017 06:2
Operator : KGG Inst ID: 70msv6.i
Smp Info : 7016438007,
Misc Info : 2005,
Comment :
Method : \\v70wintarget\chem\70msv6.i\042517.b\032717_8260W.m
Meth Date : 29-Apr-2017 22:43 blagula Quant Type: ISTD
Cal Date : 27-MAR-2017 18:25 Cal File: J33244.D
Als bottle: 15
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A
Processing Host: 70MSV4WS10B6

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)	REVIEW C
1 Chlorodifluoromethane	51	Compound Not Detected.						
2 Dichlorotetrafluoroethane	135	Compound Not Detected.						
3 Dichlorodifluoromethane	85	Compound Not Detected.						
4 Chloromethane	50	Compound Not Detected.						
5 Vinyl chloride	62	Compound Not Detected.						
6 1,3-Butadiene	54	Compound Not Detected.						
7 Acetaldehyde	44	Compound Not Detected.						
8 Bromomethane	94	Compound Not Detected.						
9 Chloroethane	64	Compound Not Detected.						
10 Dichlorofluoromethane	67	Compound Not Detected.						
11 Trichlorofluoromethane	101	Compound Not Detected.						
12 Ethanol	45	Compound Not Detected.						
13 Diethyl ether (Ethyl ether)	59	Compound Not Detected.						
16 1,1,2-Trichlorotrifluoroethane	101	Compound Not Detected.						
14 Acrolein	56	Compound Not Detected.						
15 1,1-Dichloroethene	96	Compound Not Detected.						
17 Acetone	43	2.245	2.245	(0.646)	5912	4.20803	4.21	
18 Iodomethane	142	Compound Not Detected.						
19 2-Propanol	45	Compound Not Detected.						(D)
20 Carbon disulfide	76	Compound Not Detected.						
21 Allyl chloride	76	Compound Not Detected.						
22 Acetonitrile	41	Compound Not Detected.						

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34409.D
Report Date: 29-Apr-2017 22:54

							CONCENTRATIONS		
		QUANT SIG					ON-COLUMN	FINAL	
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)	REVIEW C
	23 Methyl acetate	43	Compound Not Detected.						
	24 Methylene Chloride	84	Compound Not Detected.						
	25 tert-Butyl Alcohol	59	Compound Not Detected.						
	28 Methyl-tert-butyl ether	73	Compound Not Detected.						
	27 trans-1,2-Dichloroethene	96	Compound Not Detected.						
	26 Acrylonitrile	53	Compound Not Detected.						
	30 n-Hexane	57	Compound Not Detected.						
	29 Diisopropyl ether	45	Compound Not Detected.						
	32 Vinyl acetate	43	Compound Not Detected.						
	31 1,1-Dichloroethane	63	Compound Not Detected.						
	33 Chloroprene	53	Compound Not Detected.						
	34 Ethyl-tert-butyl ether	59	Compound Not Detected.						
	36 2,2-Dichloropropane	77	Compound Not Detected.						
	35 cis-1,2-Dichloroethene	96	Compound Not Detected.						
	39 Ethyl acetate	61	Compound Not Detected.						
	37 2-Butanone (MEK)	43	Compound Not Detected.						
	41 Bromochloromethane	128	Compound Not Detected.						
	42 Tetrahydrofuran	42	Compound Not Detected.						
	43 Chloroform	83	3.373	3.366	(0.970)	8192	1.20130	1.20	
	38 Propionitrile	54	Compound Not Detected.						
	46 Cyclohexane	56	Compound Not Detected.						
	45 1,1,1-Trichloroethane	97	Compound Not Detected.						
*	44 Pentafluorobenzene (IS)	168	3.476	3.476	(1.000)	237620	50.0000	(Q)	
	48 Carbon tetrachloride	117	Compound Not Detected.						(D)
	47 1,1-Dichloropropene	75	Compound Not Detected.						(D)
	55 2,2,4-Trimethylpentane	57	Compound Not Detected.						
	51 Benzene	78	Compound Not Detected.						
	40 Methacrylonitrile	67	Compound Not Detected.						
$	50 1,2-Dichloroethane-d4 (S)	65	3.677	3.677	(0.941)	133395	45.0818	45.1	
	56 tert-Amylmethyl ether	73	Compound Not Detected.						
	52 1,2-Dichloroethane	62	Compound Not Detected.						
	57 n-Heptane	43	Compound Not Detected.						
*	58 1,4-Difluorobenzene (IS)	114	3.909	3.909	(1.000)	415436	50.0000		
	59 Trichloroethene	95	Compound Not Detected.						
	60 Methylcyclohexane	83	Compound Not Detected.						
	49 Isobutanol	43	Compound Not Detected.						
	53 tert-Amyl Alcohol	59	Compound Not Detected.						
	54 tert-Amyl ethyl ether	59	Compound Not Detected.						
	61 1,2-Dichloropropane	63	Compound Not Detected.						
	63 Methyl methacrylate	69	Compound Not Detected.						
	64 1,4-Dioxane (p-Dioxane)	88	Compound Not Detected.						
	62 Dibromomethane	93	Compound Not Detected.						
	65 Bromodichloromethane	83	Compound Not Detected.						
	66 2-Nitropropane	43	Compound Not Detected.						
	67 2-Chloroethylvinyl ether	63	Compound Not Detected.						
	68 cis-1,3-Dichloropropene	75	Compound Not Detected.						
	69 4-Methyl-2-pentanone (MIBK)	43	Compound Not Detected.						
$	70 Toluene-d8 (S)	98	4.811	4.811	(0.828)	486307	56.3760	56.4	
	71 Toluene	91	Compound Not Detected.						
	72 Methyl isothiocyanate	73	Compound Not Detected.						
	74 trans-1,3-Dichloropropene	75	Compound Not Detected.						
	75 Ethyl methacrylate	69	Compound Not Detected.						(D)
	76 1,1,2-Trichloroethane	83	Compound Not Detected.						
	77 Tetrachloroethene	166	Compound Not Detected.						

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34409.D
Report Date: 29-Apr-2017 22:54

								CONCENTRATIONS		
		QUANT SIG						ON-COLUMN	FINAL	
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE		(ug/L)	(ug/L)	REVIEW C
	78 1,3-Dichloropropane	76	Compound Not Detected.							
	79 2-Hexanone	43	Compound Not Detected.							
	73 n-Octane	43	Compound Not Detected.							
	81 n-Butyl acetate	43	Compound Not Detected.							
	80 Dibromochloromethane	129	Compound Not Detected.							
	82 1,2-Dibromoethane (EDB)	107	Compound Not Detected.							
*	83 Chlorobenzene-d5 (IS)	82	5.811	5.811	(1.000)	226448		50.0000		
	84 Chlorobenzene	112	Compound Not Detected.							
	86 Ethylbenzene	106	Compound Not Detected.							
	85 1,1,1,2-Tetrachloroethane	131	Compound Not Detected.							
	88 n-Nonane	43	Compound Not Detected.							(D)
	87 m&p-Xylene	106	Compound Not Detected.							
	89 o-Xylene	106	Compound Not Detected.							
	90 Styrene	104	Compound Not Detected.							
	91 Bromoform	173	Compound Not Detected.							
	92 Isopropylbenzene (Cumene)	105	Compound Not Detected.							
$	93 4-Bromofluorobenzene (S)	95	6.671	6.671	(1.148)	182186		59.2714	59.3	
	94 Bromobenzene	156	Compound Not Detected.							
	95 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.							
	98 n-Propylbenzene	91	Compound Not Detected.							
	96 1,2,3-Trichloropropane	110	Compound Not Detected.							
	97 trans-1,4-Dichloro-2-butene	53	Compound Not Detected.							
	103 n-Decane	43	Compound Not Detected.							
	99 2-Chlorotoluene	91	Compound Not Detected.							
	100 4-Ethyltoluene	105	Compound Not Detected.							
	101 1,3,5-Trimethylbenzene	105	Compound Not Detected.							
	102 4-Chlorotoluene	91	Compound Not Detected.							
	104 tert-Butylbenzene	119	Compound Not Detected.							
	105 Pentachloroethane	167	Compound Not Detected.							
	106 1,2,4-Trimethylbenzene	105	Compound Not Detected.							
	107 sec-Butylbenzene	105	Compound Not Detected.							
	109 d-Limonene	136	Compound Not Detected.							
	110 p-Isopropyltoluene	119	Compound Not Detected.							
	108 1,3-Dichlorobenzene	146	Compound Not Detected.							
*	111 1,4-Dichlorobenzene-d4 (IS)	152	7.549	7.549	(1.000)	187186		50.0000		
	112 1,4-Dichlorobenzene	146	Compound Not Detected.							
	113 1,2,3-Trimethylbenzene	105	Compound Not Detected.							
	114 Benzyl chloride	91	Compound Not Detected.							
	115 trans-Decalin	138	Compound Not Detected.							
	116 1,4-Diethylbenzene	119	Compound Not Detected.							
	117 n-Butylbenzene	91	Compound Not Detected.							
	119 n-Undecane	43	Compound Not Detected.							(D)
	118 1,2-Dichlorobenzene	146	Compound Not Detected.							
	120 cis-Decalin	138	Compound Not Detected.							
	121 1,2,4,5-tetramethylbenzene	119	Compound Not Detected.							
	122 1,2-Dibromo-3-chloropropane	75	Compound Not Detected.							
	123 n-Dodecane	43	Compound Not Detected.							(D)
	124 1,2,4-Trichlorobenzene	180	Compound Not Detected.							
	125 Hexachloro-1,3-butadiene	225	Compound Not Detected.							
	126 Naphthalene	128	Compound Not Detected.							
	127 1,2,3-Trichlorobenzene	180	Compound Not Detected.							

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34409.D
Report Date: 29-Apr-2017 22:54

QC Flag Legend

Q - Qualifier signal failed the ratio test.
D - User disabled compound identification.

Review Codes Legend

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Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34409.D
Report Date: 29-Apr-2017 22:54

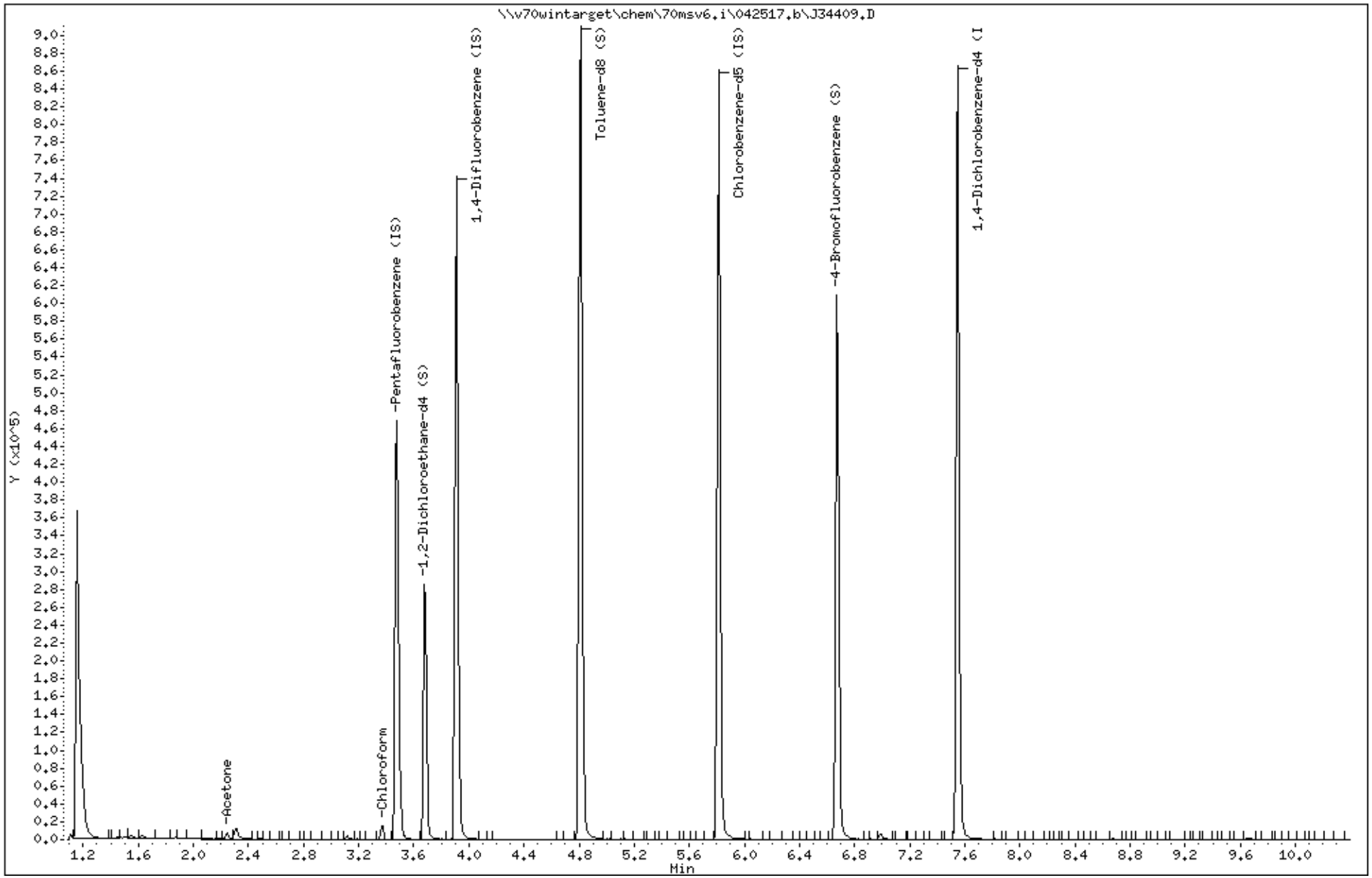
Pace Analytical Services, Inc.

SW846-8260C/EPA 624

Data file : \\v70wintarget\chem\70msv6.i\042517.b\J34409.D
Lab Smp Id: 7016438007 Client Smp ID: MW-12B
Inj Date : 25-APR-2017 16:44 MS Autotune Date: 17-MAR-2017 06:2
Operator : KGG Inst ID: 70msv6.i
Smp Info : 7016438007,
Misc Info : 2005,
Comment :
Method : \\v70wintarget\chem\70msv6.i\042517.b\032717_8260W.m
Meth Date : 29-Apr-2017 22:43 blagula Quant Type: ISTD
Cal Date : 27-MAR-2017 18:25 Cal File: J33244.D
Als bottle: 15
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A
Processing Host: 70MSV4WS10B6

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34409.D
Date : 25-APR-2017 16:44
Client ID: MW-12B
Instrument: 70msv6.i
Sample Info: 7016438007,
Purge Volume: 5.0
Operator: KGG
Column phase: RTX-624
Column diameter: 0.18



Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34409.D

Date : 25-APR-2017 16:44

Client ID: MW-12B

Instrument: 70msv6.i

Sample Info: 7016438007,

Purge Volume: 5.0

Operator: KGG

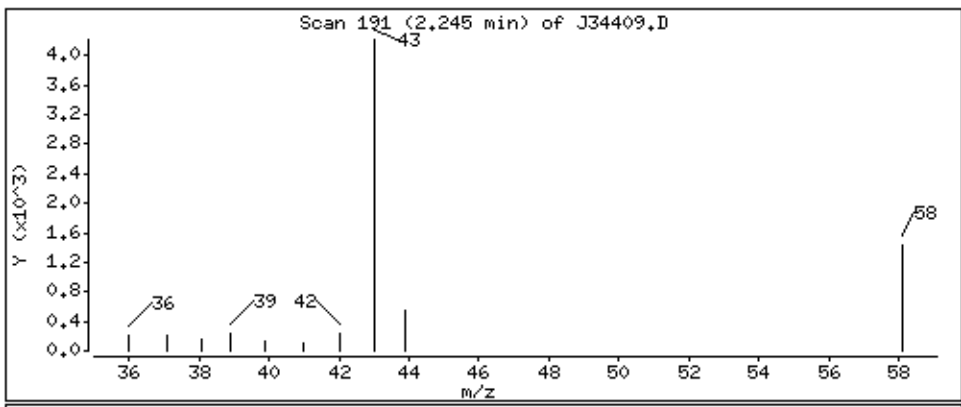
Column phase: RTX-624

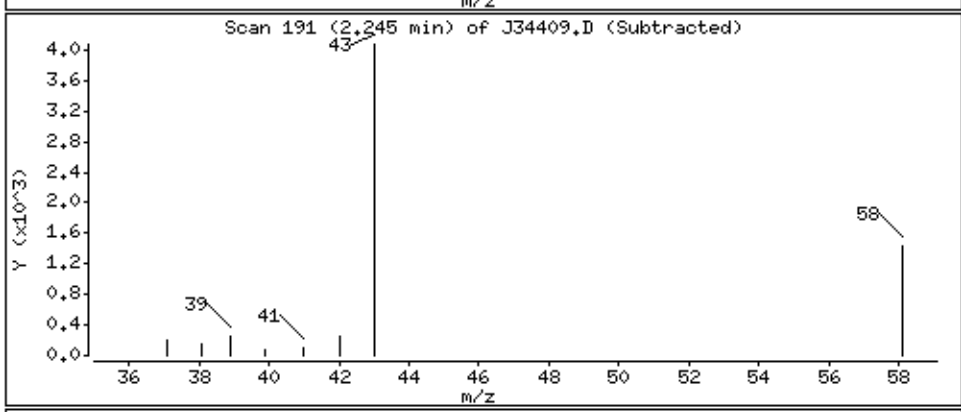
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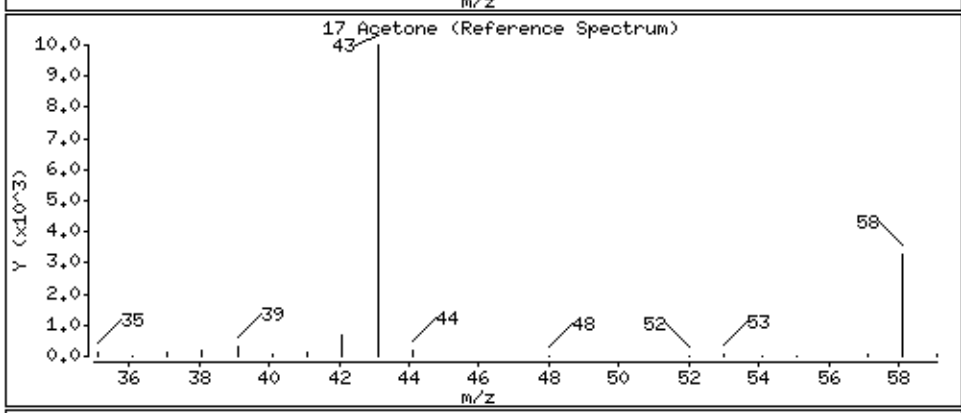
17 Acetone

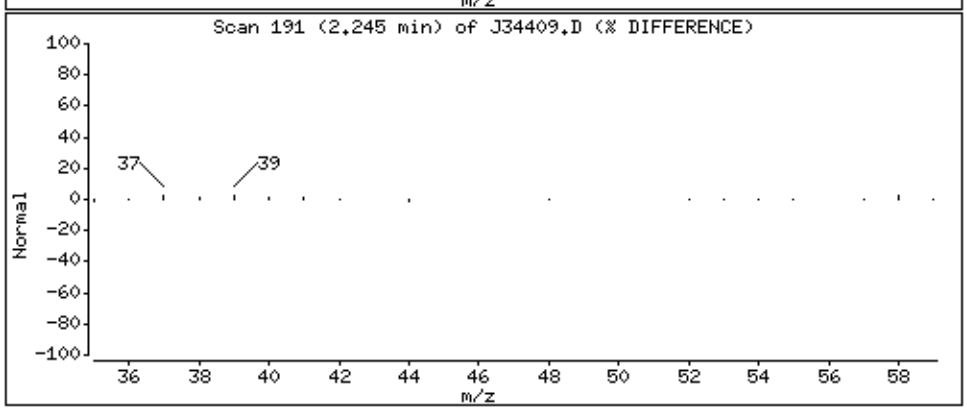
Concentration: 4.21 ug/L

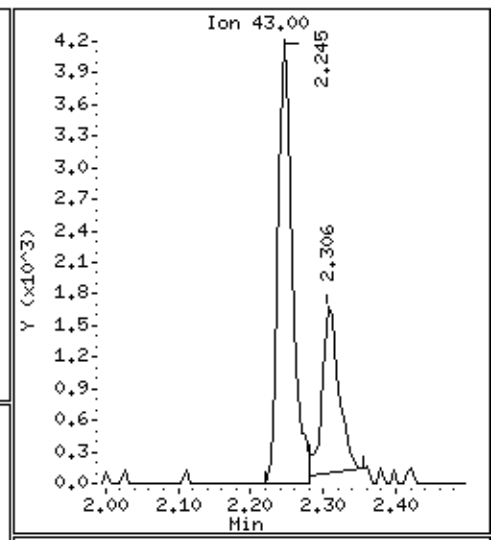
Review Code:

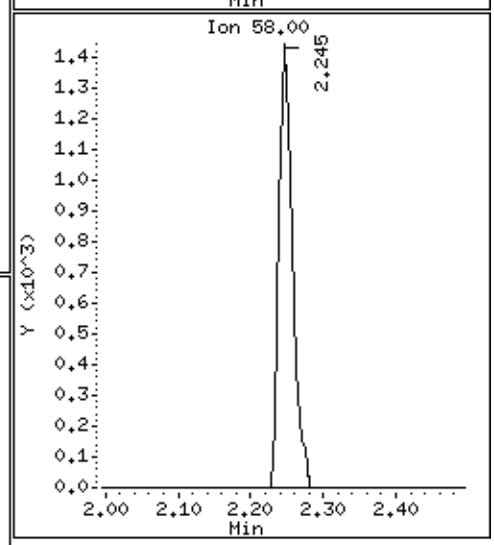












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34409.D

Date : 25-APR-2017 16:44

Client ID: MW-12B

Instrument: 70msv6.i

Sample Info: 7016438007,

Purge Volume: 5.0

Operator: KGG

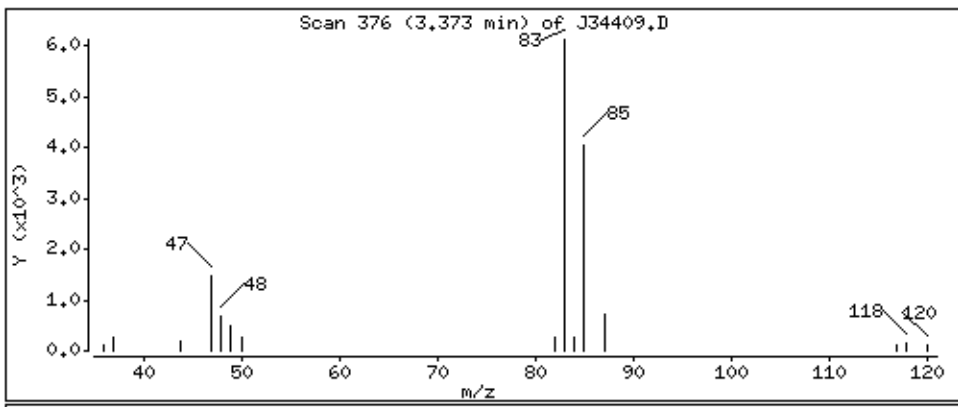
Column phase: RTX-624

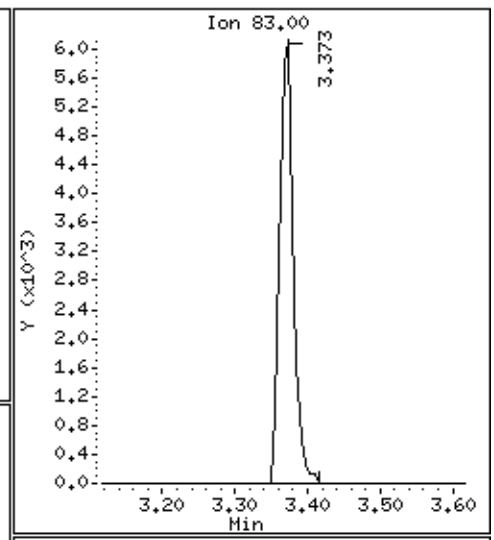
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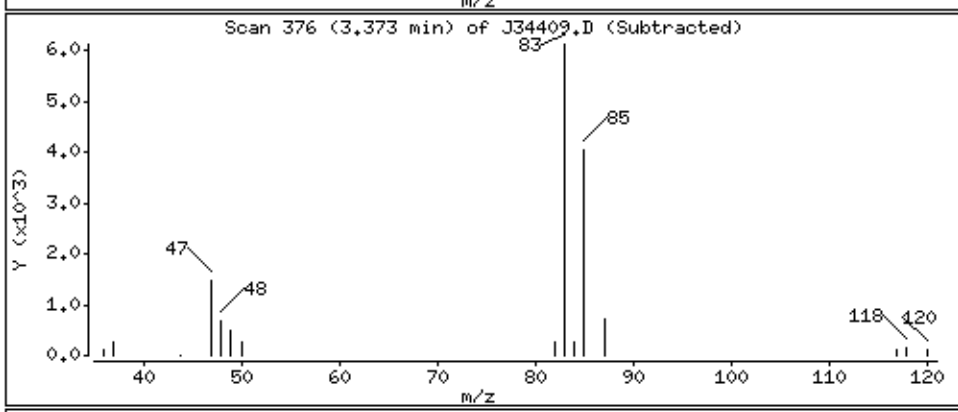
43 Chloroform

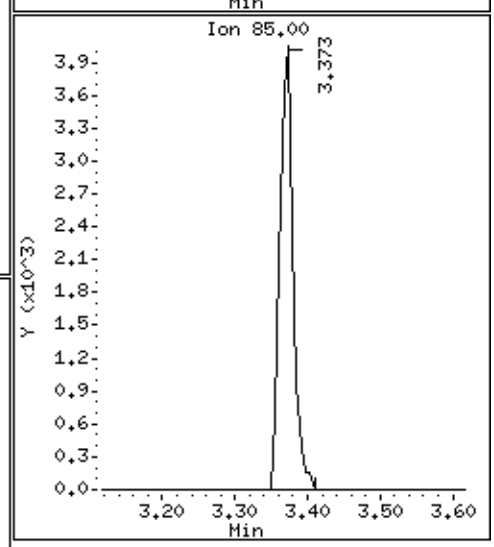
Concentration: 1.20 ug/L

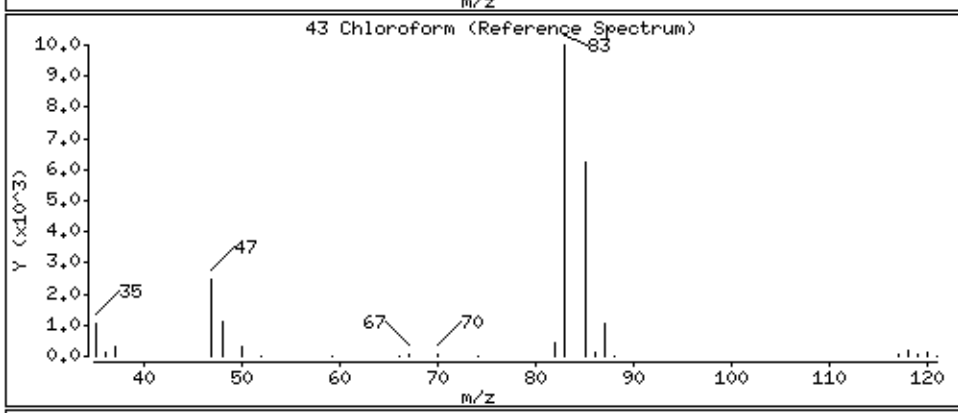
Review Code:

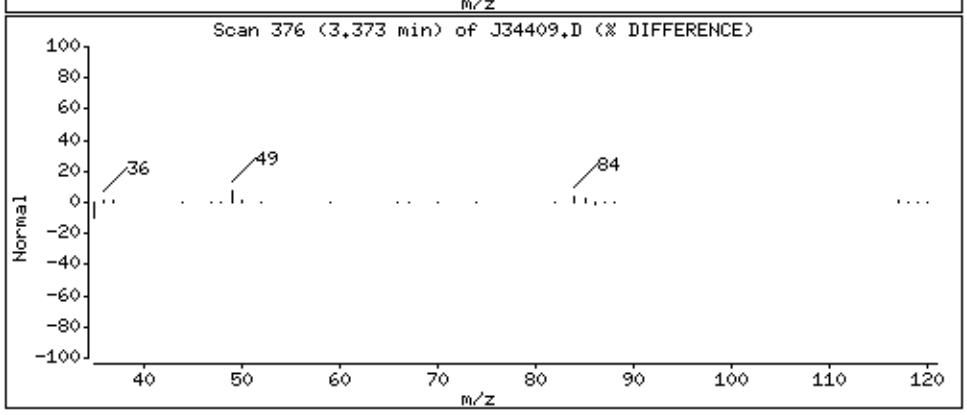












Data File: \\v70wintarget\chem\70msv6.i\042517.b/J34409.D
Injection Date: 25-APR-2017 16:44
Instrument: 70msv6.i
Lab Sample ID: 7016438007
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

SAMPLE NO.

DUP001

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York Contract: NORTH SEA LANDFILL

Date Received: 04/20/2017 12:20 Matrix: Water SDG No.: 7016438

Date Extracted: 04/25/2017 17:02 Lab Sample ID: 7016438008

Date Analyzed: 04/25/2017 17:02 Lab File ID: 042517.B\J34410.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1 Instrument: 70MSV6 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	2.2	J
107-13-1	Acrylonitrile	<5.0	U
71-43-2	Benzene	<5.0	U
74-97-5	Bromochloromethane	<5.0	U
75-27-4	Bromodichloromethane	<5.0	U
75-25-2	Bromoform	<5.0	U
74-83-9	Bromomethane	<5.0	U
78-93-3	2-Butanone (MEK)	<5.0	U
75-15-0	Carbon disulfide	<5.0	U
56-23-5	Carbon tetrachloride	<5.0	U
108-90-7	Chlorobenzene	<5.0	U
75-00-3	Chloroethane	<5.0	U
67-66-3	Chloroform	2.3	J
74-87-3	Chloromethane	<5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	<5.0	U
124-48-1	Dibromochloromethane	<5.0	U
106-93-4	1,2-Dibromoethane (EDB)	<5.0	U
74-95-3	Dibromomethane	<5.0	U
95-50-1	1,2-Dichlorobenzene	<5.0	U
106-46-7	1,4-Dichlorobenzene	<5.0	U
110-57-6	trans-1,4-Dichloro-2-butene	<5.0	U
75-34-3	1,1-Dichloroethane	<5.0	U
107-06-2	1,2-Dichloroethane	<5.0	U
75-35-4	1,1-Dichloroethene	<5.0	U
156-59-2	cis-1,2-Dichloroethene	<5.0	U
156-60-5	trans-1,2-Dichloroethene	<5.0	U
78-87-5	1,2-Dichloropropane	<5.0	U
10061-01-5	cis-1,3-Dichloropropene	<5.0	U
10061-02-6	trans-1,3-Dichloropropene	<5.0	U
100-41-4	Ethylbenzene	<5.0	U
591-78-6	2-Hexanone	<5.0	U
74-88-4	Iodomethane	<5.0	U
75-09-2	Methylene Chloride	<5.0	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<5.0	U
100-42-5	Styrene	<5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	<5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	<5.0	U

SAMPLE NO.

DUP001

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York Contract: NORTH SEA LANDFILL

Date Received: 04/20/2017 12:20 Matrix: Water SDG No.: 7016438

Date Extracted: 04/25/2017 17:02 Lab Sample ID: 7016438008

Date Analyzed: 04/25/2017 17:02 Lab File ID: 042517.B\J34410.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1 Instrument: 70MSV6 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
127-18-4	Tetrachloroethene	<5.0	U
108-88-3	Toluene	<5.0	U
71-55-6	1,1,1-Trichloroethane	<5.0	U
79-00-5	1,1,2-Trichloroethane	<5.0	U
79-01-6	Trichloroethene	<5.0	U
75-69-4	Trichlorofluoromethane	<5.0	U
96-18-4	1,2,3-Trichloropropane	<5.0	U
108-05-4	Vinyl acetate	<5.0	U
75-01-4	Vinyl chloride	<5.0	U
1330-20-7	Xylene (Total)	<5.0	U

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34410.D
Report Date: 29-Apr-2017 22:54

Pace Analytical Services, Inc.

SW846-8260C/EPA 624

Data file : \\v70wintarget\chem\70msv6.i\042517.b\J34410.D
Lab Smp Id: 7016438008 Client Smp ID: DUP001
Inj Date : 25-APR-2017 17:02 MS Autotune Date: 17-MAR-2017 06:2
Operator : KGG Inst ID: 70msv6.i
Smp Info : 7016438008,
Misc Info : 2005,
Comment :
Method : \\v70wintarget\chem\70msv6.i\042517.b\032717_8260W.m
Meth Date : 29-Apr-2017 22:43 blagula Quant Type: ISTD
Cal Date : 27-MAR-2017 18:25 Cal File: J33244.D
Als bottle: 16
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A
Processing Host: 70MSV4WS10B6

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)	REVIEW C
1 Chlorodifluoromethane	51	Compound Not Detected.						
2 Dichlorotetrafluoroethane	135	Compound Not Detected.						
3 Dichlorodifluoromethane	85	Compound Not Detected.						
4 Chloromethane	50	Compound Not Detected.						
5 Vinyl chloride	62	Compound Not Detected.						
6 1,3-Butadiene	54	Compound Not Detected.						
7 Acetaldehyde	44	Compound Not Detected.						
8 Bromomethane	94	Compound Not Detected.						
9 Chloroethane	64	Compound Not Detected.						
10 Dichlorofluoromethane	67	Compound Not Detected.						
11 Trichlorofluoromethane	101	Compound Not Detected.						
12 Ethanol	45	Compound Not Detected.						
13 Diethyl ether (Ethyl ether)	59	Compound Not Detected.						
16 1,1,2-Trichlorotrifluoroethane	101	Compound Not Detected.						
14 Acrolein	56	Compound Not Detected.						
15 1,1-Dichloroethene	96	Compound Not Detected.						
17 Acetone	43	2.245	2.245	(0.646)	3091	2.23711	2.24	
18 Iodomethane	142	Compound Not Detected.						
19 2-Propanol	45	Compound Not Detected.						(D)
20 Carbon disulfide	76	Compound Not Detected.						
21 Allyl chloride	76	Compound Not Detected.						
22 Acetonitrile	41	Compound Not Detected.						

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34410.D
Report Date: 29-Apr-2017 22:54

			QUANT SIG					CONCENTRATIONS ON-COLUMN	FINAL	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)	REVIEW C
	23	Methyl acetate	43	Compound Not Detected.						
	24	Methylene Chloride	84	Compound Not Detected.						
	25	tert-Butyl Alcohol	59	Compound Not Detected.						
	28	Methyl-tert-butyl ether	73	Compound Not Detected.						
	27	trans-1,2-Dichloroethene	96	Compound Not Detected.						
	26	Acrylonitrile	53	Compound Not Detected.						
	30	n-Hexane	57	Compound Not Detected.						
	29	Diisopropyl ether	45	Compound Not Detected.						
	32	Vinyl acetate	43	Compound Not Detected.						
	31	1,1-Dichloroethane	63	Compound Not Detected.						
	33	Chloroprene	53	Compound Not Detected.						
	34	Ethyl-tert-butyl ether	59	Compound Not Detected.						
	36	2,2-Dichloropropane	77	Compound Not Detected.						
	35	cis-1,2-Dichloroethene	96	Compound Not Detected.						
	39	Ethyl acetate	61	Compound Not Detected.						
	37	2-Butanone (MEK)	43	Compound Not Detected.						
	41	Bromochloromethane	128	Compound Not Detected.						
	42	Tetrahydrofuran	42	Compound Not Detected.						
	43	Chloroform	83	3.372	3.366	(0.970)	15287	2.27943	2.28	
	38	Propionitrile	54	Compound Not Detected.						
	46	Cyclohexane	56	Compound Not Detected.						
	45	1,1,1-Trichloroethane	97	Compound Not Detected.						
*	44	Pentafluorobenzene (IS)	168	3.476	3.476	(1.000)	233689	50.0000	(Q)	
	48	Carbon tetrachloride	117	Compound Not Detected.						(D)
	47	1,1-Dichloropropene	75	Compound Not Detected.						(D)
	55	2,2,4-Trimethylpentane	57	Compound Not Detected.						
	51	Benzene	78	Compound Not Detected.						
	40	Methacrylonitrile	67	Compound Not Detected.						
$	50	1,2-Dichloroethane-d4 (S)	65	3.677	3.677	(0.941)	132309	45.6725	45.7	
	56	tert-Amylmethyl ether	73	Compound Not Detected.						
	52	1,2-Dichloroethane	62	Compound Not Detected.						
	57	n-Heptane	43	Compound Not Detected.						
*	58	1,4-Difluorobenzene (IS)	114	3.909	3.909	(1.000)	406725	50.0000		
	59	Trichloroethene	95	Compound Not Detected.						
	60	Methylcyclohexane	83	Compound Not Detected.						
	49	Isobutanol	43	Compound Not Detected.						
	53	tert-Amyl Alcohol	59	Compound Not Detected.						
	54	tert-Amyl ethyl ether	59	Compound Not Detected.						
	61	1,2-Dichloropropane	63	Compound Not Detected.						
	63	Methyl methacrylate	69	Compound Not Detected.						
	64	1,4-Dioxane (p-Dioxane)	88	Compound Not Detected.						
	62	Dibromomethane	93	Compound Not Detected.						
	65	Bromodichloromethane	83	Compound Not Detected.						
	66	2-Nitropropane	43	Compound Not Detected.						
	67	2-Chloroethylvinyl ether	63	Compound Not Detected.						
	68	cis-1,3-Dichloropropene	75	Compound Not Detected.						
	69	4-Methyl-2-pentanone (MIBK)	43	Compound Not Detected.						
$	70	Toluene-d8 (S)	98	4.811	4.811	(0.828)	473182	55.5571	55.6	
	71	Toluene	91	Compound Not Detected.						
	72	Methyl isothiocyanate	73	Compound Not Detected.						
	74	trans-1,3-Dichloropropene	75	Compound Not Detected.						
	75	Ethyl methacrylate	69	Compound Not Detected.						(D)
	76	1,1,2-Trichloroethane	83	Compound Not Detected.						
	77	Tetrachloroethene	166	Compound Not Detected.						

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34410.D
Report Date: 29-Apr-2017 22:54

								CONCENTRATIONS		
		QUANT SIG						ON-COLUMN	FINAL	
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE		(ug/L)	(ug/L)	REVIEW C
	78 1,3-Dichloropropane	76	Compound Not Detected.							
	79 2-Hexanone	43	Compound Not Detected.							
	73 n-Octane	43	Compound Not Detected.							
	81 n-Butyl acetate	43	Compound Not Detected.							
	80 Dibromochloromethane	129	Compound Not Detected.							
	82 1,2-Dibromoethane (EDB)	107	Compound Not Detected.							
*	83 Chlorobenzene-d5 (IS)	82	5.811	5.811	(1.000)	223584		50.0000		
	84 Chlorobenzene	112	Compound Not Detected.							
	86 Ethylbenzene	106	Compound Not Detected.							
	85 1,1,1,2-Tetrachloroethane	131	Compound Not Detected.							
	88 n-Nonane	43	Compound Not Detected.							(D)
	87 m&p-Xylene	106	Compound Not Detected.							
	89 o-Xylene	106	Compound Not Detected.							
	90 Styrene	104	Compound Not Detected.							
	91 Bromoform	173	Compound Not Detected.							
	92 Isopropylbenzene (Cumene)	105	Compound Not Detected.							
$	93 4-Bromofluorobenzene (S)	95	6.671	6.671	(1.148)	178393		58.7808	58.8	
	94 Bromobenzene	156	Compound Not Detected.							
	95 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.							
	98 n-Propylbenzene	91	Compound Not Detected.							
	96 1,2,3-Trichloropropane	110	Compound Not Detected.							
	97 trans-1,4-Dichloro-2-butene	53	Compound Not Detected.							
	103 n-Decane	43	Compound Not Detected.							
	99 2-Chlorotoluene	91	Compound Not Detected.							
	100 4-Ethyltoluene	105	Compound Not Detected.							
	101 1,3,5-Trimethylbenzene	105	Compound Not Detected.							
	102 4-Chlorotoluene	91	Compound Not Detected.							
	104 tert-Butylbenzene	119	Compound Not Detected.							
	105 Pentachloroethane	167	Compound Not Detected.							
	106 1,2,4-Trimethylbenzene	105	Compound Not Detected.							
	107 sec-Butylbenzene	105	Compound Not Detected.							
	109 d-Limonene	136	Compound Not Detected.							
	110 p-Isopropyltoluene	119	Compound Not Detected.							
	108 1,3-Dichlorobenzene	146	Compound Not Detected.							
*	111 1,4-Dichlorobenzene-d4 (IS)	152	7.548	7.549	(1.000)	172219		50.0000		
	112 1,4-Dichlorobenzene	146	Compound Not Detected.							
	113 1,2,3-Trimethylbenzene	105	Compound Not Detected.							
	114 Benzyl chloride	91	Compound Not Detected.							
	115 trans-Decalin	138	Compound Not Detected.							
	116 1,4-Diethylbenzene	119	Compound Not Detected.							
	117 n-Butylbenzene	91	Compound Not Detected.							
	119 n-Undecane	43	Compound Not Detected.							
	118 1,2-Dichlorobenzene	146	Compound Not Detected.							
	120 cis-Decalin	138	Compound Not Detected.							
	121 1,2,4,5-tetramethylbenzene	119	Compound Not Detected.							
	122 1,2-Dibromo-3-chloropropane	75	Compound Not Detected.							
	123 n-Dodecane	43	Compound Not Detected.							(D)
	124 1,2,4-Trichlorobenzene	180	Compound Not Detected.							
	125 Hexachloro-1,3-butadiene	225	Compound Not Detected.							
	126 Naphthalene	128	Compound Not Detected.							
	127 1,2,3-Trichlorobenzene	180	Compound Not Detected.							

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34410.D
Report Date: 29-Apr-2017 22:54

QC Flag Legend

Q - Qualifier signal failed the ratio test.
D - User disabled compound identification.

Review Codes Legend

:

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34410.D
Report Date: 29-Apr-2017 22:54

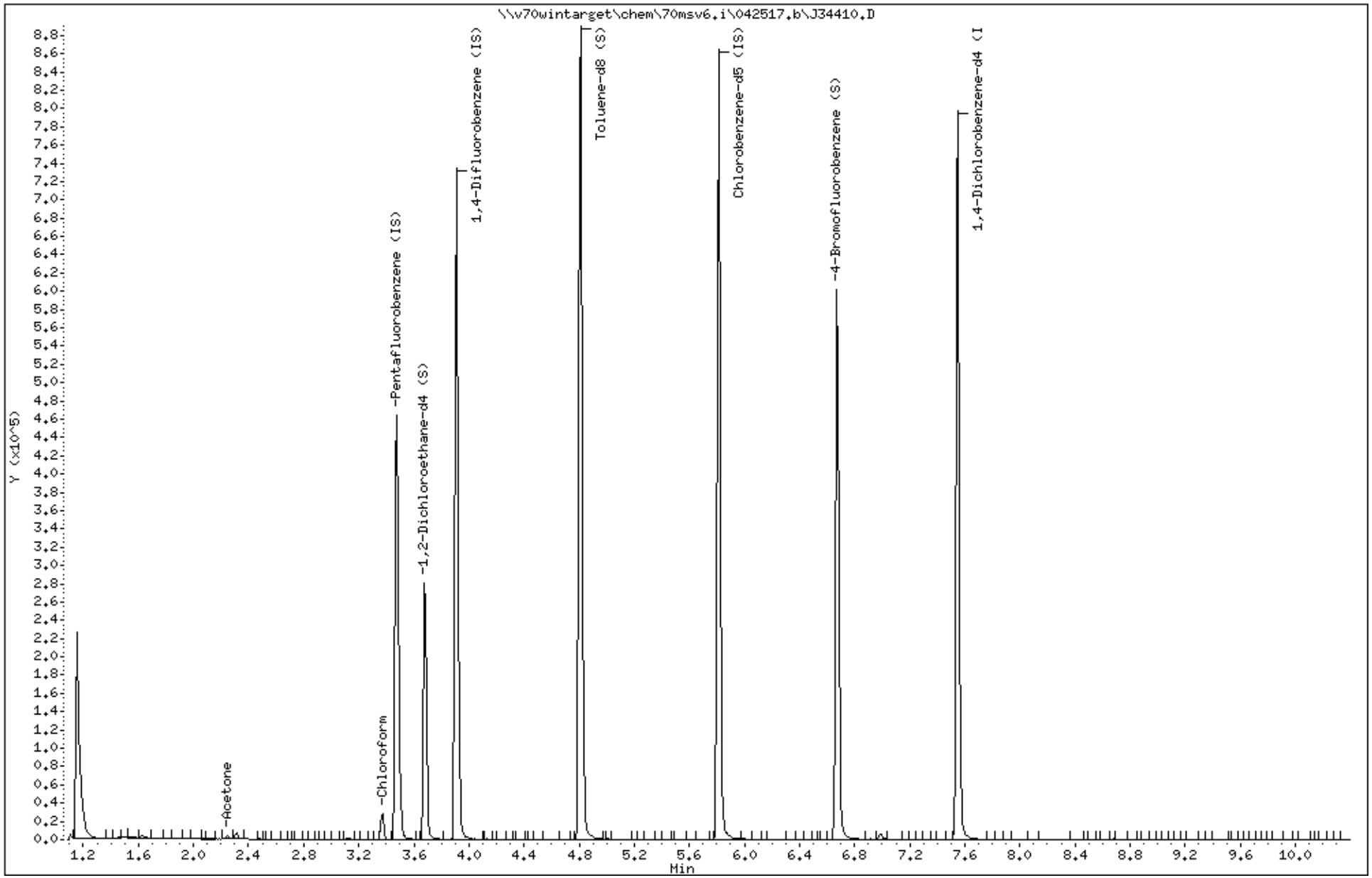
Pace Analytical Services, Inc.

SW846-8260C/EPA 624

Data file : \\v70wintarget\chem\70msv6.i\042517.b\J34410.D
Lab Smp Id: 7016438008 Client Smp ID: DUP001
Inj Date : 25-APR-2017 17:02 MS Autotune Date: 17-MAR-2017 06:2
Operator : KGG Inst ID: 70msv6.i
Smp Info : 7016438008,
Misc Info : 2005,
Comment :
Method : \\v70wintarget\chem\70msv6.i\042517.b\032717_8260W.m
Meth Date : 29-Apr-2017 22:43 blagula Quant Type: ISTD
Cal Date : 27-MAR-2017 18:25 Cal File: J33244.D
Als bottle: 16
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A
Processing Host: 70MSV4WS10B6

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34410.D
Date : 25-APR-2017 17:02
Client ID: DUP001
Instrument: 70msv6.i
Sample Info: 7016438008,
Purge Volume: 5.0
Operator: KGG
Column phase: RTX-624
Column diameter: 0.18



Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34410.D

Date : 25-APR-2017 17:02

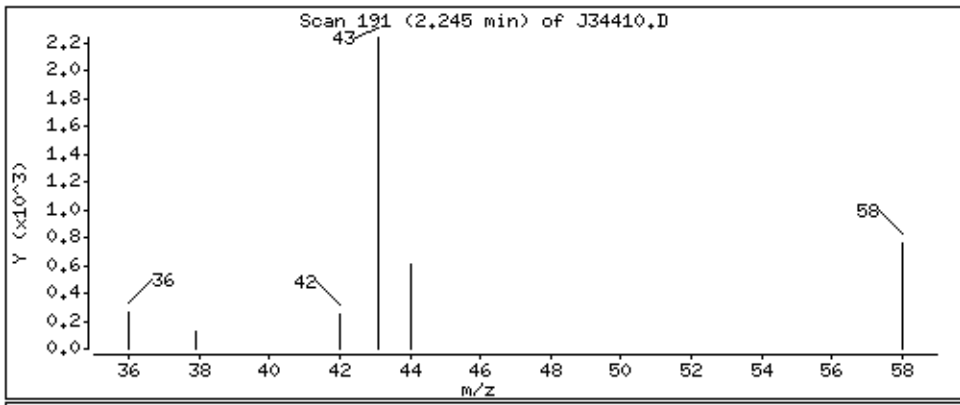
Client ID: DUP001 Instrument: 70msv6.i

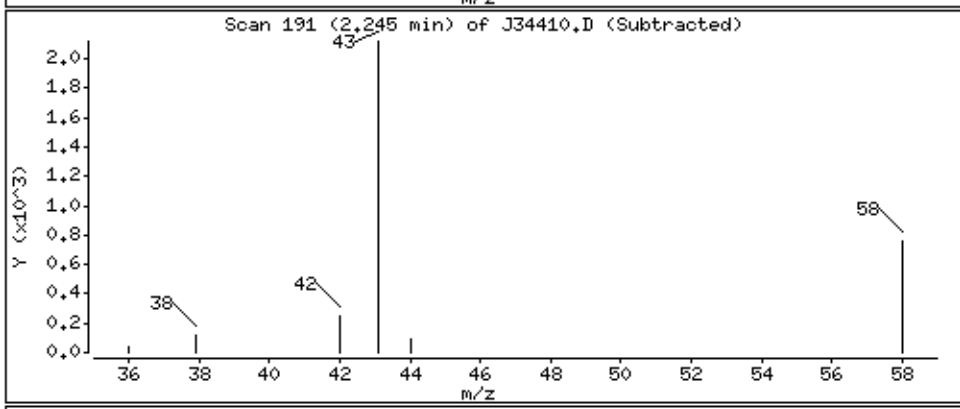
Sample Info: 7016438008,

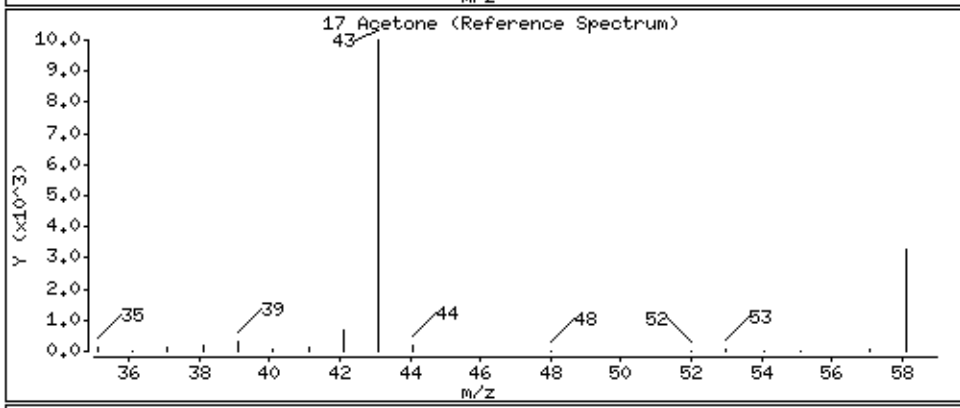
Purge Volume: 5.0 Operator: KGG

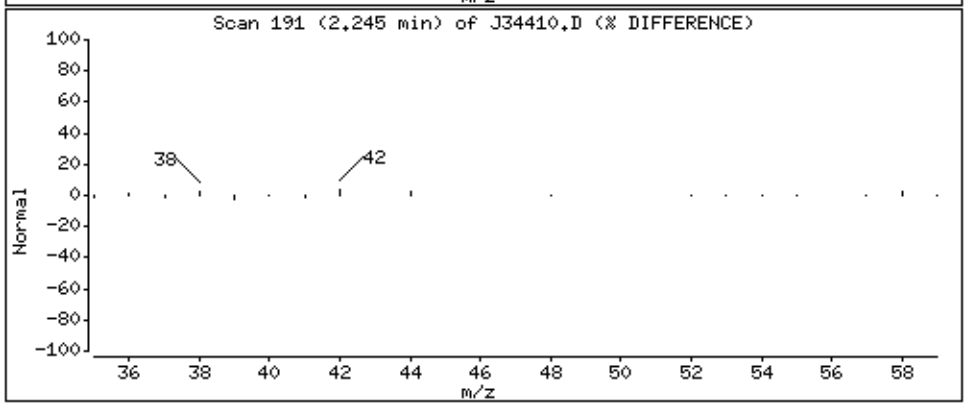
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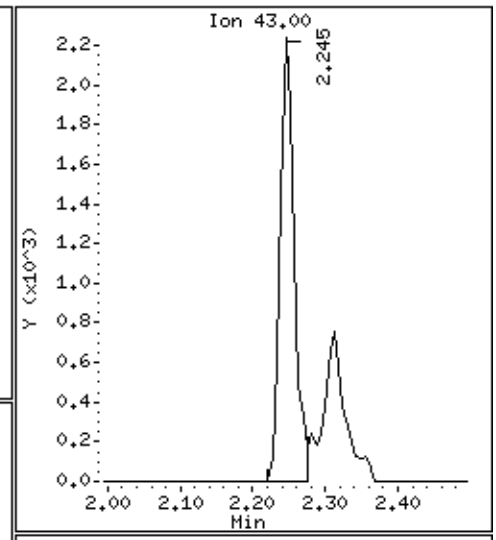
17 Acetone Concentration: 2.24 ug/L Review Code:

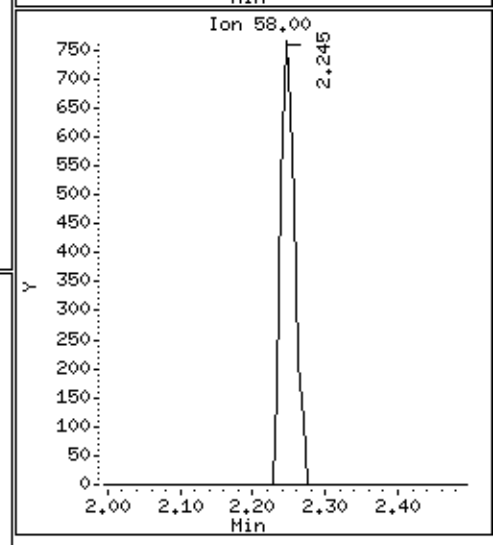












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34410.D

Date : 25-APR-2017 17:02

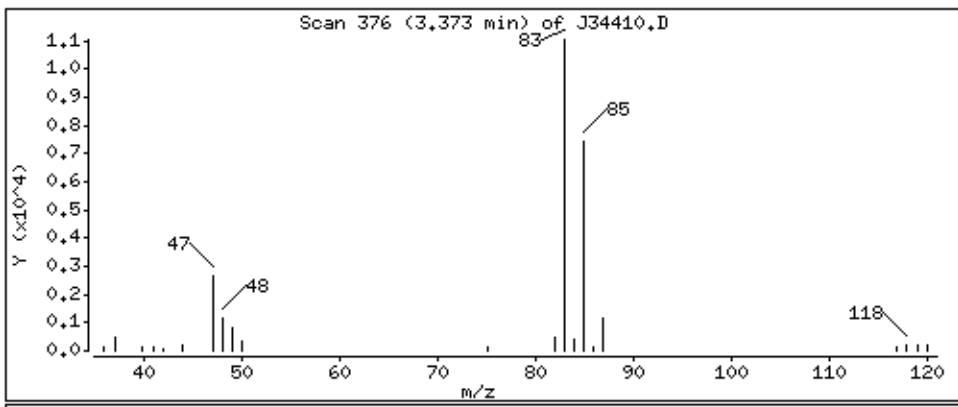
Client ID: DUP001 Instrument: 70msv6.i

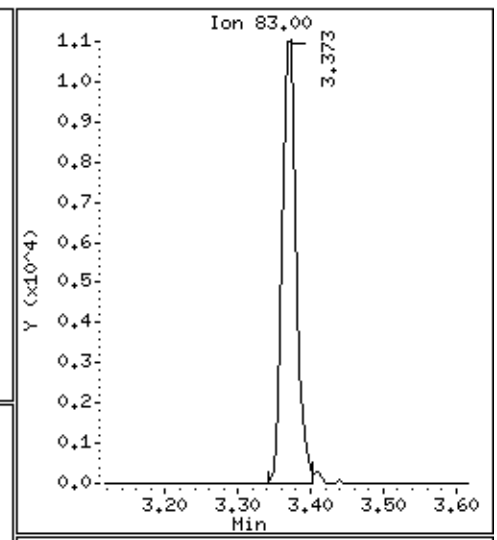
Sample Info: 7016438008,

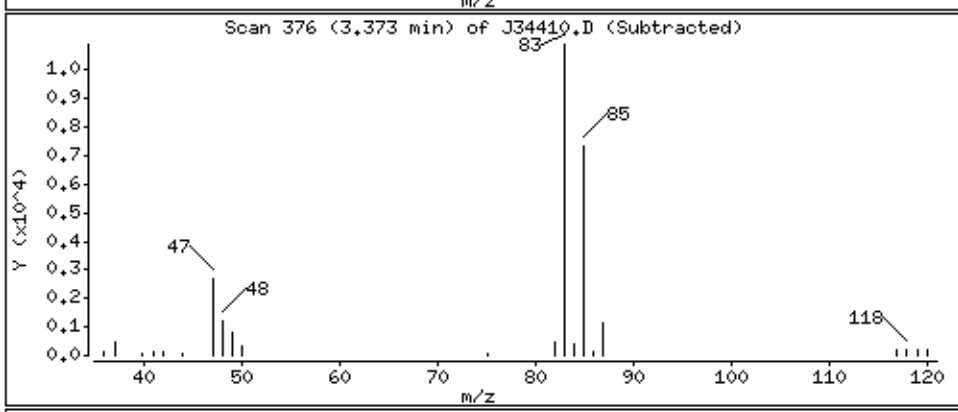
Purge Volume: 5.0 Operator: KGG

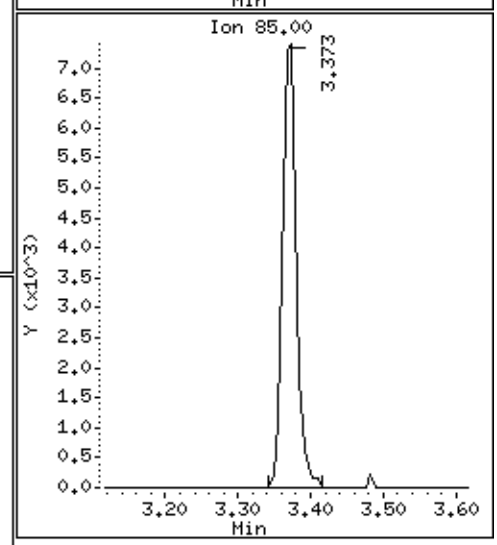
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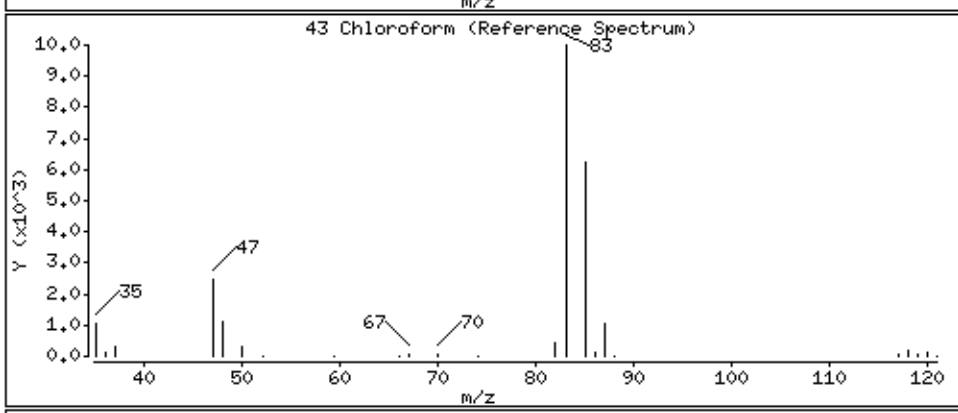
43 Chloroform Concentration: 2.28 ug/L Review Code:

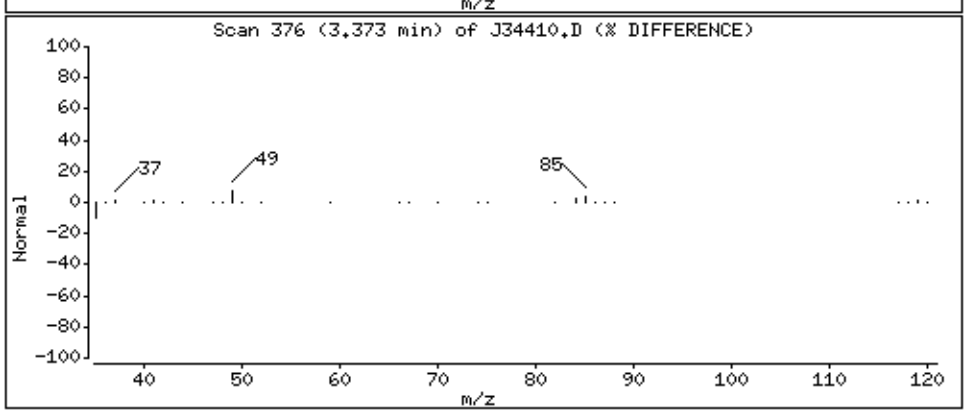












Data File: \\v70wintarget\chem\70msv6.i\042517.b/J34410.D
Injection Date: 25-APR-2017 17:02
Instrument: 70msv6.i
Lab Sample ID: 7016438008
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

SAMPLE NO.

FB

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York Contract: NORTH SEA LANDFILL

Date Received: 04/20/2017 12:20 Matrix: Water SDG No.: 7016438

Date Extracted: 04/25/2017 14:21 Lab Sample ID: 7016438009

Date Analyzed: 04/25/2017 14:21 Lab File ID: 042517.B\J34401.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1 Instrument: 70MSV6 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	5.3	
107-13-1	Acrylonitrile	<5.0	U
71-43-2	Benzene	<5.0	U
74-97-5	Bromochloromethane	<5.0	U
75-27-4	Bromodichloromethane	<5.0	U
75-25-2	Bromoform	<5.0	U
74-83-9	Bromomethane	<5.0	U
78-93-3	2-Butanone (MEK)	<5.0	U
75-15-0	Carbon disulfide	<5.0	U
56-23-5	Carbon tetrachloride	<5.0	U
108-90-7	Chlorobenzene	<5.0	U
75-00-3	Chloroethane	<5.0	U
67-66-3	Chloroform	<5.0	U
74-87-3	Chloromethane	<5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	<5.0	U
124-48-1	Dibromochloromethane	<5.0	U
106-93-4	1,2-Dibromoethane (EDB)	<5.0	U
74-95-3	Dibromomethane	<5.0	U
95-50-1	1,2-Dichlorobenzene	<5.0	U
106-46-7	1,4-Dichlorobenzene	<5.0	U
110-57-6	trans-1,4-Dichloro-2-butene	<5.0	U
75-34-3	1,1-Dichloroethane	<5.0	U
107-06-2	1,2-Dichloroethane	<5.0	U
75-35-4	1,1-Dichloroethene	<5.0	U
156-59-2	cis-1,2-Dichloroethene	<5.0	U
156-60-5	trans-1,2-Dichloroethene	<5.0	U
78-87-5	1,2-Dichloropropane	<5.0	U
10061-01-5	cis-1,3-Dichloropropene	<5.0	U
10061-02-6	trans-1,3-Dichloropropene	<5.0	U
100-41-4	Ethylbenzene	<5.0	U
591-78-6	2-Hexanone	<5.0	U
74-88-4	Iodomethane	<5.0	U
75-09-2	Methylene Chloride	3.3	J
108-10-1	4-Methyl-2-pentanone (MIBK)	<5.0	U
100-42-5	Styrene	<5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	<5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	<5.0	U

SAMPLE NO.

FB

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York Contract: NORTH SEA LANDFILL

Date Received: 04/20/2017 12:20 Matrix: Water SDG No.: 7016438

Date Extracted: 04/25/2017 14:21 Lab Sample ID: 7016438009

Date Analyzed: 04/25/2017 14:21 Lab File ID: 042517.B\J34401.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1 Instrument: 70MSV6 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
127-18-4	Tetrachloroethene	<5.0	U
108-88-3	Toluene	<5.0	U
71-55-6	1,1,1-Trichloroethane	<5.0	U
79-00-5	1,1,2-Trichloroethane	<5.0	U
79-01-6	Trichloroethene	<5.0	U
75-69-4	Trichlorofluoromethane	<5.0	U
96-18-4	1,2,3-Trichloropropane	<5.0	U
108-05-4	Vinyl acetate	<5.0	U
75-01-4	Vinyl chloride	<5.0	U
1330-20-7	Xylene (Total)	<5.0	U

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34401.D
Report Date: 29-Apr-2017 22:54

Pace Analytical Services, Inc.

SW846-8260C/EPA 624

Data file : \\v70wintarget\chem\70msv6.i\042517.b\J34401.D
Lab Smp Id: 7016438009 Client Smp ID: FB
Inj Date : 25-APR-2017 14:21 MS Autotune Date: 17-MAR-2017 06:2
Operator : KGG Inst ID: 70msv6.i
Smp Info : 7016438009,
Misc Info : 2005,
Comment :
Method : \\v70wintarget\chem\70msv6.i\042517.b\032717_8260W.m
Meth Date : 29-Apr-2017 22:43 blagula Quant Type: ISTD
Cal Date : 27-MAR-2017 18:25 Cal File: J33244.D
Als bottle: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A
Processing Host: 70MSV4WS10B6

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)	REVIEW C
1 Chlorodifluoromethane	51	Compound Not Detected.						
2 Dichlorotetrafluoroethane	135	Compound Not Detected.						
3 Dichlorodifluoromethane	85	Compound Not Detected.						
4 Chloromethane	50	Compound Not Detected.						
5 Vinyl chloride	62	Compound Not Detected.						
6 1,3-Butadiene	54	Compound Not Detected.						
7 Acetaldehyde	44	Compound Not Detected.						
8 Bromomethane	94	Compound Not Detected.						
9 Chloroethane	64	Compound Not Detected.						
10 Dichlorofluoromethane	67	Compound Not Detected.						
11 Trichlorofluoromethane	101	Compound Not Detected.						
12 Ethanol	45	Compound Not Detected.						
13 Diethyl ether (Ethyl ether)	59	Compound Not Detected.						
16 1,1,2-Trichlorotrifluoroethane	101	Compound Not Detected.						
14 Acrolein	56	Compound Not Detected.						
15 1,1-Dichloroethene	96	Compound Not Detected.						
17 Acetone	43	2.245	2.245	(0.646)	7558	5.27567	5.28	
18 Iodomethane	142	Compound Not Detected.						
19 2-Propanol	45	Compound Not Detected.						(D)
20 Carbon disulfide	76	Compound Not Detected.						
21 Allyl chloride	76	Compound Not Detected.						
22 Acetonitrile	41	Compound Not Detected.						

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34401.D
Report Date: 29-Apr-2017 22:54

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)		REVIEW C
	23 Methyl acetate	43	Compound Not Detected.							
	24 Methylene Chloride	84	2.489	2.489	(0.716)	12710	3.29030	3.29		
	25 tert-Butyl Alcohol	59	Compound Not Detected.							
	28 Methyl-tert-butyl ether	73	Compound Not Detected.							
	27 trans-1,2-Dichloroethene	96	Compound Not Detected.							
	26 Acrylonitrile	53	Compound Not Detected.							
	30 n-Hexane	57	Compound Not Detected.							
	29 Diisopropyl ether	45	Compound Not Detected.							
	32 Vinyl acetate	43	Compound Not Detected.							
	31 1,1-Dichloroethane	63	Compound Not Detected.							
	33 Chloroprene	53	Compound Not Detected.							
	34 Ethyl-tert-butyl ether	59	Compound Not Detected.							
	36 2,2-Dichloropropane	77	Compound Not Detected.							
	35 cis-1,2-Dichloroethene	96	Compound Not Detected.							
	39 Ethyl acetate	61	Compound Not Detected.							
	37 2-Butanone (MEK)	43	Compound Not Detected.							
	41 Bromochloromethane	128	Compound Not Detected.							
	42 Tetrahydrofuran	42	Compound Not Detected.							
	43 Chloroform	83	Compound Not Detected.							
	38 Propionitrile	54	Compound Not Detected.							
	46 Cyclohexane	56	Compound Not Detected.							
	45 1,1,1-Trichloroethane	97	Compound Not Detected.							
*	44 Pentafluorobenzene (IS)	168	3.476	3.476	(1.000)	242302	50.0000		(Q)	
	48 Carbon tetrachloride	117	Compound Not Detected.							(D)
	47 1,1-Dichloropropene	75	Compound Not Detected.							(D)
	55 2,2,4-Trimethylpentane	57	Compound Not Detected.							
	51 Benzene	78	Compound Not Detected.							
	40 Methacrylonitrile	67	Compound Not Detected.							
$	50 1,2-Dichloroethane-d4 (S)	65	3.677	3.677	(0.941)	132518	45.0057	45.0		
	56 tert-Amylmethyl ether	73	Compound Not Detected.							
	52 1,2-Dichloroethane	62	Compound Not Detected.							
	57 n-Heptane	43	Compound Not Detected.							
*	58 1,4-Difluorobenzene (IS)	114	3.909	3.909	(1.000)	413403	50.0000			
	59 Trichloroethene	95	Compound Not Detected.							
	60 Methylcyclohexane	83	Compound Not Detected.							
	49 Isobutanol	43	Compound Not Detected.							
	53 tert-Amyl Alcohol	59	Compound Not Detected.							
	54 tert-Amyl ethyl ether	59	Compound Not Detected.							
	61 1,2-Dichloropropane	63	Compound Not Detected.							
	63 Methyl methacrylate	69	Compound Not Detected.							
	64 1,4-Dioxane (p-Dioxane)	88	Compound Not Detected.							
	62 Dibromomethane	93	Compound Not Detected.							
	65 Bromodichloromethane	83	Compound Not Detected.							
	66 2-Nitropropane	43	Compound Not Detected.							
	67 2-Chloroethylvinyl ether	63	Compound Not Detected.							
	68 cis-1,3-Dichloropropene	75	Compound Not Detected.							
	69 4-Methyl-2-pentanone (MIBK)	43	Compound Not Detected.							
$	70 Toluene-d8 (S)	98	4.811	4.811	(0.828)	484075	56.5689	56.6		
	71 Toluene	91	Compound Not Detected.							
	72 Methyl isothiocyanate	73	Compound Not Detected.							
	74 trans-1,3-Dichloropropene	75	Compound Not Detected.							
	75 Ethyl methacrylate	69	Compound Not Detected.							(D)
	76 1,1,2-Trichloroethane	83	Compound Not Detected.							
	77 Tetrachloroethene	166	Compound Not Detected.							

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34401.D
Report Date: 29-Apr-2017 22:54

							CONCENTRATIONS		
		QUANT SIG					ON-COLUMN	FINAL	
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)	REVIEW C
	78 1,3-Dichloropropane	76	Compound Not Detected.						
	79 2-Hexanone	43	Compound Not Detected.						
	73 n-Octane	43	Compound Not Detected.						
	81 n-Butyl acetate	43	Compound Not Detected.						
	80 Dibromochloromethane	129	Compound Not Detected.						
	82 1,2-Dibromoethane (EDB)	107	Compound Not Detected.						
*	83 Chlorobenzene-d5 (IS)	82	5.811	5.811	(1.000)	224640	50.0000		
	84 Chlorobenzene	112	Compound Not Detected.						
	86 Ethylbenzene	106	Compound Not Detected.						
	85 1,1,1,2-Tetrachloroethane	131	Compound Not Detected.						
	88 n-Nonane	43	Compound Not Detected.						(D)
	87 m&p-Xylene	106	Compound Not Detected.						
	89 o-Xylene	106	Compound Not Detected.						
	90 Styrene	104	Compound Not Detected.						
	91 Bromoform	173	Compound Not Detected.						
	92 Isopropylbenzene (Cumene)	105	Compound Not Detected.						
$	93 4-Bromofluorobenzene (S)	95	6.671	6.671	(1.148)	179472	58.8584	58.8	
	94 Bromobenzene	156	Compound Not Detected.						
	95 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.						
	98 n-Propylbenzene	91	Compound Not Detected.						
	96 1,2,3-Trichloropropane	110	Compound Not Detected.						
	97 trans-1,4-Dichloro-2-butene	53	Compound Not Detected.						
	103 n-Decane	43	Compound Not Detected.						
	99 2-Chlorotoluene	91	Compound Not Detected.						
	100 4-Ethyltoluene	105	Compound Not Detected.						
	101 1,3,5-Trimethylbenzene	105	Compound Not Detected.						
	102 4-Chlorotoluene	91	Compound Not Detected.						
	104 tert-Butylbenzene	119	Compound Not Detected.						
	105 Pentachloroethane	167	Compound Not Detected.						
	106 1,2,4-Trimethylbenzene	105	Compound Not Detected.						
	107 sec-Butylbenzene	105	Compound Not Detected.						
	109 d-Limonene	136	Compound Not Detected.						
	110 p-Isopropyltoluene	119	Compound Not Detected.						
	108 1,3-Dichlorobenzene	146	Compound Not Detected.						
*	111 1,4-Dichlorobenzene-d4 (IS)	152	7.549	7.549	(1.000)	186351	50.0000		
	112 1,4-Dichlorobenzene	146	Compound Not Detected.						
	113 1,2,3-Trimethylbenzene	105	Compound Not Detected.						
	114 Benzyl chloride	91	Compound Not Detected.						
	115 trans-Decalin	138	Compound Not Detected.						
	116 1,4-Diethylbenzene	119	Compound Not Detected.						
	117 n-Butylbenzene	91	Compound Not Detected.						
	119 n-Undecane	43	Compound Not Detected.						(D)
	118 1,2-Dichlorobenzene	146	Compound Not Detected.						
	120 cis-Decalin	138	Compound Not Detected.						
	121 1,2,4,5-tetramethylbenzene	119	Compound Not Detected.						
	122 1,2-Dibromo-3-chloropropane	75	Compound Not Detected.						
	123 n-Dodecane	43	Compound Not Detected.						(D)
	124 1,2,4-Trichlorobenzene	180	Compound Not Detected.						
	125 Hexachloro-1,3-butadiene	225	Compound Not Detected.						
	126 Naphthalene	128	Compound Not Detected.						
	127 1,2,3-Trichlorobenzene	180	Compound Not Detected.						

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34401.D
Report Date: 29-Apr-2017 22:54

QC Flag Legend

Q - Qualifier signal failed the ratio test.
D - User disabled compound identification.

Review Codes Legend

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Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34401.D
Report Date: 29-Apr-2017 22:54

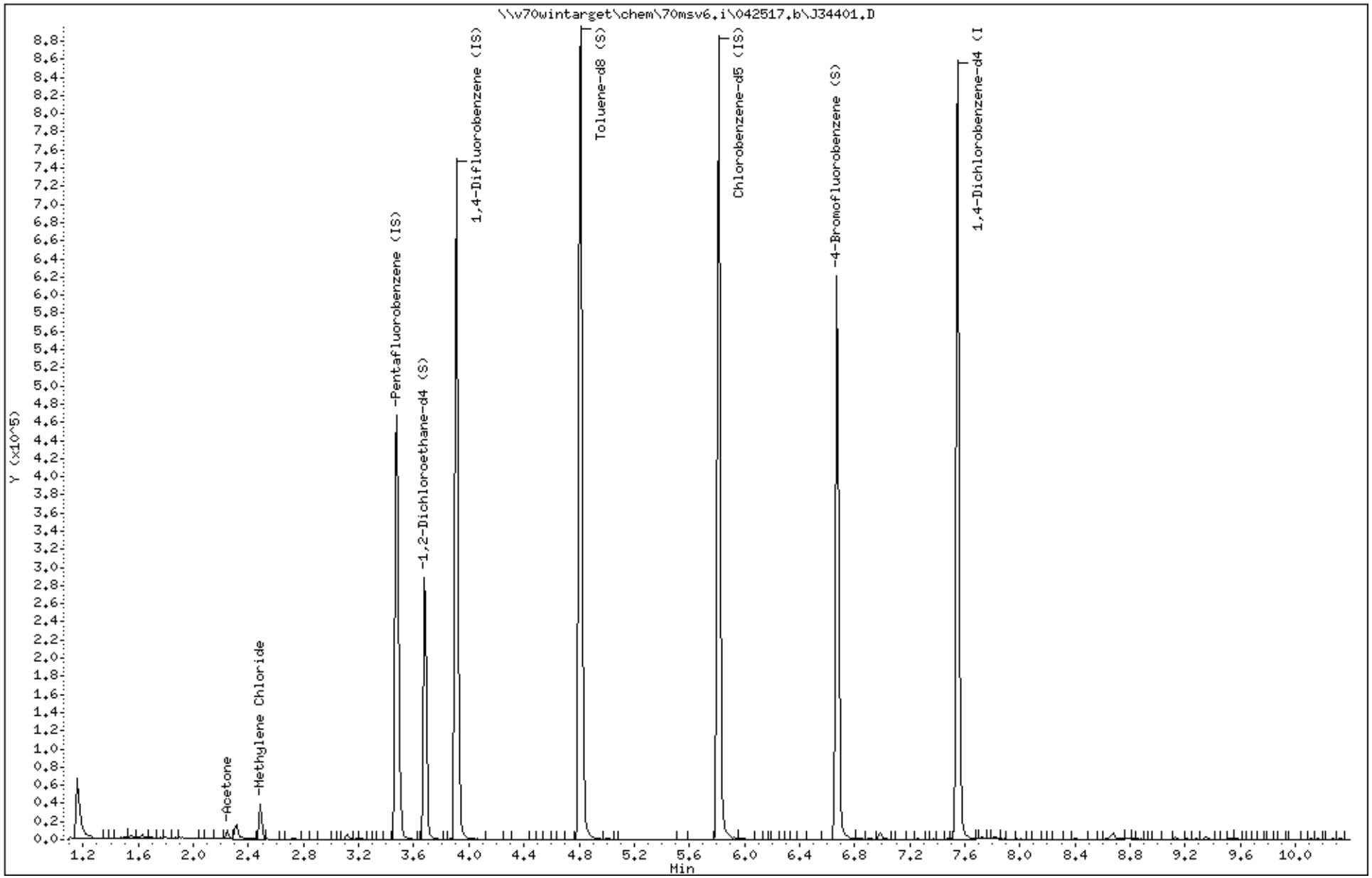
Pace Analytical Services, Inc.

SW846-8260C/EPA 624

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Inj Date : 25-APR-2017 14:21 MS Autotune Date: 17-MAR-2017 06:2
Operator : KGG Inst ID: 70msv6.i
Smp Info : 7016438009,
Misc Info : 2005,
Comment :
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Meth Date : 29-Apr-2017 22:43 blagula Quant Type: ISTD
Cal Date : 27-MAR-2017 18:25 Cal File: J33244.D
Als bottle: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A
Processing Host: 70MSV4WS10B6

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34401.D
Date : 25-APR-2017 14:21
Client ID: FB
Instrument: 70msv6.i
Sample Info: 7016438009,
Purge Volume: 5.0
Operator: KGG
Column phase: RTX-624
Column diameter: 0.18



Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34401.D

Date : 25-APR-2017 14:21

Client ID: FB

Instrument: 70msv6.i

Sample Info: 7016438009,

Purge Volume: 5.0

Operator: KGG

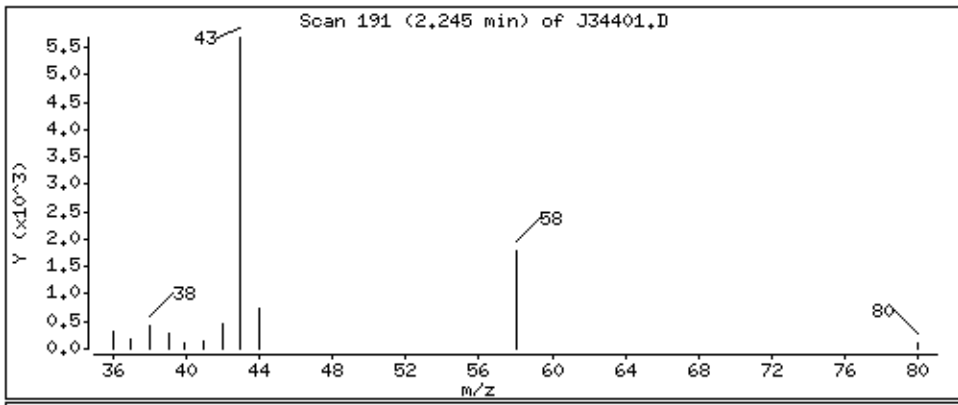
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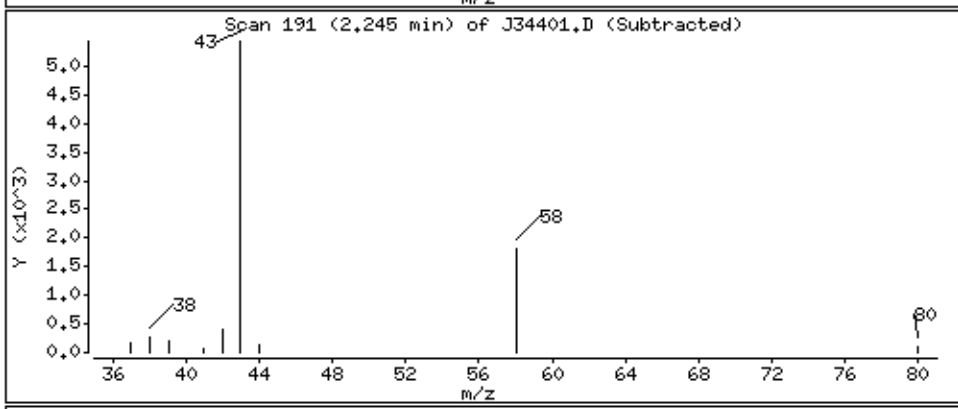
Column diameter: 0.18

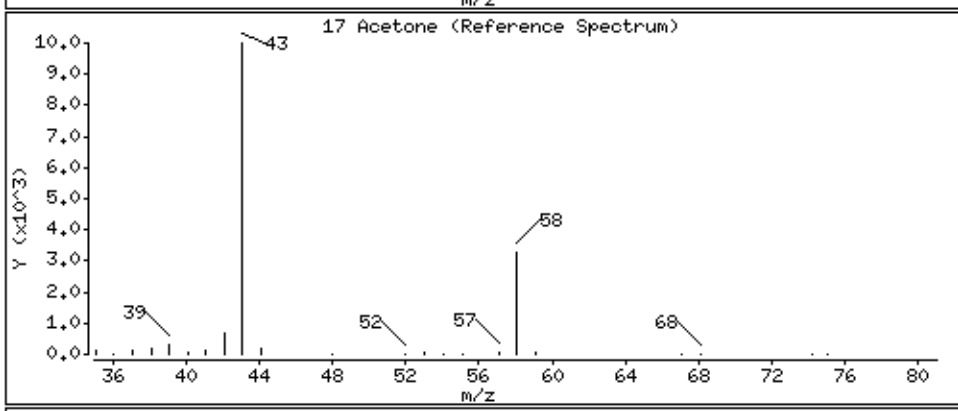
17 Acetone

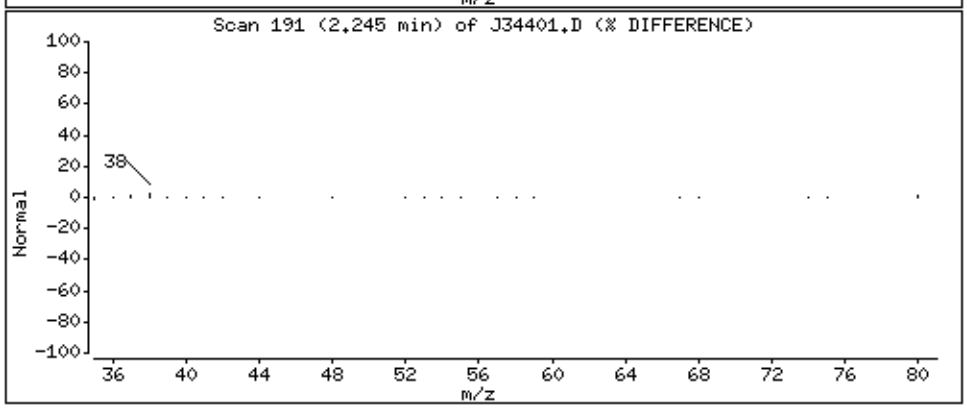
Concentration: 5.28 ug/L

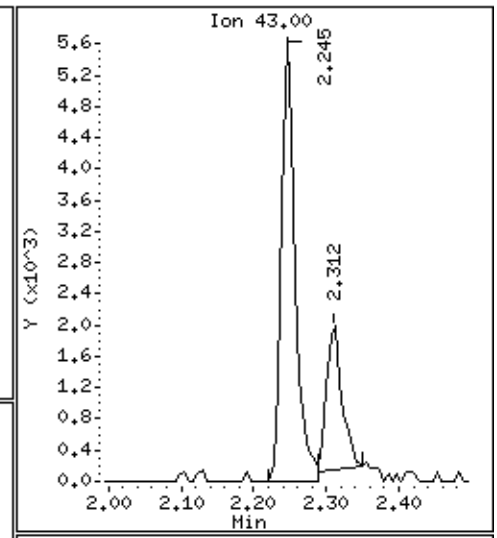
Review Code:

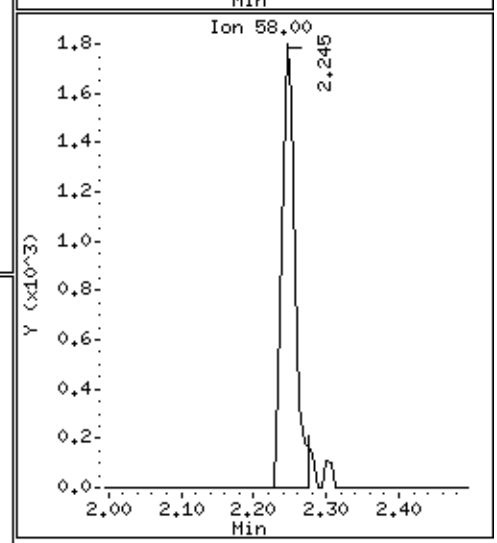












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34401.D

Date : 25-APR-2017 14:21

Client ID: FB

Instrument: 70msv6.i

Sample Info: 7016438009,

Purge Volume: 5.0

Operator: KGG

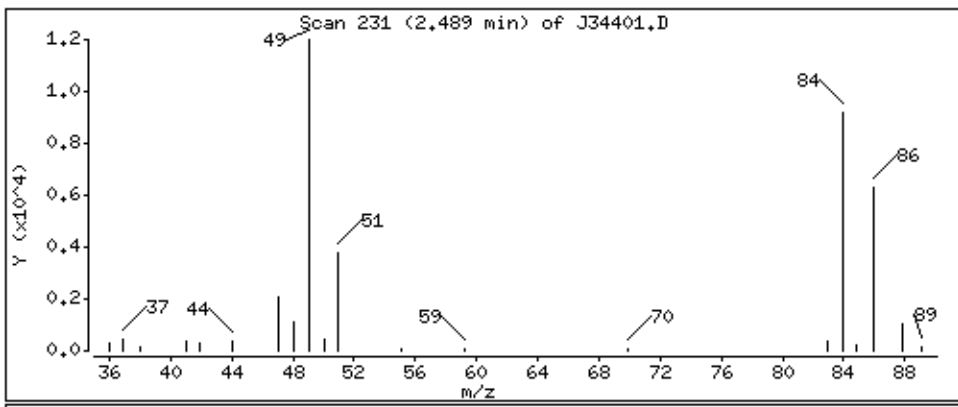
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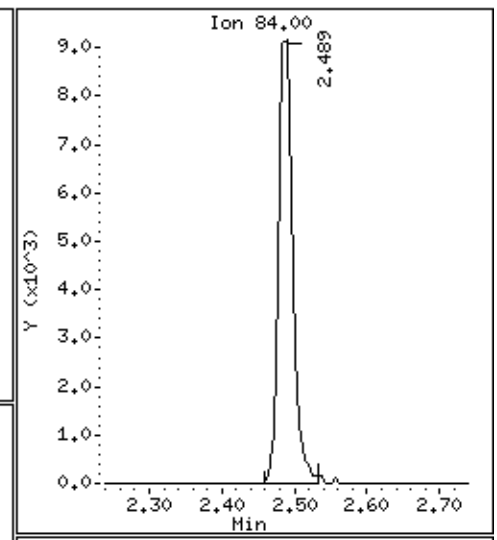
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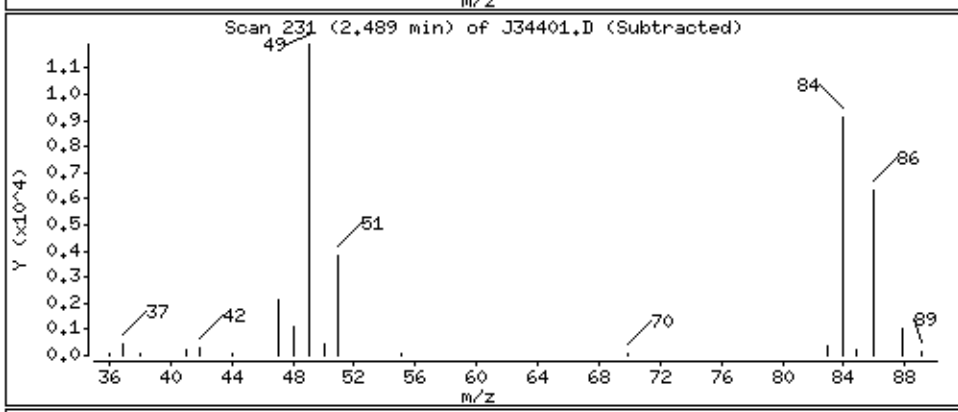
24 Methylene Chloride

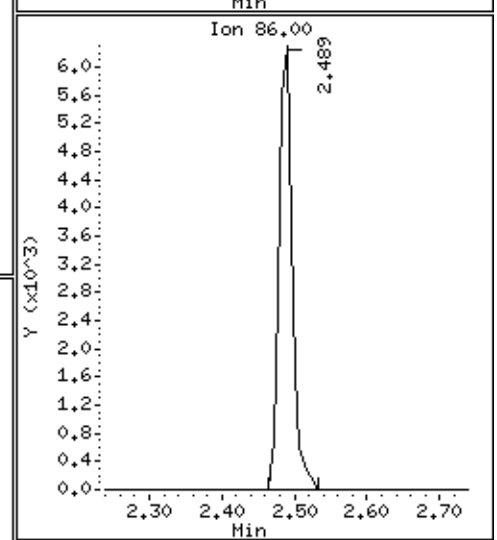
Concentration: 3.29 ug/L

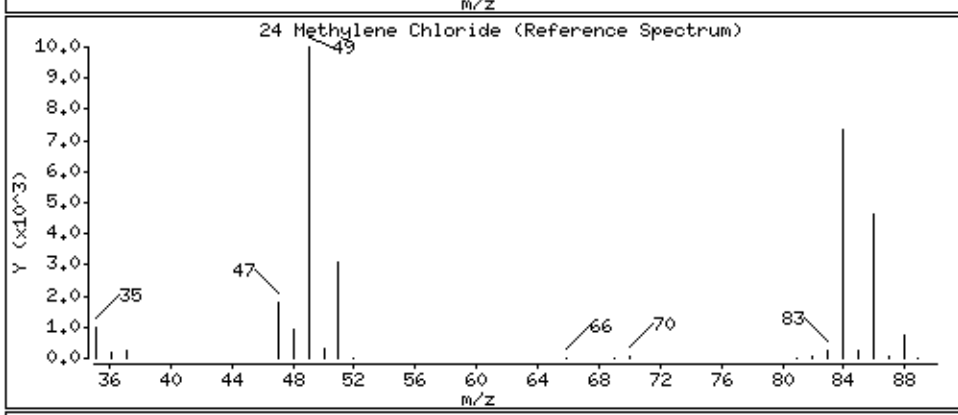
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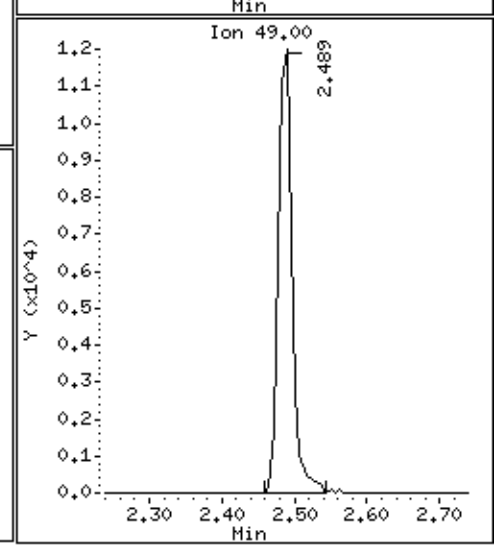


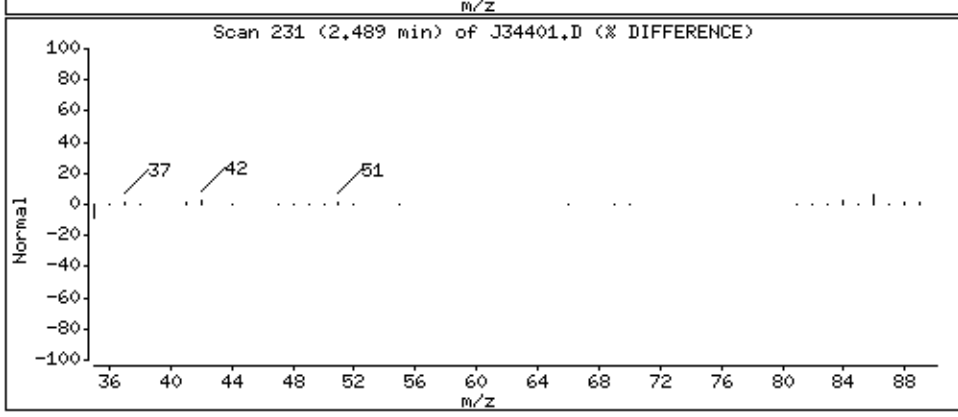












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Injection Date: 25-APR-2017 14:21
Instrument: 70msv6.i
Lab Sample ID: 7016438009
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

SAMPLE NO.

TRIP BLANK

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York Contract: NORTH SEA LANDFILL

Date Received: 04/20/2017 12:20 Matrix: Water SDG No.: 7016438

Date Extracted: 04/25/2017 13:46 Lab Sample ID: 7016438012

Date Analyzed: 04/25/2017 13:46 Lab File ID: 042517.B\J34399.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1 Instrument: 70MSV6 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	3.6	J
107-13-1	Acrylonitrile	<5.0	U
71-43-2	Benzene	<5.0	U
74-97-5	Bromochloromethane	<5.0	U
75-27-4	Bromodichloromethane	<5.0	U
75-25-2	Bromoform	<5.0	U
74-83-9	Bromomethane	<5.0	U
78-93-3	2-Butanone (MEK)	<5.0	U
75-15-0	Carbon disulfide	<5.0	U
56-23-5	Carbon tetrachloride	<5.0	U
108-90-7	Chlorobenzene	<5.0	U
75-00-3	Chloroethane	<5.0	U
67-66-3	Chloroform	<5.0	U
74-87-3	Chloromethane	<5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	<5.0	U
124-48-1	Dibromochloromethane	<5.0	U
106-93-4	1,2-Dibromoethane (EDB)	<5.0	U
74-95-3	Dibromomethane	<5.0	U
95-50-1	1,2-Dichlorobenzene	<5.0	U
106-46-7	1,4-Dichlorobenzene	<5.0	U
110-57-6	trans-1,4-Dichloro-2-butene	<5.0	U
75-34-3	1,1-Dichloroethane	<5.0	U
107-06-2	1,2-Dichloroethane	<5.0	U
75-35-4	1,1-Dichloroethene	<5.0	U
156-59-2	cis-1,2-Dichloroethene	<5.0	U
156-60-5	trans-1,2-Dichloroethene	<5.0	U
78-87-5	1,2-Dichloropropane	<5.0	U
10061-01-5	cis-1,3-Dichloropropene	<5.0	U
10061-02-6	trans-1,3-Dichloropropene	<5.0	U
100-41-4	Ethylbenzene	<5.0	U
591-78-6	2-Hexanone	<5.0	U
74-88-4	Iodomethane	<5.0	U
75-09-2	Methylene Chloride	1.8	J
108-10-1	4-Methyl-2-pentanone (MIBK)	<5.0	U
100-42-5	Styrene	<5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	<5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	<5.0	U

SAMPLE NO.

TRIP BLANK

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York Contract: NORTH SEA LANDFILL

Date Received: 04/20/2017 12:20 Matrix: Water SDG No.: 7016438

Date Extracted: 04/25/2017 13:46 Lab Sample ID: 7016438012

Date Analyzed: 04/25/2017 13:46 Lab File ID: 042517.B\J34399.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1 Instrument: 70MSV6 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
127-18-4	Tetrachloroethene	<5.0	U
108-88-3	Toluene	<5.0	U
71-55-6	1,1,1-Trichloroethane	<5.0	U
79-00-5	1,1,2-Trichloroethane	<5.0	U
79-01-6	Trichloroethene	<5.0	U
75-69-4	Trichlorofluoromethane	<5.0	U
96-18-4	1,2,3-Trichloropropane	<5.0	U
108-05-4	Vinyl acetate	<5.0	U
75-01-4	Vinyl chloride	<5.0	U
1330-20-7	Xylene (Total)	<5.0	U

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34399.D
Report Date: 29-Apr-2017 22:54

Pace Analytical Services, Inc.

SW846-8260C/EPA 624

Data file : \\v70wintarget\chem\70msv6.i\042517.b\J34399.D
Lab Smp Id: 7016438012 Client Smp ID: TRIP BLANK
Inj Date : 25-APR-2017 13:46 MS Autotune Date: 17-MAR-2017 06:2
Operator : KGG Inst ID: 70msv6.i
Smp Info : 7016438012,
Misc Info : 2005,
Comment :
Method : \\v70wintarget\chem\70msv6.i\042517.b\032717_8260W.m
Meth Date : 29-Apr-2017 22:43 blagula Quant Type: ISTD
Cal Date : 27-MAR-2017 18:25 Cal File: J33244.D
Als bottle: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A
Processing Host: 70MSV4WS10B6

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)	REVIEW C
1 Chlorodifluoromethane	51	Compound Not Detected.						
2 Dichlorotetrafluoroethane	135	Compound Not Detected.						
3 Dichlorodifluoromethane	85	Compound Not Detected.						
4 Chloromethane	50	Compound Not Detected.						
5 Vinyl chloride	62	Compound Not Detected.						
6 1,3-Butadiene	54	Compound Not Detected.						
7 Acetaldehyde	44	Compound Not Detected.						
8 Bromomethane	94	Compound Not Detected.						
9 Chloroethane	64	Compound Not Detected.						
10 Dichlorofluoromethane	67	Compound Not Detected.						
11 Trichlorofluoromethane	101	Compound Not Detected.						
12 Ethanol	45	Compound Not Detected.						(D)
13 Diethyl ether (Ethyl ether)	59	Compound Not Detected.						
16 1,1,2-Trichlorotrifluoroethane	101	Compound Not Detected.						
14 Acrolein	56	Compound Not Detected.						
15 1,1-Dichloroethene	96	Compound Not Detected.						
17 Acetone	43	2.251	2.245	(0.648)	5360	3.61104	3.61	
18 Iodomethane	142	Compound Not Detected.						
19 2-Propanol	45	Compound Not Detected.						(D)
20 Carbon disulfide	76	Compound Not Detected.						
21 Allyl chloride	76	Compound Not Detected.						(D)
22 Acetonitrile	41	Compound Not Detected.						

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34399.D
Report Date: 29-Apr-2017 22:54

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)		REVIEW C
	23 Methyl acetate	43	Compound Not Detected.							
	24 Methylene Chloride	84	2.489	2.489	(0.716)	7256	1.81294	1.81		
	25 tert-Butyl Alcohol	59	Compound Not Detected.							
	28 Methyl-tert-butyl ether	73	Compound Not Detected.							
	27 trans-1,2-Dichloroethene	96	Compound Not Detected.							
	26 Acrylonitrile	53	Compound Not Detected.							
	30 n-Hexane	57	Compound Not Detected.							
	29 Diisopropyl ether	45	Compound Not Detected.							
	32 Vinyl acetate	43	Compound Not Detected.							
	31 1,1-Dichloroethane	63	Compound Not Detected.							
	33 Chloroprene	53	Compound Not Detected.							
	34 Ethyl-tert-butyl ether	59	Compound Not Detected.							
	36 2,2-Dichloropropane	77	Compound Not Detected.							
	35 cis-1,2-Dichloroethene	96	Compound Not Detected.							
	39 Ethyl acetate	61	Compound Not Detected.							
	37 2-Butanone (MEK)	43	Compound Not Detected.							
	41 Bromochloromethane	128	Compound Not Detected.							
	42 Tetrahydrofuran	42	Compound Not Detected.							
	43 Chloroform	83	Compound Not Detected.							
	38 Propionitrile	54	Compound Not Detected.							
	46 Cyclohexane	56	Compound Not Detected.							
	45 1,1,1-Trichloroethane	97	Compound Not Detected.							
*	44 Pentafluorobenzene (IS)	168	3.476	3.476	(1.000)	251050	50.0000		(Q)	
	48 Carbon tetrachloride	117	Compound Not Detected.							(D)
	47 1,1-Dichloropropene	75	Compound Not Detected.							(D)
	55 2,2,4-Trimethylpentane	57	Compound Not Detected.							
	51 Benzene	78	Compound Not Detected.							
	40 Methacrylonitrile	67	Compound Not Detected.							
$	50 1,2-Dichloroethane-d4 (S)	65	3.677	3.677	(0.941)	134323	44.4040	44.4		
	56 tert-Amylmethyl ether	73	Compound Not Detected.							
	52 1,2-Dichloroethane	62	Compound Not Detected.							
	57 n-Heptane	43	Compound Not Detected.							
*	58 1,4-Difluorobenzene (IS)	114	3.909	3.909	(1.000)	424712	50.0000			
	59 Trichloroethene	95	Compound Not Detected.							
	60 Methylcyclohexane	83	Compound Not Detected.							
	49 Isobutanol	43	Compound Not Detected.							(D)
	53 tert-Amyl Alcohol	59	Compound Not Detected.							
	54 tert-Amyl ethyl ether	59	Compound Not Detected.							
	61 1,2-Dichloropropane	63	Compound Not Detected.							
	63 Methyl methacrylate	69	Compound Not Detected.							
	64 1,4-Dioxane (p-Dioxane)	88	Compound Not Detected.							(D)
	62 Dibromomethane	93	Compound Not Detected.							
	65 Bromodichloromethane	83	Compound Not Detected.							
	66 2-Nitropropane	43	Compound Not Detected.							
	67 2-Chloroethylvinyl ether	63	Compound Not Detected.							
	68 cis-1,3-Dichloropropene	75	Compound Not Detected.							
	69 4-Methyl-2-pentanone (MIBK)	43	Compound Not Detected.							
$	70 Toluene-d8 (S)	98	4.811	4.811	(0.828)	496030	59.2880	59.3		
	71 Toluene	91	Compound Not Detected.							
	72 Methyl isothiocyanate	73	Compound Not Detected.							
	74 trans-1,3-Dichloropropene	75	Compound Not Detected.							
	75 Ethyl methacrylate	69	Compound Not Detected.							(D)
	76 1,1,2-Trichloroethane	83	Compound Not Detected.							
	77 Tetrachloroethene	166	Compound Not Detected.							

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34399.D
Report Date: 29-Apr-2017 22:54

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)	REVIEW C
78	1,3-Dichloropropane	76	Compound Not Detected.						
79	2-Hexanone	43	Compound Not Detected.						
73	n-Octane	43	Compound Not Detected.						
81	n-Butyl acetate	43	Compound Not Detected.						
80	Dibromochloromethane	129	Compound Not Detected.						
82	1,2-Dibromoethane (EDB)	107	Compound Not Detected.						
* 83	Chlorobenzene-d5 (IS)	82	5.811	5.811	(1.000)	219631	50.0000		
84	Chlorobenzene	112	Compound Not Detected.						
86	Ethylbenzene	106	Compound Not Detected.						
85	1,1,1,2-Tetrachloroethane	131	Compound Not Detected.						
88	n-Nonane	43	Compound Not Detected.						(D)
87	m&p-Xylene	106	Compound Not Detected.						
89	o-Xylene	106	Compound Not Detected.						
90	Styrene	104	Compound Not Detected.						
91	Bromoform	173	Compound Not Detected.						
92	Isopropylbenzene (Cumene)	105	Compound Not Detected.						
$ 93	4-Bromofluorobenzene (S)	95	6.671	6.671	(1.148)	171919	57.6672	57.7	
94	Bromobenzene	156	Compound Not Detected.						
95	1,1,2,2-Tetrachloroethane	83	Compound Not Detected.						
98	n-Propylbenzene	91	Compound Not Detected.						
96	1,2,3-Trichloropropane	110	Compound Not Detected.						
97	trans-1,4-Dichloro-2-butene	53	Compound Not Detected.						
103	n-Decane	43	Compound Not Detected.						
99	2-Chlorotoluene	91	Compound Not Detected.						
100	4-Ethyltoluene	105	Compound Not Detected.						
101	1,3,5-Trimethylbenzene	105	Compound Not Detected.						
102	4-Chlorotoluene	91	Compound Not Detected.						
104	tert-Butylbenzene	119	Compound Not Detected.						
105	Pentachloroethane	167	Compound Not Detected.						
106	1,2,4-Trimethylbenzene	105	Compound Not Detected.						
107	sec-Butylbenzene	105	Compound Not Detected.						
109	d-Limonene	136	Compound Not Detected.						
110	p-Isopropyltoluene	119	Compound Not Detected.						
108	1,3-Dichlorobenzene	146	Compound Not Detected.						
* 111	1,4-Dichlorobenzene-d4 (IS)	152	7.549	7.549	(1.000)	189651	50.0000		
112	1,4-Dichlorobenzene	146	Compound Not Detected.						
113	1,2,3-Trimethylbenzene	105	Compound Not Detected.						
114	Benzyl chloride	91	Compound Not Detected.						
115	trans-Decalin	138	Compound Not Detected.						
116	1,4-Diethylbenzene	119	Compound Not Detected.						
117	n-Butylbenzene	91	Compound Not Detected.						
119	n-Undecane	43	Compound Not Detected.						(D)
118	1,2-Dichlorobenzene	146	Compound Not Detected.						
120	cis-Decalin	138	Compound Not Detected.						
121	1,2,4,5-tetramethylbenzene	119	Compound Not Detected.						
122	1,2-Dibromo-3-chloropropane	75	Compound Not Detected.						(D)
123	n-Dodecane	43	Compound Not Detected.						(D)
124	1,2,4-Trichlorobenzene	180	Compound Not Detected.						(D)
125	Hexachloro-1,3-butadiene	225	Compound Not Detected.						(D)
126	Naphthalene	128	Compound Not Detected.						(D)
127	1,2,3-Trichlorobenzene	180	Compound Not Detected.						(D)

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34399.D
Report Date: 29-Apr-2017 22:54

QC Flag Legend

Q - Qualifier signal failed the ratio test.
D - User disabled compound identification.

Review Codes Legend

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Report Date: 29-Apr-2017 22:54

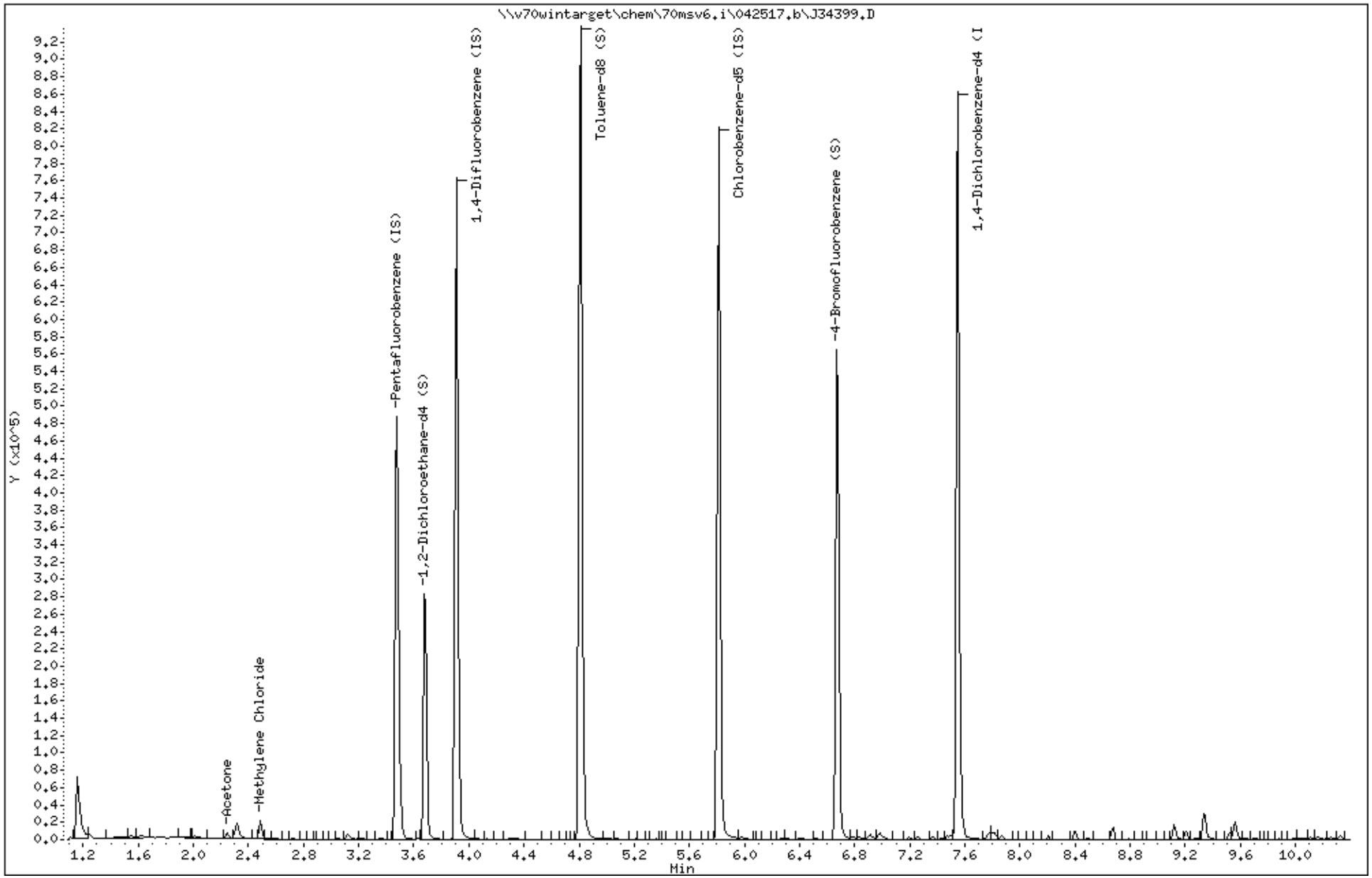
Pace Analytical Services, Inc.

SW846-8260C/EPA 624

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Operator : KGG Inst ID: 70msv6.i
Smp Info : 7016438012,
Misc Info : 2005,
Comment :
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Meth Date : 29-Apr-2017 22:43 blagula Quant Type: ISTD
Cal Date : 27-MAR-2017 18:25 Cal File: J33244.D
Als bottle: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A
Processing Host: 70MSV4WS10B6

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34399.D
Date : 25-APR-2017 13:46
Client ID: TRIP BLANK
Instrument: 70msv6.i
Sample Info: 7016438012,
Purge Volume: 5.0
Operator: KGG
Column phase: RTX-624
Column diameter: 0.18



Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34399.D

Date : 25-APR-2017 13:46

Client ID: TRIP BLANK

Instrument: 70msv6.i

Sample Info: 7016438012,

Purge Volume: 5.0

Operator: KGG

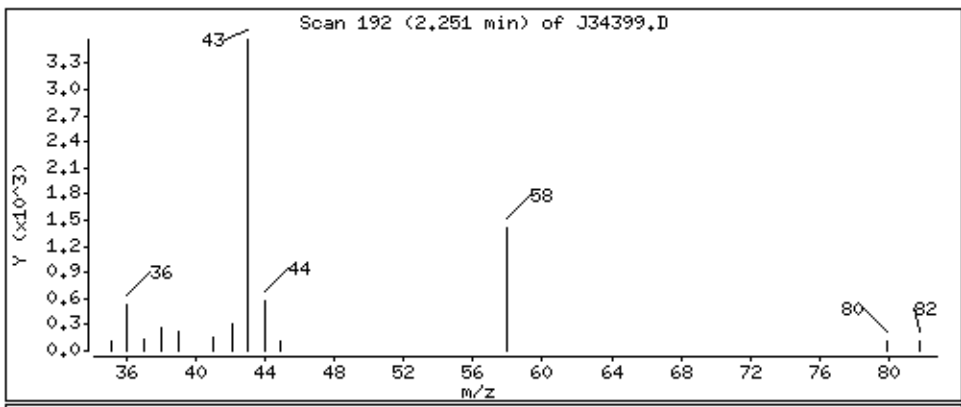
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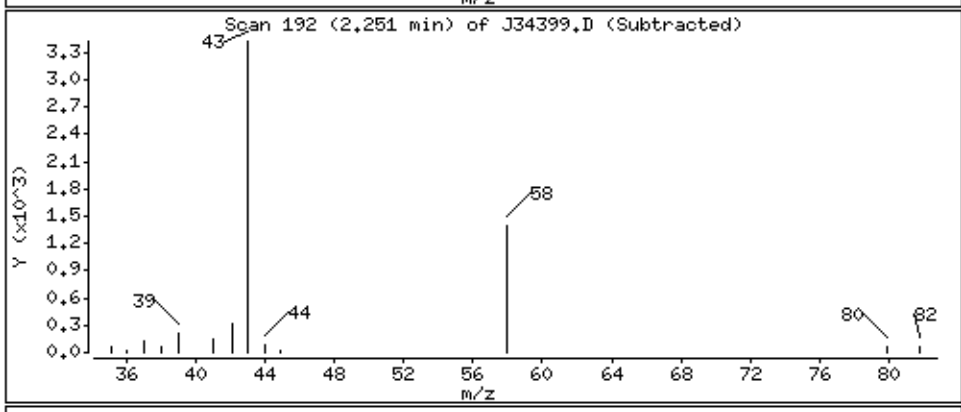
Column diameter: 0.18

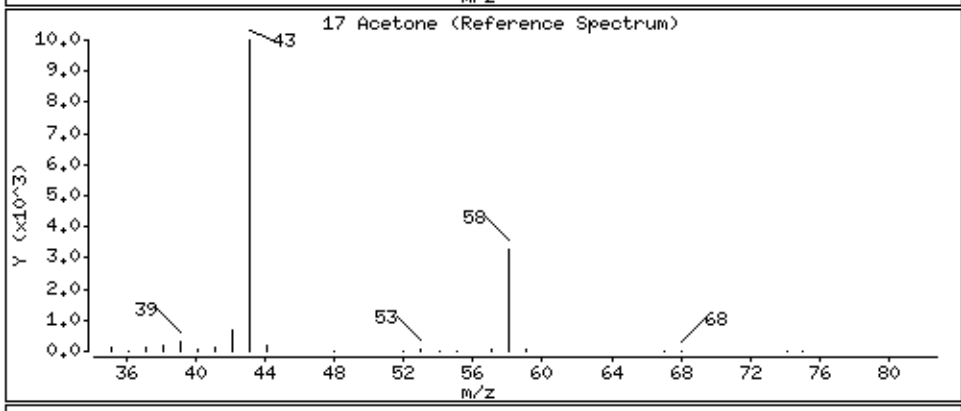
17 Acetone

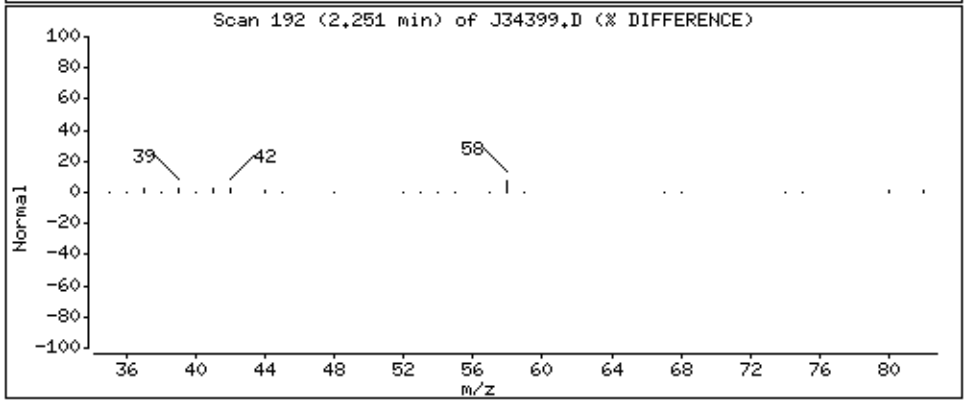
Concentration: 3.61 ug/L

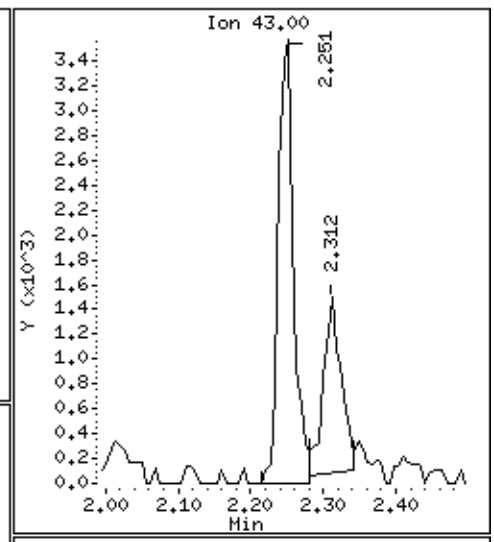
Review Code:

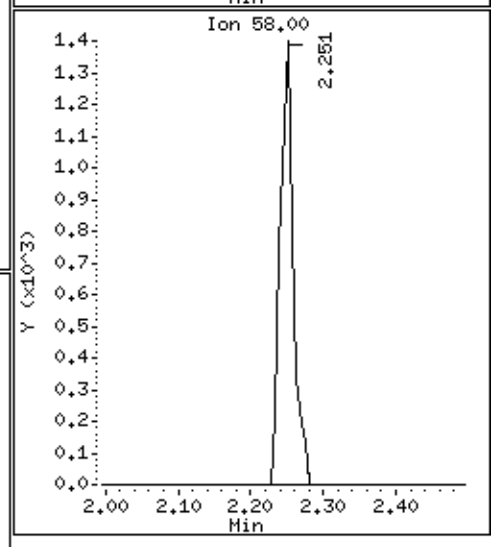












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34399.D

Date : 25-APR-2017 13:46

Client ID: TRIP BLANK

Instrument: 70msv6.i

Sample Info: 7016438012,

Purge Volume: 5.0

Operator: KGG

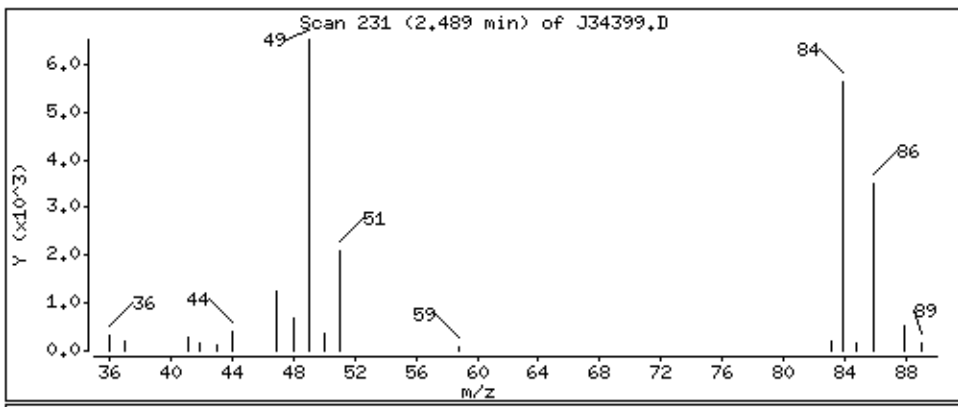
Column phase: RTX-624

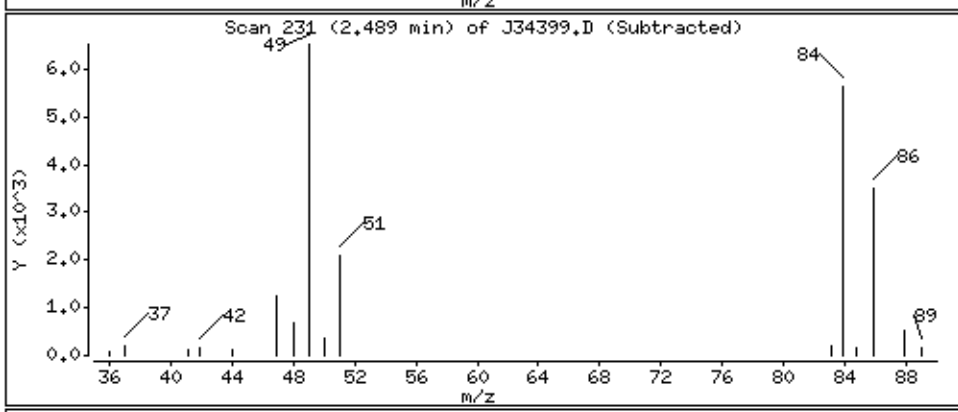
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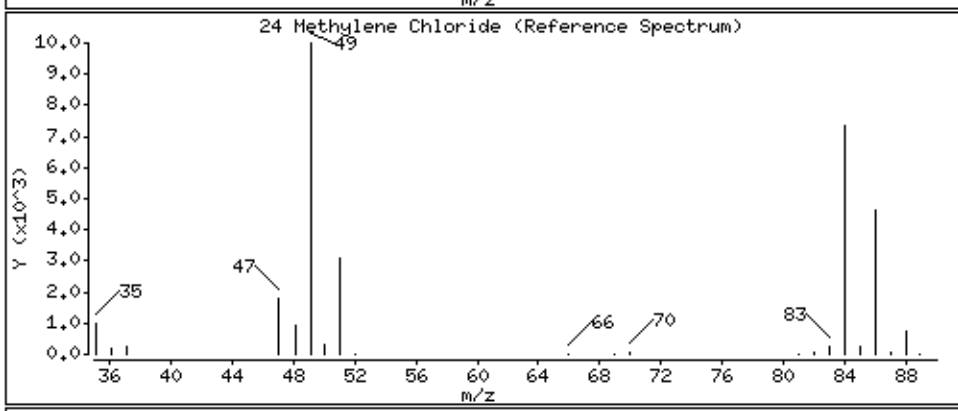
24 Methylene Chloride

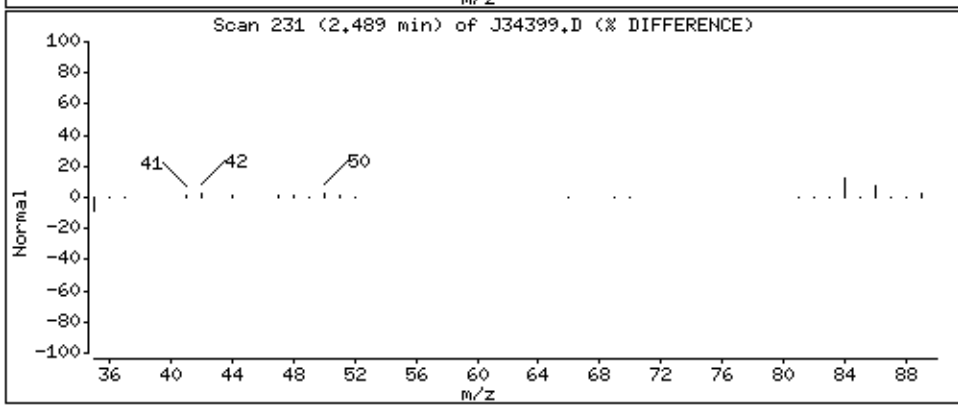
Concentration: 1.81 ug/L

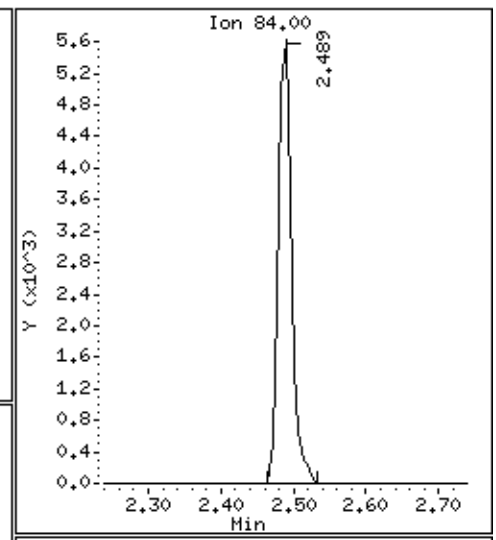
Review Code:

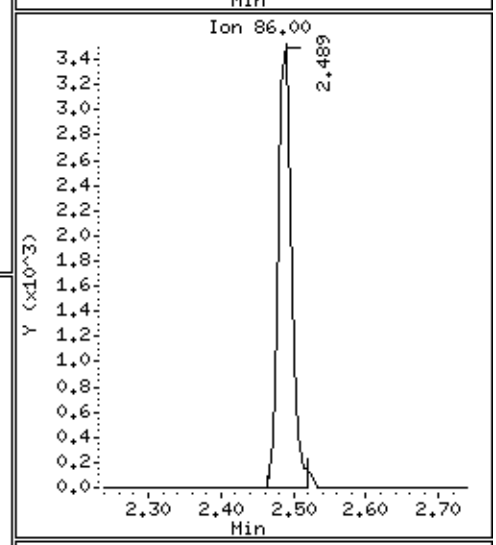


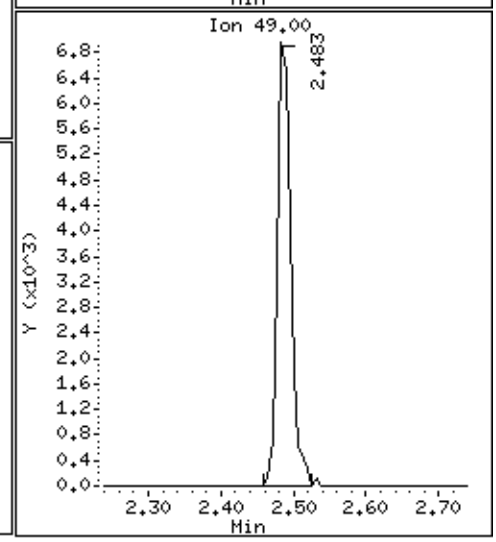












Data File: \\v70wintarget\chem\70msv6.i\042517.b/J34399.D
Injection Date: 25-APR-2017 13:46
Instrument: 70msv6.i
Lab Sample ID: 7016438012
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

SAMPLE NO.

STORAGE BLANK

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York Contract: NORTH SEA LANDFILL

Date Received: 04/20/2017 12:20 Matrix: Water SDG No.: 7016438

Date Extracted: 04/25/2017 14:03 Lab Sample ID: 7016438013

Date Analyzed: 04/25/2017 14:03 Lab File ID: 042517.B\J34400.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1 Instrument: 70MSV6 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	1.6	J
107-13-1	Acrylonitrile	<5.0	U
71-43-2	Benzene	<5.0	U
74-97-5	Bromochloromethane	<5.0	U
75-27-4	Bromodichloromethane	<5.0	U
75-25-2	Bromoform	<5.0	U
74-83-9	Bromomethane	<5.0	U
78-93-3	2-Butanone (MEK)	<5.0	U
75-15-0	Carbon disulfide	<5.0	U
56-23-5	Carbon tetrachloride	<5.0	U
108-90-7	Chlorobenzene	<5.0	U
75-00-3	Chloroethane	<5.0	U
67-66-3	Chloroform	<5.0	U
74-87-3	Chloromethane	<5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	<5.0	U
124-48-1	Dibromochloromethane	<5.0	U
106-93-4	1,2-Dibromoethane (EDB)	<5.0	U
74-95-3	Dibromomethane	<5.0	U
95-50-1	1,2-Dichlorobenzene	<5.0	U
106-46-7	1,4-Dichlorobenzene	<5.0	U
110-57-6	trans-1,4-Dichloro-2-butene	<5.0	U
75-34-3	1,1-Dichloroethane	<5.0	U
107-06-2	1,2-Dichloroethane	<5.0	U
75-35-4	1,1-Dichloroethene	<5.0	U
156-59-2	cis-1,2-Dichloroethene	<5.0	U
156-60-5	trans-1,2-Dichloroethene	<5.0	U
78-87-5	1,2-Dichloropropane	<5.0	U
10061-01-5	cis-1,3-Dichloropropene	<5.0	U
10061-02-6	trans-1,3-Dichloropropene	<5.0	U
100-41-4	Ethylbenzene	<5.0	U
591-78-6	2-Hexanone	<5.0	U
74-88-4	Iodomethane	<5.0	U
75-09-2	Methylene Chloride	4.5	J
108-10-1	4-Methyl-2-pentanone (MIBK)	<5.0	U
100-42-5	Styrene	<5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	<5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	<5.0	U

SAMPLE NO.

STORAGE BLANK

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York Contract: NORTH SEA LANDFILL

Date Received: 04/20/2017 12:20 Matrix: Water SDG No.: 7016438

Date Extracted: 04/25/2017 14:03 Lab Sample ID: 7016438013

Date Analyzed: 04/25/2017 14:03 Lab File ID: 042517.B\J34400.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1 Instrument: 70MSV6 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
127-18-4	Tetrachloroethene	<5.0	U
108-88-3	Toluene	<5.0	U
71-55-6	1,1,1-Trichloroethane	<5.0	U
79-00-5	1,1,2-Trichloroethane	<5.0	U
79-01-6	Trichloroethene	<5.0	U
75-69-4	Trichlorofluoromethane	<5.0	U
96-18-4	1,2,3-Trichloropropane	<5.0	U
108-05-4	Vinyl acetate	<5.0	U
75-01-4	Vinyl chloride	<5.0	U
1330-20-7	Xylene (Total)	<5.0	U

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34400.D
Report Date: 29-Apr-2017 22:54

Pace Analytical Services, Inc.

SW846-8260C/EPA 624

Data file : \\v70wintarget\chem\70msv6.i\042517.b\J34400.D
Lab Smp Id: 7016438013 Client Smp ID: STORAGE BLANK
Inj Date : 25-APR-2017 14:03 MS Autotune Date: 17-MAR-2017 06:2
Operator : KGG Inst ID: 70msv6.i
Smp Info : 7016438013,
Misc Info : 2005,
Comment :
Method : \\v70wintarget\chem\70msv6.i\042517.b\032717_8260W.m
Meth Date : 29-Apr-2017 22:43 blagula Quant Type: ISTD
Cal Date : 27-MAR-2017 18:25 Cal File: J33244.D
Als bottle: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A
Processing Host: 70MSV4WS10B6

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)	REVIEW C
1 Chlorodifluoromethane	51	Compound Not Detected.						
2 Dichlorotetrafluoroethane	135	Compound Not Detected.						
3 Dichlorodifluoromethane	85	Compound Not Detected.						
4 Chloromethane	50	Compound Not Detected.						
5 Vinyl chloride	62	Compound Not Detected.						
6 1,3-Butadiene	54	Compound Not Detected.						
7 Acetaldehyde	44	Compound Not Detected.						
8 Bromomethane	94	Compound Not Detected.						
9 Chloroethane	64	Compound Not Detected.						
10 Dichlorofluoromethane	67	Compound Not Detected.						
11 Trichlorofluoromethane	101	Compound Not Detected.						
12 Ethanol	45	Compound Not Detected.						(D)
13 Diethyl ether (Ethyl ether)	59	Compound Not Detected.						
16 1,1,2-Trichlorotrifluoroethane	101	Compound Not Detected.						
14 Acrolein	56	Compound Not Detected.						
15 1,1-Dichloroethene	96	Compound Not Detected.						
17 Acetone	43	2.245	2.245	(0.646)	2275	1.59801	1.60	
18 Iodomethane	142	Compound Not Detected.						
19 2-Propanol	45	Compound Not Detected.						(D)
20 Carbon disulfide	76	Compound Not Detected.						
21 Allyl chloride	76	Compound Not Detected.						
22 Acetonitrile	41	Compound Not Detected.						

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34400.D
Report Date: 29-Apr-2017 22:54

		QUANT SIG					CONCENTRATIONS ON-COLUMN	FINAL		
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)		REVIEW C
	23 Methyl acetate	43	Compound Not Detected.							
	24 Methylene Chloride	84	2.489	2.489	(0.716)	17410	4.53540	4.54		
	25 tert-Butyl Alcohol	59	Compound Not Detected.							
	28 Methyl-tert-butyl ether	73	Compound Not Detected.							
	27 trans-1,2-Dichloroethene	96	Compound Not Detected.							
	26 Acrylonitrile	53	Compound Not Detected.							
	30 n-Hexane	57	Compound Not Detected.							
	29 Diisopropyl ether	45	Compound Not Detected.							
	32 Vinyl acetate	43	Compound Not Detected.							
	31 1,1-Dichloroethane	63	Compound Not Detected.							
	33 Chloroprene	53	Compound Not Detected.							
	34 Ethyl-tert-butyl ether	59	Compound Not Detected.							
	36 2,2-Dichloropropane	77	Compound Not Detected.							
	35 cis-1,2-Dichloroethene	96	Compound Not Detected.							
	39 Ethyl acetate	61	Compound Not Detected.							
	37 2-Butanone (MEK)	43	Compound Not Detected.							
	41 Bromochloromethane	128	Compound Not Detected.							
	42 Tetrahydrofuran	42	Compound Not Detected.							
	43 Chloroform	83	Compound Not Detected.							
	38 Propionitrile	54	Compound Not Detected.							
	46 Cyclohexane	56	Compound Not Detected.							
	45 1,1,1-Trichloroethane	97	Compound Not Detected.							
*	44 Pentafluorobenzene (IS)	168	3.476	3.476	(1.000)	240785	50.0000		(Q)	
	48 Carbon tetrachloride	117	Compound Not Detected.							(D)
	47 1,1-Dichloropropene	75	Compound Not Detected.							(D)
	55 2,2,4-Trimethylpentane	57	Compound Not Detected.							
	51 Benzene	78	Compound Not Detected.							
	40 Methacrylonitrile	67	Compound Not Detected.							
$	50 1,2-Dichloroethane-d4 (S)	65	3.677	3.677	(0.941)	131254	44.6289	44.6		
	56 tert-Amylmethyl ether	73	Compound Not Detected.							
	52 1,2-Dichloroethane	62	Compound Not Detected.							
	57 n-Heptane	43	Compound Not Detected.							
*	58 1,4-Difluorobenzene (IS)	114	3.909	3.909	(1.000)	412917	50.0000			
	59 Trichloroethene	95	Compound Not Detected.							
	60 Methylcyclohexane	83	Compound Not Detected.							
	49 Isobutanol	43	Compound Not Detected.							
	53 tert-Amyl Alcohol	59	Compound Not Detected.							
	54 tert-Amyl ethyl ether	59	Compound Not Detected.							
	61 1,2-Dichloropropane	63	Compound Not Detected.							
	63 Methyl methacrylate	69	Compound Not Detected.							
	64 1,4-Dioxane (p-Dioxane)	88	Compound Not Detected.							
	62 Dibromomethane	93	Compound Not Detected.							
	65 Bromodichloromethane	83	Compound Not Detected.							
	66 2-Nitropropane	43	Compound Not Detected.							
	67 2-Chloroethylvinyl ether	63	Compound Not Detected.							
	68 cis-1,3-Dichloropropene	75	Compound Not Detected.							
	69 4-Methyl-2-pentanone (MIBK)	43	Compound Not Detected.							
$	70 Toluene-d8 (S)	98	4.811	4.811	(0.828)	469787	56.6548	56.6		
	71 Toluene	91	Compound Not Detected.							
	72 Methyl isothiocyanate	73	Compound Not Detected.							
	74 trans-1,3-Dichloropropene	75	Compound Not Detected.							
	75 Ethyl methacrylate	69	Compound Not Detected.							(D)
	76 1,1,2-Trichloroethane	83	Compound Not Detected.							
	77 Tetrachloroethene	166	Compound Not Detected.							

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34400.D
Report Date: 29-Apr-2017 22:54

							CONCENTRATIONS		
		QUANT SIG					ON-COLUMN	FINAL	
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)	REVIEW C
	78 1,3-Dichloropropane	76	Compound Not Detected.						
	79 2-Hexanone	43	Compound Not Detected.						
	73 n-Octane	43	Compound Not Detected.						
	81 n-Butyl acetate	43	Compound Not Detected.						
	80 Dibromochloromethane	129	Compound Not Detected.						
	82 1,2-Dibromoethane (EDB)	107	Compound Not Detected.						
*	83 Chlorobenzene-d5 (IS)	82	5.811	5.811	(1.000)	217679	50.0000		
	84 Chlorobenzene	112	Compound Not Detected.						
	86 Ethylbenzene	106	Compound Not Detected.						
	85 1,1,1,2-Tetrachloroethane	131	Compound Not Detected.						
	88 n-Nonane	43	Compound Not Detected.						(D)
	87 m&p-Xylene	106	Compound Not Detected.						
	89 o-Xylene	106	Compound Not Detected.						
	90 Styrene	104	Compound Not Detected.						
	91 Bromoform	173	Compound Not Detected.						
	92 Isopropylbenzene (Cumene)	105	Compound Not Detected.						
$	93 4-Bromofluorobenzene (S)	95	6.671	6.671	(1.148)	163417	55.3069	55.3	
	94 Bromobenzene	156	Compound Not Detected.						
	95 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.						
	98 n-Propylbenzene	91	Compound Not Detected.						
	96 1,2,3-Trichloropropane	110	Compound Not Detected.						
	97 trans-1,4-Dichloro-2-butene	53	Compound Not Detected.						
	103 n-Decane	43	Compound Not Detected.						
	99 2-Chlorotoluene	91	Compound Not Detected.						
	100 4-Ethyltoluene	105	Compound Not Detected.						
	101 1,3,5-Trimethylbenzene	105	Compound Not Detected.						
	102 4-Chlorotoluene	91	Compound Not Detected.						
	104 tert-Butylbenzene	119	Compound Not Detected.						
	105 Pentachloroethane	167	Compound Not Detected.						
	106 1,2,4-Trimethylbenzene	105	Compound Not Detected.						
	107 sec-Butylbenzene	105	Compound Not Detected.						
	109 d-Limonene	136	Compound Not Detected.						
	110 p-Isopropyltoluene	119	Compound Not Detected.						
	108 1,3-Dichlorobenzene	146	Compound Not Detected.						
*	111 1,4-Dichlorobenzene-d4 (IS)	152	7.549	7.549	(1.000)	171239	50.0000		
	112 1,4-Dichlorobenzene	146	Compound Not Detected.						
	113 1,2,3-Trimethylbenzene	105	Compound Not Detected.						
	114 Benzyl chloride	91	Compound Not Detected.						
	115 trans-Decalin	138	Compound Not Detected.						
	116 1,4-Diethylbenzene	119	Compound Not Detected.						
	117 n-Butylbenzene	91	Compound Not Detected.						
	119 n-Undecane	43	Compound Not Detected.						(D)
	118 1,2-Dichlorobenzene	146	Compound Not Detected.						
	120 cis-Decalin	138	Compound Not Detected.						
	121 1,2,4,5-tetramethylbenzene	119	Compound Not Detected.						
	122 1,2-Dibromo-3-chloropropane	75	Compound Not Detected.						
	123 n-Dodecane	43	Compound Not Detected.						(D)
	124 1,2,4-Trichlorobenzene	180	Compound Not Detected.						
	125 Hexachloro-1,3-butadiene	225	Compound Not Detected.						
	126 Naphthalene	128	Compound Not Detected.						
	127 1,2,3-Trichlorobenzene	180	Compound Not Detected.						

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34400.D
Report Date: 29-Apr-2017 22:54

QC Flag Legend

Q - Qualifier signal failed the ratio test.
D - User disabled compound identification.

Review Codes Legend

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Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34400.D
Report Date: 29-Apr-2017 22:54

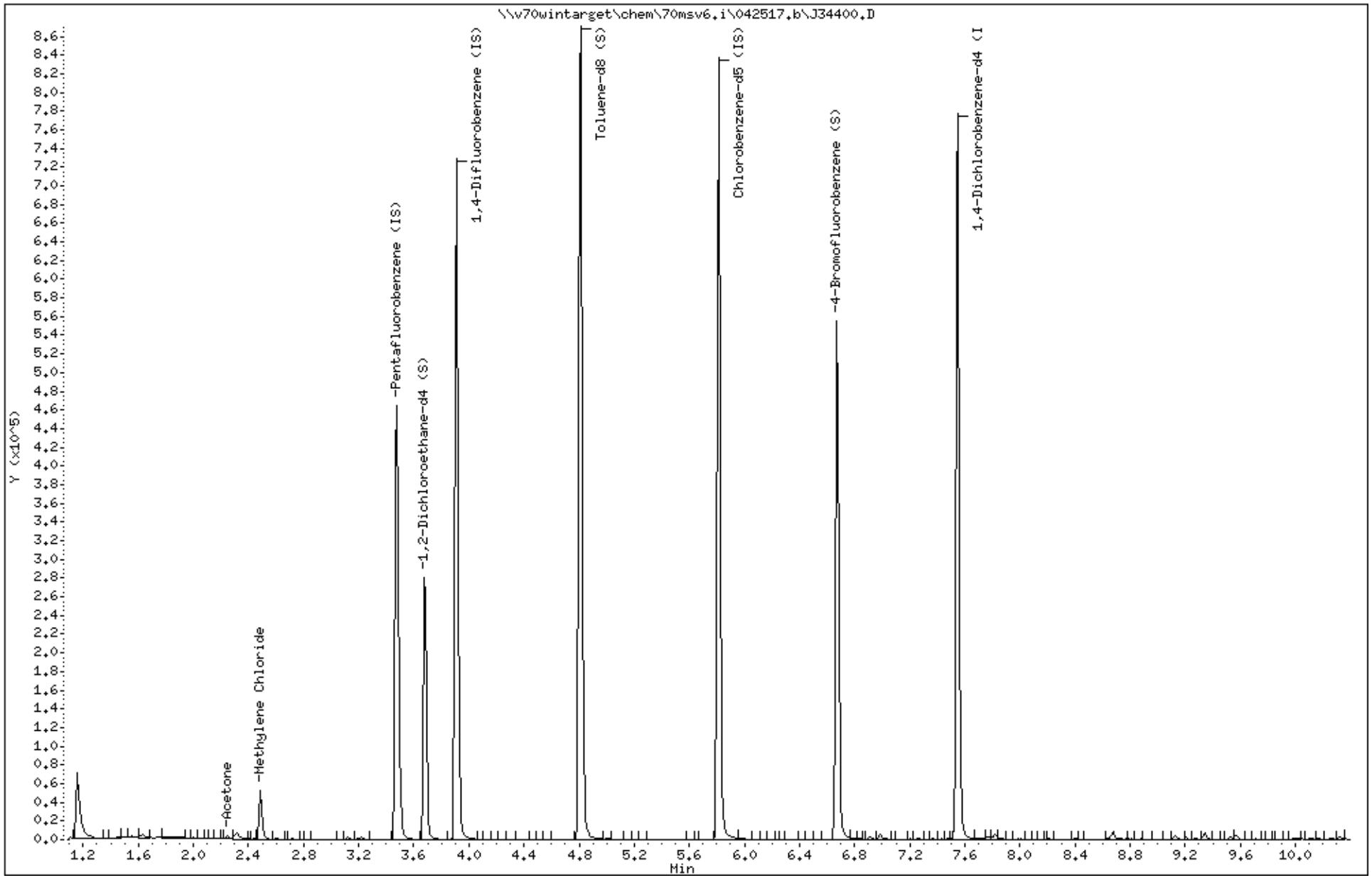
Pace Analytical Services, Inc.

SW846-8260C/EPA 624

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Inj Date : 25-APR-2017 14:03 MS Autotune Date: 17-MAR-2017 06:2
Operator : KGG Inst ID: 70msv6.i
Smp Info : 7016438013,
Misc Info : 2005,
Comment :
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Meth Date : 29-Apr-2017 22:43 blagula Quant Type: ISTD
Cal Date : 27-MAR-2017 18:25 Cal File: J33244.D
Als bottle: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A
Processing Host: 70MSV4WS10B6

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34400.D
Date : 25-APR-2017 14:03
Client ID: STORAGE BLANK
Instrument: 70msv6.i
Sample Info: 7016438013,
Purge Volume: 5.0
Operator: KGG
Column phase: RTX-624
Column diameter: 0.18



Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34400.D

Date : 25-APR-2017 14:03

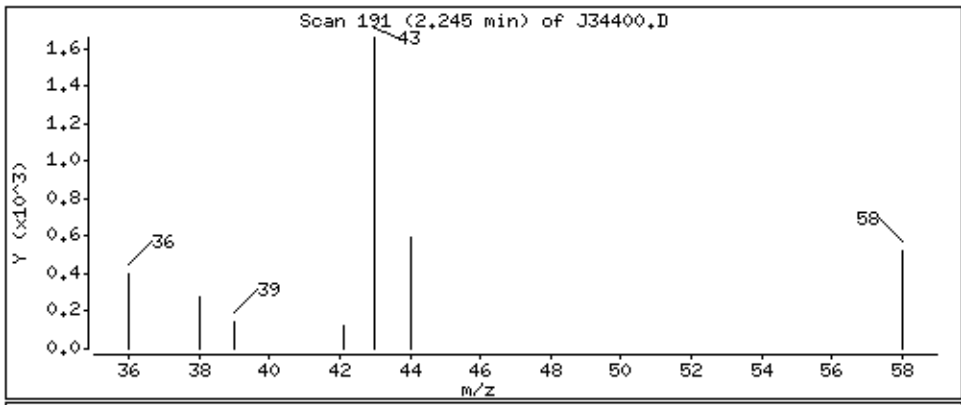
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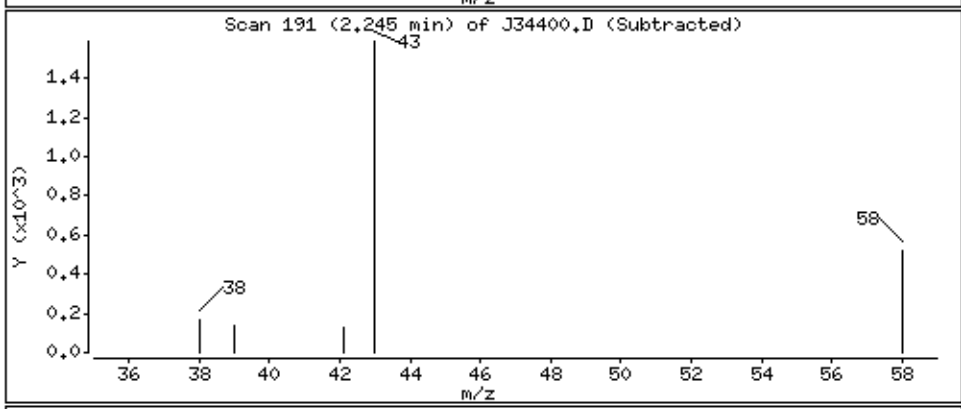
Sample Info: 7016438013,

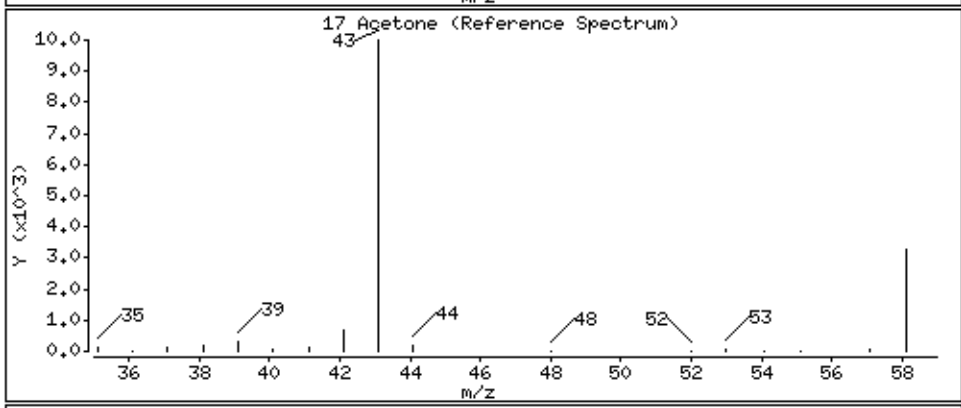
Purge Volume: 5.0 | Operator: KGG

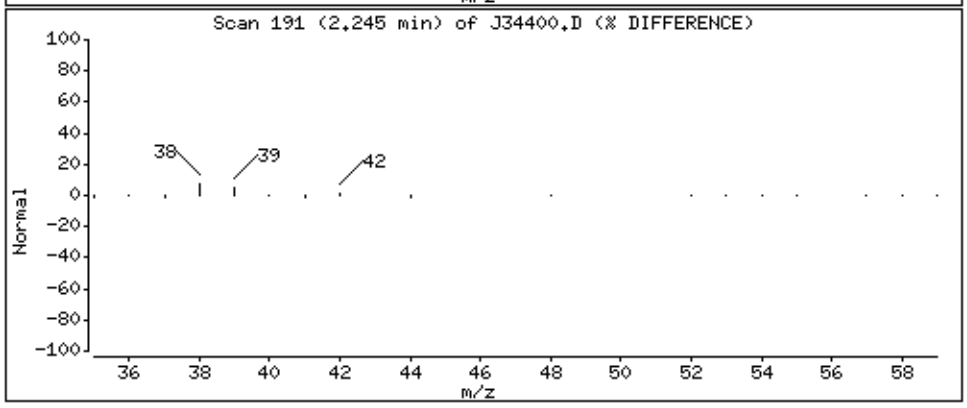
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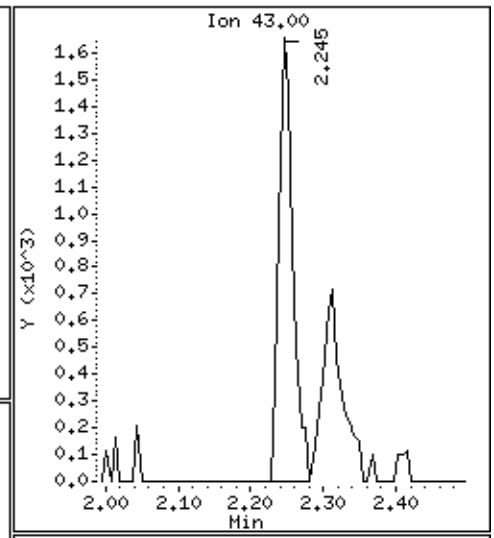
17 Acetone | Concentration: 1.60 ug/L | Review Code:

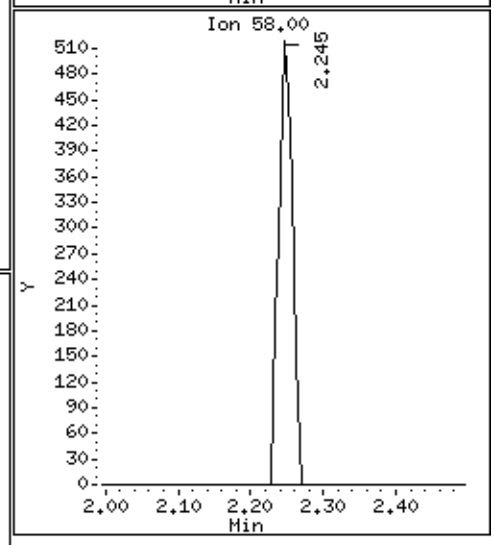












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34400.D

Date : 25-APR-2017 14:03

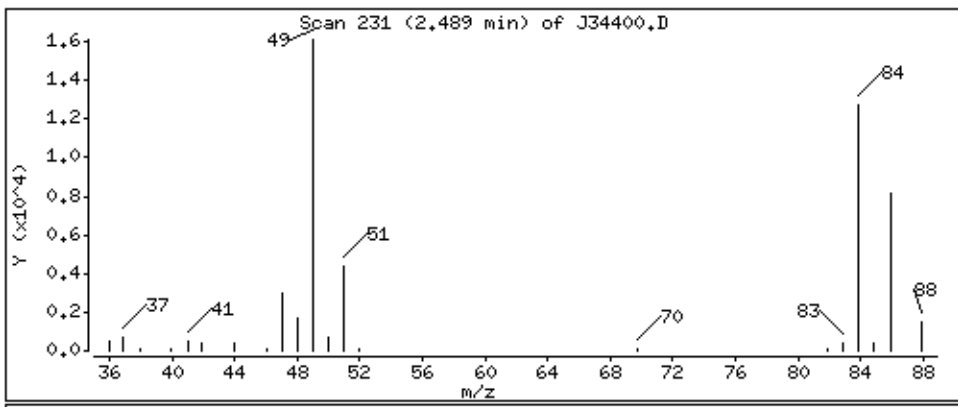
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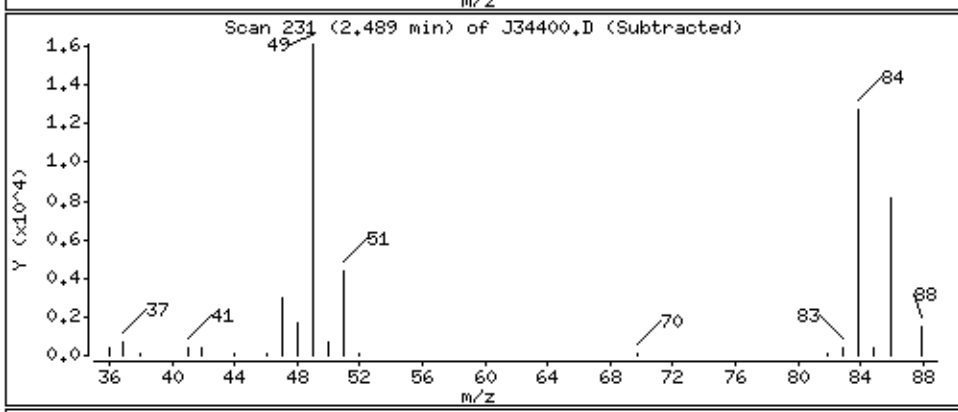
Sample Info: 7016438013,

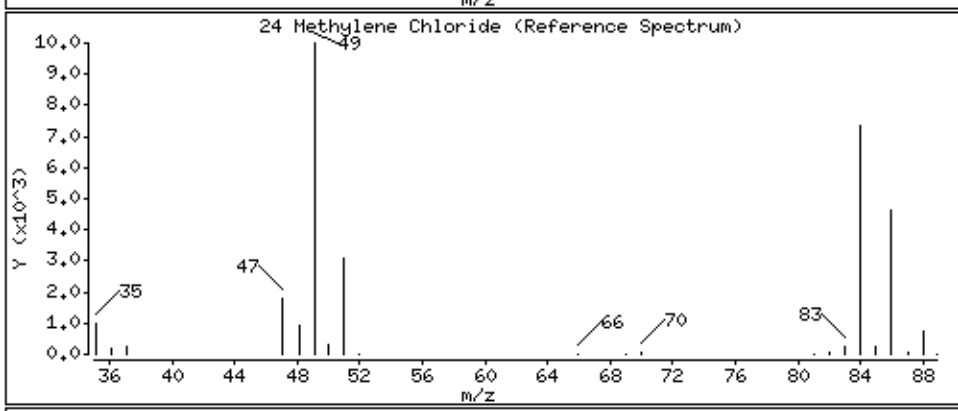
Purge Volume: 5.0 | Operator: KGG

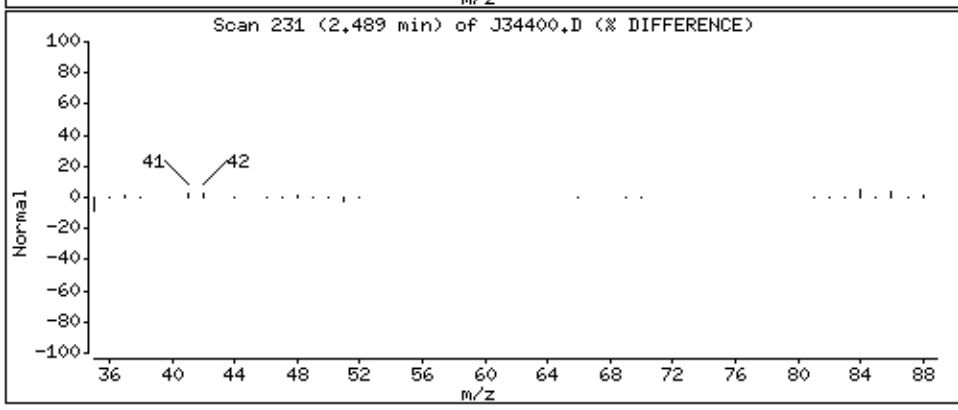
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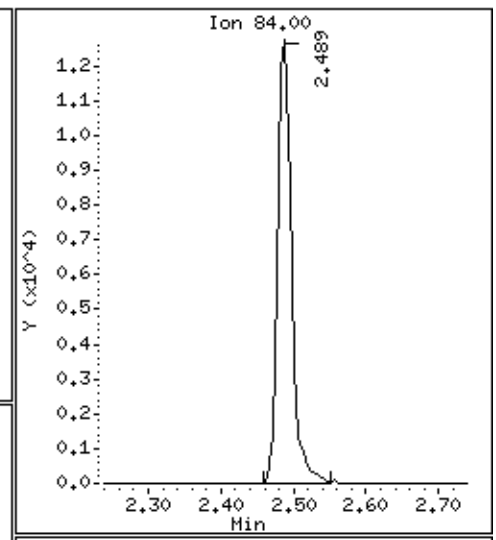
24 Methylene Chloride | Concentration: 4.54 ug/L | Review Code:

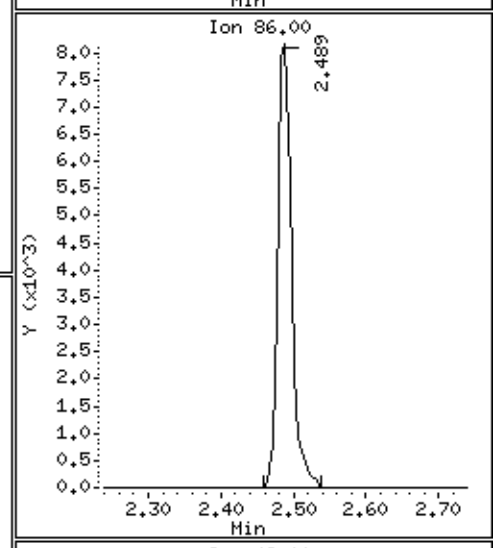


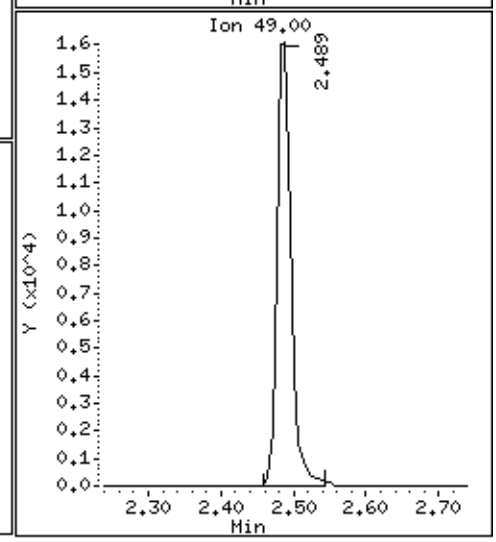












Data File: \\v70wintarget\chem\70msv6.i\042517.b/J34400.D
Injection Date: 25-APR-2017 14:03
Instrument: 70msv6.i
Lab Sample ID: 7016438013
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

SAMPLE NO.

MW-11A

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York Contract: NORTH SEA LANDFILL

Date Received: 04/20/2017 12:20 Matrix: Water SDG No.: 7016438

Date Extracted: 04/25/2017 14:57 Lab Sample ID: 7016438014

Date Analyzed: 04/25/2017 14:57 Lab File ID: 042517.B\J34403.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1 Instrument: 70MSV6 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	4.3	J
107-13-1	Acrylonitrile	<5.0	U
71-43-2	Benzene	<5.0	U
74-97-5	Bromochloromethane	<5.0	U
75-27-4	Bromodichloromethane	<5.0	U
75-25-2	Bromoform	<5.0	U
74-83-9	Bromomethane	<5.0	U
78-93-3	2-Butanone (MEK)	<5.0	U
75-15-0	Carbon disulfide	<5.0	U
56-23-5	Carbon tetrachloride	<5.0	U
108-90-7	Chlorobenzene	<5.0	U
75-00-3	Chloroethane	<5.0	U
67-66-3	Chloroform	<5.0	U
74-87-3	Chloromethane	<5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	<5.0	U
124-48-1	Dibromochloromethane	<5.0	U
106-93-4	1,2-Dibromoethane (EDB)	<5.0	U
74-95-3	Dibromomethane	<5.0	U
95-50-1	1,2-Dichlorobenzene	<5.0	U
106-46-7	1,4-Dichlorobenzene	<5.0	U
110-57-6	trans-1,4-Dichloro-2-butene	<5.0	U
75-34-3	1,1-Dichloroethane	<5.0	U
107-06-2	1,2-Dichloroethane	<5.0	U
75-35-4	1,1-Dichloroethene	<5.0	U
156-59-2	cis-1,2-Dichloroethene	<5.0	U
156-60-5	trans-1,2-Dichloroethene	<5.0	U
78-87-5	1,2-Dichloropropane	<5.0	U
10061-01-5	cis-1,3-Dichloropropene	<5.0	U
10061-02-6	trans-1,3-Dichloropropene	<5.0	U
100-41-4	Ethylbenzene	<5.0	U
591-78-6	2-Hexanone	<5.0	U
74-88-4	Iodomethane	<5.0	U
75-09-2	Methylene Chloride	<5.0	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<5.0	U
100-42-5	Styrene	<5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	<5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	<5.0	U

SAMPLE NO.

MW-11A

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York Contract: NORTH SEA LANDFILL

Date Received: 04/20/2017 12:20 Matrix: Water SDG No.: 7016438

Date Extracted: 04/25/2017 14:57 Lab Sample ID: 7016438014

Date Analyzed: 04/25/2017 14:57 Lab File ID: 042517.B\J34403.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1 Instrument: 70MSV6 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
127-18-4	Tetrachloroethene	<5.0	U
108-88-3	Toluene	<5.0	U
71-55-6	1,1,1-Trichloroethane	<5.0	U
79-00-5	1,1,2-Trichloroethane	<5.0	U
79-01-6	Trichloroethene	<5.0	U
75-69-4	Trichlorofluoromethane	<5.0	U
96-18-4	1,2,3-Trichloropropane	<5.0	U
108-05-4	Vinyl acetate	<5.0	U
75-01-4	Vinyl chloride	<5.0	U
1330-20-7	Xylene (Total)	<5.0	U

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34403.D
Report Date: 29-Apr-2017 22:54

Pace Analytical Services, Inc.

SW846-8260C/EPA 624

Data file : \\v70wintarget\chem\70msv6.i\042517.b\J34403.D
Lab Smp Id: 7016438014 Client Smp ID: MW-11A
Inj Date : 25-APR-2017 14:57 MS Autotune Date: 17-MAR-2017 06:2
Operator : KGG Inst ID: 70msv6.i
Smp Info : 7016438014,
Misc Info : 2005,
Comment :
Method : \\v70wintarget\chem\70msv6.i\042517.b\032717_8260W.m
Meth Date : 29-Apr-2017 22:43 blagula Quant Type: ISTD
Cal Date : 27-MAR-2017 18:25 Cal File: J33244.D
Als bottle: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A
Processing Host: 70MSV4WS10B6

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)	REVIEW C
1 Chlorodifluoromethane	51	Compound Not Detected.						
2 Dichlorotetrafluoroethane	135	Compound Not Detected.						
3 Dichlorodifluoromethane	85	Compound Not Detected.						
4 Chloromethane	50	Compound Not Detected.						
5 Vinyl chloride	62	Compound Not Detected.						
6 1,3-Butadiene	54	Compound Not Detected.						
7 Acetaldehyde	44	Compound Not Detected.						
8 Bromomethane	94	Compound Not Detected.						
9 Chloroethane	64	Compound Not Detected.						
10 Dichlorofluoromethane	67	Compound Not Detected.						
11 Trichlorofluoromethane	101	Compound Not Detected.						
12 Ethanol	45	Compound Not Detected.						
13 Diethyl ether (Ethyl ether)	59	Compound Not Detected.						
16 1,1,2-Trichlorotrifluoroethane	101	Compound Not Detected.						
14 Acrolein	56	Compound Not Detected.						
15 1,1-Dichloroethene	96	Compound Not Detected.						
17 Acetone	43	2.245	2.245	(0.646)	6125	4.31520	4.32	
18 Iodomethane	142	Compound Not Detected.						
19 2-Propanol	45	Compound Not Detected.						(D)
20 Carbon disulfide	76	Compound Not Detected.						
21 Allyl chloride	76	Compound Not Detected.						
22 Acetonitrile	41	Compound Not Detected.						

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34403.D
Report Date: 29-Apr-2017 22:54

			QUANT SIG					CONCENTRATIONS ON-COLUMN	FINAL		
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)		REVIEW C
	23	Methyl acetate	43	Compound Not Detected.							
	24	Methylene Chloride	84	Compound Not Detected.							
	25	tert-Butyl Alcohol	59	Compound Not Detected.							
	28	Methyl-tert-butyl ether	73	Compound Not Detected.							
	27	trans-1,2-Dichloroethene	96	Compound Not Detected.							
	26	Acrylonitrile	53	Compound Not Detected.							
	30	n-Hexane	57	Compound Not Detected.							
	29	Diisopropyl ether	45	Compound Not Detected.							
	32	Vinyl acetate	43	Compound Not Detected.							
	31	1,1-Dichloroethane	63	Compound Not Detected.							
	33	Chloroprene	53	Compound Not Detected.							
	34	Ethyl-tert-butyl ether	59	Compound Not Detected.							
	36	2,2-Dichloropropane	77	Compound Not Detected.							
	35	cis-1,2-Dichloroethene	96	Compound Not Detected.							
	39	Ethyl acetate	61	Compound Not Detected.							
	37	2-Butanone (MEK)	43	Compound Not Detected.							
	41	Bromochloromethane	128	Compound Not Detected.							
	42	Tetrahydrofuran	42	Compound Not Detected.							
	43	Chloroform	83	Compound Not Detected.							
	38	Propionitrile	54	Compound Not Detected.							
	46	Cyclohexane	56	Compound Not Detected.							
	45	1,1,1-Trichloroethane	97	Compound Not Detected.							
*	44	Pentafluorobenzene (IS)	168	3.476	3.476	(1.000)	240067	50.0000		(Q)	
	48	Carbon tetrachloride	117	Compound Not Detected.							(D)
	47	1,1-Dichloropropene	75	Compound Not Detected.							(D)
	55	2,2,4-Trimethylpentane	57	Compound Not Detected.							
	51	Benzene	78	Compound Not Detected.							
	40	Methacrylonitrile	67	Compound Not Detected.							
$	50	1,2-Dichloroethane-d4 (S)	65	3.677	3.677	(0.941)	133552	45.4219	45.4		
	56	tert-Amylmethyl ether	73	Compound Not Detected.							
	52	1,2-Dichloroethane	62	Compound Not Detected.							
	57	n-Heptane	43	Compound Not Detected.							
*	58	1,4-Difluorobenzene (IS)	114	3.909	3.909	(1.000)	412811	50.0000			
	59	Trichloroethene	95	Compound Not Detected.							
	60	Methylcyclohexane	83	Compound Not Detected.							
	49	Isobutanol	43	Compound Not Detected.							
	53	tert-Amyl Alcohol	59	Compound Not Detected.							
	54	tert-Amyl ethyl ether	59	Compound Not Detected.							
	61	1,2-Dichloropropane	63	Compound Not Detected.							
	63	Methyl methacrylate	69	Compound Not Detected.							
	64	1,4-Dioxane (p-Dioxane)	88	Compound Not Detected.							
	62	Dibromomethane	93	Compound Not Detected.							
	65	Bromodichloromethane	83	Compound Not Detected.							
	66	2-Nitropropane	43	Compound Not Detected.							
	67	2-Chloroethylvinyl ether	63	Compound Not Detected.							
	68	cis-1,3-Dichloropropene	75	Compound Not Detected.							
	69	4-Methyl-2-pentanone (MIBK)	43	Compound Not Detected.							
$	70	Toluene-d8 (S)	98	4.811	4.811	(0.828)	467007	54.1097	54.1		
	71	Toluene	91	Compound Not Detected.							
	72	Methyl isothiocyanate	73	Compound Not Detected.							
	74	trans-1,3-Dichloropropene	75	Compound Not Detected.							
	75	Ethyl methacrylate	69	Compound Not Detected.							(D)
	76	1,1,2-Trichloroethane	83	Compound Not Detected.							
	77	Tetrachloroethene	166	Compound Not Detected.							

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34403.D
Report Date: 29-Apr-2017 22:54

							CONCENTRATIONS		
		QUANT SIG					ON-COLUMN	FINAL	
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)	REVIEW C
	78 1,3-Dichloropropane	76	Compound Not Detected.						
	79 2-Hexanone	43	Compound Not Detected.						
	73 n-Octane	43	Compound Not Detected.						
	81 n-Butyl acetate	43	Compound Not Detected.						
	80 Dibromochloromethane	129	Compound Not Detected.						
	82 1,2-Dibromoethane (EDB)	107	Compound Not Detected.						
*	83 Chlorobenzene-d5 (IS)	82	5.811	5.811	(1.000)	226569	50.0000		
	84 Chlorobenzene	112	Compound Not Detected.						
	86 Ethylbenzene	106	Compound Not Detected.						
	85 1,1,1,2-Tetrachloroethane	131	Compound Not Detected.						
	88 n-Nonane	43	Compound Not Detected.						(D)
	87 m&p-Xylene	106	Compound Not Detected.						
	89 o-Xylene	106	Compound Not Detected.						
	90 Styrene	104	Compound Not Detected.						
	91 Bromoform	173	Compound Not Detected.						
	92 Isopropylbenzene (Cumene)	105	Compound Not Detected.						
$	93 4-Bromofluorobenzene (S)	95	6.671	6.671	(1.148)	182961	59.4917	59.5	
	94 Bromobenzene	156	Compound Not Detected.						
	95 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.						
	98 n-Propylbenzene	91	Compound Not Detected.						
	96 1,2,3-Trichloropropane	110	Compound Not Detected.						
	97 trans-1,4-Dichloro-2-butene	53	Compound Not Detected.						
	103 n-Decane	43	Compound Not Detected.						
	99 2-Chlorotoluene	91	Compound Not Detected.						
	100 4-Ethyltoluene	105	Compound Not Detected.						
	101 1,3,5-Trimethylbenzene	105	Compound Not Detected.						
	102 4-Chlorotoluene	91	Compound Not Detected.						
	104 tert-Butylbenzene	119	Compound Not Detected.						
	105 Pentachloroethane	167	Compound Not Detected.						
	106 1,2,4-Trimethylbenzene	105	Compound Not Detected.						
	107 sec-Butylbenzene	105	Compound Not Detected.						
	109 d-Limonene	136	Compound Not Detected.						
	110 p-Isopropyltoluene	119	Compound Not Detected.						
	108 1,3-Dichlorobenzene	146	Compound Not Detected.						
*	111 1,4-Dichlorobenzene-d4 (IS)	152	7.549	7.549	(1.000)	187164	50.0000		
	112 1,4-Dichlorobenzene	146	Compound Not Detected.						
	113 1,2,3-Trimethylbenzene	105	Compound Not Detected.						
	114 Benzyl chloride	91	Compound Not Detected.						
	115 trans-Decalin	138	Compound Not Detected.						
	116 1,4-Diethylbenzene	119	Compound Not Detected.						
	117 n-Butylbenzene	91	Compound Not Detected.						
	119 n-Undecane	43	Compound Not Detected.						(D)
	118 1,2-Dichlorobenzene	146	Compound Not Detected.						
	120 cis-Decalin	138	Compound Not Detected.						
	121 1,2,4,5-tetramethylbenzene	119	Compound Not Detected.						
	122 1,2-Dibromo-3-chloropropane	75	Compound Not Detected.						
	123 n-Dodecane	43	Compound Not Detected.						(D)
	124 1,2,4-Trichlorobenzene	180	Compound Not Detected.						
	125 Hexachloro-1,3-butadiene	225	Compound Not Detected.						
	126 Naphthalene	128	Compound Not Detected.						
	127 1,2,3-Trichlorobenzene	180	Compound Not Detected.						

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34403.D
Report Date: 29-Apr-2017 22:54

QC Flag Legend

Q - Qualifier signal failed the ratio test.
D - User disabled compound identification.

Review Codes Legend

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Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34403.D
Report Date: 29-Apr-2017 22:54

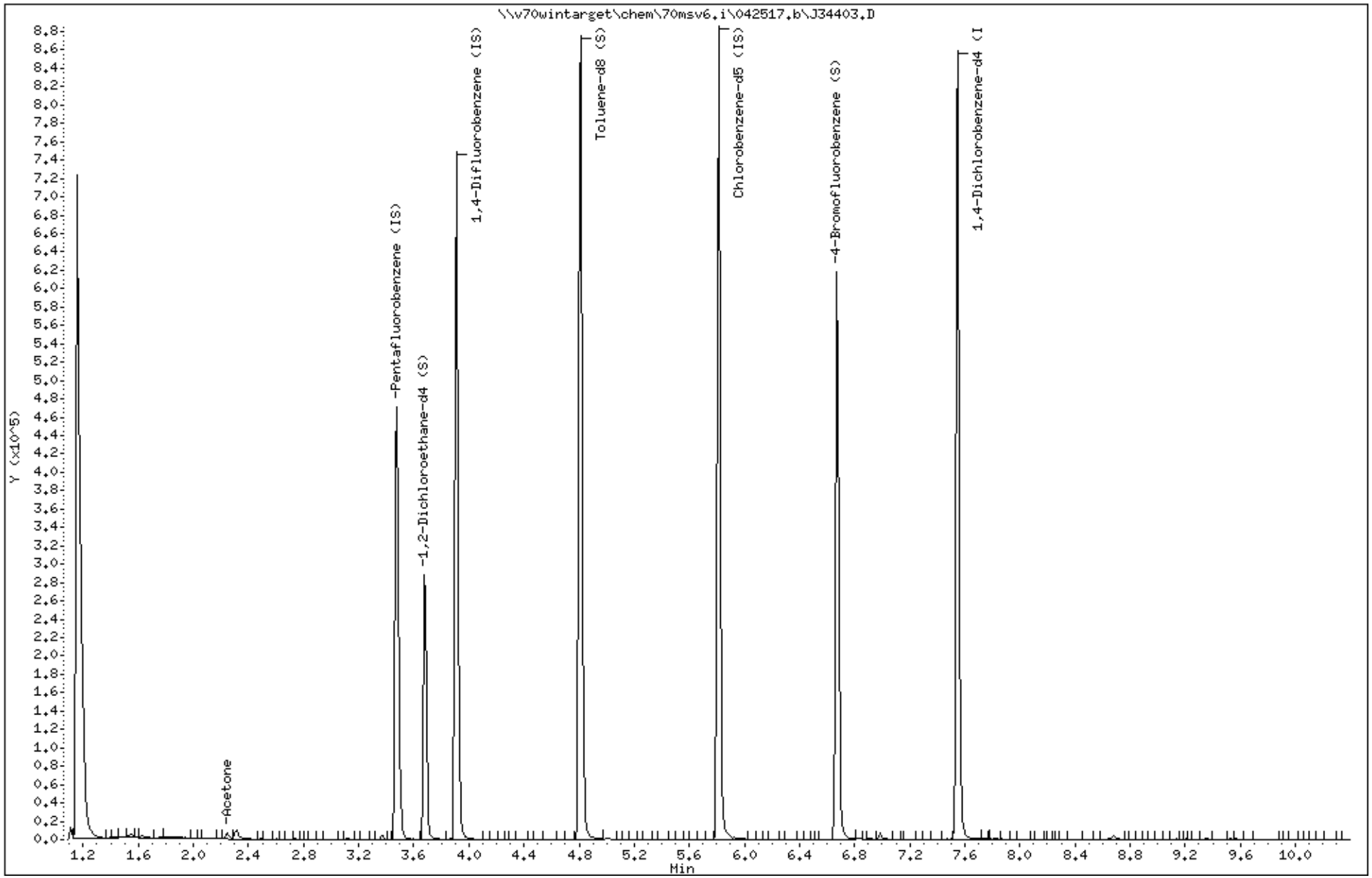
Pace Analytical Services, Inc.

SW846-8260C/EPA 624

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Inj Date : 25-APR-2017 14:57 MS Autotune Date: 17-MAR-2017 06:2
Operator : KGG Inst ID: 70msv6.i
Smp Info : 7016438014,
Misc Info : 2005,
Comment :
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Meth Date : 29-Apr-2017 22:43 blagula Quant Type: ISTD
Cal Date : 27-MAR-2017 18:25 Cal File: J33244.D
Als bottle: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A
Processing Host: 70MSV4WS10B6

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34403.D
Date : 25-APR-2017 14:57
Client ID: MW-11A
Instrument: 70msv6.i
Sample Info: 7016438014,
Purge Volume: 5.0
Operator: KGG
Column phase: RTX-624
Column diameter: 0.18



Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34403.D

Date : 25-APR-2017 14:57

Client ID: MW-11A

Instrument: 70msv6.i

Sample Info: 7016438014,

Purge Volume: 5.0

Operator: KGG

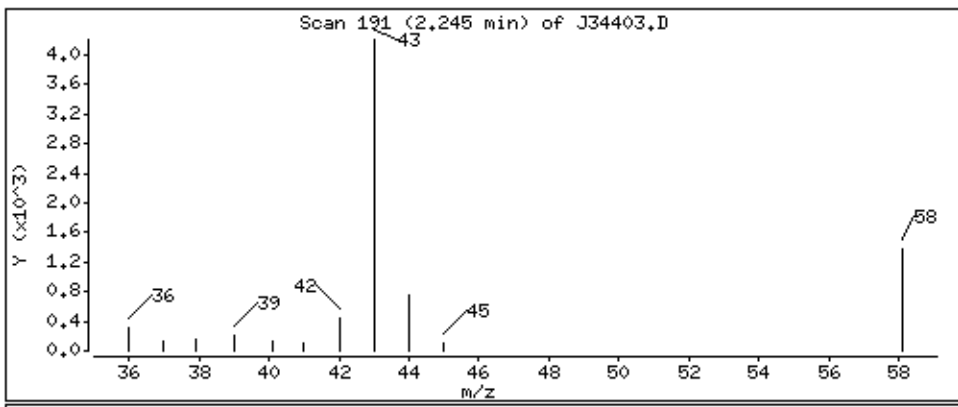
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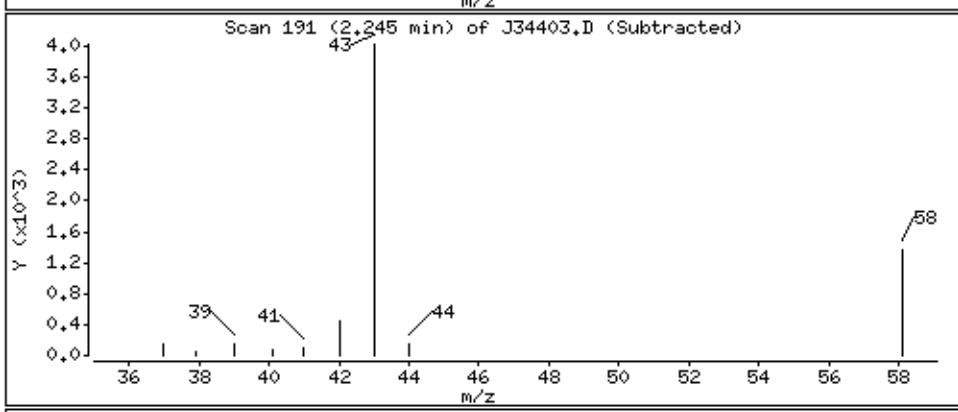
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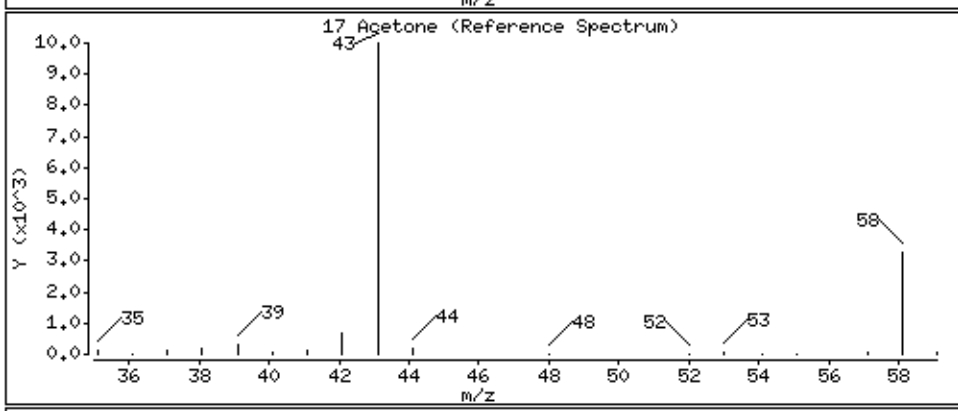
17 Acetone

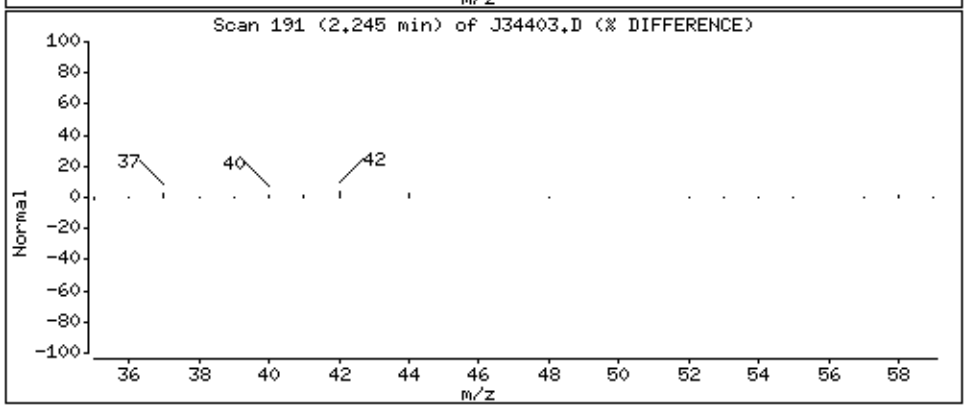
Concentration: 4.32 ug/L

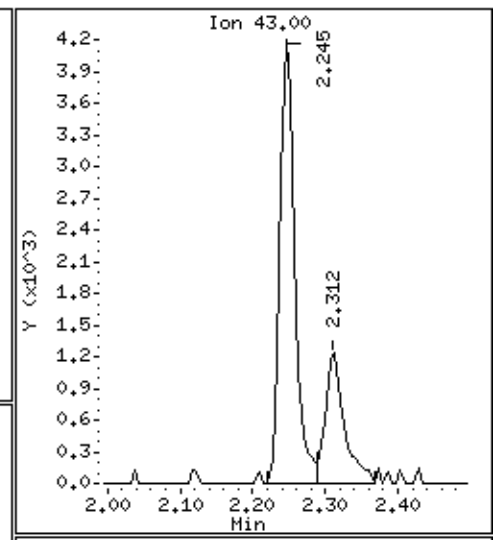
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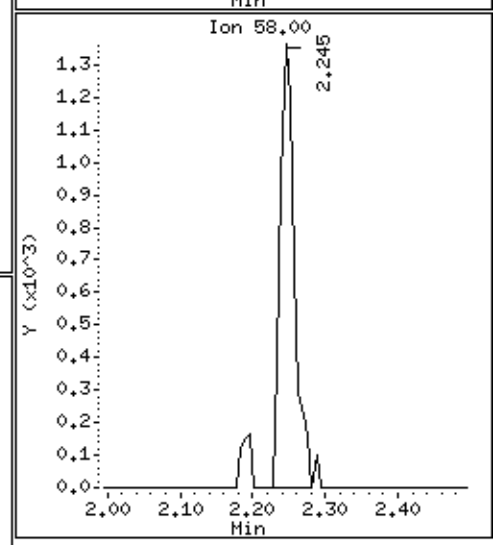












Data File: \\v70wintarget\chem\70msv6.i\042517.b/J34403.D
Injection Date: 25-APR-2017 14:57
Instrument: 70msv6.i
Lab Sample ID: 7016438014
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

SAMPLE NO.

MW-3A

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York Contract: NORTH SEA LANDFILL

Date Received: 04/21/2017 11:00 Matrix: Water SDG No.: 7016438

Date Extracted: 04/25/2017 17:20 Lab Sample ID: 7016438015

Date Analyzed: 04/25/2017 17:20 Lab File ID: 042517.B\J34411.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1 Instrument: 70MSV6 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	3.8	J
107-13-1	Acrylonitrile	<5.0	U
71-43-2	Benzene	<5.0	U
74-97-5	Bromochloromethane	<5.0	U
75-27-4	Bromodichloromethane	<5.0	U
75-25-2	Bromoform	<5.0	U
74-83-9	Bromomethane	<5.0	U
78-93-3	2-Butanone (MEK)	<5.0	U
75-15-0	Carbon disulfide	<5.0	U
56-23-5	Carbon tetrachloride	<5.0	U
108-90-7	Chlorobenzene	<5.0	U
75-00-3	Chloroethane	<5.0	U
67-66-3	Chloroform	<5.0	U
74-87-3	Chloromethane	<5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	<5.0	U
124-48-1	Dibromochloromethane	<5.0	U
106-93-4	1,2-Dibromoethane (EDB)	<5.0	U
74-95-3	Dibromomethane	<5.0	U
95-50-1	1,2-Dichlorobenzene	<5.0	U
106-46-7	1,4-Dichlorobenzene	<5.0	U
110-57-6	trans-1,4-Dichloro-2-butene	<5.0	U
75-34-3	1,1-Dichloroethane	<5.0	U
107-06-2	1,2-Dichloroethane	<5.0	U
75-35-4	1,1-Dichloroethene	<5.0	U
156-59-2	cis-1,2-Dichloroethene	<5.0	U
156-60-5	trans-1,2-Dichloroethene	<5.0	U
78-87-5	1,2-Dichloropropane	<5.0	U
10061-01-5	cis-1,3-Dichloropropene	<5.0	U
10061-02-6	trans-1,3-Dichloropropene	<5.0	U
100-41-4	Ethylbenzene	<5.0	U
591-78-6	2-Hexanone	<5.0	U
74-88-4	Iodomethane	<5.0	U
75-09-2	Methylene Chloride	<5.0	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<5.0	U
100-42-5	Styrene	<5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	<5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	<5.0	U

SAMPLE NO.

MW-3A

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York Contract: NORTH SEA LANDFILL

Date Received: 04/21/2017 11:00 Matrix: Water SDG No.: 7016438

Date Extracted: 04/25/2017 17:20 Lab Sample ID: 7016438015

Date Analyzed: 04/25/2017 17:20 Lab File ID: 042517.B\J34411.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1 Instrument: 70MSV6 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
127-18-4	Tetrachloroethene	<5.0	U
108-88-3	Toluene	<5.0	U
71-55-6	1,1,1-Trichloroethane	<5.0	U
79-00-5	1,1,2-Trichloroethane	<5.0	U
79-01-6	Trichloroethene	<5.0	U
75-69-4	Trichlorofluoromethane	<5.0	U
96-18-4	1,2,3-Trichloropropane	<5.0	U
108-05-4	Vinyl acetate	<5.0	U
75-01-4	Vinyl chloride	<5.0	U
1330-20-7	Xylene (Total)	<5.0	U

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34411.D
Report Date: 29-Apr-2017 22:54

Pace Analytical Services, Inc.

SW846-8260C/EPA 624

Data file : \\v70wintarget\chem\70msv6.i\042517.b\J34411.D
Lab Smp Id: 7016438015 Client Smp ID: MW-3A
Inj Date : 25-APR-2017 17:20 MS Autotune Date: 17-MAR-2017 06:2
Operator : KGG Inst ID: 70msv6.i
Smp Info : 7016438015,
Misc Info : 2005,
Comment :
Method : \\v70wintarget\chem\70msv6.i\042517.b\032717_8260W.m
Meth Date : 29-Apr-2017 22:43 blagula Quant Type: ISTD
Cal Date : 27-MAR-2017 18:25 Cal File: J33244.D
Als bottle: 17
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A
Processing Host: 70MSV4WS10B6

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)	REVIEW C
1 Chlorodifluoromethane	51	Compound Not Detected.						
2 Dichlorotetrafluoroethane	135	Compound Not Detected.						
3 Dichlorodifluoromethane	85	Compound Not Detected.						
4 Chloromethane	50	Compound Not Detected.						
5 Vinyl chloride	62	Compound Not Detected.						
6 1,3-Butadiene	54	Compound Not Detected.						
7 Acetaldehyde	44	Compound Not Detected.						
8 Bromomethane	94	Compound Not Detected.						
9 Chloroethane	64	Compound Not Detected.						
10 Dichlorofluoromethane	67	Compound Not Detected.						
11 Trichlorofluoromethane	101	Compound Not Detected.						
12 Ethanol	45	Compound Not Detected.						
13 Diethyl ether (Ethyl ether)	59	Compound Not Detected.						
16 1,1,2-Trichlorotrifluoroethane	101	Compound Not Detected.						
14 Acrolein	56	Compound Not Detected.						
15 1,1-Dichloroethene	96	Compound Not Detected.						
17 Acetone	43	2.245	2.245	(0.646)	5285	3.77978	3.78	
18 Iodomethane	142	Compound Not Detected.						
19 2-Propanol	45	Compound Not Detected.						(D)
20 Carbon disulfide	76	Compound Not Detected.						
21 Allyl chloride	76	Compound Not Detected.						
22 Acetonitrile	41	Compound Not Detected.						

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34411.D
Report Date: 29-Apr-2017 22:54

			QUANT SIG					CONCENTRATIONS ON-COLUMN	FINAL		
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)		REVIEW C
	23	Methyl acetate	43	Compound Not Detected.							
	24	Methylene Chloride	84	Compound Not Detected.							
	25	tert-Butyl Alcohol	59	Compound Not Detected.							
	28	Methyl-tert-butyl ether	73	Compound Not Detected.							
	27	trans-1,2-Dichloroethene	96	Compound Not Detected.							
	26	Acrylonitrile	53	Compound Not Detected.							
	30	n-Hexane	57	Compound Not Detected.							
	29	Diisopropyl ether	45	Compound Not Detected.							
	32	Vinyl acetate	43	Compound Not Detected.							
	31	1,1-Dichloroethane	63	Compound Not Detected.							
	33	Chloroprene	53	Compound Not Detected.							
	34	Ethyl-tert-butyl ether	59	Compound Not Detected.							
	36	2,2-Dichloropropane	77	Compound Not Detected.							
	35	cis-1,2-Dichloroethene	96	Compound Not Detected.							
	39	Ethyl acetate	61	Compound Not Detected.							
	37	2-Butanone (MEK)	43	Compound Not Detected.							
	41	Bromochloromethane	128	Compound Not Detected.							
	42	Tetrahydrofuran	42	Compound Not Detected.							
	43	Chloroform	83	Compound Not Detected.							
	38	Propionitrile	54	Compound Not Detected.							
	46	Cyclohexane	56	Compound Not Detected.							
	45	1,1,1-Trichloroethane	97	Compound Not Detected.							
*	44	Pentafluorobenzene (IS)	168	3.476	3.476	(1.000)	236486	50.0000		(Q)	
	48	Carbon tetrachloride	117	Compound Not Detected.							(D)
	47	1,1-Dichloropropene	75	Compound Not Detected.							(D)
	55	2,2,4-Trimethylpentane	57	Compound Not Detected.							
	51	Benzene	78	Compound Not Detected.							
	40	Methacrylonitrile	67	Compound Not Detected.							
$	50	1,2-Dichloroethane-d4 (S)	65	3.677	3.677	(0.941)	133328	45.3903	45.4		
	56	tert-Amylmethyl ether	73	Compound Not Detected.							
	52	1,2-Dichloroethane	62	Compound Not Detected.							
	57	n-Heptane	43	Compound Not Detected.							
*	58	1,4-Difluorobenzene (IS)	114	3.909	3.909	(1.000)	412406	50.0000			
	59	Trichloroethene	95	Compound Not Detected.							
	60	Methylcyclohexane	83	Compound Not Detected.							
	49	Isobutanol	43	Compound Not Detected.							
	53	tert-Amyl Alcohol	59	Compound Not Detected.							
	54	tert-Amyl ethyl ether	59	Compound Not Detected.							
	61	1,2-Dichloropropane	63	Compound Not Detected.							
	63	Methyl methacrylate	69	Compound Not Detected.							
	64	1,4-Dioxane (p-Dioxane)	88	Compound Not Detected.							
	62	Dibromomethane	93	Compound Not Detected.							
	65	Bromodichloromethane	83	Compound Not Detected.							
	66	2-Nitropropane	43	Compound Not Detected.							
	67	2-Chloroethylvinyl ether	63	Compound Not Detected.							
	68	cis-1,3-Dichloropropene	75	Compound Not Detected.							
	69	4-Methyl-2-pentanone (MIBK)	43	Compound Not Detected.							
$	70	Toluene-d8 (S)	98	4.811	4.811	(0.828)	480841	57.2400	57.2		
	71	Toluene	91	Compound Not Detected.							
	72	Methyl isothiocyanate	73	Compound Not Detected.							
	74	trans-1,3-Dichloropropene	75	Compound Not Detected.							
	75	Ethyl methacrylate	69	Compound Not Detected.							(D)
	76	1,1,2-Trichloroethane	83	Compound Not Detected.							
	77	Tetrachloroethene	166	Compound Not Detected.							

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34411.D
Report Date: 29-Apr-2017 22:54

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)	REVIEW C
78	1,3-Dichloropropane	76	Compound Not Detected.						
79	2-Hexanone	43	Compound Not Detected.						
73	n-Octane	43	Compound Not Detected.						
81	n-Butyl acetate	43	Compound Not Detected.						
80	Dibromochloromethane	129	Compound Not Detected.						
82	1,2-Dibromoethane (EDB)	107	Compound Not Detected.						
* 83	Chlorobenzene-d5 (IS)	82	5.811	5.811	(1.000)	220523	50.0000		
84	Chlorobenzene	112	Compound Not Detected.						
86	Ethylbenzene	106	Compound Not Detected.						
85	1,1,1,2-Tetrachloroethane	131	Compound Not Detected.						
88	n-Nonane	43	Compound Not Detected.						(D)
87	m&p-Xylene	106	Compound Not Detected.						
89	o-Xylene	106	Compound Not Detected.						
90	Styrene	104	Compound Not Detected.						
91	Bromoform	173	Compound Not Detected.						
92	Isopropylbenzene (Cumene)	105	Compound Not Detected.						
$ 93	4-Bromofluorobenzene (S)	95	6.671	6.671	(1.148)	182687	61.0313	61.0	
94	Bromobenzene	156	Compound Not Detected.						
95	1,1,2,2-Tetrachloroethane	83	Compound Not Detected.						
98	n-Propylbenzene	91	Compound Not Detected.						
96	1,2,3-Trichloropropane	110	Compound Not Detected.						
97	trans-1,4-Dichloro-2-butene	53	Compound Not Detected.						
103	n-Decane	43	Compound Not Detected.						
99	2-Chlorotoluene	91	Compound Not Detected.						
100	4-Ethyltoluene	105	Compound Not Detected.						
101	1,3,5-Trimethylbenzene	105	Compound Not Detected.						
102	4-Chlorotoluene	91	Compound Not Detected.						
104	tert-Butylbenzene	119	Compound Not Detected.						
105	Pentachloroethane	167	Compound Not Detected.						
106	1,2,4-Trimethylbenzene	105	Compound Not Detected.						
107	sec-Butylbenzene	105	Compound Not Detected.						
109	d-Limonene	136	Compound Not Detected.						
110	p-Isopropyltoluene	119	Compound Not Detected.						
108	1,3-Dichlorobenzene	146	Compound Not Detected.						
* 111	1,4-Dichlorobenzene-d4 (IS)	152	7.548	7.549	(1.000)	185224	50.0000		
112	1,4-Dichlorobenzene	146	Compound Not Detected.						
113	1,2,3-Trimethylbenzene	105	Compound Not Detected.						
114	Benzyl chloride	91	Compound Not Detected.						
115	trans-Decalin	138	Compound Not Detected.						
116	1,4-Diethylbenzene	119	Compound Not Detected.						
117	n-Butylbenzene	91	Compound Not Detected.						
119	n-Undecane	43	Compound Not Detected.						
118	1,2-Dichlorobenzene	146	Compound Not Detected.						
120	cis-Decalin	138	Compound Not Detected.						
121	1,2,4,5-tetramethylbenzene	119	Compound Not Detected.						
122	1,2-Dibromo-3-chloropropane	75	Compound Not Detected.						
123	n-Dodecane	43	Compound Not Detected.						(D)
124	1,2,4-Trichlorobenzene	180	Compound Not Detected.						
125	Hexachloro-1,3-butadiene	225	Compound Not Detected.						
126	Naphthalene	128	Compound Not Detected.						
127	1,2,3-Trichlorobenzene	180	Compound Not Detected.						

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34411.D
Report Date: 29-Apr-2017 22:54

QC Flag Legend

Q - Qualifier signal failed the ratio test.
D - User disabled compound identification.

Review Codes Legend

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Report Date: 29-Apr-2017 22:54

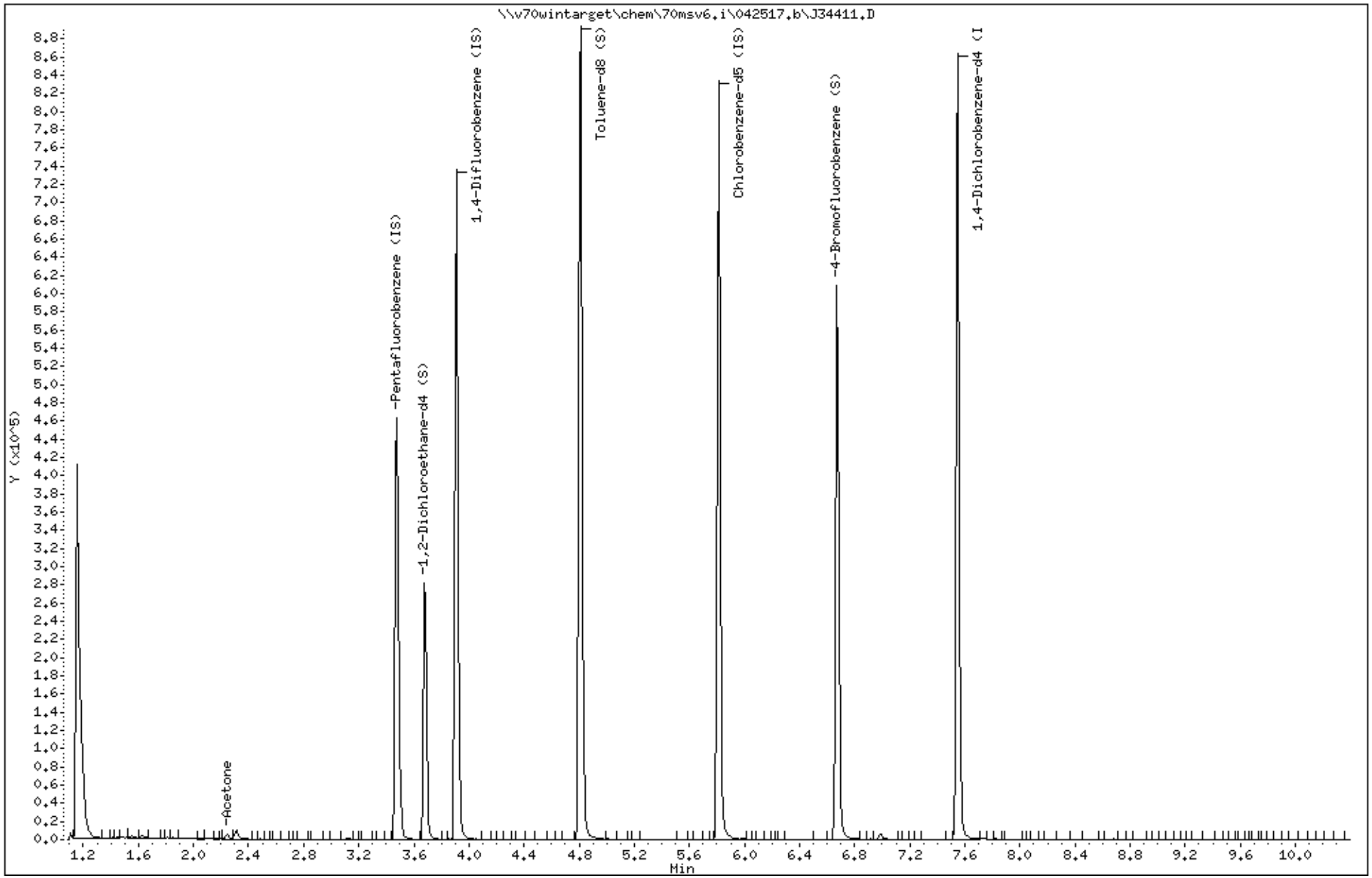
Pace Analytical Services, Inc.

SW846-8260C/EPA 624

Data file : \\v70wintarget\chem\70msv6.i\042517.b\J34411.D
Lab Smp Id: 7016438015 Client Smp ID: MW-3A
Inj Date : 25-APR-2017 17:20 MS Autotune Date: 17-MAR-2017 06:2
Operator : KGG Inst ID: 70msv6.i
Smp Info : 7016438015,
Misc Info : 2005,
Comment :
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Meth Date : 29-Apr-2017 22:43 blagula Quant Type: ISTD
Cal Date : 27-MAR-2017 18:25 Cal File: J33244.D
Als bottle: 17
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A
Processing Host: 70MSV4WS10B6

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34411.D
Date : 25-APR-2017 17:20
Client ID: MW-3A
Instrument: 70msv6.i
Sample Info: 7016438015,
Purge Volume: 5.0
Operator: KGG
Column phase: RTX-624
Column diameter: 0.18



Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34411.D

Date : 25-APR-2017 17:20

Client ID: MW-3A

Instrument: 70msv6.i

Sample Info: 7016438015,

Purge Volume: 5.0

Operator: KGG

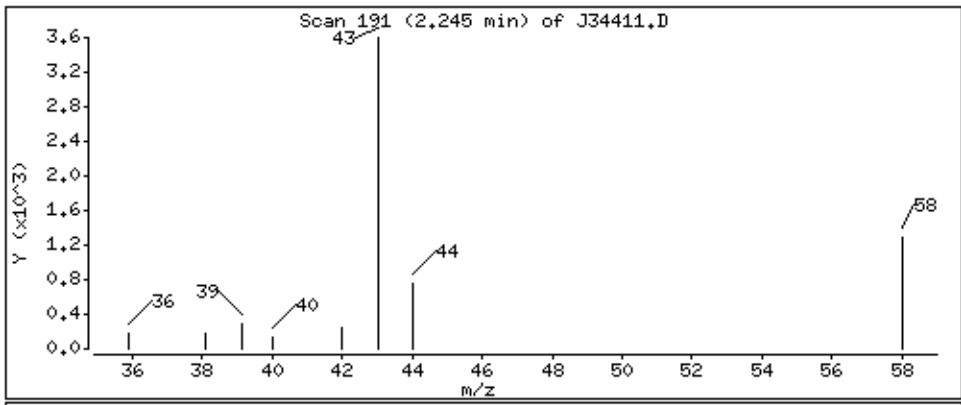
Column phase: RTX-624

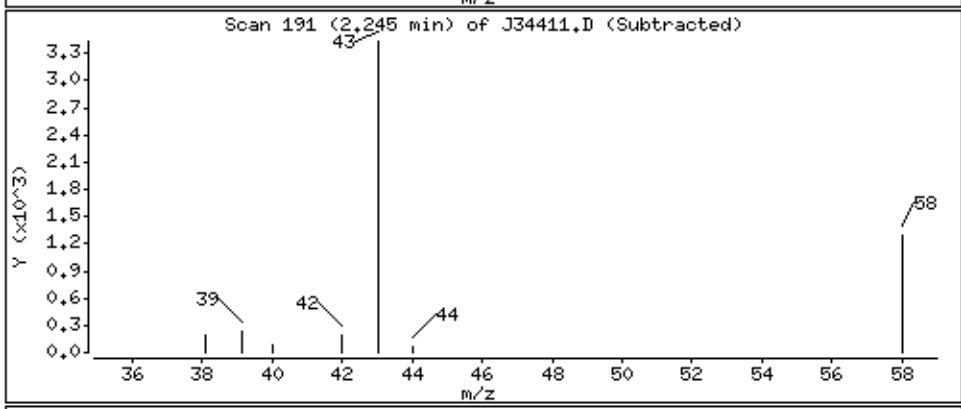
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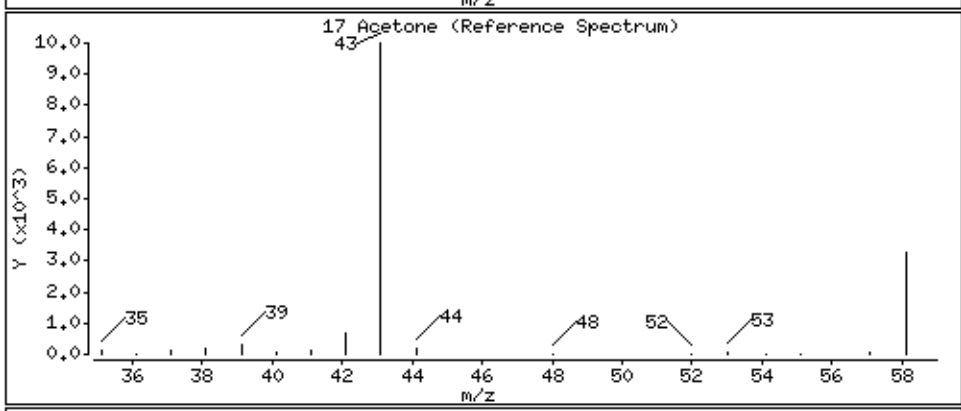
17 Acetone

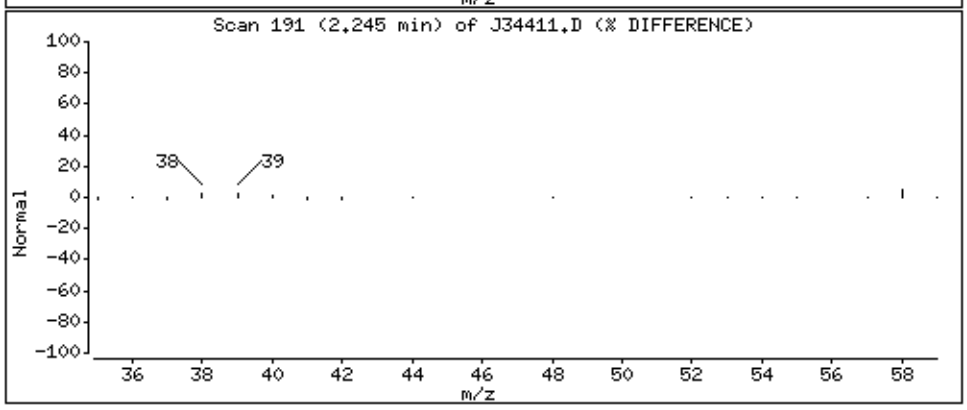
Concentration: 3.78 ug/L

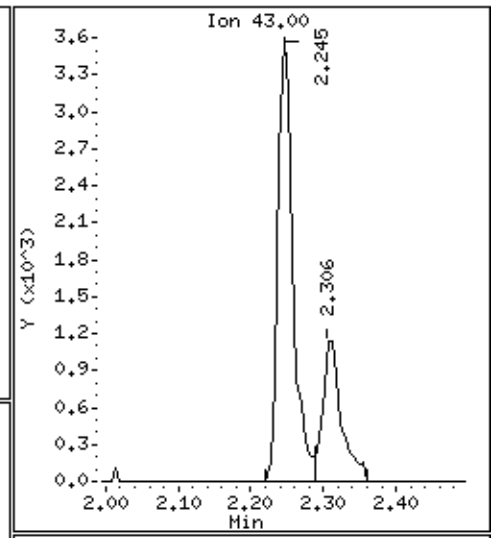
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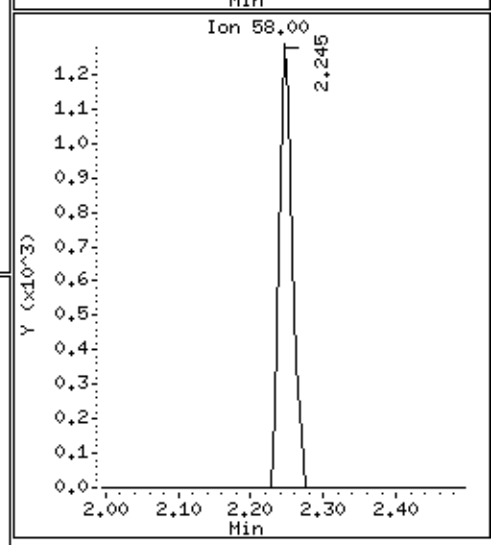












Data File: \\v70wintarget\chem\70msv6.i\042517.b/J34411.D
Injection Date: 25-APR-2017 17:20
Instrument: 70msv6.i
Lab Sample ID: 7016438015
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

SAMPLE NO.

MW-3B

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York Contract: NORTH SEA LANDFILL

Date Received: 04/21/2017 11:00 Matrix: Water SDG No.: 7016438

Date Extracted: 04/25/2017 17:37 Lab Sample ID: 7016438016

Date Analyzed: 04/25/2017 17:37 Lab File ID: 042517.B\J34412.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1 Instrument: 70MSV6 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	2.2	J
107-13-1	Acrylonitrile	<5.0	U
71-43-2	Benzene	<5.0	U
74-97-5	Bromochloromethane	<5.0	U
75-27-4	Bromodichloromethane	<5.0	U
75-25-2	Bromoform	<5.0	U
74-83-9	Bromomethane	<5.0	U
78-93-3	2-Butanone (MEK)	<5.0	U
75-15-0	Carbon disulfide	<5.0	U
56-23-5	Carbon tetrachloride	<5.0	U
108-90-7	Chlorobenzene	<5.0	U
75-00-3	Chloroethane	<5.0	U
67-66-3	Chloroform	<5.0	U
74-87-3	Chloromethane	<5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	<5.0	U
124-48-1	Dibromochloromethane	<5.0	U
106-93-4	1,2-Dibromoethane (EDB)	<5.0	U
74-95-3	Dibromomethane	<5.0	U
95-50-1	1,2-Dichlorobenzene	<5.0	U
106-46-7	1,4-Dichlorobenzene	<5.0	U
110-57-6	trans-1,4-Dichloro-2-butene	<5.0	U
75-34-3	1,1-Dichloroethane	<5.0	U
107-06-2	1,2-Dichloroethane	<5.0	U
75-35-4	1,1-Dichloroethene	<5.0	U
156-59-2	cis-1,2-Dichloroethene	<5.0	U
156-60-5	trans-1,2-Dichloroethene	<5.0	U
78-87-5	1,2-Dichloropropane	<5.0	U
10061-01-5	cis-1,3-Dichloropropene	<5.0	U
10061-02-6	trans-1,3-Dichloropropene	<5.0	U
100-41-4	Ethylbenzene	<5.0	U
591-78-6	2-Hexanone	<5.0	U
74-88-4	Iodomethane	<5.0	U
75-09-2	Methylene Chloride	<5.0	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<5.0	U
100-42-5	Styrene	<5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	<5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	<5.0	U

SAMPLE NO.

MW-3B

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York Contract: NORTH SEA LANDFILL

Date Received: 04/21/2017 11:00 Matrix: Water SDG No.: 7016438

Date Extracted: 04/25/2017 17:37 Lab Sample ID: 7016438016

Date Analyzed: 04/25/2017 17:37 Lab File ID: 042517.B\J34412.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1 Instrument: 70MSV6 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
127-18-4	Tetrachloroethene	<5.0	U
108-88-3	Toluene	<5.0	U
71-55-6	1,1,1-Trichloroethane	<5.0	U
79-00-5	1,1,2-Trichloroethane	<5.0	U
79-01-6	Trichloroethene	<5.0	U
75-69-4	Trichlorofluoromethane	<5.0	U
96-18-4	1,2,3-Trichloropropane	<5.0	U
108-05-4	Vinyl acetate	<5.0	U
75-01-4	Vinyl chloride	<5.0	U
1330-20-7	Xylene (Total)	<5.0	U

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34412.D
Report Date: 29-Apr-2017 22:54

Pace Analytical Services, Inc.

SW846-8260C/EPA 624

Data file : \\v70wintarget\chem\70msv6.i\042517.b\J34412.D
Lab Smp Id: 7016438016 Client Smp ID: MW-3B
Inj Date : 25-APR-2017 17:37 MS Autotune Date: 17-MAR-2017 06:2
Operator : KGG Inst ID: 70msv6.i
Smp Info : 7016438016,
Misc Info : 2005,
Comment :
Method : \\v70wintarget\chem\70msv6.i\042517.b\032717_8260W.m
Meth Date : 29-Apr-2017 22:43 blagula Quant Type: ISTD
Cal Date : 27-MAR-2017 18:25 Cal File: J33244.D
Als bottle: 18
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A
Processing Host: 70MSV4WS10B6

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)	REVIEW C
1 Chlorodifluoromethane	51	Compound Not Detected.						
2 Dichlorotetrafluoroethane	135	Compound Not Detected.						
3 Dichlorodifluoromethane	85	Compound Not Detected.						
4 Chloromethane	50	Compound Not Detected.						
5 Vinyl chloride	62	Compound Not Detected.						
6 1,3-Butadiene	54	Compound Not Detected.						
7 Acetaldehyde	44	Compound Not Detected.						
8 Bromomethane	94	Compound Not Detected.						
9 Chloroethane	64	Compound Not Detected.						
10 Dichlorofluoromethane	67	Compound Not Detected.						
11 Trichlorofluoromethane	101	Compound Not Detected.						
12 Ethanol	45	Compound Not Detected.						
13 Diethyl ether (Ethyl ether)	59	Compound Not Detected.						
16 1,1,2-Trichlorotrifluoroethane	101	Compound Not Detected.						
14 Acrolein	56	Compound Not Detected.						
15 1,1-Dichloroethene	96	Compound Not Detected.						
17 Acetone	43	2.245	2.245	(0.646)	3072	2.20691	2.21	
18 Iodomethane	142	Compound Not Detected.						
19 2-Propanol	45	Compound Not Detected.						(D)
20 Carbon disulfide	76	Compound Not Detected.						
21 Allyl chloride	76	Compound Not Detected.						
22 Acetonitrile	41	Compound Not Detected.						

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34412.D
Report Date: 29-Apr-2017 22:54

			QUANT SIG					CONCENTRATIONS ON-COLUMN	FINAL		
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)		REVIEW C
	23	Methyl acetate	43	Compound Not Detected.							
	24	Methylene Chloride	84	Compound Not Detected.							
	25	tert-Butyl Alcohol	59	Compound Not Detected.							
	28	Methyl-tert-butyl ether	73	Compound Not Detected.							
	27	trans-1,2-Dichloroethene	96	Compound Not Detected.							
	26	Acrylonitrile	53	Compound Not Detected.							
	30	n-Hexane	57	Compound Not Detected.							
	29	Diisopropyl ether	45	Compound Not Detected.							
	32	Vinyl acetate	43	Compound Not Detected.							
	31	1,1-Dichloroethane	63	Compound Not Detected.							
	33	Chloroprene	53	Compound Not Detected.							
	34	Ethyl-tert-butyl ether	59	Compound Not Detected.							
	36	2,2-Dichloropropane	77	Compound Not Detected.							
	35	cis-1,2-Dichloroethene	96	Compound Not Detected.							
	39	Ethyl acetate	61	Compound Not Detected.							
	37	2-Butanone (MEK)	43	Compound Not Detected.							
	41	Bromochloromethane	128	Compound Not Detected.							
	42	Tetrahydrofuran	42	Compound Not Detected.							
	43	Chloroform	83	Compound Not Detected.							
	38	Propionitrile	54	Compound Not Detected.							
	46	Cyclohexane	56	Compound Not Detected.							
	45	1,1,1-Trichloroethane	97	Compound Not Detected.							
*	44	Pentafluorobenzene (IS)	168	3.476	3.476	(1.000)	235431	50.0000		(Q)	
	48	Carbon tetrachloride	117	Compound Not Detected.							(D)
	47	1,1-Dichloropropene	75	Compound Not Detected.							(D)
	55	2,2,4-Trimethylpentane	57	Compound Not Detected.							
	51	Benzene	78	Compound Not Detected.							
	40	Methacrylonitrile	67	Compound Not Detected.							
$	50	1,2-Dichloroethane-d4 (S)	65	3.677	3.677	(0.941)	132020	45.5968	45.6		
	56	tert-Amylmethyl ether	73	Compound Not Detected.							
	52	1,2-Dichloroethane	62	Compound Not Detected.							
	57	n-Heptane	43	Compound Not Detected.							
*	58	1,4-Difluorobenzene (IS)	114	3.909	3.909	(1.000)	406510	50.0000			
	59	Trichloroethene	95	Compound Not Detected.							
	60	Methylcyclohexane	83	Compound Not Detected.							
	49	Isobutanol	43	Compound Not Detected.							
	53	tert-Amyl Alcohol	59	Compound Not Detected.							
	54	tert-Amyl ethyl ether	59	Compound Not Detected.							
	61	1,2-Dichloropropane	63	Compound Not Detected.							
	63	Methyl methacrylate	69	Compound Not Detected.							
	64	1,4-Dioxane (p-Dioxane)	88	Compound Not Detected.							
	62	Dibromomethane	93	Compound Not Detected.							
	65	Bromodichloromethane	83	Compound Not Detected.							
	66	2-Nitropropane	43	Compound Not Detected.							
	67	2-Chloroethylvinyl ether	63	Compound Not Detected.							
	68	cis-1,3-Dichloropropene	75	Compound Not Detected.							
	69	4-Methyl-2-pentanone (MIBK)	43	Compound Not Detected.							
$	70	Toluene-d8 (S)	98	4.811	4.811	(0.828)	476619	56.3173	56.3		
	71	Toluene	91	Compound Not Detected.							
	72	Methyl isothiocyanate	73	Compound Not Detected.							
	74	trans-1,3-Dichloropropene	75	Compound Not Detected.							
	75	Ethyl methacrylate	69	Compound Not Detected.							(D)
	76	1,1,2-Trichloroethane	83	Compound Not Detected.							
	77	Tetrachloroethene	166	Compound Not Detected.							

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34412.D
Report Date: 29-Apr-2017 22:54

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)	REVIEW C
78	1,3-Dichloropropane	76	Compound Not Detected.						
79	2-Hexanone	43	Compound Not Detected.						
73	n-Octane	43	Compound Not Detected.						
81	n-Butyl acetate	43	Compound Not Detected.						
80	Dibromochloromethane	129	Compound Not Detected.						
82	1,2-Dibromoethane (EDB)	107	Compound Not Detected.						
* 83	Chlorobenzene-d5 (IS)	82	5.811	5.811	(1.000)	222168	50.0000		
84	Chlorobenzene	112	Compound Not Detected.						
86	Ethylbenzene	106	Compound Not Detected.						
85	1,1,1,2-Tetrachloroethane	131	Compound Not Detected.						
88	n-Nonane	43	Compound Not Detected.						
87	m&p-Xylene	106	Compound Not Detected.						
89	o-Xylene	106	Compound Not Detected.						
90	Styrene	104	Compound Not Detected.						
91	Bromoform	173	Compound Not Detected.						
92	Isopropylbenzene (Cumene)	105	Compound Not Detected.						
$ 93	4-Bromofluorobenzene (S)	95	6.671	6.671	(1.148)	175009	58.0333	58.0	
94	Bromobenzene	156	Compound Not Detected.						
95	1,1,2,2-Tetrachloroethane	83	Compound Not Detected.						
98	n-Propylbenzene	91	Compound Not Detected.						
96	1,2,3-Trichloropropane	110	Compound Not Detected.						
97	trans-1,4-Dichloro-2-butene	53	Compound Not Detected.						
103	n-Decane	43	Compound Not Detected.						
99	2-Chlorotoluene	91	Compound Not Detected.						
100	4-Ethyltoluene	105	Compound Not Detected.						
101	1,3,5-Trimethylbenzene	105	Compound Not Detected.						
102	4-Chlorotoluene	91	Compound Not Detected.						
104	tert-Butylbenzene	119	Compound Not Detected.						
105	Pentachloroethane	167	Compound Not Detected.						
106	1,2,4-Trimethylbenzene	105	Compound Not Detected.						
107	sec-Butylbenzene	105	Compound Not Detected.						
109	d-Limonene	136	Compound Not Detected.						
110	p-Isopropyltoluene	119	Compound Not Detected.						
108	1,3-Dichlorobenzene	146	Compound Not Detected.						
* 111	1,4-Dichlorobenzene-d4 (IS)	152	7.549	7.549	(1.000)	182901	50.0000		
112	1,4-Dichlorobenzene	146	Compound Not Detected.						
113	1,2,3-Trimethylbenzene	105	Compound Not Detected.						
114	Benzyl chloride	91	Compound Not Detected.						
115	trans-Decalin	138	Compound Not Detected.						
116	1,4-Diethylbenzene	119	Compound Not Detected.						
117	n-Butylbenzene	91	Compound Not Detected.						
119	n-Undecane	43	Compound Not Detected.						
118	1,2-Dichlorobenzene	146	Compound Not Detected.						
120	cis-Decalin	138	Compound Not Detected.						
121	1,2,4,5-tetramethylbenzene	119	Compound Not Detected.						
122	1,2-Dibromo-3-chloropropane	75	Compound Not Detected.						
123	n-Dodecane	43	Compound Not Detected.						(D)
124	1,2,4-Trichlorobenzene	180	Compound Not Detected.						
125	Hexachloro-1,3-butadiene	225	Compound Not Detected.						
126	Naphthalene	128	Compound Not Detected.						
127	1,2,3-Trichlorobenzene	180	Compound Not Detected.						

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34412.D
Report Date: 29-Apr-2017 22:54

QC Flag Legend

Q - Qualifier signal failed the ratio test.
D - User disabled compound identification.

Review Codes Legend

:

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34412.D
Report Date: 29-Apr-2017 22:54

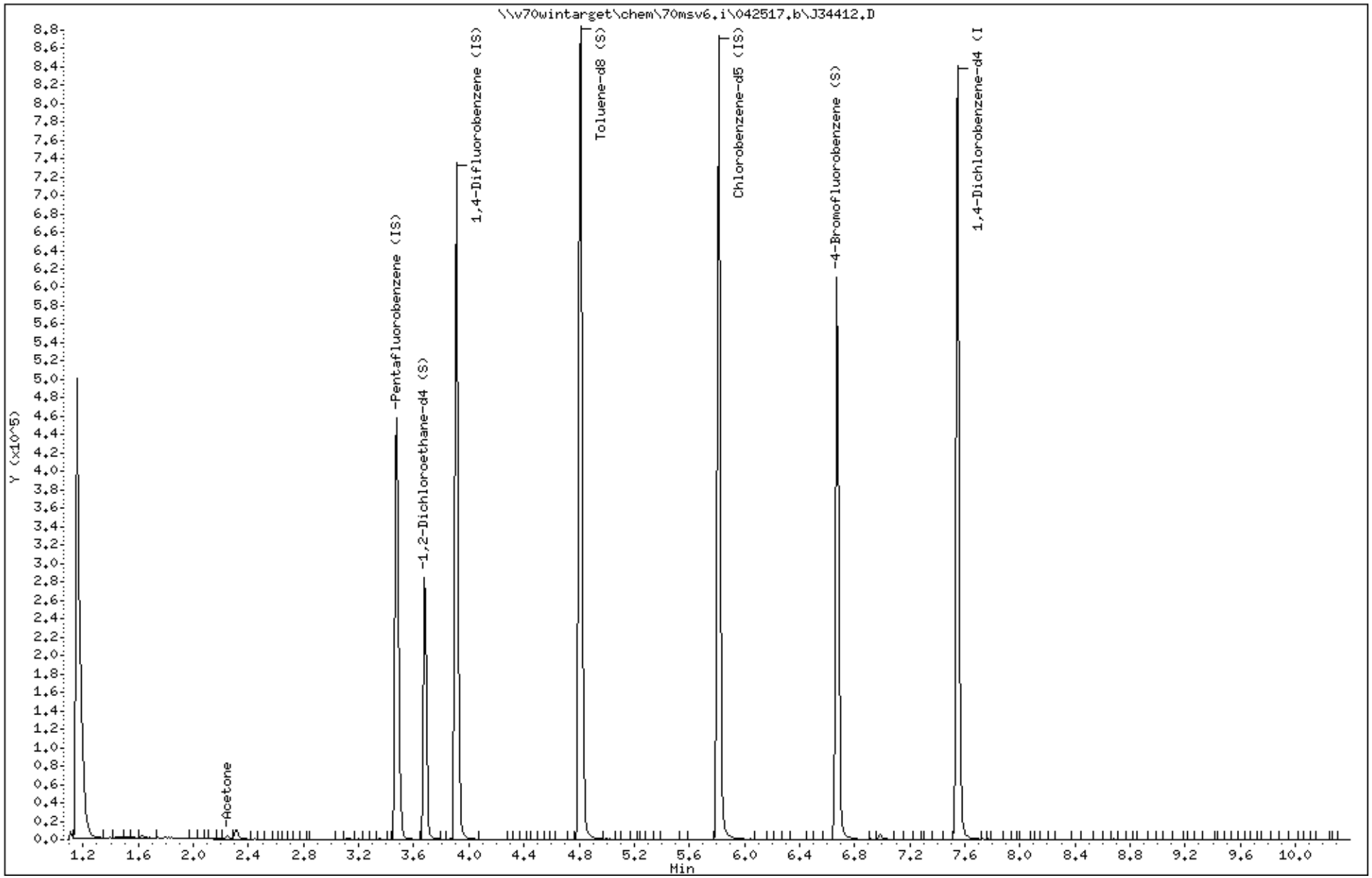
Pace Analytical Services, Inc.

SW846-8260C/EPA 624

Data file : \\v70wintarget\chem\70msv6.i\042517.b\J34412.D
Lab Smp Id: 7016438016 Client Smp ID: MW-3B
Inj Date : 25-APR-2017 17:37 MS Autotune Date: 17-MAR-2017 06:2
Operator : KGG Inst ID: 70msv6.i
Smp Info : 7016438016,
Misc Info : 2005,
Comment :
Method : \\v70wintarget\chem\70msv6.i\042517.b\032717_8260W.m
Meth Date : 29-Apr-2017 22:43 blagula Quant Type: ISTD
Cal Date : 27-MAR-2017 18:25 Cal File: J33244.D
Als bottle: 18
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A
Processing Host: 70MSV4WS10B6

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34412.D
Date : 25-APR-2017 17:37
Client ID: MW-3B
Instrument: 70msv6.i
Sample Info: 7016438016,
Purge Volume: 5.0
Operator: KGG
Column phase: RTX-624
Column diameter: 0.18



Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34412.D

Date : 25-APR-2017 17:37

Client ID: MW-3B

Instrument: 70msv6.i

Sample Info: 7016438016,

Purge Volume: 5.0

Operator: KGG

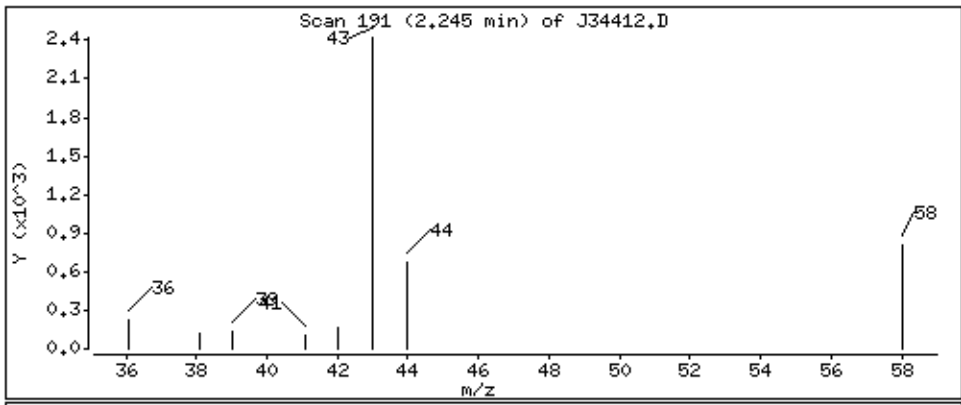
Column phase: RTX-624

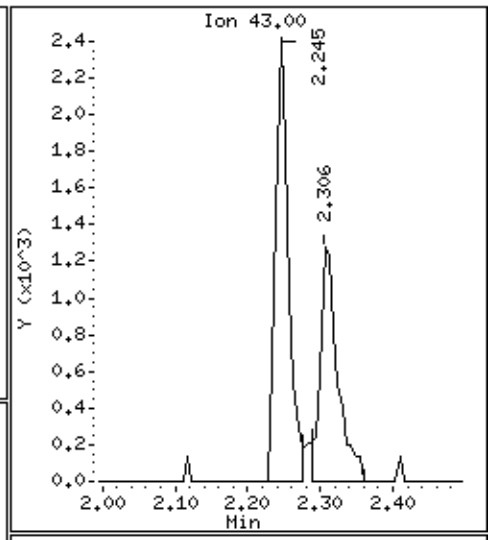
Column diameter: 0.18

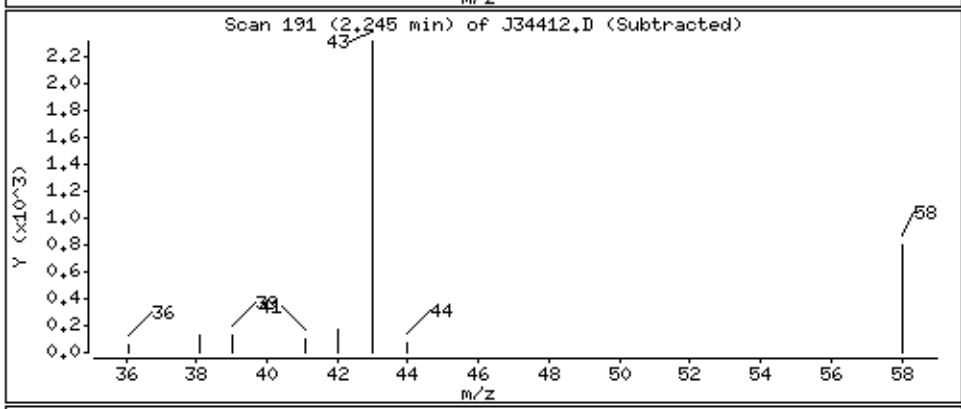
17 Acetone

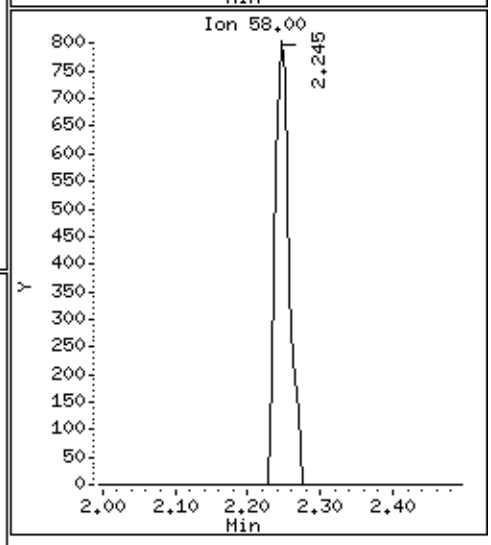
Concentration: 2.21 ug/L

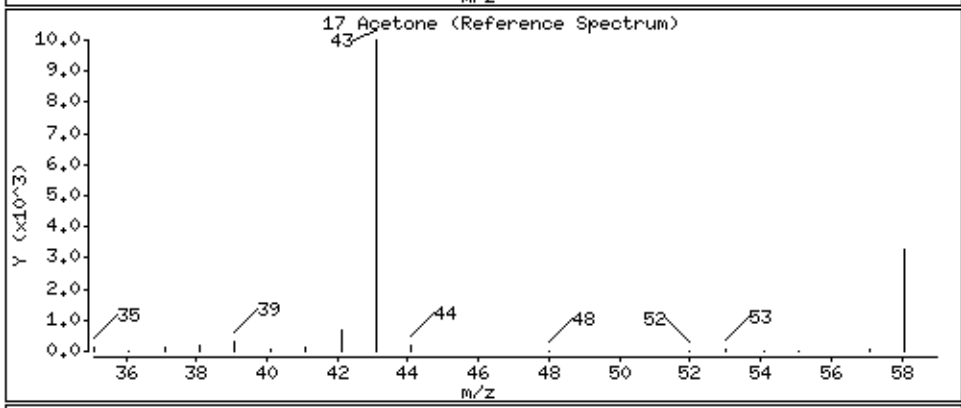
Review Code:

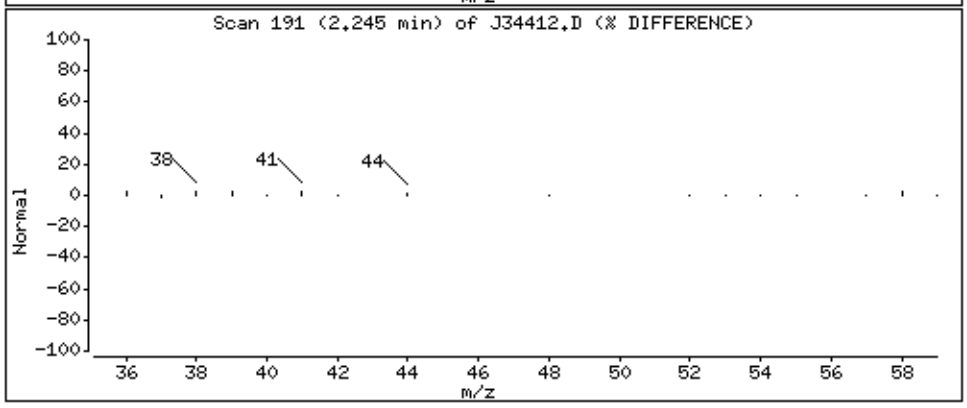












Data File: \\v70wintarget\chem\70msv6.i\042517.b/J34412.D
Injection Date: 25-APR-2017 17:37
Instrument: 70msv6.i
Lab Sample ID: 7016438016
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

SAMPLE NO.

MW-3C

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York Contract: NORTH SEA LANDFILL

Date Received: 04/21/2017 11:00 Matrix: Water SDG No.: 7016438

Date Extracted: 04/25/2017 17:55 Lab Sample ID: 7016438017

Date Analyzed: 04/25/2017 17:55 Lab File ID: 042517.B\J34413.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1 Instrument: 70MSV6 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	2.4	J
107-13-1	Acrylonitrile	<5.0	U
71-43-2	Benzene	<5.0	U
74-97-5	Bromochloromethane	<5.0	U
75-27-4	Bromodichloromethane	<5.0	U
75-25-2	Bromoform	<5.0	U
74-83-9	Bromomethane	<5.0	U
78-93-3	2-Butanone (MEK)	<5.0	U
75-15-0	Carbon disulfide	<5.0	U
56-23-5	Carbon tetrachloride	<5.0	U
108-90-7	Chlorobenzene	<5.0	U
75-00-3	Chloroethane	<5.0	U
67-66-3	Chloroform	<5.0	U
74-87-3	Chloromethane	<5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	<5.0	U
124-48-1	Dibromochloromethane	<5.0	U
106-93-4	1,2-Dibromoethane (EDB)	<5.0	U
74-95-3	Dibromomethane	<5.0	U
95-50-1	1,2-Dichlorobenzene	<5.0	U
106-46-7	1,4-Dichlorobenzene	<5.0	U
110-57-6	trans-1,4-Dichloro-2-butene	<5.0	U
75-34-3	1,1-Dichloroethane	<5.0	U
107-06-2	1,2-Dichloroethane	<5.0	U
75-35-4	1,1-Dichloroethene	<5.0	U
156-59-2	cis-1,2-Dichloroethene	<5.0	U
156-60-5	trans-1,2-Dichloroethene	<5.0	U
78-87-5	1,2-Dichloropropane	<5.0	U
10061-01-5	cis-1,3-Dichloropropene	<5.0	U
10061-02-6	trans-1,3-Dichloropropene	<5.0	U
100-41-4	Ethylbenzene	<5.0	U
591-78-6	2-Hexanone	<5.0	U
74-88-4	Iodomethane	<5.0	U
75-09-2	Methylene Chloride	<5.0	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<5.0	U
100-42-5	Styrene	<5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	<5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	<5.0	U

SAMPLE NO.

MW-3C

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York Contract: NORTH SEA LANDFILL

Date Received: 04/21/2017 11:00 Matrix: Water SDG No.: 7016438

Date Extracted: 04/25/2017 17:55 Lab Sample ID: 7016438017

Date Analyzed: 04/25/2017 17:55 Lab File ID: 042517.B\J34413.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1 Instrument: 70MSV6 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
127-18-4	Tetrachloroethene	<5.0	U
108-88-3	Toluene	<5.0	U
71-55-6	1,1,1-Trichloroethane	<5.0	U
79-00-5	1,1,2-Trichloroethane	<5.0	U
79-01-6	Trichloroethene	<5.0	U
75-69-4	Trichlorofluoromethane	<5.0	U
96-18-4	1,2,3-Trichloropropane	<5.0	U
108-05-4	Vinyl acetate	<5.0	U
75-01-4	Vinyl chloride	<5.0	U
1330-20-7	Xylene (Total)	<5.0	U

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34413.D
Report Date: 29-Apr-2017 22:54

Pace Analytical Services, Inc.

SW846-8260C/EPA 624

Data file : \\v70wintarget\chem\70msv6.i\042517.b\J34413.D
Lab Smp Id: 7016438017 Client Smp ID: MW-3C
Inj Date : 25-APR-2017 17:55 MS Autotune Date: 17-MAR-2017 06:2
Operator : KGG Inst ID: 70msv6.i
Smp Info : 7016438017,
Misc Info : 2005,
Comment :
Method : \\v70wintarget\chem\70msv6.i\042517.b\032717_8260W.m
Meth Date : 29-Apr-2017 22:43 blagula Quant Type: ISTD
Cal Date : 27-MAR-2017 18:25 Cal File: J33244.D
Als bottle: 19
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A
Processing Host: 70MSV4WS10B6

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)	REVIEW C
1 Chlorodifluoromethane	51	Compound Not Detected.						
2 Dichlorotetrafluoroethane	135	Compound Not Detected.						
3 Dichlorodifluoromethane	85	Compound Not Detected.						
4 Chloromethane	50	Compound Not Detected.						
5 Vinyl chloride	62	Compound Not Detected.						
6 1,3-Butadiene	54	Compound Not Detected.						
7 Acetaldehyde	44	Compound Not Detected.						
8 Bromomethane	94	Compound Not Detected.						
9 Chloroethane	64	Compound Not Detected.						
10 Dichlorofluoromethane	67	Compound Not Detected.						
11 Trichlorofluoromethane	101	Compound Not Detected.						
12 Ethanol	45	Compound Not Detected.						
13 Diethyl ether (Ethyl ether)	59	Compound Not Detected.						
16 1,1,2-Trichlorotrifluoroethane	101	Compound Not Detected.						
14 Acrolein	56	Compound Not Detected.						
15 1,1-Dichloroethene	96	Compound Not Detected.						
17 Acetone	43	2.244	2.245	(0.646)	3296	2.41085	2.41	
18 Iodomethane	142	Compound Not Detected.						
19 2-Propanol	45	Compound Not Detected.						(D)
20 Carbon disulfide	76	Compound Not Detected.						
21 Allyl chloride	76	Compound Not Detected.						
22 Acetonitrile	41	Compound Not Detected.						

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34413.D
Report Date: 29-Apr-2017 22:54

			QUANT SIG					CONCENTRATIONS ON-COLUMN	FINAL	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)	REVIEW C
	23	Methyl acetate	43	Compound Not Detected.						
	24	Methylene Chloride	84	Compound Not Detected.						
	25	tert-Butyl Alcohol	59	Compound Not Detected.						
	28	Methyl-tert-butyl ether	73	Compound Not Detected.						
	27	trans-1,2-Dichloroethene	96	Compound Not Detected.						
	26	Acrylonitrile	53	Compound Not Detected.						
	30	n-Hexane	57	Compound Not Detected.						
	29	Diisopropyl ether	45	Compound Not Detected.						
	32	Vinyl acetate	43	Compound Not Detected.						
	31	1,1-Dichloroethane	63	Compound Not Detected.						
	33	Chloroprene	53	Compound Not Detected.						
	34	Ethyl-tert-butyl ether	59	Compound Not Detected.						
	36	2,2-Dichloropropane	77	Compound Not Detected.						
	35	cis-1,2-Dichloroethene	96	Compound Not Detected.						
	39	Ethyl acetate	61	Compound Not Detected.						
	37	2-Butanone (MEK)	43	Compound Not Detected.						
	41	Bromochloromethane	128	Compound Not Detected.						
	42	Tetrahydrofuran	42	Compound Not Detected.						
	43	Chloroform	83	Compound Not Detected.						
	38	Propionitrile	54	Compound Not Detected.						
	46	Cyclohexane	56	Compound Not Detected.						
	45	1,1,1-Trichloroethane	97	Compound Not Detected.						
*	44	Pentafluorobenzene (IS)	168	3.476	3.476	(1.000)	231230	50.0000	(Q)	
	48	Carbon tetrachloride	117	Compound Not Detected.						(D)
	47	1,1-Dichloropropene	75	Compound Not Detected.						(D)
	55	2,2,4-Trimethylpentane	57	Compound Not Detected.						
	51	Benzene	78	Compound Not Detected.						
	40	Methacrylonitrile	67	Compound Not Detected.						
$	50	1,2-Dichloroethane-d4 (S)	65	3.677	3.677	(0.941)	131138	44.9441	44.9	
	56	tert-Amylmethyl ether	73	Compound Not Detected.						
	52	1,2-Dichloroethane	62	Compound Not Detected.						
	57	n-Heptane	43	Compound Not Detected.						
*	58	1,4-Difluorobenzene (IS)	114	3.909	3.909	(1.000)	409659	50.0000		
	59	Trichloroethene	95	Compound Not Detected.						
	60	Methylcyclohexane	83	Compound Not Detected.						
	49	Isobutanol	43	Compound Not Detected.						
	53	tert-Amyl Alcohol	59	Compound Not Detected.						
	54	tert-Amyl ethyl ether	59	Compound Not Detected.						
	61	1,2-Dichloropropane	63	Compound Not Detected.						
	63	Methyl methacrylate	69	Compound Not Detected.						
	64	1,4-Dioxane (p-Dioxane)	88	Compound Not Detected.						
	62	Dibromomethane	93	Compound Not Detected.						
	65	Bromodichloromethane	83	Compound Not Detected.						
	66	2-Nitropropane	43	Compound Not Detected.						
	67	2-Chloroethylvinyl ether	63	Compound Not Detected.						
	68	cis-1,3-Dichloropropene	75	Compound Not Detected.						
	69	4-Methyl-2-pentanone (MIBK)	43	Compound Not Detected.						
$	70	Toluene-d8 (S)	98	4.811	4.811	(0.828)	474378	56.6667	56.7	
	71	Toluene	91	Compound Not Detected.						
	72	Methyl isothiocyanate	73	Compound Not Detected.						
	74	trans-1,3-Dichloropropene	75	Compound Not Detected.						
	75	Ethyl methacrylate	69	Compound Not Detected.						(D)
	76	1,1,2-Trichloroethane	83	Compound Not Detected.						
	77	Tetrachloroethene	166	Compound Not Detected.						

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34413.D
Report Date: 29-Apr-2017 22:54

								CONCENTRATIONS		
		QUANT SIG						ON-COLUMN	FINAL	
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE		(ug/L)	(ug/L)	REVIEW C
	78 1,3-Dichloropropane	76	Compound Not Detected.							
	79 2-Hexanone	43	Compound Not Detected.							
	73 n-Octane	43	Compound Not Detected.							
	81 n-Butyl acetate	43	Compound Not Detected.							
	80 Dibromochloromethane	129	Compound Not Detected.							
	82 1,2-Dibromoethane (EDB)	107	Compound Not Detected.							
*	83 Chlorobenzene-d5 (IS)	82	5.811	5.811	(1.000)	219760		50.0000		
	84 Chlorobenzene	112	Compound Not Detected.							
	86 Ethylbenzene	106	Compound Not Detected.							
	85 1,1,1,2-Tetrachloroethane	131	Compound Not Detected.							
	88 n-Nonane	43	Compound Not Detected.							
	87 m&p-Xylene	106	Compound Not Detected.							
	89 o-Xylene	106	Compound Not Detected.							
	90 Styrene	104	Compound Not Detected.							
	91 Bromoform	173	Compound Not Detected.							
	92 Isopropylbenzene (Cumene)	105	Compound Not Detected.							
$	93 4-Bromofluorobenzene (S)	95	6.670	6.671	(1.148)	177999		59.6716	59.7	
	94 Bromobenzene	156	Compound Not Detected.							
	95 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.							
	98 n-Propylbenzene	91	Compound Not Detected.							
	96 1,2,3-Trichloropropane	110	Compound Not Detected.							
	97 trans-1,4-Dichloro-2-butene	53	Compound Not Detected.							
	103 n-Decane	43	Compound Not Detected.							
	99 2-Chlorotoluene	91	Compound Not Detected.							
	100 4-Ethyltoluene	105	Compound Not Detected.							
	101 1,3,5-Trimethylbenzene	105	Compound Not Detected.							
	102 4-Chlorotoluene	91	Compound Not Detected.							
	104 tert-Butylbenzene	119	Compound Not Detected.							
	105 Pentachloroethane	167	Compound Not Detected.							
	106 1,2,4-Trimethylbenzene	105	Compound Not Detected.							
	107 sec-Butylbenzene	105	Compound Not Detected.							
	109 d-Limonene	136	Compound Not Detected.							
	110 p-Isopropyltoluene	119	Compound Not Detected.							
	108 1,3-Dichlorobenzene	146	Compound Not Detected.							
*	111 1,4-Dichlorobenzene-d4 (IS)	152	7.548	7.549	(1.000)	170938		50.0000		
	112 1,4-Dichlorobenzene	146	Compound Not Detected.							
	113 1,2,3-Trimethylbenzene	105	Compound Not Detected.							
	114 Benzyl chloride	91	Compound Not Detected.							
	115 trans-Decalin	138	Compound Not Detected.							
	116 1,4-Diethylbenzene	119	Compound Not Detected.							
	117 n-Butylbenzene	91	Compound Not Detected.							
	119 n-Undecane	43	Compound Not Detected.							
	118 1,2-Dichlorobenzene	146	Compound Not Detected.							
	120 cis-Decalin	138	Compound Not Detected.							
	121 1,2,4,5-tetramethylbenzene	119	Compound Not Detected.							
	122 1,2-Dibromo-3-chloropropane	75	Compound Not Detected.							
	123 n-Dodecane	43	Compound Not Detected.							(D)
	124 1,2,4-Trichlorobenzene	180	Compound Not Detected.							
	125 Hexachloro-1,3-butadiene	225	Compound Not Detected.							
	126 Naphthalene	128	Compound Not Detected.							
	127 1,2,3-Trichlorobenzene	180	Compound Not Detected.							

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34413.D
Report Date: 29-Apr-2017 22:54

QC Flag Legend

Q - Qualifier signal failed the ratio test.
D - User disabled compound identification.

Review Codes Legend

:

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34413.D
Report Date: 29-Apr-2017 22:54

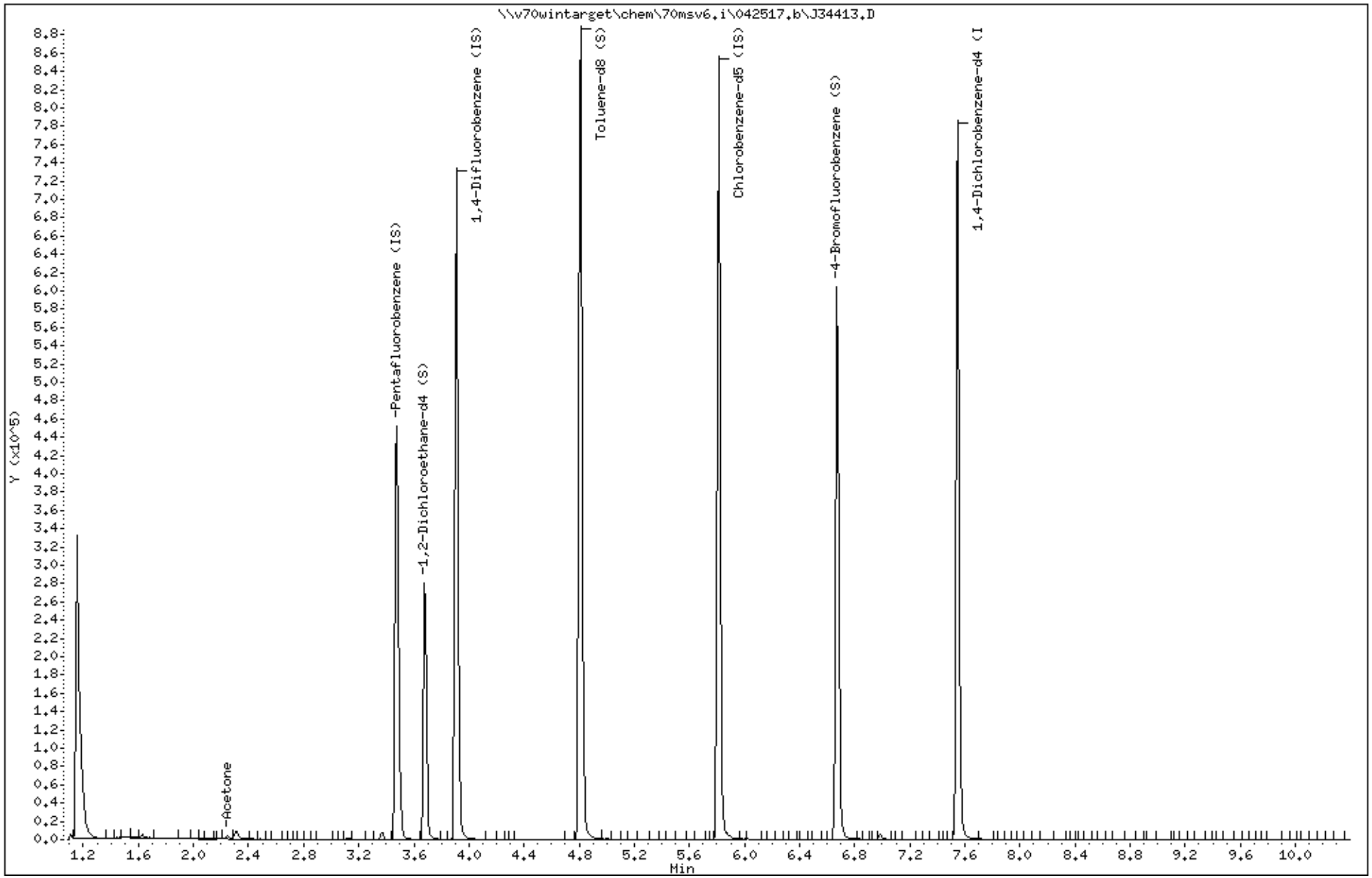
Pace Analytical Services, Inc.

SW846-8260C/EPA 624

Data file : \\v70wintarget\chem\70msv6.i\042517.b\J34413.D
Lab Smp Id: 7016438017 Client Smp ID: MW-3C
Inj Date : 25-APR-2017 17:55 MS Autotune Date: 17-MAR-2017 06:2
Operator : KGG Inst ID: 70msv6.i
Smp Info : 7016438017,
Misc Info : 2005,
Comment :
Method : \\v70wintarget\chem\70msv6.i\042517.b\032717_8260W.m
Meth Date : 29-Apr-2017 22:43 blagula Quant Type: ISTD
Cal Date : 27-MAR-2017 18:25 Cal File: J33244.D
Als bottle: 19
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A
Processing Host: 70MSV4WS10B6

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34413.D
Date : 25-APR-2017 17:55
Client ID: MW-3C
Instrument: 70msv6.i
Sample Info: 7016438017,
Purge Volume: 5.0
Operator: KGG
Column phase: RTX-624
Column diameter: 0.18



Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34413.D

Date : 25-APR-2017 17:55

Client ID: MW-3C

Instrument: 70msv6.i

Sample Info: 7016438017,

Purge Volume: 5.0

Operator: KGG

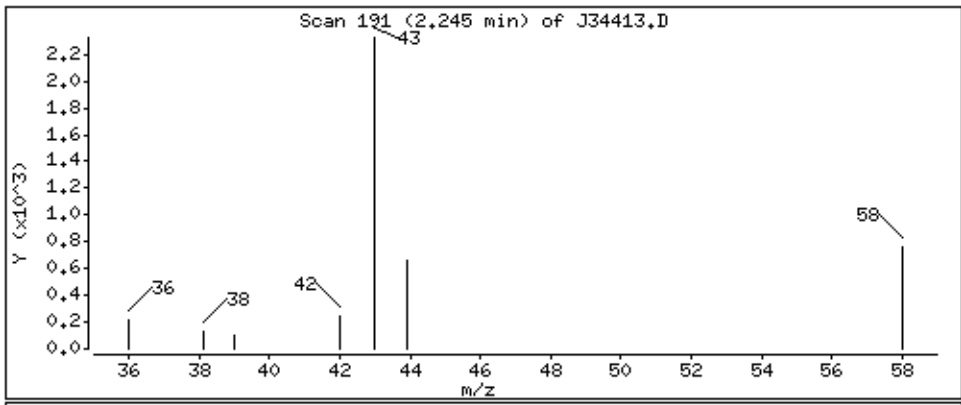
Column phase: RTX-624

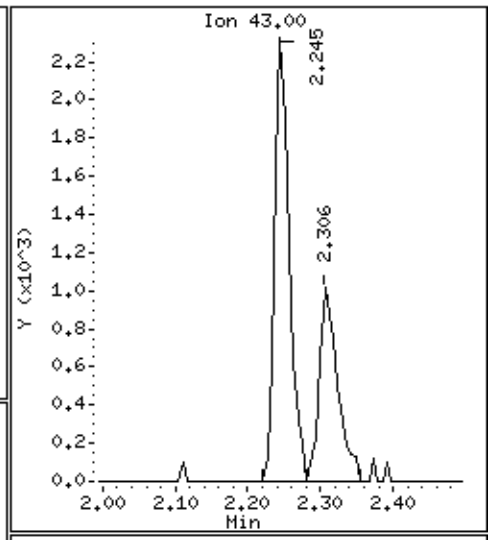
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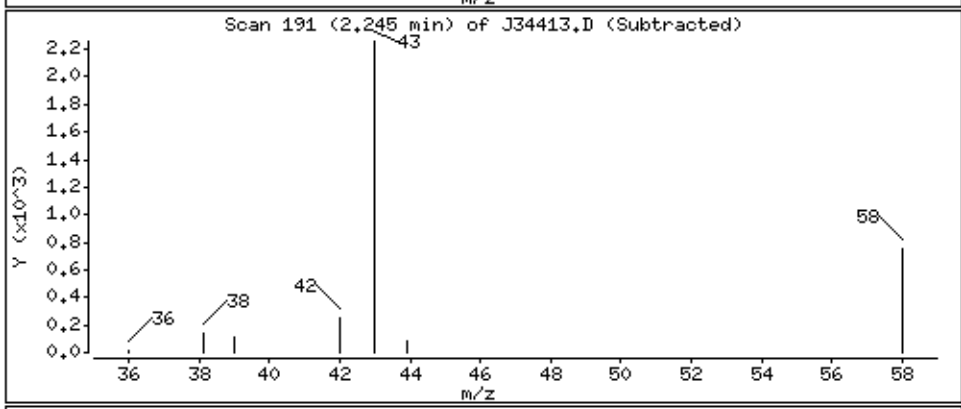
17 Acetone

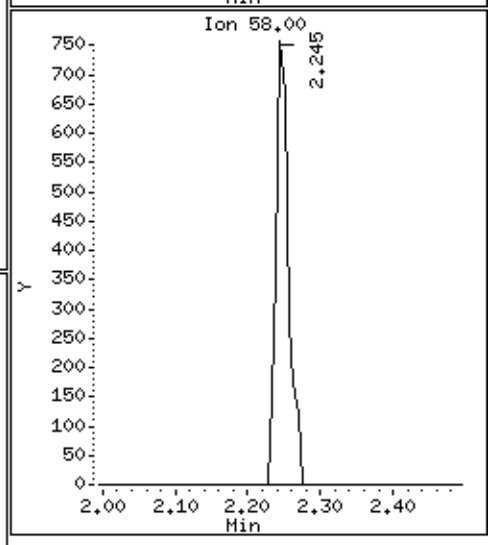
Concentration: 2.41 ug/L

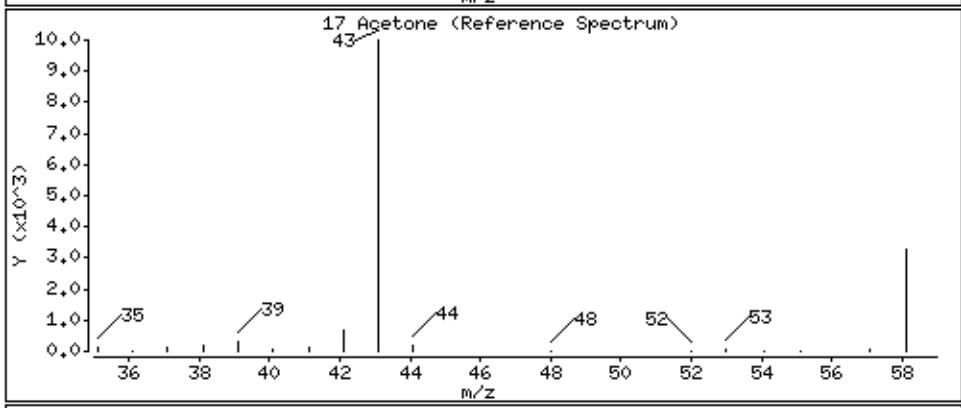
Review Code:

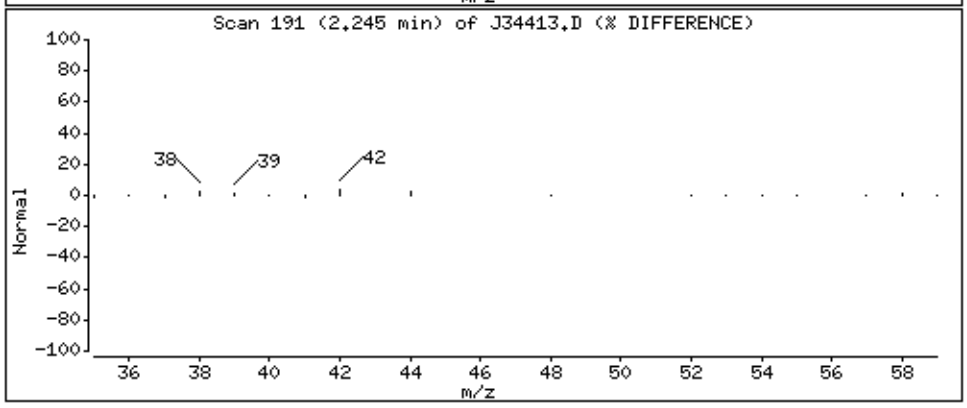












Data File: \\v70wintarget\chem\70msv6.i\042517.b/J34413.D
Injection Date: 25-APR-2017 17:55
Instrument: 70msv6.i
Lab Sample ID: 7016438017
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

SAMPLE NO.

MW-4A

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York Contract: NORTH SEA LANDFILL

Date Received: 04/21/2017 11:00 Matrix: Water SDG No.: 7016438

Date Extracted: 04/25/2017 18:13 Lab Sample ID: 7016438018

Date Analyzed: 04/25/2017 18:13 Lab File ID: 042517.B\J34414.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1 Instrument: 70MSV6 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	4.6	J
107-13-1	Acrylonitrile	<5.0	U
71-43-2	Benzene	<5.0	U
74-97-5	Bromochloromethane	<5.0	U
75-27-4	Bromodichloromethane	<5.0	U
75-25-2	Bromoform	<5.0	U
74-83-9	Bromomethane	<5.0	U
78-93-3	2-Butanone (MEK)	<5.0	U
75-15-0	Carbon disulfide	<5.0	U
56-23-5	Carbon tetrachloride	<5.0	U
108-90-7	Chlorobenzene	<5.0	U
75-00-3	Chloroethane	<5.0	U
67-66-3	Chloroform	4.2	J
74-87-3	Chloromethane	<5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	<5.0	U
124-48-1	Dibromochloromethane	<5.0	U
106-93-4	1,2-Dibromoethane (EDB)	<5.0	U
74-95-3	Dibromomethane	<5.0	U
95-50-1	1,2-Dichlorobenzene	<5.0	U
106-46-7	1,4-Dichlorobenzene	<5.0	U
110-57-6	trans-1,4-Dichloro-2-butene	<5.0	U
75-34-3	1,1-Dichloroethane	<5.0	U
107-06-2	1,2-Dichloroethane	<5.0	U
75-35-4	1,1-Dichloroethene	<5.0	U
156-59-2	cis-1,2-Dichloroethene	<5.0	U
156-60-5	trans-1,2-Dichloroethene	<5.0	U
78-87-5	1,2-Dichloropropane	<5.0	U
10061-01-5	cis-1,3-Dichloropropene	<5.0	U
10061-02-6	trans-1,3-Dichloropropene	<5.0	U
100-41-4	Ethylbenzene	<5.0	U
591-78-6	2-Hexanone	<5.0	U
74-88-4	Iodomethane	<5.0	U
75-09-2	Methylene Chloride	<5.0	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<5.0	U
100-42-5	Styrene	<5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	<5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	<5.0	U

SAMPLE NO.

MW-4A

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York Contract: NORTH SEA LANDFILL

Date Received: 04/21/2017 11:00 Matrix: Water SDG No.: 7016438

Date Extracted: 04/25/2017 18:13 Lab Sample ID: 7016438018

Date Analyzed: 04/25/2017 18:13 Lab File ID: 042517.B\J34414.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1 Instrument: 70MSV6 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
127-18-4	Tetrachloroethene	<5.0	U
108-88-3	Toluene	<5.0	U
71-55-6	1,1,1-Trichloroethane	<5.0	U
79-00-5	1,1,2-Trichloroethane	<5.0	U
79-01-6	Trichloroethene	<5.0	U
75-69-4	Trichlorofluoromethane	<5.0	U
96-18-4	1,2,3-Trichloropropane	<5.0	U
108-05-4	Vinyl acetate	<5.0	U
75-01-4	Vinyl chloride	<5.0	U
1330-20-7	Xylene (Total)	<5.0	U

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34414.D
Report Date: 29-Apr-2017 22:54

Pace Analytical Services, Inc.

SW846-8260C/EPA 624

Data file : \\v70wintarget\chem\70msv6.i\042517.b\J34414.D
Lab Smp Id: 7016438018 Client Smp ID: MW-4A
Inj Date : 25-APR-2017 18:13 MS Autotune Date: 17-MAR-2017 06:2
Operator : KGG Inst ID: 70msv6.i
Smp Info : 7016438018,
Misc Info : 2005,
Comment :
Method : \\v70wintarget\chem\70msv6.i\042517.b\032717_8260W.m
Meth Date : 29-Apr-2017 22:43 blagula Quant Type: ISTD
Cal Date : 27-MAR-2017 18:25 Cal File: J33244.D
Als bottle: 20
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A
Processing Host: 70MSV4WS10B6

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)	REVIEW C
1 Chlorodifluoromethane	51	Compound Not Detected.						
2 Dichlorotetrafluoroethane	135	Compound Not Detected.						
3 Dichlorodifluoromethane	85	Compound Not Detected.						
4 Chloromethane	50	Compound Not Detected.						
5 Vinyl chloride	62	Compound Not Detected.						
6 1,3-Butadiene	54	Compound Not Detected.						
7 Acetaldehyde	44	Compound Not Detected.						
8 Bromomethane	94	Compound Not Detected.						
9 Chloroethane	64	Compound Not Detected.						
10 Dichlorofluoromethane	67	Compound Not Detected.						
11 Trichlorofluoromethane	101	Compound Not Detected.						
12 Ethanol	45	Compound Not Detected.						
13 Diethyl ether (Ethyl ether)	59	Compound Not Detected.						
16 1,1,2-Trichlorotrifluoroethane	101	Compound Not Detected.						
14 Acrolein	56	Compound Not Detected.						
15 1,1-Dichloroethene	96	Compound Not Detected.						
17 Acetone	43	2.244	2.245	(0.646)	6298	4.57449	4.57	
18 Iodomethane	142	Compound Not Detected.						
19 2-Propanol	45	Compound Not Detected.						(D)
20 Carbon disulfide	76	Compound Not Detected.						
21 Allyl chloride	76	Compound Not Detected.						
22 Acetonitrile	41	Compound Not Detected.						

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34414.D
Report Date: 29-Apr-2017 22:54

			QUANT SIG					CONCENTRATIONS ON-COLUMN	FINAL	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)	REVIEW C
	23	Methyl acetate	43	Compound Not Detected.						
	24	Methylene Chloride	84	Compound Not Detected.						
	25	tert-Butyl Alcohol	59	Compound Not Detected.						
	28	Methyl-tert-butyl ether	73	Compound Not Detected.						
	27	trans-1,2-Dichloroethene	96	Compound Not Detected.						
	26	Acrylonitrile	53	Compound Not Detected.						
	30	n-Hexane	57	Compound Not Detected.						
	29	Diisopropyl ether	45	Compound Not Detected.						
	32	Vinyl acetate	43	Compound Not Detected.						
	31	1,1-Dichloroethane	63	Compound Not Detected.						
	33	Chloroprene	53	Compound Not Detected.						
	34	Ethyl-tert-butyl ether	59	Compound Not Detected.						
	36	2,2-Dichloropropane	77	Compound Not Detected.						
	35	cis-1,2-Dichloroethene	96	Compound Not Detected.						
	39	Ethyl acetate	61	Compound Not Detected.						
	37	2-Butanone (MEK)	43	Compound Not Detected.						
	41	Bromochloromethane	128	Compound Not Detected.						
	42	Tetrahydrofuran	42	Compound Not Detected.						
	43	Chloroform	83	3.372	3.366	(0.970)	27903	4.17548	4.18	
	38	Propionitrile	54	Compound Not Detected.						
	46	Cyclohexane	56	Compound Not Detected.						
	45	1,1,1-Trichloroethane	97	Compound Not Detected.						
*	44	Pentafluorobenzene (IS)	168	3.476	3.476	(1.000)	232856	50.0000	(Q)	
	48	Carbon tetrachloride	117	Compound Not Detected.						(D)
	47	1,1-Dichloropropene	75	Compound Not Detected.						(D)
	55	2,2,4-Trimethylpentane	57	Compound Not Detected.						
	51	Benzene	78	Compound Not Detected.						
	40	Methacrylonitrile	67	Compound Not Detected.						
$	50	1,2-Dichloroethane-d4 (S)	65	3.677	3.677	(0.941)	133823	45.9970	46.0	
	56	tert-Amylmethyl ether	73	Compound Not Detected.						
	52	1,2-Dichloroethane	62	Compound Not Detected.						
	57	n-Heptane	43	Compound Not Detected.						
*	58	1,4-Difluorobenzene (IS)	114	3.909	3.909	(1.000)	408477	50.0000		
	59	Trichloroethene	95	Compound Not Detected.						
	60	Methylcyclohexane	83	Compound Not Detected.						
	49	Isobutanol	43	Compound Not Detected.						
	53	tert-Amyl Alcohol	59	Compound Not Detected.						
	54	tert-Amyl ethyl ether	59	Compound Not Detected.						
	61	1,2-Dichloropropane	63	Compound Not Detected.						
	63	Methyl methacrylate	69	Compound Not Detected.						
	64	1,4-Dioxane (p-Dioxane)	88	Compound Not Detected.						
	62	Dibromomethane	93	Compound Not Detected.						
	65	Bromodichloromethane	83	Compound Not Detected.						
	66	2-Nitropropane	43	Compound Not Detected.						
	67	2-Chloroethylvinyl ether	63	Compound Not Detected.						
	68	cis-1,3-Dichloropropene	75	Compound Not Detected.						
	69	4-Methyl-2-pentanone (MIBK)	43	Compound Not Detected.						
$	70	Toluene-d8 (S)	98	4.811	4.811	(0.828)	474918	55.4056	55.4	
	71	Toluene	91	Compound Not Detected.						
	72	Methyl isothiocyanate	73	Compound Not Detected.						
	74	trans-1,3-Dichloropropene	75	Compound Not Detected.						
	75	Ethyl methacrylate	69	Compound Not Detected.						(D)
	76	1,1,2-Trichloroethane	83	Compound Not Detected.						
	77	Tetrachloroethene	166	Compound Not Detected.						

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34414.D
Report Date: 29-Apr-2017 22:54

							CONCENTRATIONS		
		QUANT SIG					ON-COLUMN	FINAL	
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)	REVIEW C
	78 1,3-Dichloropropane	76	Compound Not Detected.						
	79 2-Hexanone	43	Compound Not Detected.						
	73 n-Octane	43	Compound Not Detected.						
	81 n-Butyl acetate	43	Compound Not Detected.						
	80 Dibromochloromethane	129	Compound Not Detected.						
	82 1,2-Dibromoethane (EDB)	107	Compound Not Detected.						
*	83 Chlorobenzene-d5 (IS)	82	5.811	5.811	(1.000)	225018	50.0000		
	84 Chlorobenzene	112	Compound Not Detected.						
	86 Ethylbenzene	106	Compound Not Detected.						
	85 1,1,1,2-Tetrachloroethane	131	Compound Not Detected.						
	88 n-Nonane	43	Compound Not Detected.						(D)
	87 m&p-Xylene	106	Compound Not Detected.						
	89 o-Xylene	106	Compound Not Detected.						
	90 Styrene	104	Compound Not Detected.						
	91 Bromoform	173	Compound Not Detected.						
	92 Isopropylbenzene (Cumene)	105	Compound Not Detected.						
$	93 4-Bromofluorobenzene (S)	95	6.670	6.671	(1.148)	178549	58.4573	58.4	
	94 Bromobenzene	156	Compound Not Detected.						
	95 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.						
	98 n-Propylbenzene	91	Compound Not Detected.						
	96 1,2,3-Trichloropropane	110	Compound Not Detected.						
	97 trans-1,4-Dichloro-2-butene	53	Compound Not Detected.						
	103 n-Decane	43	Compound Not Detected.						
	99 2-Chlorotoluene	91	Compound Not Detected.						
	100 4-Ethyltoluene	105	Compound Not Detected.						
	101 1,3,5-Trimethylbenzene	105	Compound Not Detected.						
	102 4-Chlorotoluene	91	Compound Not Detected.						
	104 tert-Butylbenzene	119	Compound Not Detected.						
	105 Pentachloroethane	167	Compound Not Detected.						
	106 1,2,4-Trimethylbenzene	105	Compound Not Detected.						
	107 sec-Butylbenzene	105	Compound Not Detected.						
	109 d-Limonene	136	Compound Not Detected.						
	110 p-Isopropyltoluene	119	Compound Not Detected.						
	108 1,3-Dichlorobenzene	146	Compound Not Detected.						
*	111 1,4-Dichlorobenzene-d4 (IS)	152	7.548	7.549	(1.000)	183998	50.0000		
	112 1,4-Dichlorobenzene	146	Compound Not Detected.						
	113 1,2,3-Trimethylbenzene	105	Compound Not Detected.						
	114 Benzyl chloride	91	Compound Not Detected.						
	115 trans-Decalin	138	Compound Not Detected.						
	116 1,4-Diethylbenzene	119	Compound Not Detected.						
	117 n-Butylbenzene	91	Compound Not Detected.						
	119 n-Undecane	43	Compound Not Detected.						
	118 1,2-Dichlorobenzene	146	Compound Not Detected.						
	120 cis-Decalin	138	Compound Not Detected.						
	121 1,2,4,5-tetramethylbenzene	119	Compound Not Detected.						
	122 1,2-Dibromo-3-chloropropane	75	Compound Not Detected.						
	123 n-Dodecane	43	Compound Not Detected.						
	124 1,2,4-Trichlorobenzene	180	Compound Not Detected.						
	125 Hexachloro-1,3-butadiene	225	Compound Not Detected.						
	126 Naphthalene	128	Compound Not Detected.						
	127 1,2,3-Trichlorobenzene	180	Compound Not Detected.						

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34414.D
Report Date: 29-Apr-2017 22:54

QC Flag Legend

Q - Qualifier signal failed the ratio test.
D - User disabled compound identification.

Review Codes Legend

:

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34414.D
Report Date: 29-Apr-2017 22:54

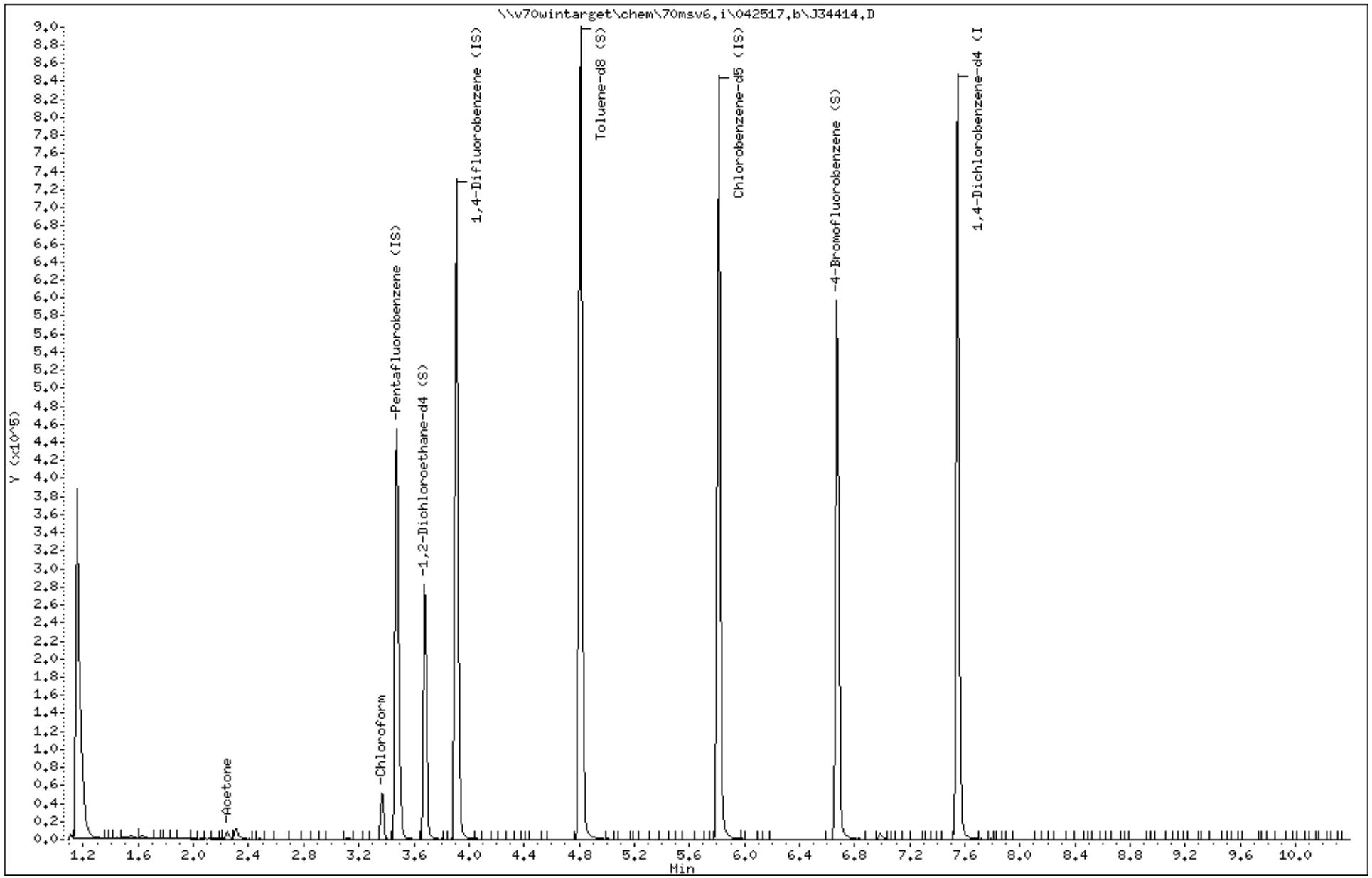
Pace Analytical Services, Inc.

SW846-8260C/EPA 624

Data file : \\v70wintarget\chem\70msv6.i\042517.b\J34414.D
Lab Smp Id: 7016438018 Client Smp ID: MW-4A
Inj Date : 25-APR-2017 18:13 MS Autotune Date: 17-MAR-2017 06:2
Operator : KGG Inst ID: 70msv6.i
Smp Info : 7016438018,
Misc Info : 2005,
Comment :
Method : \\v70wintarget\chem\70msv6.i\042517.b\032717_8260W.m
Meth Date : 29-Apr-2017 22:43 blagula Quant Type: ISTD
Cal Date : 27-MAR-2017 18:25 Cal File: J33244.D
Als bottle: 20
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A
Processing Host: 70MSV4WS10B6

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34414.D
Date : 25-APR-2017 18:13
Client ID: MW-4A
Instrument: 70msv6.i
Sample Info: 7016438018,
Purge Volume: 5.0
Operator: KGG
Column phase: RTX-624
Column diameter: 0.18



Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34414.D

Date : 25-APR-2017 18:13

Client ID: MW-4A

Instrument: 70msv6.i

Sample Info: 7016438018,

Purge Volume: 5.0

Operator: KGG

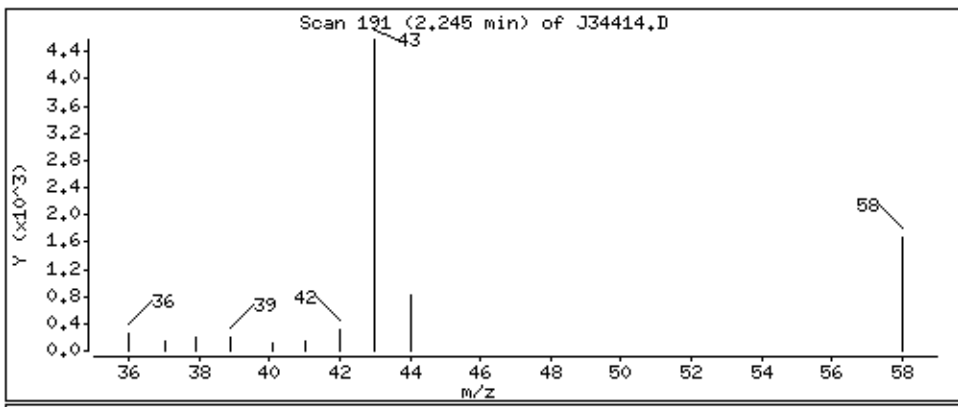
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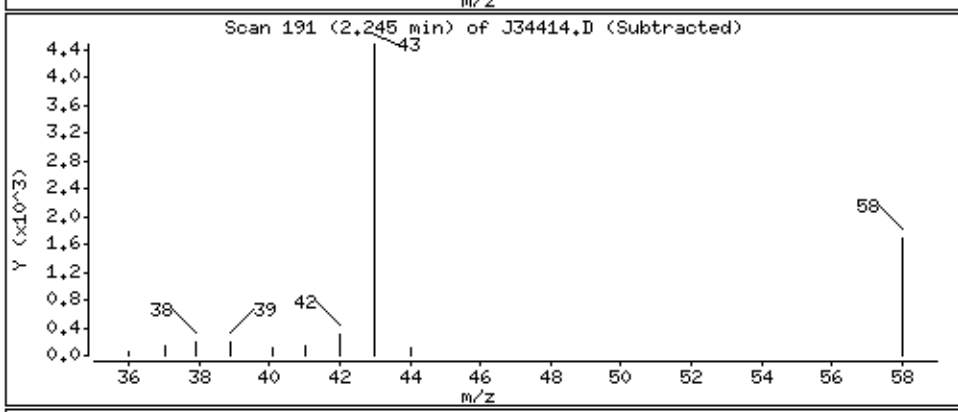
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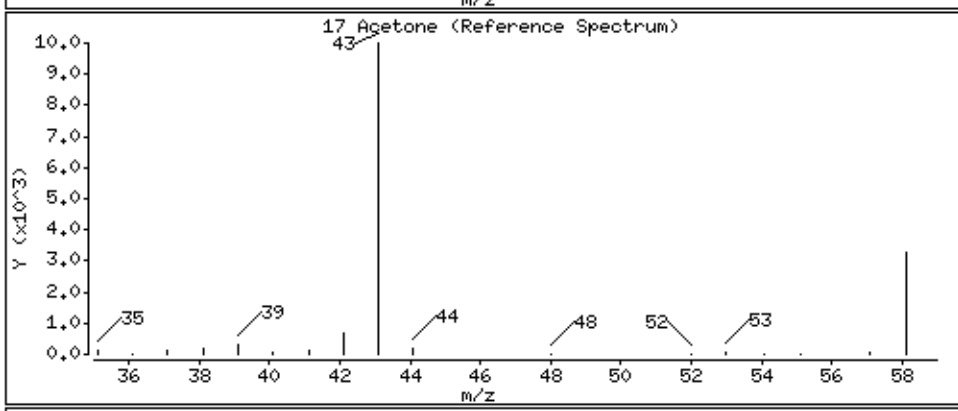
17 Acetone

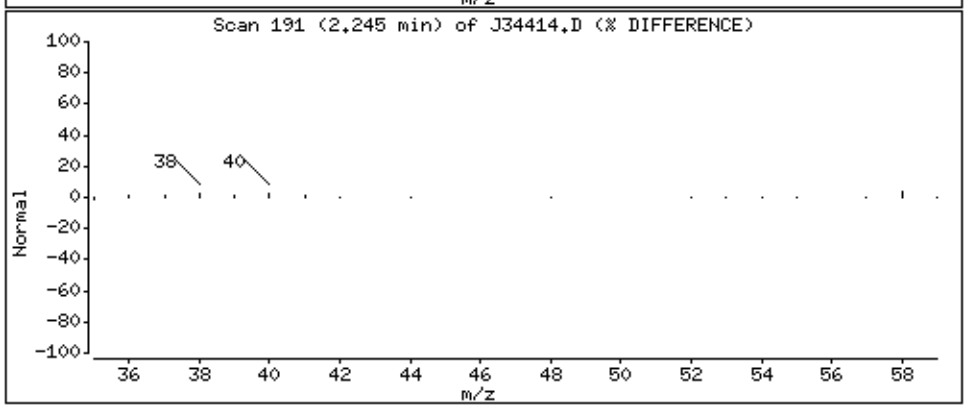
Concentration: 4.57 ug/L

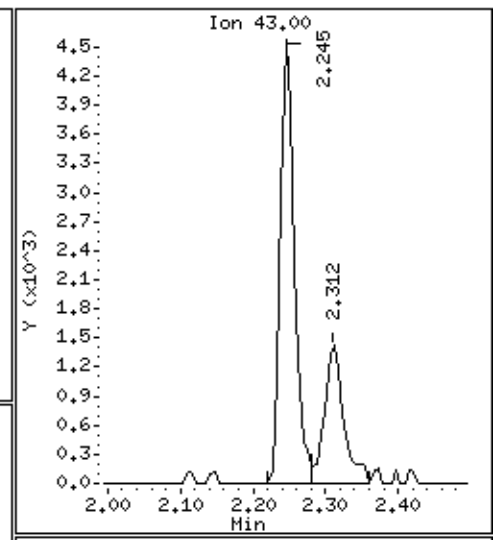
Review Code:

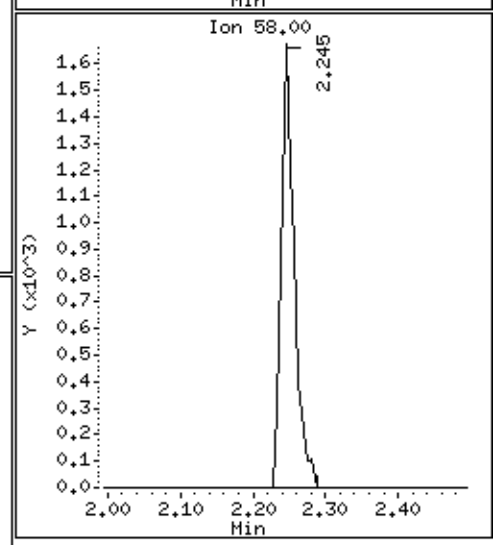












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34414.D

Date : 25-APR-2017 18:13

Client ID: MW-4A

Instrument: 70msv6.i

Sample Info: 7016438018,

Purge Volume: 5.0

Operator: KGG

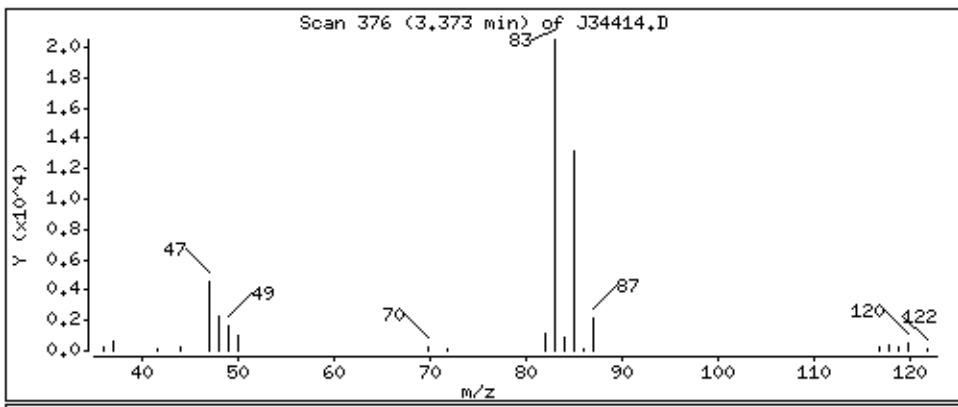
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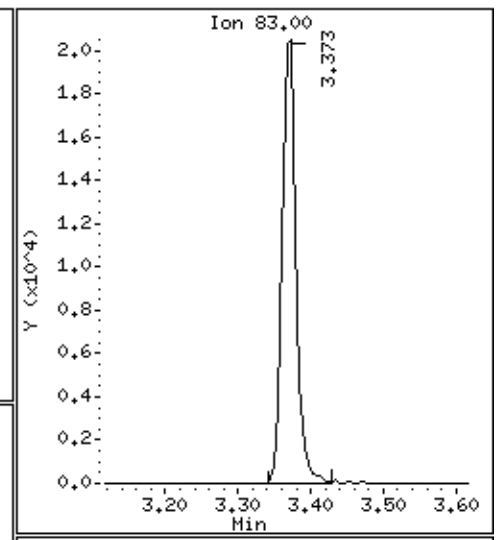
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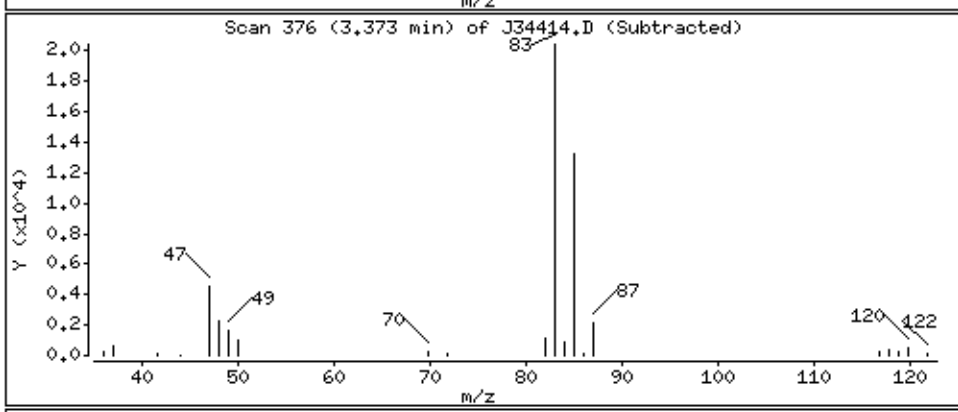
43 Chloroform

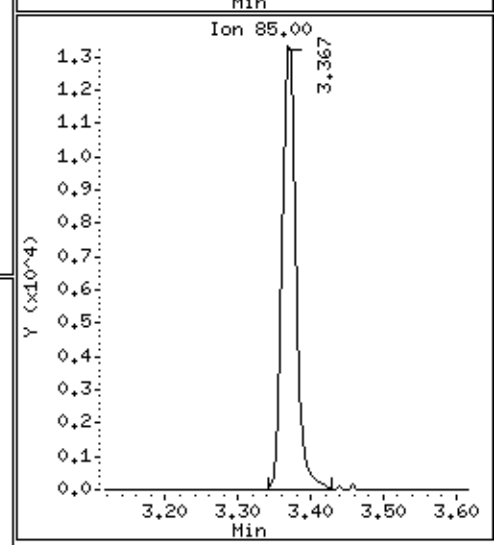
Concentration: 4.18 ug/L

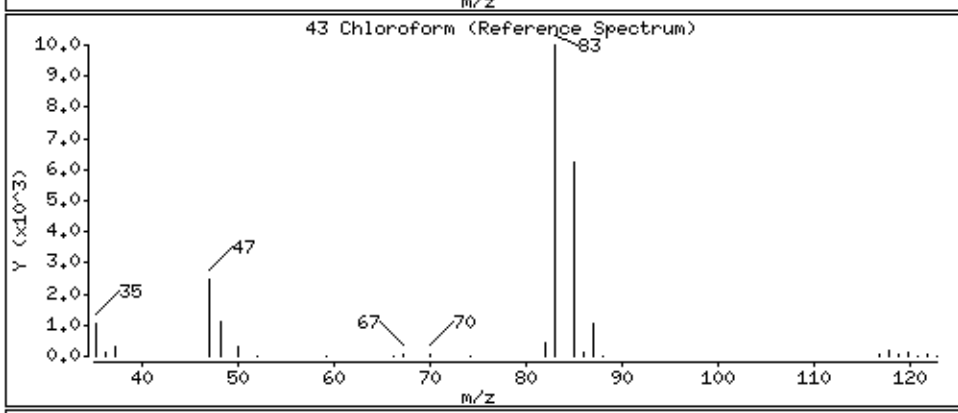
Review Code:

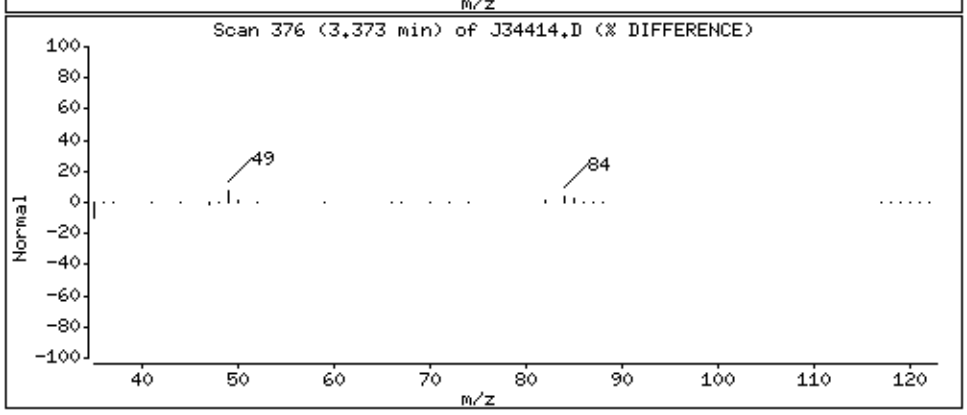












Data File: \\v70wintarget\chem\70msv6.i\042517.b/J34414.D
Injection Date: 25-APR-2017 18:13
Instrument: 70msv6.i
Lab Sample ID: 7016438018
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

SAMPLE NO.

MW-4B

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York Contract: NORTH SEA LANDFILL

Date Received: 04/21/2017 11:00 Matrix: Water SDG No.: 7016438

Date Extracted: 04/25/2017 18:31 Lab Sample ID: 7016438019

Date Analyzed: 04/25/2017 18:31 Lab File ID: 042517.B\J34415.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1 Instrument: 70MSV6 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	2.4	J
107-13-1	Acrylonitrile	<5.0	U
71-43-2	Benzene	<5.0	U
74-97-5	Bromochloromethane	<5.0	U
75-27-4	Bromodichloromethane	<5.0	U
75-25-2	Bromoform	<5.0	U
74-83-9	Bromomethane	<5.0	U
78-93-3	2-Butanone (MEK)	<5.0	U
75-15-0	Carbon disulfide	<5.0	U
56-23-5	Carbon tetrachloride	<5.0	U
108-90-7	Chlorobenzene	<5.0	U
75-00-3	Chloroethane	<5.0	U
67-66-3	Chloroform	<5.0	U
74-87-3	Chloromethane	<5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	<5.0	U
124-48-1	Dibromochloromethane	<5.0	U
106-93-4	1,2-Dibromoethane (EDB)	<5.0	U
74-95-3	Dibromomethane	<5.0	U
95-50-1	1,2-Dichlorobenzene	<5.0	U
106-46-7	1,4-Dichlorobenzene	1.2	J
110-57-6	trans-1,4-Dichloro-2-butene	<5.0	U
75-34-3	1,1-Dichloroethane	<5.0	U
107-06-2	1,2-Dichloroethane	<5.0	U
75-35-4	1,1-Dichloroethene	<5.0	U
156-59-2	cis-1,2-Dichloroethene	<5.0	U
156-60-5	trans-1,2-Dichloroethene	<5.0	U
78-87-5	1,2-Dichloropropane	<5.0	U
10061-01-5	cis-1,3-Dichloropropene	<5.0	U
10061-02-6	trans-1,3-Dichloropropene	<5.0	U
100-41-4	Ethylbenzene	<5.0	U
591-78-6	2-Hexanone	<5.0	U
74-88-4	Iodomethane	<5.0	U
75-09-2	Methylene Chloride	<5.0	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<5.0	U
100-42-5	Styrene	<5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	<5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	<5.0	U

SAMPLE NO.

MW-4B

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York Contract: NORTH SEA LANDFILL

Date Received: 04/21/2017 11:00 Matrix: Water SDG No.: 7016438

Date Extracted: 04/25/2017 18:31 Lab Sample ID: 7016438019

Date Analyzed: 04/25/2017 18:31 Lab File ID: 042517.B\J34415.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1 Instrument: 70MSV6 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
127-18-4	Tetrachloroethene	<5.0	U
108-88-3	Toluene	<5.0	U
71-55-6	1,1,1-Trichloroethane	<5.0	U
79-00-5	1,1,2-Trichloroethane	<5.0	U
79-01-6	Trichloroethene	<5.0	U
75-69-4	Trichlorofluoromethane	<5.0	U
96-18-4	1,2,3-Trichloropropane	<5.0	U
108-05-4	Vinyl acetate	<5.0	U
75-01-4	Vinyl chloride	<5.0	U
1330-20-7	Xylene (Total)	<5.0	U

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34415.D
Report Date: 29-Apr-2017 22:54

Pace Analytical Services, Inc.

SW846-8260C/EPA 624

Data file : \\v70wintarget\chem\70msv6.i\042517.b\J34415.D
Lab Smp Id: 7016438019 Client Smp ID: MW-4B
Inj Date : 25-APR-2017 18:31 MS Autotune Date: 17-MAR-2017 06:2
Operator : KGG Inst ID: 70msv6.i
Smp Info : 7016438019,
Misc Info : 2005,
Comment :
Method : \\v70wintarget\chem\70msv6.i\042517.b\032717_8260W.m
Meth Date : 29-Apr-2017 22:43 blagula Quant Type: ISTD
Cal Date : 27-MAR-2017 18:25 Cal File: J33244.D
Als bottle: 21
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A
Processing Host: 70MSV4WS10B6

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)	REVIEW C
1 Chlorodifluoromethane	51	Compound Not Detected.						
2 Dichlorotetrafluoroethane	135	Compound Not Detected.						
3 Dichlorodifluoromethane	85	Compound Not Detected.						
4 Chloromethane	50	Compound Not Detected.						
5 Vinyl chloride	62	Compound Not Detected.						
6 1,3-Butadiene	54	Compound Not Detected.						
7 Acetaldehyde	44	Compound Not Detected.						
8 Bromomethane	94	Compound Not Detected.						
9 Chloroethane	64	Compound Not Detected.						
10 Dichlorofluoromethane	67	Compound Not Detected.						
11 Trichlorofluoromethane	101	Compound Not Detected.						
12 Ethanol	45	Compound Not Detected.						
13 Diethyl ether (Ethyl ether)	59	Compound Not Detected.						
16 1,1,2-Trichlorotrifluoroethane	101	Compound Not Detected.						
14 Acrolein	56	Compound Not Detected.						
15 1,1-Dichloroethene	96	Compound Not Detected.						
17 Acetone	43	2.245	2.245	(0.646)	3378	2.43923	2.44	
18 Iodomethane	142	Compound Not Detected.						
19 2-Propanol	45	Compound Not Detected.						(D)
20 Carbon disulfide	76	Compound Not Detected.						
21 Allyl chloride	76	Compound Not Detected.						
22 Acetonitrile	41	Compound Not Detected.						

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34415.D
Report Date: 29-Apr-2017 22:54

			QUANT SIG					CONCENTRATIONS ON-COLUMN	FINAL	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)	REVIEW C
	23	Methyl acetate	43	Compound Not Detected.						
	24	Methylene Chloride	84	Compound Not Detected.						
	25	tert-Butyl Alcohol	59	Compound Not Detected.						(D)
	28	Methyl-tert-butyl ether	73	Compound Not Detected.						
	27	trans-1,2-Dichloroethene	96	Compound Not Detected.						
	26	Acrylonitrile	53	Compound Not Detected.						
	30	n-Hexane	57	Compound Not Detected.						
	29	Diisopropyl ether	45	Compound Not Detected.						
	32	Vinyl acetate	43	Compound Not Detected.						
	31	1,1-Dichloroethane	63	Compound Not Detected.						
	33	Chloroprene	53	Compound Not Detected.						
	34	Ethyl-tert-butyl ether	59	Compound Not Detected.						
	36	2,2-Dichloropropane	77	Compound Not Detected.						
	35	cis-1,2-Dichloroethene	96	Compound Not Detected.						
	39	Ethyl acetate	61	Compound Not Detected.						
	37	2-Butanone (MEK)	43	Compound Not Detected.						
	41	Bromochloromethane	128	Compound Not Detected.						
	42	Tetrahydrofuran	42	Compound Not Detected.						
	43	Chloroform	83	Compound Not Detected.						
	38	Propionitrile	54	Compound Not Detected.						
	46	Cyclohexane	56	Compound Not Detected.						
	45	1,1,1-Trichloroethane	97	Compound Not Detected.						
*	44	Pentafluorobenzene (IS)	168	3.476	3.476	(1.000)	234226	50.0000	(Q)	
	48	Carbon tetrachloride	117	Compound Not Detected.						(D)
	47	1,1-Dichloropropene	75	Compound Not Detected.						(D)
	55	2,2,4-Trimethylpentane	57	Compound Not Detected.						
	51	Benzene	78	Compound Not Detected.						
	40	Methacrylonitrile	67	Compound Not Detected.						
$	50	1,2-Dichloroethane-d4 (S)	65	3.677	3.677	(0.941)	131582	45.7406	45.7	
	56	tert-Amylmethyl ether	73	Compound Not Detected.						
	52	1,2-Dichloroethane	62	Compound Not Detected.						
	57	n-Heptane	43	Compound Not Detected.						
*	58	1,4-Difluorobenzene (IS)	114	3.909	3.909	(1.000)	403888	50.0000		
	59	Trichloroethene	95	Compound Not Detected.						
	60	Methylcyclohexane	83	Compound Not Detected.						
	49	Isobutanol	43	Compound Not Detected.						
	53	tert-Amyl Alcohol	59	Compound Not Detected.						
	54	tert-Amyl ethyl ether	59	Compound Not Detected.						
	61	1,2-Dichloropropane	63	Compound Not Detected.						
	63	Methyl methacrylate	69	Compound Not Detected.						
	64	1,4-Dioxane (p-Dioxane)	88	Compound Not Detected.						
	62	Dibromomethane	93	Compound Not Detected.						
	65	Bromodichloromethane	83	Compound Not Detected.						
	66	2-Nitropropane	43	Compound Not Detected.						
	67	2-Chloroethylvinyl ether	63	Compound Not Detected.						
	68	cis-1,3-Dichloropropene	75	Compound Not Detected.						
	69	4-Methyl-2-pentanone (MIBK)	43	Compound Not Detected.						
$	70	Toluene-d8 (S)	98	4.811	4.811	(0.828)	474036	55.9208	55.9	
	71	Toluene	91	Compound Not Detected.						
	72	Methyl isothiocyanate	73	Compound Not Detected.						
	74	trans-1,3-Dichloropropene	75	Compound Not Detected.						
	75	Ethyl methacrylate	69	Compound Not Detected.						(D)
	76	1,1,2-Trichloroethane	83	Compound Not Detected.						
	77	Tetrachloroethene	166	Compound Not Detected.						

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34415.D
Report Date: 29-Apr-2017 22:54

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)	REVIEW C
78	1,3-Dichloropropane	76	Compound Not Detected.						
79	2-Hexanone	43	Compound Not Detected.						
73	n-Octane	43	Compound Not Detected.						
81	n-Butyl acetate	43	Compound Not Detected.						
80	Dibromochloromethane	129	Compound Not Detected.						
82	1,2-Dibromoethane (EDB)	107	Compound Not Detected.						
* 83	Chlorobenzene-d5 (IS)	82	5.811	5.811	(1.000)	222531	50.0000		
84	Chlorobenzene	112	Compound Not Detected.						
86	Ethylbenzene	106	Compound Not Detected.						
85	1,1,1,2-Tetrachloroethane	131	Compound Not Detected.						
88	n-Nonane	43	Compound Not Detected.						(D)
87	m&p-Xylene	106	Compound Not Detected.						
89	o-Xylene	106	Compound Not Detected.						
90	Styrene	104	Compound Not Detected.						
91	Bromoform	173	Compound Not Detected.						
92	Isopropylbenzene (Cumene)	105	Compound Not Detected.						
$ 93	4-Bromofluorobenzene (S)	95	6.671	6.671	(1.148)	179101	59.2934	59.3	
94	Bromobenzene	156	Compound Not Detected.						
95	1,1,2,2-Tetrachloroethane	83	Compound Not Detected.						
98	n-Propylbenzene	91	Compound Not Detected.						
96	1,2,3-Trichloropropane	110	Compound Not Detected.						
97	trans-1,4-Dichloro-2-butene	53	Compound Not Detected.						
103	n-Decane	43	Compound Not Detected.						
99	2-Chlorotoluene	91	Compound Not Detected.						
100	4-Ethyltoluene	105	Compound Not Detected.						
101	1,3,5-Trimethylbenzene	105	Compound Not Detected.						
102	4-Chlorotoluene	91	Compound Not Detected.						
104	tert-Butylbenzene	119	Compound Not Detected.						
105	Pentachloroethane	167	Compound Not Detected.						
106	1,2,4-Trimethylbenzene	105	Compound Not Detected.						
107	sec-Butylbenzene	105	Compound Not Detected.						
109	d-Limonene	136	Compound Not Detected.						
110	p-Isopropyltoluene	119	Compound Not Detected.						
108	1,3-Dichlorobenzene	146	Compound Not Detected.						(D)
* 111	1,4-Dichlorobenzene-d4 (IS)	152	7.548	7.549	(1.000)	182643	50.0000		
112	1,4-Dichlorobenzene	146	7.567	7.567	(1.002)	8669	1.17431	1.17(Q)	
113	1,2,3-Trimethylbenzene	105	Compound Not Detected.						
114	Benzyl chloride	91	Compound Not Detected.						
115	trans-Decalin	138	Compound Not Detected.						
116	1,4-Diethylbenzene	119	Compound Not Detected.						
117	n-Butylbenzene	91	Compound Not Detected.						
119	n-Undecane	43	Compound Not Detected.						
118	1,2-Dichlorobenzene	146	Compound Not Detected.						
120	cis-Decalin	138	Compound Not Detected.						
121	1,2,4,5-tetramethylbenzene	119	Compound Not Detected.						
122	1,2-Dibromo-3-chloropropane	75	Compound Not Detected.						
123	n-Dodecane	43	Compound Not Detected.						(D)
124	1,2,4-Trichlorobenzene	180	Compound Not Detected.						
125	Hexachloro-1,3-butadiene	225	Compound Not Detected.						
126	Naphthalene	128	Compound Not Detected.						
127	1,2,3-Trichlorobenzene	180	Compound Not Detected.						

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34415.D
Report Date: 29-Apr-2017 22:54

QC Flag Legend

Q - Qualifier signal failed the ratio test.
D - User disabled compound identification.

Review Codes Legend

:

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34415.D
Report Date: 29-Apr-2017 22:54

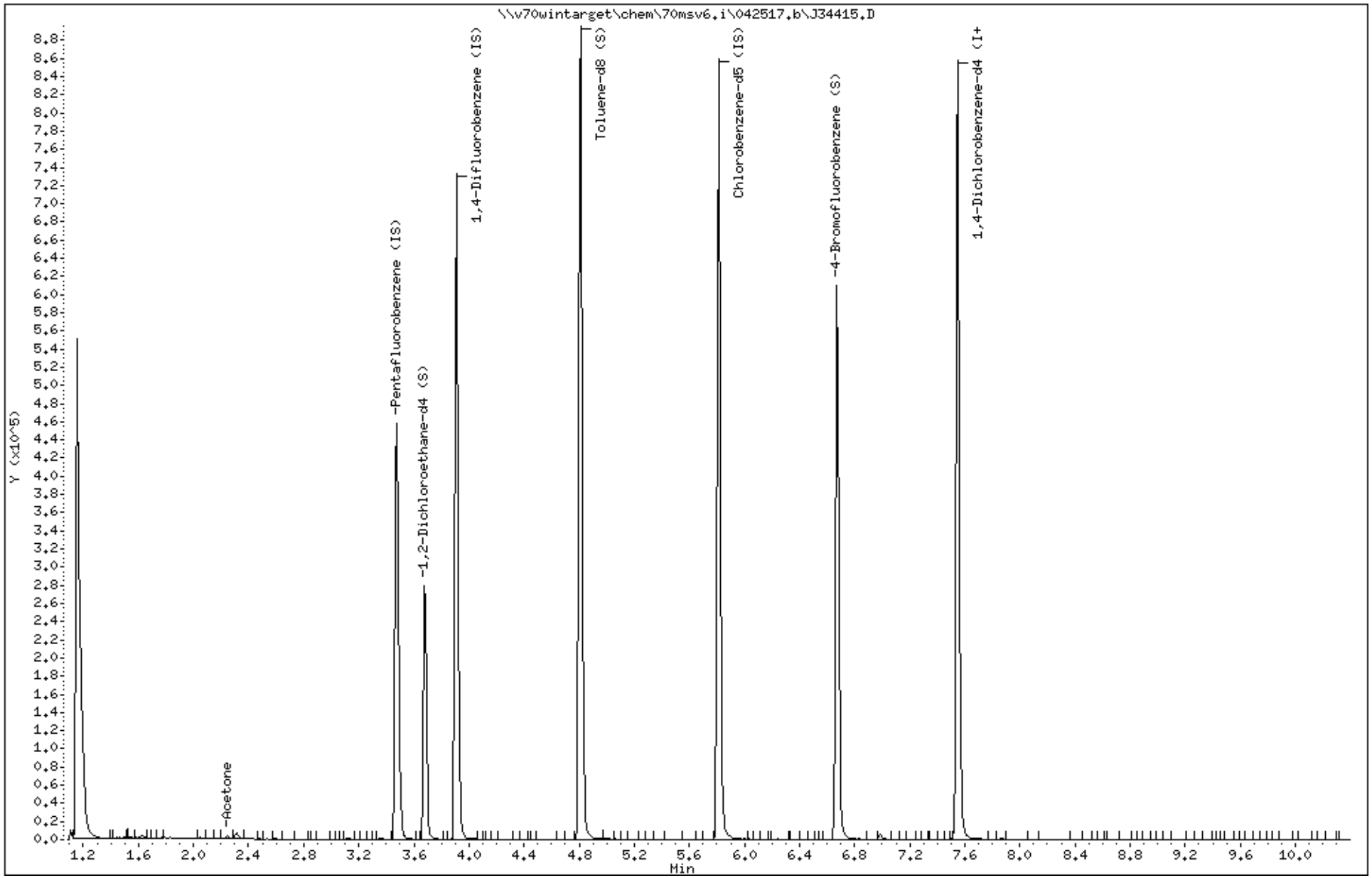
Pace Analytical Services, Inc.

SW846-8260C/EPA 624

Data file : \\v70wintarget\chem\70msv6.i\042517.b\J34415.D
Lab Smp Id: 7016438019 Client Smp ID: MW-4B
Inj Date : 25-APR-2017 18:31 MS Autotune Date: 17-MAR-2017 06:2
Operator : KGG Inst ID: 70msv6.i
Smp Info : 7016438019,
Misc Info : 2005,
Comment :
Method : \\v70wintarget\chem\70msv6.i\042517.b\032717_8260W.m
Meth Date : 29-Apr-2017 22:43 blagula Quant Type: ISTD
Cal Date : 27-MAR-2017 18:25 Cal File: J33244.D
Als bottle: 21
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A
Processing Host: 70MSV4WS10B6

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34415.D
Date : 25-APR-2017 18:31
Client ID: MW-4B
Instrument: 70msv6.i
Sample Info: 7016438019,
Purge Volume: 5.0
Operator: KGG
Column phase: RTX-624
Column diameter: 0.18



Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34415.D

Date : 25-APR-2017 18:31

Client ID: MW-4B

Instrument: 70msv6.i

Sample Info: 7016438019,

Purge Volume: 5.0

Operator: KGG

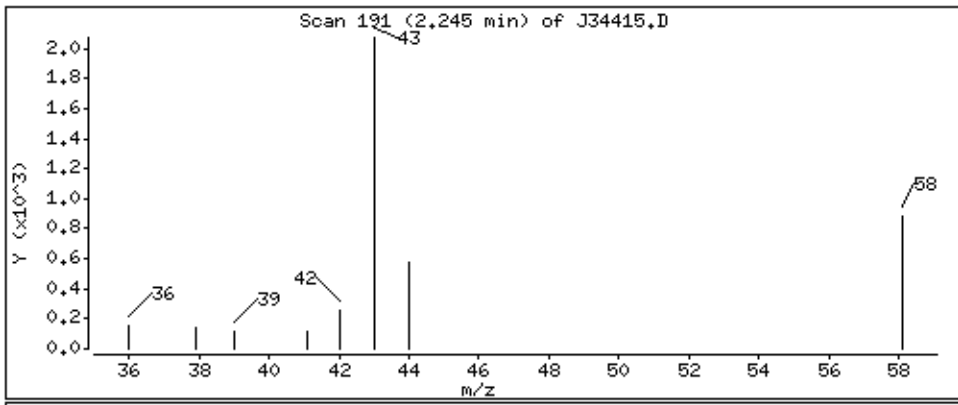
Column phase: RTX-624

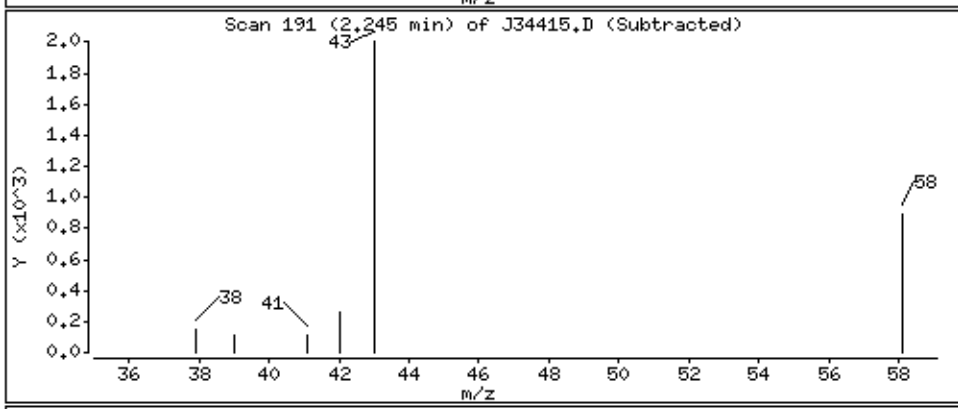
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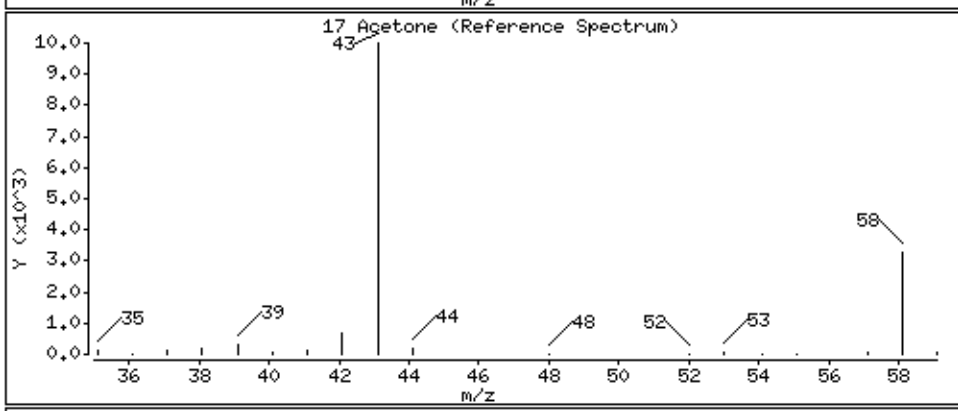
17 Acetone

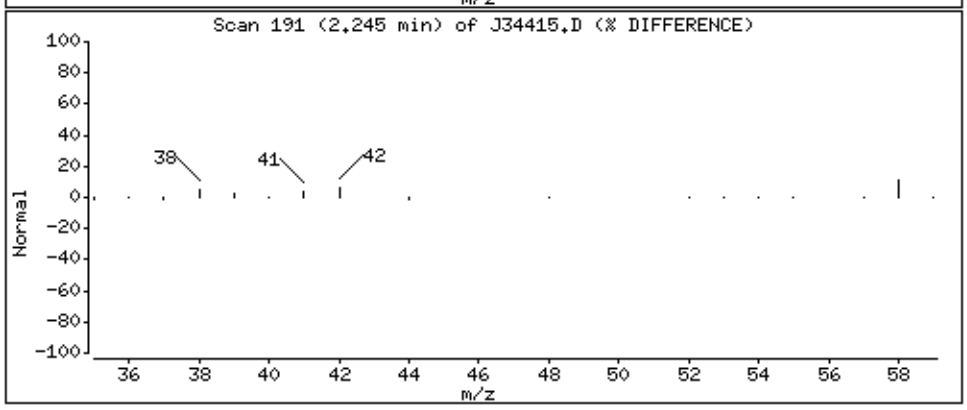
Concentration: 2.44 ug/L

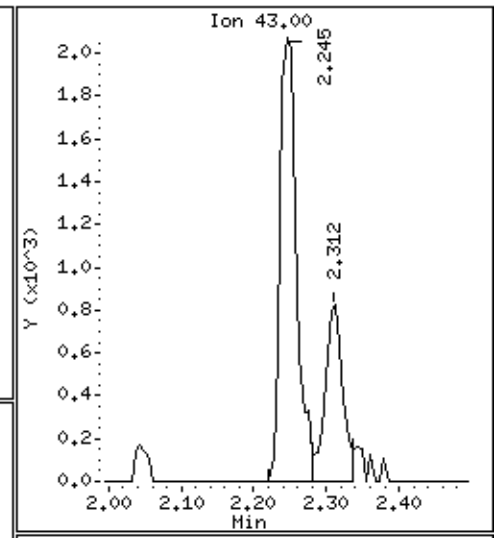
Review Code:

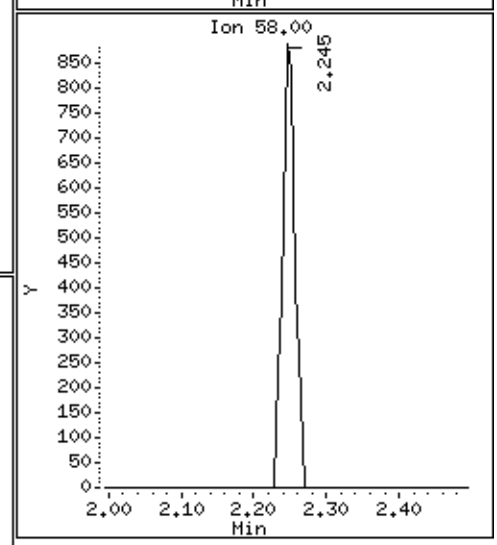












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34415.D

Date : 25-APR-2017 18:31

Client ID: MW-4B

Instrument: 70msv6.i

Sample Info: 7016438019,

Purge Volume: 5.0

Operator: KGG

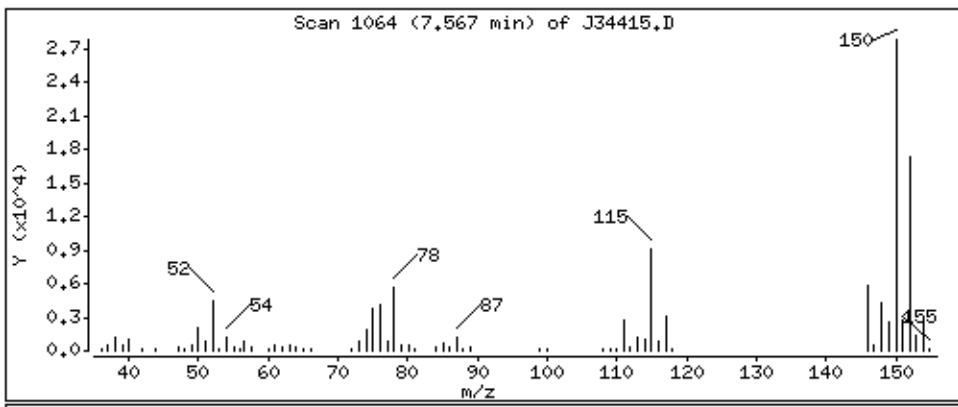
Column phase: RTX-624

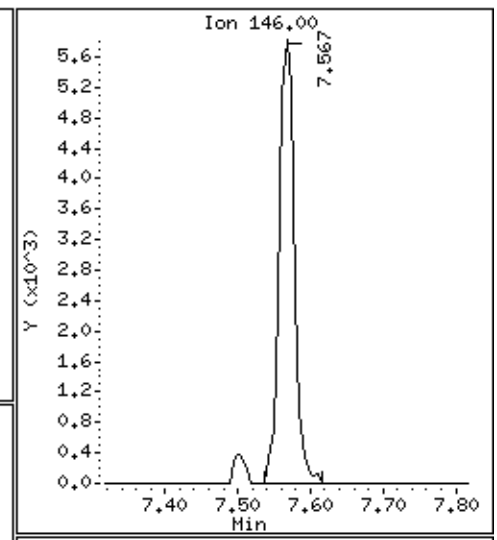
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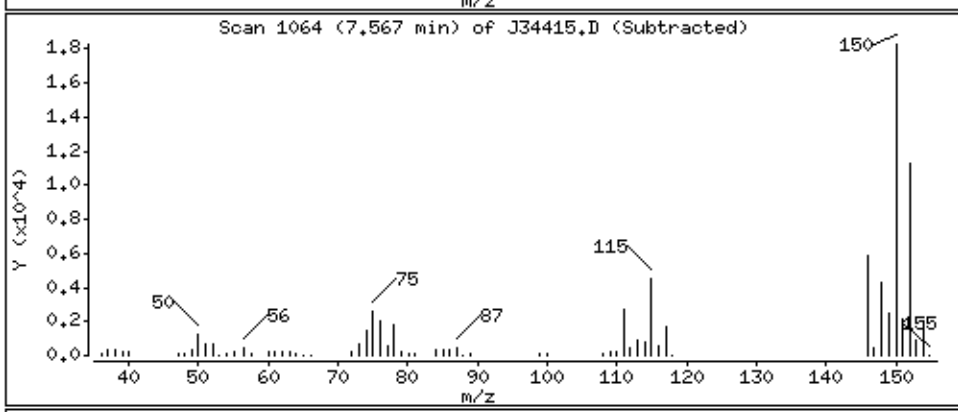
112 1,4-Dichlorobenzene

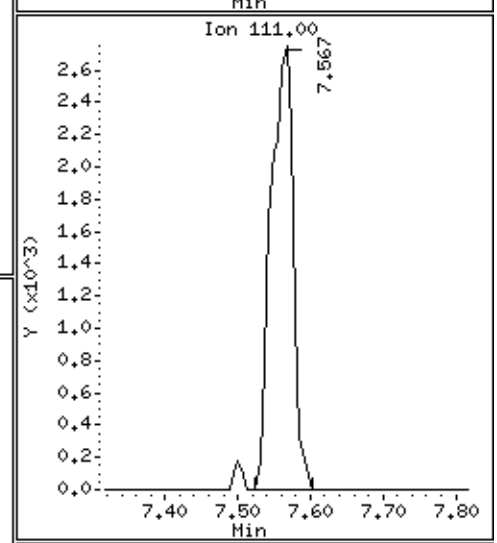
Concentration: 1.17 ug/L

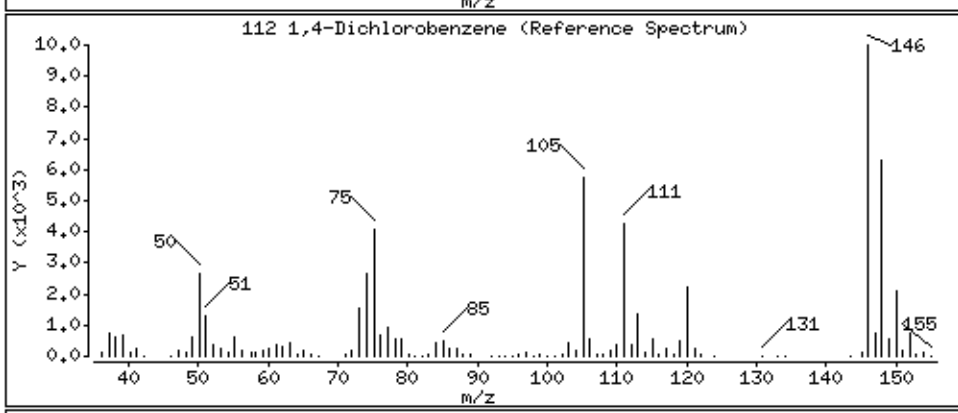
Review Code:

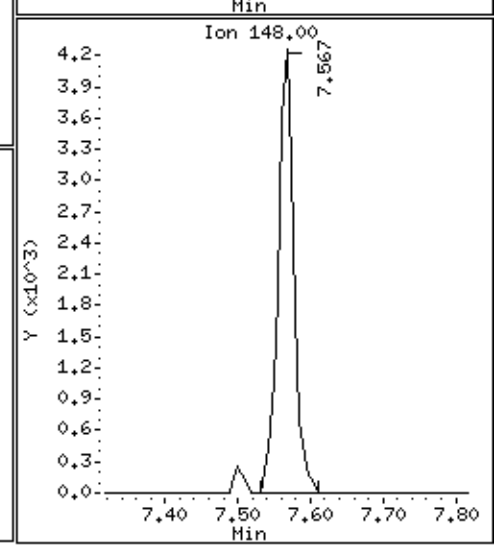


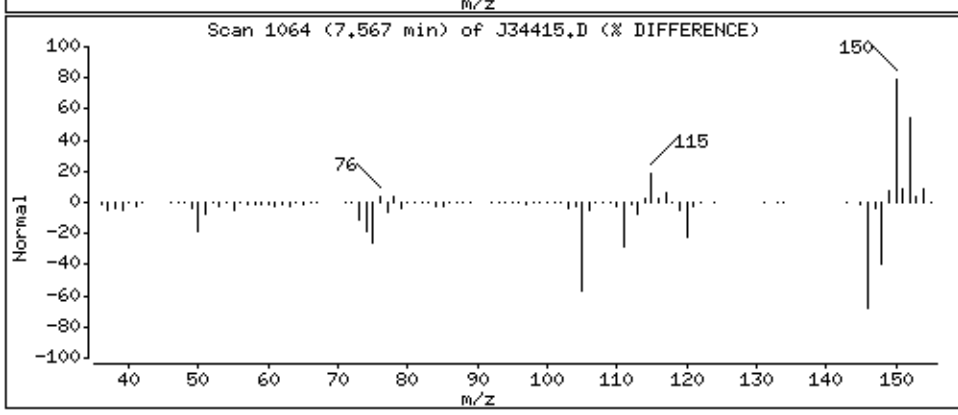












Data File: \\v70wintarget\chem\70msv6.i\042517.b/J34415.D
Injection Date: 25-APR-2017 18:31
Instrument: 70msv6.i
Lab Sample ID: 7016438019
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

SAMPLE NO.

MW-4C

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York Contract: NORTH SEA LANDFILL

Date Received: 04/21/2017 11:00 Matrix: Water SDG No.: 7016438

Date Extracted: 04/25/2017 18:49 Lab Sample ID: 7016438020

Date Analyzed: 04/25/2017 18:49 Lab File ID: 042517.B\J34416.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1 Instrument: 70MSV6 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	2.8	J
107-13-1	Acrylonitrile	<5.0	U
71-43-2	Benzene	<5.0	U
74-97-5	Bromochloromethane	<5.0	U
75-27-4	Bromodichloromethane	<5.0	U
75-25-2	Bromoform	<5.0	U
74-83-9	Bromomethane	<5.0	U
78-93-3	2-Butanone (MEK)	<5.0	U
75-15-0	Carbon disulfide	<5.0	U
56-23-5	Carbon tetrachloride	<5.0	U
108-90-7	Chlorobenzene	<5.0	U
75-00-3	Chloroethane	<5.0	U
67-66-3	Chloroform	<5.0	U
74-87-3	Chloromethane	<5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	<5.0	U
124-48-1	Dibromochloromethane	<5.0	U
106-93-4	1,2-Dibromoethane (EDB)	<5.0	U
74-95-3	Dibromomethane	<5.0	U
95-50-1	1,2-Dichlorobenzene	<5.0	U
106-46-7	1,4-Dichlorobenzene	<5.0	U
110-57-6	trans-1,4-Dichloro-2-butene	<5.0	U
75-34-3	1,1-Dichloroethane	<5.0	U
107-06-2	1,2-Dichloroethane	<5.0	U
75-35-4	1,1-Dichloroethene	<5.0	U
156-59-2	cis-1,2-Dichloroethene	<5.0	U
156-60-5	trans-1,2-Dichloroethene	<5.0	U
78-87-5	1,2-Dichloropropane	<5.0	U
10061-01-5	cis-1,3-Dichloropropene	<5.0	U
10061-02-6	trans-1,3-Dichloropropene	<5.0	U
100-41-4	Ethylbenzene	<5.0	U
591-78-6	2-Hexanone	<5.0	U
74-88-4	Iodomethane	<5.0	U
75-09-2	Methylene Chloride	<5.0	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<5.0	U
100-42-5	Styrene	<5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	<5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	<5.0	U

SAMPLE NO.

MW-4C

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York Contract: NORTH SEA LANDFILL

Date Received: 04/21/2017 11:00 Matrix: Water SDG No.: 7016438

Date Extracted: 04/25/2017 18:49 Lab Sample ID: 7016438020

Date Analyzed: 04/25/2017 18:49 Lab File ID: 042517.B\J34416.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1 Instrument: 70MSV6 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
127-18-4	Tetrachloroethene	<5.0	U
108-88-3	Toluene	<5.0	U
71-55-6	1,1,1-Trichloroethane	<5.0	U
79-00-5	1,1,2-Trichloroethane	<5.0	U
79-01-6	Trichloroethene	<5.0	U
75-69-4	Trichlorofluoromethane	<5.0	U
96-18-4	1,2,3-Trichloropropane	<5.0	U
108-05-4	Vinyl acetate	<5.0	U
75-01-4	Vinyl chloride	<5.0	U
1330-20-7	Xylene (Total)	<5.0	U

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34416.D
Report Date: 29-Apr-2017 22:54

Pace Analytical Services, Inc.

SW846-8260C/EPA 624

Data file : \\v70wintarget\chem\70msv6.i\042517.b\J34416.D
Lab Smp Id: 7016438020 Client Smp ID: MW-4C
Inj Date : 25-APR-2017 18:49 MS Autotune Date: 17-MAR-2017 06:2
Operator : KGG Inst ID: 70msv6.i
Smp Info : 7016438020,
Misc Info : 2005,
Comment :
Method : \\v70wintarget\chem\70msv6.i\042517.b\032717_8260W.m
Meth Date : 29-Apr-2017 22:43 blagula Quant Type: ISTD
Cal Date : 27-MAR-2017 18:25 Cal File: J33244.D
Als bottle: 22
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A
Processing Host: 70MSV4WS10B6

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)	REVIEW C
1 Chlorodifluoromethane	51	Compound Not Detected.						
2 Dichlorotetrafluoroethane	135	Compound Not Detected.						
3 Dichlorodifluoromethane	85	Compound Not Detected.						
4 Chloromethane	50	Compound Not Detected.						
5 Vinyl chloride	62	Compound Not Detected.						
6 1,3-Butadiene	54	Compound Not Detected.						
7 Acetaldehyde	44	Compound Not Detected.						
8 Bromomethane	94	Compound Not Detected.						
9 Chloroethane	64	Compound Not Detected.						
10 Dichlorofluoromethane	67	Compound Not Detected.						
11 Trichlorofluoromethane	101	Compound Not Detected.						
12 Ethanol	45	Compound Not Detected.						
13 Diethyl ether (Ethyl ether)	59	Compound Not Detected.						
16 1,1,2-Trichlorotrifluoroethane	101	Compound Not Detected.						
14 Acrolein	56	Compound Not Detected.						
15 1,1-Dichloroethene	96	Compound Not Detected.						
17 Acetone	43	2.245	2.245	(0.646)	3957	2.82720	2.83	
18 Iodomethane	142	Compound Not Detected.						
19 2-Propanol	45	Compound Not Detected.						(D)
20 Carbon disulfide	76	Compound Not Detected.						
21 Allyl chloride	76	Compound Not Detected.						
22 Acetonitrile	41	Compound Not Detected.						

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34416.D
Report Date: 29-Apr-2017 22:54

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)		REVIEW C
	23 Methyl acetate	43	Compound Not Detected.							
	24 Methylene Chloride	84	Compound Not Detected.							
	25 tert-Butyl Alcohol	59	Compound Not Detected.							
	28 Methyl-tert-butyl ether	73	Compound Not Detected.							
	27 trans-1,2-Dichloroethene	96	Compound Not Detected.							
	26 Acrylonitrile	53	Compound Not Detected.							
	30 n-Hexane	57	Compound Not Detected.							
	29 Diisopropyl ether	45	Compound Not Detected.							
	32 Vinyl acetate	43	Compound Not Detected.							
	31 1,1-Dichloroethane	63	Compound Not Detected.							
	33 Chloroprene	53	Compound Not Detected.							
	34 Ethyl-tert-butyl ether	59	Compound Not Detected.							
	36 2,2-Dichloropropane	77	Compound Not Detected.							
	35 cis-1,2-Dichloroethene	96	Compound Not Detected.							
	39 Ethyl acetate	61	Compound Not Detected.							
	37 2-Butanone (MEK)	43	Compound Not Detected.							
	41 Bromochloromethane	128	Compound Not Detected.							
	42 Tetrahydrofuran	42	Compound Not Detected.							
	43 Chloroform	83	Compound Not Detected.							
	38 Propionitrile	54	Compound Not Detected.							
	46 Cyclohexane	56	Compound Not Detected.							
	45 1,1,1-Trichloroethane	97	Compound Not Detected.							
*	44 Pentafluorobenzene (IS)	168	3.476	3.476	(1.000)	236721	50.0000		(Q)	
	48 Carbon tetrachloride	117	Compound Not Detected.							(D)
	47 1,1-Dichloropropene	75	Compound Not Detected.							(D)
	55 2,2,4-Trimethylpentane	57	Compound Not Detected.							
	51 Benzene	78	Compound Not Detected.							
	40 Methacrylonitrile	67	Compound Not Detected.							
$	50 1,2-Dichloroethane-d4 (S)	65	3.677	3.677	(0.941)	132561	45.2114	45.2		
	56 tert-Amylmethyl ether	73	Compound Not Detected.							
	52 1,2-Dichloroethane	62	Compound Not Detected.							
	57 n-Heptane	43	Compound Not Detected.							
*	58 1,4-Difluorobenzene (IS)	114	3.909	3.909	(1.000)	411656	50.0000			
	59 Trichloroethene	95	Compound Not Detected.							
	60 Methylcyclohexane	83	Compound Not Detected.							
	49 Isobutanol	43	Compound Not Detected.							
	53 tert-Amyl Alcohol	59	Compound Not Detected.							
	54 tert-Amyl ethyl ether	59	Compound Not Detected.							
	61 1,2-Dichloropropane	63	Compound Not Detected.							
	63 Methyl methacrylate	69	Compound Not Detected.							
	64 1,4-Dioxane (p-Dioxane)	88	Compound Not Detected.							
	62 Dibromomethane	93	Compound Not Detected.							
	65 Bromodichloromethane	83	Compound Not Detected.							
	66 2-Nitropropane	43	Compound Not Detected.							
	67 2-Chloroethylvinyl ether	63	Compound Not Detected.							
	68 cis-1,3-Dichloropropene	75	Compound Not Detected.							
	69 4-Methyl-2-pentanone (MIBK)	43	Compound Not Detected.							
$	70 Toluene-d8 (S)	98	4.811	4.811	(0.828)	480025	55.9375	55.9		
	71 Toluene	91	Compound Not Detected.							
	72 Methyl isothiocyanate	73	Compound Not Detected.							
	74 trans-1,3-Dichloropropene	75	Compound Not Detected.							
	75 Ethyl methacrylate	69	Compound Not Detected.							(D)
	76 1,1,2-Trichloroethane	83	Compound Not Detected.							
	77 Tetrachloroethene	166	Compound Not Detected.							

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34416.D
Report Date: 29-Apr-2017 22:54

								CONCENTRATIONS		
		QUANT SIG						ON-COLUMN	FINAL	
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE		(ug/L)	(ug/L)	REVIEW C
	78 1,3-Dichloropropane	76	Compound Not Detected.							
	79 2-Hexanone	43	Compound Not Detected.							
	73 n-Octane	43	Compound Not Detected.							
	81 n-Butyl acetate	43	Compound Not Detected.							
	80 Dibromochloromethane	129	Compound Not Detected.							
	82 1,2-Dibromoethane (EDB)	107	Compound Not Detected.							
*	83 Chlorobenzene-d5 (IS)	82	5.811	5.811	(1.000)	225275		50.0000		
	84 Chlorobenzene	112	Compound Not Detected.							
	86 Ethylbenzene	106	Compound Not Detected.							
	85 1,1,1,2-Tetrachloroethane	131	Compound Not Detected.							
	88 n-Nonane	43	Compound Not Detected.							(D)
	87 m&p-Xylene	106	Compound Not Detected.							
	89 o-Xylene	106	Compound Not Detected.							
	90 Styrene	104	Compound Not Detected.							
	91 Bromoform	173	Compound Not Detected.							
	92 Isopropylbenzene (Cumene)	105	Compound Not Detected.							
$	93 4-Bromofluorobenzene (S)	95	6.671	6.671	(1.148)	181077		59.2173	59.2	
	94 Bromobenzene	156	Compound Not Detected.							
	95 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.							
	98 n-Propylbenzene	91	Compound Not Detected.							
	96 1,2,3-Trichloropropane	110	Compound Not Detected.							
	97 trans-1,4-Dichloro-2-butene	53	Compound Not Detected.							
	103 n-Decane	43	Compound Not Detected.							
	99 2-Chlorotoluene	91	Compound Not Detected.							
	100 4-Ethyltoluene	105	Compound Not Detected.							
	101 1,3,5-Trimethylbenzene	105	Compound Not Detected.							
	102 4-Chlorotoluene	91	Compound Not Detected.							
	104 tert-Butylbenzene	119	Compound Not Detected.							
	105 Pentachloroethane	167	Compound Not Detected.							
	106 1,2,4-Trimethylbenzene	105	Compound Not Detected.							
	107 sec-Butylbenzene	105	Compound Not Detected.							
	109 d-Limonene	136	Compound Not Detected.							
	110 p-Isopropyltoluene	119	Compound Not Detected.							
	108 1,3-Dichlorobenzene	146	Compound Not Detected.							
*	111 1,4-Dichlorobenzene-d4 (IS)	152	7.548	7.549	(1.000)	185277		50.0000		
	112 1,4-Dichlorobenzene	146	Compound Not Detected.							
	113 1,2,3-Trimethylbenzene	105	Compound Not Detected.							
	114 Benzyl chloride	91	Compound Not Detected.							
	115 trans-Decalin	138	Compound Not Detected.							
	116 1,4-Diethylbenzene	119	Compound Not Detected.							
	117 n-Butylbenzene	91	Compound Not Detected.							
	119 n-Undecane	43	Compound Not Detected.							
	118 1,2-Dichlorobenzene	146	Compound Not Detected.							
	120 cis-Decalin	138	Compound Not Detected.							
	121 1,2,4,5-tetramethylbenzene	119	Compound Not Detected.							
	122 1,2-Dibromo-3-chloropropane	75	Compound Not Detected.							
	123 n-Dodecane	43	Compound Not Detected.							
	124 1,2,4-Trichlorobenzene	180	Compound Not Detected.							
	125 Hexachloro-1,3-butadiene	225	Compound Not Detected.							
	126 Naphthalene	128	Compound Not Detected.							
	127 1,2,3-Trichlorobenzene	180	Compound Not Detected.							

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34416.D
Report Date: 29-Apr-2017 22:54

QC Flag Legend

Q - Qualifier signal failed the ratio test.
D - User disabled compound identification.

Review Codes Legend

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Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34416.D
Report Date: 29-Apr-2017 22:54

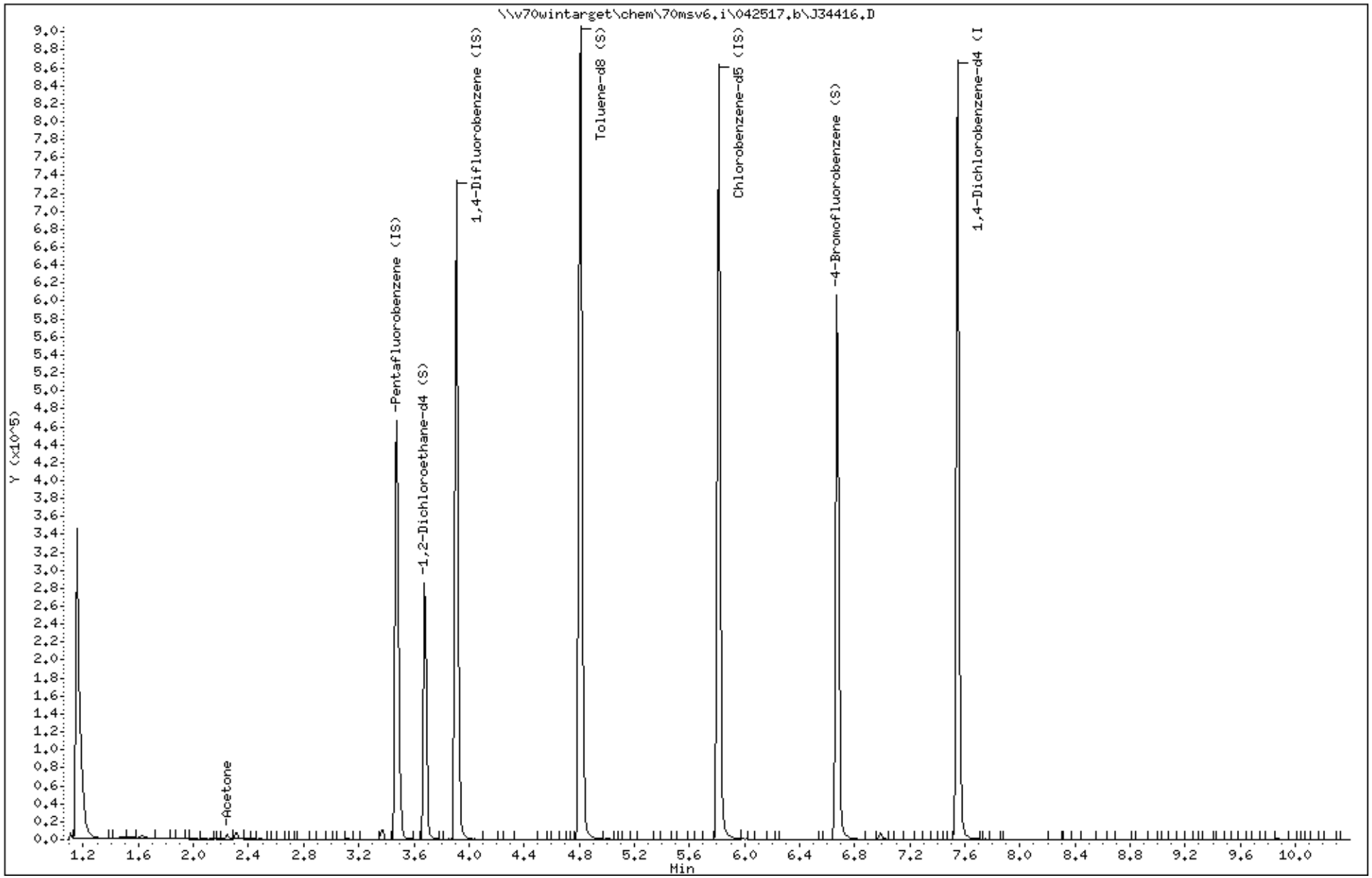
Pace Analytical Services, Inc.

SW846-8260C/EPA 624

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Inj Date : 25-APR-2017 18:49 MS Autotune Date: 17-MAR-2017 06:2
Operator : KGG Inst ID: 70msv6.i
Smp Info : 7016438020,
Misc Info : 2005,
Comment :
Method : \\v70wintarget\chem\70msv6.i\042517.b\032717_8260W.m
Meth Date : 29-Apr-2017 22:43 blagula Quant Type: ISTD
Cal Date : 27-MAR-2017 18:25 Cal File: J33244.D
Als bottle: 22
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A
Processing Host: 70MSV4WS10B6

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34416.D
Date : 25-APR-2017 18:49
Client ID: MW-4C
Instrument: 70msv6.i
Sample Info: 7016438020,
Purge Volume: 5.0
Operator: KGG
Column phase: RTX-624
Column diameter: 0.18



Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34416.D

Date : 25-APR-2017 18:49

Client ID: MW-4C

Instrument: 70msv6.i

Sample Info: 7016438020,

Purge Volume: 5.0

Operator: KGG

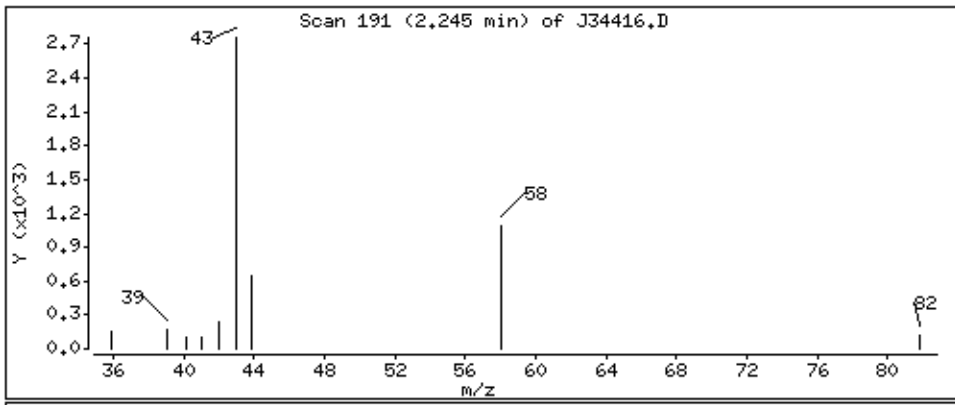
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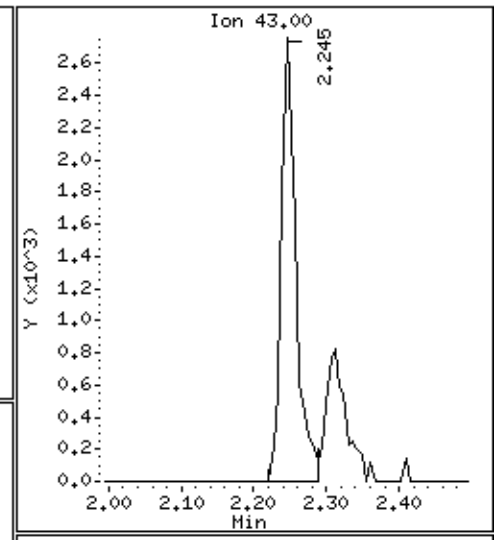
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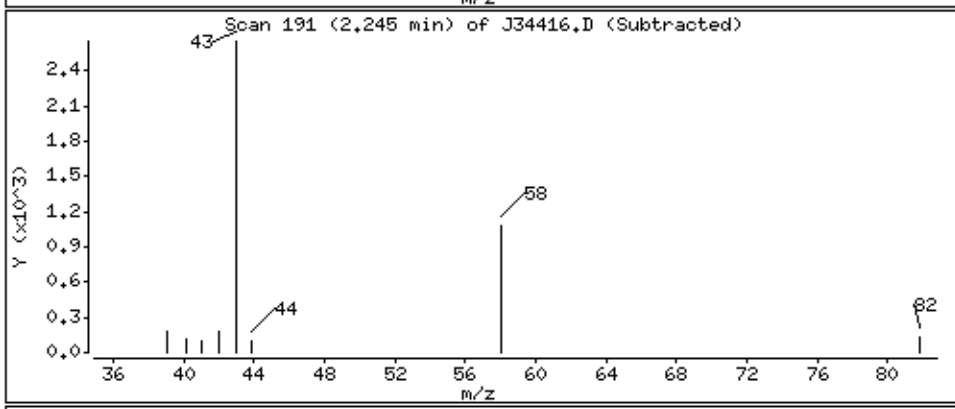
17 Acetone

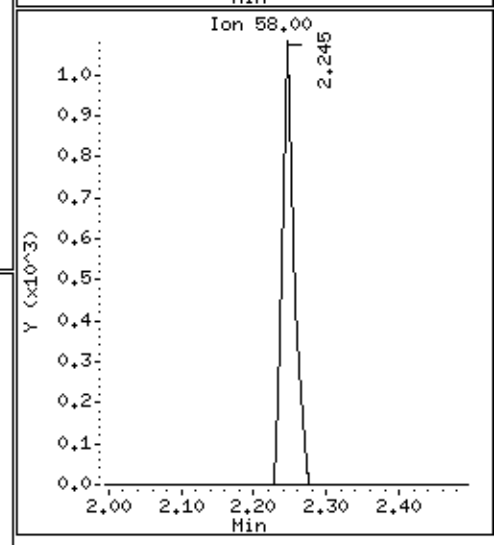
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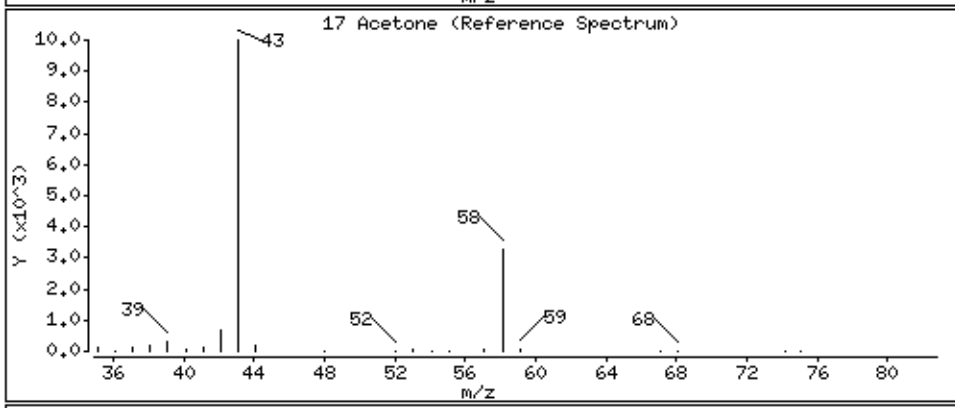
Review Code:

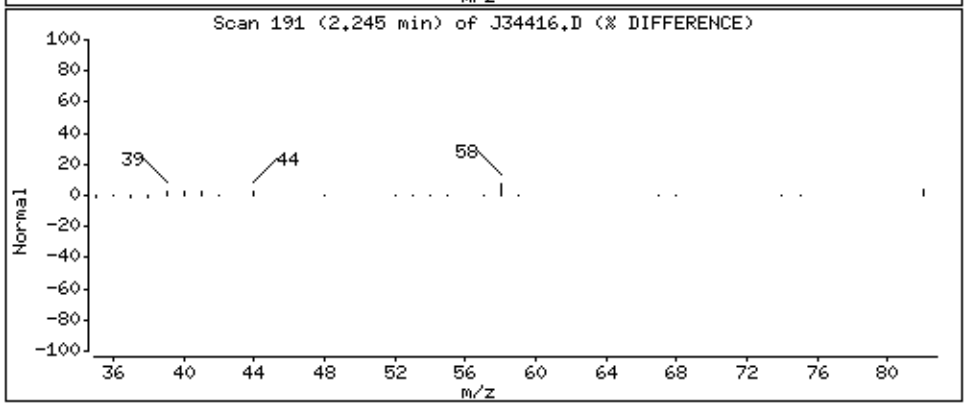












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Injection Date: 25-APR-2017 18:49
Instrument: 70msv6.i
Lab Sample ID: 7016438020
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

SAMPLE NO.

TRIP BLANK

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York Contract: NORTH SEA LANDFILL

Date Received: 04/21/2017 11:00 Matrix: Water SDG No.: 7016438

Date Extracted: 04/25/2017 14:39 Lab Sample ID: 7016438021

Date Analyzed: 04/25/2017 14:39 Lab File ID: 042517.B\J34402.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1 Instrument: 70MSV6 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	6.5	
107-13-1	Acrylonitrile	<5.0	U
71-43-2	Benzene	<5.0	U
74-97-5	Bromochloromethane	<5.0	U
75-27-4	Bromodichloromethane	<5.0	U
75-25-2	Bromoform	<5.0	U
74-83-9	Bromomethane	<5.0	U
78-93-3	2-Butanone (MEK)	<5.0	U
75-15-0	Carbon disulfide	<5.0	U
56-23-5	Carbon tetrachloride	<5.0	U
108-90-7	Chlorobenzene	<5.0	U
75-00-3	Chloroethane	<5.0	U
67-66-3	Chloroform	<5.0	U
74-87-3	Chloromethane	<5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	<5.0	U
124-48-1	Dibromochloromethane	<5.0	U
106-93-4	1,2-Dibromoethane (EDB)	<5.0	U
74-95-3	Dibromomethane	<5.0	U
95-50-1	1,2-Dichlorobenzene	<5.0	U
106-46-7	1,4-Dichlorobenzene	<5.0	U
110-57-6	trans-1,4-Dichloro-2-butene	<5.0	U
75-34-3	1,1-Dichloroethane	<5.0	U
107-06-2	1,2-Dichloroethane	<5.0	U
75-35-4	1,1-Dichloroethene	<5.0	U
156-59-2	cis-1,2-Dichloroethene	<5.0	U
156-60-5	trans-1,2-Dichloroethene	<5.0	U
78-87-5	1,2-Dichloropropane	<5.0	U
10061-01-5	cis-1,3-Dichloropropene	<5.0	U
10061-02-6	trans-1,3-Dichloropropene	<5.0	U
100-41-4	Ethylbenzene	<5.0	U
591-78-6	2-Hexanone	<5.0	U
74-88-4	Iodomethane	<5.0	U
75-09-2	Methylene Chloride	2.1	J
108-10-1	4-Methyl-2-pentanone (MIBK)	<5.0	U
100-42-5	Styrene	<5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	<5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	<5.0	U

SAMPLE NO.

TRIP BLANK

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York Contract: NORTH SEA LANDFILL

Date Received: 04/21/2017 11:00 Matrix: Water SDG No.: 7016438

Date Extracted: 04/25/2017 14:39 Lab Sample ID: 7016438021

Date Analyzed: 04/25/2017 14:39 Lab File ID: 042517.B\J34402.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1 Instrument: 70MSV6 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
127-18-4	Tetrachloroethene	<5.0	U
108-88-3	Toluene	<5.0	U
71-55-6	1,1,1-Trichloroethane	<5.0	U
79-00-5	1,1,2-Trichloroethane	<5.0	U
79-01-6	Trichloroethene	<5.0	U
75-69-4	Trichlorofluoromethane	<5.0	U
96-18-4	1,2,3-Trichloropropane	<5.0	U
108-05-4	Vinyl acetate	<5.0	U
75-01-4	Vinyl chloride	<5.0	U
1330-20-7	Xylene (Total)	<5.0	U

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34402.D
Report Date: 29-Apr-2017 22:54

Pace Analytical Services, Inc.

SW846-8260C/EPA 624

Data file : \\v70wintarget\chem\70msv6.i\042517.b\J34402.D
Lab Smp Id: 7016438021 Client Smp ID: TRIP BLANK
Inj Date : 25-APR-2017 14:39 MS Autotune Date: 17-MAR-2017 06:2
Operator : KGG Inst ID: 70msv6.i
Smp Info : 7016438021,
Misc Info : 2005,
Comment :
Method : \\v70wintarget\chem\70msv6.i\042517.b\032717_8260W.m
Meth Date : 29-Apr-2017 22:43 blagula Quant Type: ISTD
Cal Date : 27-MAR-2017 18:25 Cal File: J33244.D
Als bottle: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A
Processing Host: 70MSV4WS10B6

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)	REVIEW C
1 Chlorodifluoromethane	51	Compound Not Detected.						
2 Dichlorotetrafluoroethane	135	Compound Not Detected.						
3 Dichlorodifluoromethane	85	Compound Not Detected.						
4 Chloromethane	50	Compound Not Detected.						
5 Vinyl chloride	62	Compound Not Detected.						
6 1,3-Butadiene	54	Compound Not Detected.						
7 Acetaldehyde	44	Compound Not Detected.						
8 Bromomethane	94	Compound Not Detected.						
9 Chloroethane	64	Compound Not Detected.						
10 Dichlorofluoromethane	67	Compound Not Detected.						
11 Trichlorofluoromethane	101	Compound Not Detected.						
12 Ethanol	45	Compound Not Detected.						(D)
13 Diethyl ether (Ethyl ether)	59	Compound Not Detected.						
16 1,1,2-Trichlorotrifluoroethane	101	Compound Not Detected.						
14 Acrolein	56	Compound Not Detected.						
15 1,1-Dichloroethene	96	Compound Not Detected.						
17 Acetone	43	2.245	2.245	(0.646)	9217	6.52905	6.53	
18 Iodomethane	142	Compound Not Detected.						
19 2-Propanol	45	Compound Not Detected.						(D)
20 Carbon disulfide	76	Compound Not Detected.						
21 Allyl chloride	76	Compound Not Detected.						
22 Acetonitrile	41	Compound Not Detected.						

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34402.D
Report Date: 29-Apr-2017 22:54

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)		REVIEW C
	23 Methyl acetate	43	Compound Not Detected.							
	24 Methylene Chloride	84	2.488	2.489	(0.716)	7878	2.06964	2.07		
	25 tert-Butyl Alcohol	59	Compound Not Detected.							
	28 Methyl-tert-butyl ether	73	Compound Not Detected.							
	27 trans-1,2-Dichloroethene	96	Compound Not Detected.							
	26 Acrylonitrile	53	Compound Not Detected.							
	30 n-Hexane	57	Compound Not Detected.							
	29 Diisopropyl ether	45	Compound Not Detected.							
	32 Vinyl acetate	43	Compound Not Detected.							
	31 1,1-Dichloroethane	63	Compound Not Detected.							
	33 Chloroprene	53	Compound Not Detected.							
	34 Ethyl-tert-butyl ether	59	Compound Not Detected.							
	36 2,2-Dichloropropane	77	Compound Not Detected.							
	35 cis-1,2-Dichloroethene	96	Compound Not Detected.							
	39 Ethyl acetate	61	Compound Not Detected.							
	37 2-Butanone (MEK)	43	Compound Not Detected.							
	41 Bromochloromethane	128	Compound Not Detected.							
	42 Tetrahydrofuran	42	Compound Not Detected.							
	43 Chloroform	83	Compound Not Detected.							
	38 Propionitrile	54	Compound Not Detected.							
	46 Cyclohexane	56	Compound Not Detected.							
	45 1,1,1-Trichloroethane	97	Compound Not Detected.							
*	44 Pentafluorobenzene (IS)	168	3.476	3.476	(1.000)	238763	50.0000		(Q)	
	48 Carbon tetrachloride	117	Compound Not Detected.							(D)
	47 1,1-Dichloropropene	75	Compound Not Detected.							(D)
	55 2,2,4-Trimethylpentane	57	Compound Not Detected.							
	51 Benzene	78	Compound Not Detected.							
	40 Methacrylonitrile	67	Compound Not Detected.							
$	50 1,2-Dichloroethane-d4 (S)	65	3.677	3.677	(0.941)	131858	44.8373	44.8		
	56 tert-Amylmethyl ether	73	Compound Not Detected.							
	52 1,2-Dichloroethane	62	Compound Not Detected.							
	57 n-Heptane	43	Compound Not Detected.							
*	58 1,4-Difluorobenzene (IS)	114	3.909	3.909	(1.000)	412889	50.0000			
	59 Trichloroethene	95	Compound Not Detected.							
	60 Methylcyclohexane	83	Compound Not Detected.							
	49 Isobutanol	43	Compound Not Detected.							
	53 tert-Amyl Alcohol	59	Compound Not Detected.							
	54 tert-Amyl ethyl ether	59	Compound Not Detected.							
	61 1,2-Dichloropropane	63	Compound Not Detected.							
	63 Methyl methacrylate	69	Compound Not Detected.							
	64 1,4-Dioxane (p-Dioxane)	88	Compound Not Detected.							
	62 Dibromomethane	93	Compound Not Detected.							
	65 Bromodichloromethane	83	Compound Not Detected.							
	66 2-Nitropropane	43	Compound Not Detected.							
	67 2-Chloroethylvinyl ether	63	Compound Not Detected.							
	68 cis-1,3-Dichloropropene	75	Compound Not Detected.							
	69 4-Methyl-2-pentanone (MIBK)	43	Compound Not Detected.							
$	70 Toluene-d8 (S)	98	4.811	4.811	(0.828)	477915	57.5557	57.6		
	71 Toluene	91	Compound Not Detected.							
	72 Methyl isothiocyanate	73	Compound Not Detected.							
	74 trans-1,3-Dichloropropene	75	Compound Not Detected.							
	75 Ethyl methacrylate	69	Compound Not Detected.							(D)
	76 1,1,2-Trichloroethane	83	Compound Not Detected.							
	77 Tetrachloroethene	166	Compound Not Detected.							

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34402.D
Report Date: 29-Apr-2017 22:54

								CONCENTRATIONS		
		QUANT SIG						ON-COLUMN	FINAL	
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE		(ug/L)	(ug/L)	REVIEW C
	78 1,3-Dichloropropane	76	Compound Not Detected.							
	79 2-Hexanone	43	Compound Not Detected.							
	73 n-Octane	43	Compound Not Detected.							
	81 n-Butyl acetate	43	Compound Not Detected.							
	80 Dibromochloromethane	129	Compound Not Detected.							
	82 1,2-Dibromoethane (EDB)	107	Compound Not Detected.							
*	83 Chlorobenzene-d5 (IS)	82	5.811	5.811	(1.000)	217979		50.0000		
	84 Chlorobenzene	112	Compound Not Detected.							
	86 Ethylbenzene	106	Compound Not Detected.							
	85 1,1,1,2-Tetrachloroethane	131	Compound Not Detected.							
	88 n-Nonane	43	Compound Not Detected.							(D)
	87 m&p-Xylene	106	Compound Not Detected.							
	89 o-Xylene	106	Compound Not Detected.							
	90 Styrene	104	Compound Not Detected.							
	91 Bromoform	173	Compound Not Detected.							
	92 Isopropylbenzene (Cumene)	105	Compound Not Detected.							
$	93 4-Bromofluorobenzene (S)	95	6.671	6.671	(1.148)	180879		61.1325	61.1	
	94 Bromobenzene	156	Compound Not Detected.							
	95 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.							
	98 n-Propylbenzene	91	Compound Not Detected.							
	96 1,2,3-Trichloropropane	110	Compound Not Detected.							
	97 trans-1,4-Dichloro-2-butene	53	Compound Not Detected.							
	103 n-Decane	43	Compound Not Detected.							
	99 2-Chlorotoluene	91	Compound Not Detected.							
	100 4-Ethyltoluene	105	Compound Not Detected.							
	101 1,3,5-Trimethylbenzene	105	Compound Not Detected.							
	102 4-Chlorotoluene	91	Compound Not Detected.							
	104 tert-Butylbenzene	119	Compound Not Detected.							
	105 Pentachloroethane	167	Compound Not Detected.							
	106 1,2,4-Trimethylbenzene	105	Compound Not Detected.							
	107 sec-Butylbenzene	105	Compound Not Detected.							
	109 d-Limonene	136	Compound Not Detected.							
	110 p-Isopropyltoluene	119	Compound Not Detected.							
	108 1,3-Dichlorobenzene	146	Compound Not Detected.							
*	111 1,4-Dichlorobenzene-d4 (IS)	152	7.548	7.549	(1.000)	185567		50.0000		
	112 1,4-Dichlorobenzene	146	Compound Not Detected.							
	113 1,2,3-Trimethylbenzene	105	Compound Not Detected.							
	114 Benzyl chloride	91	Compound Not Detected.							
	115 trans-Decalin	138	Compound Not Detected.							
	116 1,4-Diethylbenzene	119	Compound Not Detected.							
	117 n-Butylbenzene	91	Compound Not Detected.							
	119 n-Undecane	43	Compound Not Detected.							(D)
	118 1,2-Dichlorobenzene	146	Compound Not Detected.							
	120 cis-Decalin	138	Compound Not Detected.							
	121 1,2,4,5-tetramethylbenzene	119	Compound Not Detected.							
	122 1,2-Dibromo-3-chloropropane	75	Compound Not Detected.							
	123 n-Dodecane	43	Compound Not Detected.							(D)
	124 1,2,4-Trichlorobenzene	180	Compound Not Detected.							
	125 Hexachloro-1,3-butadiene	225	Compound Not Detected.							
	126 Naphthalene	128	Compound Not Detected.							
	127 1,2,3-Trichlorobenzene	180	Compound Not Detected.							

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34402.D
Report Date: 29-Apr-2017 22:54

QC Flag Legend

Q - Qualifier signal failed the ratio test.
D - User disabled compound identification.

Review Codes Legend

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Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34402.D
Report Date: 29-Apr-2017 22:54

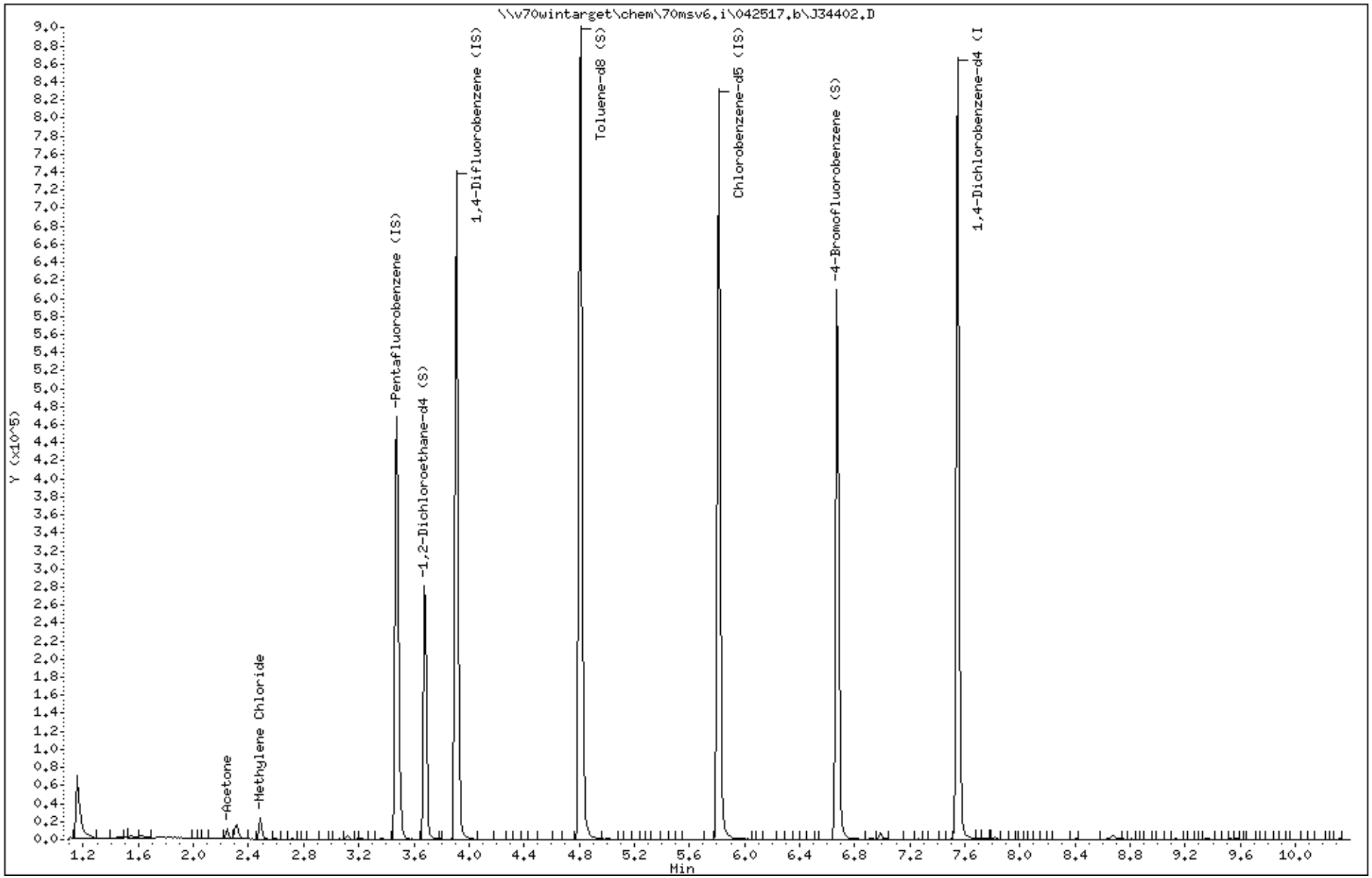
Pace Analytical Services, Inc.

SW846-8260C/EPA 624

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Inj Date : 25-APR-2017 14:39 MS Autotune Date: 17-MAR-2017 06:2
Operator : KGG Inst ID: 70msv6.i
Smp Info : 7016438021,
Misc Info : 2005,
Comment :
Method : \\v70wintarget\chem\70msv6.i\042517.b\032717_8260W.m
Meth Date : 29-Apr-2017 22:43 blagula Quant Type: ISTD
Cal Date : 27-MAR-2017 18:25 Cal File: J33244.D
Als bottle: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A
Processing Host: 70MSV4WS10B6

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34402.D
Date : 25-APR-2017 14:39
Client ID: TRIP BLANK
Instrument: 70msv6.i
Sample Info: 7016438021,
Purge Volume: 5.0
Operator: KGG
Column phase: RTX-624
Column diameter: 0.18



Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34402.D

Date : 25-APR-2017 14:39

Client ID: TRIP BLANK

Instrument: 70msv6.i

Sample Info: 7016438021,

Purge Volume: 5.0

Operator: KGG

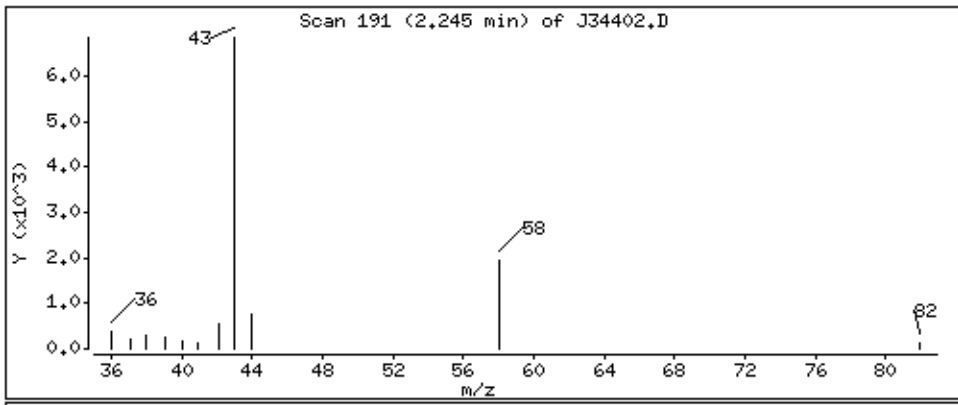
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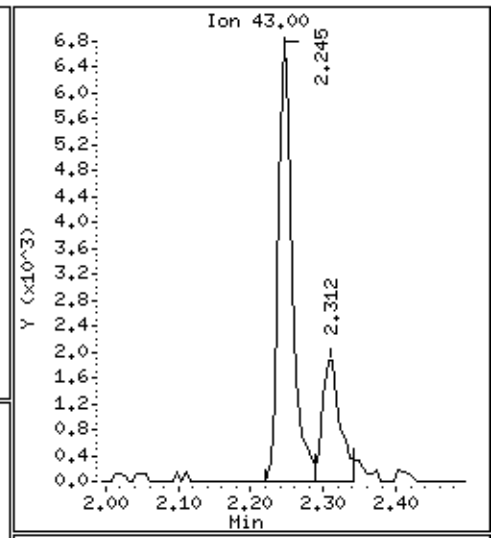
Column diameter: 0.18

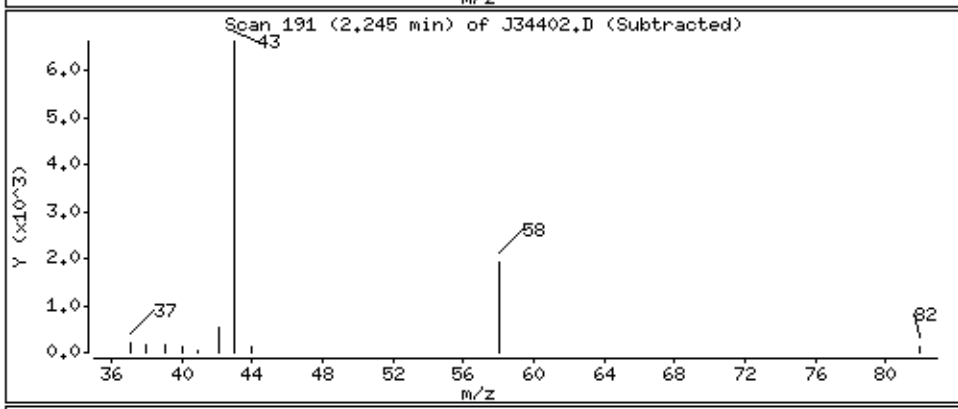
17 Acetone

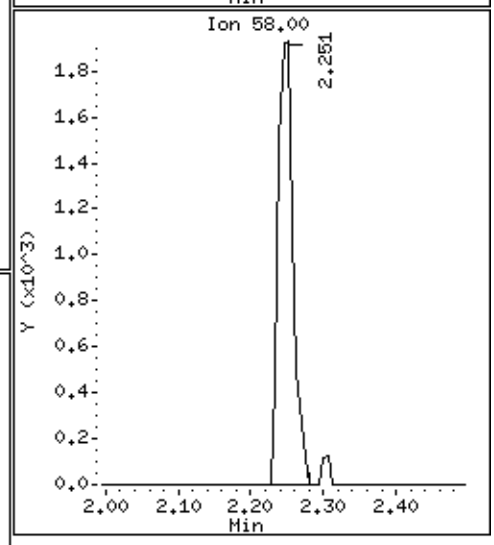
Concentration: 6.53 ug/L

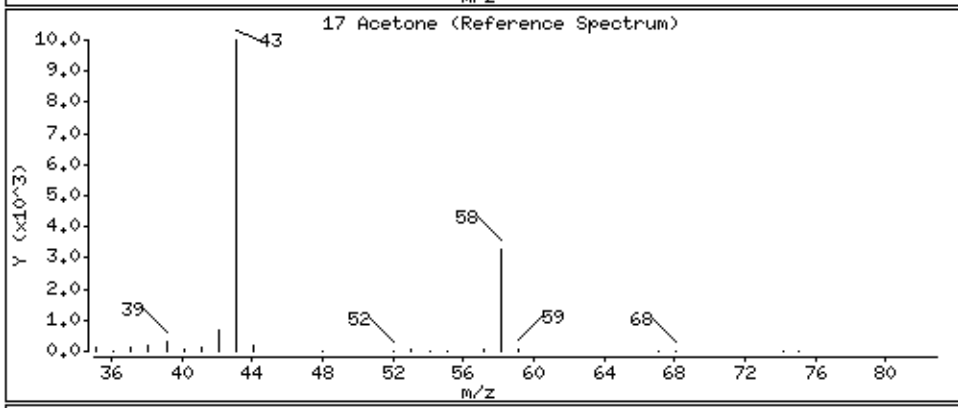
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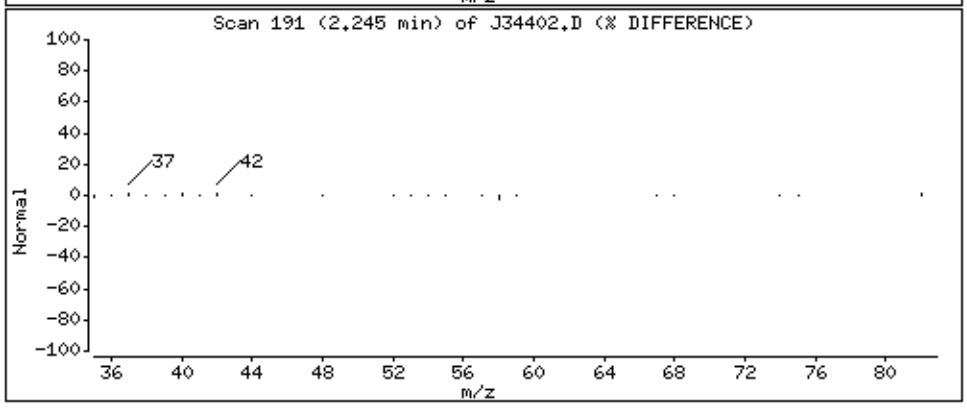












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Date : 25-APR-2017 14:39

Client ID: TRIP BLANK

Instrument: 70msv6.i

Sample Info: 7016438021,

Purge Volume: 5.0

Operator: KGG

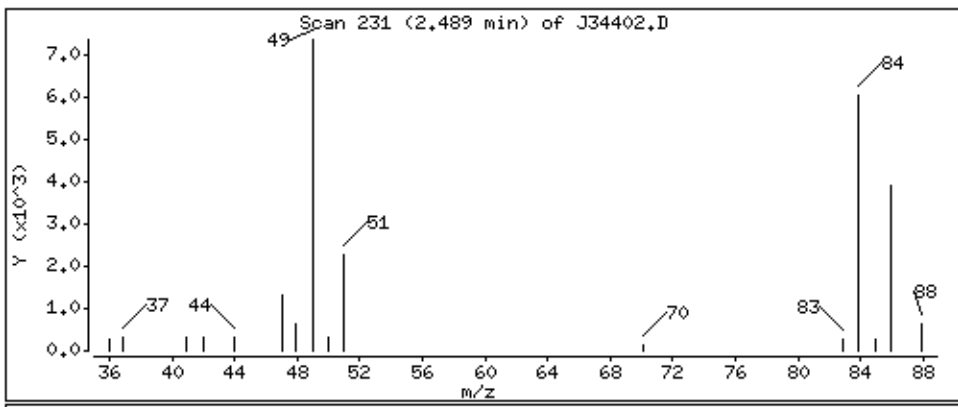
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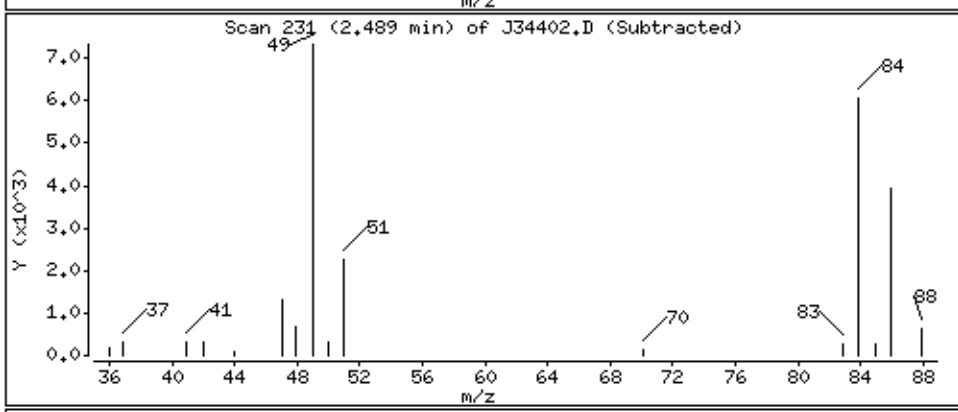
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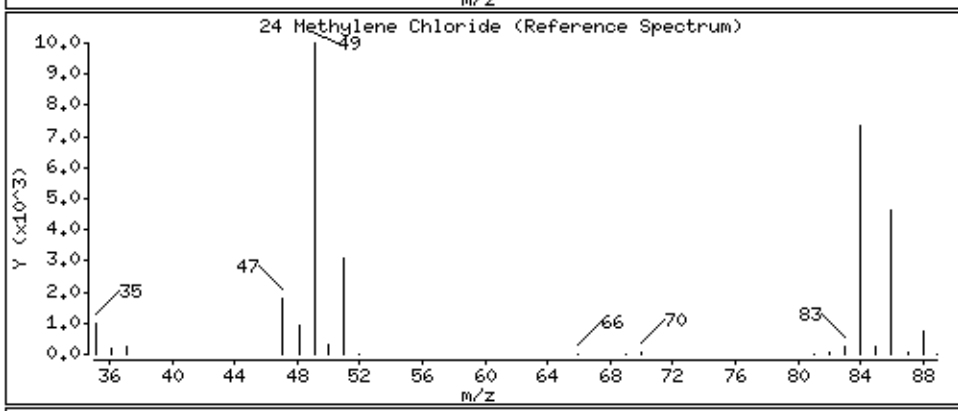
24 Methylene Chloride

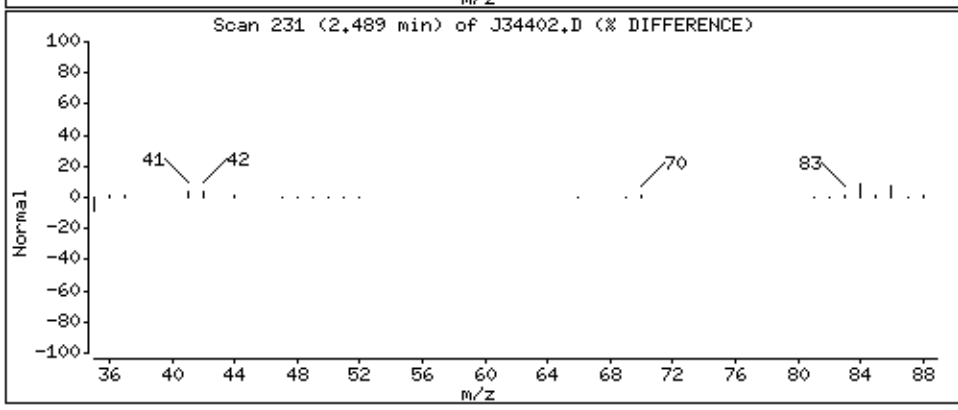
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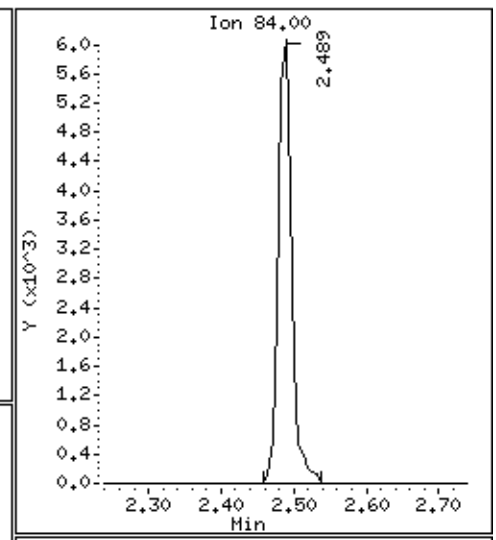
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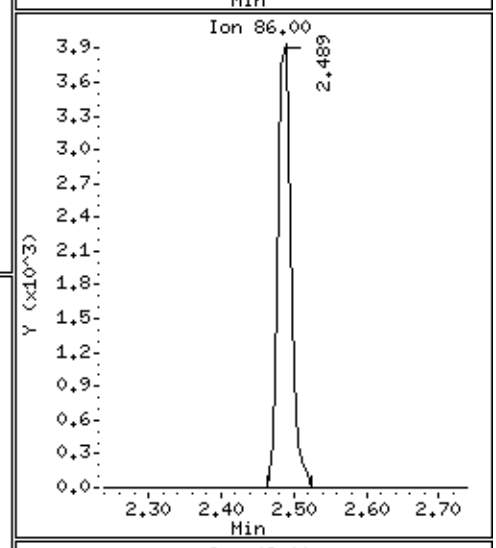


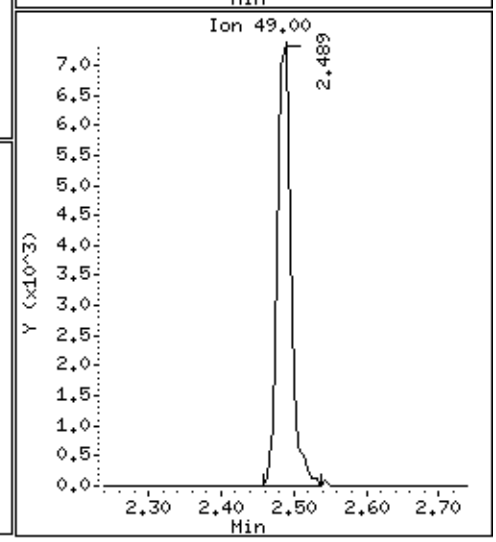












Data File: \\v70wintarget\chem\70msv6.i\042517.b/J34402.D
Injection Date: 25-APR-2017 14:39
Instrument: 70msv6.i
Lab Sample ID: 7016438021
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

MSV - FORM VI VOA-1
MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - New York Instrument ID: 70MSV6 GC Column: Col 1 SDG No.: 7016438

Calibration Date(s): 03/27/2017 03/27/2017 Calibration Time(s): 18:07 20:12

LAB FILE ID

CAL1 = 032717.B\J33243.D CAL2 = 032717.B\J33244.D CAL3 = 032717.B\J33245.D

CAL4 = 032717.B\J33246.D CAL5 = 032717.B\J33247.D CAL6 = 032717.B\J33248.D

CAL7 = 032717.B\J33249.D CAL8 = 032717.B\J33250.D

COMPOUND	CURVE TYPE	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6
Acetone	Averaged			0.34379	0.28824	0.29927	0.26600
Acrylonitrile	Averaged		0.40571	0.36293	0.33805	0.34311	0.34429
Benzene	Averaged	1.91492	2.17996	2.08410	1.93178	1.96340	1.95941
Bromochloromethane	Averaged		0.39552	0.40394	0.35941	0.37720	0.37865
Bromodichloromethane	Averaged		0.51277	0.52204	0.48806	0.52077	0.56526
Bromoform	Linear		0.19816	0.20644	0.22313	0.25553	0.31586
Bromomethane	Averaged		0.65132	0.59972	0.52855	0.54570	0.52950
2-Butanone (MEK)	Averaged		0.98288	0.71582	0.72950	0.81228	0.81649
Carbon disulfide	Averaged		2.37565	2.21233	1.99249	1.98806	1.95511
Carbon tetrachloride	Averaged		0.34167	0.33186	0.30971	0.33400	0.36773
Chlorobenzene	Averaged		2.20981	2.27140	2.12129	2.13431	2.13562
Chloroethane	Averaged		0.71619	0.68280	0.63923	0.64196	0.62885
Chloroform	Averaged		1.59133	1.50264	1.38710	1.42311	1.39838
Chloromethane	Averaged		1.34851	1.19175	1.04275	1.04132	1.01986
1,2-Dibromo-3-chloropropane	Linear		0.05096	0.08216	0.09261	0.12404	0.17212
Dibromochloromethane	Averaged		0.45829	0.45204	0.44401	0.49760	0.57098
1,2-Dibromoethane (EDB)	Averaged	0.22983	0.27479	0.28346	0.29800	0.35308	0.39101
Dibromomethane	Averaged		0.33652	0.29512	0.26681	0.28304	0.28225
1,2-Dichlorobenzene	Averaged		2.02917	1.92081	1.81454	1.84546	1.82064
1,4-Dichlorobenzene	Averaged		2.34568	2.07083	1.93997	1.96707	1.94419
trans-1,4-Dichloro-2-butene	Averaged		0.35355	0.32401	0.29742	0.32780	0.36192
1,1-Dichloroethane	Averaged		1.82582	1.83453	1.66340	1.71216	1.70017
1,2-Dichloroethane	Averaged		1.44907	1.33684	1.23041	1.23415	1.22869
1,1-Dichloroethene	Averaged	0.53047	0.63046	0.64558	0.56919	0.57258	0.56443
cis-1,2-Dichloroethene	Averaged		1.02389	0.91289	0.84565	0.85890	0.86203
trans-1,2-Dichloroethene	Averaged		0.87584	0.80537	0.72086	0.74429	0.74331
1,2-Dichloropropane	Averaged		0.65062	0.62113	0.56667	0.58091	0.58421
cis-1,3-Dichloropropene	Averaged	0.61918	0.67081	0.67435	0.67080	0.73896	0.80194
trans-1,3-Dichloropropene	Linear	0.38494	0.45749	0.46889	0.47791	0.55406	0.65757
Ethylbenzene	Averaged		1.15150	1.19057	1.12975	1.15653	1.14920
2-Hexanone	Averaged			0.85947	0.66205	0.63357	0.62616
Iodomethane	Averaged		0.78501	0.82795	0.79214	0.81680	0.84199
Methylene Chloride	Averaged		0.90665	0.84276	0.77483	0.80391	0.78094
4-Methyl-2-pentanone (MIBK)	Averaged		0.57226	0.52955	0.48290	0.50740	0.52211
Styrene	Averaged		2.33930	2.47709	2.40112	2.44794	2.46664

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSV - FORM VI VOA-2

MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - New York Instrument ID: 70MSV6 GC Column: Col 1 SDG No.: 7016438

Calibration Date(s): 03/27/2017 03/27/2017 Calibration Time(s): 18:07 20:12

LAB FILE ID

CAL1 = 032717.B\J33243.D CAL2 = 032717.B\J33244.D CAL3 = 032717.B\J33245.D

CAL4 = 032717.B\J33246.D CAL5 = 032717.B\J33247.D CAL6 = 032717.B\J33248.D

CAL7 = 032717.B\J33249.D CAL8 = 032717.B\J33250.D

COMPOUND	CURVE TYPE	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6
1,1,1,2-Tetrachloroethane	Linear		0.41227	0.38388	0.40247	0.47144	0.57003
1,1,2,2-Tetrachloroethane	Averaged		1.24422	1.23772	1.16812	1.20178	1.21703
Tetrachloroethene	Averaged		0.73553	0.74509	0.74059	0.82549	0.74364
Toluene	Averaged		2.21307	2.13320	1.97745	2.02440	2.00629
1,1,1-Trichloroethane	Averaged		0.60986	0.57559	0.55817	0.57822	0.60999
1,1,2-Trichloroethane	Averaged		0.38890	0.37435	0.34074	0.36240	0.36309
Trichloroethene	Averaged		0.51224	0.49965	0.44899	0.46674	0.46309
Trichlorofluoromethane	Averaged		1.00883	1.08662	0.98158	0.98520	0.94029
1,2,3-Trichloropropane	Averaged	0.33230	0.36399	0.35075	0.34793	0.35586	0.35580
Vinyl acetate	Averaged		1.38790	1.37073	1.29940	1.56708	1.83526
Vinyl chloride	Averaged		1.11866	1.07361	0.97590	1.00170	0.97206
m&p-Xylene	Averaged	1.28082	1.50793	1.52643	1.43101	1.42954	1.43746
o-Xylene	Averaged		1.47036	1.47034	1.37768	1.40461	1.41592
4-Bromofluorobenzene (S)	Averaged	0.67262	0.66636	0.67463	0.69141	0.68254	0.67947
1,2-Dichloroethane-d4 (S)	Averaged	0.35867	0.35856	0.34945	0.34932	0.35291	0.35165
Toluene-d8 (S)	Averaged	1.89430	1.89614	1.90780	1.92272	1.90669	1.89476

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSV - FORM VI VOA-3
MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - New York Instrument ID: 70MSV6 GC Column: Col 1 SDG No.: 7016438

Calibration Date(s): 03/27/2017 03/27/2017 Calibration Time(s): 18:07 20:12

LAB FILE ID

CAL1 = 032717.B\J33243.D CAL2 = 032717.B\J33244.D CAL3 = 032717.B\J33245.D

CAL4 = 032717.B\J33246.D CAL5 = 032717.B\J33247.D CAL6 = 032717.B\J33248.D

CAL7 = 032717.B\J33249.D CAL8 = 032717.B\J33250.D

COMPOUND	CURVE TYPE	CAL7	CAL8
Acetone	Averaged	0.28061	0.29585
Acrylonitrile	Averaged	0.33410	0.33199
Benzene	Averaged	1.87712	1.87807
Bromochloromethane	Averaged	0.36062	0.36423
Bromodichloromethane	Averaged	0.57486	0.60807
Bromoform	Linear	0.37044	0.43047
Bromomethane	Averaged	0.50430	0.48237
2-Butanone (MEK)	Averaged	0.82381	0.83975
Carbon disulfide	Averaged	1.89648	1.90600
Carbon tetrachloride	Averaged	0.41508	0.46531
Chlorobenzene	Averaged	2.04091	2.07960
Chloroethane	Averaged	0.60280	0.60488
Chloroform	Averaged	1.35524	1.38663
Chloromethane	Averaged	0.95955	0.95395
1,2-Dibromo-3-chloropropane	Linear	0.20697	0.21712
Dibromochloromethane	Averaged	0.63690	0.70292
1,2-Dibromoethane (EDB)	Averaged	0.38756	0.39009
Dibromomethane	Averaged	0.27236	0.27733
1,2-Dichlorobenzene	Averaged	1.81100	1.80251
1,4-Dichlorobenzene	Averaged	1.92977	1.94907
trans-1,4-Dichloro-2-butene	Averaged	0.39276	0.41225
1,1-Dichloroethane	Averaged	1.61900	1.64563
1,2-Dichloroethane	Averaged	1.17972	1.18912
1,1-Dichloroethene	Averaged	0.55963	0.55894
cis-1,2-Dichloroethene	Averaged	0.82020	0.84329
trans-1,2-Dichloroethene	Averaged	0.71233	0.72817
1,2-Dichloropropane	Averaged	0.55817	0.56417
cis-1,3-Dichloropropene	Averaged	0.81089	0.83994
trans-1,3-Dichloropropene	Linear	0.70484	0.74650
Ethylbenzene	Averaged	1.12373	1.14855
2-Hexanone	Averaged	0.62053	0.62730
Iodomethane	Averaged	0.80712	0.81042
Methylene Chloride	Averaged	0.73995	0.73080
4-Methyl-2-pentanone (MIBK)	Averaged	0.51098	0.50236
Styrene	Averaged	2.40445	2.44394

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSV - FORM VI VOA-4

MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - New York Instrument ID: 70MSV6 GC Column: Col 1 SDG No.: 7016438

Calibration Date(s): 03/27/2017 03/27/2017 Calibration Time(s): 18:07 20:12

LAB FILE ID

CAL1 = 032717.B\J33243.D CAL2 = 032717.B\J33244.D CAL3 = 032717.B\J33245.D

CAL4 = 032717.B\J33246.D CAL5 = 032717.B\J33247.D CAL6 = 032717.B\J33248.D

CAL7 = 032717.B\J33249.D CAL8 = 032717.B\J33250.D

COMPOUND	CURVE TYPE	CAL7	CAL8
1,1,1,2-Tetrachloroethane	Linear	0.62248	0.68978
1,1,2,2-Tetrachloroethane	Averaged	1.22282	1.18468
Tetrachloroethene	Averaged	0.75219	1.05932
Toluene	Averaged	1.92511	1.93854
1,1,1-Trichloroethane	Averaged	0.62612	0.65268
1,1,2-Trichloroethane	Averaged	0.35385	0.35435
Trichloroethene	Averaged	0.44560	0.45940
Trichlorofluoromethane	Averaged	0.96622	0.95387
1,2,3-Trichloropropane	Averaged	0.34680	0.34114
Vinyl acetate	Averaged	1.97355	1.94007
Vinyl chloride	Averaged	0.95373	0.94431
m&p-Xylene	Averaged	1.39810	1.42640
o-Xylene	Averaged	1.36536	1.39500
4-Bromofluorobenzene (S)	Averaged	0.67736	0.68513
1,2-Dichloroethane-d4 (S)	Averaged	0.35797	0.37048
Toluene-d8 (S)	Averaged	1.90232	1.91256

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSV - FORM VI VOA-5
MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - New York Instrument ID: 70MSV6 GC Column: Col 1 SDG No.: 7016438

Calibration Date(s): 03/27/2017 03/27/2017 Calibration Time(s): 18:07 20:12

LAB FILE ID

CAL1 = 032717.B\J33243.D CAL2 = 032717.B\J33244.D CAL3 = 032717.B\J33245.D

CAL4 = 032717.B\J33246.D CAL5 = 032717.B\J33247.D CAL6 = 032717.B\J33248.D

CAL7 = 032717.B\J33249.D CAL8 = 032717.B\J33250.D

COMPOUND	CURVE TYPE	%RSD	R2	A1	A2	A3
Acetone	Averaged	8.93825			0.29563	
Acrylonitrile	Averaged	7.39788			0.35145	
Benzene	Averaged	5.37345			1.97360	
Bromochloromethane	Averaged	4.60913			0.37708	
Bromodichloromethane	Averaged	7.75905			0.54169	
Bromoform	Linear		0.99368	-0.05379	0.43149	
Bromomethane	Averaged	10.59628			0.54878	
2-Butanone (MEK)	Averaged	10.71394			0.81722	
Carbon disulfide	Averaged	8.75811			2.04659	
Carbon tetrachloride	Averaged	15.03761			0.36648	
Chlorobenzene	Averaged	3.61572			2.14185	
Chloroethane	Averaged	6.38728			0.64524	
Chloroform	Averaged	5.79541			1.43492	
Chloromethane	Averaged	13.17920			1.07967	
1,2-Dibromo-3-chloropropane	Linear		0.99757	-0.02448	0.22099	
Dibromochloromethane	Averaged	18.95295			0.53753	
1,2-Dibromoethane (EDB)	Averaged	19.16597			0.32598	
Dibromomethane	Averaged	8.11537			0.28763	
1,2-Dichlorobenzene	Averaged	4.47734			1.86345	
1,4-Dichlorobenzene	Averaged	7.47090			2.02094	
trans-1,4-Dichloro-2-butene	Averaged	11.41724			0.35281	
1,1-Dichloroethane	Averaged	4.96564			1.71439	
1,2-Dichloroethane	Averaged	7.61113			1.26400	
1,1-Dichloroethene	Averaged	6.71036			0.57891	
cis-1,2-Dichloroethene	Averaged	7.84395			0.88098	
trans-1,2-Dichloroethene	Averaged	7.73324			0.76145	
1,2-Dichloropropane	Averaged	5.78786			0.58941	
cis-1,3-Dichloropropene	Averaged	11.15991			0.72836	
trans-1,3-Dichloropropene	Linear		0.99868	-0.04331	0.74814	
Ethylbenzene	Averaged	1.87658			1.14997	
2-Hexanone	Averaged	13.88525			0.67151	
Iodomethane	Averaged	2.42527			0.81163	
Methylene Chloride	Averaged	7.69122			0.79712	
4-Methyl-2-pentanone (MIBK)	Averaged	5.41945			0.51822	
Styrene	Averaged	1.96729			2.42578	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSV - FORM VI VOA-6

MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - New York Instrument ID: 70MSV6 GC Column: Col 1 SDG No.: 7016438

Calibration Date(s): 03/27/2017 03/27/2017 Calibration Time(s): 18:07 20:12

LAB FILE ID

CAL1 = 032717.B\J33243.D CAL2 = 032717.B\J33244.D CAL3 = 032717.B\J33245.D

CAL4 = 032717.B\J33246.D CAL5 = 032717.B\J33247.D CAL6 = 032717.B\J33248.D

CAL7 = 032717.B\J33249.D CAL8 = 032717.B\J33250.D

COMPOUND	CURVE TYPE	%RSD	R2	A1	A2	A3
1,1,1,2-Tetrachloroethane	Linear		0.99713	-0.06430	0.69250	
1,1,2,2-Tetrachloroethane	Averaged	2.28898			1.21091	
Tetrachloroethene	Averaged	14.79088			0.80026	
Toluene	Averaged	5.19779			2.03115	
1,1,1-Trichloroethane	Averaged	5.45420			0.60152	
1,1,2-Trichloroethane	Averaged	4.29115			0.36253	
Trichloroethene	Averaged	5.39158			0.47082	
Trichlorofluoromethane	Averaged	4.90504			0.98895	
1,2,3-Trichloropropane	Averaged	2.79376			0.34932	
Vinyl acetate	Averaged	17.68076			1.62486	
Vinyl chloride	Averaged	6.52999			1.00571	
m&p-Xylene	Averaged	5.20164			1.42971	
o-Xylene	Averaged	2.95637			1.41418	
4-Bromofluorobenzene (S)	Averaged	1.14911			0.67869	
1,2-Dichloroethane-d4 (S)	Averaged	1.96628			0.35613	
Toluene-d8 (S)	Averaged	0.51972			1.90466	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

Data File: \\v70wintarget\chem\70msv6.i\032717.b\J33243.D
Report Date: 28-Mar-2017 19:56

Pace Analytical Services, Inc.

SW846-8260C/EPA 624

Data file : \\v70wintarget\chem\70msv6.i\032717.b\J33243.D
Lab Smp Id: CAL1 Client Smp ID: CAL1
Inj Date : 27-MAR-2017 18:07 MS Autotune Date: 17-MAR-2017 06:2
Operator : BBL Inst ID: 70msv6.i
Smp Info : cal1, 13484:1
Misc Info : 1823,
Comment :
Method : \\v70wintarget\chem\70msv6.i\032717.b\032717_8260W.m
Meth Date : 28-Mar-2017 19:53 blagula Quant Type: ISTD
Cal Date : 16-DEC-2016 16:06 Cal File: J30742.D
Als bottle: 2 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	REVIEW C
1 Chlorodifluoromethane	51	Compound Not Detected.						(D)
2 Dichlorotetrafluoroethane	135	Compound Not Detected.						(D)
3 Dichlorodifluoromethane	85	Compound Not Detected.						(D)
4 Chloromethane	50	Compound Not Detected.						(D)
5 Vinyl chloride	62	Compound Not Detected.						(D)
6 1,3-Butadiene	54	Compound Not Detected.						(D)
7 Acetaldehyde	44	Compound Not Detected.						(D)
8 Bromomethane	94	Compound Not Detected.						(D)
9 Chloroethane	64	Compound Not Detected.						(D)
10 Dichlorofluoromethane	67	Compound Not Detected.						(D)
11 Trichlorofluoromethane	101	Compound Not Detected.						(D)
12 Ethanol	45	Compound Not Detected.						(D)
13 Diethyl ether (Ethyl ether)	59	Compound Not Detected.						(D)
16 1,1,2-Trichlorotrifluoroethane	101	Compound Not Detected.						(D)
14 Acrolein	56	Compound Not Detected.						(D)
15 1,1-Dichloroethene	96	2.184	2.184	(0.628)	967	0.40000		(Q)
17 Acetone	43	Compound Not Detected.						(D)
18 Iodomethane	142	Compound Not Detected.						(D)
19 2-Propanol	45	Compound Not Detected.						(D)
20 Carbon disulfide	76	Compound Not Detected.						(D)
21 Allyl chloride	76	Compound Not Detected.						(D)
22 Acetonitrile	41	Compound Not Detected.						(D)
23 Methyl acetate	43	Compound Not Detected.						(D)

Data File: \\v70wintarget\chem\70msv6.i\032717.b\J33243.D
Report Date: 28-Mar-2017 19:56

		QUANT SIG					AMOUNTS			
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)		REVIEW C
	24 Methylene Chloride	84	Compound Not Detected.							(D)
	25 tert-Butyl Alcohol	59	Compound Not Detected.							(D)
	28 Methyl-tert-butyl ether	73	Compound Not Detected.							(D)
	27 trans-1,2-Dichloroethene	96	Compound Not Detected.							(D)
	26 Acrylonitrile	53	Compound Not Detected.							(D)
	30 n-Hexane	57	Compound Not Detected.							(D)
	29 Diisopropyl ether	45	Compound Not Detected.							(D)
	32 Vinyl acetate	43	Compound Not Detected.							(D)
	31 1,1-Dichloroethane	63	Compound Not Detected.							(D)
	33 Chloroprene	53	Compound Not Detected.							(D)
	34 Ethyl-tert-butyl ether	59	Compound Not Detected.							(D)
	36 2,2-Dichloropropane	77	Compound Not Detected.							(D)
	35 cis-1,2-Dichloroethene	96	Compound Not Detected.							(D)
	39 Ethyl acetate	61	Compound Not Detected.							(D)
	37 2-Butanone (MEK)	43	Compound Not Detected.							(D)
	41 Bromochloromethane	128	Compound Not Detected.							(D)
	42 Tetrahydrofuran	42	Compound Not Detected.							(D)
	43 Chloroform	83	Compound Not Detected.							(D)
	38 Propionitrile	54	Compound Not Detected.							(D)
	46 Cyclohexane	56	Compound Not Detected.							(D)
	45 1,1,1-Trichloroethane	97	Compound Not Detected.							(D)
*	44 Pentafluorobenzene (IS)	168	3.476	3.476	(1.000)	227863	50.0000		(Q)	
	48 Carbon tetrachloride	117	Compound Not Detected.							(D)
	47 1,1-Dichloropropene	75	Compound Not Detected.							(D)
	55 2,2,4-Trimethylpentane	57	Compound Not Detected.							(D)
	51 Benzene	78	3.677	3.671	(0.941)	6074	0.40000		(Q)	
	40 Methacrylonitrile	67	Compound Not Detected.							(D)
$	50 1,2-Dichloroethane-d4 (S)	65	3.677	3.677	(0.941)	142209	50.0000		(Q)	
	56 tert-Amylmethyl ether	73	Compound Not Detected.							(D)
	52 1,2-Dichloroethane	62	3.726	3.720	(1.072)	2008	0.40000		(Q)	
	57 n-Heptane	43	Compound Not Detected.							(D)
*	58 1,4-Difluorobenzene (IS)	114	3.909	3.909	(1.000)	396492	50.0000		(Q)	
	59 Trichloroethene	95	Compound Not Detected.							(D)
	60 Methylcyclohexane	83	Compound Not Detected.							(D)
	49 Isobutanol	43	Compound Not Detected.							(D)
	53 tert-Amyl Alcohol	59	Compound Not Detected.							(D)
	54 tert-Amyl ethyl ether	59	Compound Not Detected.							(D)
	61 1,2-Dichloropropane	63	Compound Not Detected.							(D)
	63 Methyl methacrylate	69	Compound Not Detected.							(D)
	64 1,4-Dioxane (p-Dioxane)	88	Compound Not Detected.							(D)
	62 Dibromomethane	93	Compound Not Detected.							(D)
	65 Bromodichloromethane	83	Compound Not Detected.							(D)
	66 2-Nitropropane	43	Compound Not Detected.							(D)
	67 2-Chloroethylvinyl ether	63	Compound Not Detected.							(D)
	68 cis-1,3-Dichloropropene	75	4.665	4.665	(1.193)	1964	0.40000		(Q)	
	69 4-Methyl-2-pentanone (MIBK)	43	Compound Not Detected.							(D)
$	70 Toluene-d8 (S)	98	4.811	4.811	(0.828)	432694	50.0000		(Q)	
	71 Toluene	91	Compound Not Detected.							(D)
	72 Methyl isothiocyanate	73	Compound Not Detected.							(D)
	74 trans-1,3-Dichloropropene	75	5.043	5.037	(1.290)	1221	0.40000		(Q)	
	75 Ethyl methacrylate	69	Compound Not Detected.							(D)
	76 1,1,2-Trichloroethane	83	Compound Not Detected.							(D)
	77 Tetrachloroethene	166	Compound Not Detected.							(D)
	78 1,3-Dichloropropane	76	Compound Not Detected.							(D)

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		QUANT SIG					AMOUNTS CAL-AMT	AMOUNTS ON-COL	
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)	REVIEW C
79	2-Hexanone	43	Compound Not Detected.						(D)
73	n-Octane	43	Compound Not Detected.						(D)
81	n-Butyl acetate	43	Compound Not Detected.						(D)
80	Dibromochloromethane	129	Compound Not Detected.						(D)
82	1,2-Dibromoethane (EDB)	107	5.518	5.512	(1.412)	729	0.40000	(Q)	
* 83	Chlorobenzene-d5 (IS)	82	5.811	5.811	(1.000)	228419	50.0000	(Q)	
84	Chlorobenzene	112	Compound Not Detected.						(D)
86	Ethylbenzene	106	Compound Not Detected.						(D)
85	1,1,1,2-Tetrachloroethane	131	Compound Not Detected.						(D)
88	n-Nonane	43	Compound Not Detected.						(D)
87	m&p-Xylene	106	5.969	5.963	(1.027)	4681	0.80000	(Q)	
89	o-Xylene	106	Compound Not Detected.						(D)
90	Styrene	104	Compound Not Detected.						(D)
91	Bromoform	173	Compound Not Detected.						(D)
92	Isopropylbenzene (Cumene)	105	Compound Not Detected.						(D)
$ 93	4-Bromofluorobenzene (S)	95	6.671	6.671	(1.148)	153639	50.0000	(Q)	
94	Bromobenzene	156	Compound Not Detected.						(D)
95	1,1,2,2-Tetrachloroethane	83	Compound Not Detected.						(D)
98	n-Propylbenzene	91	Compound Not Detected.						(D)
96	1,2,3-Trichloropropane	110	6.841	6.835	(0.906)	452	0.40000	(Q)	
97	trans-1,4-Dichloro-2-butene	53	Compound Not Detected.						(D)
103	n-Decane	43	Compound Not Detected.						(D)
99	2-Chlorotoluene	91	Compound Not Detected.						(D)
100	4-Ethyltoluene	105	Compound Not Detected.						(D)
101	1,3,5-Trimethylbenzene	105	Compound Not Detected.						(D)
102	4-Chlorotoluene	91	Compound Not Detected.						(D)
104	tert-Butylbenzene	119	Compound Not Detected.						(D)
105	Pentachloroethane	167	Compound Not Detected.						(D)
106	1,2,4-Trimethylbenzene	105	Compound Not Detected.						(D)
107	sec-Butylbenzene	105	Compound Not Detected.						(D)
109	d-Limonene	136	Compound Not Detected.						(D)
110	p-Isopropyltoluene	119	Compound Not Detected.						(D)
108	1,3-Dichlorobenzene	146	Compound Not Detected.						(D)
* 111	1,4-Dichlorobenzene-d4 (IS)	152	7.548	7.548	(1.000)	170026	50.0000	(Q)	
112	1,4-Dichlorobenzene	146	Compound Not Detected.						(D)
113	1,2,3-Trimethylbenzene	105	Compound Not Detected.						(D)
114	Benzyl chloride	91	Compound Not Detected.						(D)
115	trans-Decalin	138	Compound Not Detected.						(D)
116	1,4-Diethylbenzene	119	Compound Not Detected.						(D)
117	n-Butylbenzene	91	Compound Not Detected.						(D)
119	n-Undecane	43	Compound Not Detected.						(D)
118	1,2-Dichlorobenzene	146	Compound Not Detected.						(D)
120	cis-Decalin	138	Compound Not Detected.						(D)
121	1,2,4,5-tetramethylbenzene	119	Compound Not Detected.						(D)
122	1,2-Dibromo-3-chloropropane	75	Compound Not Detected.						
123	n-Dodecane	43	Compound Not Detected.						(D)
124	1,2,4-Trichlorobenzene	180	Compound Not Detected.						(D)
125	Hexachloro-1,3-butadiene	225	Compound Not Detected.						
126	Naphthalene	128	Compound Not Detected.						(D)
127	1,2,3-Trichlorobenzene	180	Compound Not Detected.						(D)

Data File: \\v70wintarget\chem\70msv6.i\032717.b\J33243.D
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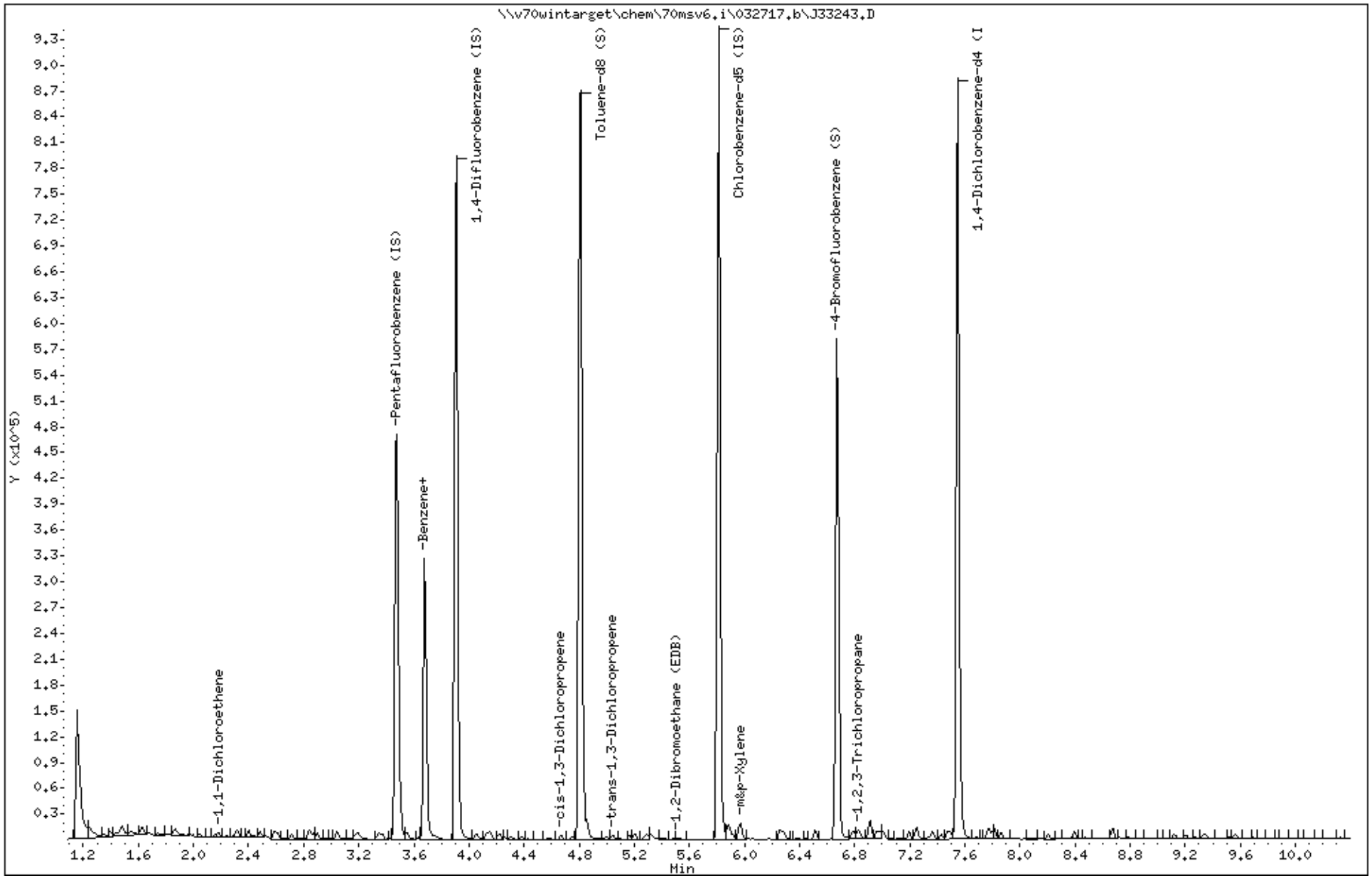
QC Flag Legend

Q - Qualifier signal failed the ratio test.
D - User disabled compound identification.

Review Codes Legend

:

Data File: \\v70wintarget\chem\70msv6.i\032717.b\J33243.D
Date : 27-MAR-2017 18:07
Client ID: CAL1
Instrument: 70msv6.i
Sample Info: CAL1, 13484:1
Purge Volume: 5.0
Operator: BBL
Column phase: RTX-624
Column diameter: 0.18



Data File: \\v70wintarget\chem\70msv6.i\032717.b/J33243.D
Injection Date: 27-MAR-2017 18:07
Instrument: 70msv6.i
Lab Sample ID: CAL1
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Data File: \\v70wintarget\chem\70msv6.i\032717.b\J33244.D
Report Date: 28-Mar-2017 19:56

Pace Analytical Services, Inc.

SW846-8260C/EPA 624

Data file : \\v70wintarget\chem\70msv6.i\032717.b\J33244.D
Lab Smp Id: CAL2 Client Smp ID: CAL2
Inj Date : 27-MAR-2017 18:25 MS Autotune Date: 17-MAR-2017 06:2
Operator : BBL Inst ID: 70msv6.i
Smp Info : cal2, 13485:1
Misc Info : 1823,
Comment :
Method : \\v70wintarget\chem\70msv6.i\032717.b\032717_8260W.m
Meth Date : 28-Mar-2017 19:53 blagula Quant Type: ISTD
Cal Date : 27-MAR-2017 18:25 Cal File: J33244.D
Als bottle: 3 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)	REVIEW C
1	Chlorodifluoromethane	51	1.281	1.281	(0.369)	5753	1.00000	1.16	
2	Dichlorotetrafluoroethane	135	1.342	1.348	(0.386)	1298	1.00000	0.889	
3	Dichlorodifluoromethane	85	1.263	1.263	(0.363)	3361	1.00000	1.16(Q)	
4	Chloromethane	50	1.391	1.391	(0.400)	5820	1.00000	1.25	
5	Vinyl chloride	62	1.464	1.458	(0.421)	4828	1.00000	1.11	
6	1,3-Butadiene	54	1.482	1.476	(0.427)	4561	1.00000	1.06	
7	Acetaldehyde	44	Compound Not Detected.						(D)
8	Bromomethane	94	1.678	1.672	(0.483)	2811	1.00000	1.19	
9	Chloroethane	64	1.739	1.739	(0.500)	3091	1.00000	1.11	
10	Dichlorofluoromethane	67	1.867	1.867	(0.537)	8468	1.00000	1.15	
11	Trichlorofluoromethane	101	1.873	1.873	(0.539)	4354	1.00000	1.02	
12	Ethanol	45	2.013	2.007	(0.579)	1318	1.00000	36.2(Q)	
13	Diethyl ether (Ethyl ether)	59	2.043	2.037	(0.588)	3675	1.00000	1.07	
16	1,1,2-Trichlorotrifluoroethane	101	2.159	2.153	(0.621)	2632	1.00000	1.05	
14	Acrolein	56	2.159	2.159	(0.621)	812	1.00000	1.59	
15	1,1-Dichloroethene	96	2.184	2.184	(0.628)	2721	1.00000	1.09	
17	Acetone	43	2.245	2.239	(0.646)	3021	1.00000	1.98	
18	Iodomethane	142	2.287	2.287	(0.658)	3388	1.00000	0.967	
19	2-Propanol	45	2.312	2.306	(0.665)	6876	25.0000	29.5(Q)	
20	Carbon disulfide	76	2.318	2.318	(0.667)	10253	1.00000	1.16	
21	Allyl chloride	76	2.397	2.397	(0.690)	2603	1.00000	1.20	
22	Acetonitrile	41	2.397	2.397	(0.690)	7911	5.00000	5.48	
23	Methyl acetate	43	2.409	2.403	(0.693)	6182	1.00000	1.09	

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Report Date: 28-Mar-2017 19:56

			QUANT SIG					AMOUNTS CAL-AMT	AMOUNTS ON-COL	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)	REVIEW C
	24	Methylene Chloride	84	2.482	2.482	(0.714)	3913	1.00000	1.14	
	25	tert-Butyl Alcohol	59	2.525	2.525	(0.726)	966	5.00000	4.63	
	28	Methyl-tert-butyl ether	73	2.592	2.586	(0.746)	13211	1.00000	1.09	
	27	trans-1,2-Dichloroethene	96	2.610	2.610	(0.751)	3780	1.00000	1.15	
	26	Acrylonitrile	53	2.653	2.653	(0.763)	1751	1.00000	1.15	
	30	n-Hexane	57	2.714	2.708	(0.781)	4302	1.00000	0.959	
	29	Diisopropyl ether	45	2.842	2.842	(0.818)	17329	1.00000	1.13	
	32	Vinyl acetate	43	2.872	2.873	(0.826)	5990	1.00000	0.854	
	31	1,1-Dichloroethane	63	2.866	2.866	(0.825)	7880	1.00000	1.06	
	33	Chloroprene	53	2.897	2.897	(0.833)	6956	1.00000	1.11	
	34	Ethyl-tert-butyl ether	59	3.043	3.043	(0.875)	12627	1.00000	1.02	
	36	2,2-Dichloropropane	77	3.183	3.177	(0.916)	3440	1.00000	0.872	
	35	cis-1,2-Dichloroethene	96	3.196	3.196	(0.919)	4419	1.00000	1.16	
	39	Ethyl acetate	61	3.196	3.196	(0.919)	7371	1.00000	1.08	
	37	2-Butanone (MEK)	43	3.208	3.202	(0.923)	4242	1.00000	1.20(Q)	
	41	Bromochloromethane	128	3.342	3.342	(0.961)	1707	1.00000	1.05(Q)	
	42	Tetrahydrofuran	42	3.348	3.342	(0.963)	1775	1.00000	1.24	
	43	Chloroform	83	3.366	3.366	(0.968)	6868	1.00000	1.11	
	38	Propionitrile	54	3.287	3.281	(0.946)	433	1.00000	0.819(Q)	
	46	Cyclohexane	56	3.464	3.458	(0.996)	12513	1.00000	1.58(Q)	
	45	1,1,1-Trichloroethane	97	3.464	3.458	(0.886)	4623	1.00000	1.01(Q)	
*	44	Pentafluorobenzene (IS)	168	3.476	3.476	(1.000)	215794	50.0000	(Q)	
	48	Carbon tetrachloride	117	3.537	3.537	(0.905)	2590	1.00000	0.932	
	47	1,1-Dichloropropene	75	3.555	3.555	(0.910)	5860	1.00000	1.11	
	55	2,2,4-Trimethylpentane	57	3.647	3.647	(1.049)	5827	1.00000	0.815(Q)	
	51	Benzene	78	3.677	3.671	(0.941)	16525	1.00000	1.10	
	40	Methacrylonitrile	67	3.354	3.348	(0.965)	1808	1.00000	1.10	
$	50	1,2-Dichloroethane-d4 (S)	65	3.677	3.677	(0.941)	135901	50.0000	50.3	
	56	tert-Amylmethyl ether	73	3.702	3.702	(1.065)	11467	1.00000	1.03	
	52	1,2-Dichloroethane	62	3.726	3.720	(1.072)	6254	1.00000	1.15	
	57	n-Heptane	43	3.756	3.757	(1.081)	3291	1.00000	0.930	
*	58	1,4-Difluorobenzene (IS)	114	3.909	3.909	(1.000)	379021	50.0000		
	59	Trichloroethene	95	4.055	4.055	(1.037)	3883	1.00000	1.09	
	60	Methylcyclohexane	83	4.128	4.128	(1.056)	4088	1.00000	0.878(Q)	
	49	Isobutanol	43	3.653	3.647	(1.051)	1177	5.00000	4.02	
	53	tert-Amyl Alcohol	59	Compound Not Detected.						(D)
	54	tert-Amyl ethyl ether	59	4.153	4.153	(1.195)	7874	1.00000	0.927	
	61	1,2-Dichloropropane	63	4.220	4.220	(1.080)	4932	1.00000	1.10(QM)	CO
	63	Methyl methacrylate	69	4.256	4.250	(1.089)	1686	1.00000	0.783(Q)	
	64	1,4-Dioxane (p-Dioxane)	88	4.287	4.281	(1.097)	963	25.0000	27.0(Q)	
	62	Dibromomethane	93	4.305	4.299	(1.101)	2551	1.00000	1.17	
	65	Bromodichloromethane	83	4.384	4.378	(1.122)	3887	1.00000	0.947	
	66	2-Nitropropane	43	4.561	4.561	(1.167)	2081	1.00000	1.03(Q)	
	67	2-Chloroethylvinyl ether	63	4.567	4.561	(1.168)	1972	1.00000	0.879(Q)	
	68	cis-1,3-Dichloropropene	75	4.665	4.665	(1.193)	5085	1.00000	0.921	
	69	4-Methyl-2-pentanone (MIBK)	43	4.750	4.744	(1.215)	4338	1.00000	1.10	
$	70	Toluene-d8 (S)	98	4.805	4.811	(0.827)	410021	50.0000	49.8	
	71	Toluene	91	4.854	4.854	(1.242)	16776	1.00000	1.09	
	72	Methyl isothiocyanate	73	4.988	4.976	(1.276)	4612	2.50000	2.07	
	74	trans-1,3-Dichloropropene	75	5.043	5.037	(1.290)	3468	1.00000	0.822	
	75	Ethyl methacrylate	69	5.043	5.037	(1.290)	2738	1.00000	0.742	
	76	1,1,2-Trichloroethane	83	5.165	5.165	(1.321)	2948	1.00000	1.07	
	77	Tetrachloroethene	166	5.207	5.201	(0.896)	3181	1.00000	0.919	
	78	1,3-Dichloropropane	76	5.287	5.281	(0.910)	6386	1.00000	1.05	

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Report Date: 28-Mar-2017 19:56

		QUANT SIG					AMOUNTS CAL-AMT	AMOUNTS ON-COL	
Compounds		MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)	REVIEW C
79	2-Hexanone	43	5.317	5.299	(0.915)	8521	1.00000	2.30(Q)	
73	n-Octane	43	4.854	4.854	(1.242)	3376	1.00000	0.949(Q)	
81	n-Butyl acetate	43	Compound Not Detected.						(D)
80	Dibromochloromethane	129	5.421	5.421	(0.933)	1982	1.00000	0.852	
82	1,2-Dibromoethane (EDB)	107	5.518	5.512	(1.412)	2083	1.00000	0.843	
* 83	Chlorobenzene-d5 (IS)	82	5.811	5.811	(1.000)	216240	50.0000		
84	Chlorobenzene	112	5.835	5.835	(1.004)	9557	1.00000	1.03(Q)	
86	Ethylbenzene	106	5.878	5.878	(1.012)	4980	1.00000	1.00	
85	1,1,1,2-Tetrachloroethane	131	5.890	5.890	(1.014)	1783	1.00000	0.812(Q)	
88	n-Nonane	43	5.915	5.909	(1.018)	2897	1.00000	0.929(Q)	
87	m&p-Xylene	106	5.969	5.963	(1.027)	13043	2.00000	2.11	
89	o-Xylene	106	6.256	6.256	(1.077)	6359	1.00000	1.04	
90	Styrene	104	6.280	6.274	(1.081)	10117	1.00000	0.964	
91	Bromoform	173	6.439	6.439	(1.108)	857	1.00000	0.694	
92	Isopropylbenzene (Cumene)	105	6.512	6.512	(0.863)	14719	1.00000	1.04	
$ 93	4-Bromofluorobenzene (S)	95	6.670	6.671	(1.148)	144094	50.0000	49.1	
94	Bromobenzene	156	6.786	6.780	(0.899)	3935	1.00000	1.11	
95	1,1,2,2-Tetrachloroethane	83	6.792	6.793	(0.900)	3931	1.00000	1.03	
98	n-Propylbenzene	91	6.823	6.823	(0.904)	17350	1.00000	1.04	
96	1,2,3-Trichloropropane	110	6.835	6.835	(0.905)	1150	1.00000	1.04	
97	trans-1,4-Dichloro-2-butene	53	6.853	6.841	(0.908)	1117	1.00000	1.00(Q)	
103	n-Decane	43	6.896	6.902	(1.187)	3102	1.00000	1.01(Q)	
99	2-Chlorotoluene	91	6.914	6.914	(0.916)	12632	1.00000	1.05	
100	4-Ethyltoluene	105	6.908	6.908	(0.915)	13687	1.00000	0.982	
101	1,3,5-Trimethylbenzene	105	6.957	6.957	(0.922)	11906	1.00000	1.04	
102	4-Chlorotoluene	91	7.006	7.000	(0.928)	12269	1.00000	1.12	
104	tert-Butylbenzene	119	7.195	7.195	(0.953)	8797	1.00000	1.00	
105	Pentachloroethane	167	7.250	7.250	(0.960)	819	1.00000	0.854(Q)	
106	1,2,4-Trimethylbenzene	105	7.250	7.244	(0.960)	12075	1.00000	1.03	
107	sec-Butylbenzene	105	7.365	7.366	(0.976)	11682	1.00000	0.971	
109	d-Limonene	136	7.420	7.427	(1.277)	210	1.00000	0.493(Q)	
110	p-Isopropyltoluene	119	7.475	7.475	(0.990)	9822	1.00000	0.948	
108	1,3-Dichlorobenzene	146	7.493	7.494	(0.993)	6536	1.00000	1.07	
* 111	1,4-Dichlorobenzene-d4 (IS)	152	7.548	7.548	(1.000)	157971	50.0000		
112	1,4-Dichlorobenzene	146	7.567	7.567	(1.002)	7411	1.00000	1.16(Q)	
113	1,2,3-Trimethylbenzene	105	7.579	7.579	(1.004)	13350	1.00000	1.08	
114	Benzyl chloride	91	7.676	7.676	(1.017)	2461	1.00000	0.619	
115	trans-Decalin	138	7.768	7.768	(1.029)	1136	1.00000	0.822	
116	1,4-Diethylbenzene	119	7.774	7.774	(1.030)	5450	1.00000	0.909	
117	n-Butylbenzene	91	7.792	7.792	(1.032)	10310	1.00000	0.939	
119	n-Undecane	43	7.817	7.817	(1.036)	2923	1.00000	1.16(T)	
118	1,2-Dichlorobenzene	146	7.859	7.859	(1.041)	6411	1.00000	1.09	
120	cis-Decalin	138	8.207	8.207	(1.087)	959	1.00000	0.872	
121	1,2,4,5-tetramethylbenzene	119	8.396	8.396	(1.112)	8565	1.00000	1.02	
122	1,2-Dibromo-3-chloropropane	75	8.481	8.481	(1.124)	161	1.00000	0.377(Q)	
123	n-Dodecane	43	8.670	8.670	(1.149)	2994	1.00000	1.62(Q)	
124	1,2,4-Trichlorobenzene	180	9.115	9.115	(1.208)	3313	1.00000	1.05	
125	Hexachloro-1,3-butadiene	225	9.213	9.207	(1.220)	1100	1.00000	1.01	
126	Naphthalene	128	9.341	9.335	(1.237)	8441	1.00000	1.07	
127	1,2,3-Trichlorobenzene	180	9.560	9.560	(1.267)	2935	1.00000	1.04	

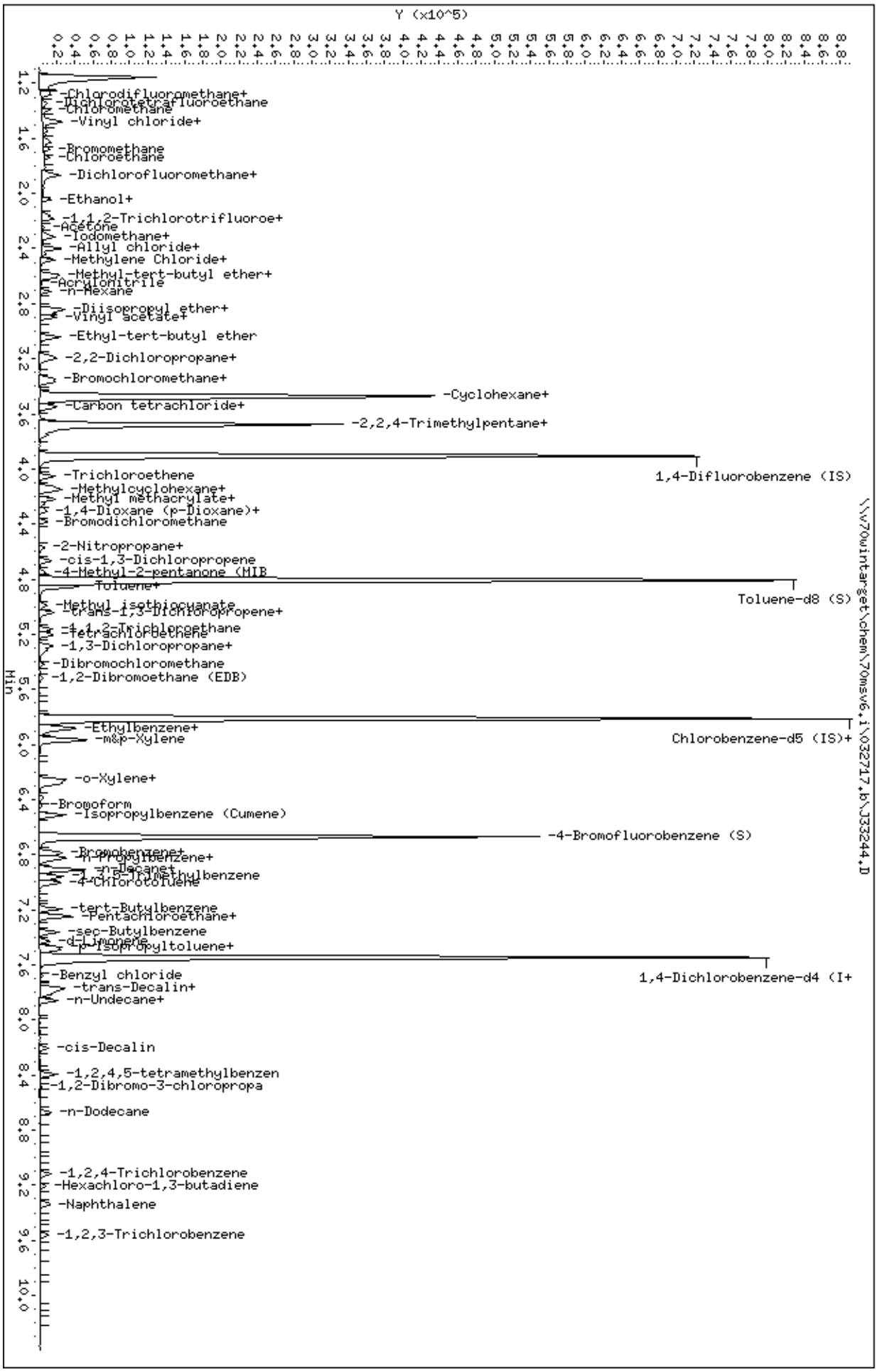
Data File: \\v70wintarget\chem\70msv6.i\032717.b\J33244.D
Report Date: 28-Mar-2017 19:56

QC Flag Legend

T - Target compound detected outside RT window.
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.
D - User disabled compound identification.

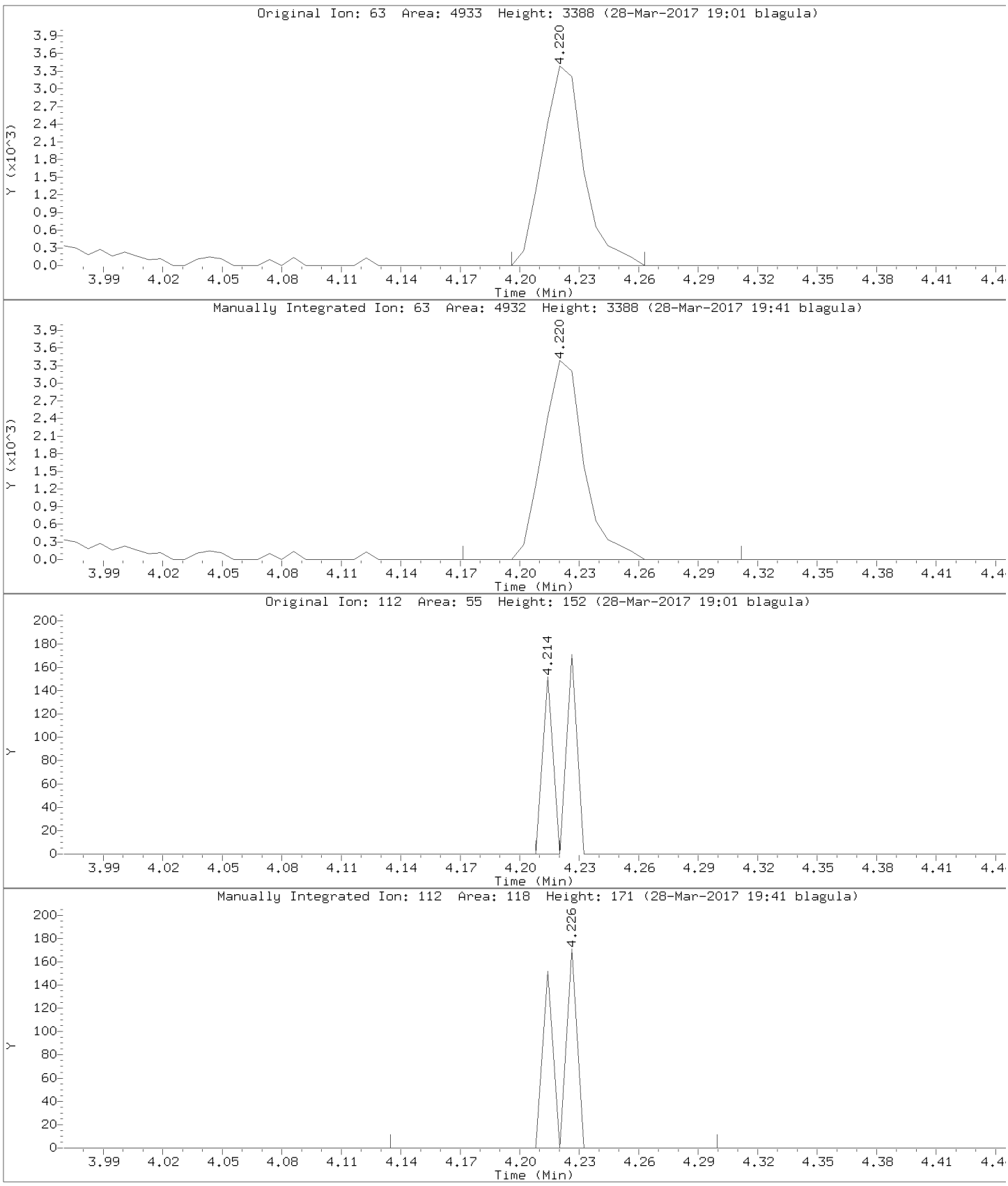
Review Codes Legend

:
CO: Indicates that the analyst had to split two co-eluting peaks apart that were not (or could not be) separated by the computer system.


Data File: \\v70wintarget\chem\70msv6.i\032717.b\J33244.D
Date : 27-MAR-2017 18:25
Client ID: CAL2
Sample Info: CAL2, 13485:1
Purge Volume: 5.0
Column phase: RTX-624
Instrument: 70msv6.i
Operator: BBL
Column diameter: 0.18
Y (x10^5)
Min
-Chlorodifluoromethane+
-Dichlorotetrafluoroethane
-Chloromethane
-Vinyl chloride+
-Bromomethane
-Chloroethane
-Dichlorofluoromethane+
-Ethanol+
-1,1,2-Trichlorotrifluoroe+
-Acetone
-Iodomethane+
-Allyl chloride+
-Methylene Chloride+
-Methyl-tert-butyl ether+
-Acrylonitrile
-n-Hexane
-Diisopropyl ether+
-Vinyl acetate+
-Ethyl-tert-butyl ether
-2,2-Dichloropropane+
-Bromochloromethane+
-Cyclohexane+
-Carbon tetrachloride+
-2,2,4-Trimethylpentane+
1,4-Difluorobenzene (IS)
-Trichloroethene
-Methylcyclohexane+
-Methyl methacrylate+
-1,4-Dioxane (p-Dioxane)+
-Bromodichloromethane
-2-Nitropropane+
-cis-1,3-Dichloropropene
-4-Methyl-2-pentanone (MIB
-Toluene+
Toluene-d8 (S)
-Methyl isothiocyanate
-trans-1,3-Dichloropropene+
-1,1,2-Trichloroethane
-Tetrachloroethene
-1,3-Dichloropropane+
-Dibromochloromethane
-1,2-Dibromoethane (EDB)
\\v70wintarget\chem\70msv6.i\032717.b\J33244.D
-Ethylbenzene+
-m&p-Xylene
Chlorobenzene-d5 (IS)+
-o-Xylene+
-Bromoform
-Isopropylbenzene (Cumene)
-4-Bromofluorobenzene (S)
-Bromobenzene+
-n-Propylbenzene+
-n-Decane+
-1,3,5-Trimethylbenzene
-4-Chlorotoluene
-tert-Butylbenzene
-Pentachloroethane+
-sec-Butylbenzene
-d-Limonene
-p-Isopropyltoluene+
-Benzyl chloride
1,4-Dichlorobenzene-d4 (I+
-trans-Decalin+
-n-Undecane+
-cis-Decalin
-1,2,4,5-tetramethylbenzen
-1,2-Dibromo-3-chloropropa
-n-Dodecane
-1,2,4-Trichlorobenzene
-Hexachloro-1,3-butadiene
-Naphthalene
-1,2,3-Trichlorobenzene

Data File: \\v70wintarget\chem\70msv6.i\032717.b/J33244.D
Injection Date: 27-MAR-2017 18:25
Instrument: 70msv6.i
Lab Sample ID: CAL2

Compound: 1,2-Dichloropropane Review Code: CO
CAS Number: 78-87-5



Data File: \\v70wintarget\chem\70msv6.i\032717.b\J33245.D
Report Date: 28-Mar-2017 19:56

Pace Analytical Services, Inc.

SW846-8260C/EPA 624

Data file : \\v70wintarget\chem\70msv6.i\032717.b\J33245.D
Lab Smp Id: CAL3 Client Smp ID: CAL3
Inj Date : 27-MAR-2017 18:42 MS Autotune Date: 17-MAR-2017 06:2
Operator : BBL Inst ID: 70msv6.i
Smp Info : cal3, 13486:1
Misc Info : 1823,
Comment :
Method : \\v70wintarget\chem\70msv6.i\032717.b\032717_8260W.m
Meth Date : 28-Mar-2017 19:53 blagula Quant Type: ISTD
Cal Date : 27-MAR-2017 18:42 Cal File: J33245.D
Als bottle: 4 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	REVIEW C
1	Chlorodifluoromethane	51	1.281	1.281	(0.369)	21776	4.00000	3.81(Q)	
2	Dichlorotetrafluoroethane	135	1.349	1.348	(0.388)	6197	4.00000	4.81(Q)	
3	Dichlorodifluoromethane	85	1.263	1.263	(0.363)	12672	4.00000	3.80(Q)	
4	Chloromethane	50	1.391	1.391	(0.400)	20428	4.00000	3.54(Q)	
5	Vinyl chloride	62	1.458	1.458	(0.420)	18403	4.00000	3.84(Q)	
6	1,3-Butadiene	54	1.483	1.476	(0.427)	18756	4.00000	4.14(Q)	
7	Acetaldehyde	44	1.550	1.544	(0.446)	6353	4.00000	(Q)	
8	Bromomethane	94	1.678	1.672	(0.483)	10280	4.00000	3.68(Q)	
9	Chloroethane	64	1.739	1.739	(0.500)	11704	4.00000	3.81(Q)	
10	Dichlorofluoromethane	67	1.867	1.867	(0.537)	31325	4.00000	3.72(Q)	
11	Trichlorofluoromethane	101	1.873	1.873	(0.539)	18626	4.00000	4.31(Q)	
12	Ethanol	45	2.013	2.007	(0.579)	4312	100.000	(Q)	
13	Diethyl ether (Ethyl ether)	59	2.044	2.037	(0.588)	14667	4.00000	4.02(Q)	
16	1,1,2-Trichlorotrifluoroethane	101	2.159	2.153	(0.621)	10578	4.00000	4.05(Q)	
14	Acrolein	56	2.159	2.159	(0.621)	2424	4.00000	3.01(Q)	
15	1,1-Dichloroethene	96	2.184	2.184	(0.628)	11066	4.00000	4.45(Q)	
17	Acetone	43	2.245	2.239	(0.646)	5893	4.00000	1.96(Q)	
18	Iodomethane	142	2.287	2.287	(0.658)	14192	4.00000	4.22(Q)	
19	2-Propanol	45	2.306	2.306	(0.663)	22975	100.000	(Q)	
20	Carbon disulfide	76	2.318	2.318	(0.667)	37922	4.00000	3.72(Q)	
21	Allyl chloride	76	2.397	2.397	(0.690)	8921	4.00000	3.45(Q)	
22	Acetonitrile	41	2.397	2.397	(0.690)	30636	20.0000	19.5(Q)	
23	Methyl acetate	43	2.409	2.403	(0.693)	23832	4.00000	3.88(Q)	

Data File: \\v70wintarget\chem\70msv6.i\032717.b\J33245.D
Report Date: 28-Mar-2017 19:56

			QUANT SIG					AMOUNTS		
								CAL-AMT	ON-COL	
	Compounds		MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)	REVIEW C
	24 Methylene Chloride		84	2.482	2.482	(0.714)	14446	4.00000	3.72(Q)	
	25 tert-Butyl Alcohol		59	2.525	2.525	(0.726)	3571	20.0000	18.6(Q)	
	28 Methyl-tert-butyl ether		73	2.592	2.586	(0.746)	49875	4.00000	3.80(Q)	
	27 trans-1,2-Dichloroethene		96	2.610	2.610	(0.751)	13805	4.00000	3.68(Q)	
	26 Acrylonitrile		53	2.653	2.653	(0.763)	6221	4.00000	3.58(Q)	
	30 n-Hexane		57	2.708	2.708	(0.779)	19511	4.00000	4.57(Q)	
	29 Diisopropyl ether		45	2.842	2.842	(0.818)	64485	4.00000	3.75(Q)	
	32 Vinyl acetate		43	2.873	2.873	(0.826)	23496	4.00000	3.95(Q)	
	31 1,1-Dichloroethane		63	2.867	2.866	(0.825)	31446	4.00000	4.02(Q)	
	33 Chloroprene		53	2.897	2.897	(0.833)	26127	4.00000	3.78(Q)	
	34 Ethyl-tert-butyl ether		59	3.043	3.043	(0.875)	48981	4.00000	3.91(Q)	
	36 2,2-Dichloropropane		77	3.177	3.177	(0.914)	14033	4.00000	4.11(Q)	
	35 cis-1,2-Dichloroethene		96	3.196	3.196	(0.919)	15648	4.00000	3.57(Q)	
	39 Ethyl acetate		61	3.196	3.196	(0.919)	28221	4.00000	3.86(Q)	
	37 2-Butanone (MEK)		43	3.208	3.202	(0.923)	12270	4.00000	2.91(Q)	
	41 Bromochloromethane		128	3.342	3.342	(0.961)	6924	4.00000	4.08(Q)	
	42 Tetrahydrofuran		42	3.348	3.342	(0.963)	5739	4.00000	3.26(Q)	
	43 Chloroform		83	3.366	3.366	(0.968)	25757	4.00000	3.78(Q)	
	38 Propionitrile		54	3.287	3.281	(0.946)	2156	4.00000	5.01(Q)	
	46 Cyclohexane		56	3.458	3.458	(0.995)	34640	4.00000	2.79(Q)	
	45 1,1,1-Trichloroethane		97	3.458	3.458	(0.885)	17327	4.00000	3.78(Q)	
*	44 Pentafluorobenzene (IS)		168	3.476	3.476	(1.000)	214265	50.0000	(Q)	
	48 Carbon tetrachloride		117	3.537	3.537	(0.905)	9990	4.00000	3.88(Q)	
	47 1,1-Dichloropropene		75	3.555	3.555	(0.910)	21995	4.00000	3.78(Q)	
	55 2,2,4-Trimethylpentane		57	3.647	3.647	(1.049)	31366	4.00000	5.42(Q)	
	51 Benzene		78	3.671	3.671	(0.939)	62738	4.00000	4.07(Q)	
	40 Methacrylonitrile		67	3.348	3.348	(0.963)	6860	4.00000	3.82(Q)	
$	50 1,2-Dichloroethane-d4 (S)		65	3.677	3.677	(0.941)	131494	50.0000	48.7(Q)	
	56 tert-Amylmethyl ether		73	3.702	3.702	(1.065)	43037	4.00000	3.78(Q)	
	52 1,2-Dichloroethane		62	3.726	3.720	(1.072)	22915	4.00000	3.69(Q)	
	57 n-Heptane		43	3.757	3.757	(1.081)	15035	4.00000	4.60(Q)	
*	58 1,4-Difluorobenzene (IS)		114	3.909	3.909	(1.000)	376289	50.0000	(Q)	
	59 Trichloroethene		95	4.055	4.055	(1.037)	15041	4.00000	3.90(Q)	
	60 Methylcyclohexane		83	4.128	4.128	(1.056)	20467	4.00000	5.04(Q)	
	49 Isobutanol		43	3.647	3.647	(1.049)	7419	20.0000	31.7(Q)	
	53 tert-Amyl Alcohol		59	Compound Not Detected.						(D)
	54 tert-Amyl ethyl ether		59	4.153	4.153	(1.195)	30441	4.00000	3.89(Q)	
	61 1,2-Dichloropropane		63	4.220	4.220	(1.080)	18698	4.00000	(Q)	
	63 Methyl methacrylate		69	4.250	4.250	(1.087)	7178	4.00000	4.29(Q)	
	64 1,4-Dioxane (p-Dioxane)		88	4.287	4.281	(1.097)	3591	100.000	(Q)	
	62 Dibromomethane		93	4.299	4.299	(1.100)	8884	4.00000	3.51(Q)	
	65 Bromodichloromethane		83	4.378	4.378	(1.120)	15715	4.00000	4.07(Q)	
	66 2-Nitropropane		43	4.561	4.561	(1.167)	7959	4.00000	3.85(Q)	
	67 2-Chloroethylvinyl ether		63	4.561	4.561	(1.167)	9119	4.00000	4.66(Q)	
	68 cis-1,3-Dichloropropene		75	4.665	4.665	(1.193)	20300	4.00000	4.18(Q)	
	69 4-Methyl-2-pentanone (MIBK)		43	4.744	4.744	(1.214)	15941	4.00000	3.70(Q)	
$	70 Toluene-d8 (S)		98	4.805	4.811	(0.827)	411122	50.0000	50.3(Q)	
	71 Toluene		91	4.854	4.854	(1.242)	64216	4.00000	3.86(Q)	
	72 Methyl isothiocyanate		73	4.982	4.976	(1.274)	19544	10.0000	10.7(Q)	
	74 trans-1,3-Dichloropropene		75	5.043	5.037	(1.290)	14115	4.00000	4.45(Q)	
	75 Ethyl methacrylate		69	5.043	5.037	(1.290)	10654	4.00000	3.92(Q)	
	76 1,1,2-Trichloroethane		83	5.165	5.165	(1.321)	11269	4.00000	3.85(Q)	
	77 Tetrachloroethene		166	5.201	5.201	(0.895)	12845	4.00000	4.05(Q)	
	78 1,3-Dichloropropane		76	5.281	5.281	(0.909)	25315	4.00000	3.98(Q)	

Data File: \\v70wintarget\chem\70msv6.i\032717.b\J33245.D
Report Date: 28-Mar-2017 19:56

		QUANT SIG					AMOUNTS CAL-AMT	AMOUNTS ON-COL	
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)	REVIEW C
	79 2-Hexanone	43	5.311	5.299	(0.914)	14817	4.00000	1.74(Q)	
	73 n-Octane	43	4.854	4.854	(1.242)	14457	4.00000	4.31(Q)	
	81 n-Butyl acetate	43	5.366	5.360	(1.373)	5621	4.00000	(Q)	
	80 Dibromochloromethane	129	5.421	5.421	(0.933)	7793	4.00000	3.94(Q)	
	82 1,2-Dibromoethane (EDB)	107	5.518	5.512	(1.412)	8533	4.00000	4.49(Q)	
*	83 Chlorobenzene-d5 (IS)	82	5.811	5.811	(1.000)	215495	50.0000	(Q)	
	84 Chlorobenzene	112	5.829	5.835	(1.003)	39158	4.00000	4.11(Q)	
	86 Ethylbenzene	106	5.878	5.878	(1.012)	20525	4.00000	4.14(Q)	
	85 1,1,1,2-Tetrachloroethane	131	5.890	5.890	(1.014)	6618	4.00000	3.72(Q)	
	88 n-Nonane	43	5.909	5.909	(1.017)	13438	4.00000	4.65(Q)	
	87 m&p-Xylene	106	5.963	5.963	(1.026)	52630	8.00000	8.76(Q)	
	89 o-Xylene	106	6.256	6.256	(1.077)	25348	4.00000	4.00(Q)	
	90 Styrene	104	6.280	6.274	(1.081)	42704	4.00000	4.24(Q)	
	91 Bromoform	173	6.439	6.439	(1.108)	3559	4.00000	4.17(Q)	
	92 Isopropylbenzene (Cumene)	105	6.512	6.512	(0.863)	60017	4.00000	4.05(Q)	
$	93 4-Bromofluorobenzene (S)	95	6.671	6.671	(1.148)	145380	50.0000	50.4(Q)	
	94 Bromobenzene	156	6.780	6.780	(0.898)	15078	4.00000	3.81(Q)	
	95 1,1,2,2-Tetrachloroethane	83	6.793	6.793	(0.900)	15742	4.00000	3.98(Q)	
	98 n-Propylbenzene	91	6.823	6.823	(0.904)	70319	4.00000	4.03(Q)	
	96 1,2,3-Trichloropropane	110	6.835	6.835	(0.905)	4461	4.00000	4.03(Q)	
	97 trans-1,4-Dichloro-2-butene	53	6.847	6.841	(0.907)	4121	4.00000	3.66(Q)	
	103 n-Decane	43	6.902	6.902	(1.188)	15468	4.00000	5.00(Q)	
	99 2-Chlorotoluene	91	6.915	6.914	(0.916)	51695	4.00000	4.07(Q)	
	100 4-Ethyltoluene	105	6.908	6.908	(0.915)	58652	4.00000	4.26(Q)	
	101 1,3,5-Trimethylbenzene	105	6.957	6.957	(0.922)	48279	4.00000	4.03(Q)	
	102 4-Chlorotoluene	91	7.000	7.000	(0.927)	45251	4.00000	3.66(Q)	
	104 tert-Butylbenzene	119	7.195	7.195	(0.953)	37158	4.00000	4.20(Q)	
	105 Pentachloroethane	167	7.250	7.250	(0.960)	2993	4.00000	3.63(Q)	
	106 1,2,4-Trimethylbenzene	105	7.250	7.244	(0.960)	49389	4.00000	4.06(Q)	
	107 sec-Butylbenzene	105	7.366	7.366	(0.976)	52194	4.00000	4.44(Q)	
	109 d-Limonene	136	7.427	7.427	(1.278)	1658	4.00000	7.92(Q)	
	110 p-Isopropyltoluene	119	7.475	7.475	(0.990)	44239	4.00000	4.48(Q)	
	108 1,3-Dichlorobenzene	146	7.494	7.494	(0.993)	25598	4.00000	3.89(Q)	
*	111 1,4-Dichlorobenzene-d4 (IS)	152	7.549	7.548	(1.000)	158982	50.0000	(Q)	
	112 1,4-Dichlorobenzene	146	7.567	7.567	(1.002)	26338	4.00000	3.53(Q)	
	113 1,2,3-Trimethylbenzene	105	7.579	7.579	(1.004)	52601	4.00000	3.92(Q)	
	114 Benzyl chloride	91	7.677	7.676	(1.017)	11008	4.00000	4.44(Q)	
	115 trans-Decalin	138	7.768	7.768	(1.029)	5969	4.00000	5.22(Q)	
	116 1,4-Diethylbenzene	119	7.774	7.774	(1.030)	25156	4.00000	4.59(Q)	
	117 n-Butylbenzene	91	7.792	7.792	(1.032)	45590	4.00000	4.39(Q)	
	119 n-Undecane	43	7.817	7.817	(1.036)	15178	4.00000	(Q)	
	118 1,2-Dichlorobenzene	146	7.859	7.859	(1.041)	24430	4.00000	3.79(Q)	
	120 cis-Decalin	138	8.207	8.207	(1.087)	4861	4.00000	5.04(Q)	
	121 1,2,4,5-tetramethylbenzene	119	8.396	8.396	(1.112)	35708	4.00000	4.14(Q)	
	122 1,2-Dibromo-3-chloropropane	75	8.481	8.481	(1.124)	1045	4.00000	6.45(Q)	
	123 n-Dodecane	43	8.670	8.670	(1.149)	12747	4.00000	4.23(Q)	
	124 1,2,4-Trichlorobenzene	180	9.115	9.115	(1.208)	12384	4.00000	3.71(Q)	
	125 Hexachloro-1,3-butadiene	225	9.207	9.207	(1.220)	4615	4.00000	4.17(Q)	
	126 Naphthalene	128	9.335	9.335	(1.237)	31384	4.00000	3.69(Q)	
	127 1,2,3-Trichlorobenzene	180	9.560	9.560	(1.266)	11093	4.00000	3.76(Q)	

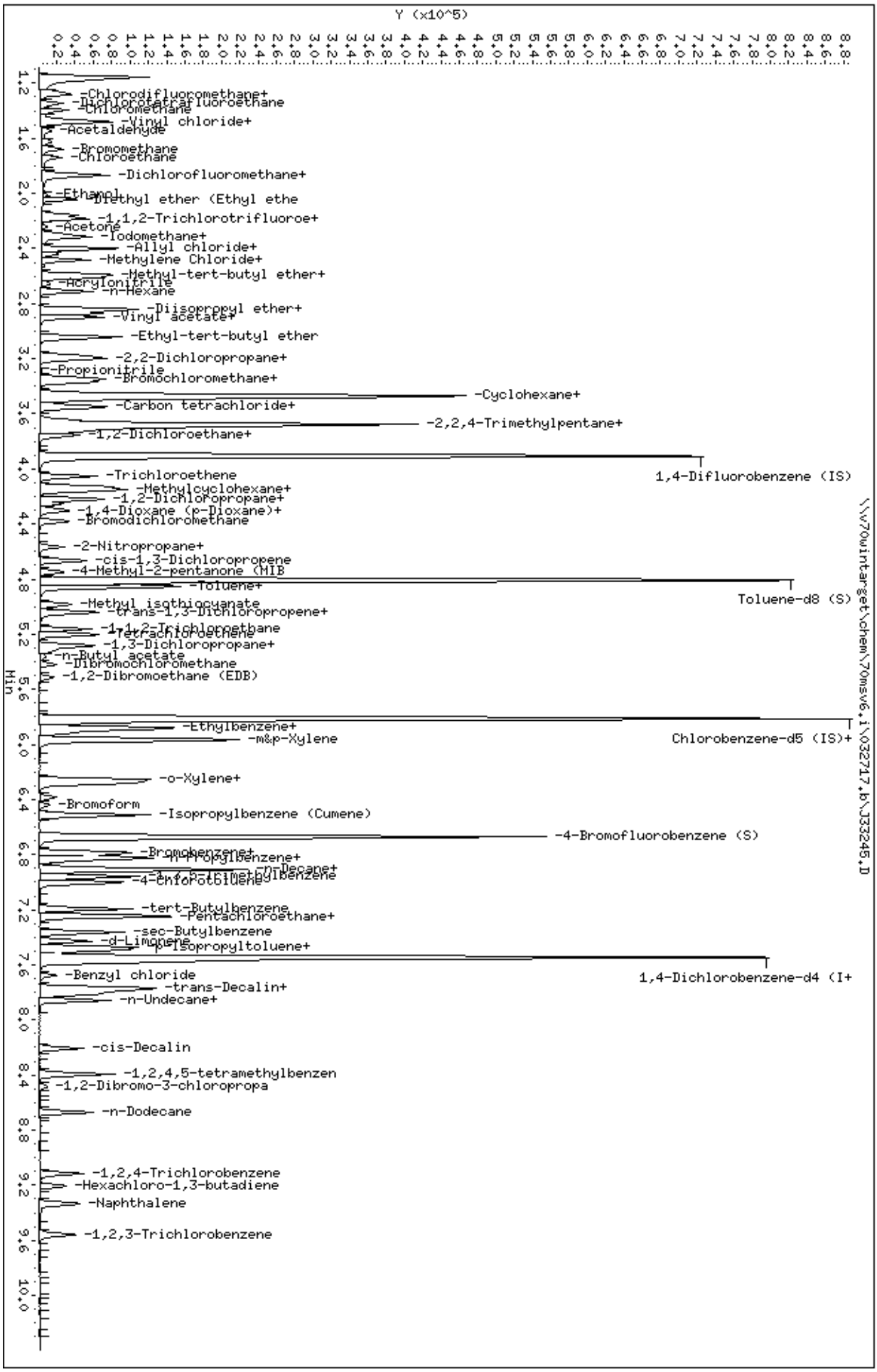
Data File: \\v70wintarget\chem\70msv6.i\032717.b\J33245.D
Report Date: 28-Mar-2017 19:56

QC Flag Legend

Q - Qualifier signal failed the ratio test.
D - User disabled compound identification.

Review Codes Legend

:


Data File: \\v70wintarget\chem\70msv6.i\032717.b\J33245.D
Date : 27-MAR-2017 18:42
Client ID: CAL3
Sample Info: CAL3, 13486:1
Purge Volume: 5.0
Column phase: RTX-624
Instrument: 70msv6.i
Operator: BBL
Column diameter: 0.18
Y (x10^5)
Min
\\v70wintarget\chem\70msv6.i\032717.b\J33245.D
-Chlorodifluoromethane+
-Dichlorotetrafluoroethane
-Chloromethane
-Vinyl chloride+
-Acetaldehyde
-Bromomethane
-Chloroethane
-Dichlorofluoromethane+
-Ethanol
-Diethyl ether (Ethyl ethe
-1,1,2-Trichlorotrifluoroe+
-Acetone
-Iodomethane+
-Allyl chloride+
-Methylene Chloride+
-Methyl-tert-butyl ether+
-Acrylonitrile
-n-Hexane
-Diisopropyl ether+
-Vinyl acetate+
-Ethyl-tert-butyl ether
-2,2-Dichloropropane+
-Propionitrile
-Bromochloromethane+
-Cyclohexane+
-Carbon tetrachloride+
-2,2,4-Trimethylpentane+
-1,2-Dichloroethane+
1,4-Difluorobenzene (IS)
-Trichloroethene
-Methylcyclohexane+
-1,2-Dichloropropane+
-1,4-Dioxane (p-Dioxane)+
-Bromodichloromethane
-2-Nitropropane+
-cis-1,3-Dichloropropene
-4-Methyl-2-pentanone (MIB
-Toluene+
Toluene-d8 (S)
-Methyl isothiocyanate
-trans-1,3-Dichloropropene+
-1,1,2-Trichloroethane
-Tetrachloroethene
-1,3-Dichloropropane+
-n-Butyl acetate
-Dibromochloromethane
-1,2-Dibromoethane (EDB)
-Ethylbenzene+
-m&p-Xylene
Chlorobenzene-d5 (IS)+
-o-Xylene+
-Bromoform
-Isopropylbenzene (Cumene)
-4-Bromofluorobenzene (S)
-Bromobenzene+
-n-Propylbenzene+
-o-Decane+
-4-Chlorotoluene
-tert-Butylbenzene
-Pentachloroethane+
-sec-Butylbenzene
-d-Limonene
-p-Isopropyltoluene+
1,4-Dichlorobenzene-d4 (I+
-Benzyl chloride
-trans-Decalin+
-n-Undecane+
-cis-Decalin
-1,2,4,5-tetramethylbenzen
-1,2-Dibromo-3-chloropropa
-n-Dodecane
-1,2,4-Trichlorobenzene
-Hexachloro-1,3-butadiene
-Naphthalene
-1,2,3-Trichlorobenzene

Data File: \\v70wintarget\chem\70msv6.i\032717.b/J33245.D
Injection Date: 27-MAR-2017 18:42
Instrument: 70msv6.i
Lab Sample ID: CAL3
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Data File: \\v70wintarget\chem\70msv6.i\032717.b\J33246.D
Report Date: 28-Mar-2017 19:56

Pace Analytical Services, Inc.

SW846-8260C/EPA 624

Data file : \\v70wintarget\chem\70msv6.i\032717.b\J33246.D
Lab Smp Id: CAL4 Client Smp ID: CAL4
Inj Date : 27-MAR-2017 19:00 MS Autotune Date: 17-MAR-2017 06:2
Operator : BBL Inst ID: 70msv6.i
Smp Info : cal4, 13487:1
Misc Info : 1823,
Comment :
Method : \\v70wintarget\chem\70msv6.i\032717.b\032717_8260W.m
Meth Date : 28-Mar-2017 19:53 blagula Quant Type: ISTD
Cal Date : 27-MAR-2017 19:00 Cal File: J33246.D
Als bottle: 5 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)	REVIEW C
1	Chlorodifluoromethane	51	1.281	1.281	(0.369)	48070	10.0000	8.49(Q)	
2	Dichlorotetrafluoroethane	135	1.348	1.348	(0.388)	15753	10.0000	10.9(Q)	
3	Dichlorodifluoromethane	85	1.263	1.263	(0.363)	29705	10.0000	9.00(Q)	
4	Chloromethane	50	1.391	1.391	(0.400)	45362	10.0000	8.21(Q)	
5	Vinyl chloride	62	1.458	1.458	(0.420)	42454	10.0000	8.90(Q)	
6	1,3-Butadiene	54	1.477	1.476	(0.425)	43075	10.0000	9.21(Q)	
7	Acetaldehyde	44	1.544	1.544	(0.444)	17658	10.0000	11.0(Q)	
8	Bromomethane	94	1.678	1.672	(0.483)	22993	10.0000	8.45(Q)	
9	Chloroethane	64	1.739	1.739	(0.500)	27808	10.0000	9.14(Q)	
10	Dichlorofluoromethane	67	1.867	1.867	(0.537)	70976	10.0000	8.61(Q)	
11	Trichlorofluoromethane	101	1.873	1.873	(0.539)	42701	10.0000	9.37(Q)	
12	Ethanol	45	2.013	2.007	(0.579)	9238	250.000	211(Q)	
13	Diethyl ether (Ethyl ether)	59	2.043	2.037	(0.588)	33547	10.0000	9.03(Q)	
16	1,1,2-Trichlorotrifluoroethane	101	2.153	2.153	(0.619)	24477	10.0000	9.17(Q)	
14	Acrolein	56	2.159	2.159	(0.621)	4566	10.0000	6.37(Q)	
15	1,1-Dichloroethene	96	2.184	2.184	(0.628)	24761	10.0000	9.45(Q)	
17	Acetone	43	2.239	2.239	(0.644)	12539	10.0000	5.52(Q)	
18	Iodomethane	142	2.287	2.287	(0.658)	34460	10.0000	9.82(Q)	
19	2-Propanol	45	2.306	2.306	(0.663)	56195	250.000	241(Q)	
20	Carbon disulfide	76	2.312	2.318	(0.665)	86678	10.0000	8.68(Q)	
21	Allyl chloride	76	2.397	2.397	(0.690)	20650	10.0000	8.45(Q)	
22	Acetonitrile	41	2.397	2.397	(0.690)	70071	50.0000	44.5(Q)	
23	Methyl acetate	43	2.403	2.403	(0.691)	53951	10.0000	8.79(Q)	

Data File: \\v70wintarget\chem\70msv6.i\032717.b\J33246.D
Report Date: 28-Mar-2017 19:56

			QUANT SIG					AMOUNTS		
								CAL-AMT	ON-COL	
	Compounds		MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)	REVIEW C
	24 Methylene Chloride		84	2.482	2.482	(0.714)	33707	10.0000	8.86(Q)	
	25 tert-Butyl Alcohol		59	2.525	2.525	(0.726)	7477	50.0000	39.8(Q)	
	28 Methyl-tert-butyl ether		73	2.592	2.586	(0.746)	117433	10.0000	9.04(Q)	
	27 trans-1,2-Dichloroethene		96	2.610	2.610	(0.751)	31359	10.0000	8.58(Q)	
	26 Acrylonitrile		53	2.653	2.653	(0.763)	14706	10.0000	8.80(Q)	
	30 n-Hexane		57	2.708	2.708	(0.779)	45340	10.0000	9.76(Q)	
	29 Diisopropyl ether		45	2.842	2.842	(0.818)	148955	10.0000	8.80(Q)	
	32 Vinyl acetate		43	2.873	2.873	(0.826)	56527	10.0000	9.42(Q)	
	31 1,1-Dichloroethane		63	2.866	2.866	(0.825)	72362	10.0000	9.09(Q)	
	33 Chloroprene		53	2.897	2.897	(0.833)	60751	10.0000	8.91(Q)	
	34 Ethyl-tert-butyl ether		59	3.043	3.043	(0.875)	115613	10.0000	9.19(Q)	
	36 2,2-Dichloropropane		77	3.177	3.177	(0.914)	33787	10.0000	9.61(Q)	
	35 cis-1,2-Dichloroethene		96	3.196	3.196	(0.919)	36788	10.0000	8.73(Q)	
	39 Ethyl acetate		61	3.196	3.196	(0.919)	66637	10.0000	9.13(Q)	
	37 2-Butanone (MEK)		43	3.202	3.202	(0.921)	31735	10.0000	8.59(Q)	
	41 Bromochloromethane		128	3.342	3.342	(0.961)	15635	10.0000	8.99(Q)	
	42 Tetrahydrofuran		42	3.342	3.342	(0.961)	13693	10.0000	8.44(Q)	
	43 Chloroform		83	3.366	3.366	(0.968)	60342	10.0000	8.97(Q)	
	38 Propionitrile		54	3.287	3.281	(0.946)	5023	10.0000	10.2(Q)	
	46 Cyclohexane		56	3.452	3.458	(0.993)	73991	10.0000	6.91(Q)	
	45 1,1,1-Trichloroethane		97	3.458	3.458	(0.885)	42417	10.0000	9.42(Q)	
*	44 Pentafluorobenzene (IS)		168	3.476	3.476	(1.000)	217512	50.0000	(Q)	
	48 Carbon tetrachloride		117	3.537	3.537	(0.905)	23536	10.0000	9.20(Q)	
	47 1,1-Dichloropropene		75	3.549	3.555	(0.908)	50866	10.0000	8.90(Q)	
	55 2,2,4-Trimethylpentane		57	3.647	3.647	(1.049)	71753	10.0000	10.4(Q)	
	51 Benzene		78	3.671	3.671	(0.939)	146802	10.0000	9.38(Q)	
	40 Methacrylonitrile		67	3.348	3.348	(0.963)	15389	10.0000	8.64(Q)	
$	50 1,2-Dichloroethane-d4 (S)		65	3.677	3.677	(0.941)	132728	50.0000	49.1(Q)	
	56 tert-Amylmethyl ether		73	3.702	3.702	(1.065)	103856	10.0000	9.24(Q)	
	52 1,2-Dichloroethane		62	3.726	3.720	(1.072)	53526	10.0000	8.83(Q)	
	57 n-Heptane		43	3.757	3.757	(1.081)	36703	10.0000	10.3(Q)	
*	58 1,4-Difluorobenzene (IS)		114	3.909	3.909	(1.000)	379965	50.0000	(Q)	
	59 Trichloroethene		95	4.055	4.055	(1.037)	34120	10.0000	8.87(Q)	
	60 Methylcyclohexane		83	4.128	4.128	(1.056)	47175	10.0000	10.2(Q)	
	49 Isobutanol		43	3.647	3.647	(1.049)	14390	50.0000	46.9(Q)	
	53 tert-Amyl Alcohol		59	Compound Not Detected.						(D)
	54 tert-Amyl ethyl ether		59	4.153	4.153	(1.195)	73789	10.0000	9.42(Q)	
	61 1,2-Dichloropropane		63	4.220	4.220	(1.080)	43063	10.0000	9.12(Q)	
	63 Methyl methacrylate		69	4.250	4.250	(1.087)	18333	10.0000	10.5(Q)	
	64 1,4-Dioxane (p-Dioxane)		88	4.287	4.281	(1.097)	8649	250.000	238(Q)	
	62 Dibromomethane		93	4.299	4.299	(1.100)	20276	10.0000	8.45(Q)	
	65 Bromodichloromethane		83	4.378	4.378	(1.120)	37089	10.0000	9.43(Q)	
	66 2-Nitropropane		43	4.561	4.561	(1.167)	18282	10.0000	8.93(Q)	
	67 2-Chloroethylvinyl ether		63	4.561	4.561	(1.167)	21346	10.0000	9.98(Q)	
	68 cis-1,3-Dichloropropene		75	4.665	4.665	(1.193)	50976	10.0000	10.2(Q)	
	69 4-Methyl-2-pentanone (MIBK)		43	4.744	4.744	(1.214)	36697	10.0000	8.76(Q)	
$	70 Toluene-d8 (S)		98	4.805	4.811	(0.827)	414003	50.0000	50.6(Q)	
	71 Toluene		91	4.854	4.854	(1.242)	150272	10.0000	9.10(Q)	
	72 Methyl isothiocyanate		73	4.982	4.976	(1.274)	49964	25.0000	26.1(Q)	
	74 trans-1,3-Dichloropropene		75	5.037	5.037	(1.288)	36318	10.0000	10.9(Q)	
	75 Ethyl methacrylate		69	5.043	5.037	(1.290)	28989	10.0000	10.7(Q)	
	76 1,1,2-Trichloroethane		83	5.165	5.165	(1.321)	25894	10.0000	8.93(Q)	
	77 Tetrachloroethene		166	5.201	5.201	(0.895)	31893	10.0000	10.0(Q)	
	78 1,3-Dichloropropane		76	5.281	5.281	(0.909)	58325	10.0000	9.20(Q)	

Data File: \\v70wintarget\chem\70msv6.i\032717.b\J33246.D
Report Date: 28-Mar-2017 19:56

		QUANT SIG					AMOUNTS CAL-AMT	ON-COL	
Compounds		MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)	REVIEW C
79	2-Hexanone	43	5.305	5.299	(0.913)	28511	10.0000	4.68(Q)	
73	n-Octane	43	4.854	4.854	(1.242)	33241	10.0000	9.45(Q)	
81	n-Butyl acetate	43	5.360	5.360	(1.371)	15457	10.0000	10.9(Q)	
80	Dibromochloromethane	129	5.421	5.421	(0.933)	19121	10.0000	9.75(Q)	
82	1,2-Dibromoethane (EDB)	107	5.512	5.512	(1.410)	22646	10.0000	11.3(Q)	
* 83	Chlorobenzene-d5 (IS)	82	5.811	5.811	(1.000)	215322	50.0000	(Q)	
84	Chlorobenzene	112	5.829	5.835	(1.003)	91352	10.0000	9.47(Q)	
86	Ethylbenzene	106	5.878	5.878	(1.012)	48652	10.0000	9.65(Q)	
85	1,1,1,2-Tetrachloroethane	131	5.890	5.890	(1.014)	17332	10.0000	10.1(Q)	
88	n-Nonane	43	5.909	5.909	(1.017)	29741	10.0000	9.53(Q)	
87	m&p-Xylene	106	5.963	5.963	(1.026)	123251	20.0000	19.9(Q)	
89	o-Xylene	106	6.256	6.256	(1.077)	59329	10.0000	9.37(Q)	
90	Styrene	104	6.274	6.274	(1.080)	103403	10.0000	9.97(Q)	
91	Bromoform	173	6.439	6.439	(1.108)	9609	10.0000	11.0(Q)	
92	Isopropylbenzene (Cumene)	105	6.512	6.512	(0.863)	142902	10.0000	9.33(Q)	
$ 93	4-Bromofluorobenzene (S)	95	6.671	6.671	(1.148)	148876	50.0000	51.5(Q)	
94	Bromobenzene	156	6.780	6.780	(0.898)	35435	10.0000	8.92(Q)	
95	1,1,2,2-Tetrachloroethane	83	6.793	6.793	(0.900)	38156	10.0000	9.41(Q)	
98	n-Propylbenzene	91	6.817	6.823	(0.903)	167759	10.0000	9.32(Q)	
96	1,2,3-Trichloropropane	110	6.835	6.835	(0.905)	11365	10.0000	9.97(Q)	
97	trans-1,4-Dichloro-2-butene	53	6.841	6.841	(0.906)	9715	10.0000	8.78(Q)	
103	n-Decane	43	6.896	6.902	(1.187)	30431	10.0000	8.75(Q)	
99	2-Chlorotoluene	91	6.914	6.914	(0.916)	121050	10.0000	9.19(Q)	
100	4-Ethyltoluene	105	6.908	6.908	(0.915)	143525	10.0000	9.82(Q)	
101	1,3,5-Trimethylbenzene	105	6.957	6.957	(0.922)	115452	10.0000	9.34(Q)	
102	4-Chlorotoluene	91	7.000	7.000	(0.927)	109658	10.0000	9.02(Q)	
104	tert-Butylbenzene	119	7.195	7.195	(0.953)	88325	10.0000	9.48(Q)	
105	Pentachloroethane	167	7.244	7.250	(0.960)	8338	10.0000	10.3(Q)	
106	1,2,4-Trimethylbenzene	105	7.244	7.244	(0.960)	117238	10.0000	9.32(Q)	
107	sec-Butylbenzene	105	7.366	7.366	(0.976)	122172	10.0000	9.59(Q)	
109	d-Limonene	136	7.427	7.427	(1.278)	4268	10.0000	13.7(Q)	
110	p-Isopropyltoluene	119	7.475	7.475	(0.990)	105274	10.0000	9.78(Q)	
108	1,3-Dichlorobenzene	146	7.494	7.494	(0.993)	61507	10.0000	9.23(Q)	
* 111	1,4-Dichlorobenzene-d4 (IS)	152	7.548	7.548	(1.000)	163322	50.0000	(Q)	
112	1,4-Dichlorobenzene	146	7.567	7.567	(1.002)	63368	10.0000	8.78(Q)	
113	1,2,3-Trimethylbenzene	105	7.573	7.579	(1.003)	124974	10.0000	9.15(Q)	
114	Benzyl chloride	91	7.677	7.676	(1.017)	27322	10.0000	10.2(Q)	
115	trans-Decalin	138	7.768	7.768	(1.029)	13252	10.0000	9.79(Q)	
116	1,4-Diethylbenzene	119	7.774	7.774	(1.030)	61184	10.0000	10.1(Q)	
117	n-Butylbenzene	91	7.792	7.792	(1.032)	113351	10.0000	10.1(Q)	
119	n-Undecane	43	7.817	7.817	(1.036)	29533	10.0000	7.58(Q)	
118	1,2-Dichlorobenzene	146	7.859	7.859	(1.041)	59271	10.0000	9.19(Q)	
120	cis-Decalin	138	8.207	8.207	(1.087)	10547	10.0000	9.42(Q)	
121	1,2,4,5-tetramethylbenzene	119	8.396	8.396	(1.112)	85711	10.0000	9.51(Q)	
122	1,2-Dibromo-3-chloropropane	75	8.481	8.481	(1.124)	3025	10.0000	13.9(Q)	
123	n-Dodecane	43	8.670	8.670	(1.149)	23234	10.0000	7.30(Q)	
124	1,2,4-Trichlorobenzene	180	9.115	9.115	(1.208)	31300	10.0000	9.48(Q)	
125	Hexachloro-1,3-butadiene	225	9.207	9.207	(1.220)	10416	10.0000	8.97(Q)	
126	Naphthalene	128	9.335	9.335	(1.237)	77622	10.0000	9.25(Q)	
127	1,2,3-Trichlorobenzene	180	9.554	9.560	(1.266)	27798	10.0000	9.45(Q)	

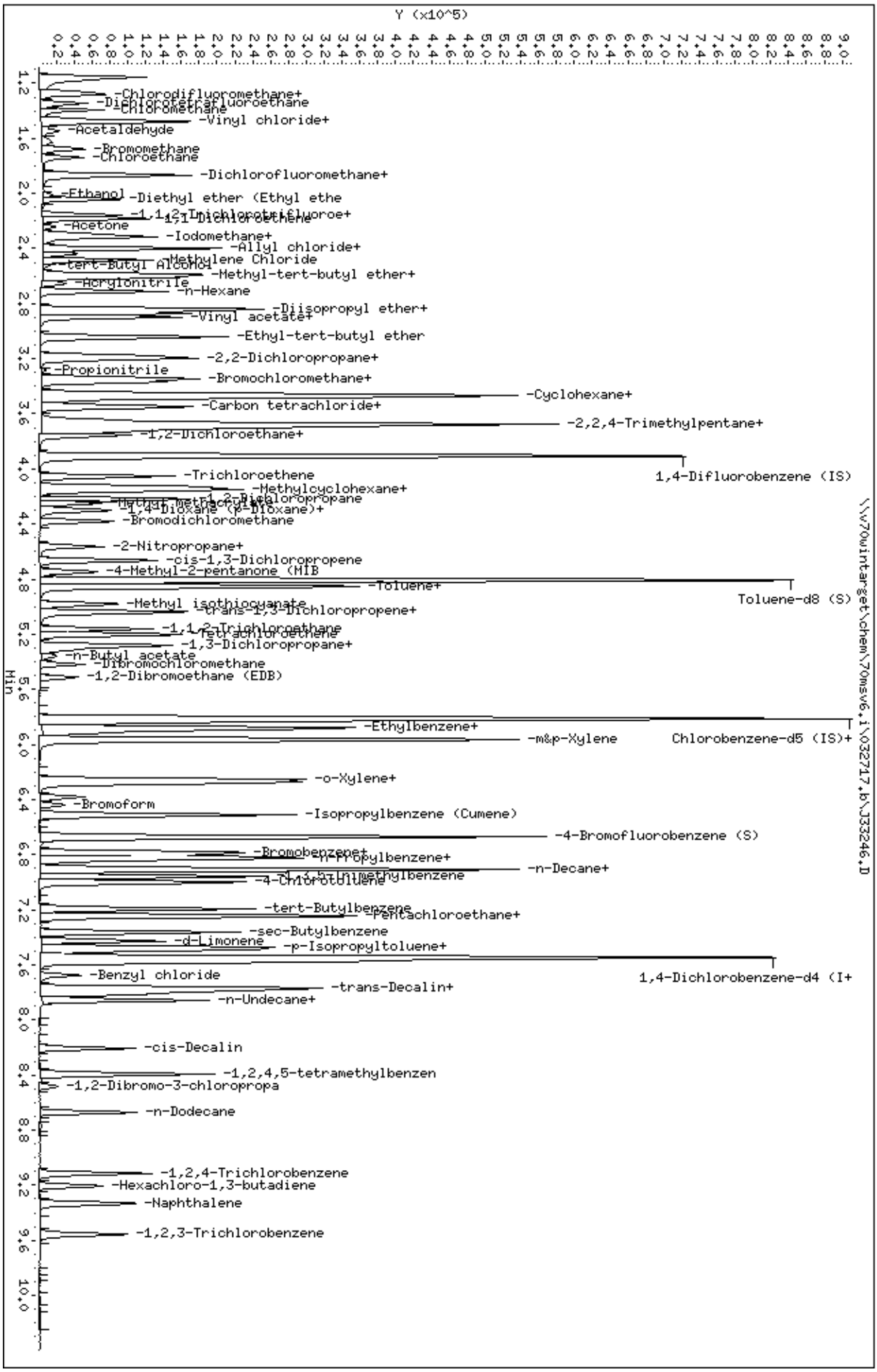
Data File: \\v70wintarget\chem\70msv6.i\032717.b\J33246.D
Report Date: 28-Mar-2017 19:56

QC Flag Legend

Q - Qualifier signal failed the ratio test.
D - User disabled compound identification.

Review Codes Legend

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Data File: \\v70wintarget\chem\70msv6.i\032717.b\J33246.D
Date : 27-MAR-2017 19:00
Client ID: CAL4
Sample Info: CAL4, 13487:1
Purge Volume: 5.0
Column phase: RTX-624

\\v70wintarget\chem\70msv6.i\032717.b\J33246.D

Instrument: 70msv6.i
Operator: BBL
Column diameter: 0.18

Data File: \\v70wintarget\chem\70msv6.i\032717.b/J33246.D
Injection Date: 27-MAR-2017 19:00
Instrument: 70msv6.i
Lab Sample ID: CAL4
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Data File: \\v70wintarget\chem\70msv6.i\032717.b\J33247.D
Report Date: 28-Mar-2017 19:56

Pace Analytical Services, Inc.

SW846-8260C/EPA 624

Data file : \\v70wintarget\chem\70msv6.i\032717.b\J33247.D
Lab Smp Id: CAL5 Client Smp ID: CAL5
Inj Date : 27-MAR-2017 19:18 MS Autotune Date: 17-MAR-2017 06:2
Operator : BBL Inst ID: 70msv6.i
Smp Info : cal5, 13488:1
Misc Info : 1823,
Comment :
Method : \\v70wintarget\chem\70msv6.i\032717.b\032717_8260W.m
Meth Date : 28-Mar-2017 19:53 blagula Quant Type: ISTD
Cal Date : 27-MAR-2017 19:18 Cal File: J33247.D
Als bottle: 6 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	REVIEW C
1	Chlorodifluoromethane	51	1.281	1.281	(0.369)	101192	20.0000	18.5(Q)	
2	Dichlorotetrafluoroethane	135	1.348	1.348	(0.388)	29930	20.0000	19.8(Q)	
3	Dichlorodifluoromethane	85	1.263	1.263	(0.363)	58905	20.0000	18.2(Q)	
4	Chloromethane	50	1.391	1.391	(0.400)	91986	20.0000	17.4(Q)	
5	Vinyl chloride	62	1.458	1.458	(0.420)	88486	20.0000	19.0(Q)	
6	1,3-Butadiene	54	1.476	1.476	(0.425)	87713	20.0000	19.0(Q)	
7	Acetaldehyde	44	1.544	1.544	(0.444)	28508	20.0000	16.6(Q)	
8	Bromomethane	94	1.678	1.672	(0.483)	48205	20.0000	18.4(Q)	
9	Chloroethane	64	1.739	1.739	(0.500)	56708	20.0000	18.9(Q)	
10	Dichlorofluoromethane	67	1.861	1.867	(0.535)	147290	20.0000	18.4(Q)	
11	Trichlorofluoromethane	101	1.873	1.873	(0.539)	87029	20.0000	19.2(Q)	
12	Ethanol	45	2.013	2.007	(0.579)	17155	500.000	419(Q)	
13	Diethyl ether (Ethyl ether)	59	2.037	2.037	(0.586)	69673	20.0000	19.1(Q)	
16	1,1,2-Trichlorotrifluoroethane	101	2.153	2.153	(0.619)	51417	20.0000	19.5(Q)	
14	Acrolein	56	2.159	2.159	(0.621)	8805	20.0000	13.8(Q)	
15	1,1-Dichloroethene	96	2.184	2.184	(0.628)	50579	20.0000	19.3(Q)	
17	Acetone	43	2.239	2.239	(0.644)	26436	20.0000	13.5(Q)	
18	Iodomethane	142	2.287	2.287	(0.658)	72153	20.0000	20.4(Q)	
19	2-Propanol	45	2.306	2.306	(0.663)	118425	500.000	509(Q)	
20	Carbon disulfide	76	2.312	2.318	(0.665)	175617	20.0000	18.1(Q)	
21	Allyl chloride	76	2.397	2.397	(0.690)	39660	20.0000	16.8(Q)	
22	Acetonitrile	41	2.397	2.397	(0.690)	146019	100.000	94.8(Q)	
23	Methyl acetate	43	2.403	2.403	(0.691)	114963	20.0000	19.2(Q)	

Data File: \\v70wintarget\chem\70msv6.i\032717.b\J33247.D
Report Date: 28-Mar-2017 19:56

			QUANT SIG					AMOUNTS		
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)	REVIEW C
	24	Methylene Chloride	84	2.482	2.482	(0.714)	71014	20.0000	19.1(Q)	
	25	tert-Butyl Alcohol	59	2.525	2.525	(0.726)	17845	100.000	100(Q)	
	28	Methyl-tert-butyl ether	73	2.586	2.586	(0.744)	246334	20.0000	19.3(Q)	
	27	trans-1,2-Dichloroethene	96	2.610	2.610	(0.751)	65748	20.0000	18.6(Q)	
	26	Acrylonitrile	53	2.653	2.653	(0.763)	30309	20.0000	18.6(Q)	
	30	n-Hexane	57	2.708	2.708	(0.779)	92811	20.0000	19.8(Q)	
	29	Diisopropyl ether	45	2.842	2.842	(0.818)	313171	20.0000	19.0(Q)	
	32	Vinyl acetate	43	2.873	2.873	(0.826)	138430	20.0000	23.2(Q)	
	31	1,1-Dichloroethane	63	2.866	2.866	(0.825)	151245	20.0000	19.3(Q)	
	33	Chloroprene	53	2.897	2.897	(0.833)	127446	20.0000	19.1(Q)	
	34	Ethyl-tert-butyl ether	59	3.043	3.043	(0.875)	250432	20.0000	20.2(Q)	
	36	2,2-Dichloropropane	77	3.177	3.177	(0.914)	75808	20.0000	21.5(Q)	
	35	cis-1,2-Dichloroethene	96	3.196	3.196	(0.919)	75872	20.0000	18.5(Q)	
	39	Ethyl acetate	61	3.196	3.196	(0.919)	136492	20.0000	19.0(Q)	
	37	2-Butanone (MEK)	43	3.202	3.202	(0.921)	71754	20.0000	20.1(Q)	
	41	Bromochloromethane	128	3.336	3.342	(0.960)	33320	20.0000	19.5(Q)	
	42	Tetrahydrofuran	42	3.342	3.342	(0.961)	28856	20.0000	18.5(Q)	
	43	Chloroform	83	3.366	3.366	(0.968)	125712	20.0000	19.0(Q)	
	38	Propionitrile	54	3.281	3.281	(0.944)	11303	20.0000	22.5(Q)	
	46	Cyclohexane	56	3.458	3.458	(0.995)	144250	20.0000	14.8(Q)	
	45	1,1,1-Trichloroethane	97	3.458	3.458	(0.885)	89226	20.0000	19.9(Q)	
*	44	Pentafluorobenzene (IS)	168	3.476	3.476	(1.000)	220840	50.0000	(Q)	
	48	Carbon tetrachloride	117	3.537	3.537	(0.905)	51540	20.0000	20.4(Q)	
	47	1,1-Dichloropropene	75	3.549	3.555	(0.908)	105323	20.0000	18.8(Q)	
	55	2,2,4-Trimethylpentane	57	3.647	3.647	(1.049)	141972	20.0000	20.0(Q)	
	51	Benzene	78	3.671	3.671	(0.939)	302975	20.0000	19.4(Q)	
	40	Methacrylonitrile	67	3.348	3.348	(0.963)	33548	20.0000	19.4(Q)	
$	50	1,2-Dichloroethane-d4 (S)	65	3.677	3.677	(0.941)	136146	50.0000	49.8(Q)	
	56	tert-Amylmethyl ether	73	3.702	3.702	(1.065)	226058	20.0000	20.3(Q)	
	52	1,2-Dichloroethane	62	3.720	3.720	(1.070)	109020	20.0000	18.4(Q)	
	57	n-Heptane	43	3.757	3.757	(1.081)	71119	20.0000	19.4(Q)	
*	58	1,4-Difluorobenzene (IS)	114	3.909	3.909	(1.000)	385779	50.0000	(Q)	
	59	Trichloroethene	95	4.055	4.055	(1.037)	72023	20.0000	19.2(Q)	
	60	Methylcyclohexane	83	4.128	4.128	(1.056)	95559	20.0000	20.2(Q)	
	49	Isobutanol	43	3.647	3.647	(1.049)	30179	100.000	98.9(Q)	
	53	tert-Amyl Alcohol	59	Compound Not Detected.						(D)
	54	tert-Amyl ethyl ether	59	4.153	4.153	(1.195)	166923	20.0000	21.4(Q)	
	61	1,2-Dichloropropane	63	4.220	4.220	(1.080)	89641	20.0000	19.6(Q)	
	63	Methyl methacrylate	69	4.250	4.250	(1.087)	42399	20.0000	23.5(Q)	
	64	1,4-Dioxane (p-Dioxane)	88	4.287	4.281	(1.097)	18734	500.000	521(Q)	
	62	Dibromomethane	93	4.299	4.299	(1.100)	43677	20.0000	18.9(Q)	
	65	Bromodichloromethane	83	4.378	4.378	(1.120)	80361	20.0000	20.5(Q)	
	66	2-Nitropropane	43	4.561	4.561	(1.167)	38120	20.0000	19.0(Q)	
	67	2-Chloroethylvinyl ether	63	4.561	4.561	(1.167)	46909	20.0000	21.6(Q)	
	68	cis-1,3-Dichloropropene	75	4.665	4.665	(1.193)	114030	20.0000	22.4(Q)	
	69	4-Methyl-2-pentanone (MIBK)	43	4.744	4.744	(1.214)	78298	20.0000	19.2(Q)	
$	70	Toluene-d8 (S)	98	4.805	4.811	(0.827)	423021	50.0000	50.0(Q)	
	71	Toluene	91	4.854	4.854	(1.242)	312388	20.0000	19.2(Q)	
	72	Methyl isothiocyanate	73	4.976	4.976	(1.273)	114960	50.0000	58.4(Q)	
	74	trans-1,3-Dichloropropene	75	5.037	5.037	(1.288)	85498	20.0000	24.8(Q)	
	75	Ethyl methacrylate	69	5.037	5.037	(1.288)	71918	20.0000	25.5(Q)	
	76	1,1,2-Trichloroethane	83	5.159	5.165	(1.320)	55923	20.0000	19.7(Q)	
	77	Tetrachloroethene	166	5.201	5.201	(0.895)	73258	20.0000	22.3(Q)	
	78	1,3-Dichloropropane	76	5.281	5.281	(0.909)	124571	20.0000	19.6(Q)	

Data File: \\v70wintarget\chem\70msv6.i\032717.b\J33247.D
Report Date: 28-Mar-2017 19:56

							AMOUNTS		
		QUANT SIG					CAL-AMT	ON-COL	
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)	REVIEW C
	79 2-Hexanone	43	5.305	5.299	(0.913)	56226	20.0000	10.9(Q)	
	73 n-Octane	43	4.854	4.854	(1.242)	65015	20.0000	18.5(Q)	
	81 n-Butyl acetate	43	5.354	5.360	(1.370)	35946	20.0000	23.9(Q)	
	80 Dibromochloromethane	129	5.421	5.421	(0.933)	44159	20.0000	22.0(Q)	
	82 1,2-Dibromoethane (EDB)	107	5.512	5.512	(1.410)	54485	20.0000	26.0(Q)	
*	83 Chlorobenzene-d5 (IS)	82	5.811	5.811	(1.000)	221862	50.0000	(Q)	
	84 Chlorobenzene	112	5.829	5.835	(1.003)	189409	20.0000	19.4(Q)	
	86 Ethylbenzene	106	5.878	5.878	(1.012)	102636	20.0000	20.0(Q)	
	85 1,1,1,2-Tetrachloroethane	131	5.890	5.890	(1.014)	41838	20.0000	23.6(Q)	
	88 n-Nonane	43	5.909	5.909	(1.017)	52056	20.0000	16.4(Q)	
	87 m&p-Xylene	106	5.963	5.963	(1.026)	253728	40.0000	39.8(Q)	
	89 o-Xylene	106	6.256	6.256	(1.077)	124652	20.0000	19.5(Q)	
	90 Styrene	104	6.274	6.274	(1.080)	217242	20.0000	20.4(Q)	
	91 Bromoform	173	6.439	6.439	(1.108)	22677	20.0000	24.4(Q)	
	92 Isopropylbenzene (Cumene)	105	6.512	6.512	(0.863)	297986	20.0000	19.5(Q)	
$	93 4-Bromofluorobenzene (S)	95	6.671	6.671	(1.148)	151429	50.0000	50.5(Q)	
	94 Bromobenzene	156	6.780	6.780	(0.898)	73874	20.0000	18.9(Q)	
	95 1,1,2,2-Tetrachloroethane	83	6.793	6.793	(0.900)	80045	20.0000	19.8(Q)	
	98 n-Propylbenzene	91	6.817	6.823	(0.903)	350299	20.0000	19.5(Q)	
	96 1,2,3-Trichloropropane	110	6.835	6.835	(0.905)	23702	20.0000	20.4(Q)	
	97 trans-1,4-Dichloro-2-butene	53	6.841	6.841	(0.906)	21833	20.0000	20.2(Q)	
	103 n-Decane	43	6.896	6.902	(1.187)	51740	20.0000	15.1(Q)	
	99 2-Chlorotoluene	91	6.914	6.914	(0.916)	249963	20.0000	19.1(Q)	
	100 4-Ethyltoluene	105	6.908	6.908	(0.915)	293816	20.0000	19.8(Q)	
	101 1,3,5-Trimethylbenzene	105	6.957	6.957	(0.922)	245210	20.0000	19.9(Q)	
	102 4-Chlorotoluene	91	7.000	7.000	(0.927)	227262	20.0000	19.0(Q)	
	104 tert-Butylbenzene	119	7.195	7.195	(0.953)	186773	20.0000	20.0(Q)	
	105 Pentachloroethane	167	7.250	7.250	(0.960)	16665	20.0000	20.0(Q)	
	106 1,2,4-Trimethylbenzene	105	7.244	7.244	(0.960)	245467	20.0000	19.6(Q)	
	107 sec-Butylbenzene	105	7.366	7.366	(0.976)	252861	20.0000	19.7(Q)	
	109 d-Limonene	136	7.427	7.427	(1.278)	9154	20.0000	25.4(Q)	
	110 p-Isopropyltoluene	119	7.475	7.475	(0.990)	219782	20.0000	20.2(Q)	
	108 1,3-Dichlorobenzene	146	7.488	7.494	(0.992)	127158	20.0000	19.2(Q)	
*	111 1,4-Dichlorobenzene-d4 (IS)	152	7.548	7.548	(1.000)	166514	50.0000	(Q)	
	112 1,4-Dichlorobenzene	146	7.567	7.567	(1.002)	131018	20.0000	18.6(Q)	
	113 1,2,3-Trimethylbenzene	105	7.573	7.579	(1.003)	255344	20.0000	18.9(Q)	
	114 Benzyl chloride	91	7.676	7.676	(1.017)	68458	20.0000	24.8(Q)	
	115 trans-Decalin	138	7.768	7.768	(1.029)	26594	20.0000	19.4(Q)	
	116 1,4-Diethylbenzene	119	7.774	7.774	(1.030)	126961	20.0000	20.5(Q)	
	117 n-Butylbenzene	91	7.792	7.792	(1.032)	230595	20.0000	20.1(Q)	
	119 n-Undecane	43	7.817	7.817	(1.036)	43028	20.0000	12.3(Q)	
	118 1,2-Dichlorobenzene	146	7.859	7.859	(1.041)	122918	20.0000	19.2(Q)	
	120 cis-Decalin	138	8.207	8.207	(1.087)	21502	20.0000	19.2(Q)	
	121 1,2,4,5-tetramethylbenzene	119	8.396	8.396	(1.112)	178041	20.0000	19.7(Q)	
	122 1,2-Dibromo-3-chloropropane	75	8.481	8.481	(1.124)	8262	20.0000	33.0(Q)	
	123 n-Dodecane	43	8.670	8.670	(1.149)	33066	20.0000	11.2(Q)	
	124 1,2,4-Trichlorobenzene	180	9.115	9.115	(1.208)	66822	20.0000	20.2(Q)	
	125 Hexachloro-1,3-butadiene	225	9.207	9.207	(1.220)	22041	20.0000	19.3(Q)	
	126 Naphthalene	128	9.329	9.335	(1.236)	166403	20.0000	19.9(Q)	
	127 1,2,3-Trichlorobenzene	180	9.560	9.560	(1.267)	58794	20.0000	20.0(Q)	

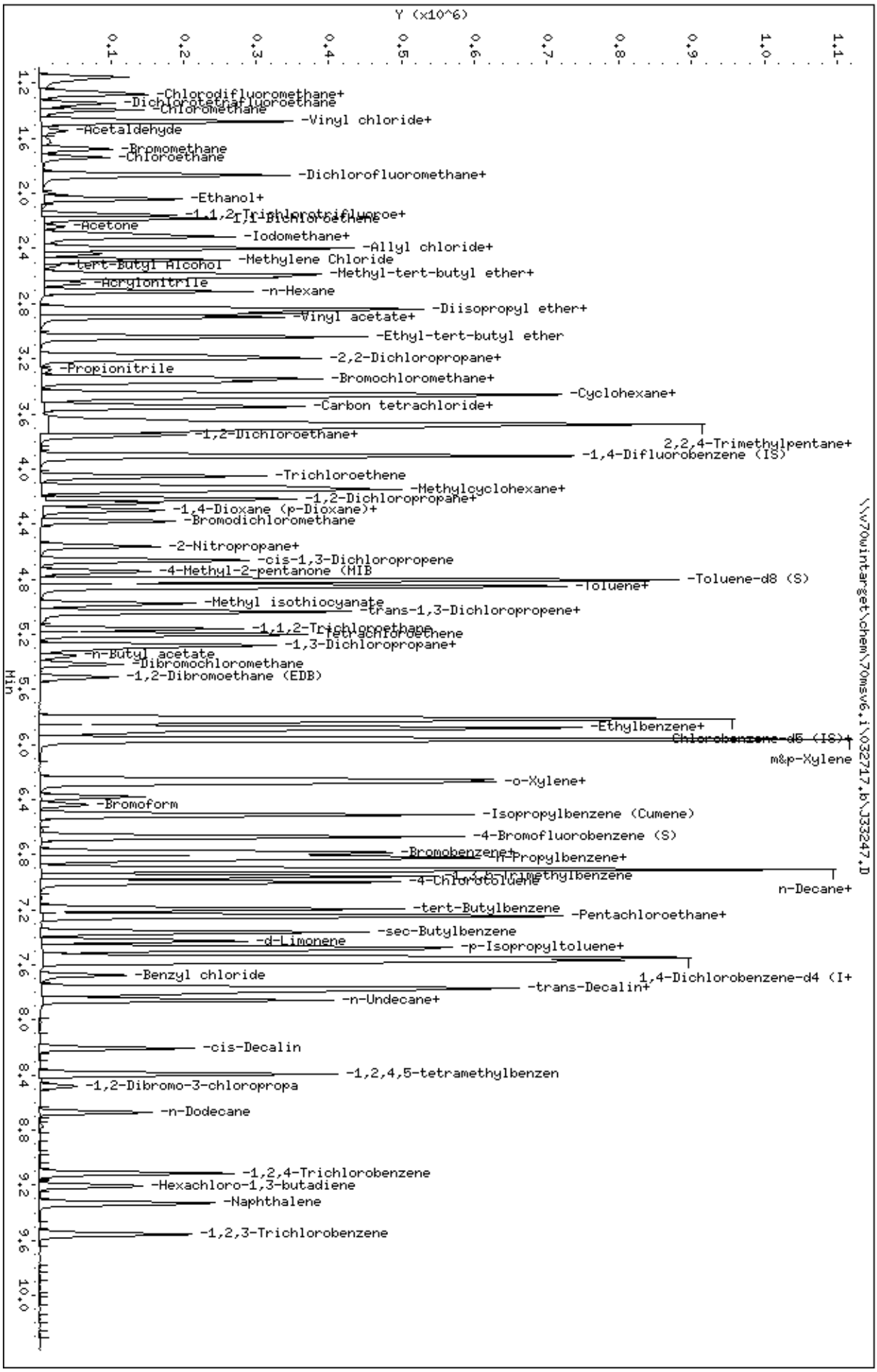
Data File: \\v70wintarget\chem\70msv6.i\032717.b\J33247.D
Report Date: 28-Mar-2017 19:56

QC Flag Legend

Q - Qualifier signal failed the ratio test.
D - User disabled compound identification.

Review Codes Legend

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Data File: \\v70wintarget\chem\70msv6.i\032717.b\J33247.D
Date : 27-MAR-2017 19:18
Client ID: CAL5
Sample Info: CAL5, 13488:1
Purge Volume: 5.0
Column phase: RTX-624
Instrument: 70msv6.i
Operator: BBL
Column diameter: 0.18
\\v70wintarget\chem\70msv6.i\032717.b\J33247.D
Y (x10^6)
Min
-Chlorodifluoromethane+
-Dichlorotetrafluoroethane
-Chloromethane
-Vinyl chloride+
-Acetaldehyde
-Bromomethane
-Chloroethane
-Dichlorofluoromethane+
-Ethanol+
-1,1,2-Trichlorotrifluoroe+
-1,1-Dichloroethene
-Acetone
-Iodomethane+
-Allyl chloride+
-Methylene Chloride
-tert-Butyl Alcohol
-Methyl-tert-butyl ether+
-Acrylonitrile
-n-Hexane
-Diisopropyl ether+
-Vinyl acetate+
-Ethyl-tert-butyl ether
-2,2-Dichloropropane+
-Propionitrile
-Bromochloromethane+
-Cyclohexane+
-Carbon tetrachloride+
-1,2-Dichloroethane+
2,2,4-Trimethylpentane+
-1,4-Difluorobenzene (IS)
-Trichloroethene
-Methylcyclohexane+
-1,2-Dichloropropane+
-1,4-Dioxane (p-Dioxane)+
-Bromodichloromethane
-2-Nitropropane+
-cis-1,3-Dichloropropene
-4-Methyl-2-pentanone (MIB
-Toluene-d8 (S)
-Toluene+
-Methyl isothiocyanate
-trans-1,3-Dichloropropene+
-1,1,2-Trichloroethane
Tetrachloroethene
-1,3-Dichloropropane+
-n-Butyl acetate
-Dibromochloromethane
-1,2-Dibromoethane (EDB)
-Ethylbenzene+
Chlorobenzene-d5 (IS)+
m&p-Xylene
-o-Xylene+
-Bromoform
-Isopropylbenzene (Cumene)
-4-Bromofluorobenzene (S)
-Bromobenzene+
-n-Propylbenzene+
-1,3,5-Trimethylbenzene
-4-Chlorotoluene
n-Decane+
-tert-Butylbenzene
-Pentachloroethane+
-sec-Butylbenzene
-d-Limonene
-p-Isopropyltoluene+
1,4-Dichlorobenzene-d4 (I+
-Benzyl chloride
-trans-Decalin+
-n-Undecane+
-cis-Decalin
-1,2,4,5-tetramethylbenzen
-1,2-Dibromo-3-chloropropa
-n-Dodecane
-1,2,4-Trichlorobenzene
-Hexachloro-1,3-butadiene
-Naphthalene
-1,2,3-Trichlorobenzene

Data File: \\v70wintarget\chem\70msv6.i\032717.b/J33247.D
Injection Date: 27-MAR-2017 19:18
Instrument: 70msv6.i
Lab Sample ID: CAL5
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Data File: \\v70wintarget\chem\70msv6.i\032717.b\J33248.D
Report Date: 28-Mar-2017 19:56

Pace Analytical Services, Inc.

SW846-8260C/EPA 624

Data file : \\v70wintarget\chem\70msv6.i\032717.b\J33248.D
Lab Smp Id: CAL6 Client Smp ID: CAL6
Inj Date : 27-MAR-2017 19:36 MS Autotune Date: 17-MAR-2017 06:2
Operator : BBL Inst ID: 70msv6.i
Smp Info : cal6, 13489:1
Misc Info : 1823,
Comment :
Method : \\v70wintarget\chem\70msv6.i\032717.b\032717_8260W.m
Meth Date : 28-Mar-2017 19:53 blagula Quant Type: ISTD
Cal Date : 27-MAR-2017 19:36 Cal File: J33248.D
Als bottle: 7 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)	REVIEW C
1	Chlorodifluoromethane	51	1.281	1.281	(0.369)	246444	50.0000	45.5(Q)	
2	Dichlorotetrafluoroethane	135	1.348	1.348	(0.388)	75147	50.0000	49.4(Q)	
3	Dichlorodifluoromethane	85	1.263	1.263	(0.363)	138688	50.0000	43.3(Q)	
4	Chloromethane	50	1.391	1.391	(0.400)	227693	50.0000	44.1(Q)	
5	Vinyl chloride	62	1.458	1.458	(0.420)	217021	50.0000	46.6(Q)	
6	1,3-Butadiene	54	1.476	1.476	(0.425)	212461	50.0000	46.0(Q)	
7	Acetaldehyde	44	1.543	1.544	(0.444)	50104	50.0000	30.6(Q)	
8	Bromomethane	94	1.671	1.672	(0.481)	118214	50.0000	45.5(Q)	
9	Chloroethane	64	1.739	1.739	(0.500)	140395	50.0000	46.9(Q)	
10	Dichlorofluoromethane	67	1.867	1.867	(0.537)	368691	50.0000	46.6(Q)	
11	Trichlorofluoromethane	101	1.873	1.873	(0.539)	209927	50.0000	46.3(Q)	
12	Ethanol	45	2.013	2.007	(0.579)	45448	1250.00	1160(Q)	
13	Diethyl ether (Ethyl ether)	59	2.037	2.037	(0.586)	175113	50.0000	48.0(Q)	
16	1,1,2-Trichlorotrifluoroethane	101	2.153	2.153	(0.619)	124373	50.0000	47.0(Q)	
14	Acrolein	56	2.159	2.159	(0.621)	22676	50.0000	38.0(Q)	
15	1,1-Dichloroethene	96	2.184	2.184	(0.628)	126013	50.0000	47.9(Q)	
17	Acetone	43	2.238	2.239	(0.644)	59386	50.0000	32.6(Q)	
18	Iodomethane	142	2.287	2.287	(0.658)	187980	50.0000	52.3(Q)	
19	2-Propanol	45	2.305	2.306	(0.663)	313375	1250.00	1320(Q)	
20	Carbon disulfide	76	2.318	2.318	(0.667)	436495	50.0000	45.6(Q)	
21	Allyl chloride	76	2.397	2.397	(0.690)	111174	50.0000	48.6(Q)	
22	Acetonitrile	41	2.397	2.397	(0.690)	376755	250.000	245(Q)	
23	Methyl acetate	43	2.403	2.403	(0.691)	288569	50.0000	48.2(Q)	

Data File: \\v70wintarget\chem\70msv6.i\032717.b\J33248.D
Report Date: 28-Mar-2017 19:56

			QUANT SIG					AMOUNTS		
	Compounds		MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)	REVIEW C
	24 Methylene Chloride		84	2.482	2.482	(0.714)	174350	50.0000	46.9(Q)	
	25 tert-Butyl Alcohol		59	2.525	2.525	(0.726)	57256	250.000	318(Q)	
	28 Methyl-tert-butyl ether		73	2.586	2.586	(0.744)	622437	50.0000	48.7(Q)	
	27 trans-1,2-Dichloroethene		96	2.610	2.610	(0.751)	165951	50.0000	47.2(Q)	
	26 Acrylonitrile		53	2.653	2.653	(0.763)	76866	50.0000	47.5(Q)	
	30 n-Hexane		57	2.708	2.708	(0.779)	216271	50.0000	45.8(Q)	
	29 Diisopropyl ether		45	2.842	2.842	(0.818)	783558	50.0000	47.6(Q)	
	32 Vinyl acetate		43	2.872	2.873	(0.826)	409736	50.0000	65.2(Q)	
	31 1,1-Dichloroethane		63	2.866	2.866	(0.825)	379576	50.0000	48.3(Q)	
	33 Chloroprene		53	2.897	2.897	(0.833)	317157	50.0000	47.5(Q)	
	34 Ethyl-tert-butyl ether		59	3.043	3.043	(0.875)	645905	50.0000	51.3(Q)	
	36 2,2-Dichloropropane		77	3.177	3.177	(0.914)	214855	50.0000	59.2(Q)	
	35 cis-1,2-Dichloroethene		96	3.196	3.196	(0.919)	192456	50.0000	47.3(Q)	
	39 Ethyl acetate		61	3.196	3.196	(0.919)	348144	50.0000	48.5(Q)	
	37 2-Butanone (MEK)		43	3.202	3.202	(0.921)	182287	50.0000	50.4(Q)	
	41 Bromochloromethane		128	3.336	3.342	(0.960)	84536	50.0000	49.3(Q)	
	42 Tetrahydrofuran		42	3.342	3.342	(0.961)	71803	50.0000	46.4(Q)	
	43 Chloroform		83	3.366	3.366	(0.968)	312199	50.0000	47.4(Q)	
	38 Propionitrile		54	3.281	3.281	(0.944)	29524	50.0000	56.3(Q)	
	46 Cyclohexane		56	3.458	3.458	(0.995)	337962	50.0000	36.7(Q)	
	45 1,1,1-Trichloroethane		97	3.458	3.458	(0.885)	237493	50.0000	52.5(Q)	
*	44 Pentafluorobenzene (IS)		168	3.476	3.476	(1.000)	223258	50.0000	(Q)	
	48 Carbon tetrachloride		117	3.537	3.537	(0.905)	143172	50.0000	55.8(Q)	
	47 1,1-Dichloropropene		75	3.549	3.555	(0.908)	263887	50.0000	47.5(Q)	
	55 2,2,4-Trimethylpentane		57	3.647	3.647	(1.049)	331465	50.0000	46.1(Q)	
	51 Benzene		78	3.671	3.671	(0.939)	762874	50.0000	48.6(Q)	
	40 Methacrylonitrile		67	3.342	3.348	(0.961)	85248	50.0000	49.2(Q)	
$	50 1,2-Dichloroethane-d4 (S)		65	3.677	3.677	(0.941)	136910	50.0000	49.7(Q)	
	56 tert-Amylmethyl ether		73	3.702	3.702	(1.065)	589129	50.0000	52.2(Q)	
	52 1,2-Dichloroethane		62	3.720	3.720	(1.070)	274315	50.0000	46.8(Q)	
	57 n-Heptane		43	3.756	3.757	(1.081)	164670	50.0000	44.8(Q)	
*	58 1,4-Difluorobenzene (IS)		114	3.909	3.909	(1.000)	389338	50.0000	(Q)	
	59 Trichloroethene		95	4.055	4.055	(1.037)	180300	50.0000	48.0(Q)	
	60 Methylcyclohexane		83	4.128	4.128	(1.056)	227457	50.0000	47.5(Q)	
	49 Isobutanol		43	3.647	3.647	(1.049)	62829	250.000	204(Q)	
	53 tert-Amyl Alcohol		59	Compound Not Detected.						(D)
	54 tert-Amyl ethyl ether		59	4.153	4.153	(1.195)	464126	50.0000	57.8(Q)	
	61 1,2-Dichloropropane		63	4.220	4.220	(1.080)	227457	50.0000	49.5(Q)	
	63 Methyl methacrylate		69	4.244	4.250	(1.086)	125166	50.0000	65.8(Q)	
	64 1,4-Dioxane (p-Dioxane)		88	4.281	4.281	(1.095)	47527	1250.00	1290(Q)	
	62 Dibromomethane		93	4.299	4.299	(1.100)	109889	50.0000	47.8(Q)	
	65 Bromodichloromethane		83	4.378	4.378	(1.120)	220076	50.0000	55.3(Q)	
	66 2-Nitropropane		43	4.555	4.561	(1.165)	104115	50.0000	52.1(Q)	
	67 2-Chloroethylvinyl ether		63	4.555	4.561	(1.165)	120382	50.0000	53.9(Q)	
	68 cis-1,3-Dichloropropene		75	4.665	4.665	(1.193)	312225	50.0000	59.4(Q)	
	69 4-Methyl-2-pentanone (MIBK)		43	4.744	4.744	(1.214)	203277	50.0000	49.9(Q)	
$	70 Toluene-d8 (S)		98	4.805	4.811	(0.827)	426336	50.0000	49.7(Q)	
	71 Toluene		91	4.854	4.854	(1.242)	781126	50.0000	48.1(Q)	
	72 Methyl isothiocyanate		73	4.976	4.976	(1.273)	315518	125.000	152(Q)	
	74 trans-1,3-Dichloropropene		75	5.037	5.037	(1.288)	256017	50.0000	70.2(Q)	
	75 Ethyl methacrylate		69	5.037	5.037	(1.288)	221752	50.0000	72.9(Q)	
	76 1,1,2-Trichloroethane		83	5.159	5.165	(1.320)	141366	50.0000	49.5(Q)	
	77 Tetrachloroethene		166	5.201	5.201	(0.895)	167324	50.0000	48.8(Q)	
	78 1,3-Dichloropropane		76	5.281	5.281	(0.909)	312830	50.0000	48.8(Q)	

Data File: \\v70wintarget\chem\70msv6.i\032717.b\J33248.D
Report Date: 28-Mar-2017 19:56

		QUANT SIG					AMOUNTS		
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)	REVIEW C
	79 2-Hexanone	43	5.299	5.299	(0.912)	140890	50.0000	30.4(Q)	
	73 n-Octane	43	4.854	4.854	(1.242)	151768	50.0000	43.7(Q)	
	81 n-Butyl acetate	43	5.354	5.360	(1.370)	107388	50.0000	66.4(Q)	
	80 Dibromochloromethane	129	5.421	5.421	(0.933)	128474	50.0000	61.7(Q)	
	82 1,2-Dibromoethane (EDB)	107	5.512	5.512	(1.410)	152236	50.0000	67.9(Q)	
*	83 Chlorobenzene-d5 (IS)	82	5.811	5.811	(1.000)	225008	50.0000	(Q)	
	84 Chlorobenzene	112	5.829	5.835	(1.003)	480531	50.0000	48.9(Q)	
	86 Ethylbenzene	106	5.878	5.878	(1.012)	258579	50.0000	49.6(Q)	
	85 1,1,1,2-Tetrachloroethane	131	5.890	5.890	(1.014)	128261	50.0000	68.3(Q)	
	88 n-Nonane	43	5.908	5.909	(1.017)	120545	50.0000	39.3(Q)	
	87 m&p-Xylene	106	5.963	5.963	(1.026)	646879	100.000	100(Q)	
	89 o-Xylene	106	6.256	6.256	(1.077)	318593	50.0000	49.5(Q)	
	90 Styrene	104	6.274	6.274	(1.080)	555013	50.0000	51.0(Q)	
	91 Bromoform	173	6.439	6.439	(1.108)	71072	50.0000	71.5(Q)	
	92 Isopropylbenzene (Cumene)	105	6.512	6.512	(0.863)	748647	50.0000	47.9(Q)	
$	93 4-Bromofluorobenzene (S)	95	6.670	6.671	(1.148)	152886	50.0000	50.1(Q)	
	94 Bromobenzene	156	6.780	6.780	(0.898)	186135	50.0000	46.9(Q)	
	95 1,1,2,2-Tetrachloroethane	83	6.792	6.793	(0.900)	208777	50.0000	50.2(Q)	
	98 n-Propylbenzene	91	6.817	6.823	(0.903)	886727	50.0000	48.3(Q)	
	96 1,2,3-Trichloropropane	110	6.835	6.835	(0.905)	61036	50.0000	50.8(Q)	
	97 trans-1,4-Dichloro-2-butene	53	6.841	6.841	(0.906)	62086	50.0000	55.6(Q)	
	103 n-Decane	43	6.896	6.902	(1.187)	118453	50.0000	36.2(Q)	
	99 2-Chlorotoluene	91	6.914	6.914	(0.916)	637438	50.0000	47.9(Q)	
	100 4-Ethyltoluene	105	6.908	6.908	(0.915)	751182	50.0000	49.3(Q)	
	101 1,3,5-Trimethylbenzene	105	6.957	6.957	(0.922)	611085	50.0000	48.2(Q)	
	102 4-Chlorotoluene	91	7.000	7.000	(0.927)	578260	50.0000	47.4(Q)	
	104 tert-Butylbenzene	119	7.195	7.195	(0.953)	467139	50.0000	48.6(Q)	
	105 Pentachloroethane	167	7.250	7.250	(0.960)	64533	50.0000	75.2(Q)	
	106 1,2,4-Trimethylbenzene	105	7.244	7.244	(0.960)	625530	50.0000	48.7(Q)	
	107 sec-Butylbenzene	105	7.365	7.366	(0.976)	636301	50.0000	48.4(Q)	
	109 d-Limonene	136	7.426	7.427	(1.278)	23512	50.0000	60.2(Q)	
	110 p-Isopropyltoluene	119	7.475	7.475	(0.990)	552357	50.0000	49.1(Q)	
	108 1,3-Dichlorobenzene	146	7.487	7.494	(0.992)	323160	50.0000	47.8(Q)	
*	111 1,4-Dichlorobenzene-d4 (IS)	152	7.548	7.548	(1.000)	171547	50.0000	(Q)	
	112 1,4-Dichlorobenzene	146	7.567	7.567	(1.002)	333520	50.0000	46.7(Q)	
	113 1,2,3-Trimethylbenzene	105	7.573	7.579	(1.003)	654319	50.0000	47.6(Q)	
	114 Benzyl chloride	91	7.670	7.676	(1.016)	246658	50.0000	82.0(Q)	
	115 trans-Decalin	138	7.768	7.768	(1.029)	63951	50.0000	45.6(Q)	
	116 1,4-Diethylbenzene	119	7.774	7.774	(1.030)	323093	50.0000	50.3(Q)	
	117 n-Butylbenzene	91	7.792	7.792	(1.032)	583713	50.0000	49.4(Q)	
	119 n-Undecane	43	7.817	7.817	(1.036)	93902	50.0000	29.9(Q)	
	118 1,2-Dichlorobenzene	146	7.853	7.859	(1.040)	312326	50.0000	47.8(Q)	
	120 cis-Decalin	138	8.207	8.207	(1.087)	49658	50.0000	43.5(Q)	
	121 1,2,4,5-tetramethylbenzene	119	8.390	8.396	(1.111)	444350	50.0000	47.9(Q)	
	122 1,2-Dibromo-3-chloropropane	75	8.481	8.481	(1.124)	29527	50.0000	98.4(Q)	
	123 n-Dodecane	43	8.670	8.670	(1.149)	66892	50.0000	24.7(Q)	
	124 1,2,4-Trichlorobenzene	180	9.115	9.115	(1.208)	169019	50.0000	49.5(Q)	
	125 Hexachloro-1,3-butadiene	225	9.207	9.207	(1.220)	54046	50.0000	46.3(Q)	
	126 Naphthalene	128	9.329	9.335	(1.236)	425206	50.0000	49.5(Q)	
	127 1,2,3-Trichlorobenzene	180	9.554	9.560	(1.266)	151767	50.0000	50.0(Q)	

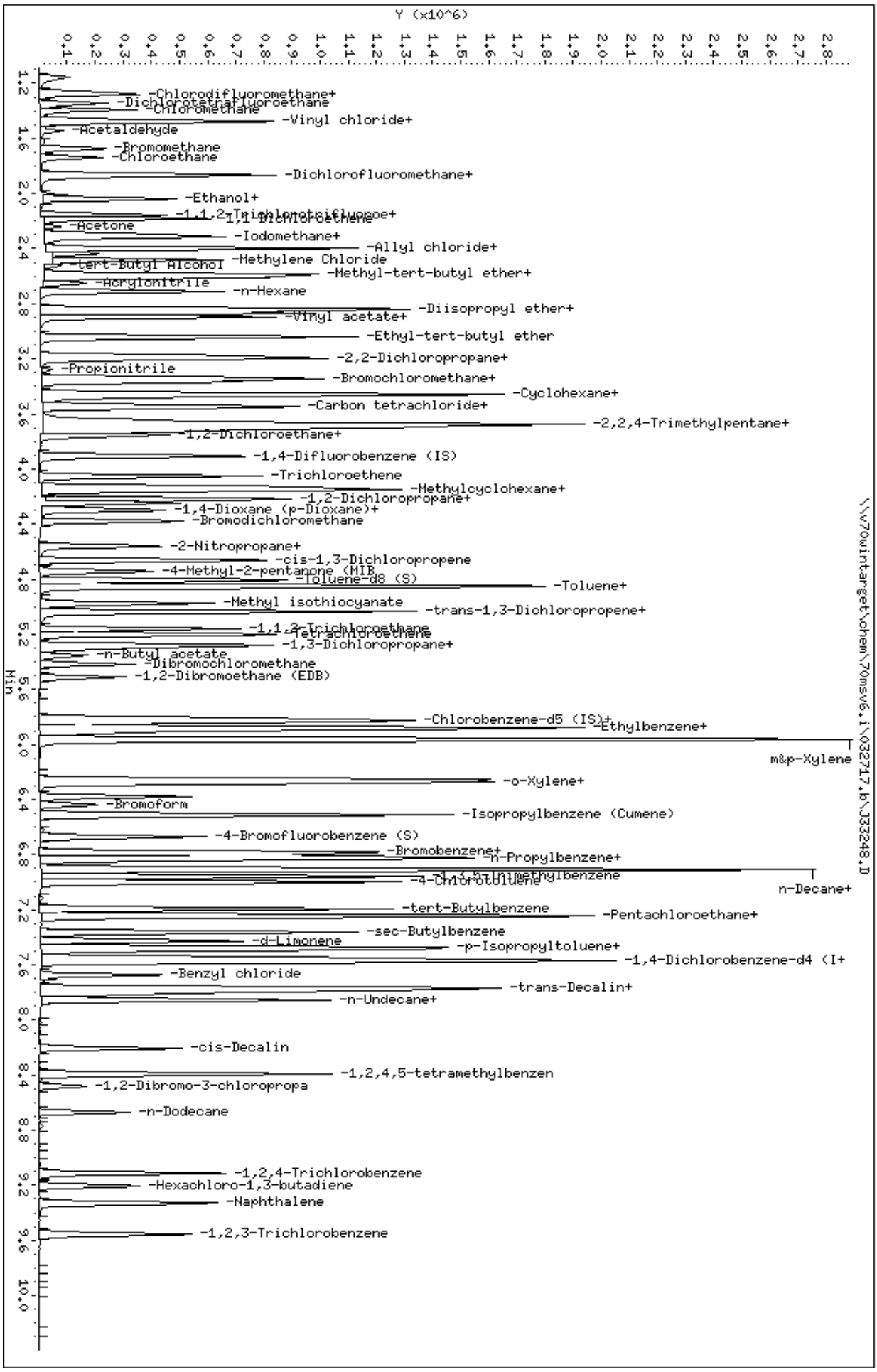
Data File: \\v70wintarget\chem\70msv6.i\032717.b\J33248.D
Report Date: 28-Mar-2017 19:56

QC Flag Legend

Q - Qualifier signal failed the ratio test.
D - User disabled compound identification.

Review Codes Legend

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Data File: \\v70wintarget\chem\70msv6.i\032717.b\J33248.D
Date : 27-MAR-2017 19:36
Client ID: CAL6
Sample Info: CAL6, 13489:1
Purge Volume: 5.0
Column phase: RTX-624
Instrument: 70msv6.i
Operator: BBL
Column diameter: 0.18
\\v70wintarget\chem\70msv6.i\032717.b\J33248.D
Y (x10^6)
Min
-Chlorodifluoromethane+
-Dichlorotetrafluoroethane
-Chloromethane
-Vinyl chloride+
-Acetaldehyde
-Bromomethane
-Chloroethane
-Dichlorofluoromethane+
-Ethanol+
-1,1,2-Trichlorotrifluoroe+
1,1-Dichloroethene
-Acetone
-Iodomethane+
-Allyl chloride+
-Methylene Chloride
-tert-Butyl Alcohol
-Methyl-tert-butyl ether+
-Acrylonitrile
-n-Hexane
-Diisopropyl ether+
-Vinyl acetate+
-Ethyl-tert-butyl ether
-2,2-Dichloropropane+
-Propionitrile
-Bromochloromethane+
-Cyclohexane+
-Carbon tetrachloride+
-2,2,4-Trimethylpentane+
-1,2-Dichloroethane+
-1,4-Difluorobenzene (IS)
-Trichloroethene
-Methylcyclohexane+
-1,2-Dichloropropane+
-1,4-Dioxane (p-Dioxane)+
-Bromodichloromethane
-2-Nitropropane+
-cis-1,3-Dichloropropene
-4-Methyl-2-pentanone (MIB
-Toluene-d8 (S)
-Toluene+
-Methyl isothiocyanate
-trans-1,3-Dichloropropene+
-1,1,2-Trichloroethane
-Tetrachloroethene
-1,3-Dichloropropane+
-n-Butyl acetate
-Dibromochloromethane
-1,2-Dibromoethane (EDB)
-Chlorobenzene-d5 (IS)+
-Ethylbenzene+
m&p-Xylene
-o-Xylene+
-Bromoform
-Isopropylbenzene (Cumene)
-4-Bromofluorobenzene (S)
-Bromobenzene+
-n-Propylbenzene+
-1,3,5-Trimethylbenzene
-4-Chlorotoluene
n-Decane+
-tert-Butylbenzene
-Pentachloroethane+
-sec-Butylbenzene
-d-Limonene
-p-Isopropyltoluene+
-1,4-Dichlorobenzene-d4 (I+
-Benzyl chloride
-trans-Decalin+
-n-Undecane+
-cis-Decalin
-1,2,4,5-tetramethylbenzen
-1,2-Dibromo-3-chloropropa
-n-Dodecane
-1,2,4-Trichlorobenzene
-Hexachloro-1,3-butadiene
-Naphthalene
-1,2,3-Trichlorobenzene

Data File: \\v70wintarget\chem\70msv6.i\032717.b/J33248.D
Injection Date: 27-MAR-2017 19:36
Instrument: 70msv6.i
Lab Sample ID: CAL6
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Data File: \\v70wintarget\chem\70msv6.i\032717.b\J33249.D
Report Date: 28-Mar-2017 19:56

Pace Analytical Services, Inc.

SW846-8260C/EPA 624

Data file : \\v70wintarget\chem\70msv6.i\032717.b\J33249.D
Lab Smp Id: CAL7 Client Smp ID: CAL7
Inj Date : 27-MAR-2017 19:54 MS Autotune Date: 17-MAR-2017 06:2
Operator : BBL Inst ID: 70msv6.i
Smp Info : cal7, 13490:1
Misc Info : 1823,
Comment :
Method : \\v70wintarget\chem\70msv6.i\032717.b\032717_8260W.m
Meth Date : 28-Mar-2017 19:53 blagula Quant Type: ISTD
Cal Date : 27-MAR-2017 19:54 Cal File: J33249.D
Als bottle: 8 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	REVIEW C
1	Chlorodifluoromethane	51	1.281	1.281	(0.369)	478567	100.000	89.8	
2	Dichlorotetrafluoroethane	135	1.348	1.348	(0.388)	151517	100.000	99.7	
3	Dichlorodifluoromethane	85	1.263	1.263	(0.363)	273258	100.000	87.6	
4	Chloromethane	50	1.391	1.391	(0.400)	429105	100.000	85.0	
5	Vinyl chloride	62	1.458	1.458	(0.420)	426504	100.000	92.7	
6	1,3-Butadiene	54	1.476	1.476	(0.425)	423631	100.000	93.1	
7	Acetaldehyde	44	1.543	1.544	(0.444)	87807	100.000	59.3	
8	Bromomethane	94	1.672	1.672	(0.481)	225523	100.000	88.3	
9	Chloroethane	64	1.739	1.739	(0.500)	269568	100.000	91.1	
10	Dichlorofluoromethane	67	1.861	1.867	(0.535)	712996	100.000	91.2	
11	Trichlorofluoromethane	101	1.873	1.873	(0.539)	432090	100.000	96.6	
12	Ethanol	45	2.007	2.007	(0.577)	92866	2500.00	2410(Q)	
13	Diethyl ether (Ethyl ether)	59	2.037	2.037	(0.586)	339223	100.000	93.6	
16	1,1,2-Trichlorotrifluoroethane	101	2.153	2.153	(0.619)	255230	100.000	97.4	
14	Acrolein	56	2.159	2.159	(0.621)	44338	100.000	78.0	
15	1,1-Dichloroethene	96	2.184	2.184	(0.628)	250265	100.000	95.6	
17	Acetone	43	2.238	2.239	(0.644)	125489	100.000	74.0	
18	Iodomethane	142	2.287	2.287	(0.658)	360941	100.000	99.3	
19	2-Propanol	45	2.306	2.306	(0.663)	616854	2500.00	2560	
20	Carbon disulfide	76	2.312	2.318	(0.665)	848097	100.000	90.1	
21	Allyl chloride	76	2.397	2.397	(0.690)	214507	100.000	94.2	
22	Acetonitrile	41	2.397	2.397	(0.690)	707183	500.000	461	
23	Methyl acetate	43	2.403	2.403	(0.691)	573610	100.000	96.3	

Data File: \\v70wintarget\chem\70msv6.i\032717.b\J33249.D
Report Date: 28-Mar-2017 19:56

			QUANT SIG					AMOUNTS		
								CAL-AMT	ON-COL	
	Compounds		MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)	REVIEW C
	24 Methylene Chloride		84	2.482	2.482	(0.714)	330901	100.000	90.0	
	25 tert-Butyl Alcohol		59	2.525	2.525	(0.726)	133870	500.000	704	
	28 Methyl-tert-butyl ether		73	2.586	2.586	(0.744)	1208246	100.000	94.8	
	27 trans-1,2-Dichloroethene		96	2.610	2.610	(0.751)	318550	100.000	91.6	
	26 Acrylonitrile		53	2.653	2.653	(0.763)	149410	100.000	93.1	
	30 n-Hexane		57	2.708	2.708	(0.779)	466887	100.000	100	
	29 Diisopropyl ether		45	2.842	2.842	(0.818)	1489495	100.000	91.2	
	32 Vinyl acetate		43	2.866	2.873	(0.825)	882562	100.000	132	
	31 1,1-Dichloroethane		63	2.866	2.866	(0.825)	724009	100.000	92.7	
	33 Chloroprene		53	2.897	2.897	(0.833)	624129	100.000	94.4	
	34 Ethyl-tert-butyl ether		59	3.043	3.043	(0.875)	1285094	100.000	101	
	36 2,2-Dichloropropane		77	3.177	3.177	(0.914)	466273	100.000	124	
	35 cis-1,2-Dichloroethene		96	3.196	3.196	(0.919)	366789	100.000	91.1	
	39 Ethyl acetate		61	3.196	3.196	(0.919)	673892	100.000	94.3	
	37 2-Butanone (MEK)		43	3.202	3.202	(0.921)	368403	100.000	102	
	41 Bromochloromethane		128	3.336	3.342	(0.960)	161267	100.000	94.2	
	42 Tetrahydrofuran		42	3.342	3.342	(0.961)	139071	100.000	91.0	
	43 Chloroform		83	3.366	3.366	(0.968)	606059	100.000	92.8	
	38 Propionitrile		54	3.281	3.281	(0.944)	57912	100.000	108	
	46 Cyclohexane		56	3.458	3.458	(0.995)	696129	100.000	79.7	
	45 1,1,1-Trichloroethane		97	3.458	3.458	(0.885)	490947	100.000	107(Q)	
*	44 Pentafluorobenzene (IS)		168	3.476	3.476	(1.000)	223598	50.0000	(Q)	
	48 Carbon tetrachloride		117	3.537	3.537	(0.905)	325466	100.000	123	
	47 1,1-Dichloropropene		75	3.549	3.555	(0.908)	519867	100.000	93.8	
	55 2,2,4-Trimethylpentane		57	3.647	3.647	(1.049)	769430	100.000	109	
	51 Benzene		78	3.671	3.671	(0.939)	1471868	100.000	93.6	
	40 Methacrylonitrile		67	3.342	3.348	(0.961)	165077	100.000	95.4	
$	50 1,2-Dichloroethane-d4 (S)		65	3.677	3.677	(0.941)	140345	50.0000	50.6	
	56 tert-Amylmethyl ether		73	3.702	3.702	(1.065)	1175096	100.000	103	
	52 1,2-Dichloroethane		62	3.720	3.720	(1.070)	527565	100.000	91.0	
	57 n-Heptane		43	3.756	3.757	(1.081)	368357	100.000	102	
*	58 1,4-Difluorobenzene (IS)		114	3.909	3.909	(1.000)	392054	50.0000		
	59 Trichloroethene		95	4.055	4.055	(1.037)	349400	100.000	93.2	
	60 Methylcyclohexane		83	4.128	4.128	(1.056)	493820	100.000	103	
	49 Isobutanol		43	3.647	3.647	(1.049)	142108	500.000	479	
	53 tert-Amyl Alcohol		59	Compound Not Detected.						(D)
	54 tert-Amyl ethyl ether		59	4.153	4.153	(1.195)	974355	100.000	118	
	61 1,2-Dichloropropane		63	4.220	4.220	(1.080)	437664	100.000	94.9	
	63 Methyl methacrylate		69	4.244	4.250	(1.086)	265417	100.000	130	
	64 1,4-Dioxane (p-Dioxane)		88	4.281	4.281	(1.095)	91523	2500.00	2450	
	62 Dibromomethane		93	4.299	4.299	(1.100)	213561	100.000	93.0	
	65 Bromodichloromethane		83	4.378	4.378	(1.120)	450751	100.000	110	
	66 2-Nitropropane		43	4.561	4.561	(1.167)	215157	100.000	106	
	67 2-Chloroethylvinyl ether		63	4.555	4.561	(1.165)	238521	100.000	104	
	68 cis-1,3-Dichloropropene		75	4.665	4.665	(1.193)	635824	100.000	116	
	69 4-Methyl-2-pentanone (MIBK)		43	4.744	4.744	(1.214)	400666	100.000	97.7	
$	70 Toluene-d8 (S)		98	4.805	4.811	(0.827)	427851	50.0000	50.0	
	71 Toluene		91	4.854	4.854	(1.242)	1509497	100.000	93.0	
	72 Methyl isothiocyanate		73	4.976	4.976	(1.273)	653769	250.000	300(A)	
	74 trans-1,3-Dichloropropene		75	5.037	5.037	(1.288)	552670	100.000	141	
	75 Ethyl methacrylate		69	5.037	5.037	(1.288)	487179	100.000	146	
	76 1,1,2-Trichloroethane		83	5.159	5.165	(1.320)	277458	100.000	96.7	
	77 Tetrachloroethene		166	5.201	5.201	(0.895)	338350	100.000	99.2	
	78 1,3-Dichloropropane		76	5.281	5.281	(0.909)	607539	100.000	95.2	

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Report Date: 28-Mar-2017 19:56

							AMOUNTS		
		QUANT SIG					CAL-AMT	ON-COL	
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)	REVIEW C
	79 2-Hexanone	43	5.299	5.299	(0.912)	279128	100.000	65.3	
	73 n-Octane	43	4.854	4.854	(1.242)	376151	100.000	110	
	81 n-Butyl acetate	43	5.354	5.360	(1.370)	236893	100.000	134	
	80 Dibromochloromethane	129	5.421	5.421	(0.933)	286489	100.000	131	
	82 1,2-Dibromoethane (EDB)	107	5.512	5.512	(1.410)	303890	100.000	127	
*	83 Chlorobenzene-d5 (IS)	82	5.811	5.811	(1.000)	224910	50.0000		
	84 Chlorobenzene	112	5.829	5.835	(1.003)	918041	100.000	93.8	
	86 Ethylbenzene	106	5.878	5.878	(1.012)	505474	100.000	97.2	
	85 1,1,1,2-Tetrachloroethane	131	5.890	5.890	(1.014)	280002	100.000	139	
	88 n-Nonane	43	5.908	5.909	(1.017)	347647	100.000	118	
	87 m&p-Xylene	106	5.963	5.963	(1.026)	1257785	200.000	195	
	89 o-Xylene	106	6.256	6.256	(1.077)	614165	100.000	95.6	
	90 Styrene	104	6.274	6.274	(1.080)	1081569	100.000	99.1	
	91 Bromoform	173	6.439	6.439	(1.108)	166631	100.000	154	
	92 Isopropylbenzene (Cumene)	105	6.512	6.512	(0.863)	1479607	100.000	96.5	
$	93 4-Bromofluorobenzene (S)	95	6.671	6.671	(1.148)	152345	50.0000	50.0	
	94 Bromobenzene	156	6.780	6.780	(0.898)	361799	100.000	93.3	
	95 1,1,2,2-Tetrachloroethane	83	6.792	6.793	(0.900)	415063	100.000	101	
	98 n-Propylbenzene	91	6.817	6.823	(0.903)	1766493	100.000	97.9	
	96 1,2,3-Trichloropropane	110	6.835	6.835	(0.905)	117714	100.000	98.8	
	97 trans-1,4-Dichloro-2-butene	53	6.841	6.841	(0.906)	133316	100.000	118	
	103 n-Decane	43	6.896	6.902	(1.187)	357826	100.000	116	
	99 2-Chlorotoluene	91	6.914	6.914	(0.916)	1250229	100.000	95.7	
	100 4-Ethyltoluene	105	6.908	6.908	(0.915)	1484557	100.000	98.8	
	101 1,3,5-Trimethylbenzene	105	6.957	6.957	(0.922)	1200453	100.000	96.4	
	102 4-Chlorotoluene	91	7.000	7.000	(0.927)	1127853	100.000	94.5	
	104 tert-Butylbenzene	119	7.195	7.195	(0.953)	927999	100.000	98.1	
	105 Pentachloroethane	167	7.250	7.250	(0.960)	151013	100.000	162	
	106 1,2,4-Trimethylbenzene	105	7.244	7.244	(0.960)	1237069	100.000	97.8	
	107 sec-Butylbenzene	105	7.366	7.366	(0.976)	1292873	100.000	100	
	109 d-Limonene	136	7.426	7.427	(1.278)	52188	100.000	128	
	110 p-Isopropyltoluene	119	7.475	7.475	(0.990)	1119496	100.000	101	
	108 1,3-Dichlorobenzene	146	7.487	7.494	(0.992)	637696	100.000	96.3	
*	111 1,4-Dichlorobenzene-d4 (IS)	152	7.548	7.548	(1.000)	169715	50.0000		
	112 1,4-Dichlorobenzene	146	7.567	7.567	(1.002)	655021	100.000	94.0	
	113 1,2,3-Trimethylbenzene	105	7.573	7.579	(1.003)	1289923	100.000	95.8	
	114 Benzyl chloride	91	7.670	7.676	(1.016)	615396	100.000	183	
	115 trans-Decalin	138	7.768	7.768	(1.029)	155004	100.000	114	
	116 1,4-Diethylbenzene	119	7.774	7.774	(1.030)	658380	100.000	104	
	117 n-Butylbenzene	91	7.792	7.792	(1.032)	1203604	100.000	103(Q)	
	119 n-Undecane	43	7.817	7.817	(1.036)	238403	100.000	85.4	
	118 1,2-Dichlorobenzene	146	7.859	7.859	(1.041)	614709	100.000	96.0	
	120 cis-Decalin	138	8.207	8.207	(1.087)	122524	100.000	111	
	121 1,2,4,5-tetramethylbenzene	119	8.396	8.396	(1.112)	902035	100.000	99.1	
	122 1,2-Dibromo-3-chloropropane	75	8.481	8.481	(1.124)	70251	100.000	198	
	123 n-Dodecane	43	8.670	8.670	(1.149)	118508	100.000	49.2	
	124 1,2,4-Trichlorobenzene	180	9.115	9.115	(1.208)	347086	100.000	103	
	125 Hexachloro-1,3-butadiene	225	9.207	9.207	(1.220)	117855	100.000	104	
	126 Naphthalene	128	9.329	9.335	(1.236)	860730	100.000	101	
	127 1,2,3-Trichlorobenzene	180	9.554	9.560	(1.266)	307730	100.000	102	

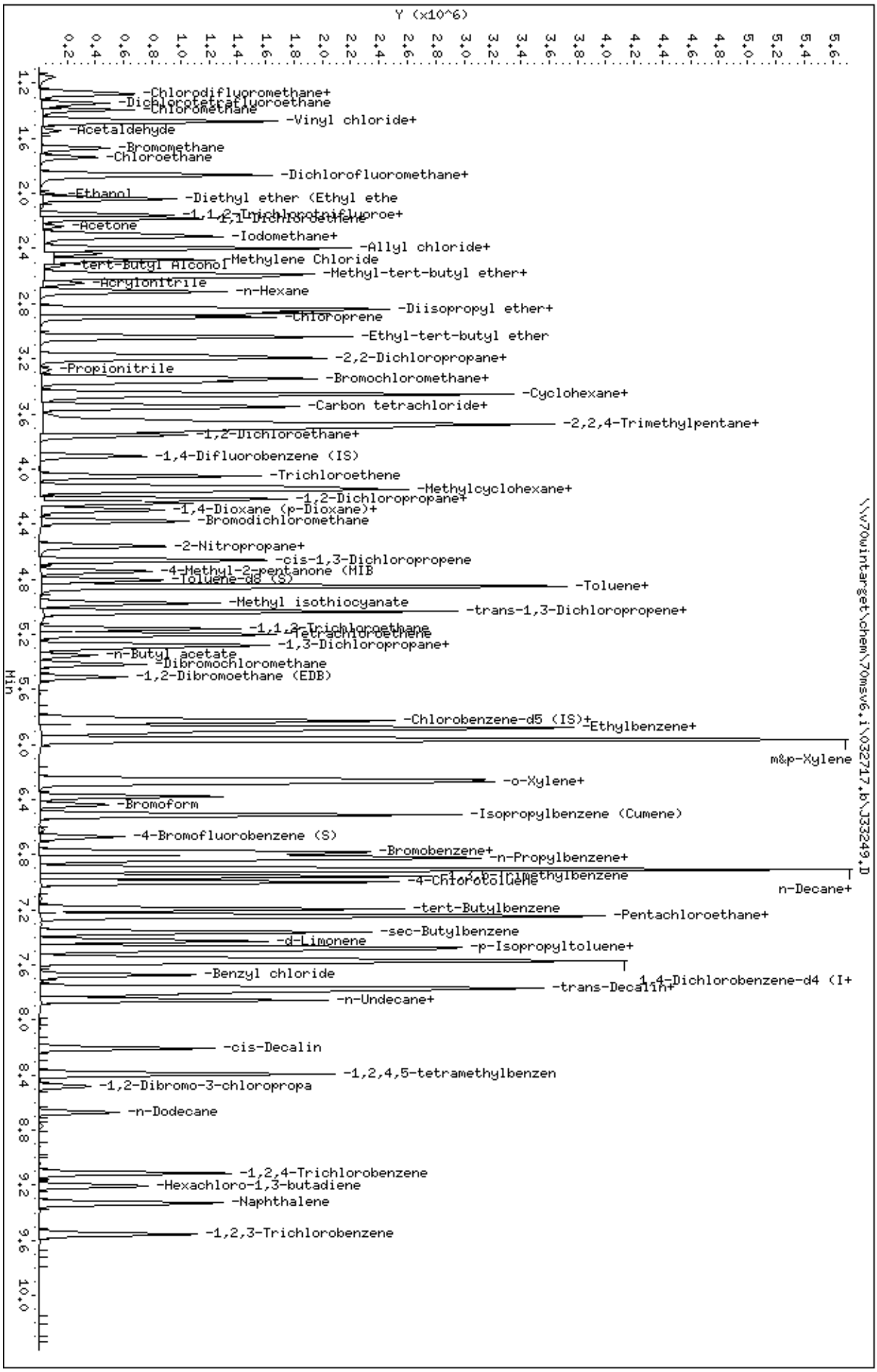
Data File: \\v70wintarget\chem\70msv6.i\032717.b\J33249.D
Report Date: 28-Mar-2017 19:56

QC Flag Legend

A - Target compound detected but, quantitated amount
    exceeded maximum amount.
Q - Qualifier signal failed the ratio test.
D - User disabled compound identification.

Review Codes Legend

    :


Data File: \\v70wintarget\chem\70msv6.i\032717.b\J33249.D
Date : 27-MAR-2017 19:54
Client ID: CAL7
Sample Info: CAL7, 13490:1
Purge Volume: 5.0
Column phase: RTX-624
Instrument: 70msv6.i
Operator: BBL
Column diameter: 0.18
Y (x10^6)
Min
-Chlorodifluoromethane+
-Dichlorotetrafluoroethane
-Chloromethane
-Vinyl chloride+
-Acetaldehyde
-Bromomethane
-Chloroethane
-Dichlorofluoromethane+
-Ethanol
-Diethyl ether (Ethyl ethe
-1,1,2-Trichlorotrifluoroe+
-1,1-Dichloroethene
-Acetone
-Iodomethane+
-Allyl chloride+
-Methylene Chloride
-tert-Butyl Alcohol
-Methyl-tert-butyl ether+
-Acrylonitrile
-n-Hexane
-Diisopropyl ether+
-Chloroprene
-Ethyl-tert-butyl ether
-2,2-Dichloropropane+
-Propionitrile
-Bromochloromethane+
-Cyclohexane+
-Carbon tetrachloride+
-2,2,4-Trimethylpentane+
-1,2-Dichloroethane+
-1,4-Difluorobenzene (IS)
-Trichloroethene
-Methylcyclohexane+
-1,2-Dichloropropane+
-1,4-Dioxane (p-Dioxane)+
-Bromodichloromethane
-2-Nitropropane+
-cis-1,3-Dichloropropene
-4-Methyl-2-pentanone (MIB
-Toluene-d8 (S)
-Toluene+
-Methyl isothiocyanate
-trans-1,3-Dichloropropene+
-1,1,2-Trichloroethane
-Tetrachloroethene
-1,3-Dichloropropane+
-n-Butyl acetate
-Dibromochloromethane
-1,2-Dibromoethane (EDB)
-Chlorobenzene-d5 (IS)+
-Ethylbenzene+
m&p-Xylene
-o-Xylene+
-Bromoform
-Isopropylbenzene (Cumene)
-4-Bromofluorobenzene (S)
-Bromobenzene+
-n-Propylbenzene+
-1,3,5-Trimethylbenzene
-4-Chlorotoluene
n-Decane+
-tert-Butylbenzene
-Pentachloroethane+
-sec-Butylbenzene
-d-Limonene
-p-Isopropyltoluene+
-Benzyl chloride
1,4-Dichlorobenzene-d4 (I+
-trans-Decalin+
-n-Undecane+
-cis-Decalin
-1,2,4,5-tetramethylbenzen
-1,2-Dibromo-3-chloropropa
-n-Dodecane
-1,2,4-Trichlorobenzene
-Hexachloro-1,3-butadiene
-Naphthalene
-1,2,3-Trichlorobenzene
\\v70wintarget\chem\70msv6.i\032717.b\J33249.D

Data File: \\v70wintarget\chem\70msv6.i\032717.b/J33249.D
Injection Date: 27-MAR-2017 19:54
Instrument: 70msv6.i
Lab Sample ID: CAL7
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Data File: \\v70wintarget\chem\70msv6.i\032717.b\J33250.D
Report Date: 28-Mar-2017 19:56

Pace Analytical Services, Inc.

SW846-8260C/EPA 624

Data file : \\v70wintarget\chem\70msv6.i\032717.b\J33250.D
Lab Smp Id: CAL8 Client Smp ID: CAL8
Inj Date : 27-MAR-2017 20:12 MS Autotune Date: 17-MAR-2017 06:2
Operator : BBL Inst ID: 70msv6.i
Smp Info : cal8, 13491:1
Misc Info : 1823,
Comment :
Method : \\v70wintarget\chem\70msv6.i\032717.b\032717_8260W.m
Meth Date : 28-Mar-2017 19:53 blagula Quant Type: ISTD
Cal Date : 27-MAR-2017 20:12 Cal File: J33250.D
Als bottle: 9 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	REVIEW C
1	Chlorodifluoromethane	51	1.282	1.281	(0.369)	947951	200.000	179	
2	Dichlorotetrafluoroethane	135	1.342	1.348	(0.386)	298304	200.000	194	
3	Dichlorodifluoromethane	85	1.263	1.263	(0.363)	533183	200.000	173(Q)	
4	Chloromethane	50	1.391	1.391	(0.400)	860894	200.000	173	
5	Vinyl chloride	62	1.458	1.458	(0.420)	852191	200.000	186	
6	1,3-Butadiene	54	1.483	1.476	(0.427)	851704	200.000	188	
7	Acetaldehyde	44	1.544	1.544	(0.444)	173346	200.000	126	
8	Bromomethane	94	1.672	1.672	(0.481)	435312	200.000	172	
9	Chloroethane	64	1.733	1.739	(0.499)	545872	200.000	186	
10	Dichlorofluoromethane	67	1.861	1.867	(0.535)	1457408	200.000	188	
11	Trichlorofluoromethane	101	1.867	1.873	(0.537)	860826	200.000	192	
12	Ethanol	45	2.013	2.007	(0.579)	176891	5000.00	4580	
13	Diethyl ether (Ethyl ether)	59	2.037	2.037	(0.586)	682446	200.000	189	
16	1,1,2-Trichlorotrifluoroethane	101	2.153	2.153	(0.619)	511742	200.000	194	
14	Acrolein	56	2.159	2.159	(0.621)	85830	200.000	155	
15	1,1-Dichloroethene	96	2.184	2.184	(0.628)	504415	200.000	192	
17	Acetone	43	2.239	2.239	(0.644)	266991	200.000	163	
18	Iodomethane	142	2.287	2.287	(0.658)	731367	200.000	200	
19	2-Propanol	45	2.306	2.306	(0.663)	1215906	5000.00	4980	
20	Carbon disulfide	76	2.312	2.318	(0.665)	1720075	200.000	184	
21	Allyl chloride	76	2.397	2.397	(0.690)	433680	200.000	191	
22	Acetonitrile	41	2.397	2.397	(0.690)	1391671	1000.00	911	
23	Methyl acetate	43	2.403	2.403	(0.691)	1143476	200.000	192	

Data File: \\v70wintarget\chem\70msv6.i\032717.b\J33250.D
Report Date: 28-Mar-2017 19:56

		QUANT SIG					AMOUNTS		
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)	REVIEW C
	24 Methylene Chloride	84	2.483	2.482	(0.714)	659515	200.000	181	
	25 tert-Butyl Alcohol	59	2.525	2.525	(0.726)	298402	1000.00	1460(A)	
	28 Methyl-tert-butyl ether	73	2.586	2.586	(0.744)	2446794	200.000	192	
	27 trans-1,2-Dichloroethene	96	2.611	2.610	(0.751)	657137	200.000	190	
	26 Acrylonitrile	53	2.653	2.653	(0.763)	299601	200.000	187	
	30 n-Hexane	57	2.714	2.708	(0.781)	933932	200.000	199	
	29 Diisopropyl ether	45	2.842	2.842	(0.818)	3039371	200.000	187	
	32 Vinyl acetate	43	2.867	2.873	(0.825)	1750822	200.000	247(A)	
	31 1,1-Dichloroethane	63	2.867	2.866	(0.825)	1485105	200.000	191	
	33 Chloroprene	53	2.897	2.897	(0.833)	1265021	200.000	191	
	34 Ethyl-tert-butyl ether	59	3.043	3.043	(0.875)	2670327	200.000	208(A)	
	36 2,2-Dichloropropane	77	3.177	3.177	(0.914)	1027363	200.000	260(A)	
	35 cis-1,2-Dichloroethene	96	3.196	3.196	(0.919)	761026	200.000	190	
	39 Ethyl acetate	61	3.196	3.196	(0.919)	1394782	200.000	195	
	37 2-Butanone (MEK)	43	3.202	3.202	(0.921)	757833	200.000	206(A)	
	41 Bromochloromethane	128	3.336	3.342	(0.960)	328696	200.000	192	
	42 Tetrahydrofuran	42	3.342	3.342	(0.961)	277600	200.000	183	
	43 Chloroform	83	3.366	3.366	(0.968)	1251366	200.000	192	
	38 Propionitrile	54	3.281	3.281	(0.944)	114167	200.000	208(A)	
	46 Cyclohexane	56	3.458	3.458	(0.995)	1397248	200.000	164	
	45 1,1,1-Trichloroethane	97	3.458	3.458	(0.885)	1037453	200.000	220(AQ)	
*	44 Pentafluorobenzene (IS)	168	3.476	3.476	(1.000)	225613	50.0000	(Q)	
	48 Carbon tetrachloride	117	3.537	3.537	(0.905)	739629	200.000	266(A)	
	47 1,1-Dichloropropene	75	3.555	3.555	(0.910)	1063179	200.000	191	
	55 2,2,4-Trimethylpentane	57	3.647	3.647	(1.049)	1762225	200.000	243(A)	
	51 Benzene	78	3.671	3.671	(0.939)	2985254	200.000	189	
	40 Methacrylonitrile	67	3.342	3.348	(0.961)	333640	200.000	192	
$	50 1,2-Dichloroethane-d4 (S)	65	3.677	3.677	(0.941)	147224	50.0000	52.3	
	56 tert-Amylmethyl ether	73	3.702	3.702	(1.065)	2437427	200.000	211(A)	
	52 1,2-Dichloroethane	62	3.720	3.720	(1.070)	1073120	200.000	186	
	57 n-Heptane	43	3.757	3.757	(1.081)	804905	200.000	221(A)	
*	58 1,4-Difluorobenzene (IS)	114	3.909	3.909	(1.000)	397384	50.0000		
	59 Trichloroethene	95	4.055	4.055	(1.037)	730228	200.000	194	
	60 Methylcyclohexane	83	4.129	4.128	(1.056)	991433	200.000	204(A)	
	49 Isobutanol	43	3.647	3.647	(1.049)	360577	1000.00	1210(A)	
	53 tert-Amyl Alcohol	59	Compound Not Detected.						(D)
	54 tert-Amyl ethyl ether	59	4.153	4.153	(1.195)	2105309	200.000	245(A)	
	61 1,2-Dichloropropane	63	4.220	4.220	(1.080)	896771	200.000	194	
	63 Methyl methacrylate	69	4.244	4.250	(1.086)	557478	200.000	257(A)	
	64 1,4-Dioxane (p-Dioxane)	88	4.281	4.281	(1.095)	179897	5000.00	4770	
	62 Dibromomethane	93	4.299	4.299	(1.100)	440831	200.000	192	
	65 Bromodichloromethane	83	4.378	4.378	(1.120)	966557	200.000	229(A)	
	66 2-Nitropropane	43	4.561	4.561	(1.167)	463381	200.000	223(A)	
	67 2-Chloroethylvinyl ether	63	4.561	4.561	(1.167)	492682	200.000	211(A)	
	68 cis-1,3-Dichloropropene	75	4.665	4.665	(1.193)	1335111	200.000	236(A)	
	69 4-Methyl-2-pentanone (MIBK)	43	4.744	4.744	(1.214)	798522	200.000	193	
$	70 Toluene-d8 (S)	98	4.805	4.811	(0.827)	432033	50.0000	50.2	
	71 Toluene	91	4.854	4.854	(1.242)	3081385	200.000	189	
	72 Methyl isothiocyanate	73	4.976	4.976	(1.273)	1342072	500.000	588(A)	
	74 trans-1,3-Dichloropropene	75	5.037	5.037	(1.288)	1186589	200.000	282(A)	
	75 Ethyl methacrylate	69	5.037	5.037	(1.288)	1040328	200.000	285(A)	
	76 1,1,2-Trichloroethane	83	5.165	5.165	(1.321)	563259	200.000	195	
	77 Tetrachloroethene	166	5.201	5.201	(0.895)	957171	200.000	280(A)	
	78 1,3-Dichloropropane	76	5.281	5.281	(0.909)	1233063	200.000	194	

Data File: \\v70wintarget\chem\70msv6.i\032717.b\J33250.D
Report Date: 28-Mar-2017 19:56

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)	REVIEW C
79	2-Hexanone	43	5.299	5.299	(0.912)	566808	200.000	140	
73	n-Octane	43	4.854	4.854	(1.242)	1003237	200.000	285(AQ)	
81	n-Butyl acetate	43	5.354	5.360	(1.370)	505076	200.000	264(A)	
80	Dibromochloromethane	129	5.421	5.421	(0.933)	635136	200.000	276(A)	
82	1,2-Dibromoethane (EDB)	107	5.512	5.512	(1.410)	620069	200.000	246(A)	
* 83	Chlorobenzene-d5 (IS)	82	5.811	5.811	(1.000)	225892	50.0000		
84	Chlorobenzene	112	5.829	5.835	(1.003)	1879060	200.000	193	
86	Ethylbenzene	106	5.878	5.878	(1.012)	1037790	200.000	200	
85	1,1,1,2-Tetrachloroethane	131	5.890	5.890	(1.014)	623262	200.000	289(A)	
88	n-Nonane	43	5.909	5.909	(1.017)	915340	200.000	301(AQ)	
87	m&p-Xylene	106	5.964	5.963	(1.026)	2577695	400.000	399	
89	o-Xylene	106	6.256	6.256	(1.077)	1260477	200.000	197	
90	Styrene	104	6.274	6.274	(1.080)	2208264	200.000	202(A)	
91	Bromoform	173	6.439	6.439	(1.108)	388959	200.000	329(A)	
92	Isopropylbenzene (Cumene)	105	6.512	6.512	(0.863)	2985199	200.000	192	
$ 93	4-Bromofluorobenzene (S)	95	6.671	6.671	(1.148)	154765	50.0000	50.5	
94	Bromobenzene	156	6.780	6.780	(0.898)	737913	200.000	189	
95	1,1,2,2-Tetrachloroethane	83	6.793	6.793	(0.900)	820093	200.000	195	
98	n-Propylbenzene	91	6.823	6.823	(0.904)	3587928	200.000	196	
96	1,2,3-Trichloropropane	110	6.835	6.835	(0.905)	236156	200.000	195	
97	trans-1,4-Dichloro-2-butene	53	6.841	6.841	(0.906)	285377	200.000	240(AQ)	
103	n-Decane	43	6.902	6.902	(1.188)	662895	200.000	208(AQ)	
99	2-Chlorotoluene	91	6.915	6.914	(0.916)	2568615	200.000	194	
100	4-Ethyltoluene	105	6.908	6.908	(0.915)	3037430	200.000	199	
101	1,3,5-Trimethylbenzene	105	6.957	6.957	(0.922)	2452750	200.000	194	
102	4-Chlorotoluene	91	7.000	7.000	(0.927)	2307475	200.000	191	
104	tert-Butylbenzene	119	7.195	7.195	(0.953)	1891558	200.000	197	
105	Pentachloroethane	167	Compound Not Detected.						(D)
106	1,2,4-Trimethylbenzene	105	7.244	7.244	(0.960)	2512911	200.000	196	
107	sec-Butylbenzene	105	7.366	7.366	(0.976)	2622938	200.000	199	
109	d-Limonene	136	7.427	7.427	(1.278)	109772	200.000	257(A)	
110	p-Isopropyltoluene	119	7.475	7.475	(0.990)	2302638	200.000	203(A)	
108	1,3-Dichlorobenzene	146	7.494	7.494	(0.993)	1308239	200.000	195	
* 111	1,4-Dichlorobenzene-d4 (IS)	152	7.549	7.548	(1.000)	173062	50.0000	(Q)	
112	1,4-Dichlorobenzene	146	7.567	7.567	(1.002)	1349237	200.000	192	
113	1,2,3-Trimethylbenzene	105	7.579	7.579	(1.004)	2631476	200.000	193	
114	Benzyl chloride	91	7.671	7.676	(1.016)	1416620	200.000	363(A)	
115	trans-Decalin	138	7.768	7.768	(1.029)	415052	200.000	292(A)	
116	1,4-Diethylbenzene	119	7.774	7.774	(1.030)	1365596	200.000	209(A)	
117	n-Butylbenzene	91	7.792	7.792	(1.032)	2487093	200.000	208(A)	
119	n-Undecane	43	Compound Not Detected.						(D)
118	1,2-Dichlorobenzene	146	7.860	7.859	(1.041)	1247781	200.000	192	
120	cis-Decalin	138	8.207	8.207	(1.087)	314733	200.000	275(A)	
121	1,2,4,5-tetramethylbenzene	119	8.396	8.396	(1.112)	1819433	200.000	196	
122	1,2-Dibromo-3-chloropropane	75	8.481	8.481	(1.124)	150302	200.000	357(A)	
123	n-Dodecane	43	8.670	8.670	(1.149)	127233	200.000	56.6(Q)	
124	1,2,4-Trichlorobenzene	180	9.115	9.115	(1.208)	702913	200.000	203(A)	
125	Hexachloro-1,3-butadiene	225	9.207	9.207	(1.220)	275111	200.000	236(A)	
126	Naphthalene	128	9.329	9.335	(1.236)	1700420	200.000	196	
127	1,2,3-Trichlorobenzene	180	9.554	9.560	(1.266)	616869	200.000	201(A)	

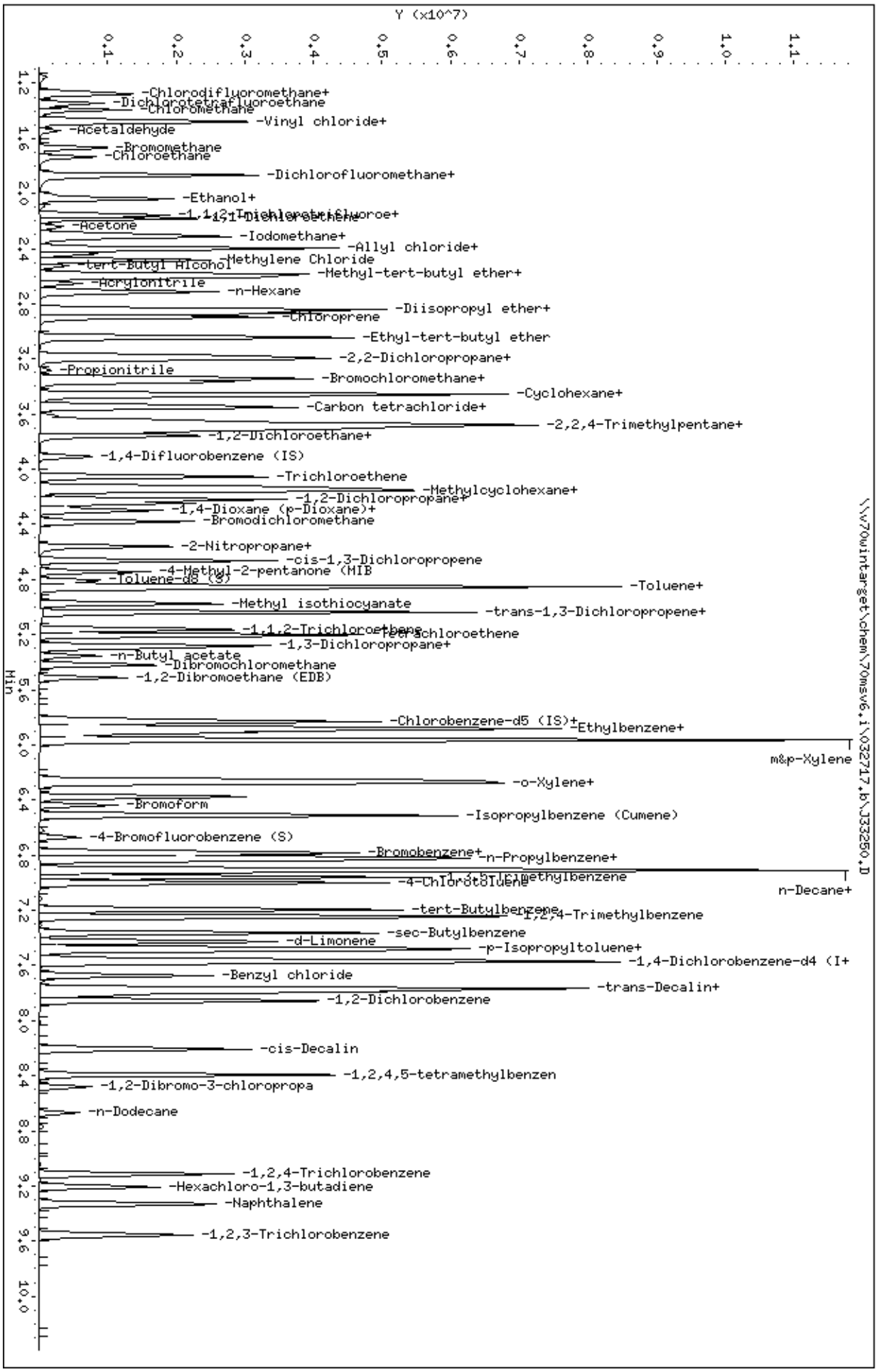
Data File: \\v70wintarget\chem\70msv6.i\032717.b\J33250.D
Report Date: 28-Mar-2017 19:56

QC Flag Legend

A - Target compound detected but, quantitated amount
    exceeded maximum amount.
Q - Qualifier signal failed the ratio test.
D - User disabled compound identification.

Review Codes Legend

    :


Data File: \\v70wintarget\chem\70msv6.i\032717.b\J33250.D
Date : 27-MAR-2017 20:12
Client ID: CAL8
Sample Info: CAL8, 1349:1
Purge Volume: 5.0
Column phase: RTX-624
Instrument: 70msv6.i
Operator: BBL
Column diameter: 0.18
\\v70wintarget\chem\70msv6.i\032717.b\J33250.D
Y (x10^7)
Min
-Chlorodifluoromethane+
-Dichlorotetrafluoroethane
-Chloromethane
-Vinyl chloride+
-Acetaldehyde
-Bromomethane
-Chloroethane
-Dichlorofluoromethane+
-Ethanol+
-Acetone
-Iodomethane+
-Allyl chloride+
-Methylene Chloride
-tert-Butyl Alcohol
-Methyl-tert-butyl ether+
-Acrylonitrile
-n-Hexane
-Diisopropyl ether+
-Chloroprene
-Ethyl-tert-butyl ether
-2,2-Dichloropropane+
-Propionitrile
-Bromochloromethane+
-Cyclohexane+
-Carbon tetrachloride+
-2,2,4-Trimethylpentane+
-1,2-Dichloroethane+
-1,4-Difluorobenzene (IS)
-Trichloroethene
-Methylcyclohexane+
-1,2-Dichloropropane+
-1,4-Dioxane (p-Dioxane)+
-Bromodichloromethane
-2-Nitropropane+
-cis-1,3-Dichloropropene
-4-Methyl-2-pentanone (MIB
-Toluene-d8 (S)
-Toluene+
-Methyl isothiocyanate
-trans-1,3-Dichloropropene+
-1,1,2-Trichloroethane
-Tetrachloroethene
-1,3-Dichloropropane+
-n-Butyl acetate
-Dibromochloromethane
-1,2-Dibromoethane (EDB)
-Chlorobenzene-d5 (IS)+
-Ethylbenzene+
m&p-Xylene
-o-Xylene+
-Bromoform
-Isopropylbenzene (Cumene)
-4-Bromofluorobenzene (S)
-Bromobenzene+
-n-Propylbenzene+
1,3,5-Trimethylbenzene
-4-Chlorotoluene
n-Decane+
-tert-Butylbenzene
1,2,4-Trimethylbenzene
-sec-Butylbenzene
-d-Limonene
-p-Isopropyltoluene+
-1,4-Dichlorobenzene-d4 (I+
-Benzyl chloride
-trans-Decalin+
-1,2-Dichlorobenzene
-cis-Decalin
-1,2,4,5-tetramethylbenzen
-1,2-Dibromo-3-chloropropa
-n-Dodecane
-1,2,4-Trichlorobenzene
-Hexachloro-1,3-butadiene
-Naphthalene
-1,2,3-Trichlorobenzene

Data File: \\v70wintarget\chem\70msv6.i\032717.b/J33250.D
Injection Date: 27-MAR-2017 20:12
Instrument: 70msv6.i
Lab Sample ID: CAL8
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

SAMPLE NO.

8793336ICV

MSV - FORM VII VOA-1
MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - New York Calibration Date: 03/27/2017 Time: 21:57

Instrument ID: 70MSV6 GC Column: Col 1 Init. Calib. Date(s): 03/27/2017 03/27/2017

Lab File ID: 032717.B\J33253.D Init. Calib. Time(s): 18:07 20:12

SDG No.: 7016438

COMPOUND	CURVE	$\overline{\text{RRF}}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
Acetone	Averaged	0.29563	0.29963	0.0100	1.3529	30.0000
Acrylonitrile	Averaged	0.35145	0.34617	0.0100	-1.5049	30.0000
Benzene	Averaged	1.97360	1.73895	0.0100	-11.8893	30.0000
Bromochloromethane	Averaged	0.37708	0.37484	0.0100	-0.5938	30.0000
Bromodichloromethane	Averaged	0.54169	0.55790	0.0100	2.9928	30.0000
Bromoform	Linear	50	41.80742	0.0100	-16.3852	30.0000
Bromomethane	Averaged	0.54878	0.57817	0.0100	5.3561	30.0000
2-Butanone (MEK)	Averaged	0.81722	0.62022	0.0100	-24.1063	30.0000
Carbon disulfide	Averaged	2.04659	1.94383	0.0100	-5.0210	30.0000
Carbon tetrachloride	Averaged	0.36648	0.35368	0.0100	-3.4927	30.0000
Chlorobenzene	Averaged	2.14185	1.90281	0.0100	-11.1606	30.0000
Chloroethane	Averaged	0.64524	0.59937	0.0100	-7.1095	30.0000
Chloroform	Averaged	1.43492	1.39544	0.0100	-2.7510	30.0000
Chloromethane	Averaged	1.07967	1.07275	0.0100	-0.6408	30.0000
1,2-Dibromo-3-chloropropane	Linear	50	48.71997	0.0100	-2.5600	30.0000
Dibromochloromethane	Averaged	0.53753	0.62545	0.0100	16.3563	30.0000
1,2-Dibromoethane (EDB)	Averaged	0.32598	0.38525	0.0100	18.1813	30.0000
Dibromomethane	Averaged	0.28763	0.27028	0.0100	-6.0339	30.0000
1,2-Dichlorobenzene	Averaged	1.86345	1.64470	0.0100	-11.7387	30.0000
1,4-Dichlorobenzene	Averaged	2.02094	1.76332	0.0100	-12.7474	30.0000
trans-1,4-Dichloro-2-butene	Averaged	0.35281	0.38122	0.0100	8.0518	30.0000
1,1-Dichloroethane	Averaged	1.71439	1.59411	0.0100	-7.0156	30.0000
1,2-Dichloroethane	Averaged	1.26400	1.18868	0.0100	-5.9588	30.0000
1,1-Dichloroethene	Averaged	0.57891	0.51679	0.0100	-10.7309	30.0000
cis-1,2-Dichloroethene	Averaged	0.88098	0.81509	0.0100	-7.4789	30.0000
trans-1,2-Dichloroethene	Averaged	0.76145	0.67880	0.0100	-10.8542	30.0000
1,2-Dichloropropane	Averaged	0.58941	0.51950	0.0100	-11.8618	30.0000
cis-1,3-Dichloropropene	Averaged	0.72836	0.77242	0.0100	6.0502	30.0000
trans-1,3-Dichloropropene	Linear	50	46.94605	0.0100	-6.1079	30.0000
Ethylbenzene	Averaged	1.14997	0.97690	0.0100	-15.0504	30.0000
2-Hexanone	Averaged	0.67151	0.61056	0.0100	-9.0774	30.0000
Iodomethane	Averaged	0.81163	0.84449	0.0100	4.0483	30.0000
Methylene Chloride	Averaged	0.79712	0.79006	0.0100	-0.8859	30.0000
4-Methyl-2-pentanone (MIBK)	Averaged	0.51822	0.51421	0.0100	-0.7740	30.0000
Styrene	Averaged	2.42578	2.18020	0.0100	-10.1238	30.0000
1,1,1,2-Tetrachloroethane	Linear	50	46.06104	0.0100	-7.8779	30.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

MSV - FORM VII VOA-2
MSV INITIAL CALIBRATION DATA

8793336ICV

Lab Name: Pace Analytical - New York Calibration Date: 03/27/2017 Time: 21:57

Instrument ID: 70MSV6 GC Column: Col 1 Init. Calib. Date(s): 03/27/2017 03/27/2017

Lab File ID: 032717.B\J33253.D Init. Calib. Time(s): 18:07 20:12

SDG No.: 7016438

COMPOUND	CURVE	$\overline{\text{RRF}}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
1,1,2,2-Tetrachloroethane	Averaged	1.21091	1.14725	0.0100	-5.2571	30.0000
Tetrachloroethene	Averaged	0.80026	0.63324	0.0100	-20.8708	30.0000
Toluene	Averaged	2.03115	1.74347	0.0100	-14.1633	30.0000
1,1,1-Trichloroethane	Averaged	0.60152	0.53429	0.0100	-11.1759	30.0000
1,1,2-Trichloroethane	Averaged	0.36253	0.33556	0.0100	-7.4380	30.0000
Trichloroethene	Averaged	0.47082	0.38431	0.0100	-18.3738	30.0000
Trichlorofluoromethane	Averaged	0.98895	0.88232	0.0100	-10.7819	30.0000
1,2,3-Trichloropropane	Averaged	0.34932	0.33622	0.0100	-3.7511	30.0000
Vinyl acetate	Averaged	1.62486	2.02227	0.0100	24.4587	30.0000
Vinyl chloride	Averaged	1.00571	0.85106	0.0100	-15.3768	30.0000
m&p-Xylene	Averaged	1.42971	1.20174	0.0100	-15.9455	30.0000
o-Xylene	Averaged	1.41418	1.19972	0.0100	-15.1652	30.0000
4-Bromofluorobenzene (S)	Averaged	0.67869	0.68377	0.0100	0.7491	30.0000
1,2-Dichloroethane-d4 (S)	Averaged	0.35613	0.34958	0.0100	-1.8395	30.0000
Toluene-d8 (S)	Averaged	1.90466	1.91567	0.0100	0.5779	30.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

MSV - FORM VII VOA-1
MSV CONTINUING CALIBRATION DATA

8774811CCV

Lab Name: Pace Analytical - New York Calibration Date: 04/25/2017 Time: 07:59

Instrument ID: 70MSV6 GC Column: Col 1 Init. Calib. Date(s): 03/27/2017 03/27/2017

Lab File ID: 042517.B\J34394.D Init. Calib. Time(s): 18:07 20:12

SDG No.: 7016438

COMPOUND	CURVE	$\overline{RRF}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
Acetone	Averaged	0.29563	0.21357	0.0100	-27.7551	20.0000
Acrylonitrile	Averaged	0.35145	0.27317	0.0100	-22.2756	20.0000
Benzene	Averaged	1.97360	1.87358	0.0100	-5.0677	20.0000
Bromochloromethane	Averaged	0.37708	0.37504	0.0100	-0.5409	20.0000
Bromodichloromethane	Averaged	0.54169	0.56827	0.0100	4.9072	20.0000
Bromoform	Linear	50	58.74328	0.0100	17.4866	20.0000
Bromomethane	Averaged	0.54878	0.45679	0.0100	-16.7633	20.0000
2-Butanone (MEK)	Averaged	0.81722	0.62705	0.0100	-23.2707	20.0000
Carbon disulfide	Averaged	2.04659	2.04247	0.0100	-0.2011	20.0000
Carbon tetrachloride	Averaged	0.36648	0.46582	0.0100	27.1059	20.0000
Chlorobenzene	Averaged	2.14185	2.30089	0.0100	7.4255	20.0000
Chloroethane	Averaged	0.64524	0.61378	0.0100	-4.8766	20.0000
Chloroform	Averaged	1.43492	1.30389	0.0100	-9.1315	20.0000
Chloromethane	Averaged	1.07967	0.94217	0.0100	-12.7357	20.0000
1,2-Dibromo-3-chloropropane	Linear	50	46.89869	0.0100	-6.2026	20.0000
Dibromochloromethane	Averaged	0.53753	0.74528	0.0100	38.6488	20.0000
1,2-Dibromoethane (EDB)	Averaged	0.32598	0.41489	0.0100	27.2749	20.0000
Dibromomethane	Averaged	0.28763	0.27589	0.0100	-4.0818	20.0000
1,2-Dichlorobenzene	Averaged	1.86345	1.87594	0.0100	0.6702	20.0000
1,4-Dichlorobenzene	Averaged	2.02094	2.01191	0.0100	-0.4466	20.0000
trans-1,4-Dichloro-2-butene	Averaged	0.35281	0.30242	0.0100	-14.2823	20.0000
1,1-Dichloroethane	Averaged	1.71439	1.42015	0.0100	-17.1628	20.0000
1,2-Dichloroethane	Averaged	1.26400	1.02898	0.0100	-18.5932	20.0000
1,1-Dichloroethene	Averaged	0.57891	0.61750	0.0100	6.6663	20.0000
cis-1,2-Dichloroethene	Averaged	0.88098	0.83532	0.0100	-5.1830	20.0000
trans-1,2-Dichloroethene	Averaged	0.76145	0.71646	0.0100	-5.9083	20.0000
1,2-Dichloropropane	Averaged	0.58941	0.51165	0.0100	-13.1937	20.0000
cis-1,3-Dichloropropene	Averaged	0.72836	0.77720	0.0100	6.7055	20.0000
trans-1,3-Dichloropropene	Linear	50	47.63264	0.0100	-4.7347	20.0000
Ethylbenzene	Averaged	1.14997	1.24753	0.0100	8.4835	20.0000
2-Hexanone	Averaged	0.67151	0.50706	0.0100	-24.4900	20.0000
Iodomethane	Averaged	0.81163	0.69466	0.0100	-14.4122	20.0000
Methylene Chloride	Averaged	0.79712	0.69997	0.0100	-12.1873	20.0000
4-Methyl-2-pentanone (MIBK)	Averaged	0.51822	0.40143	0.0100	-22.5372	20.0000
Styrene	Averaged	2.42578	2.65276	0.0100	9.3570	20.0000
1,1,1,2-Tetrachloroethane	Linear	50	56.99693	0.0100	13.9939	20.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

MSV - FORM VII VOA-2
MSV CONTINUING CALIBRATION DATA

8774811CCV

Lab Name: Pace Analytical - New York Calibration Date: 04/25/2017 Time: 07:59

Instrument ID: 70MSV6 GC Column: Col 1 Init. Calib. Date(s): 03/27/2017 03/27/2017

Lab File ID: 042517.B\J34394.D Init. Calib. Time(s): 18:07 20:12

SDG No.: 7016438

COMPOUND	CURVE	$\overline{RRF}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
1,1,2,2-Tetrachloroethane	Averaged	1.21091	1.08681	0.0100	-10.2482	20.0000
Tetrachloroethene	Averaged	0.80026	0.96885	0.0100	21.0668	20.0000
Toluene	Averaged	2.03115	1.97104	0.0100	-2.9596	20.0000
1,1,1-Trichloroethane	Averaged	0.60152	0.61864	0.0100	2.8462	20.0000
1,1,2-Trichloroethane	Averaged	0.36253	0.35633	0.0100	-1.7106	20.0000
Trichloroethene	Averaged	0.47082	0.47253	0.0100	0.3649	20.0000
Trichlorofluoromethane	Averaged	0.98895	1.03726	0.0100	4.8858	20.0000
1,2,3-Trichloropropane	Averaged	0.34932	0.32622	0.0100	-6.6145	20.0000
Vinyl acetate	Averaged	1.62486	1.62772	0.0100	0.1763	20.0000
Vinyl chloride	Averaged	1.00571	1.03548	0.0100	2.9601	20.0000
m&p-Xylene	Averaged	1.42971	1.55682	0.0100	8.8906	20.0000
o-Xylene	Averaged	1.41418	1.52812	0.0100	8.0569	20.0000
4-Bromofluorobenzene (S)	Averaged	0.67869	0.82096	0.0100	20.9622	20.0000
1,2-Dichloroethane-d4 (S)	Averaged	0.35613	0.31397	0.0100	-11.8365	20.0000
Toluene-d8 (S)	Averaged	1.90466	2.17068	0.0100	13.9666	20.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

MSV - FORM VII VOA-1
MSV CONTINUING CALIBRATION DATA

8761662CCV

Lab Name: Pace Analytical - New York Calibration Date: 04/25/2017 Time: 12:13

Instrument ID: 70MSV6 GC Column: Col 1 Init. Calib. Date(s): 03/27/2017 03/27/2017

Lab File ID: 042517.B\J34396.D Init. Calib. Time(s): 18:07 20:12

SDG No.: 7016438

COMPOUND	CURVE	$\overline{\text{RRF}}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
Acetone	Averaged	0.29563	0.22617	0.0100	-23.4942	20.0000
Acrylonitrile	Averaged	0.35145	0.23855	0.0100	-32.1251	20.0000
Benzene	Averaged	1.97360	1.65532	0.0100	-16.1265	36.0000
Bromodichloromethane	Averaged	0.54169	0.50950	0.0100	-5.9429	34.5000
Bromoform	Averaged	0.28572	0.37555	0.0100	31.4411	29.0000
Bromomethane	Averaged	0.54878	0.33107	0.0100	-39.6706	86.0000
2-Butanone (MEK)	Averaged	0.79630	0.57653	0.0100	-27.5990	20.0000
Carbon disulfide	Averaged	2.04659	1.62967	0.0100	-20.3715	20.0000
Carbon tetrachloride	Averaged	0.36648	0.37089	0.0100	1.2044	27.0000
Chlorobenzene	Averaged	2.14185	2.06983	0.0100	-3.3623	34.0000
Chloroethane	Averaged	0.64524	0.47591	0.0100	-26.2436	62.0000
Chloroform	Averaged	1.43492	1.15692	0.0100	-19.3740	32.5000
Chloromethane	Averaged	1.07967	0.63506	0.0100	-41.1802	104.0000
Dibromochloromethane	Averaged	0.53753	0.64387	0.0100	19.7829	32.5000
1,2-Dichlorobenzene	Averaged	1.86345	1.70740	0.0100	-8.3739	37.0000
1,4-Dichlorobenzene	Averaged	2.02094	1.79823	0.0100	-11.0204	37.0000
1,1-Dichloroethane	Averaged	1.71439	1.28518	0.0100	-25.0358	27.5000
1,2-Dichloroethane	Averaged	1.26400	0.90123	0.0100	-28.7004	32.0000
1,1-Dichloroethene	Averaged	0.57891	0.50390	0.0100	-12.9569	49.5000
cis-1,2-Dichloroethene	Averaged	0.88098	0.76491	0.0100	-13.1749	20.0000
trans-1,2-Dichloroethene	Averaged	0.76145	0.65394	0.0100	-14.1195	30.5000
1,2-Dichloropropane	Averaged	0.59032	0.44461	0.0100	-24.6821	66.0000
cis-1,3-Dichloropropene	Averaged	0.72836	0.68560	0.0100	-5.8706	76.0000
trans-1,3-Dichloropropene	Averaged	0.55653	0.57409	0.0100	3.1553	50.0000
Ethylbenzene	Averaged	1.14997	1.09208	0.0100	-5.0345	41.0000
2-Hexanone	Averaged	0.67151	0.45362	0.0100	-32.4476	20.0000
Methylene Chloride	Averaged	0.79712	0.62145	0.0100	-22.0379	39.5000
4-Methyl-2-pentanone (MIBK)	Averaged	0.51822	0.34194	0.0100	-34.0161	20.0000
Styrene	Averaged	2.42578	2.36530	0.0100	-2.4934	20.0000
1,1,2,2-Tetrachloroethane	Averaged	1.21091	0.98546	0.0100	-18.6184	39.5000
Tetrachloroethene	Averaged	0.80026	0.80172	0.0100	0.1821	26.5000
Toluene	Averaged	2.03115	1.74256	0.0100	-14.2081	25.5000
1,1,1-Trichloroethane	Averaged	0.60152	0.51660	0.0100	-14.1169	25.0000
1,1,2-Trichloroethane	Averaged	0.36253	0.31693	0.0100	-12.5787	29.0000
Trichloroethene	Averaged	0.47082	0.40624	0.0100	-13.7163	33.5000
Trichlorofluoromethane	Averaged	0.98895	0.74267	0.0100	-24.9028	52.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

8761662CCV

MSV - FORM VII VOA-2
MSV CONTINUING CALIBRATION DATA

Lab Name: Pace Analytical - New York Calibration Date: 04/25/2017 Time: 12:13

Instrument ID: 70MSV6 GC Column: Col 1 Init. Calib. Date(s): 03/27/2017 03/27/2017

Lab File ID: 042517.B\J34396.D Init. Calib. Time(s): 18:07 20:12

SDG No.: 7016438

COMPOUND	CURVE	$\overline{RRF}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
Vinyl acetate	Averaged	1.57293	1.42016	0.0100	-9.7126	20.0000
Vinyl chloride	Averaged	1.00571	0.70976	0.0100	-29.4268	96.0000
m&p-Xylene	Averaged	1.45098	1.35809	0.0100	-6.4017	20.0000
o-Xylene	Averaged	1.41418	1.34577	0.0100	-4.8375	20.0000
4-Bromofluorobenzene (S)	Averaged	0.67869	0.79967	0.0100	17.8260	20.0000
1,2-Dichloroethane-d4 (S)	Averaged	0.35613	0.31022	0.0100	-12.8898	20.0000
Toluene-d8 (S)	Averaged	1.90466	2.14996	0.0100	12.8787	20.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

Data File: \\v70wintarget\chem\70msv6.i\032717.b\J33253.D
Report Date: 15-May-2017 16:16

Pace Analytical Services, Inc.

SW846-8260C/EPA 624

Data file : \\v70wintarget\chem\70msv6.i\032717.b\J33253.D
Lab Smp Id: ICV Client Smp ID: ICV
Inj Date : 27-MAR-2017 21:57 MS Autotune Date: 17-MAR-2017 06:2
Operator : BBL Inst ID: 70msv6.i
Smp Info : icv, 13493:1
Misc Info : 1823,
Comment : SW846-8260C/EPA 624
Method : \\v70wintarget\chem\70msv5.i\050817.B\MSV5CRDL_8260W.m
Meth Date : 15-May-2017 16:16 70msv6.i Quant Type: ISTD
Cal Date : 27-MAR-2017 18:25 Cal File: J33244.D
Als bottle: 12 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)	REVIEW C
1	Chlorodifluoromethane	51	1.281	1.281	(0.369)	267194	50.0000	56.8(T)	
2	Dichlorotetrafluoroethane	135	1.348	1.348	(0.388)	77159	50.0000	45.0(T)	
3	Dichlorodifluoromethane	85	1.263	1.263	(0.363)	140001	50.0000	41.6(TQ)	
4	Chloromethane	50	1.391	1.391	(0.400)	246060	50.0000	76.8(T)	
5	Vinyl chloride	62	1.458	1.458	(0.420)	195211	50.0000	63.1(T)	
6	1,3-Butadiene	54	1.476	1.476	(0.425)	187759	50.0000	56.2(T)	
7	Acetaldehyde	44	1.544	1.544	(0.444)	49814	50.0000	(TQ)	
8	Bromomethane	94	1.672	1.672	(0.481)	132617	50.0000	93.2(T)	
9	Chloroethane	64	1.739	1.739	(0.500)	137479	50.0000	80.1(T)	
10	Dichlorofluoromethane	67	1.867	1.867	(0.537)	373620	50.0000	66.1(T)	
11	Trichlorofluoromethane	101	1.873	1.873	(0.539)	202380	50.0000	44.1(T)	
12	Ethanol	45	2.007	2.007	(0.577)	47445	1250.00	2790(T)	
13	Diethyl ether (Ethyl ether)	59	2.037	2.037	(0.586)	179483	50.0000	81.2(T)	
14	Acrolein	56	2.159	2.159	(0.621)	27633	50.0000	136(T)	
15	1,1-Dichloroethene	96	2.184	2.184	(0.628)	118537	50.0000	51.6(T)	
16	1,1,2-Trichlorotrifluoroethane	101	2.153	2.153	(0.619)	115288	50.0000	46.4(T)	
17	Acetone	43	2.239	2.239	(0.644)	68726	50.0000	96.0(T)	
18	Iodomethane	142	2.287	2.287	(0.658)	193703	50.0000	84.7(T)	
19	2-Propanol	45	2.306	2.306	(0.663)	322958	1250.00	3270	
20	Carbon disulfide	76	2.318	2.318	(0.667)	445862	50.0000	65.5(T)	
21	Allyl chloride	76	2.397	2.397	(0.690)	106560	50.0000	114(T)	
22	Acetonitrile	41	2.397	2.397	(0.690)	341015	250.000	597(T)	
23	Methyl acetate	43	2.403	2.403	(0.691)	400443	50.0000	189	

Data File: \\v70wintarget\chem\70msv6.i\032717.b\J33253.D
Report Date: 15-May-2017 16:16

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)	REVIEW C
	24 Methylene Chloride	84	2.482	2.482	(0.714)	181218	50.0000	67.6	
	25 tert-Butyl Alcohol	59	2.525	2.525	(0.726)	77216	250.000	471(Q)	
	26 Acrylonitrile	53	2.653	2.653	(0.763)	79401	50.0000	12.5(Q)	
	27 trans-1,2-Dichloroethene	96	2.610	2.610	(0.751)	155699	50.0000	59.7	
	28 Methyl-tert-butyl ether	73	2.586	2.586	(0.744)	634124	50.0000	74.7	
	29 Diisopropyl ether	45	2.842	2.842	(0.818)	805668	50.0000	69.5	
	30 n-Hexane	57	2.708	2.708	(0.779)	219638	50.0000	41.6	
	31 1,1-Dichloroethane	63	2.866	2.866	(0.825)	365646	50.0000	63.0	
	32 Vinyl acetate	43	2.873	2.873	(0.826)	463855	50.0000	90.4	
	33 Chloroprene	53	2.897	2.897	(0.833)	281187	50.0000	44.4	
	34 Ethyl-tert-butyl ether	59	3.043	3.043	(0.875)	695948	50.0000	69.7	
	35 cis-1,2-Dichloroethene	96	3.196	3.196	(0.919)	186960	50.0000	60.0	
	36 2,2-Dichloropropane	77	3.177	3.177	(0.914)	223782	50.0000	49.7	
	37 2-Butanone (MEK)	43	3.202	3.202	(0.921)	142261	50.0000	56.4(Q)	
	38 Propionitrile	54	3.281	3.281	(0.944)	32574	50.0000	128	
	39 Ethyl acetate	43	3.196	3.196	(0.919)	328145	50.0000	130(Q)	
	40 Methacrylonitrile	67	3.348	3.348	(0.963)	87422	50.0000	107	
	41 Bromochloromethane	128	3.342	3.342	(0.961)	85978	50.0000	72.4	
	42 Tetrahydrofuran	42	3.342	3.342	(0.961)	73706	50.0000	110	
	43 Chloroform	83	3.366	3.366	(0.968)	320077	50.0000	53.3	
*	44 Pentafluorobenzene (IS)	168	3.476	3.476	(1.000)	229373	50.0000	(Q)	
	45 1,1,1-Trichloroethane	97	3.458	3.458	(0.885)	221908	50.0000	41.8(Q)	
	46 Cyclohexane	56	3.458	3.458	(0.995)	304767	50.0000	47.6	
	47 1,1-Dichloropropene	75	3.555	3.555	(0.910)	218544	50.0000	44.2	
	48 Carbon tetrachloride	117	3.537	3.537	(0.905)	146894	50.0000	34.0	
	49 Isobutanol	43	3.647	3.647	(1.049)	68241	250.000	150(Q)	
$	50 1,2-Dichloroethane-d4 (S)	65	3.677	3.677	(0.941)	145189	50.0000	36.4(Q)	
	51 Benzene	78	3.671	3.671	(0.939)	722238	50.0000	51.5	
	52 1,2-Dichloroethane	62	3.720	3.720	(1.070)	272651	50.0000	56.9(T)	
	53 tert-Amyl Alcohol	59	Compound Not Detected.						(D)
	54 tert-Amyl ethyl ether	59	4.153	4.153	(1.195)	538205	50.0000	73.6(T)	
	55 2,2,4-Trimethylpentane	57	3.647	3.647	(1.049)	348263	50.0000	34.0	
	56 tert-Amylmethyl ether	73	3.702	3.702	(1.065)	642651	50.0000	86.8(T)	
	57 n-Heptane	43	3.757	3.757	(1.081)	181843	50.0000	36.2(T)	
*	58 1,4-Difluorobenzene (IS)	114	3.909	3.909	(1.000)	415330	50.0000	(T)	
	59 Trichloroethene	95	4.055	4.055	(1.037)	159615	50.0000	46.2(T)	
	60 Methylcyclohexane	83	4.128	4.128	(1.056)	213266	50.0000	36.4(TQ)	
	61 1,2-Dichloropropane	63	4.220	4.220	(1.080)	215763	50.0000	63.7(T)	
	62 Dibromomethane	93	4.299	4.299	(1.100)	112255	50.0000	73.3(T)	
	63 Methyl methacrylate	69	4.250	4.250	(1.087)	145708	50.0000	97.4(T)	
	64 1,4-Dioxane (p-Dioxane)	88	4.281	4.281	(1.095)	46178	1250.00	2250(TQ)	
	65 Bromodichloromethane	83	4.378	4.378	(1.120)	231713	50.0000	57.8(T)	
	66 2-Nitropropane	43	4.561	4.561	(1.167)	114669	50.0000	72.2(T)	
	67 2-Chloroethylvinyl ether	63	4.561	4.561	(1.167)	133984	50.0000	101(T)	
	68 cis-1,3-Dichloropropene	75	4.665	4.665	(1.193)	320811	50.0000	72.6(T)	
	69 4-Methyl-2-pentanone (MIBK)	43	4.744	4.744	(1.214)	213568	50.0000	106(T)	
$	70 Toluene-d8 (S)	98	4.811	4.811	(0.828)	458408	50.0000	43.7(T)	
	71 Toluene	91	4.854	4.854	(1.242)	724117	50.0000	53.7(T)	
	72 Methyl isothiocyanate	73	4.976	4.976	(1.273)	329464	125.000	359(T)	
	73 n-Octane	43	4.854	4.854	(1.242)	167039	50.0000	33.1(TQ)	
	74 trans-1,3-Dichloropropene	75	5.037	5.037	(1.288)	273759	50.0000	75.6(T)	
	75 Ethyl methacrylate	69	5.037	5.037	(1.288)	256128	50.0000	92.2(T)	
	76 1,1,2-Trichloroethane	83	5.165	5.165	(1.321)	139369	50.0000	75.1(T)	
	77 Tetrachloroethene	166	5.201	5.201	(0.895)	151531	50.0000	49.8(T)	

Data File: \\v70wintarget\chem\70msv6.i\032717.b\J33253.D
Report Date: 15-May-2017 16:16

		QUANT SIG					AMOUNTS		
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)	REVIEW C
	78 1,3-Dichloropropane	76	5.281	5.281	(0.909)	305402	50.0000	71.2(T)	
	79 2-Hexanone	43	5.299	5.299	(0.912)	146103	50.0000	105(T)	
	80 Dibromochloromethane	129	5.421	5.421	(0.933)	149667	50.0000	72.1(T)	
	81 n-Butyl acetate	43	5.360	5.360	(1.371)	35447	50.0000	15.6(T)	
	82 1,2-Dibromoethane (EDB)	107	5.512	5.512	(1.410)	160004	50.0000	85.0(T)	
*	83 Chlorobenzene-d5 (IS)	82	5.811	5.811	(1.000)	239294	50.0000	(T)	
	84 Chlorobenzene	112	5.835	5.835	(1.004)	455330	50.0000	57.5(T)	
	85 1,1,1,2-Tetrachloroethane	131	5.890	5.890	(1.014)	137269	50.0000	53.7(T)	
	86 Ethylbenzene	106	5.878	5.878	(1.012)	233766	50.0000	53.1(T)	
	87 m&p-Xylene	106	5.963	5.963	(1.026)	575136	100.000	103(T)	
	88 n-Nonane	43	5.909	5.909	(1.017)	165269	50.0000	39.7(TQ)	
	89 o-Xylene	106	6.256	6.256	(1.077)	287085	50.0000	53.1(T)	
	90 Styrene	104	6.274	6.274	(1.080)	521709	50.0000	58.3(T)	
	91 Bromoform	173	6.439	6.439	(1.108)	73463	50.0000	83.3(T)	
	92 Isopropylbenzene (Cumene)	105	6.512	6.512	(0.863)	644627	50.0000	46.0(T)	
$	93 4-Bromofluorobenzene (S)	95	6.671	6.671	(1.148)	163623	50.0000	40.6(T)	
	94 Bromobenzene	156	6.780	6.780	(0.898)	180339	50.0000	61.6(T)	
	95 1,1,2,2-Tetrachloroethane	83	6.793	6.793	(0.900)	210408	50.0000	88.3(T)	
	96 1,2,3-Trichloropropane	110	6.835	6.835	(0.905)	61663	50.0000	83.2(TQ)	
	97 trans-1,4-Dichloro-2-butene	53	6.841	6.841	(0.906)	69917	50.0000	215(TAQ)	
	98 n-Propylbenzene	91	6.823	6.823	(0.904)	766255	50.0000	45.6(T)	
	99 2-Chlorotoluene	91	6.914	6.914	(0.916)	576859	50.0000	47.4(T)	
	100 4-Ethyltoluene	105	6.908	6.908	(0.915)	662640	50.0000	47.9(T)	
	101 1,3,5-Trimethylbenzene	105	6.957	6.957	(0.922)	553150	50.0000	46.6(T)	
	102 4-Chlorotoluene	91	7.000	7.000	(0.927)	540996	50.0000	46.1(TQ)	
	103 n-Decane	43	6.902	6.902	(1.188)	204859	50.0000	47.0(TQ)	
	104 tert-Butylbenzene	119	7.195	7.195	(0.953)	399361	50.0000	40.0(T)	
	105 Pentachloroethane	167	7.250	7.250	(0.960)	74138	50.0000	50.0(T)	
	106 1,2,4-Trimethylbenzene	105	7.244	7.244	(0.960)	573761	50.0000	47.5(T)	
	107 sec-Butylbenzene	105	7.366	7.366	(0.976)	544472	50.0000	36.7(T)	
	108 1,3-Dichlorobenzene	146	7.494	7.494	(0.993)	313650	50.0000	51.3(T)	
	109 d-Limonene	136	7.427	7.427	(1.278)	21790	50.0000	29.6(T)	
	110 p-Isopropyltoluene	119	7.475	7.475	(0.990)	497063	50.0000	38.5(T)	
*	111 1,4-Dichlorobenzene-d4 (IS)	152	7.548	7.548	(1.000)	183402	50.0000	(T)	
	112 1,4-Dichlorobenzene	146	7.567	7.567	(1.002)	323397	50.0000	52.7(T)	
	113 1,2,3-Trimethylbenzene	105	7.579	7.579	(1.004)	610482	50.0000	49.1(T)	
	114 Benzyl chloride	91	7.676	7.676	(1.017)	296221	50.0000	87.0(T)	
	115 trans-Decalin	138	7.768	7.768	(1.029)	65441	50.0000	28.0(T)	
	116 1,4-Diethylbenzene	119	7.774	7.774	(1.030)	275490	50.0000	36.1(T)	
	117 n-Butylbenzene	91	7.792	7.792	(1.032)	508899	50.0000	34.4(T)	
	118 1,2-Dichlorobenzene	146	7.859	7.859	(1.041)	301642	50.0000	53.8(T)	
	119 n-Undecane	43	7.817	7.817	(1.036)	151626	50.0000	37.4(TQ)	
	120 cis-Decalin	138	8.207	8.207	(1.087)	53331	50.0000	27.8(T)	
	121 1,2,4,5-tetramethylbenzene	119	8.396	8.396	(1.112)	414334	50.0000	36.3(T)	
	122 1,2-Dibromo-3-chloropropane	75	8.481	8.481	(1.124)	35003	50.0000	91.6(T)	
	123 n-Dodecane	43	8.670	8.670	(1.149)	99660	50.0000	31.1(TQ)	
	124 1,2,4-Trichlorobenzene	180	9.115	9.115	(1.208)	165246	50.0000	46.6(T)	
	125 Hexachloro-1,3-butadiene	225	9.207	9.207	(1.220)	51263	50.0000	27.0(T)	
	126 Naphthalene	128	9.335	9.335	(1.237)	434615	50.0000	73.4(T)	
	127 1,2,3-Trichlorobenzene	180	9.560	9.560	(1.267)	149528	50.0000	56.6(T)	

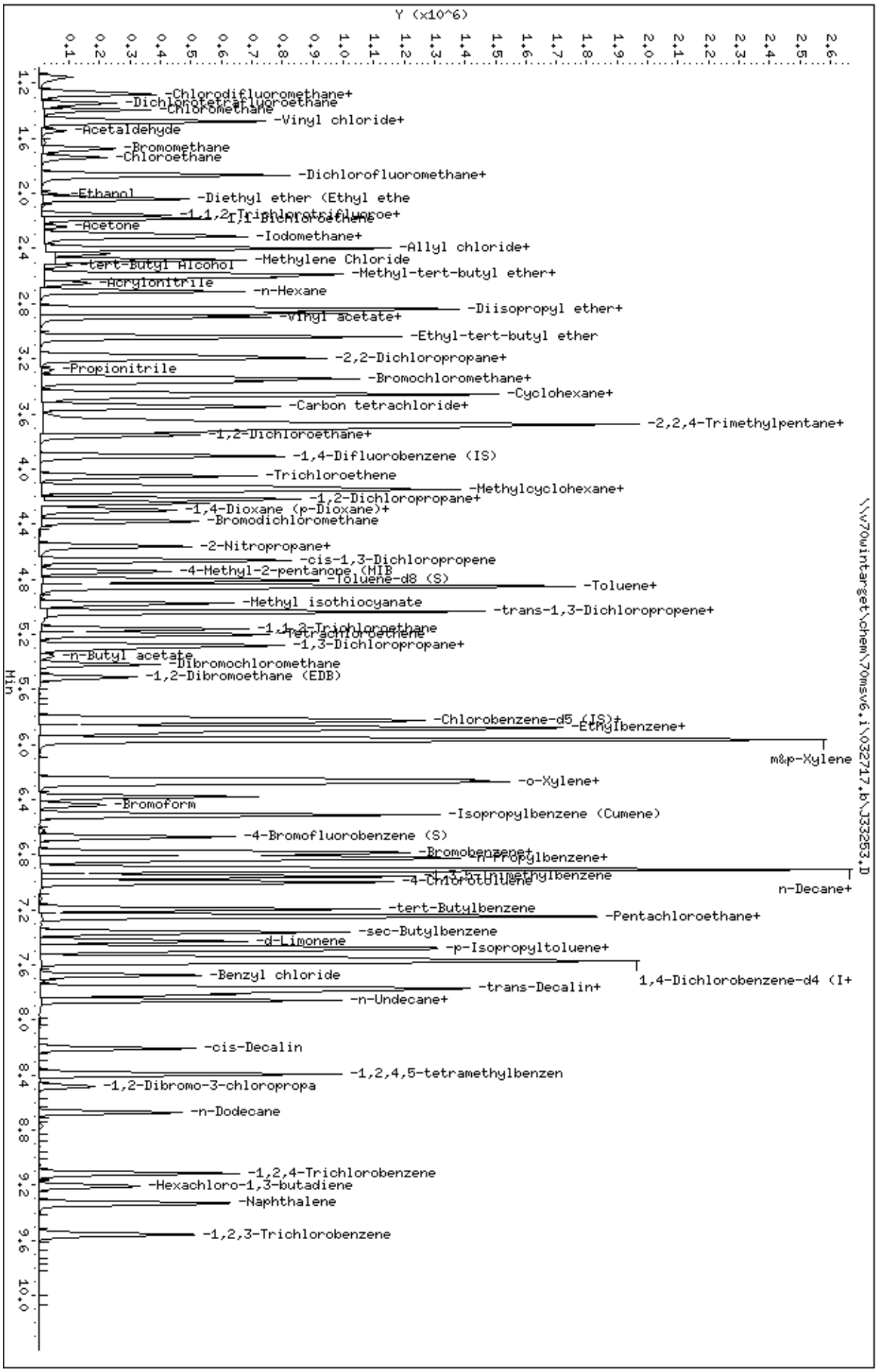
Data File: \\v70wintarget\chem\70msv6.i\032717.b\J33253.D
Report Date: 15-May-2017 16:16

QC Flag Legend

T - Target compound detected outside RT window.
A - Target compound detected but, quantitated amount
    exceeded maximum amount.
Q - Qualifier signal failed the ratio test.
D - User disabled compound identification.

Review Codes Legend

    :


Data File: \\v70wintarget\chem\70msv6.i\032717.b\J33253.D
Date : 27-MAR-2017 21:57
Client ID: ICV
Sample Info: ICV, 134931
Purge Volume: 5.0
Column phase: RTX-VMS
Instrument: 70msv6.i
Operator: BBL
Column diameter: 0.18
\\v70wintarget\chem\70msv6.i\032717.b\J33253.D
Y (x10^6)
Min
-Chlorodifluoromethane+
-Dichlorotetrafluoroethane
-Chloromethane
-Vinyl chloride+
-Acetaldehyde
-Bromomethane
-Chloroethane
-Dichlorofluoromethane+
-Ethanol
-Diethyl ether (Ethyl ethe
-1,1,2-Trichlorotrifluoroe+
1,1-Dichloroethene
-Acetone
-Iodomethane+
-Allyl chloride+
-Methylene Chloride
-tert-Butyl Alcohol
-Methyl-tert-butyl ether+
-Acrylonitrile
-n-Hexane
-Diisopropyl ether+
-Vinyl acetate+
-Ethyl-tert-butyl ether
-2,2-Dichloropropane+
-Propionitrile
-Bromochloromethane+
-Cyclohexane+
-Carbon tetrachloride+
-2,2,4-Trimethylpentane+
-1,2-Dichloroethane+
-1,4-Difluorobenzene (IS)
-Trichloroethene
-Methylcyclohexane+
-1,2-Dichloropropane+
-1,4-Dioxane (p-Dioxane)+
-Bromodichloromethane
-2-Nitropropane+
-cis-1,3-Dichloropropene
-4-Methyl-2-pentanone (MIB
-Toluene-d8 (S)
-Toluene+
-Methyl isothiocyanate
-trans-1,3-Dichloropropene+
-1,1,2-Trichloroethane
-Tetrachloroethene
-1,3-Dichloropropane+
-n-Butyl acetate
-Dibromochloromethane
-1,2-Dibromoethane (EDB)
-Chlorobenzene-d5 (IS)+
-Ethylbenzene+
m&p-Xylene
-o-Xylene+
-Bromoform
-Isopropylbenzene (Cumene)
-4-Bromofluorobenzene (S)
-Bromobenzene+
n-Propylbenzene+
1,3,5-Trimethylbenzene
-4-Chlorotoluene
n-Decane+
-tert-Butylbenzene
-Pentachloroethane+
-sec-Butylbenzene
-d-Limonene
-p-Isopropyltoluene+
1,4-Dichlorobenzene-d4 (I+
-Benzyl chloride
-trans-Decalin+
-n-Undecane+
-cis-Decalin
-1,2,4,5-tetramethylbenzen
-1,2-Dibromo-3-chloropropa
-n-Dodecane
-1,2,4-Trichlorobenzene
-Hexachloro-1,3-butadiene
-Naphthalene
-1,2,3-Trichlorobenzene

Data File: \\v70wintarget\chem\70msv6.i\032717.b/J33253.D
Injection Date: 27-MAR-2017 21:57
Instrument: 70msv6.i
Lab Sample ID: ICV
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34394.D
Report Date: 29-Apr-2017 22:54

Pace Analytical Services, Inc.

SW846-8260C/EPA 624

Data file : \\v70wintarget\chem\70msv6.i\042517.b\J34394.D
Lab Smp Id: CCV Client Smp ID: CCV
Inj Date : 25-APR-2017 07:59 MS Autotune Date: 17-MAR-2017 06:2
Operator : KGG Inst ID: 70msv6.i
Smp Info : ccv, 15707:1
Misc Info : 1823,
Comment :
Method : \\v70wintarget\chem\70msv6.i\042517.b\032717_8260W.m
Meth Date : 29-Apr-2017 22:43 blagula Quant Type: ISTD
Cal Date : 27-MAR-2017 18:25 Cal File: J33244.D
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A
Processing Host: 70MSV4WS10B6

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	REVIEW C
1 Chlorodifluoromethane	51	1.282	1.282	(0.369)	278985	50.0000	47.1	
2 Dichlorotetrafluoroethane	135	1.349	1.349	(0.388)	130717	50.0000	75.2	
3 Dichlorodifluoromethane	85	1.269	1.269	(0.365)	227440	50.0000	66.1(Q)	
4 Chloromethane	50	1.397	1.397	(0.402)	241838	50.0000	43.6	
5 Vinyl chloride	62	1.464	1.464	(0.421)	265790	50.0000	51.5	
6 1,3-Butadiene	54	1.483	1.483	(0.427)	253728	50.0000	49.6	
7 Acetaldehyde	44	1.550	1.550	(0.446)	35225	50.0000	27.3	
8 Bromomethane	94	1.678	1.678	(0.483)	117249	50.0000	41.6	
9 Chloroethane	64	1.745	1.745	(0.502)	157546	50.0000	47.6	
10 Dichlorofluoromethane	67	1.867	1.867	(0.537)	382690	50.0000	43.7	
11 Trichlorofluoromethane	101	1.879	1.879	(0.541)	266248	50.0000	52.4	
12 Ethanol	45	2.013	2.013	(0.579)	40906	1250.00	944	
13 Diethyl ether (Ethyl ether)	59	2.044	2.044	(0.588)	182779	50.0000	44.8	
16 1,1,2-Trichlorotrifluoroethane	101	2.159	2.159	(0.621)	165827	50.0000	55.6	
14 Acrolein	56	2.165	2.165	(0.623)	6723	50.0000	11.9	
15 1,1-Dichloroethene	96	2.190	2.190	(0.630)	158502	50.0000	53.3	
17 Acetone	43	2.245	2.245	(0.646)	54821	50.0000	36.1	
18 Iodomethane	142	2.294	2.294	(0.660)	178307	50.0000	42.8	
19 2-Propanol	45	2.306	2.306	(0.663)	253700	1250.00	915	
20 Carbon disulfide	76	2.318	2.318	(0.667)	524268	50.0000	49.9	
21 Allyl chloride	76	2.403	2.403	(0.691)	124018	50.0000	48.2	
22 Acetonitrile	41	2.403	2.403	(0.691)	304715	250.000	178	

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34394.D
Report Date: 29-Apr-2017 22:54

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	REVIEW C
	23 Methyl acetate	43	2.409	2.409	(0.693)	275062	50.0000	40.7	
	24 Methylene Chloride	84	2.489	2.489	(0.716)	179671	50.0000	43.9	
	25 tert-Butyl Alcohol	59	2.525	2.525	(0.726)	75424	250.000	247	
	28 Methyl-tert-butyl ether	73	2.592	2.592	(0.746)	636018	50.0000	44.1	
	27 trans-1,2-Dichloroethene	96	2.611	2.611	(0.751)	183904	50.0000	47.0	
	26 Acrylonitrile	53	2.653	2.653	(0.763)	70117	50.0000	38.9	
	30 n-Hexane	57	2.714	2.714	(0.781)	332766	50.0000	62.4	
	29 Diisopropyl ether	45	2.842	2.842	(0.818)	672467	50.0000	36.7	
	32 Vinyl acetate	43	2.873	2.873	(0.826)	417808	50.0000	50.1	
	31 1,1-Dichloroethane	63	2.873	2.873	(0.826)	364528	50.0000	41.4	
	33 Chloroprene	53	2.897	2.897	(0.833)	290004	50.0000	38.8	
	34 Ethyl-tert-butyl ether	59	3.043	3.043	(0.875)	660897	50.0000	45.0	
	36 2,2-Dichloropropane	77	3.184	3.184	(0.916)	275206	50.0000	58.7	
	35 cis-1,2-Dichloroethene	96	3.202	3.202	(0.921)	214412	50.0000	47.4	
	39 Ethyl acetate	61	3.202	3.202	(0.921)	338260	50.0000	41.8	
	37 2-Butanone (MEK)	43	3.202	3.202	(0.921)	160952	50.0000	38.4	
	41 Bromochloromethane	128	3.342	3.342	(0.961)	96266	50.0000	49.7	
	42 Tetrahydrofuran	42	3.342	3.342	(0.961)	61120	50.0000	35.8	
	43 Chloroform	83	3.366	3.366	(0.968)	334686	50.0000	45.4	
	38 Propionitrile	54	3.287	3.287	(0.946)	27201	50.0000	43.2	
	46 Cyclohexane	56	3.458	3.458	(0.995)	402214	50.0000	50.1	
	45 1,1,1-Trichloroethane	97	3.464	3.464	(0.886)	272772	50.0000	51.4	
*	44 Pentafluorobenzene (IS)	168	3.476	3.476	(1.000)	256683	50.0000		
	48 Carbon tetrachloride	117	3.537	3.537	(0.905)	205390	50.0000	63.6	
	47 1,1-Dichloropropene	75	3.555	3.555	(0.910)	281652	50.0000	46.0	
	55 2,2,4-Trimethylpentane	57	3.653	3.653	(1.051)	611810	50.0000	72.0	
	51 Benzene	78	3.677	3.677	(0.941)	826104	50.0000	47.5	
	40 Methacrylonitrile	67	3.348	3.348	(0.963)	87832	50.0000	44.8	
$	50 1,2-Dichloroethane-d4 (S)	65	3.677	3.677	(0.941)	138438	50.0000	44.1	
	56 tert-Amylmethyl ether	73	3.702	3.702	(1.065)	643207	50.0000	48.5	
	52 1,2-Dichloroethane	62	3.726	3.726	(1.072)	264122	50.0000	40.7	
	57 n-Heptane	43	3.757	3.757	(1.081)	265124	50.0000	63.0	
*	58 1,4-Difluorobenzene (IS)	114	3.909	3.909	(1.000)	440923	50.0000		
	59 Trichloroethene	95	4.055	4.055	(1.037)	208351	50.0000	50.2	
	60 Methylcyclohexane	83	4.135	4.135	(1.058)	369037	50.0000	68.2	
	49 Isobutanol	43	3.653	3.653	(1.051)	106064	250.000	304	
	53 tert-Amyl Alcohol	59	Compound Not Detected.						(D)
	54 tert-Amyl ethyl ether	59	4.153	4.153	(1.195)	536125	50.0000	53.1	
	61 1,2-Dichloropropane	63	4.220	4.220	(1.080)	225597	50.0000	43.4	
	63 Methyl methacrylate	69	4.250	4.250	(1.087)	152061	50.0000	60.7	
	64 1,4-Dioxane (p-Dioxane)	88	4.287	4.287	(1.097)	45938	1250.00	1090	
	62 Dibromomethane	93	4.299	4.299	(1.100)	121648	50.0000	48.0	
	65 Bromodichloromethane	83	4.385	4.385	(1.122)	250564	50.0000	52.4	
	66 2-Nitropropane	43	4.561	4.561	(1.167)	103316	50.0000	44.1	
	67 2-Chloroethylvinyl ether	63	4.561	4.561	(1.167)	125544	50.0000	48.1	
	68 cis-1,3-Dichloropropene	75	4.665	4.665	(1.193)	342684	50.0000	53.4	
	69 4-Methyl-2-pentanone (MIBK)	43	4.744	4.744	(1.214)	177000	50.0000	38.7	
$	70 Toluene-d8 (S)	98	4.811	4.811	(0.828)	513554	50.0000	57.0	
	71 Toluene	91	4.854	4.854	(1.242)	869076	50.0000	48.5	
	72 Methyl isothiocyanate	73	4.976	4.976	(1.273)	345645	125.000	133	
	74 trans-1,3-Dichloropropene	75	5.043	5.043	(1.290)	295158	50.0000	47.6	
	75 Ethyl methacrylate	69	5.037	5.037	(1.288)	279335	50.0000	51.8	
	76 1,1,2-Trichloroethane	83	5.165	5.165	(1.321)	157112	50.0000	49.1	
	77 Tetrachloroethene	166	5.208	5.208	(0.896)	229218	50.0000	60.5	

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34394.D
Report Date: 29-Apr-2017 22:54

		QUANT SIG					AMOUNTS		
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)	REVIEW C
78	1,3-Dichloropropane	76	5.281	5.281	(0.909)	334699	50.0000	50.5	
79	2-Hexanone	43	5.305	5.305	(0.913)	119964	50.0000	37.8	
73	n-Octane	43	4.854	4.854	(1.242)	245141	50.0000	59.2(Q)	
81	n-Butyl acetate	43	5.354	5.354	(1.370)	108059	50.0000	42.6	
80	Dibromochloromethane	129	5.421	5.421	(0.933)	176324	50.0000	69.3	
82	1,2-Dibromoethane (EDB)	107	5.512	5.512	(1.410)	182934	50.0000	63.6	
* 83	Chlorobenzene-d5 (IS)	82	5.811	5.811	(1.000)	236587	50.0000		
84	Chlorobenzene	112	5.836	5.836	(1.004)	544361	50.0000	53.7	
86	Ethylbenzene	106	5.878	5.878	(1.012)	295150	50.0000	54.2	
85	1,1,1,2-Tetrachloroethane	131	5.890	5.890	(1.014)	171550	50.0000	57.0	
88	n-Nonane	43	5.909	5.909	(1.017)	201201	50.0000	64.9(Q)	
87	m&p-Xylene	106	5.964	5.964	(1.026)	736646	100.000	109	
89	o-Xylene	106	6.256	6.256	(1.077)	361533	50.0000	54.0	
90	Styrene	104	6.274	6.274	(1.080)	627609	50.0000	54.7	
91	Bromoform	173	6.439	6.439	(1.108)	107210	50.0000	58.7	
92	Isopropylbenzene (Cumene)	105	6.512	6.512	(0.863)	896918	50.0000	49.2	
$ 93	4-Bromofluorobenzene (S)	95	6.671	6.671	(1.148)	194228	50.0000	60.5	
94	Bromobenzene	156	6.780	6.780	(0.898)	220598	50.0000	48.3	
95	1,1,2,2-Tetrachloroethane	83	6.793	6.793	(0.900)	221650	50.0000	44.9	
98	n-Propylbenzene	91	6.823	6.823	(0.904)	1079538	50.0000	50.1	
96	1,2,3-Trichloropropane	110	6.835	6.835	(0.905)	66530	50.0000	46.7	
97	trans-1,4-Dichloro-2-butene	53	6.841	6.841	(0.906)	61678	50.0000	42.8	
103	n-Decane	43	6.896	6.896	(1.187)	239277	50.0000	71.4(Q)	
99	2-Chlorotoluene	91	6.915	6.915	(0.916)	733864	50.0000	47.3	
100	4-Ethyltoluene	105	6.908	6.908	(0.915)	906408	50.0000	50.4	
101	1,3,5-Trimethylbenzene	105	6.957	6.957	(0.922)	751028	50.0000	50.7	
102	4-Chlorotoluene	91	7.006	7.006	(0.928)	670447	50.0000	47.5	
104	tert-Butylbenzene	119	7.195	7.195	(0.953)	601704	50.0000	53.2	
105	Pentachloroethane	167	7.250	7.250	(0.960)	88202	50.0000	57.5	
106	1,2,4-Trimethylbenzene	105	7.250	7.250	(0.960)	753190	50.0000	49.9	
107	sec-Butylbenzene	105	7.366	7.366	(0.976)	869340	50.0000	56.0	
109	d-Limonene	136	7.427	7.427	(1.278)	36020	50.0000	65.2	
110	p-Isopropyltoluene	119	7.475	7.475	(0.990)	749871	50.0000	56.1	
108	1,3-Dichlorobenzene	146	7.494	7.494	(0.993)	399817	50.0000	50.7	
* 111	1,4-Dichlorobenzene-d4 (IS)	152	7.549	7.549	(1.000)	203945	50.0000		
112	1,4-Dichlorobenzene	146	7.567	7.567	(1.002)	410320	50.0000	49.8	
113	1,2,3-Trimethylbenzene	105	7.579	7.579	(1.004)	784036	50.0000	49.0	
114	Benzyl chloride	91	7.677	7.677	(1.017)	327888	50.0000	45.8	
115	trans-Decalin	138	7.768	7.768	(1.029)	122391	50.0000	68.6	
116	1,4-Diethylbenzene	119	7.774	7.774	(1.030)	448757	50.0000	58.0	
117	n-Butylbenzene	91	7.792	7.792	(1.032)	810350	50.0000	57.2	
119	n-Undecane	43	7.817	7.817	(1.036)	216377	50.0000	82.2(Q)	
118	1,2-Dichlorobenzene	146	7.859	7.859	(1.041)	382588	50.0000	50.3	
120	cis-Decalin	138	8.213	8.213	(1.088)	97570	50.0000	68.7	
121	1,2,4,5-tetramethylbenzene	119	8.396	8.396	(1.112)	688818	50.0000	63.2	
122	1,2-Dibromo-3-chloropropane	75	8.481	8.481	(1.124)	37282	50.0000	46.9	
123	n-Dodecane	43	8.670	8.670	(1.149)	105812	50.0000	65.6(Q)	
124	1,2,4-Trichlorobenzene	180	9.115	9.115	(1.208)	241805	50.0000	59.2	
125	Hexachloro-1,3-butadiene	225	9.213	9.213	(1.220)	89690	50.0000	63.6	
126	Naphthalene	128	9.335	9.335	(1.237)	585489	50.0000	57.5	
127	1,2,3-Trichlorobenzene	180	9.560	9.560	(1.266)	210401	50.0000	58.1	

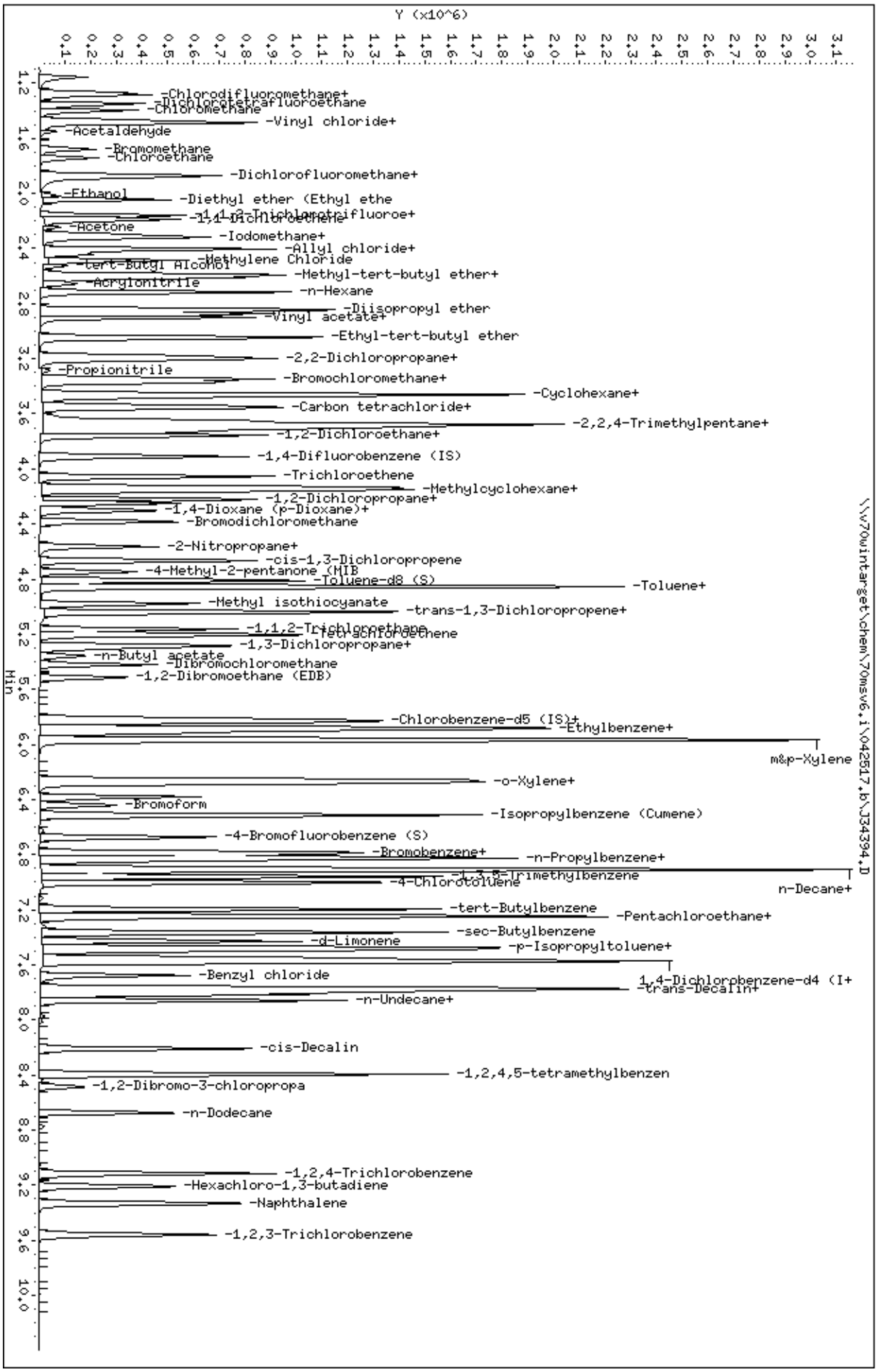
Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34394.D
Report Date: 29-Apr-2017 22:54

QC Flag Legend

Q - Qualifier signal failed the ratio test.
D - User disabled compound identification.

Review Codes Legend

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Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34394.D
Date : 25-APR-2017 07:59
Client ID: CCV
Sample Info: CCV, 1570?1
Purge Volume: 5.0
Column phase: RTX-624
Instrument: 70msv6.i
Operator: KGC
Column diameter: 0.18
\\v70wintarget\chem\70msv6.i\042517.b\J34394.D
Y (x10^6)
Min
-Chlorodifluoromethane+
-Dichlorotetrafluoroethane
-Chloromethane
-Vinyl chloride+
-Acetaldehyde
-Bromomethane
-Chloroethane
-Dichlorofluoromethane+
-Ethanol
-Diethyl ether (Ethyl ethe
-1,1,2-Trichlorotrifluoroe+
-1,1-Dichloroethene
-Acetone
-Iodomethane+
-Allyl chloride+
-Methylene Chloride
-tert-Butyl Alcohol
-Methyl-tert-butyl ether+
-Acrylonitrile
-n-Hexane
-Diisopropyl ether
-Vinyl acetate+
-Ethyl-tert-butyl ether
-2,2-Dichloropropane+
-Propionitrile
-Bromochloromethane+
-Cyclohexane+
-Carbon tetrachloride+
-2,2,4-Trimethylpentane+
-1,2-Dichloroethane+
-1,4-Difluorobenzene (IS)
-Trichloroethene
-Methylcyclohexane+
-1,2-Dichloropropane+
-1,4-Dioxane (p-Dioxane)+
-Bromodichloromethane
-2-Nitropropane+
-cis-1,3-Dichloropropene
-4-Methyl-2-pentanone (MIB
-Toluene-d8 (S)
-Toluene+
-Methyl isothiocyanate
-trans-1,3-Dichloropropene+
-1,1,2-Trichloroethane
-Tetrachloroethene
-1,3-Dichloropropane+
-n-Butyl acetate
-Dibromochloromethane
-1,2-Dibromoethane (EDB)
-Chlorobenzene-d5 (IS)+
-Ethylbenzene+
m&p-Xylene
-o-Xylene+
-Bromoform
-Isopropylbenzene (Cumene)
-4-Bromofluorobenzene (S)
-Bromobenzene+
-n-Propylbenzene+
-1,3,5-Trimethylbenzene
-4-Chlorotoluene
n-Decane+
-tert-Butylbenzene
-Pentachloroethane+
-sec-Butylbenzene
-d-Limonene
-p-Isopropyltoluene+
-Benzyl chloride
1,4-Dichlorobenzene-d4 (I+
-trans-Decalin+
-n-Undecane+
-cis-Decalin
-1,2,4,5-tetramethylbenzen
-1,2-Dibromo-3-chloropropa
-n-Dodecane
-1,2,4-Trichlorobenzene
-Hexachloro-1,3-butadiene
-Naphthalene
-1,2,3-Trichlorobenzene

Data File: \\v70wintarget\chem\70msv6.i\042517.b/J34394.D
Injection Date: 25-APR-2017 07:59
Instrument: 70msv6.i
Lab Sample ID: CCV
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34396.D
Report Date: 26-Apr-2017 16:18

Pace Analytical Services, Inc.

SW846-8260C/EPA 624

Data file : \\v70wintarget\chem\70msv6.i\042517.b\J34396.D
Lab Smp Id: CCV Client Smp ID: CCV
Inj Date : 25-APR-2017 12:13 MS Autotune Date: 17-MAR-2017 06:2
Operator : KGG Inst ID: 70msv6.i
Smp Info : ccv,15744:1
Misc Info : 2010,
Comment :
Method : \\v70wintarget\chem\70msv6.i\042517.b\032717_624W.m
Meth Date : 26-Apr-2017 15:10 70msv6.i Quant Type: ISTD
Cal Date : 27-MAR-2017 20:12 Cal File: J33250A.D
Als bottle: 4 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 624W.sub
Target Version: RC10A

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

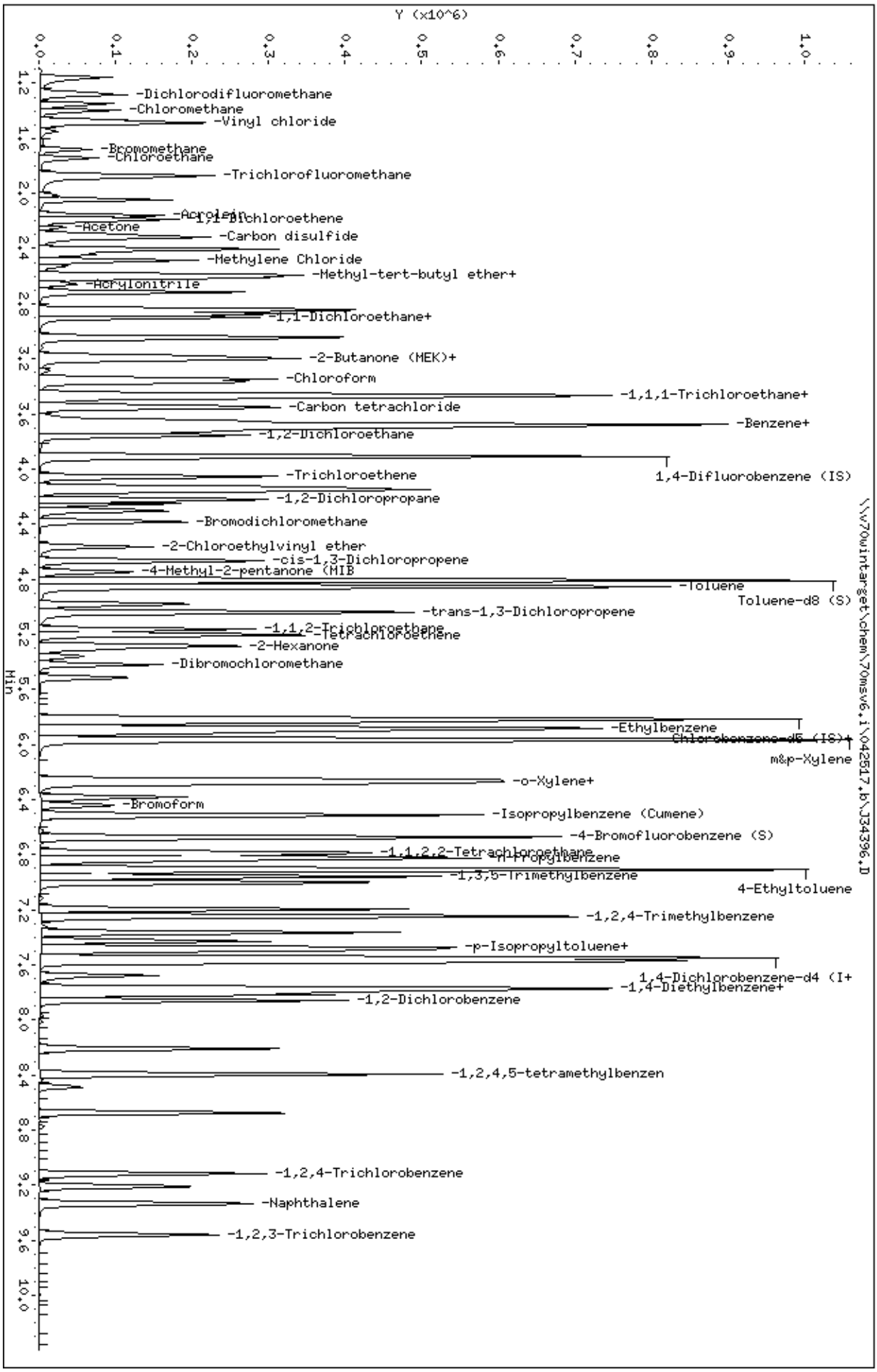
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	REVIEW C
3	Dichlorodifluoromethane	85	1.269	1.269	(0.365)	47516	20.0000	13.6(Q)	
4	Chloromethane	50	1.397	1.397	(0.402)	66131	20.0000	11.8	
5	Vinyl chloride	62	1.464	1.464	(0.421)	73910	20.0000	14.1	
8	Bromomethane	94	1.678	1.678	(0.483)	34476	20.0000	12.1	
9	Chloroethane	64	1.745	1.745	(0.502)	49558	20.0000	14.8	
11	Trichlorofluoromethane	101	1.879	1.879	(0.541)	77337	20.0000	15.0	
14	Acrolein	56	2.165	2.165	(0.623)	1554	20.0000	2.52	
15	1,1-Dichloroethene	96	2.190	2.190	(0.630)	52473	20.0000	17.4	
17	Acetone	43	2.245	2.245	(0.646)	23552	20.0000	15.3	
20	Carbon disulfide	76	2.318	2.318	(0.667)	169703	20.0000	15.9	
24	Methylene Chloride	84	2.488	2.488	(0.716)	64714	20.0000	15.6	
28	Methyl-tert-butyl ether	73	2.592	2.592	(0.746)	228921	20.0000	15.6	
27	trans-1,2-Dichloroethene	96	2.616	2.616	(0.753)	68097	20.0000	17.2	
26	Acrylonitrile	53	2.659	2.659	(0.765)	24841	20.0000	13.6	
31	1,1-Dichloroethane	63	2.873	2.873	(0.826)	133830	20.0000	15.0	
32	Vinyl acetate	43	2.873	2.873	(0.826)	147886	20.0000	18.0	
37	2-Butanone (MEK)	43	3.208	3.208	(0.923)	60036	20.0000	14.5	
35	cis-1,2-Dichloroethene	96	3.202	3.202	(0.921)	79653	20.0000	17.4	
43	Chloroform	83	3.366	3.366	(0.968)	120474	20.0000	16.1	
45	1,1,1-Trichloroethane	97	3.464	3.464	(0.886)	92774	20.0000	17.2	
* 44	Pentafluorobenzene (IS)	168	3.476	3.476	(1.000)	260334	50.0000		
48	Carbon tetrachloride	117	3.537	3.537	(0.905)	66607	20.0000	20.2	
51	Benzene	78	3.677	3.677	(0.941)	297271	20.0000	16.8	

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34396.D
Report Date: 26-Apr-2017 16:18

							AMOUNTS		
		QUANT SIG					CAL-AMT	ON-COL	
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)	REVIEW C
$	50 1,2-Dichloroethane-d4 (S)	65	3.677	3.677	(0.941)	139278	50.0000	43.6	
	52 1,2-Dichloroethane	62	3.726	3.726	(1.072)	93848	20.0000	14.2	
*	58 1,4-Difluorobenzene (IS)	114	3.909	3.909	(1.000)	448962	50.0000		
	59 Trichloroethene	95	4.055	4.055	(1.037)	72954	20.0000	17.2	
	61 1,2-Dichloropropane	63	4.220	4.220	(1.080)	79846	20.0000	15.1	
	65 Bromodichloromethane	83	4.384	4.384	(1.122)	91498	20.0000	18.8	
	67 2-Chloroethylvinyl ether	63	4.561	4.561	(1.167)	42986	20.0000	16.2	
	68 cis-1,3-Dichloropropene	75	4.665	4.665	(1.193)	123123	20.0000	18.8	
	69 4-Methyl-2-pentanone (MIBK)	43	4.744	4.744	(1.214)	61408	20.0000	13.2	
$	70 Toluene-d8 (S)	98	4.811	4.811	(0.828)	519924	50.0000	56.4	
	71 Toluene	91	4.854	4.854	(1.242)	312938	20.0000	17.2	
	74 trans-1,3-Dichloropropene	75	5.043	5.043	(1.290)	103097	20.0000	20.6	
	76 1,1,2-Trichloroethane	83	5.165	5.165	(1.321)	56915	20.0000	17.5	
	77 Tetrachloroethene	166	5.207	5.207	(0.896)	77552	20.0000	20.0	
	79 2-Hexanone	43	5.305	5.305	(0.913)	43880	20.0000	13.5	
	80 Dibromochloromethane	129	5.421	5.421	(0.933)	62283	20.0000	24.0	
*	83 Chlorobenzene-d5 (IS)	82	5.811	5.811	(1.000)	241830	50.0000		
	84 Chlorobenzene	112	5.835	5.835	(1.004)	200219	20.0000	19.3	
	86 Ethylbenzene	106	5.878	5.878	(1.012)	105639	20.0000	19.0	
	87 m&p-Xylene	106	5.963	5.963	(1.026)	262742	40.0000	37.4	
	89 o-Xylene	106	6.256	6.256	(1.077)	130179	20.0000	19.0	
	90 Styrene	104	6.280	6.280	(1.081)	228800	20.0000	19.5	
	91 Bromoform	173	6.439	6.439	(1.108)	36328	20.0000	26.3	
	92 Isopropylbenzene (Cumene)	105	6.512	6.512	(0.863)	304616	20.0000	18.0	
$	93 4-Bromofluorobenzene (S)	95	6.671	6.671	(1.148)	193385	50.0000	58.9	
	95 1,1,2,2-Tetrachloroethane	83	6.792	6.792	(0.900)	74739	20.0000	16.3	
	98 n-Propylbenzene	91	6.823	6.823	(0.904)	338324	20.0000	16.9	
	100 4-Ethyltoluene	105	6.908	6.908	(0.915)	288897	20.0000	17.3	
	101 1,3,5-Trimethylbenzene	105	6.957	6.957	(0.922)	243238	20.0000	17.7	
	106 1,2,4-Trimethylbenzene	105	7.250	7.250	(0.960)	244468	20.0000	17.4	
	110 p-Isopropyltoluene	119	7.475	7.475	(0.990)	231596	20.0000	18.6	
	108 1,3-Dichlorobenzene	146	7.494	7.494	(0.993)	134158	20.0000	18.3	
*	111 1,4-Dichlorobenzene-d4 (IS)	152	7.548	7.548	(1.000)	189605	50.0000		
	112 1,4-Dichlorobenzene	146	7.567	7.567	(1.002)	136381	20.0000	17.8	
	116 1,4-Diethylbenzene	119	7.774	7.774	(1.030)	139186	20.0000	19.4	
	117 n-Butylbenzene	91	7.792	7.792	(1.032)	249041	20.0000	18.9	
	118 1,2-Dichlorobenzene	146	7.859	7.859	(1.041)	129493	20.0000	18.3	
	121 1,2,4,5-tetramethylbenzene	119	8.396	8.396	(1.112)	230986	20.0000	22.8	
	124 1,2,4-Trichlorobenzene	180	9.115	9.115	(1.208)	81142	20.0000	21.4	
	126 Naphthalene	128	9.335	9.335	(1.237)	206355	20.0000	21.8	
	127 1,2,3-Trichlorobenzene	180	9.560	9.560	(1.267)	72939	20.0000	21.6	

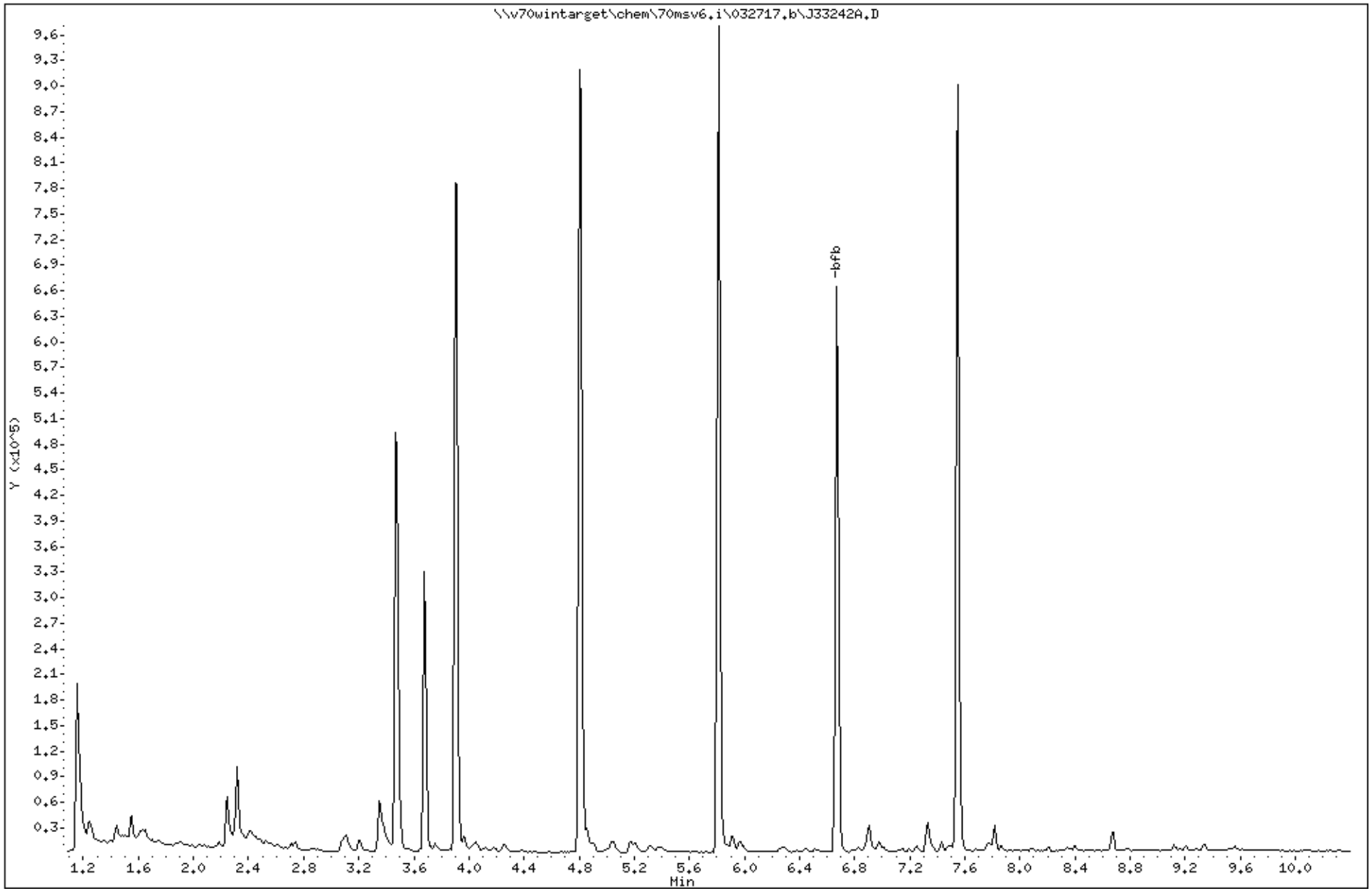
QC Flag Legend

Q - Qualifier signal failed the ratio test.


Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34396.D
Date : 25-APR-2017 12:13
Client ID: CCV
Sample Info: CCV,15744:1
Purge Volume: 5.0
Column phase: RTX-624
Instrument: 70msv6.i
Operator: KGC
Column diameter: 0.18
Y (x10^6)
Min
\\v70wintarget\chem\70msv6.i\042517.b\J34396.D
-Dichlorodifluoromethane
-Chloromethane
-Vinyl chloride
-Bromomethane
-Chloroethane
-Trichlorofluoromethane
-Acrolein
-1,1-Dichloroethene
-Acetone
-Carbon disulfide
-Methylene Chloride
-Methyl-tert-butyl ether+
-Acrylonitrile
-1,1-Dichloroethane+
-2-Butanone (MEK)+
-Chloroform
-1,1,1-Trichloroethane+
-Carbon tetrachloride
-Benzene+
-1,2-Dichloroethane
1,4-Difluorobenzene (IS)
-Trichloroethene
-1,2-Dichloropropane
-Bromodichloromethane
-2-Chloroethylvinyl ether
-cis-1,3-Dichloropropene
-4-Methyl-2-pentanone (MIB
-Toluene
Toluene-d8 (S)
-trans-1,3-Dichloropropene
-1,1,2-Trichloroethane
-Tetrachloroethene
-2-Hexanone
-Dibromochloromethane
-Ethylbenzene
Chlorobenzene-d5 (IS)+
m&p-Xylene
-o-Xylene+
-Bromoform
-Isopropylbenzene (Cumene)
-4-Bromofluorobenzene (S)
-1,1,2,2-Tetrachloroethane
-n-Propylbenzene
-1,3,5-Trimethylbenzene
4-Ethyltoluene
-1,2,4-Trimethylbenzene
-p-Isopropyltoluene+
1,4-Dichlorobenzene-d4 (I+
-1,4-Diethylbenzene+
-1,2-Dichlorobenzene
-1,2,4,5-tetramethylbenzen
-1,2,4-Trichlorobenzene
-Naphthalene
-1,2,3-Trichlorobenzene

Data File: \\v70wintarget\chem\70msv6.i\042517.b/J34396.D
Injection Date: 25-APR-2017 12:13
Instrument: 70msv6.i
Lab Sample ID: CCV
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Data File: \\v70wintarget\chem\70msv6.i\032717.b\J33242A.D
Date : 27-MAR-2017 17:19
Client ID: TUNE
Instrument: 70msv6.i
Sample Info: TUNE,13481:1
Operator: BBL
Column phase: DB-624
Column diameter: 0.18



Data File: \\v70wintarget\chem\70msv6.i\032717.b\J33242A.D

Date : 27-MAR-2017 17:19

Client ID: TUNE

Instrument: 70msv6.i

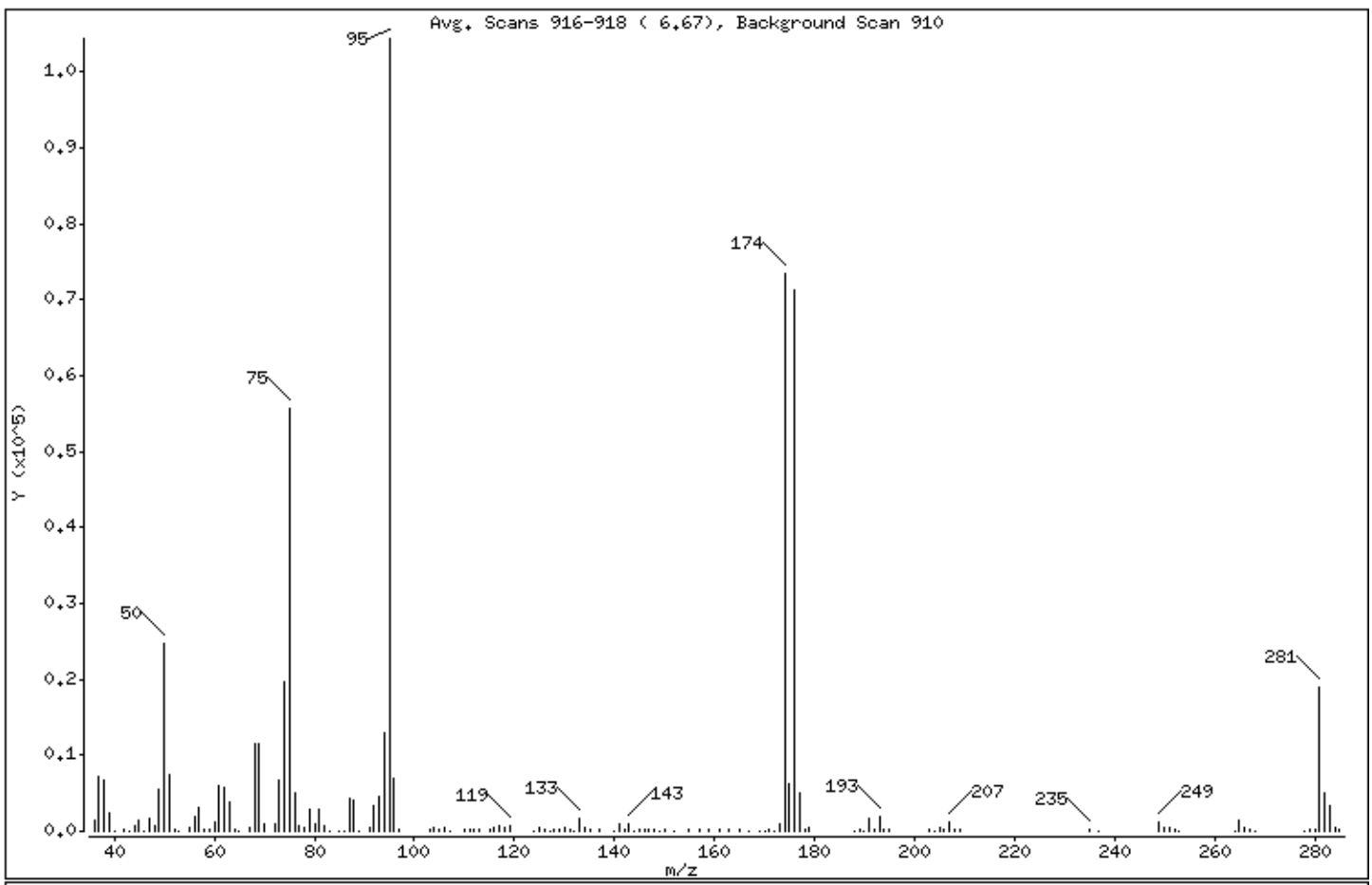
Sample Info: TUNE,13481:1

Operator: BBL

Column phase: DB-624

Column diameter: 0.18

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	23.72
75	30.00 - 60.00% of mass 95	53.35
96	5.00 - 9.00% of mass 95	6.78
173	Less than 2.00% of mass 174	0.89 (1.27)
174	50.00 - 100.00% of mass 95	70.39
175	5.00 - 9.00% of mass 174	5.88 (8.35)
176	95.00 - 101.00% of mass 174	68.27 (96.98)
177	5.00 - 9.00% of mass 176	4.87 (7.13)

Date : 27-MAR-2017 17:19

Client ID: TUNE Instrument: 70msv6.i

Sample Info: TUNE,13481:1

Operator: BBL

Column phase: DB-624 Column diameter: 0.18

Data File: J33242A.D
Spectrum: Avg. Scans 916-918 (6.67), Background Scan 910
Location of Maximum: 95.00
Number of points: 148

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1367	78.00	475	130.00	391	189.00	163
37.00	7109	79.00	2895	131.00	194	190.00	57
38.00	6649	80.00	885	132.00	34	191.00	1569
39.00	2325	81.00	2903	133.00	1586	192.00	342
40.00	43	82.00	615	134.00	513	193.00	1995
42.00	191	83.00	106	135.00	251	194.00	331
43.00	114	85.00	39	137.00	172	195.00	251
44.00	707	86.00	116	140.00	77	203.00	198
45.00	1468	87.00	4409	141.00	925	204.00	33
46.00	111	88.00	4114	142.00	187	205.00	459
47.00	1727	89.00	64	143.00	1075	206.00	121
48.00	818	91.00	537	144.00	34	207.00	1145
49.00	5448	92.00	3257	145.00	143	208.00	190
50.00	24768	93.00	4672	146.00	140	209.00	169
51.00	7473	94.00	12922	147.00	236	235.00	207
52.00	347	95.00	104400	148.00	257	237.00	39
53.00	36	96.00	7075	149.00	110	249.00	1222
55.00	487	97.00	277	150.00	140	250.00	373
56.00	1808	103.00	307	152.00	78	251.00	508
57.00	3183	104.00	549	155.00	276	252.00	133
58.00	177	105.00	237	157.00	169	253.00	55
59.00	341	106.00	375	159.00	133	264.00	45
60.00	1305	107.00	85	161.00	235	265.00	1517
61.00	6048	110.00	185	163.00	351	266.00	480
62.00	5723	111.00	190	165.00	247	267.00	339
63.00	3899	112.00	174	167.00	39	268.00	70
64.00	306	113.00	155	169.00	84	278.00	78
65.00	33	115.00	234	170.00	86	279.00	123
67.00	451	116.00	497	171.00	140	280.00	322
68.00	11500	117.00	618	172.00	99	281.00	18984
69.00	11439	118.00	518	173.00	931	282.00	5074
70.00	967	119.00	690	174.00	73488	283.00	3286
72.00	909	124.00	50	175.00	6136	284.00	576
73.00	6735	125.00	453	176.00	71272	285.00	180
74.00	19680	126.00	133	177.00	5080		

Date : 27-MAR-2017 17:19

Client ID: TUNE Instrument: 70msv6.i

Sample Info: TUNE,13481:1

Operator: BBL

Column phase: DB-624 Column diameter: 0.18

Data File: J33242A.D
Spectrum: Avg. Scans 916-918 (6.67), Background Scan 910
Location of Maximum: 95.00
Number of points: 148

m/z	Y	m/z	Y	m/z	Y	m/z	Y
75.00	55696	127.00	35	178.00	309		
76.00	4964	128.00	339	179.00	411		
77.00	618	129.00	176	188.00	37		

SAMPLE NO.

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MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York Contract: NORTH SEA LANDFILL

Date Received: Matrix: Water SDG No.: 7016438

Date Extracted: 04/25/2017 13:06 Lab Sample ID: 103008

Date Analyzed: 04/25/2017 13:06 Lab File ID: 042517.B\J34397.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1 Instrument: 70MSV6 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<5.0	U
107-13-1	Acrylonitrile	<5.0	U
71-43-2	Benzene	<5.0	U
74-97-5	Bromochloromethane	<5.0	U
75-27-4	Bromodichloromethane	<5.0	U
75-25-2	Bromoform	<5.0	U
74-83-9	Bromomethane	<5.0	U
78-93-3	2-Butanone (MEK)	<5.0	U
75-15-0	Carbon disulfide	<5.0	U
56-23-5	Carbon tetrachloride	<5.0	U
108-90-7	Chlorobenzene	<5.0	U
75-00-3	Chloroethane	<5.0	U
67-66-3	Chloroform	<5.0	U
74-87-3	Chloromethane	<5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	<5.0	U
124-48-1	Dibromochloromethane	<5.0	U
106-93-4	1,2-Dibromoethane (EDB)	<5.0	U
74-95-3	Dibromomethane	<5.0	U
95-50-1	1,2-Dichlorobenzene	<5.0	U
106-46-7	1,4-Dichlorobenzene	<5.0	U
110-57-6	trans-1,4-Dichloro-2-butene	<5.0	U
75-34-3	1,1-Dichloroethane	<5.0	U
107-06-2	1,2-Dichloroethane	<5.0	U
75-35-4	1,1-Dichloroethene	<5.0	U
156-59-2	cis-1,2-Dichloroethene	<5.0	U
156-60-5	trans-1,2-Dichloroethene	<5.0	U
78-87-5	1,2-Dichloropropane	<5.0	U
10061-01-5	cis-1,3-Dichloropropene	<5.0	U
10061-02-6	trans-1,3-Dichloropropene	<5.0	U
100-41-4	Ethylbenzene	<5.0	U
591-78-6	2-Hexanone	<5.0	U
74-88-4	Iodomethane	<5.0	U
75-09-2	Methylene Chloride	<5.0	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<5.0	U
100-42-5	Styrene	<5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	<5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	<5.0	U

SAMPLE NO.

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MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York Contract: NORTH SEA LANDFILL

Date Received: Matrix: Water SDG No.: 7016438

Date Extracted: 04/25/2017 13:06 Lab Sample ID: 103008

Date Analyzed: 04/25/2017 13:06 Lab File ID: 042517.B\J34397.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1 Instrument: 70MSV6 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
127-18-4	Tetrachloroethene	<5.0	U
108-88-3	Toluene	<5.0	U
71-55-6	1,1,1-Trichloroethane	<5.0	U
79-00-5	1,1,2-Trichloroethane	<5.0	U
79-01-6	Trichloroethene	<5.0	U
75-69-4	Trichlorofluoromethane	<5.0	U
96-18-4	1,2,3-Trichloropropane	<5.0	U
108-05-4	Vinyl acetate	<5.0	U
75-01-4	Vinyl chloride	<5.0	U
1330-20-7	Xylene (Total)	<5.0	U

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34397.D
Report Date: 29-Apr-2017 22:54

Pace Analytical Services, Inc.

SW846-8260C/EPA 624

Data file : \\v70wintarget\chem\70msv6.i\042517.b\J34397.D
Lab Smp Id: 103008 Client Smp ID: MB
Inj Date : 25-APR-2017 13:06 MS Autotune Date: 17-MAR-2017 06:2
Operator : KGG Inst ID: 70msv6.i
Smp Info : 103008,
Misc Info : 2005,
Comment :
Method : \\v70wintarget\chem\70msv6.i\042517.b\032717_8260W.m
Meth Date : 29-Apr-2017 22:43 blagula Quant Type: ISTD
Cal Date : 27-MAR-2017 18:25 Cal File: J33244.D
Als bottle: 5 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A
Processing Host: 70MSV4WS10B6

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)	REVIEW C
1 Chlorodifluoromethane	51	Compound Not Detected.						
2 Dichlorotetrafluoroethane	135	Compound Not Detected.						
3 Dichlorodifluoromethane	85	Compound Not Detected.						
4 Chloromethane	50	Compound Not Detected.						
5 Vinyl chloride	62	Compound Not Detected.						
6 1,3-Butadiene	54	Compound Not Detected.						
7 Acetaldehyde	44	Compound Not Detected.						
8 Bromomethane	94	Compound Not Detected.						
9 Chloroethane	64	Compound Not Detected.						
10 Dichlorofluoromethane	67	Compound Not Detected.						
11 Trichlorofluoromethane	101	Compound Not Detected.						
12 Ethanol	45	Compound Not Detected.						
13 Diethyl ether (Ethyl ether)	59	Compound Not Detected.						
16 1,1,2-Trichlorotrifluoroethane	101	Compound Not Detected.						
14 Acrolein	56	Compound Not Detected.						
15 1,1-Dichloroethene	96	Compound Not Detected.						
17 Acetone	43	Compound Not Detected.						
18 Iodomethane	142	Compound Not Detected.						
19 2-Propanol	45	Compound Not Detected.						
20 Carbon disulfide	76	Compound Not Detected.						
21 Allyl chloride	76	Compound Not Detected.						
22 Acetonitrile	41	Compound Not Detected.						

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34397.D
Report Date: 29-Apr-2017 22:54

			QUANT SIG					CONCENTRATIONS ON-COLUMN	FINAL		
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)		REVIEW C
	23	Methyl acetate	43	Compound Not Detected.							
	24	Methylene Chloride	84	Compound Not Detected.							
	25	tert-Butyl Alcohol	59	Compound Not Detected.							
	28	Methyl-tert-butyl ether	73	Compound Not Detected.							
	27	trans-1,2-Dichloroethene	96	Compound Not Detected.							
	26	Acrylonitrile	53	Compound Not Detected.							
	30	n-Hexane	57	Compound Not Detected.							
	29	Diisopropyl ether	45	Compound Not Detected.							
	32	Vinyl acetate	43	Compound Not Detected.							
	31	1,1-Dichloroethane	63	Compound Not Detected.							
	33	Chloroprene	53	Compound Not Detected.							
	34	Ethyl-tert-butyl ether	59	Compound Not Detected.							
	36	2,2-Dichloropropane	77	Compound Not Detected.							
	35	cis-1,2-Dichloroethene	96	Compound Not Detected.							
	39	Ethyl acetate	61	Compound Not Detected.							
	37	2-Butanone (MEK)	43	Compound Not Detected.							
	41	Bromochloromethane	128	Compound Not Detected.							
	42	Tetrahydrofuran	42	Compound Not Detected.							
	43	Chloroform	83	Compound Not Detected.							
	38	Propionitrile	54	Compound Not Detected.							
	46	Cyclohexane	56	Compound Not Detected.							
	45	1,1,1-Trichloroethane	97	Compound Not Detected.							
*	44	Pentafluorobenzene (IS)	168	3.476	3.476	(1.000)	257223	50.0000		(Q)	
	48	Carbon tetrachloride	117	Compound Not Detected.							(D)
	47	1,1-Dichloropropene	75	Compound Not Detected.							(D)
	55	2,2,4-Trimethylpentane	57	Compound Not Detected.							
	51	Benzene	78	Compound Not Detected.							
	40	Methacrylonitrile	67	Compound Not Detected.							
$	50	1,2-Dichloroethane-d4 (S)	65	3.683	3.677	(0.942)	139313	44.8269	44.8		
	56	tert-Amylmethyl ether	73	Compound Not Detected.							
	52	1,2-Dichloroethane	62	Compound Not Detected.							
	57	n-Heptane	43	Compound Not Detected.							
*	58	1,4-Difluorobenzene (IS)	114	3.909	3.909	(1.000)	436334	50.0000			
	59	Trichloroethene	95	Compound Not Detected.							
	60	Methylcyclohexane	83	Compound Not Detected.							
	49	Isobutanol	43	Compound Not Detected.							
	53	tert-Amyl Alcohol	59	Compound Not Detected.							
	54	tert-Amyl ethyl ether	59	Compound Not Detected.							
	61	1,2-Dichloropropane	63	Compound Not Detected.							
	63	Methyl methacrylate	69	Compound Not Detected.							
	64	1,4-Dioxane (p-Dioxane)	88	Compound Not Detected.							
	62	Dibromomethane	93	Compound Not Detected.							
	65	Bromodichloromethane	83	Compound Not Detected.							
	66	2-Nitropropane	43	Compound Not Detected.							
	67	2-Chloroethylvinyl ether	63	Compound Not Detected.							
	68	cis-1,3-Dichloropropene	75	Compound Not Detected.							
	69	4-Methyl-2-pentanone (MIBK)	43	Compound Not Detected.							
$	70	Toluene-d8 (S)	98	4.811	4.811	(0.828)	507438	56.1532	56.2		
	71	Toluene	91	Compound Not Detected.							
	72	Methyl isothiocyanate	73	Compound Not Detected.							
	74	trans-1,3-Dichloropropene	75	Compound Not Detected.							
	75	Ethyl methacrylate	69	Compound Not Detected.							(D)
	76	1,1,2-Trichloroethane	83	Compound Not Detected.							
	77	Tetrachloroethene	166	Compound Not Detected.							

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34397.D
Report Date: 29-Apr-2017 22:54

							CONCENTRATIONS		
		QUANT SIG					ON-COLUMN	FINAL	
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)	REVIEW C
	78 1,3-Dichloropropane	76	Compound Not Detected.						
	79 2-Hexanone	43	Compound Not Detected.						
	73 n-Octane	43	Compound Not Detected.						
	81 n-Butyl acetate	43	Compound Not Detected.						
	80 Dibromochloromethane	129	Compound Not Detected.						
	82 1,2-Dibromoethane (EDB)	107	Compound Not Detected.						
*	83 Chlorobenzene-d5 (IS)	82	5.811	5.811	(1.000)	237225	50.0000		
	84 Chlorobenzene	112	Compound Not Detected.						
	86 Ethylbenzene	106	Compound Not Detected.						
	85 1,1,1,2-Tetrachloroethane	131	Compound Not Detected.						
	88 n-Nonane	43	Compound Not Detected.						(D)
	87 m&p-Xylene	106	Compound Not Detected.						
	89 o-Xylene	106	Compound Not Detected.						
	90 Styrene	104	Compound Not Detected.						
	91 Bromoform	173	Compound Not Detected.						
	92 Isopropylbenzene (Cumene)	105	Compound Not Detected.						
$	93 4-Bromofluorobenzene (S)	95	6.671	6.671	(1.148)	191695	59.5318	59.5	
	94 Bromobenzene	156	Compound Not Detected.						
	95 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.						
	98 n-Propylbenzene	91	Compound Not Detected.						
	96 1,2,3-Trichloropropane	110	Compound Not Detected.						
	97 trans-1,4-Dichloro-2-butene	53	Compound Not Detected.						
	103 n-Decane	43	Compound Not Detected.						
	99 2-Chlorotoluene	91	Compound Not Detected.						
	100 4-Ethyltoluene	105	Compound Not Detected.						
	101 1,3,5-Trimethylbenzene	105	Compound Not Detected.						
	102 4-Chlorotoluene	91	Compound Not Detected.						
	104 tert-Butylbenzene	119	Compound Not Detected.						
	105 Pentachloroethane	167	Compound Not Detected.						
	106 1,2,4-Trimethylbenzene	105	Compound Not Detected.						
	107 sec-Butylbenzene	105	Compound Not Detected.						
	109 d-Limonene	136	Compound Not Detected.						
	110 p-Isopropyltoluene	119	Compound Not Detected.						
	108 1,3-Dichlorobenzene	146	Compound Not Detected.						
*	111 1,4-Dichlorobenzene-d4 (IS)	152	7.549	7.549	(1.000)	198068	50.0000		
	112 1,4-Dichlorobenzene	146	Compound Not Detected.						
	113 1,2,3-Trimethylbenzene	105	Compound Not Detected.						
	114 Benzyl chloride	91	Compound Not Detected.						
	115 trans-Decalin	138	Compound Not Detected.						
	116 1,4-Diethylbenzene	119	Compound Not Detected.						
	117 n-Butylbenzene	91	Compound Not Detected.						
	119 n-Undecane	43	Compound Not Detected.						(D)
	118 1,2-Dichlorobenzene	146	Compound Not Detected.						
	120 cis-Decalin	138	Compound Not Detected.						
	121 1,2,4,5-tetramethylbenzene	119	Compound Not Detected.						
	122 1,2-Dibromo-3-chloropropane	75	Compound Not Detected.						
	123 n-Dodecane	43	Compound Not Detected.						(D)
	124 1,2,4-Trichlorobenzene	180	Compound Not Detected.						
	125 Hexachloro-1,3-butadiene	225	Compound Not Detected.						
	126 Naphthalene	128	Compound Not Detected.						
	127 1,2,3-Trichlorobenzene	180	Compound Not Detected.						

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34397.D
Report Date: 29-Apr-2017 22:54

QC Flag Legend

Q - Qualifier signal failed the ratio test.
D - User disabled compound identification.

Review Codes Legend

:

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34397.D
Report Date: 29-Apr-2017 22:54

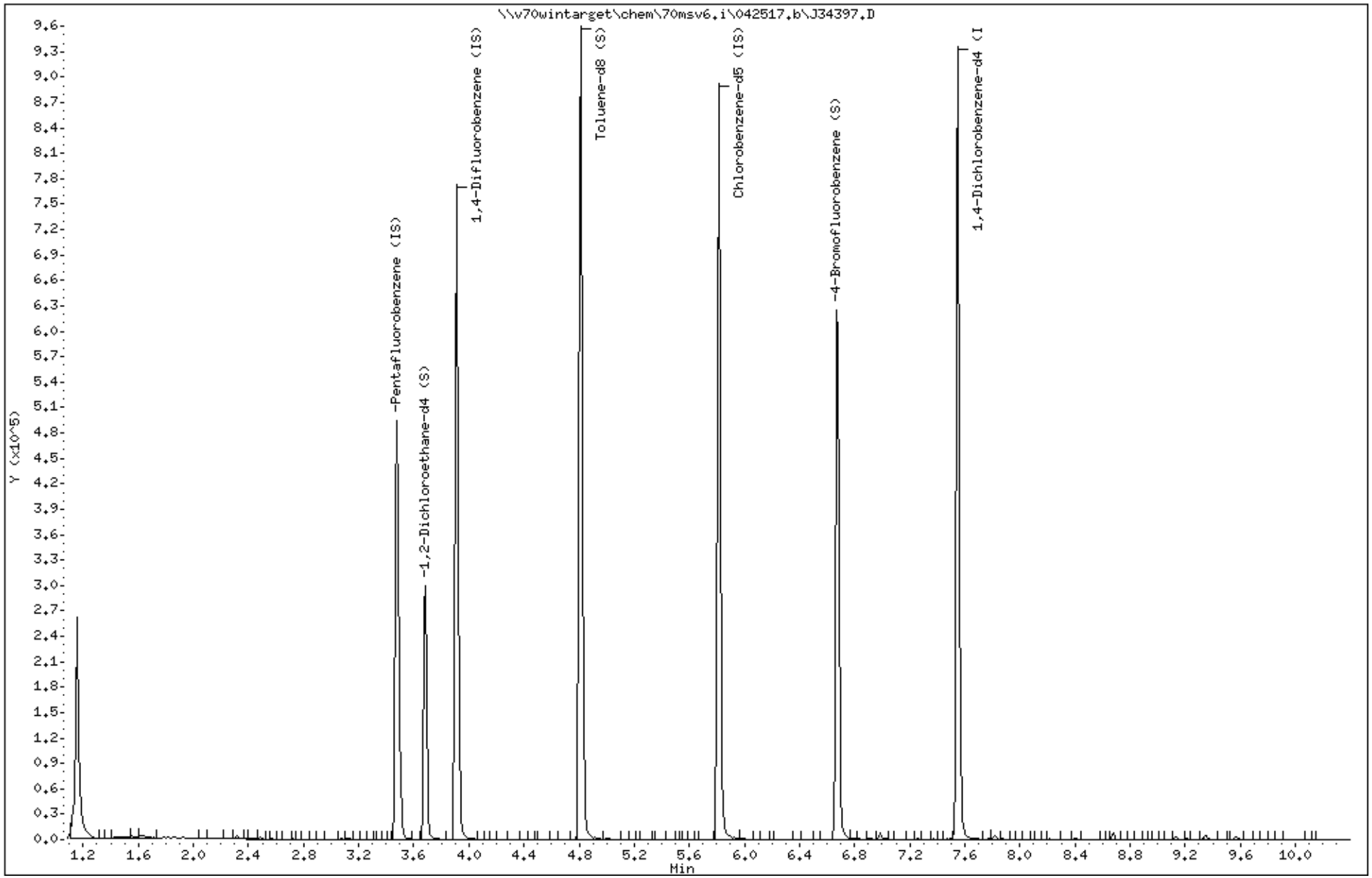
Pace Analytical Services, Inc.

SW846-8260C/EPA 624

Data file : \\v70wintarget\chem\70msv6.i\042517.b\J34397.D
Lab Smp Id: 103008 Client Smp ID: MB
Inj Date : 25-APR-2017 13:06 MS Autotune Date: 17-MAR-2017 06:2
Operator : KGG Inst ID: 70msv6.i
Smp Info : 103008,
Misc Info : 2005,
Comment :
Method : \\v70wintarget\chem\70msv6.i\042517.b\032717_8260W.m
Meth Date : 29-Apr-2017 22:43 blagula Quant Type: ISTD
Cal Date : 27-MAR-2017 18:25 Cal File: J33244.D
Als bottle: 5 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A
Processing Host: 70MSV4WS10B6

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34397.D
Date : 25-APR-2017 13:06
Client ID: MB
Instrument: 70msv6.i
Sample Info: 103008,
Purge Volume: 5.0
Operator: KGG
Column phase: RTX-624
Column diameter: 0.18



Data File: \\v70wintarget\chem\70msv6.i\042517.b/J34397.D
Injection Date: 25-APR-2017 13:06
Instrument: 70msv6.i
Lab Sample ID: 103008
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

SAMPLE NO.

LCS

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York Contract: NORTH SEA LANDFILL

Date Received: Matrix: Water SDG No.: 7016438

Date Extracted: 04/25/2017 13:27 Lab Sample ID: 103009

Date Analyzed: 04/25/2017 13:27 Lab File ID: 042517.B\J34398.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1 Instrument: 70MSV6 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	50.6	
107-13-1	Acrylonitrile	33.4	
71-43-2	Benzene	42.3	
74-97-5	Bromochloromethane	43.9	
75-27-4	Bromodichloromethane	47.8	
75-25-2	Bromoform	50.2	
74-83-9	Bromomethane	30.4	
78-93-3	2-Butanone (MEK)	38.9	
75-15-0	Carbon disulfide	38.9	
56-23-5	Carbon tetrachloride	52.5	
108-90-7	Chlorobenzene	47.2	
75-00-3	Chloroethane	36.5	
67-66-3	Chloroform	40.0	
74-87-3	Chloromethane	29.3	
96-12-8	1,2-Dibromo-3-chloropropane	41.3	
124-48-1	Dibromochloromethane	61.7	
106-93-4	1,2-Dibromoethane (EDB)	55.8	
74-95-3	Dibromomethane	42.4	
95-50-1	1,2-Dichlorobenzene	44.4	
106-46-7	1,4-Dichlorobenzene	43.9	
110-57-6	trans-1,4-Dichloro-2-butene	36.3	
75-34-3	1,1-Dichloroethane	37.1	
107-06-2	1,2-Dichloroethane	35.0	
75-35-4	1,1-Dichloroethene	40.9	
156-59-2	cis-1,2-Dichloroethene	42.8	
156-60-5	trans-1,2-Dichloroethene	42.6	
78-87-5	1,2-Dichloropropane	38.7	
10061-01-5	cis-1,3-Dichloropropene	48.2	
10061-02-6	trans-1,3-Dichloropropene	42.8	
100-41-4	Ethylbenzene	47.1	
591-78-6	2-Hexanone	42.2	
74-88-4	Iodomethane	35.8	
75-09-2	Methylene Chloride	43.4	
108-10-1	4-Methyl-2-pentanone (MIBK)	34.1	
100-42-5	Styrene	45.7	
630-20-6	1,1,1,2-Tetrachloroethane	51.1	
79-34-5	1,1,2,2-Tetrachloroethane	38.5	

SAMPLE NO.

LCS

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York Contract: NORTH SEA LANDFILL

Date Received: Matrix: Water SDG No.: 7016438

Date Extracted: 04/25/2017 13:27 Lab Sample ID: 103009

Date Analyzed: 04/25/2017 13:27 Lab File ID: 042517.B\J34398.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1 Instrument: 70MSV6 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
127-18-4	Tetrachloroethene	50.3	
108-88-3	Toluene	43.1	
71-55-6	1,1,1-Trichloroethane	44.0	
79-00-5	1,1,2-Trichloroethane	44.0	
79-01-6	Trichloroethene	43.7	
75-69-4	Trichlorofluoromethane	37.4	
96-18-4	1,2,3-Trichloropropane	40.2	
108-05-4	Vinyl acetate	43.6	
75-01-4	Vinyl chloride	35.5	
1330-20-7	Xylene (Total)	140	

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D
Report Date: 29-Apr-2017 22:54

Pace Analytical Services, Inc.

SW846-8260C/EPA 624

Data file : \\v70wintarget\chem\70msv6.i\042517.b\J34398.D
Lab Smp Id: 103009 Client Smp ID: MBLCS
Inj Date : 25-APR-2017 13:27 MS Autotune Date: 17-MAR-2017 06:2
Operator : KGG Inst ID: 70msv6.i
Smp Info : 103009, 15067:1.25
Misc Info : 2005,
Comment :
Method : \\v70wintarget\chem\70msv6.i\042517.b\032717_8260W.m
Meth Date : 29-Apr-2017 22:43 blagula Quant Type: ISTD
Cal Date : 27-MAR-2017 18:25 Cal File: J33244.D
Als bottle: 6 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A
Processing Host: 70MSV4WS10B6

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)	REVIEW C
1 Chlorodifluoromethane	51	1.281	1.282	(0.369)	192001	32.1286	32.1	
2 Dichlorotetrafluoroethane	135	1.348	1.349	(0.388)	74190	42.3310	42.3	
3 Dichlorodifluoromethane	85	1.269	1.269	(0.365)	115102	33.1703	33.2(QR)	
4 Chloromethane	50	1.397	1.397	(0.402)	163920	29.3192	29.3(R)	
5 Vinyl chloride	62	1.464	1.464	(0.421)	184919	35.5075	35.5	
6 1,3-Butadiene	54	1.483	1.483	(0.427)	167308	32.4166	32.4	
7 Acetaldehyde	44	1.550	1.550	(0.446)	28103	19.4504	19.4	
8 Bromomethane	94	1.678	1.678	(0.483)	86530	30.4495	30.4(R)	
9 Chloroethane	64	1.745	1.745	(0.502)	122042	36.5256	36.5	
10 Dichlorofluoromethane	67	1.867	1.867	(0.537)	321050	36.3198	36.3	
11 Trichlorofluoromethane	101	1.879	1.879	(0.541)	191574	37.4089	37.4	
12 Ethanol	45	2.013	2.013	(0.579)	32355	740.680	741(R)	
13 Diethyl ether (Ethyl ether)	59	2.043	2.044	(0.588)	152146	36.9499	36.9	
16 1,1,2-Trichlorotrifluoroethane	101	2.159	2.159	(0.621)	115687	38.4564	38.4	
14 Acrolein	56	2.165	2.165	(0.623)	3698	5.62321	5.62(QR)	
15 1,1-Dichloroethene	96	2.190	2.190	(0.630)	122758	40.9497	40.9	
17 Acetone	43	2.245	2.245	(0.646)	77412	50.5681	50.6	
18 Iodomethane	142	2.293	2.294	(0.660)	150535	35.8170	35.8	
19 2-Propanol	45	2.306	2.306	(0.663)	210806	753.589	754	
20 Carbon disulfide	76	2.318	2.318	(0.667)	412639	38.9360	38.9	
21 Allyl chloride	76	2.403	2.403	(0.691)	109824	42.3514	42.4	
22 Acetonitrile	41	2.403	2.403	(0.691)	259018	149.695	150(R)	

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D
Report Date: 29-Apr-2017 22:54

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)	REVIEW C
	23 Methyl acetate	43	2.409	2.409	(0.693)	237012	34.8000	34.8(R)	
	24 Methylene Chloride	84	2.488	2.489	(0.716)	179088	43.3864	43.4	
	25 tert-Butyl Alcohol	59	2.525	2.525	(0.726)	62282	207.373	207	
	28 Methyl-tert-butyl ether	73	2.592	2.592	(0.746)	574055	39.4715	39.5	
	27 trans-1,2-Dichloroethene	96	2.610	2.611	(0.751)	168076	42.6259	42.6	
	26 Acrylonitrile	53	2.653	2.653	(0.763)	60753	33.3818	33.4(R)	
	30 n-Hexane	57	2.714	2.714	(0.781)	232069	43.1182	43.1	
	29 Diisopropyl ether	45	2.842	2.842	(0.818)	601532	32.5848	32.6(R)	
	32 Vinyl acetate	43	2.872	2.873	(0.826)	367077	43.6268	43.6	
	31 1,1-Dichloroethane	63	2.872	2.873	(0.826)	329627	37.1300	37.1	
	33 Chloroprene	53	2.897	2.897	(0.833)	251131	33.3043	33.3(R)	
	34 Ethyl-tert-butyl ether	59	3.043	3.043	(0.875)	597266	40.3658	40.4	
	36 2,2-Dichloropropane	77	3.183	3.184	(0.916)	244524	51.6961	51.7	
	35 cis-1,2-Dichloroethene	96	3.202	3.202	(0.921)	195033	42.7517	42.8	
	39 Ethyl acetate	61	3.202	3.202	(0.921)	305218	37.3620	37.4	
	37 2-Butanone (MEK)	43	3.202	3.202	(0.921)	164773	38.9367	38.9	
	41 Bromochloromethane	128	3.342	3.342	(0.961)	85680	43.8792	43.9	
	42 Tetrahydrofuran	42	3.342	3.342	(0.961)	52451	30.4603	30.5(R)	
	43 Chloroform	83	3.366	3.366	(0.968)	297273	40.0073	40.0	
	38 Propionitrile	54	3.287	3.287	(0.946)	23522	37.0689	37.1	
	46 Cyclohexane	56	3.458	3.458	(0.995)	290526	35.6237	35.6	
	45 1,1,1-Trichloroethane	97	3.464	3.464	(0.886)	230776	44.0019	44.0	
*	44 Pentafluorobenzene (IS)	168	3.476	3.476	(1.000)	258916	50.0000		
	48 Carbon tetrachloride	117	3.537	3.537	(0.905)	167629	52.4599	52.4	
	47 1,1-Dichloropropene	75	3.555	3.555	(0.910)	232827	38.4200	38.4	
	55 2,2,4-Trimethylpentane	57	3.647	3.653	(1.049)	486108	56.6747	56.7	
	51 Benzene	78	3.677	3.677	(0.941)	727335	42.2674	42.3	
	40 Methacrylonitrile	67	3.348	3.348	(0.963)	75662	38.2591	38.2	
$	50 1,2-Dichloroethane-d4 (S)	65	3.677	3.677	(0.941)	136773	44.0480	44.0	
	56 tert-Amylmethyl ether	73	3.702	3.702	(1.065)	562974	42.0885	42.1	
	52 1,2-Dichloroethane	62	3.726	3.726	(1.072)	229273	35.0281	35.0	
	57 n-Heptane	43	3.756	3.757	(1.081)	211021	49.6819	49.7	
*	58 1,4-Difluorobenzene (IS)	114	3.909	3.909	(1.000)	435954	50.0000		
	59 Trichloroethene	95	4.055	4.055	(1.037)	179493	43.7246	43.7	
	60 Methylcyclohexane	83	4.134	4.135	(1.058)	268322	50.1330	50.1	
	49 Isobutanol	43	3.647	3.653	(1.049)	86328	245.503	246	
	53 tert-Amyl Alcohol	59	Compound Not Detected.						(D)
	54 tert-Amyl ethyl ether	59	4.153	4.153	(1.195)	471884	46.3018	46.3	
	61 1,2-Dichloropropane	63	4.220	4.220	(1.080)	198726	38.6691	38.7	
	63 Methyl methacrylate	69	4.250	4.250	(1.087)	130562	52.7378	52.7	
	64 1,4-Dioxane (p-Dioxane)	88	4.281	4.287	(1.095)	36506	879.060	879	
	62 Dibromomethane	93	4.299	4.299	(1.100)	106399	42.4254	42.4	
	65 Bromodichloromethane	83	4.384	4.385	(1.122)	225599	47.7657	47.8	
	66 2-Nitropropane	43	4.561	4.561	(1.167)	89718	38.7283	38.7	
	67 2-Chloroethylvinyl ether	63	4.561	4.561	(1.167)	109461	42.4272	42.4	
	68 cis-1,3-Dichloropropene	75	4.665	4.665	(1.193)	306133	48.2053	48.2	
	69 4-Methyl-2-pentanone (MIBK)	43	4.744	4.744	(1.214)	154025	34.0881	34.1(R)	
$	70 Toluene-d8 (S)	98	4.811	4.811	(0.828)	515805	57.4195	57.4	
	71 Toluene	91	4.854	4.854	(1.242)	762966	43.0816	43.1	
	72 Methyl isothiocyanate	73	4.976	4.976	(1.273)	295666	115.260	115	
	74 trans-1,3-Dichloropropene	75	5.037	5.043	(1.288)	260475	42.8256	42.8	
	75 Ethyl methacrylate	69	5.037	5.037	(1.288)	244568	46.3382	46.3	
	76 1,1,2-Trichloroethane	83	5.165	5.165	(1.321)	139186	44.0337	44.0	
	77 Tetrachloroethene	166	5.207	5.208	(0.896)	189804	50.2879	50.3	

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D
Report Date: 29-Apr-2017 22:54

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)	REVIEW C
78	1,3-Dichloropropane	76	5.281	5.281	(0.909)	293719	44.4438	44.4	
79	2-Hexanone	43	5.299	5.305	(0.912)	133627	42.1920	42.2	
73	n-Octane	43	4.854	4.854	(1.242)	228548	55.8554	55.8(Q)	
81	n-Butyl acetate	43	5.354	5.354	(1.370)	96858	39.0338	39.0	
80	Dibromochloromethane	129	5.421	5.421	(0.933)	156375	61.6814	61.7	
82	1,2-Dibromoethane (EDB)	107	5.512	5.512	(1.410)	158542	55.7808	55.8	
* 83	Chlorobenzene-d5 (IS)	82	5.811	5.811	(1.000)	235819	50.0000		
84	Chlorobenzene	112	5.835	5.836	(1.004)	476397	47.1598	47.2	
86	Ethylbenzene	106	5.878	5.878	(1.012)	255196	47.0519	47.0	
85	1,1,1,2-Tetrachloroethane	131	5.890	5.890	(1.014)	151800	51.1204	51.1	
88	n-Nonane	43	5.908	5.909	(1.017)	191677	62.5842	62.6(Q)	
87	m&p-Xylene	106	5.963	5.964	(1.026)	634459	94.0908	94.1	
89	o-Xylene	106	6.256	6.256	(1.077)	304570	45.6640	45.7	
90	Styrene	104	6.274	6.274	(1.080)	522679	45.6851	45.7	
91	Bromoform	173	6.439	6.439	(1.108)	89377	50.1515	50.2	
92	Isopropylbenzene (Cumene)	105	6.512	6.512	(0.863)	724362	40.1003	40.1	
$ 93	4-Bromofluorobenzene (S)	95	6.671	6.671	(1.148)	185715	58.0185	58.0	
94	Bromobenzene	156	6.780	6.780	(0.898)	190038	41.9401	41.9	
95	1,1,2,2-Tetrachloroethane	83	6.792	6.793	(0.900)	188427	38.4717	38.5	
98	n-Propylbenzene	91	6.823	6.823	(0.904)	895574	41.9216	41.9	
96	1,2,3-Trichloropropane	110	6.835	6.835	(0.905)	56778	40.1851	40.2	
97	trans-1,4-Dichloro-2-butene	53	6.841	6.841	(0.906)	51759	36.2701	36.3	
103	n-Decane	43	6.896	6.896	(1.187)	176124	52.7048	52.7(Q)	
99	2-Chlorotoluene	91	6.914	6.915	(0.916)	627495	40.7781	40.8	
100	4-Ethyltoluene	105	6.908	6.908	(0.915)	769239	43.0985	43.1	
101	1,3,5-Trimethylbenzene	105	6.957	6.957	(0.922)	642874	43.7639	43.8	
102	4-Chlorotoluene	91	7.000	7.006	(0.927)	561098	40.0647	40.1	
104	tert-Butylbenzene	119	7.195	7.195	(0.953)	505384	45.0759	45.1	
105	Pentachloroethane	167	7.250	7.250	(0.960)	78918	52.9839	53.0	
106	1,2,4-Trimethylbenzene	105	7.244	7.250	(0.960)	660252	44.1170	44.1	
107	sec-Butylbenzene	105	7.366	7.366	(0.976)	733580	47.6473	47.6	
109	d-Limonene	136	7.426	7.427	(1.278)	32496	59.2425	59.2	
110	p-Isopropyltoluene	119	7.475	7.475	(0.990)	642020	48.4056	48.4	
108	1,3-Dichlorobenzene	146	7.494	7.494	(0.993)	348472	44.5872	44.6	
* 111	1,4-Dichlorobenzene-d4 (IS)	152	7.548	7.549	(1.000)	202237	50.0000		
112	1,4-Dichlorobenzene	146	7.567	7.567	(1.002)	358689	43.8807	43.9	
113	1,2,3-Trimethylbenzene	105	7.573	7.579	(1.003)	686527	43.3045	43.3	
114	Benzyl chloride	91	7.676	7.677	(1.017)	286417	41.1834	41.2	
115	trans-Decalin	138	7.768	7.768	(1.029)	125257	70.7751	70.8	
116	1,4-Diethylbenzene	119	7.774	7.774	(1.030)	388977	50.6992	50.7	
117	n-Butylbenzene	91	7.792	7.792	(1.032)	705481	50.2000	50.2	
119	n-Undecane	43	7.817	7.817	(1.036)	162795	66.9397	66.9(Q)	
118	1,2-Dichlorobenzene	146	7.859	7.859	(1.041)	334719	44.4091	44.4	
120	cis-Decalin	138	8.207	8.213	(1.087)	97454	69.2202	69.2	
121	1,2,4,5-tetramethylbenzene	119	8.396	8.396	(1.112)	611926	56.6578	56.6	
122	1,2-Dibromo-3-chloropropane	75	8.481	8.481	(1.124)	31943	41.2750	41.3	
123	n-Dodecane	43	8.670	8.670	(1.149)	130987	92.6041	92.6(Q)	
124	1,2,4-Trichlorobenzene	180	9.115	9.115	(1.208)	210012	51.8703	51.9	
125	Hexachloro-1,3-butadiene	225	9.207	9.213	(1.220)	90882	64.9801	65.0	
126	Naphthalene	128	9.335	9.335	(1.237)	497303	49.2230	49.2	
127	1,2,3-Trichlorobenzene	180	9.560	9.560	(1.267)	182355	50.7601	50.8	

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D
Report Date: 29-Apr-2017 22:54

QC Flag Legend

Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.
D - User disabled compound identification.

Review Codes Legend

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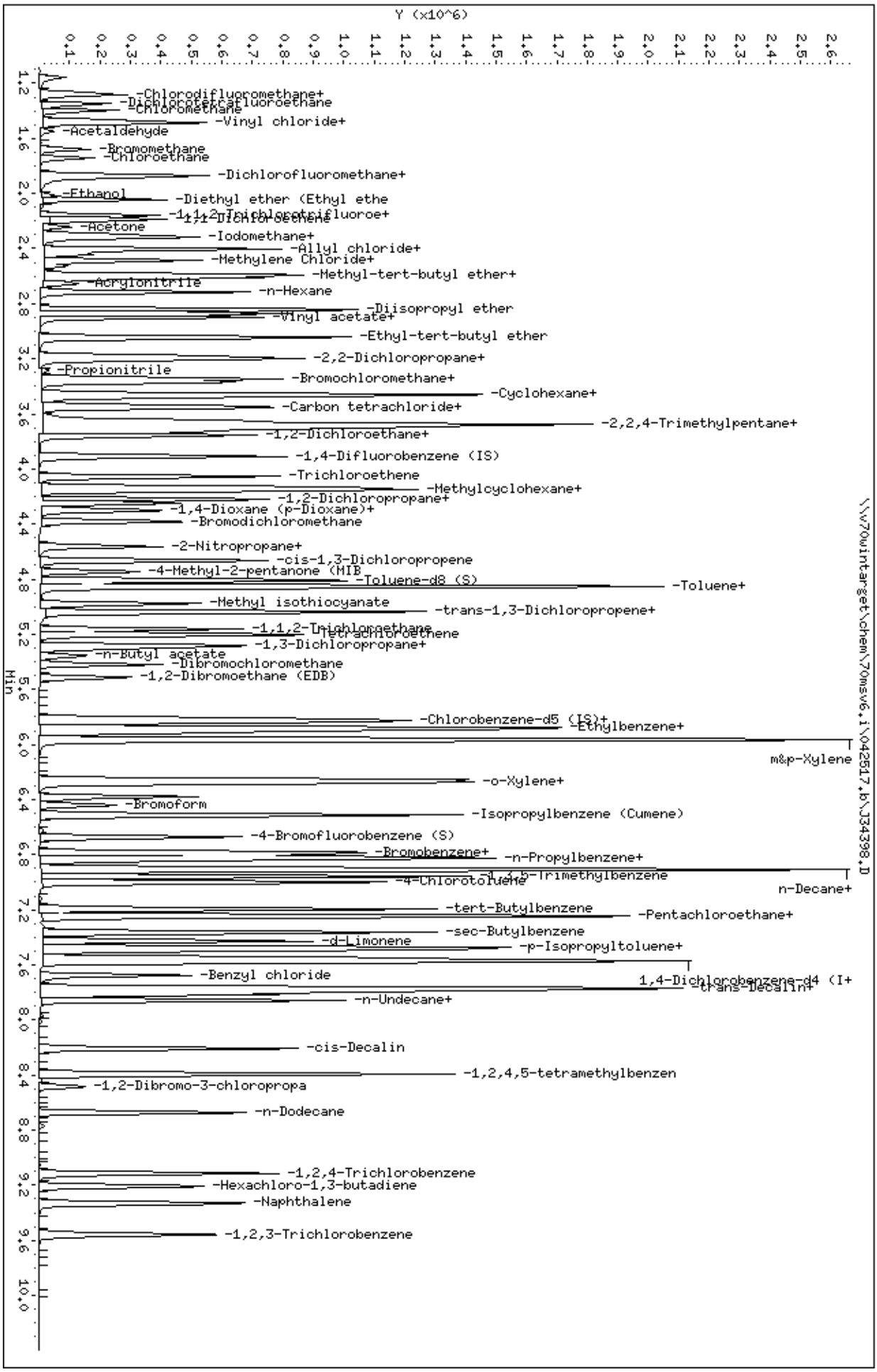
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Report Date: 29-Apr-2017 22:54

Pace Analytical Services, Inc.

SW846-8260C/EPA 624

Data file : \\v70wintarget\chem\70msv6.i\042517.b\J34398.D
Lab Smp Id: 103009 Client Smp ID: MBLCS
Inj Date : 25-APR-2017 13:27 MS Autotune Date: 17-MAR-2017 06:2
Operator : KGG Inst ID: 70msv6.i
Smp Info : 103009, 15067:1.25
Misc Info : 2005,
Comment :
Method : \\v70wintarget\chem\70msv6.i\042517.b\032717_8260W.m
Meth Date : 29-Apr-2017 22:43 blagula Quant Type: ISTD
Cal Date : 27-MAR-2017 18:25 Cal File: J33244.D
Als bottle: 6 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A
Processing Host: 70MSV4WS10B6

- NO TENTATIVELY IDENTIFIED COMPOUNDS -


Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D
Date : 25-APR-2017 13:27
Client ID: HBLCS
Sample Info: 103009, 15067:1.25
Purge Volume: 5.0
Column phase: RTX-624
Instrument: 70msv6.i
Operator: KGC
Column diameter: 0.18
Y (x10^6)
Min
-Chlorodifluoromethane+
-Dichlorotetrafluoroethane
-Chloromethane
-Vinyl chloride+
-Acetaldehyde
-Bromomethane
-Chloroethane
-Dichlorofluoromethane+
-Ethanol
-Diethyl ether (Ethyl ethe
-1,1,2-Trichlorotrifluoroe+
-1,1-Dichloroethene
-Acetone
-Iodomethane+
-Allyl chloride+
-Methylene Chloride+
-Methyl-tert-butyl ether+
-Acrylonitrile
-n-Hexane
-Diisopropyl ether
-Vinyl acetate+
-Ethyl-tert-butyl ether
-2,2-Dichloropropane+
-Propionitrile
-Bromochloromethane+
-Cyclohexane+
-Carbon tetrachloride+
-2,2,4-Trimethylpentane+
-1,2-Dichloroethane+
-1,4-Difluorobenzene (IS)
-Trichloroethene
-Methylcyclohexane+
-1,2-Dichloropropane+
-1,4-Dioxane (p-Dioxane)+
-Bromodichloromethane
-2-Nitropropane+
-cis-1,3-Dichloropropene
-4-Methyl-2-pentanone (MIB
-Toluene-d8 (S)
-Toluene+
-Methyl isothiocyanate
-trans-1,3-Dichloropropene+
-1,1,2-Trichloroethane
-Tetrachloroethene
-1,3-Dichloropropane+
-n-Butyl acetate
-Dibromochloromethane
-1,2-Dibromoethane (EDB)
-Chlorobenzene-d5 (IS)+
-Ethylbenzene+
m&p-Xylene
-o-Xylene+
-Bromoform
-Isopropylbenzene (Cumene)
-4-Bromofluorobenzene (S)
-Bromobenzene+
-n-Propylbenzene+
-1,3,5-Trimethylbenzene
-4-Chlorotoluene
n-Decane+
-tert-Butylbenzene
-Pentachloroethane+
-sec-Butylbenzene
-d-Limonene
-p-Isopropyltoluene+
-Benzyl chloride
1,4-Dichlorobenzene-d4 (I+
-trans-Decalin+
-n-Undecane+
-cis-Decalin
-1,2,4,5-tetramethylbenzen
-1,2-Dibromo-3-chloropropa
-n-Dodecane
-1,2,4-Trichlorobenzene
-Hexachloro-1,3-butadiene
-Naphthalene
-1,2,3-Trichlorobenzene

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D

Date : 25-APR-2017 13:27

Client ID: MBLCS

Instrument: 70msv6.i

Sample Info: 103009, 15067:1.25

Purge Volume: 5.0

Operator: KGG

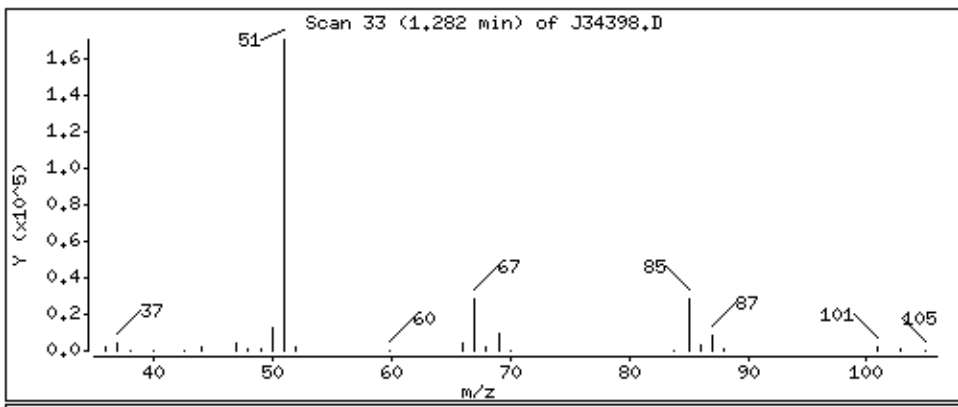
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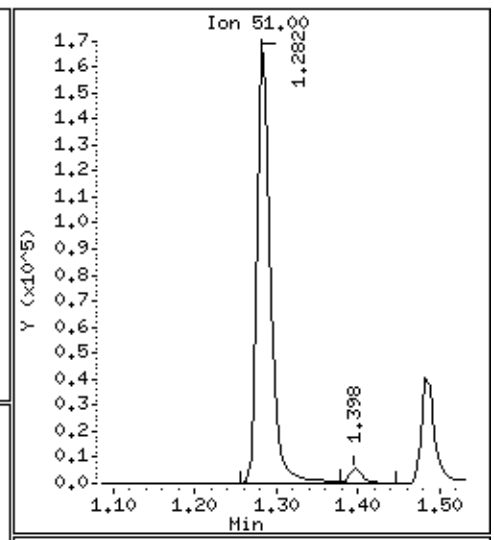
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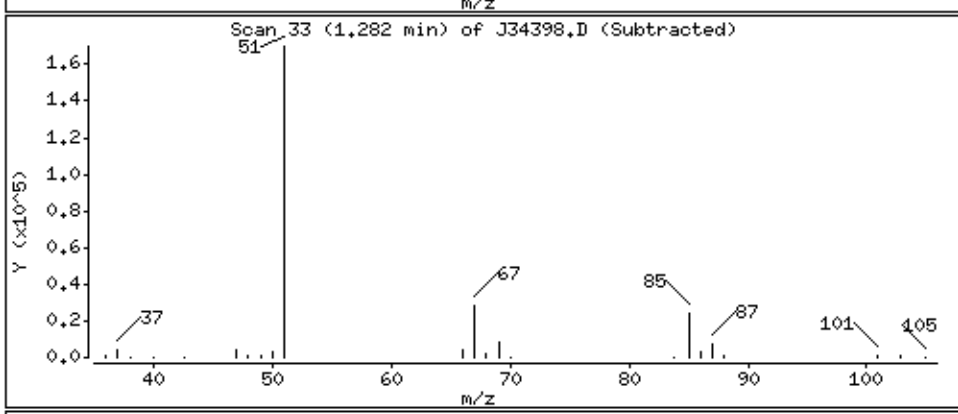
1 Chlorodifluoromethane

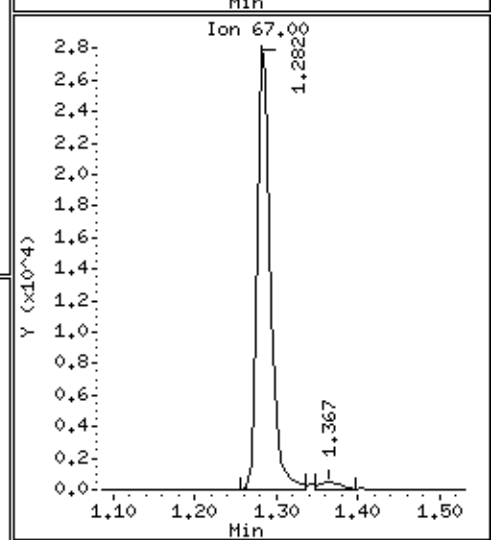
Concentration: 32.1 ug/L

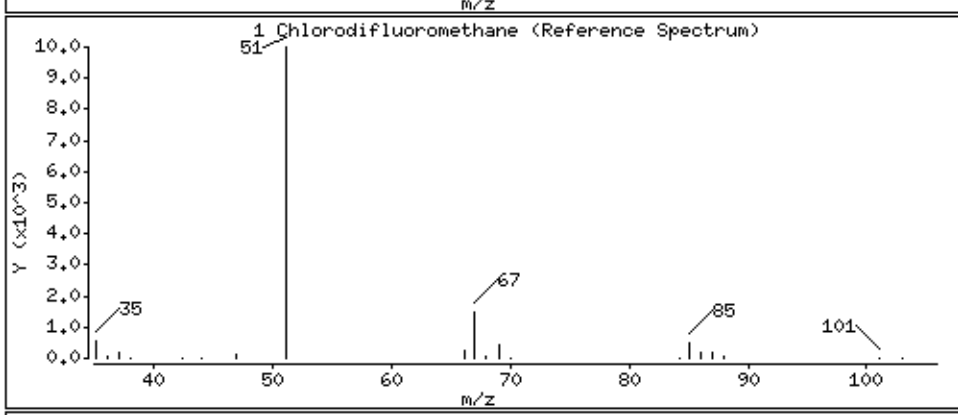
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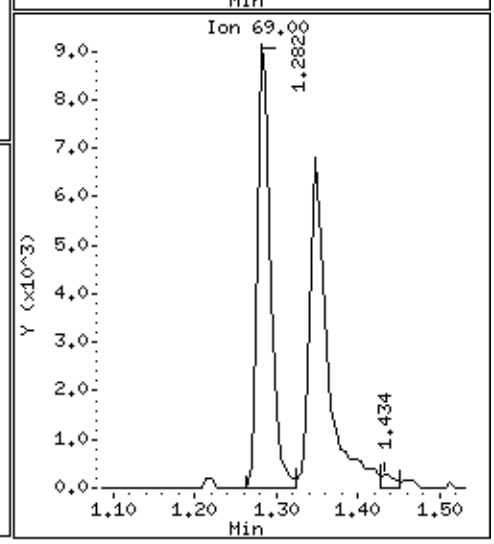


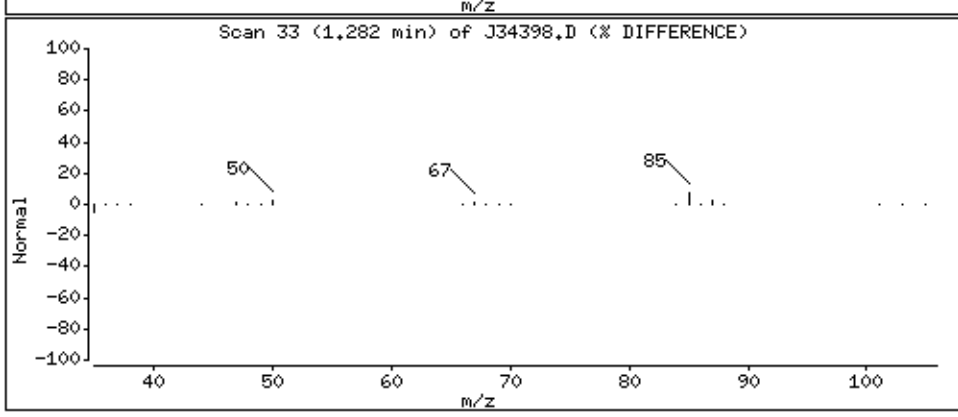












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D

Date : 25-APR-2017 13:27

Client ID: MBLCS

Instrument: 70msv6.i

Sample Info: 103009, 15067:1.25

Purge Volume: 5.0

Operator: KGG

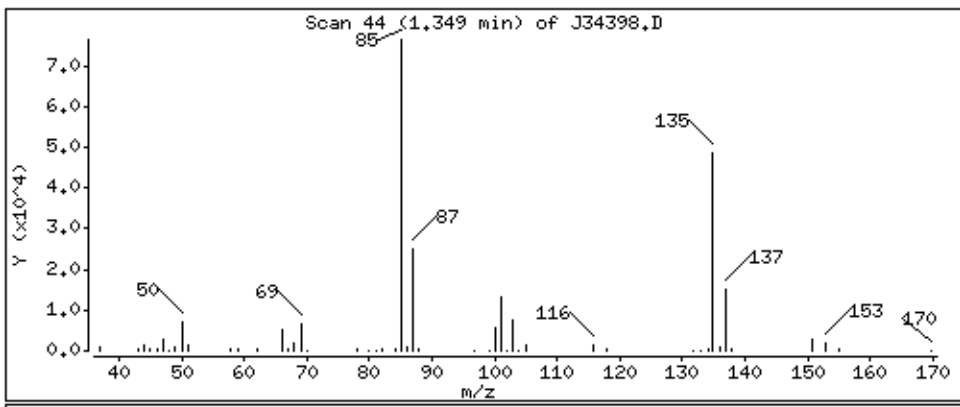
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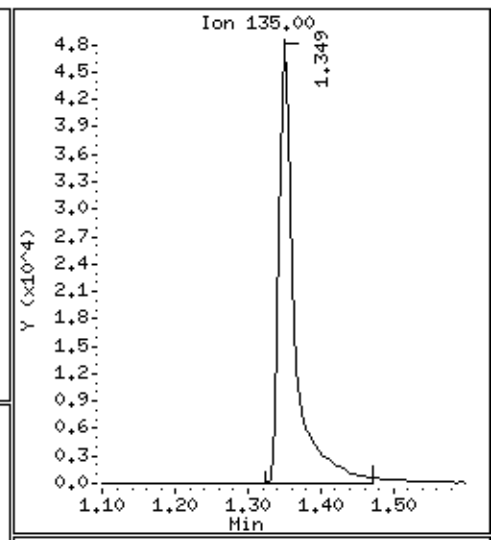
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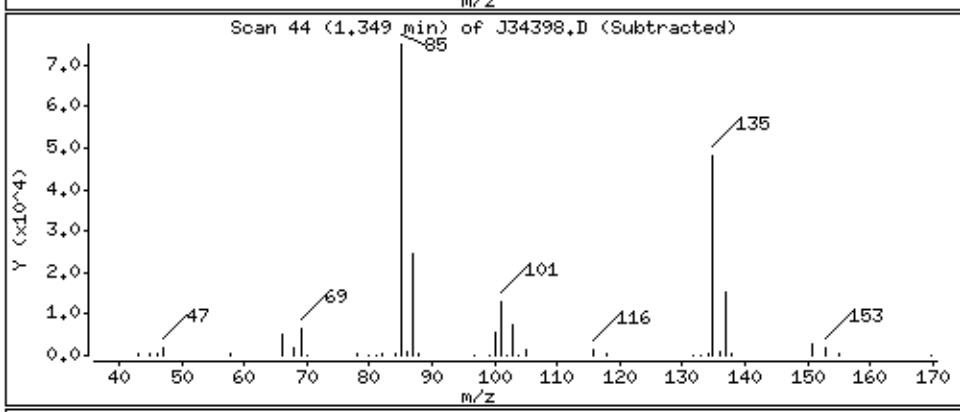
2 Dichlorotetrafluoroethane

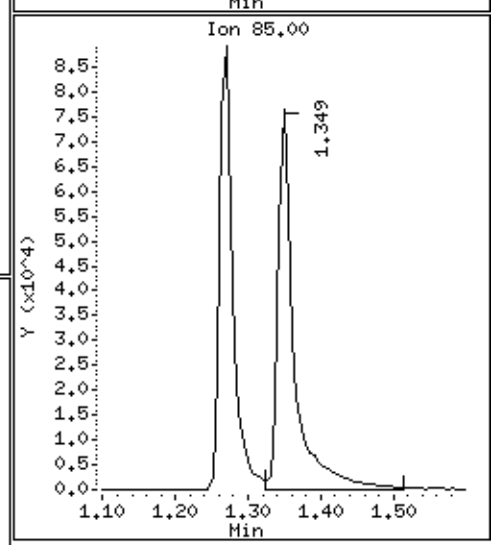
Concentration: 42.3 ug/L

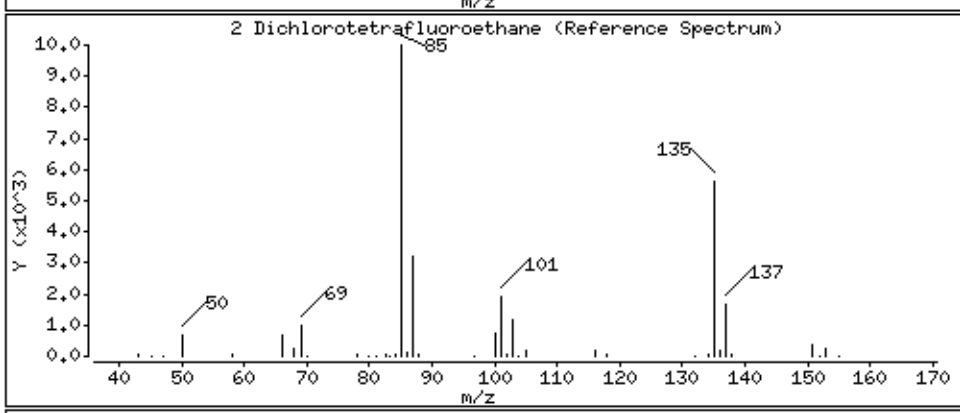
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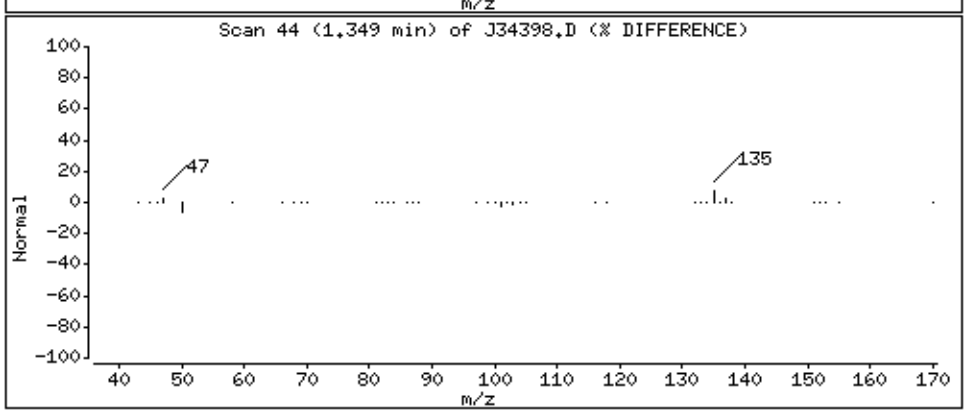












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D

Date : 25-APR-2017 13:27

Client ID: MBLCS

Instrument: 70msv6.i

Sample Info: 103009, 15067:1.25

Purge Volume: 5.0

Operator: KGG

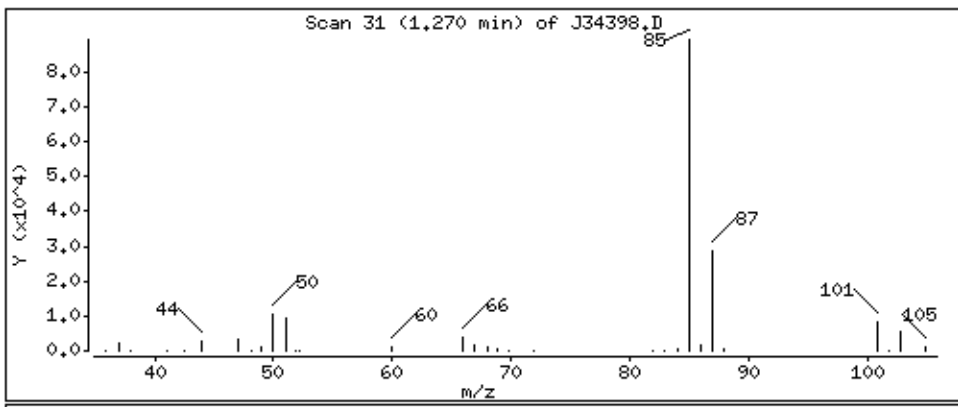
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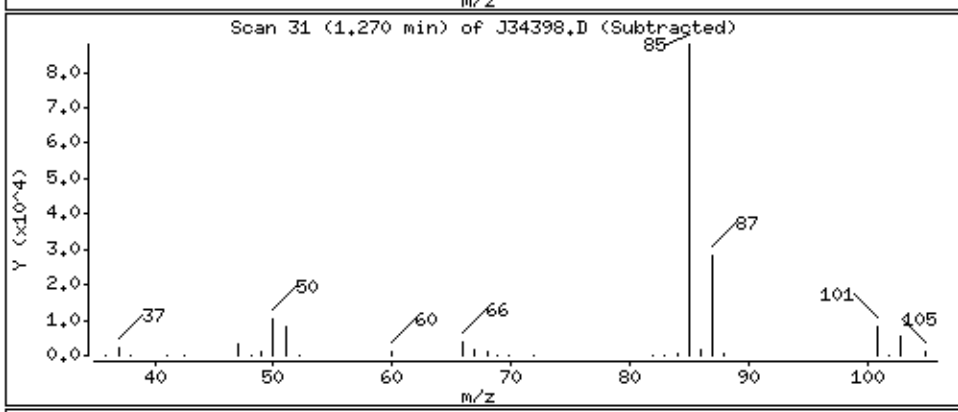
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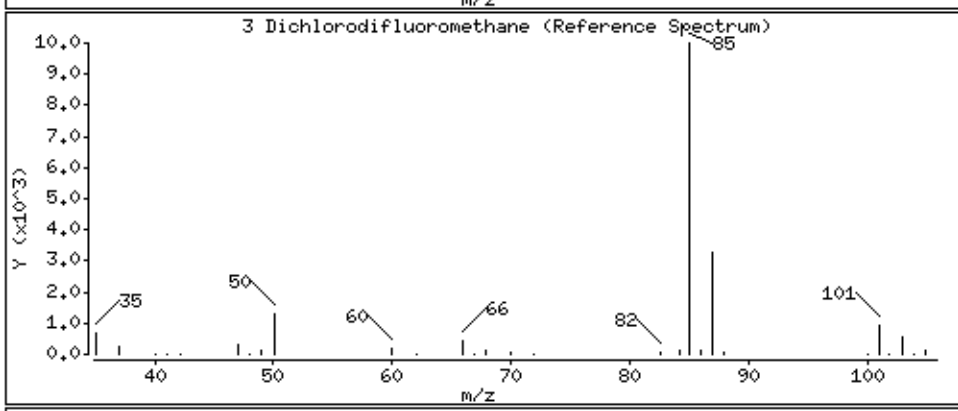
3 Dichlorodifluoromethane

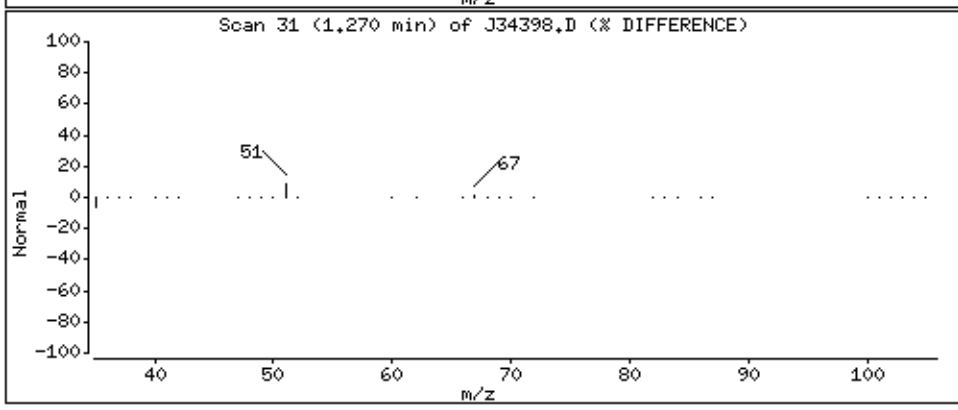
Concentration: 33.2 ug/L

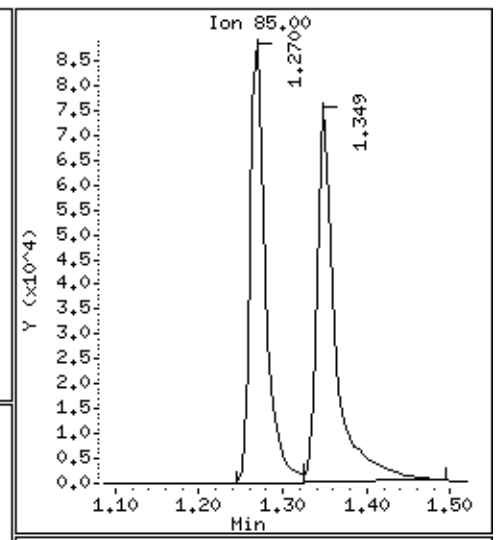
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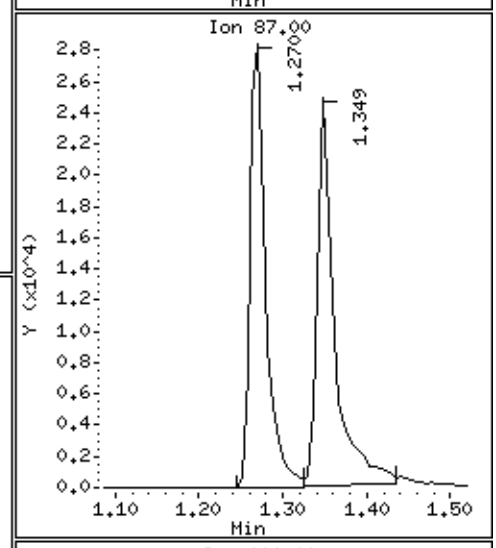


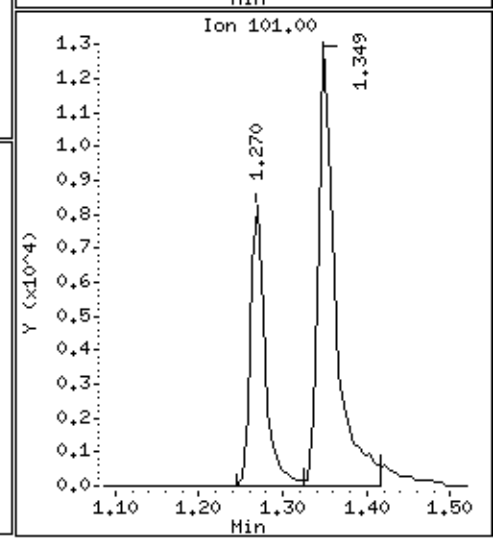












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D

Date : 25-APR-2017 13:27

Client ID: MBLCS

Instrument: 70msv6.i

Sample Info: 103009, 15067:1.25

Purge Volume: 5.0

Operator: KGG

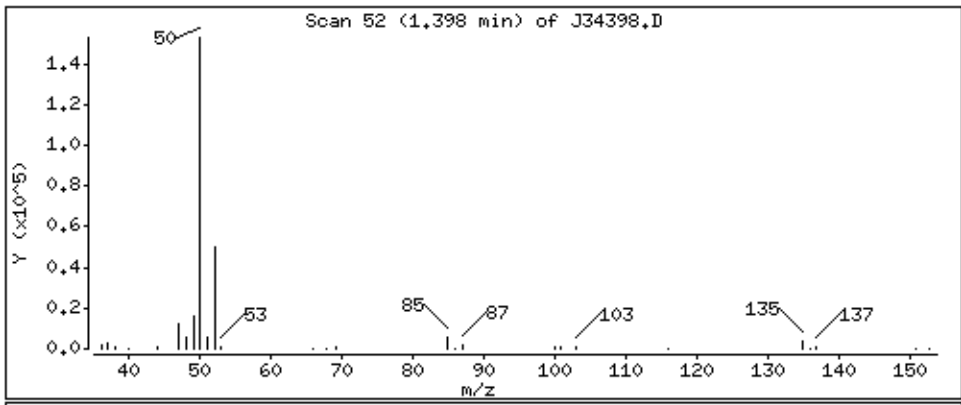
Column phase: RTX-624

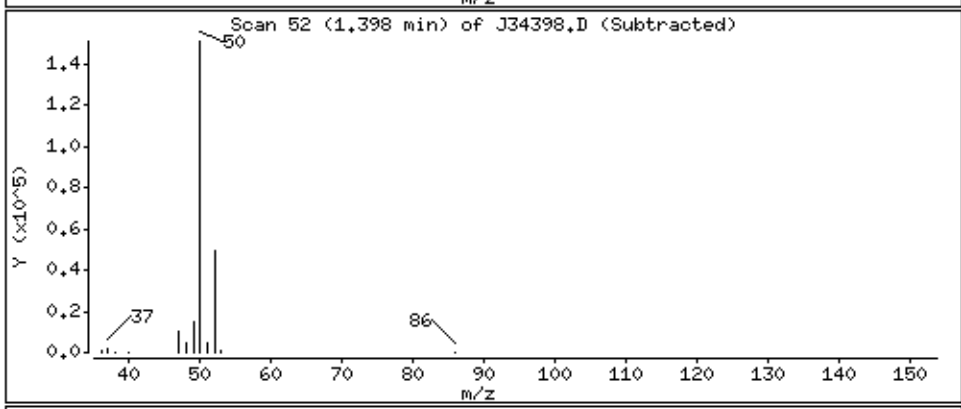
Column diameter: 0.18

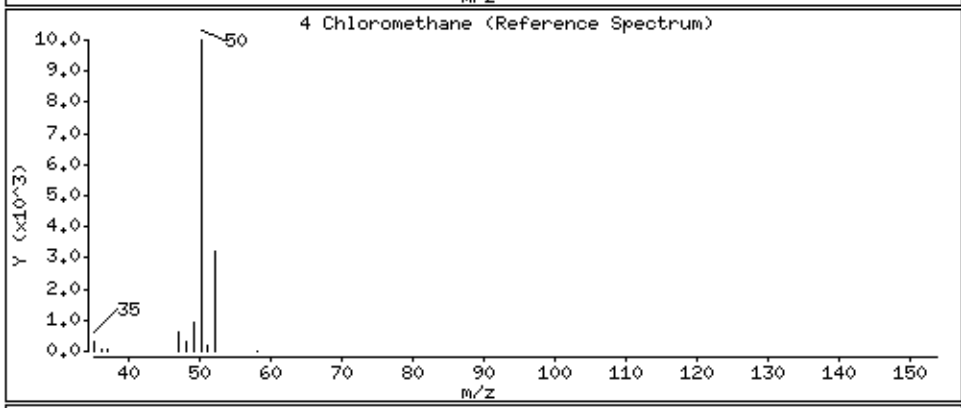
4 Chloromethane

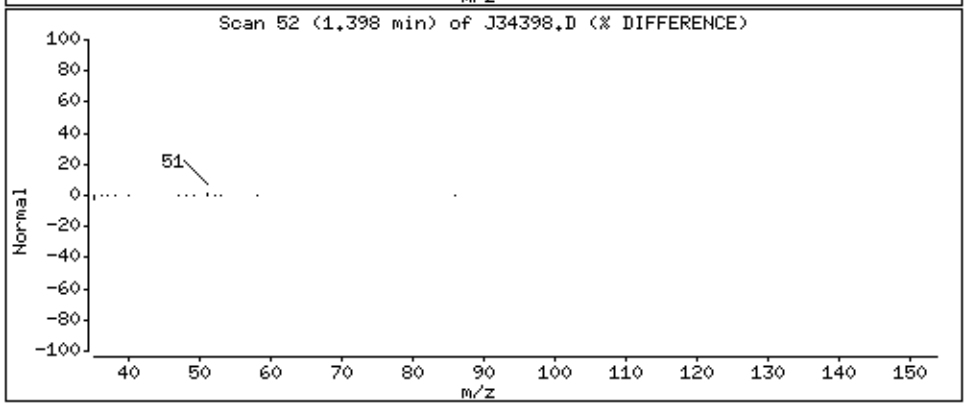
Concentration: 29.3 ug/L

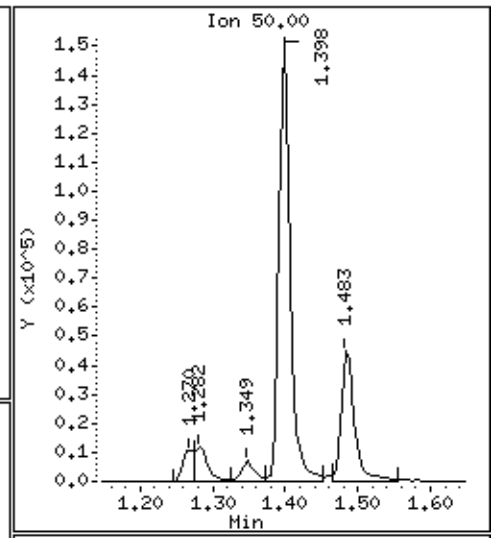
Review Code:

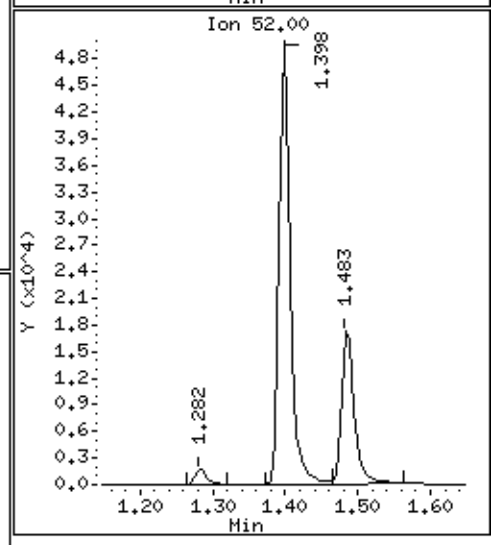












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D

Date : 25-APR-2017 13:27

Client ID: MBLCS

Instrument: 70msv6.i

Sample Info: 103009, 15067:1.25

Purge Volume: 5.0

Operator: KGG

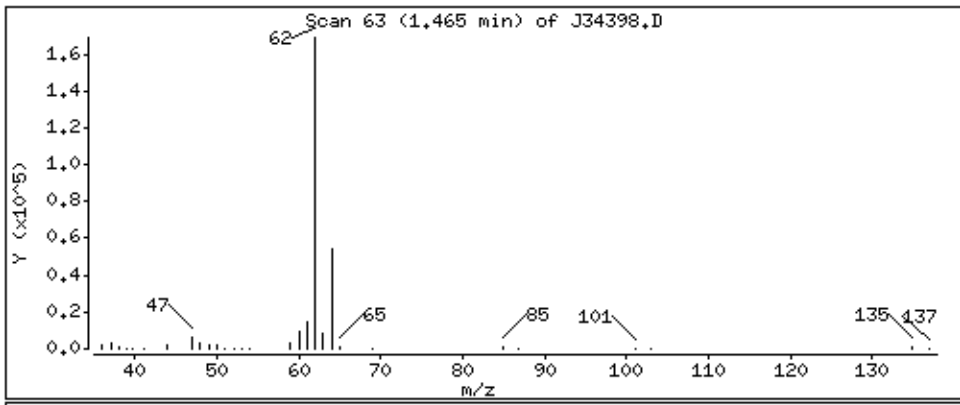
Column phase: RTX-624

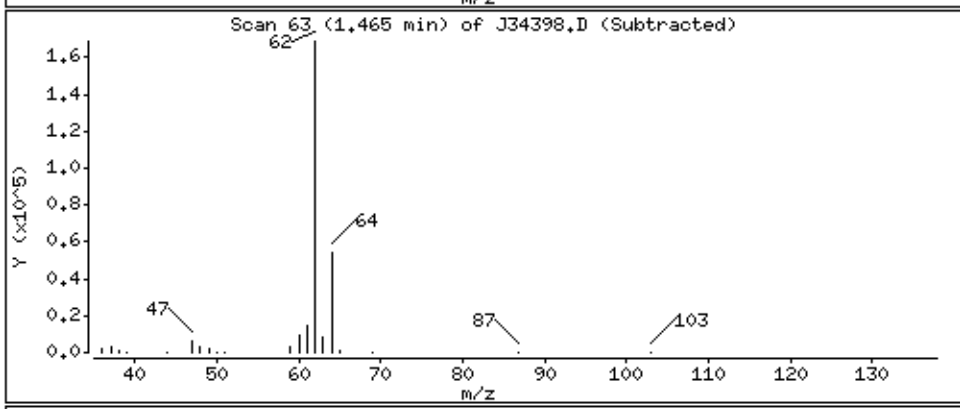
Column diameter: 0.18

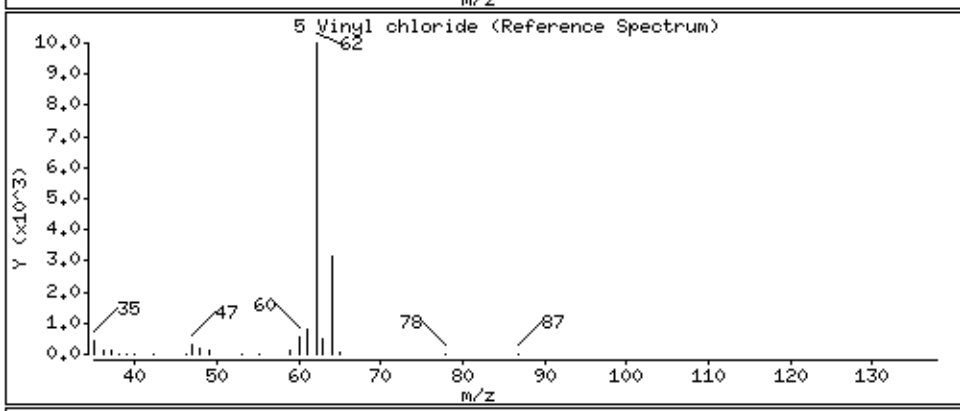
5 Vinyl chloride

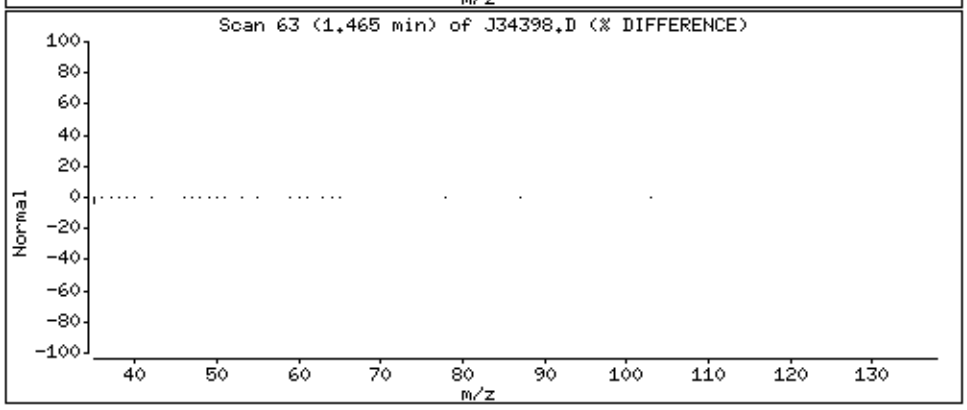
Concentration: 35.5 ug/L

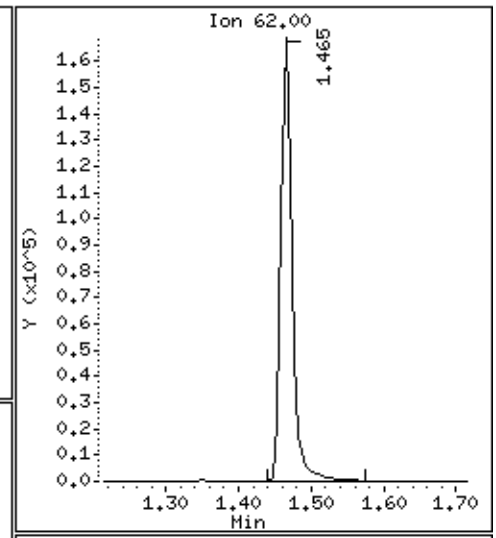
Review Code:

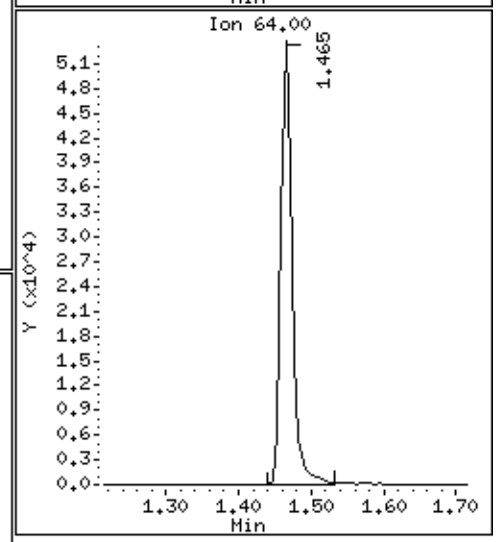












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D

Date : 25-APR-2017 13:27

Client ID: MBLCS

Instrument: 70msv6.i

Sample Info: 103009, 15067:1.25

Purge Volume: 5.0

Operator: KGG

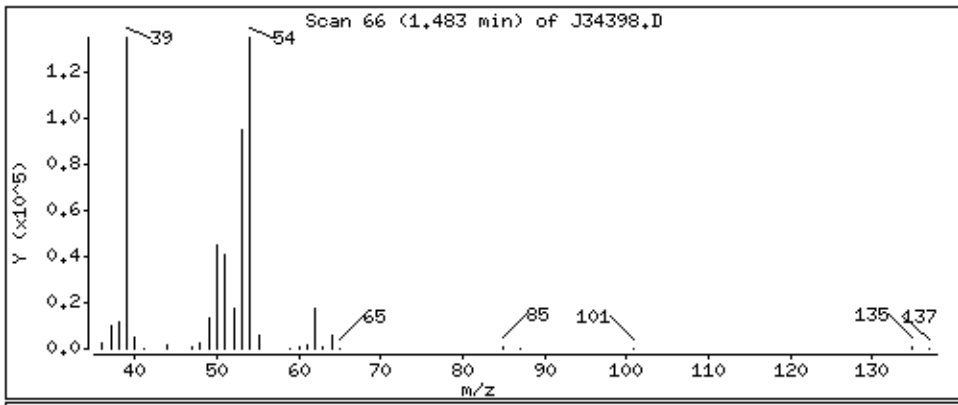
Column phase: RTX-624

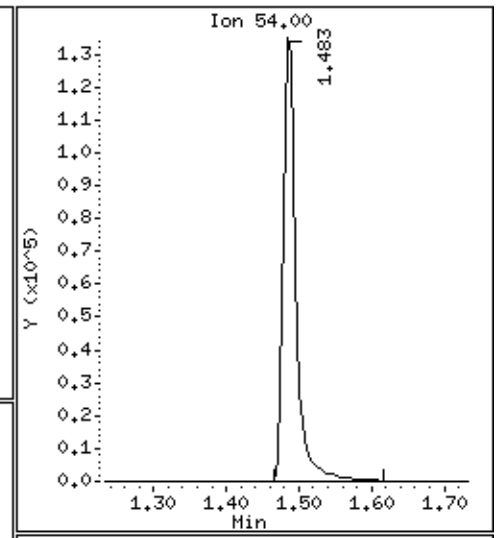
Column diameter: 0.18

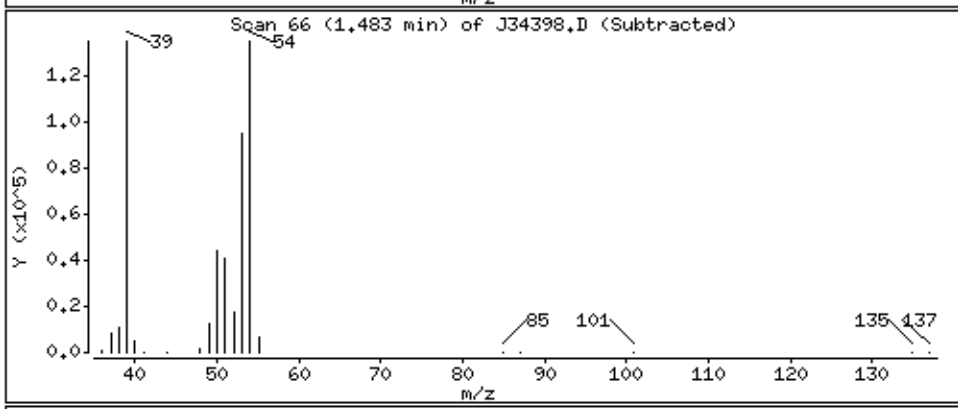
6 1,3-Butadiene

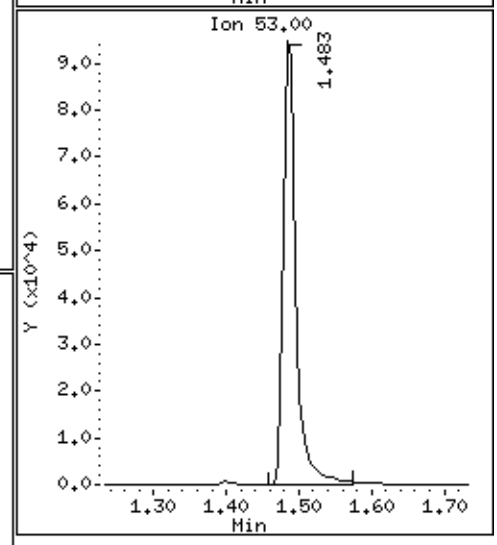
Concentration: 32.4 ug/L

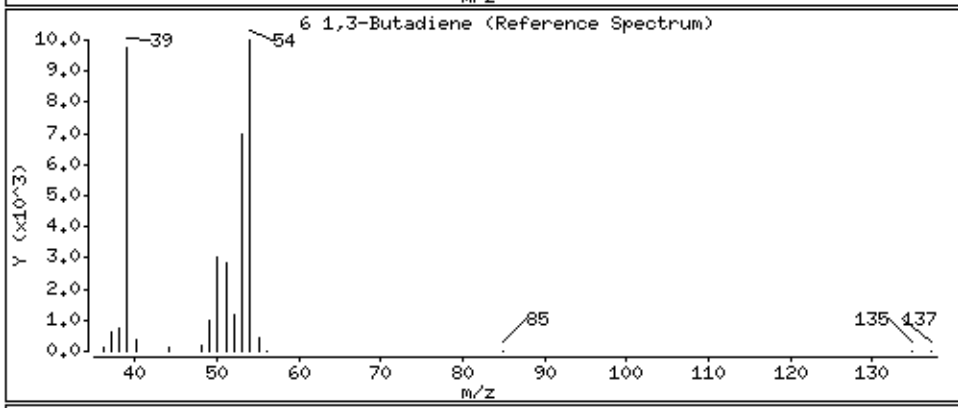
Review Code:

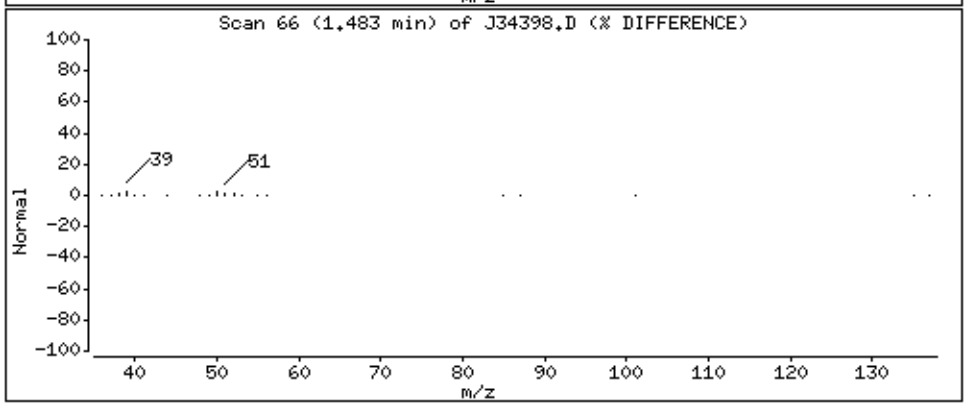












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D

Date : 25-APR-2017 13:27

Client ID: MBLCS

Instrument: 70msv6.i

Sample Info: 103009, 15067:1.25

Purge Volume: 5.0

Operator: KGG

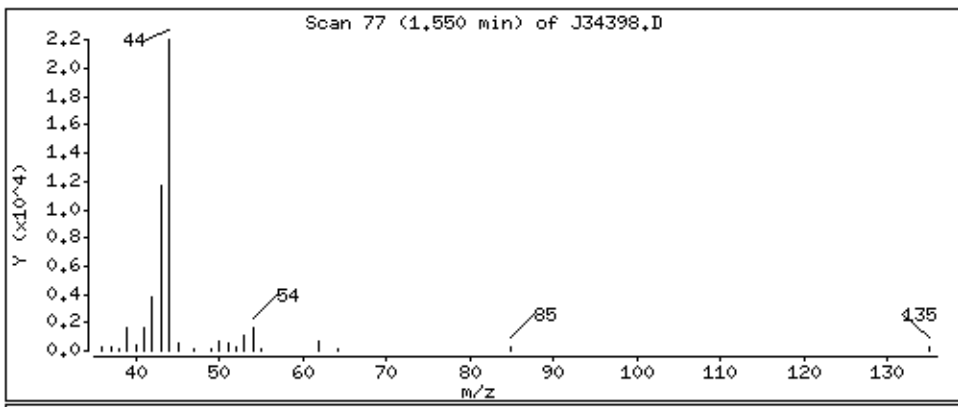
Column phase: RTX-624

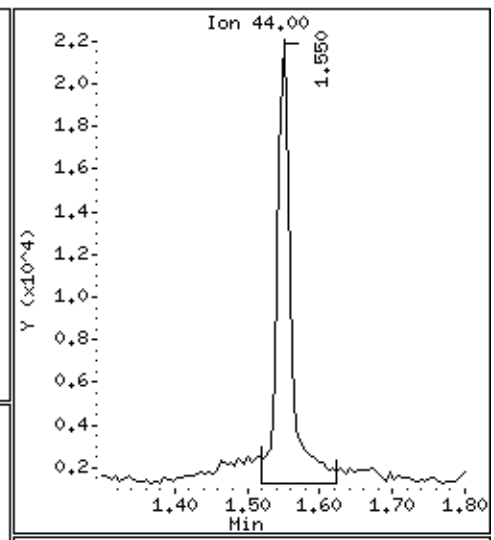
Column diameter: 0.18

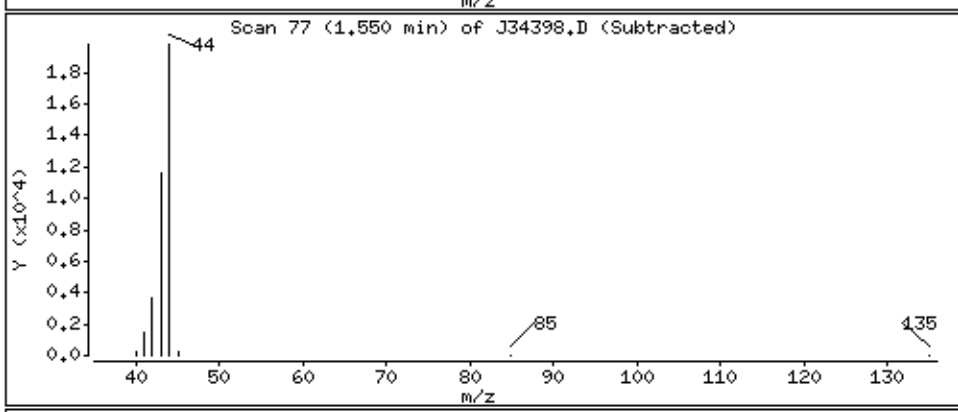
7 Acetaldehyde

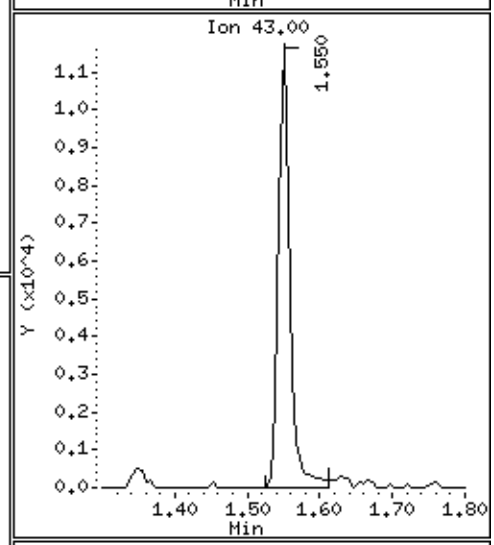
Concentration: 19.4 ug/L

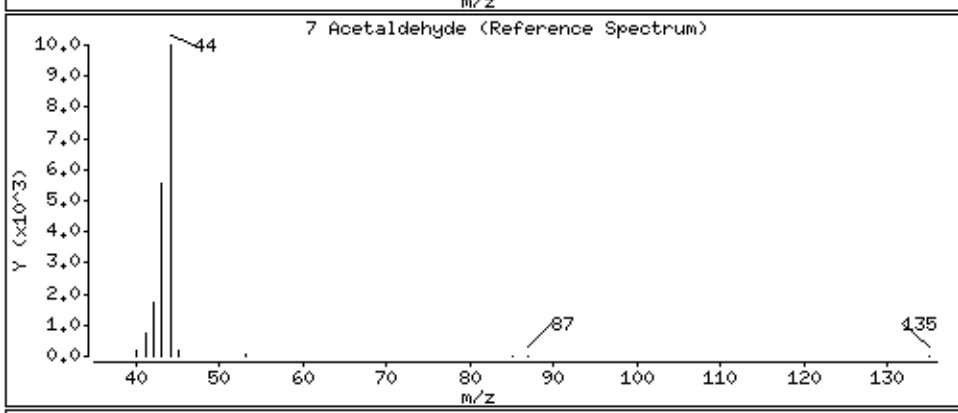
Review Code:

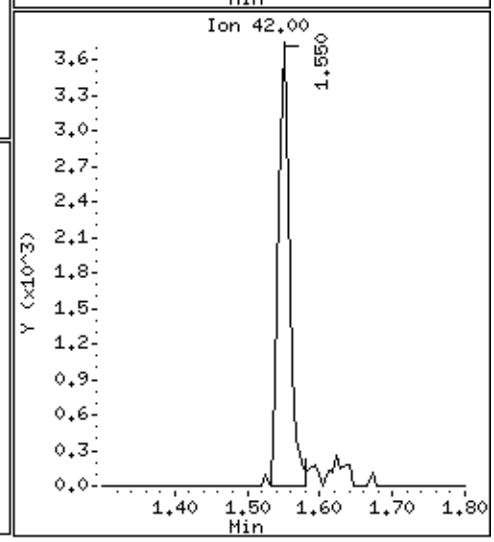


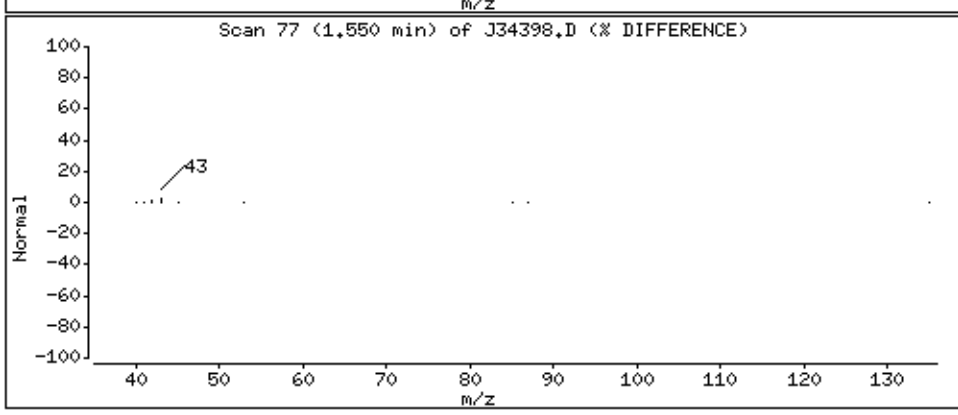












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D

Date : 25-APR-2017 13:27

Client ID: MBLCS

Instrument: 70msv6.i

Sample Info: 103009, 15067:1.25

Purge Volume: 5.0

Operator: KGG

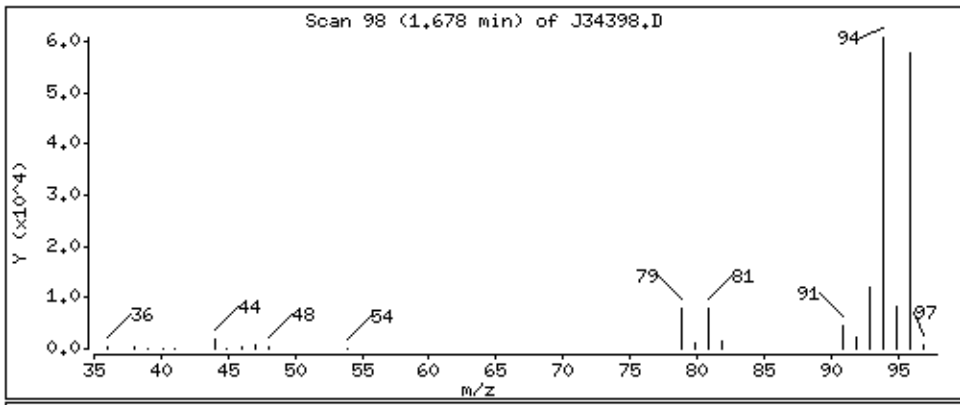
Column phase: RTX-624

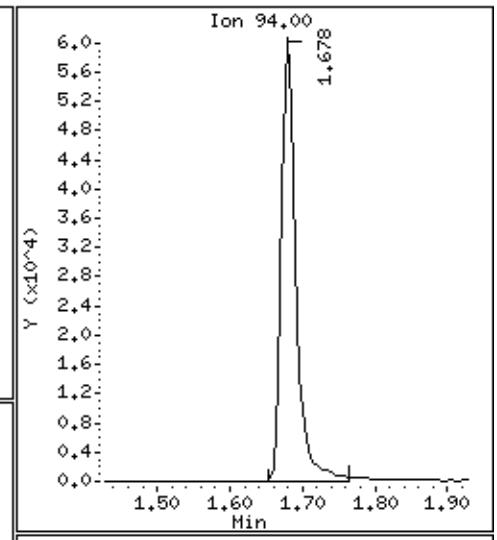
Column diameter: 0.18

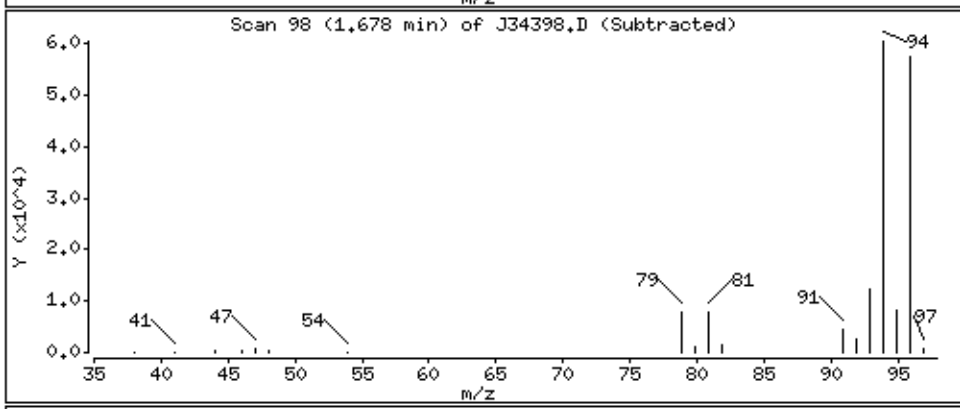
8 Bromomethane

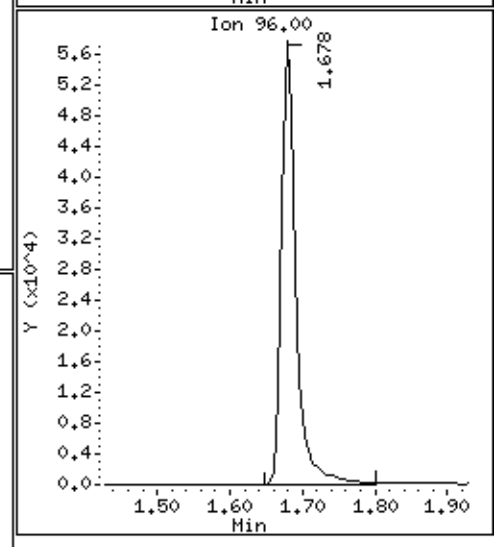
Concentration: 30.4 ug/L

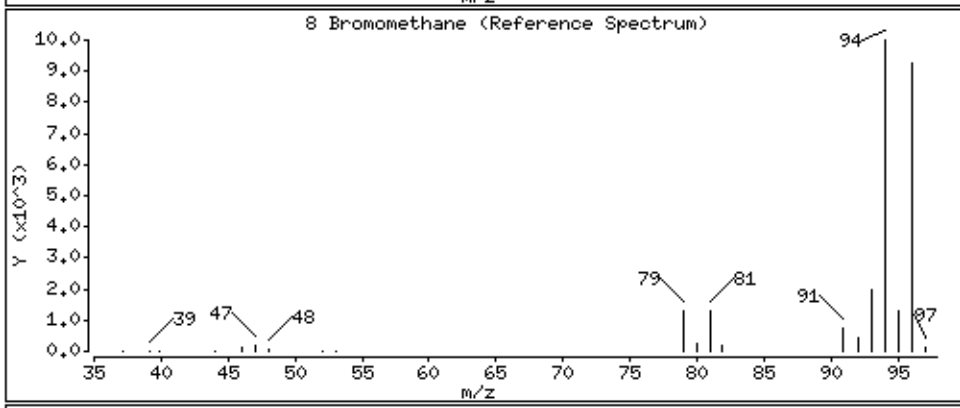
Review Code:

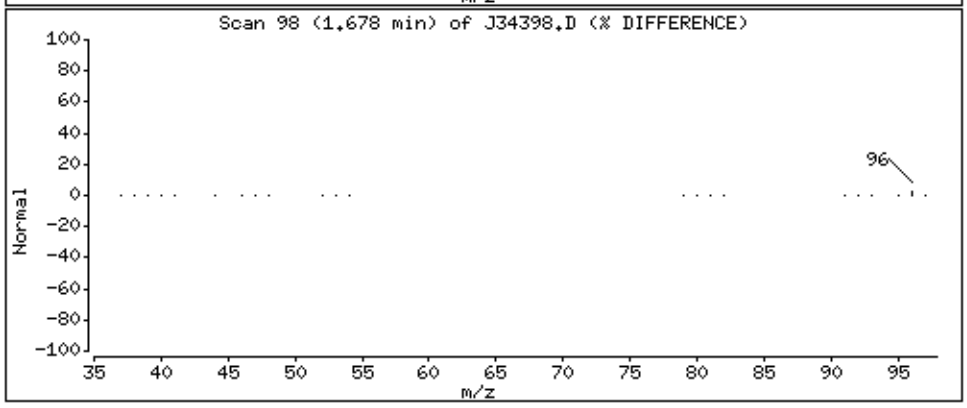












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D

Date : 25-APR-2017 13:27

Client ID: MBLCS

Instrument: 70msv6.i

Sample Info: 103009, 15067:1.25

Purge Volume: 5.0

Operator: KGG

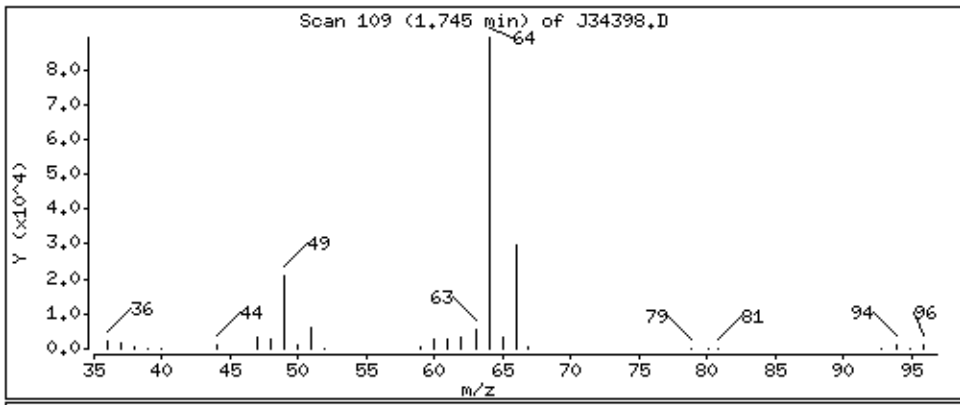
Column phase: RTX-624

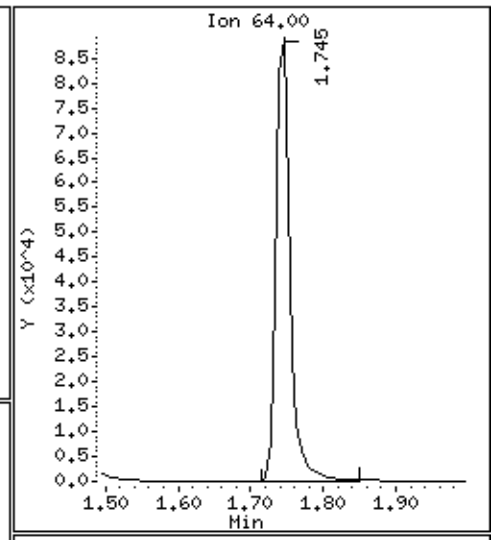
Column diameter: 0.18

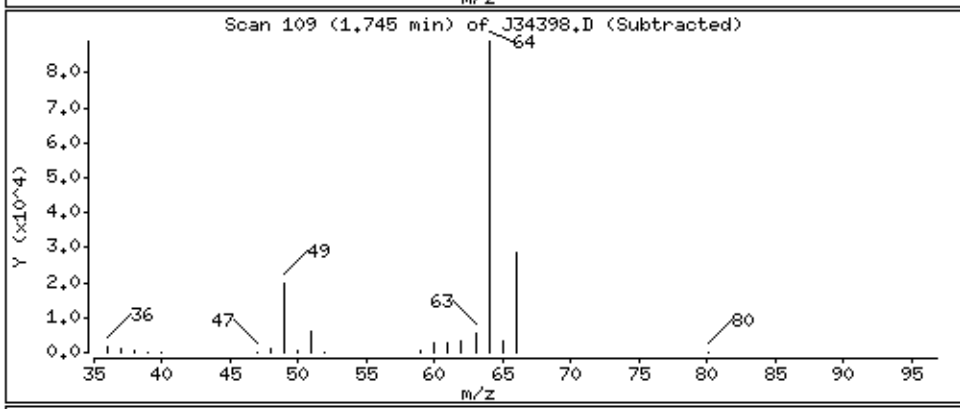
9 Chloroethane

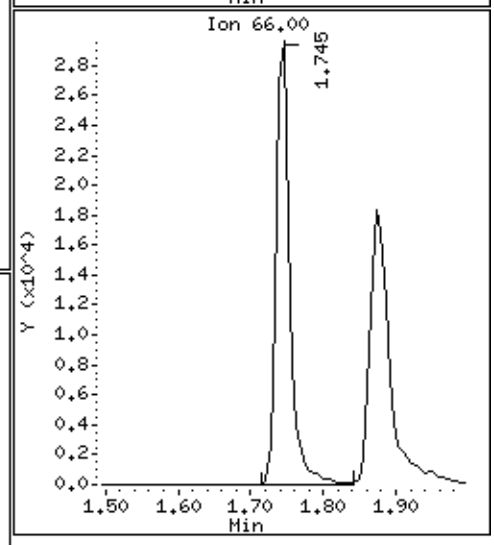
Concentration: 36.5 ug/L

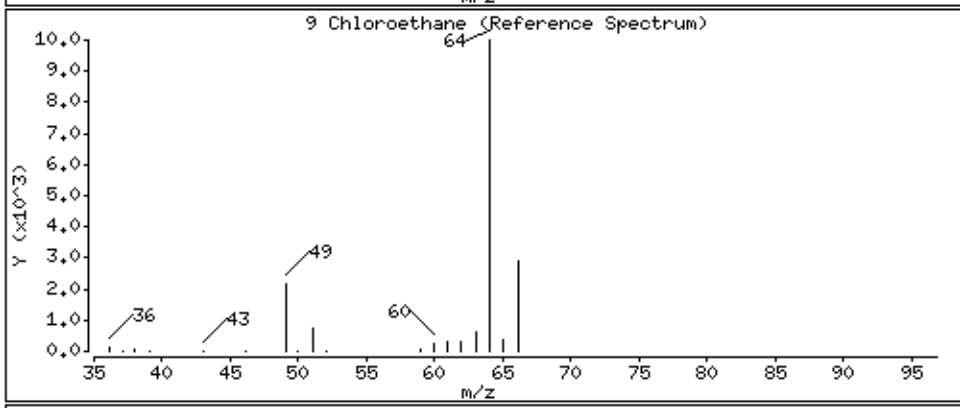
Review Code:

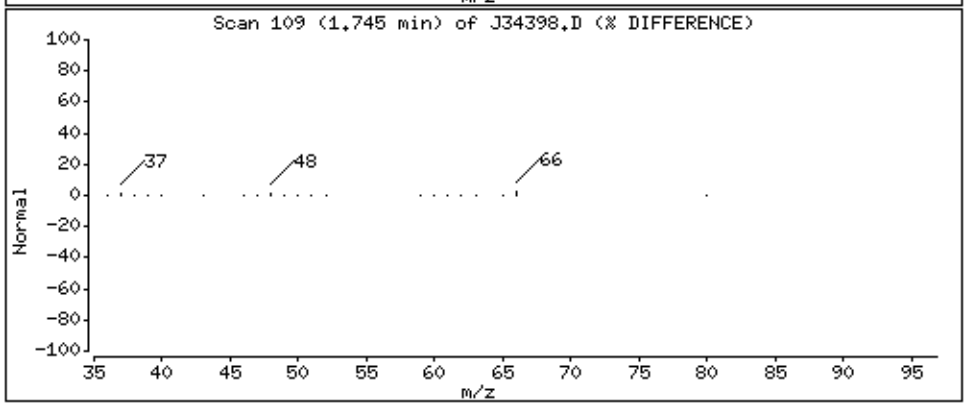












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D

Date : 25-APR-2017 13:27

Client ID: MBLCS

Instrument: 70msv6.i

Sample Info: 103009, 15067:1.25

Purge Volume: 5.0

Operator: KGG

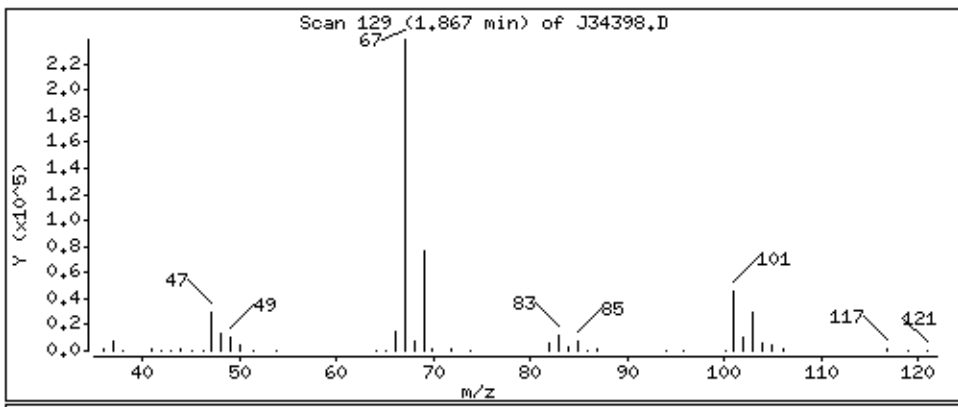
Column phase: RTX-624

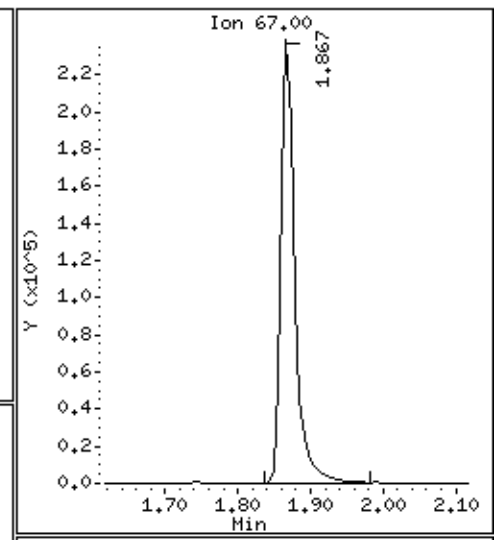
Column diameter: 0.18

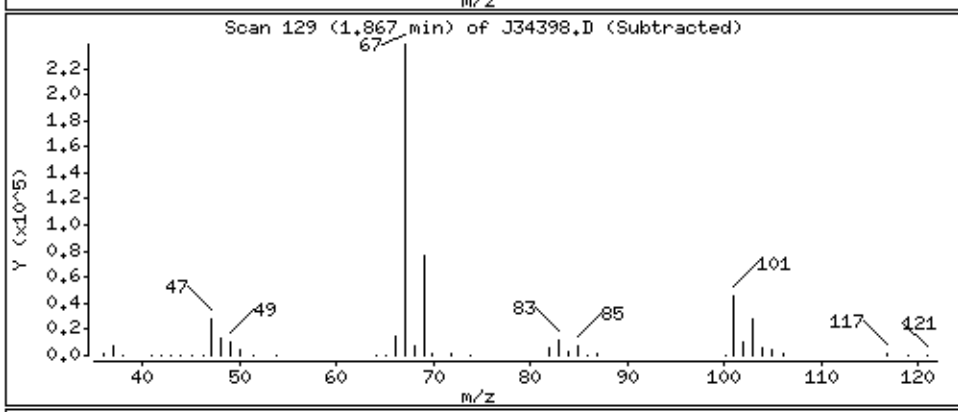
10 Dichlorofluoromethane

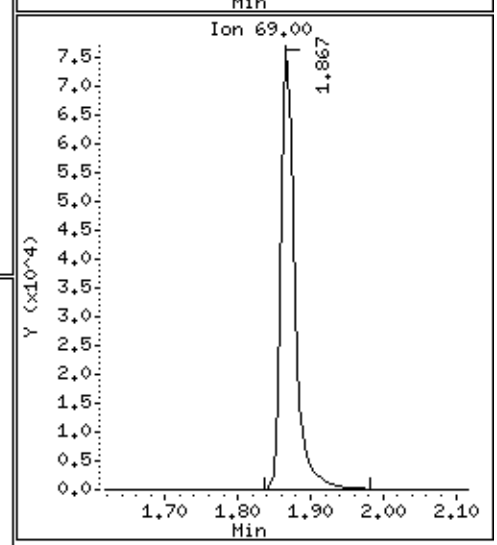
Concentration: 36.3 ug/L

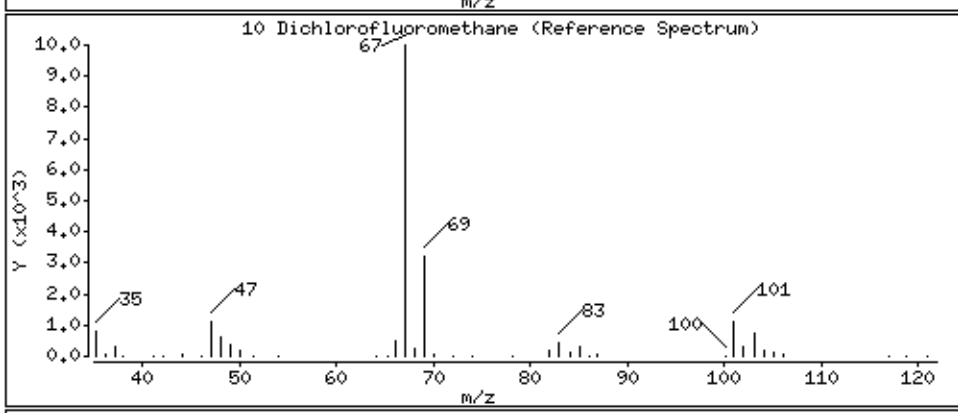
Review Code:

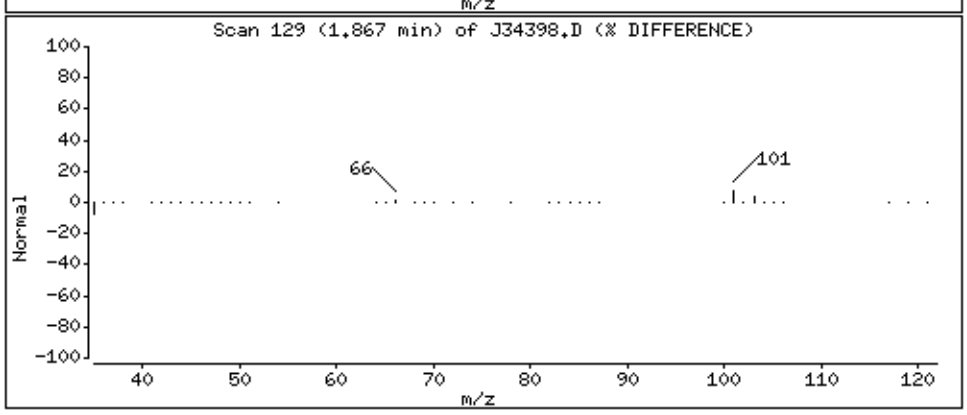












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D

Date : 25-APR-2017 13:27

Client ID: MBLCS

Instrument: 70msv6.i

Sample Info: 103009, 15067:1.25

Purge Volume: 5.0

Operator: KGG

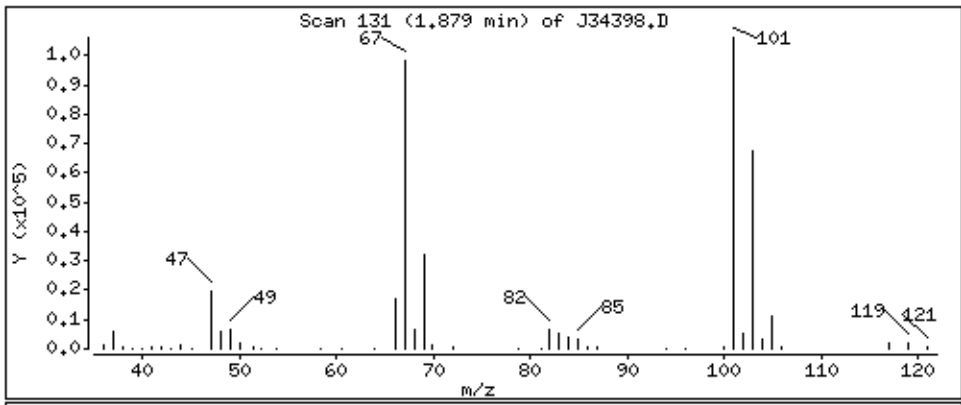
Column phase: RTX-624

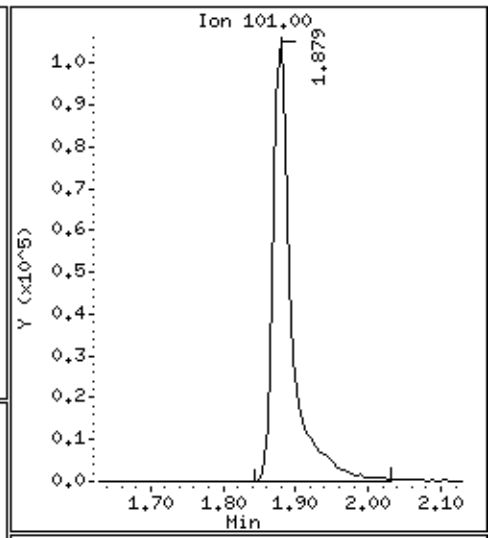
Column diameter: 0.18

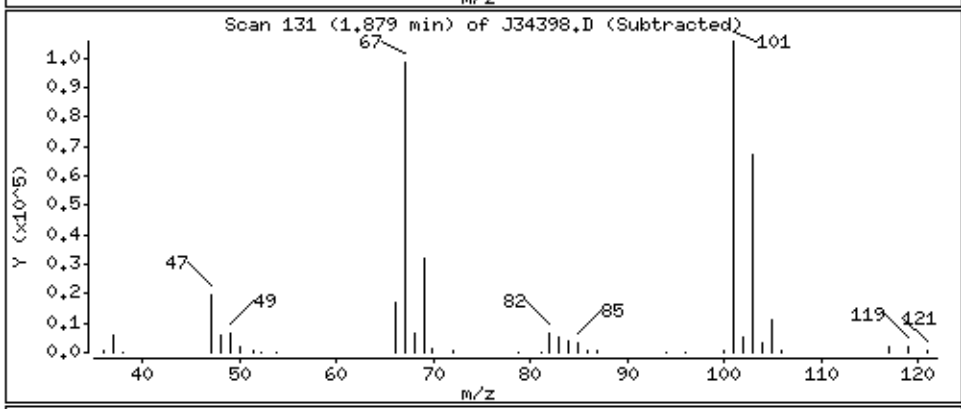
11 Trichlorofluoromethane

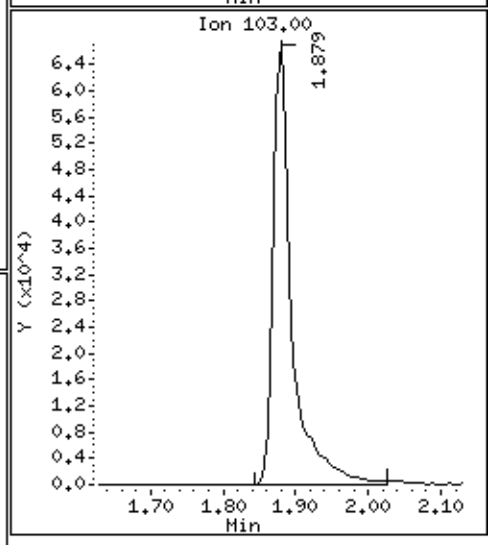
Concentration: 37.4 ug/L

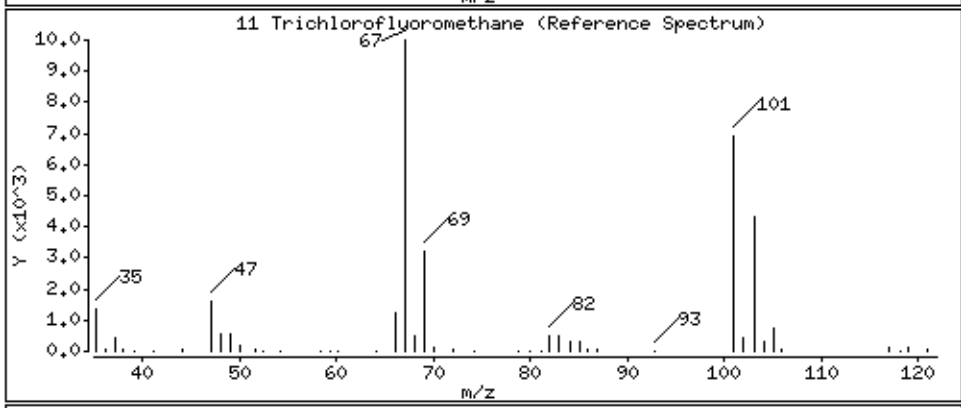
Review Code:

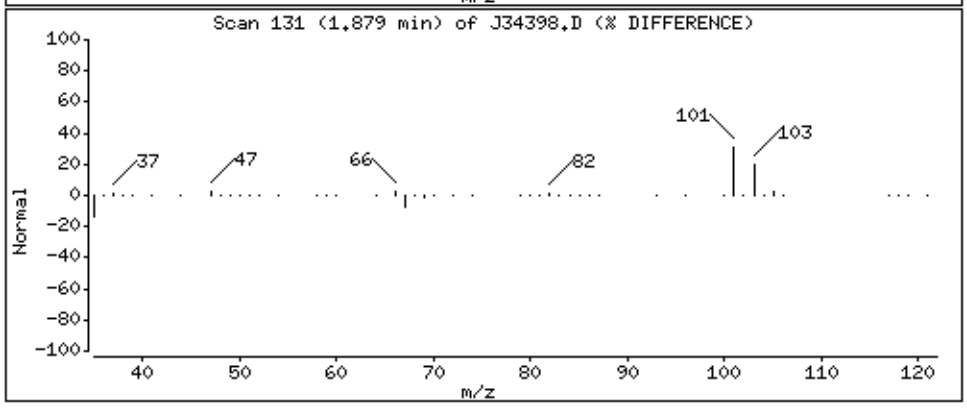












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D

Date : 25-APR-2017 13:27

Client ID: MBLCS

Instrument: 70msv6.i

Sample Info: 103009, 15067:1.25

Purge Volume: 5.0

Operator: KGG

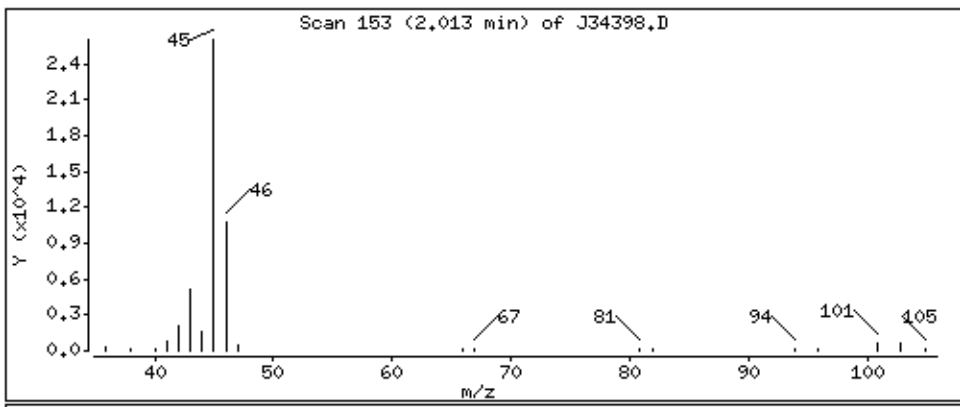
Column phase: RTX-624

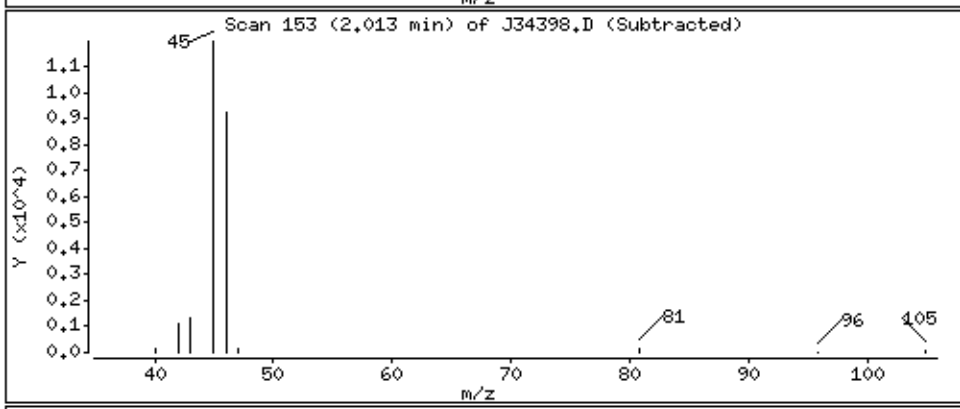
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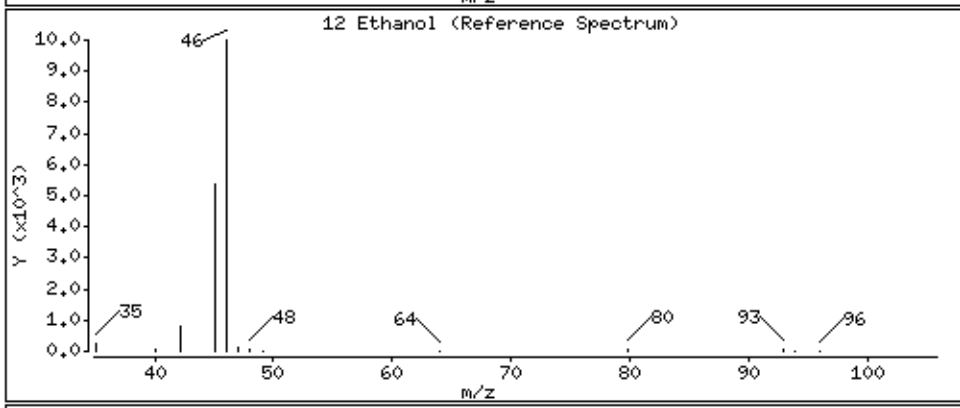
12 Ethanol

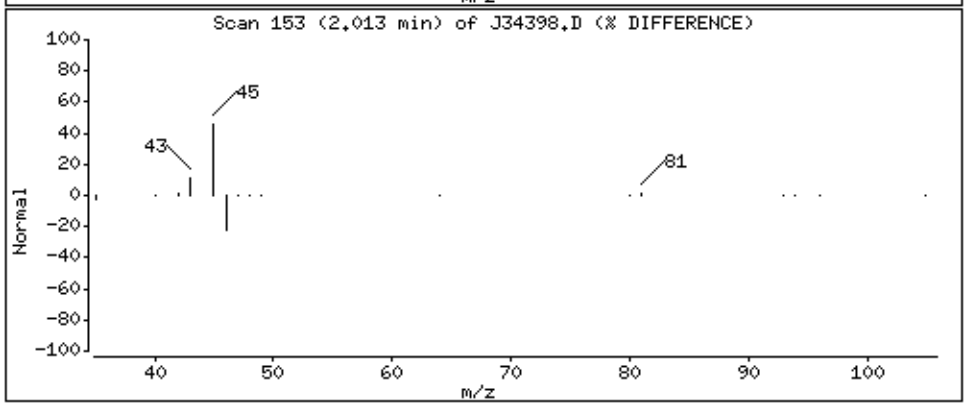
Concentration: 741 ug/L

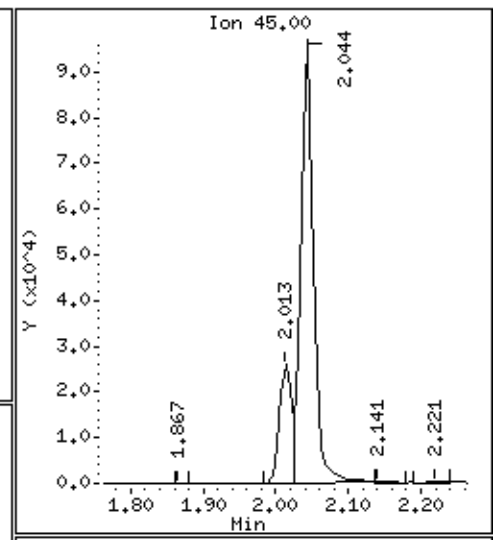
Review Code:

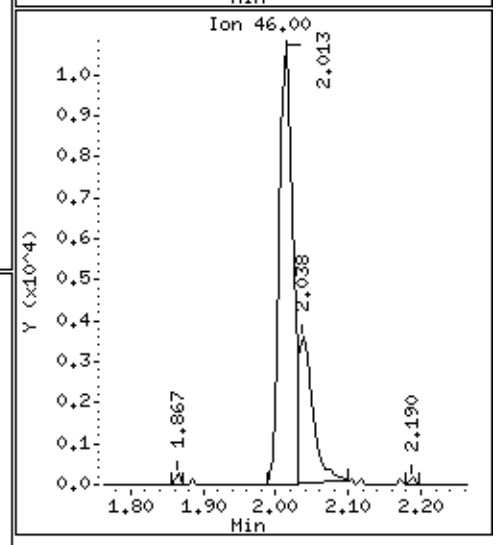












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D

Date : 25-APR-2017 13:27

Client ID: MBLCS

Instrument: 70msv6.i

Sample Info: 103009, 15067:1.25

Purge Volume: 5.0

Operator: KGG

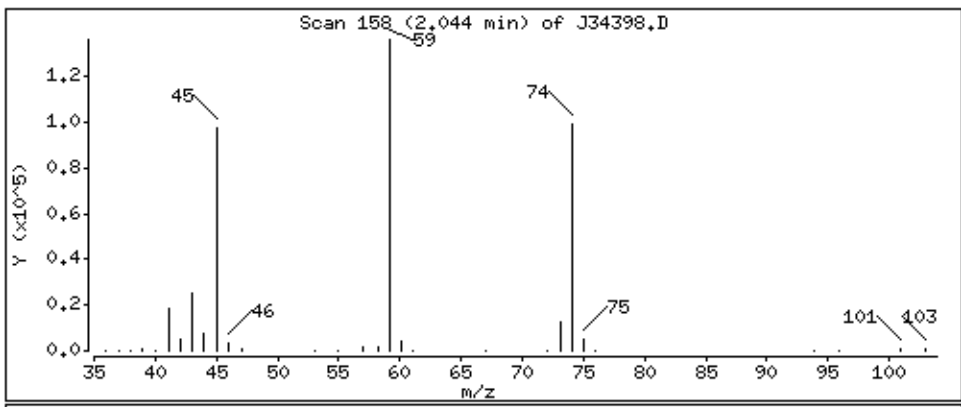
Column phase: RTX-624

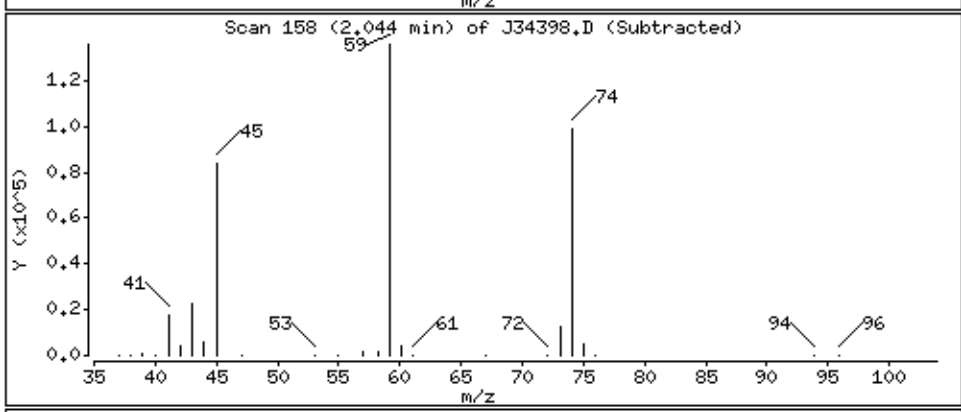
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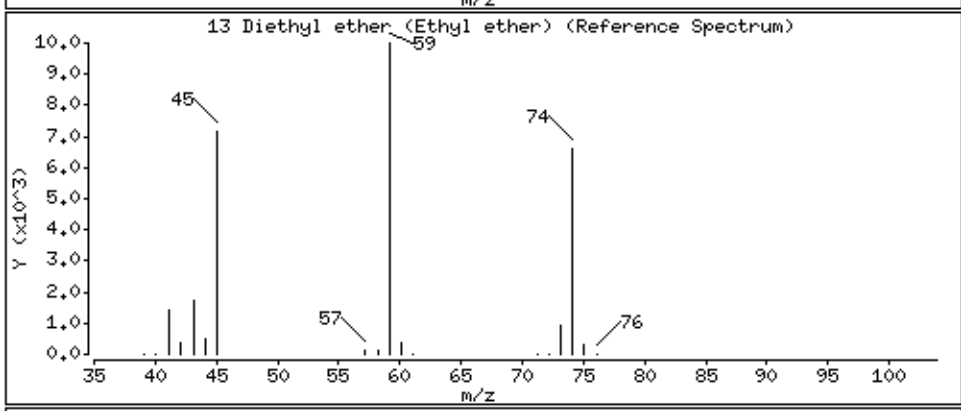
13 Diethyl ether (Ethyl ether)

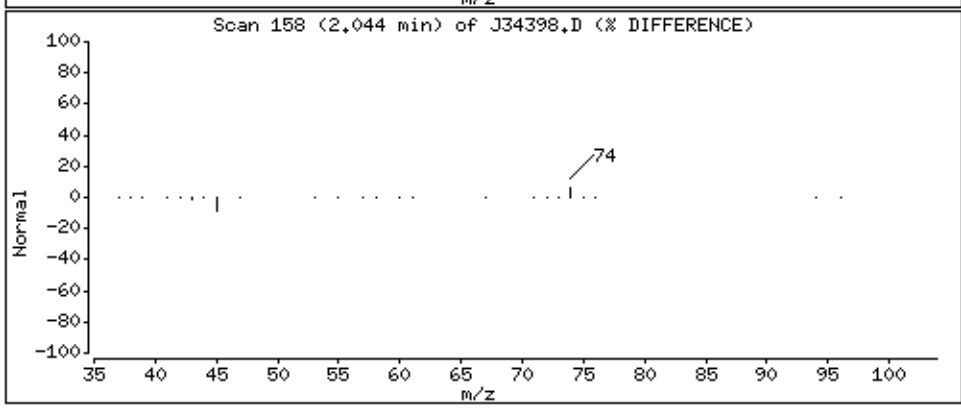
Concentration: 36.9 ug/L

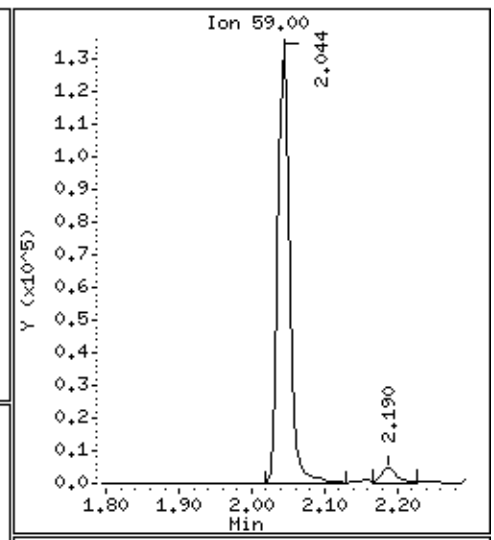
Review Code:

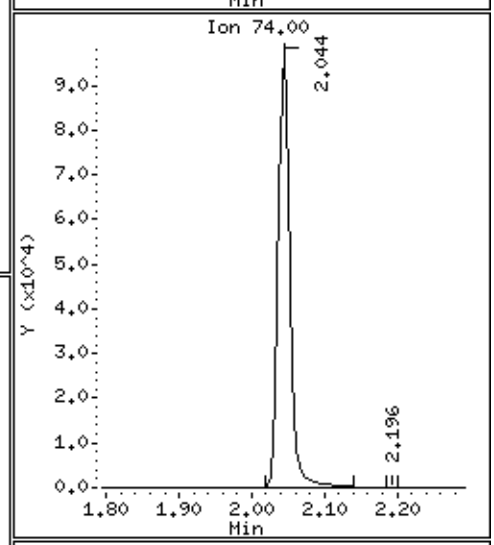


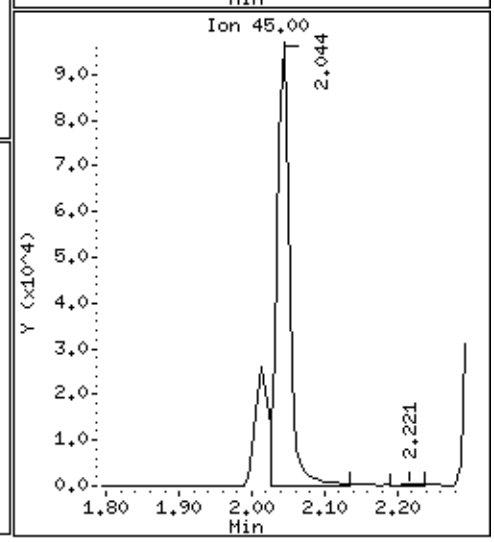












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D

Date : 25-APR-2017 13:27

Client ID: MBLCS

Instrument: 70msv6.i

Sample Info: 103009, 15067:1.25

Purge Volume: 5.0

Operator: KGG

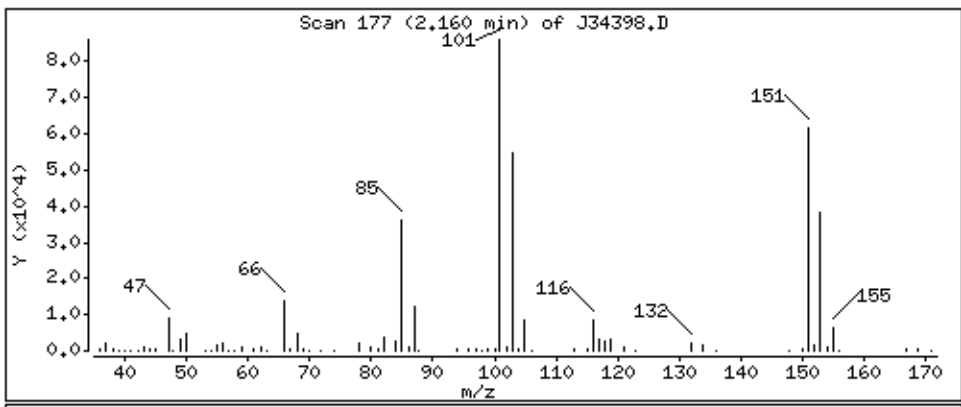
Column phase: RTX-624

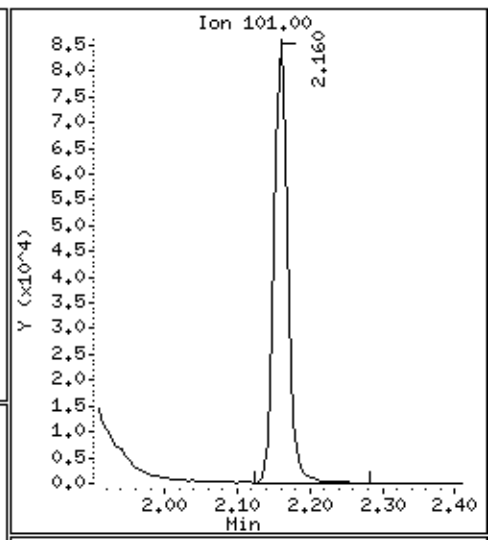
Column diameter: 0.18

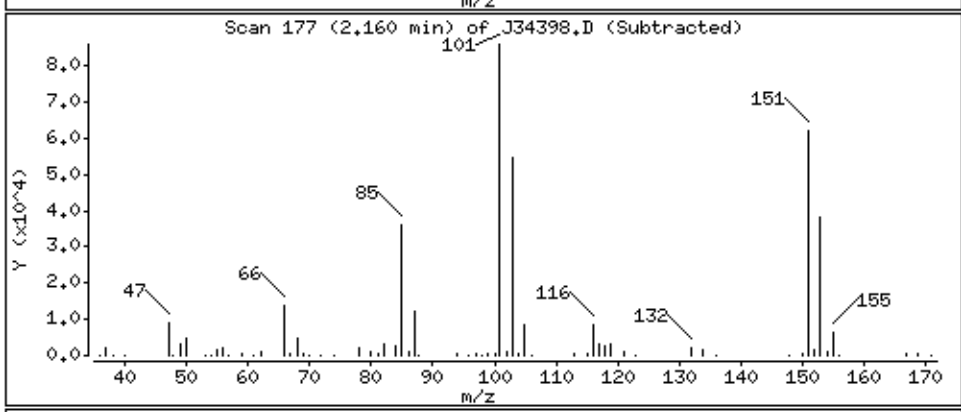
16 1,1,2-Trichlorotrifluoroethane

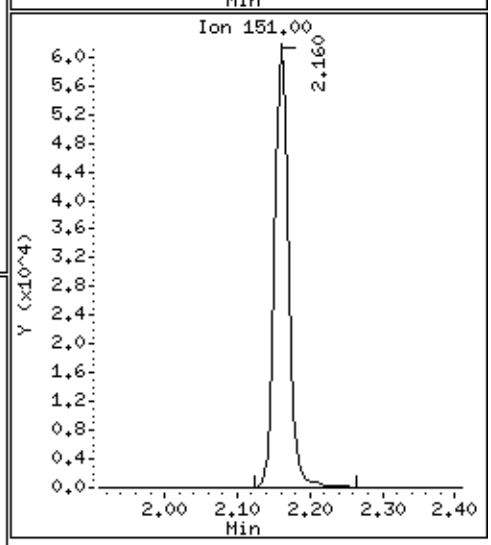
Concentration: 38.4 ug/L

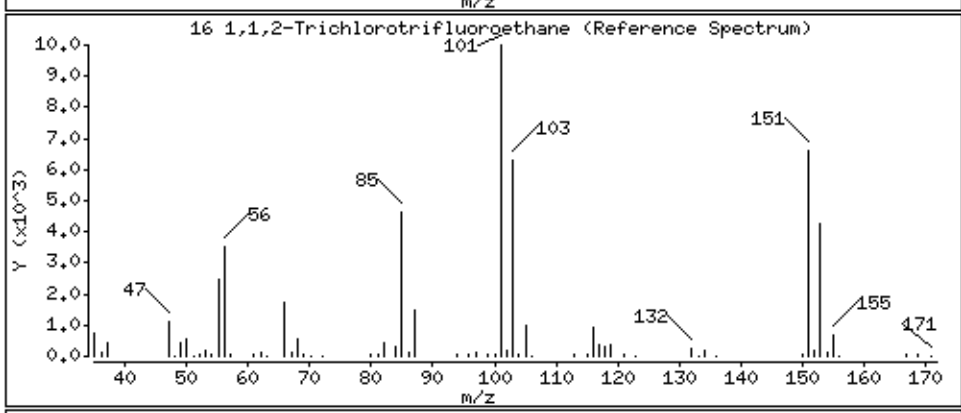
Review Code:

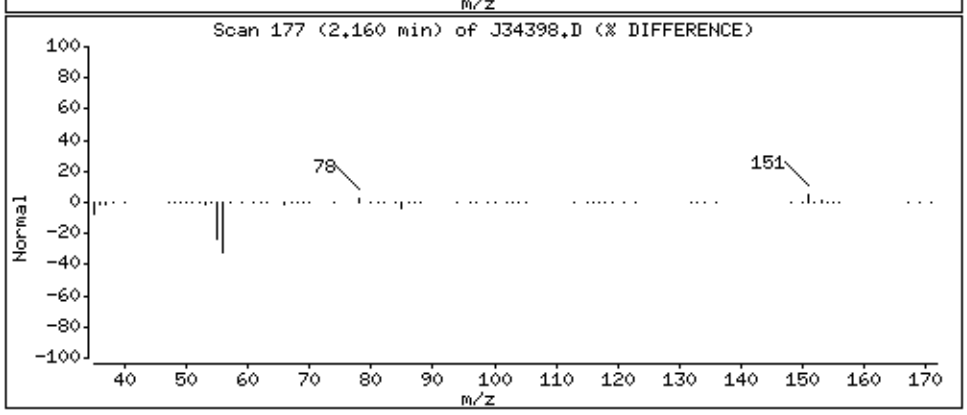












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D

Date : 25-APR-2017 13:27

Client ID: MBLCS

Instrument: 70msv6.i

Sample Info: 103009, 15067:1.25

Purge Volume: 5.0

Operator: KGG

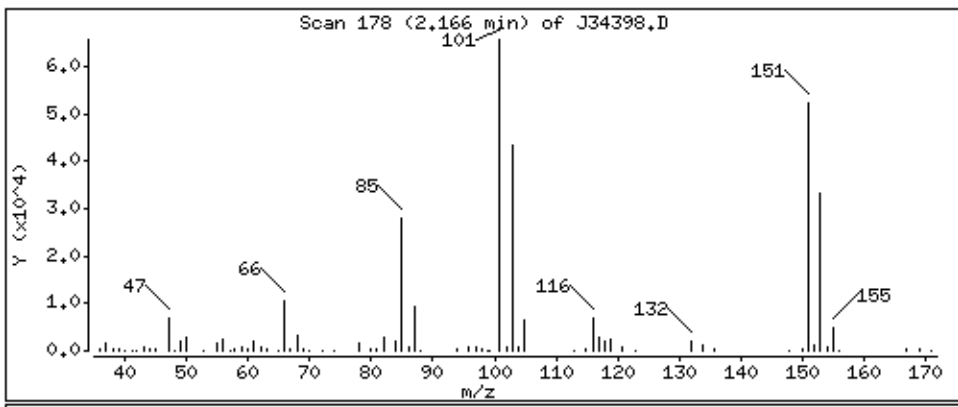
Column phase: RTX-624

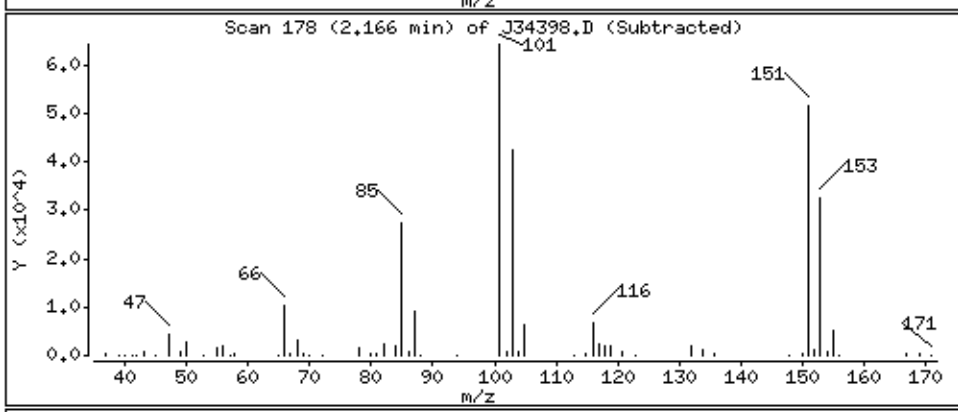
Column diameter: 0.18

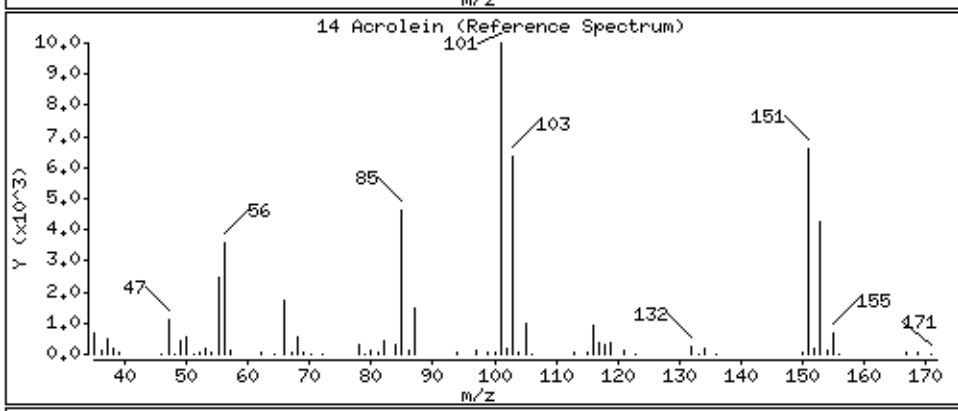
14 Acrolein

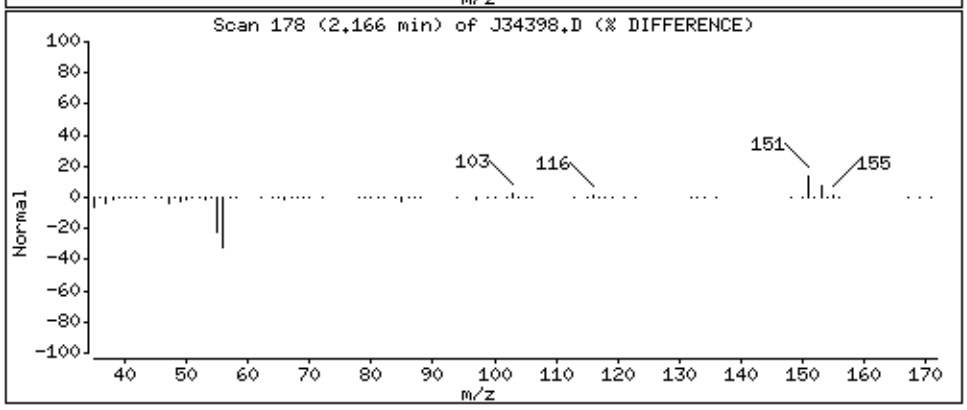
Concentration: 5.62 ug/L

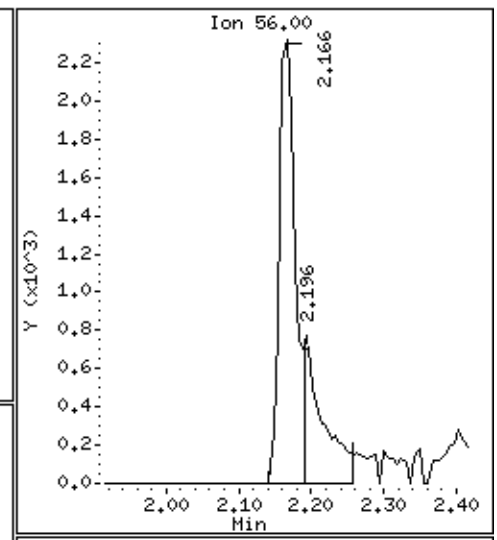
Review Code:

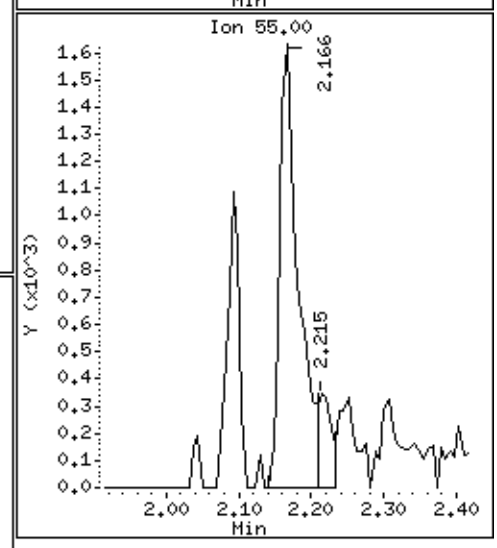












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D

Date : 25-APR-2017 13:27

Client ID: MBLCS

Instrument: 70msv6.i

Sample Info: 103009, 15067:1.25

Purge Volume: 5.0

Operator: KGG

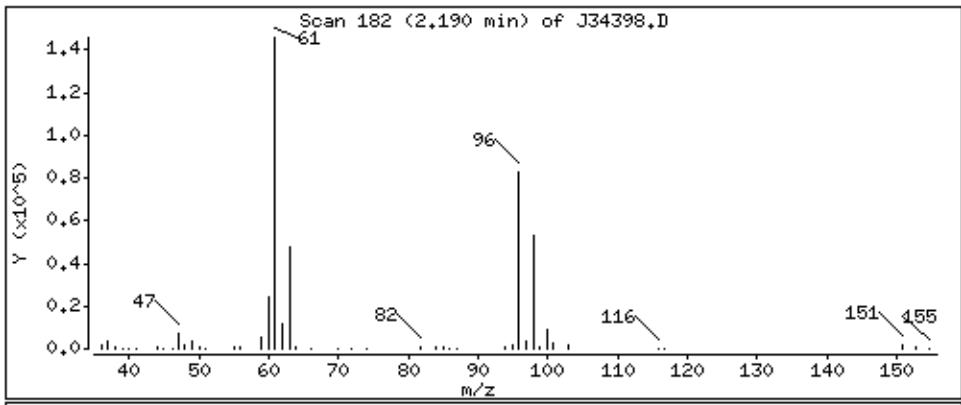
Column phase: RTX-624

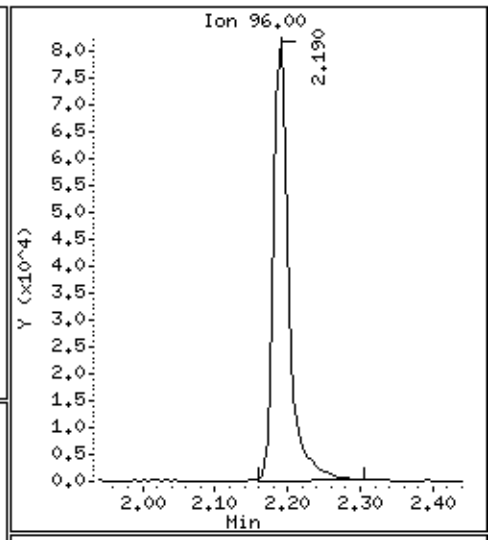
Column diameter: 0.18

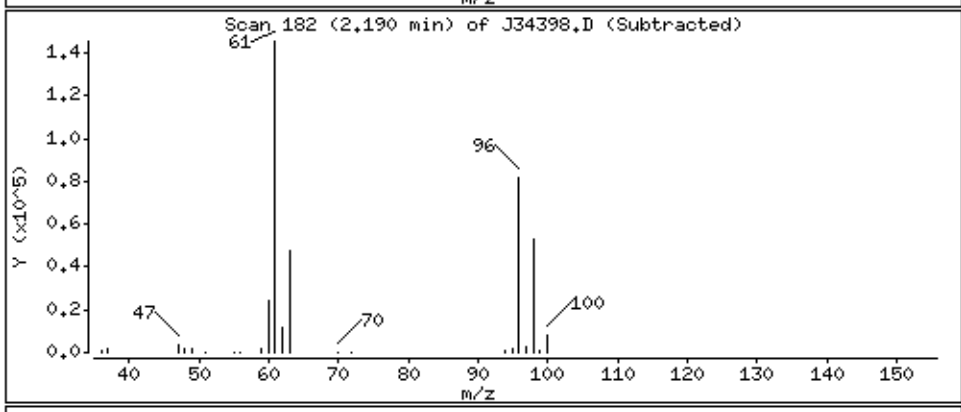
15 1,1-Dichloroethene

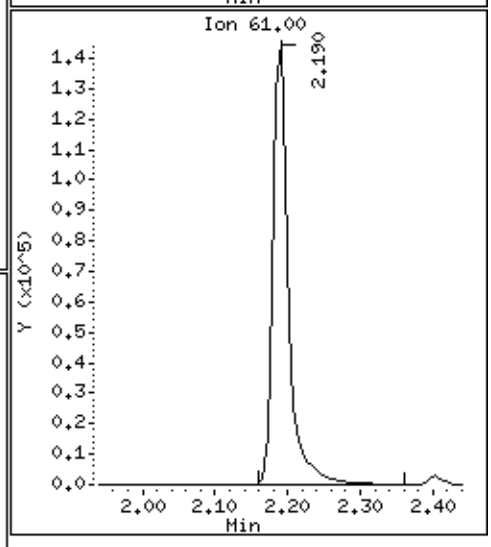
Concentration: 40.9 ug/L

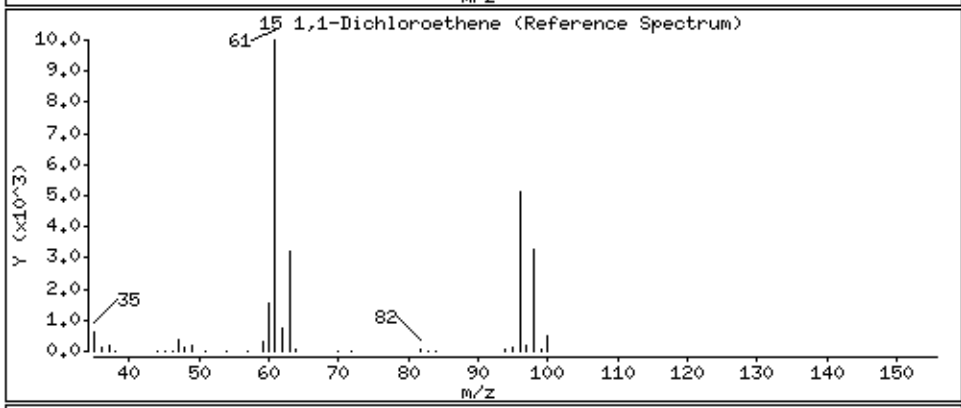
Review Code:

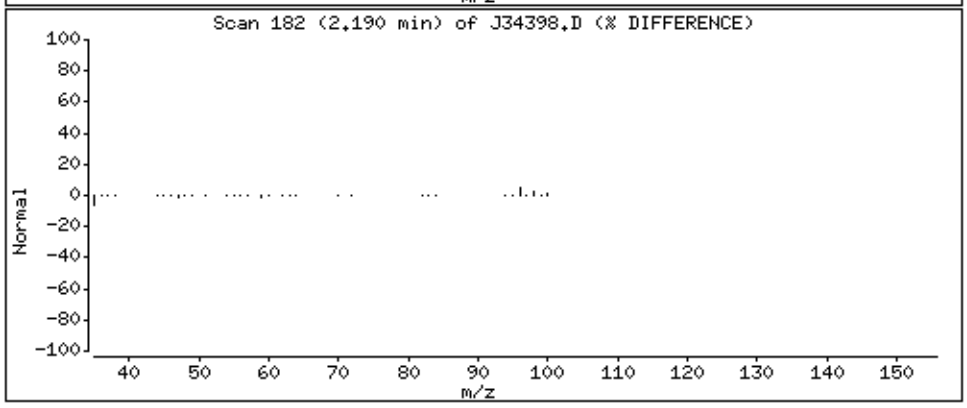












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D

Date : 25-APR-2017 13:27

Client ID: MBLCS

Instrument: 70msv6.i

Sample Info: 103009, 15067:1.25

Purge Volume: 5.0

Operator: KGG

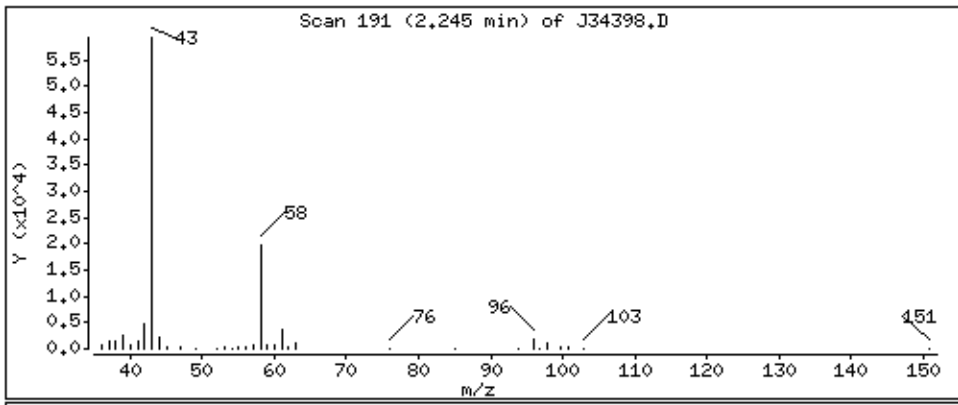
Column phase: RTX-624

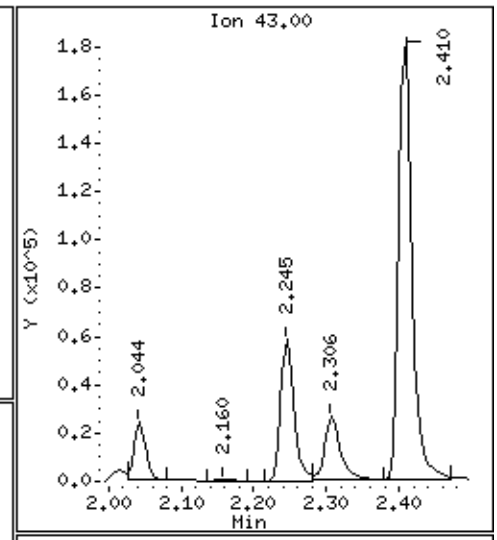
Column diameter: 0.18

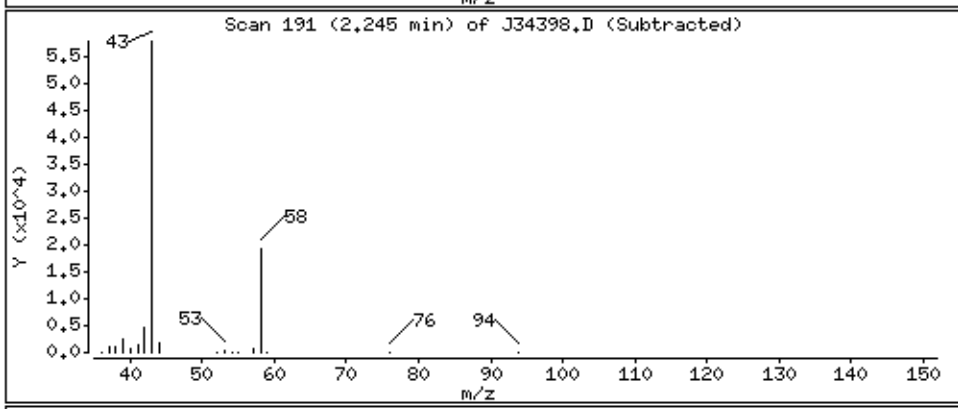
17 Acetone

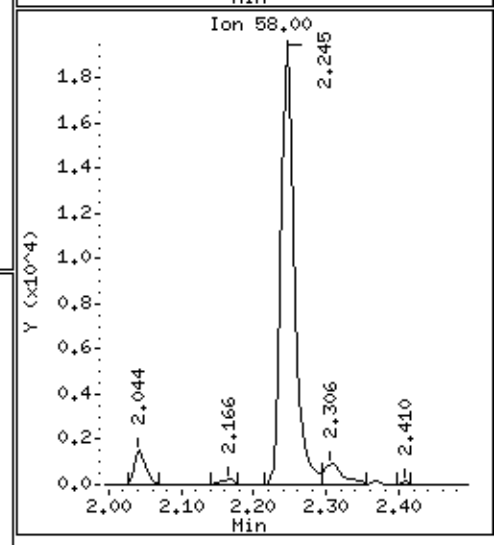
Concentration: 50.6 ug/L

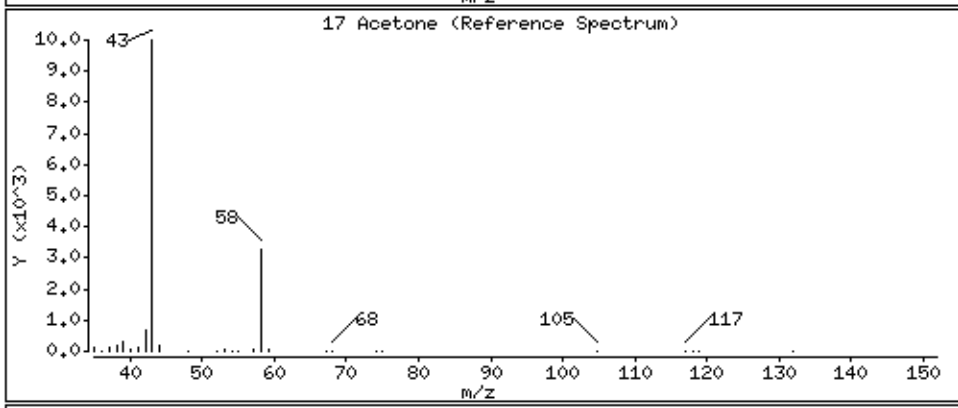
Review Code:

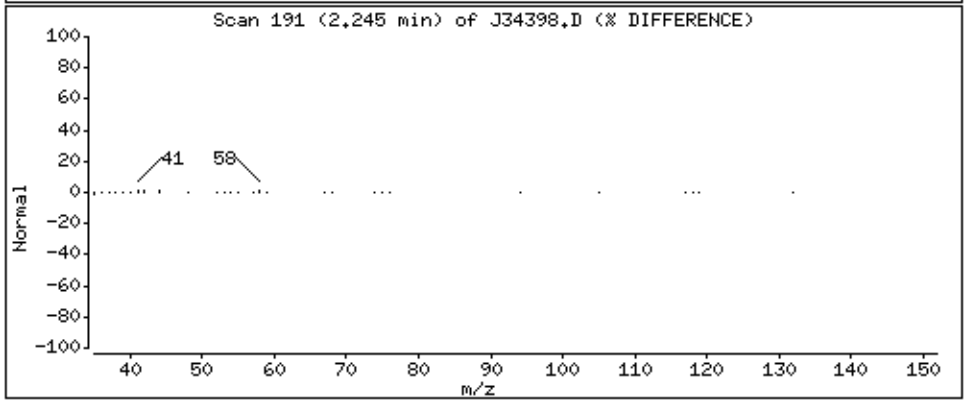












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D

Date : 25-APR-2017 13:27

Client ID: MBLCS

Instrument: 70msv6.i

Sample Info: 103009, 15067:1.25

Purge Volume: 5.0

Operator: KGG

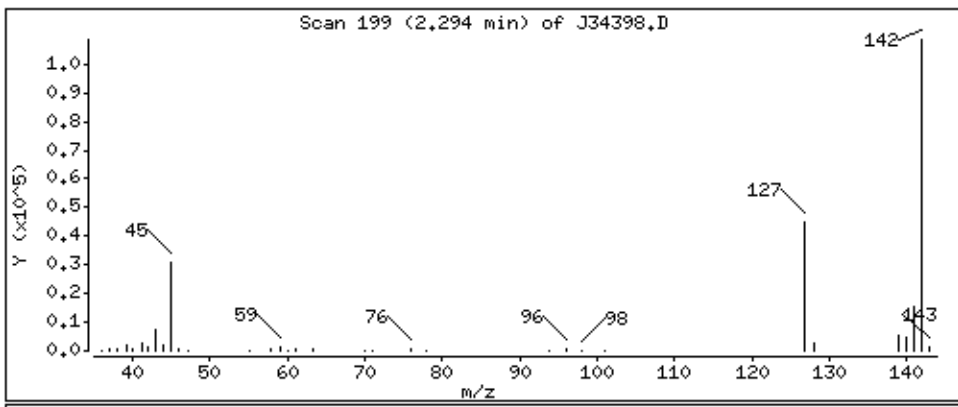
Column phase: RTX-624

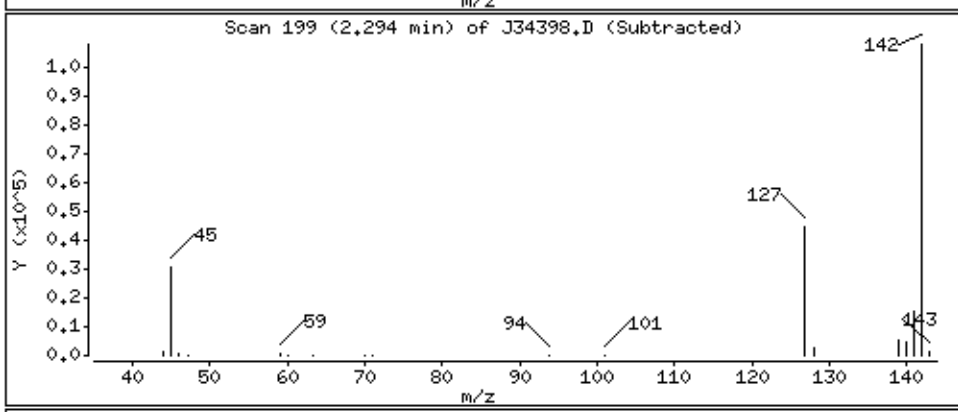
Column diameter: 0.18

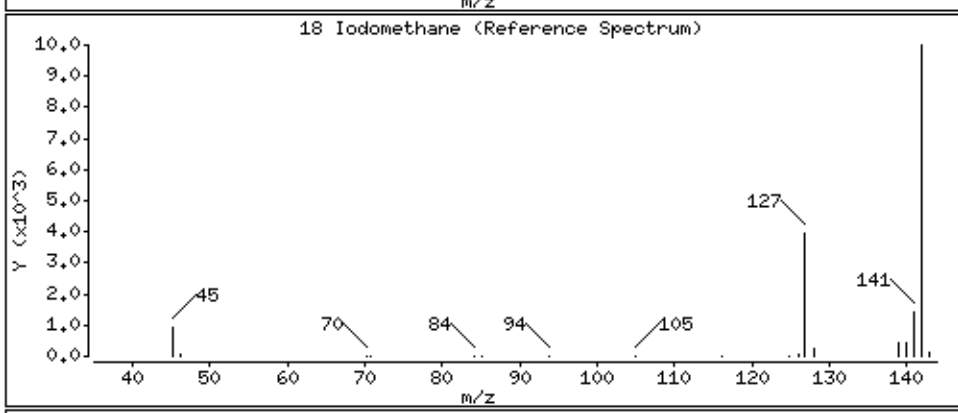
18 Iodomethane

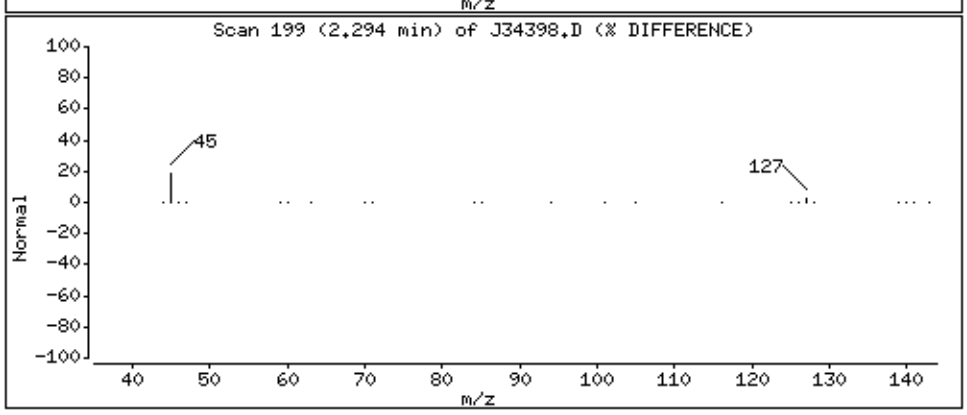
Concentration: 35.8 ug/L

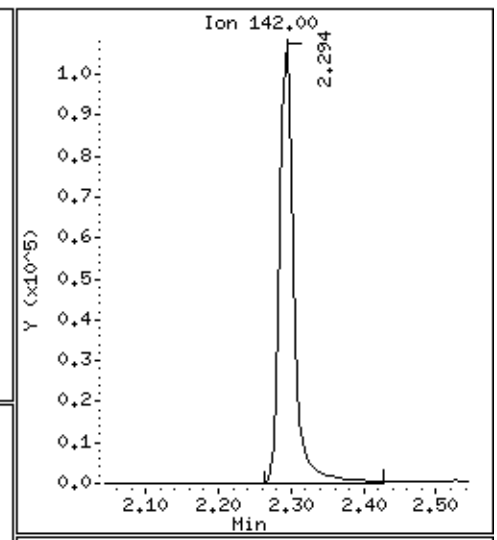
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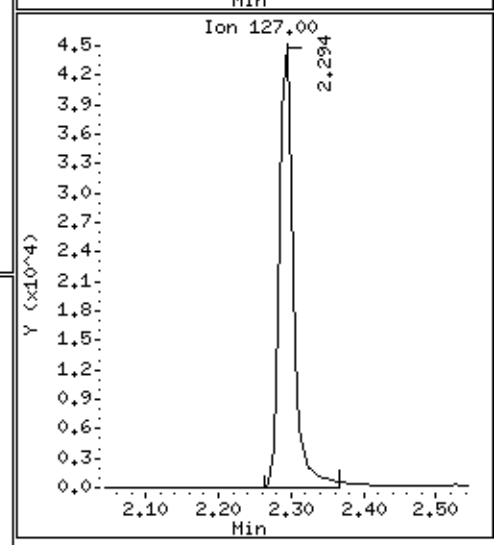












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D

Date : 25-APR-2017 13:27

Client ID: MBLCS

Instrument: 70msv6.i

Sample Info: 103009, 15067:1.25

Purge Volume: 5.0

Operator: KGG

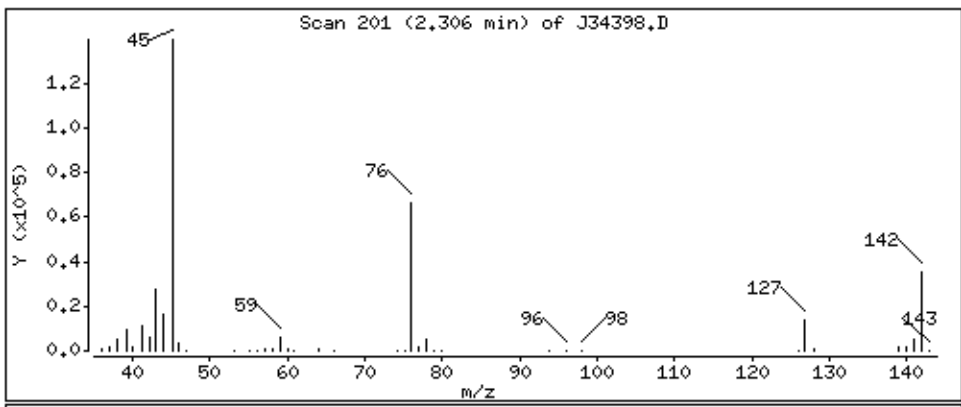
Column phase: RTX-624

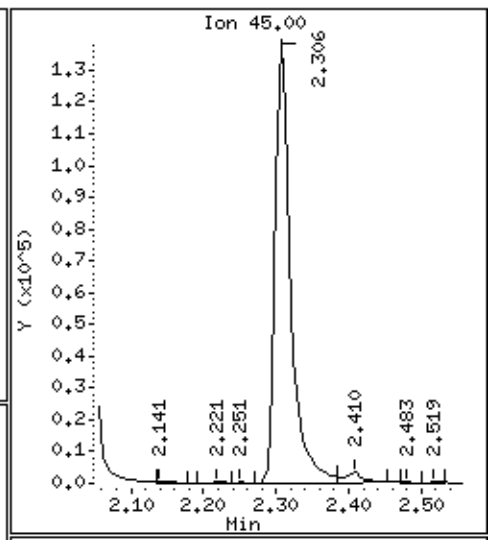
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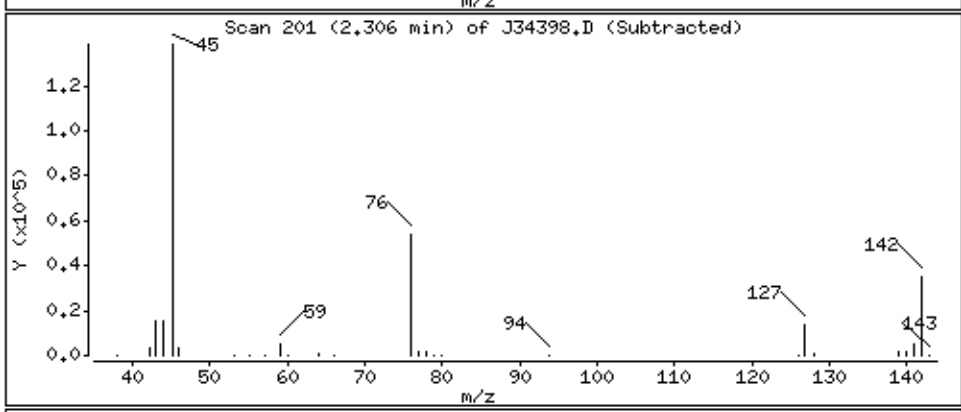
19 2-Propanol

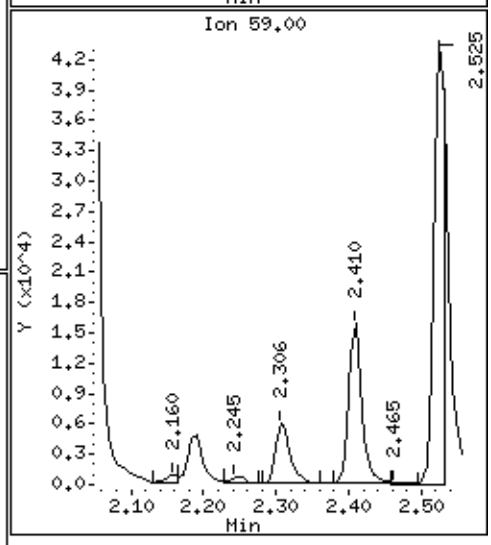
Concentration: 754 ug/L

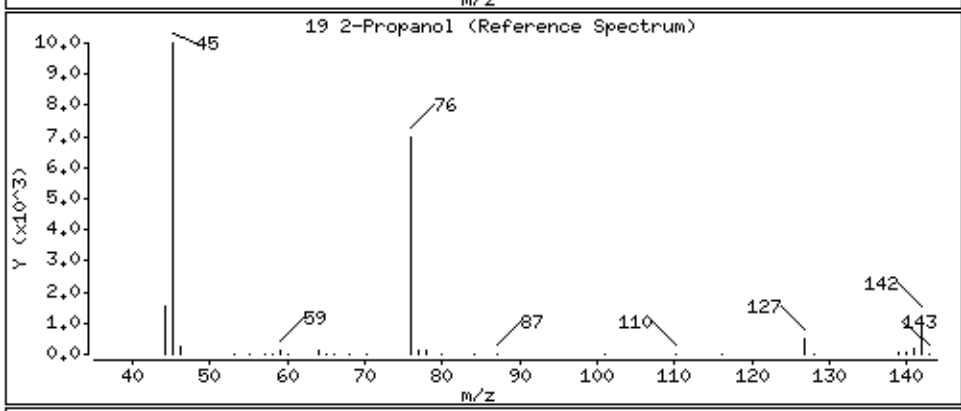
Review Code:

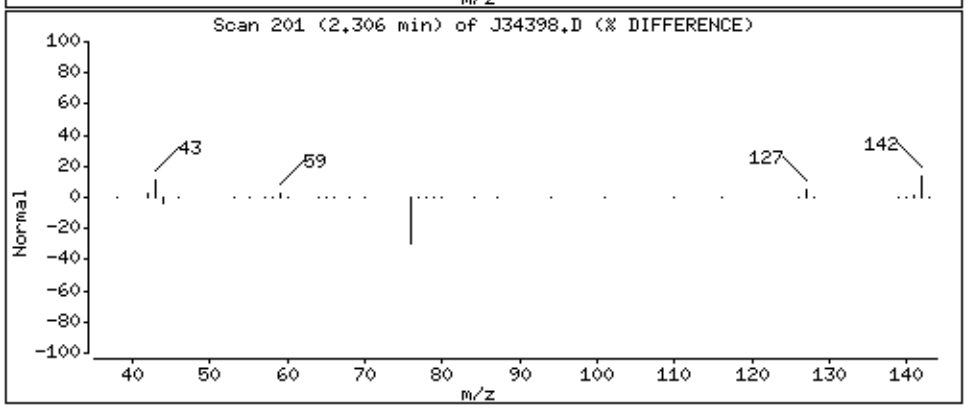












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D

Date : 25-APR-2017 13:27

Client ID: MBLCS

Instrument: 70msv6.i

Sample Info: 103009, 15067:1.25

Purge Volume: 5.0

Operator: KGG

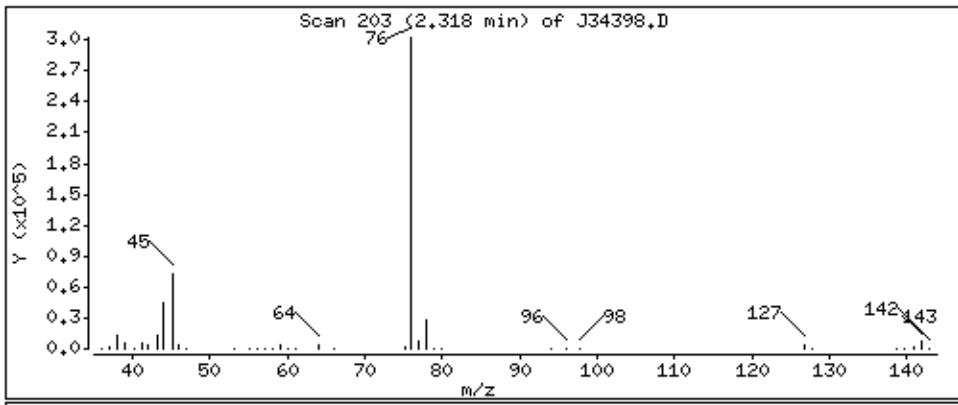
Column phase: RTX-624

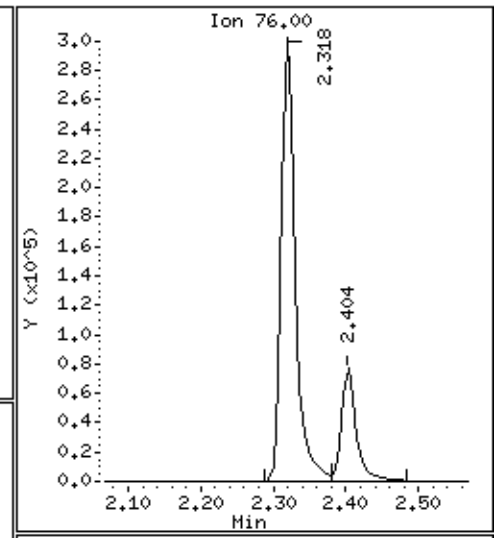
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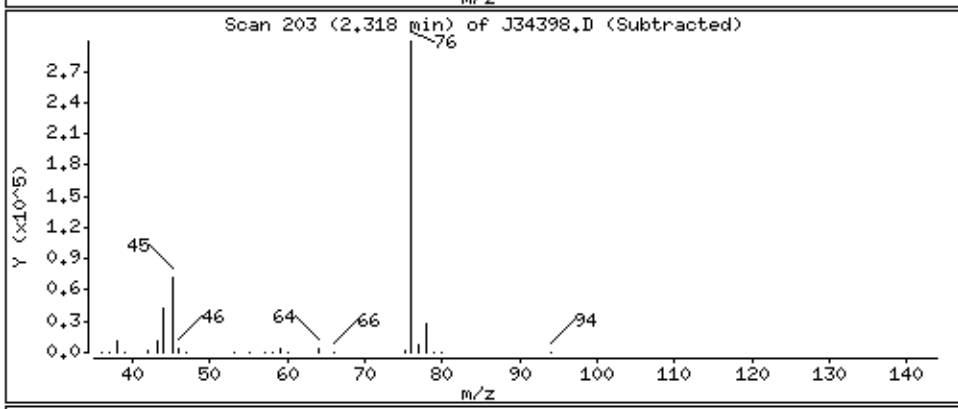
20 Carbon disulfide

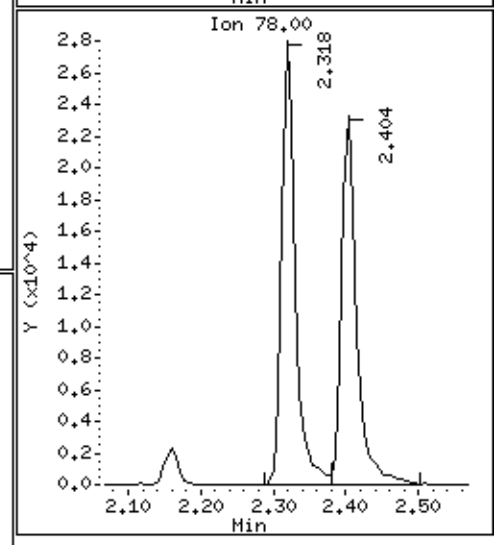
Concentration: 38.9 ug/L

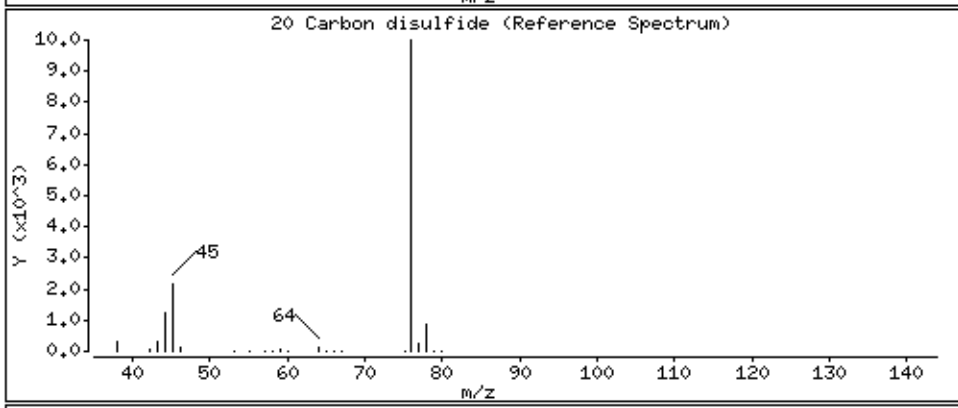
Review Code:

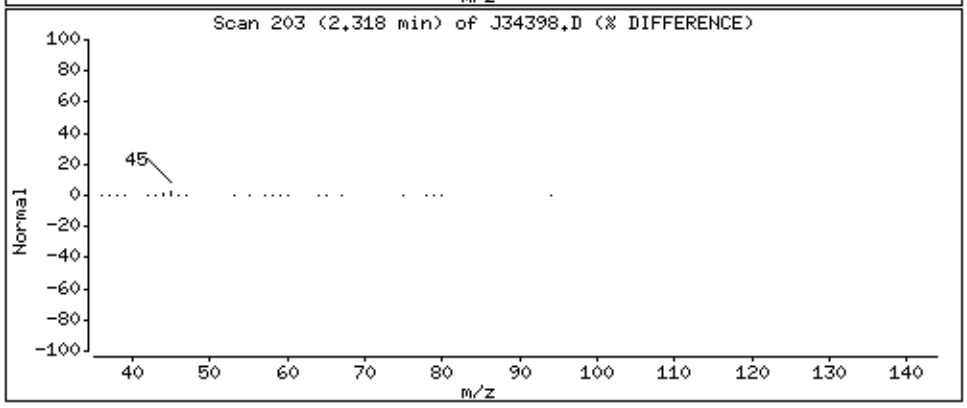












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D

Date : 25-APR-2017 13:27

Client ID: MBLCS

Instrument: 70msv6.i

Sample Info: 103009, 15067:1.25

Purge Volume: 5.0

Operator: KGG

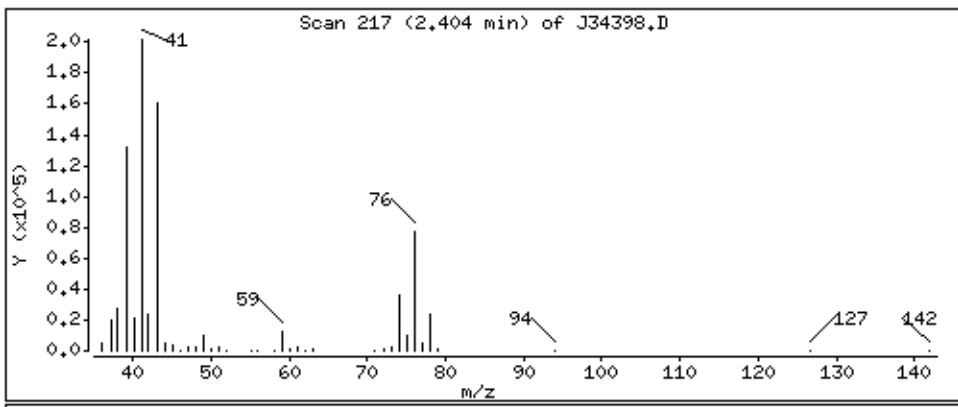
Column phase: RTX-624

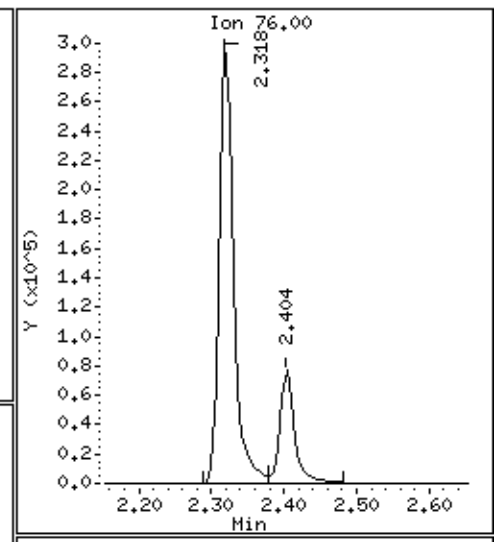
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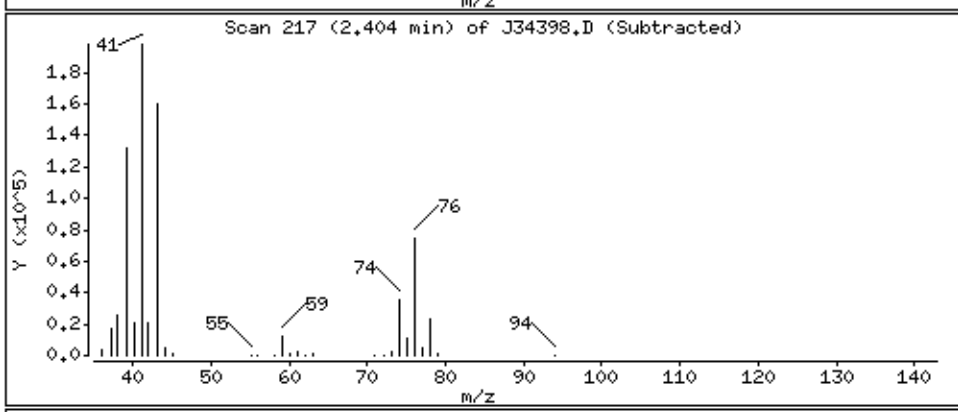
21 Allyl chloride

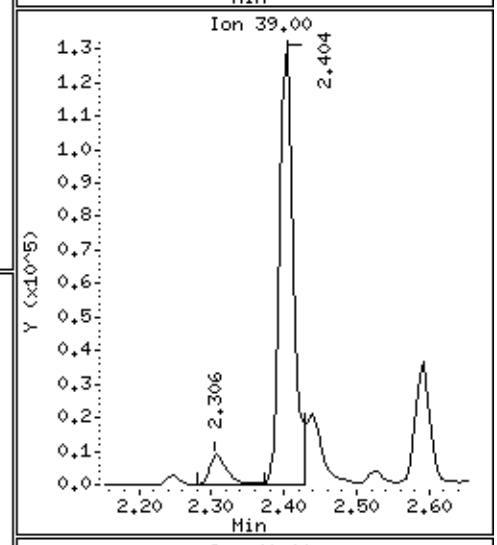
Concentration: 42.4 ug/L

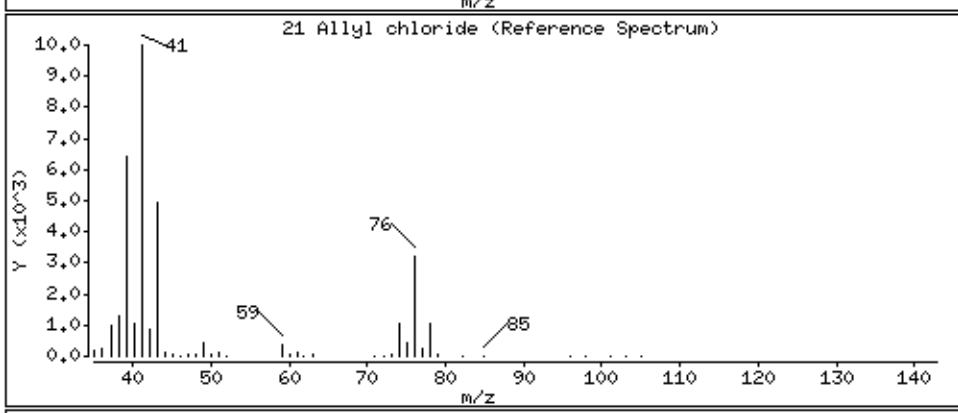
Review Code:

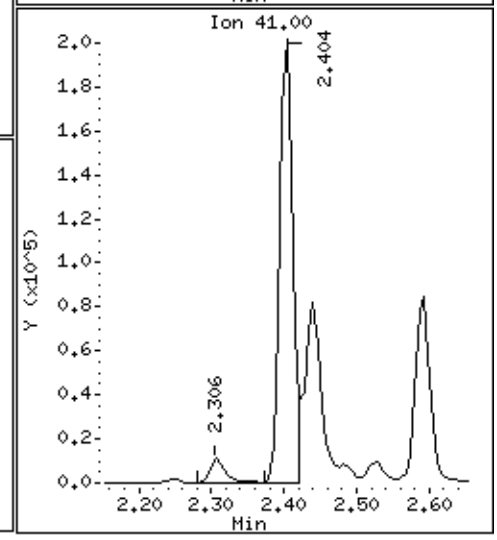


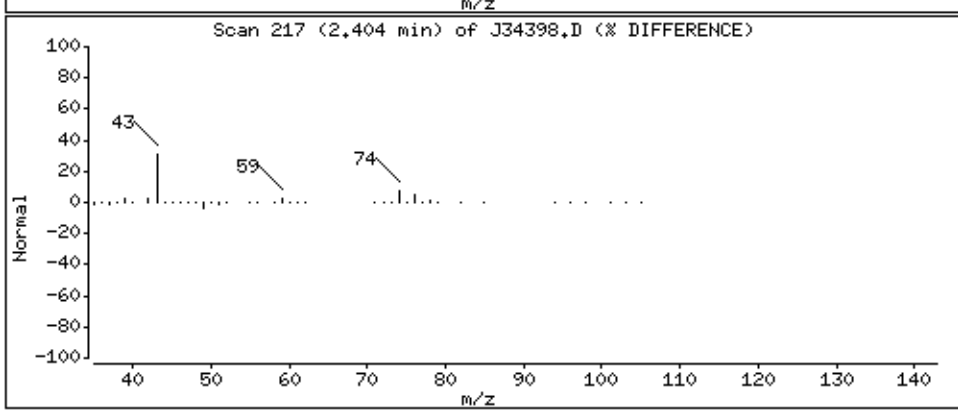












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D

Date : 25-APR-2017 13:27

Client ID: MBLCS

Instrument: 70msv6.i

Sample Info: 103009, 15067:1.25

Purge Volume: 5.0

Operator: KGG

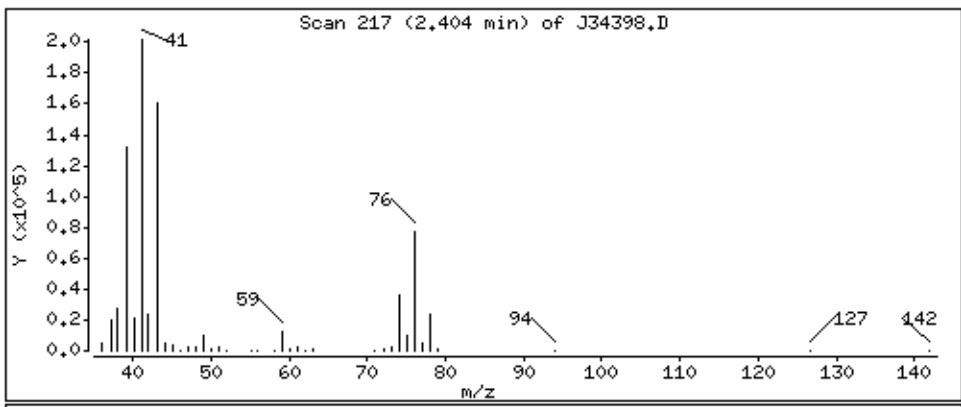
Column phase: RTX-624

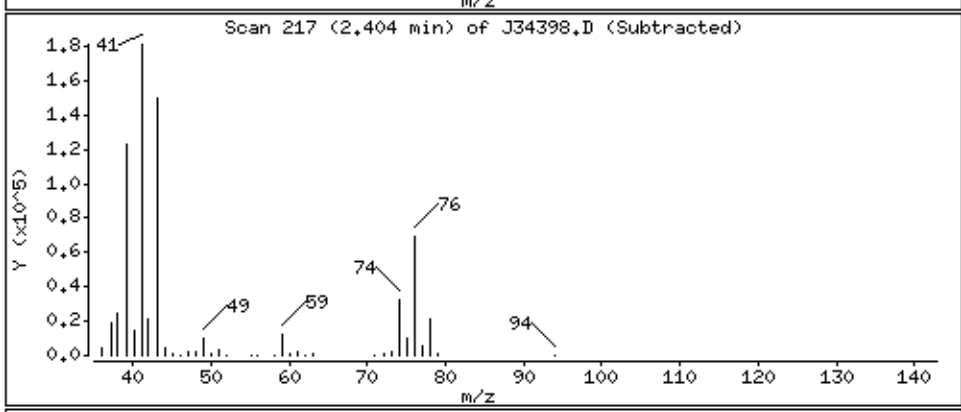
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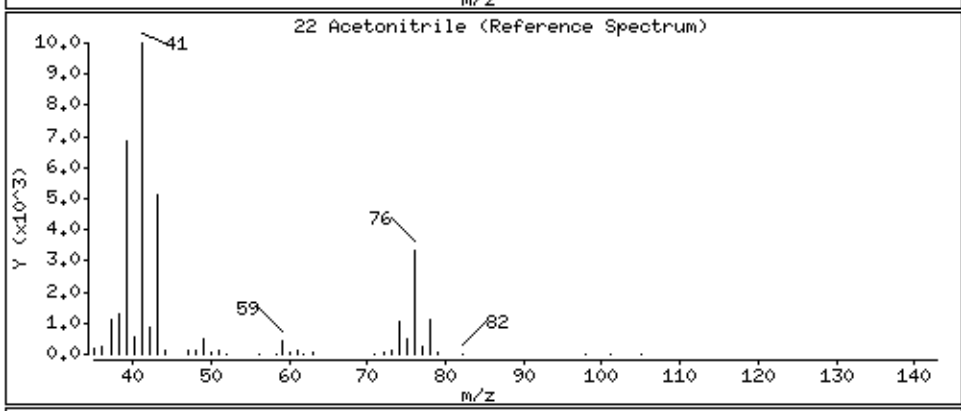
22 Acetonitrile

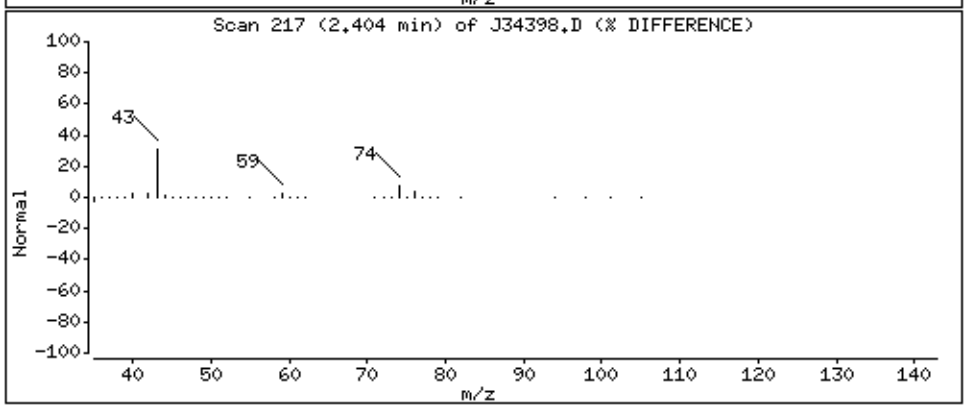
Concentration: 150 ug/L

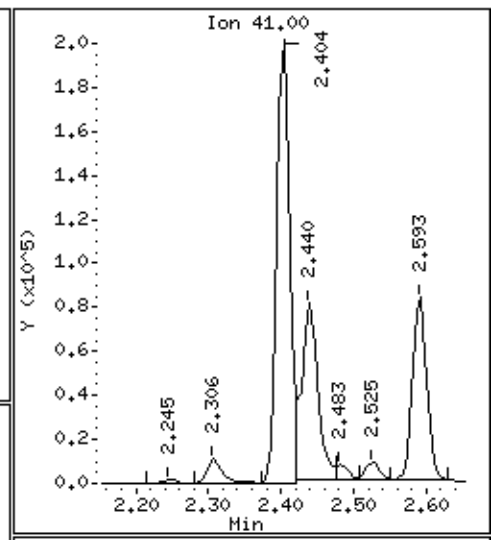
Review Code:

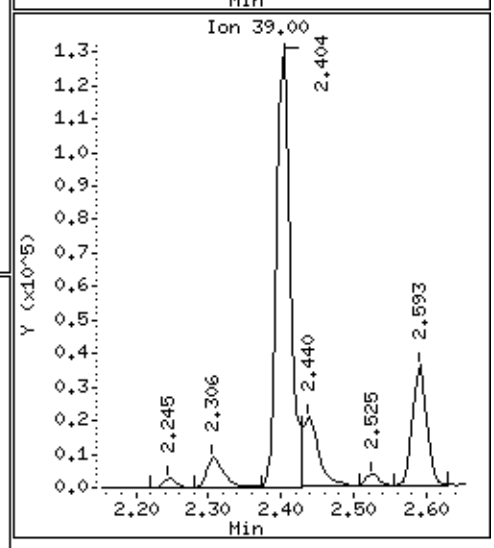












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D

Date : 25-APR-2017 13:27

Client ID: MBLCS

Instrument: 70msv6.i

Sample Info: 103009, 15067:1.25

Purge Volume: 5.0

Operator: KGG

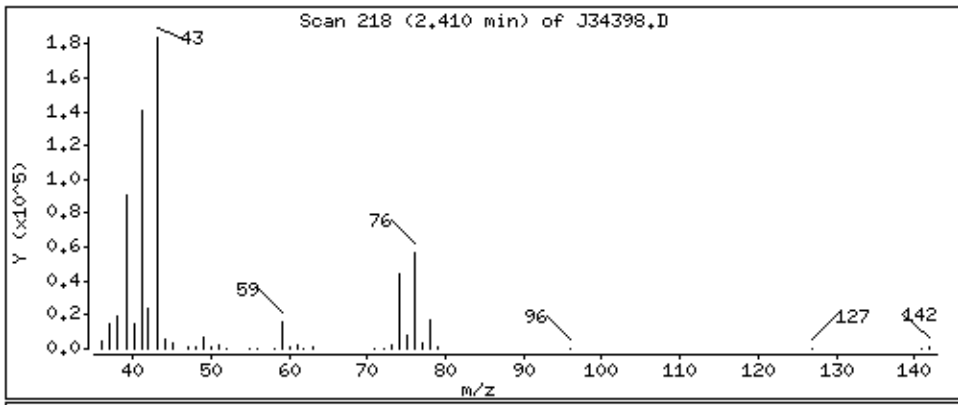
Column phase: RTX-624

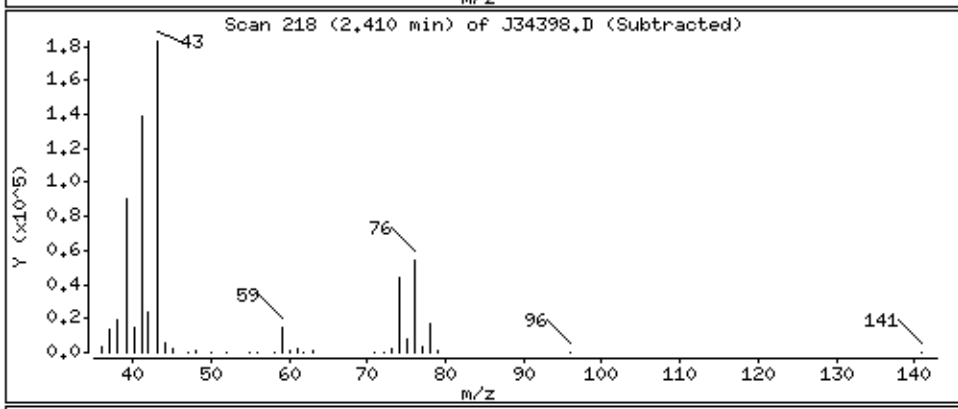
Column diameter: 0.18

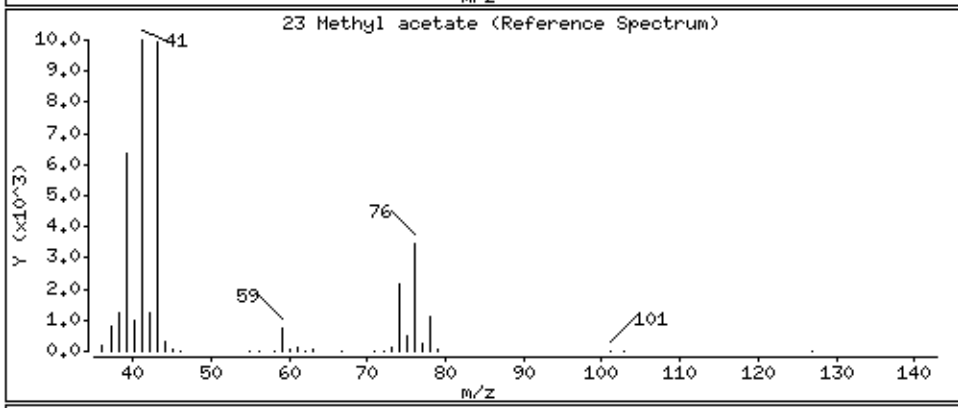
23 Methyl acetate

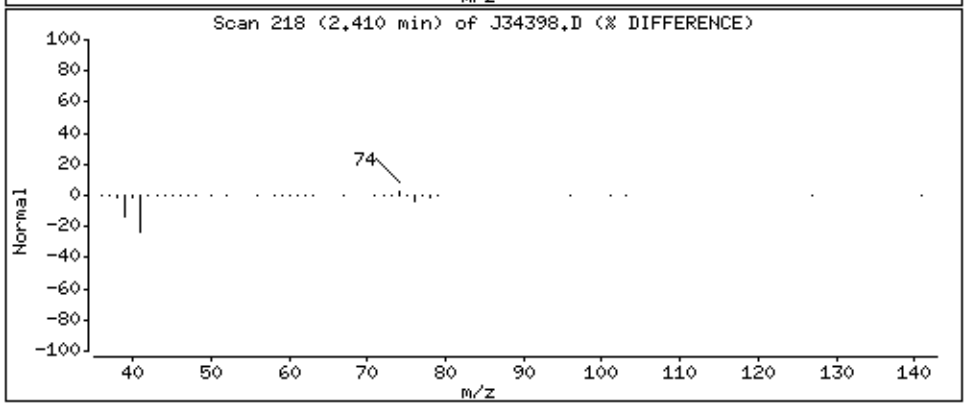
Concentration: 34.8 ug/L

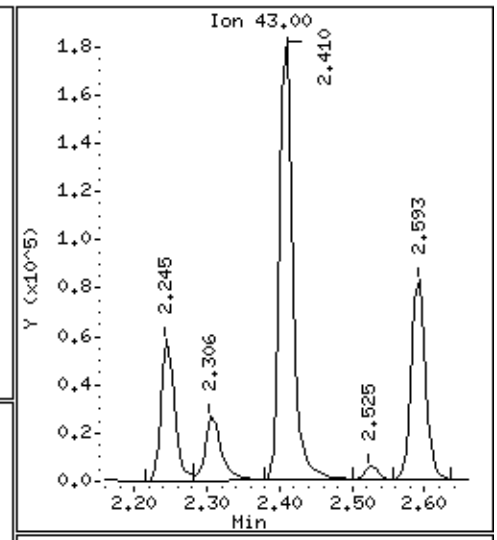
Review Code:

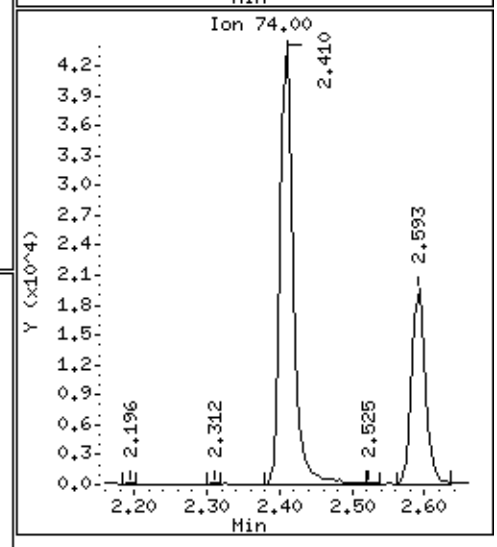












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D

Date : 25-APR-2017 13:27

Client ID: MBLCS

Instrument: 70msv6.i

Sample Info: 103009, 15067:1.25

Purge Volume: 5.0

Operator: KGG

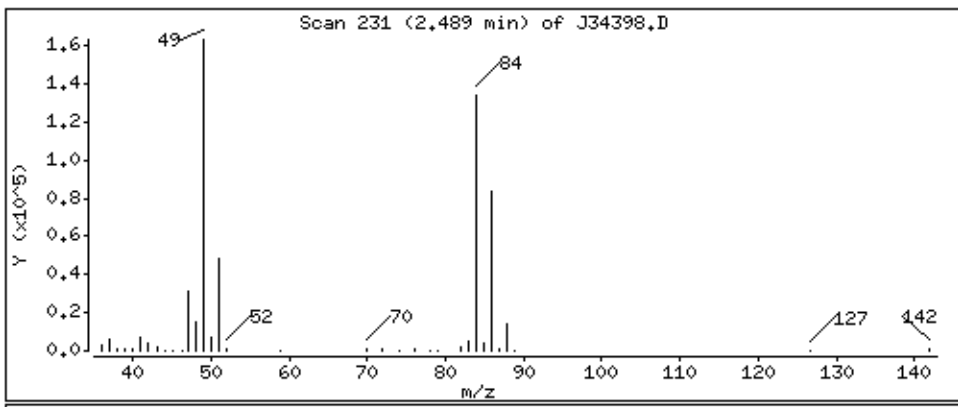
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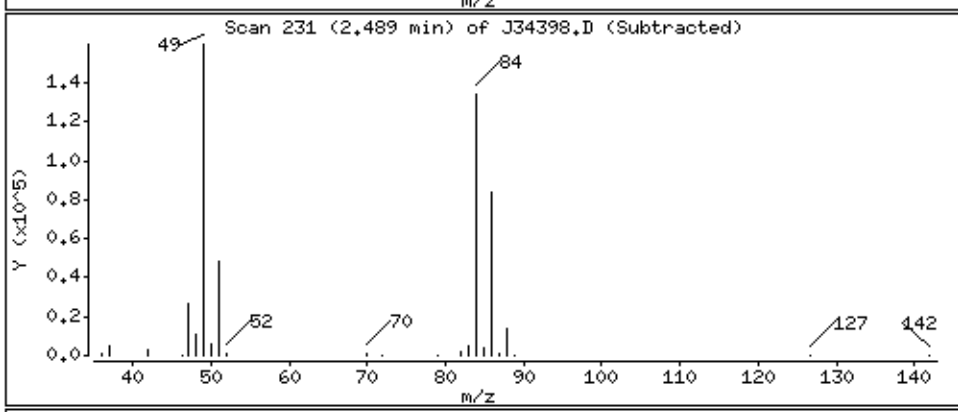
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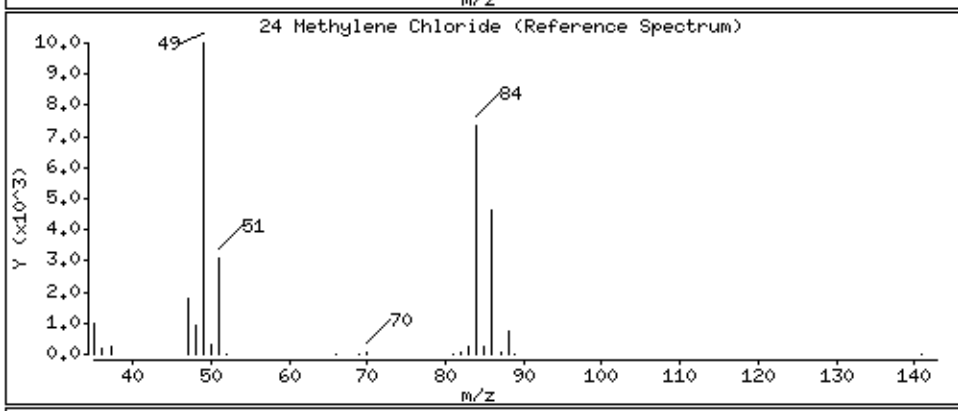
24 Methylene Chloride

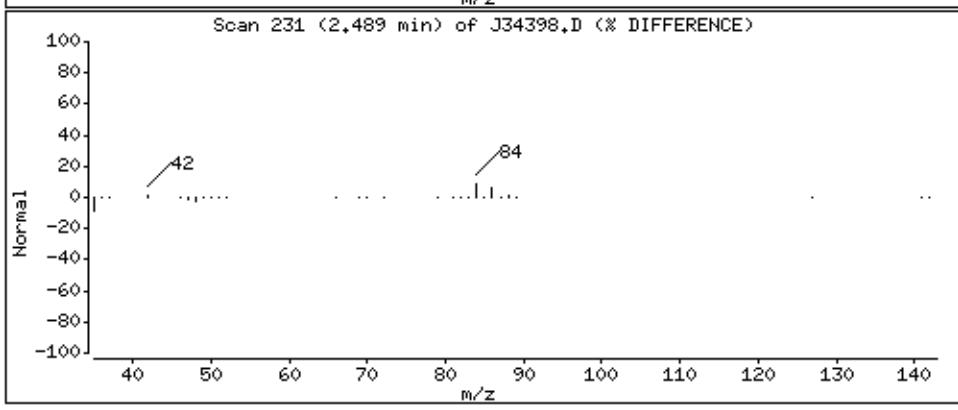
Concentration: 43.4 ug/L

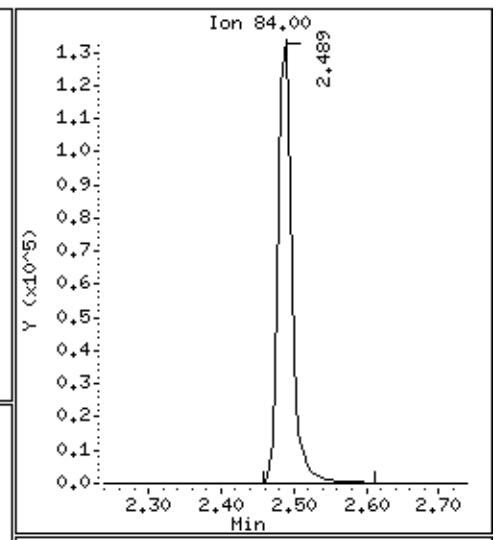
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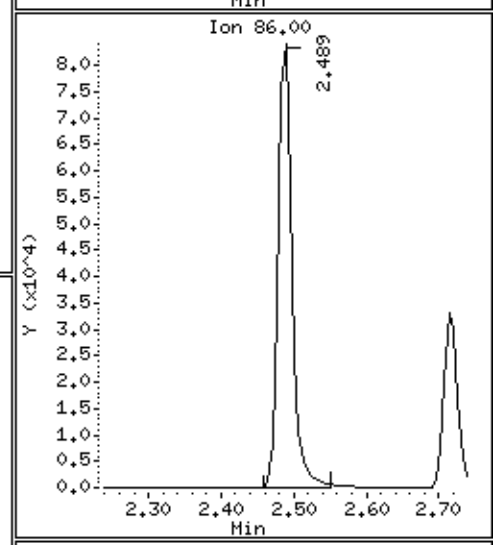


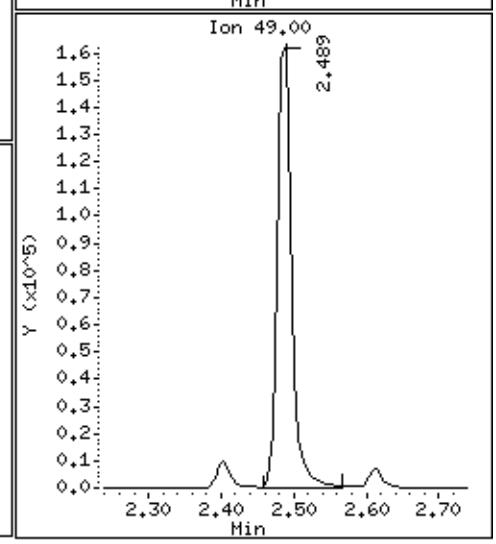












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D

Date : 25-APR-2017 13:27

Client ID: MBLCS

Instrument: 70msv6.i

Sample Info: 103009, 15067:1.25

Purge Volume: 5.0

Operator: KGG

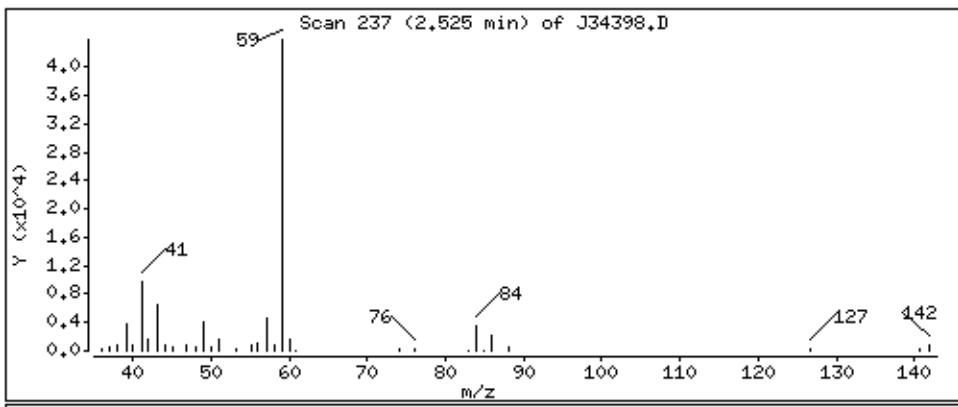
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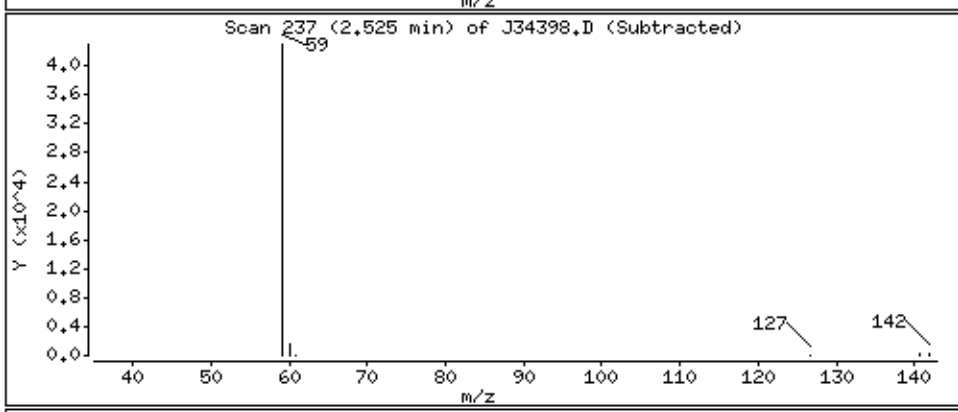
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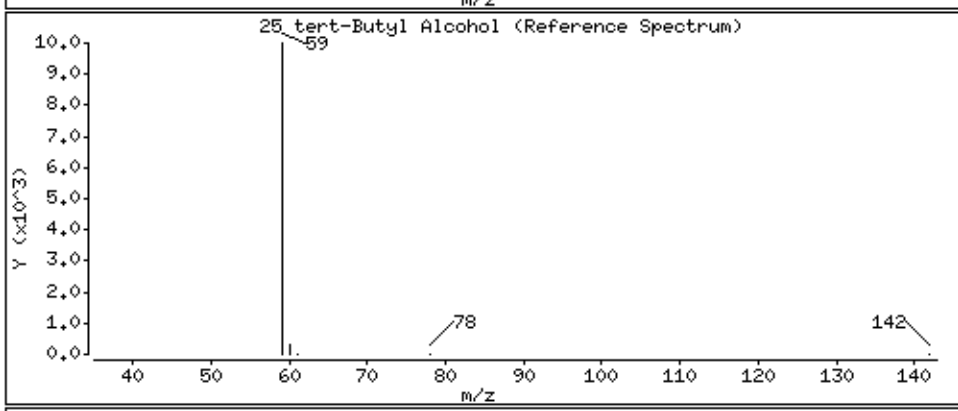
25 tert-Butyl Alcohol

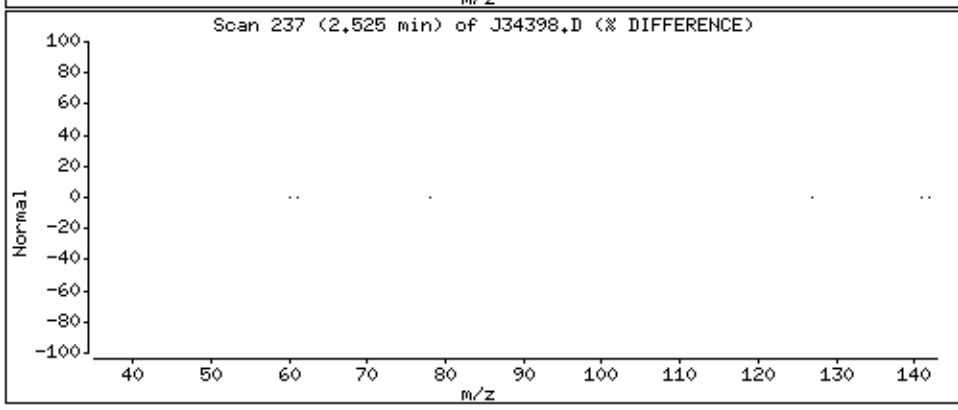
Concentration: 207 ug/L

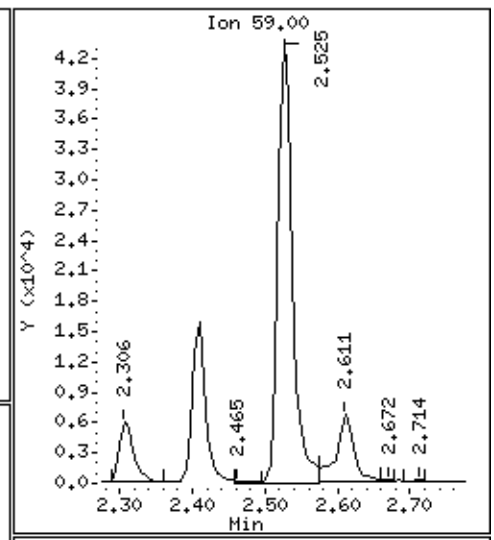
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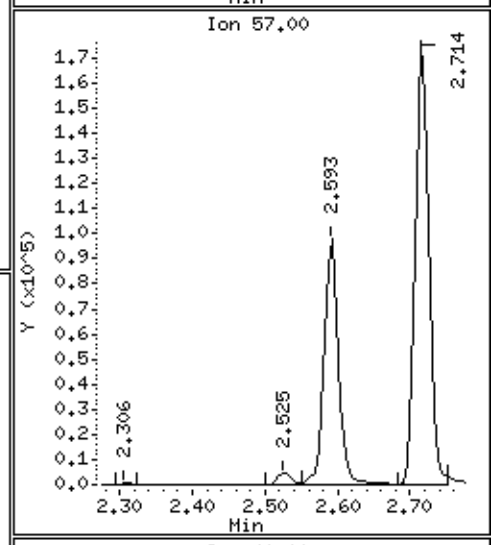


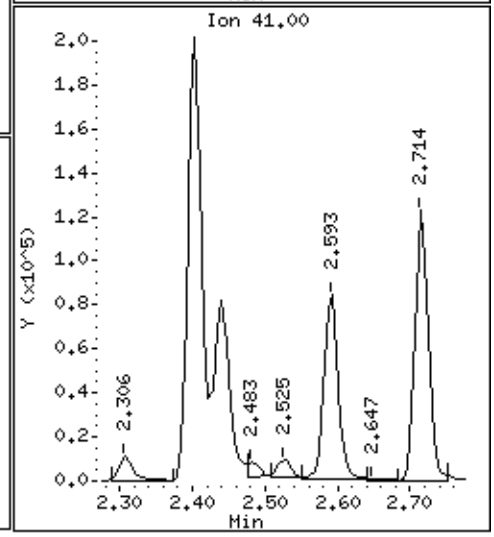












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D

Date : 25-APR-2017 13:27

Client ID: MBLCS

Instrument: 70msv6.i

Sample Info: 103009, 15067:1.25

Purge Volume: 5.0

Operator: KGG

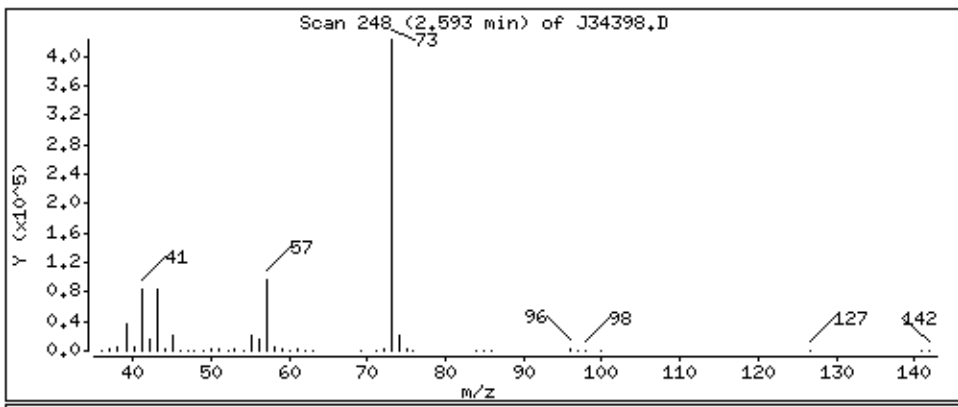
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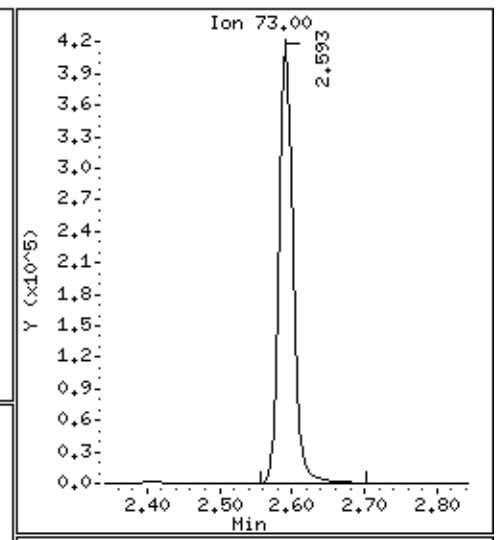
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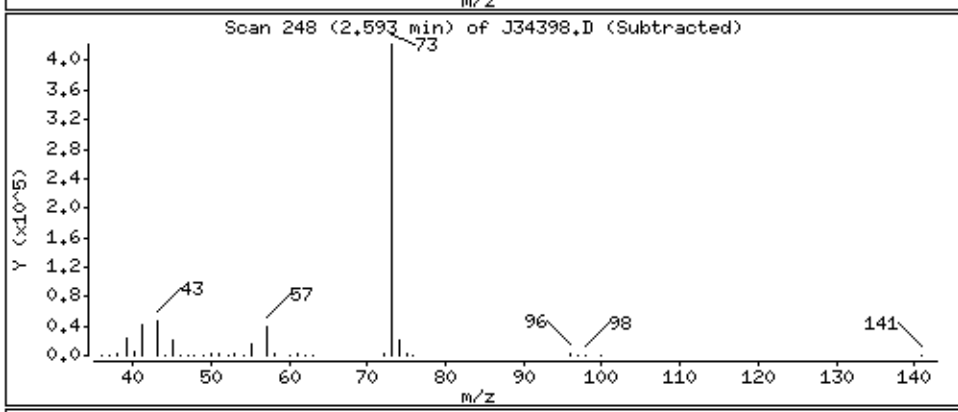
28 Methyl-tert-butyl ether

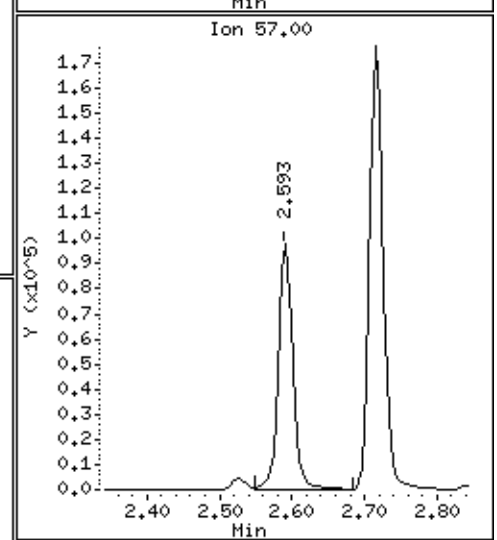
Concentration: 39.5 ug/L

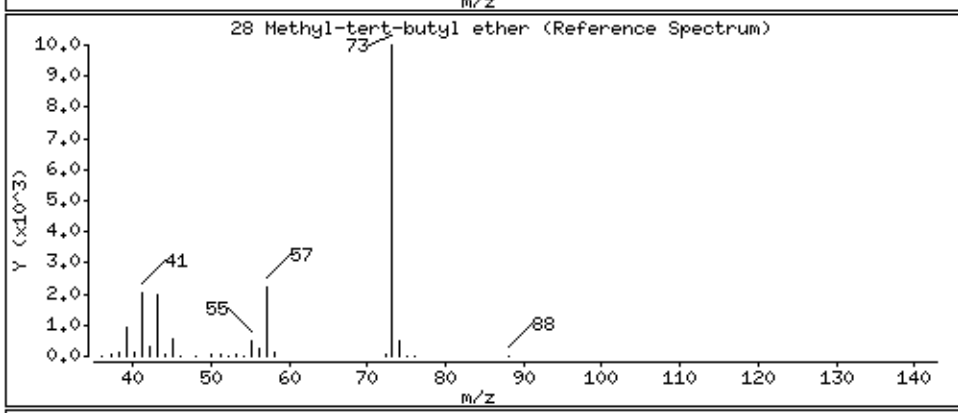
Review Code:

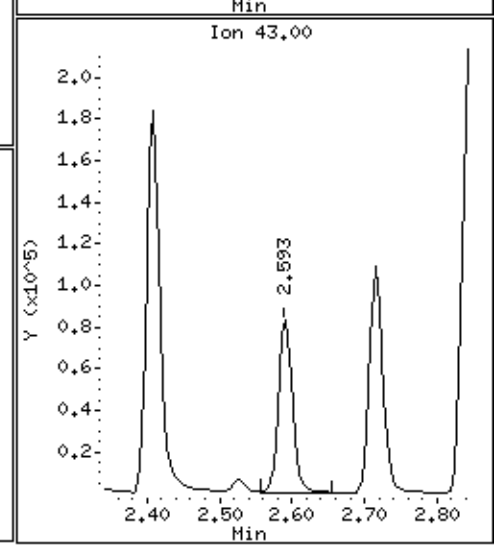


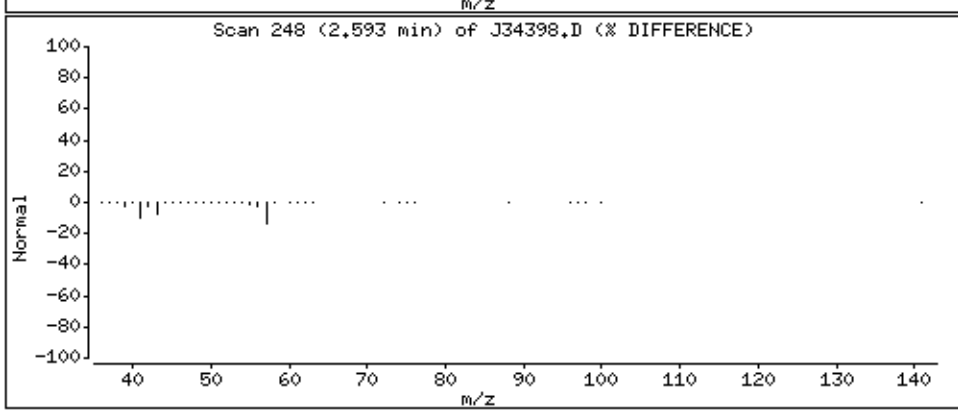












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D

Date : 25-APR-2017 13:27

Client ID: MBLCS

Instrument: 70msv6.i

Sample Info: 103009, 15067:1.25

Purge Volume: 5.0

Operator: KGG

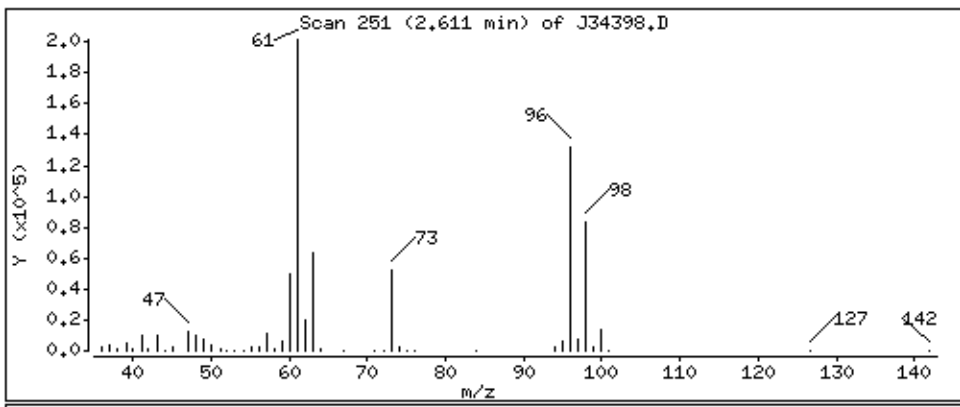
Column phase: RTX-624

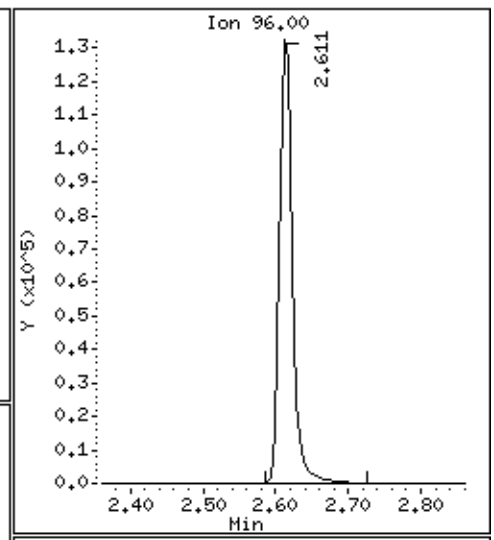
Column diameter: 0.18

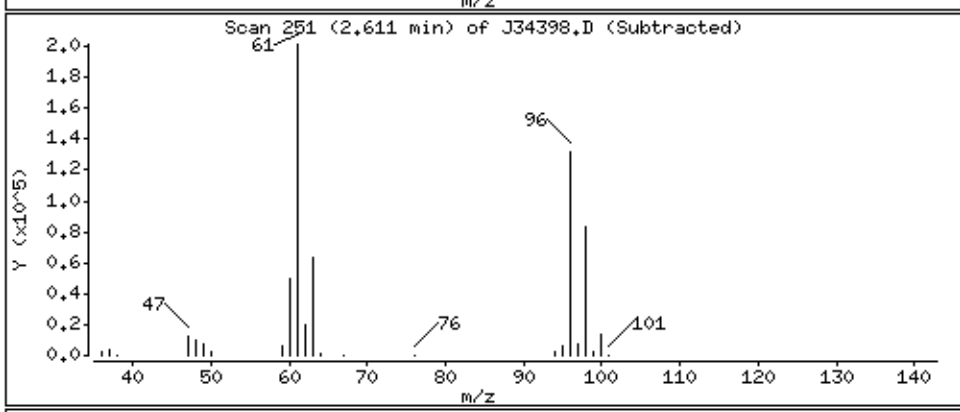
27 trans-1,2-Dichloroethene

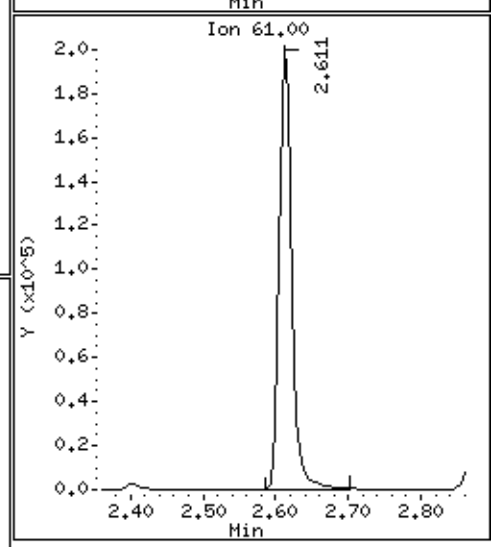
Concentration: 42.6 ug/L

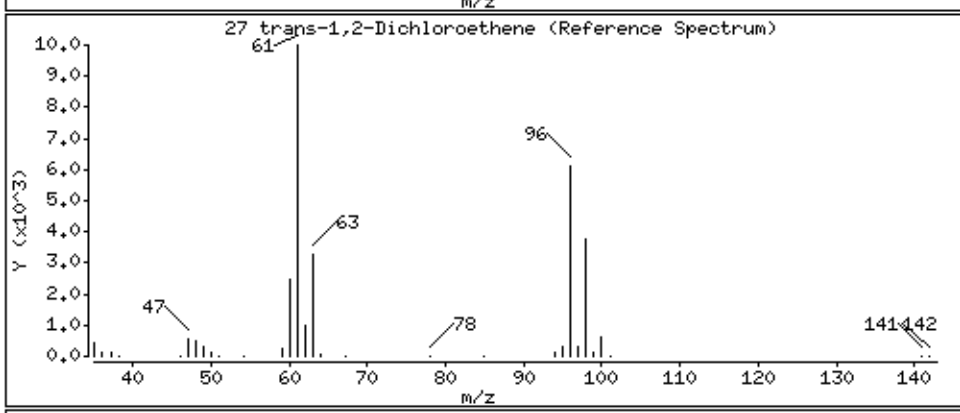
Review Code:

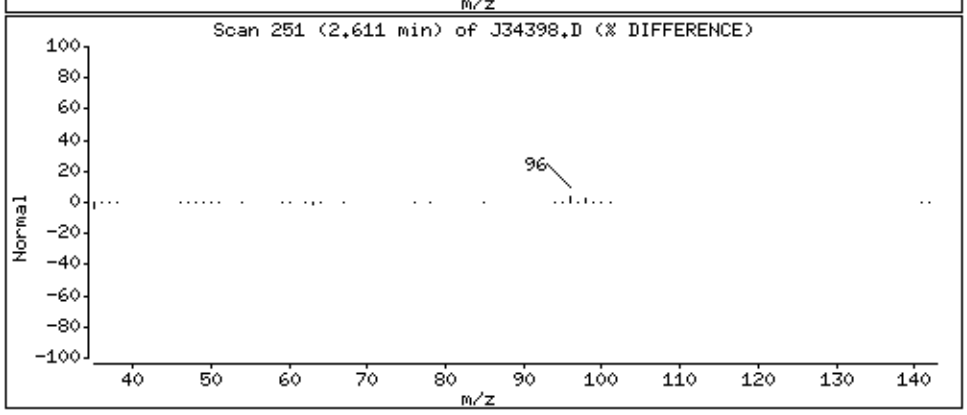












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D

Date : 25-APR-2017 13:27

Client ID: MBLCS

Instrument: 70msv6.i

Sample Info: 103009, 15067:1.25

Purge Volume: 5.0

Operator: KGG

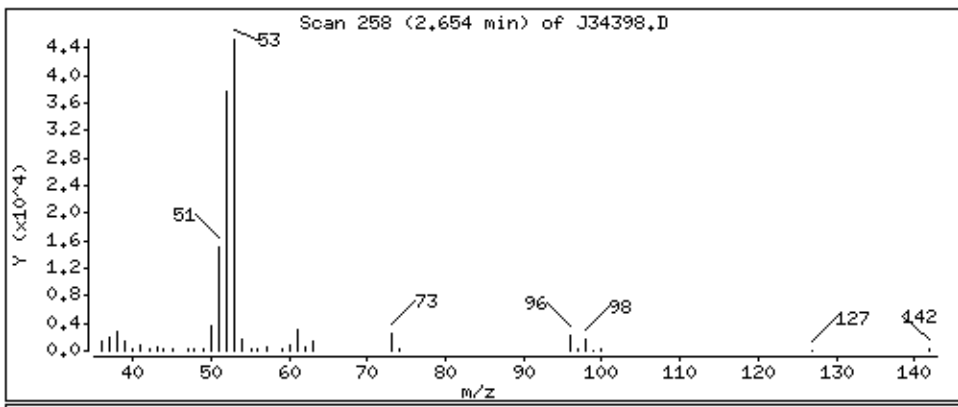
Column phase: RTX-624

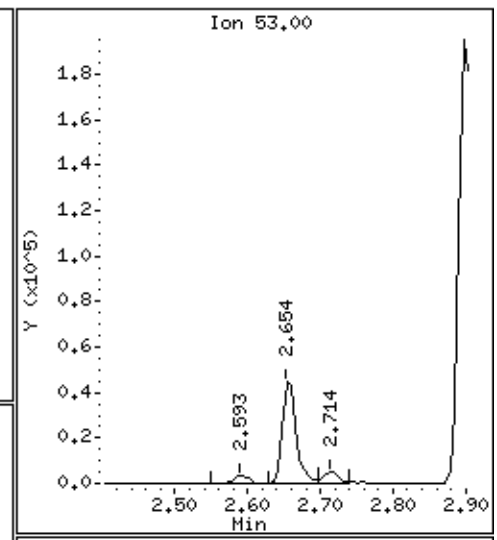
Column diameter: 0.18

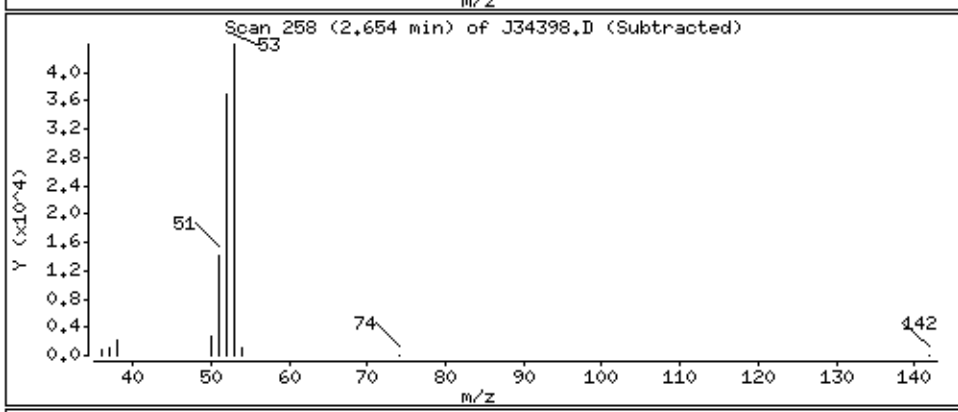
26 Acrylonitrile

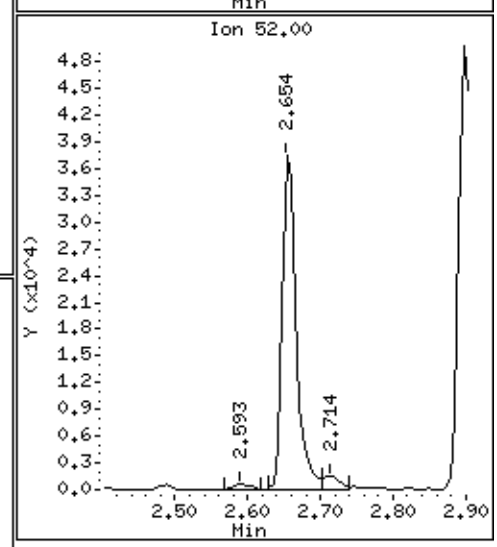
Concentration: 33.4 ug/L

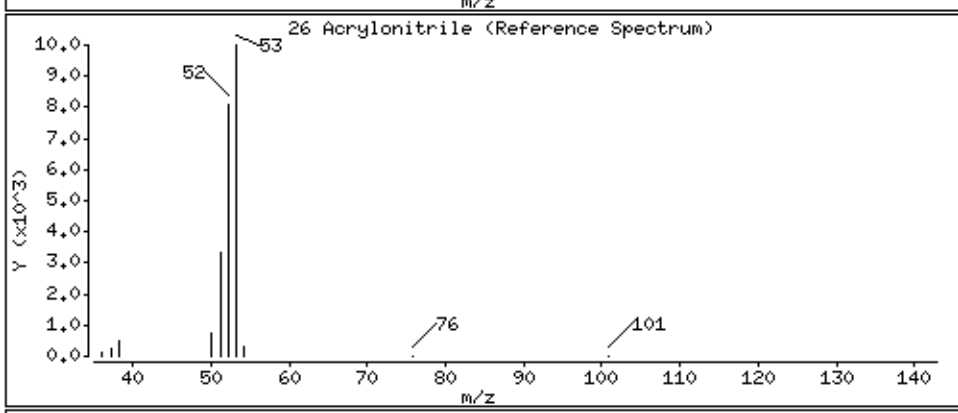
Review Code:

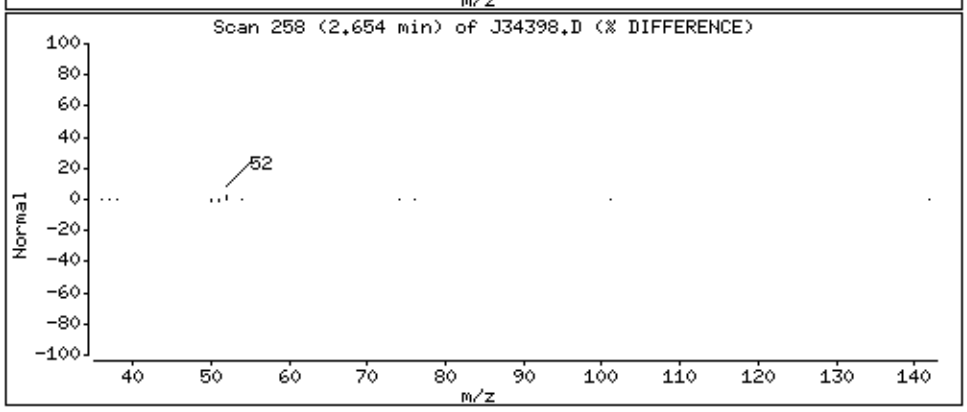












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D

Date : 25-APR-2017 13:27

Client ID: MBLCS

Instrument: 70msv6.i

Sample Info: 103009, 15067:1.25

Purge Volume: 5.0

Operator: KGG

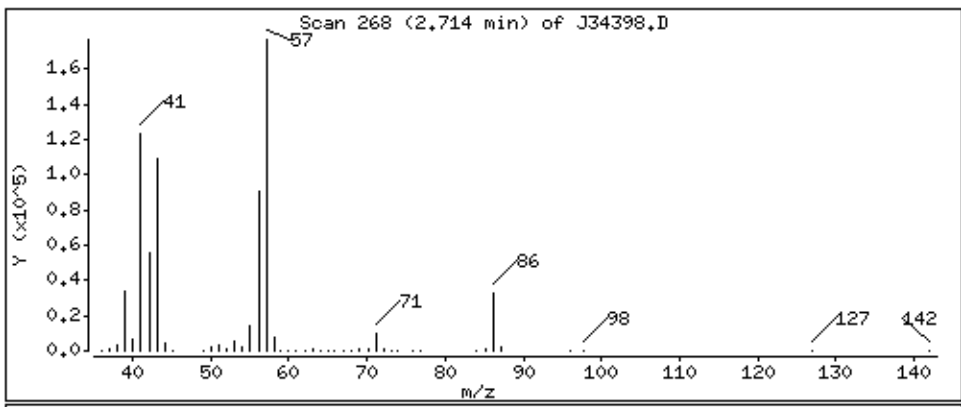
Column phase: RTX-624

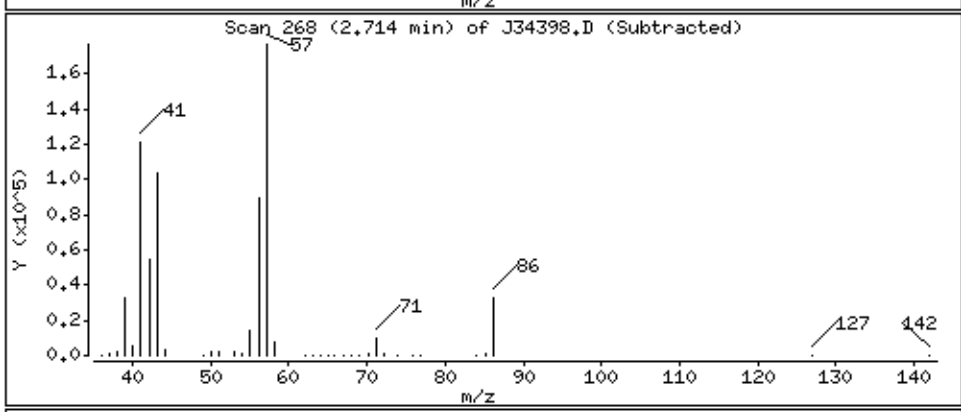
Column diameter: 0.18

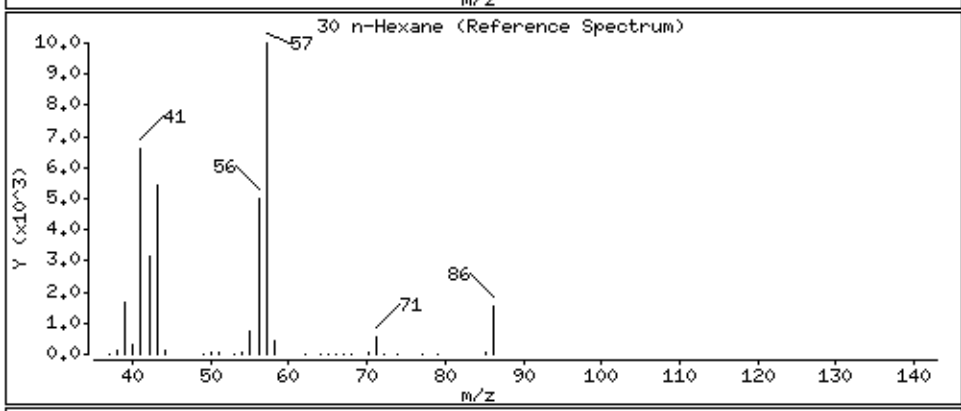
30 n-Hexane

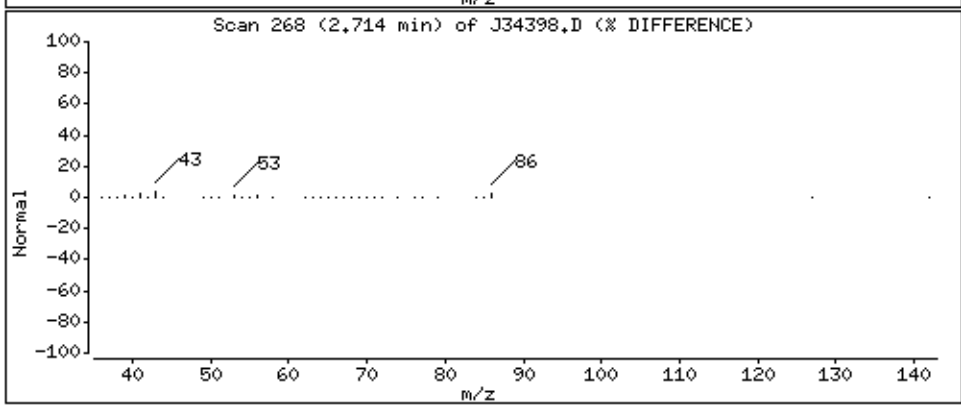
Concentration: 43.1 ug/L

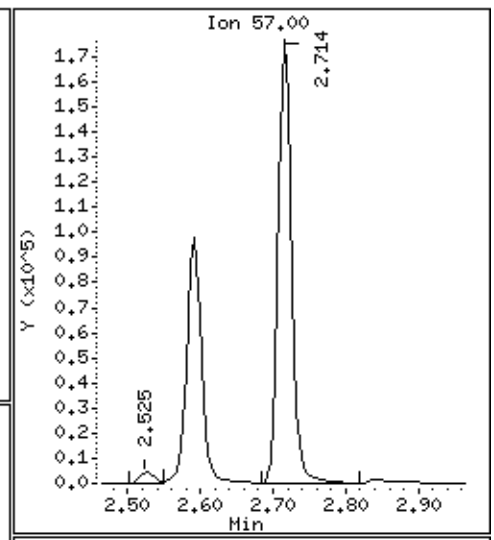
Review Code:

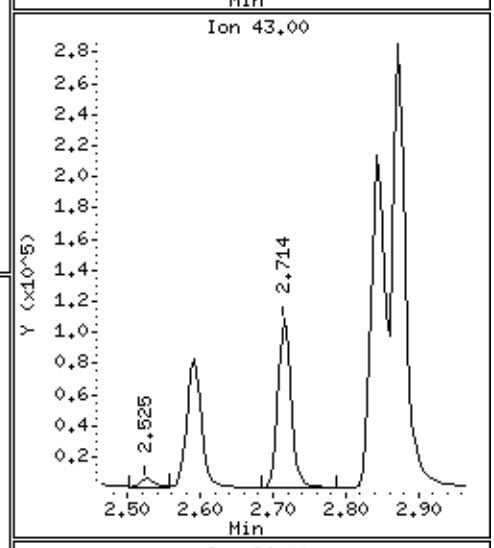


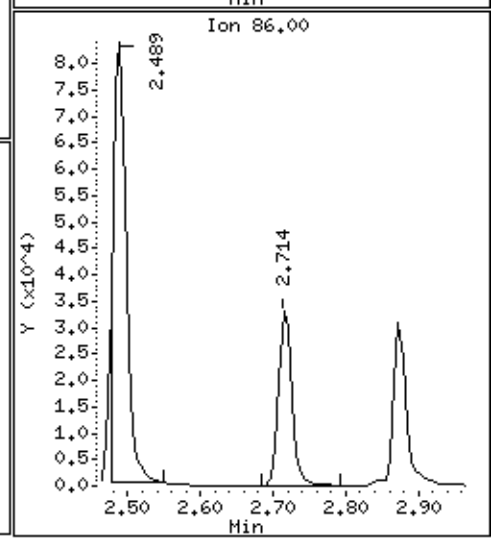












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D

Date : 25-APR-2017 13:27

Client ID: MBLCS

Instrument: 70msv6.i

Sample Info: 103009, 15067:1.25

Purge Volume: 5.0

Operator: KGG

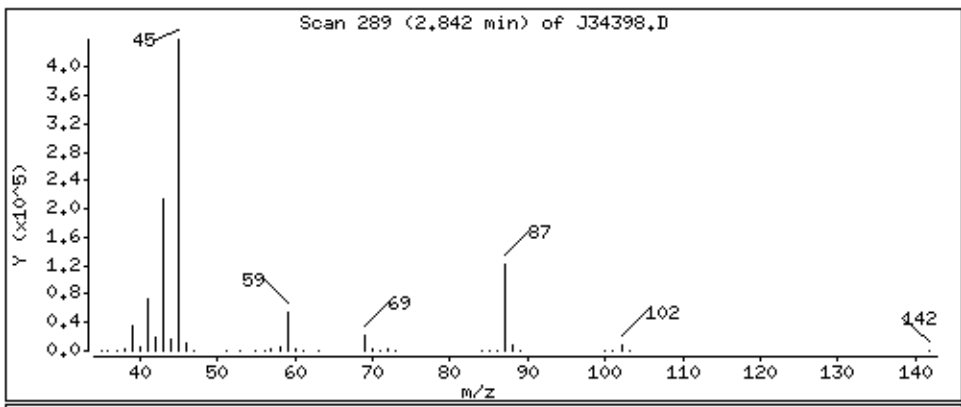
Column phase: RTX-624

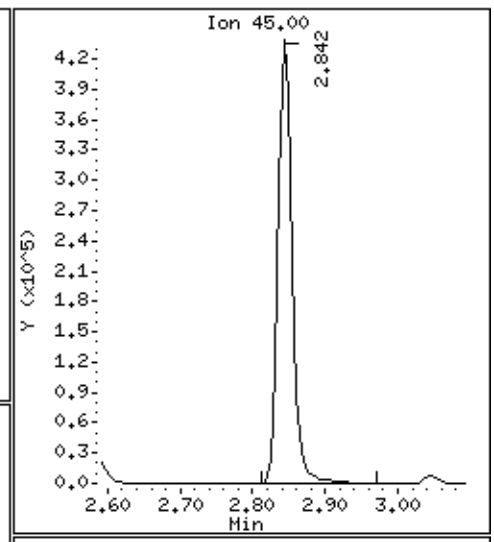
Column diameter: 0.18

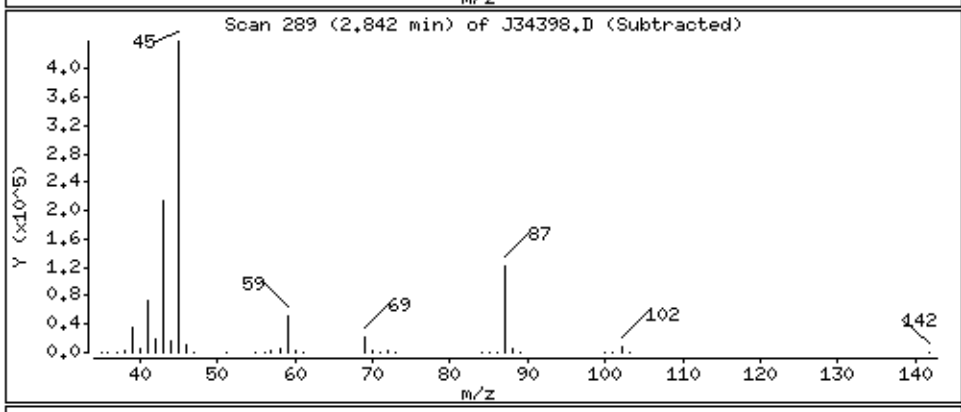
29 Diisopropyl ether

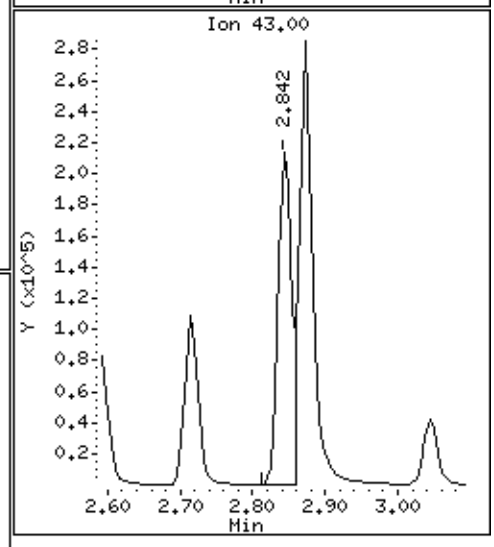
Concentration: 32.6 ug/L

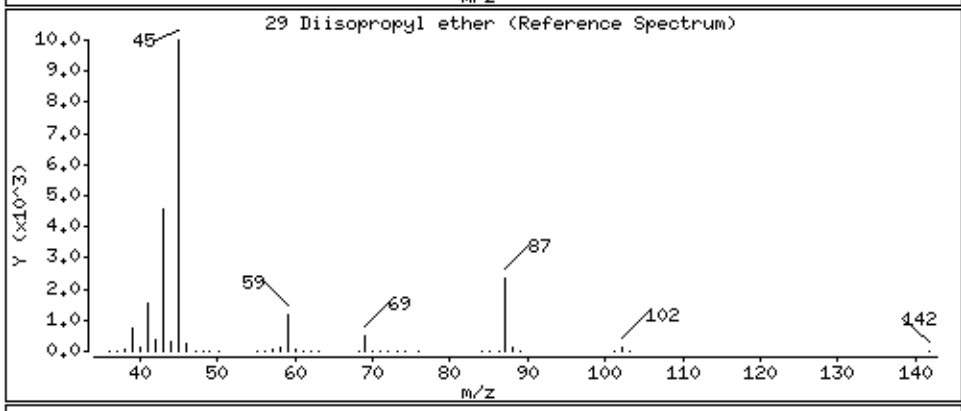
Review Code:

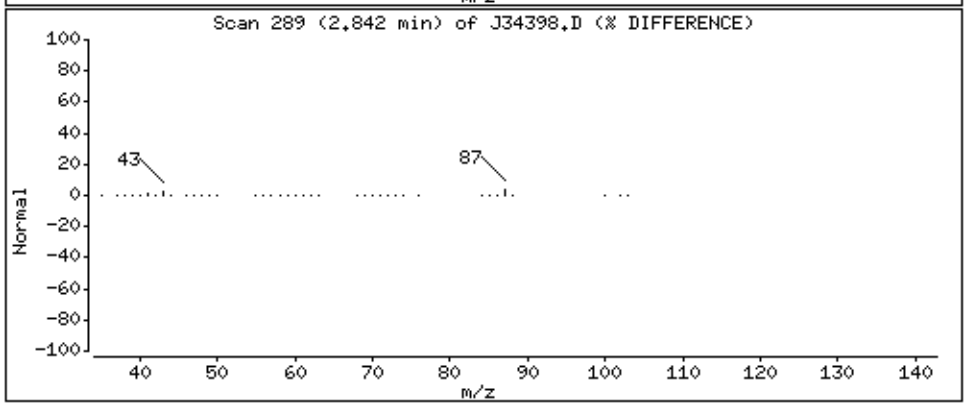












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D

Date : 25-APR-2017 13:27

Client ID: MBLCS

Instrument: 70msv6.i

Sample Info: 103009, 15067:1.25

Purge Volume: 5.0

Operator: KGG

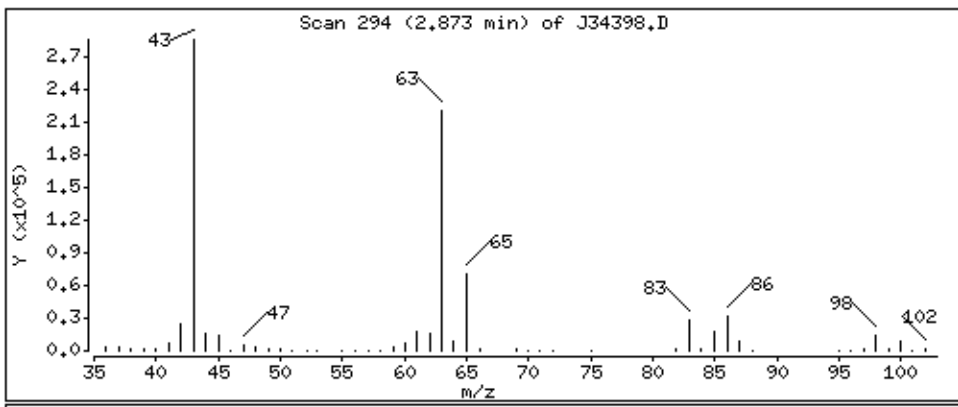
Column phase: RTX-624

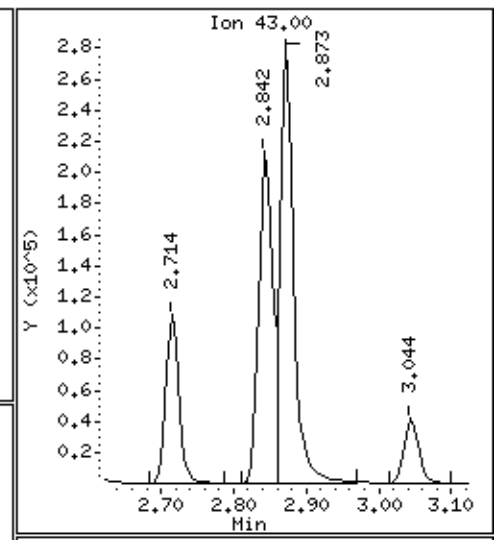
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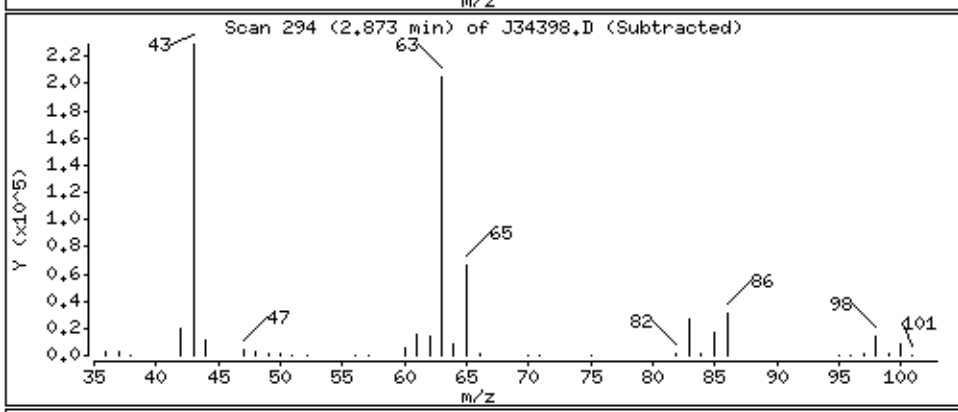
32 Vinyl acetate

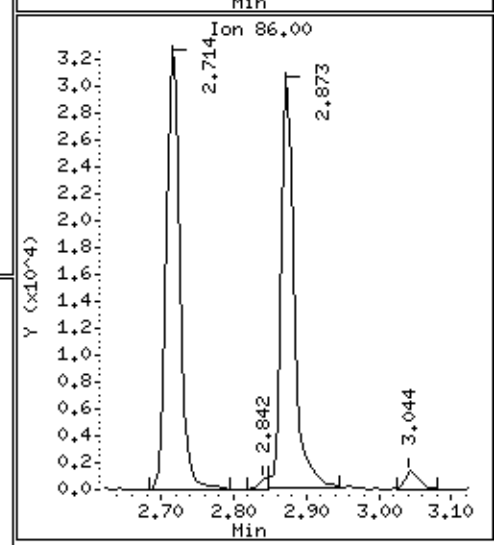
Concentration: 43.6 ug/L

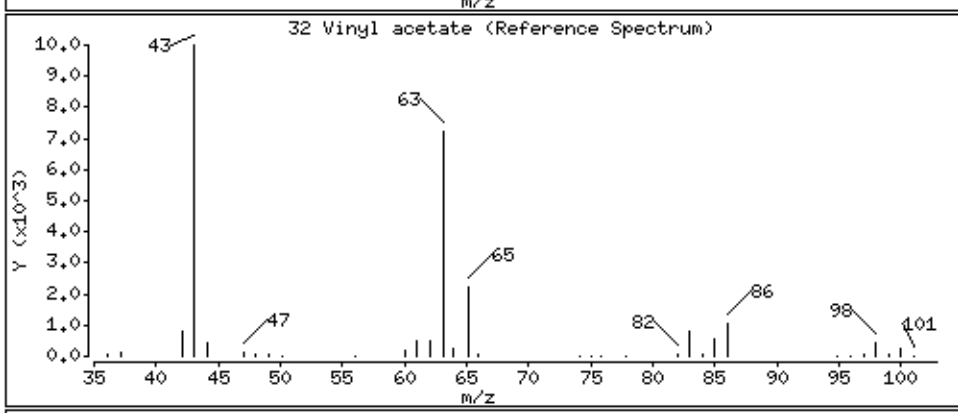
Review Code:

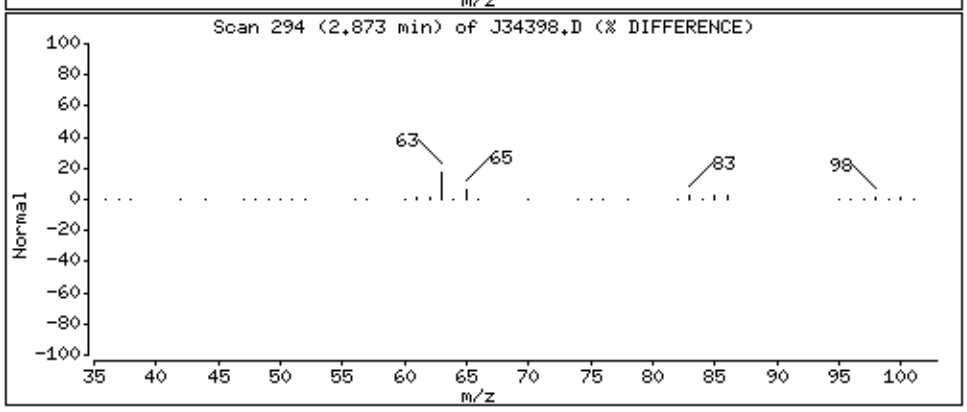












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D

Date : 25-APR-2017 13:27

Client ID: MBLCS

Instrument: 70msv6.i

Sample Info: 103009, 15067:1.25

Purge Volume: 5.0

Operator: KGG

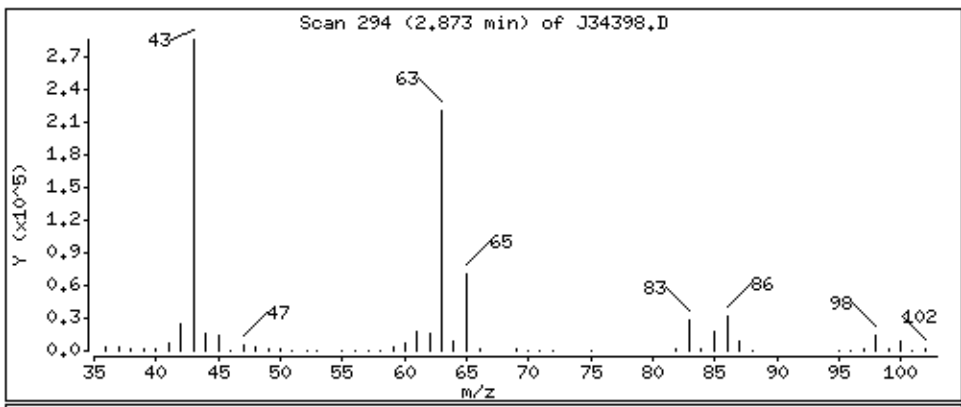
Column phase: RTX-624

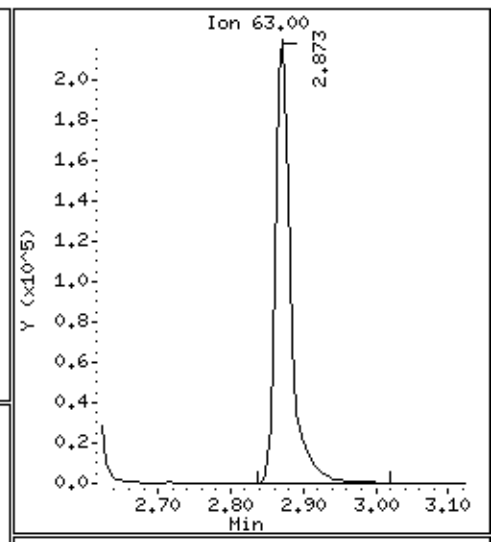
Column diameter: 0.18

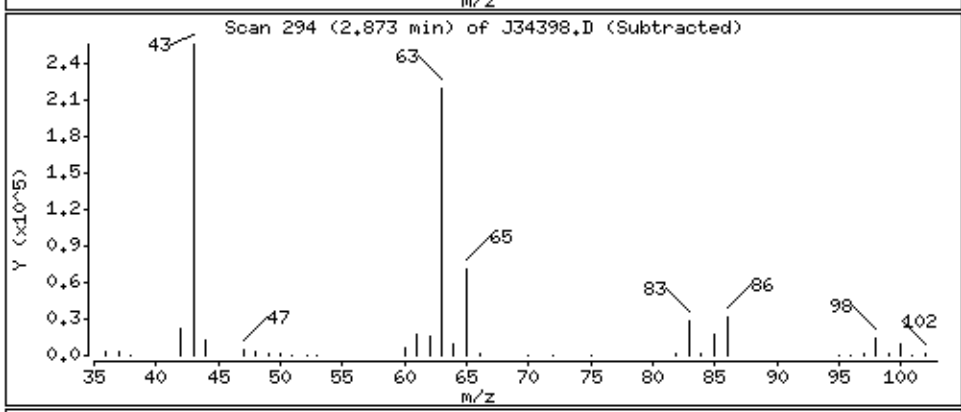
31 1,1-Dichloroethane

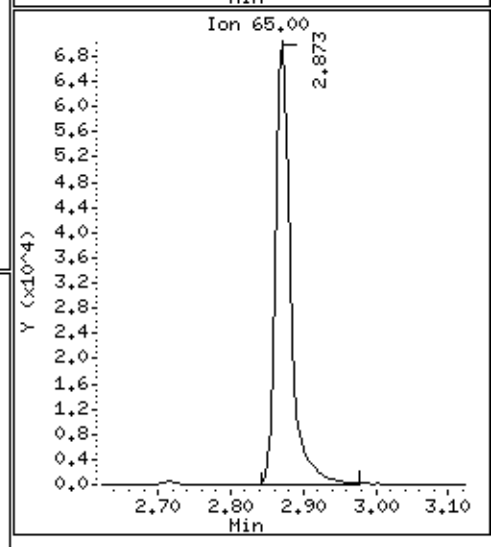
Concentration: 37.1 ug/L

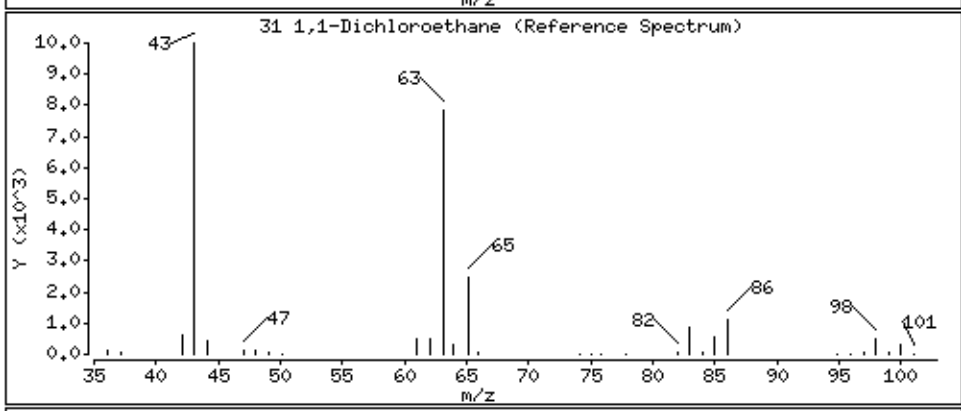
Review Code:

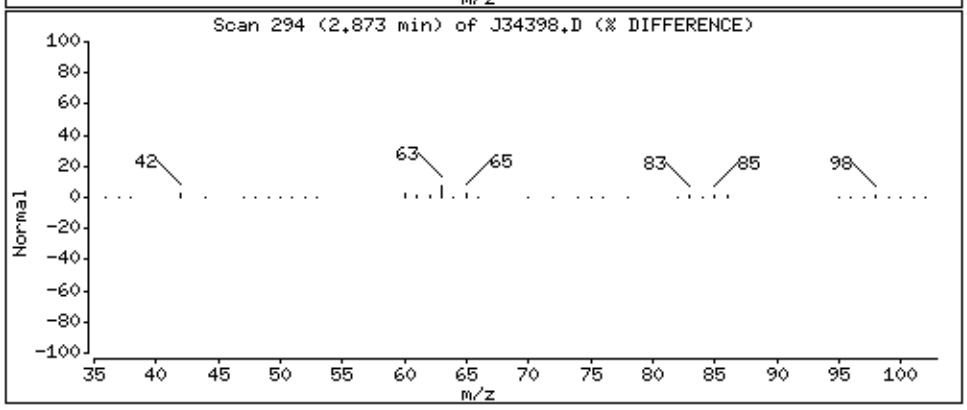












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D

Date : 25-APR-2017 13:27

Client ID: MBLCS

Instrument: 70msv6.i

Sample Info: 103009, 15067:1.25

Purge Volume: 5.0

Operator: KGG

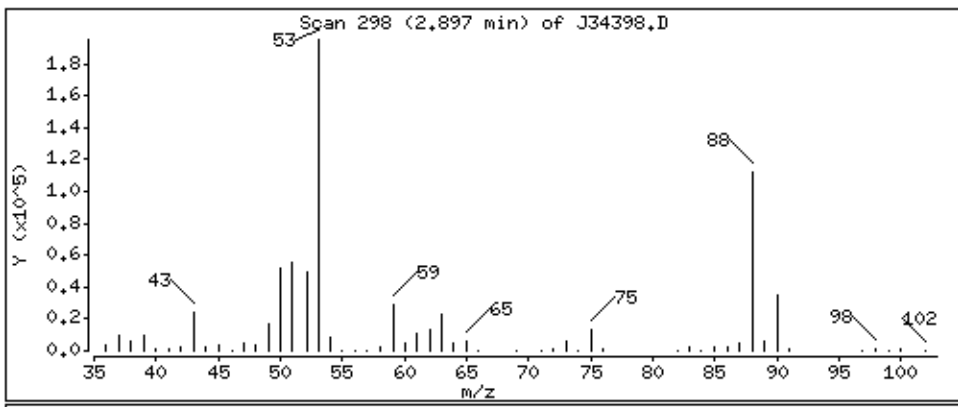
Column phase: RTX-624

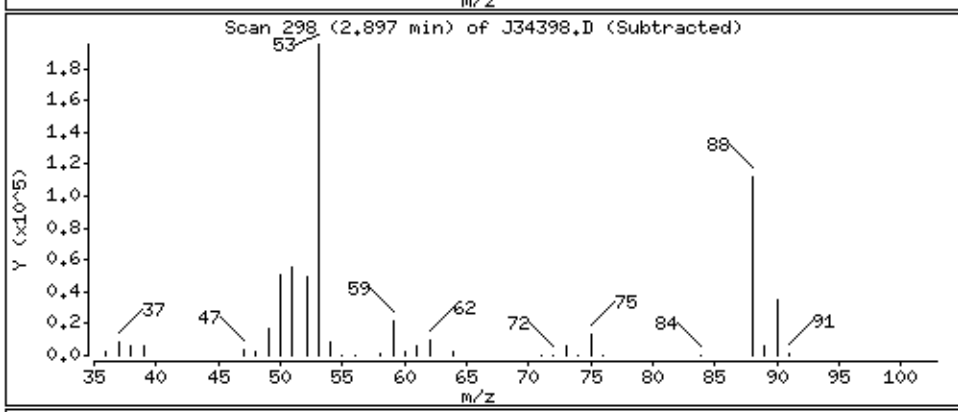
Column diameter: 0.18

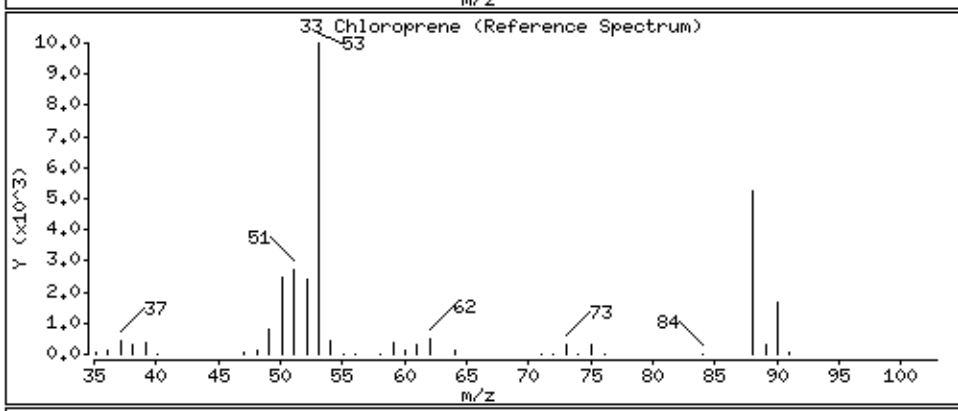
33 Chloroprene

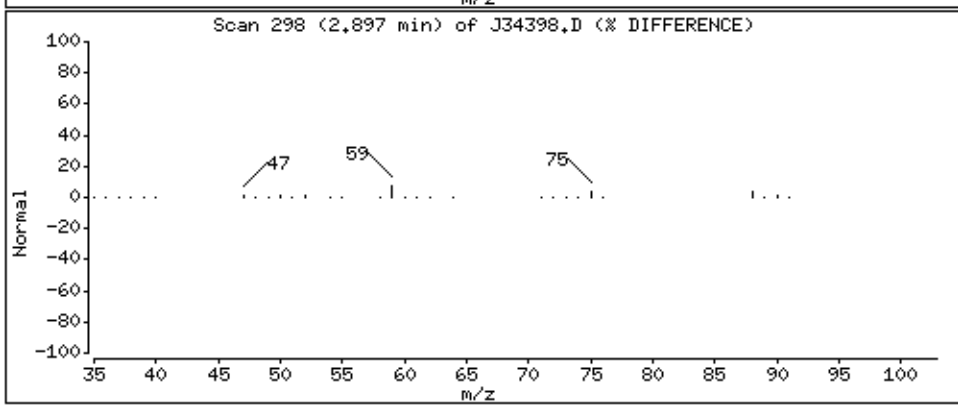
Concentration: 33.3 ug/L

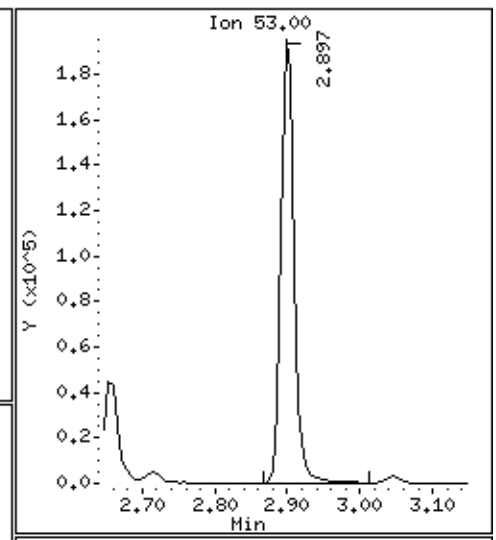
Review Code:

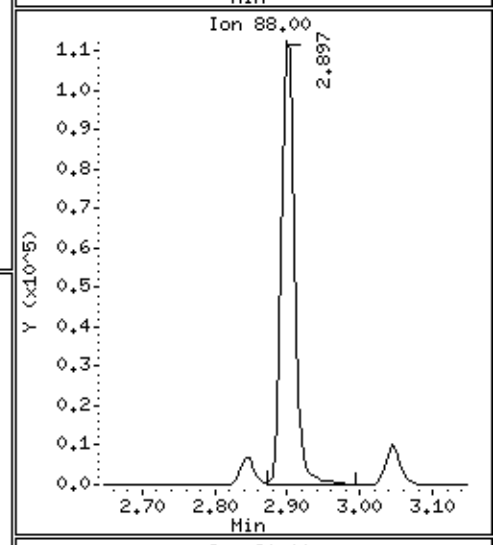


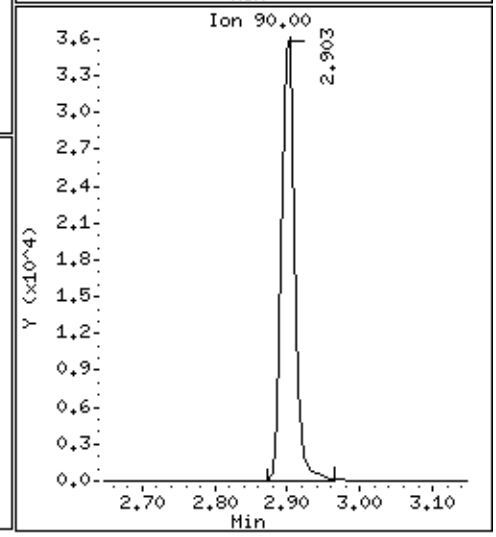












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D

Date : 25-APR-2017 13:27

Client ID: MBLCS

Instrument: 70msv6.i

Sample Info: 103009, 15067:1.25

Purge Volume: 5.0

Operator: KGG

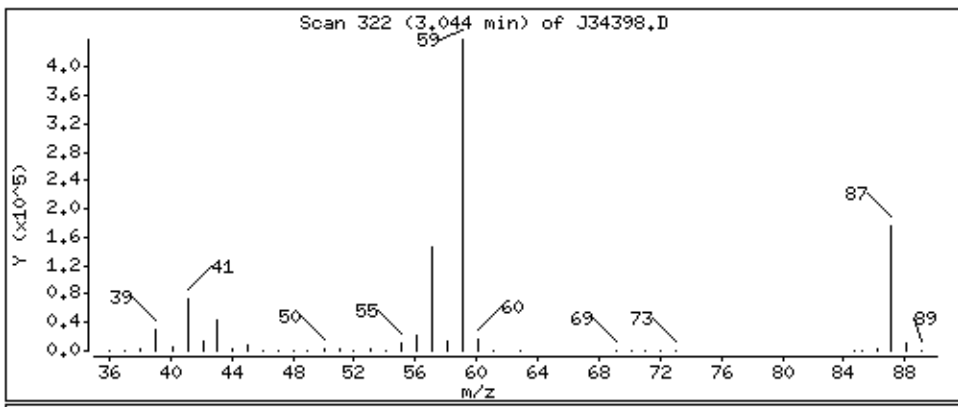
Column phase: RTX-624

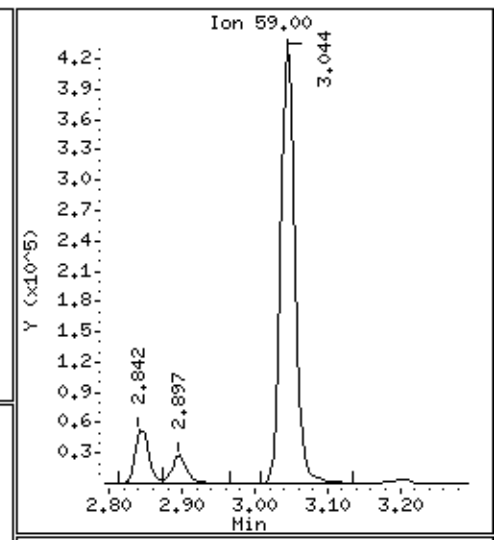
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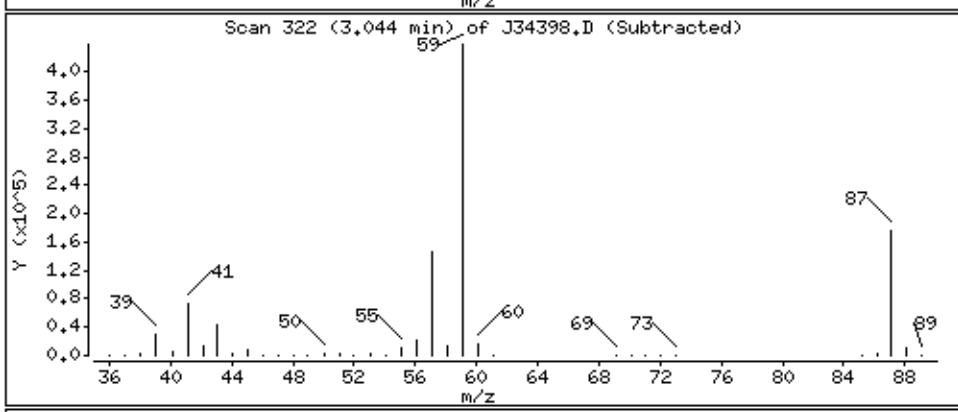
34 Ethyl-tert-butyl ether

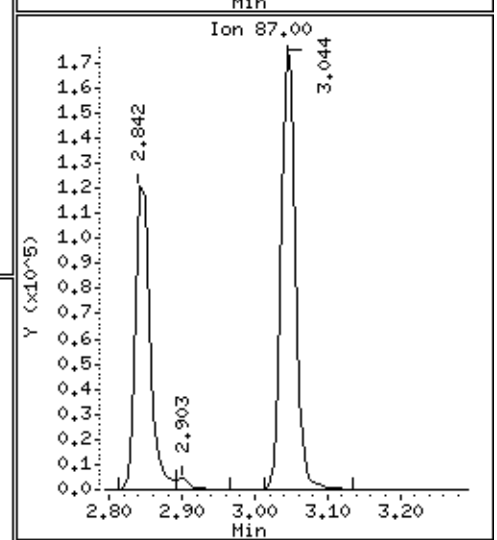
Concentration: 40.4 ug/L

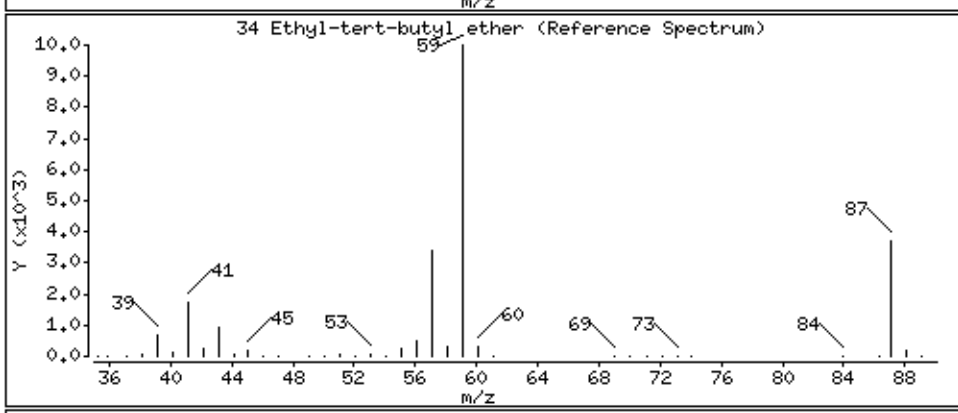
Review Code:

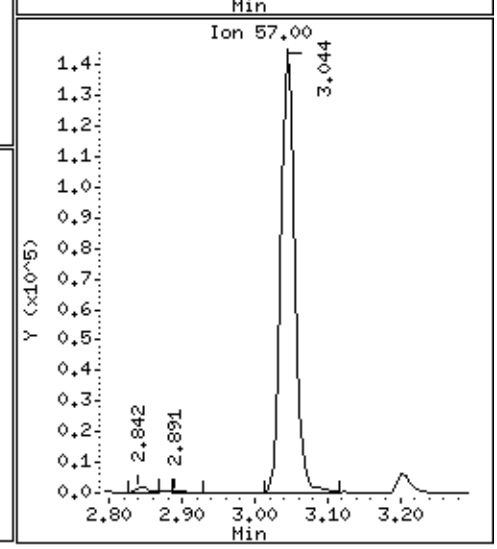


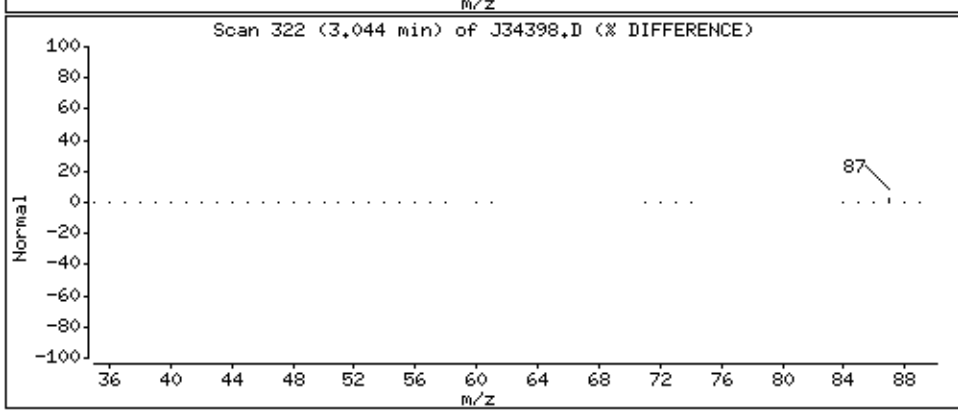












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D

Date : 25-APR-2017 13:27

Client ID: MBLCS

Instrument: 70msv6.i

Sample Info: 103009, 15067:1.25

Purge Volume: 5.0

Operator: KGG

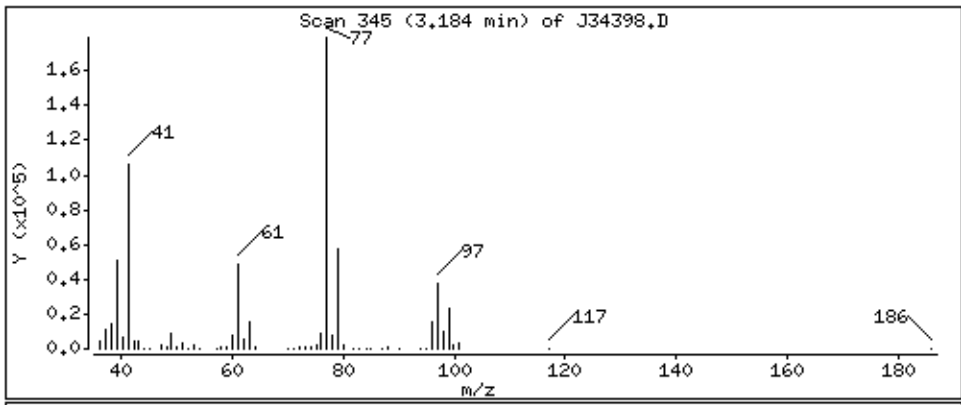
Column phase: RTX-624

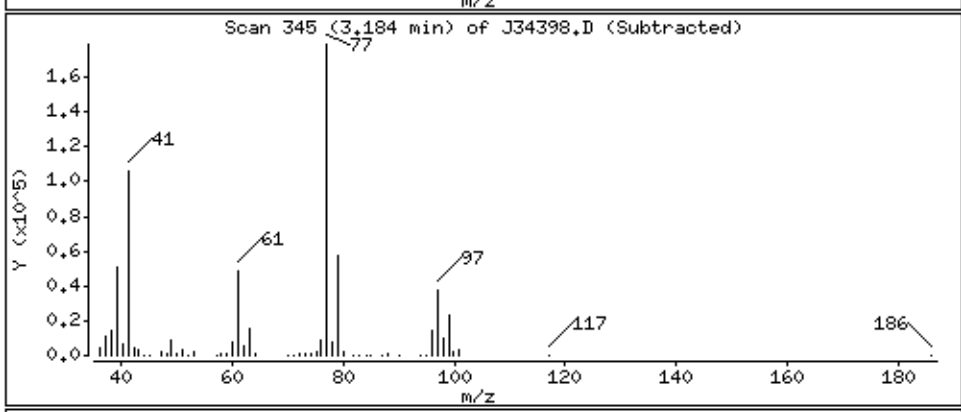
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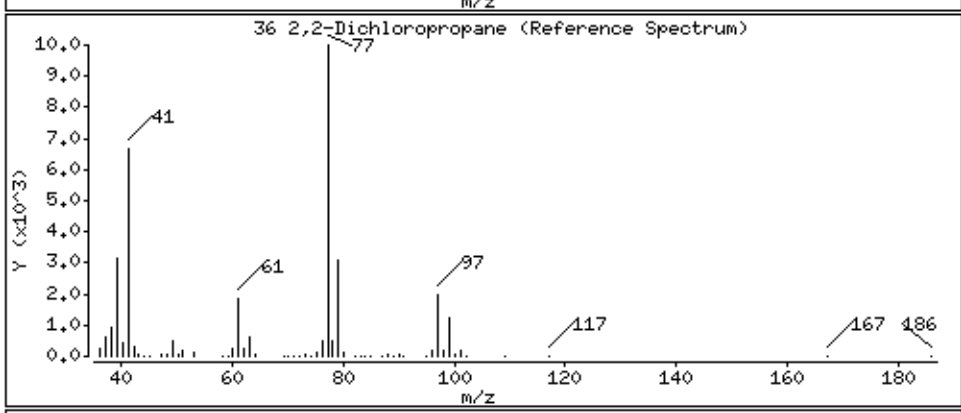
36 2,2-Dichloropropane

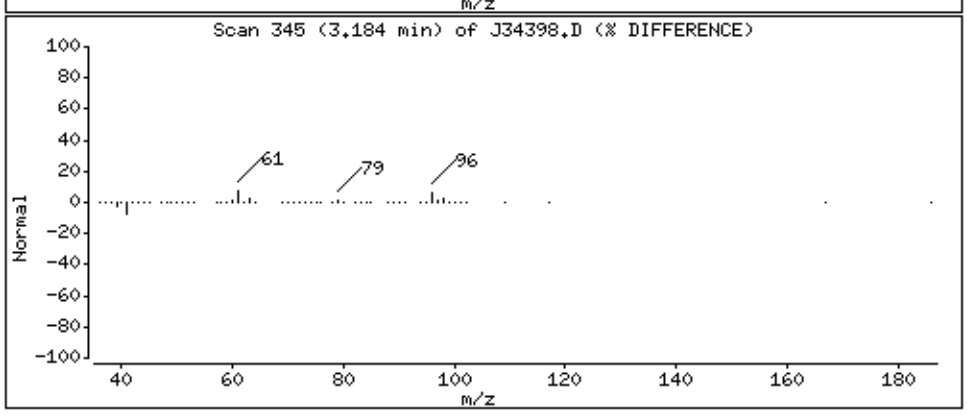
Concentration: 51.7 ug/L

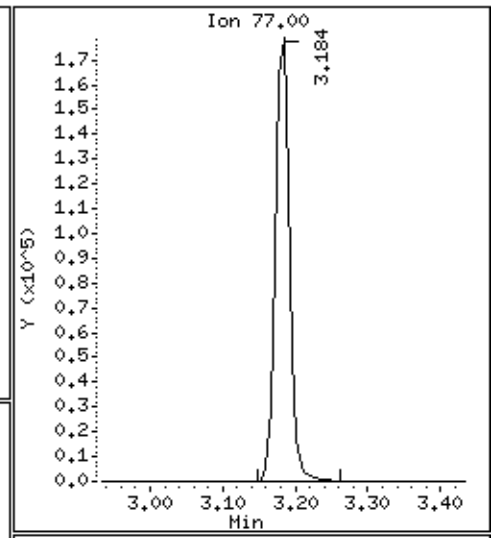
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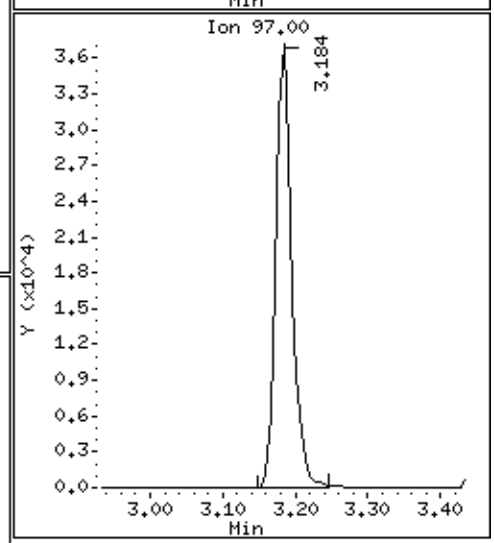












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D

Date : 25-APR-2017 13:27

Client ID: MBLCS

Instrument: 70msv6.i

Sample Info: 103009, 15067:1.25

Purge Volume: 5.0

Operator: KGG

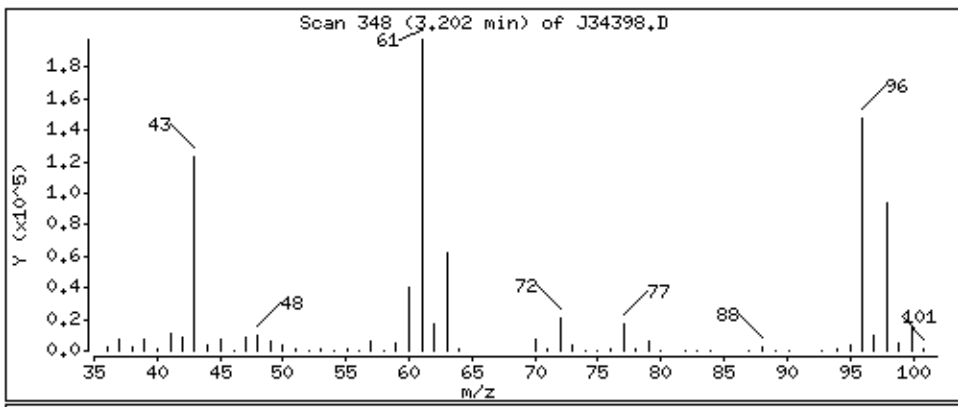
Column phase: RTX-624

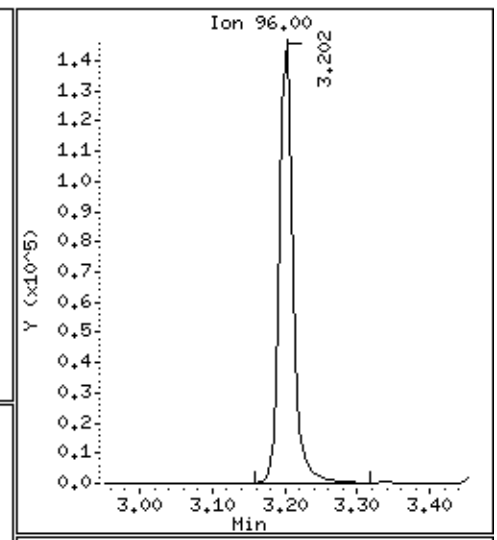
Column diameter: 0.18

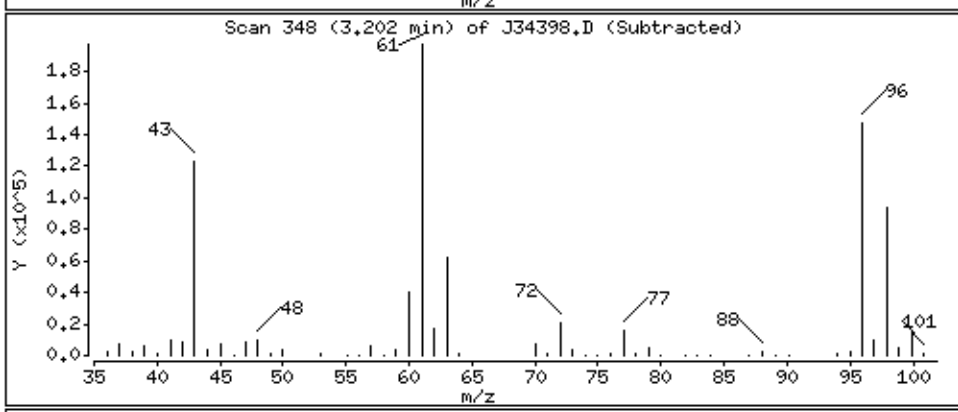
35 cis-1,2-Dichloroethene

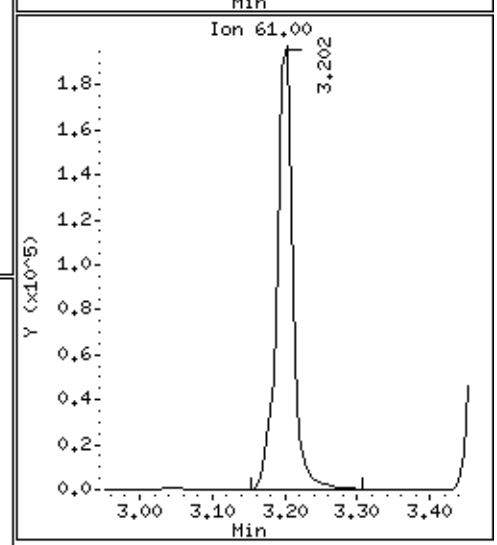
Concentration: 42.8 ug/L

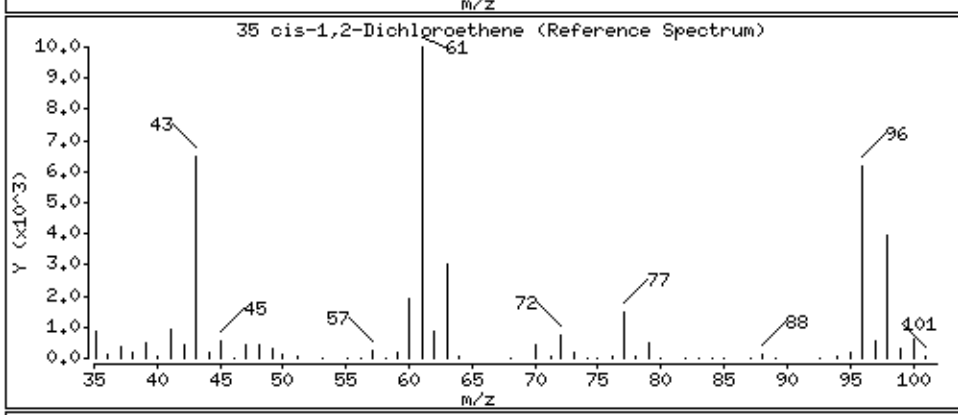
Review Code:

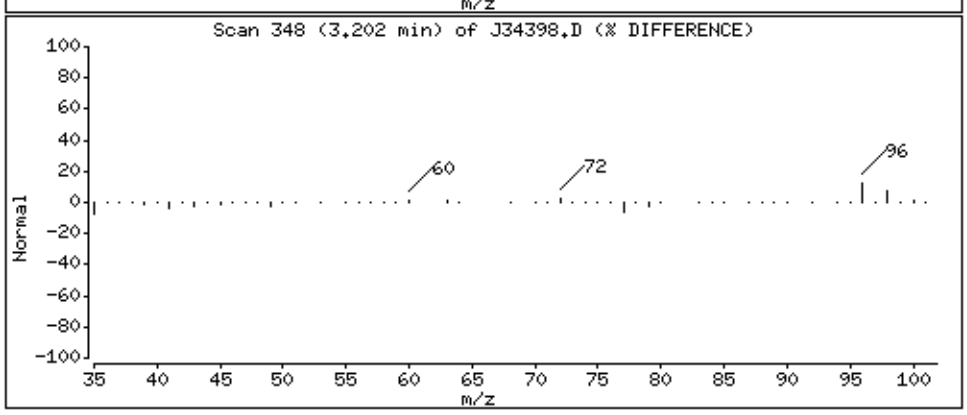












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D

Date : 25-APR-2017 13:27

Client ID: MBLCS

Instrument: 70msv6.i

Sample Info: 103009, 15067:1.25

Purge Volume: 5.0

Operator: KGG

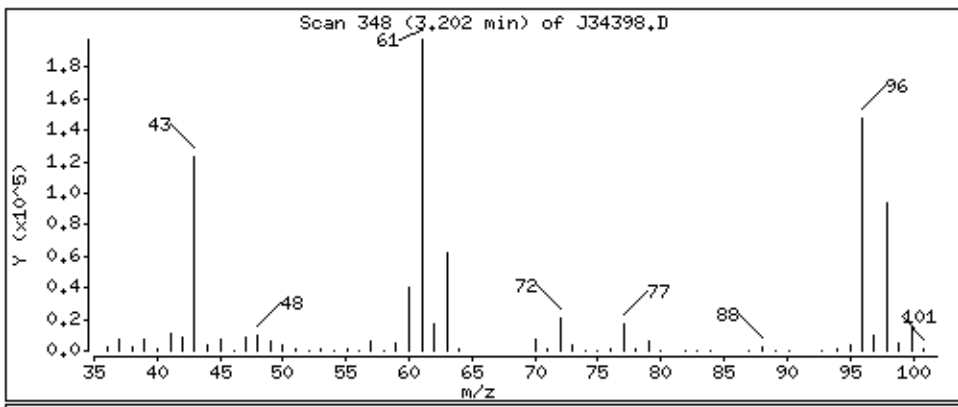
Column phase: RTX-624

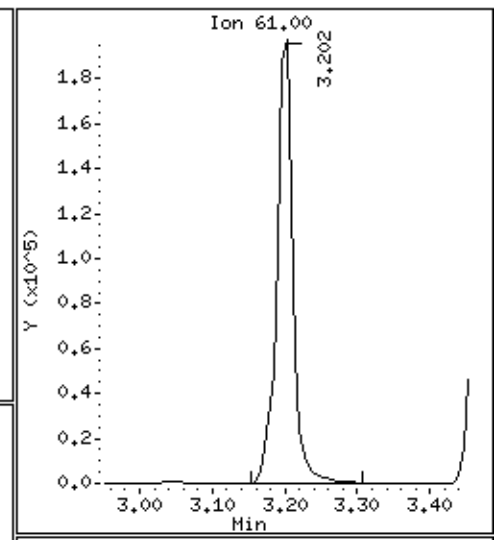
Column diameter: 0.18

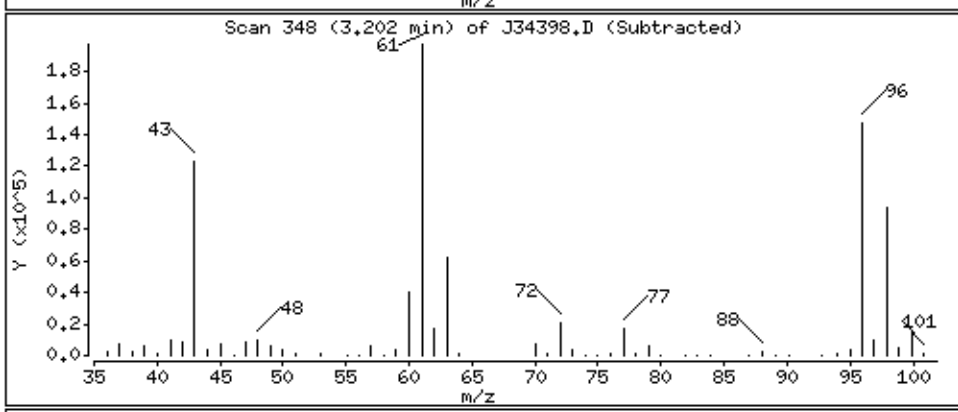
39 Ethyl acetate

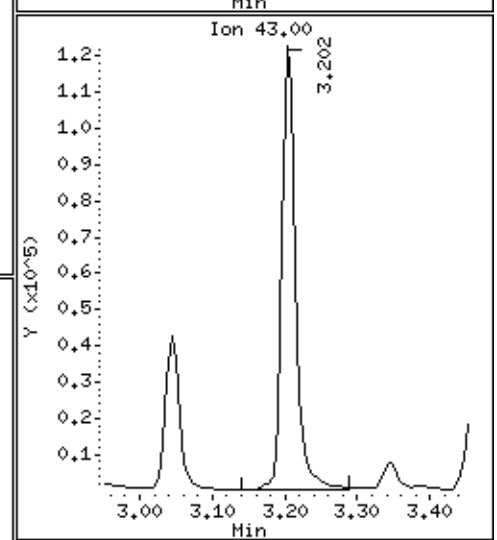
Concentration: 37.4 ug/L

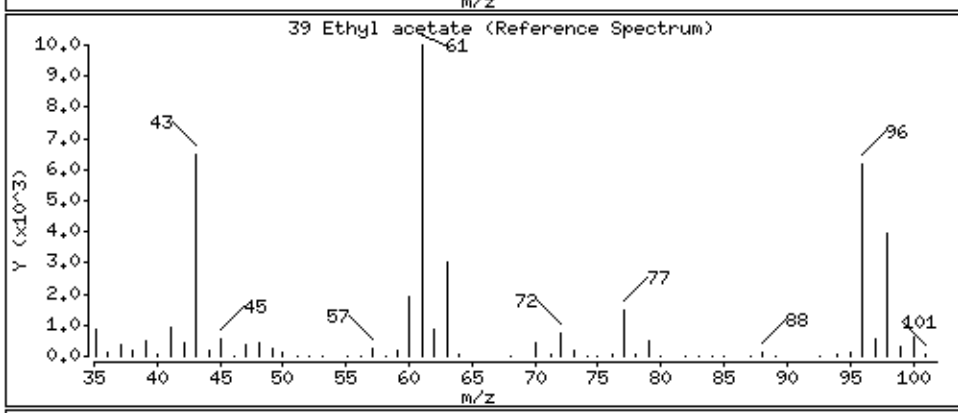
Review Code:

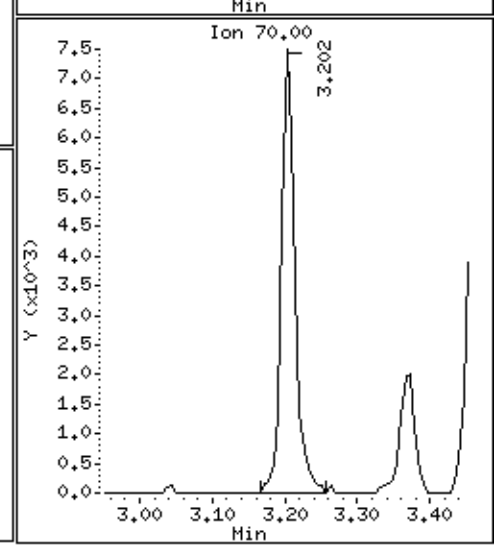


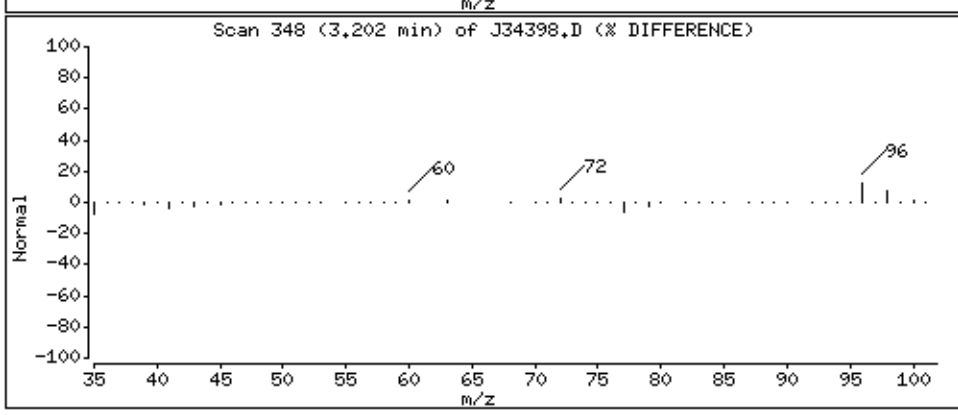












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D

Date : 25-APR-2017 13:27

Client ID: MBLCS

Instrument: 70msv6.i

Sample Info: 103009, 15067:1.25

Purge Volume: 5.0

Operator: KGG

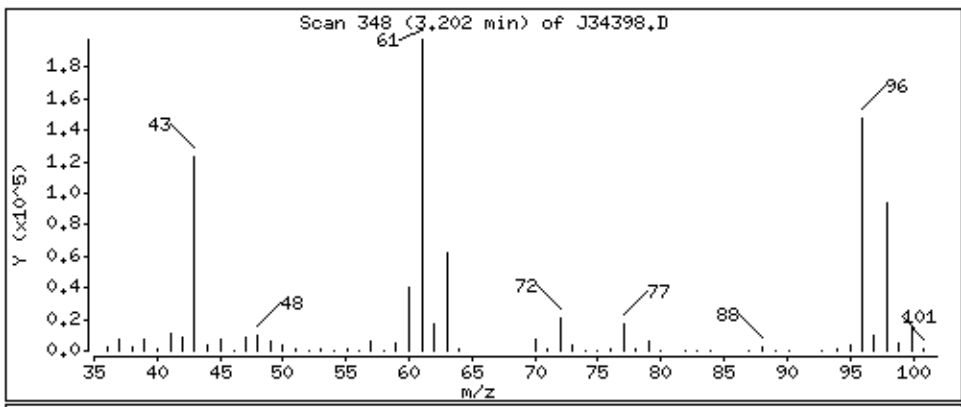
Column phase: RTX-624

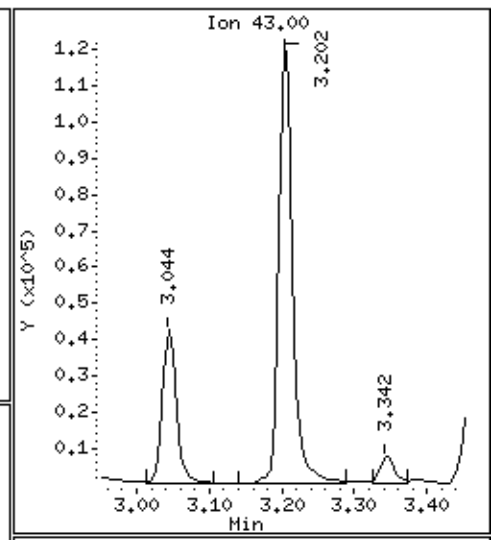
Column diameter: 0.18

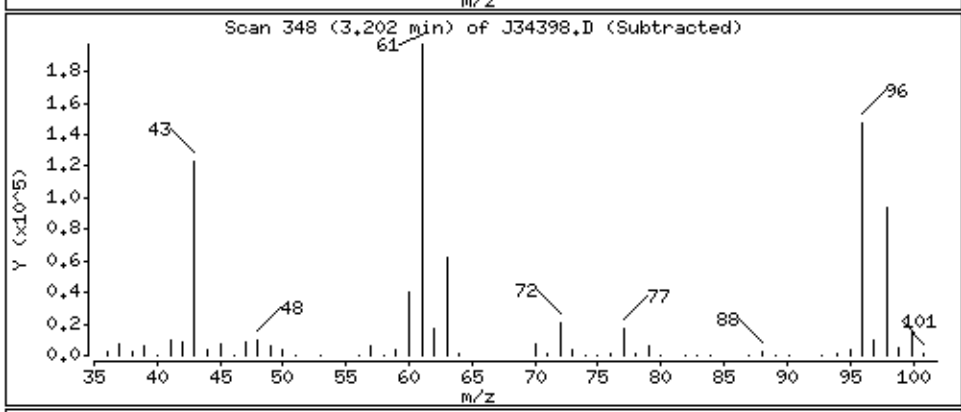
37 2-Butanone (MEK)

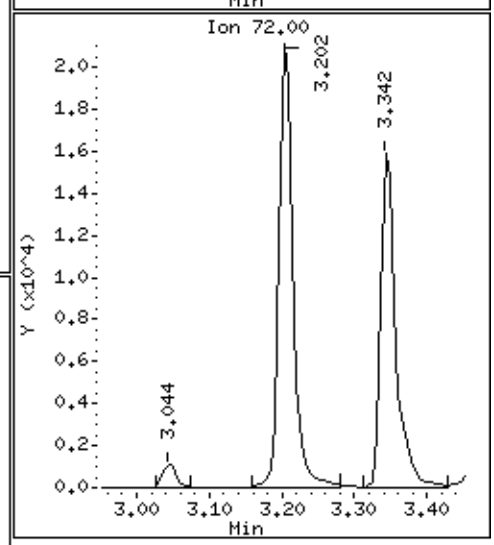
Concentration: 38.9 ug/L

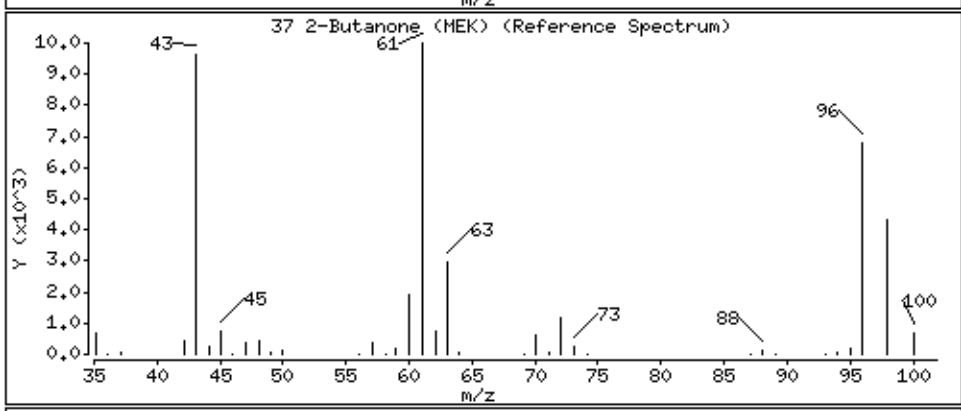
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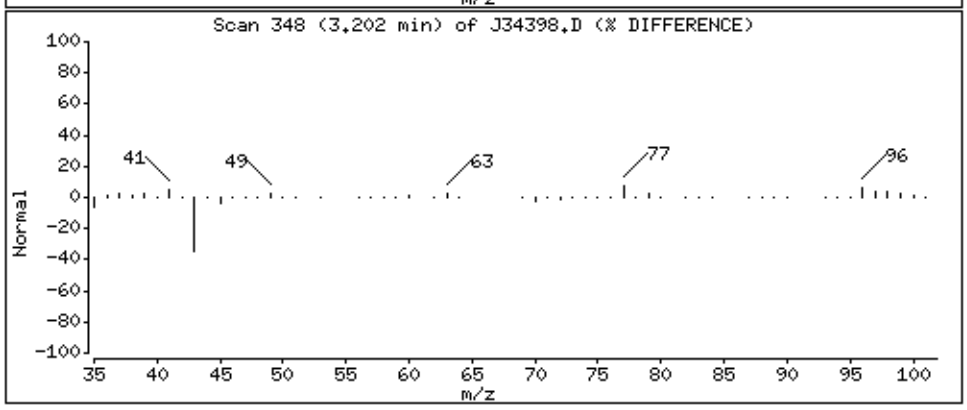












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D

Date : 25-APR-2017 13:27

Client ID: MBLCS

Instrument: 70msv6.i

Sample Info: 103009, 15067:1.25

Purge Volume: 5.0

Operator: KGG

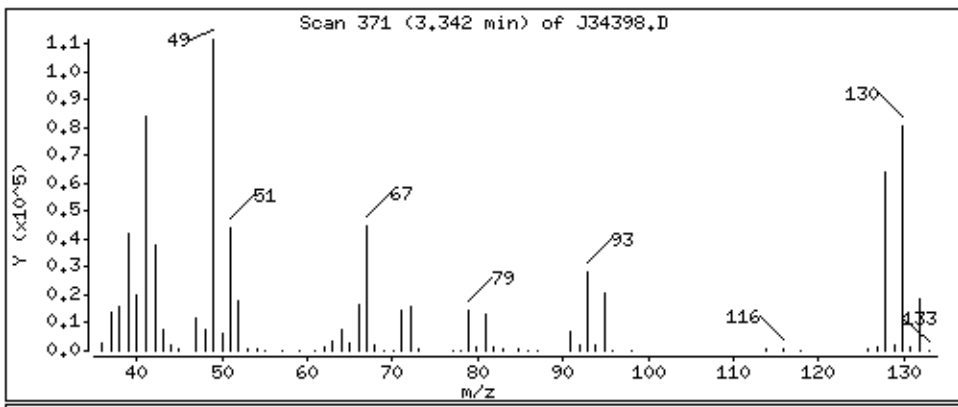
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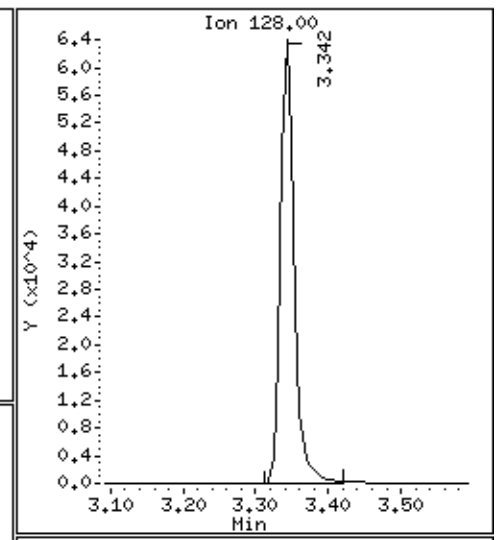
Column diameter: 0.18

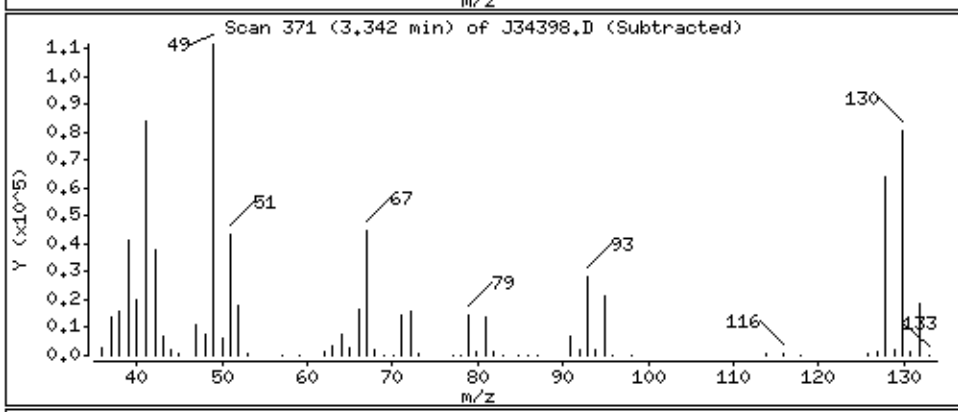
41 Bromochloromethane

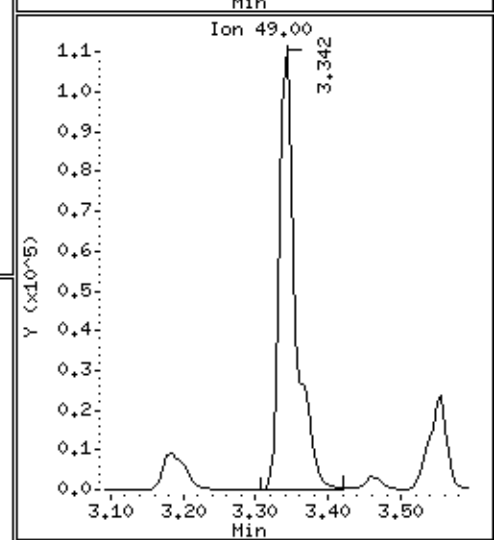
Concentration: 43.9 ug/L

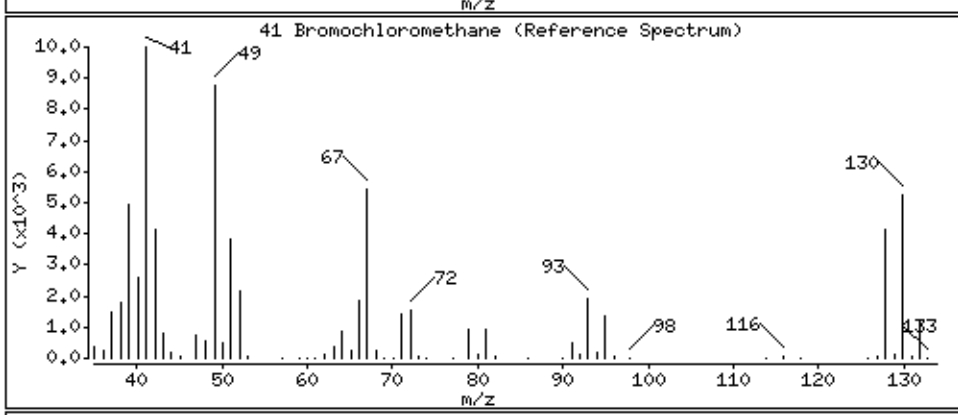
Review Code:

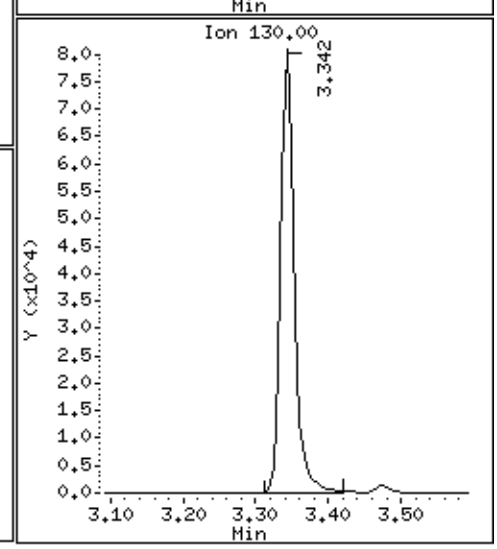


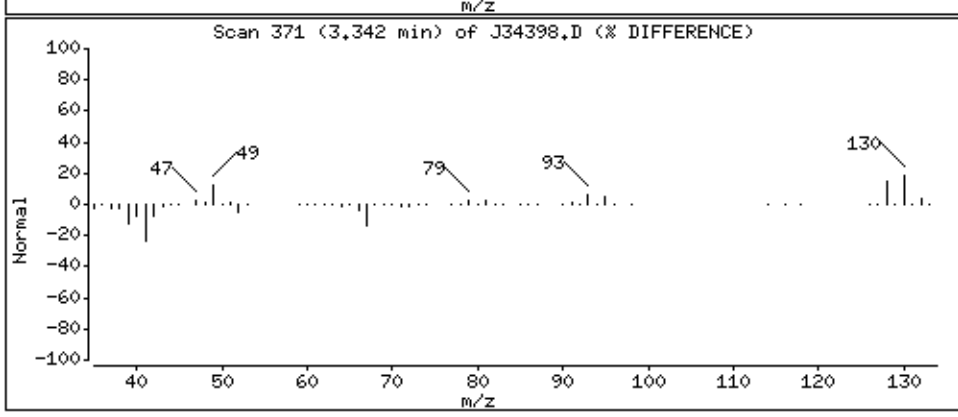












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D

Date : 25-APR-2017 13:27

Client ID: MBLCS

Instrument: 70msv6.i

Sample Info: 103009, 15067:1.25

Purge Volume: 5.0

Operator: KGG

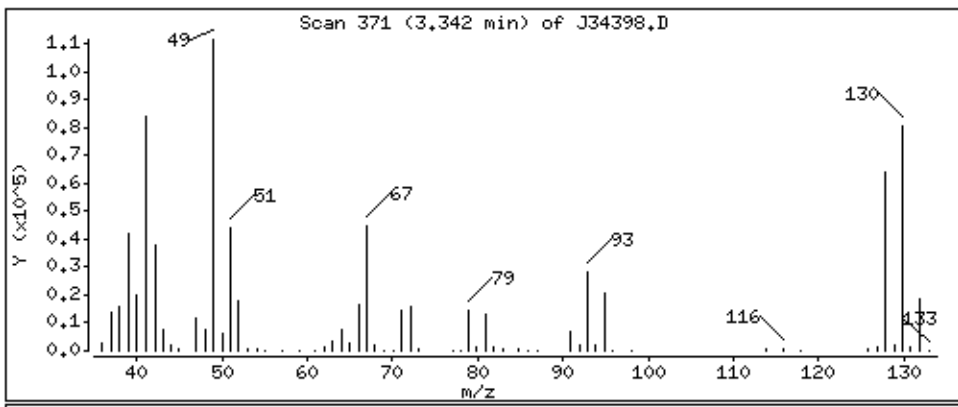
Column phase: RTX-624

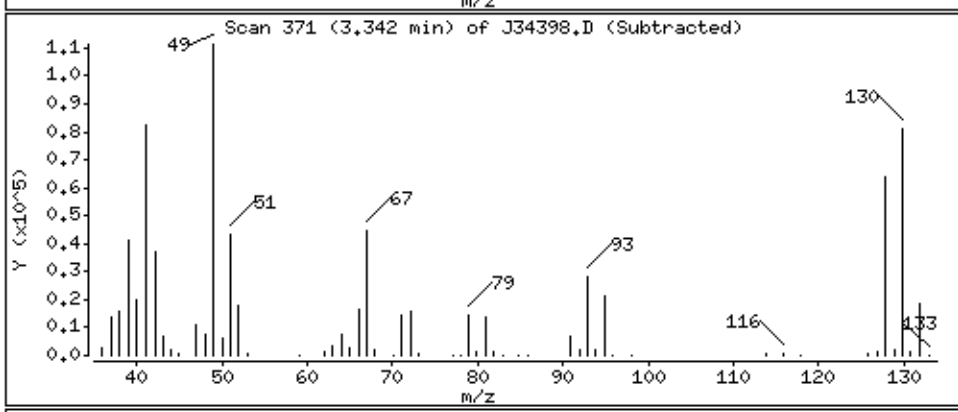
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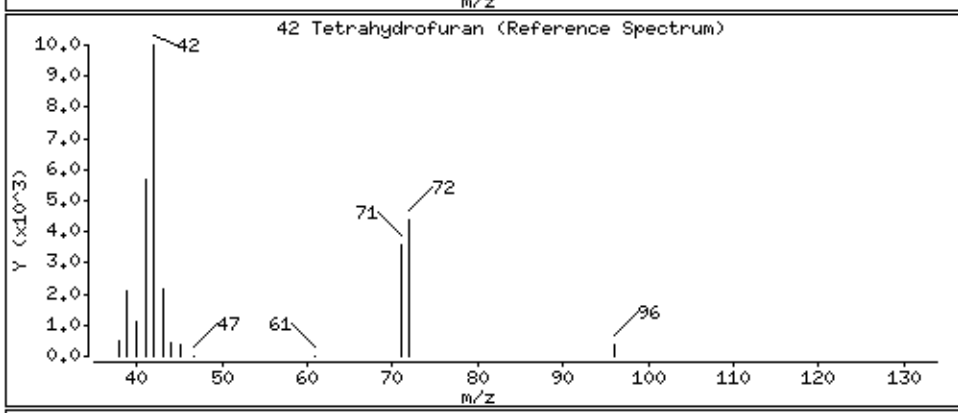
42 Tetrahydrofuran

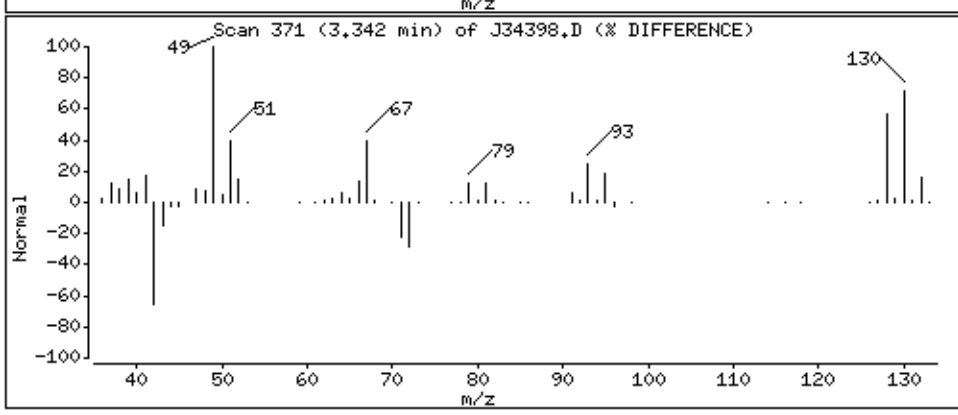
Concentration: 30.5 ug/L

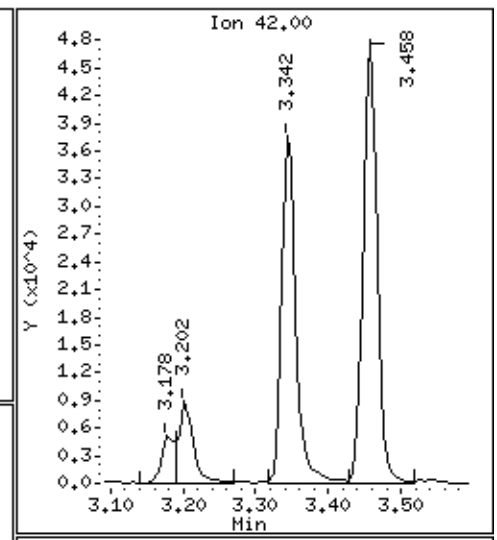
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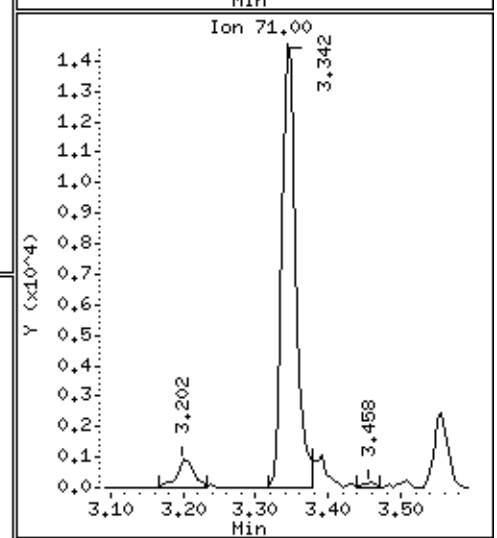


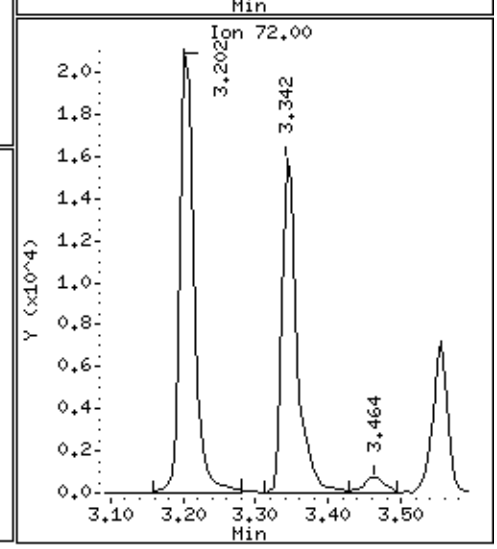












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D

Date : 25-APR-2017 13:27

Client ID: MBLCS

Instrument: 70msv6.i

Sample Info: 103009, 15067:1.25

Purge Volume: 5.0

Operator: KGG

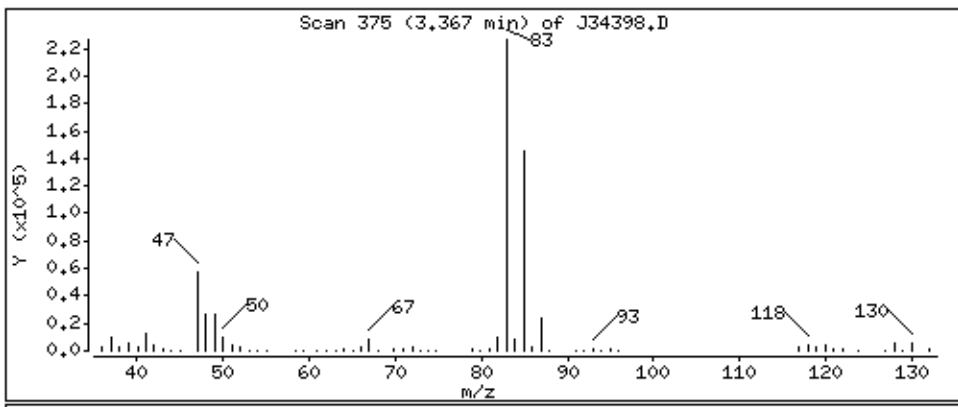
Column phase: RTX-624

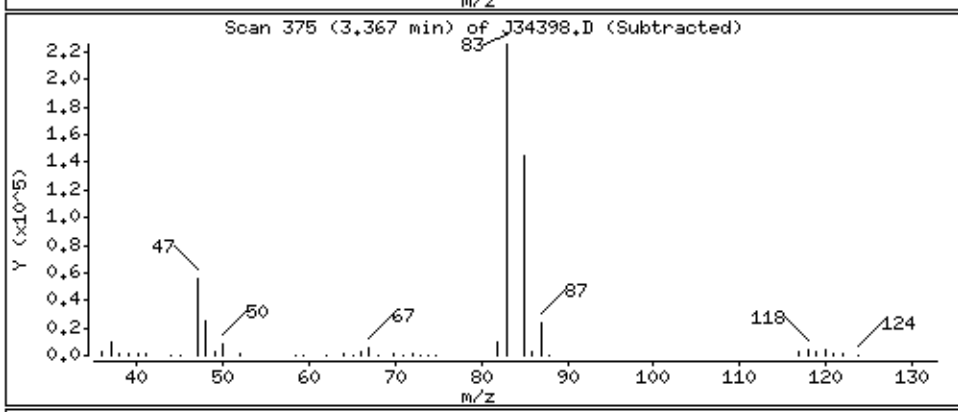
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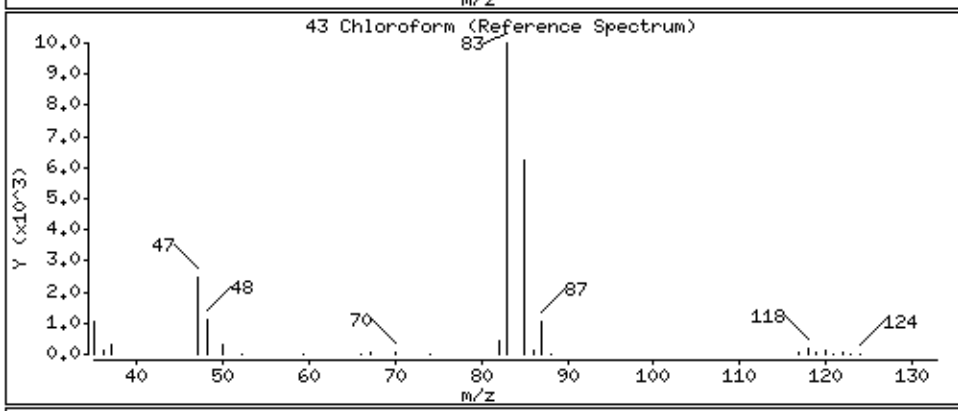
43 Chloroform

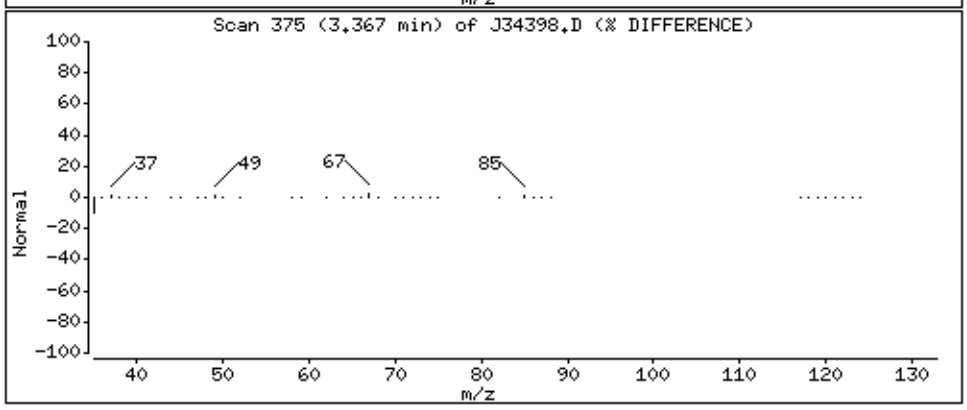
Concentration: 40.0 ug/L

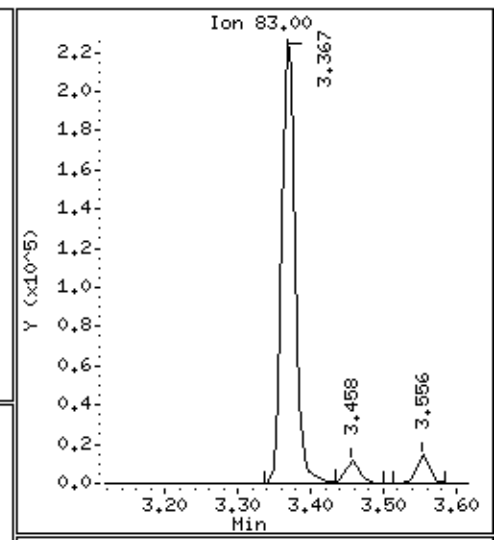
Review Code:

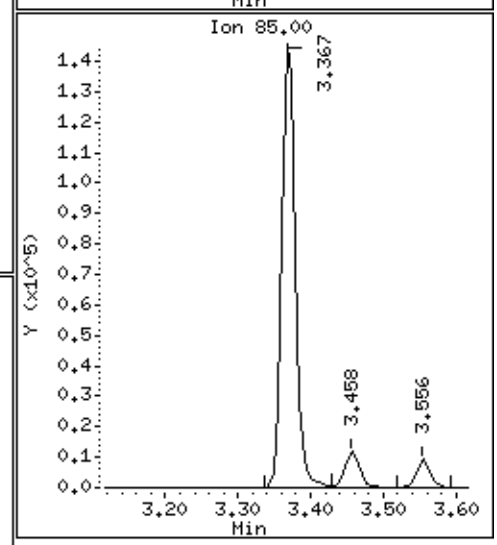












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D

Date : 25-APR-2017 13:27

Client ID: MBLCS

Instrument: 70msv6.i

Sample Info: 103009, 15067:1.25

Purge Volume: 5.0

Operator: KGG

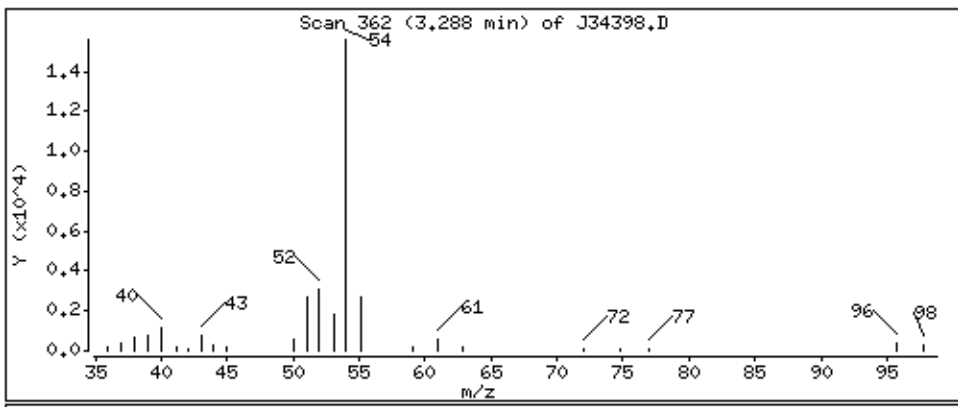
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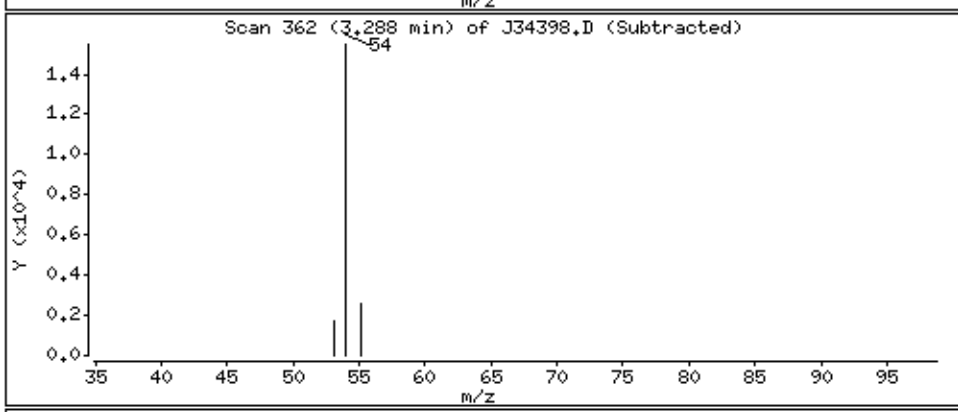
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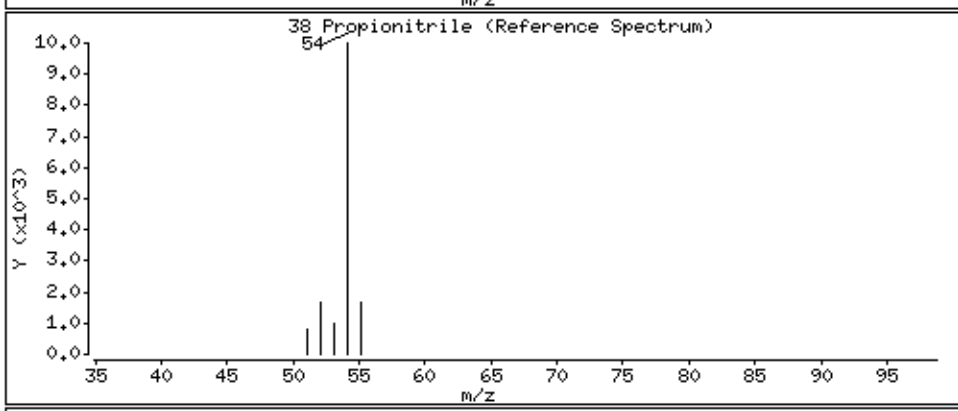
38 Propionitrile

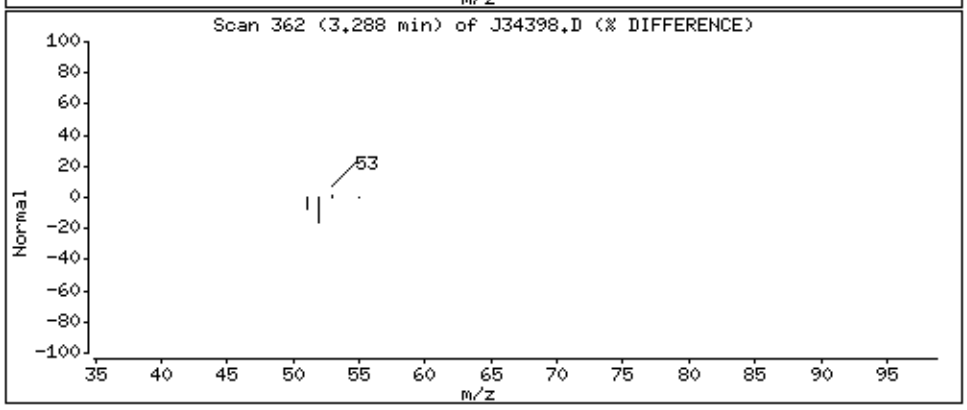
Concentration: 37.1 ug/L

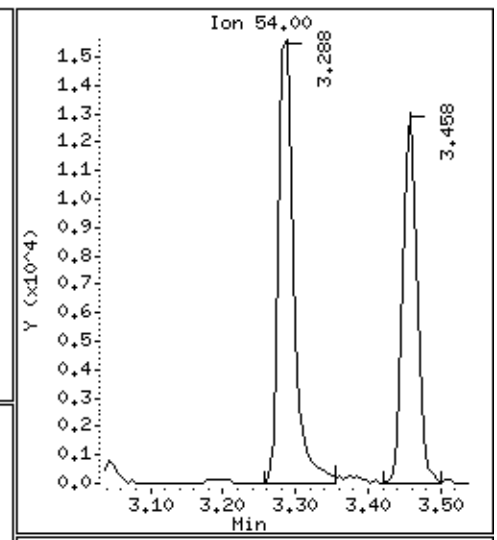
Review Code:

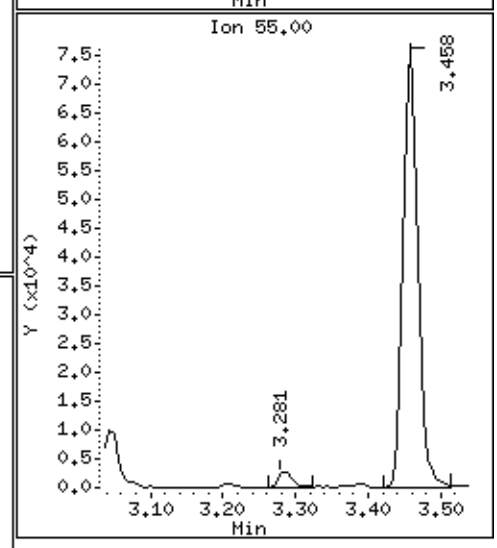












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D

Date : 25-APR-2017 13:27

Client ID: MBLCS

Instrument: 70msv6.i

Sample Info: 103009, 15067:1.25

Purge Volume: 5.0

Operator: KGG

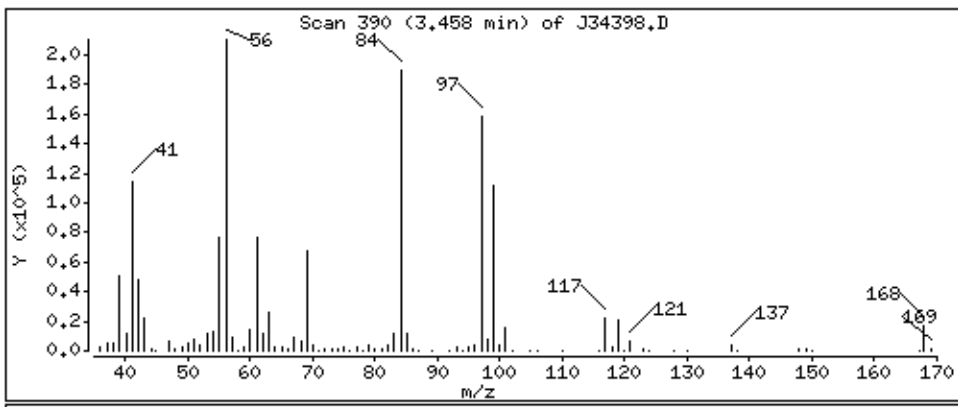
Column phase: RTX-624

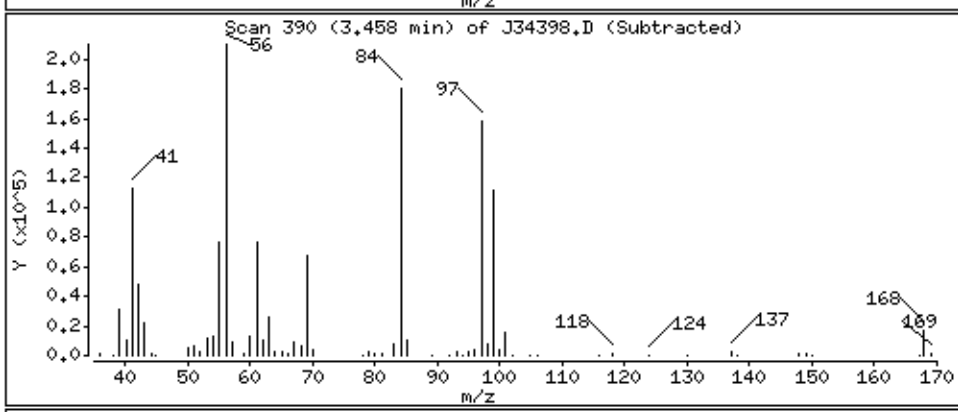
Column diameter: 0.18

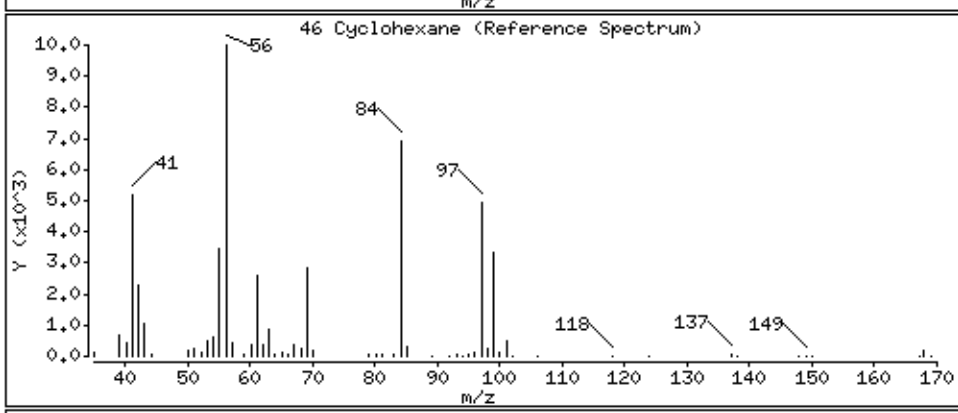
46 Cyclohexane

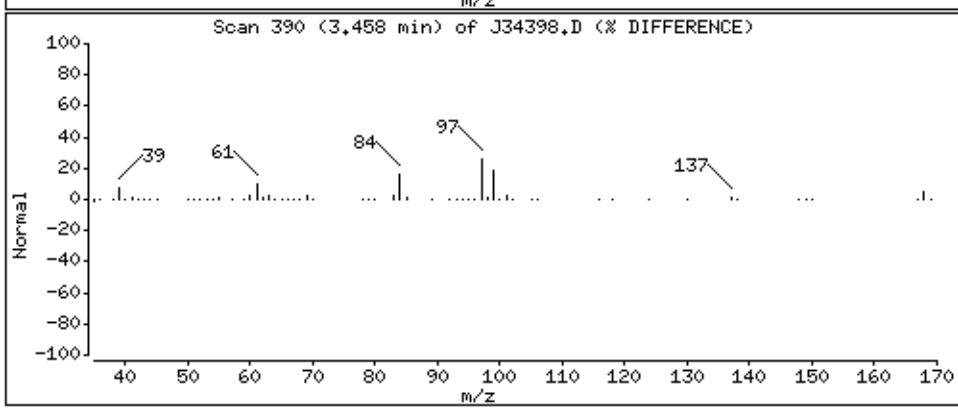
Concentration: 35.6 ug/L

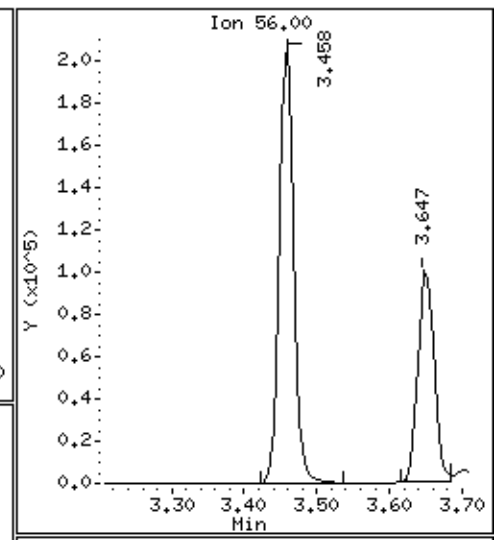
Review Code:

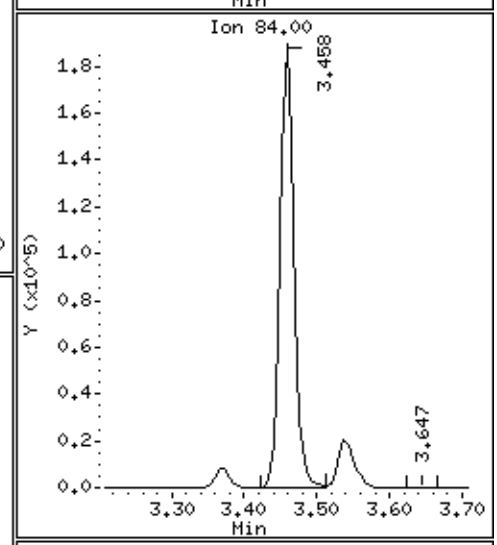


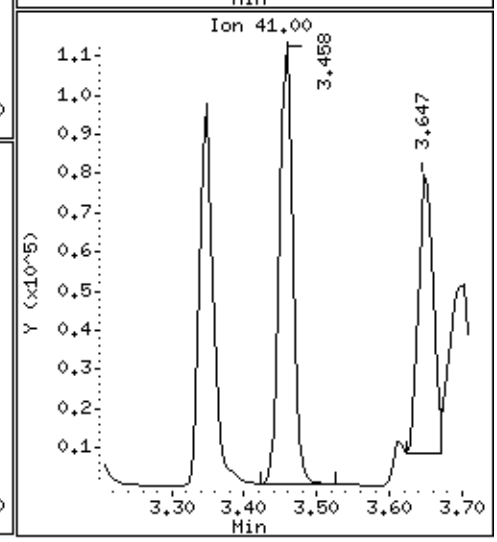












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D

Date : 25-APR-2017 13:27

Client ID: MBLCS

Instrument: 70msv6.i

Sample Info: 103009, 15067:1.25

Purge Volume: 5.0

Operator: KGG

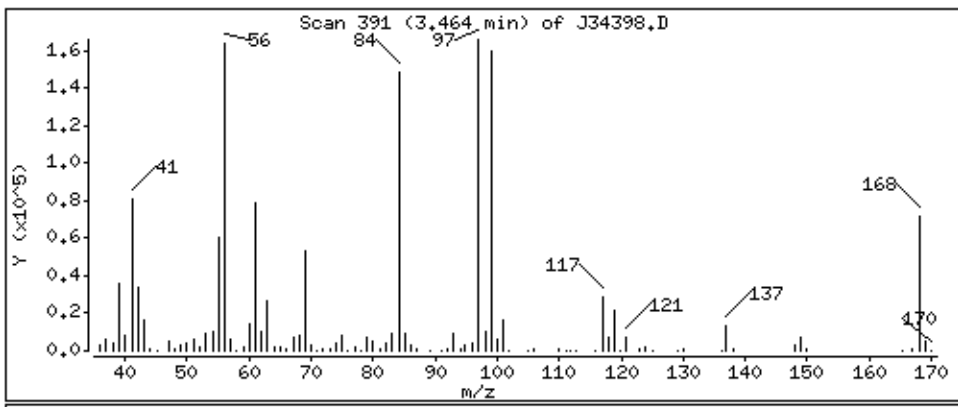
Column phase: RTX-624

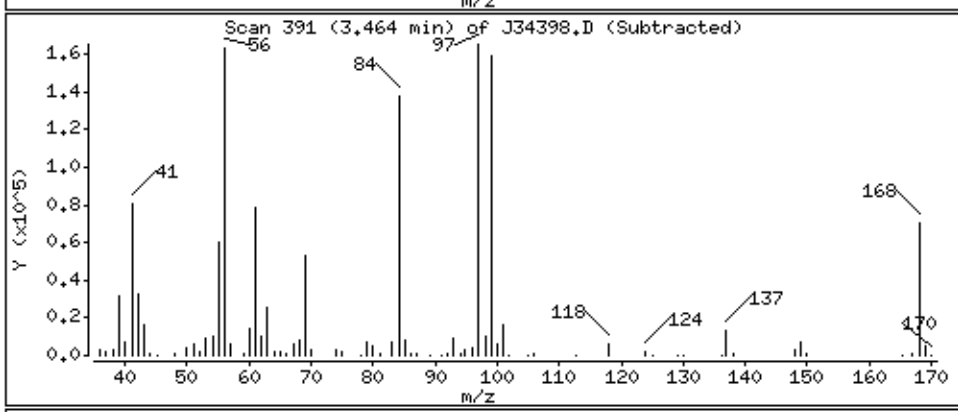
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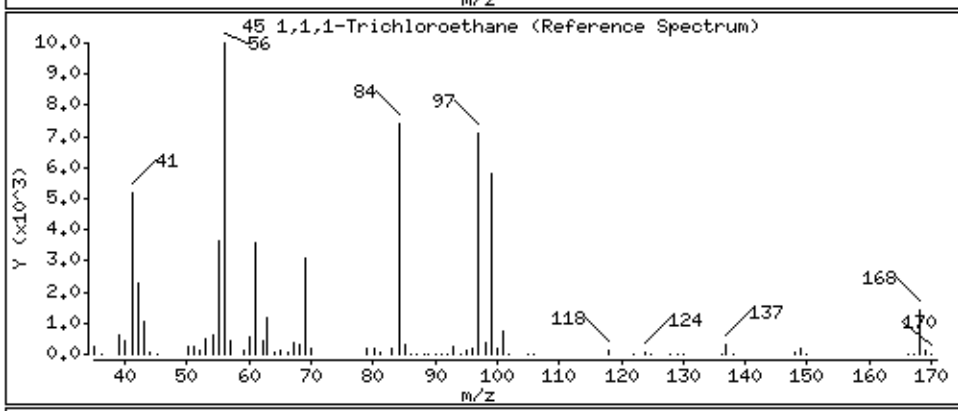
45 1,1,1-Trichloroethane

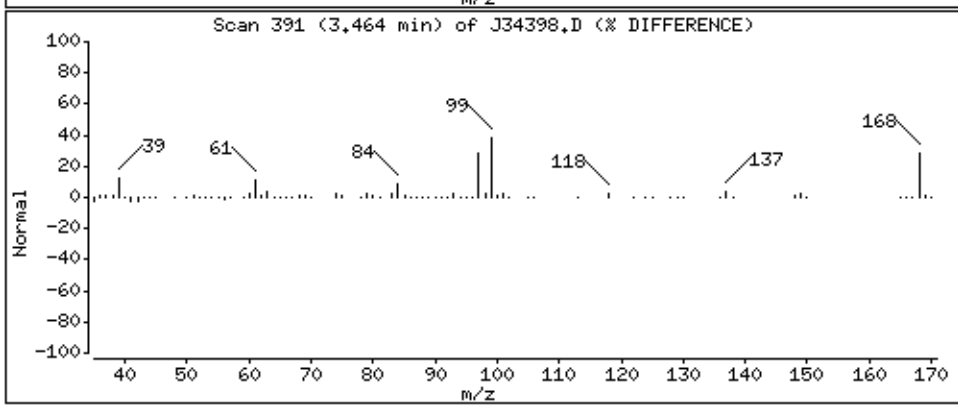
Concentration: 44.0 ug/L

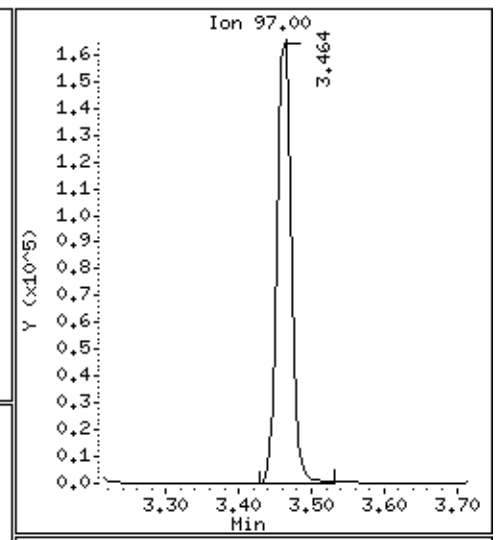
Review Code:

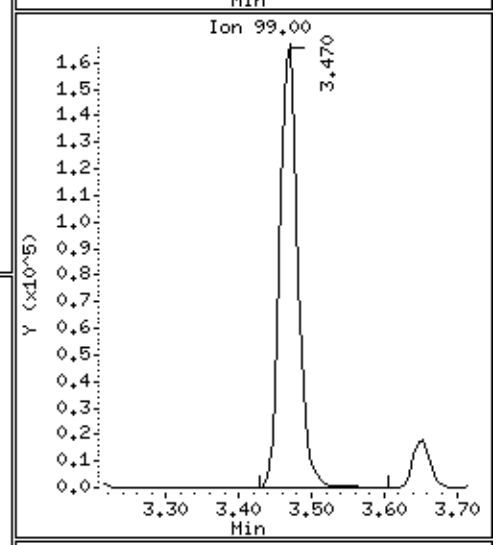


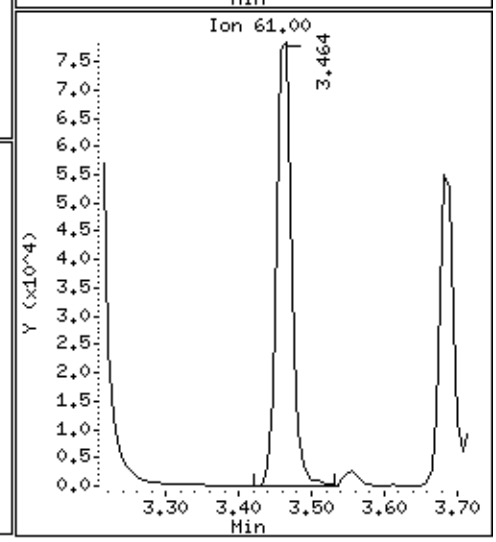












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D

Date : 25-APR-2017 13:27

Client ID: MBLCS

Instrument: 70msv6.i

Sample Info: 103009, 15067:1.25

Purge Volume: 5.0

Operator: KGG

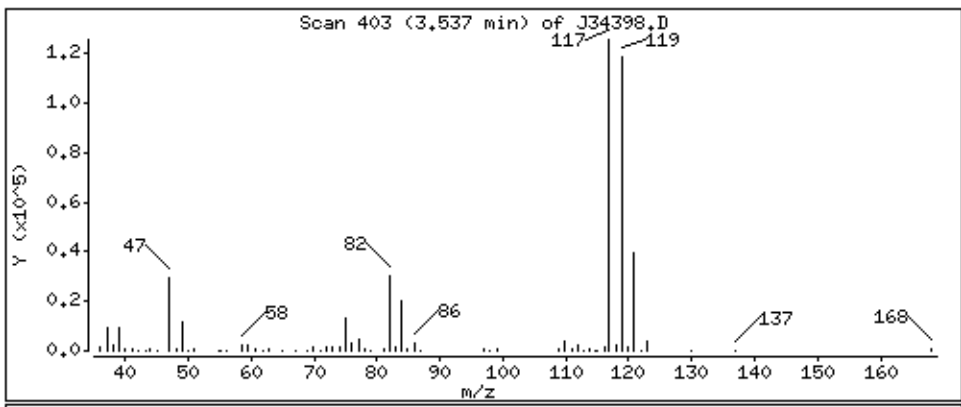
Column phase: RTX-624

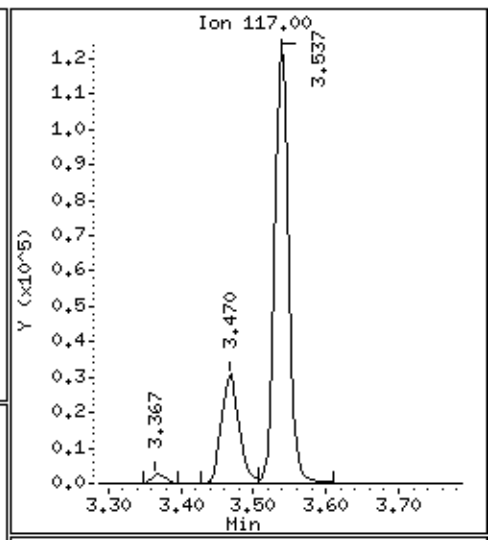
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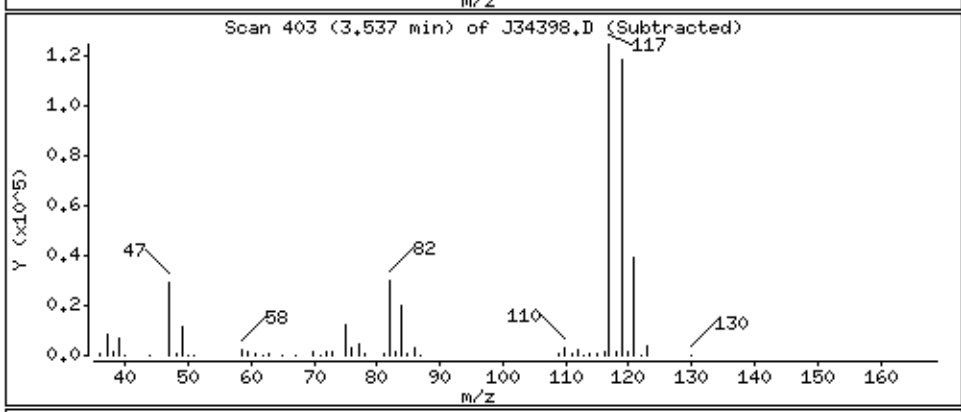
48 Carbon tetrachloride

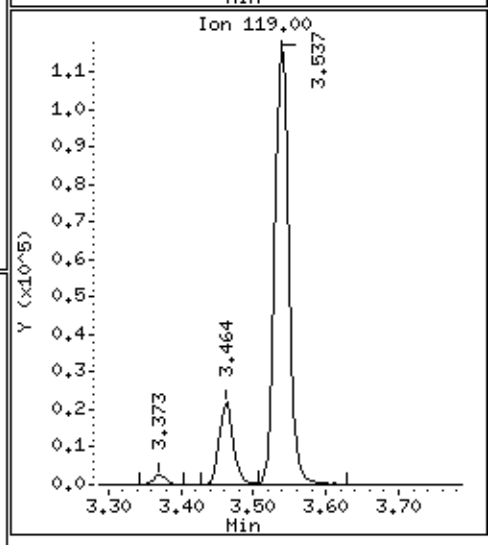
Concentration: 52.4 ug/L

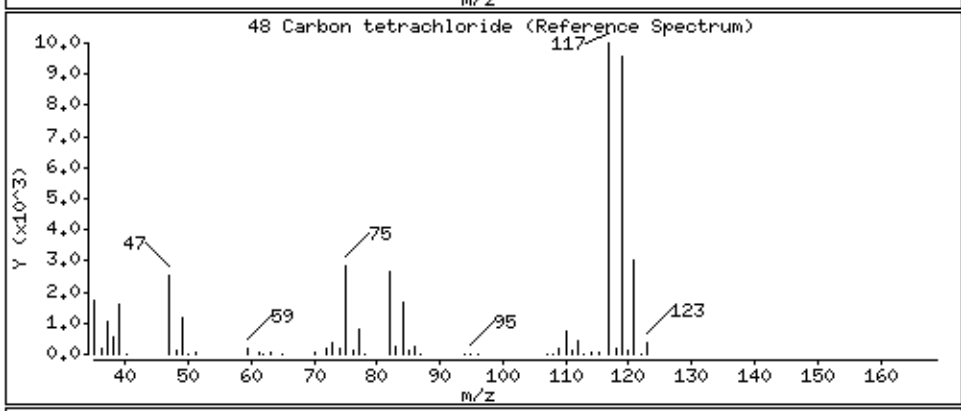
Review Code:

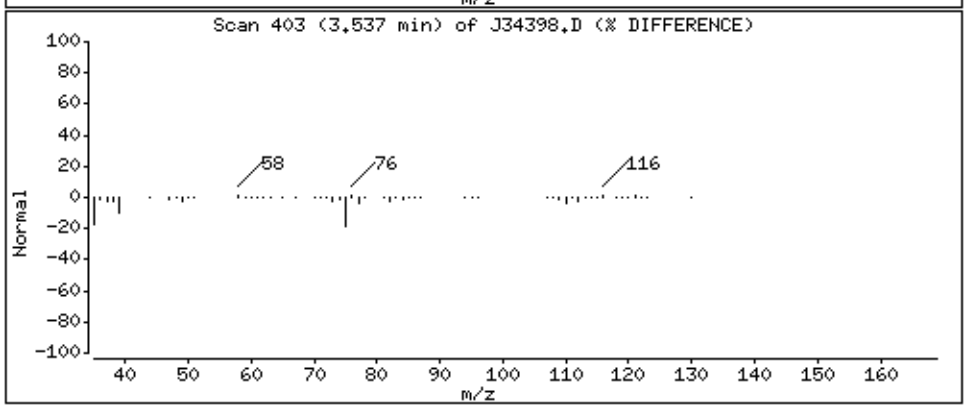












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D

Date : 25-APR-2017 13:27

Client ID: MBLCS

Instrument: 70msv6.i

Sample Info: 103009, 15067:1.25

Purge Volume: 5.0

Operator: KGG

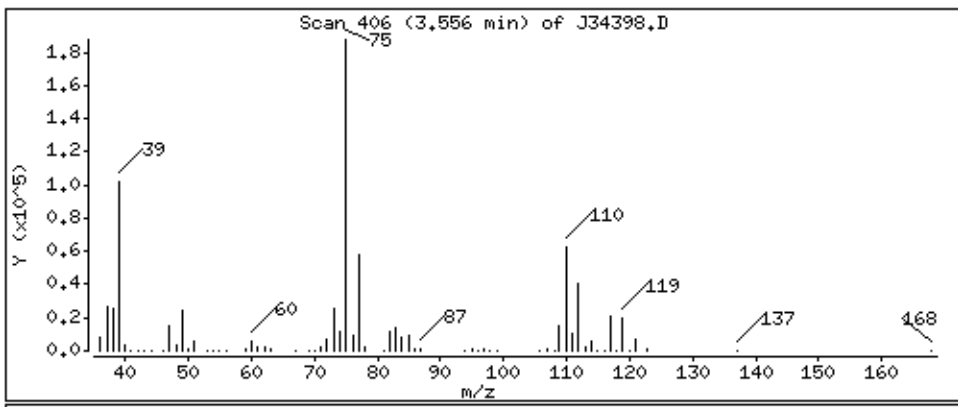
Column phase: RTX-624

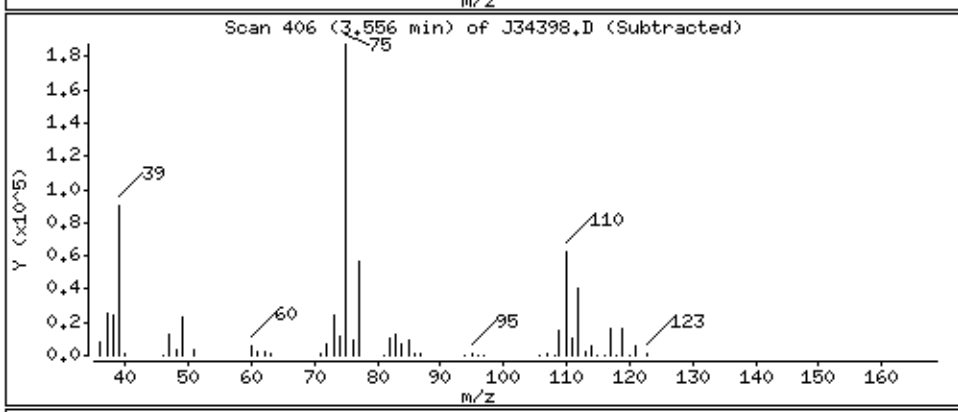
Column diameter: 0.18

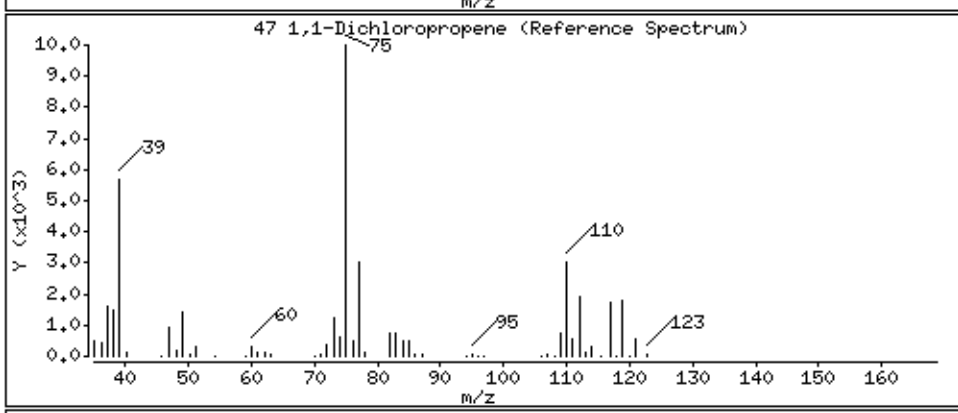
47 1,1-Dichloropropene

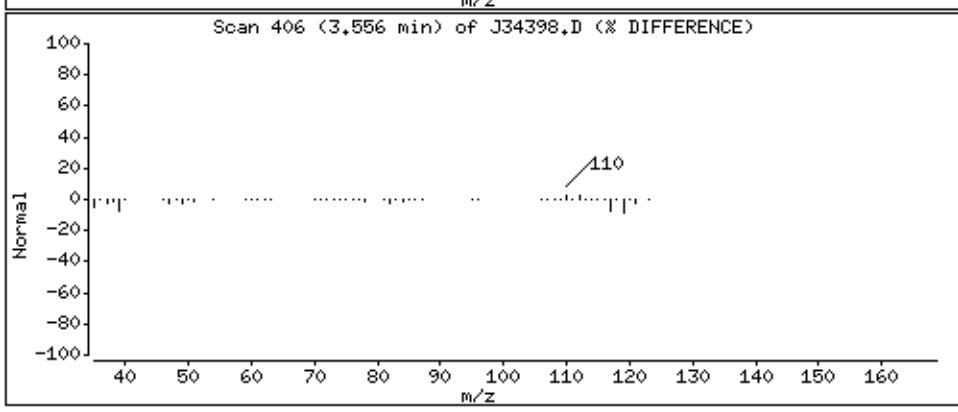
Concentration: 38.4 ug/L

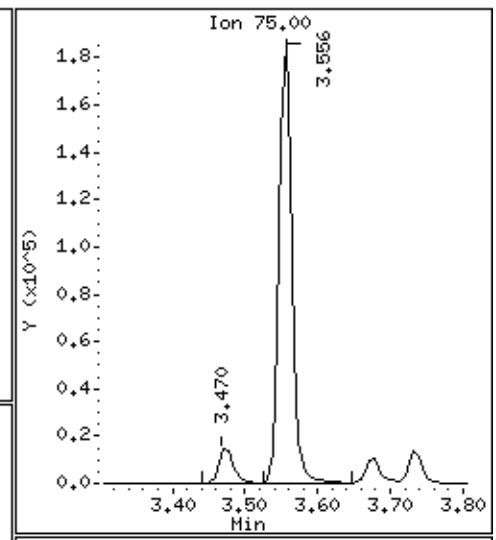
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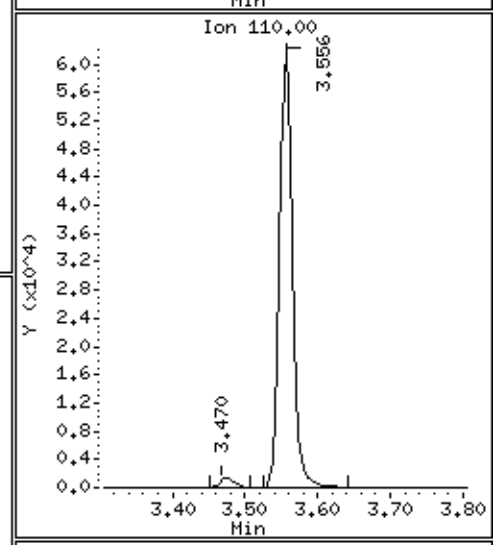


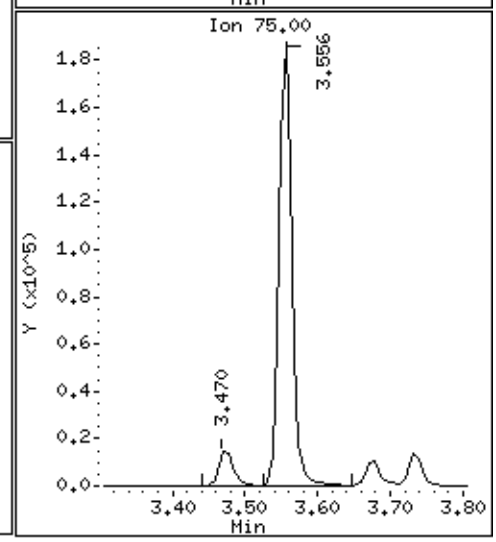












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D

Date : 25-APR-2017 13:27

Client ID: MBLCS

Instrument: 70msv6.i

Sample Info: 103009, 15067:1.25

Purge Volume: 5.0

Operator: KGG

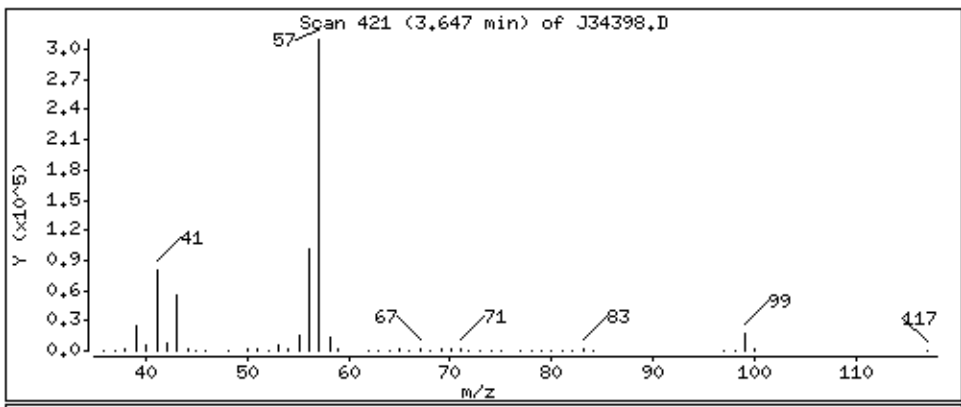
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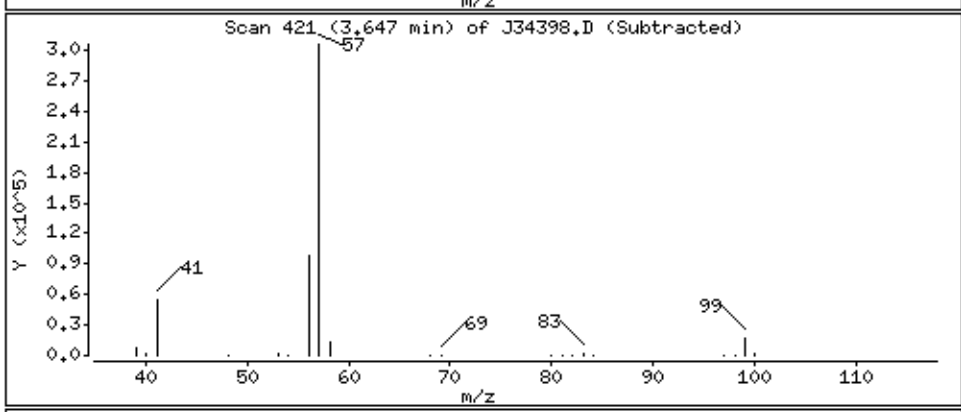
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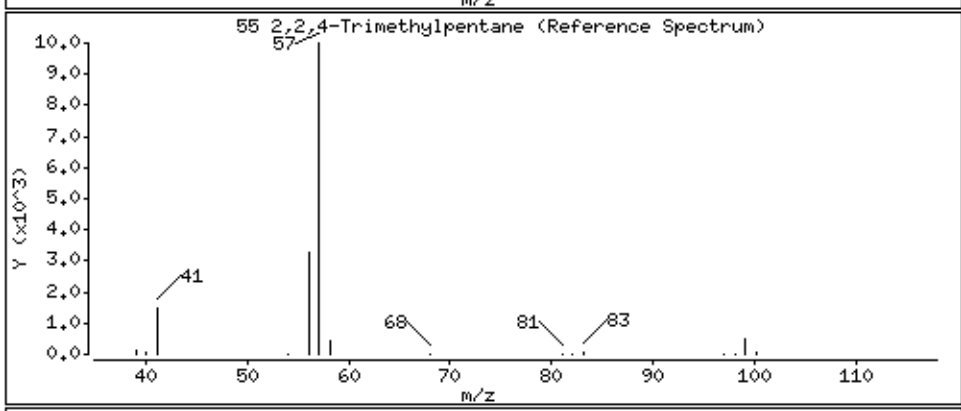
55 2,2,4-Trimethylpentane

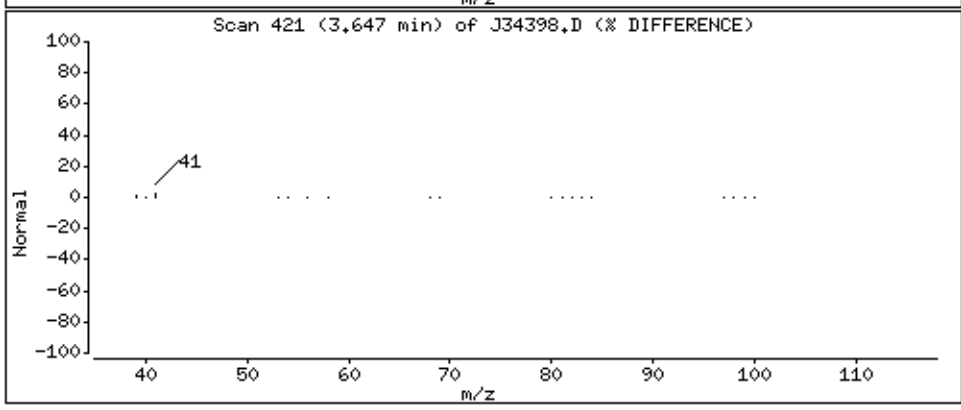
Concentration: 56.7 ug/L

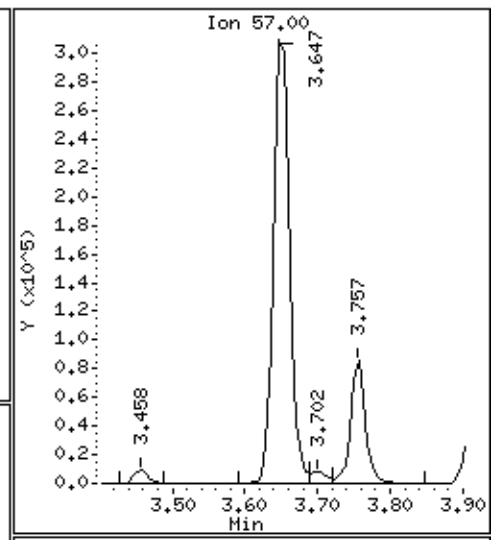
Review Code:

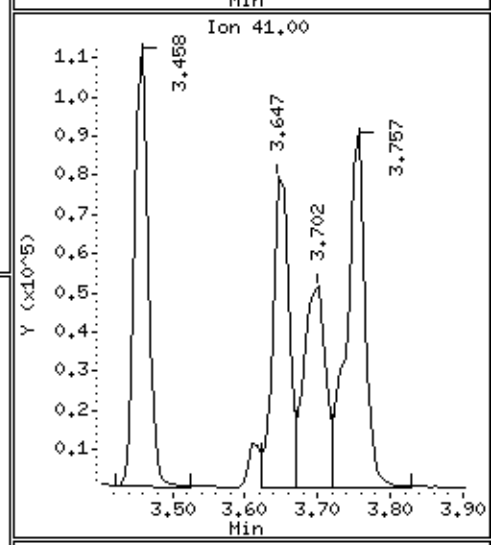


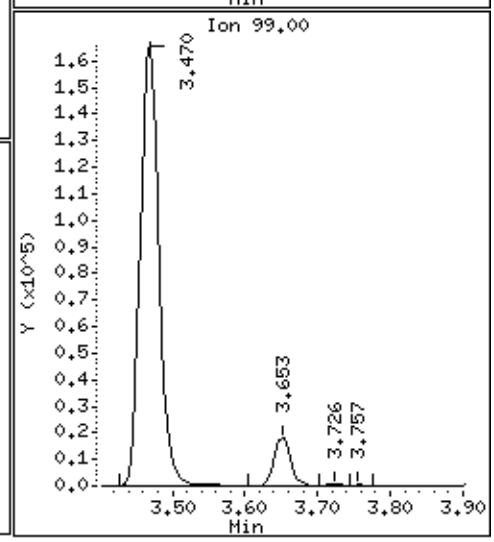












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D

Date : 25-APR-2017 13:27

Client ID: MBLCS

Instrument: 70msv6.i

Sample Info: 103009, 15067:1.25

Purge Volume: 5.0

Operator: KGG

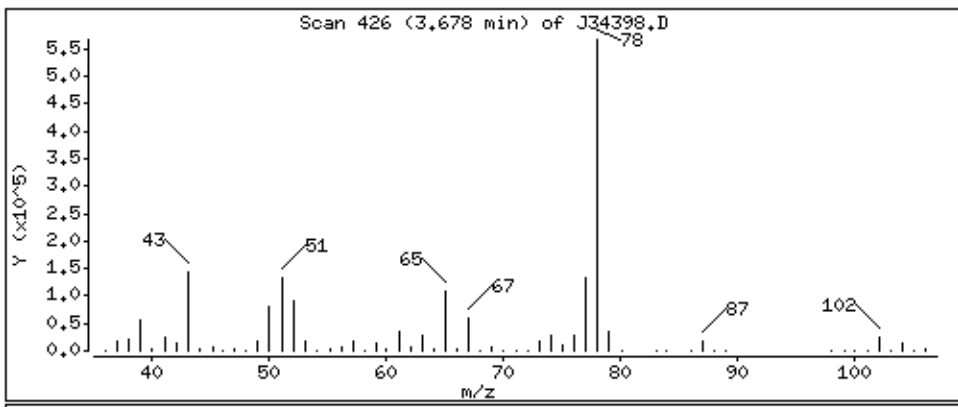
Column phase: RTX-624

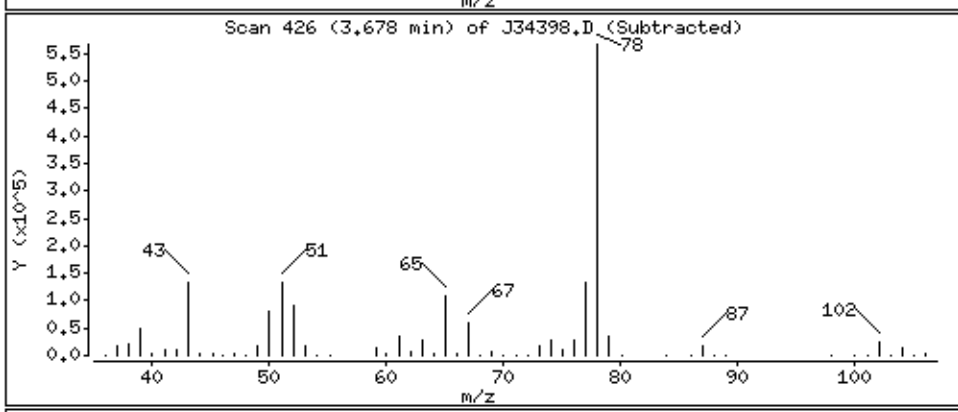
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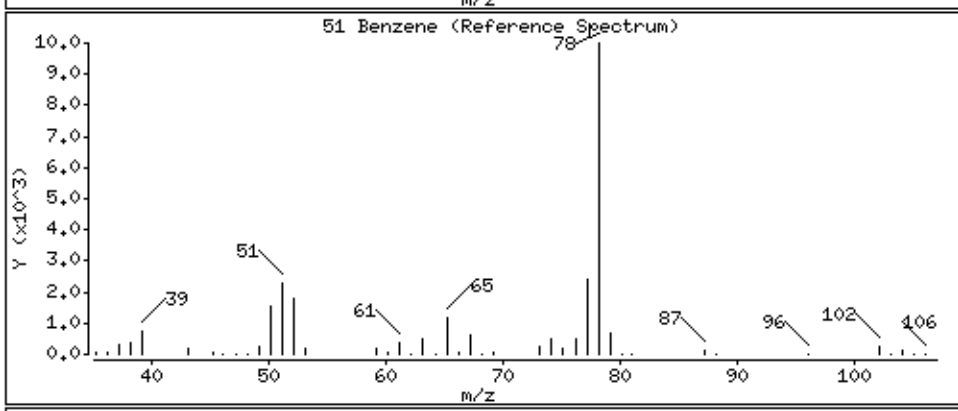
51 Benzene

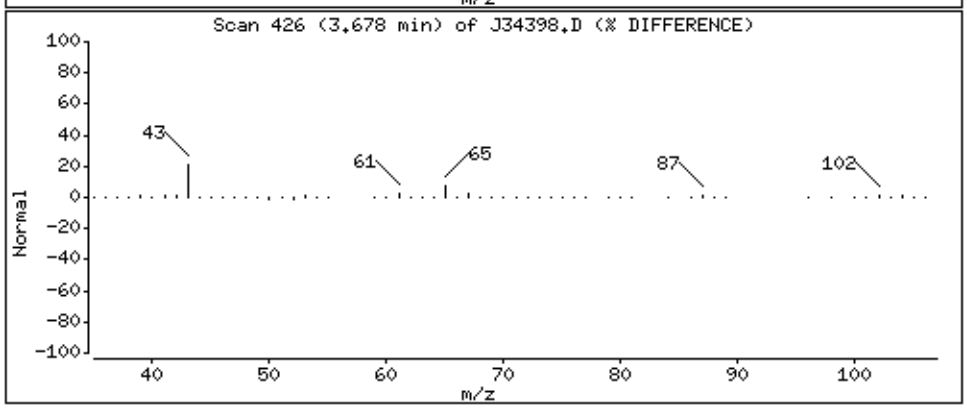
Concentration: 42.3 ug/L

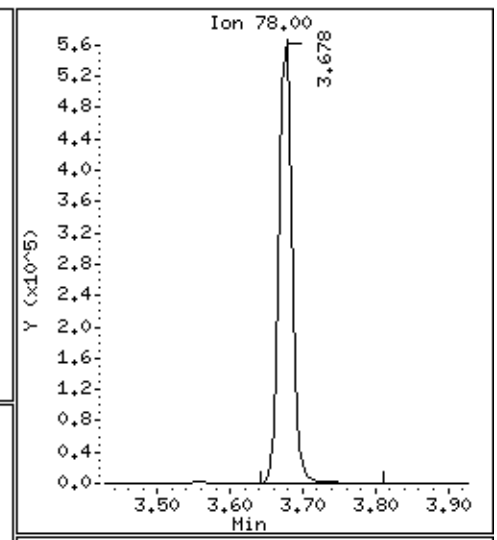
Review Code:

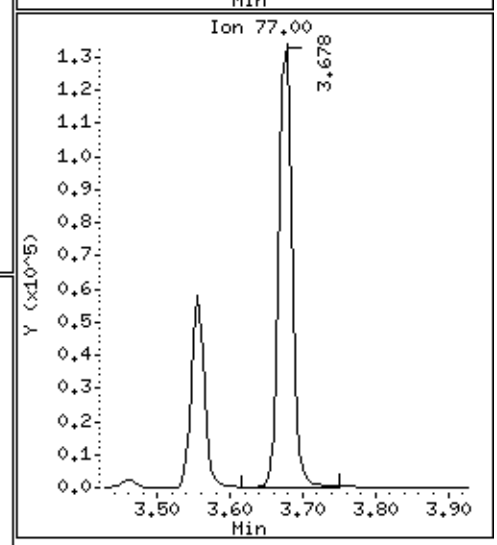












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D

Date : 25-APR-2017 13:27

Client ID: MBLCS

Instrument: 70msv6.i

Sample Info: 103009, 15067:1.25

Purge Volume: 5.0

Operator: KGG

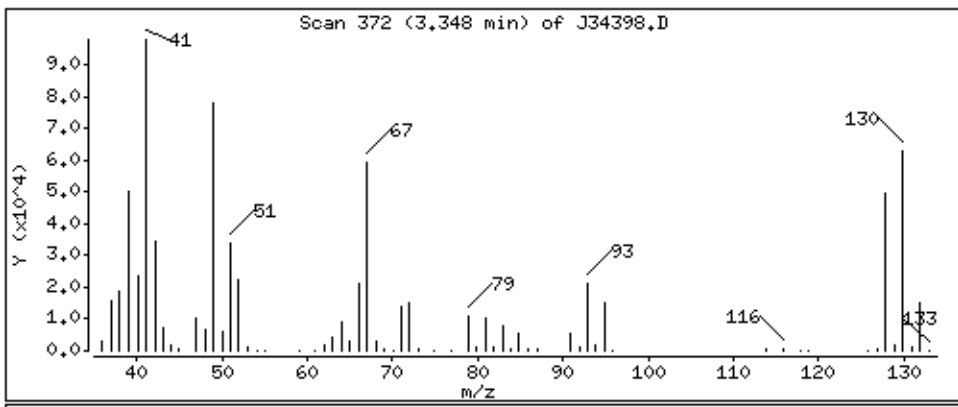
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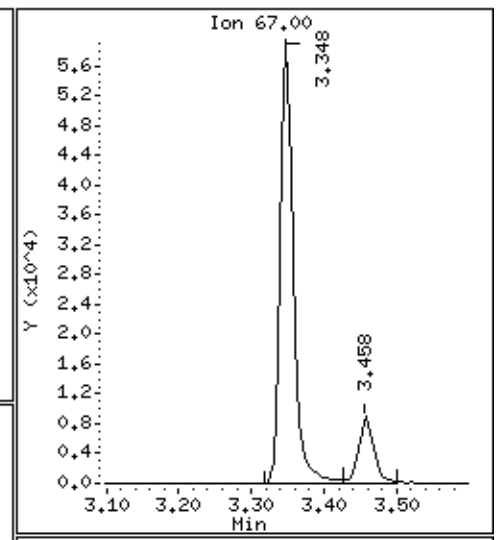
Column diameter: 0.18

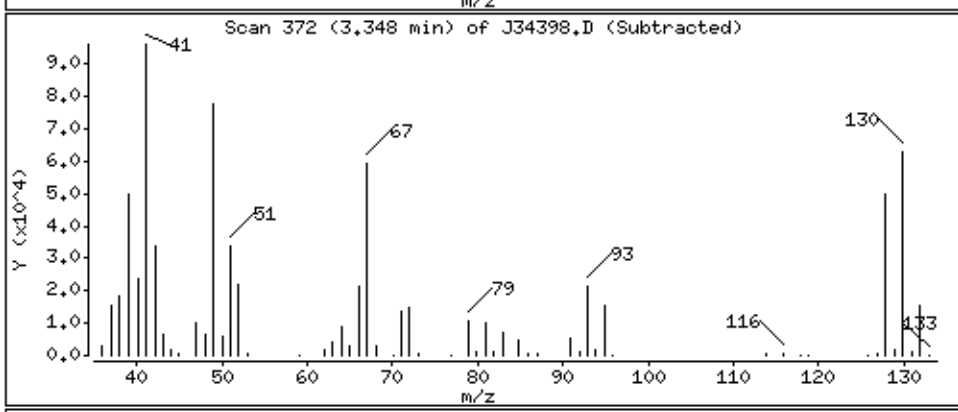
40 Methacrylonitrile

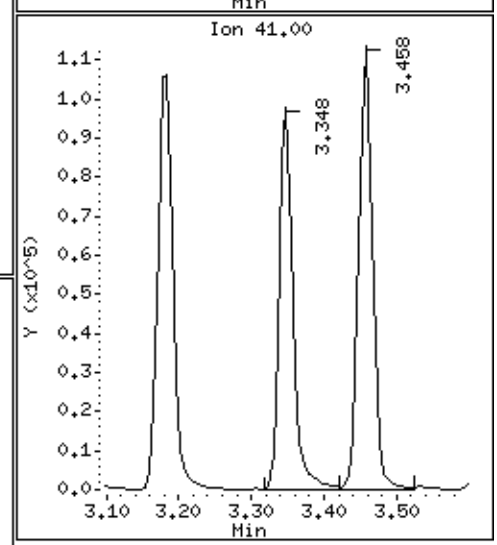
Concentration: 38.2 ug/L

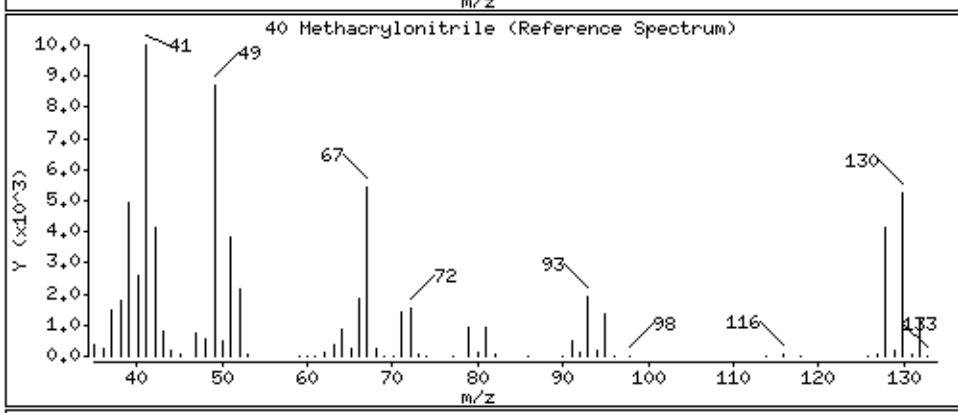
Review Code:

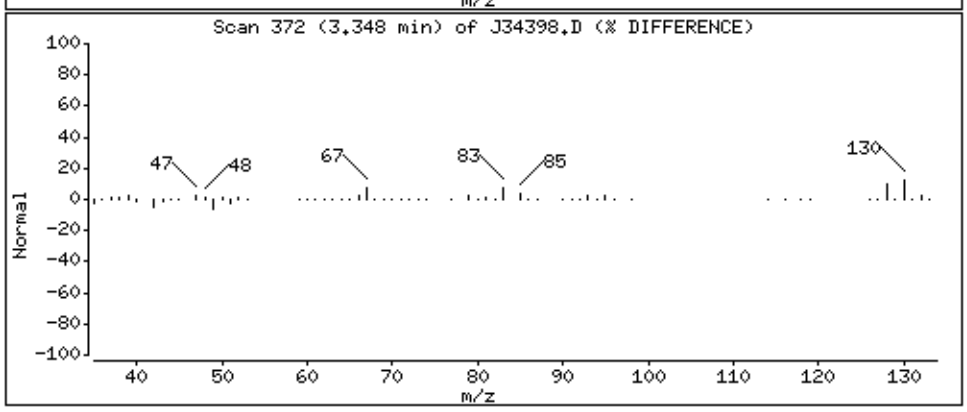












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D

Date : 25-APR-2017 13:27

Client ID: MBLCS

Instrument: 70msv6.i

Sample Info: 103009, 15067:1.25

Purge Volume: 5.0

Operator: KGG

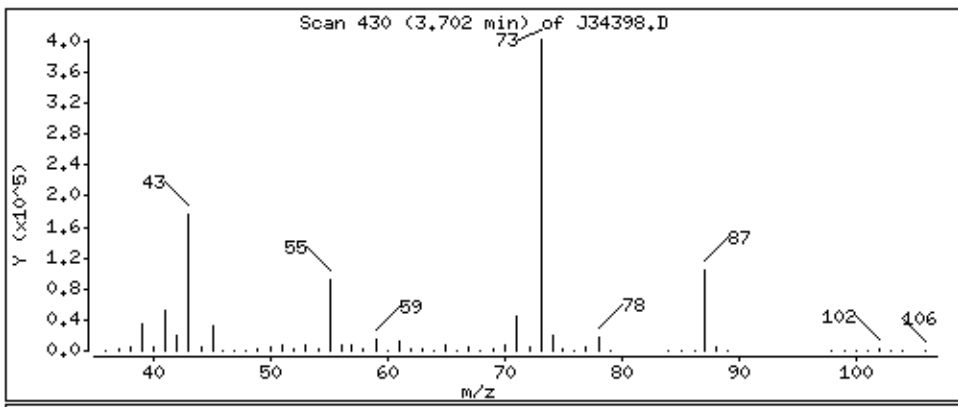
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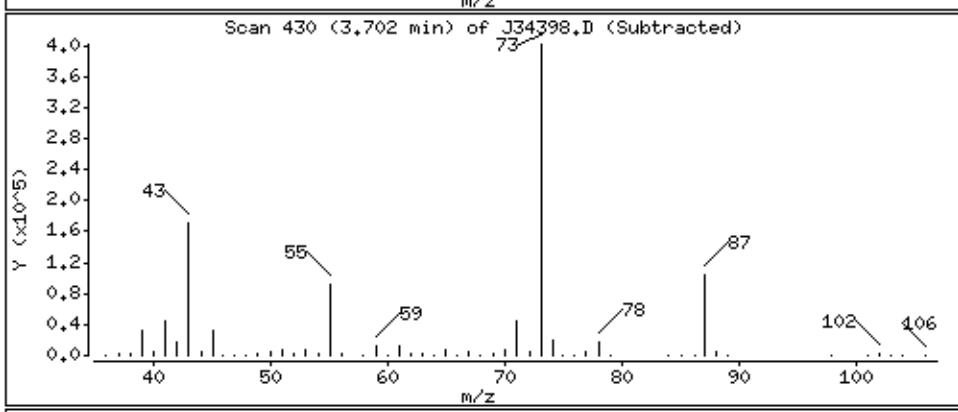
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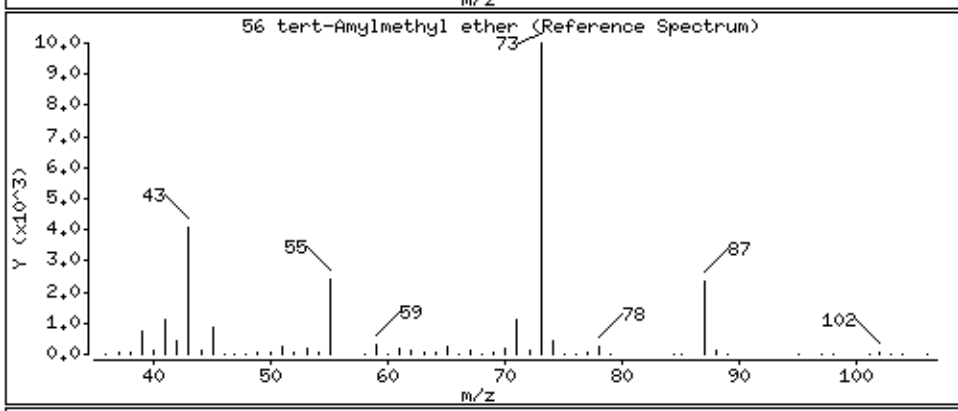
56 tert-Amylmethyl ether

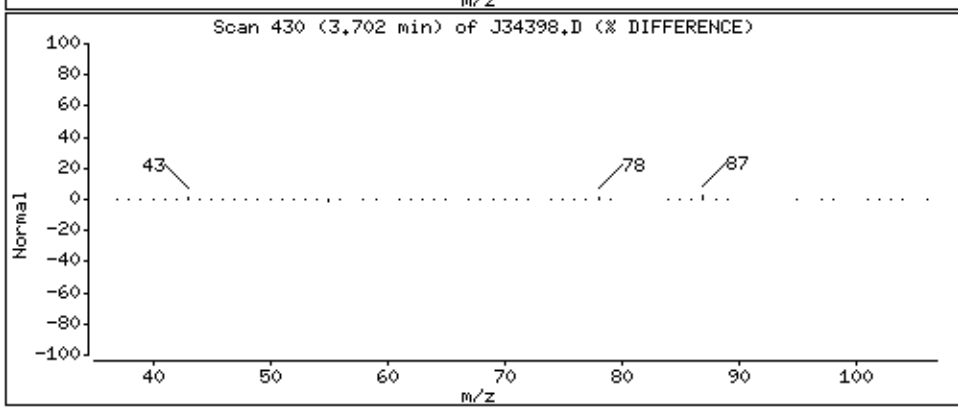
Concentration: 42.1 ug/L

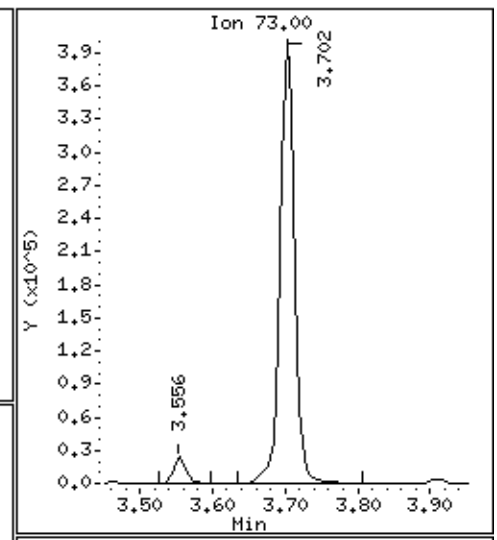
Review Code:

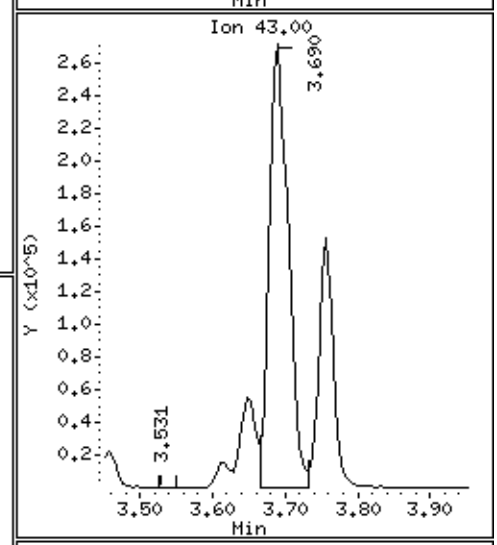


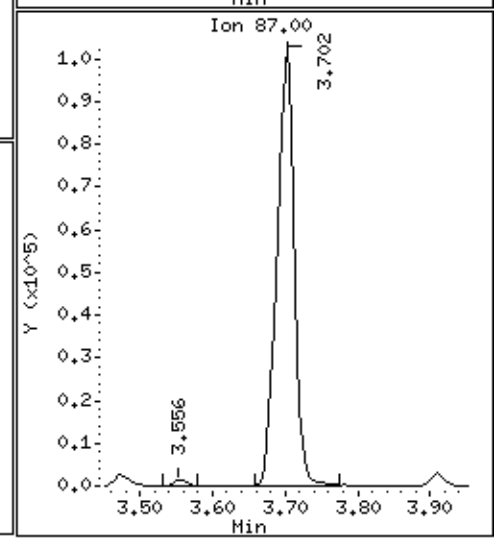












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D

Date : 25-APR-2017 13:27

Client ID: MBLCS

Instrument: 70msv6.i

Sample Info: 103009, 15067:1.25

Purge Volume: 5.0

Operator: KGG

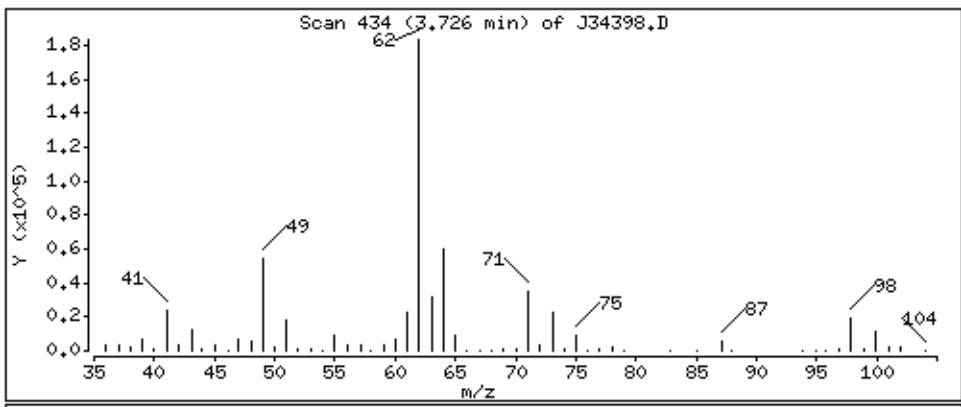
Column phase: RTX-624

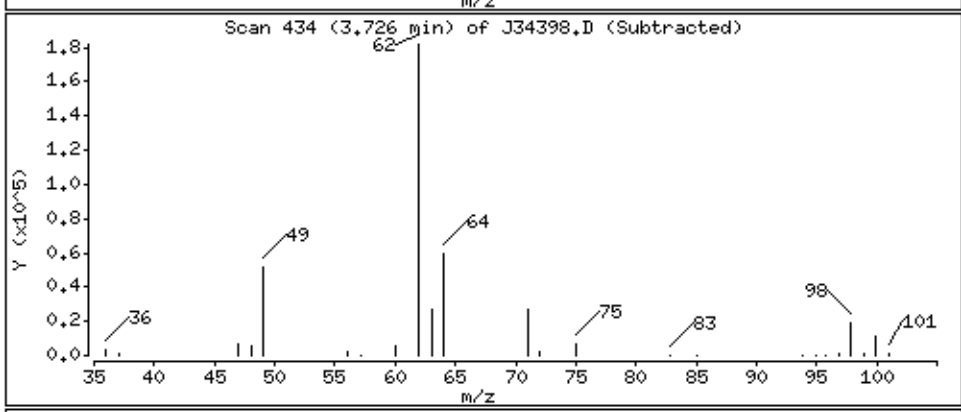
Column diameter: 0.18

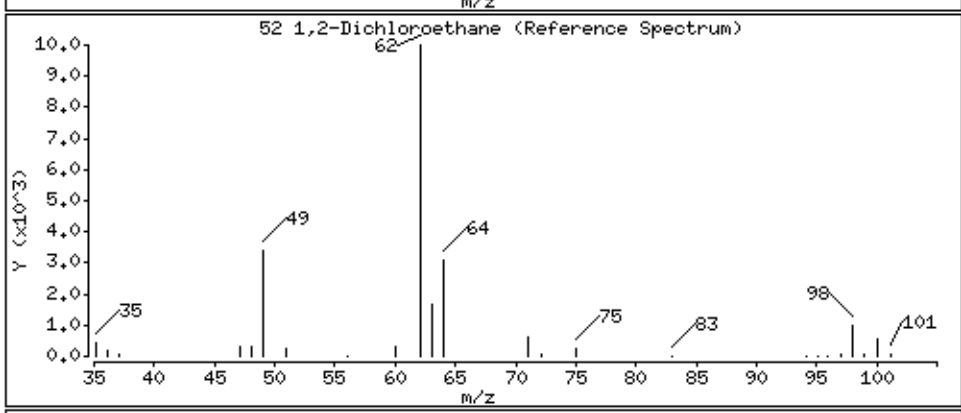
52 1,2-Dichloroethane

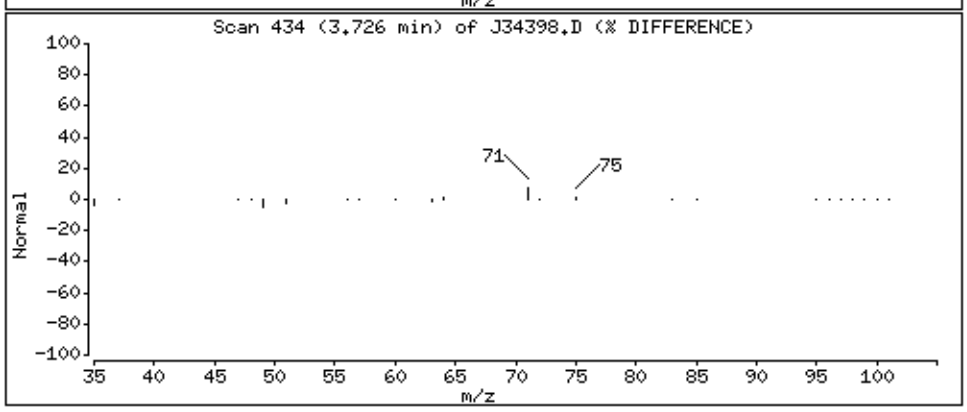
Concentration: 35.0 ug/L

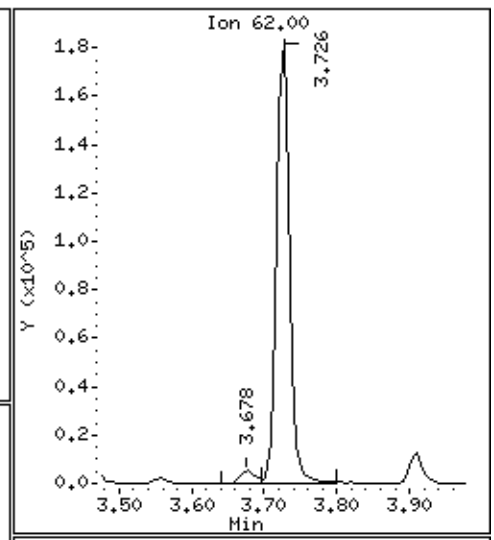
Review Code:

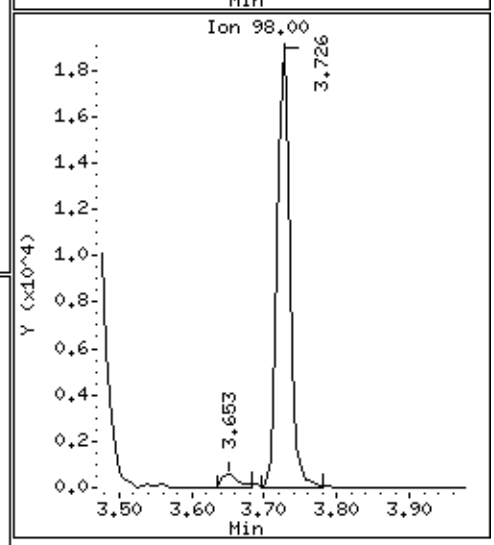












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D

Date : 25-APR-2017 13:27

Client ID: MBLCS

Instrument: 70msv6.i

Sample Info: 103009, 15067:1.25

Purge Volume: 5.0

Operator: KGG

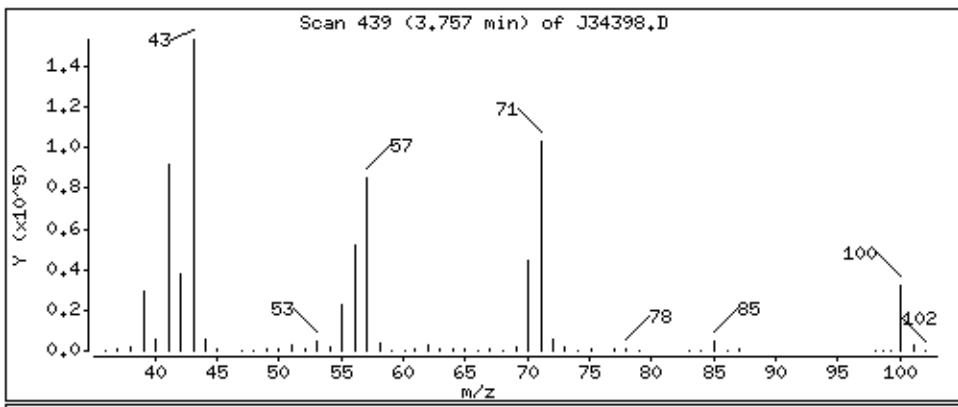
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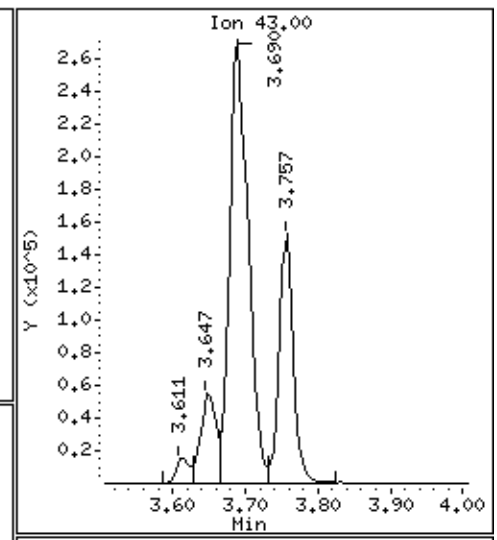
Column diameter: 0.18

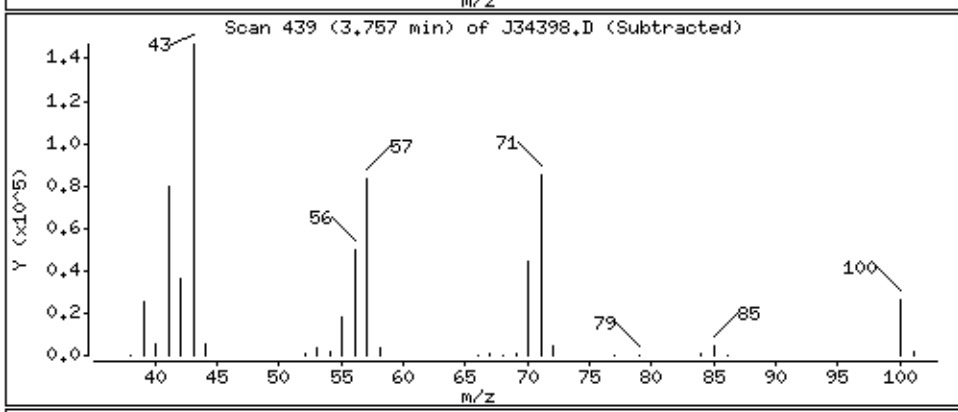
57 n-Heptane

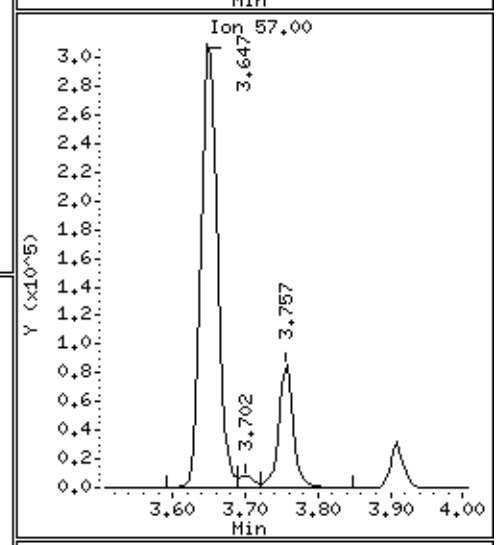
Concentration: 49.7 ug/L

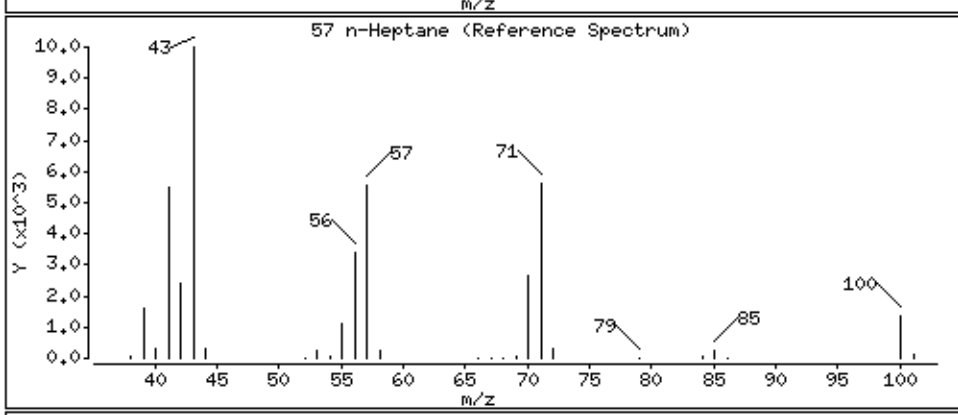
Review Code:

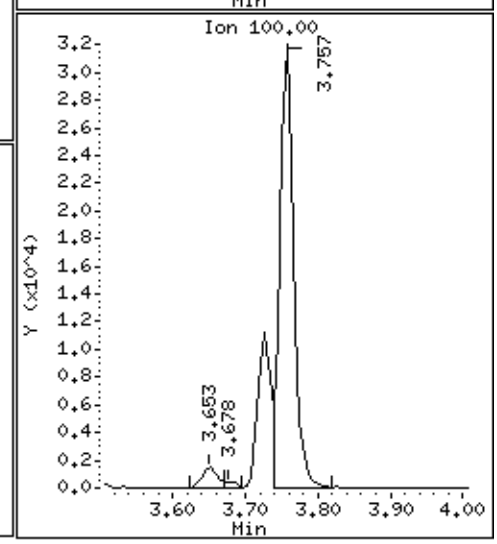


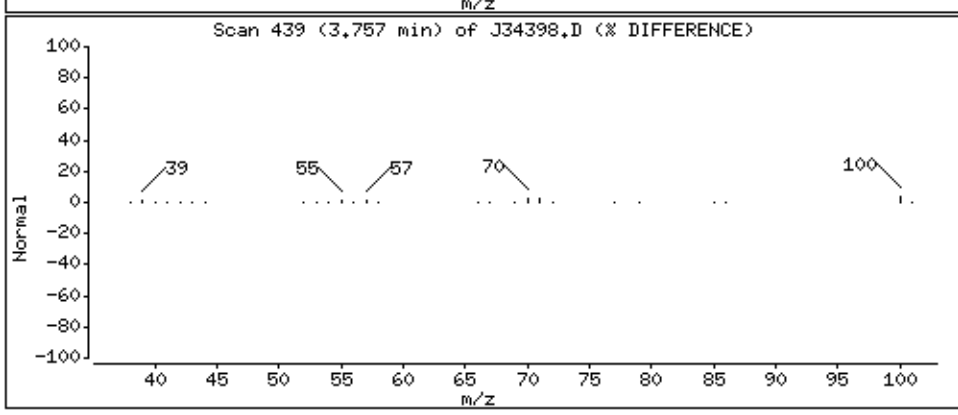












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D

Date : 25-APR-2017 13:27

Client ID: MBLCS

Instrument: 70msv6.i

Sample Info: 103009, 15067:1.25

Purge Volume: 5.0

Operator: KGG

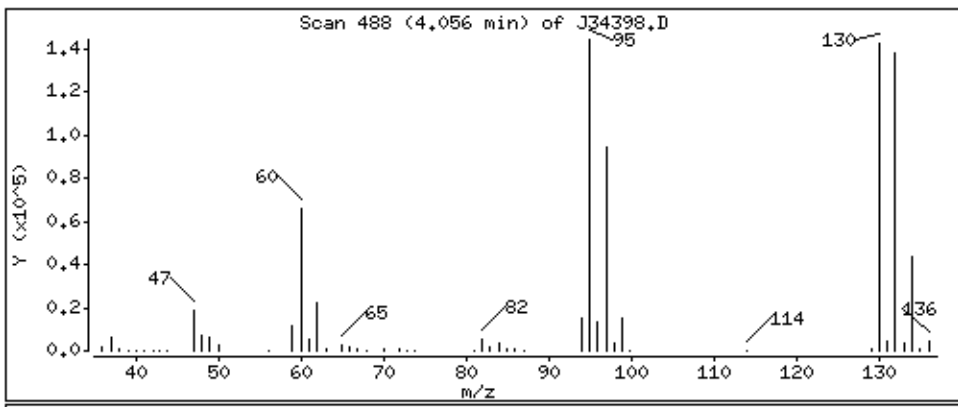
Column phase: RTX-624

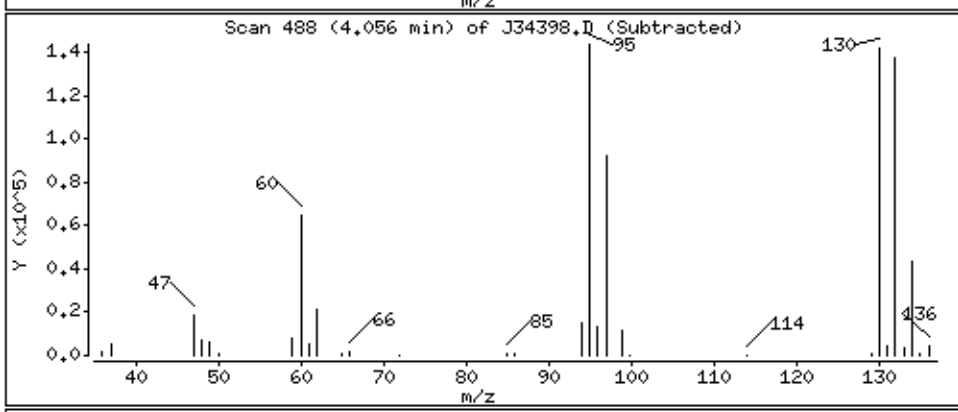
Column diameter: 0.18

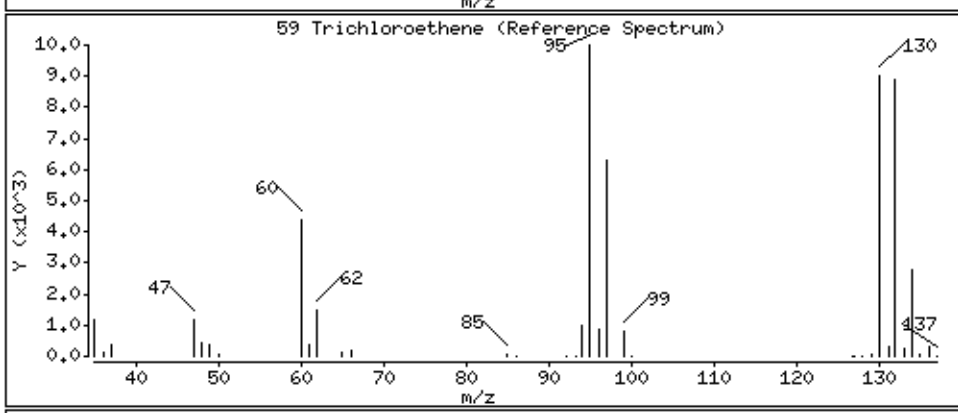
59 Trichloroethene

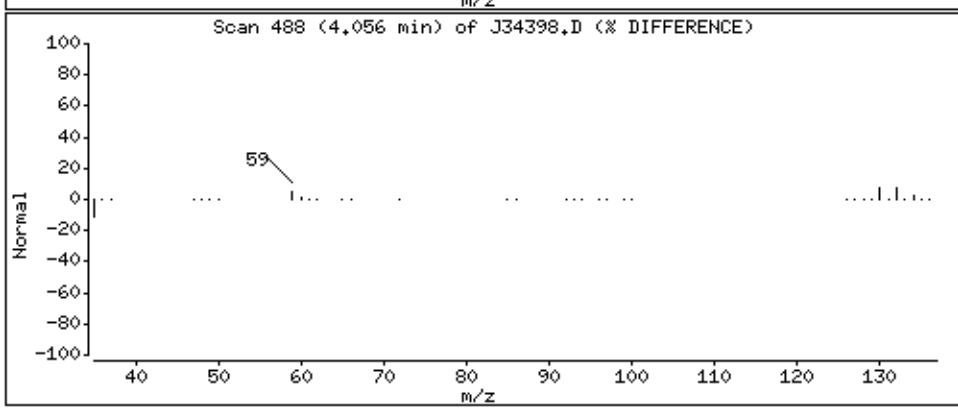
Concentration: 43.7 ug/L

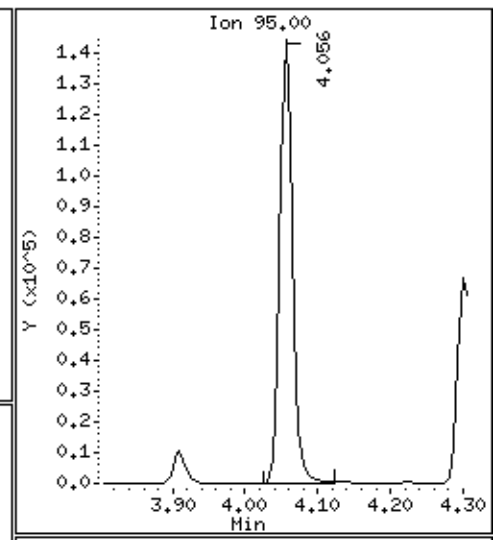
Review Code:

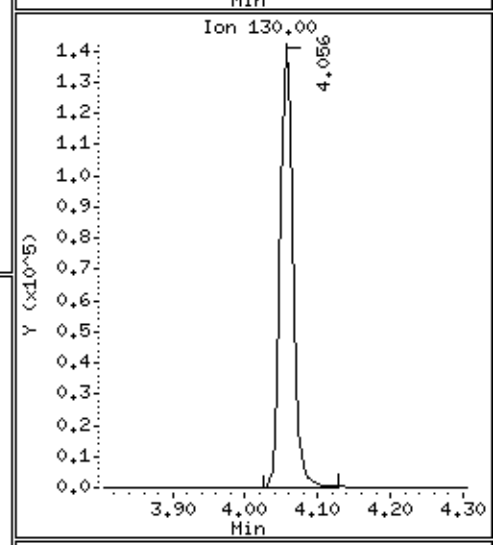


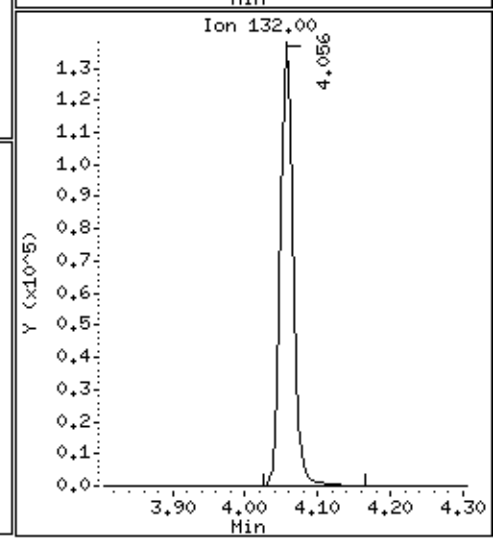












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D

Date : 25-APR-2017 13:27

Client ID: MBLCS

Instrument: 70msv6.i

Sample Info: 103009, 15067:1.25

Purge Volume: 5.0

Operator: KGG

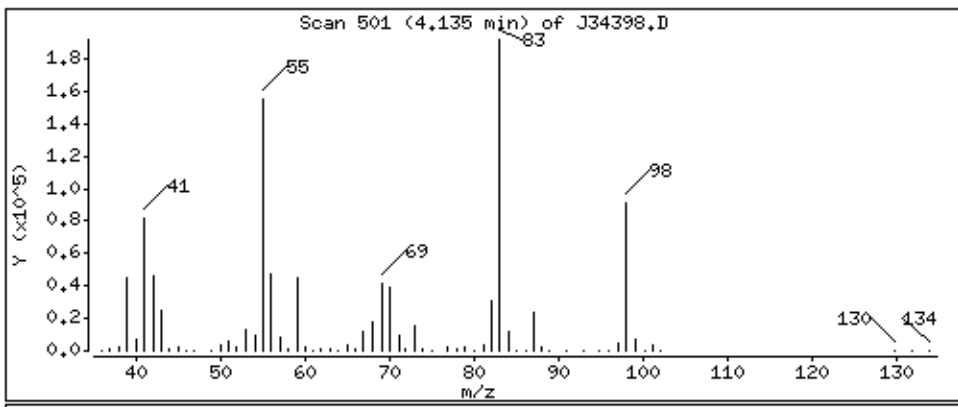
Column phase: RTX-624

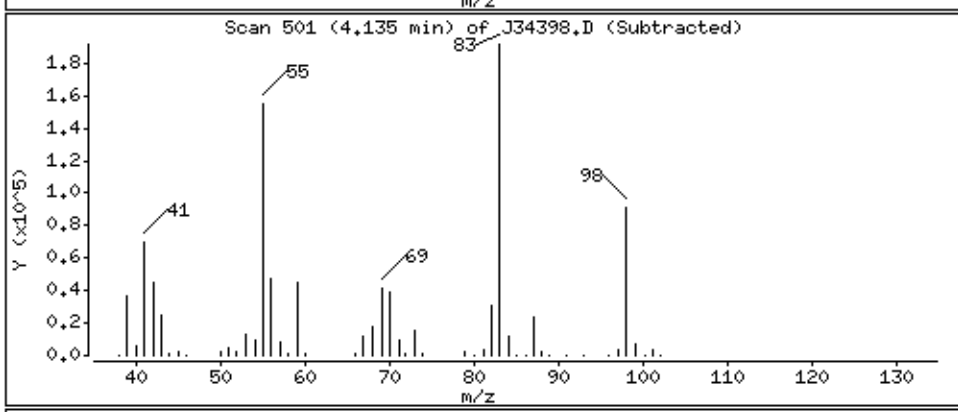
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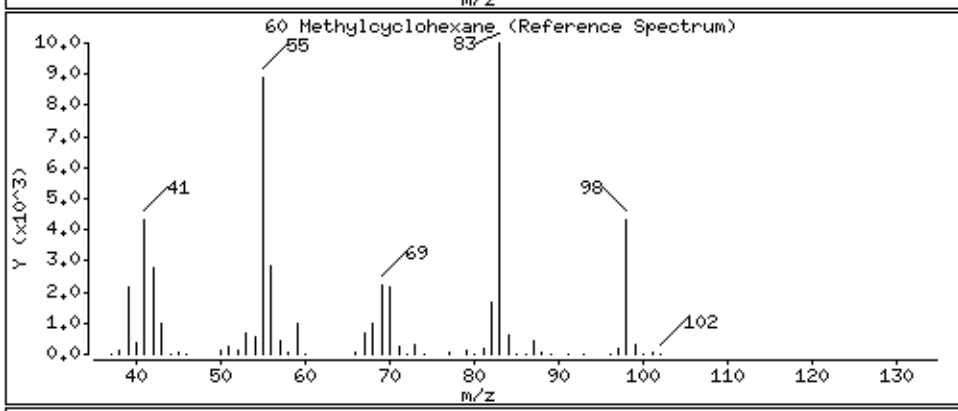
60 Methylcyclohexane

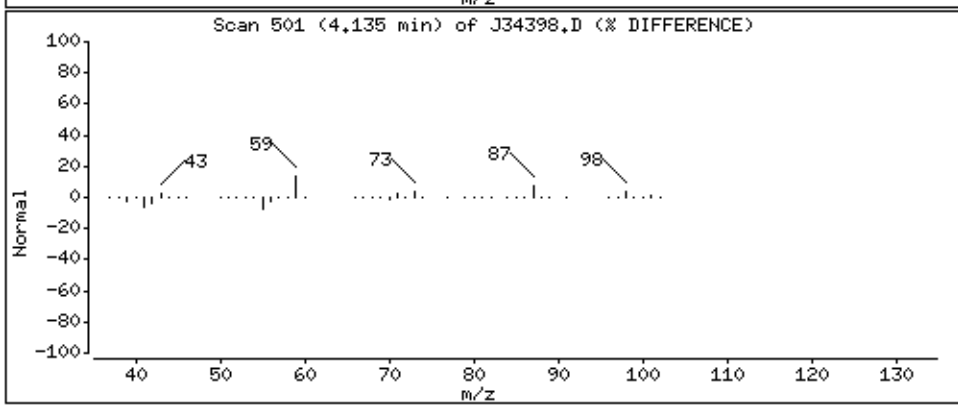
Concentration: 50.1 ug/L

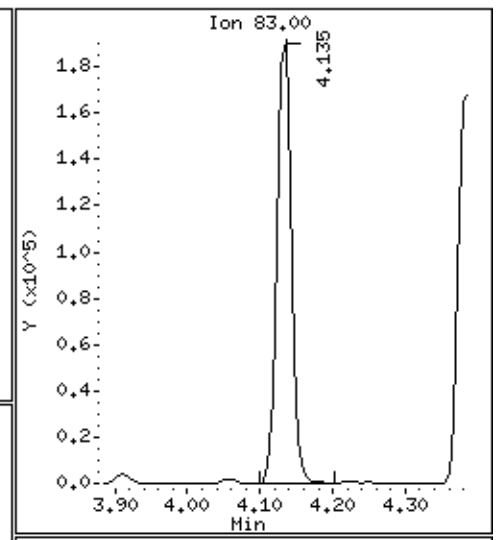
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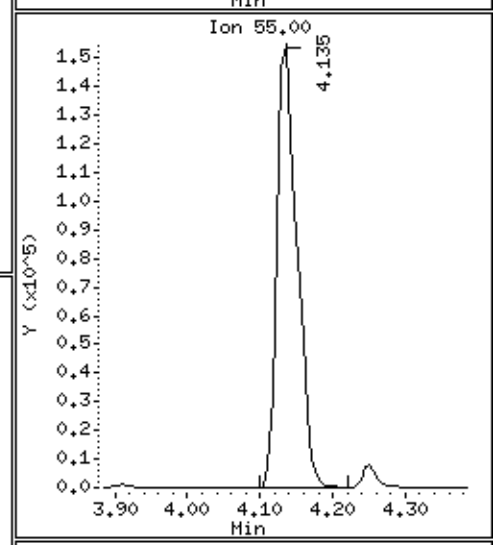


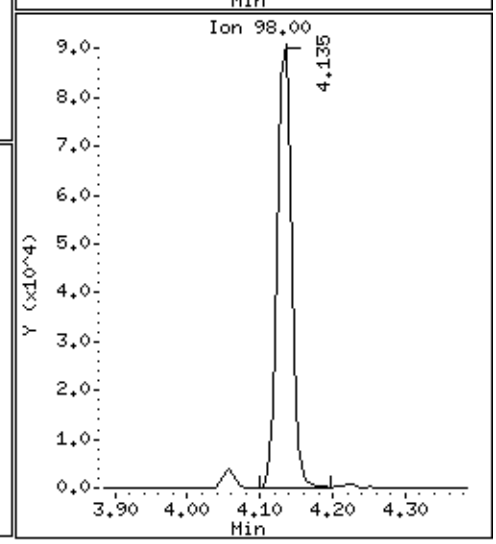












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D

Date : 25-APR-2017 13:27

Client ID: MBLCS

Instrument: 70msv6.i

Sample Info: 103009, 15067:1.25

Purge Volume: 5.0

Operator: KGG

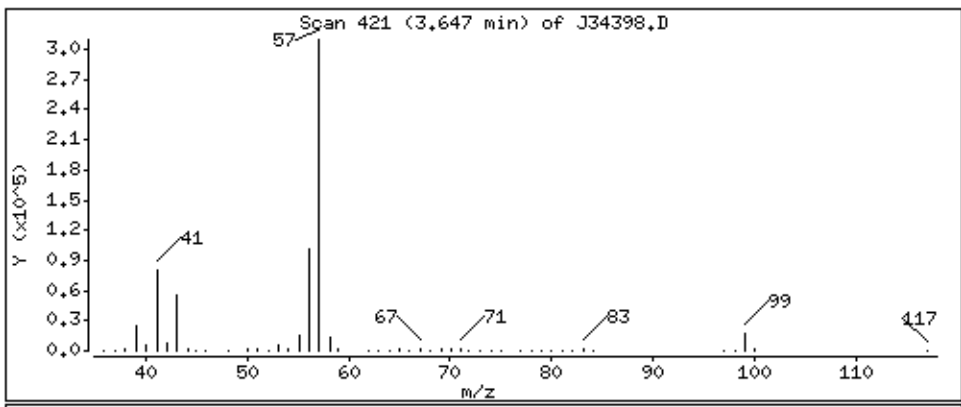
Column phase: RTX-624

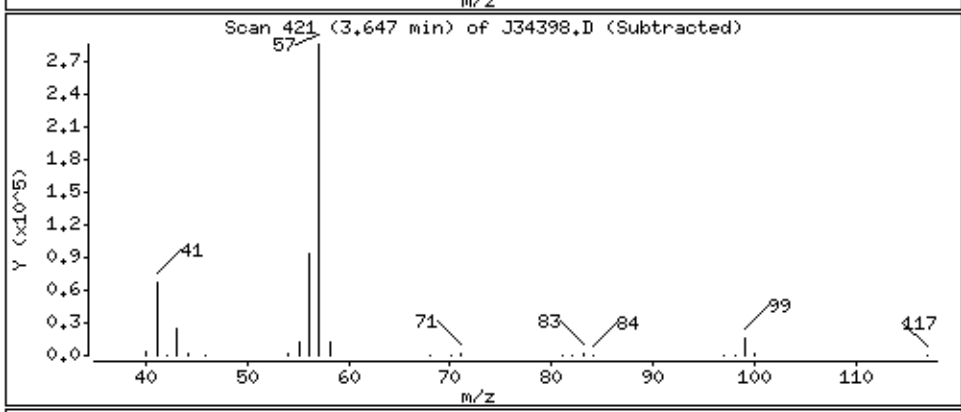
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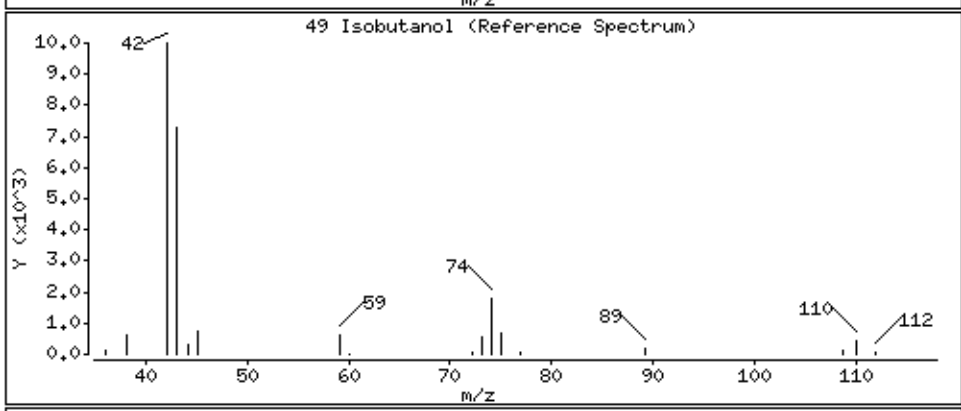
49 Isobutanol

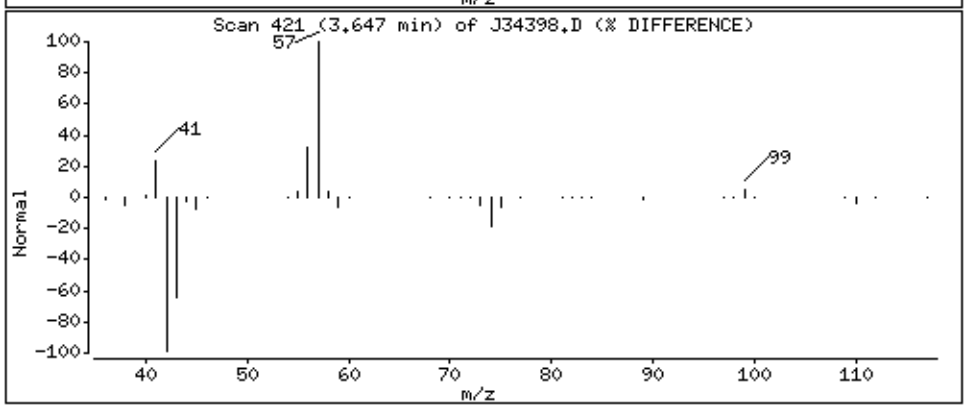
Concentration: 246 ug/L

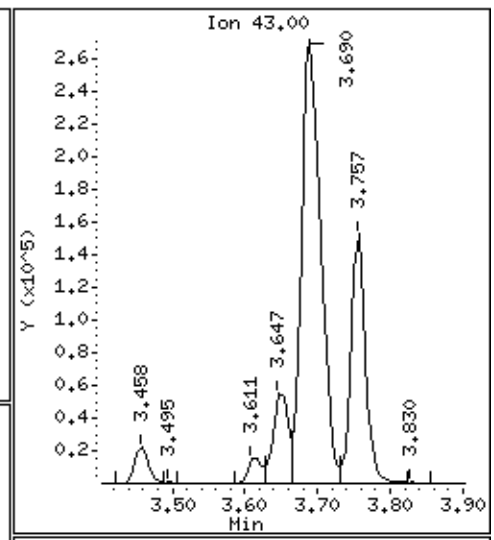
Review Code:

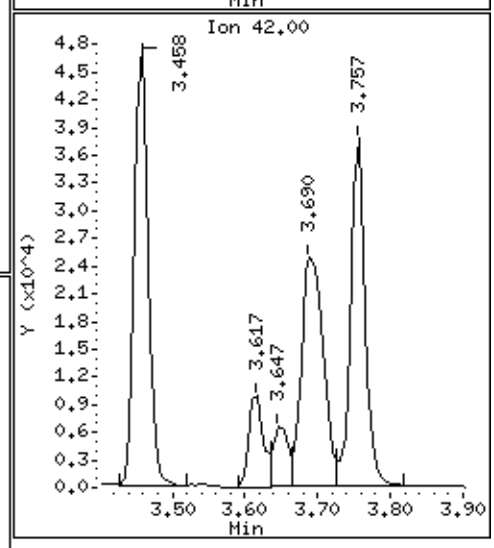












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D

Date : 25-APR-2017 13:27

Client ID: MBLCS

Instrument: 70msv6.i

Sample Info: 103009, 15067:1.25

Purge Volume: 5.0

Operator: KGG

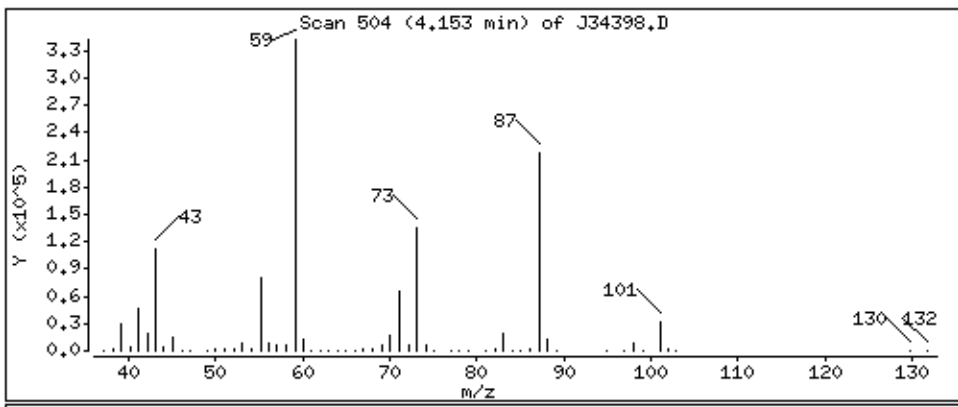
Column phase: RTX-624

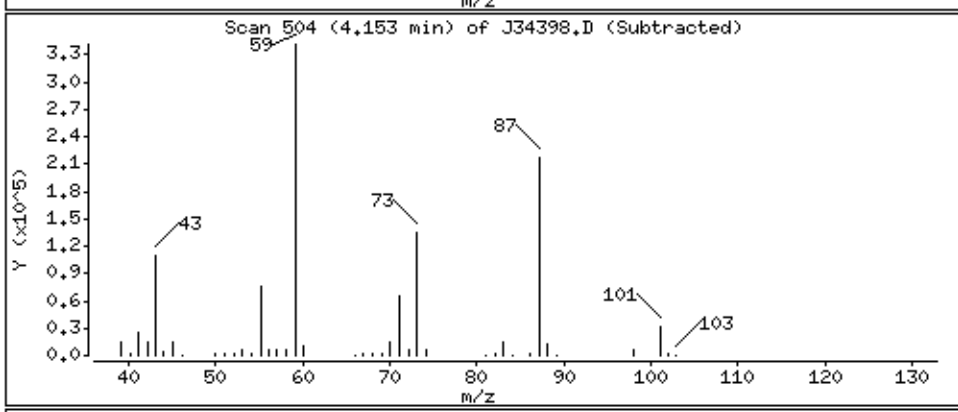
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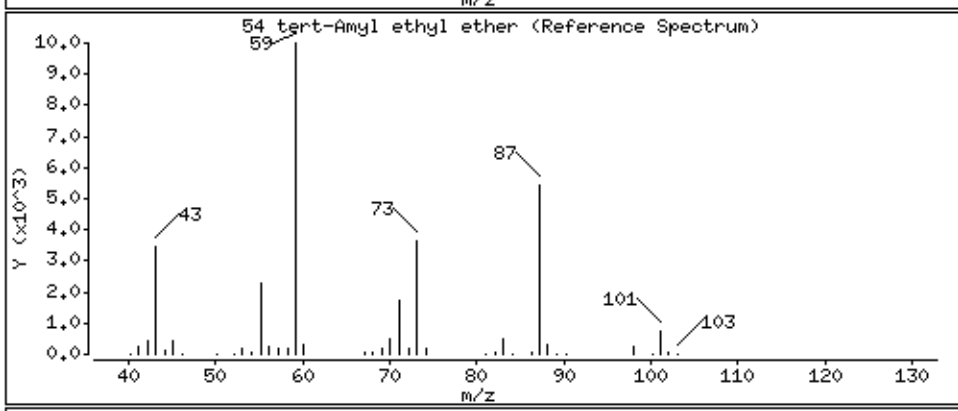
54 tert-Amyl ethyl ether

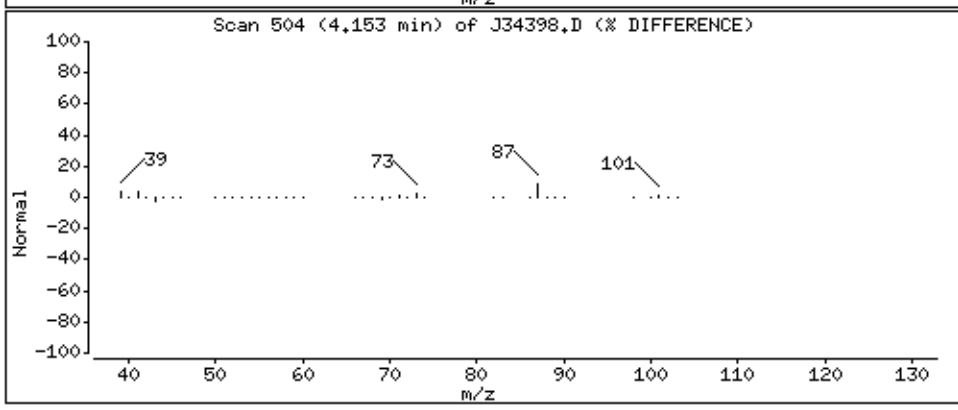
Concentration: 46.3 ug/L

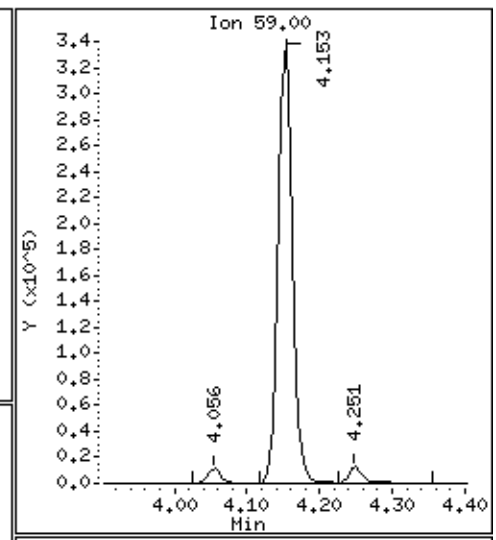
Review Code:

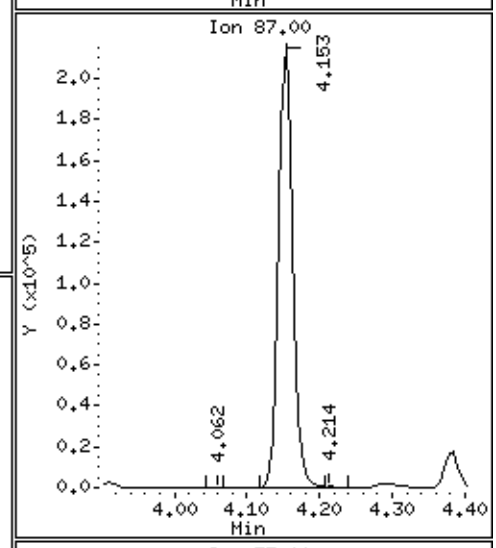


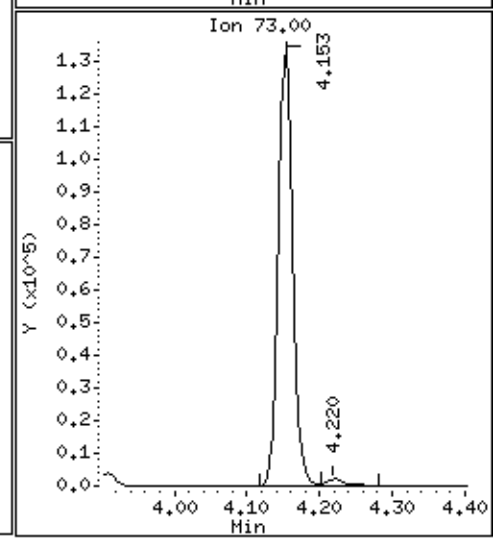












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D

Date : 25-APR-2017 13:27

Client ID: MBLCS

Instrument: 70msv6.i

Sample Info: 103009, 15067:1.25

Purge Volume: 5.0

Operator: KGG

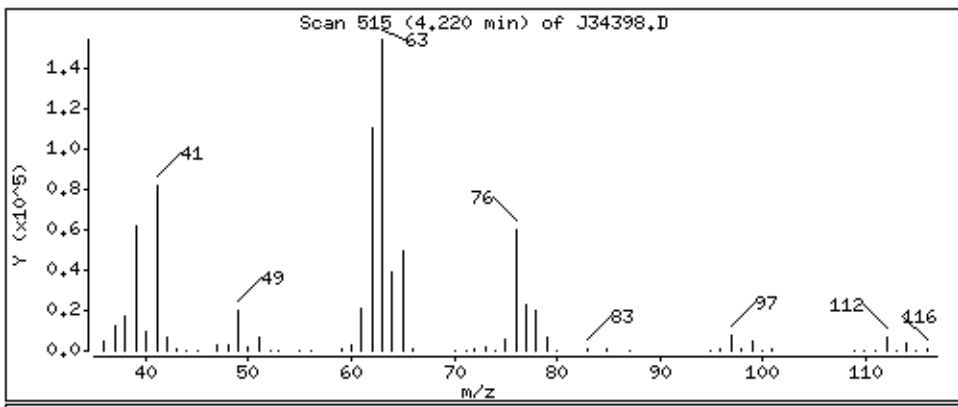
Column phase: RTX-624

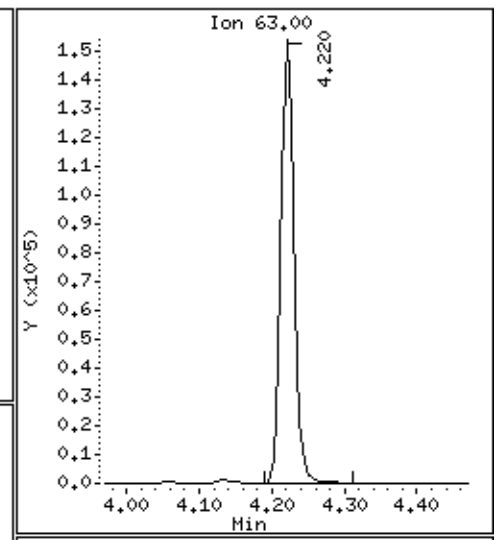
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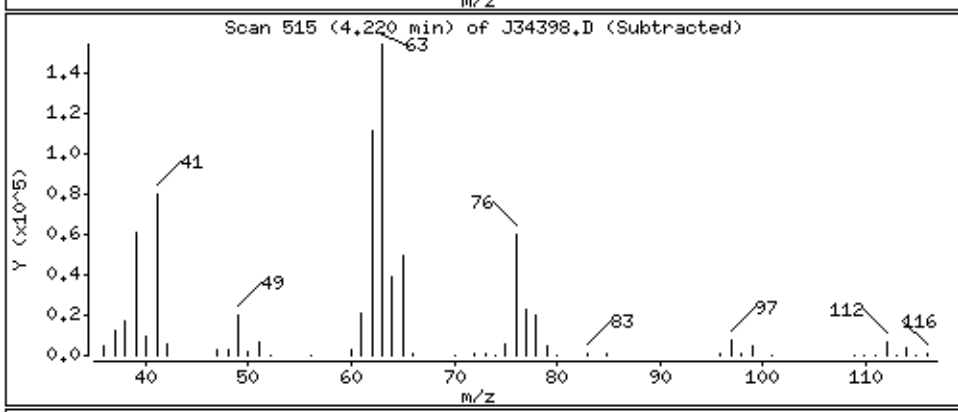
61 1,2-Dichloropropane

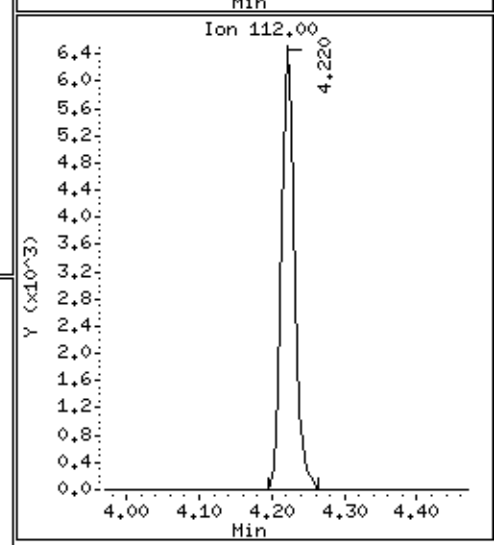
Concentration: 38.7 ug/L

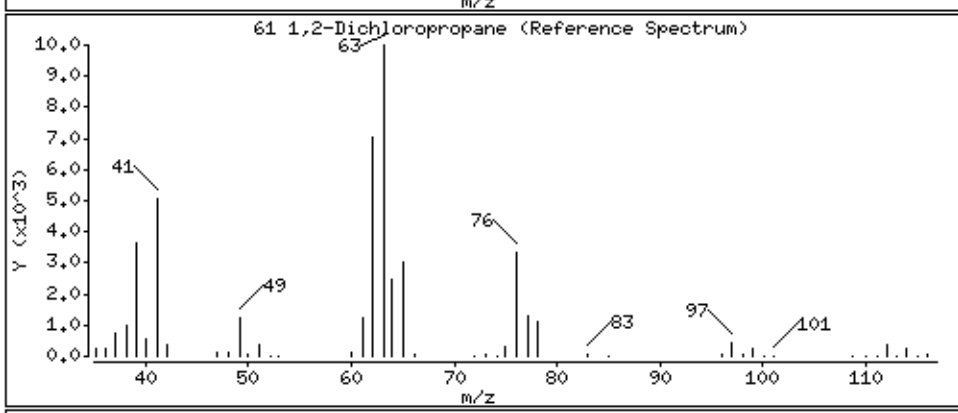
Review Code:

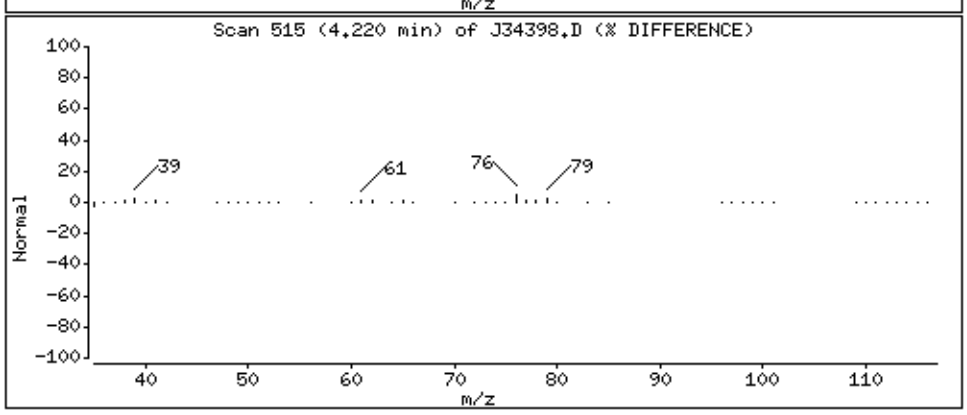












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D

Date : 25-APR-2017 13:27

Client ID: MBLCS

Instrument: 70msv6.i

Sample Info: 103009, 15067:1.25

Purge Volume: 5.0

Operator: KGG

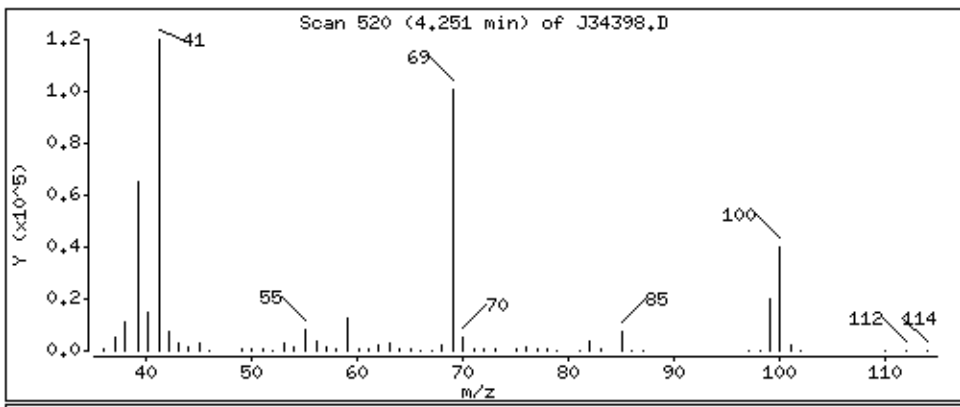
Column phase: RTX-624

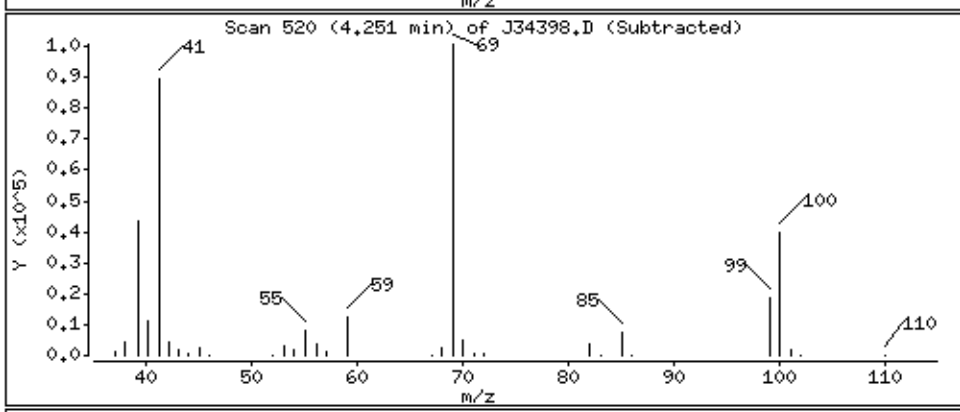
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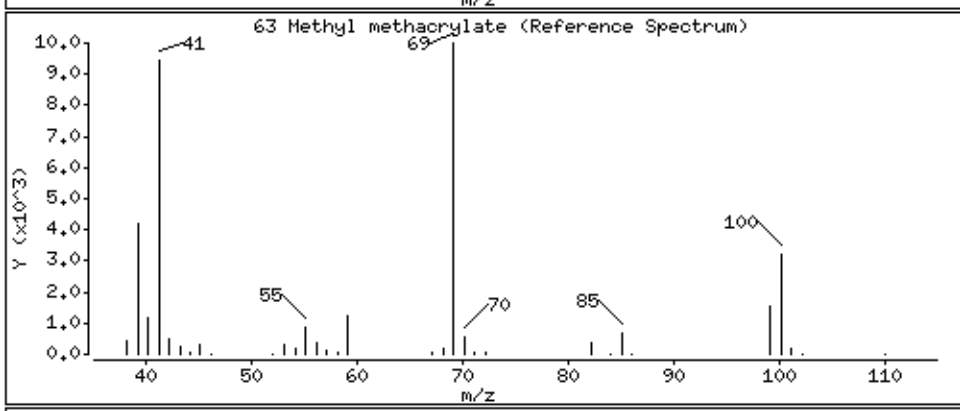
63 Methyl methacrylate

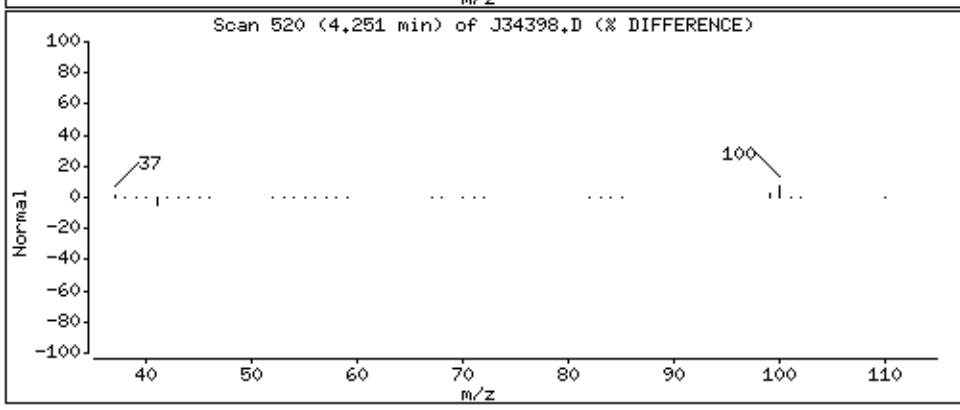
Concentration: 52.7 ug/L

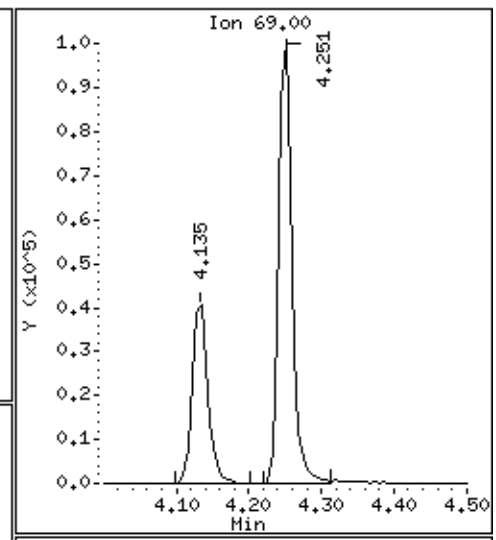
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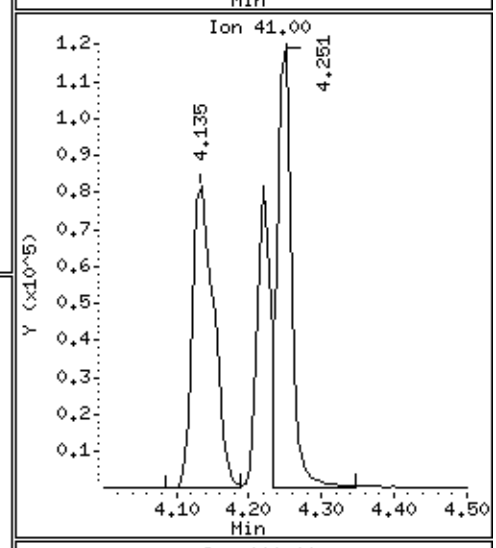


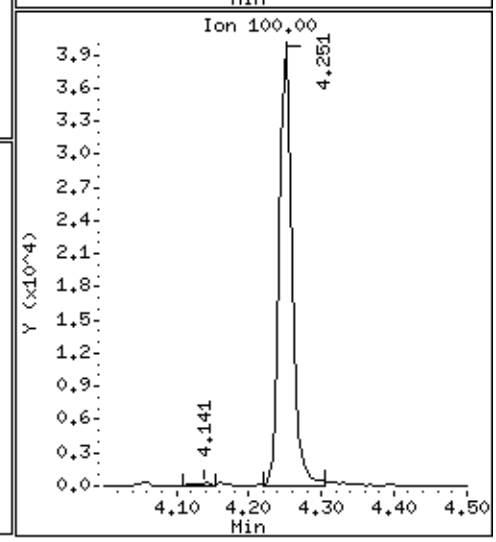












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D

Date : 25-APR-2017 13:27

Client ID: MBLCS

Instrument: 70msv6.i

Sample Info: 103009, 15067:1.25

Purge Volume: 5.0

Operator: KGG

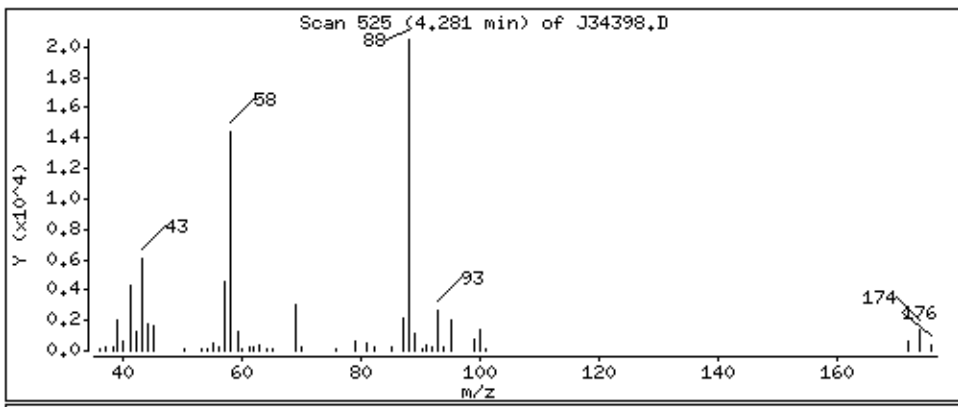
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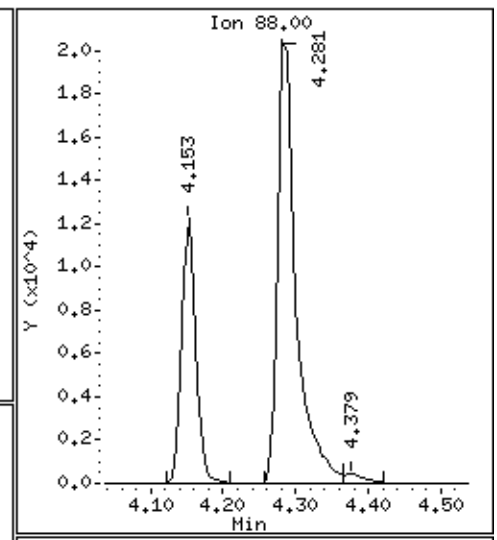
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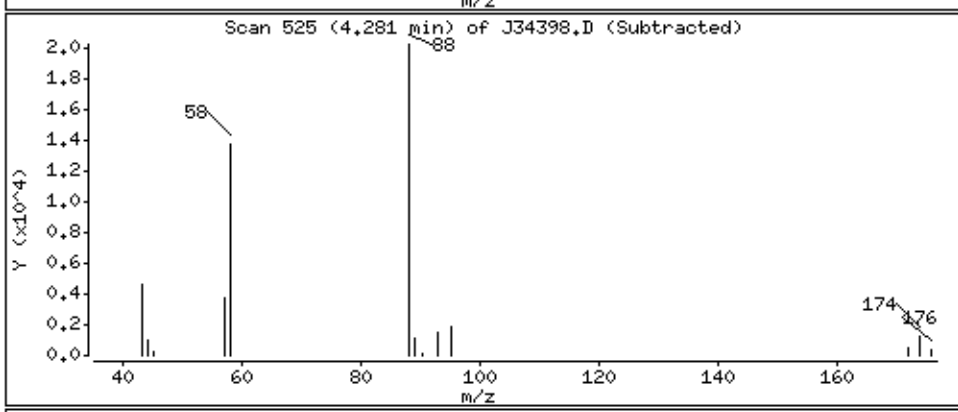
64 1,4-Dioxane (p-Dioxane)

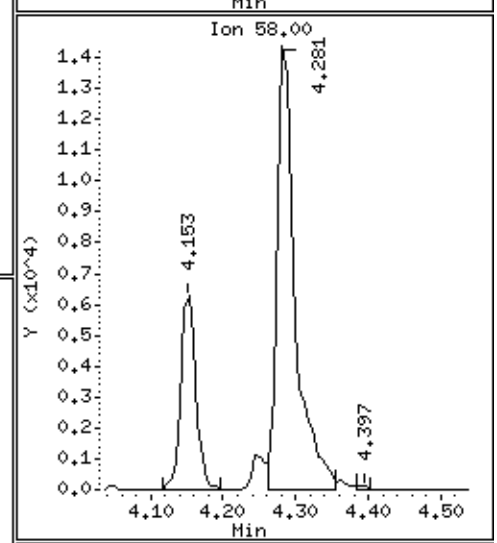
Concentration: 879 ug/L

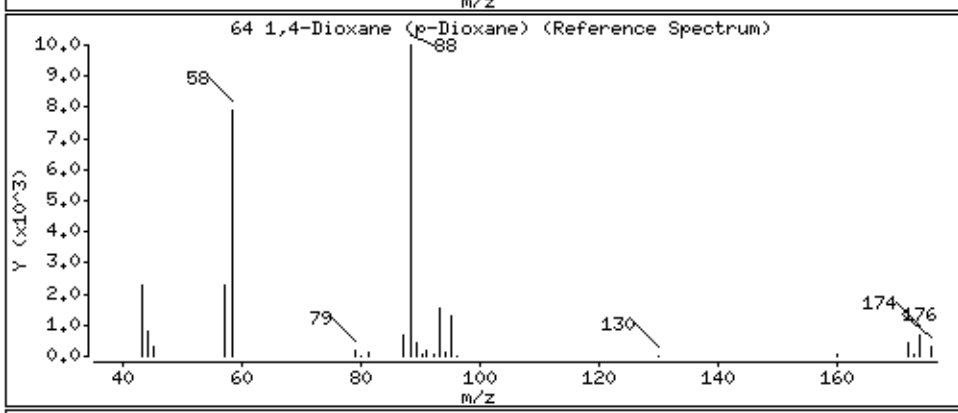
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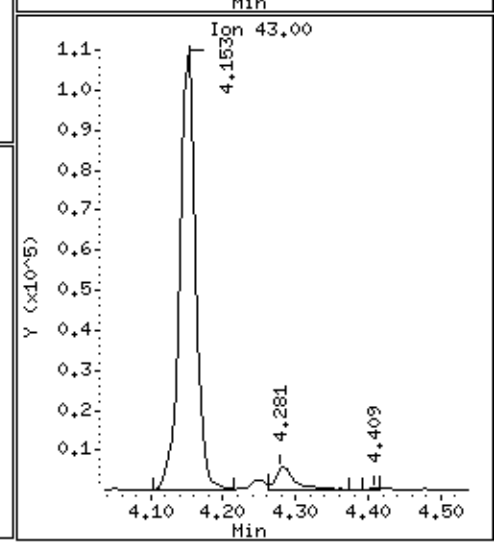


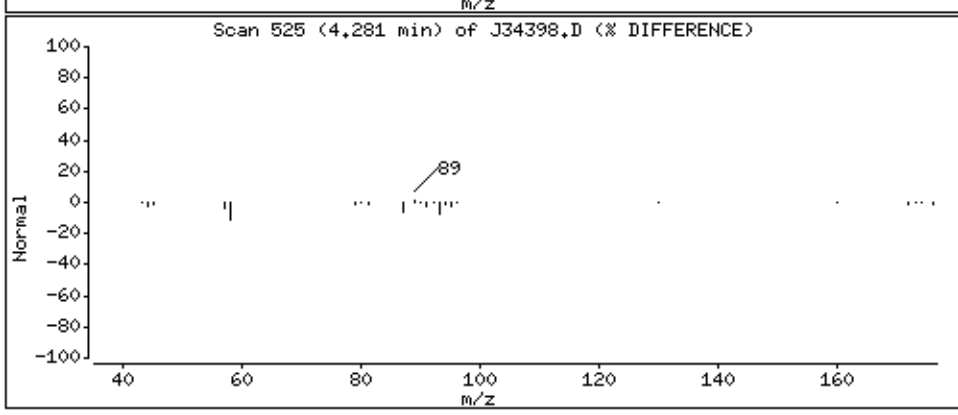












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D

Date : 25-APR-2017 13:27

Client ID: MBLCS

Instrument: 70msv6.i

Sample Info: 103009, 15067:1.25

Purge Volume: 5.0

Operator: KGG

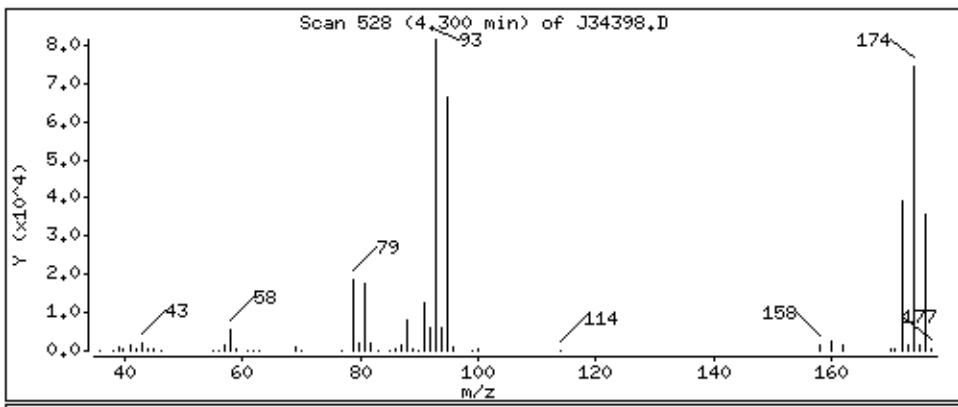
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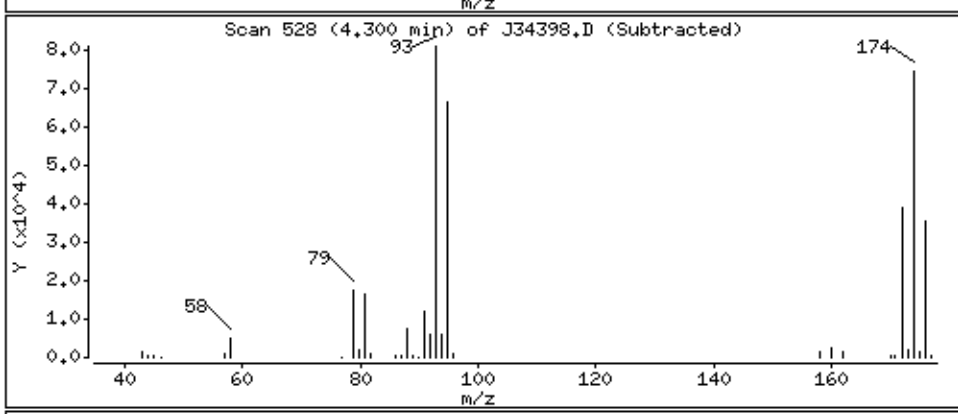
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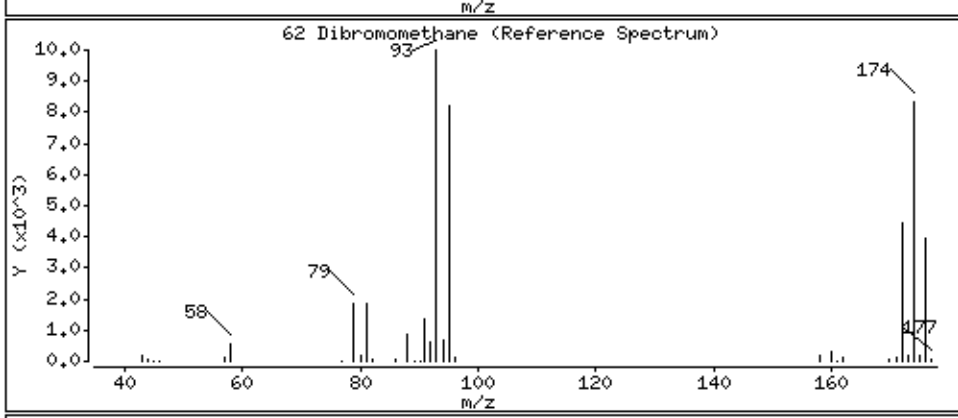
62 Dibromomethane

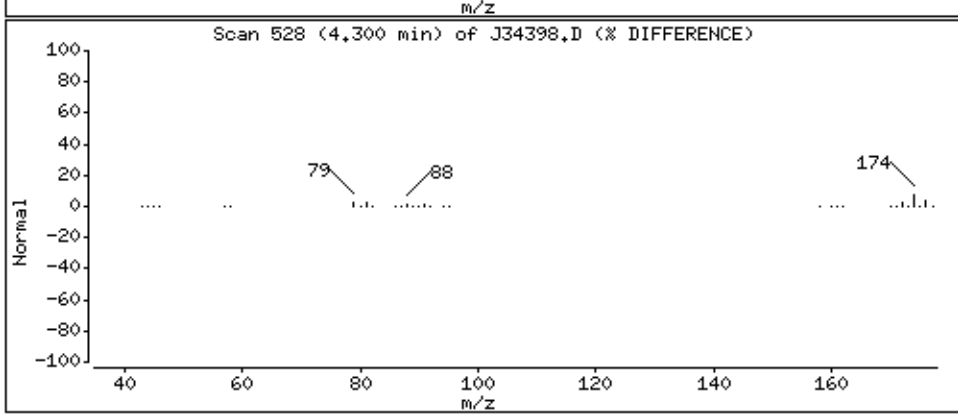
Concentration: 42.4 ug/L

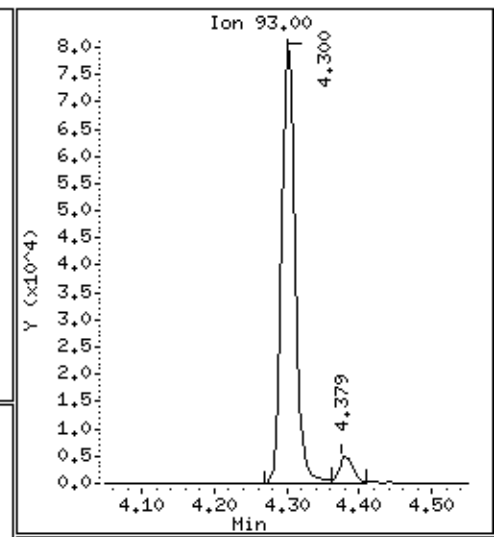
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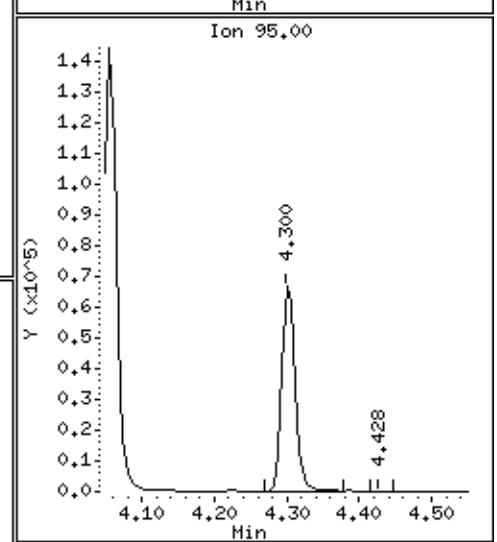


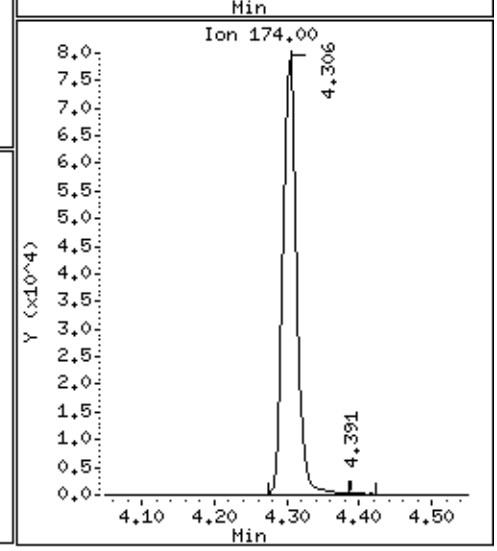












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D

Date : 25-APR-2017 13:27

Client ID: MBLCS

Instrument: 70msv6.i

Sample Info: 103009, 15067:1.25

Purge Volume: 5.0

Operator: KGG

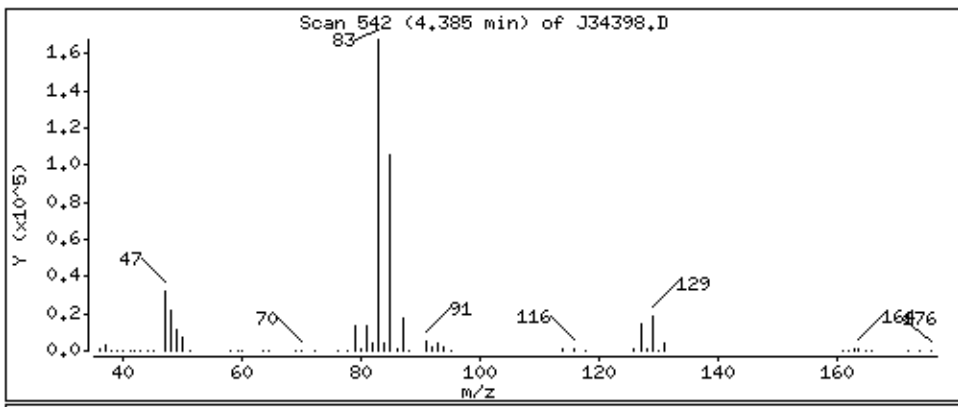
Column phase: RTX-624

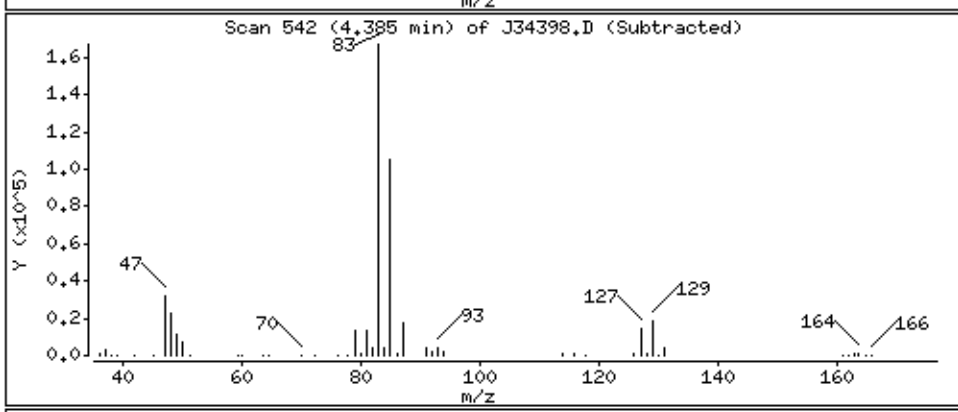
Column diameter: 0.18

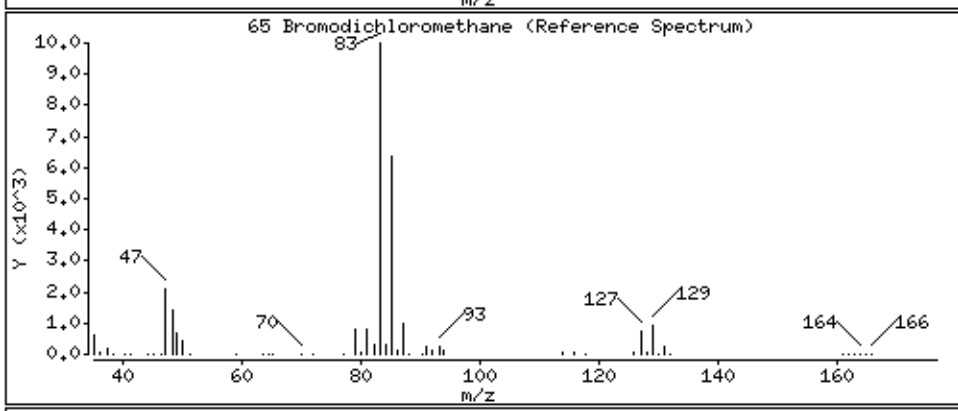
65 Bromodichloromethane

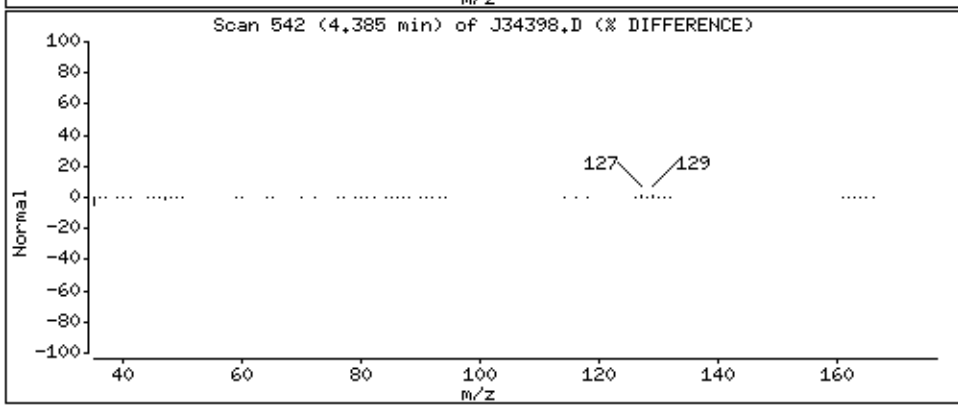
Concentration: 47.8 ug/L

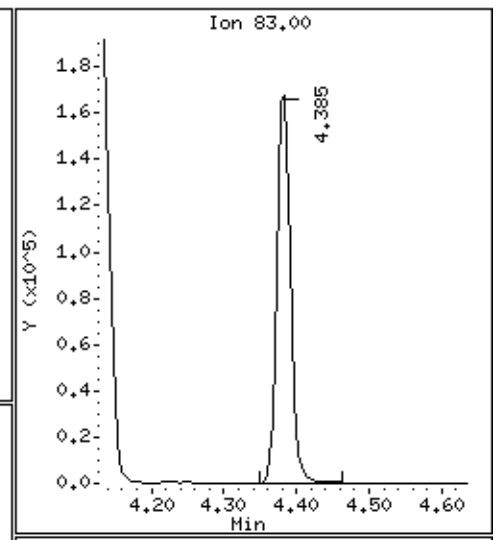
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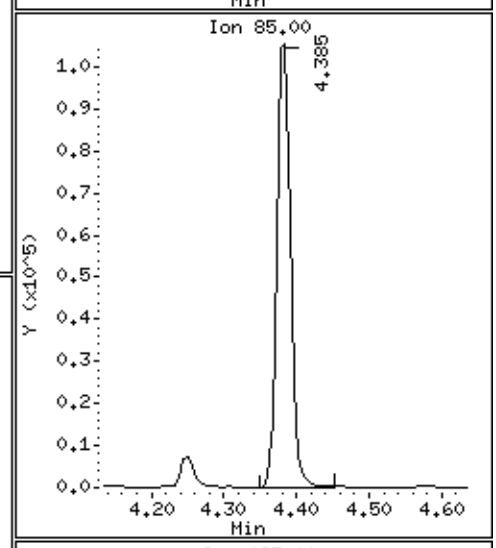


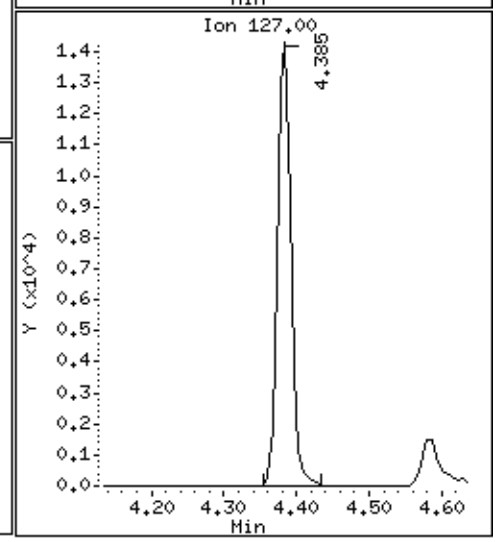












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D

Date : 25-APR-2017 13:27

Client ID: MBLCS

Instrument: 70msv6.i

Sample Info: 103009, 15067:1.25

Purge Volume: 5.0

Operator: KGG

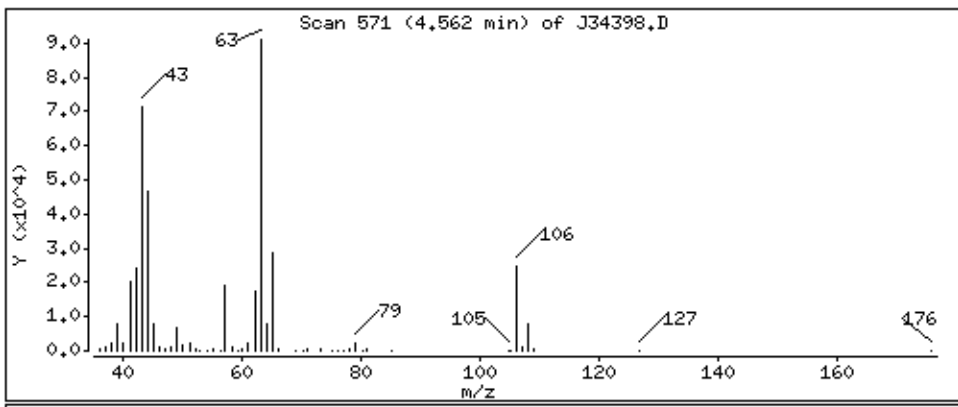
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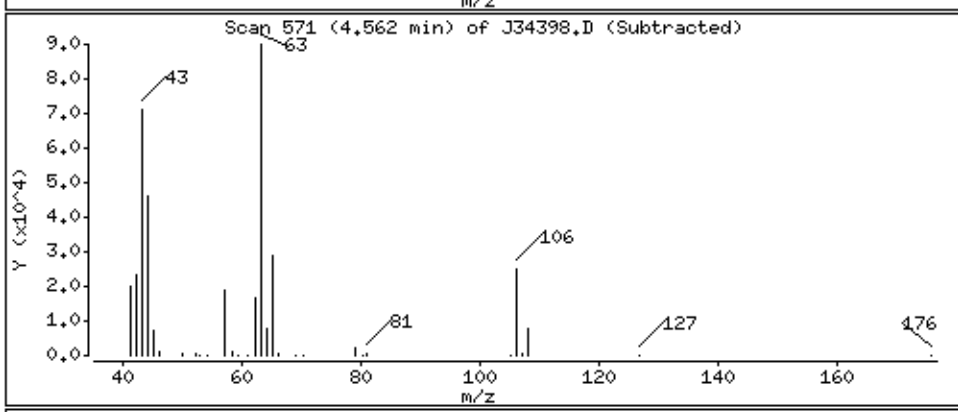
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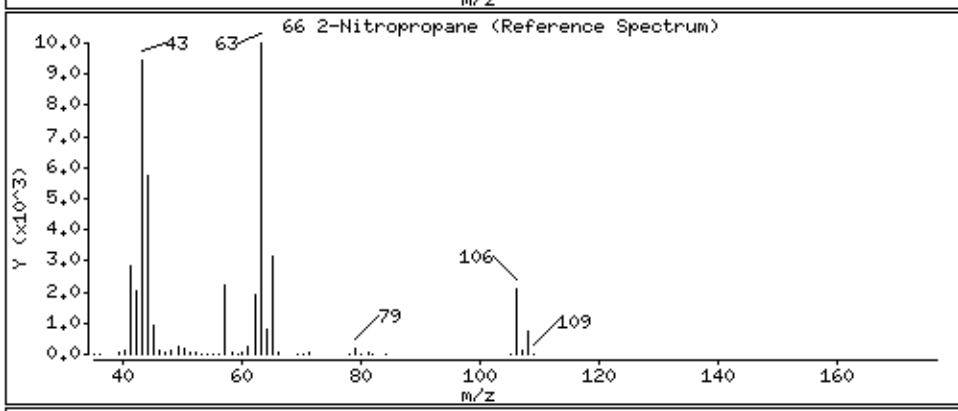
66 2-Nitropropane

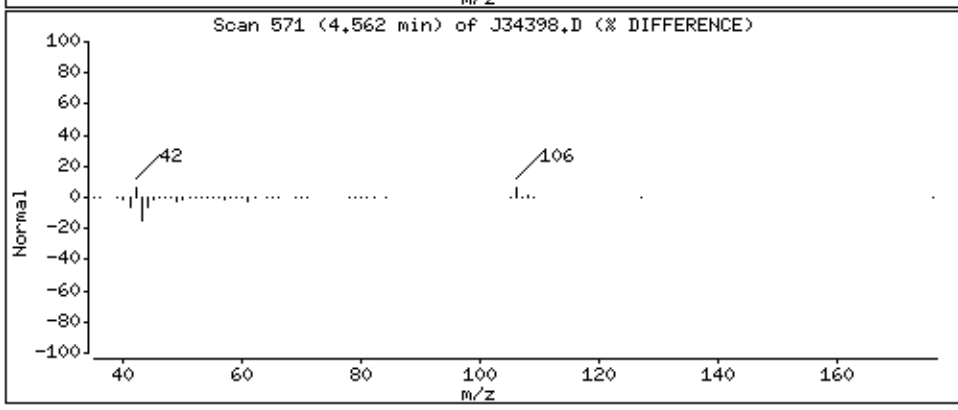
Concentration: 38.7 ug/L

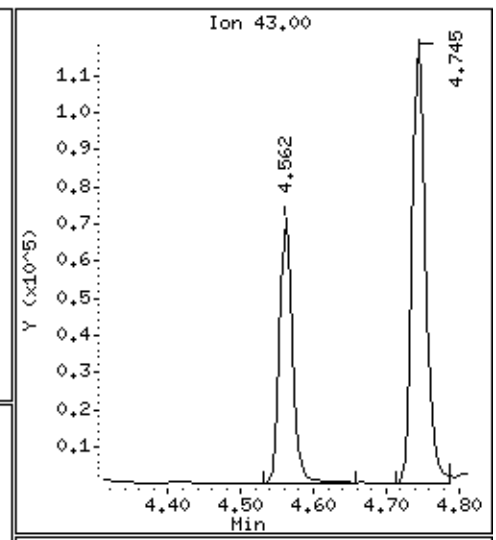
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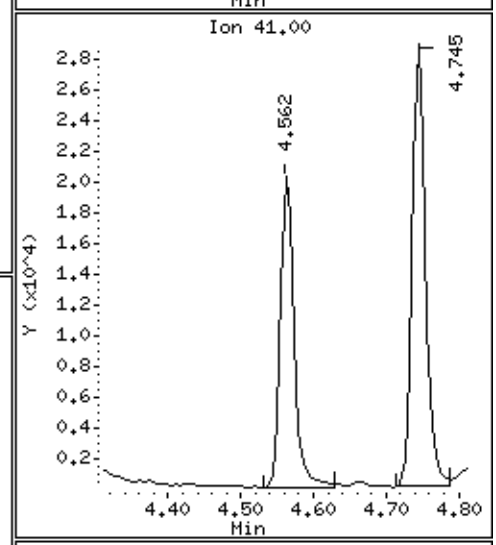


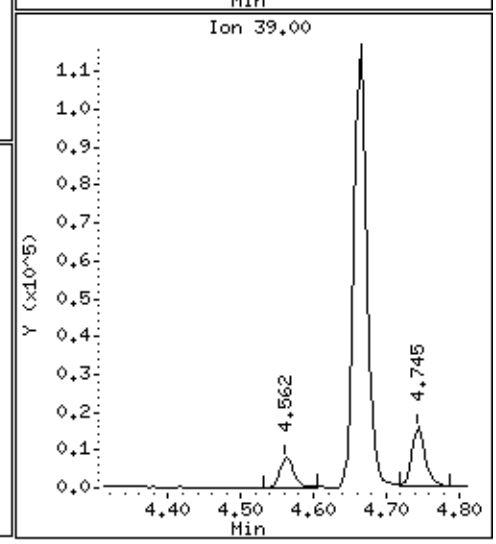












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D

Date : 25-APR-2017 13:27

Client ID: MBLCS

Instrument: 70msv6.i

Sample Info: 103009, 15067:1.25

Purge Volume: 5.0

Operator: KGG

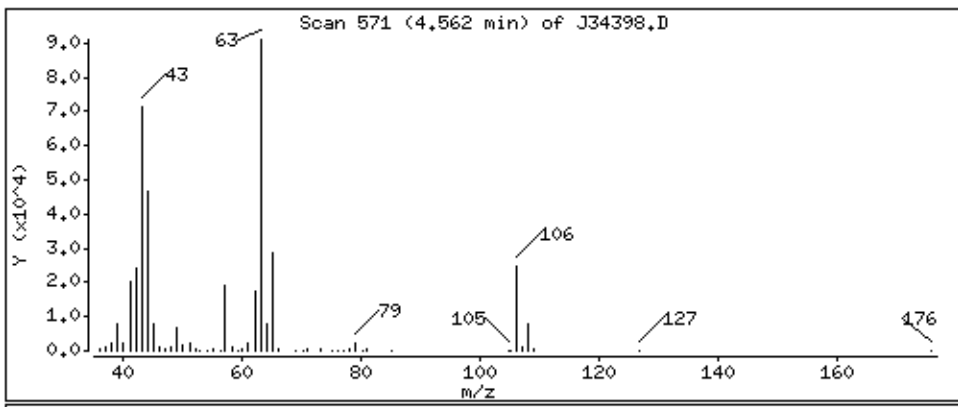
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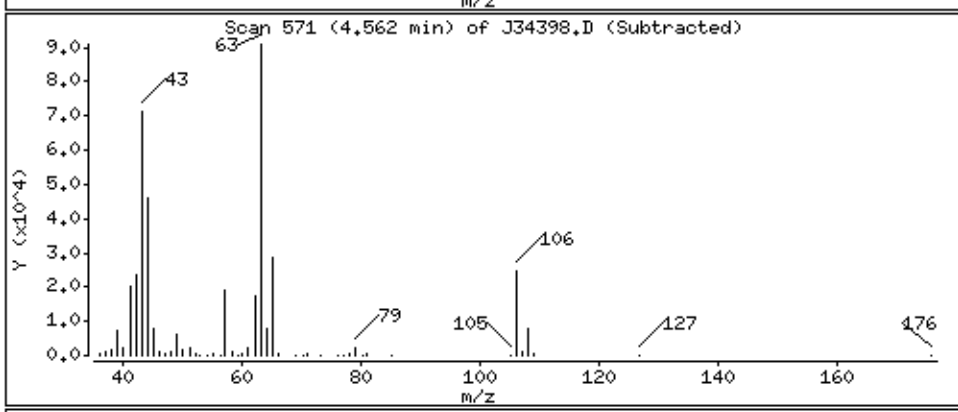
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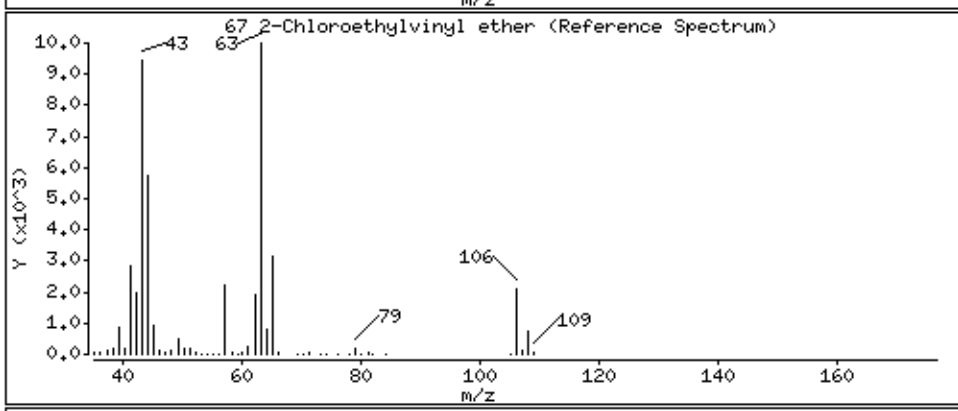
67 2-Chloroethylvinyl ether

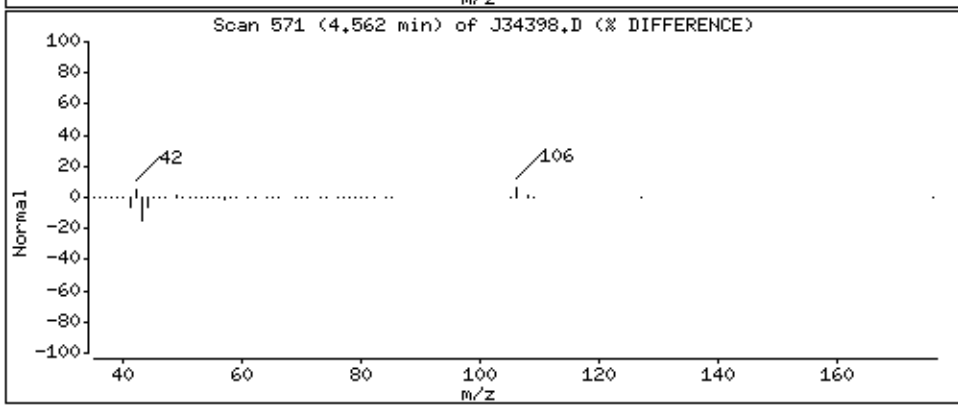
Concentration: 42.4 ug/L

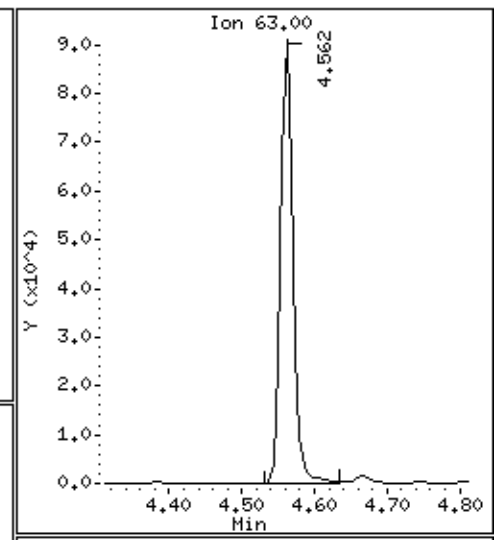
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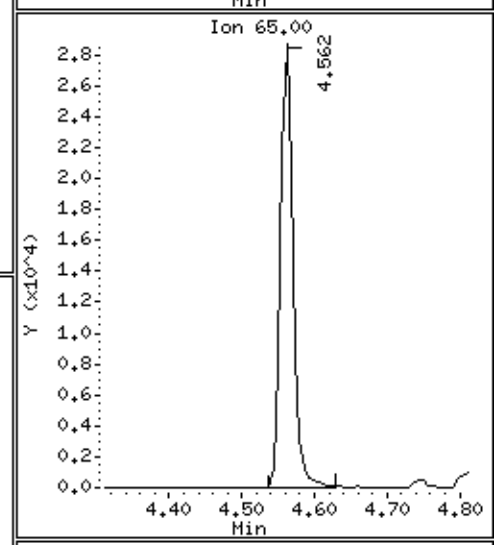


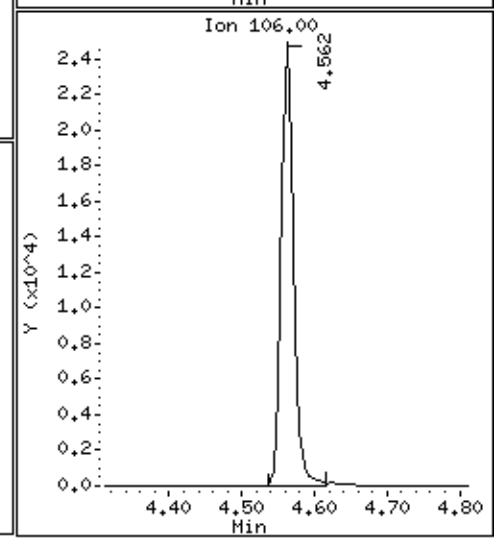












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D

Date : 25-APR-2017 13:27

Client ID: MBLCS

Instrument: 70msv6.i

Sample Info: 103009, 15067:1.25

Purge Volume: 5.0

Operator: KGG

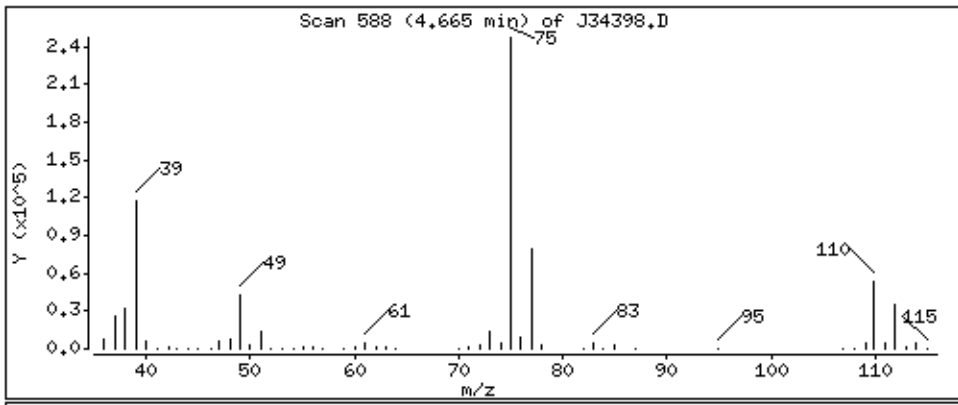
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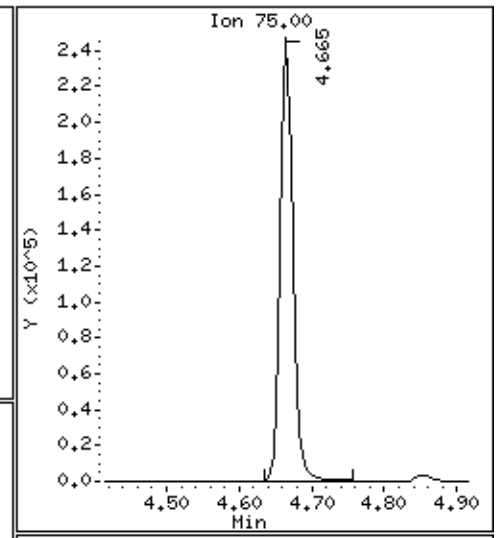
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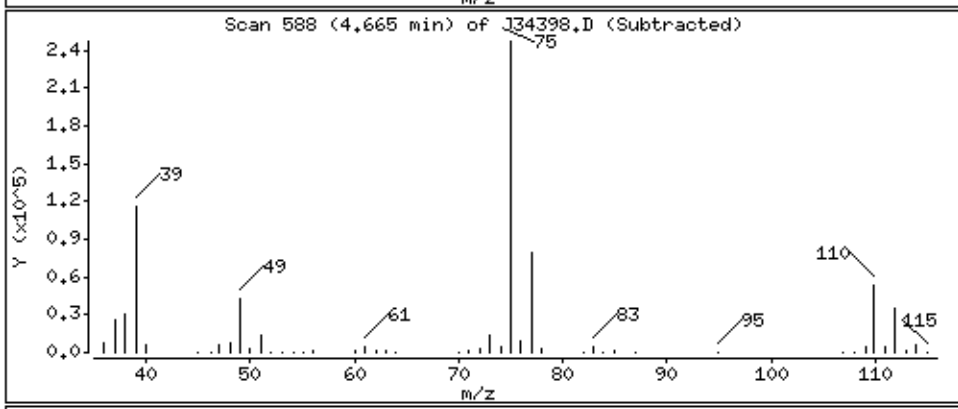
68 cis-1,3-Dichloropropene

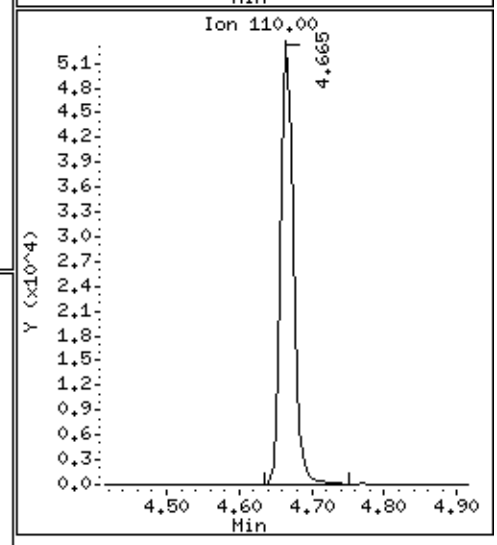
Concentration: 48.2 ug/L

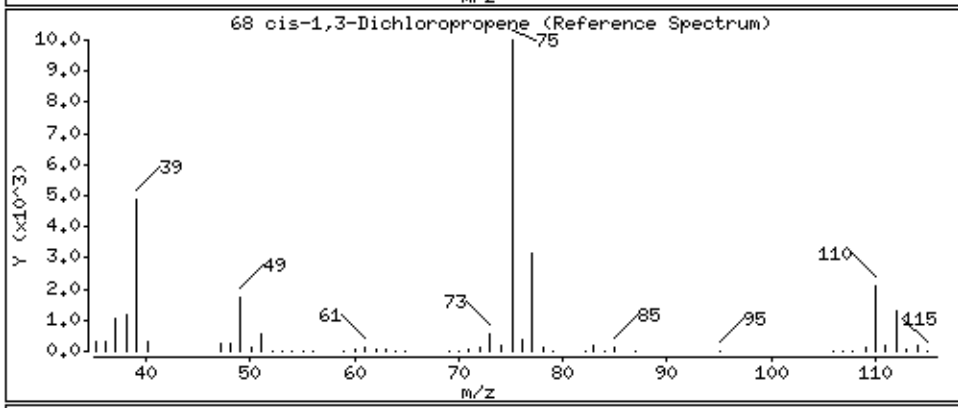
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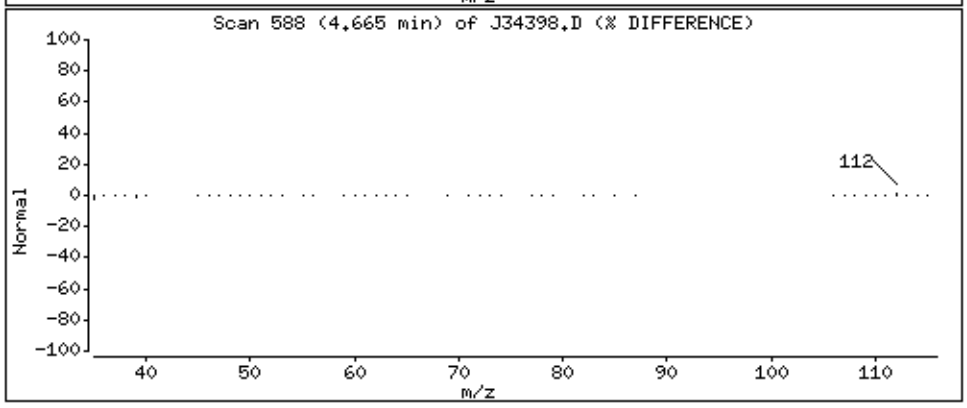












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D

Date : 25-APR-2017 13:27

Client ID: MBLCS

Instrument: 70msv6.i

Sample Info: 103009, 15067:1.25

Purge Volume: 5.0

Operator: KGG

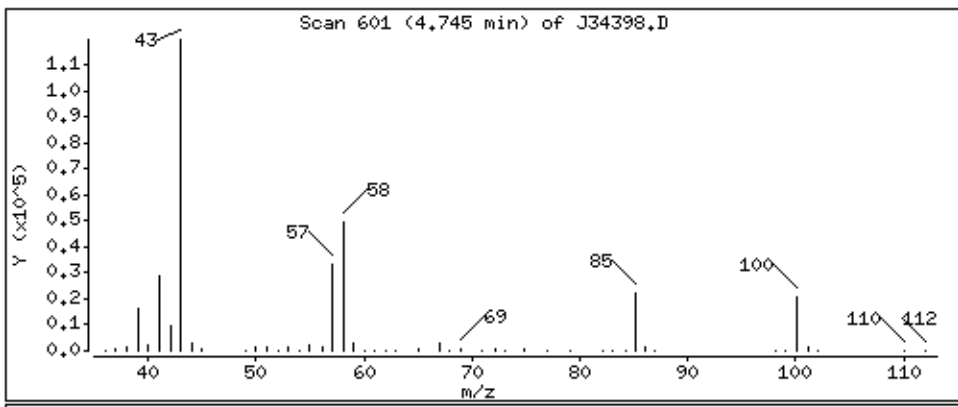
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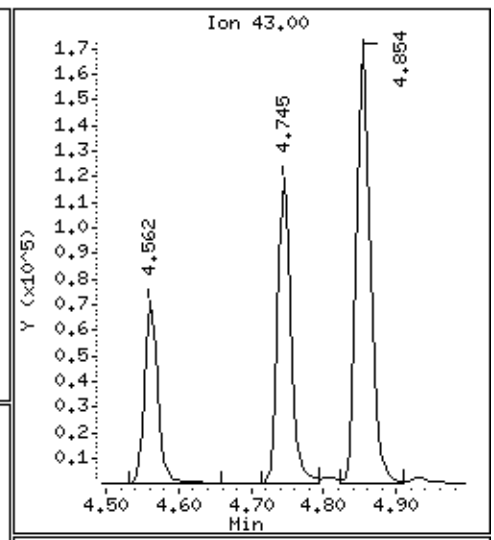
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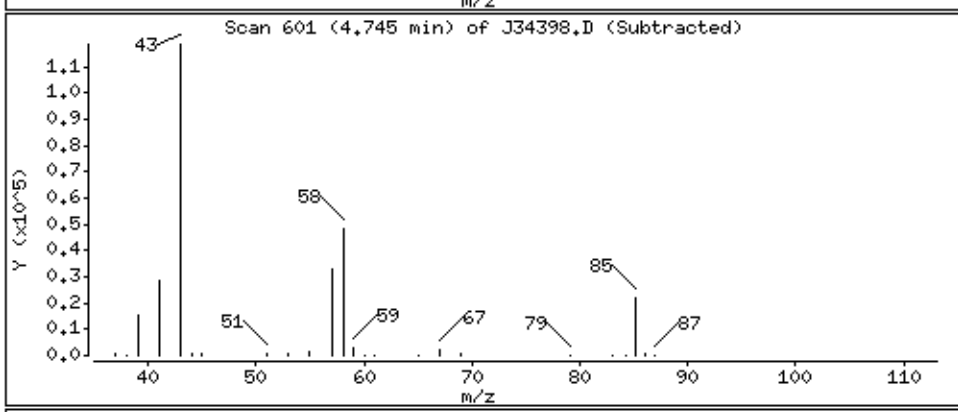
69 4-Methyl-2-pentanone (MIBK)

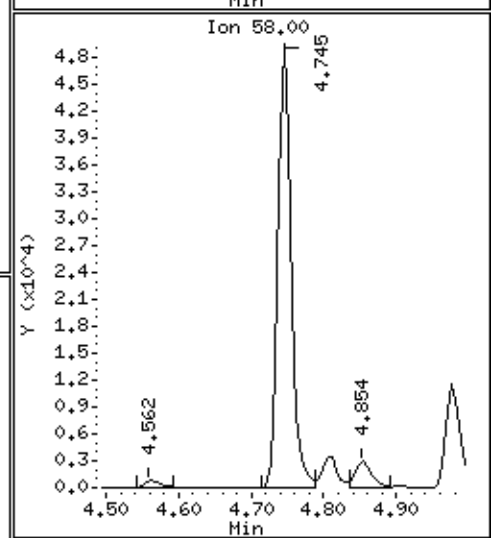
Concentration: 34.1 ug/L

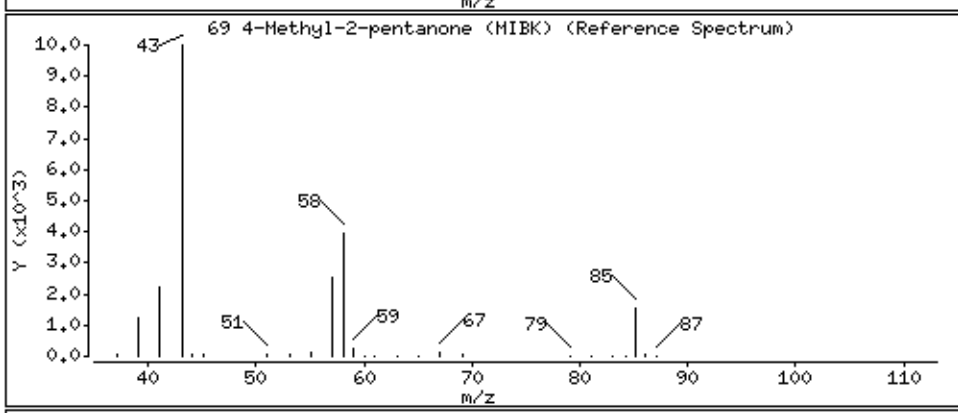
Review Code:

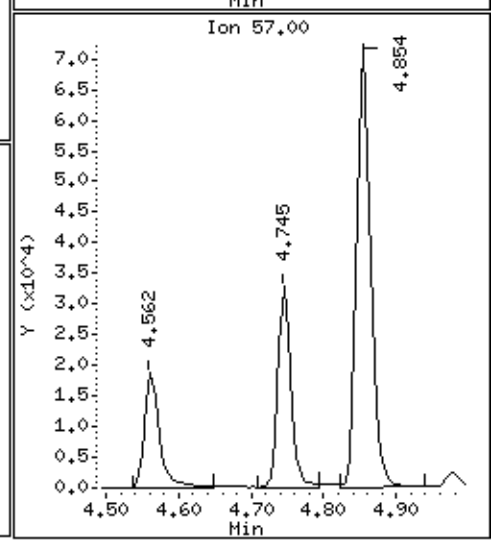


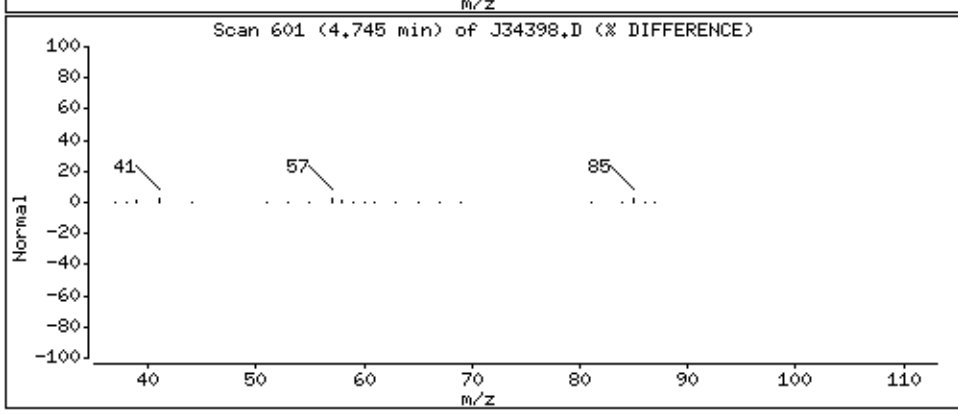












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D

Date : 25-APR-2017 13:27

Client ID: MBLCS

Instrument: 70msv6.i

Sample Info: 103009, 15067:1.25

Purge Volume: 5.0

Operator: KGG

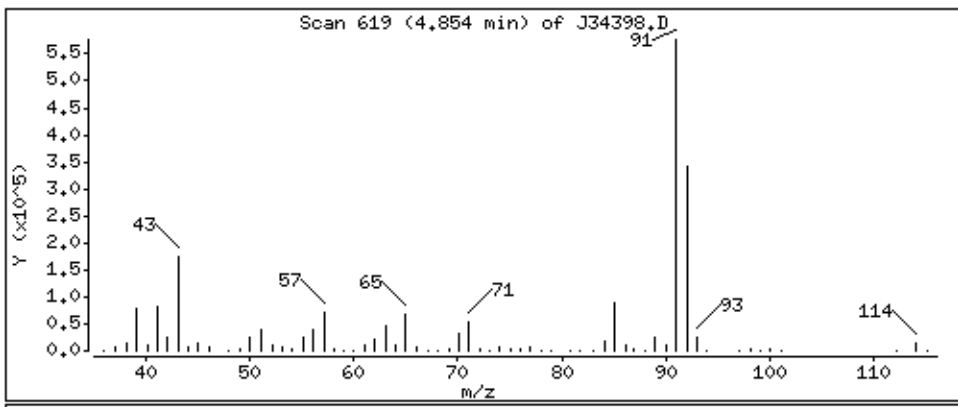
Column phase: RTX-624

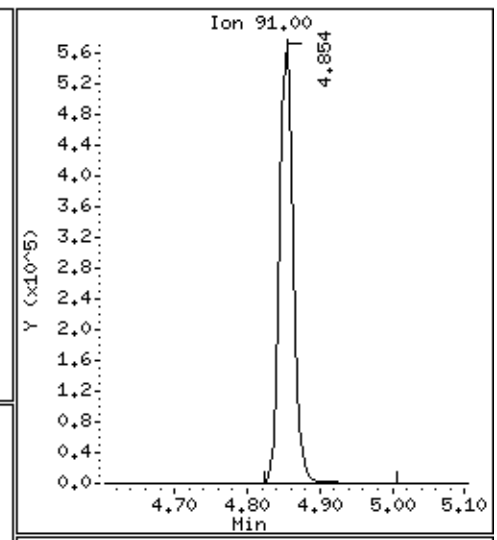
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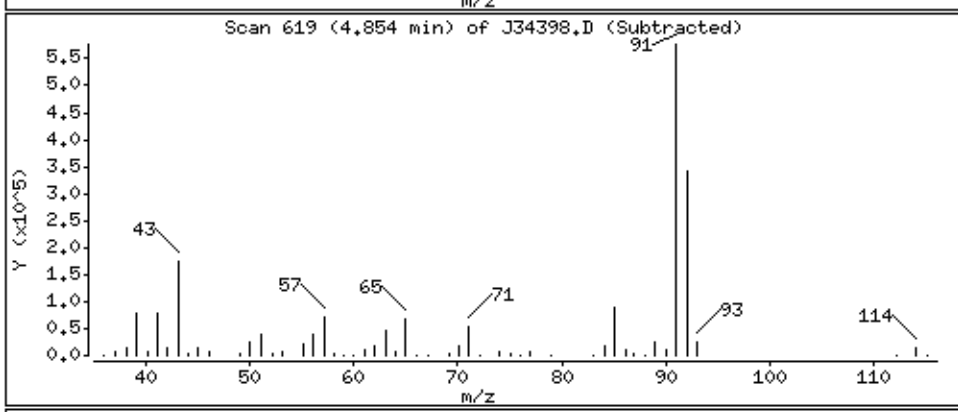
71 Toluene

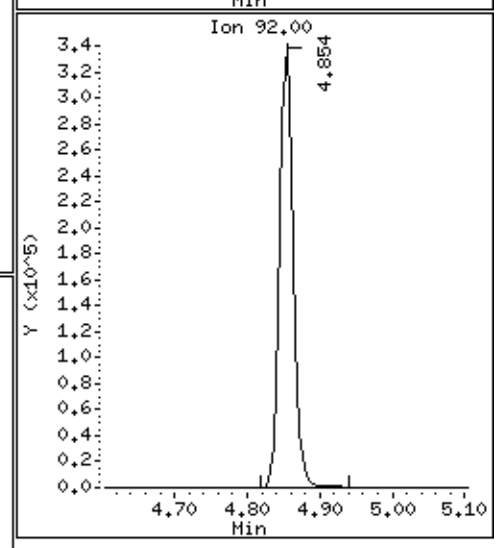
Concentration: 43.1 ug/L

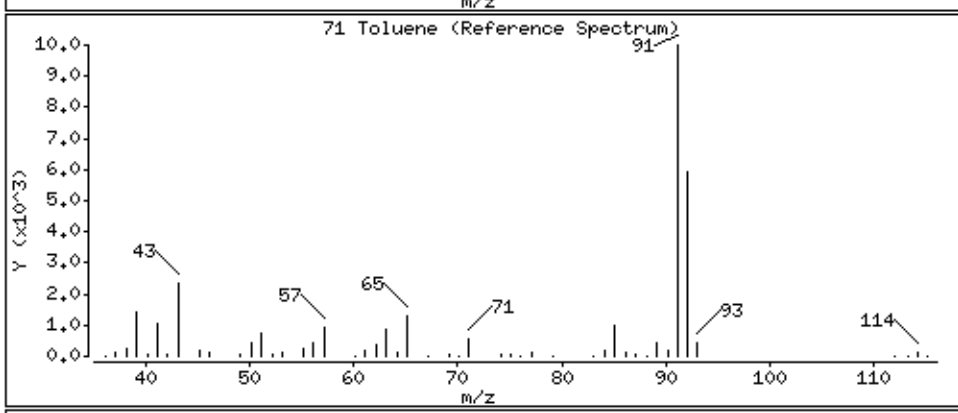
Review Code:

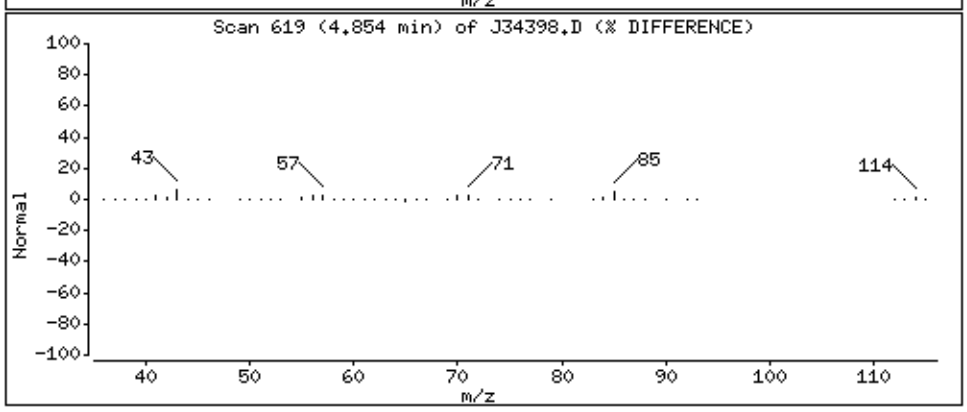












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D

Date : 25-APR-2017 13:27

Client ID: MBLCS

Instrument: 70msv6.i

Sample Info: 103009, 15067:1.25

Purge Volume: 5.0

Operator: KGG

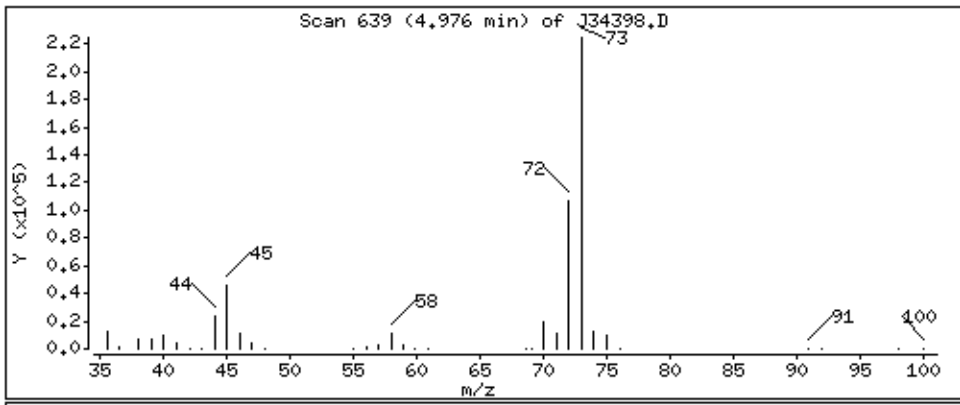
Column phase: RTX-624

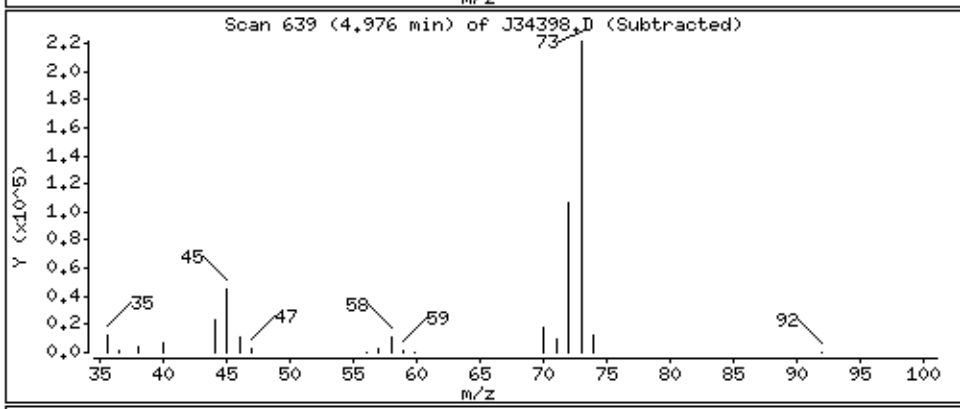
Column diameter: 0.18

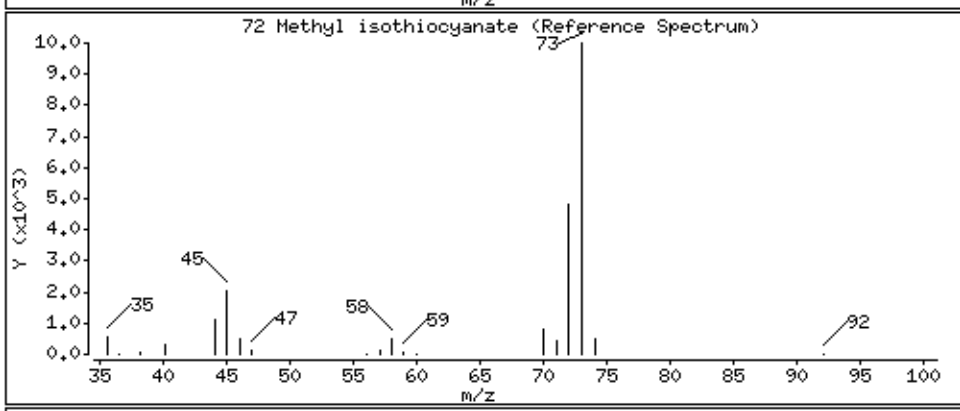
72 Methyl isothiocyanate

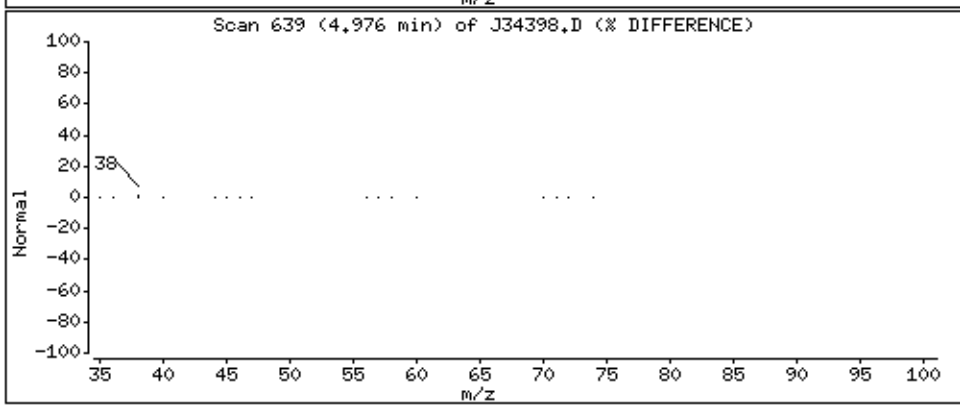
Concentration: 115 ug/L

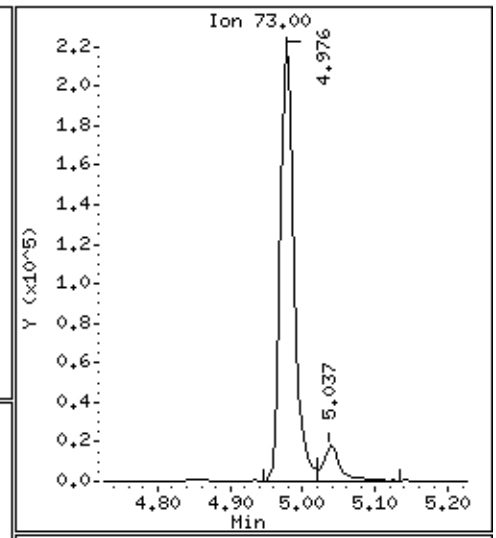
Review Code:

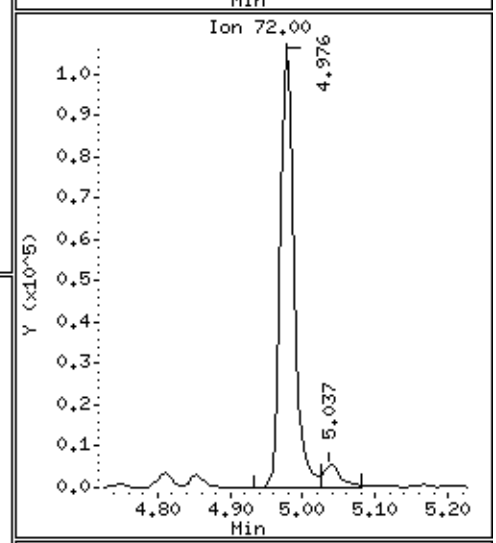


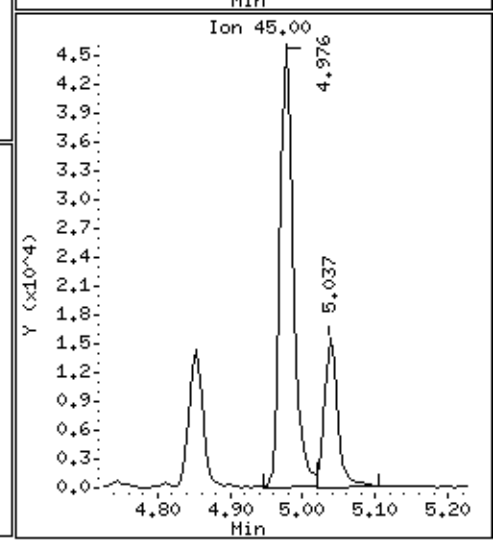












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D

Date : 25-APR-2017 13:27

Client ID: MBLCS

Instrument: 70msv6.i

Sample Info: 103009, 15067:1.25

Purge Volume: 5.0

Operator: KGG

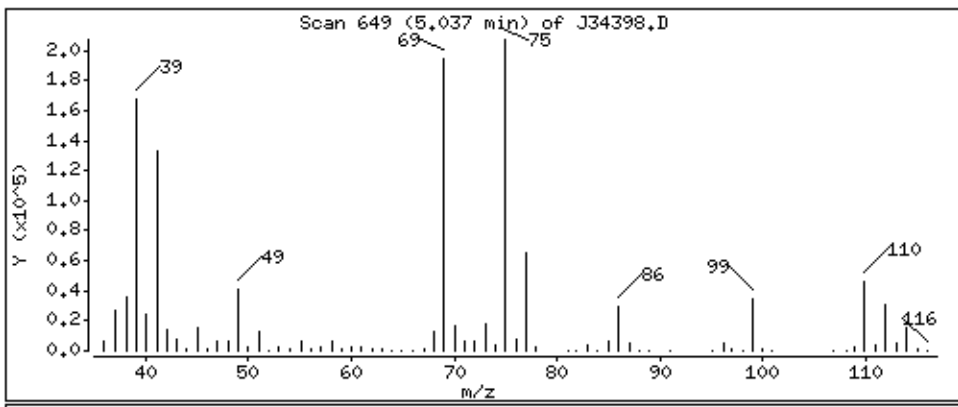
Column phase: RTX-624

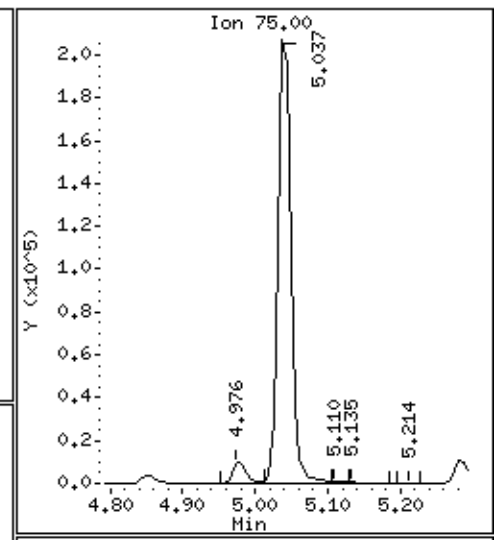
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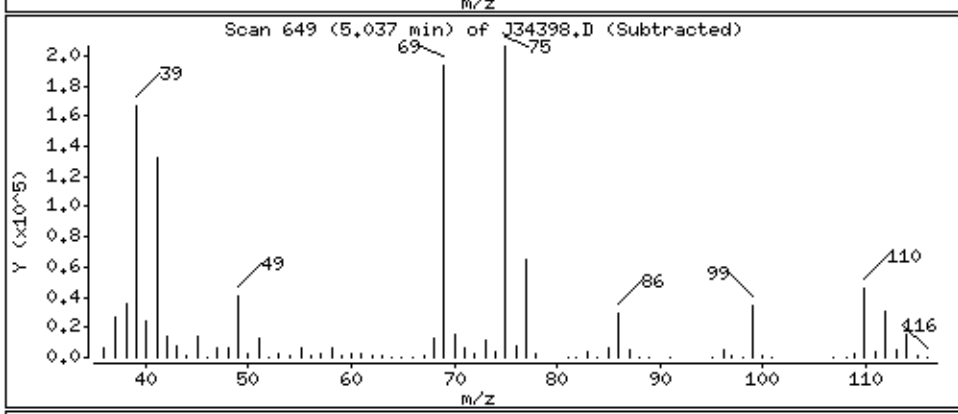
74 trans-1,3-Dichloropropene

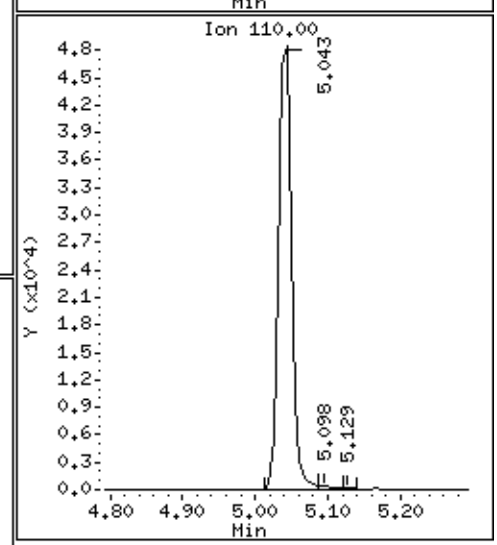
Concentration: 42.8 ug/L

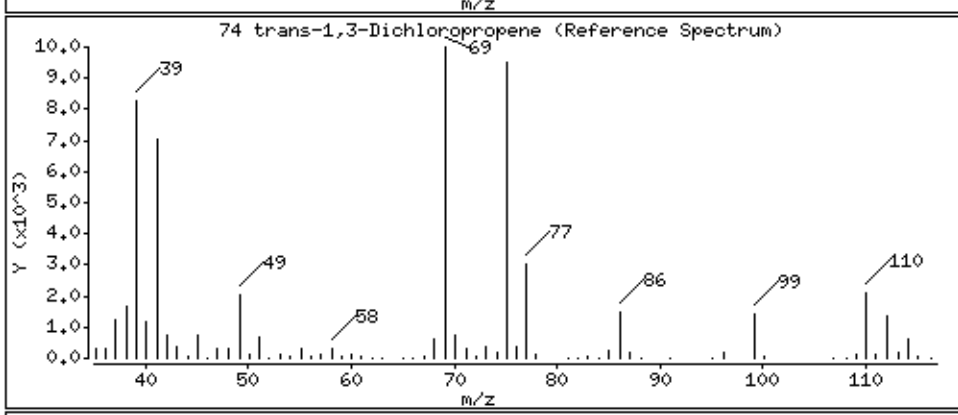
Review Code:

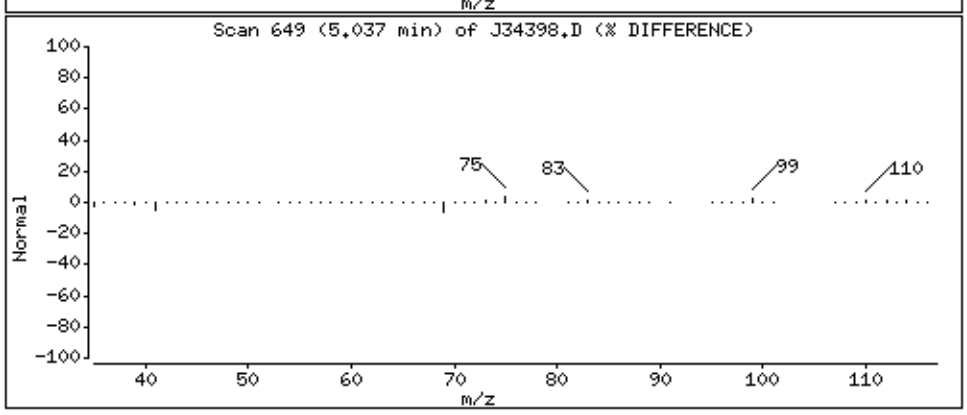












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D

Date : 25-APR-2017 13:27

Client ID: MBLCS

Instrument: 70msv6.i

Sample Info: 103009, 15067:1.25

Purge Volume: 5.0

Operator: KGG

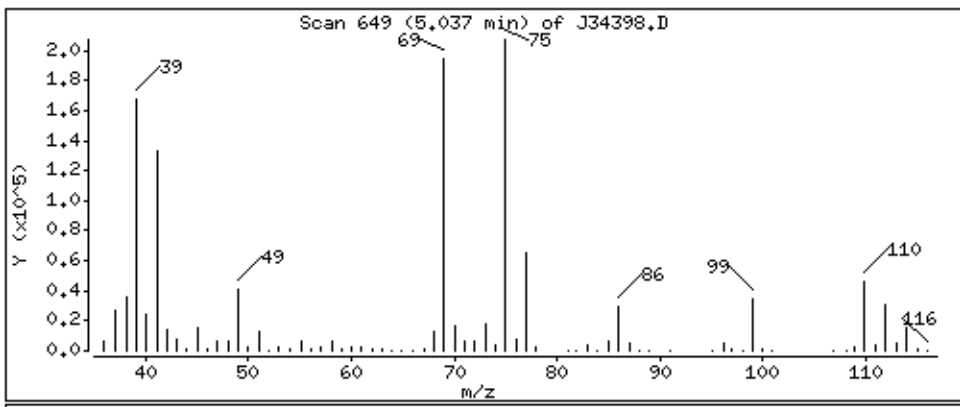
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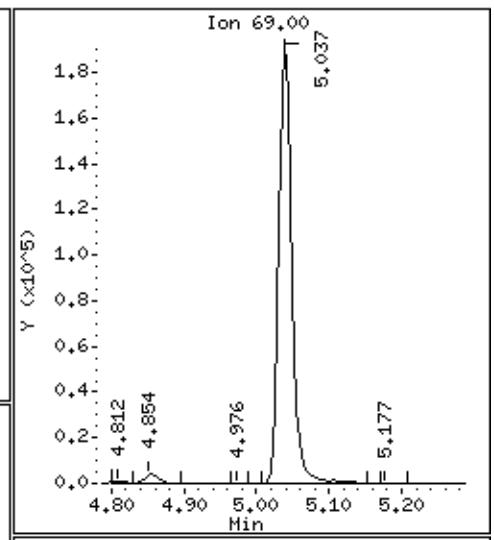
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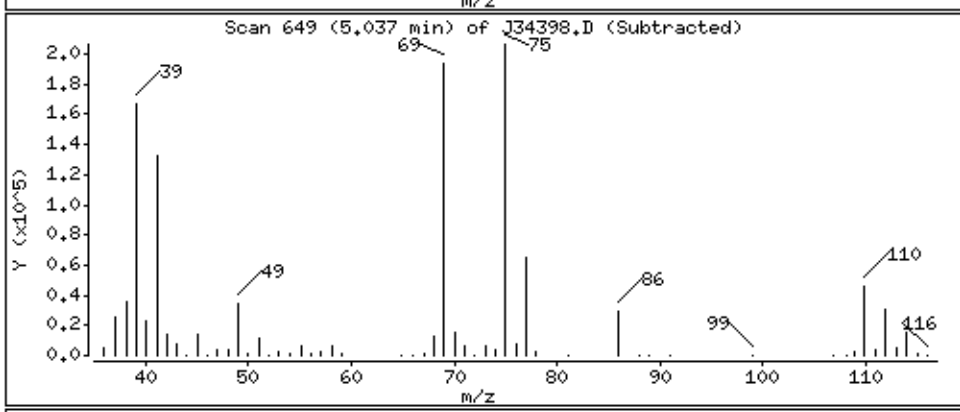
75 Ethyl methacrylate

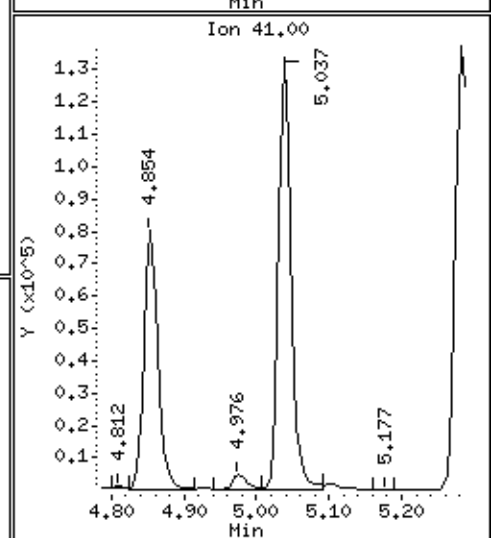
Concentration: 46.3 ug/L

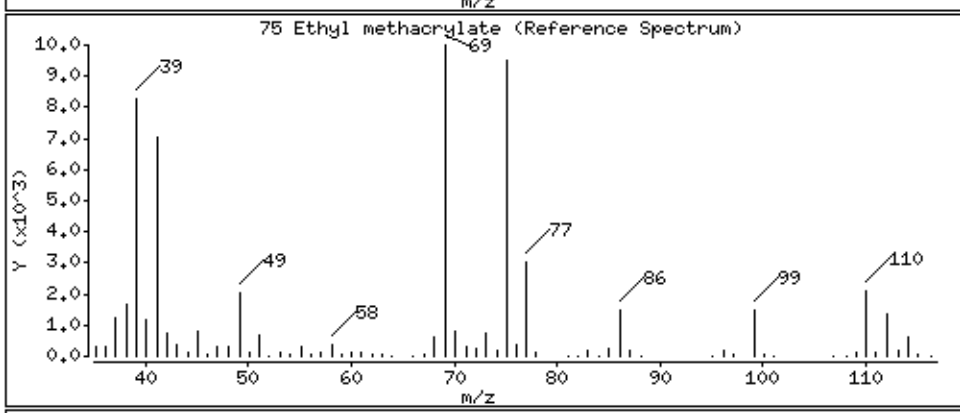
Review Code:

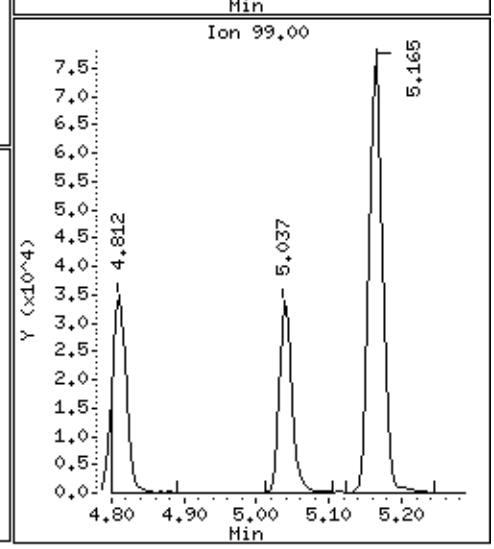


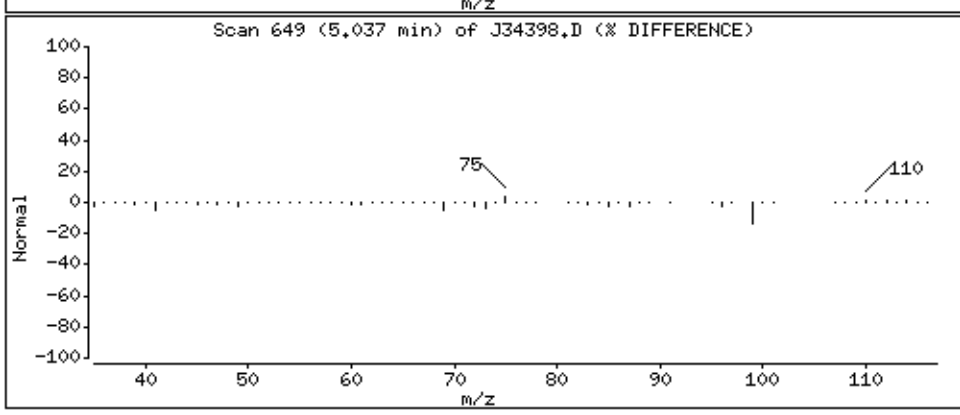












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D

Date : 25-APR-2017 13:27

Client ID: MBLCS

Instrument: 70msv6.i

Sample Info: 103009, 15067:1.25

Purge Volume: 5.0

Operator: KGG

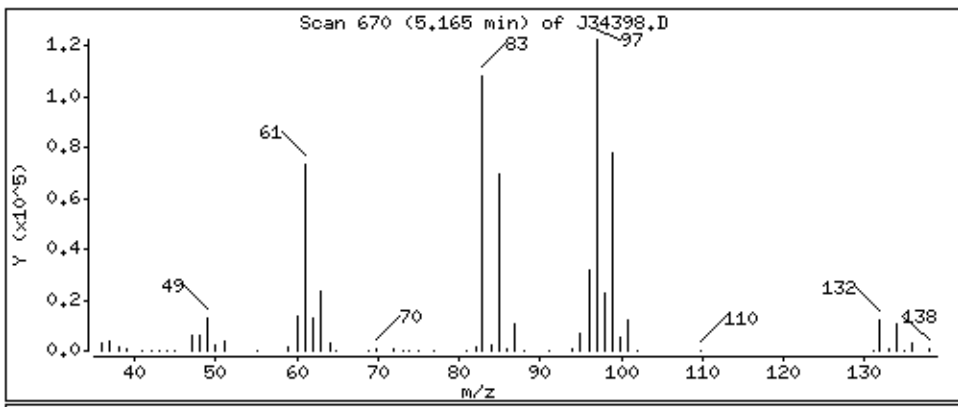
Column phase: RTX-624

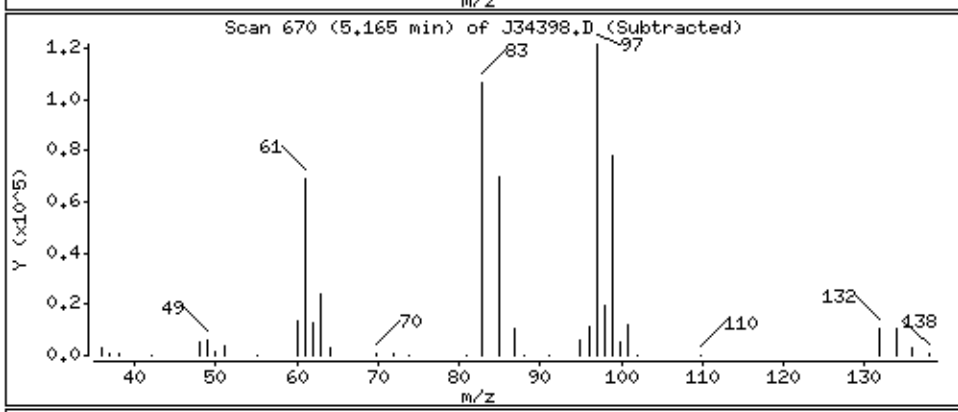
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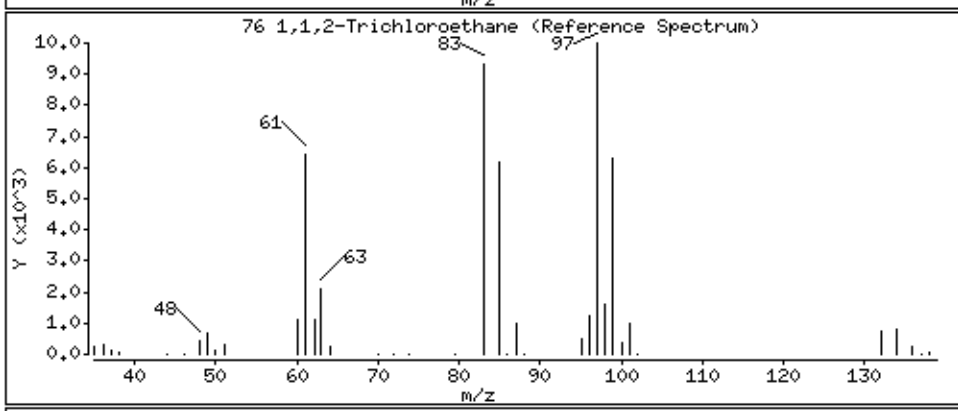
76 1,1,2-Trichloroethane

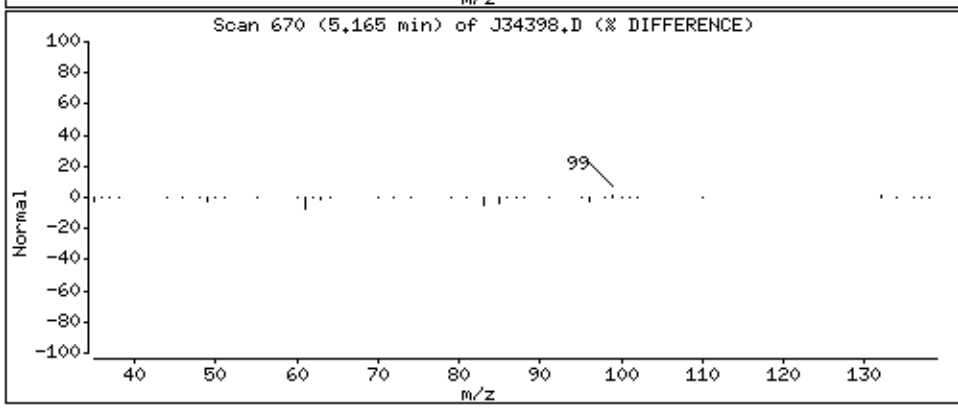
Concentration: 44.0 ug/L

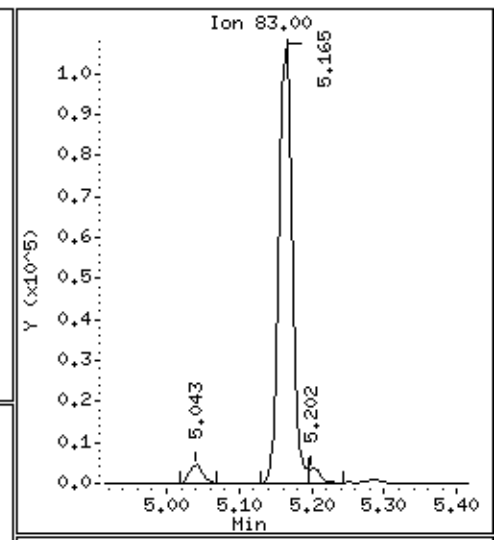
Review Code:

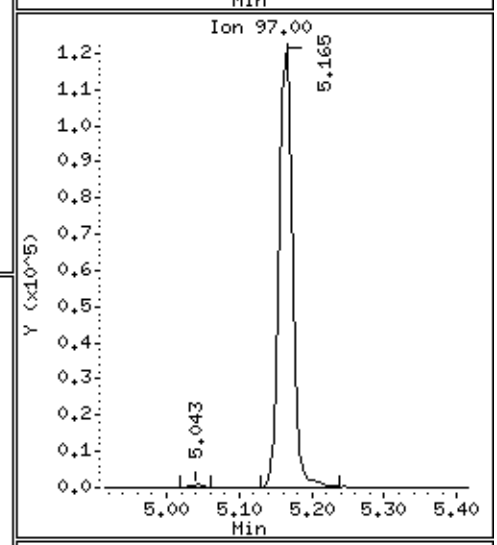


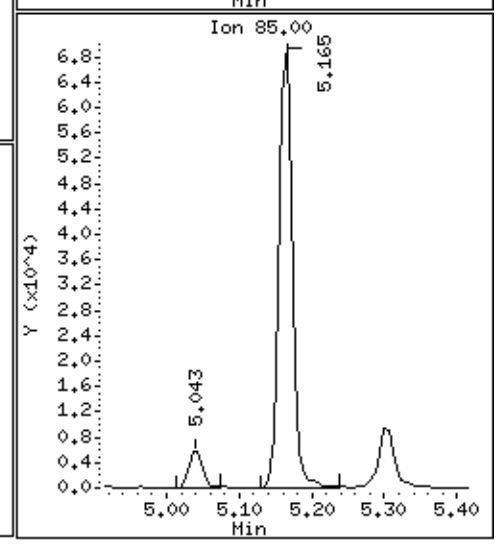












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D

Date : 25-APR-2017 13:27

Client ID: MBLCS

Instrument: 70msv6.i

Sample Info: 103009, 15067:1.25

Purge Volume: 5.0

Operator: KGG

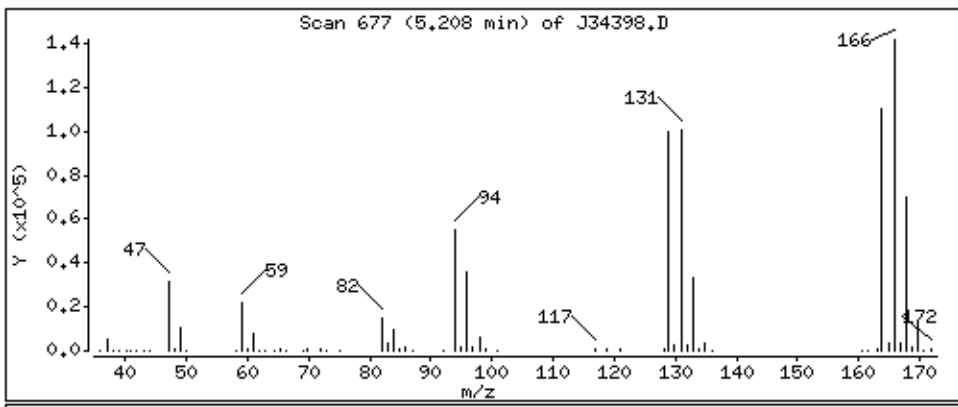
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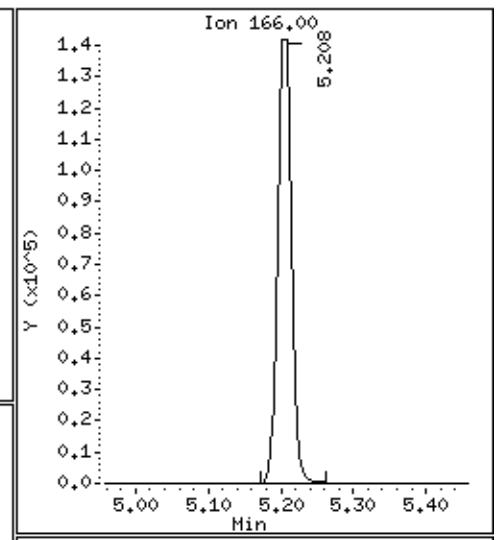
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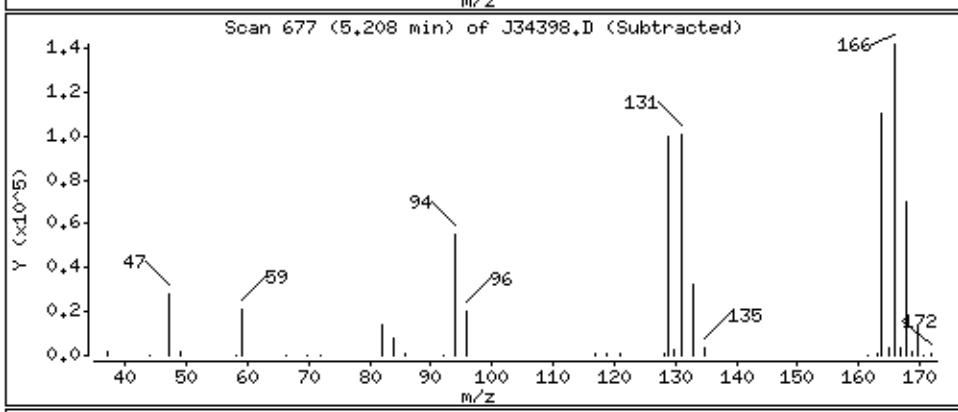
77 Tetrachloroethene

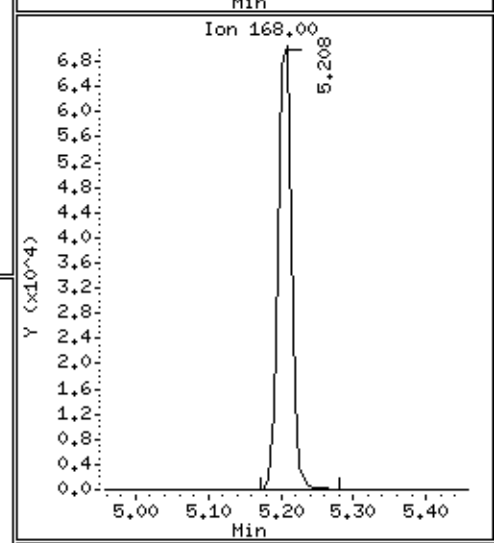
Concentration: 50.3 ug/L

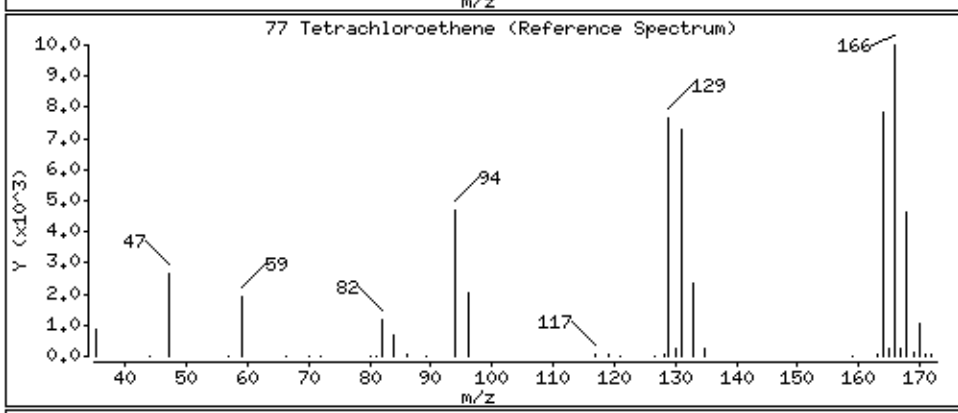
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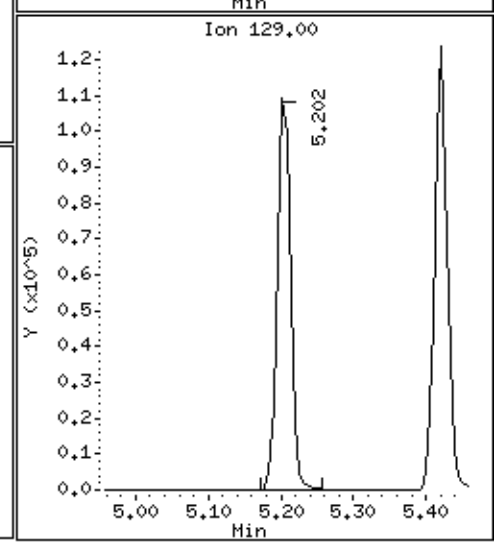


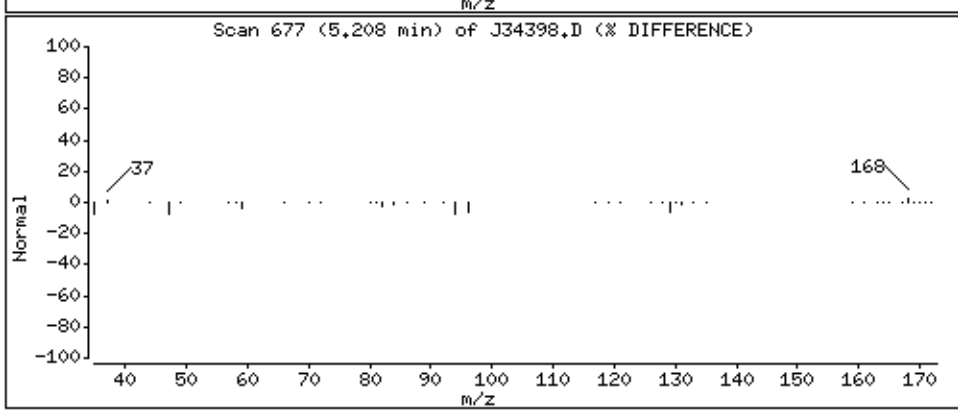












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D

Date : 25-APR-2017 13:27

Client ID: MBLCS

Instrument: 70msv6.i

Sample Info: 103009, 15067:1.25

Purge Volume: 5.0

Operator: KGG

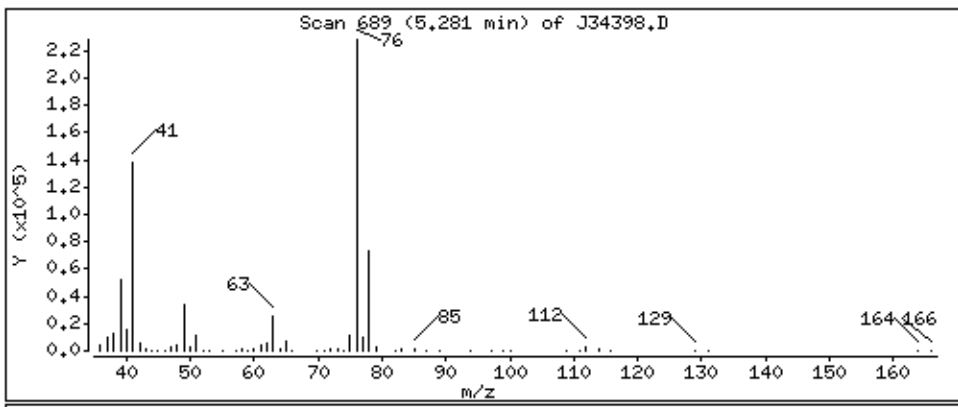
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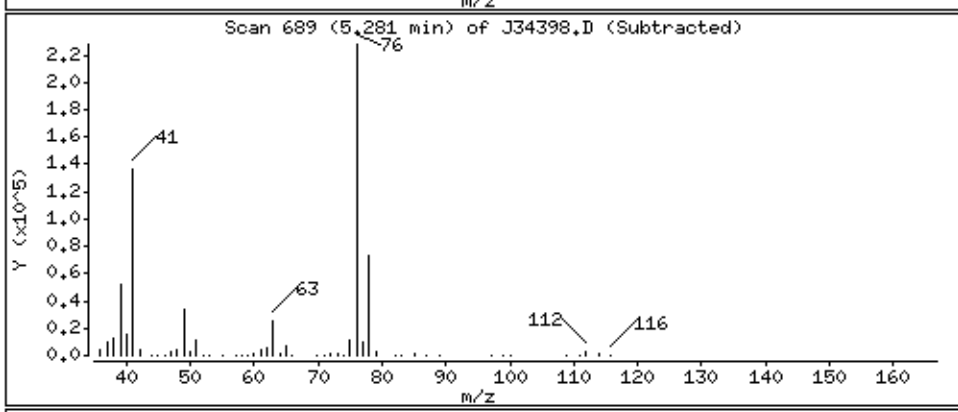
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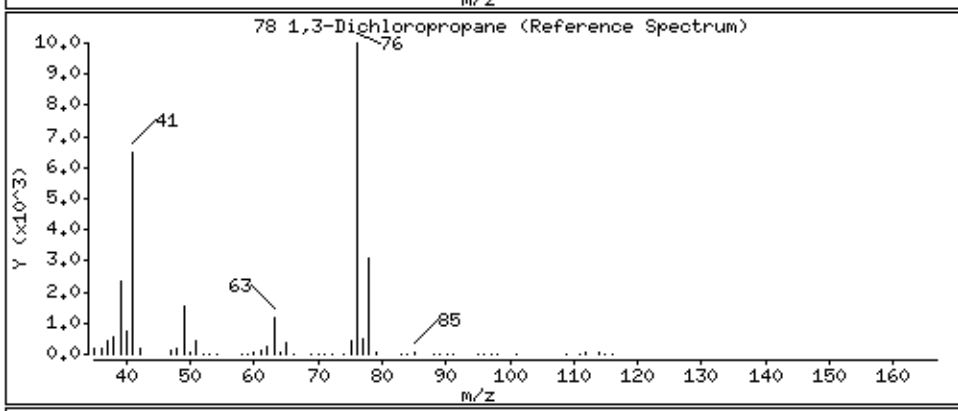
78 1,3-Dichloropropane

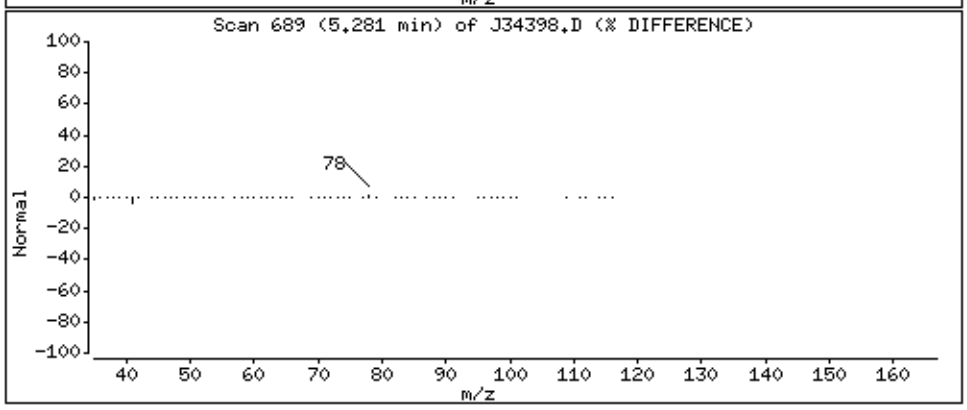
Concentration: 44.4 ug/L

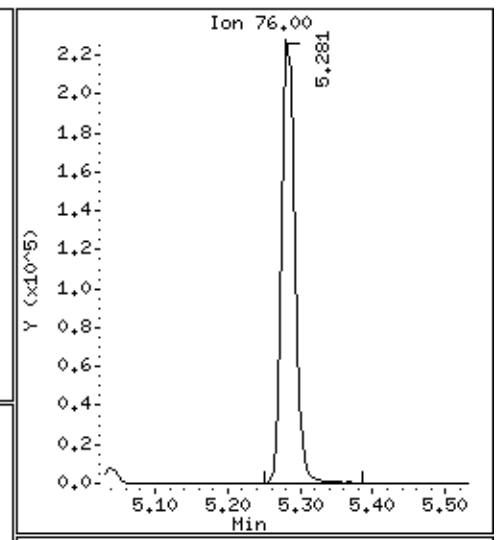
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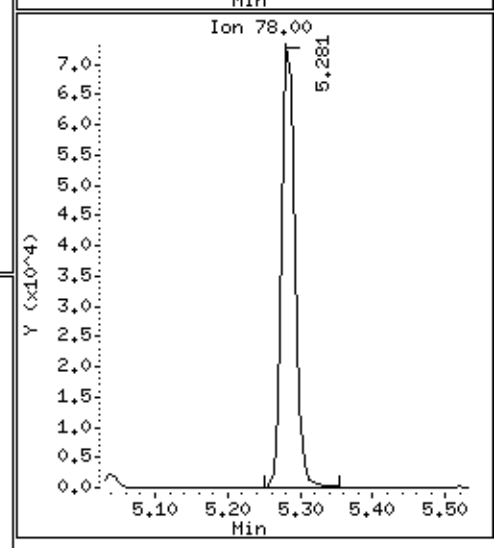












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D

Date : 25-APR-2017 13:27

Client ID: MBLCS

Instrument: 70msv6.i

Sample Info: 103009, 15067:1.25

Purge Volume: 5.0

Operator: KGG

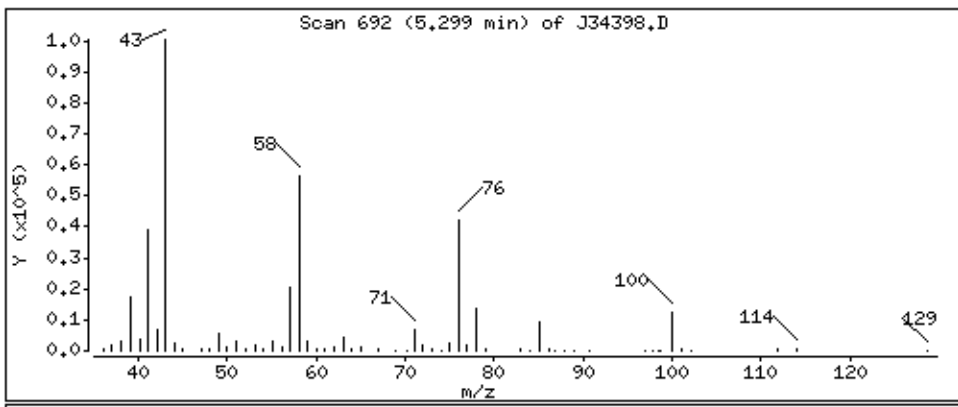
Column phase: RTX-624

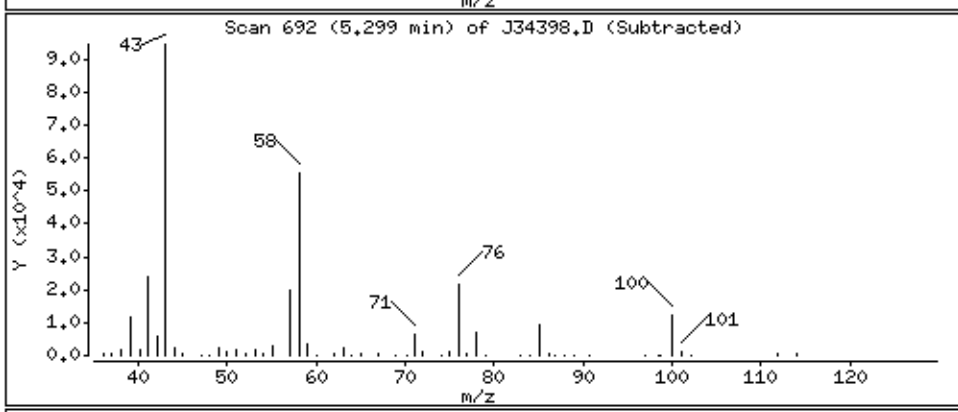
Column diameter: 0.18

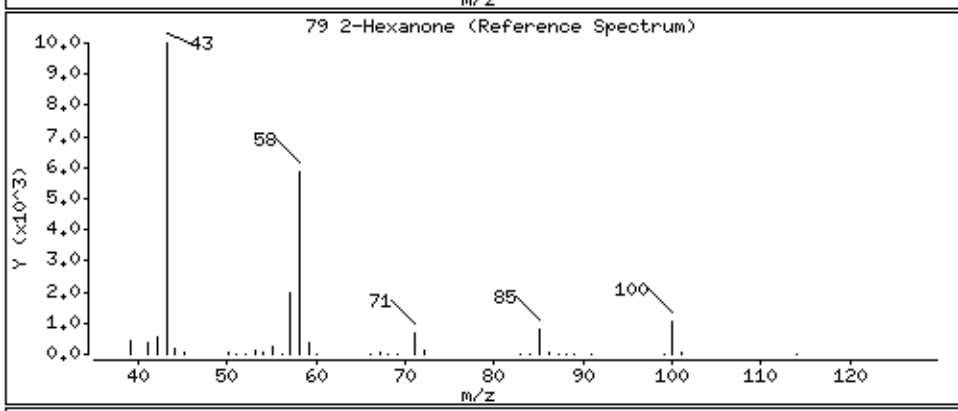
79 2-Hexanone

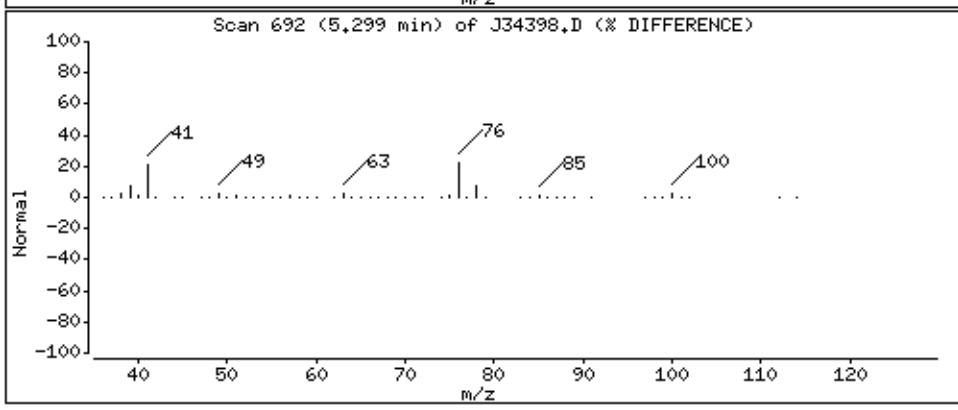
Concentration: 42.2 ug/L

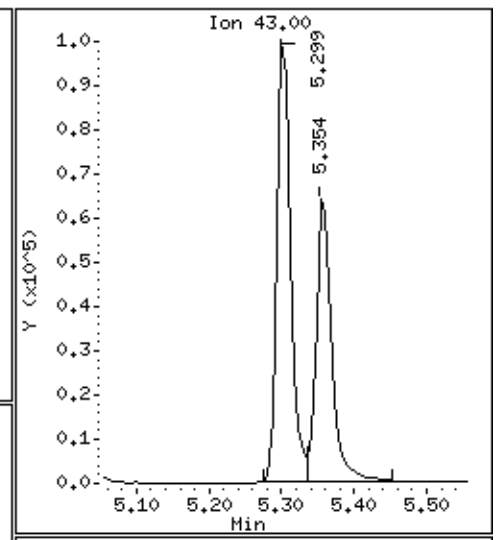
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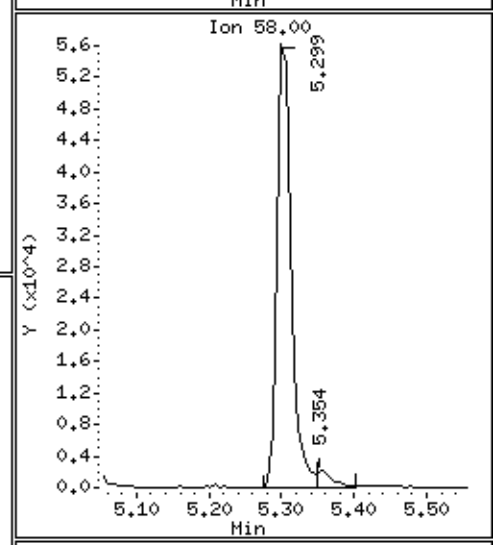


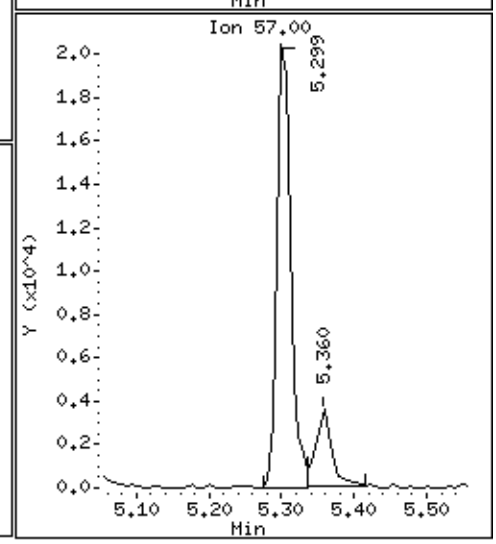












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D

Date : 25-APR-2017 13:27

Client ID: MBLCS

Instrument: 70msv6.i

Sample Info: 103009, 15067:1.25

Purge Volume: 5.0

Operator: KGG

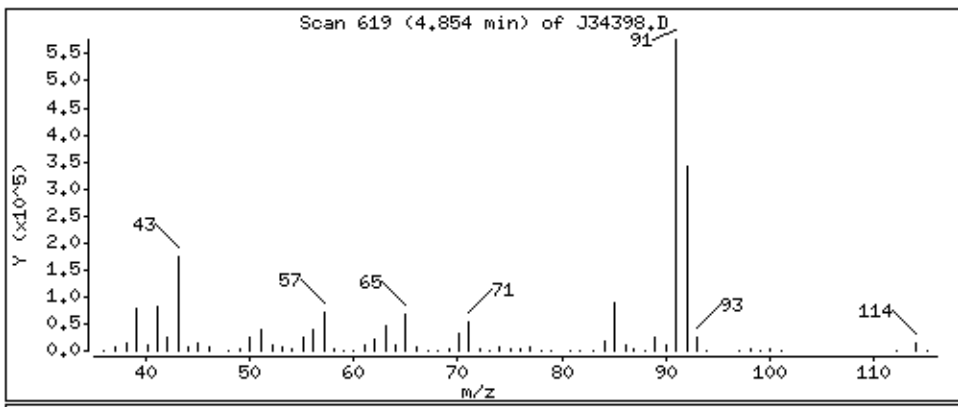
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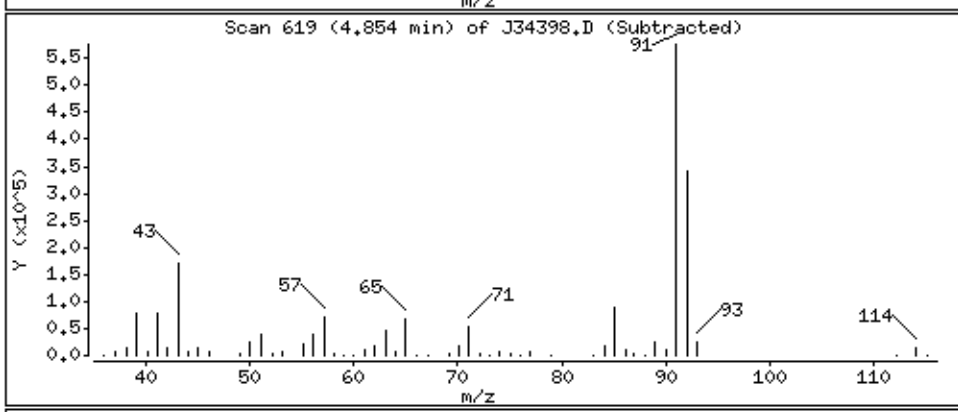
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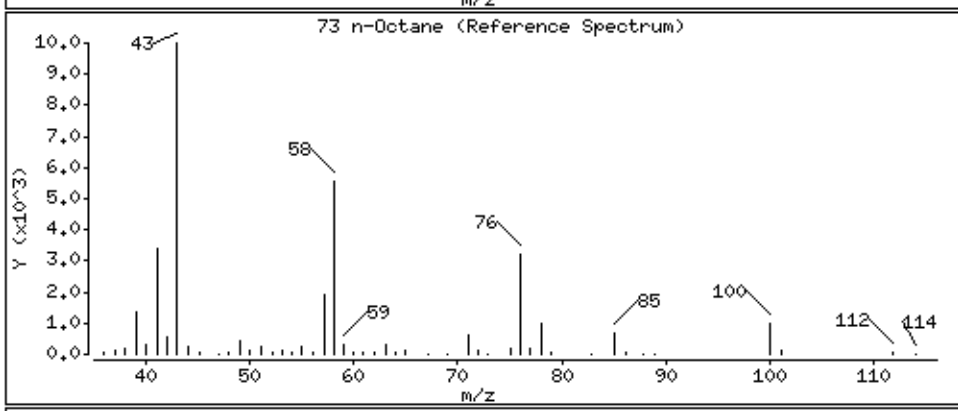
73 n-Octane

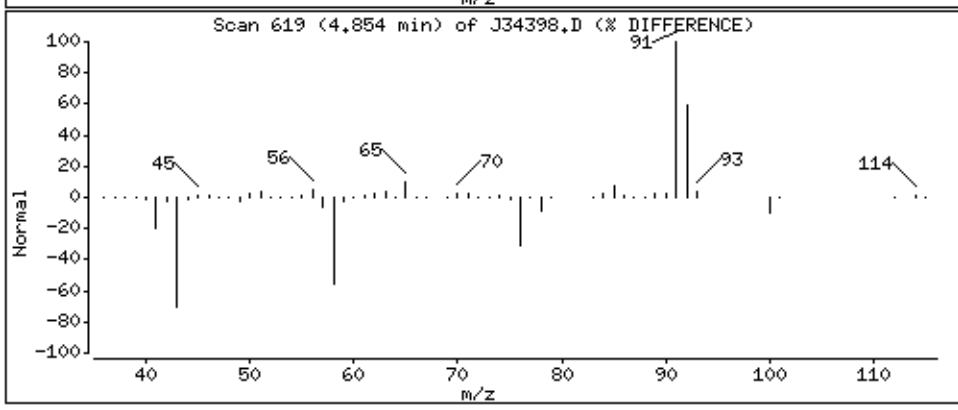
Concentration: 55.8 ug/L

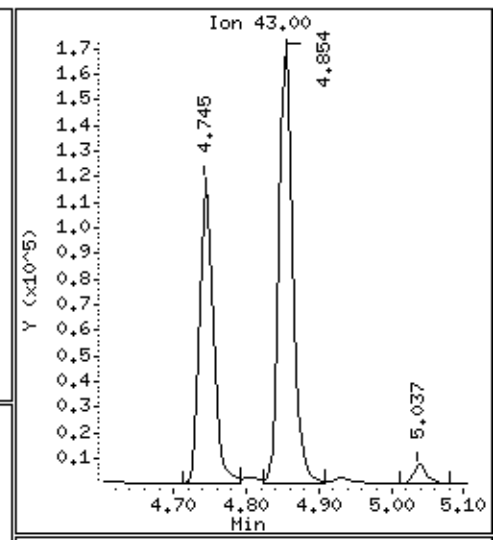
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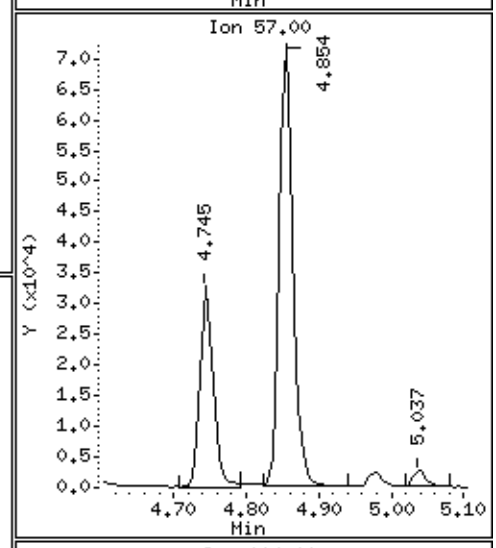


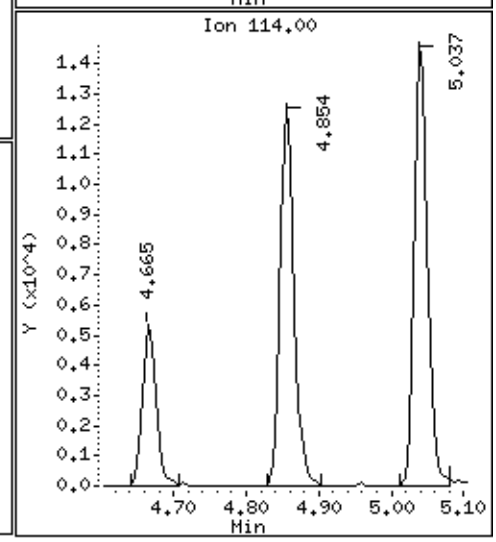












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D

Date : 25-APR-2017 13:27

Client ID: MBLCS

Instrument: 70msv6.i

Sample Info: 103009, 15067:1.25

Purge Volume: 5.0

Operator: KGG

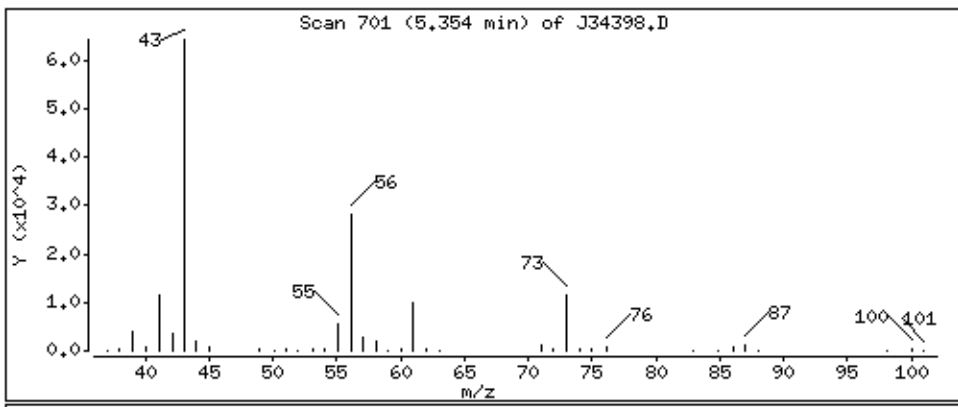
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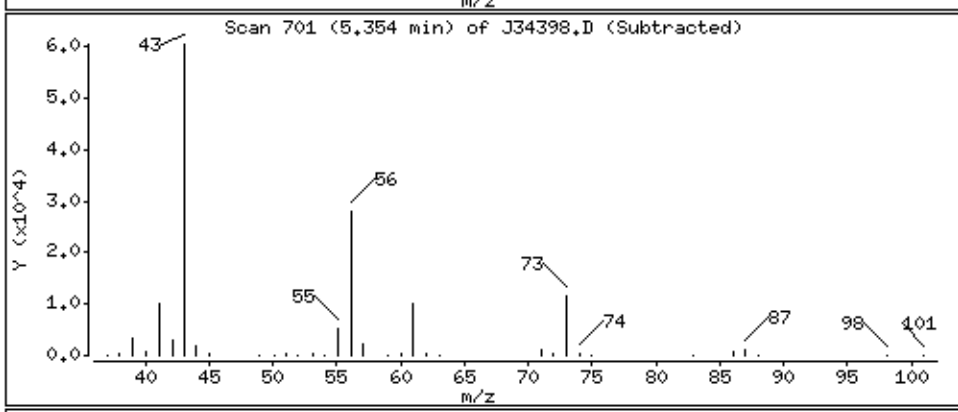
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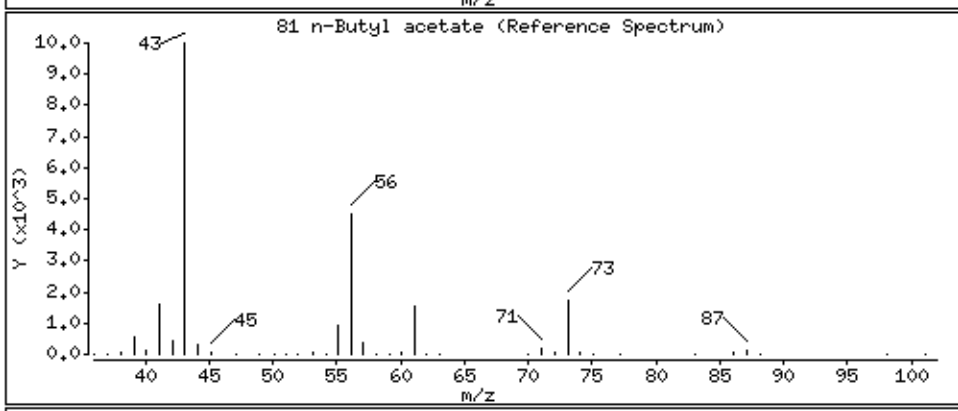
81 n-Butyl acetate

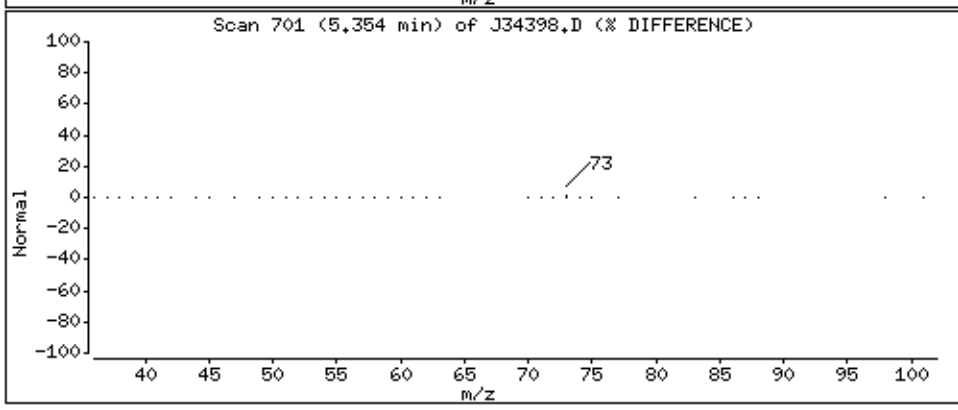
Concentration: 39.0 ug/L

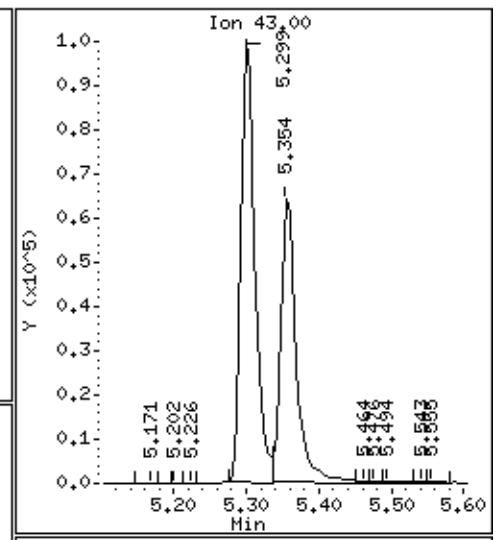
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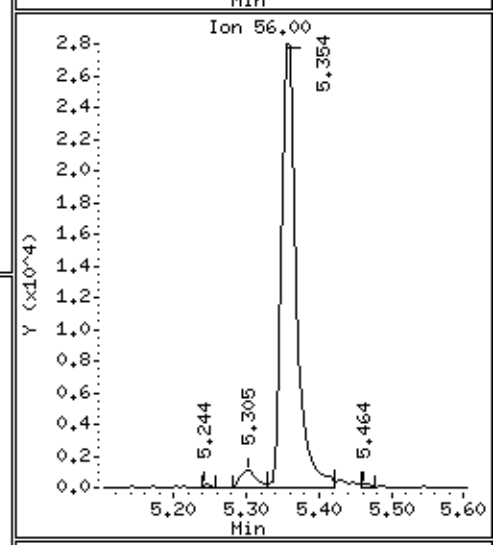


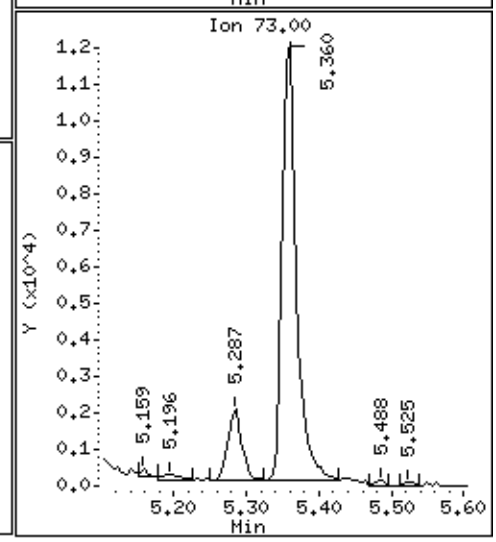












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D

Date : 25-APR-2017 13:27

Client ID: MBLCS

Instrument: 70msv6.i

Sample Info: 103009, 15067:1.25

Purge Volume: 5.0

Operator: KGG

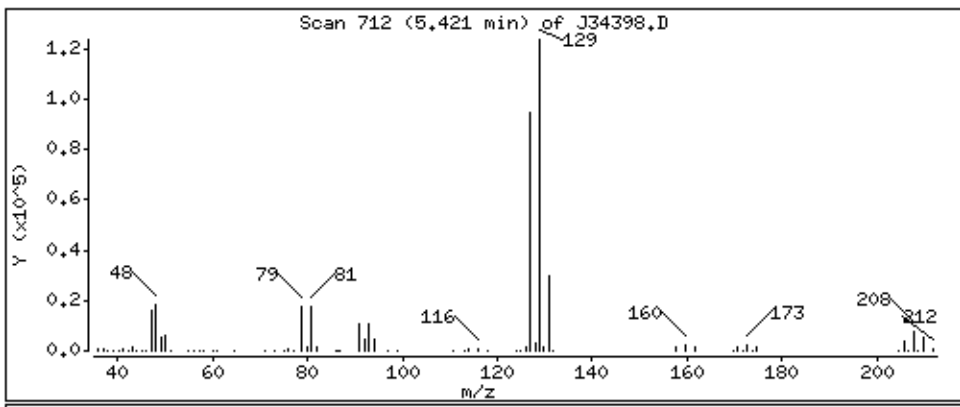
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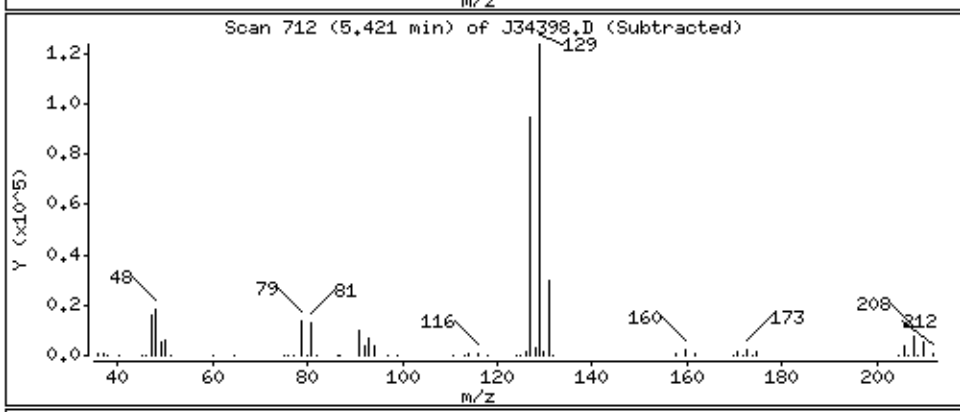
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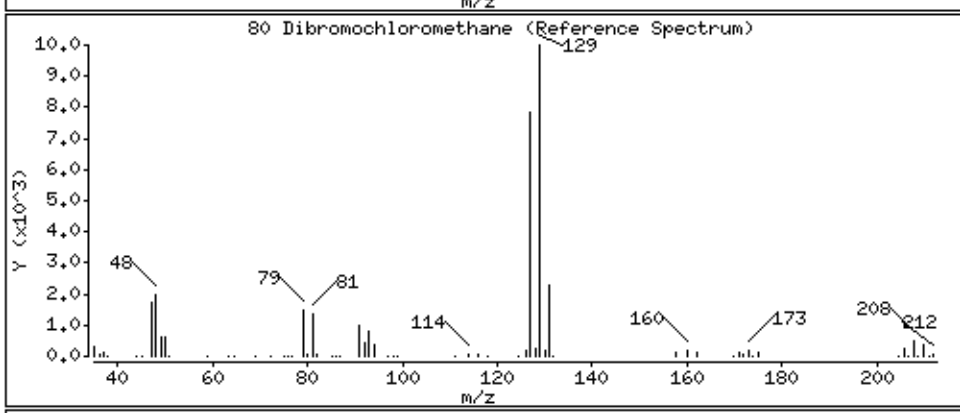
80 Dibromochloromethane

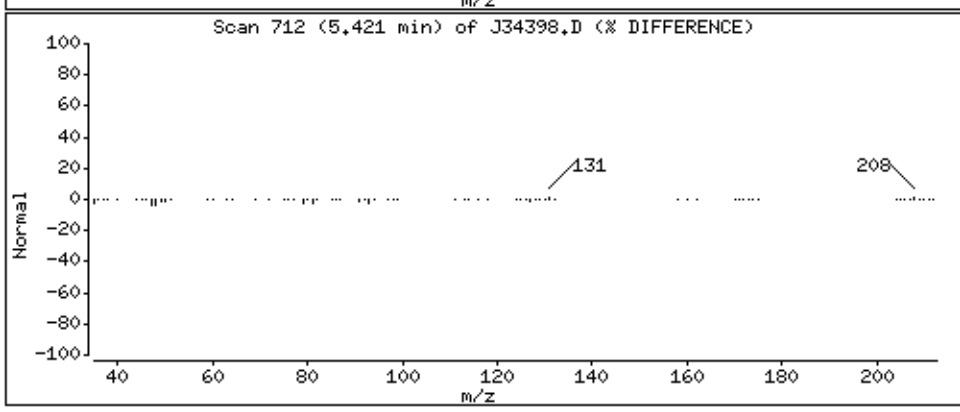
Concentration: 61.7 ug/L

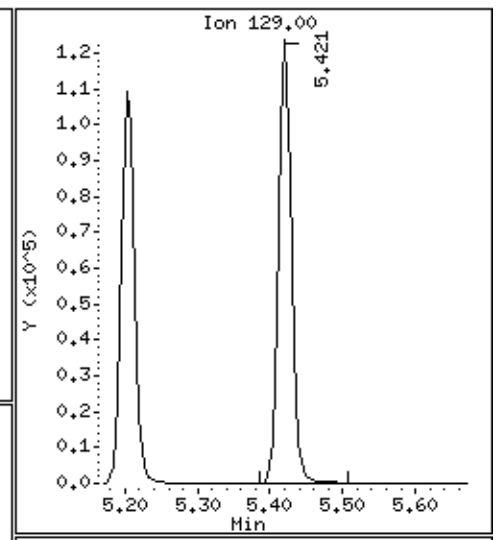
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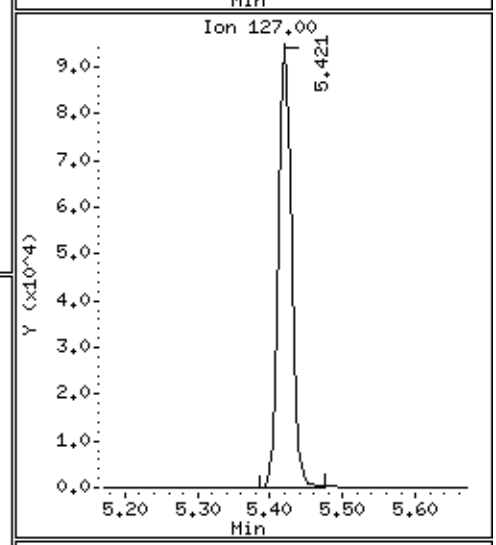


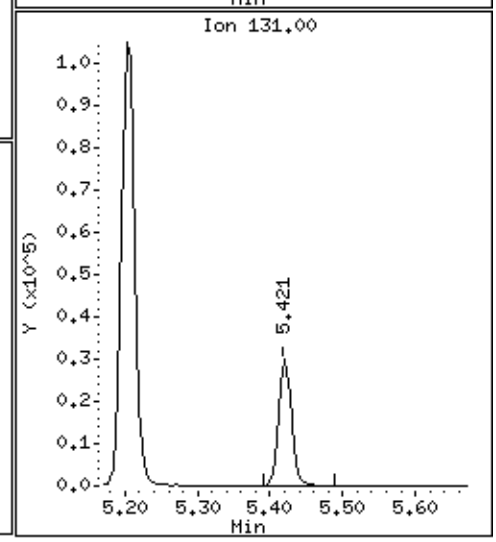












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D

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Client ID: MBLCS

Instrument: 70msv6.i

Sample Info: 103009, 15067:1.25

Purge Volume: 5.0

Operator: KGG

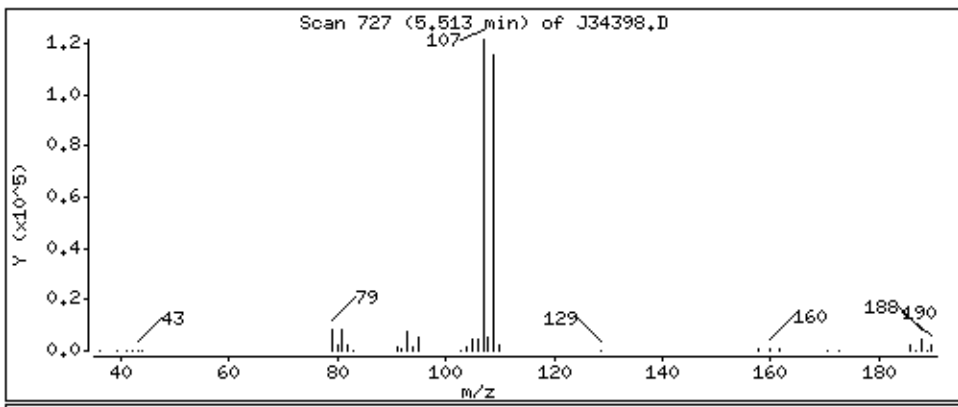
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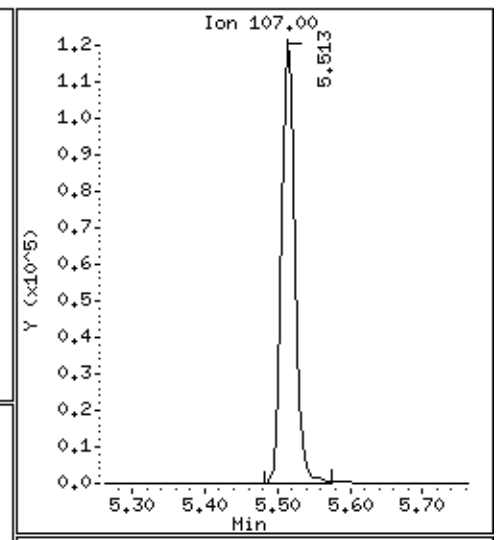
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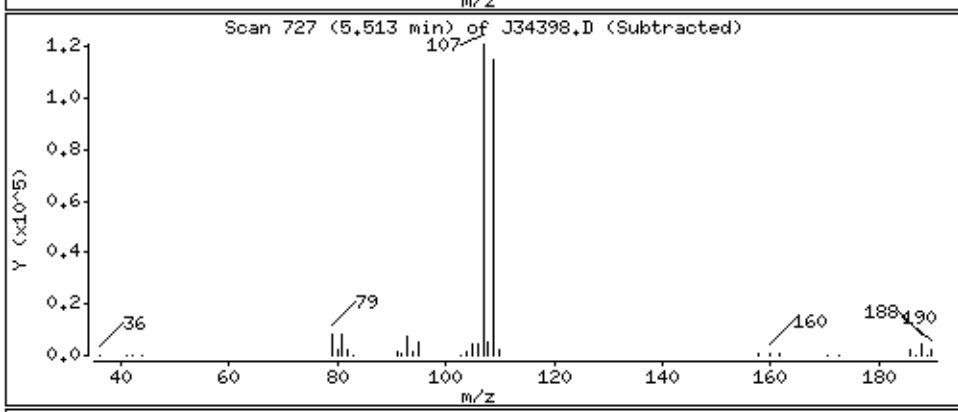
82 1,2-Dibromoethane (EDB)

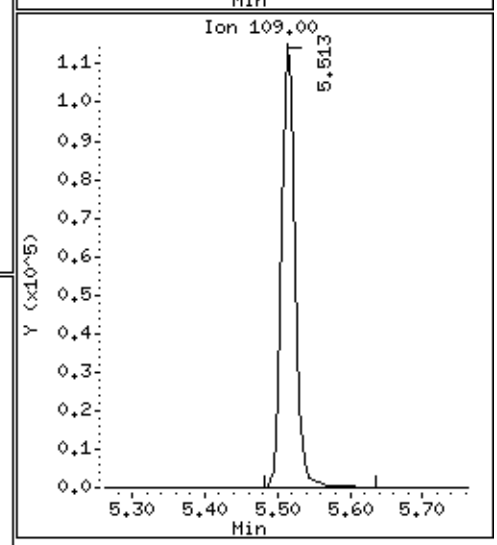
Concentration: 55.8 ug/L

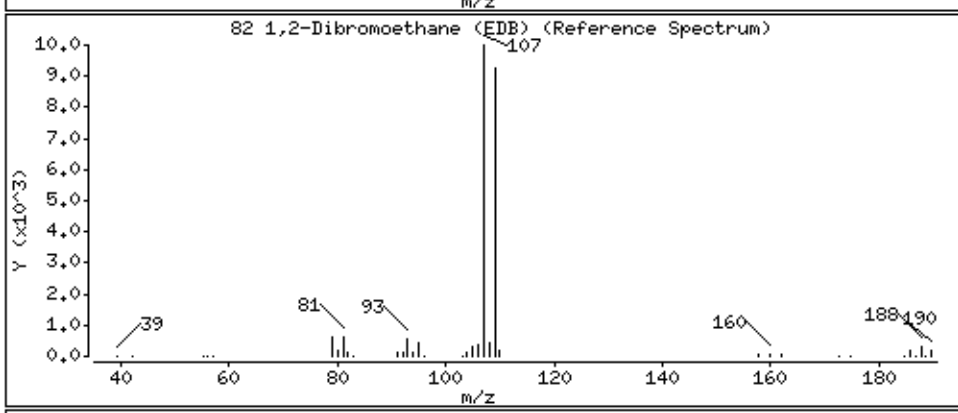
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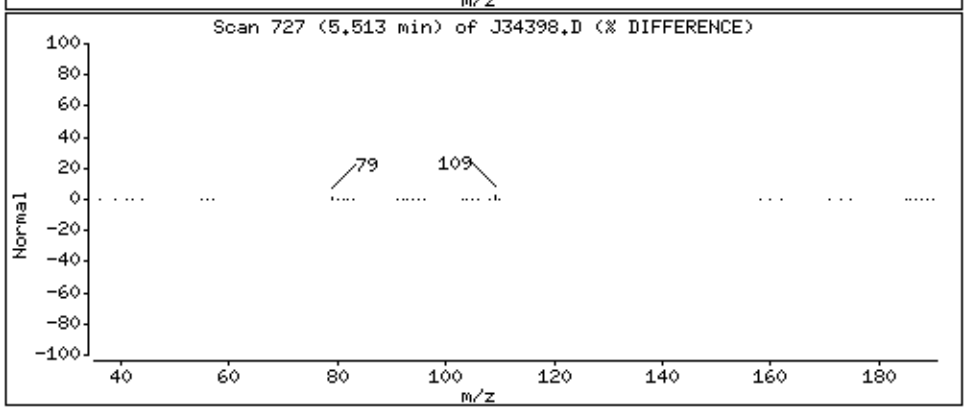












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D

Date : 25-APR-2017 13:27

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Instrument: 70msv6.i

Sample Info: 103009, 15067:1.25

Purge Volume: 5.0

Operator: KGG

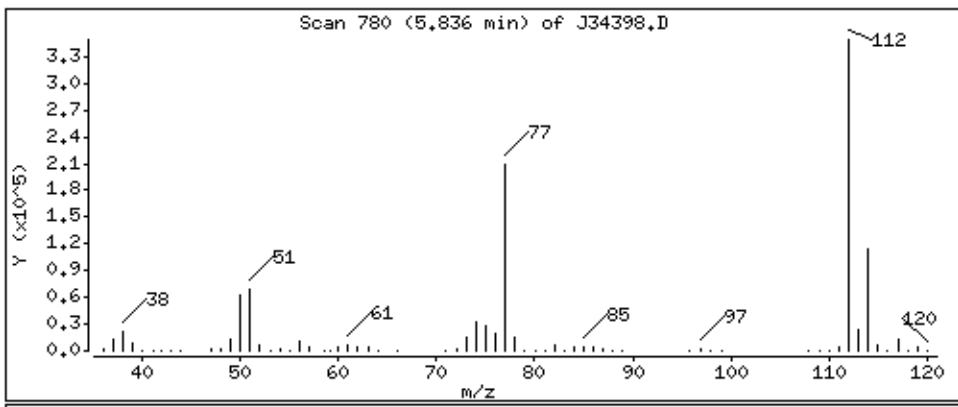
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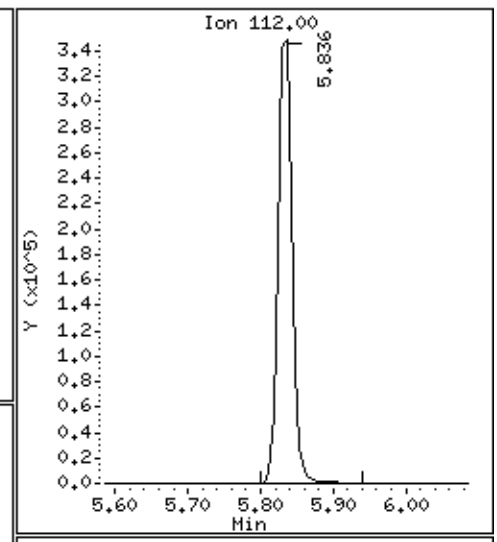
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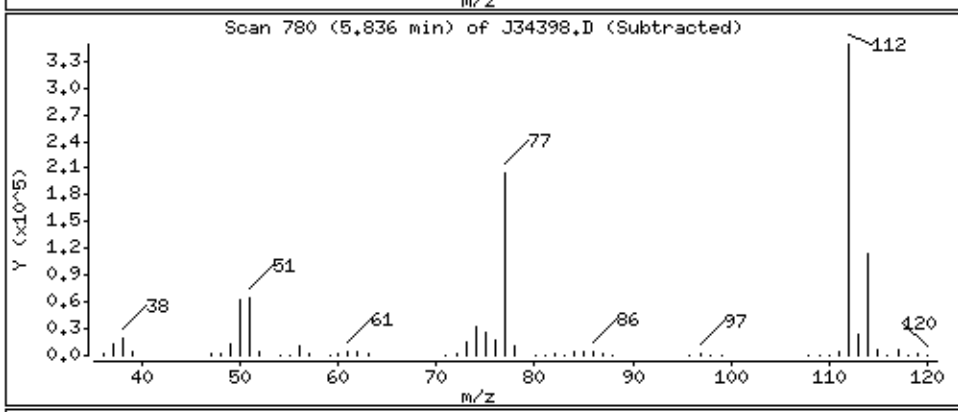
84 Chlorobenzene

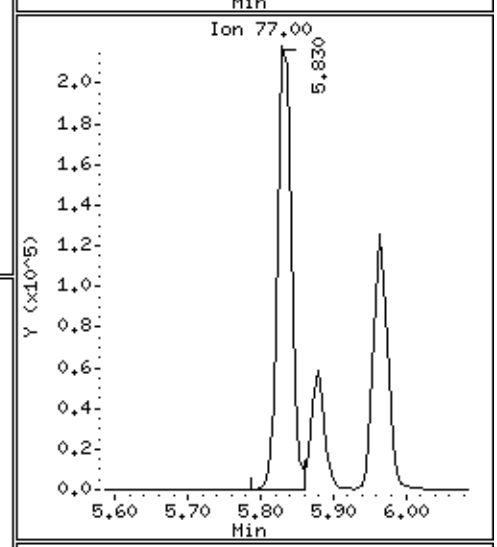
Concentration: 47.2 ug/L

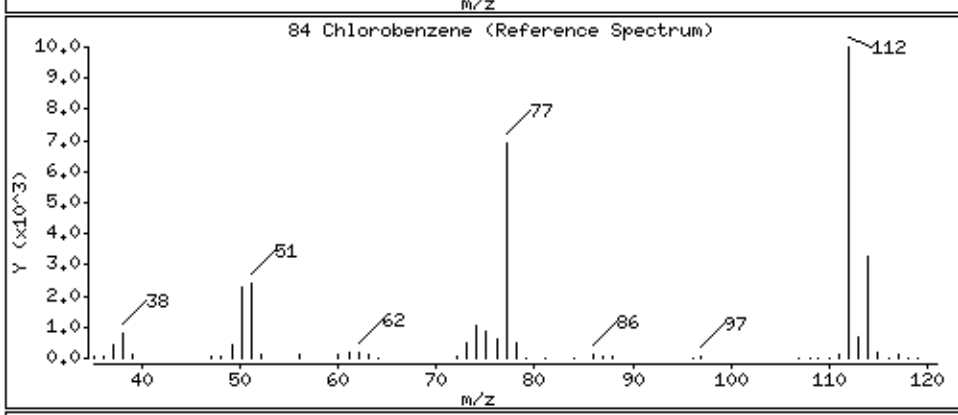
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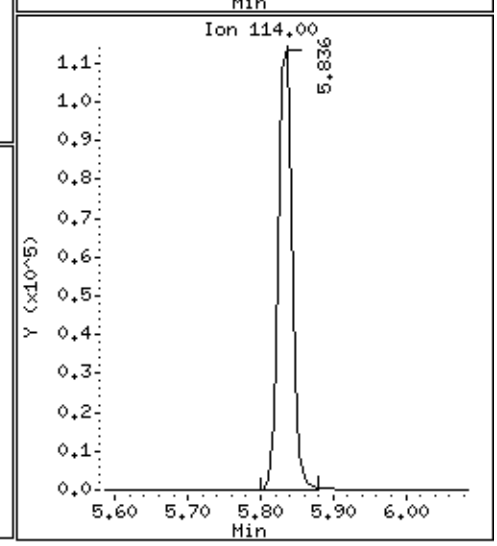


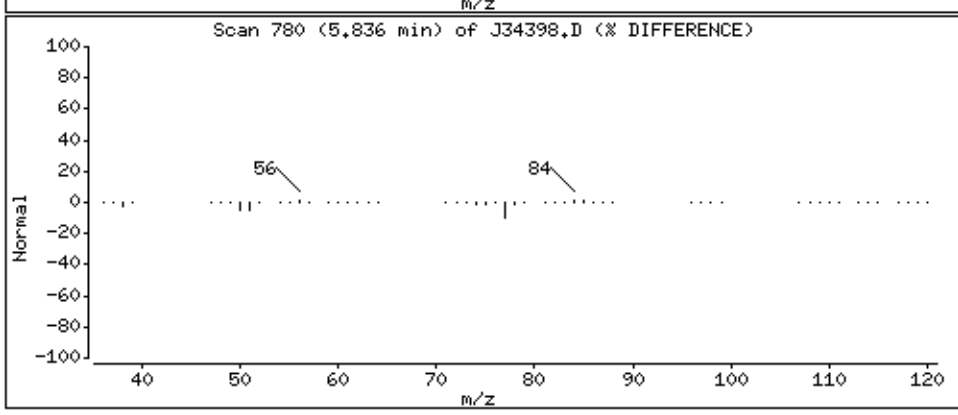












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D

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Instrument: 70msv6.i

Sample Info: 103009, 15067:1.25

Purge Volume: 5.0

Operator: KGG

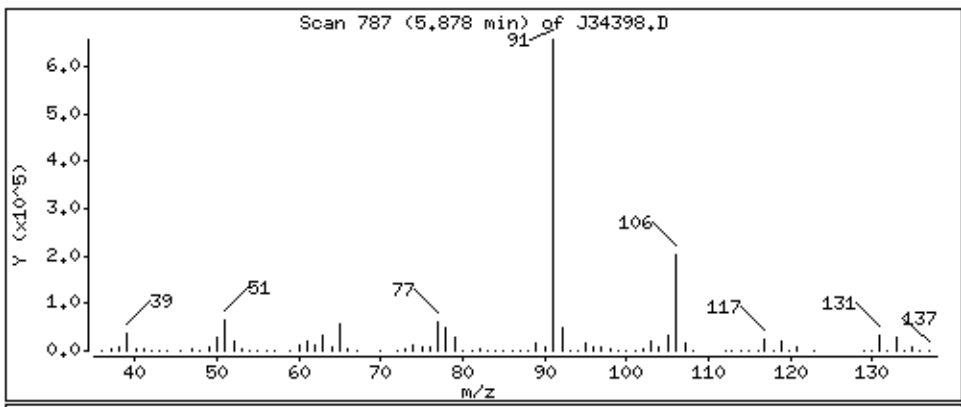
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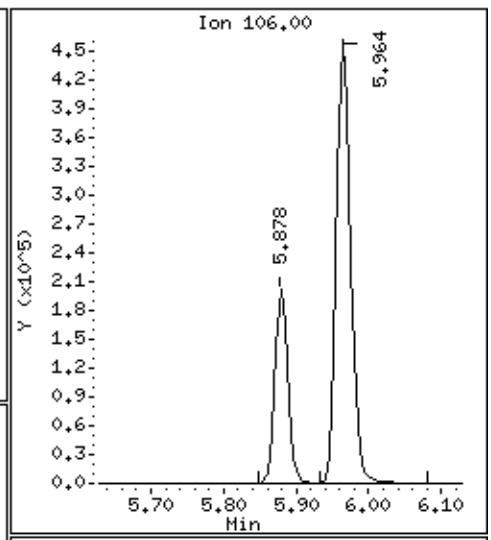
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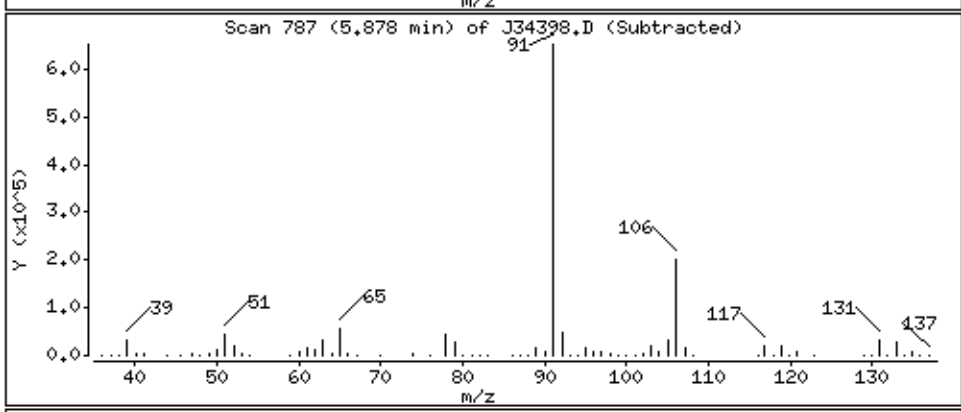
86 Ethylbenzene

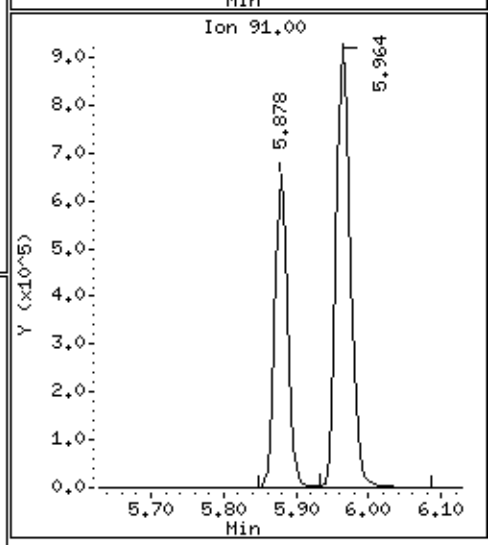
Concentration: 47.0 ug/L

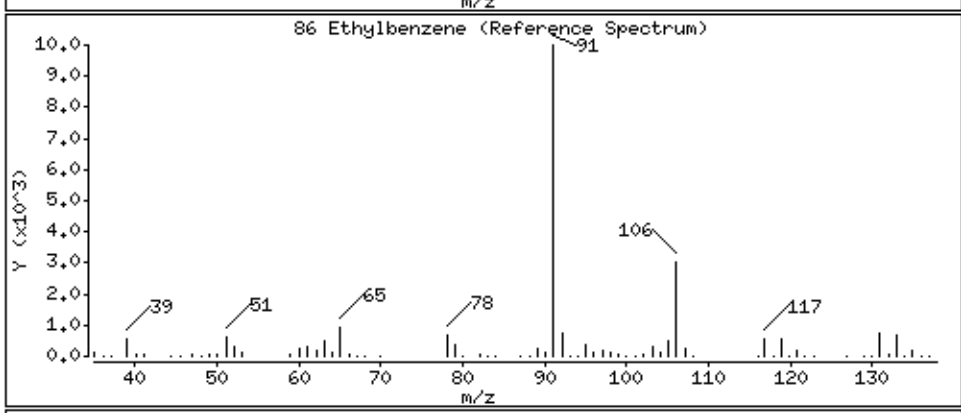
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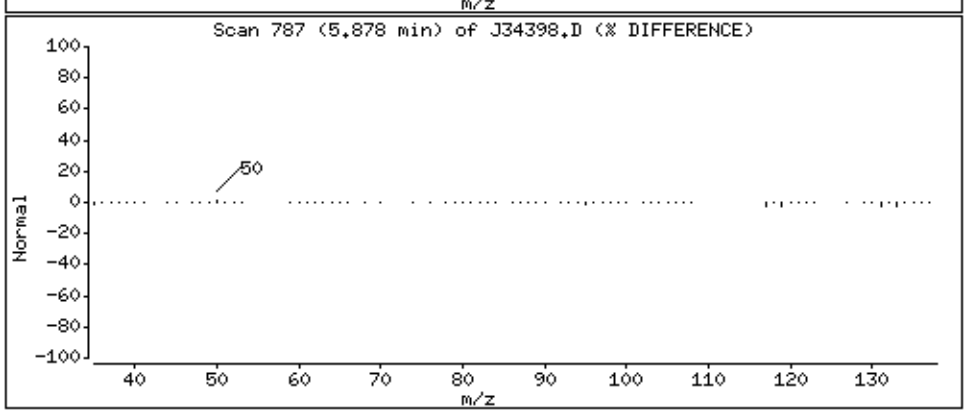












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D

Date : 25-APR-2017 13:27

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Instrument: 70msv6.i

Sample Info: 103009, 15067:1.25

Purge Volume: 5.0

Operator: KGG

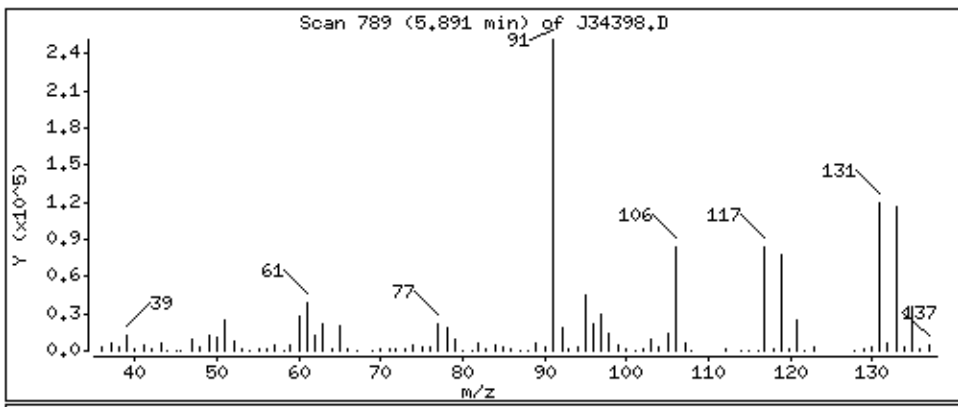
Column phase: RTX-624

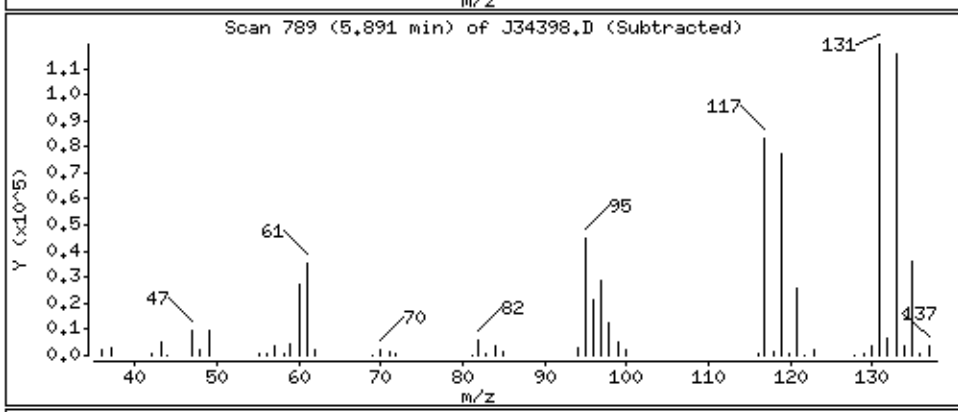
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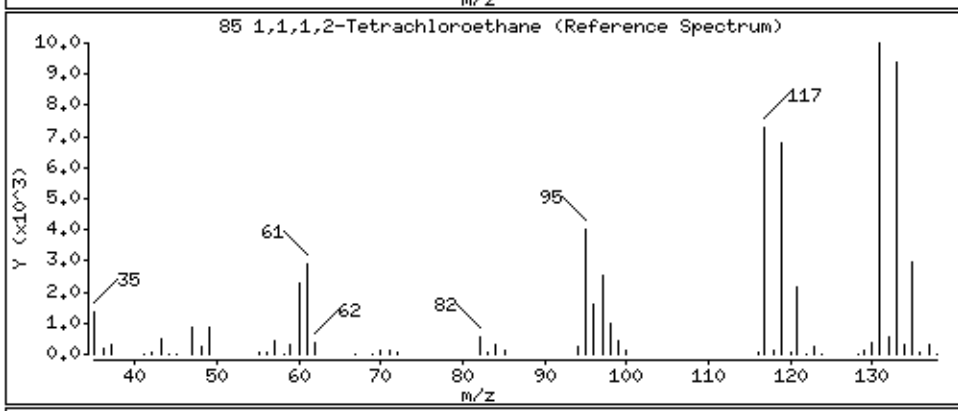
85 1,1,1,2-Tetrachloroethane

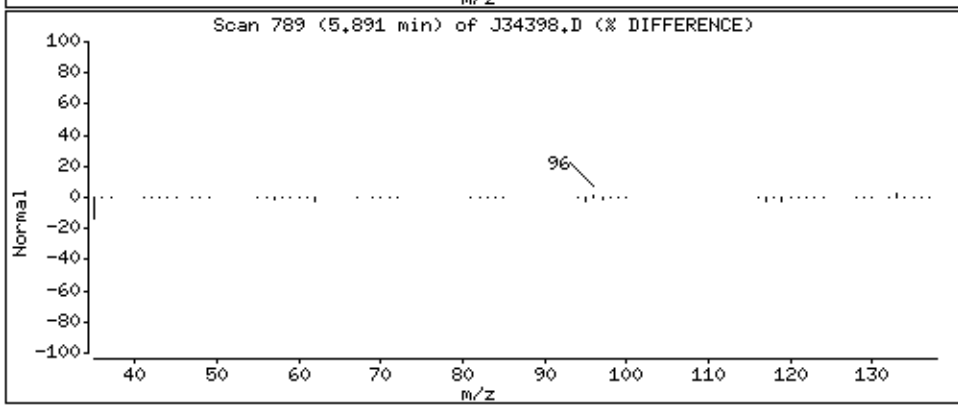
Concentration: 51.1 ug/L

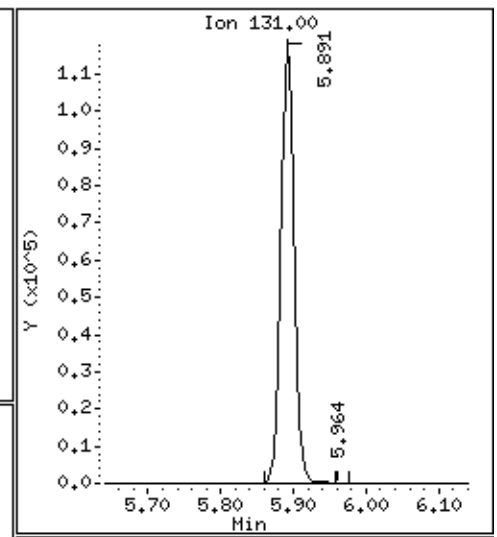
Review Code:

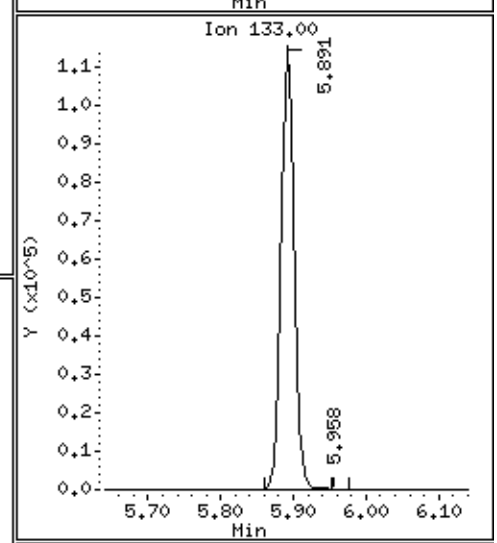


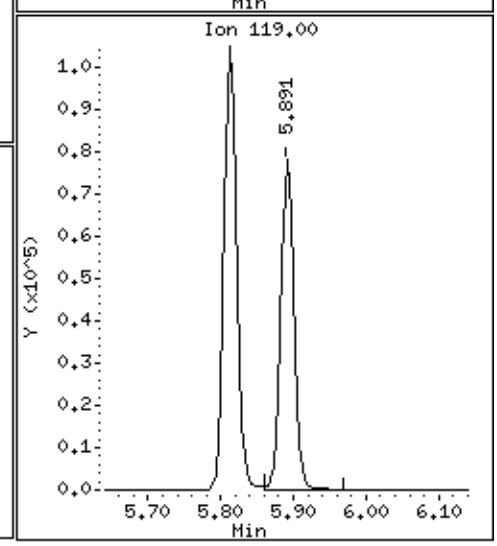












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D

Date : 25-APR-2017 13:27

Client ID: MBLCS

Instrument: 70msv6.i

Sample Info: 103009, 15067:1.25

Purge Volume: 5.0

Operator: KGG

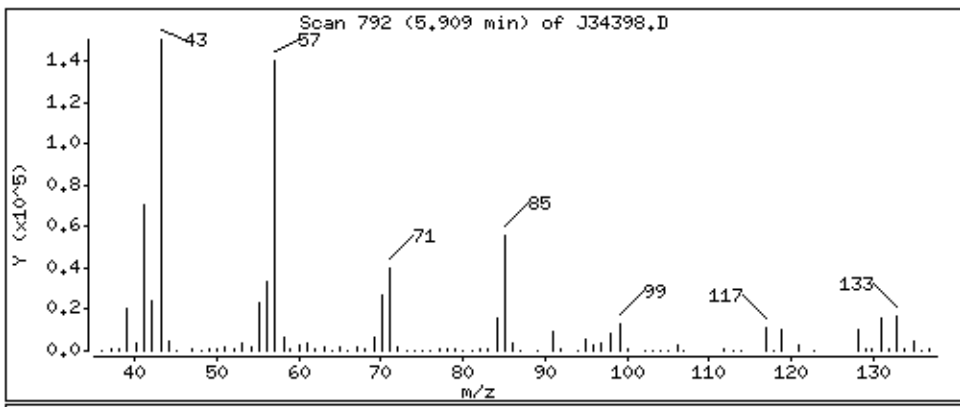
Column phase: RTX-624

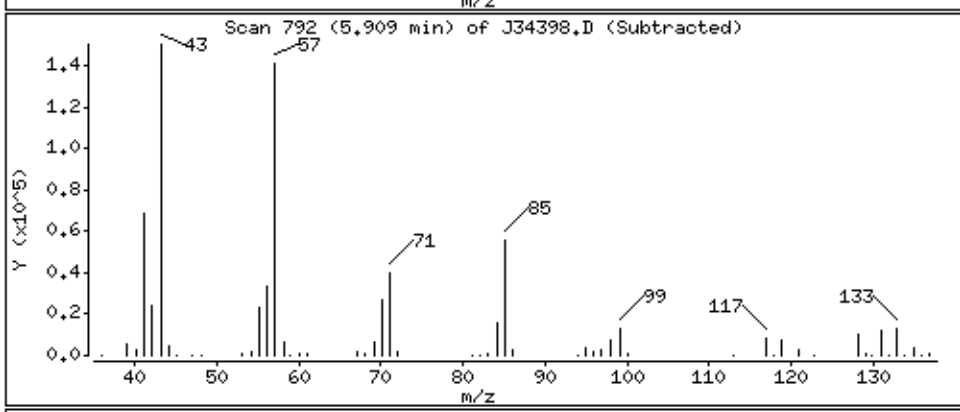
Column diameter: 0.18

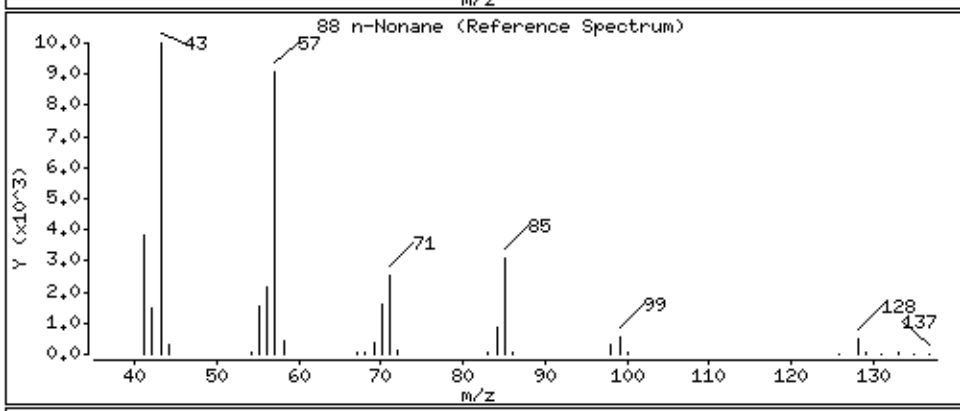
88 n-Nonane

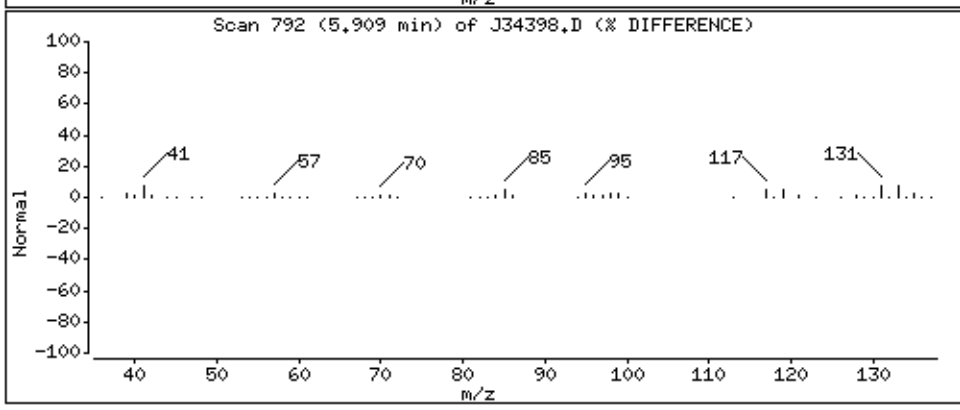
Concentration: 62.6 ug/L

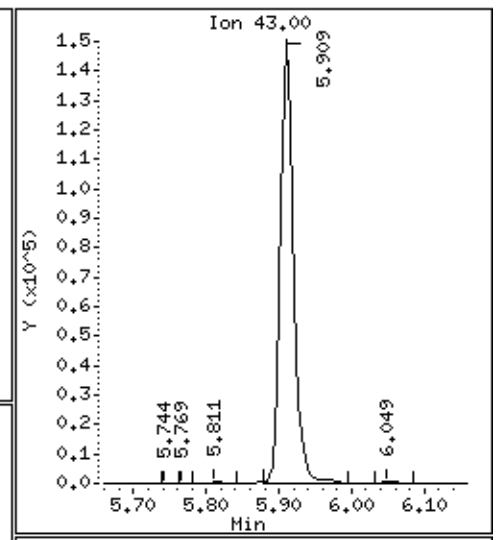
Review Code:

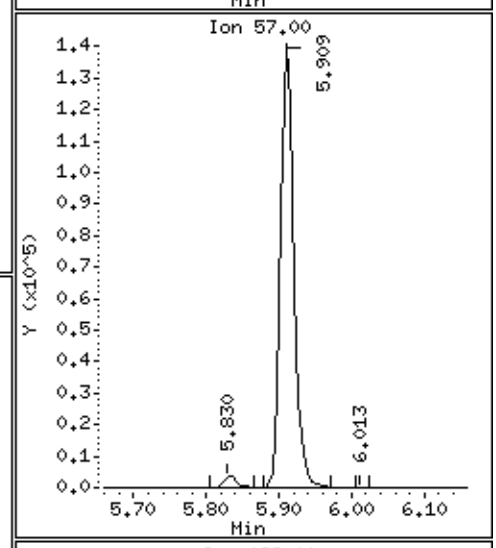


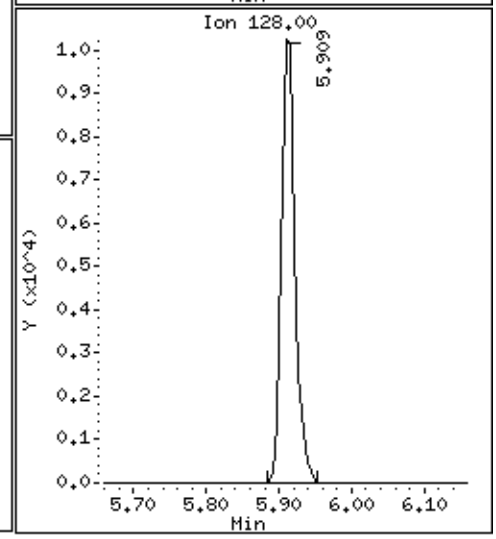












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D

Date : 25-APR-2017 13:27

Client ID: MBLCS

Instrument: 70msv6.i

Sample Info: 103009, 15067:1.25

Purge Volume: 5.0

Operator: KGG

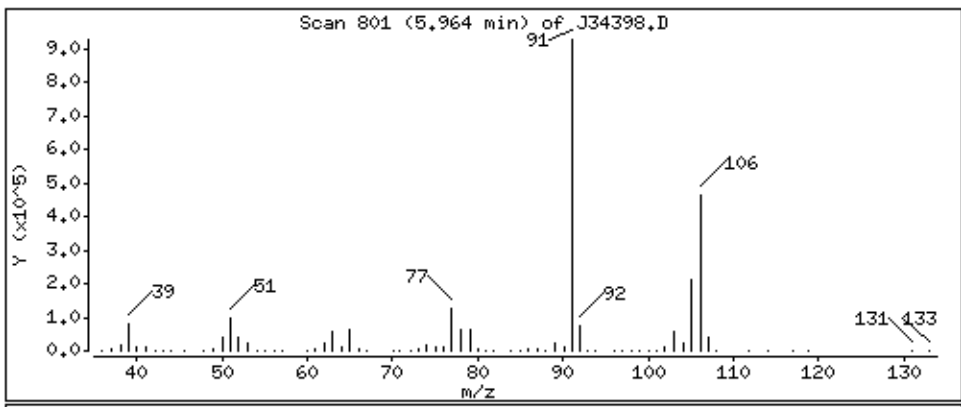
Column phase: RTX-624

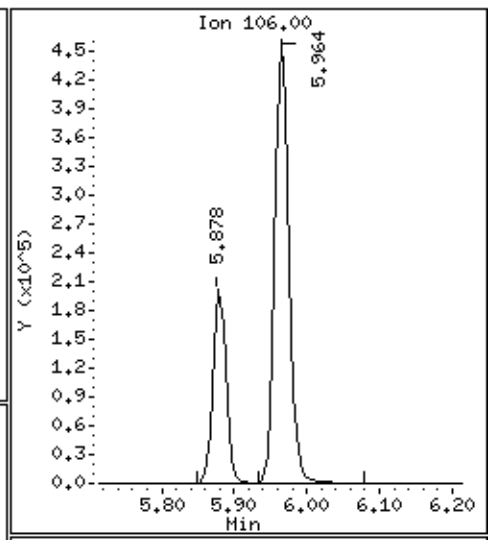
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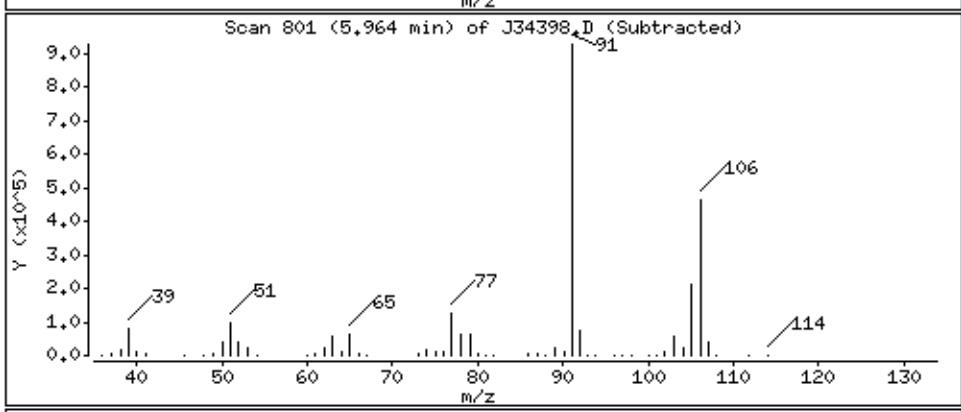
87 m&p-Xylene

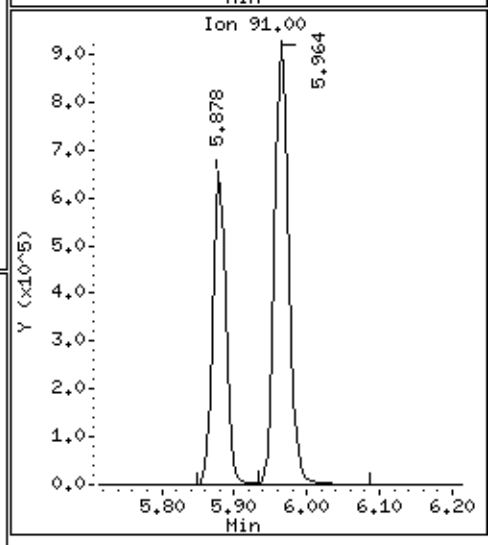
Concentration: 94.1 ug/L

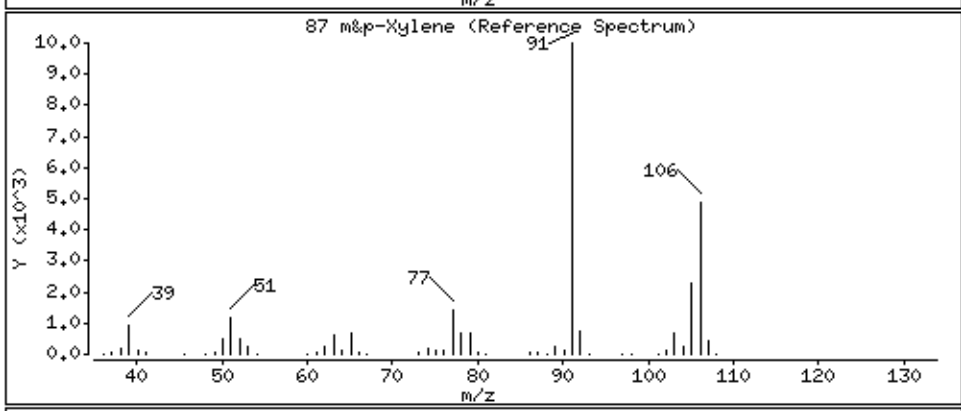
Review Code:

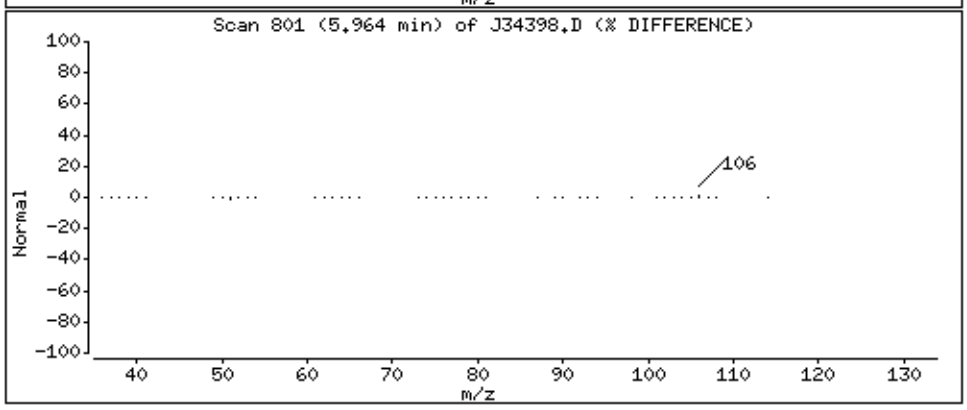












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D

Date : 25-APR-2017 13:27

Client ID: MBLCS

Instrument: 70msv6.i

Sample Info: 103009, 15067:1.25

Purge Volume: 5.0

Operator: KGG

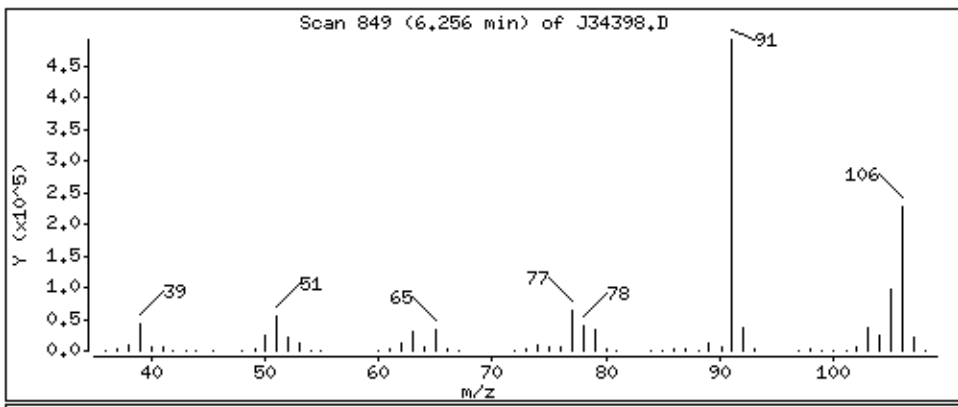
Column phase: RTX-624

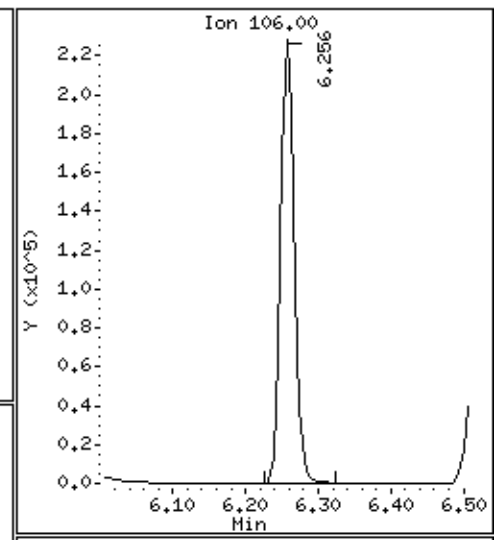
Column diameter: 0.18

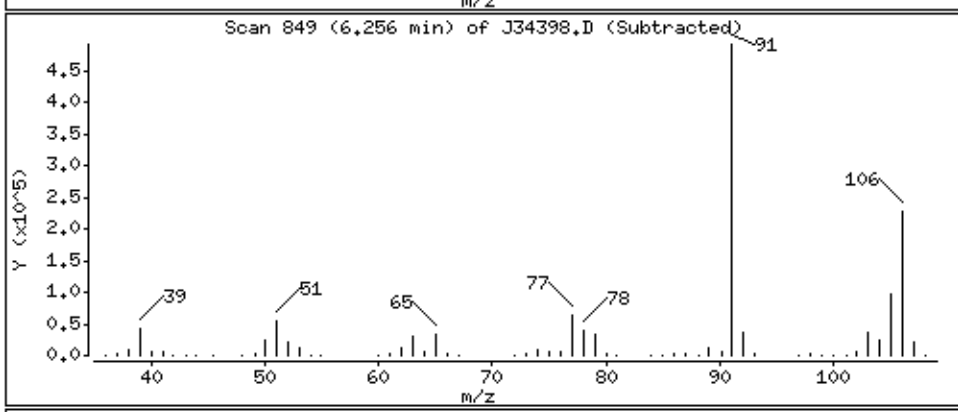
89 o-Xylene

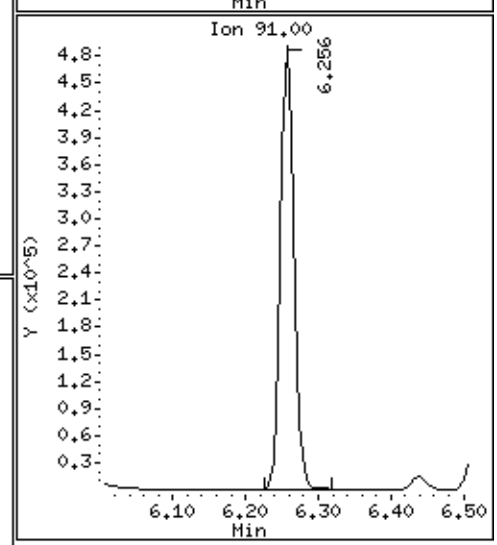
Concentration: 45.7 ug/L

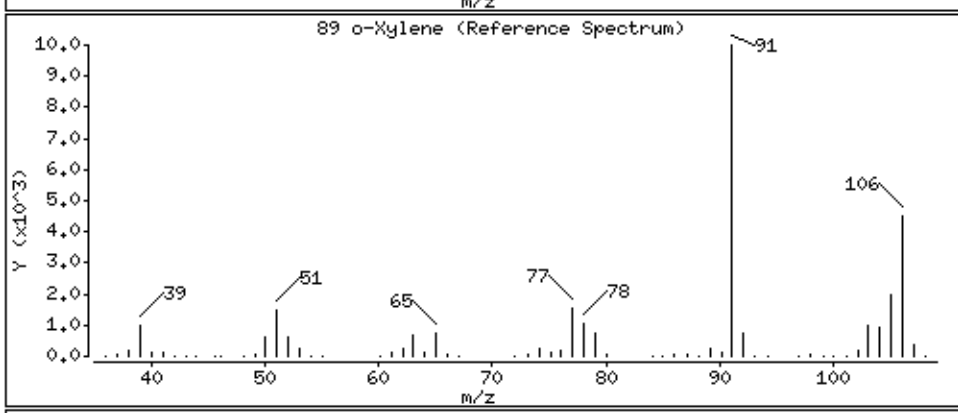
Review Code:

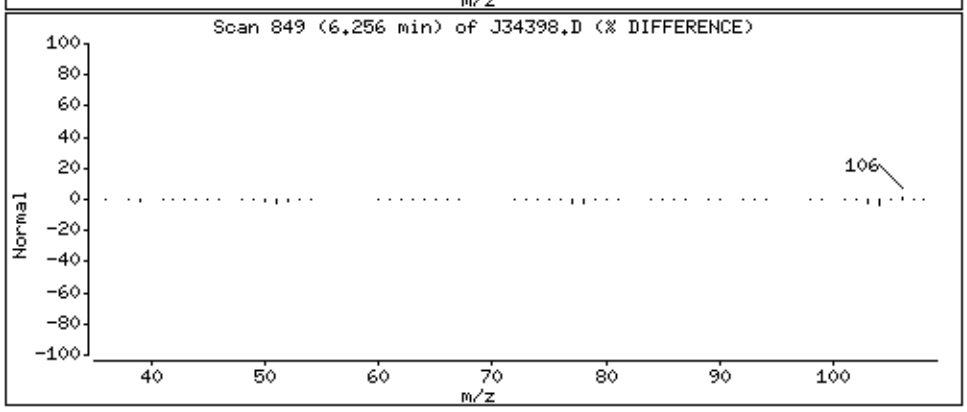












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D

Date : 25-APR-2017 13:27

Client ID: MBLCS

Instrument: 70msv6.i

Sample Info: 103009, 15067:1.25

Purge Volume: 5.0

Operator: KGG

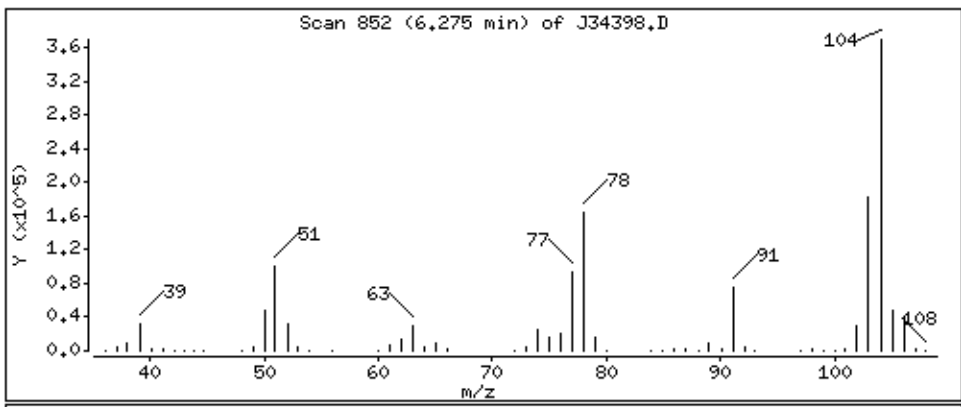
Column phase: RTX-624

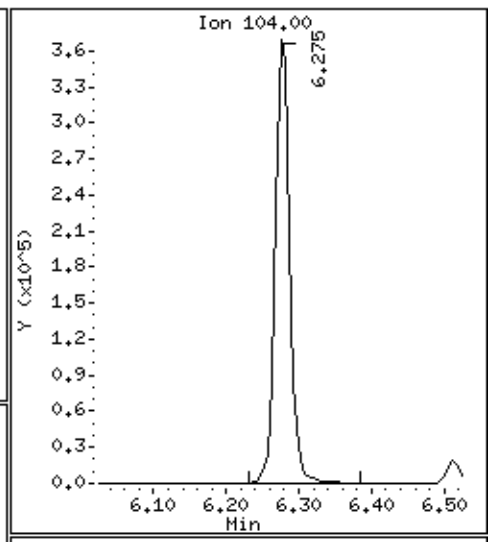
Column diameter: 0.18

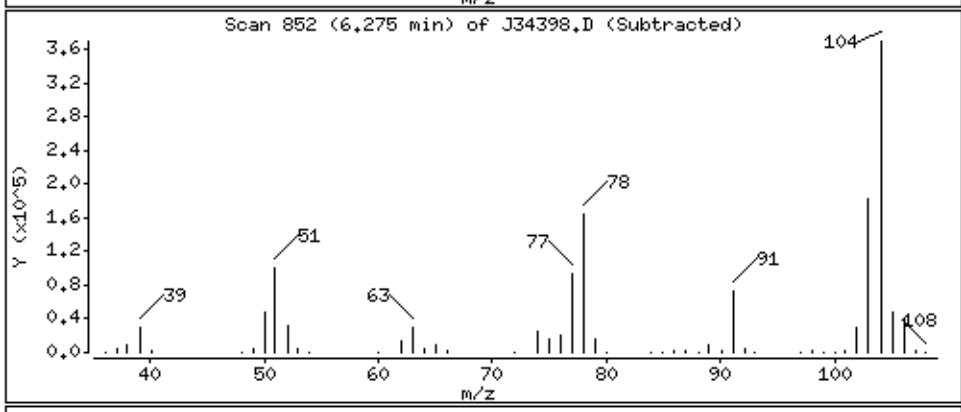
90 Styrene

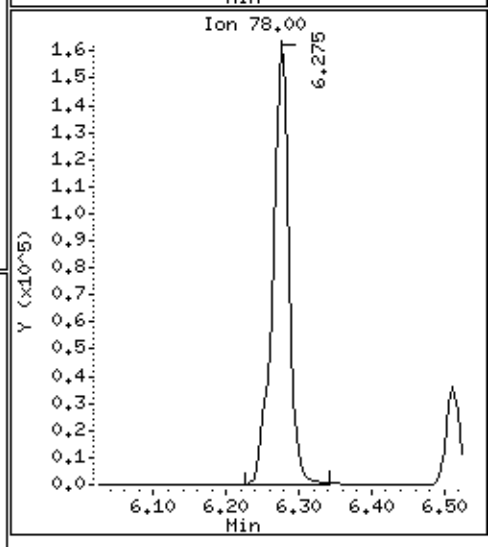
Concentration: 45.7 ug/L

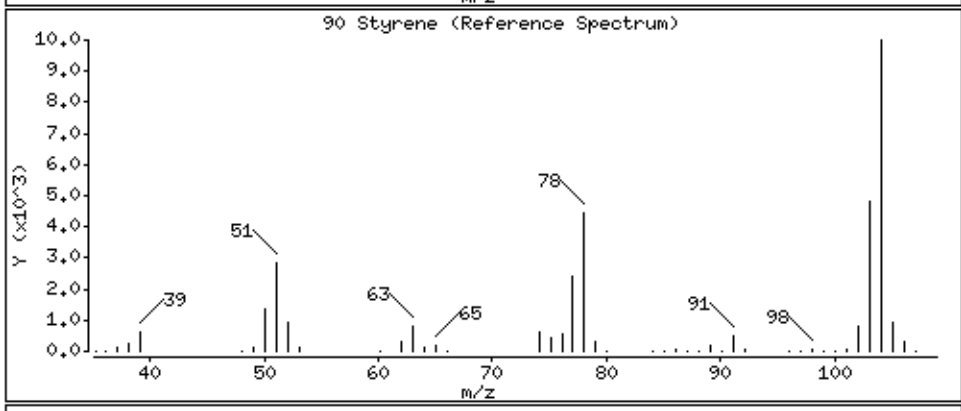
Review Code:

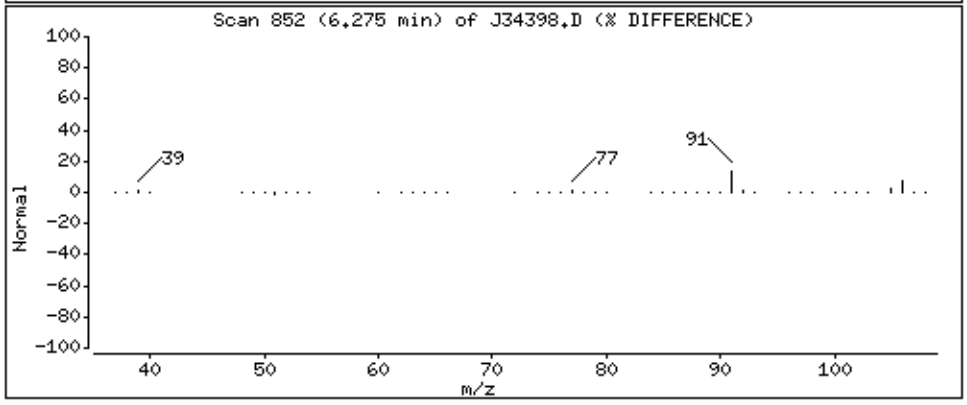












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D

Date : 25-APR-2017 13:27

Client ID: MBLCS

Instrument: 70msv6.i

Sample Info: 103009, 15067:1.25

Purge Volume: 5.0

Operator: KGG

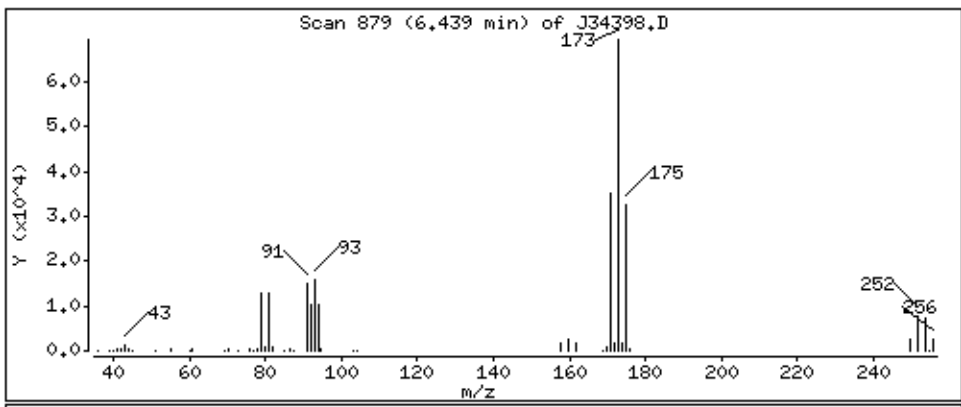
Column phase: RTX-624

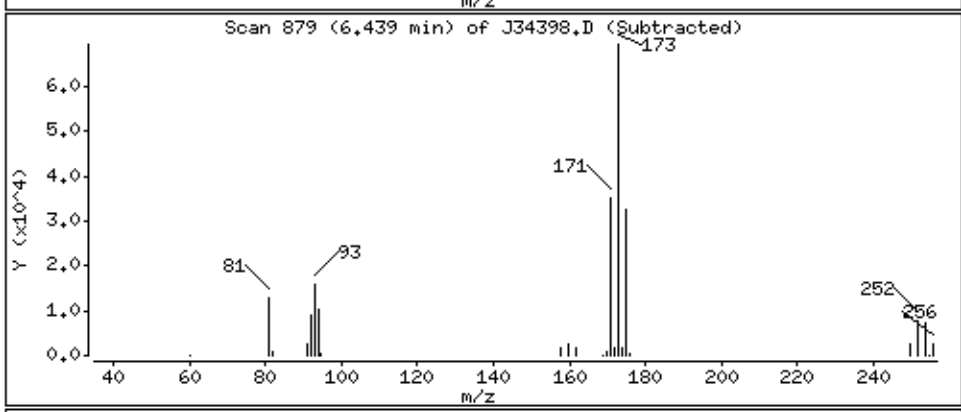
Column diameter: 0.18

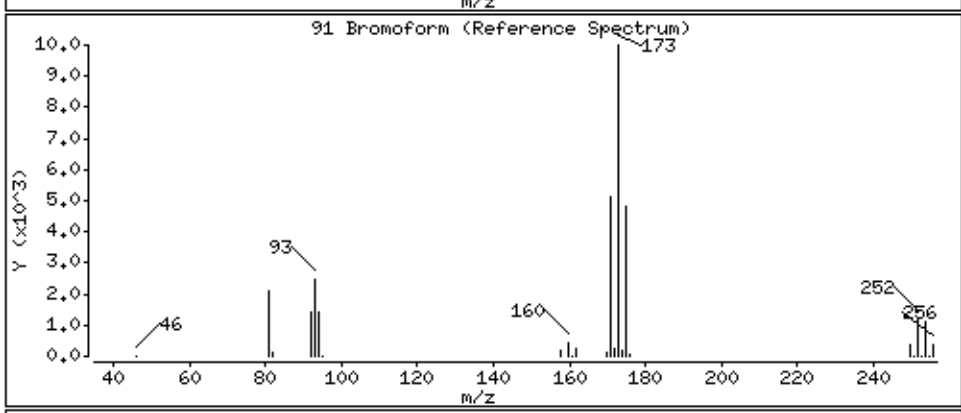
91 Bromoform

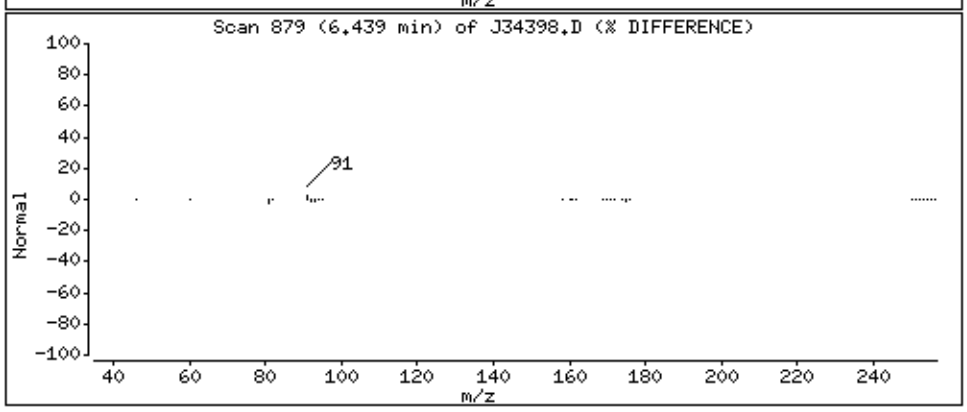
Concentration: 50.2 ug/L

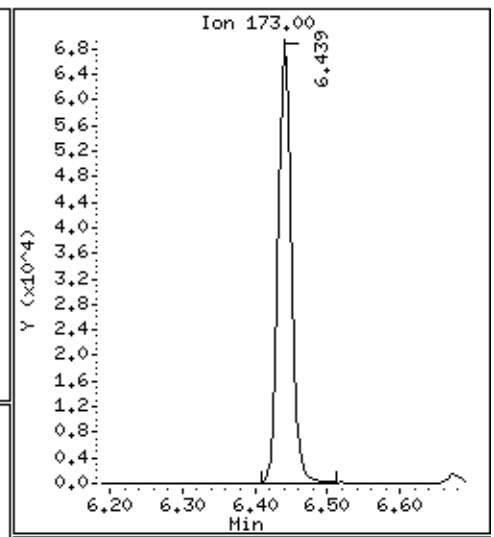
Review Code:

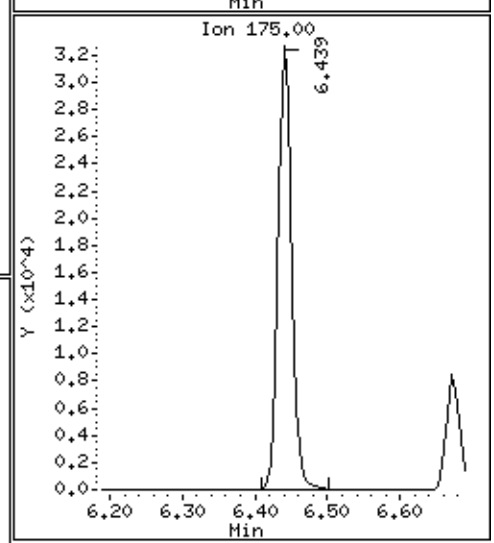












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D

Date : 25-APR-2017 13:27

Client ID: MBLCS

Instrument: 70msv6.i

Sample Info: 103009, 15067:1.25

Purge Volume: 5.0

Operator: KGG

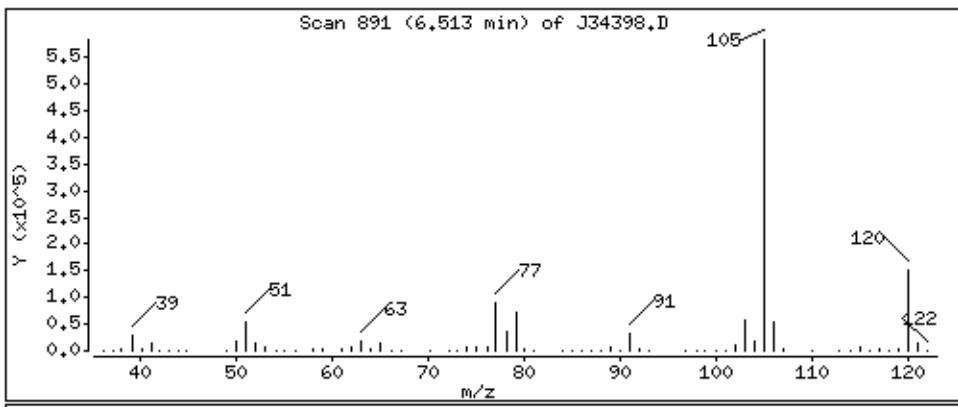
Column phase: RTX-624

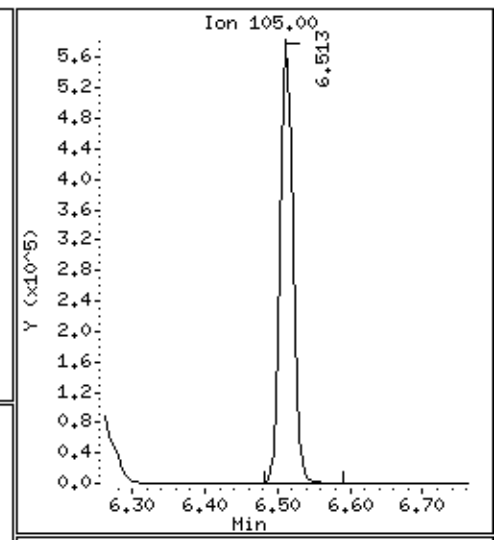
Column diameter: 0.18

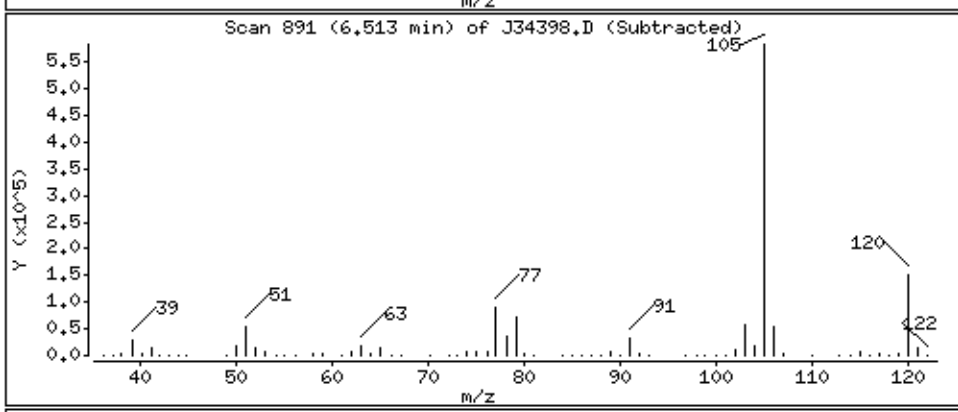
92 Isopropylbenzene (Cumene)

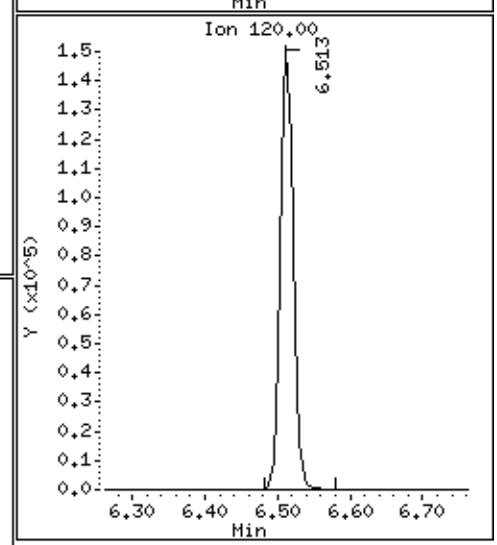
Concentration: 40.1 ug/L

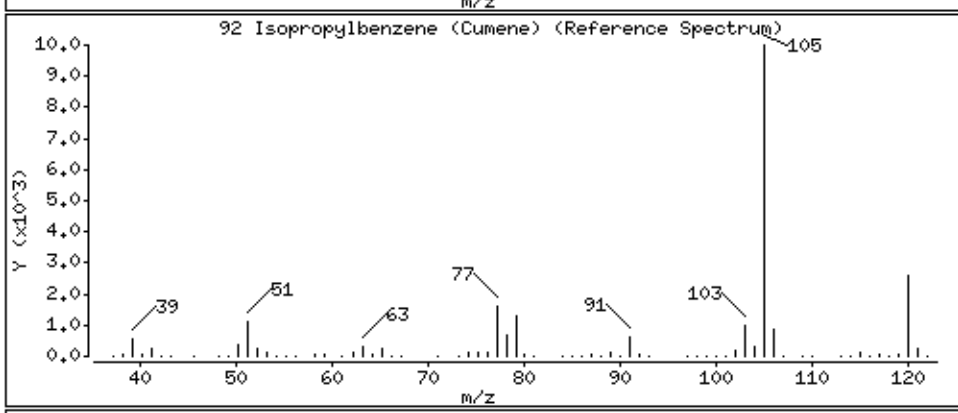
Review Code:

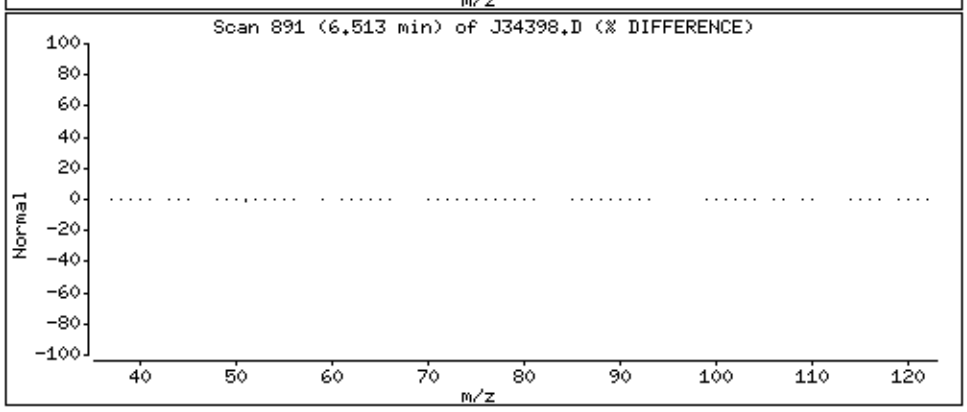












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D

Date : 25-APR-2017 13:27

Client ID: MBLCS

Instrument: 70msv6.i

Sample Info: 103009, 15067:1.25

Purge Volume: 5.0

Operator: KGG

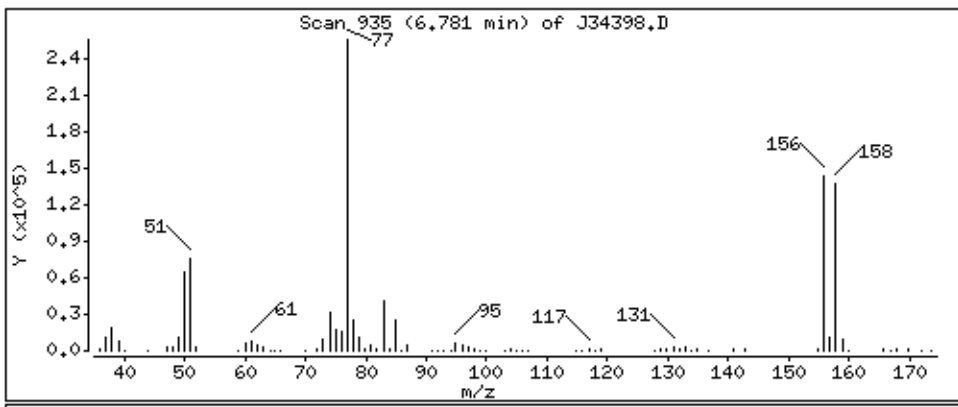
Column phase: RTX-624

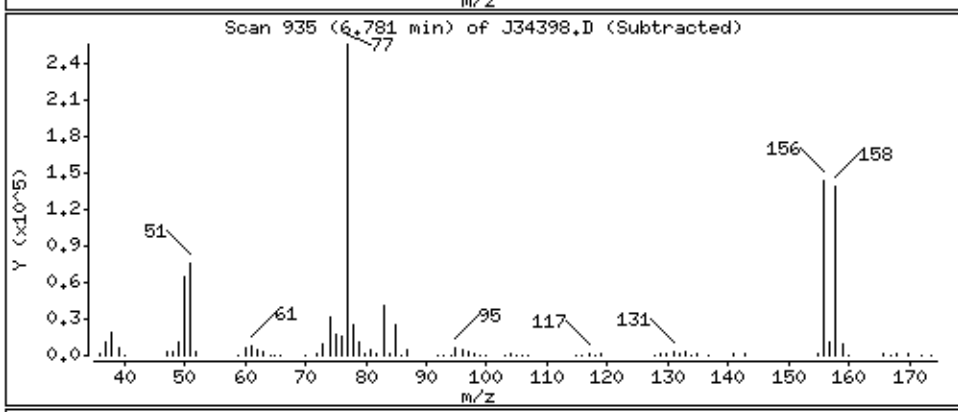
Column diameter: 0.18

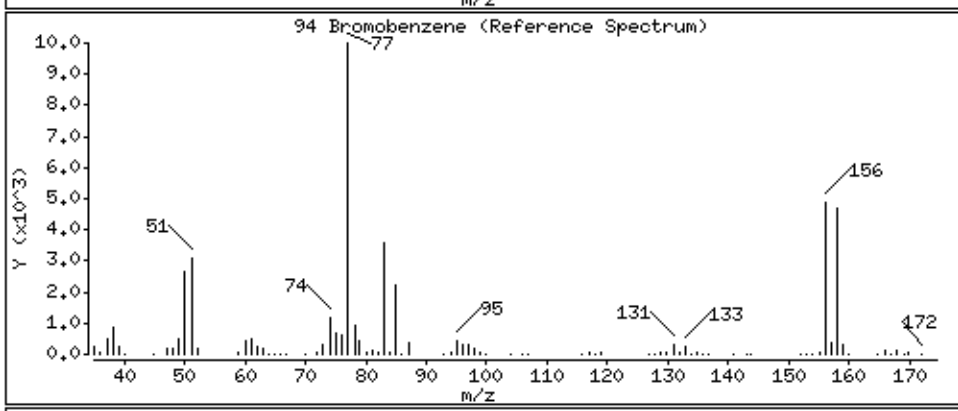
94 Bromobenzene

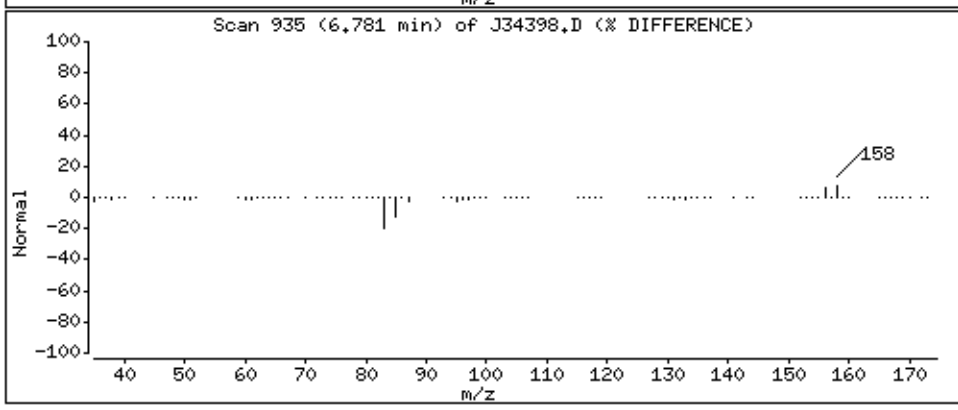
Concentration: 41.9 ug/L

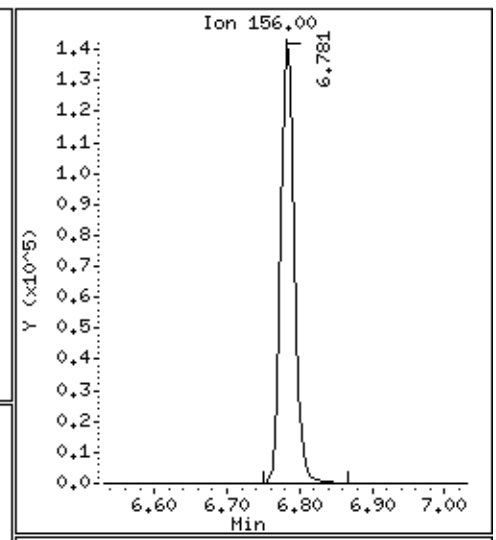
Review Code:

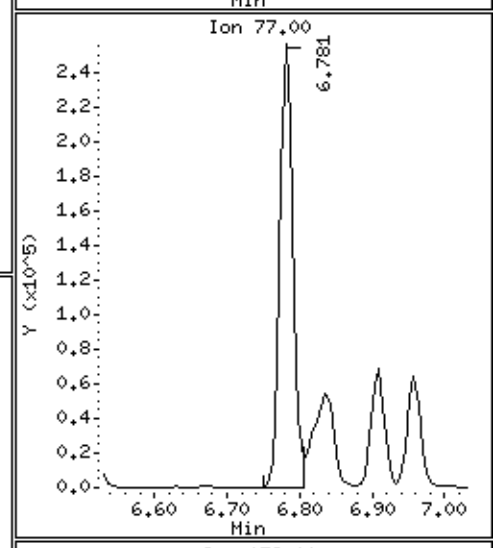


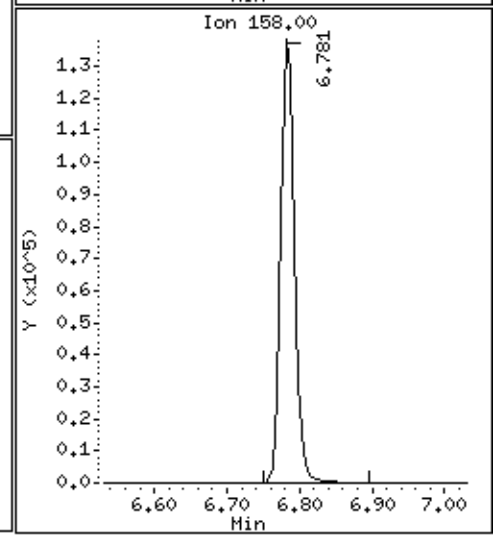












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D

Date : 25-APR-2017 13:27

Client ID: MBLCS

Instrument: 70msv6.i

Sample Info: 103009, 15067:1.25

Purge Volume: 5.0

Operator: KGG

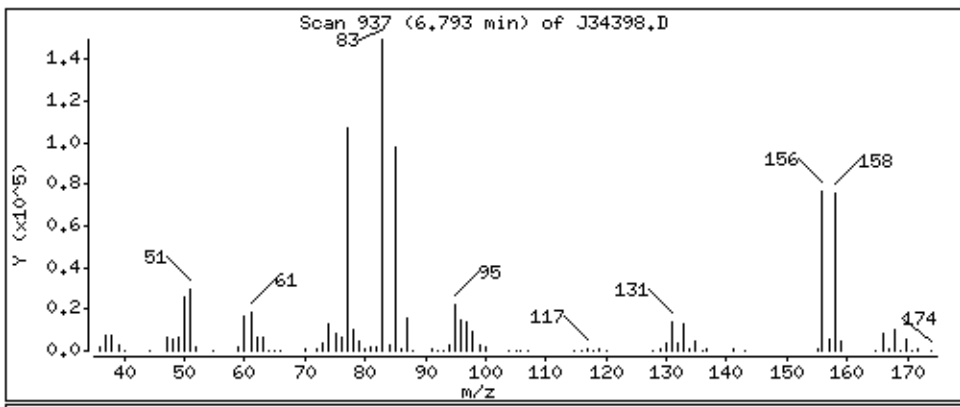
Column phase: RTX-624

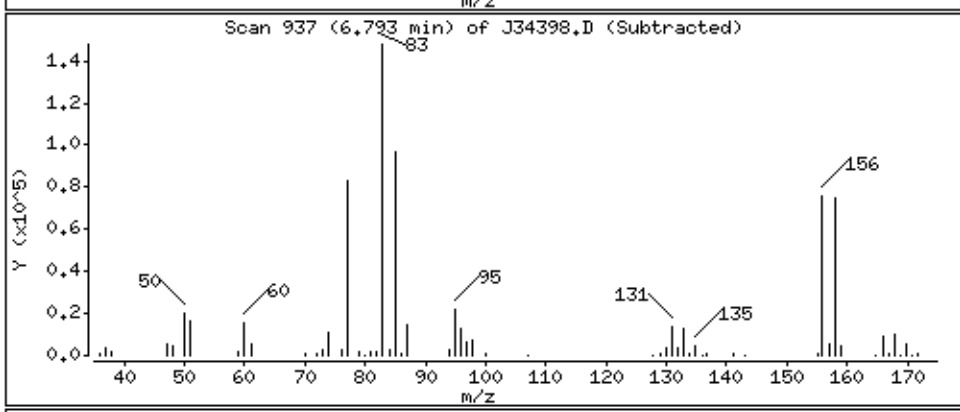
Column diameter: 0.18

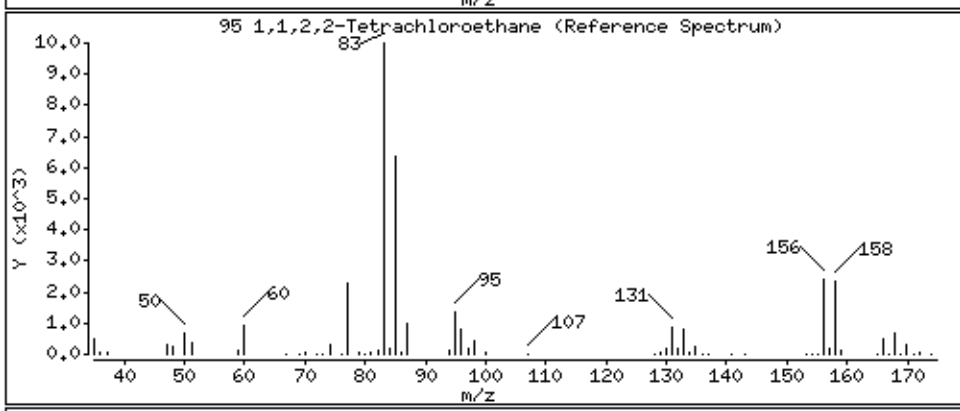
95 1,1,2,2-Tetrachloroethane

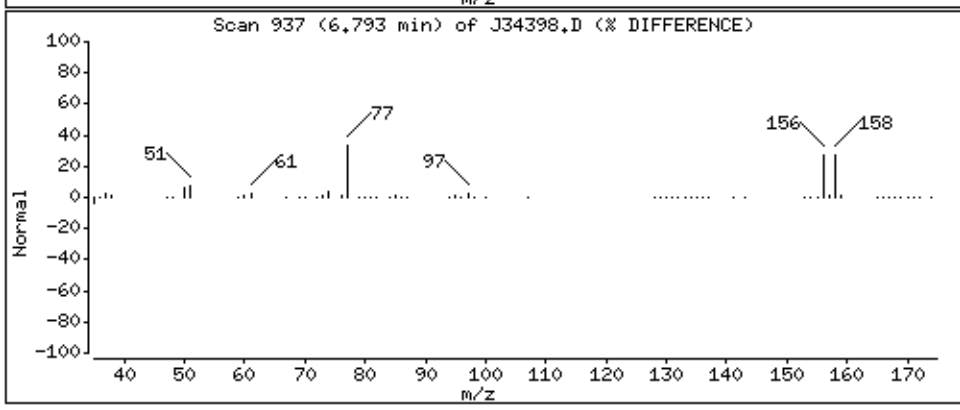
Concentration: 38.5 ug/L

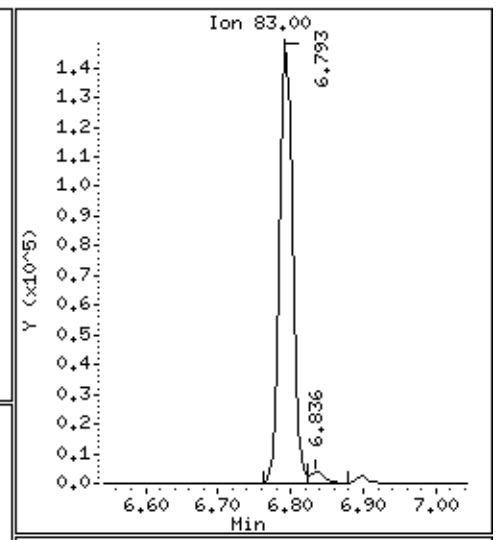
Review Code:

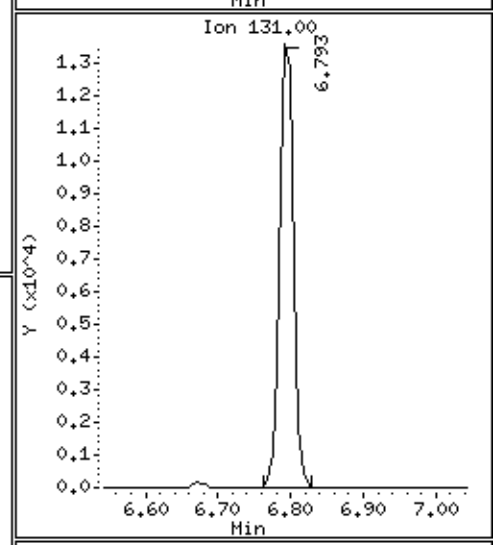


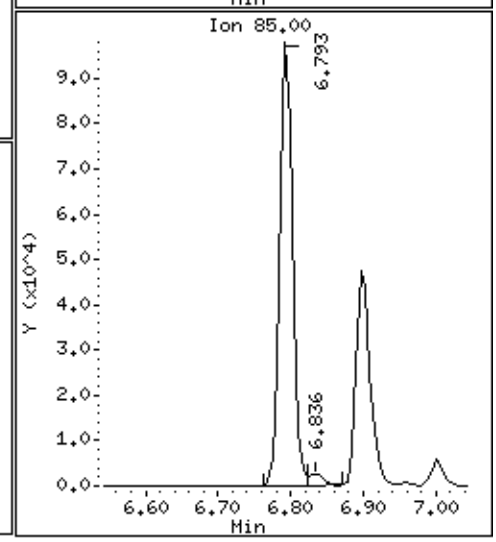












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D

Date : 25-APR-2017 13:27

Client ID: MBLCS

Instrument: 70msv6.i

Sample Info: 103009, 15067:1.25

Purge Volume: 5.0

Operator: KGG

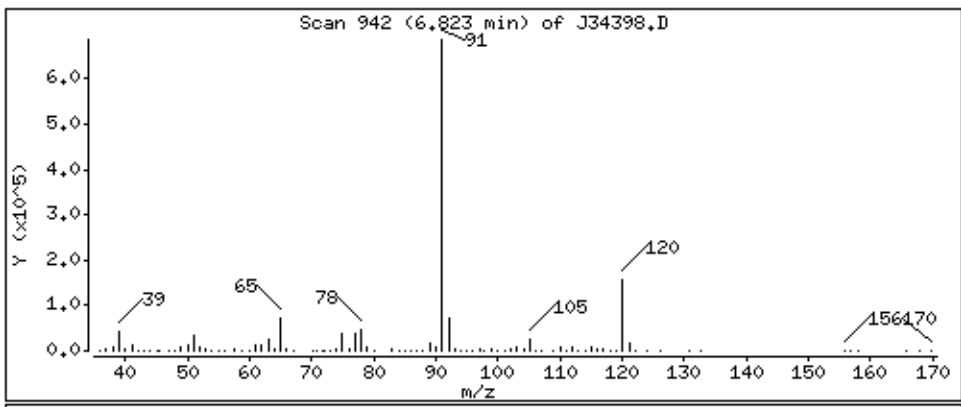
Column phase: RTX-624

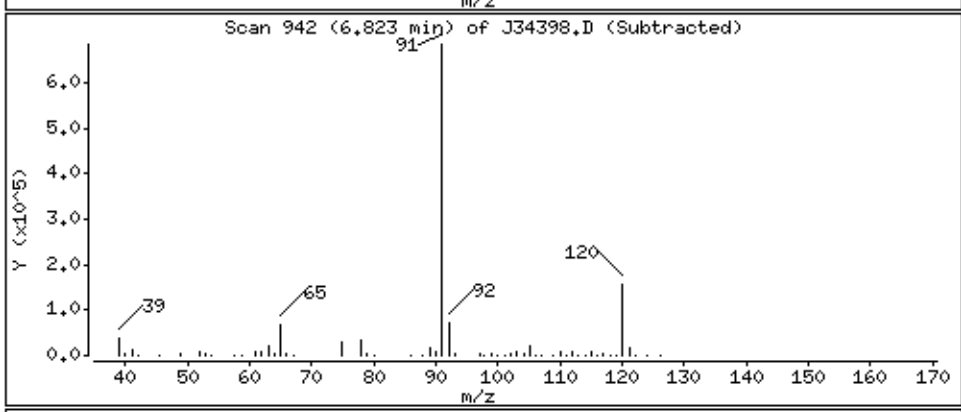
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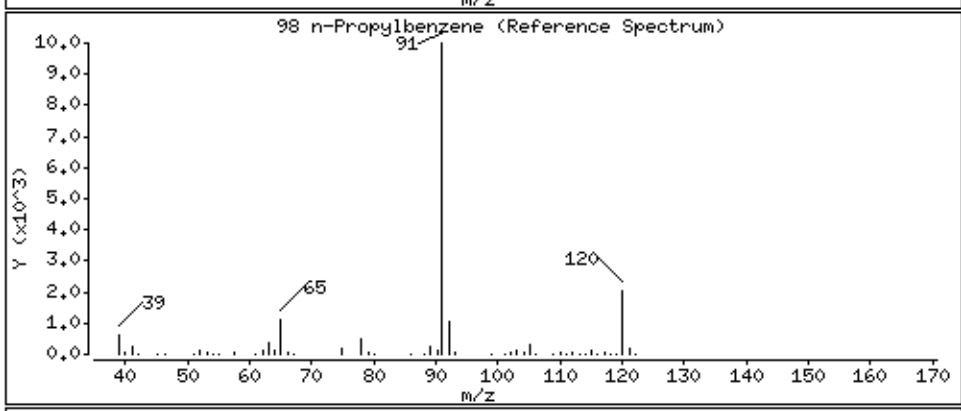
98 n-Propylbenzene

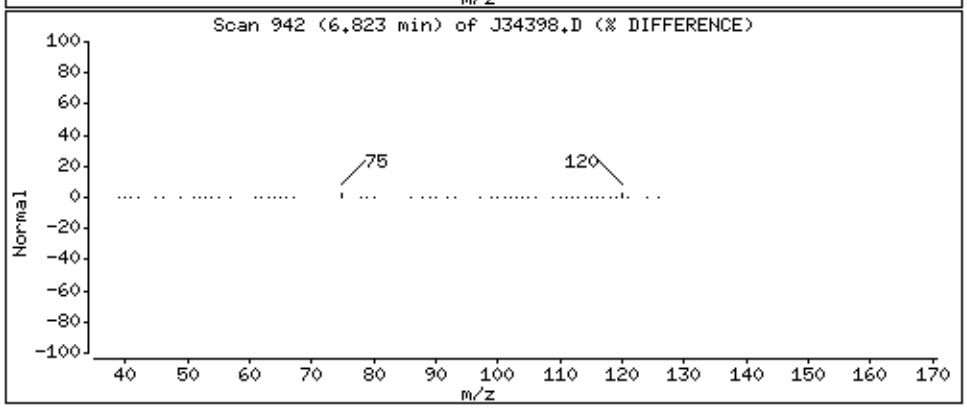
Concentration: 41.9 ug/L

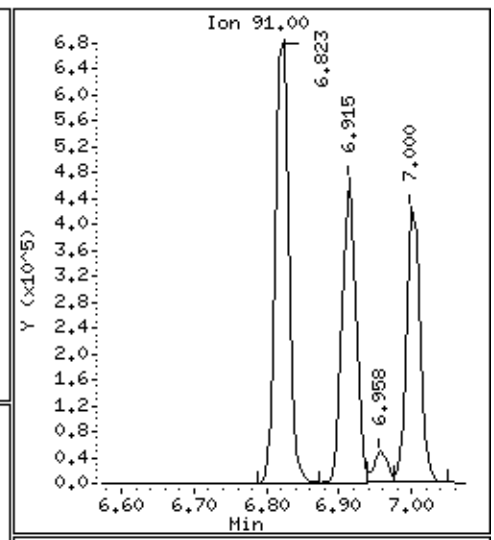
Review Code:

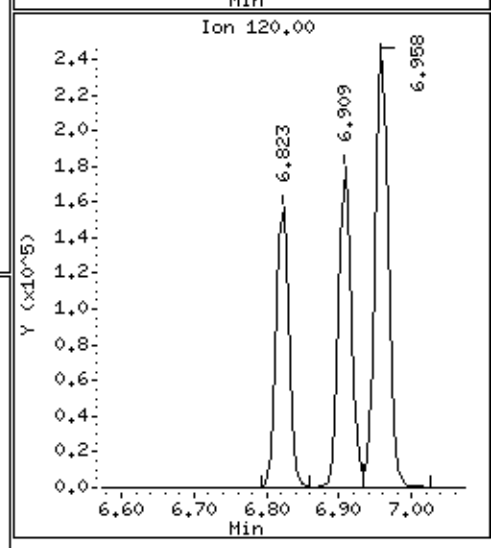












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D

Date : 25-APR-2017 13:27

Client ID: MBLCS

Instrument: 70msv6.i

Sample Info: 103009, 15067:1.25

Purge Volume: 5.0

Operator: KGG

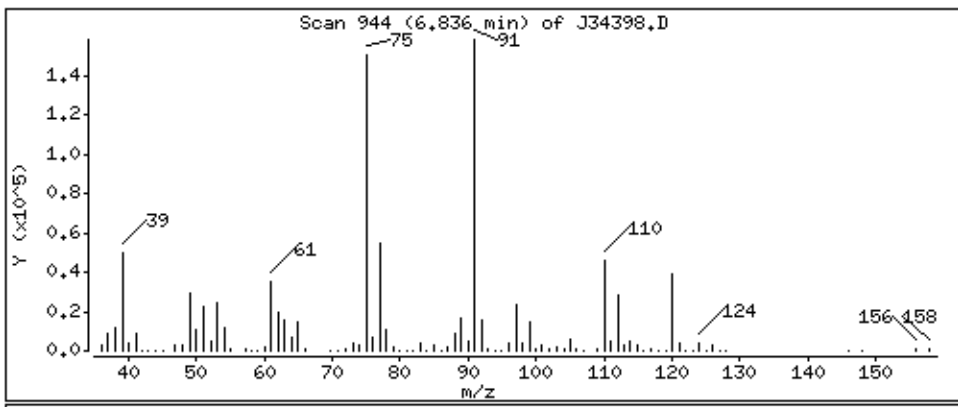
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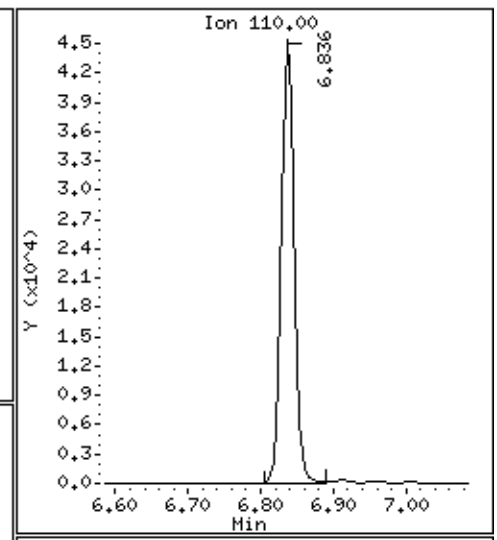
Column diameter: 0.18

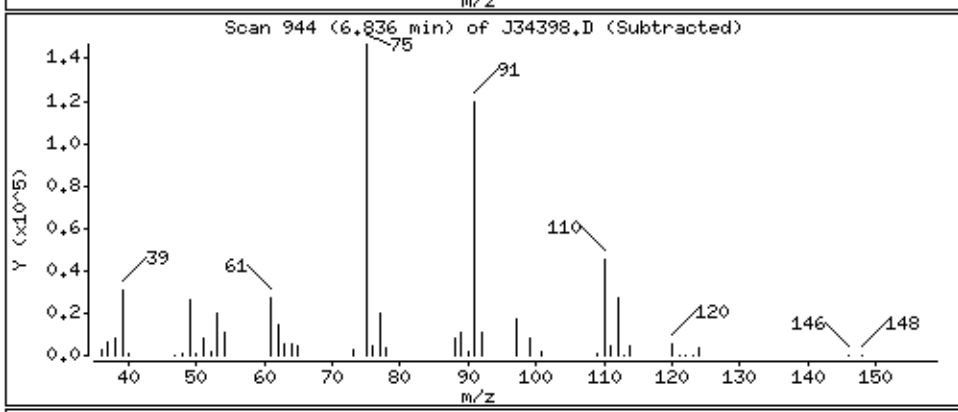
96 1,2,3-Trichloropropane

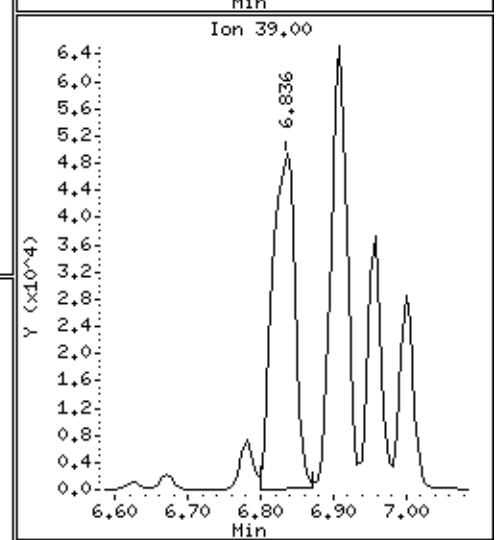
Concentration: 40.2 ug/L

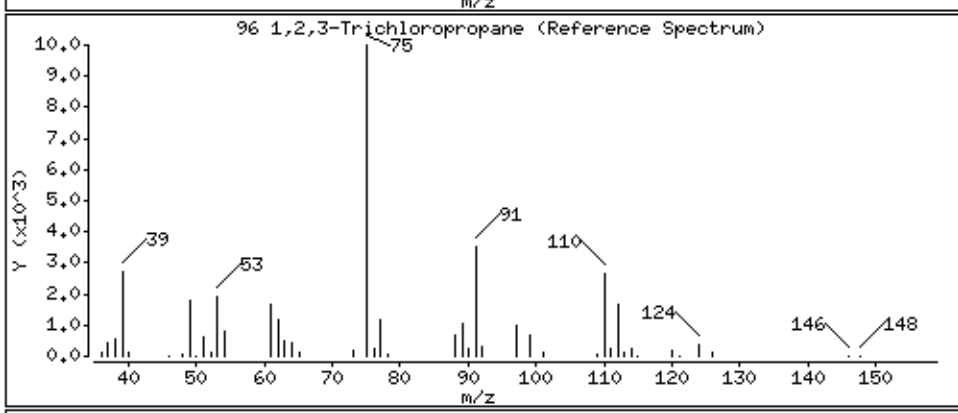
Review Code:

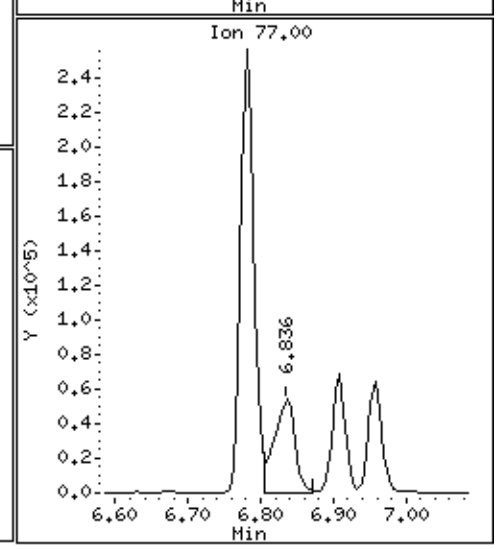


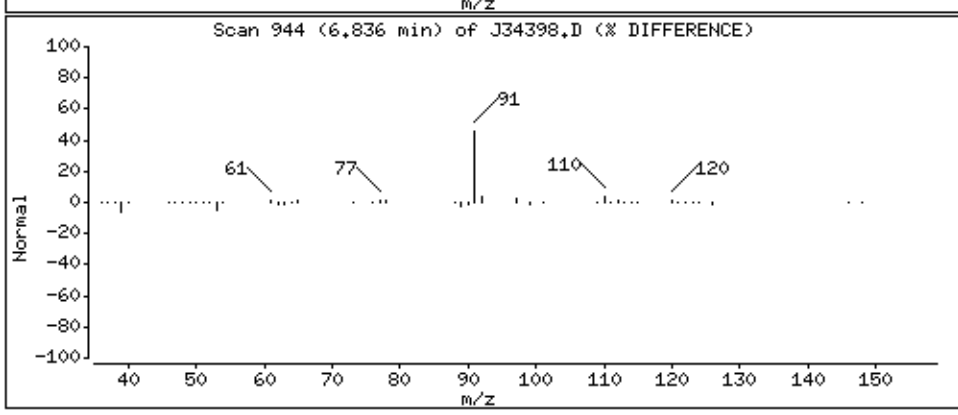












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D

Date : 25-APR-2017 13:27

Client ID: MBLCS

Instrument: 70msv6.i

Sample Info: 103009, 15067:1.25

Purge Volume: 5.0

Operator: KGG

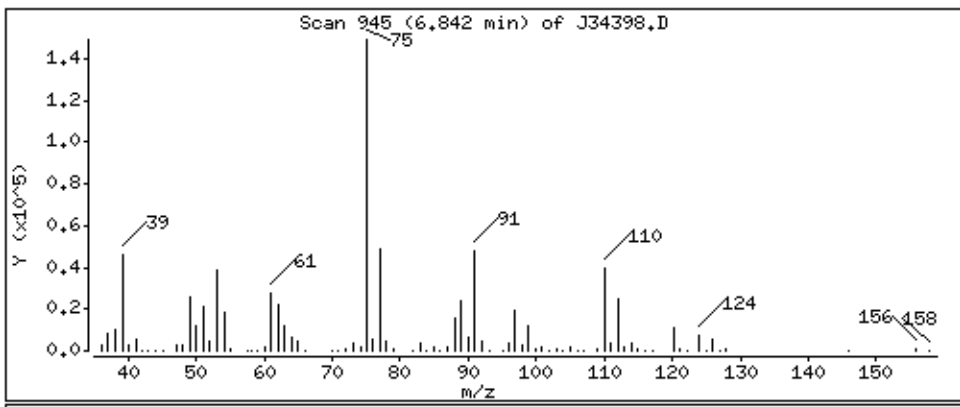
Column phase: RTX-624

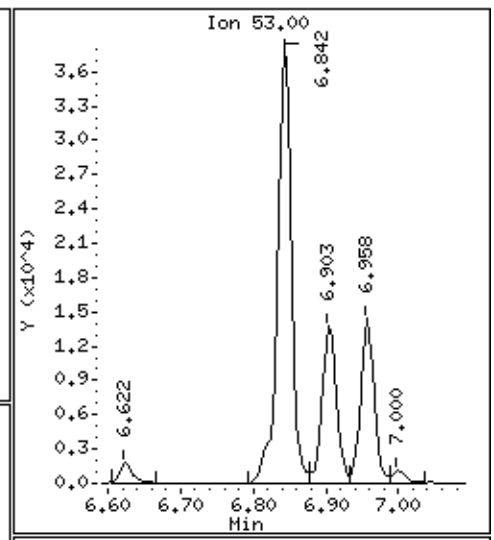
Column diameter: 0.18

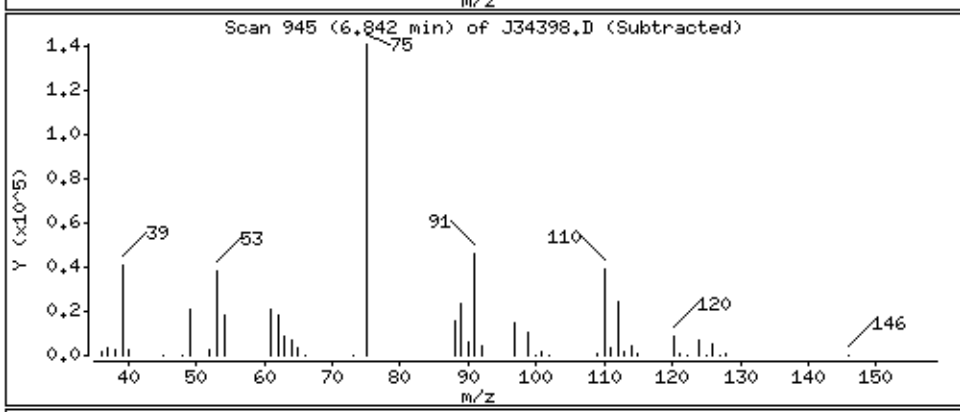
97 trans-1,4-Dichloro-2-butene

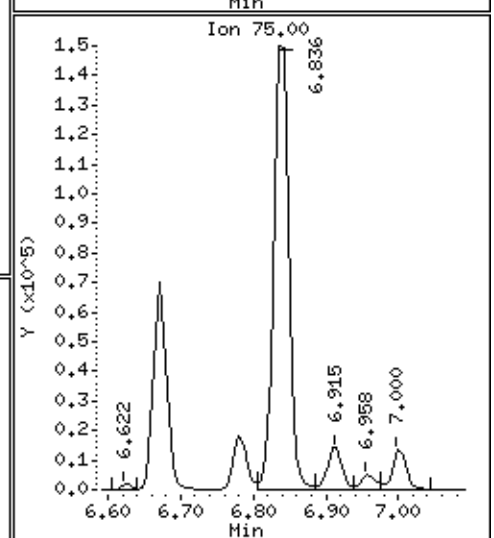
Concentration: 36.3 ug/L

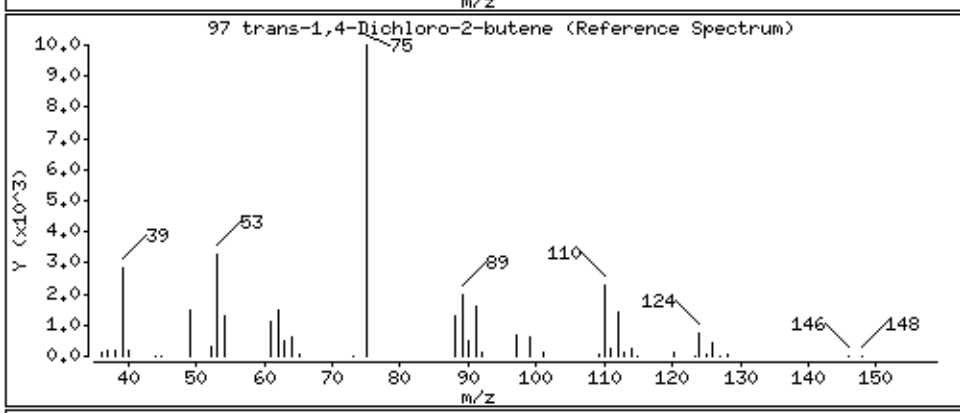
Review Code:

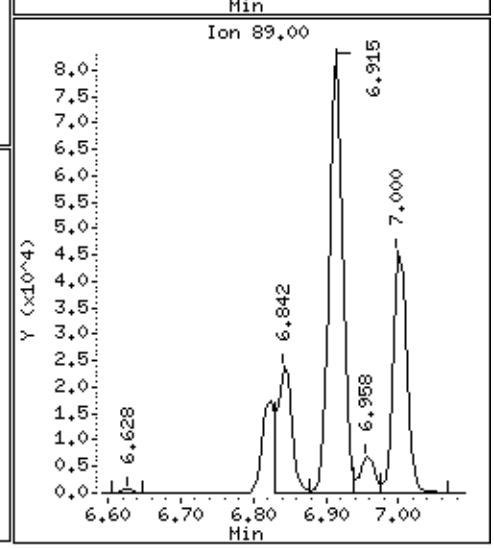


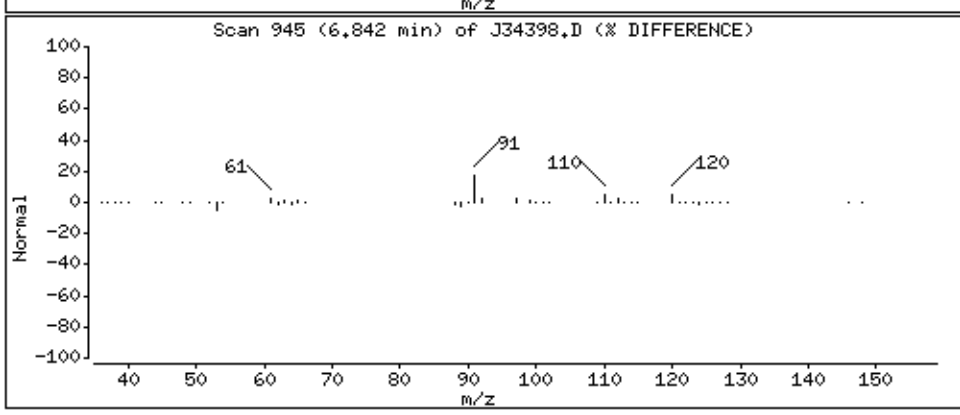












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D

Date : 25-APR-2017 13:27

Client ID: MBLCS

Instrument: 70msv6.i

Sample Info: 103009, 15067:1.25

Purge Volume: 5.0

Operator: KGG

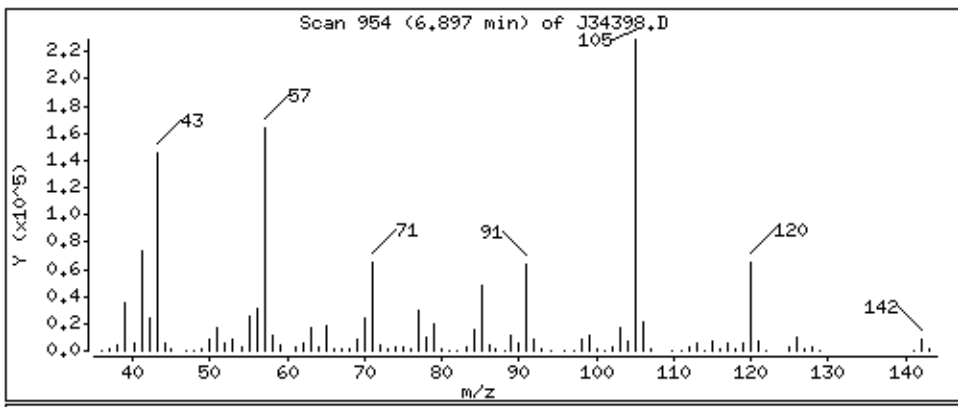
Column phase: RTX-624

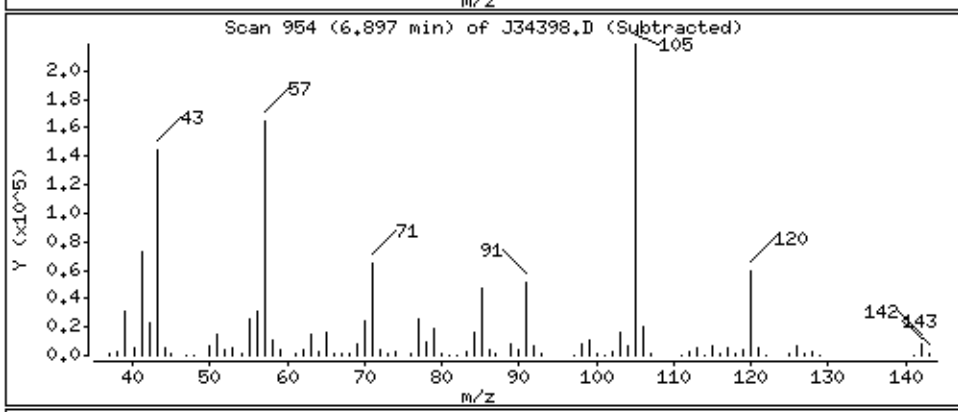
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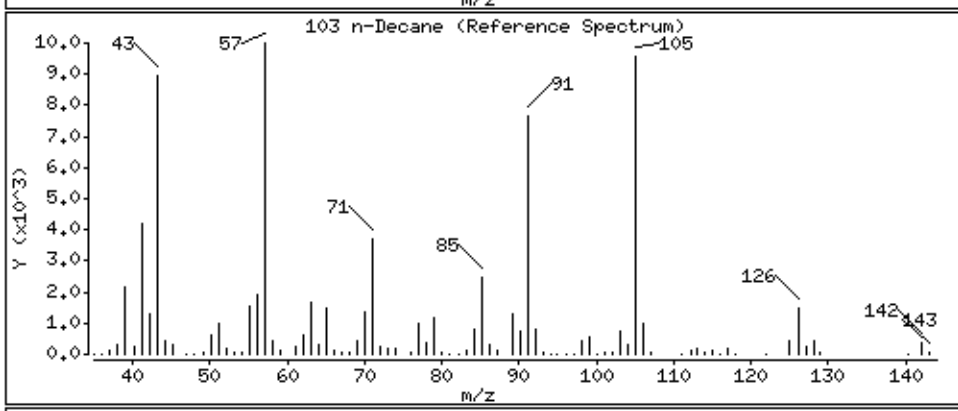
103 n-Decane

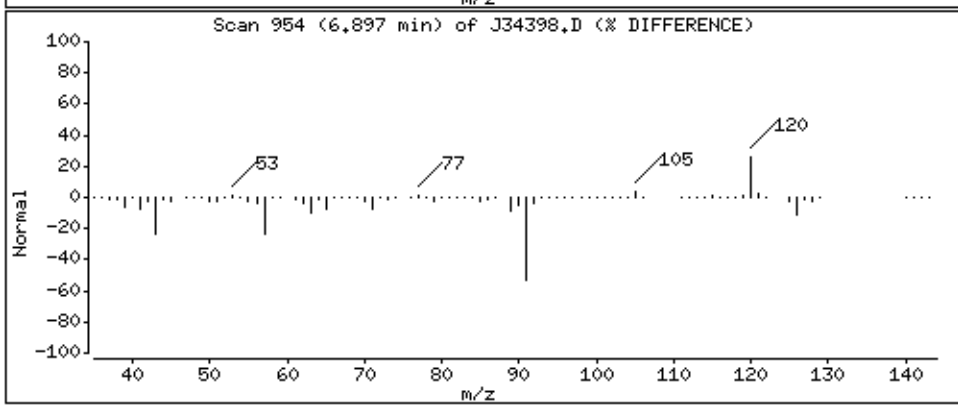
Concentration: 52.7 ug/L

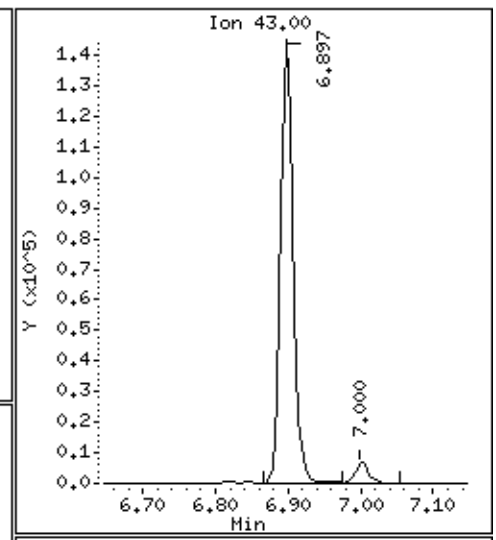
Review Code:

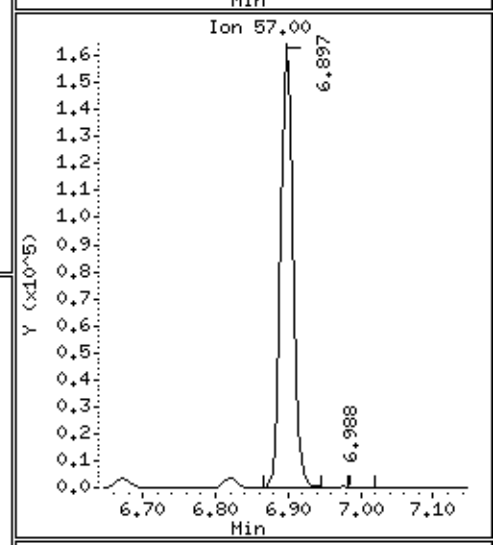


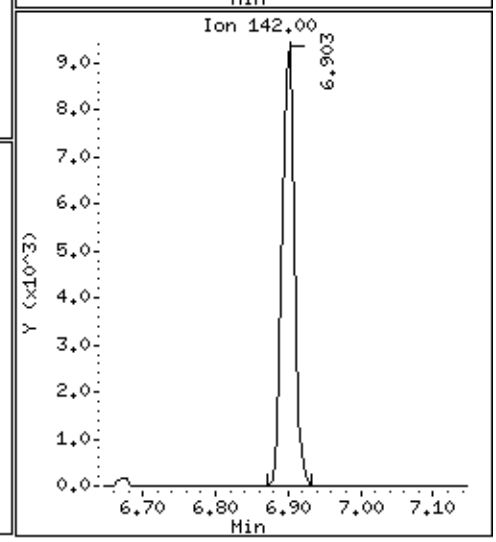












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D

Date : 25-APR-2017 13:27

Client ID: MBLCS

Instrument: 70msv6.i

Sample Info: 103009, 15067:1.25

Purge Volume: 5.0

Operator: KGG

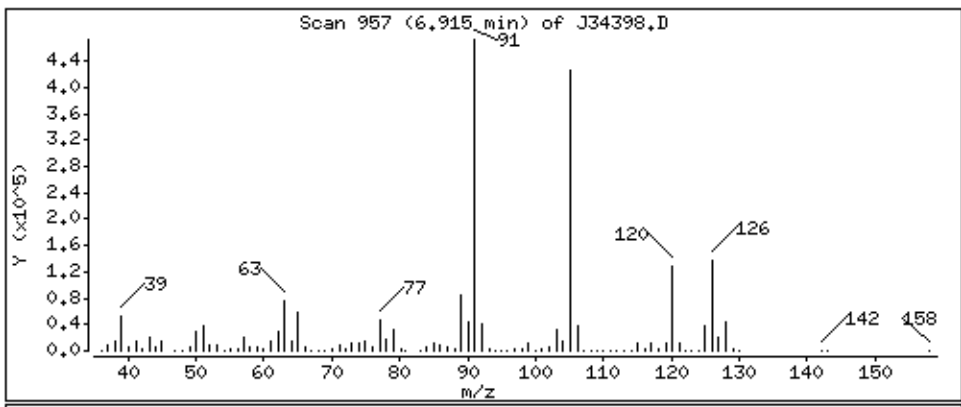
Column phase: RTX-624

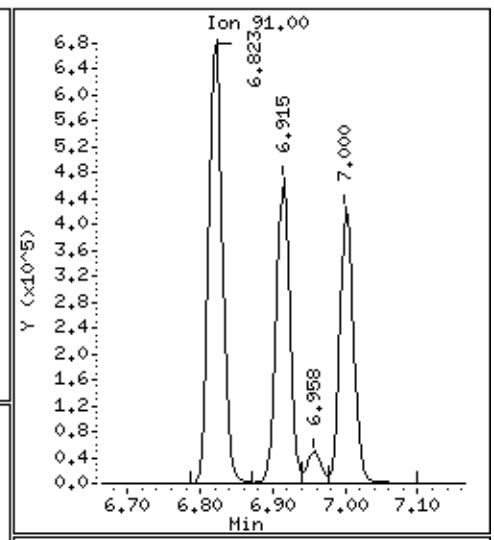
Column diameter: 0.18

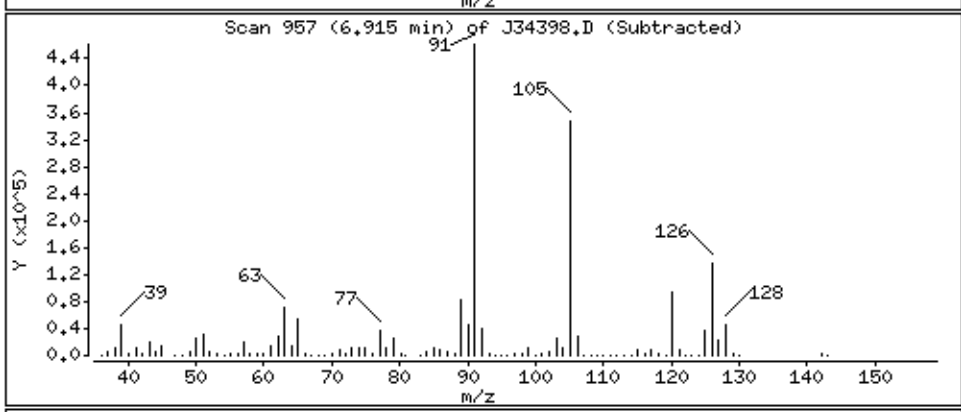
99 2-Chlorotoluene

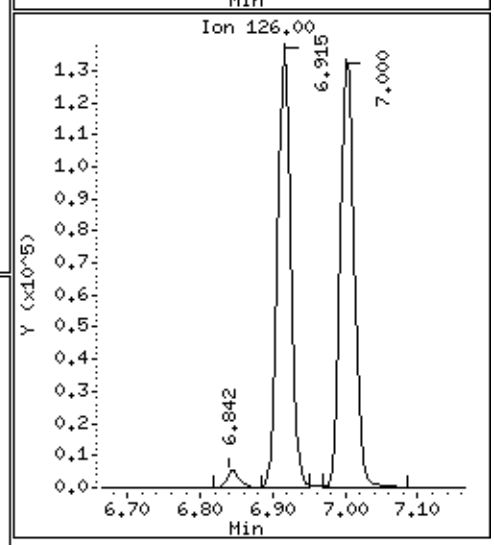
Concentration: 40.8 ug/L

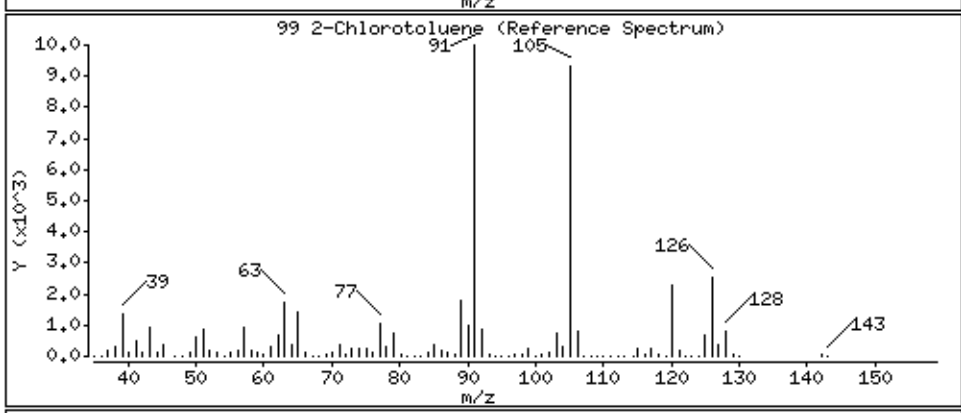
Review Code:

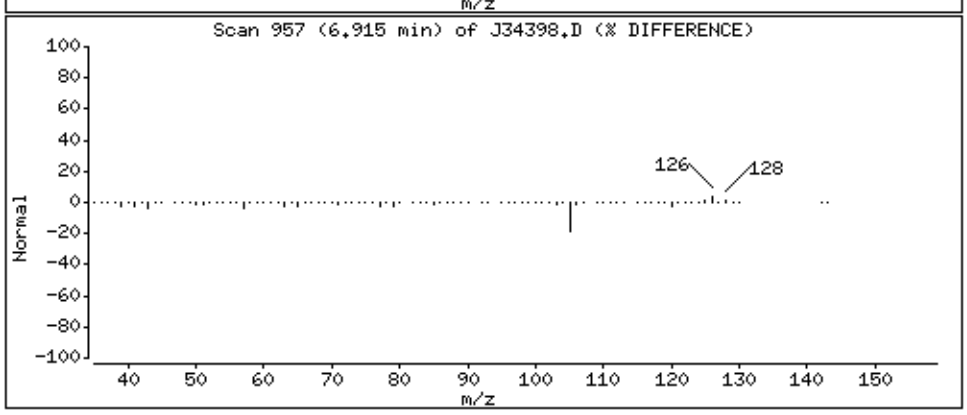












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D

Date : 25-APR-2017 13:27

Client ID: MBLCS

Instrument: 70msv6.i

Sample Info: 103009, 15067:1.25

Purge Volume: 5.0

Operator: KGG

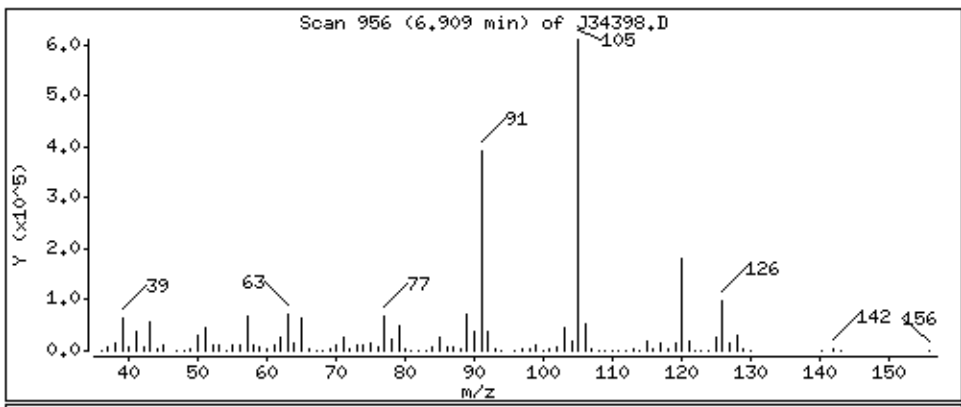
Column phase: RTX-624

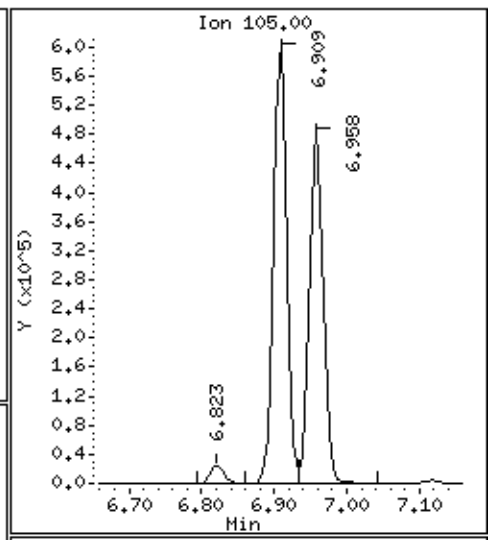
Column diameter: 0.18

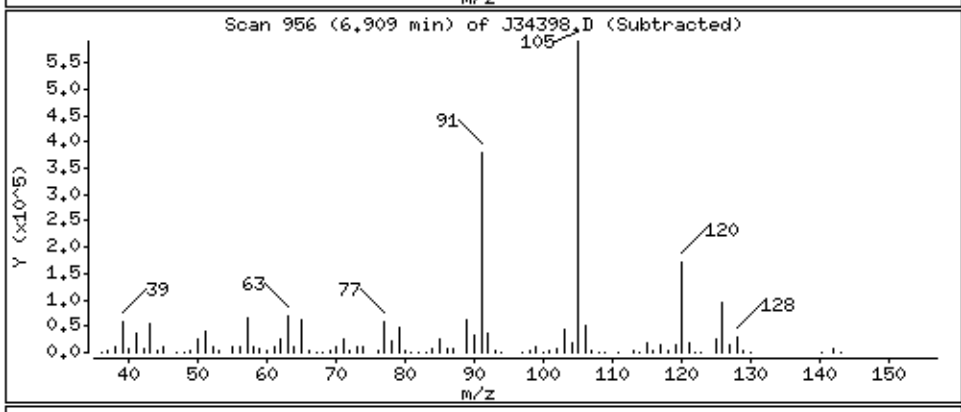
100 4-Ethyltoluene

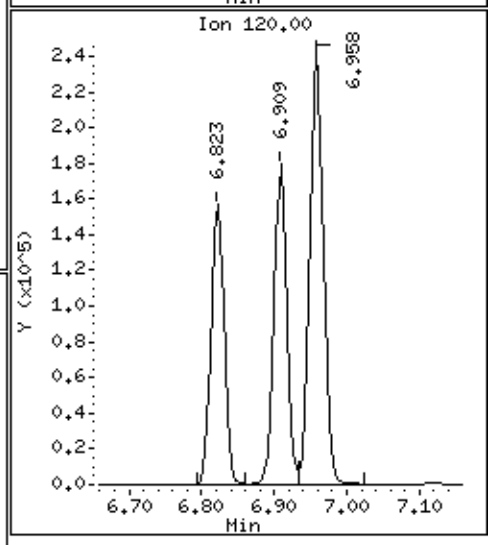
Concentration: 43.1 ug/L

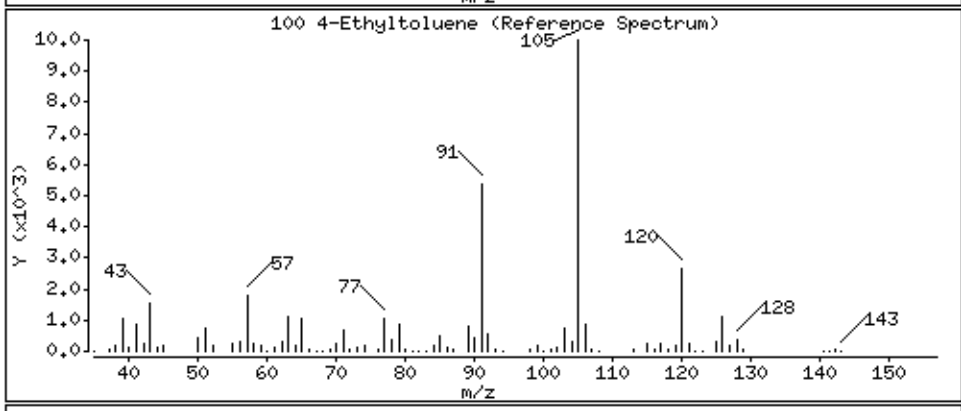
Review Code:

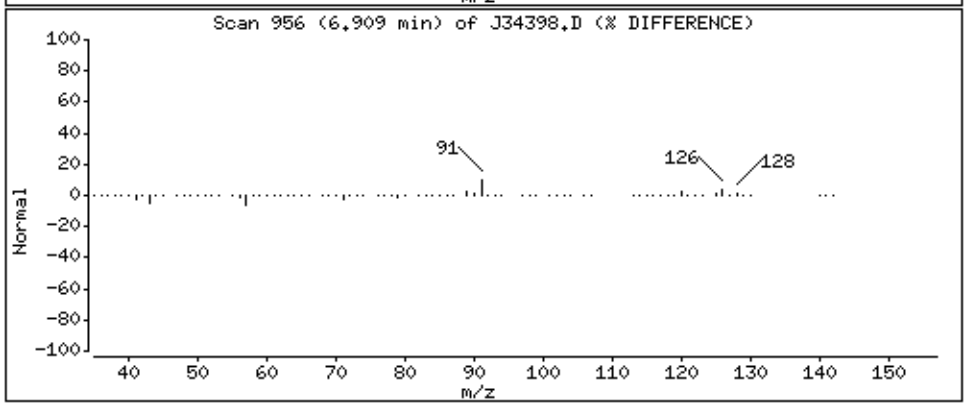












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D

Date : 25-APR-2017 13:27

Client ID: MBLCS

Instrument: 70msv6.i

Sample Info: 103009, 15067:1.25

Purge Volume: 5.0

Operator: KGG

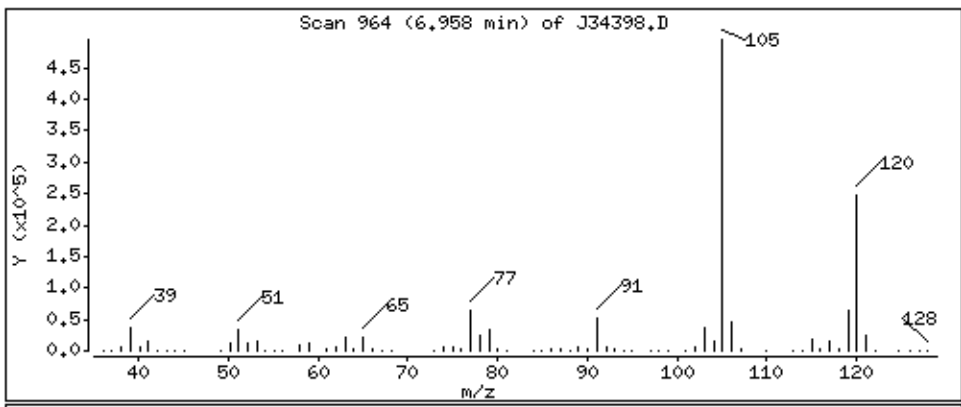
Column phase: RTX-624

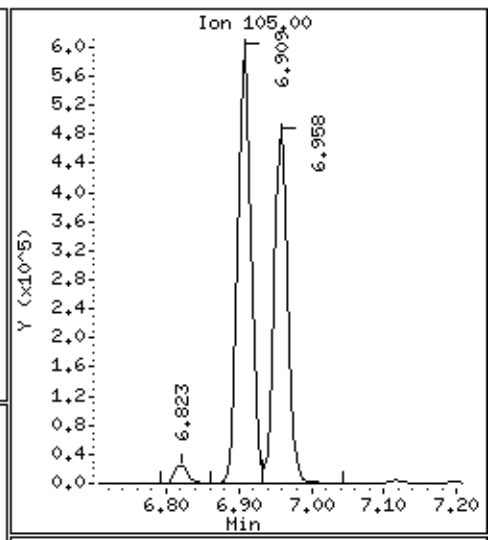
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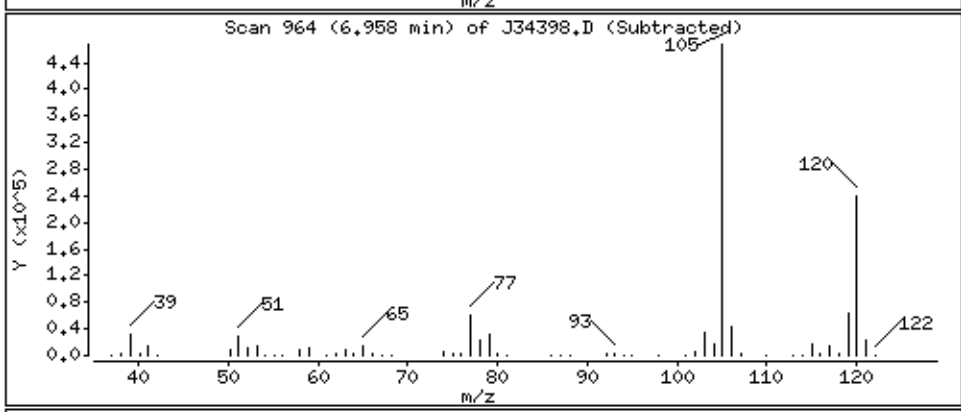
101 1,3,5-Trimethylbenzene

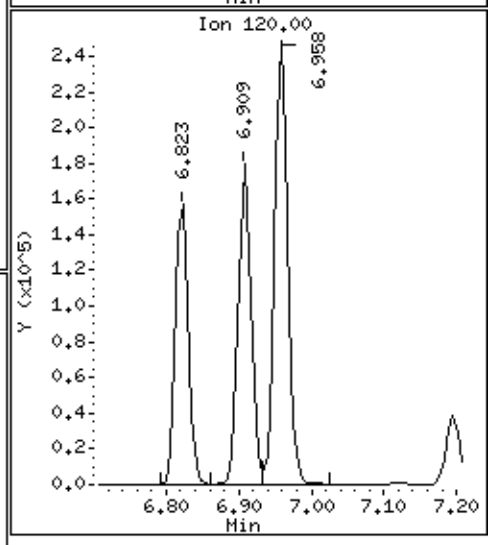
Concentration: 43.8 ug/L

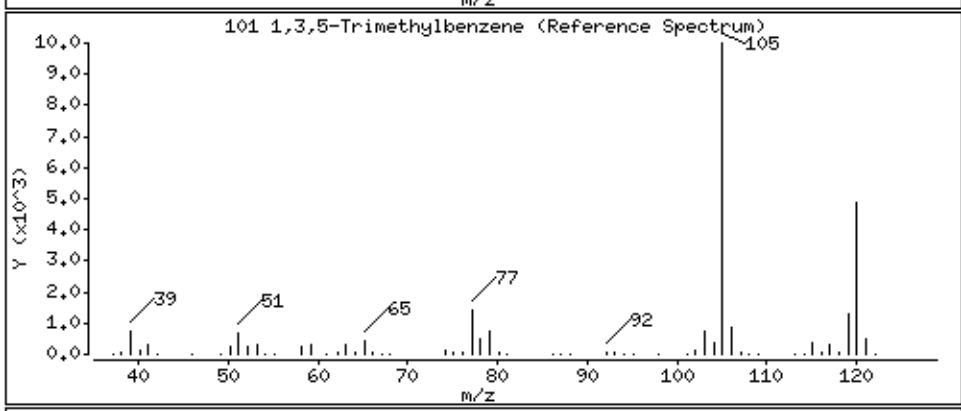
Review Code:

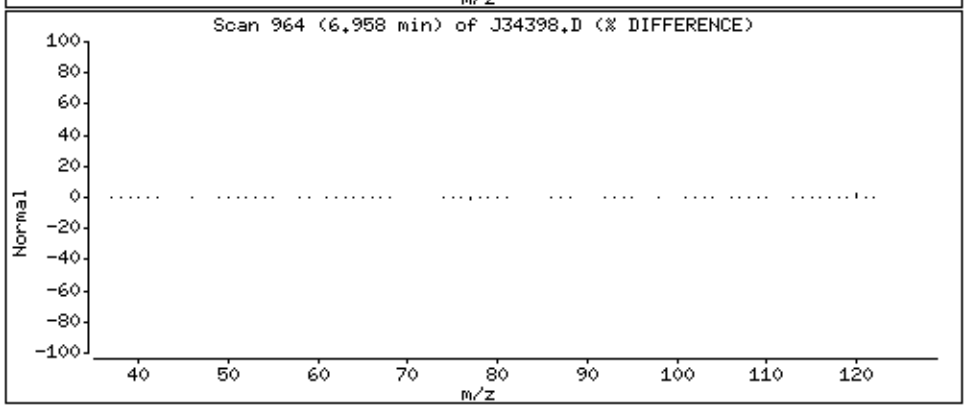












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D

Date : 25-APR-2017 13:27

Client ID: MBLCS

Instrument: 70msv6.i

Sample Info: 103009, 15067:1.25

Purge Volume: 5.0

Operator: KGG

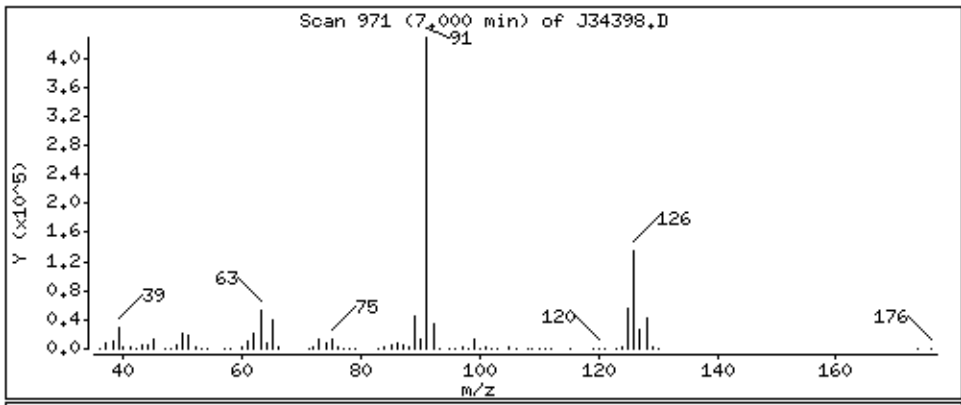
Column phase: RTX-624

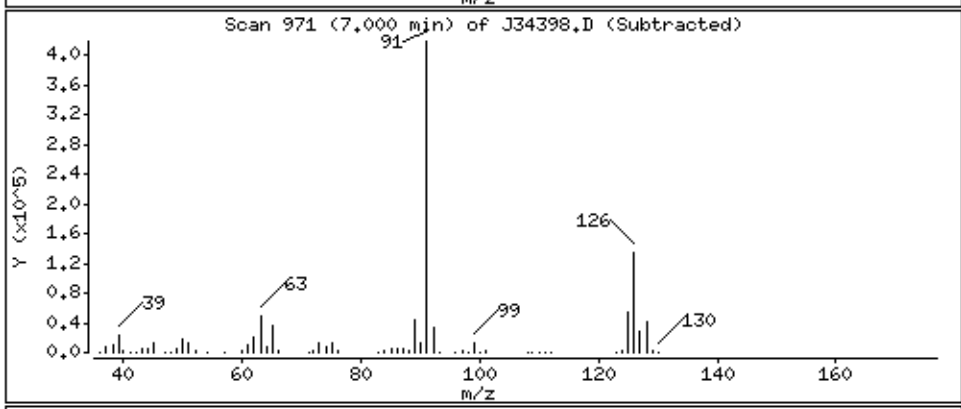
Column diameter: 0.18

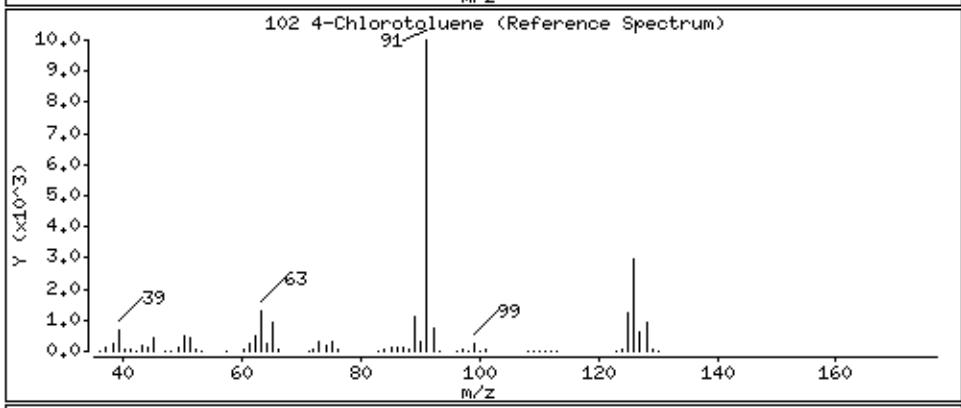
102 4-Chlorotoluene

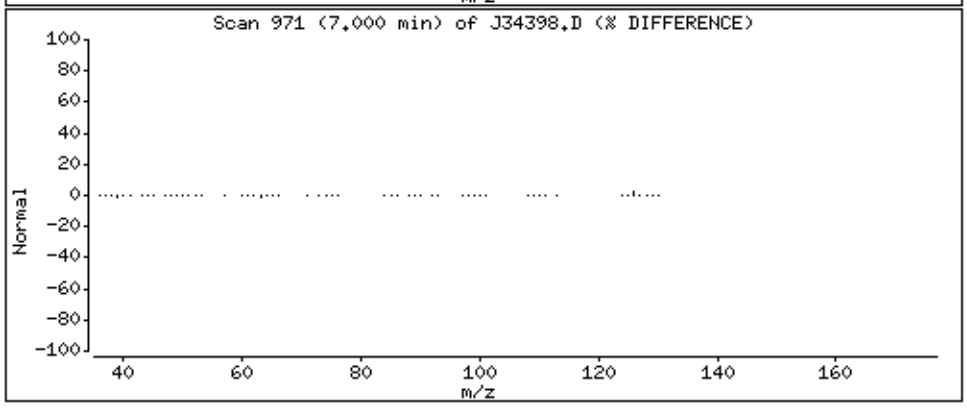
Concentration: 40.1 ug/L

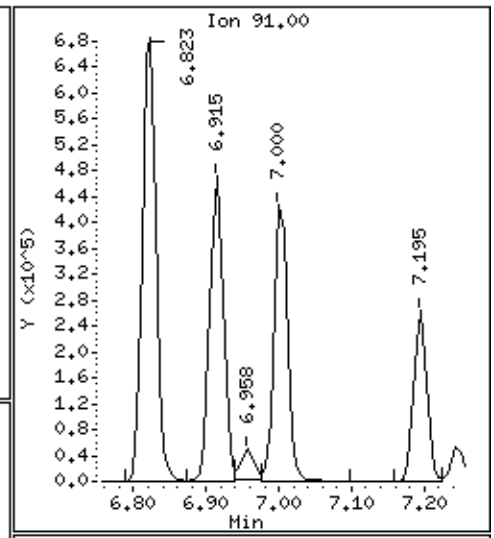
Review Code:

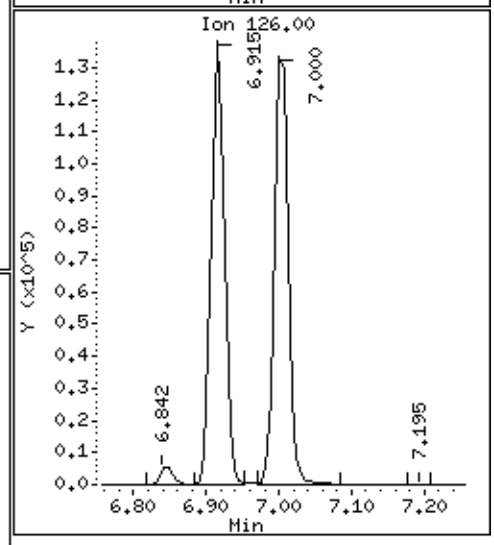












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D

Date : 25-APR-2017 13:27

Client ID: MBLCS

Instrument: 70msv6.i

Sample Info: 103009, 15067:1.25

Purge Volume: 5.0

Operator: KGG

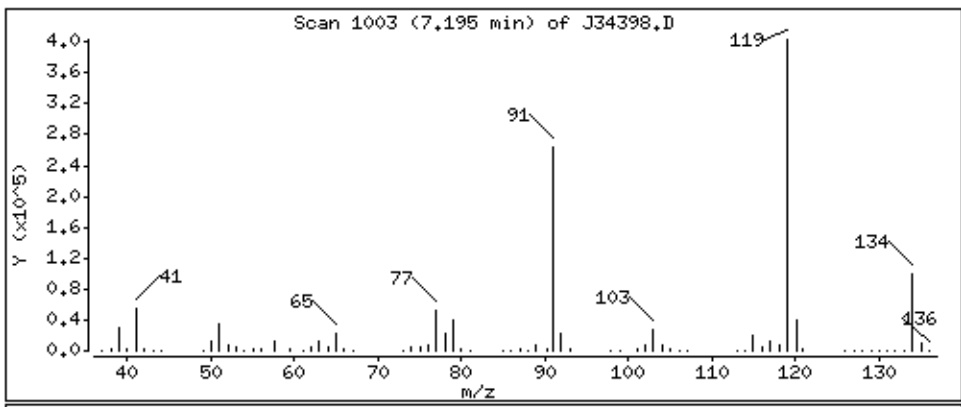
Column phase: RTX-624

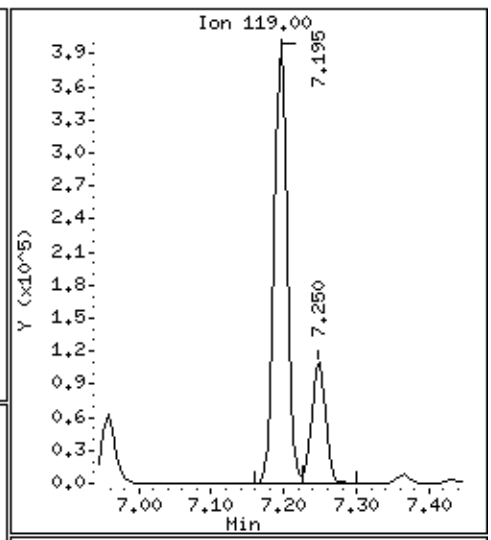
Column diameter: 0.18

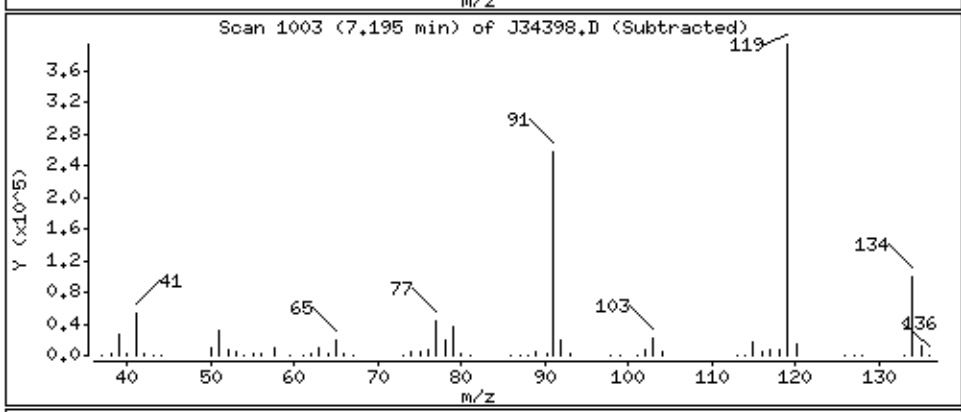
104 tert-Butylbenzene

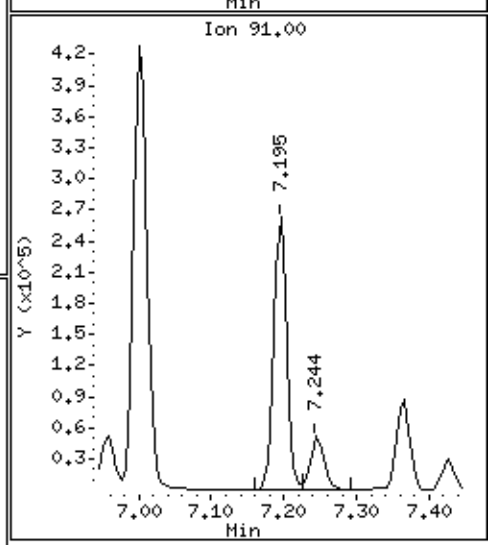
Concentration: 45.1 ug/L

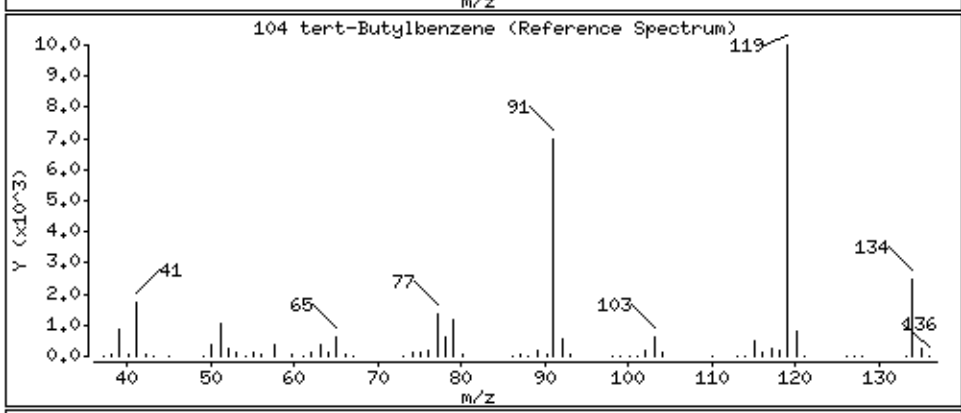
Review Code:

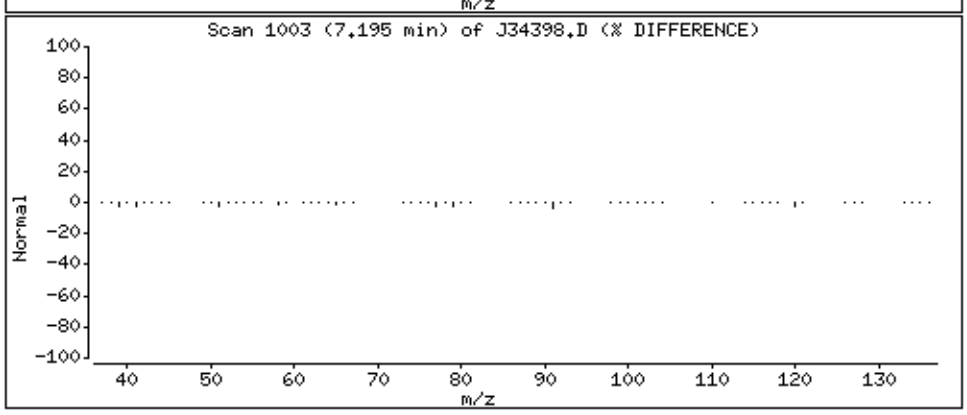












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D

Date : 25-APR-2017 13:27

Client ID: MBLCS

Instrument: 70msv6.i

Sample Info: 103009, 15067:1.25

Purge Volume: 5.0

Operator: KGG

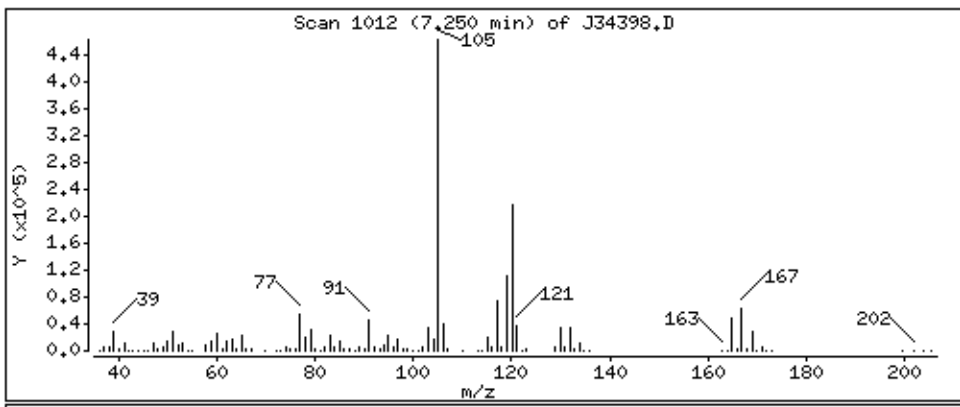
Column phase: RTX-624

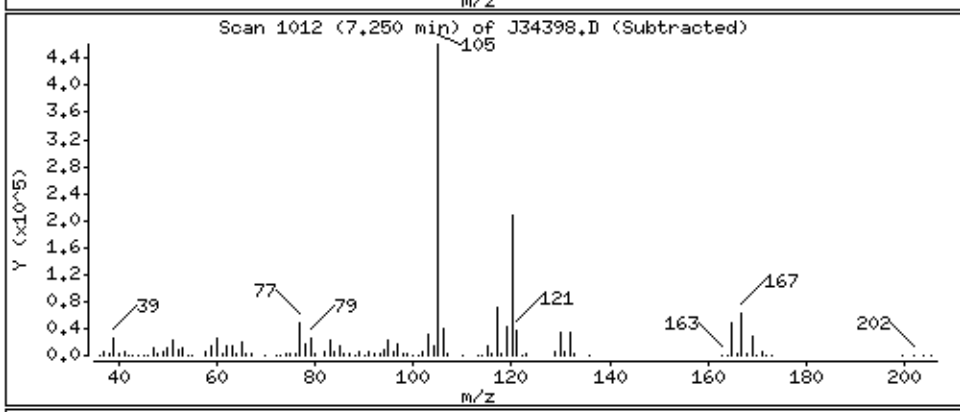
Column diameter: 0.18

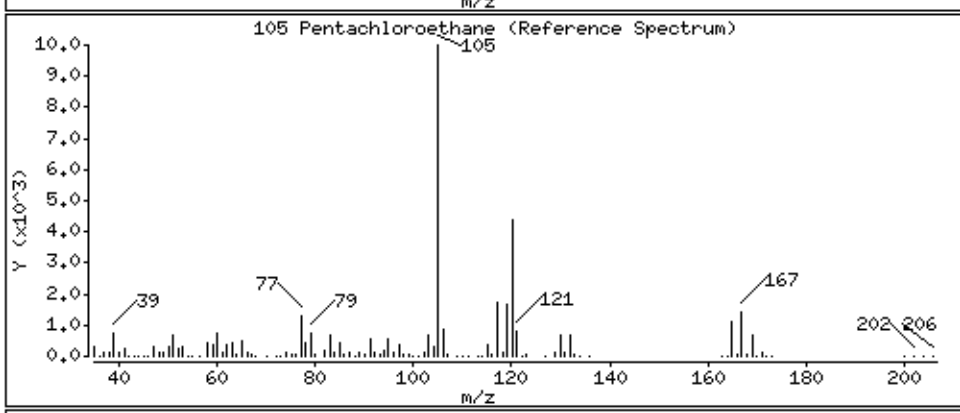
105 Pentachloroethane

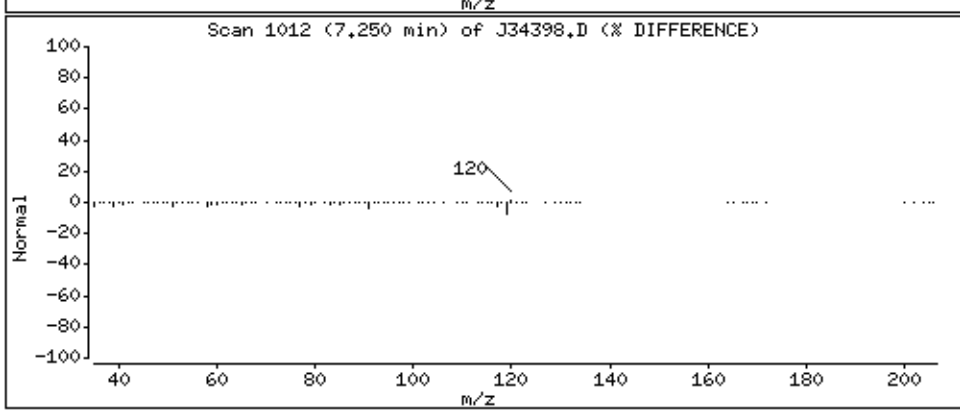
Concentration: 53.0 ug/L

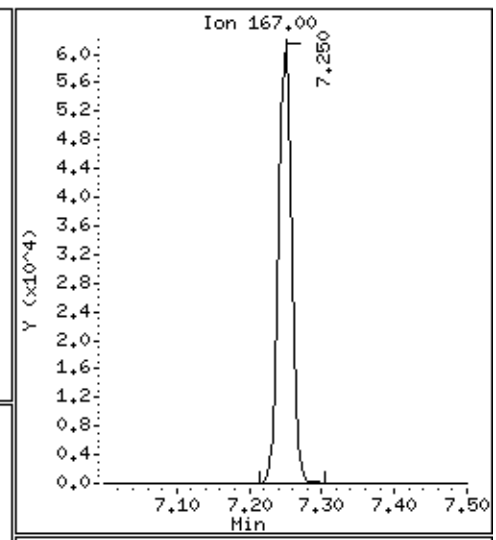
Review Code:

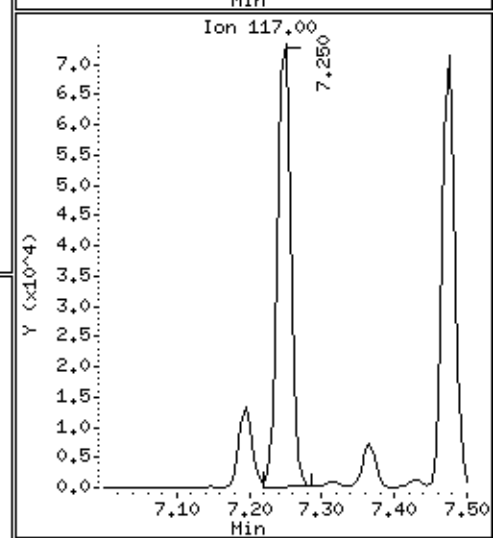


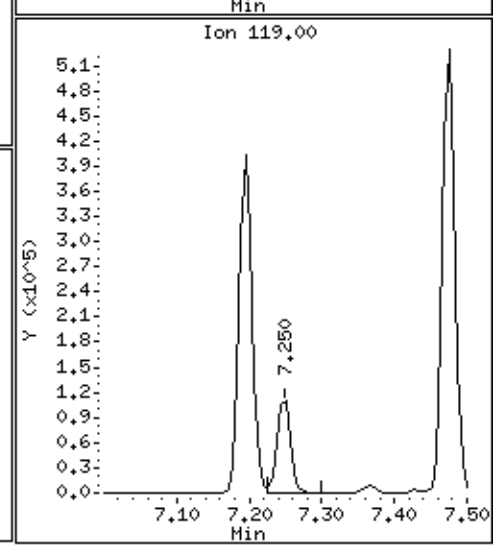












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D

Date : 25-APR-2017 13:27

Client ID: MBLCS

Instrument: 70msv6.i

Sample Info: 103009, 15067:1.25

Purge Volume: 5.0

Operator: KGG

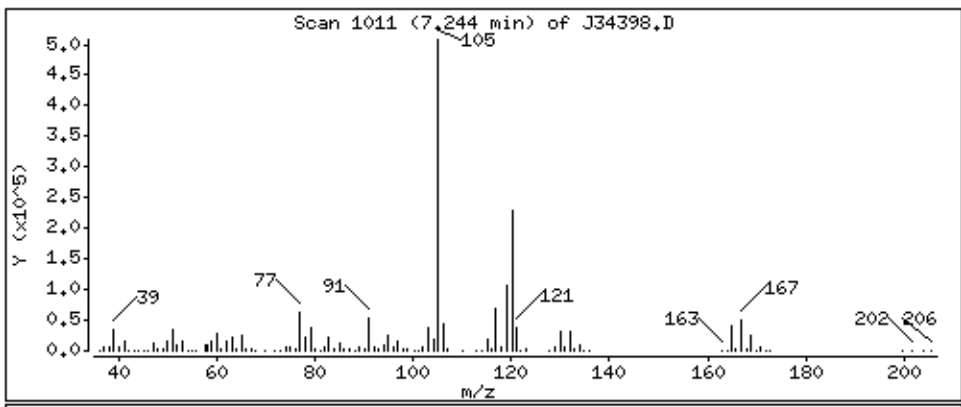
Column phase: RTX-624

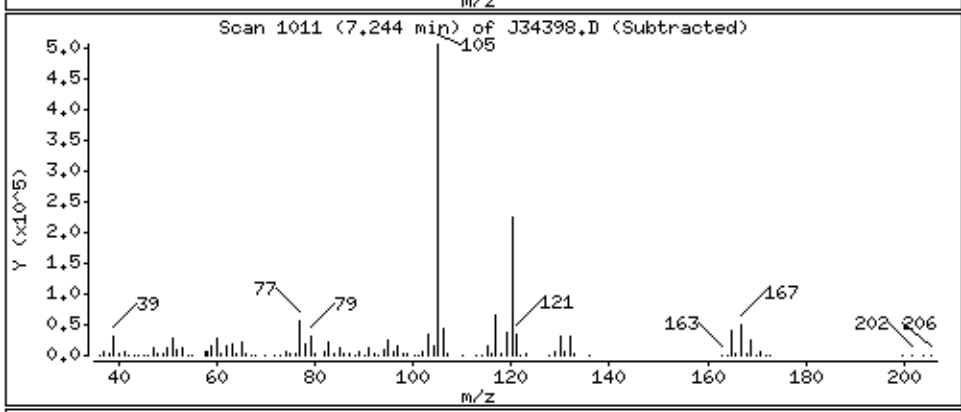
Column diameter: 0.18

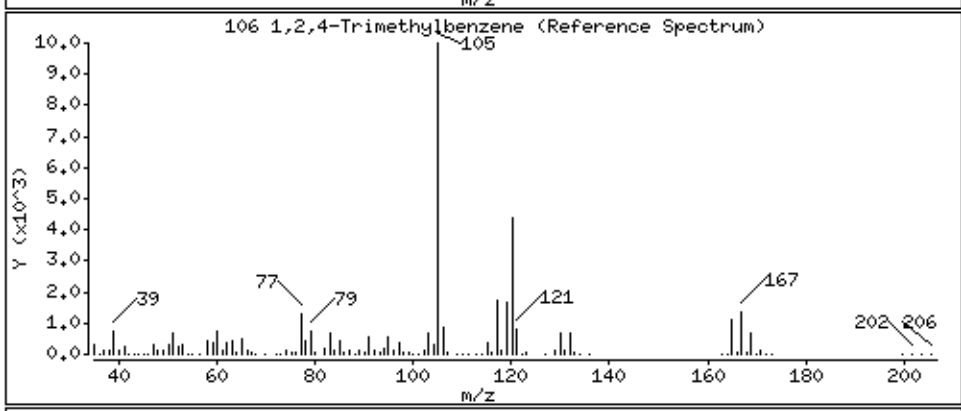
106 1,2,4-Trimethylbenzene

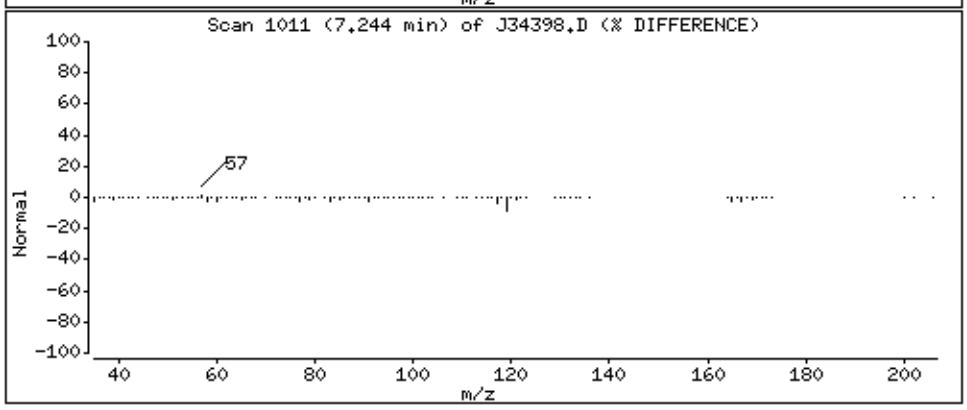
Concentration: 44.1 ug/L

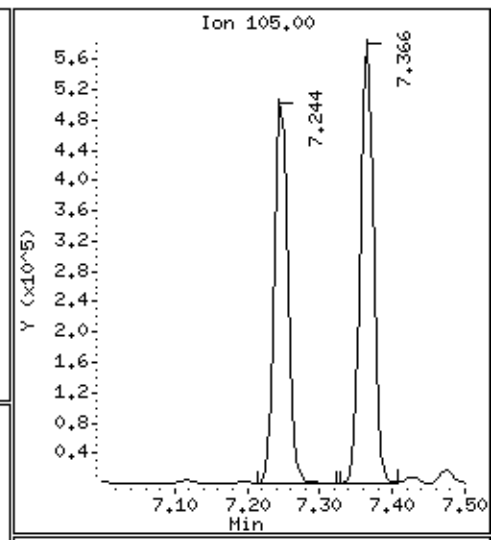
Review Code:

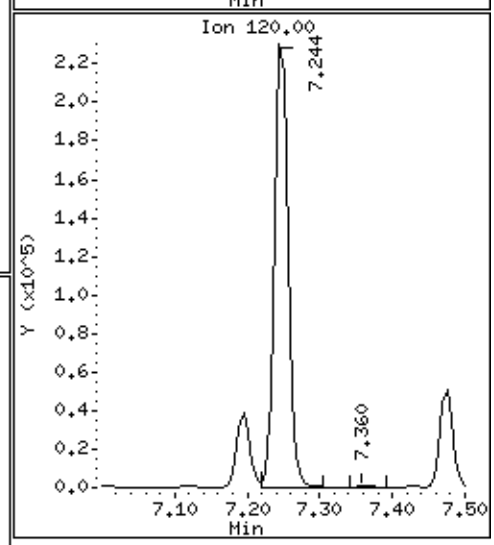












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D

Date : 25-APR-2017 13:27

Client ID: MBLCS

Instrument: 70msv6.i

Sample Info: 103009, 15067:1.25

Purge Volume: 5.0

Operator: KGG

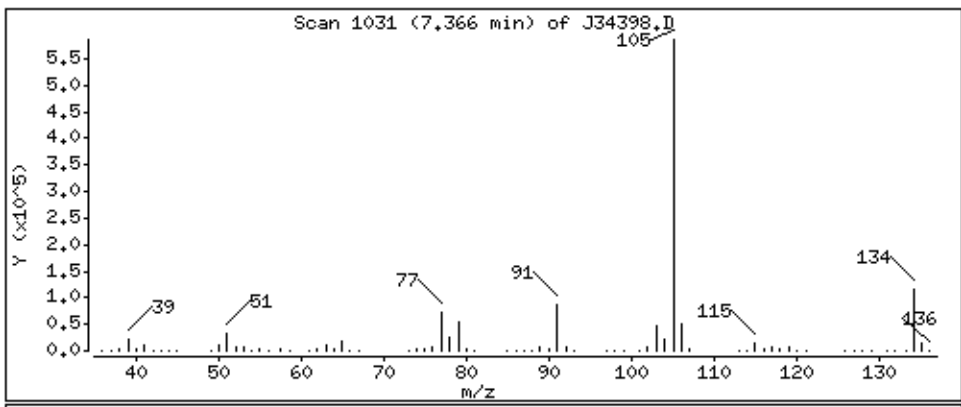
Column phase: RTX-624

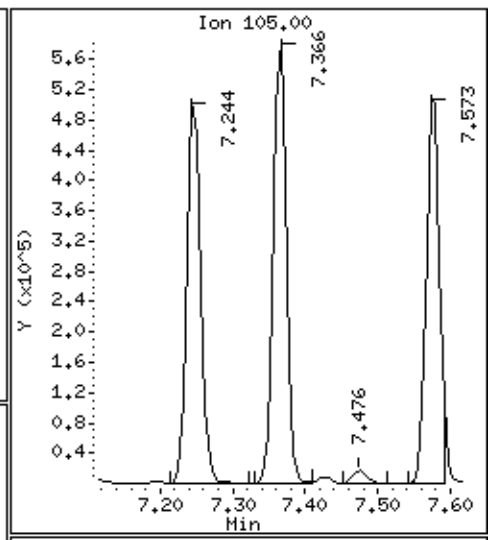
Column diameter: 0.18

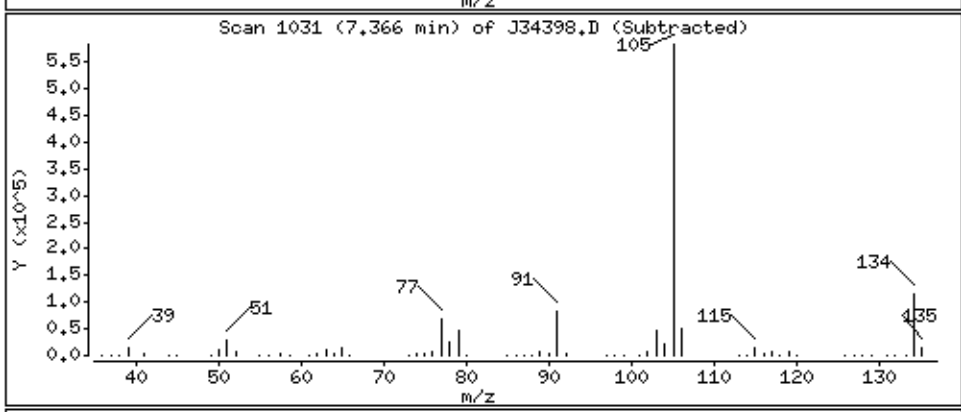
107 sec-Butylbenzene

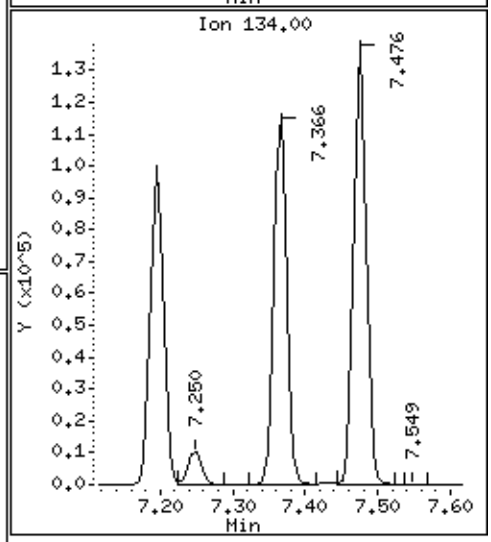
Concentration: 47.6 ug/L

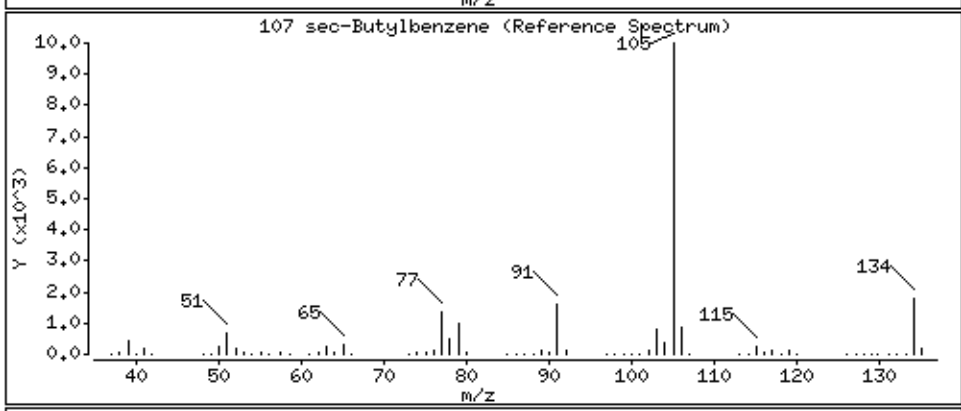
Review Code:

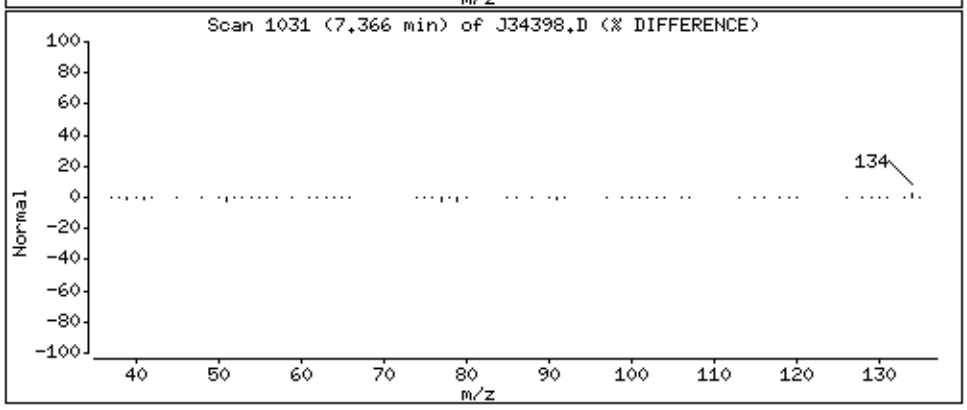












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D

Date : 25-APR-2017 13:27

Client ID: MBLCS

Instrument: 70msv6.i

Sample Info: 103009, 15067:1.25

Purge Volume: 5.0

Operator: KGG

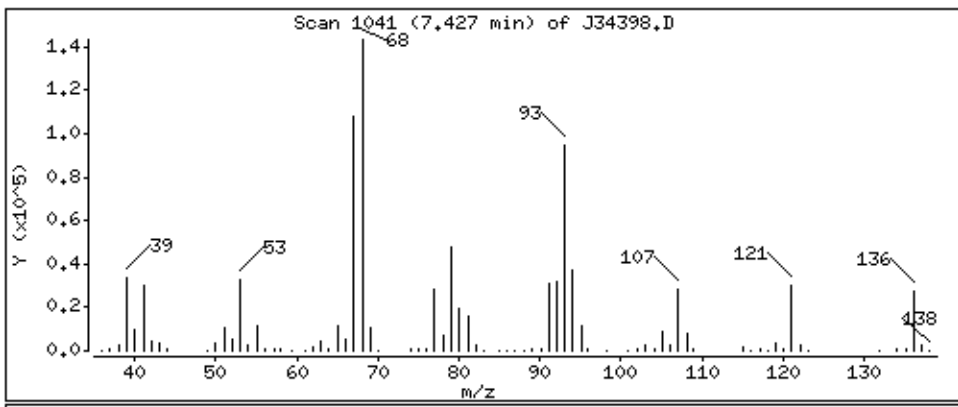
Column phase: RTX-624

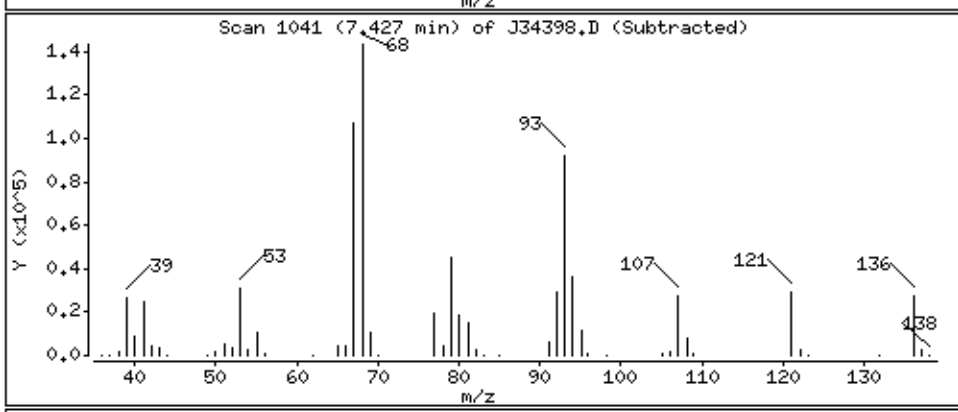
Column diameter: 0.18

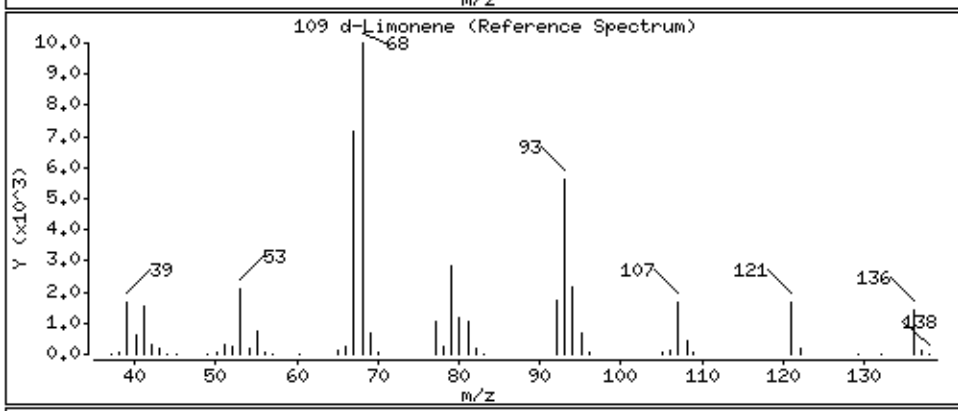
109 d-Limonene

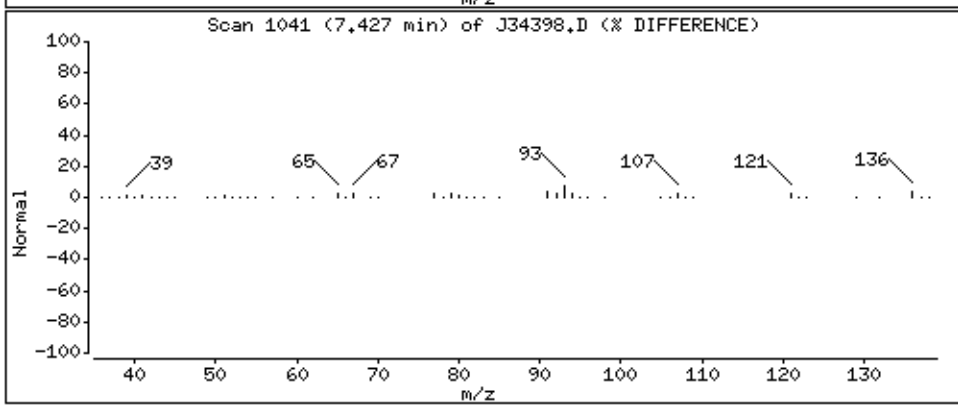
Concentration: 59.2 ug/L

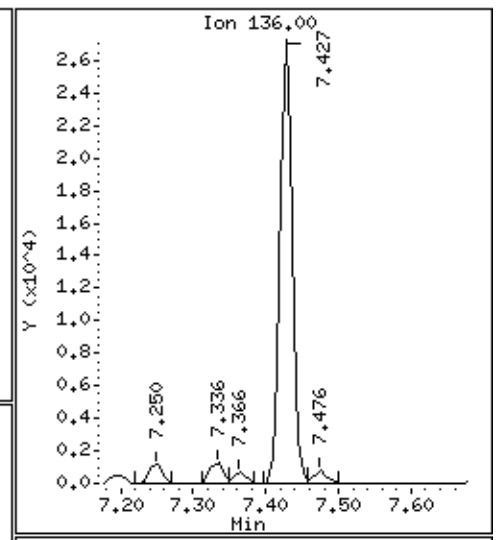
Review Code:

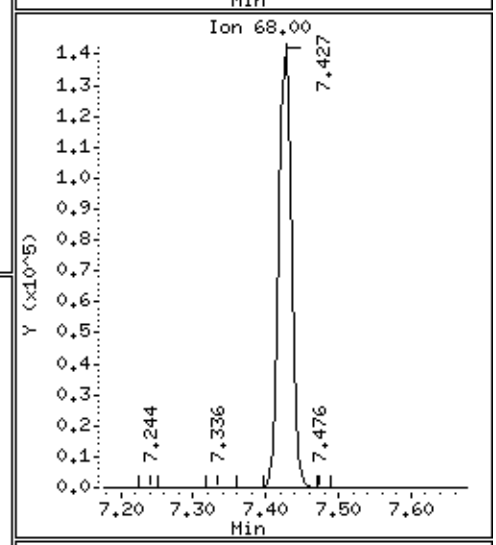


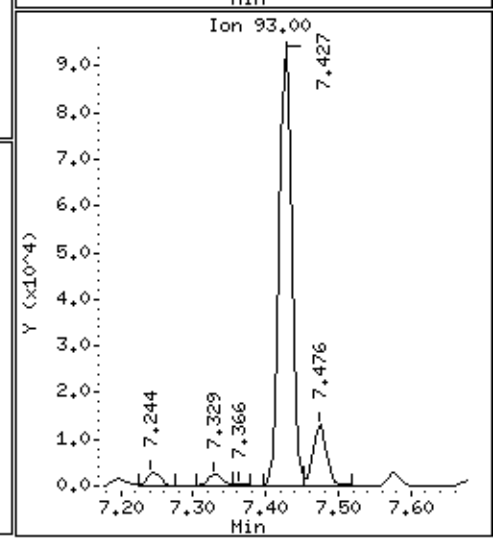












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D

Date : 25-APR-2017 13:27

Client ID: MBLCS

Instrument: 70msv6.i

Sample Info: 103009, 15067:1.25

Purge Volume: 5.0

Operator: KGG

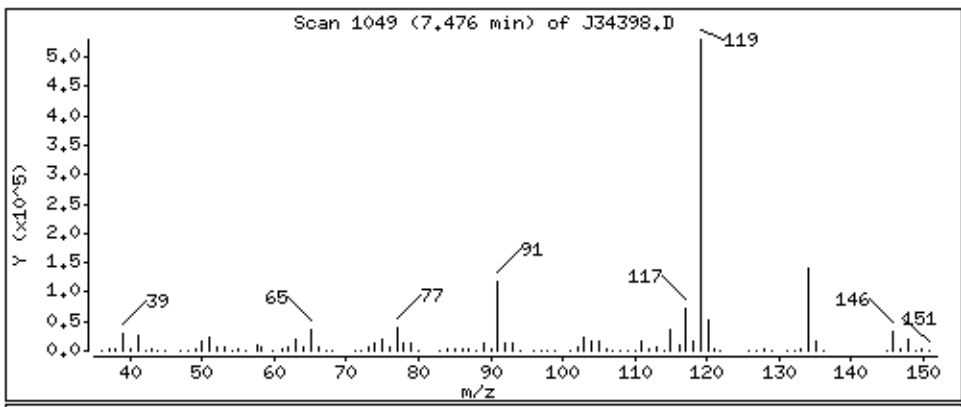
Column phase: RTX-624

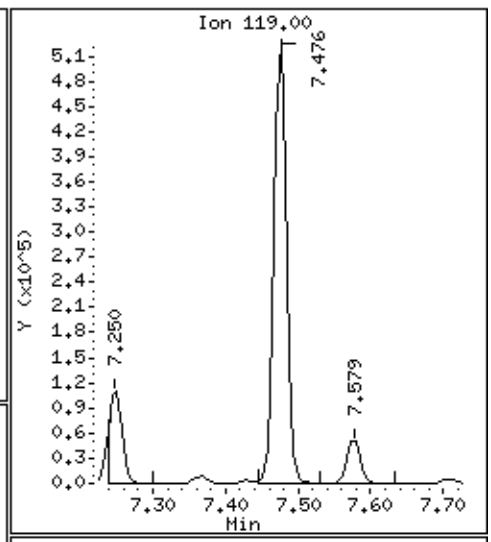
Column diameter: 0.18

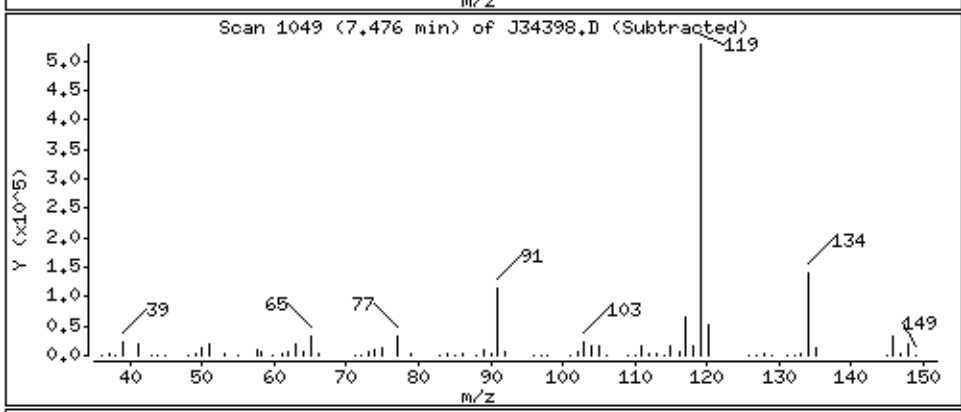
110 p-Isopropyltoluene

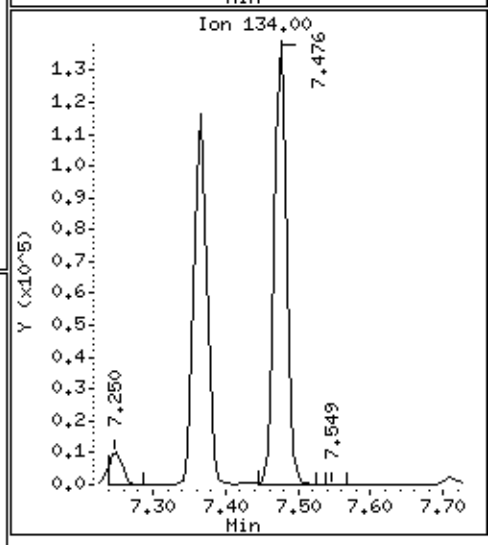
Concentration: 48.4 ug/L

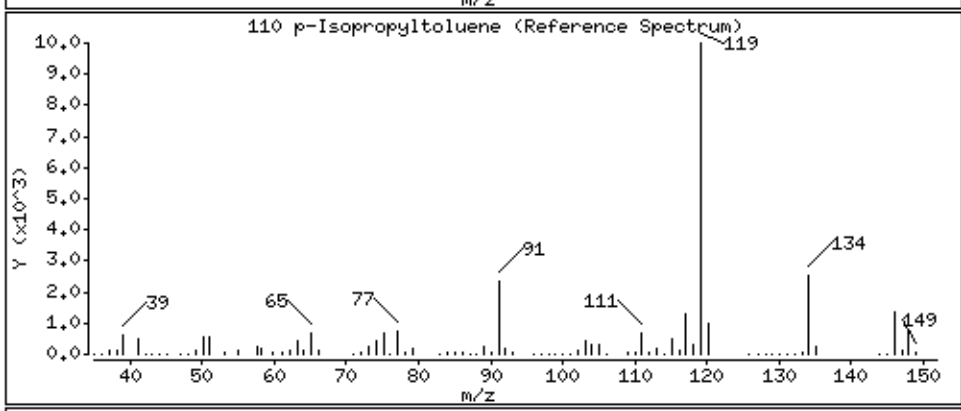
Review Code:

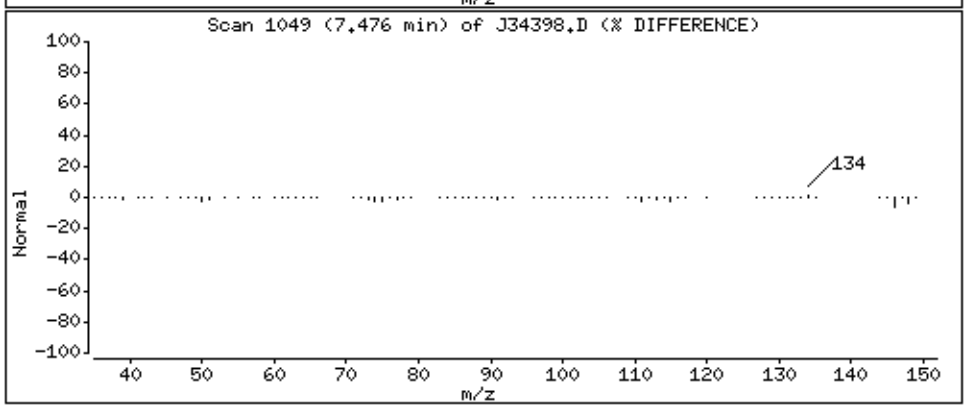












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D

Date : 25-APR-2017 13:27

Client ID: MBLCS

Instrument: 70msv6.i

Sample Info: 103009, 15067:1.25

Purge Volume: 5.0

Operator: KGG

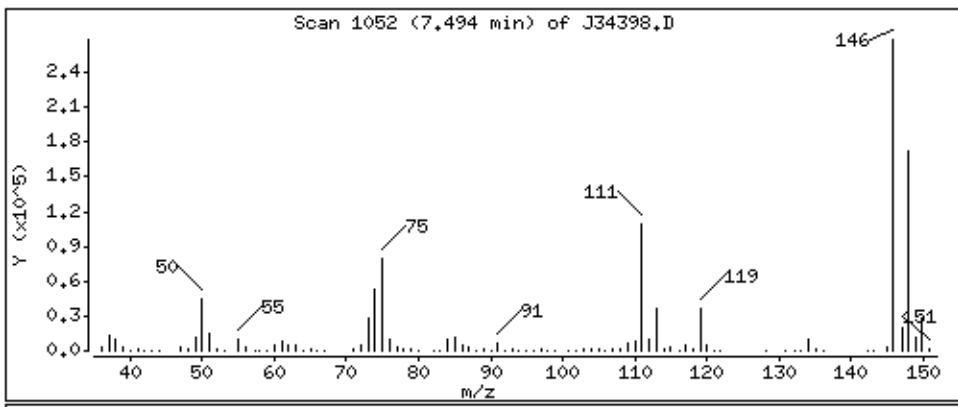
Column phase: RTX-624

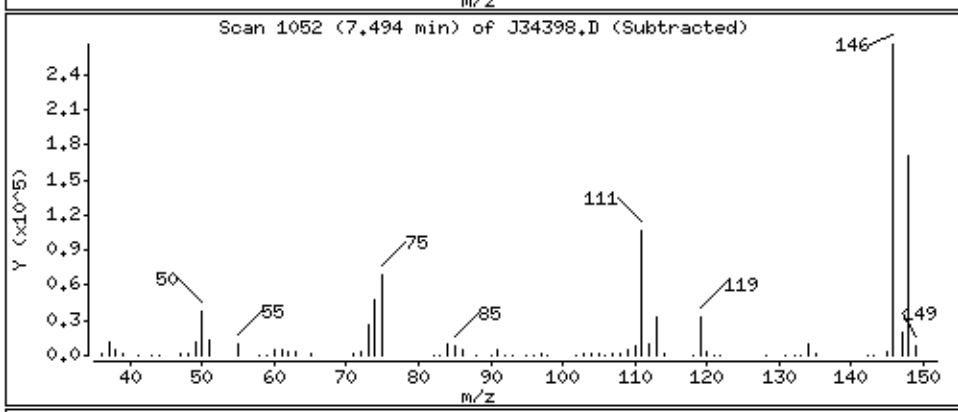
Column diameter: 0.18

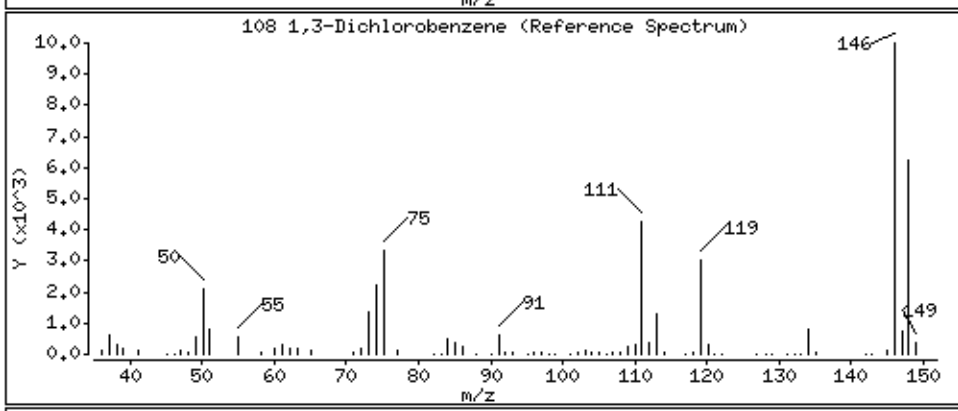
108 1,3-Dichlorobenzene

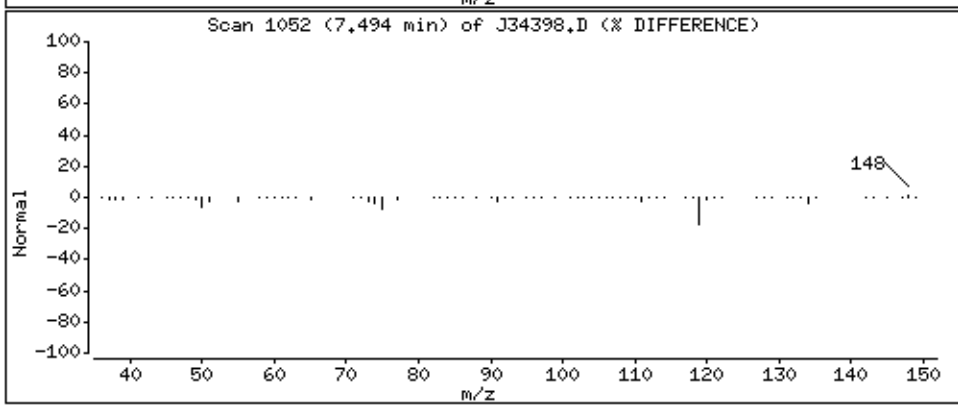
Concentration: 44.6 ug/L

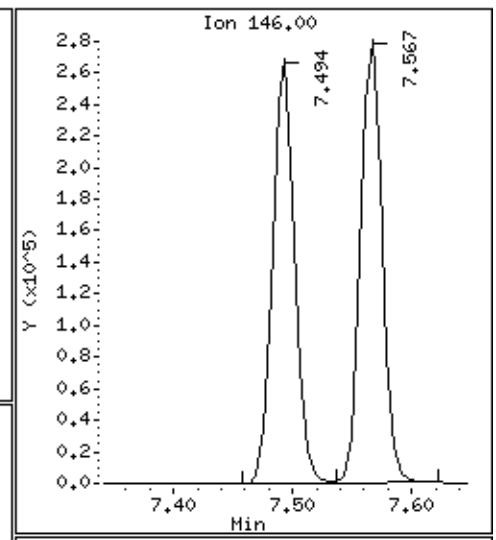
Review Code:

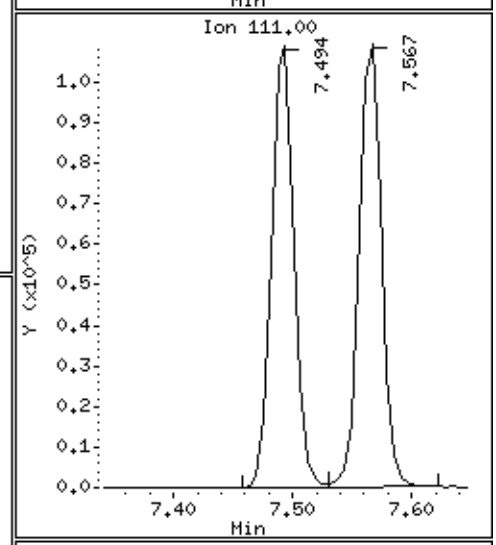


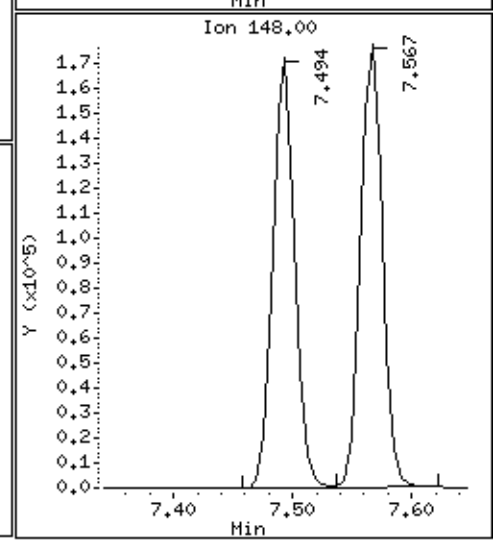












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D

Date : 25-APR-2017 13:27

Client ID: MBLCS

Instrument: 70msv6.i

Sample Info: 103009, 15067:1.25

Purge Volume: 5.0

Operator: KGG

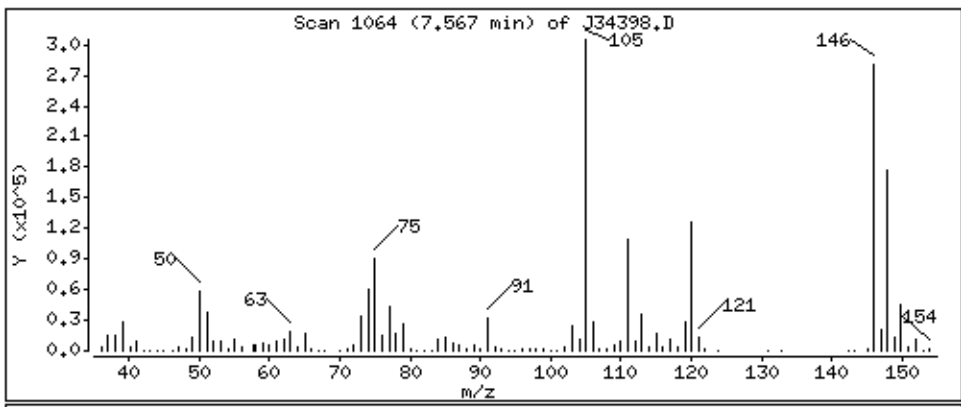
Column phase: RTX-624

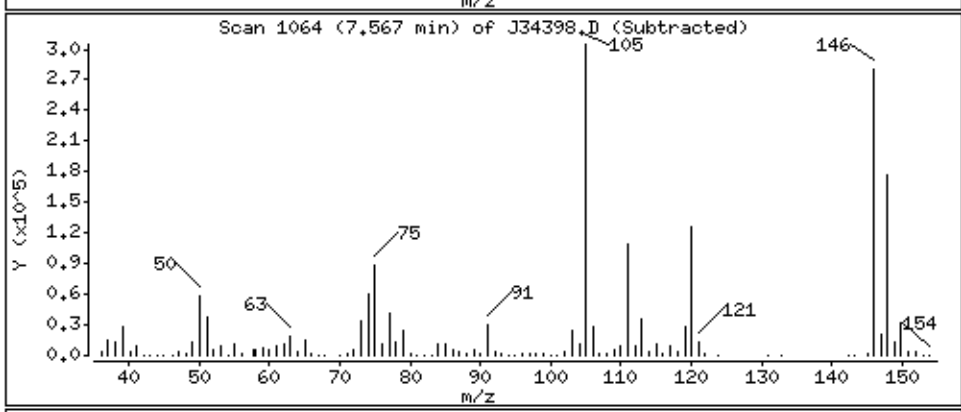
Column diameter: 0.18

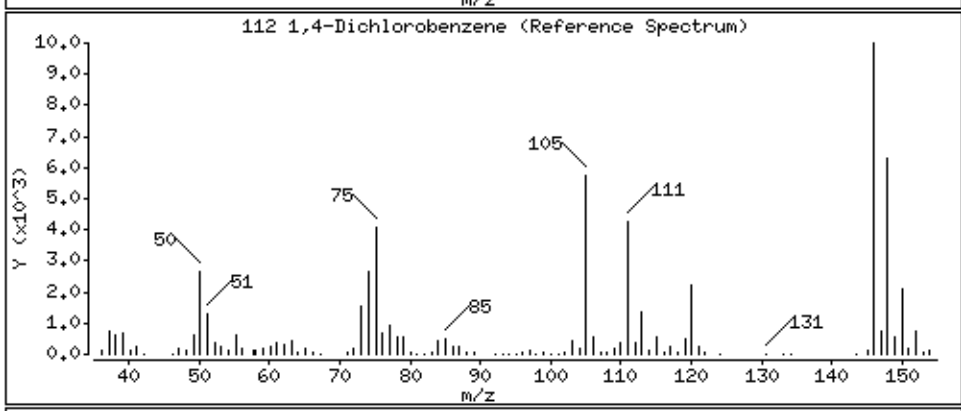
112 1,4-Dichlorobenzene

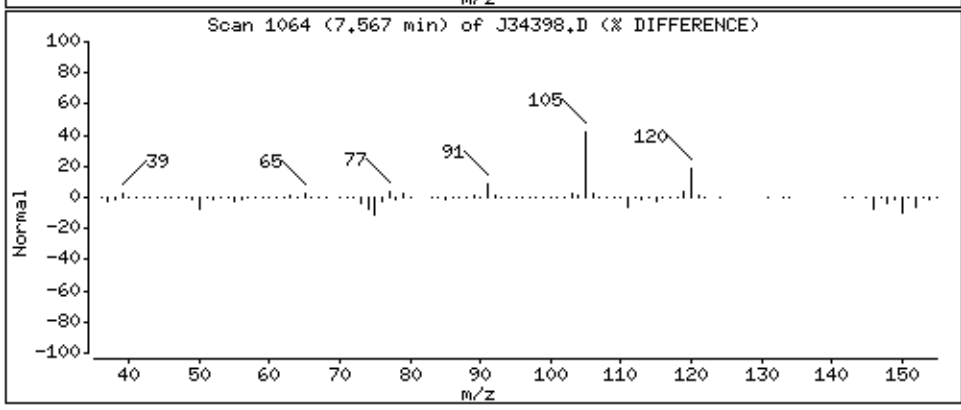
Concentration: 43.9 ug/L

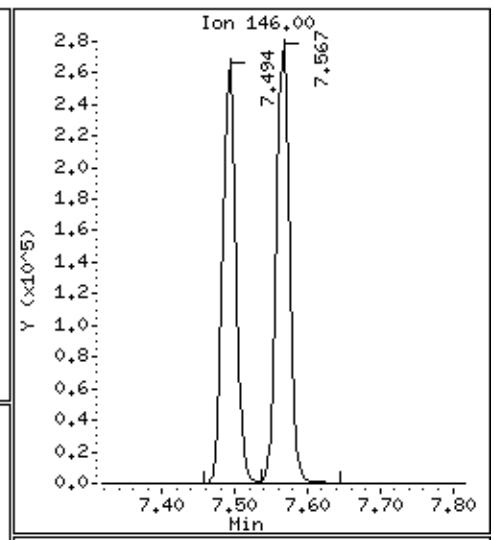
Review Code:

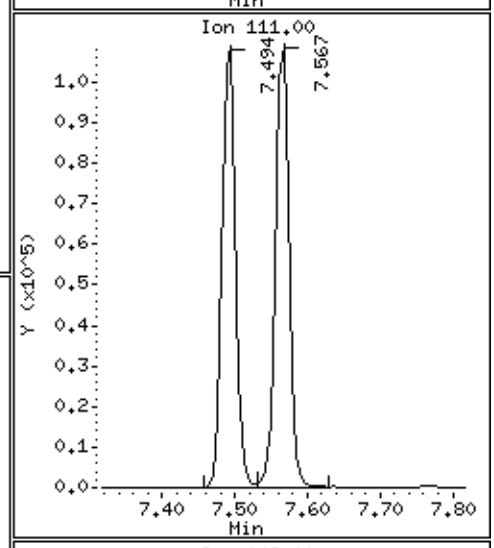


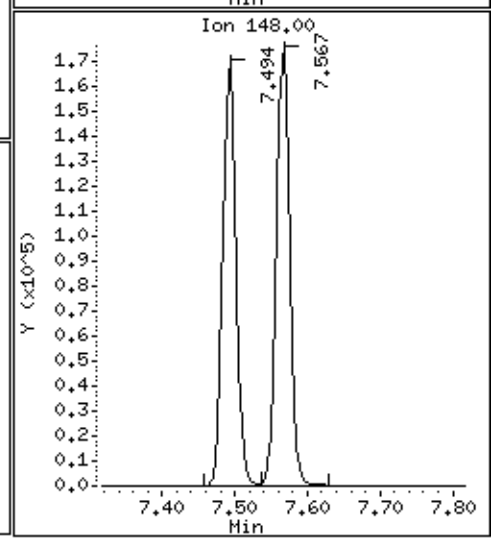












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D

Date : 25-APR-2017 13:27

Client ID: MBLCS

Instrument: 70msv6.i

Sample Info: 103009, 15067:1.25

Purge Volume: 5.0

Operator: KGG

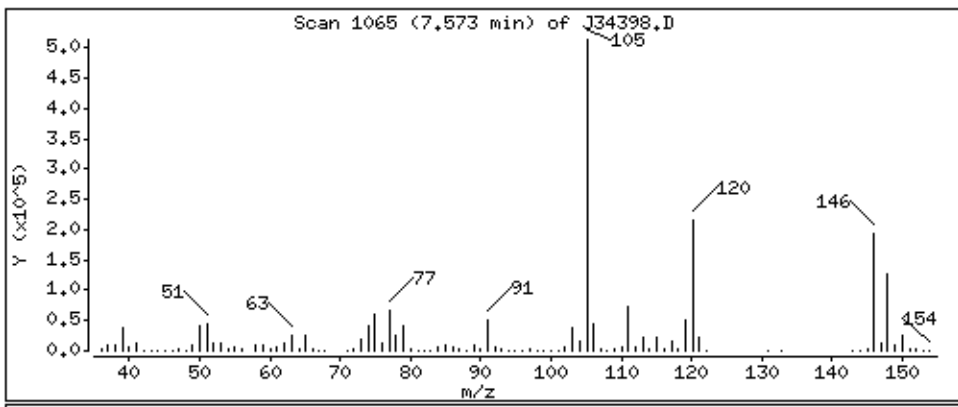
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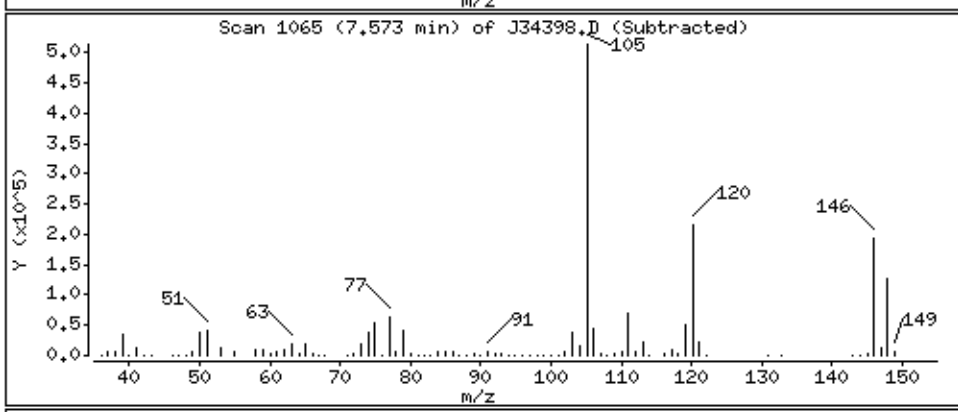
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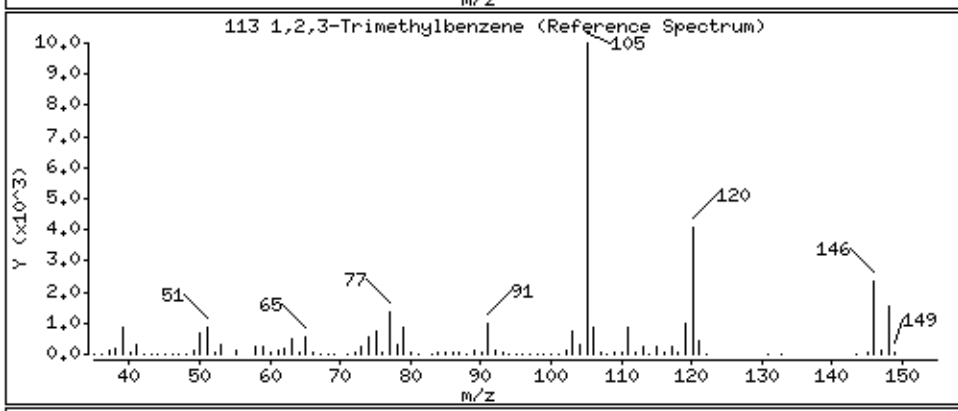
113 1,2,3-Trimethylbenzene

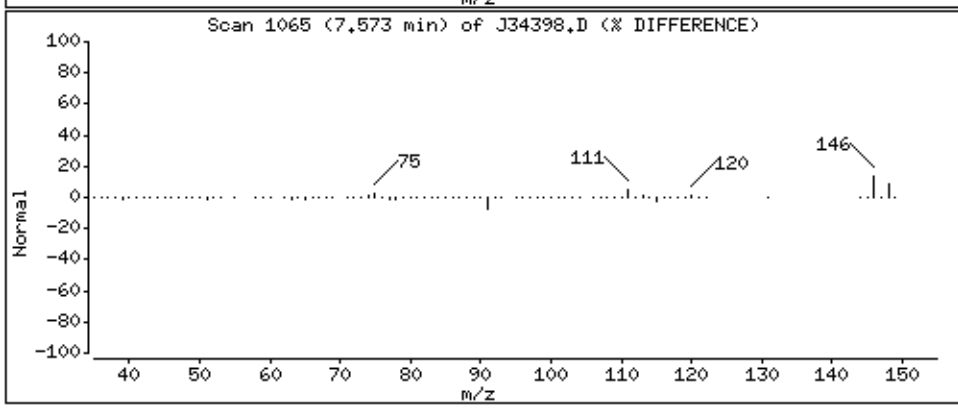
Concentration: 43.3 ug/L

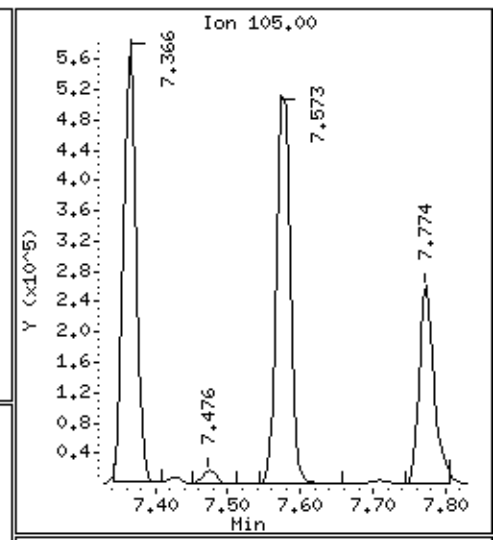
Review Code:

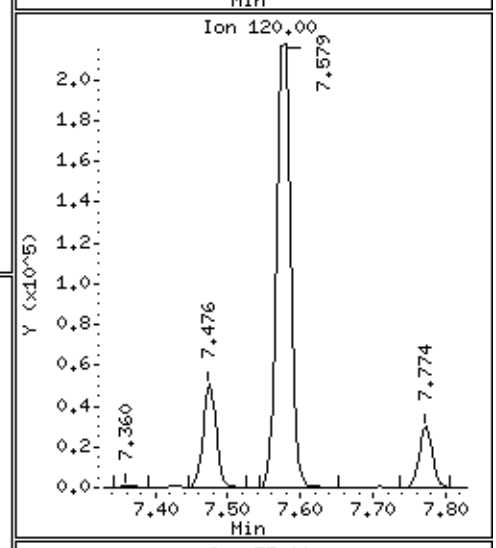


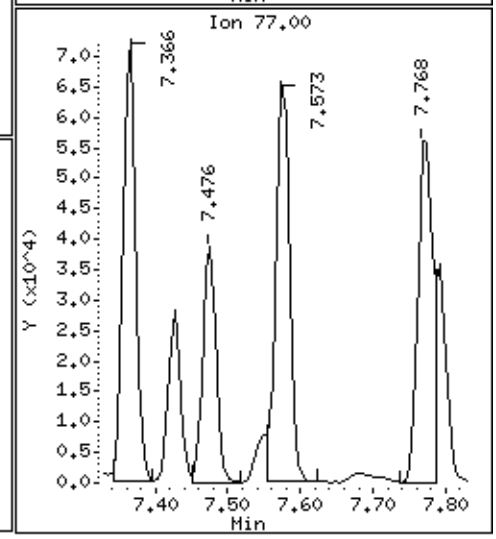












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D

Date : 25-APR-2017 13:27

Client ID: MBLCS

Instrument: 70msv6.i

Sample Info: 103009, 15067:1.25

Purge Volume: 5.0

Operator: KGG

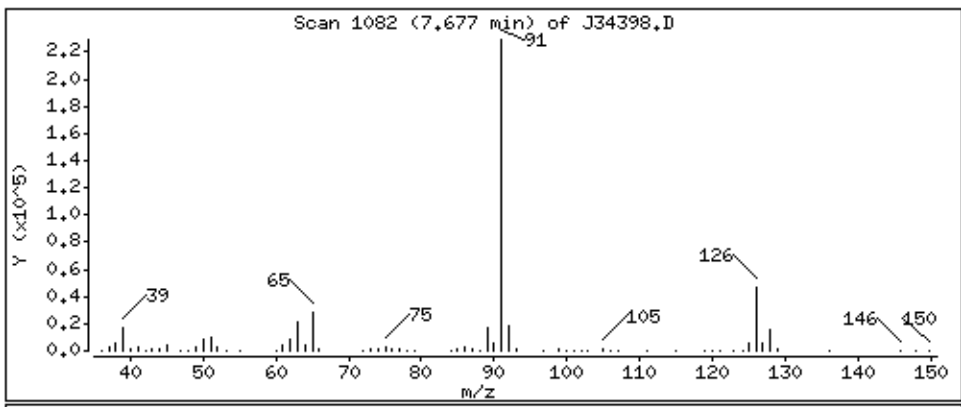
Column phase: RTX-624

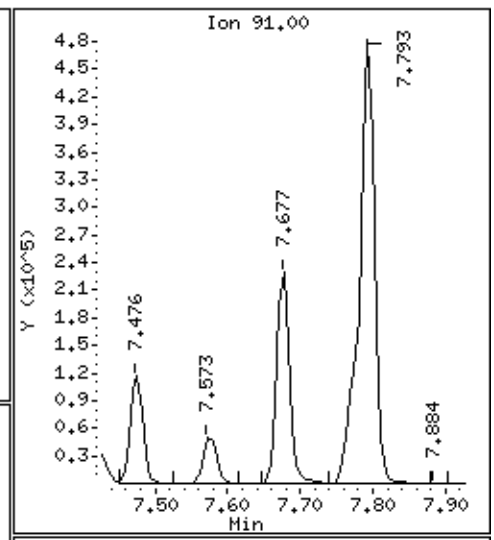
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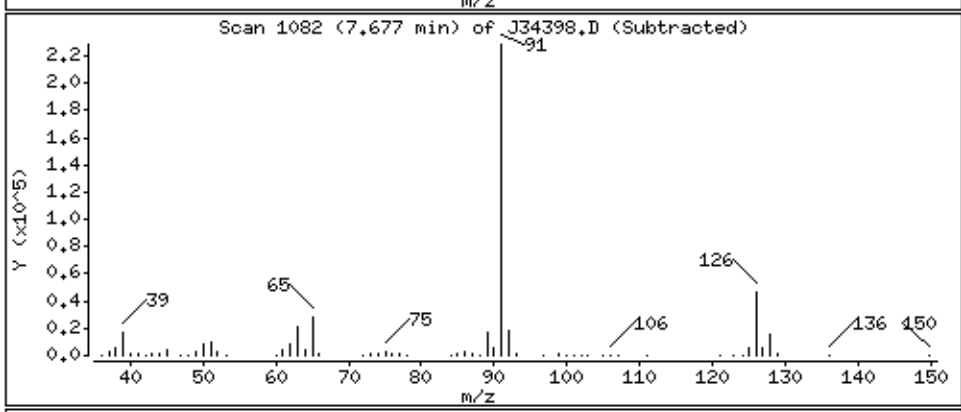
114 Benzyl chloride

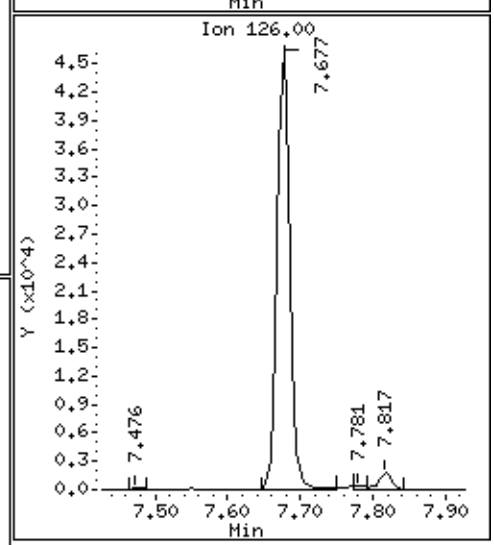
Concentration: 41.2 ug/L

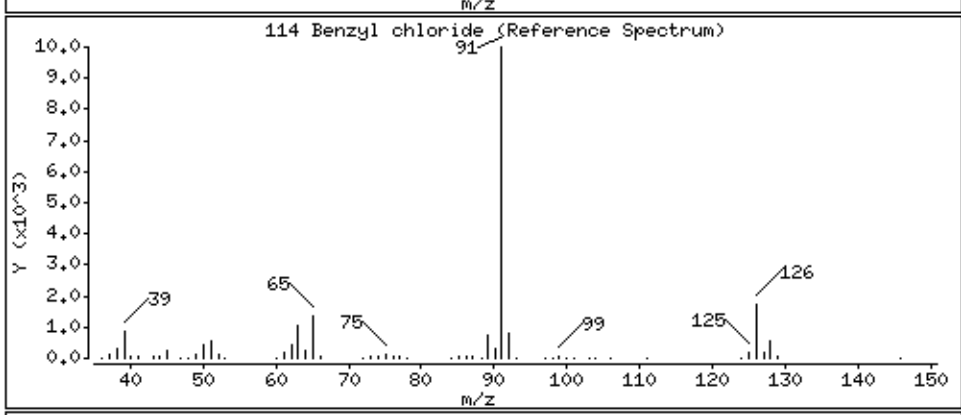
Review Code:

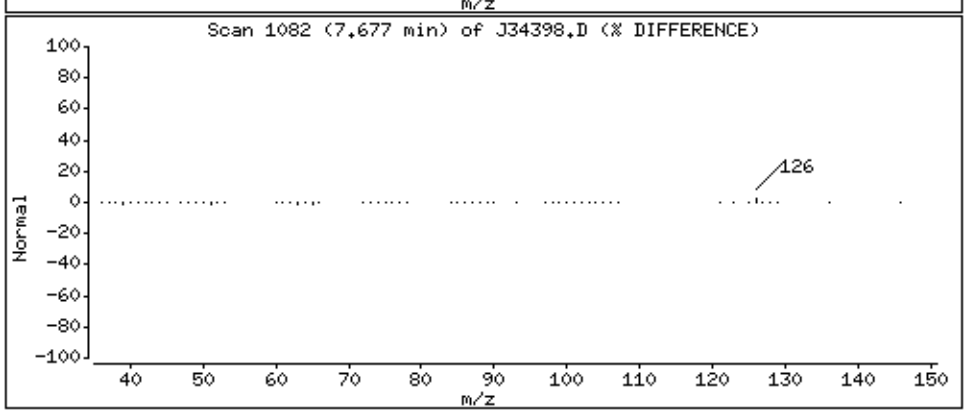












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D

Date : 25-APR-2017 13:27

Client ID: MBLCS

Instrument: 70msv6.i

Sample Info: 103009, 15067:1.25

Purge Volume: 5.0

Operator: KGG

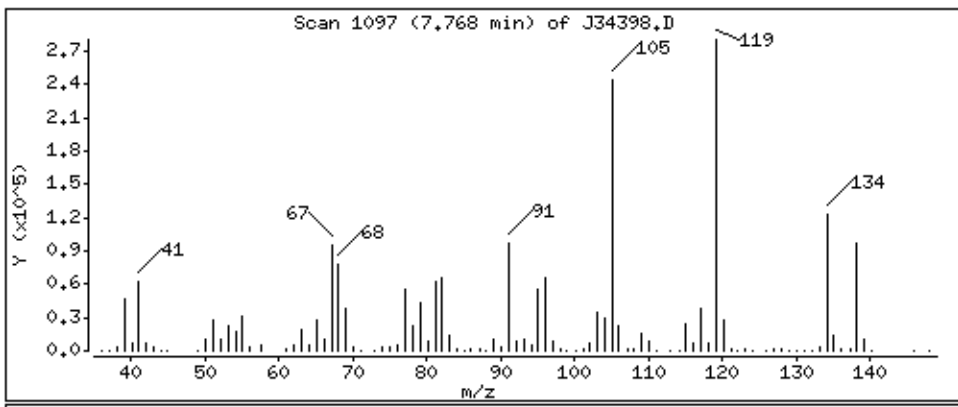
Column phase: RTX-624

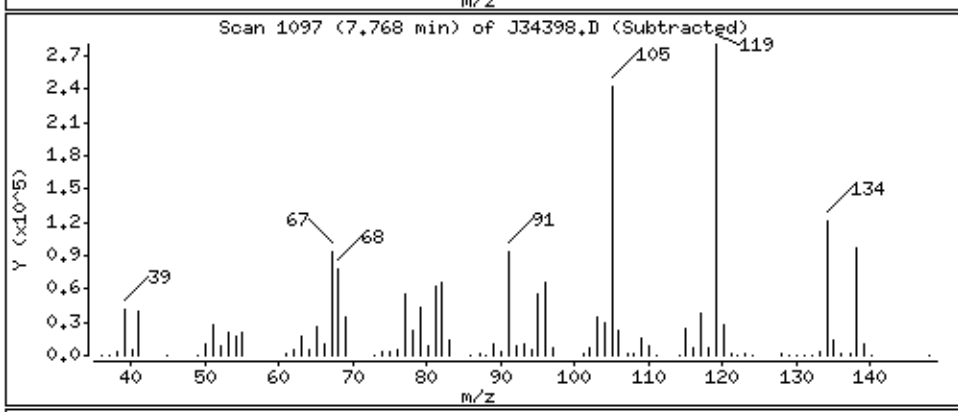
Column diameter: 0.18

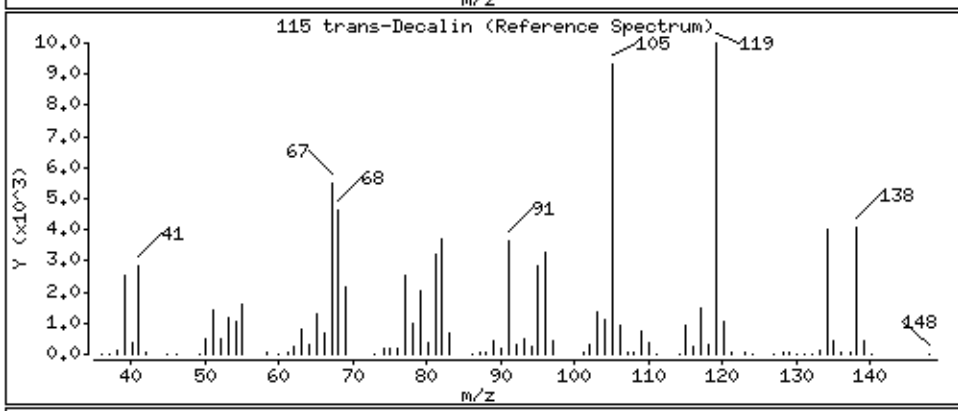
115 trans-Decalin

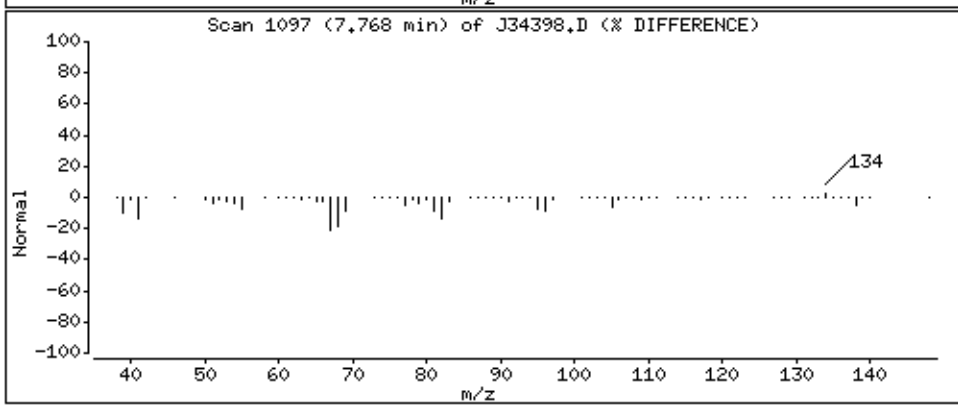
Concentration: 70.8 ug/L

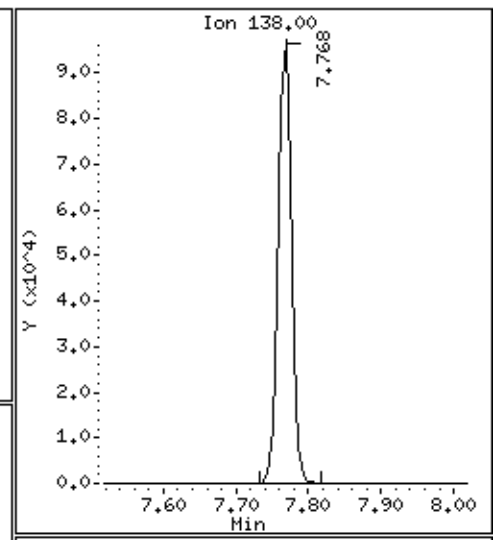
Review Code:

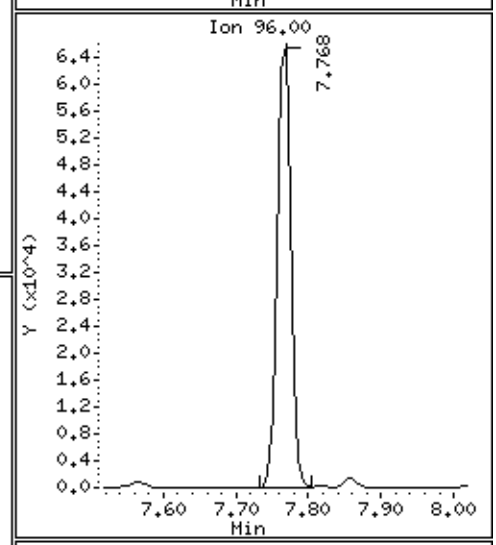


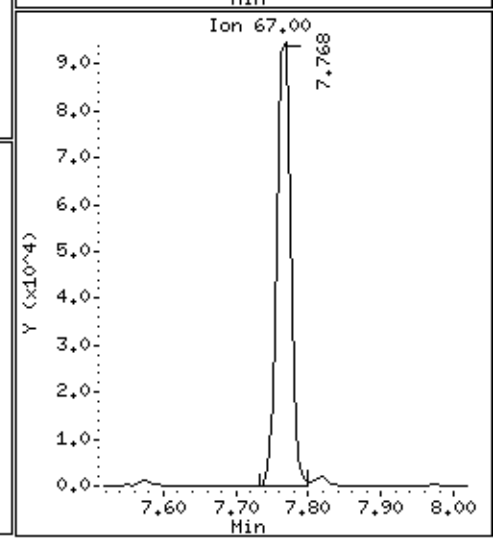












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D

Date : 25-APR-2017 13:27

Client ID: MBLCS

Instrument: 70msv6.i

Sample Info: 103009, 15067:1.25

Purge Volume: 5.0

Operator: KGG

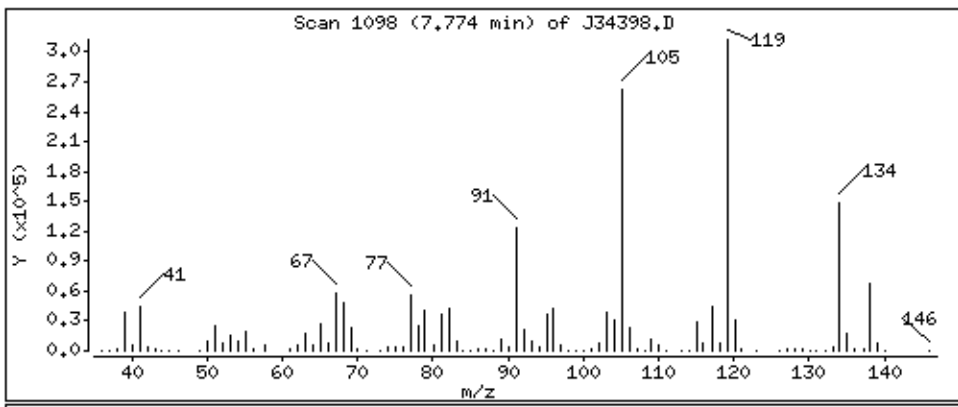
Column phase: RTX-624

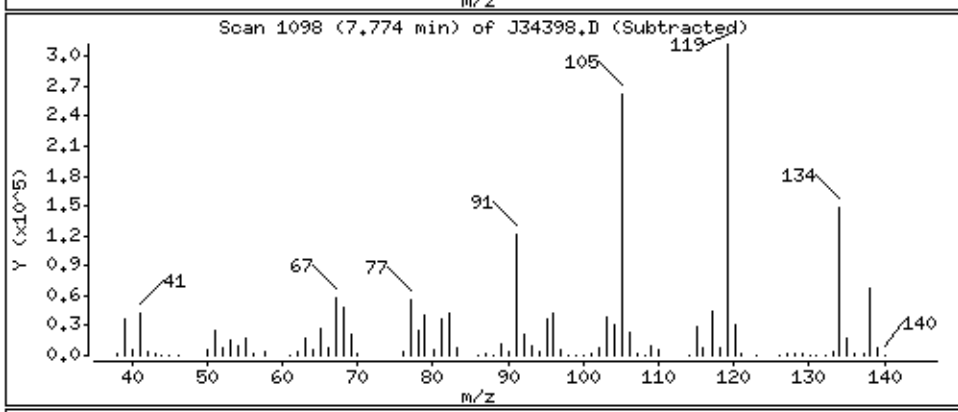
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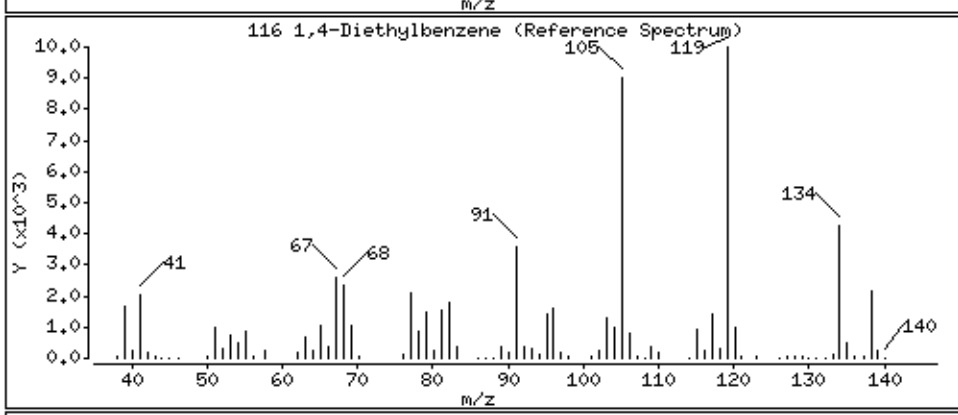
116 1,4-Diethylbenzene

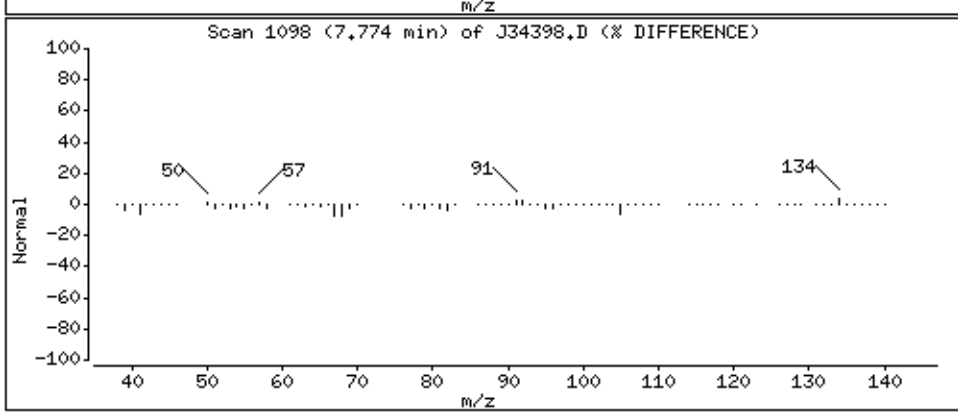
Concentration: 50.7 ug/L

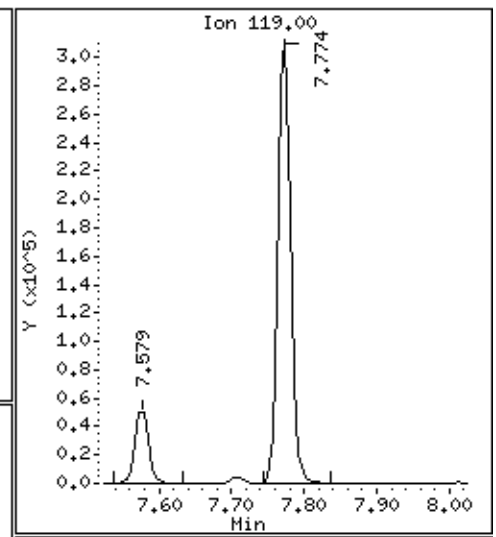
Review Code:

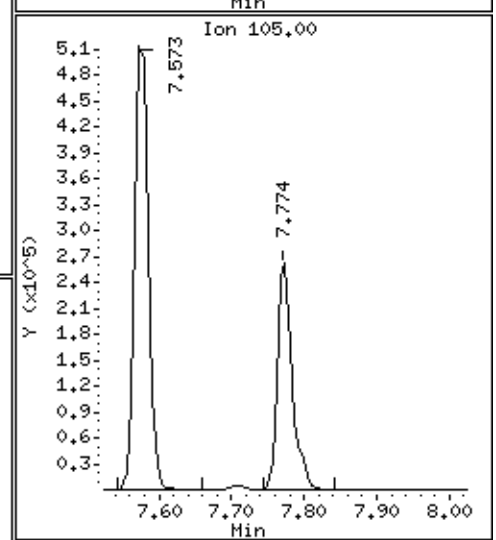


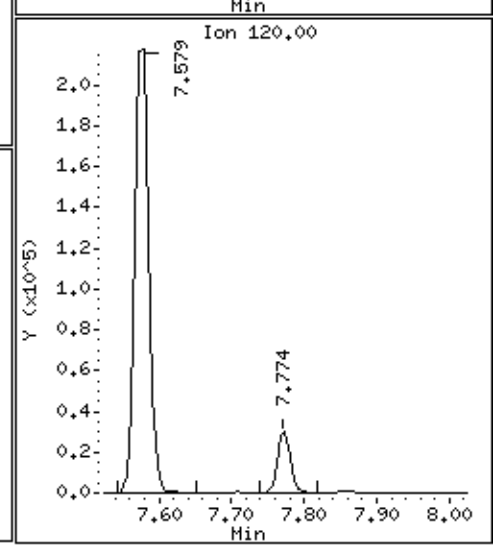












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D

Date : 25-APR-2017 13:27

Client ID: MBLCS

Instrument: 70msv6.i

Sample Info: 103009, 15067:1.25

Purge Volume: 5.0

Operator: KGG

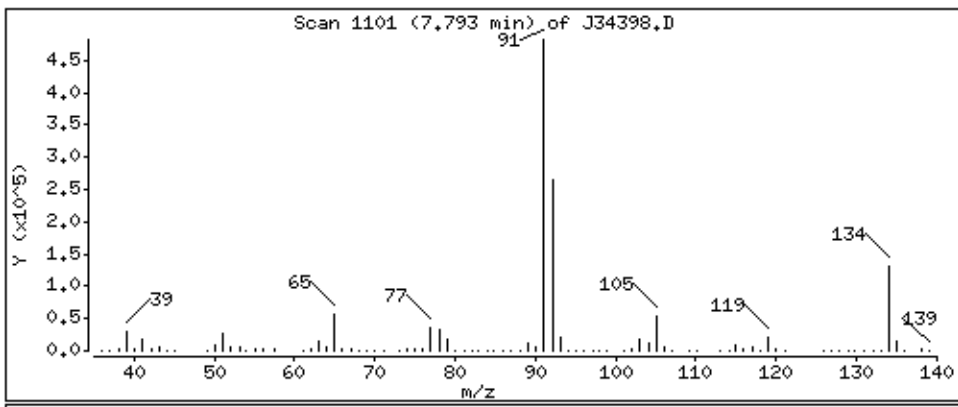
Column phase: RTX-624

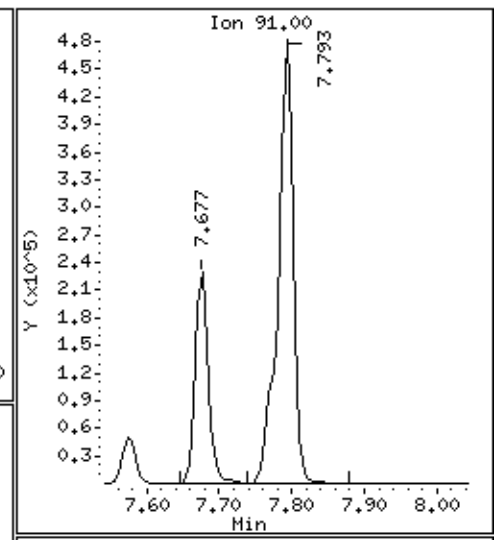
Column diameter: 0.18

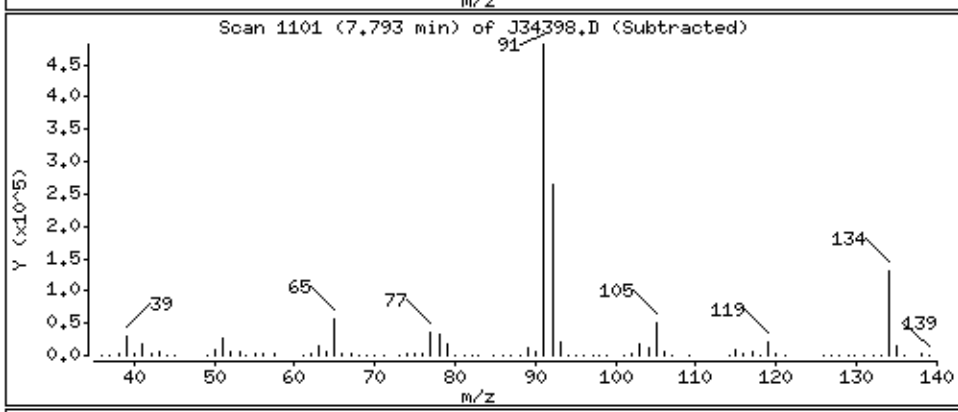
117 n-Butylbenzene

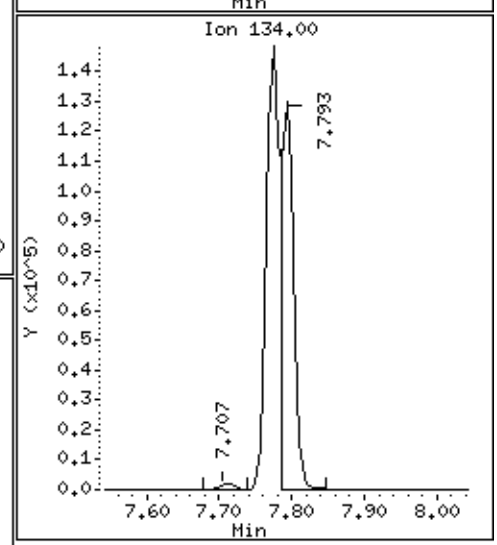
Concentration: 50.2 ug/L

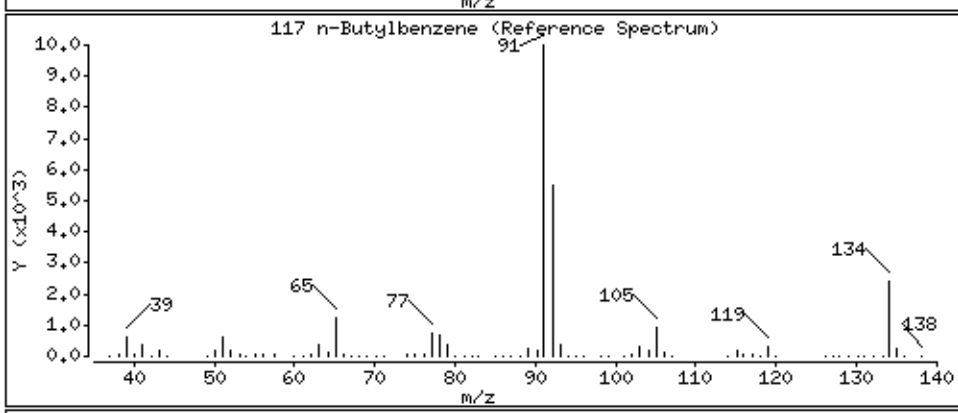
Review Code:

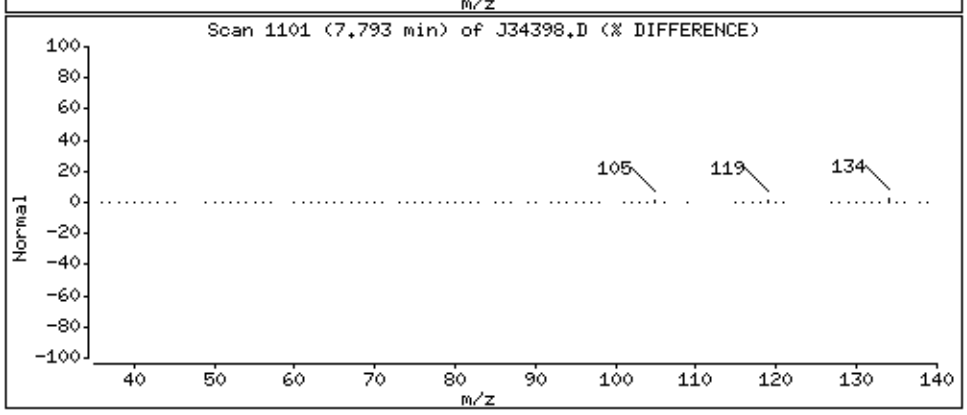












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D

Date : 25-APR-2017 13:27

Client ID: MBLCS

Instrument: 70msv6.i

Sample Info: 103009, 15067:1.25

Purge Volume: 5.0

Operator: KGG

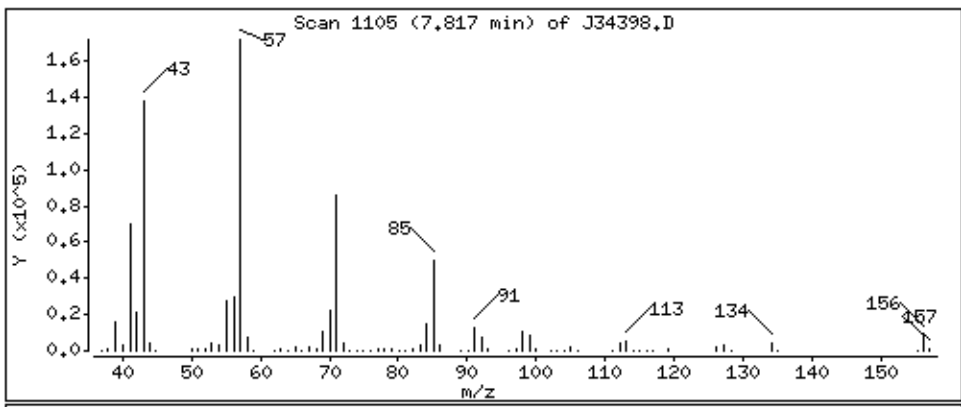
Column phase: RTX-624

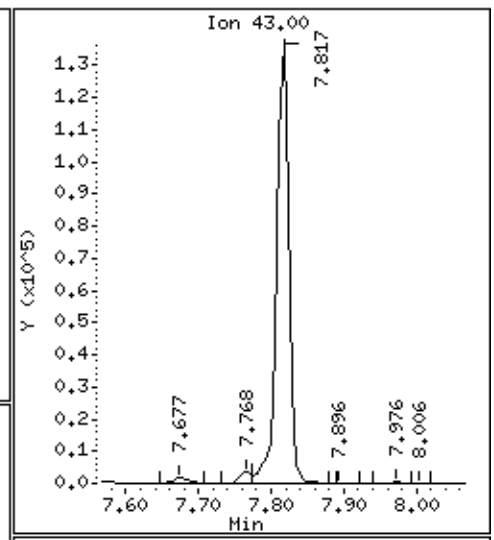
Column diameter: 0.18

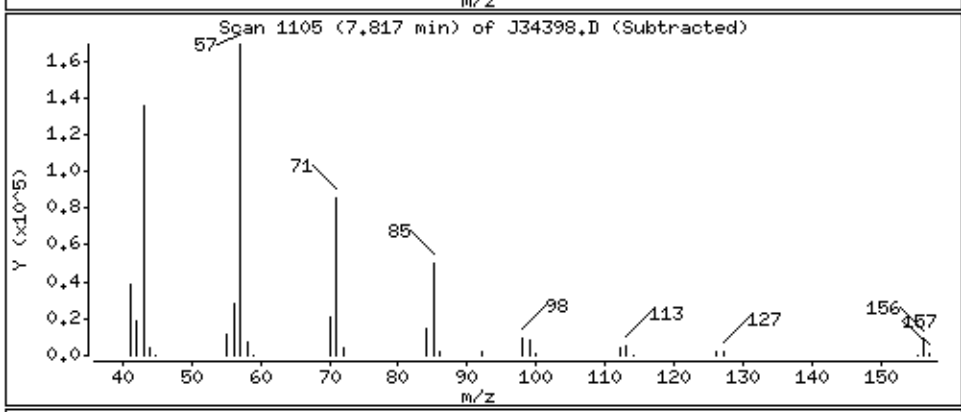
119 n-Undecane

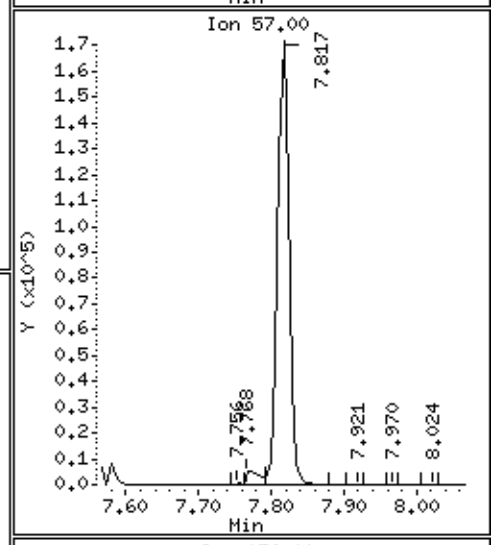
Concentration: 66.9 ug/L

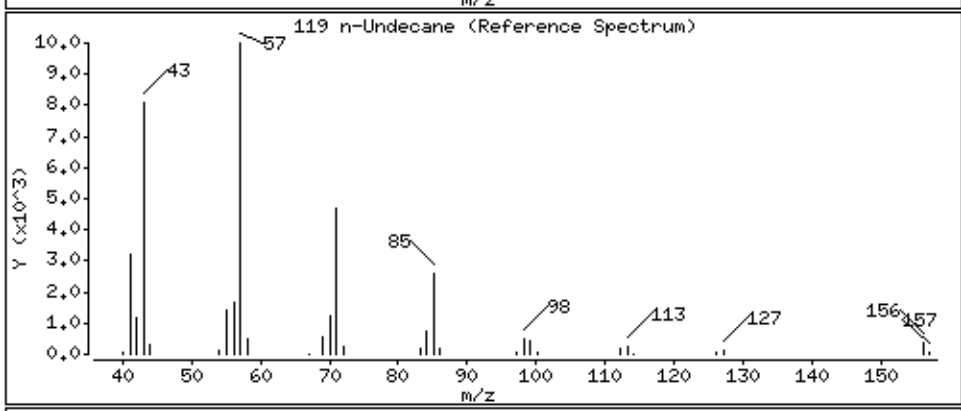
Review Code:

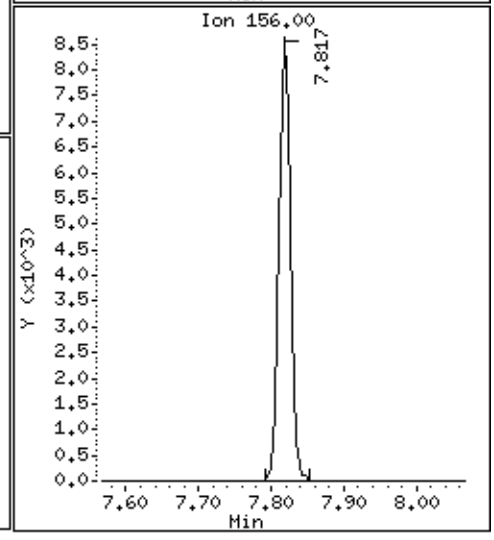


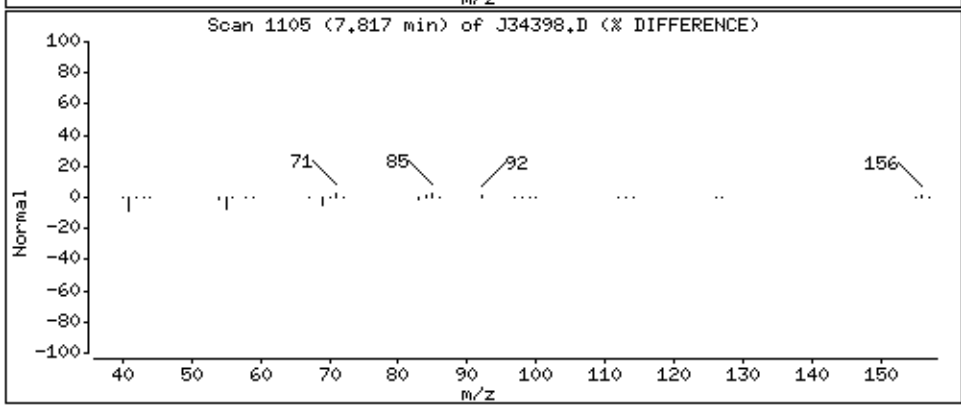












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D

Date : 25-APR-2017 13:27

Client ID: MBLCS

Instrument: 70msv6.i

Sample Info: 103009, 15067:1.25

Purge Volume: 5.0

Operator: KGG

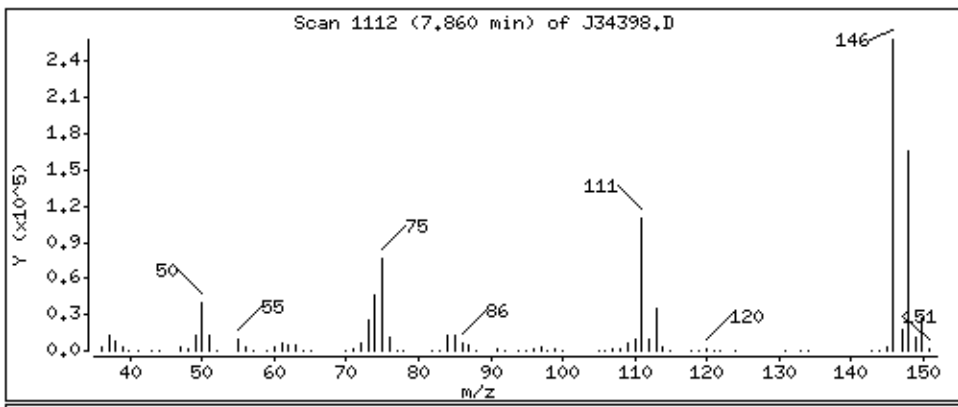
Column phase: RTX-624

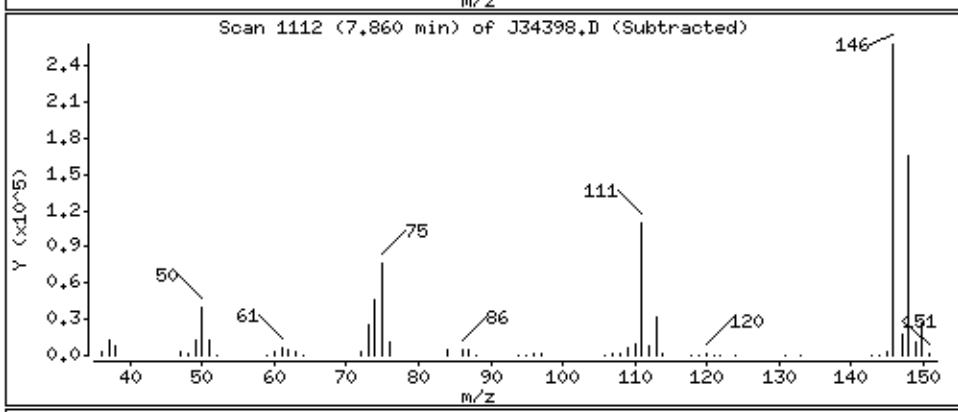
Column diameter: 0.18

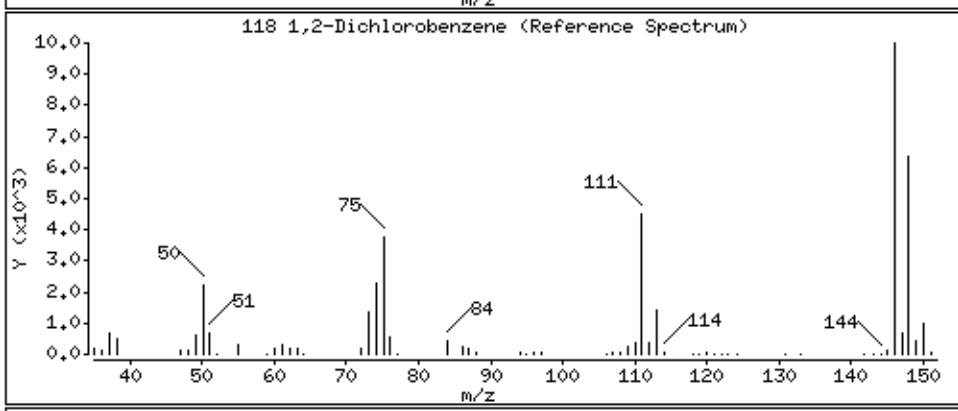
118 1,2-Dichlorobenzene

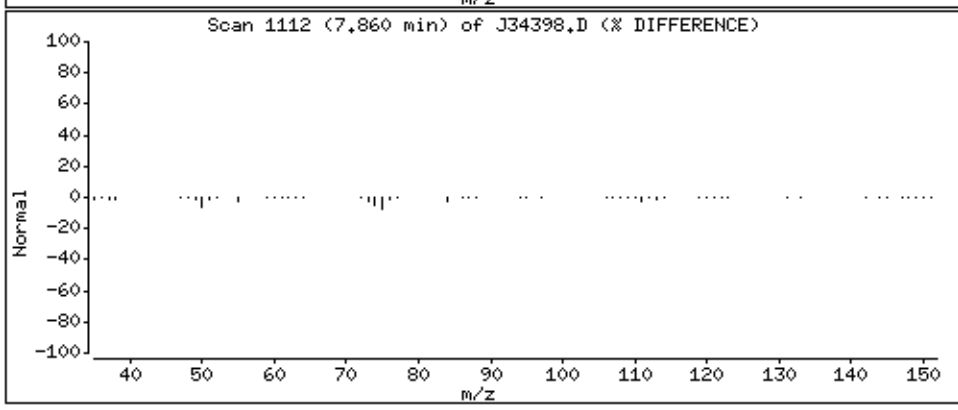
Concentration: 44.4 ug/L

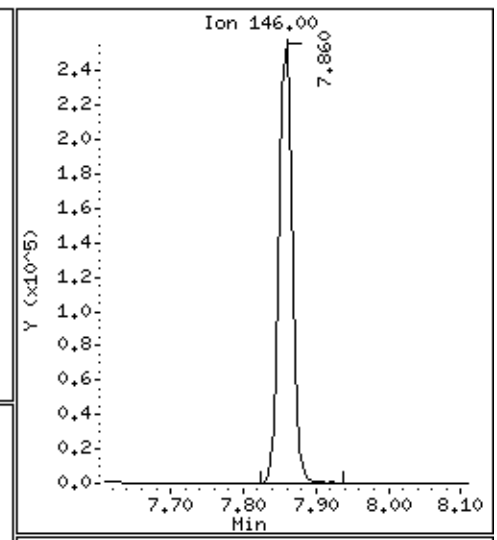
Review Code:

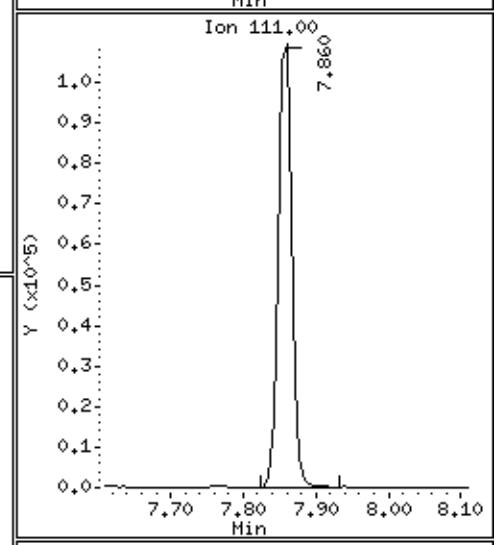


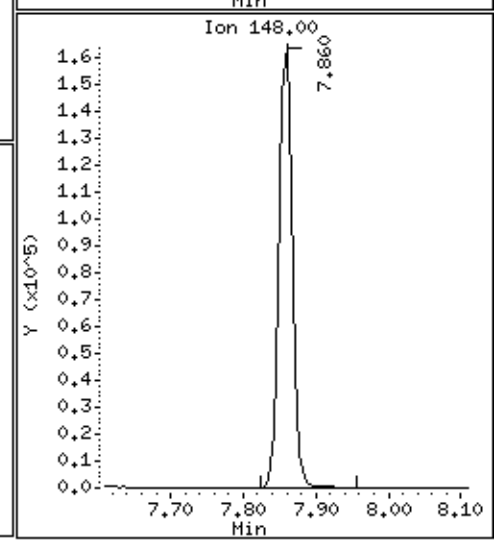












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D

Date : 25-APR-2017 13:27

Client ID: MBLCS

Instrument: 70msv6.i

Sample Info: 103009, 15067:1.25

Purge Volume: 5.0

Operator: KGG

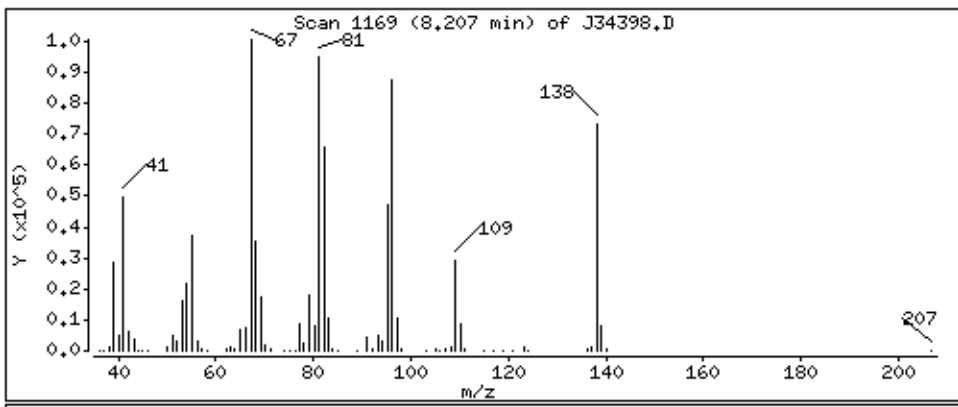
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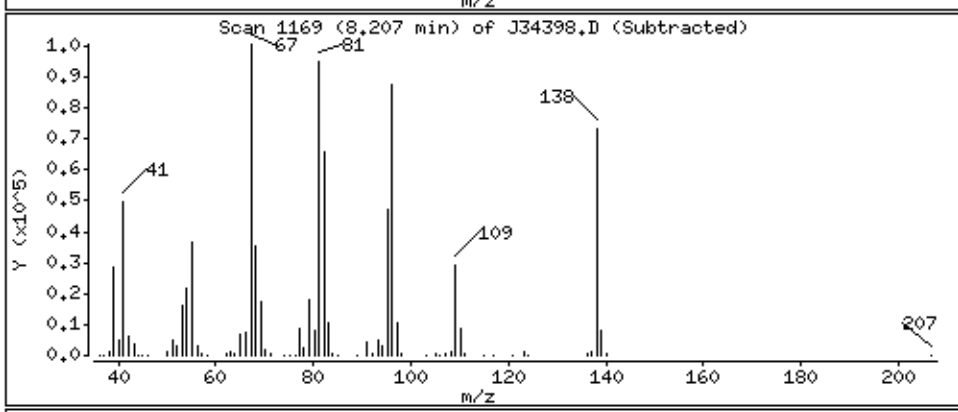
Column diameter: 0.18

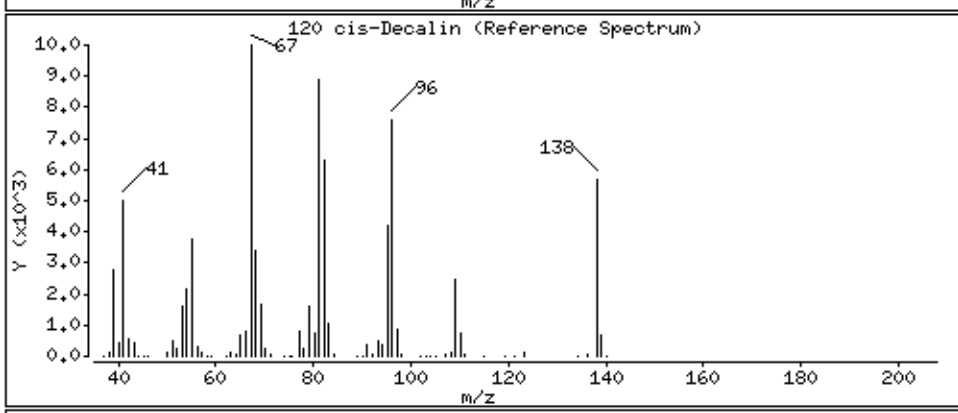
120 cis-Decalin

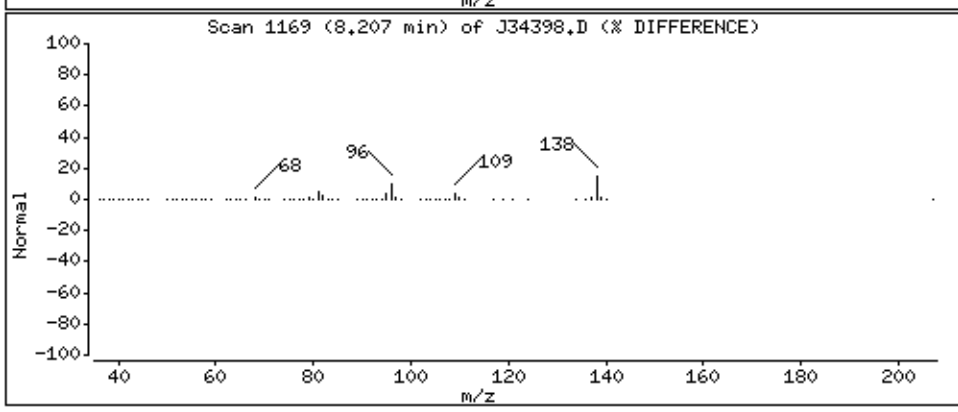
Concentration: 69.2 ug/L

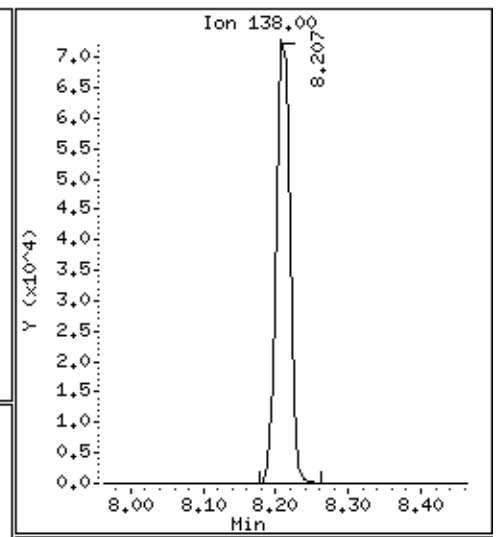
Review Code:

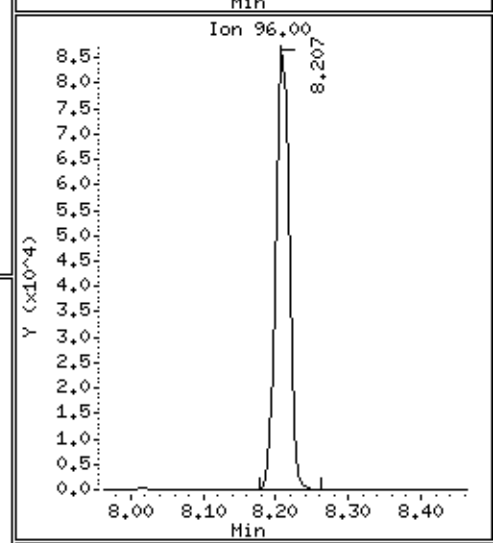


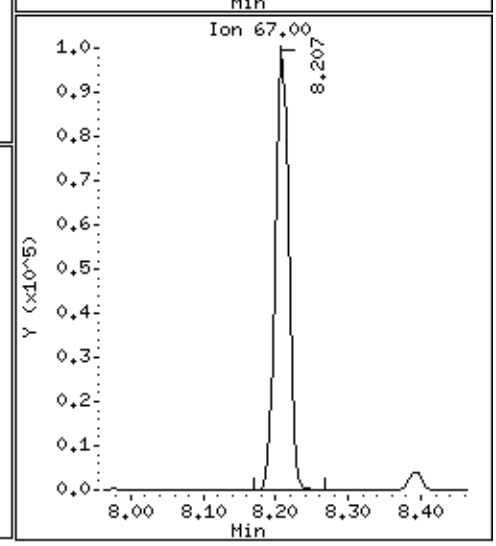












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D

Date : 25-APR-2017 13:27

Client ID: MBLCS

Instrument: 70msv6.i

Sample Info: 103009, 15067:1.25

Purge Volume: 5.0

Operator: KGG

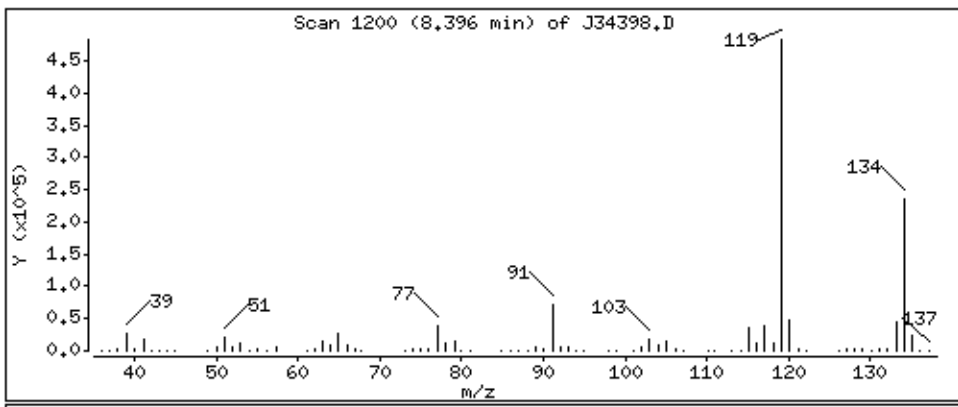
Column phase: RTX-624

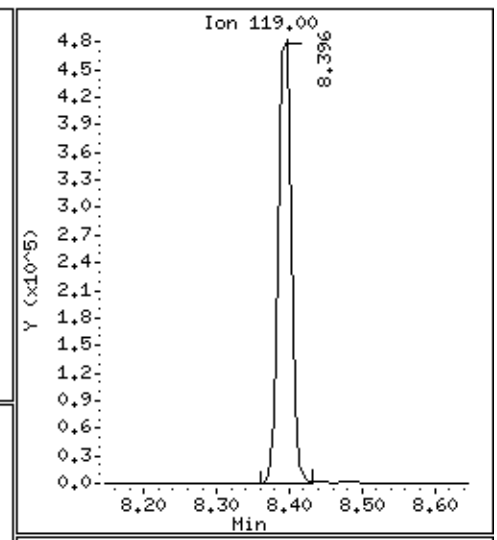
Column diameter: 0.18

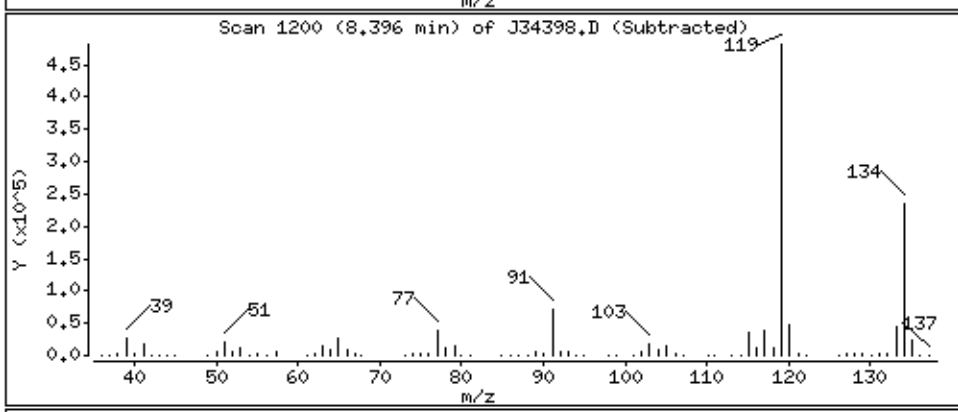
121 1,2,4,5-tetramethylbenzene

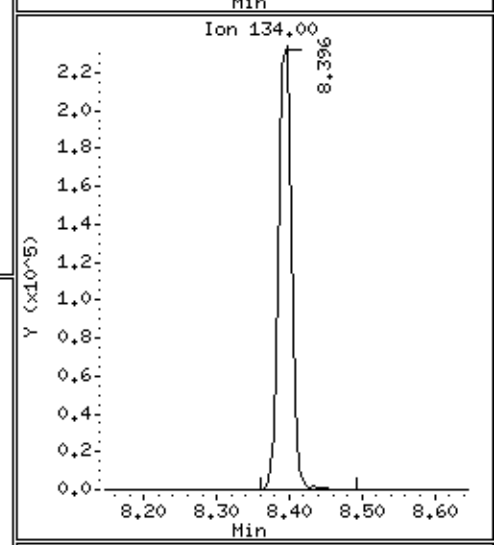
Concentration: 56.6 ug/L

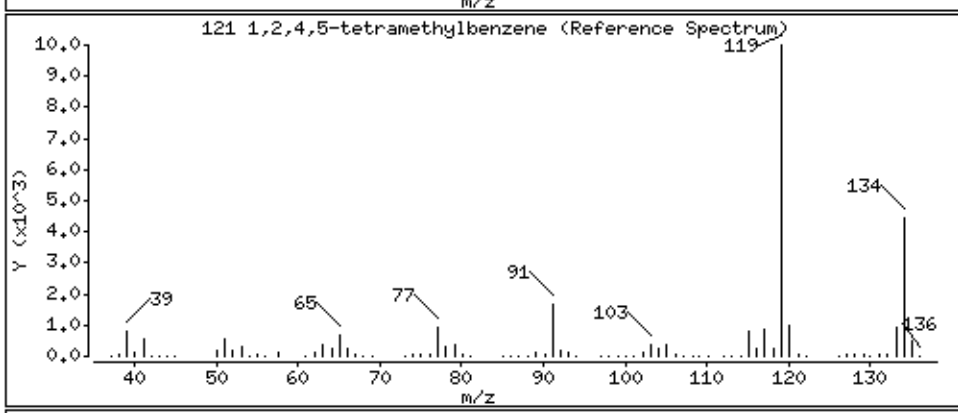
Review Code:

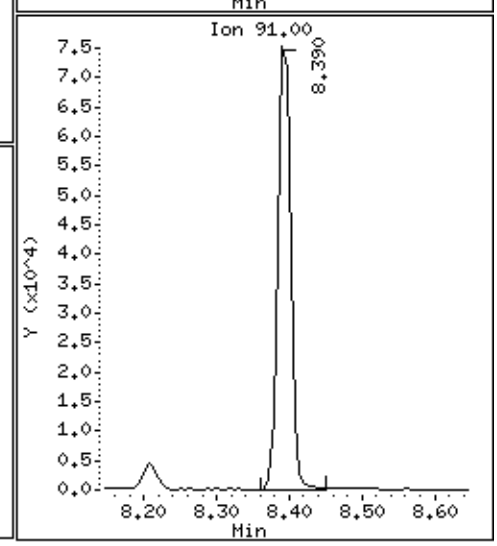


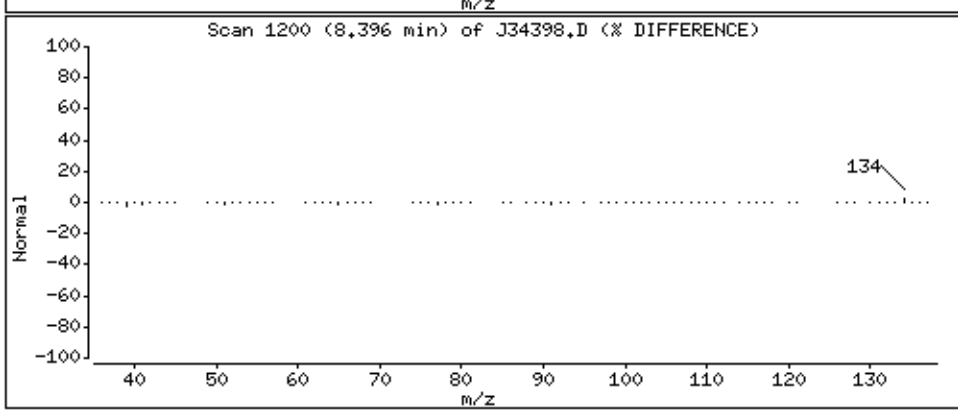












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D

Date : 25-APR-2017 13:27

Client ID: MBLCS

Instrument: 70msv6.i

Sample Info: 103009, 15067:1.25

Purge Volume: 5.0

Operator: KGG

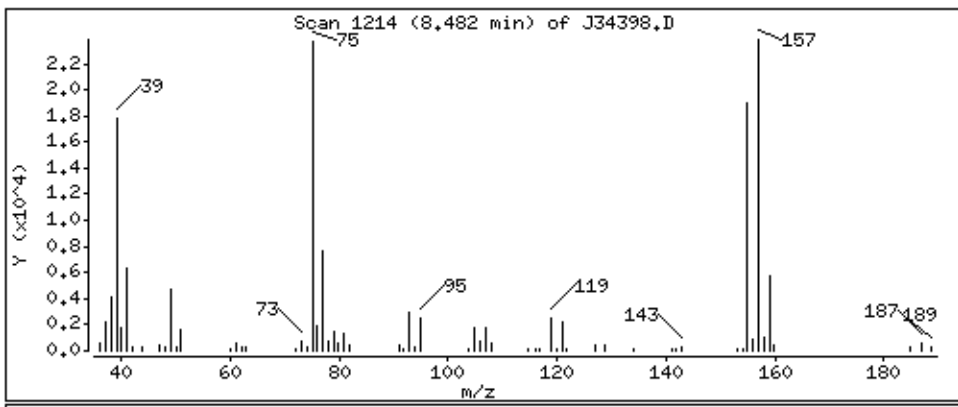
Column phase: RTX-624

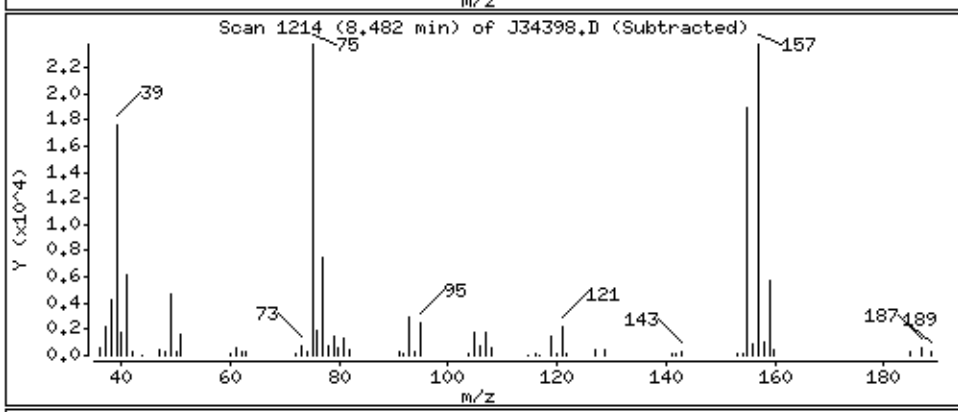
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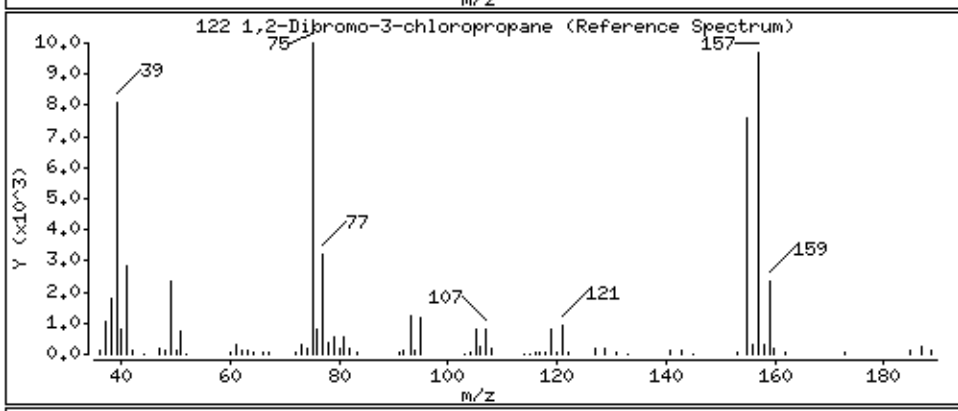
122 1,2-Dibromo-3-chloropropane

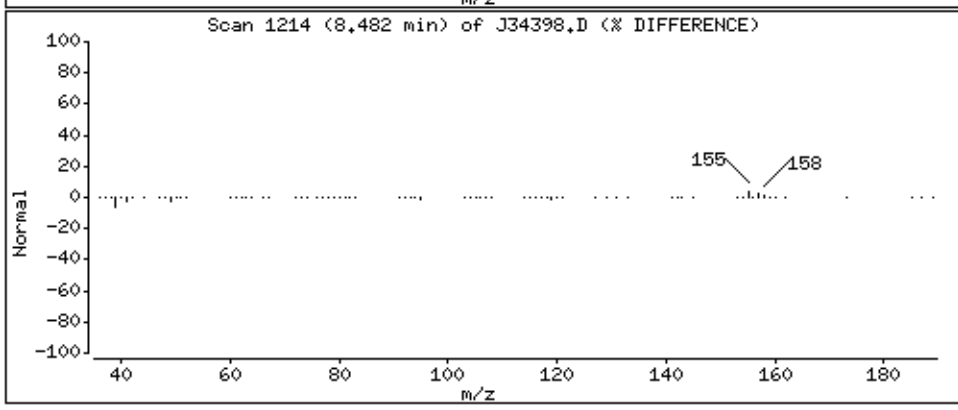
Concentration: 41.3 ug/L

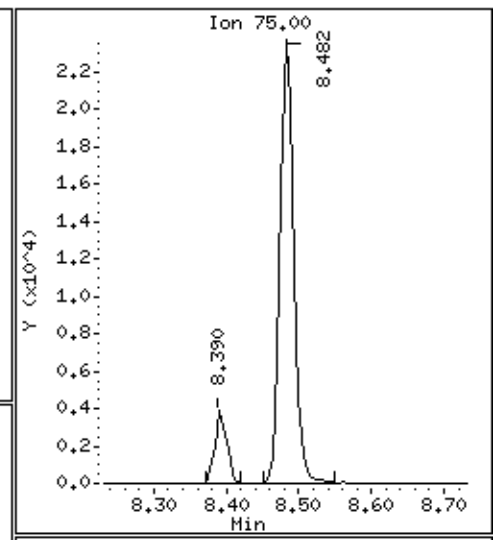
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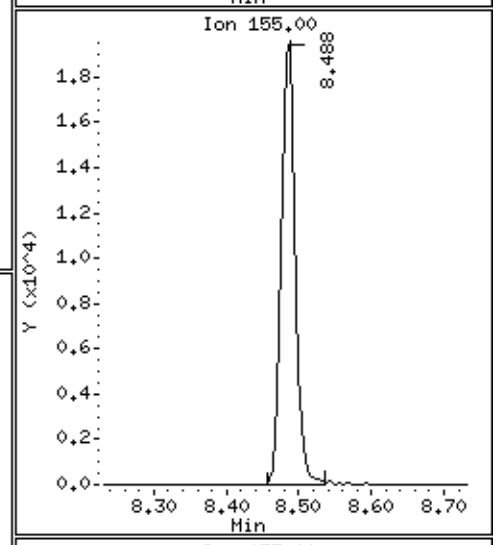


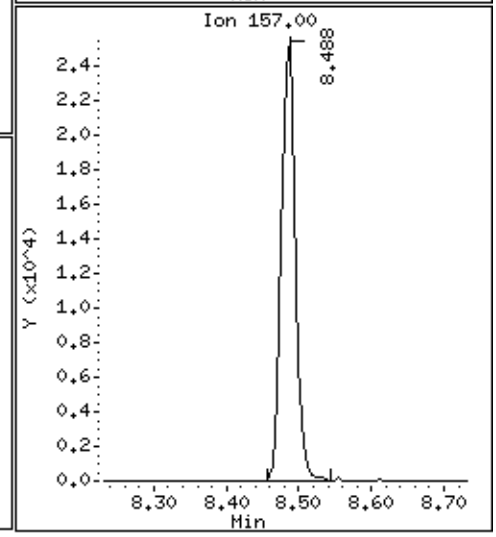












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D

Date : 25-APR-2017 13:27

Client ID: MBLCS

Instrument: 70msv6.i

Sample Info: 103009, 15067:1.25

Purge Volume: 5.0

Operator: KGG

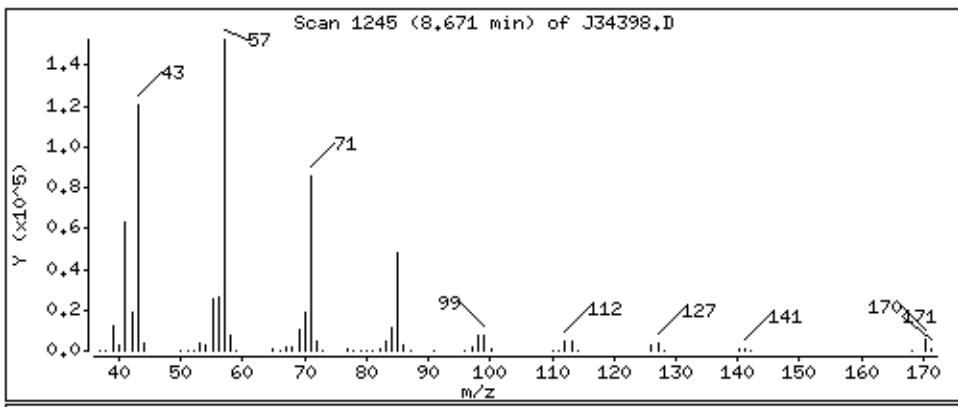
Column phase: RTX-624

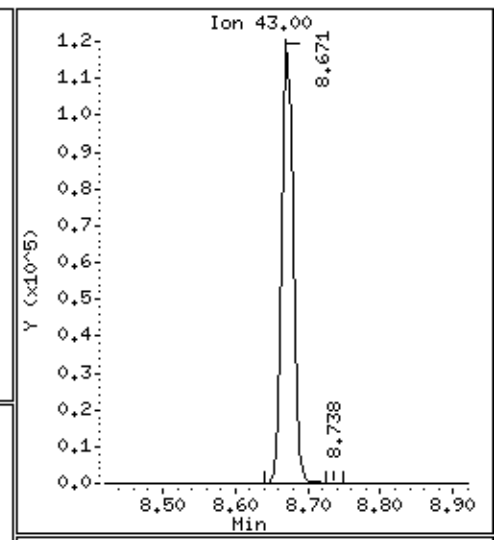
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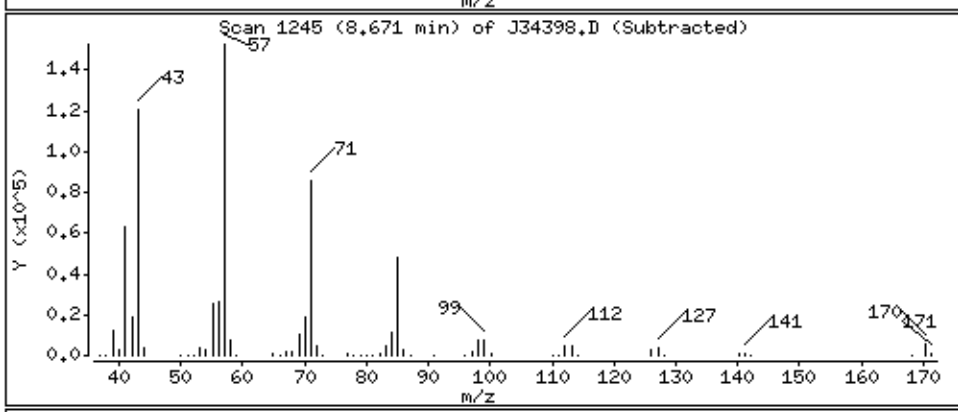
123 n-Dodecane

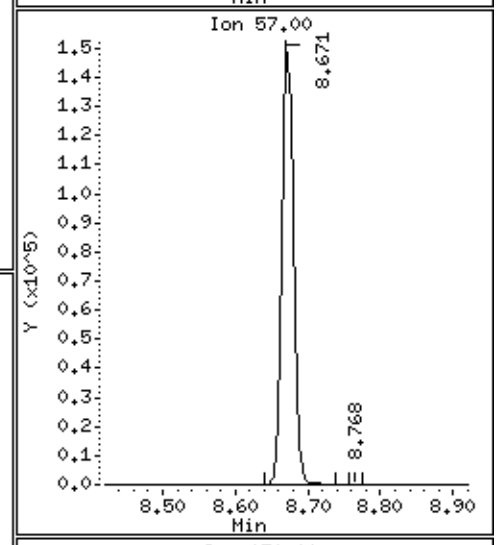
Concentration: 92.6 ug/L

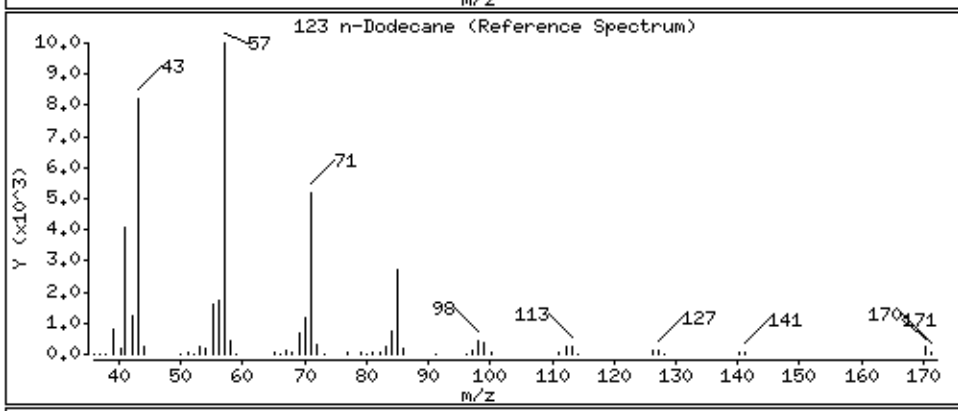
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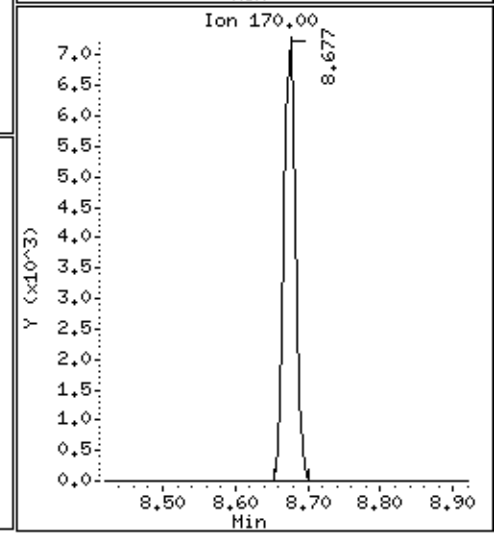


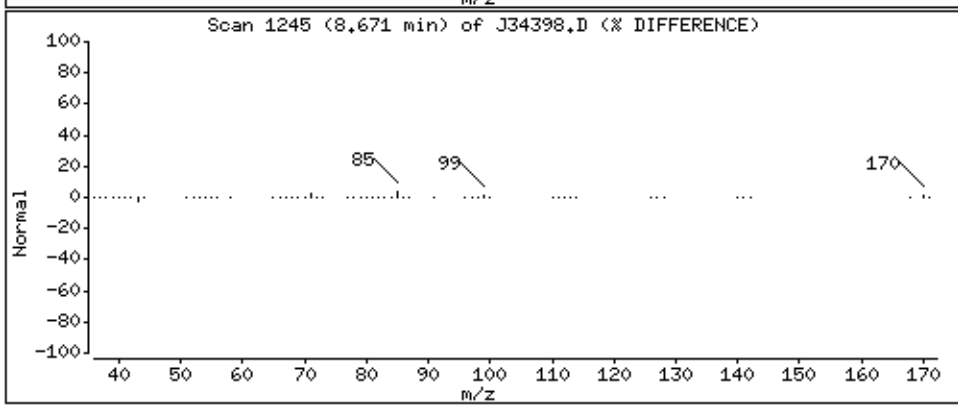












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D

Date : 25-APR-2017 13:27

Client ID: MBLCS

Instrument: 70msv6.i

Sample Info: 103009, 15067:1.25

Purge Volume: 5.0

Operator: KGG

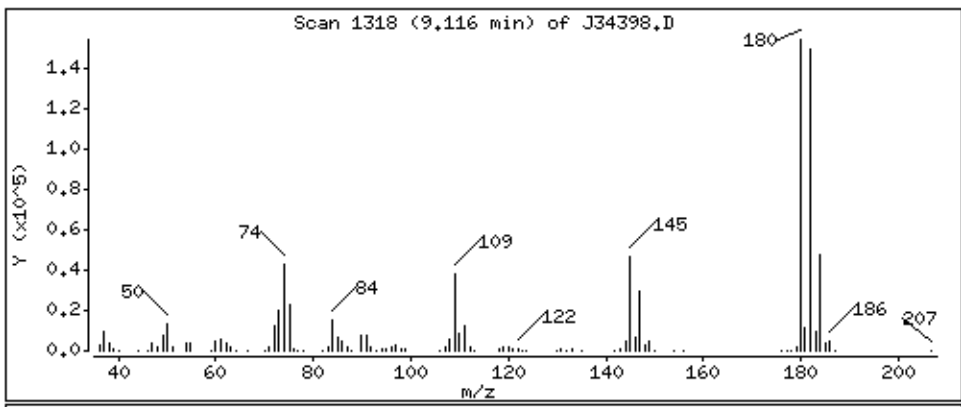
Column phase: RTX-624

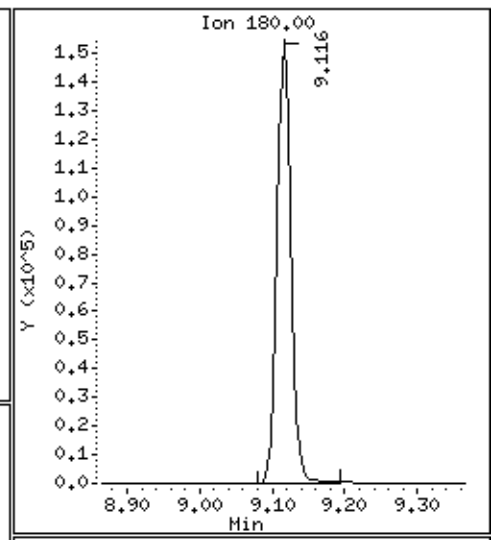
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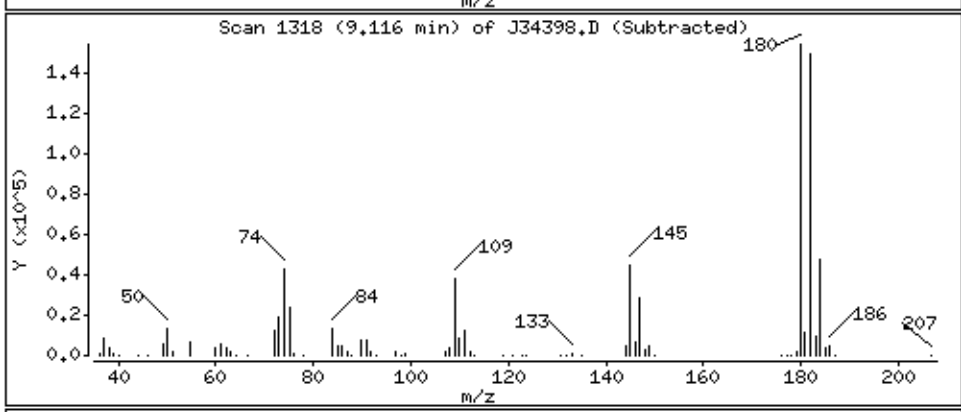
124 1,2,4-Trichlorobenzene

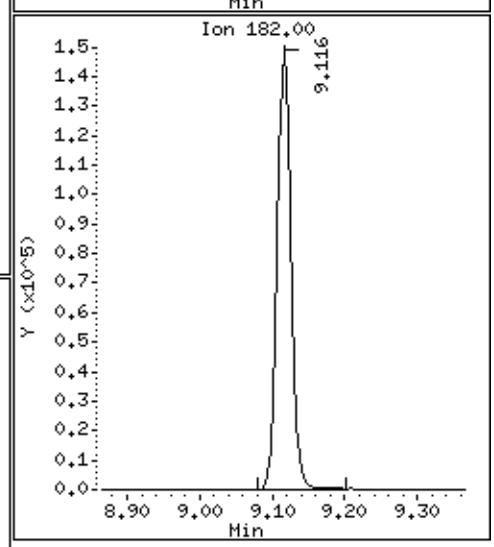
Concentration: 51.9 ug/L

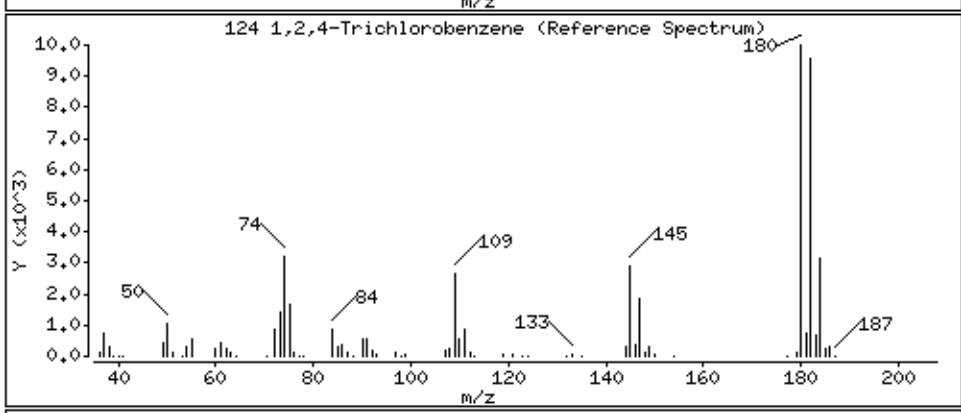
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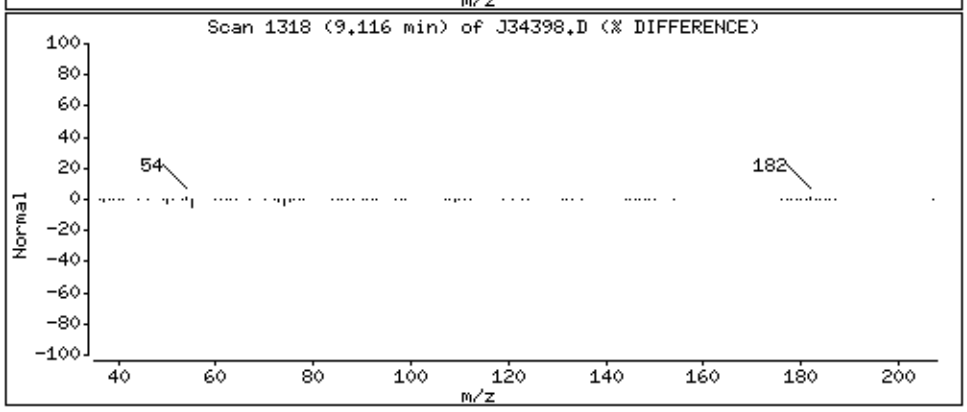












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D

Date : 25-APR-2017 13:27

Client ID: MBLCS

Instrument: 70msv6.i

Sample Info: 103009, 15067:1.25

Purge Volume: 5.0

Operator: KGG

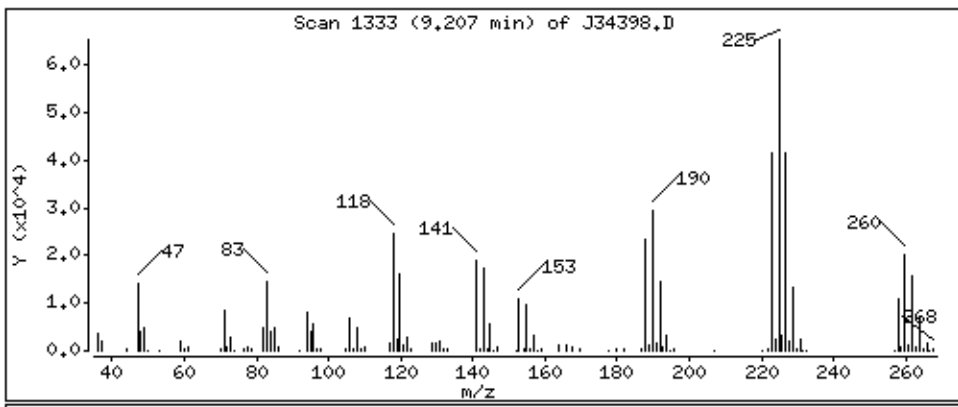
Column phase: RTX-624

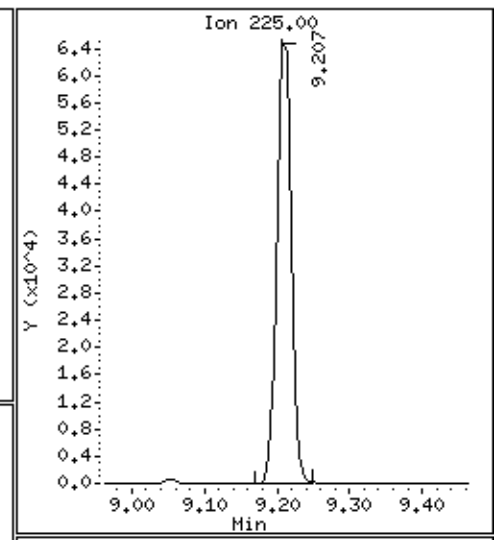
Column diameter: 0.18

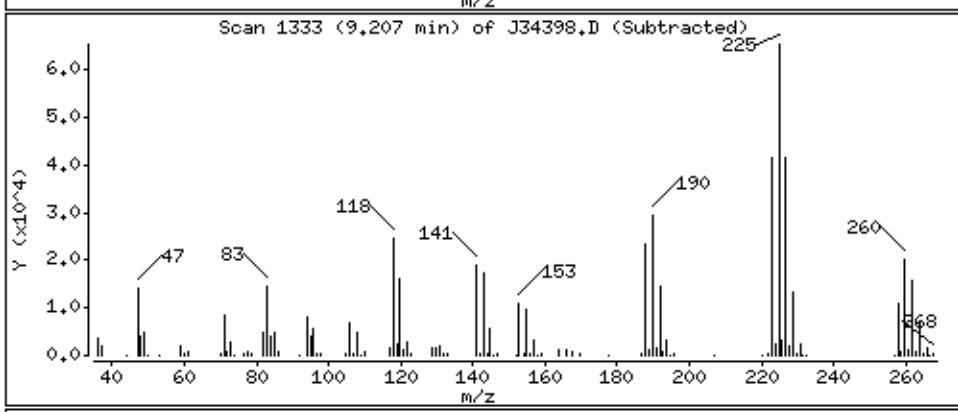
125 Hexachloro-1,3-butadiene

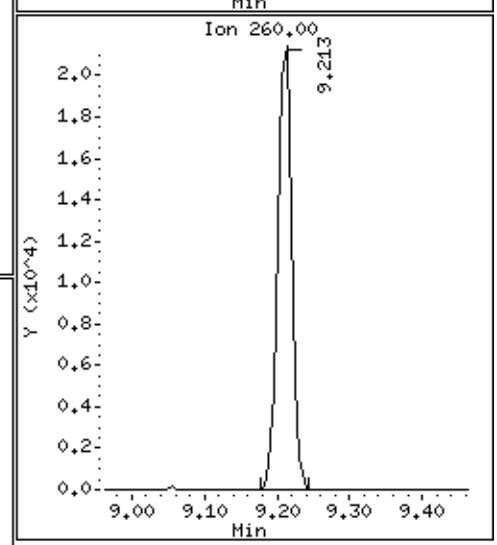
Concentration: 65.0 ug/L

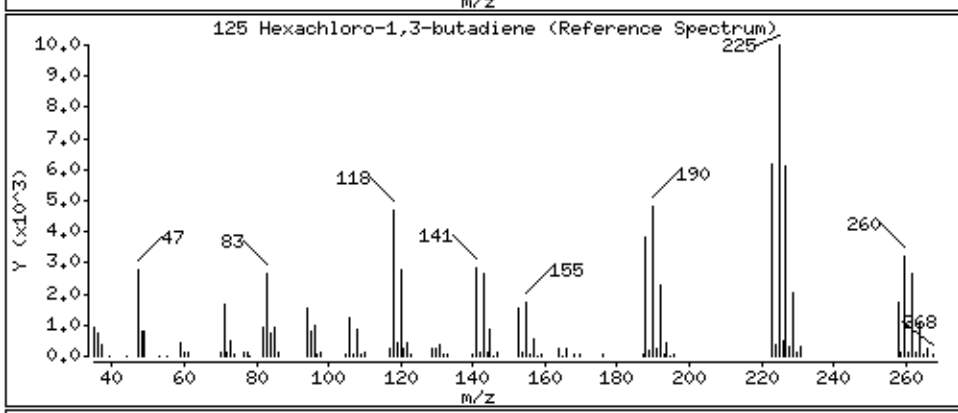
Review Code:

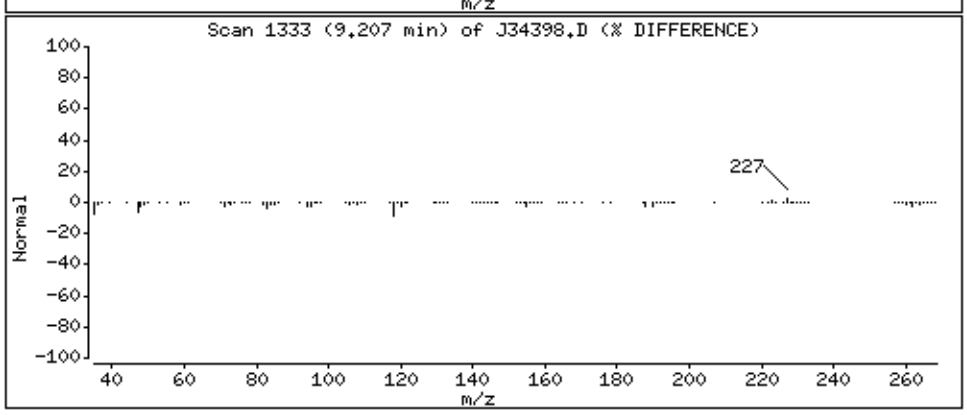












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D

Date : 25-APR-2017 13:27

Client ID: MBLCS

Instrument: 70msv6.i

Sample Info: 103009, 15067:1.25

Purge Volume: 5.0

Operator: KGG

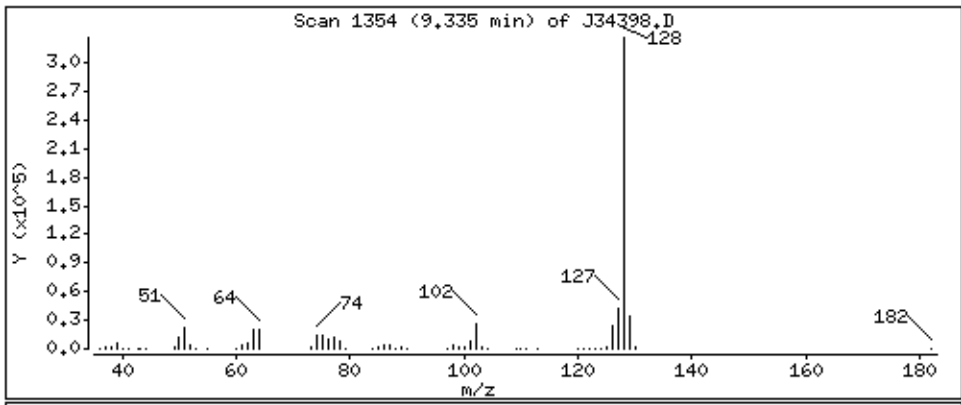
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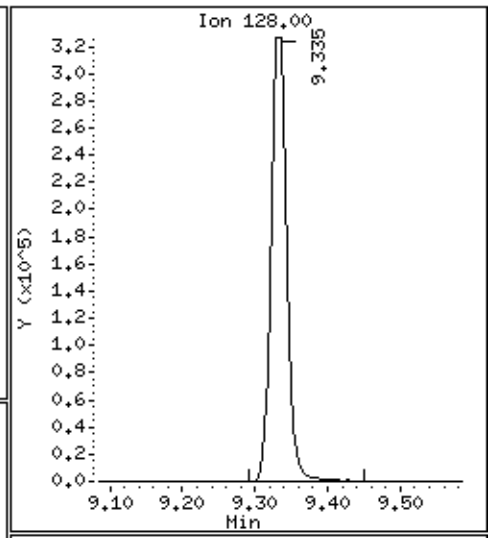
Column diameter: 0.18

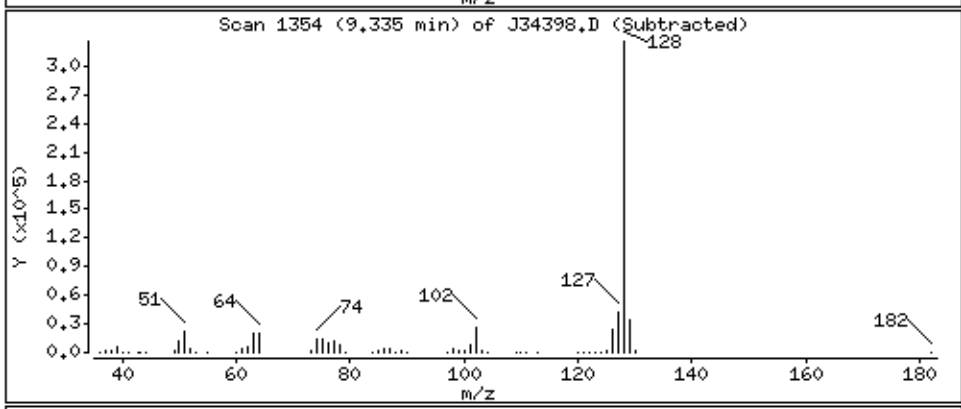
126 Naphthalene

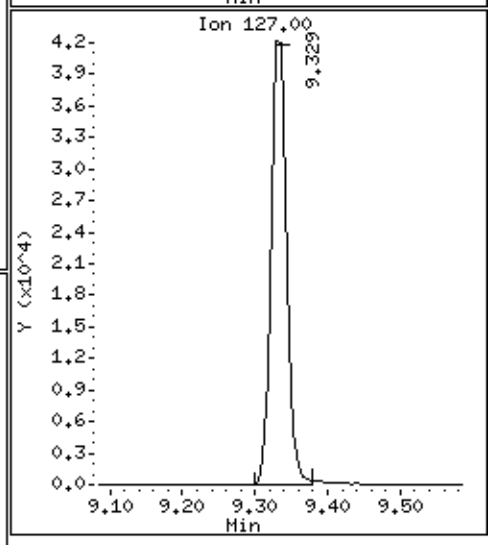
Concentration: 49.2 ug/L

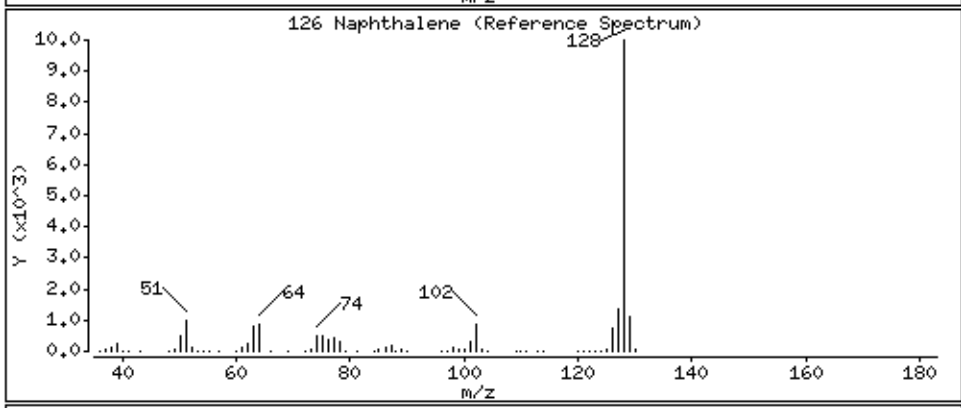
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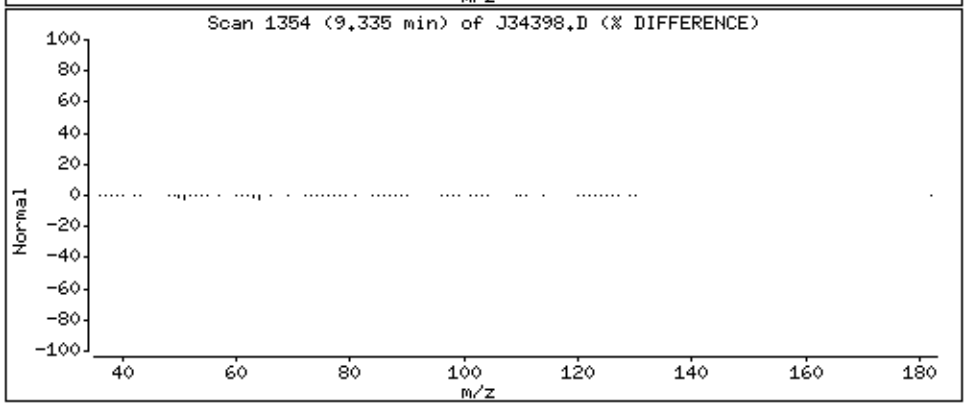












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34398.D

Date : 25-APR-2017 13:27

Client ID: MBLCS

Instrument: 70msv6.i

Sample Info: 103009, 15067:1.25

Purge Volume: 5.0

Operator: KGG

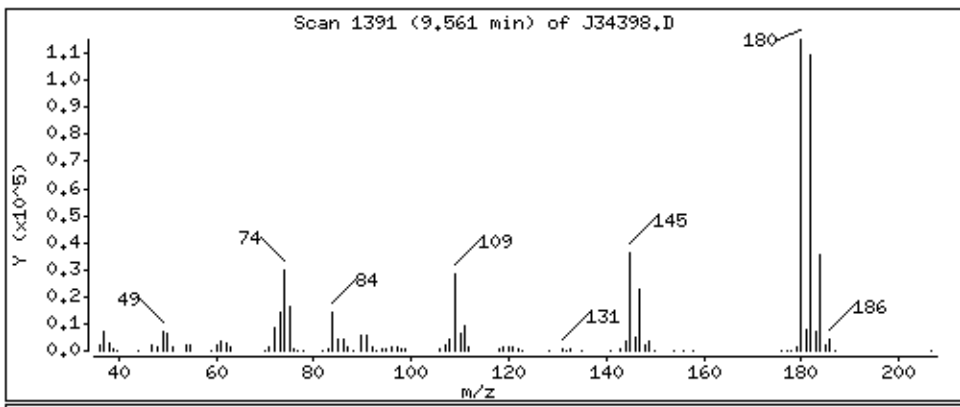
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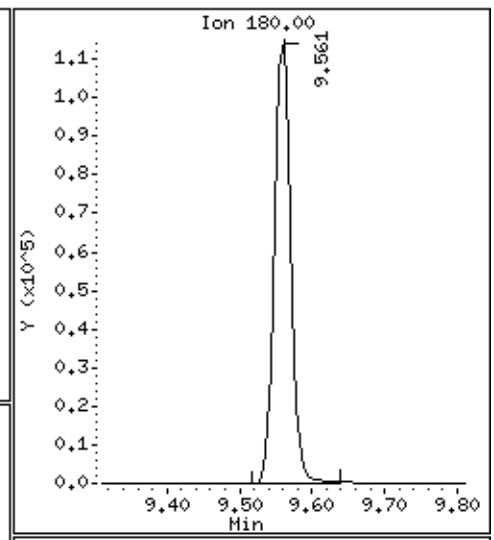
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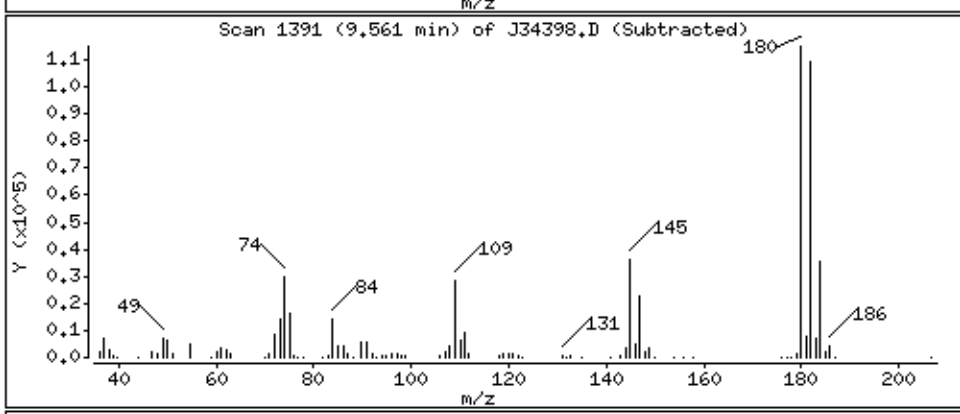
127 1,2,3-Trichlorobenzene

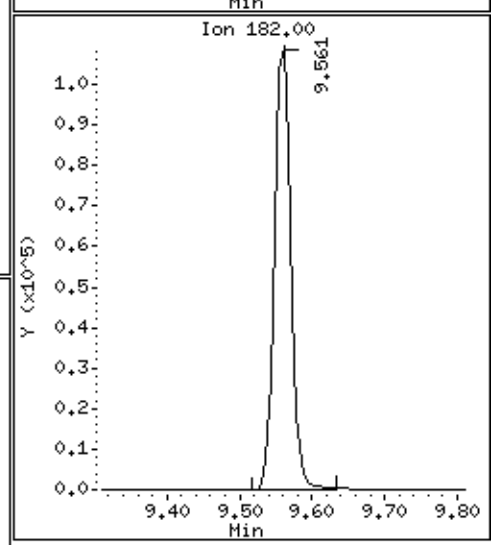
Concentration: 50.8 ug/L

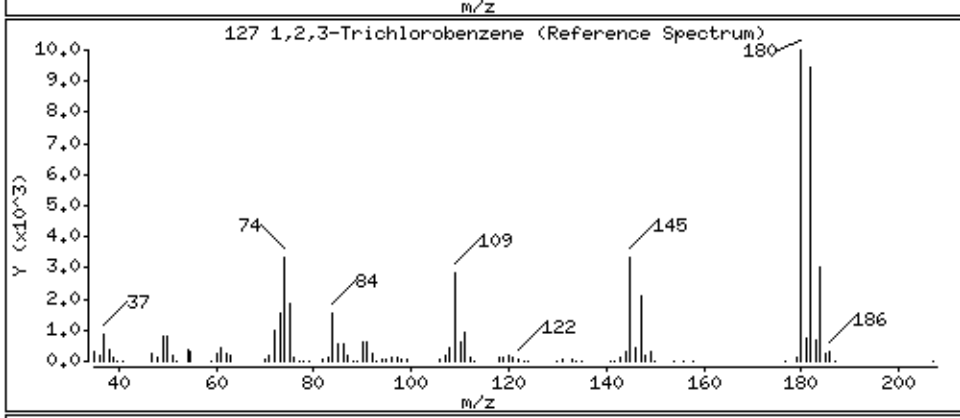
Review Code:

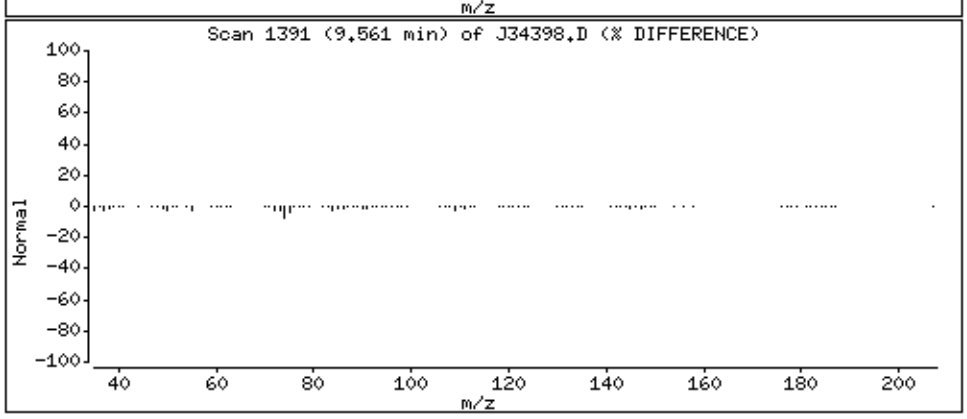












Data File: \\v70wintarget\chem\70msv6.i\042517.b/J34398.D
Injection Date: 25-APR-2017 13:27
Instrument: 70msv6.i
Lab Sample ID: 103009
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

SAMPLE NO.

MS

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York Contract: NORTH SEA LANDFILL

Date Received: 04/21/2017 11:00 Matrix: Water SDG No.: 7016438

Date Extracted: 04/25/2017 19:07 Lab Sample ID: 103081

Date Analyzed: 04/25/2017 19:07 Lab File ID: 042517.B\J34417.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1 Instrument: 70MSV6 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	31.5	
107-13-1	Acrylonitrile	35.6	
71-43-2	Benzene	44.9	
74-97-5	Bromochloromethane	45.8	
75-27-4	Bromodichloromethane	46.2	
75-25-2	Bromoform	46.6	
74-83-9	Bromomethane	39.3	
78-93-3	2-Butanone (MEK)	33.9	
75-15-0	Carbon disulfide	49.7	
56-23-5	Carbon tetrachloride	57.0	
108-90-7	Chlorobenzene	47.4	
75-00-3	Chloroethane	46.7	
67-66-3	Chloroform	43.7	
74-87-3	Chloromethane	43.3	
96-12-8	1,2-Dibromo-3-chloropropane	38.9	
124-48-1	Dibromochloromethane	56.3	
106-93-4	1,2-Dibromoethane (EDB)	56.9	
74-95-3	Dibromomethane	42.7	
95-50-1	1,2-Dichlorobenzene	44.7	
106-46-7	1,4-Dichlorobenzene	43.4	
110-57-6	trans-1,4-Dichloro-2-butene	34.8	
75-34-3	1,1-Dichloroethane	41.3	
107-06-2	1,2-Dichloroethane	37.5	
75-35-4	1,1-Dichloroethene	52.6	
156-59-2	cis-1,2-Dichloroethene	46.2	
156-60-5	trans-1,2-Dichloroethene	48.1	
78-87-5	1,2-Dichloropropane	39.8	
10061-01-5	cis-1,3-Dichloropropene	46.5	
10061-02-6	trans-1,3-Dichloropropene	41.2	
100-41-4	Ethylbenzene	49.3	
591-78-6	2-Hexanone	30.3	
74-88-4	Iodomethane	42.2	
75-09-2	Methylene Chloride	47.0	
108-10-1	4-Methyl-2-pentanone (MIBK)	33.9	
100-42-5	Styrene	48.0	
630-20-6	1,1,1,2-Tetrachloroethane	48.8	
79-34-5	1,1,2,2-Tetrachloroethane	38.3	

SAMPLE NO.

MS

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York Contract: NORTH SEA LANDFILL

Date Received: 04/21/2017 11:00 Matrix: Water SDG No.: 7016438

Date Extracted: 04/25/2017 19:07 Lab Sample ID: 103081

Date Analyzed: 04/25/2017 19:07 Lab File ID: 042517.B\J34417.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1 Instrument: 70MSV6 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
127-18-4	Tetrachloroethene	54.3	
108-88-3	Toluene	45.6	
71-55-6	1,1,1-Trichloroethane	48.2	
79-00-5	1,1,2-Trichloroethane	44.5	
79-01-6	Trichloroethene	47.3	
75-69-4	Trichlorofluoromethane	49.8	
96-18-4	1,2,3-Trichloropropane	40.4	
108-05-4	Vinyl acetate	43.4	
75-01-4	Vinyl chloride	50.8	
1330-20-7	Xylene (Total)	146	

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D
Report Date: 29-Apr-2017 22:54

Pace Analytical Services, Inc.

SW846-8260C/EPA 624

Data file : \\v70wintarget\chem\70msv6.i\042517.b\J34417.D
Lab Smp Id: 103081 Client Smp ID: MW-3CMS
Inj Date : 25-APR-2017 19:07 MS Autotune Date: 17-MAR-2017 06:2
Operator : KGG Inst ID: 70msv6.i
Smp Info : 103081, 15067:1.25
Misc Info : 2005,
Comment :
Method : \\v70wintarget\chem\70msv6.i\042517.b\032717_8260W.m
Meth Date : 29-Apr-2017 22:43 blagula Quant Type: ISTD
Cal Date : 27-MAR-2017 18:25 Cal File: J33244.D
Als bottle: 19 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A
Processing Host: 70MSV4WS10B6

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)	REVIEW C
1 Chlorodifluoromethane	51	1.281	1.282	(0.369)	244983	46.0879	46.1	
2 Dichlorotetrafluoroethane	135	1.349	1.349	(0.388)	103749	66.5518	66.6	
3 Dichlorodifluoromethane	85	1.263	1.269	(0.363)	185374	60.0591	60.0(Q)	
4 Chloromethane	50	1.397	1.397	(0.402)	215187	43.2713	43.3	
5 Vinyl chloride	62	1.464	1.464	(0.421)	235211	50.7761	50.8	
6 1,3-Butadiene	54	1.483	1.483	(0.427)	224547	48.9126	48.9	
7 Acetaldehyde	44	1.550	1.550	(0.446)	42741	40.5917	40.6	
8 Bromomethane	94	1.678	1.678	(0.483)	99285	39.2790	39.3	
9 Chloroethane	64	1.739	1.745	(0.500)	138652	46.6528	46.6	
10 Dichlorofluoromethane	67	1.867	1.867	(0.537)	332414	42.2779	42.3	
11 Trichlorofluoromethane	101	1.879	1.879	(0.541)	226858	49.8030	49.8	
12 Ethanol	45	2.013	2.013	(0.579)	33313	857.366	857(R)	
13 Diethyl ether (Ethyl ether)	59	2.043	2.044	(0.588)	148317	40.4955	40.5	
16 1,1,2-Trichlorotrifluoroethane	101	2.159	2.159	(0.621)	137770	51.4875	51.5	
14 Acrolein	56	2.159	2.165	(0.621)	8469	17.4689	17.5(QR)	
15 1,1-Dichloroethene	96	2.190	2.190	(0.630)	140235	52.5921	52.6	
17 Acetone	43	2.245	2.245	(0.646)	42917	31.5182	31.5(R)	
18 Iodomethane	142	2.293	2.294	(0.660)	157601	42.1574	42.2	
19 2-Propanol	45	2.306	2.306	(0.663)	209498	841.966	842	
20 Carbon disulfide	76	2.318	2.318	(0.667)	468272	49.6755	49.7	
21 Allyl chloride	76	2.403	2.403	(0.691)	115645	50.1372	50.1	
22 Acetonitrile	41	2.403	2.403	(0.691)	261472	169.890	170(R)	

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D
Report Date: 29-Apr-2017 22:54

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)	REVIEW C
	23 Methyl acetate	43	2.403	2.409	(0.691)	223478	36.8898	36.9	
	24 Methylene Chloride	84	2.482	2.489	(0.714)	172649	47.0235	47.0	
	25 tert-Butyl Alcohol	59	2.525	2.525	(0.726)	53559	201.374	201	
	28 Methyl-tert-butyl ether	73	2.592	2.592	(0.746)	540174	41.7567	41.8	
	27 trans-1,2-Dichloroethene	96	2.610	2.611	(0.751)	168711	48.1033	48.1	
	26 Acrylonitrile	53	2.653	2.653	(0.763)	57683	35.6331	35.6	
	30 n-Hexane	57	2.714	2.714	(0.781)	236693	49.4415	49.4	
	29 Diisopropyl ether	45	2.842	2.842	(0.818)	575027	35.0193	35.0	
	32 Vinyl acetate	43	2.873	2.873	(0.826)	325058	43.4330	43.4	
	31 1,1-Dichloroethane	63	2.867	2.873	(0.825)	325766	41.2545	41.2	
	33 Chloroprene	53	2.897	2.897	(0.833)	267672	39.9085	39.9	
	34 Ethyl-tert-butyl ether	59	3.043	3.043	(0.875)	559926	42.5441	42.5	
	36 2,2-Dichloropropane	77	3.184	3.184	(0.916)	238384	56.6599	56.6	
	35 cis-1,2-Dichloroethene	96	3.202	3.202	(0.921)	187506	46.2087	46.2	
	39 Ethyl acetate	61	3.196	3.202	(0.919)	296747	40.8384	40.8	
	37 2-Butanone (MEK)	43	3.202	3.202	(0.921)	127735	33.9349	33.9(R)	
	41 Bromochloromethane	128	3.342	3.342	(0.961)	79566	45.8111	45.8	
	42 Tetrahydrofuran	42	3.342	3.342	(0.961)	48938	31.9514	32.0(R)	
	43 Chloroform	83	3.366	3.366	(0.968)	288554	43.6590	43.6	
	38 Propionitrile	54	3.281	3.287	(0.944)	21005	37.2153	37.2	
	46 Cyclohexane	56	3.458	3.458	(0.995)	335447	46.4804	46.5	
	45 1,1,1-Trichloroethane	97	3.464	3.464	(0.886)	232468	48.1833	48.2	
*	44 Pentafluorobenzene (IS)	168	3.476	3.476	(1.000)	230301	50.0000		
	48 Carbon tetrachloride	117	3.537	3.537	(0.905)	167600	57.0172	57.0	
	47 1,1-Dichloropropene	75	3.555	3.555	(0.910)	247200	44.3430	44.3	
	55 2,2,4-Trimethylpentane	57	3.647	3.653	(1.049)	360412	47.2410	47.2	
	51 Benzene	78	3.677	3.677	(0.941)	710154	44.8618	44.9	
	40 Methacrylonitrile	67	3.348	3.348	(0.963)	70494	40.0749	40.1	
$	50 1,2-Dichloroethane-d4 (S)	65	3.677	3.677	(0.941)	129540	45.3505	45.4	
	56 tert-Amylmethyl ether	73	3.702	3.702	(1.065)	521378	43.8219	43.8	
	52 1,2-Dichloroethane	62	3.726	3.726	(1.072)	218233	37.4842	37.5	
	57 n-Heptane	43	3.757	3.757	(1.081)	157185	41.6051	41.6	
*	58 1,4-Difluorobenzene (IS)	114	3.909	3.909	(1.000)	401040	50.0000		
	59 Trichloroethene	95	4.055	4.055	(1.037)	178608	47.2969	47.3	
	60 Methylcyclohexane	83	4.135	4.135	(1.058)	275019	55.8577	55.8	
	49 Isobutanol	43	3.647	3.653	(1.049)	63547	203.171	203	
	53 tert-Amyl Alcohol	59	Compound Not Detected.						(D)
	54 tert-Amyl ethyl ether	59	4.153	4.153	(1.195)	439142	48.4430	48.4	
	61 1,2-Dichloropropane	63	4.220	4.220	(1.080)	188308	39.8319	39.8	
	63 Methyl methacrylate	69	4.250	4.250	(1.087)	117731	51.6951	51.7	
	64 1,4-Dioxane (p-Dioxane)	88	4.281	4.287	(1.095)	36574	957.370	957	
	62 Dibromomethane	93	4.299	4.299	(1.100)	98611	42.7431	42.7	
	65 Bromodichloromethane	83	4.378	4.385	(1.120)	200786	46.2131	46.2	
	66 2-Nitropropane	43	4.561	4.561	(1.167)	17788	8.34697	8.35(QR)	
	67 2-Chloroethylvinyl ether	63	Compound Not Detected.						
	68 cis-1,3-Dichloropropene	75	4.665	4.665	(1.193)	271873	46.5376	46.5	
	69 4-Methyl-2-pentanone (MIBK)	43	4.744	4.744	(1.214)	140833	33.8820	33.9(R)	
$	70 Toluene-d8 (S)	98	4.811	4.811	(0.828)	474829	55.9854	56.0	
	71 Toluene	91	4.854	4.854	(1.242)	742510	45.5766	45.6	
	72 Methyl isothiocyanate	73	4.976	4.976	(1.273)	269618	114.256	114	
	74 trans-1,3-Dichloropropene	75	5.037	5.043	(1.288)	229629	41.1616	41.2	
	75 Ethyl methacrylate	69	5.037	5.037	(1.288)	223581	46.0740	46.1	
	76 1,1,2-Trichloroethane	83	5.165	5.165	(1.321)	129422	44.5093	44.5	
	77 Tetrachloroethene	166	5.201	5.208	(0.895)	193378	54.2662	54.3	

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D
Report Date: 29-Apr-2017 22:54

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)	REVIEW C
78	1,3-Dichloropropane	76	5.281	5.281	(0.909)	273330	43.8056	43.8	
79	2-Hexanone	43	5.299	5.305	(0.912)	90660	30.3190	30.3(R)	
73	n-Octane	43	4.854	4.854	(1.242)	149722	39.7765	39.8(Q)	
81	n-Butyl acetate	43	5.354	5.354	(1.370)	83901	37.0248	37.0	
80	Dibromochloromethane	129	5.421	5.421	(0.933)	134676	56.2653	56.3	
82	1,2-Dibromoethane (EDB)	107	5.512	5.512	(1.410)	148678	56.8644	56.9	
* 83	Chlorobenzene-d5 (IS)	82	5.811	5.811	(1.000)	222646	50.0000		
84	Chlorobenzene	112	5.835	5.836	(1.004)	452038	47.3960	47.4	
86	Ethylbenzene	106	5.878	5.878	(1.012)	252282	49.2667	49.3	
85	1,1,1,2-Tetrachloroethane	131	5.890	5.890	(1.014)	136067	48.7682	48.8	
88	n-Nonane	43	5.909	5.909	(1.017)	146749	52.7544	52.8(Q)	
87	m&p-Xylene	106	5.963	5.964	(1.026)	621338	97.5967	97.6	
89	o-Xylene	106	6.256	6.256	(1.077)	303943	48.2661	48.3	
90	Styrene	104	6.274	6.274	(1.080)	518867	48.0352	48.0	
91	Bromoform	173	6.439	6.439	(1.108)	77634	46.6382	46.6	
92	Isopropylbenzene (Cumene)	105	6.512	6.512	(0.863)	751344	45.3800	45.4	
$ 93	4-Bromofluorobenzene (S)	95	6.671	6.671	(1.148)	178749	59.1463	59.1	
94	Bromobenzene	156	6.780	6.780	(0.898)	176183	42.4215	42.4	
95	1,1,2,2-Tetrachloroethane	83	6.793	6.793	(0.900)	171814	38.2727	38.3	
98	n-Propylbenzene	91	6.823	6.823	(0.904)	883778	45.1349	45.1	
96	1,2,3-Trichloropropane	110	6.835	6.835	(0.905)	52288	40.3756	40.4	
97	trans-1,4-Dichloro-2-butene	53	6.841	6.841	(0.906)	45571	34.8405	34.8(R)	
103	n-Decane	43	6.896	6.896	(1.187)	167007	52.9335	52.9(Q)	
99	2-Chlorotoluene	91	6.914	6.915	(0.916)	593651	42.0902	42.1	
100	4-Ethyltoluene	105	6.908	6.908	(0.915)	739064	45.1768	45.2	
101	1,3,5-Trimethylbenzene	105	6.957	6.957	(0.922)	601572	44.6798	44.7	
102	4-Chlorotoluene	91	7.000	7.006	(0.927)	516074	40.2039	40.2	
104	tert-Butylbenzene	119	7.195	7.195	(0.953)	474006	46.1254	46.1	
105	Pentachloroethane	167	7.250	7.250	(0.960)	65231	48.7574	48.8	
106	1,2,4-Trimethylbenzene	105	7.244	7.250	(0.960)	596332	43.4727	43.5	
107	sec-Butylbenzene	105	7.366	7.366	(0.976)	672197	47.6344	47.6	
109	d-Limonene	136	7.427	7.427	(1.278)	23591	46.1763	46.2	
110	p-Isopropyltoluene	119	7.475	7.475	(0.990)	583851	48.0266	48.0	
108	1,3-Dichlorobenzene	146	7.494	7.494	(0.993)	314938	43.9643	44.0	
* 111	1,4-Dichlorobenzene-d4 (IS)	152	7.549	7.549	(1.000)	185365	50.0000		
112	1,4-Dichlorobenzene	146	7.567	7.567	(1.002)	325050	43.3849	43.4	
113	1,2,3-Trimethylbenzene	105	7.573	7.579	(1.003)	628856	43.2772	43.3	
114	Benzyl chloride	91	7.677	7.677	(1.017)	213781	34.8240	34.8	
115	trans-Decalin	138	7.768	7.768	(1.029)	87076	53.6797	53.7	
116	1,4-Diethylbenzene	119	7.774	7.774	(1.030)	348566	49.5672	49.6	
117	n-Butylbenzene	91	7.792	7.792	(1.032)	621252	48.2302	48.2	
119	n-Undecane	43	7.817	7.817	(1.036)	180613	77.2994	77.3(Q)	
118	1,2-Dichlorobenzene	146	7.859	7.859	(1.041)	308862	44.7084	44.7	
120	cis-Decalin	138	8.207	8.213	(1.087)	68411	53.0142	53.0	
121	1,2,4,5-tetramethylbenzene	119	8.390	8.396	(1.111)	540418	54.5914	54.6	
122	1,2-Dibromo-3-chloropropane	75	8.481	8.481	(1.124)	27340	38.9094	38.9	
123	n-Dodecane	43	Compound Not Detected.						(Q)
124	1,2,4-Trichlorobenzene	180	9.115	9.115	(1.208)	183288	49.3903	49.4	
125	Hexachloro-1,3-butadiene	225	9.207	9.213	(1.220)	63548	49.5721	49.6	
126	Naphthalene	128	9.329	9.335	(1.236)	456611	49.3090	49.3	
127	1,2,3-Trichlorobenzene	180	9.560	9.560	(1.266)	160789	48.8308	48.8	

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D
Report Date: 29-Apr-2017 22:54

QC Flag Legend

Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.
D - User disabled compound identification.

Review Codes Legend

:

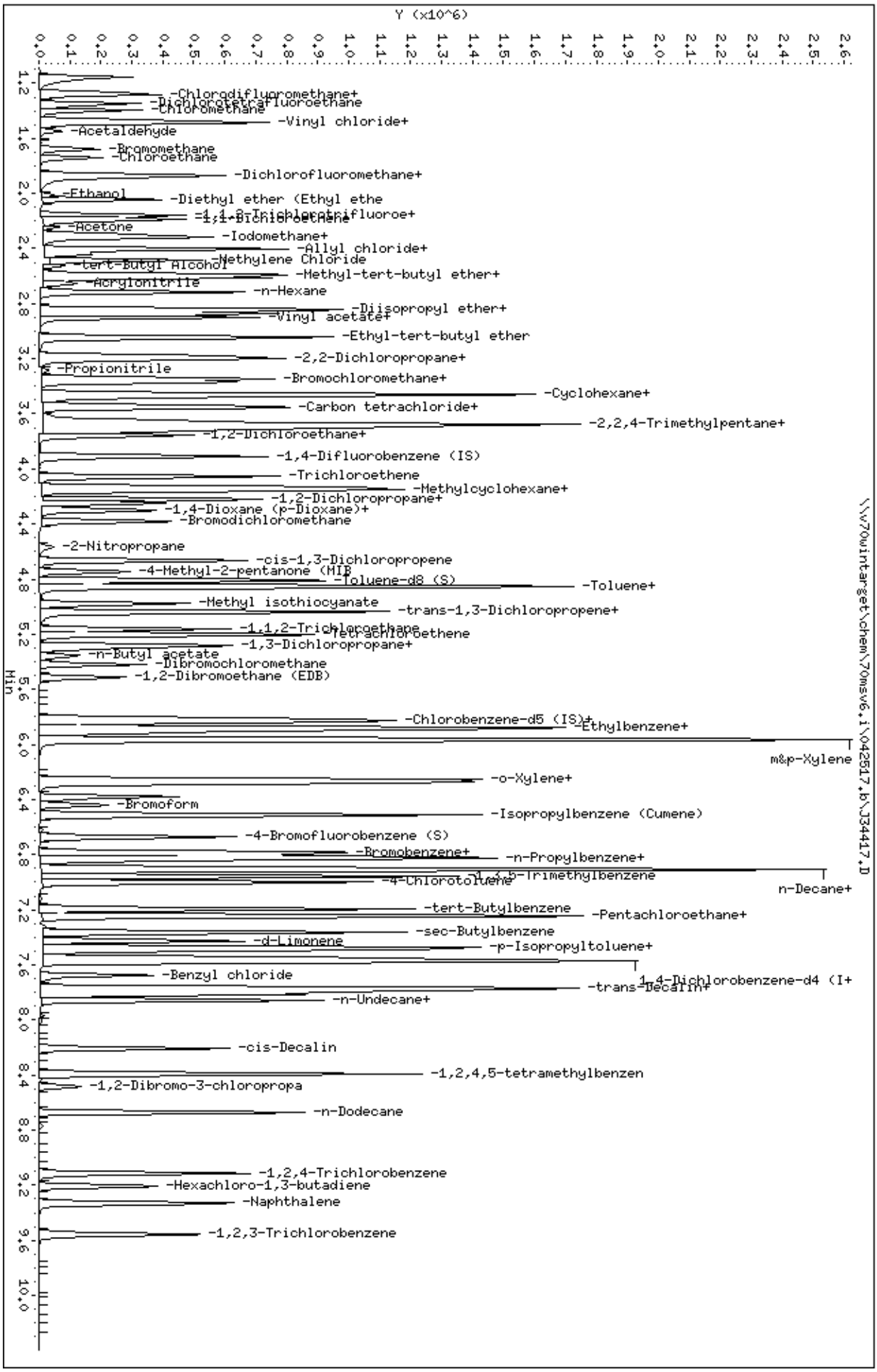
Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D
Report Date: 29-Apr-2017 22:54

Pace Analytical Services, Inc.

SW846-8260C/EPA 624

Data file : \\v70wintarget\chem\70msv6.i\042517.b\J34417.D
Lab Smp Id: 103081 Client Smp ID: MW-3CMS
Inj Date : 25-APR-2017 19:07 MS Autotune Date: 17-MAR-2017 06:2
Operator : KGG Inst ID: 70msv6.i
Smp Info : 103081, 15067:1.25
Misc Info : 2005,
Comment :
Method : \\v70wintarget\chem\70msv6.i\042517.b\032717_8260W.m
Meth Date : 29-Apr-2017 22:43 blagula Quant Type: ISTD
Cal Date : 27-MAR-2017 18:25 Cal File: J33244.D
Als bottle: 19 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A
Processing Host: 70MSV4WS10B6

- NO TENTATIVELY IDENTIFIED COMPOUNDS -


Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D
Date : 25-APR-2017 19:07
Client ID: MW-3CHS
Sample Info: 103081, 15067:1.25
Purge Volume: 5.0
Column phase: RTX-624
Instrument: 70msv6.i
Operator: KGC
Column diameter: 0.18
\\v70wintarget\chem\70msv6.i\042517.b\J34417.D
Y (x10^6)
Min
-Chlorodifluoromethane+
-Dichlorotetrafluoroethane
-Chloromethane
-Vinyl chloride+
-Acetaldehyde
-Bromomethane
-Chloroethane
-Dichlorofluoromethane+
-Ethanol
-Diethyl ether (Ethyl ethe
-1,1-Dichloroethene
-Acetone
-Iodomethane+
-Allyl chloride+
-Methylene Chloride
-tert-Butyl Alcohol
-Methyl-tert-butyl ether+
-Acrylonitrile
-n-Hexane
-Diisopropyl ether+
-Vinyl acetate+
-Ethyl-tert-butyl ether
-2,2-Dichloropropane+
-Propionitrile
-Bromochloromethane+
-Cyclohexane+
-Carbon tetrachloride+
-2,2,4-Trimethylpentane+
-1,2-Dichloroethane+
-1,4-Difluorobenzene (IS)
-Trichloroethene
-Methylcyclohexane+
-1,2-Dichloropropane+
-1,4-Dioxane (p-Dioxane)+
-Bromodichloromethane
-2-Nitropropane
-cis-1,3-Dichloropropene
-4-Methyl-2-pentanone (MIB
-Toluene-d8 (S)
-Toluene+
-Methyl isothiocyanate
-trans-1,3-Dichloropropene+
-1,1,2-Trichloroethane
-Tetrachloroethene
-1,3-Dichloropropane+
-n-Butyl acetate
-Dibromochloromethane
-1,2-Dibromoethane (EDB)
-Chlorobenzene-d5 (IS)+
-Ethylbenzene+
m&p-Xylene
-o-Xylene+
-Bromoform
-Isopropylbenzene (Cumene)
-4-Bromofluorobenzene (S)
-Bromobenzene+
-n-Propylbenzene+
-1,3,5-Trimethylbenzene
-4-Chlorotoluene
n-Decane+
-tert-Butylbenzene
-Pentachloroethane+
-sec-Butylbenzene
-d-Limonene
-p-Isopropyltoluene+
-Benzyl chloride
1,4-Dichlorobenzene-d4 (I+
-trans-Decalin+
-n-Undecane+
-cis-Decalin
-1,2,4,5-tetramethylbenzen
-1,2-Dibromo-3-chloropropa
-n-Dodecane
-1,2,4-Trichlorobenzene
-Hexachloro-1,3-butadiene
-Naphthalene
-1,2,3-Trichlorobenzene

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D

Date : 25-APR-2017 19:07

Client ID: MW-3CMS

Instrument: 70msv6.i

Sample Info: 103081, 15067:1.25

Purge Volume: 5.0

Operator: KGG

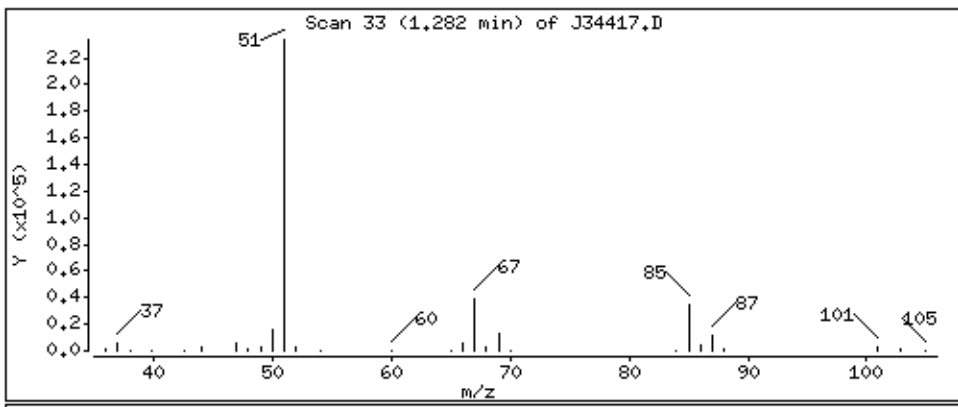
Column phase: RTX-624

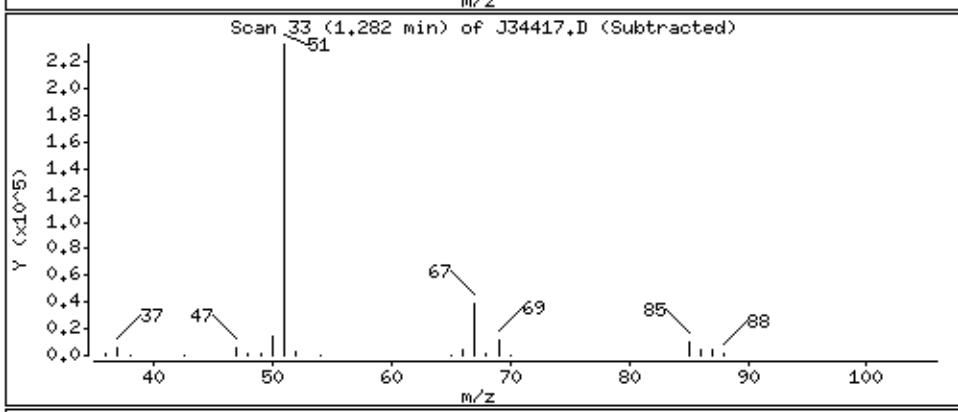
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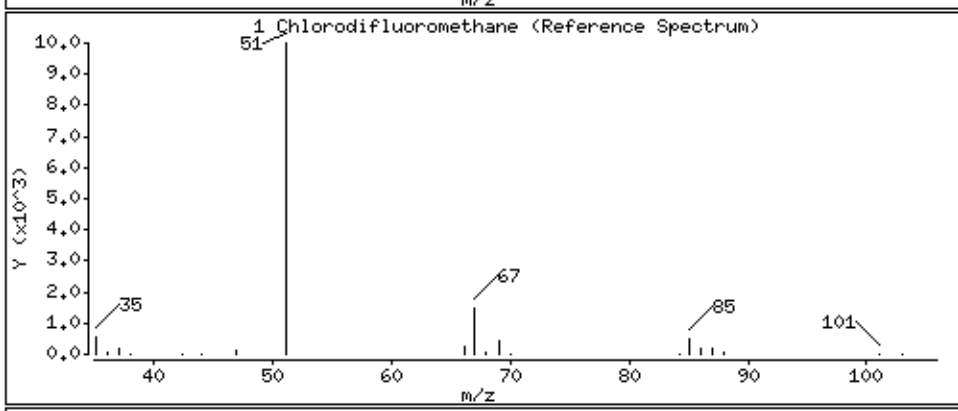
1 Chlorodifluoromethane

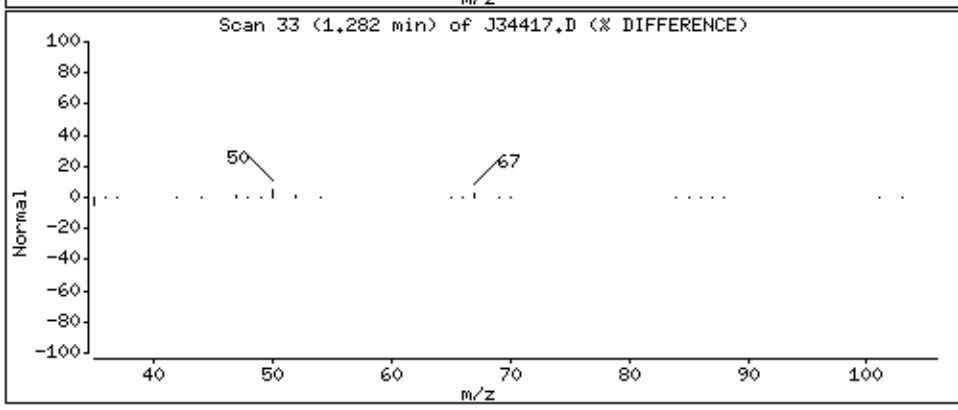
Concentration: 46.1 ug/L

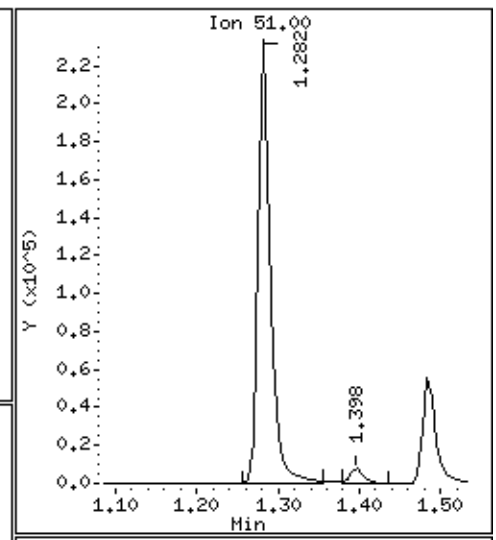
Review Code:

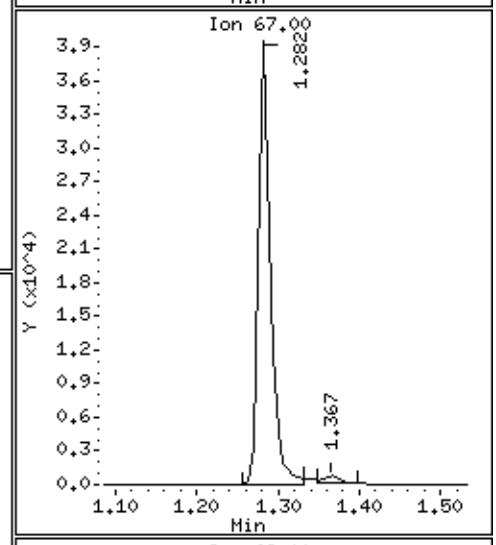


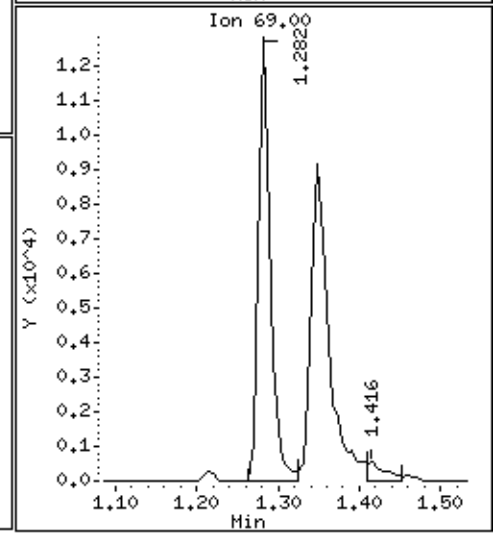












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D

Date : 25-APR-2017 19:07

Client ID: MW-3CMS

Instrument: 70msv6.i

Sample Info: 103081, 15067:1.25

Purge Volume: 5.0

Operator: KGG

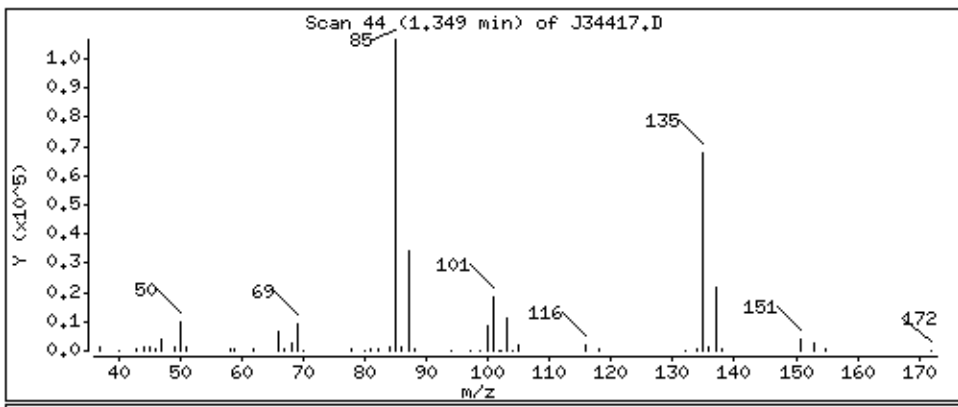
Column phase: RTX-624

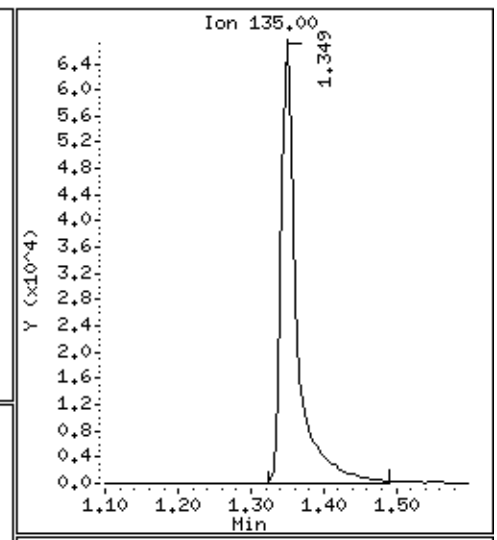
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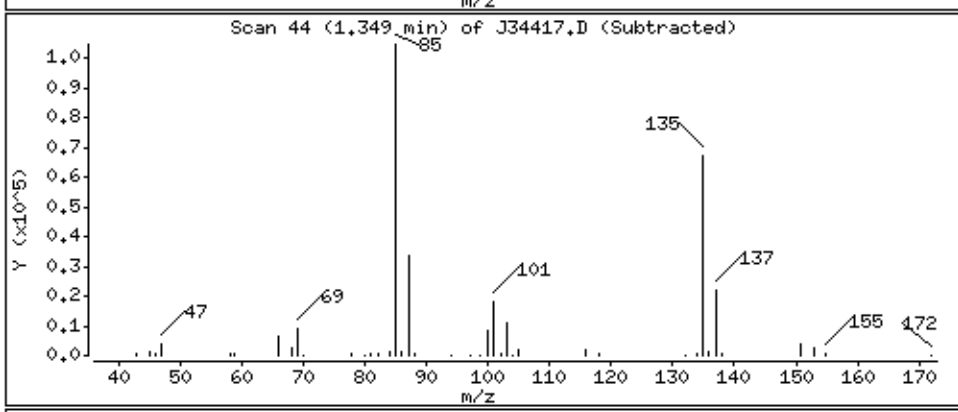
2 Dichlorotetrafluoroethane

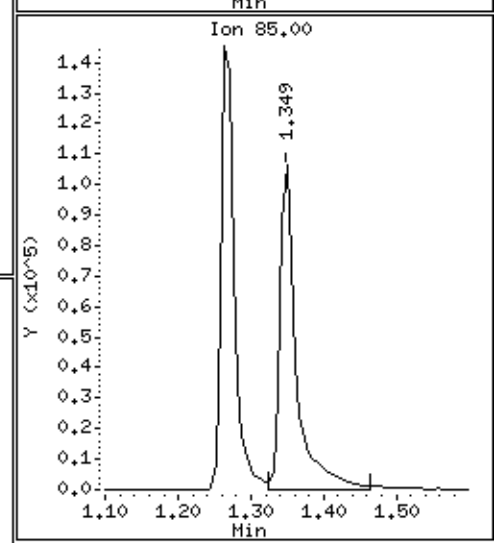
Concentration: 66.6 ug/L

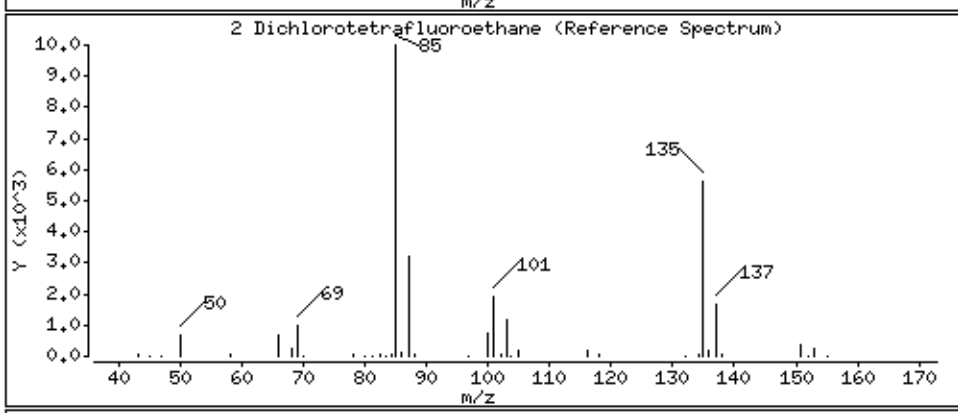
Review Code:

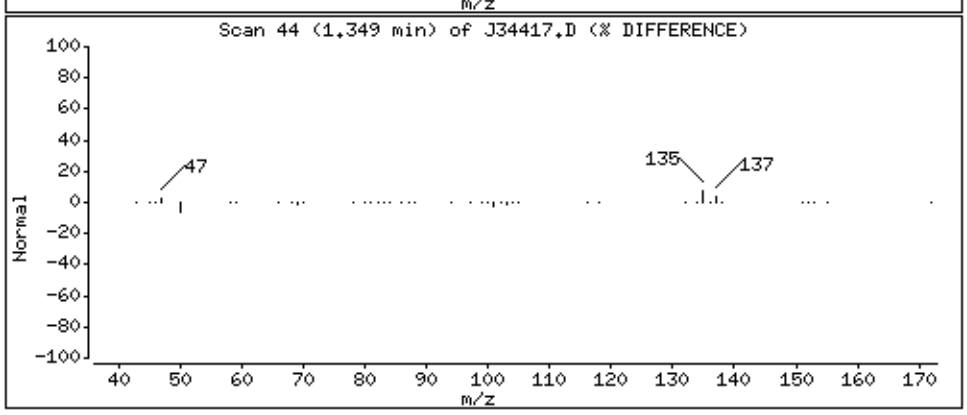












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D

Date : 25-APR-2017 19:07

Client ID: MW-3CMS

Instrument: 70msv6.i

Sample Info: 103081, 15067:1.25

Purge Volume: 5.0

Operator: KGG

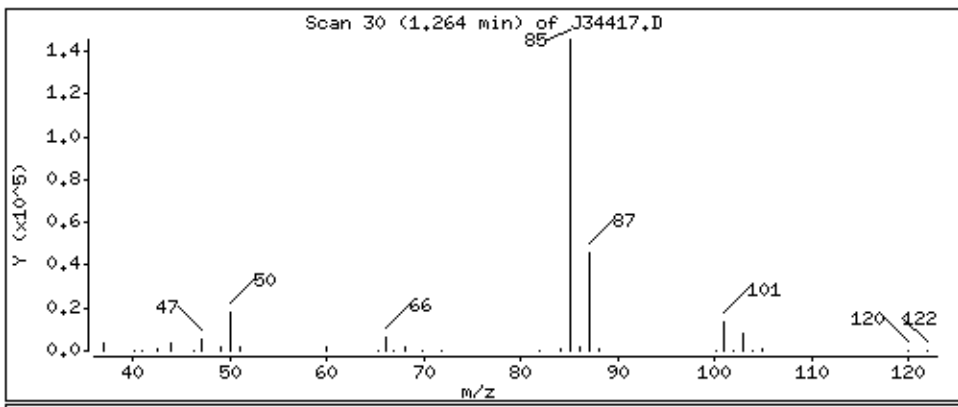
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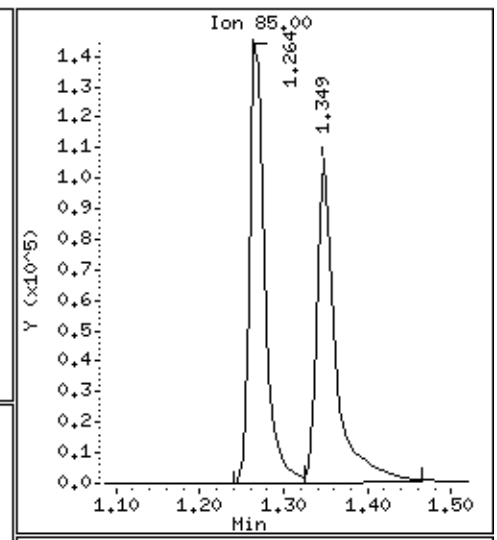
Column diameter: 0.18

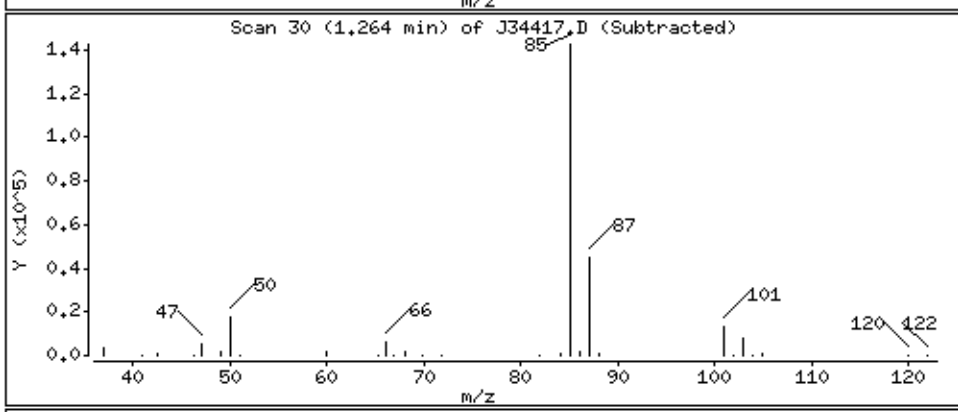
3 Dichlorodifluoromethane

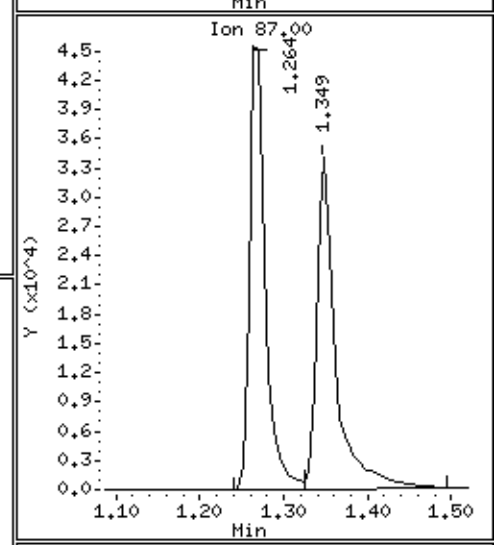
Concentration: 60.0 ug/L

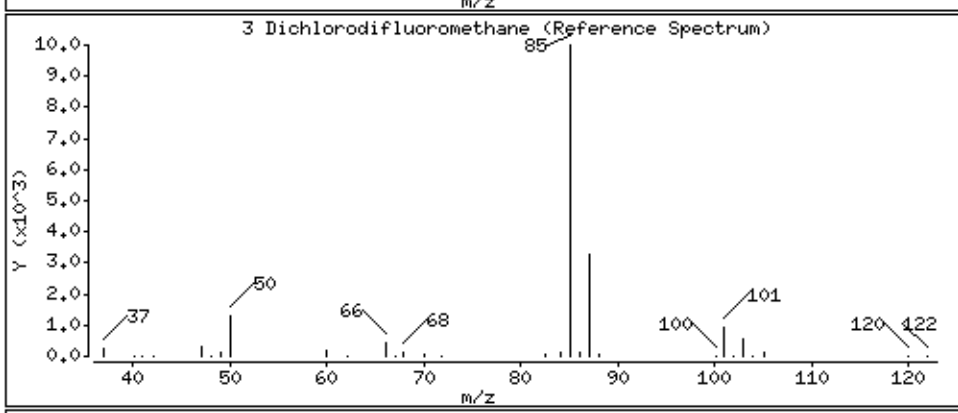
Review Code:

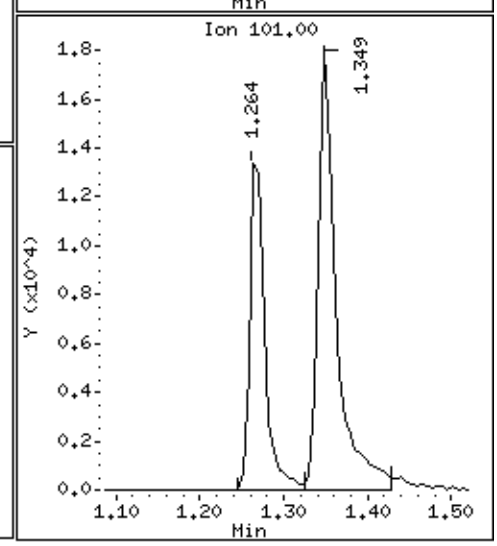


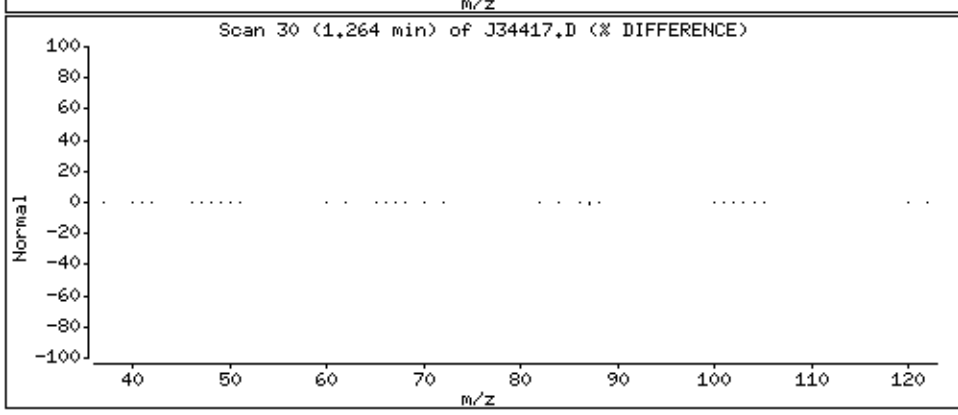












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D

Date : 25-APR-2017 19:07

Client ID: MW-3CMS

Instrument: 70msv6.i

Sample Info: 103081, 15067:1.25

Purge Volume: 5.0

Operator: KGG

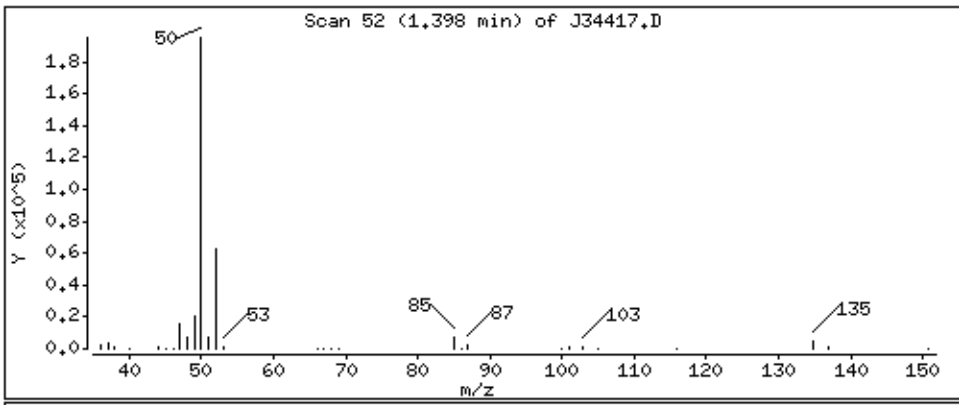
Column phase: RTX-624

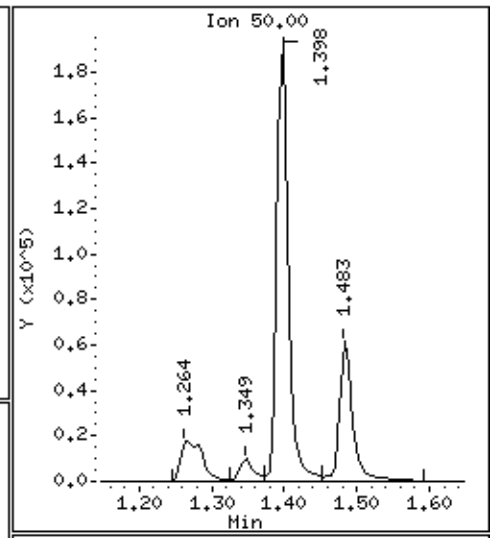
Column diameter: 0.18

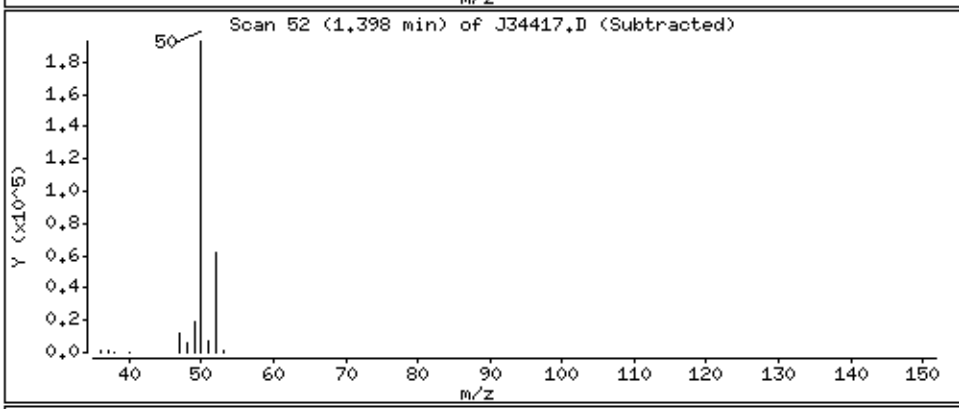
4 Chloromethane

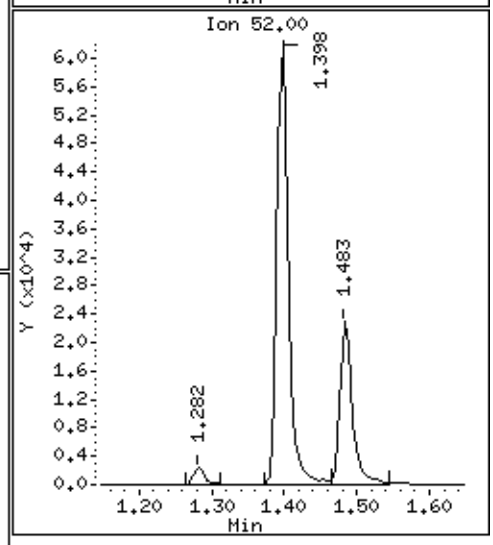
Concentration: 43.3 ug/L

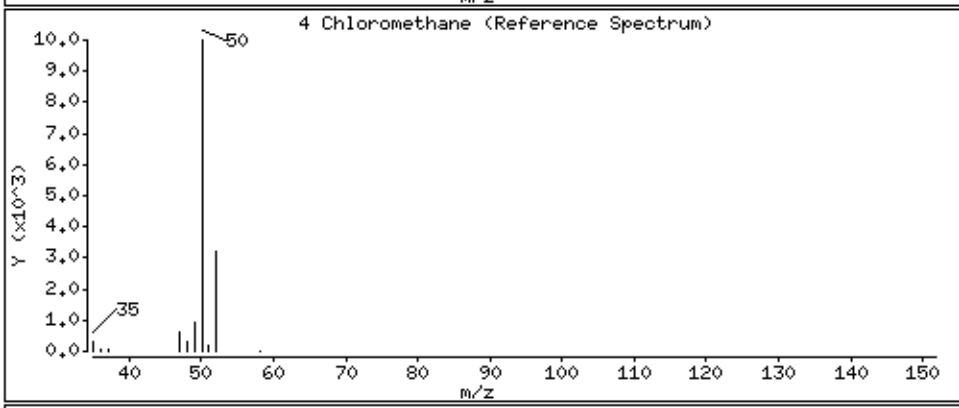
Review Code:

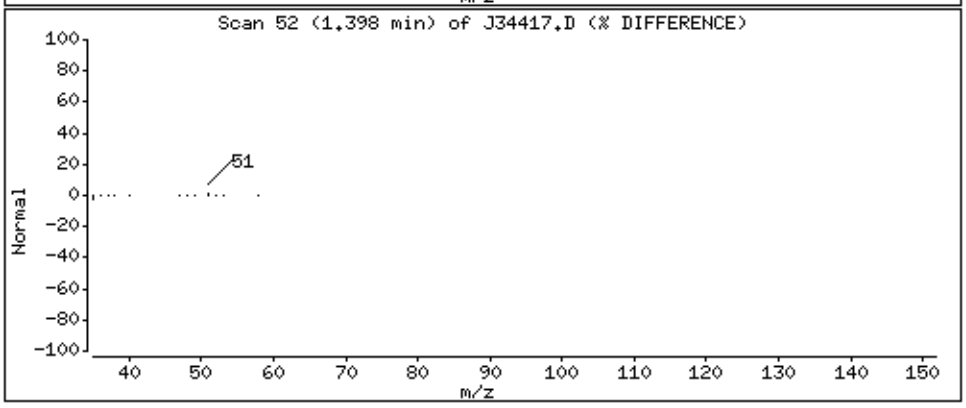












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D

Date : 25-APR-2017 19:07

Client ID: MW-3CMS

Instrument: 70msv6.i

Sample Info: 103081, 15067:1.25

Purge Volume: 5.0

Operator: KGG

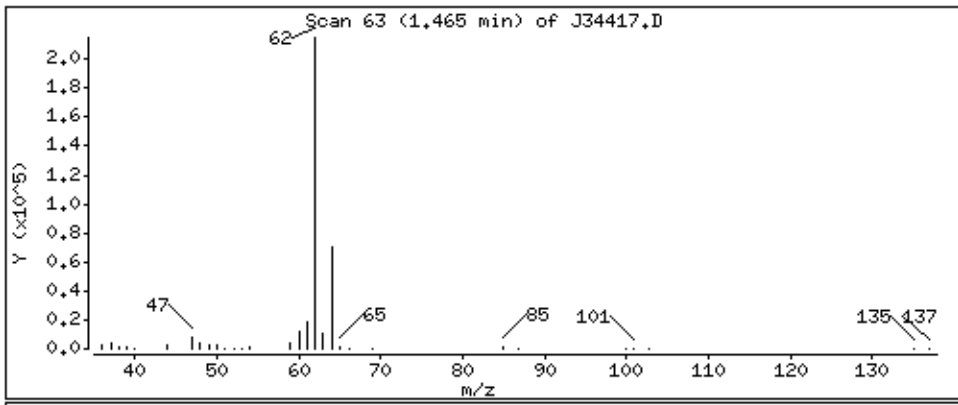
Column phase: RTX-624

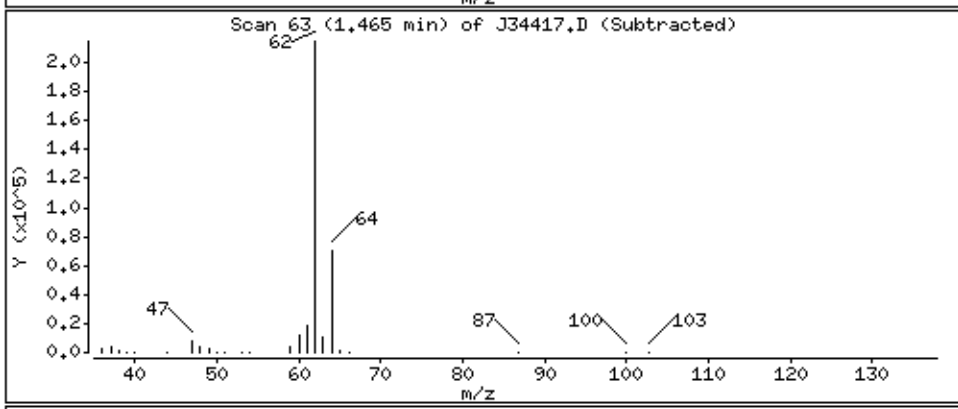
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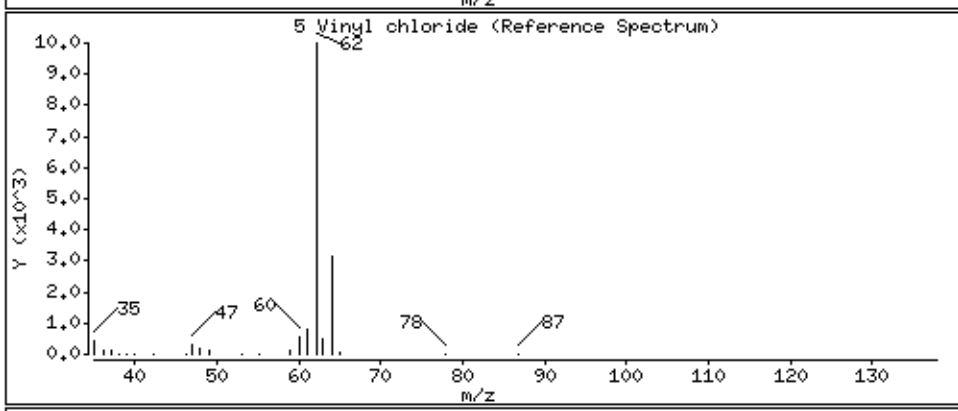
5 Vinyl chloride

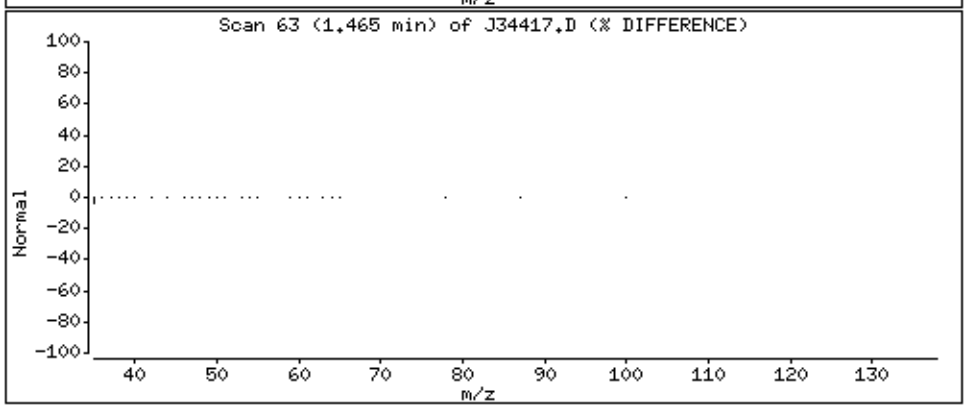
Concentration: 50.8 ug/L

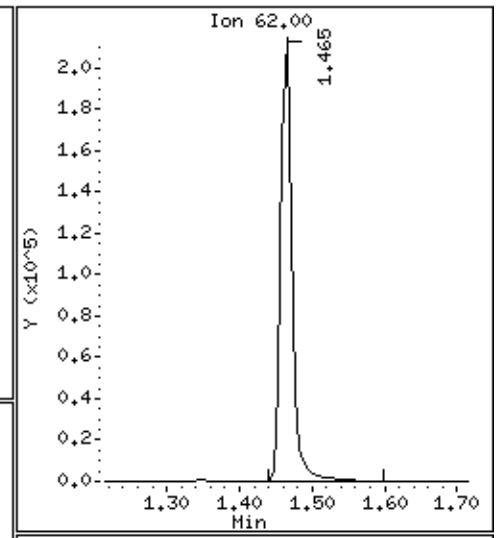
Review Code:

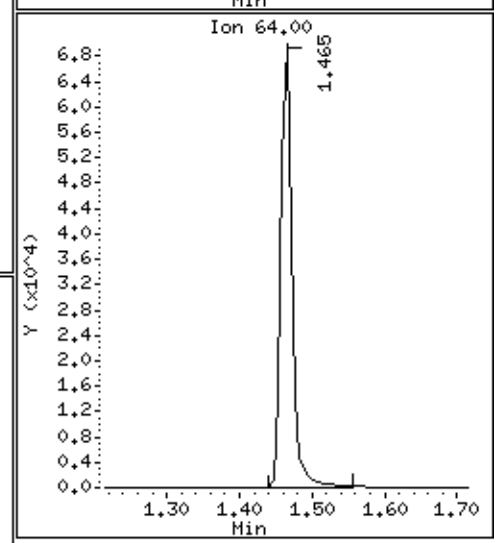












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D

Date : 25-APR-2017 19:07

Client ID: MW-3CMS

Instrument: 70msv6.i

Sample Info: 103081, 15067:1.25

Purge Volume: 5.0

Operator: KGG

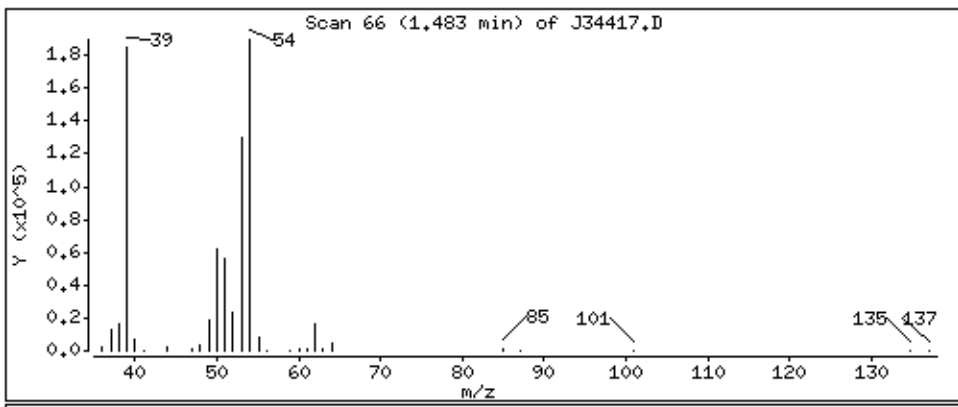
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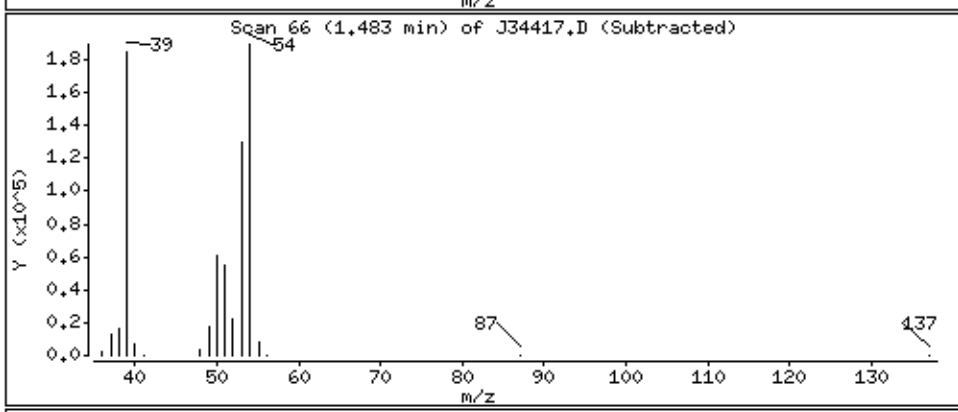
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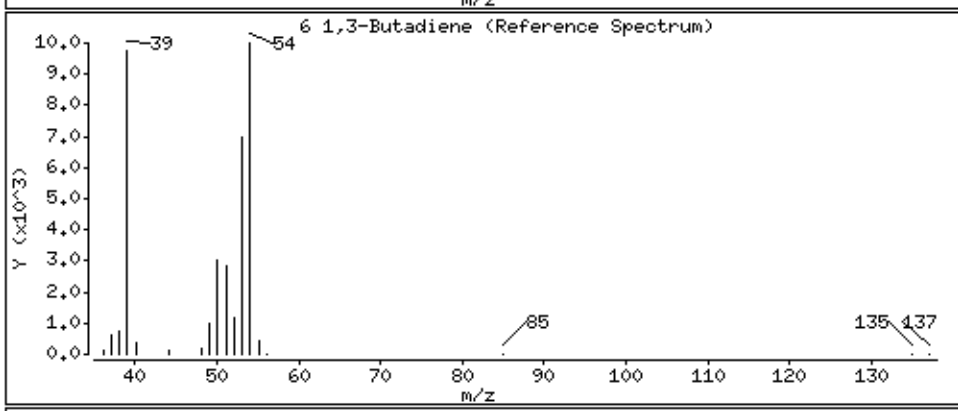
6 1,3-Butadiene

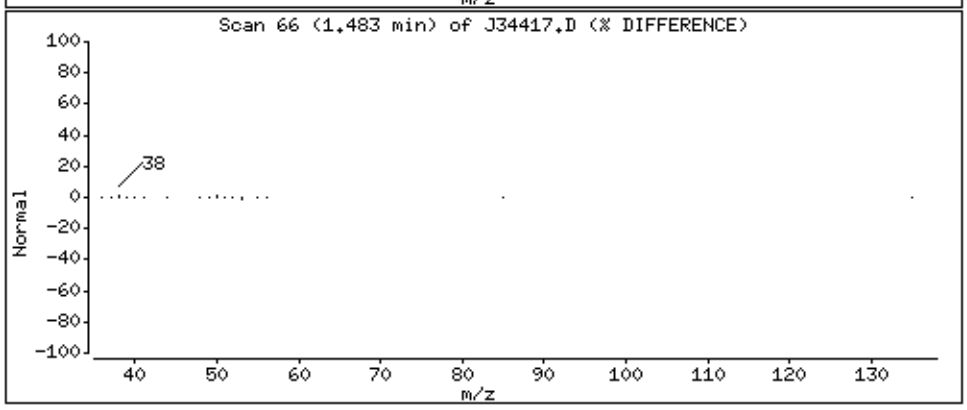
Concentration: 48.9 ug/L

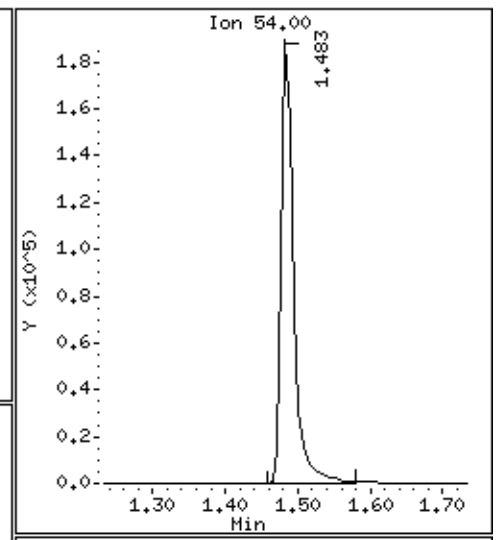
Review Code:

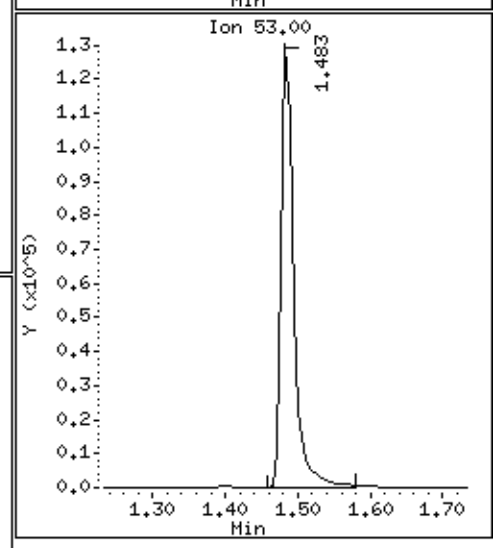












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D

Date : 25-APR-2017 19:07

Client ID: MW-3CMS

Instrument: 70msv6.i

Sample Info: 103081, 15067:1.25

Purge Volume: 5.0

Operator: KGG

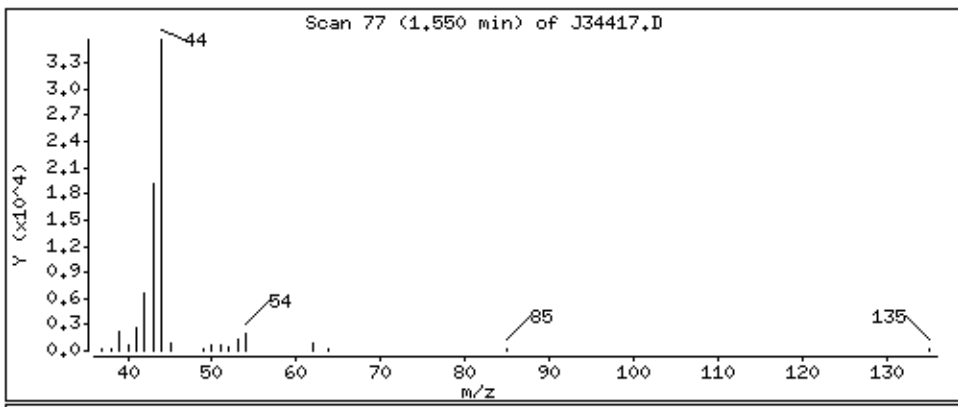
Column phase: RTX-624

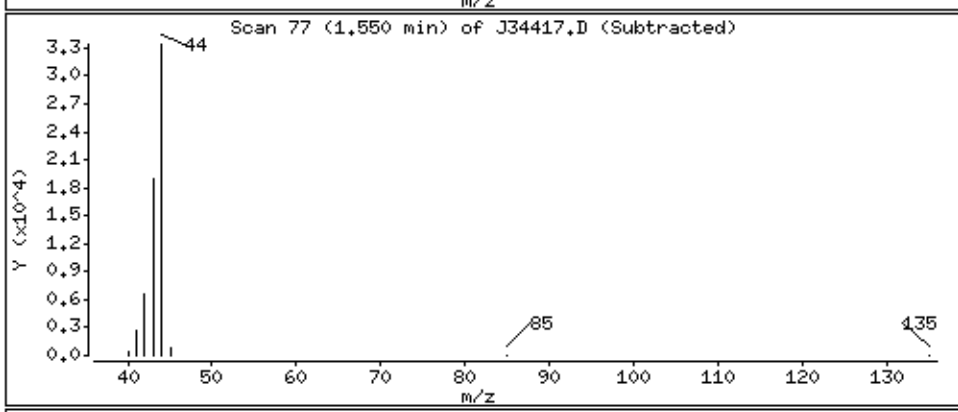
Column diameter: 0.18

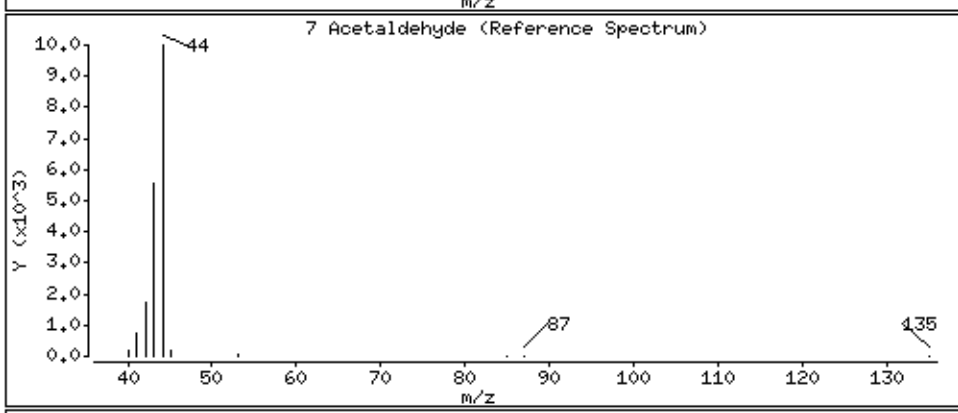
7 Acetaldehyde

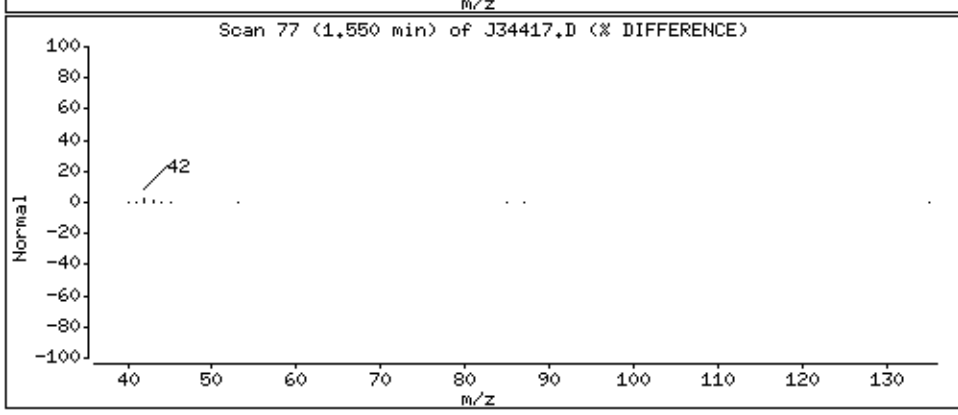
Concentration: 40.6 ug/L

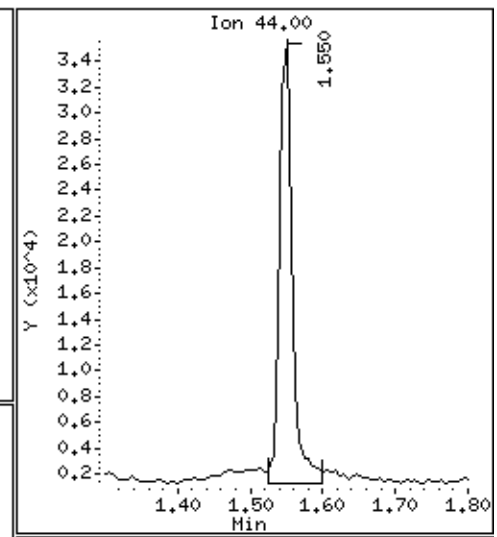
Review Code:

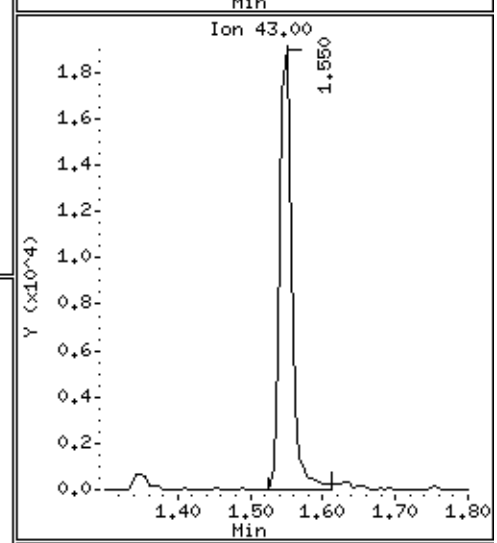


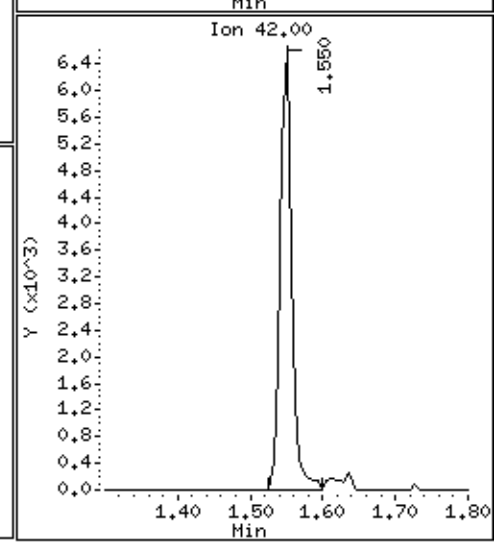












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D

Date : 25-APR-2017 19:07

Client ID: MW-3CMS

Instrument: 70msv6.i

Sample Info: 103081, 15067:1.25

Purge Volume: 5.0

Operator: KGG

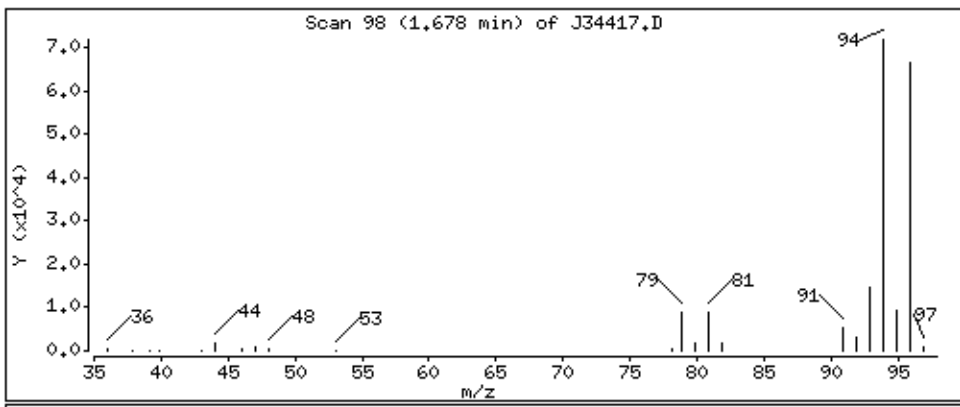
Column phase: RTX-624

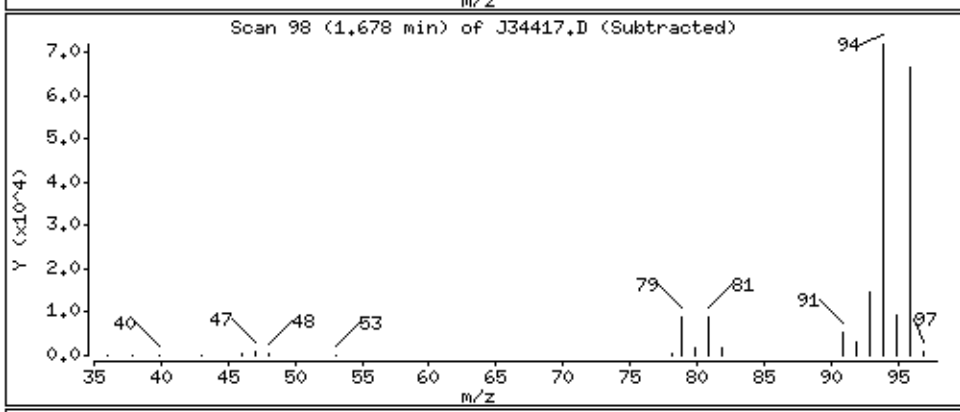
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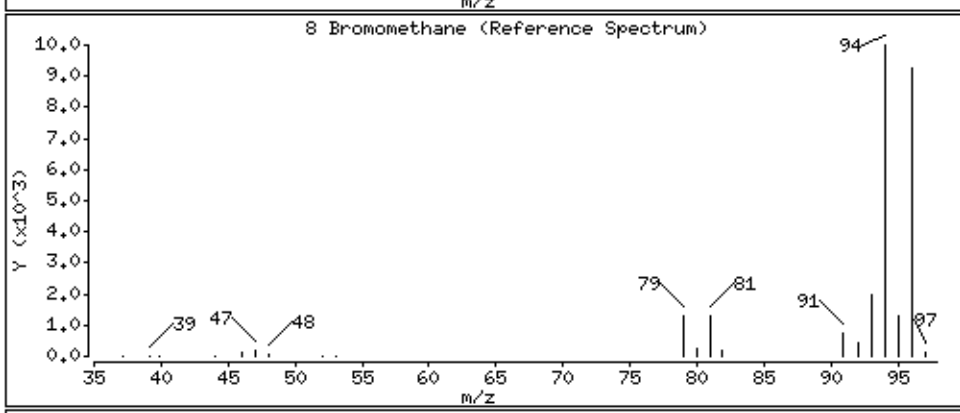
8 Bromomethane

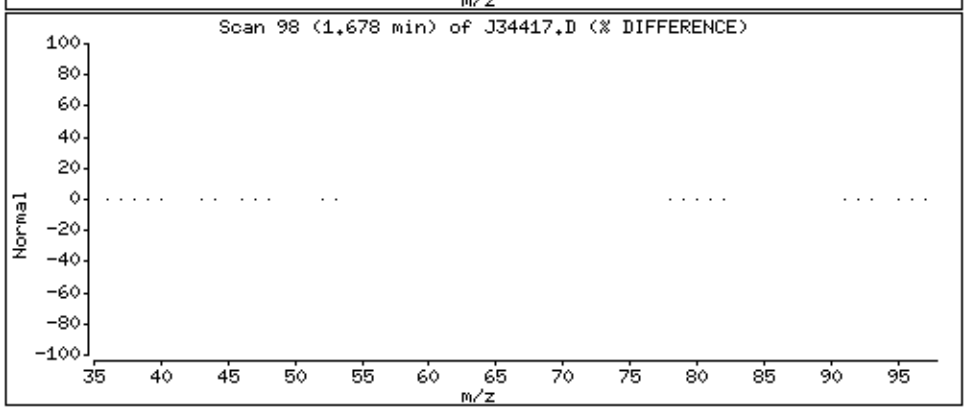
Concentration: 39.3 ug/L

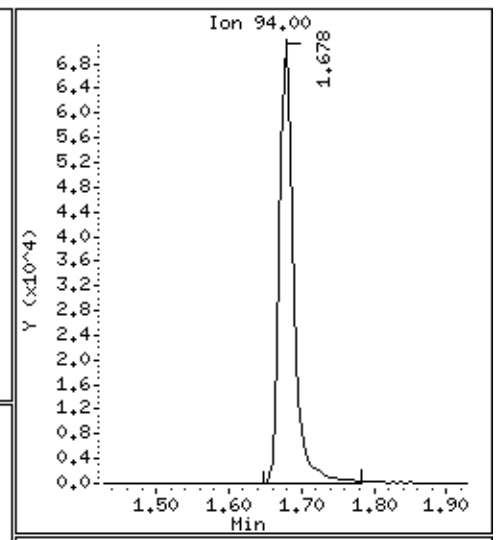
Review Code:

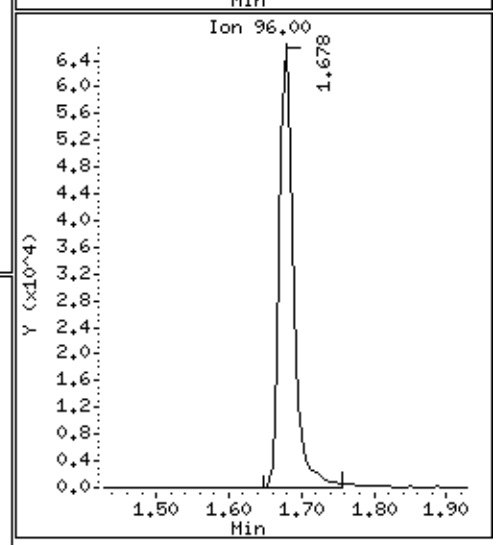












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D

Date : 25-APR-2017 19:07

Client ID: MW-3CMS

Instrument: 70msv6.i

Sample Info: 103081, 15067:1.25

Purge Volume: 5.0

Operator: KGG

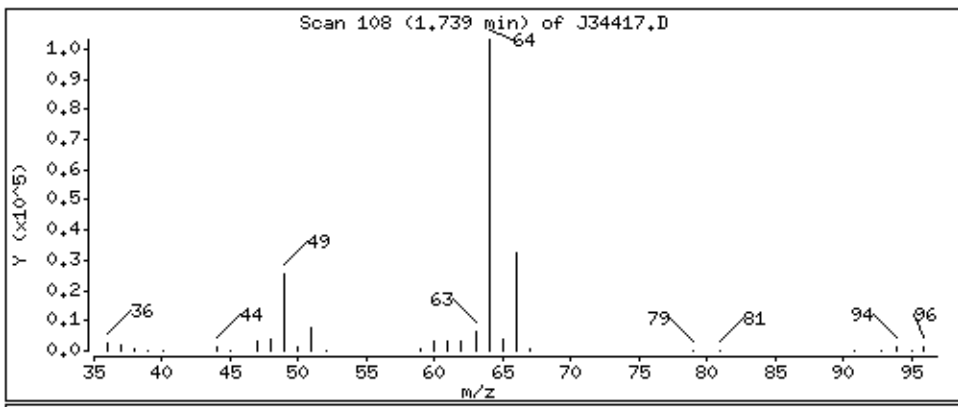
Column phase: RTX-624

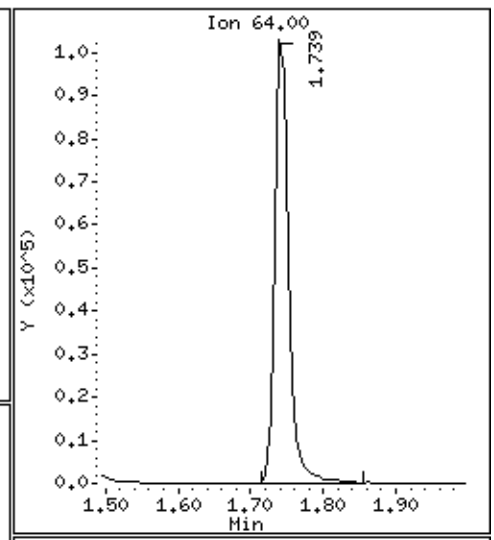
Column diameter: 0.18

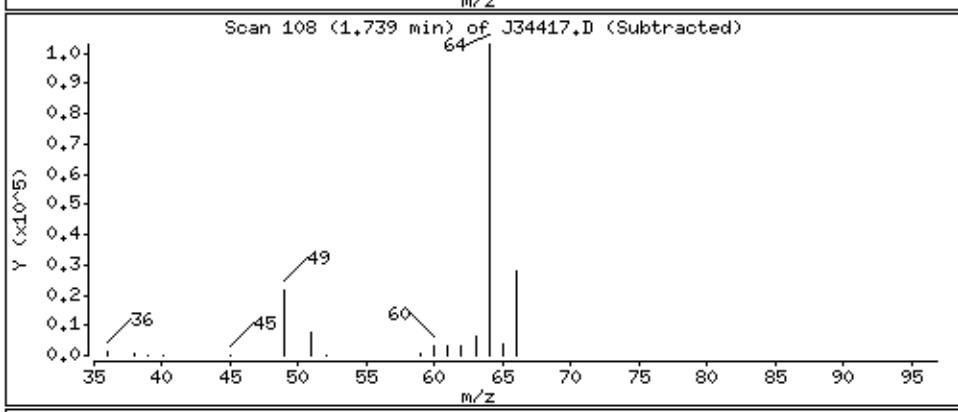
9 Chloroethane

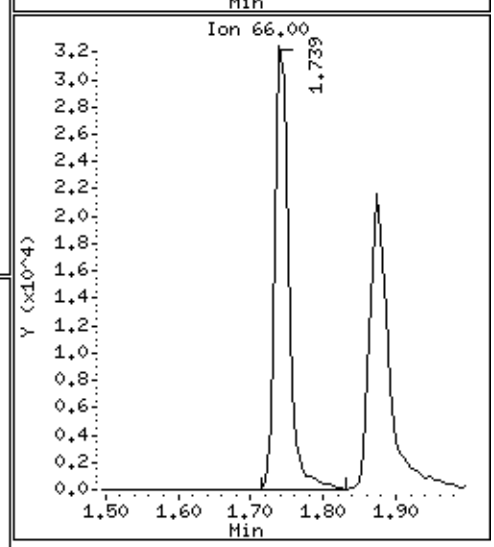
Concentration: 46.6 ug/L

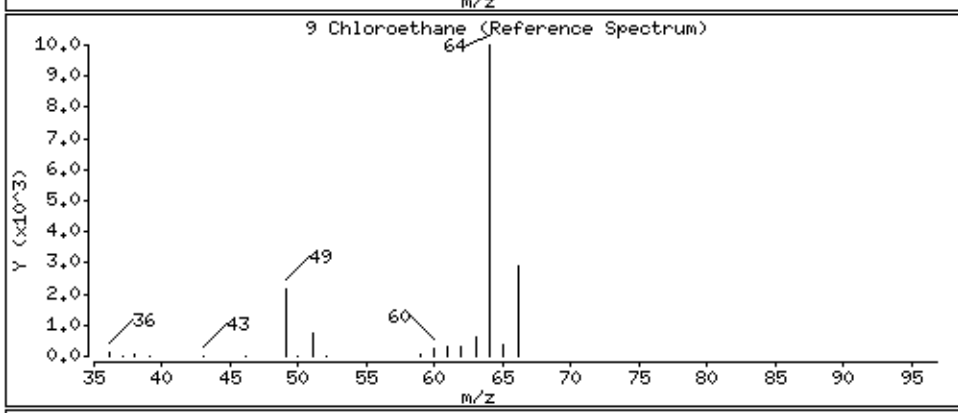
Review Code:

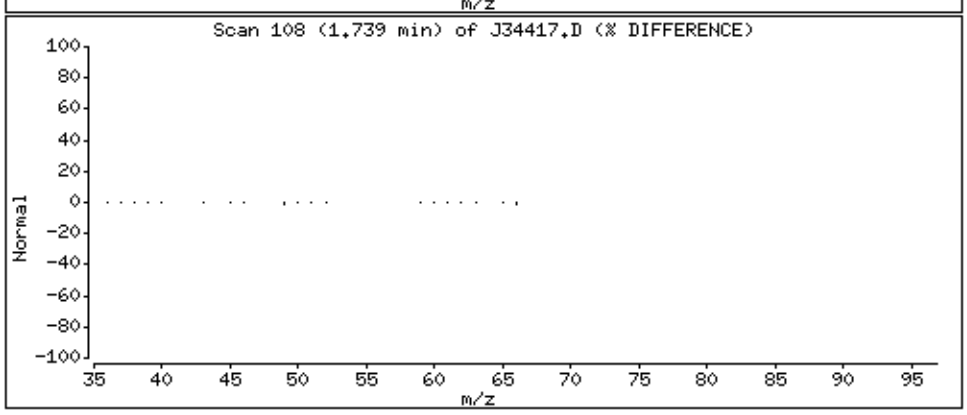












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D

Date : 25-APR-2017 19:07

Client ID: MW-3CMS

Instrument: 70msv6.i

Sample Info: 103081, 15067:1.25

Purge Volume: 5.0

Operator: KGG

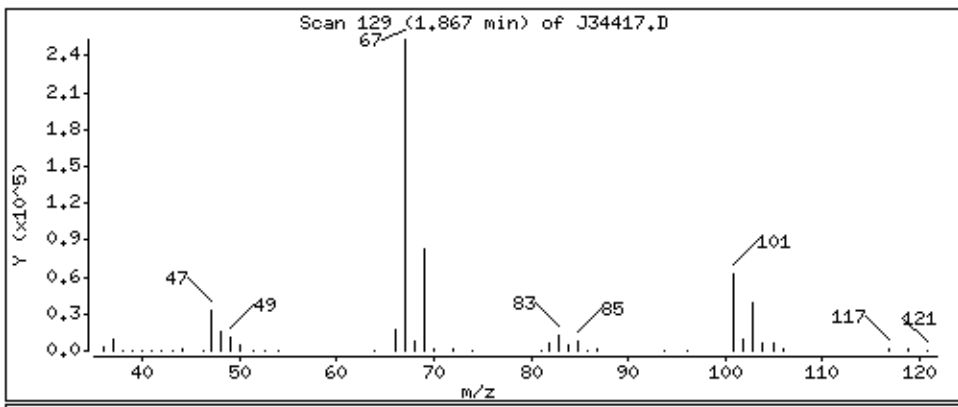
Column phase: RTX-624

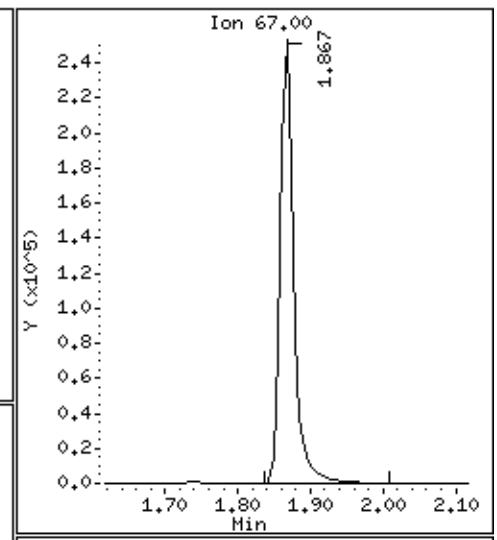
Column diameter: 0.18

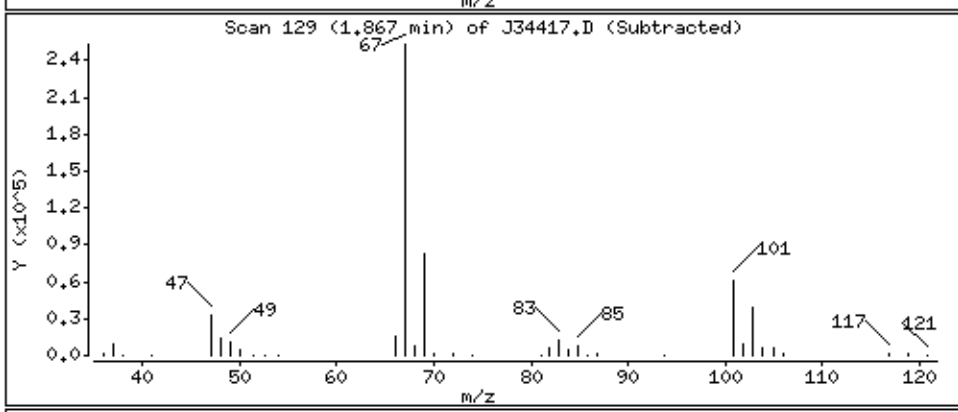
10 Dichlorofluoromethane

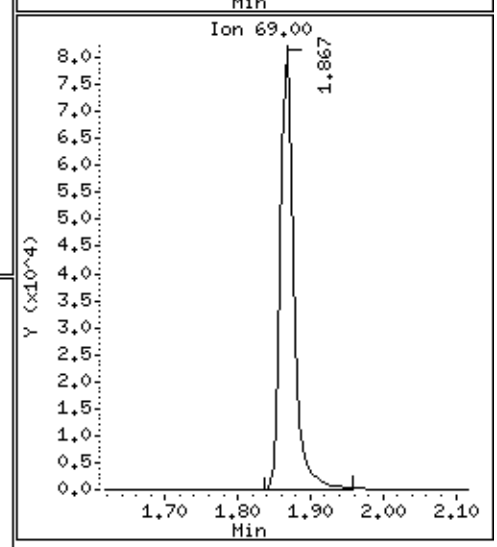
Concentration: 42.3 ug/L

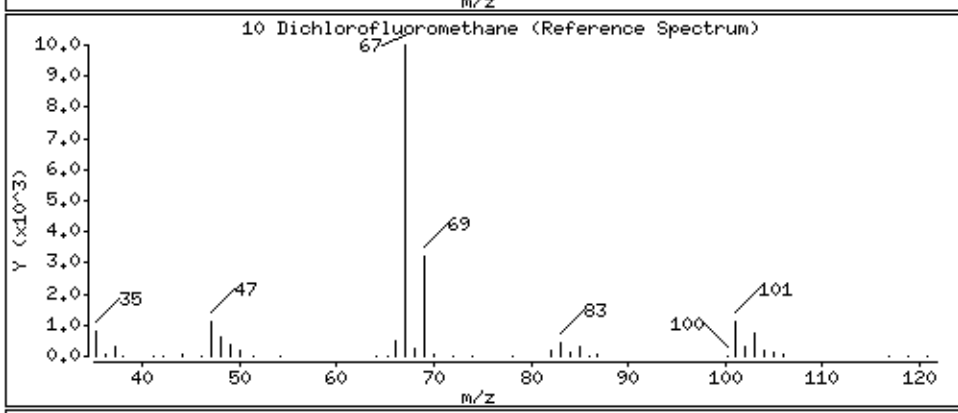
Review Code:

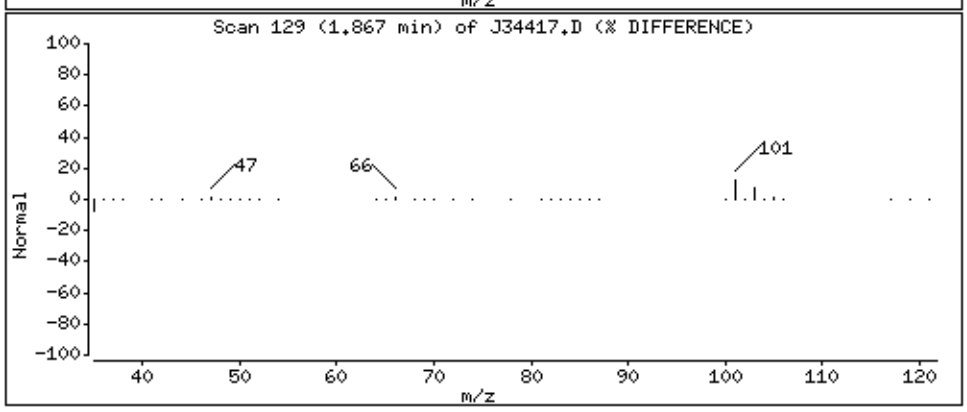












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D

Date : 25-APR-2017 19:07

Client ID: MW-3CMS

Instrument: 70msv6.i

Sample Info: 103081, 15067:1.25

Purge Volume: 5.0

Operator: KGG

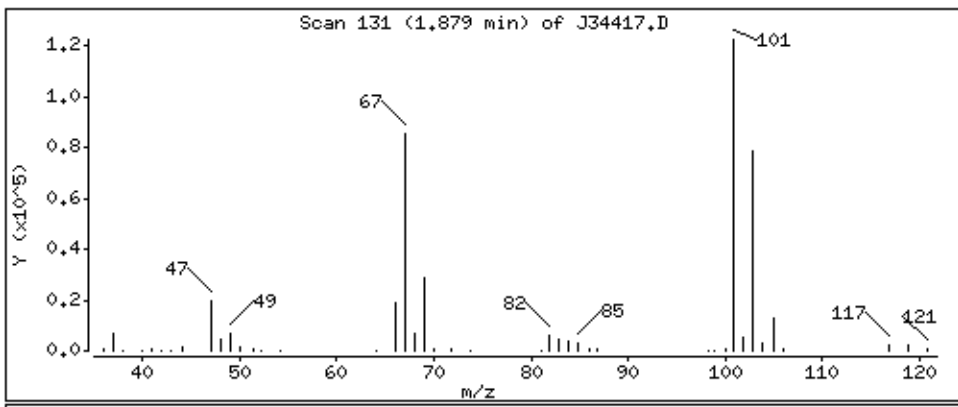
Column phase: RTX-624

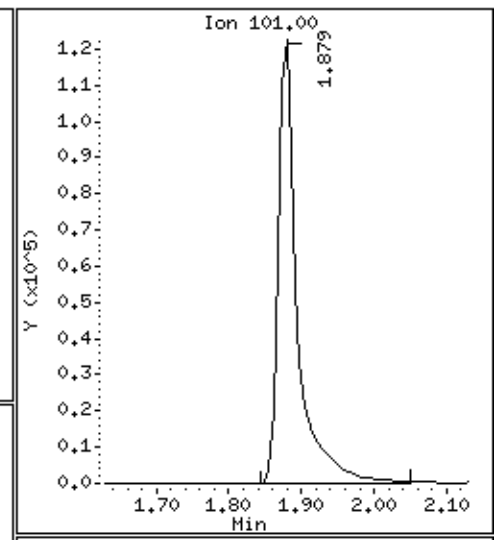
Column diameter: 0.18

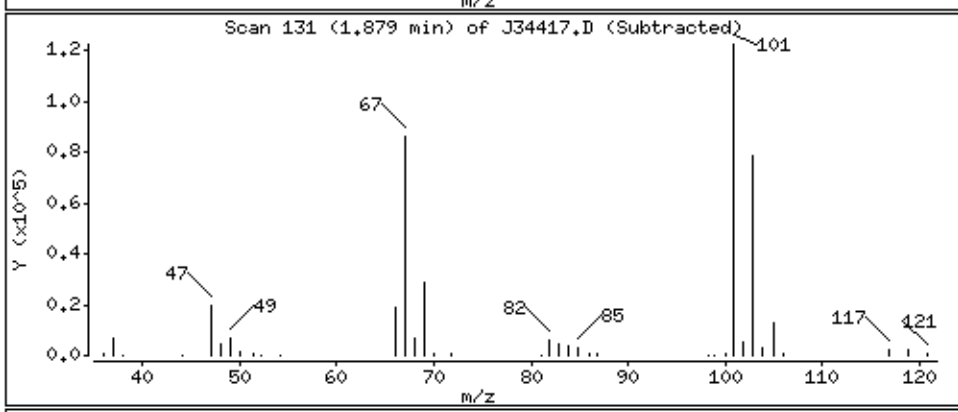
11 Trichlorofluoromethane

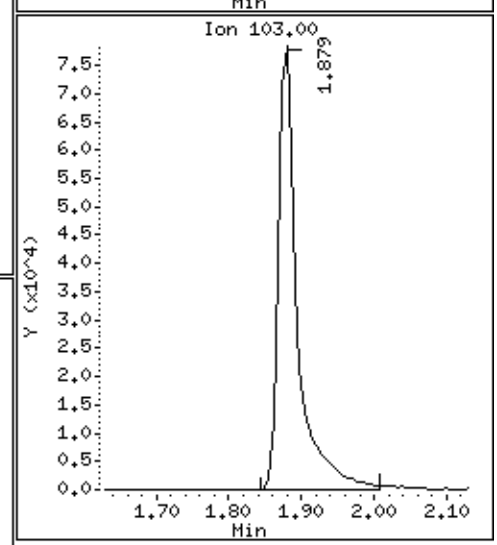
Concentration: 49.8 ug/L

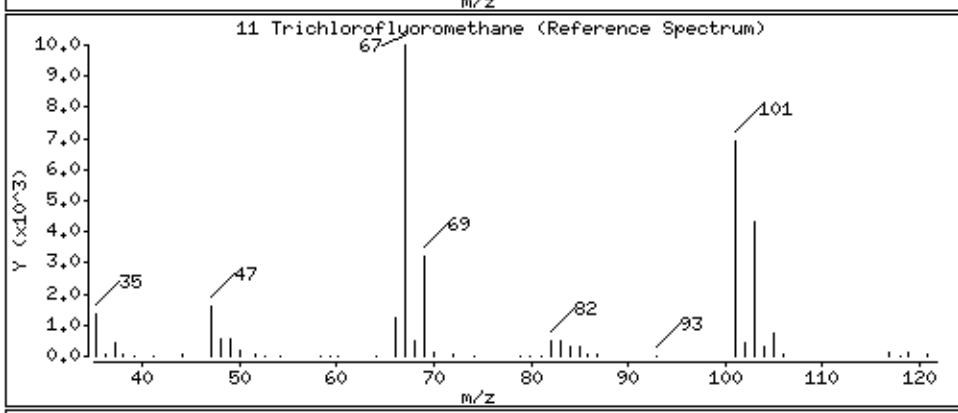
Review Code:

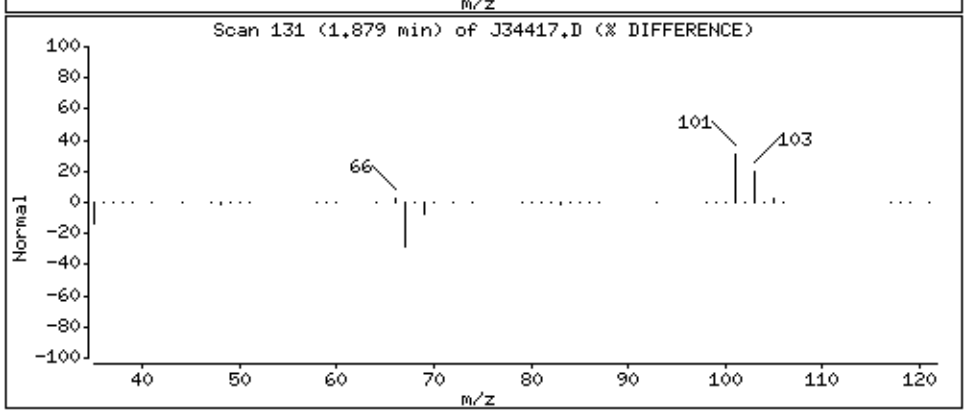












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D

Date : 25-APR-2017 19:07

Client ID: MW-3CMS

Instrument: 70msv6.i

Sample Info: 103081, 15067:1.25

Purge Volume: 5.0

Operator: KGG

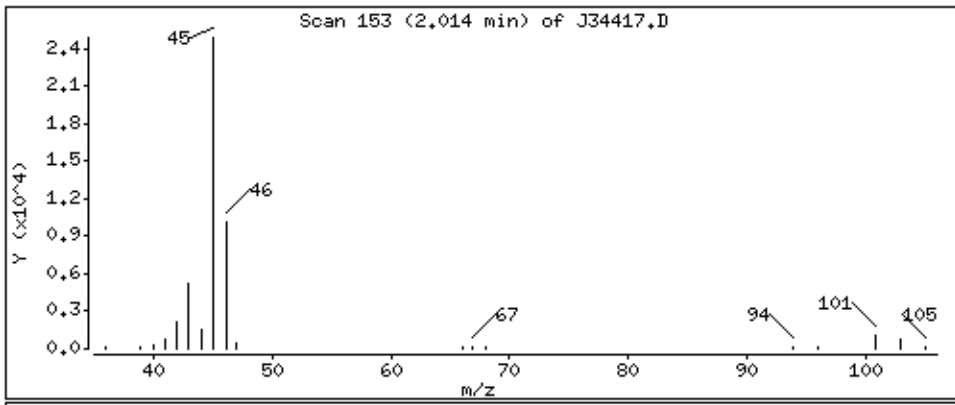
Column phase: RTX-624

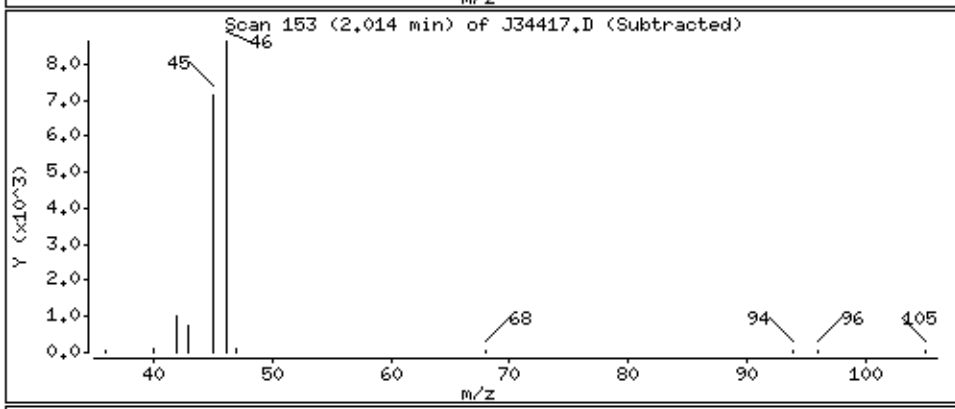
Column diameter: 0.18

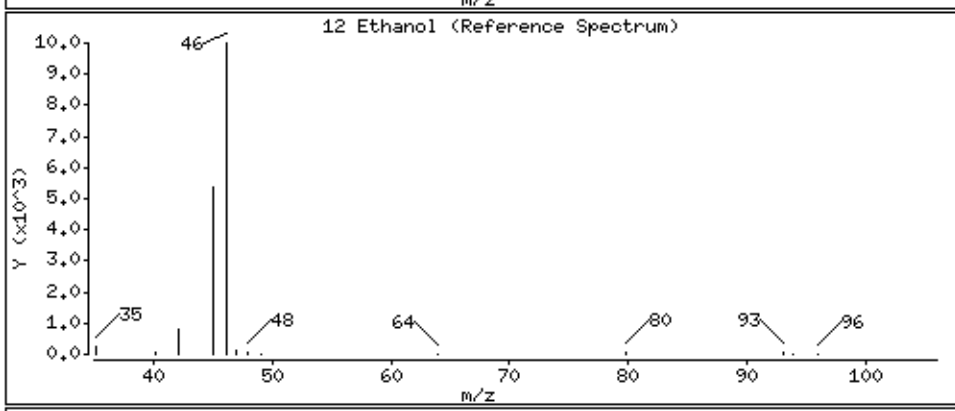
12 Ethanol

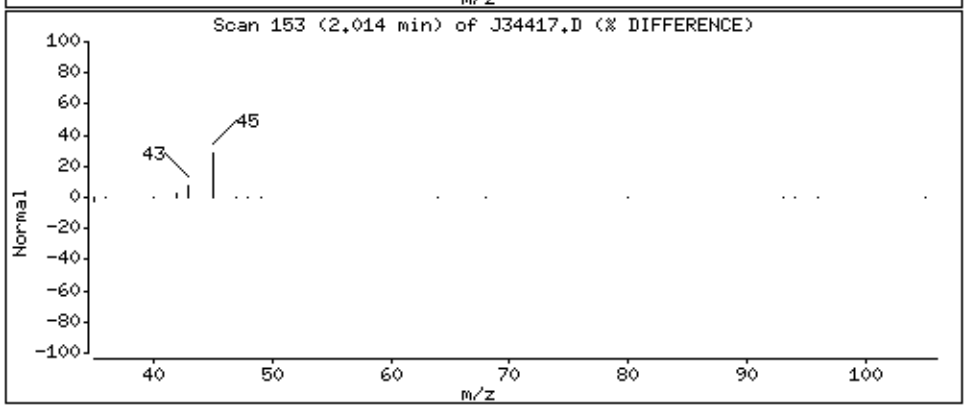
Concentration: 857 ug/L

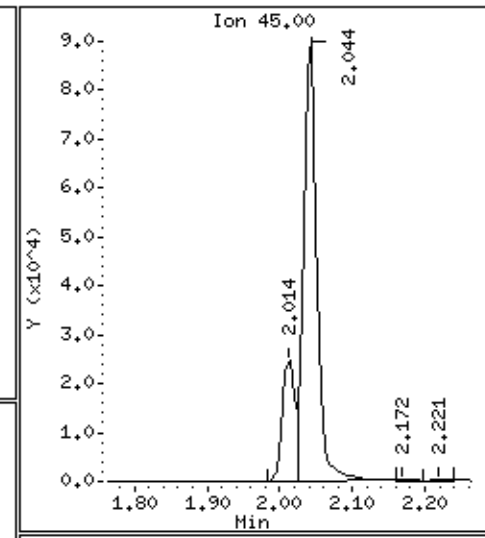
Review Code:

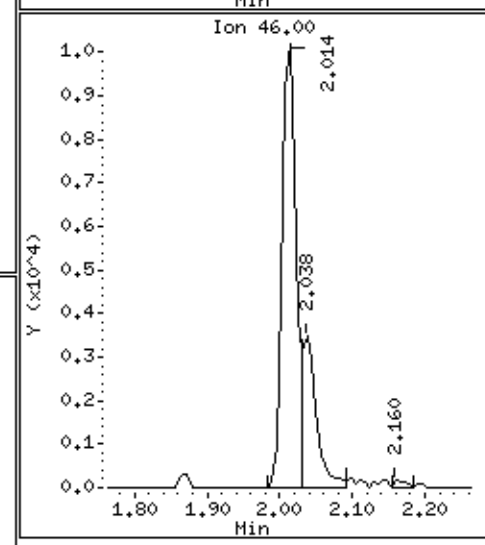












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D

Date : 25-APR-2017 19:07

Client ID: MW-3CMS

Instrument: 70msv6.i

Sample Info: 103081, 15067:1.25

Purge Volume: 5.0

Operator: KGG

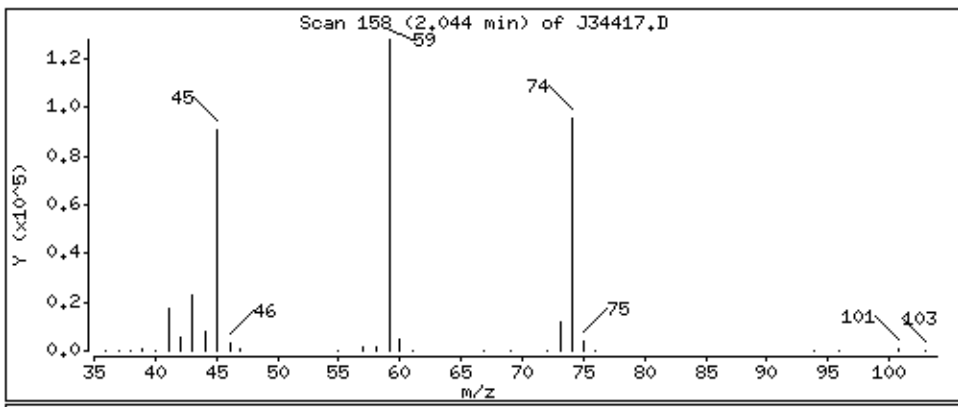
Column phase: RTX-624

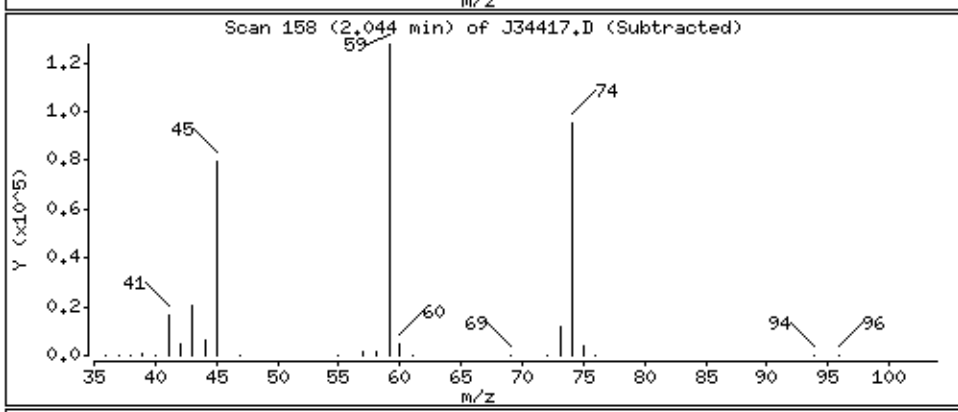
Column diameter: 0.18

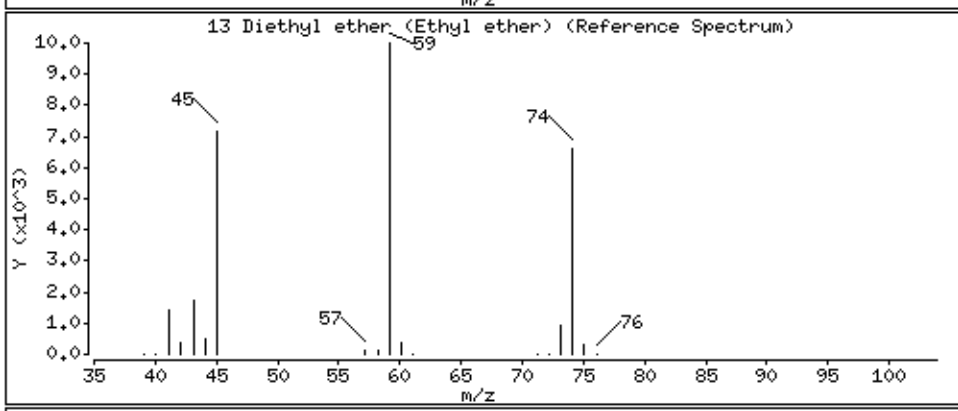
13 Diethyl ether (Ethyl ether)

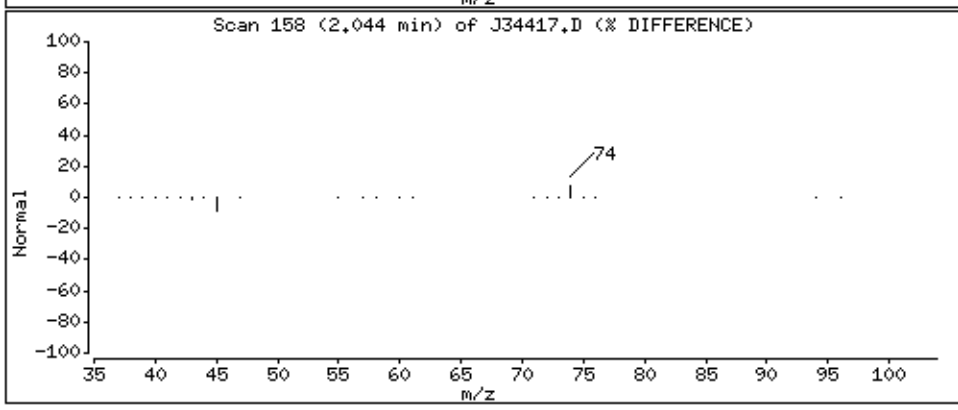
Concentration: 40.5 ug/L

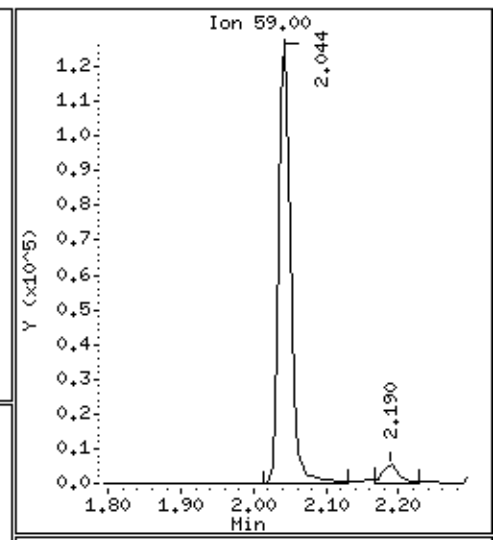
Review Code:

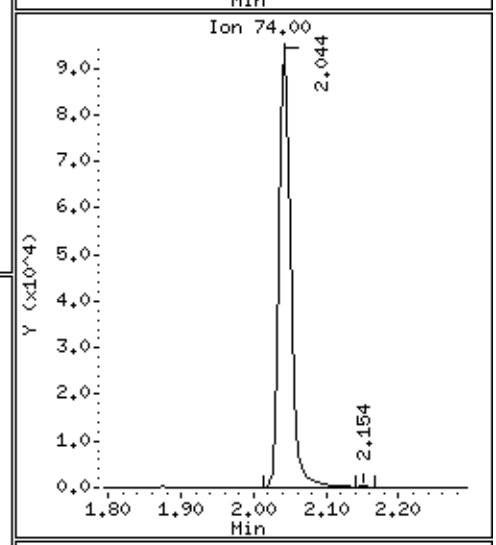


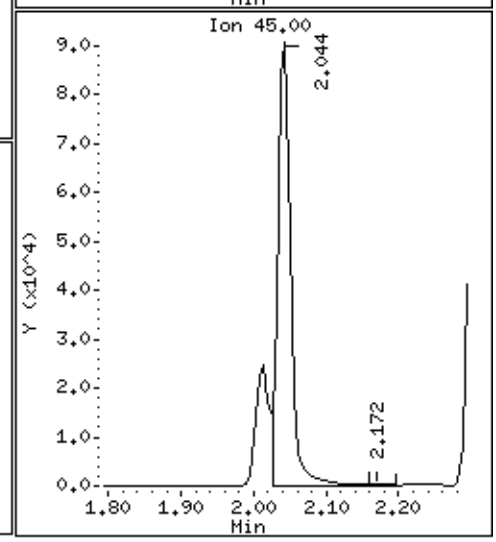












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D

Date : 25-APR-2017 19:07

Client ID: MW-3CMS

Instrument: 70msv6.i

Sample Info: 103081, 15067:1.25

Purge Volume: 5.0

Operator: KGG

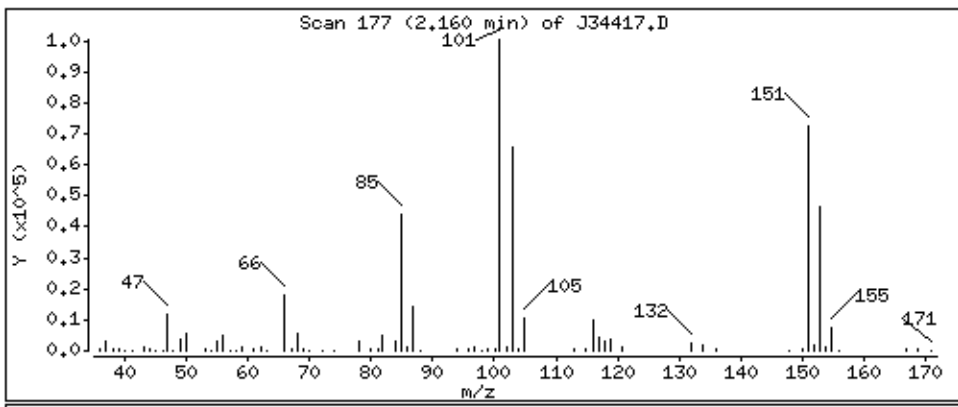
Column phase: RTX-624

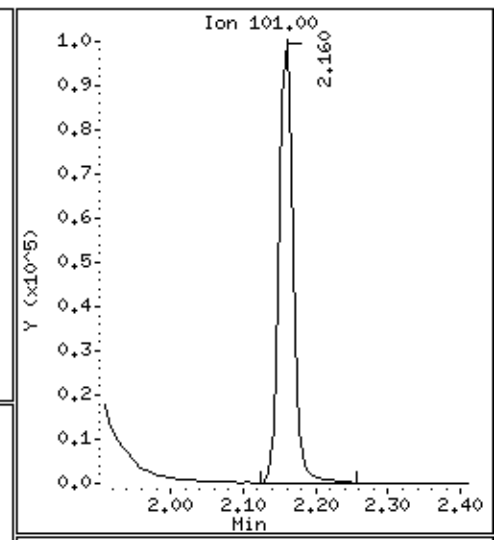
Column diameter: 0.18

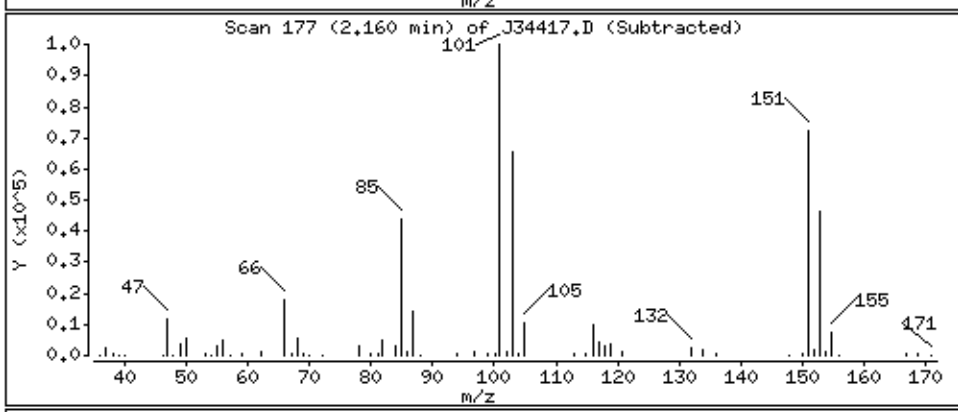
16 1,1,2-Trichlorotrifluoroethane

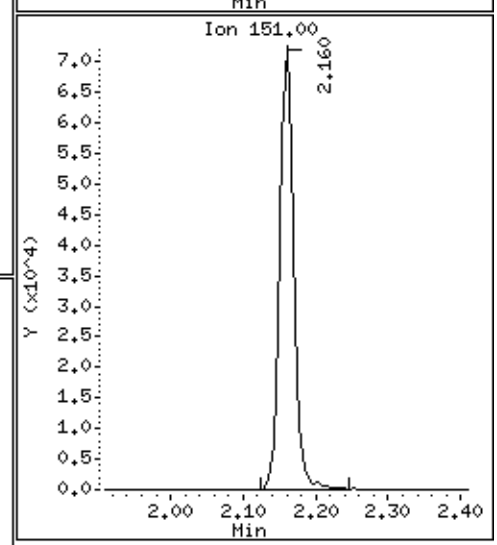
Concentration: 51.5 ug/L

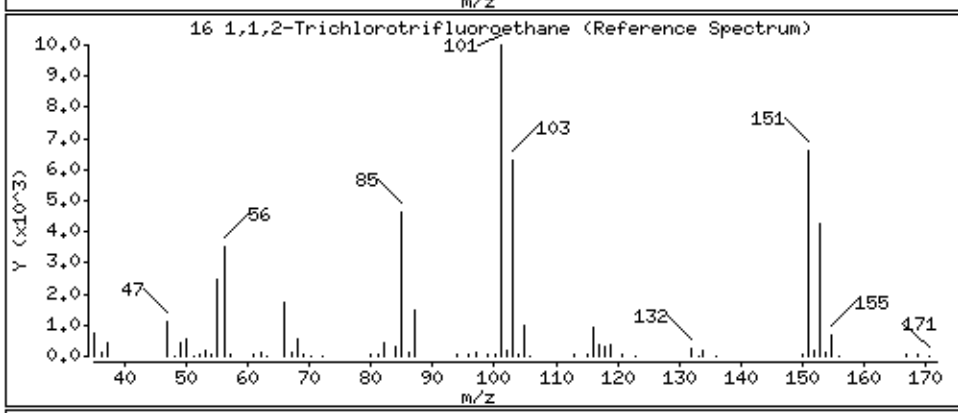
Review Code:

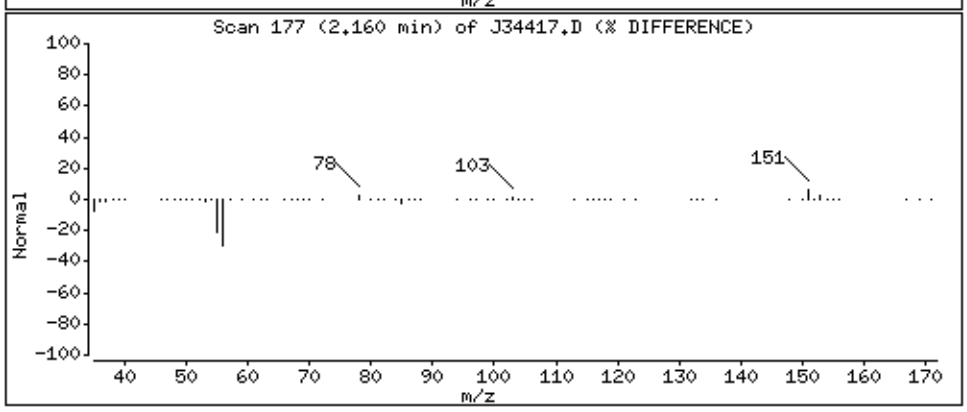












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D

Date : 25-APR-2017 19:07

Client ID: MW-3CMS

Instrument: 70msv6.i

Sample Info: 103081, 15067:1.25

Purge Volume: 5.0

Operator: KGG

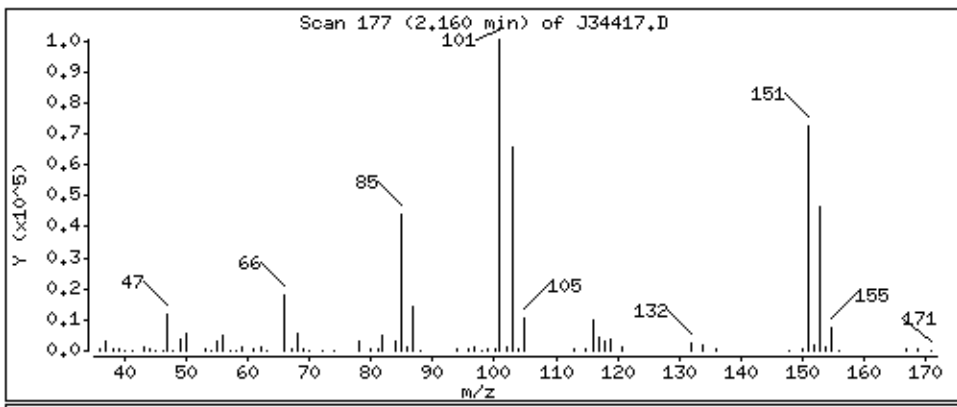
Column phase: RTX-624

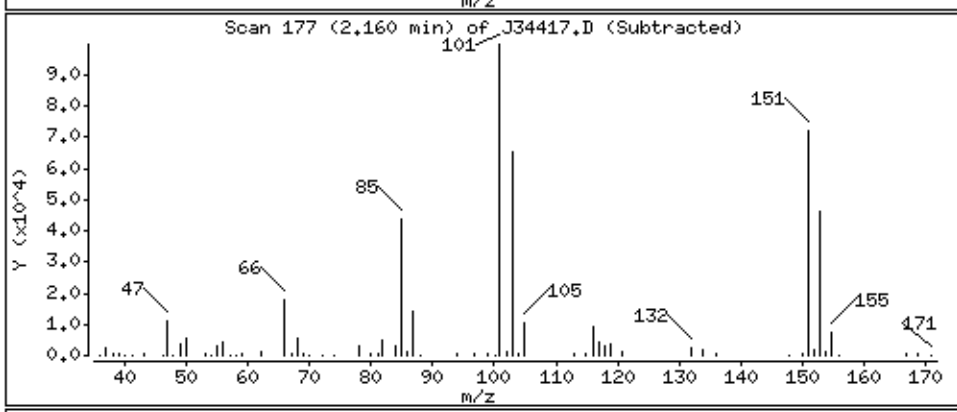
Column diameter: 0.18

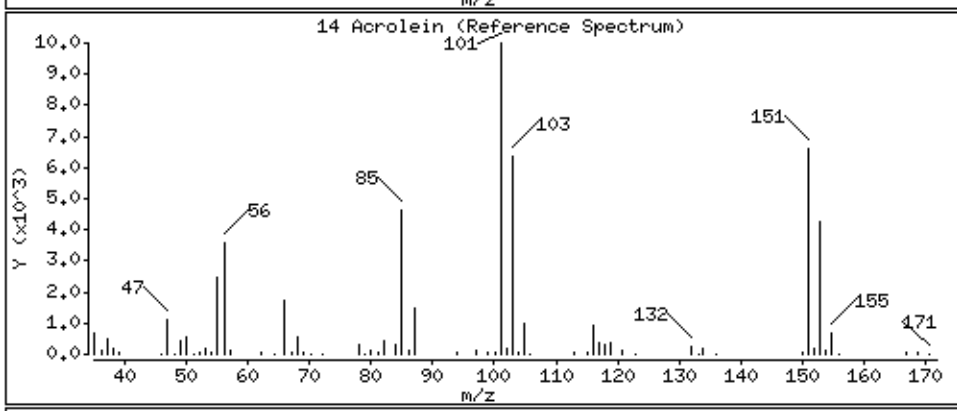
14 Acrolein

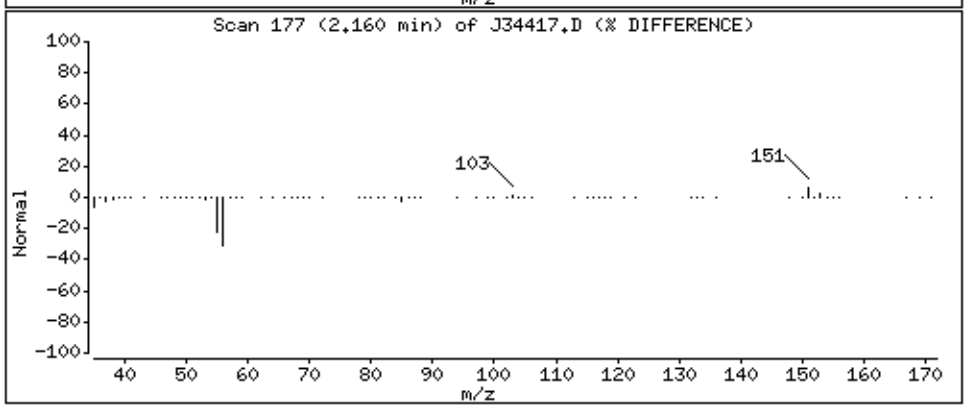
Concentration: 17.5 ug/L

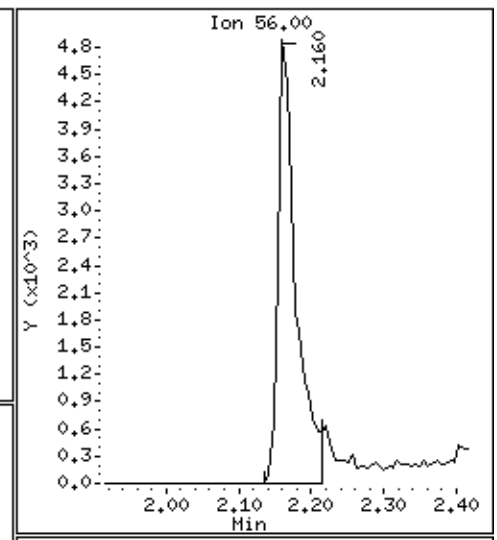
Review Code:

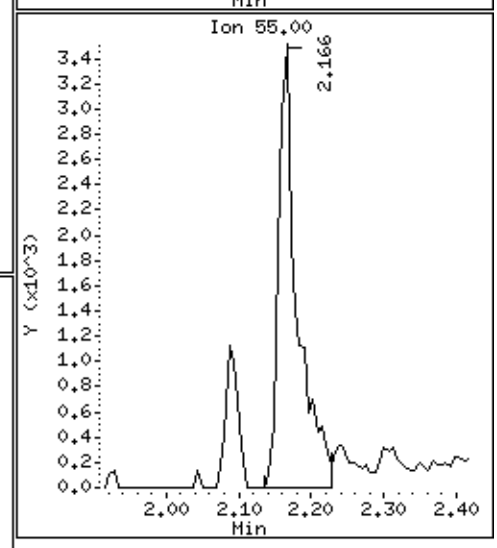












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D

Date : 25-APR-2017 19:07

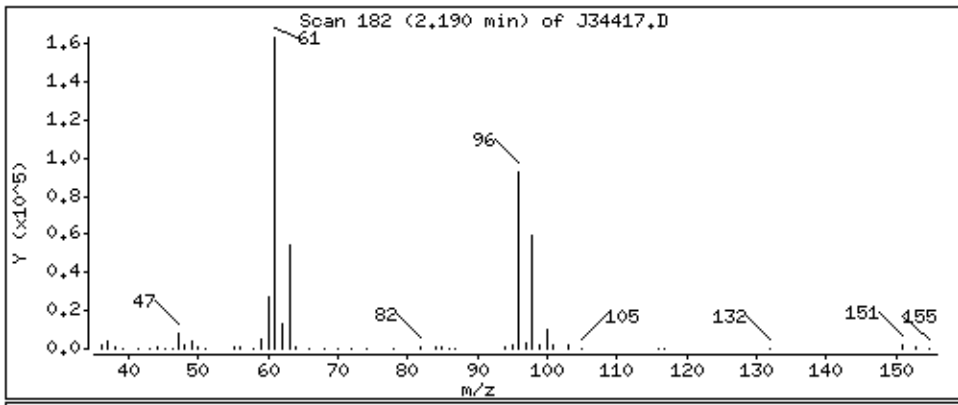
Client ID: MW-3CMS | Instrument: 70msv6.i

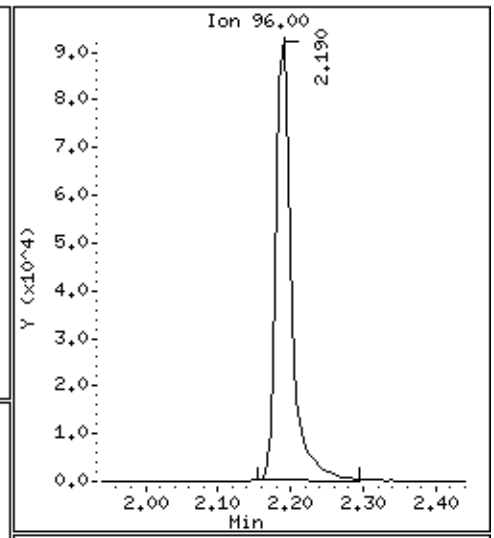
Sample Info: 103081, 15067:1.25

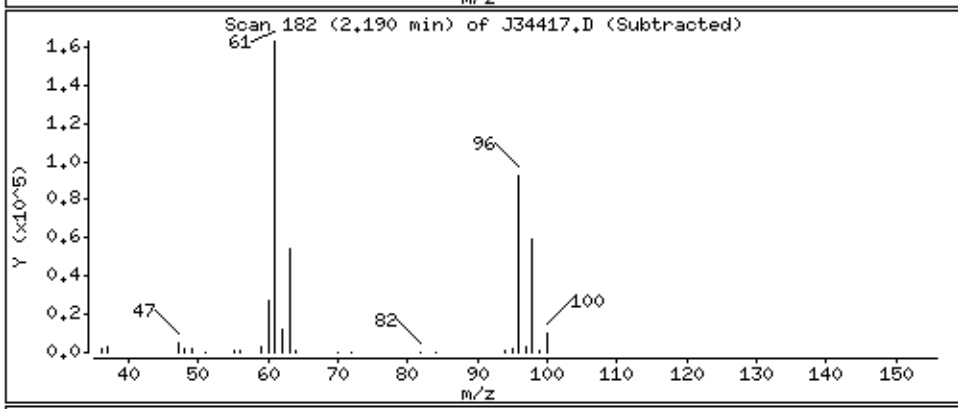
Purge Volume: 5.0 | Operator: KGG

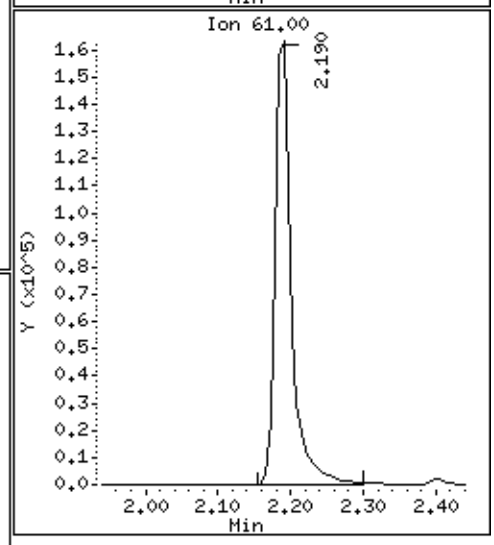
Column phase: RTX-624 | Column diameter: 0.18

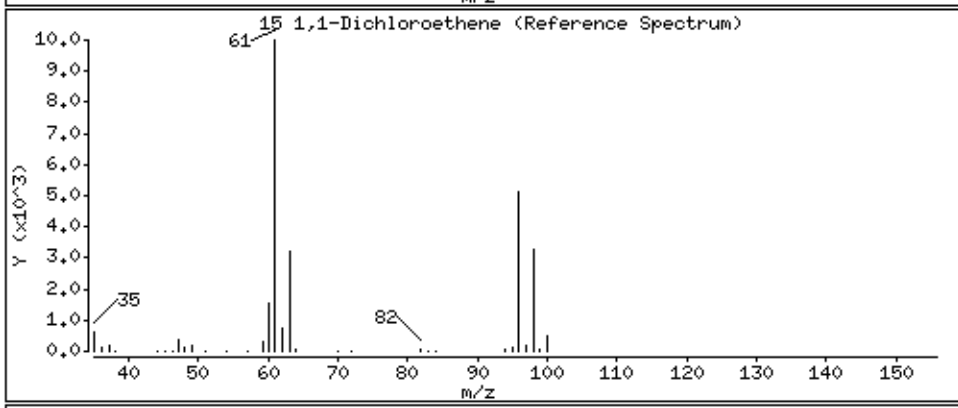
15 1,1-Dichloroethene | Concentration: 52.6 ug/L | Review Code:

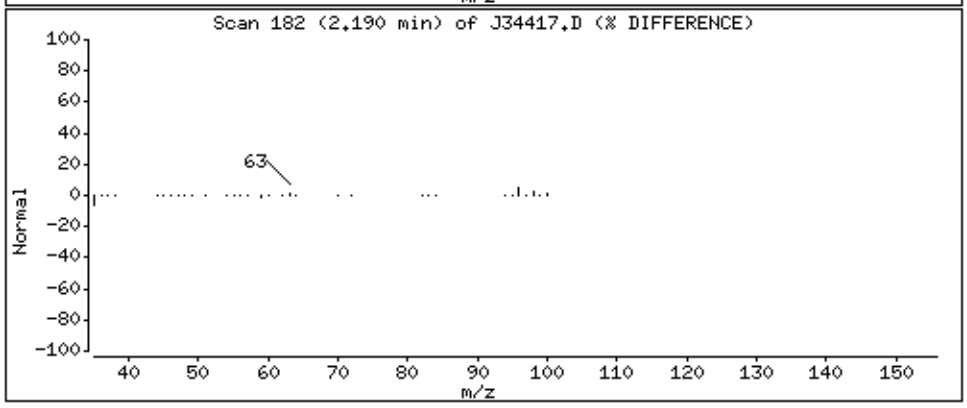












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D

Date : 25-APR-2017 19:07

Client ID: MW-3CMS

Instrument: 70msv6.i

Sample Info: 103081, 15067:1.25

Purge Volume: 5.0

Operator: KGG

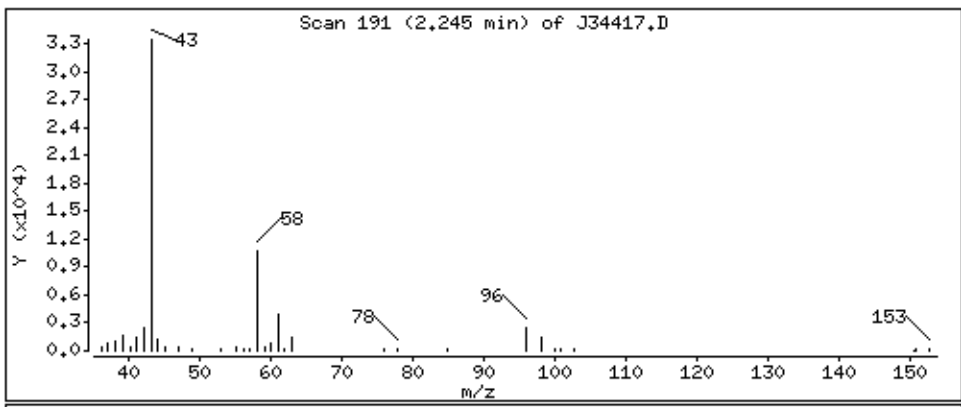
Column phase: RTX-624

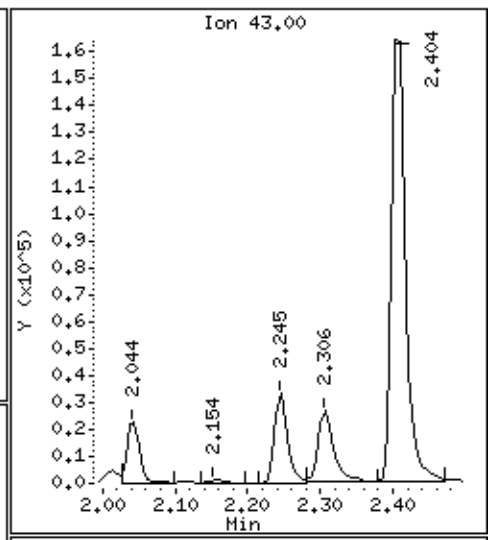
Column diameter: 0.18

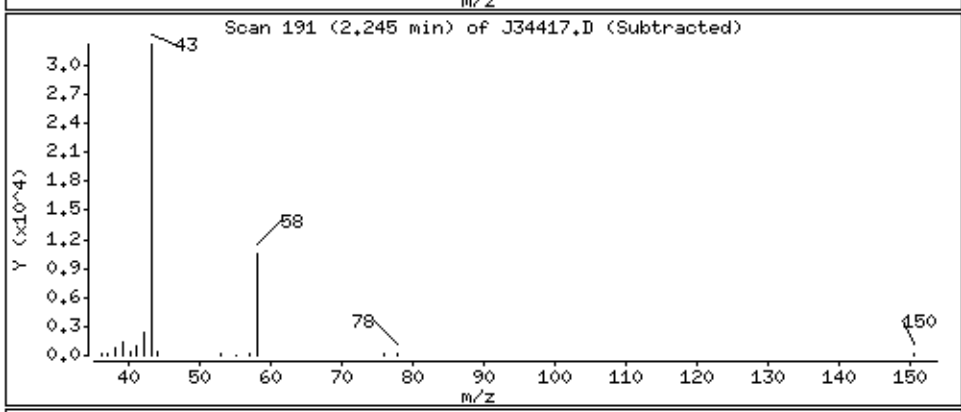
17 Acetone

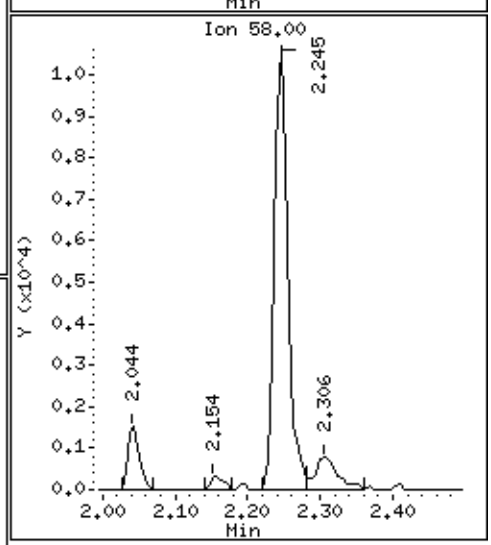
Concentration: 31.5 ug/L

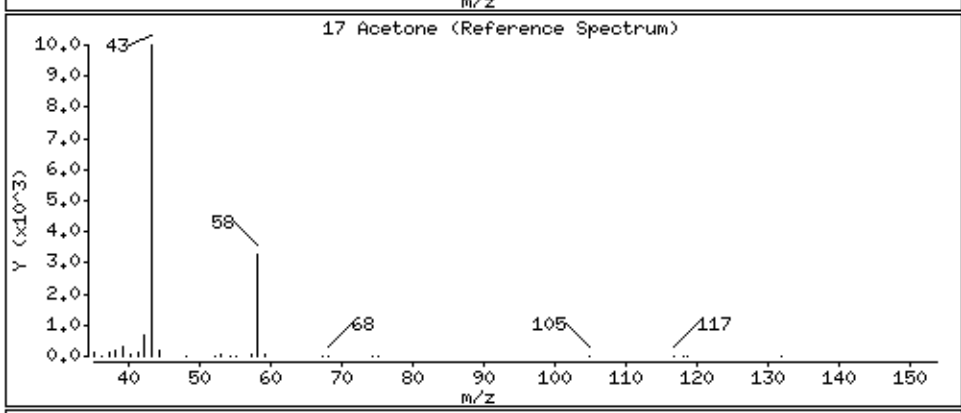
Review Code:

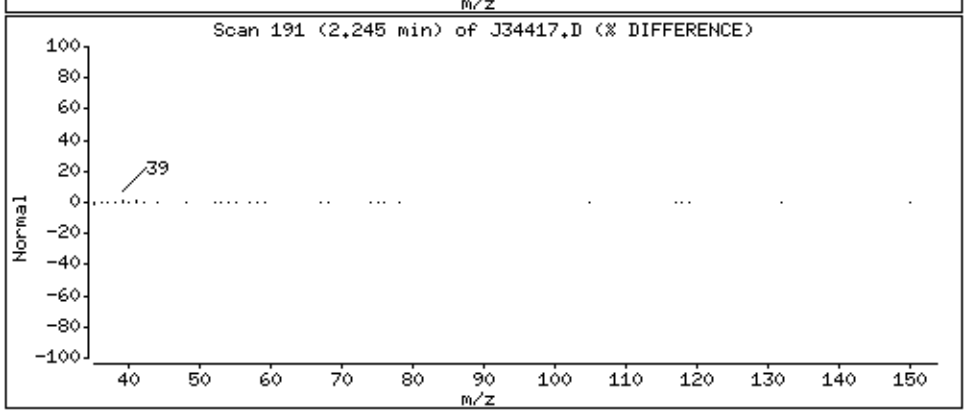












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D

Date : 25-APR-2017 19:07

Client ID: MW-3CMS

Instrument: 70msv6.i

Sample Info: 103081, 15067:1.25

Purge Volume: 5.0

Operator: KGG

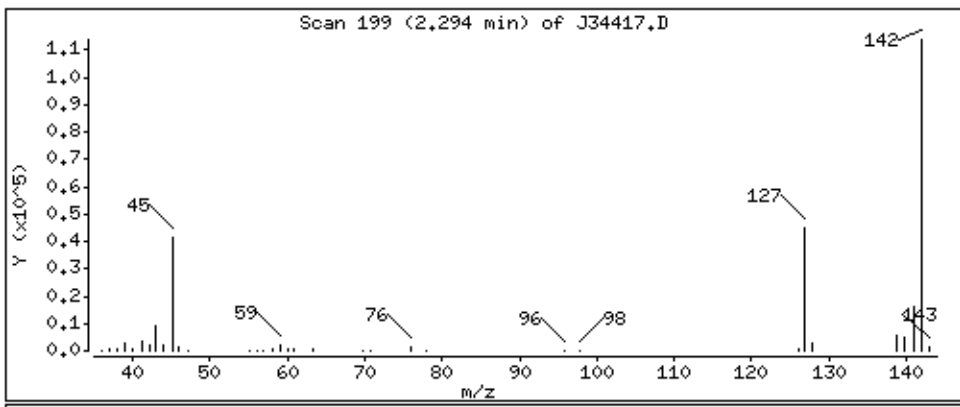
Column phase: RTX-624

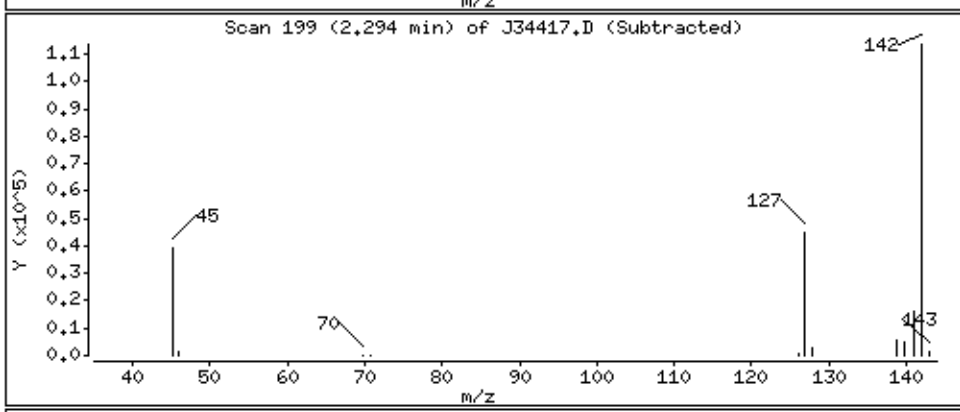
Column diameter: 0.18

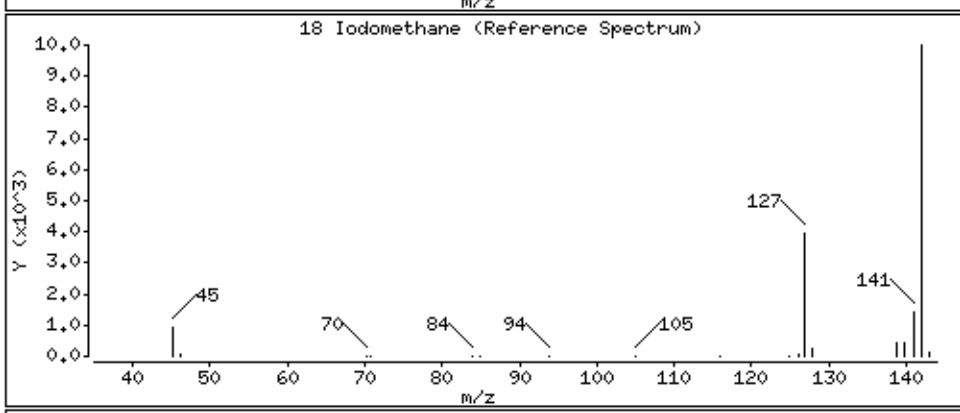
18 Iodomethane

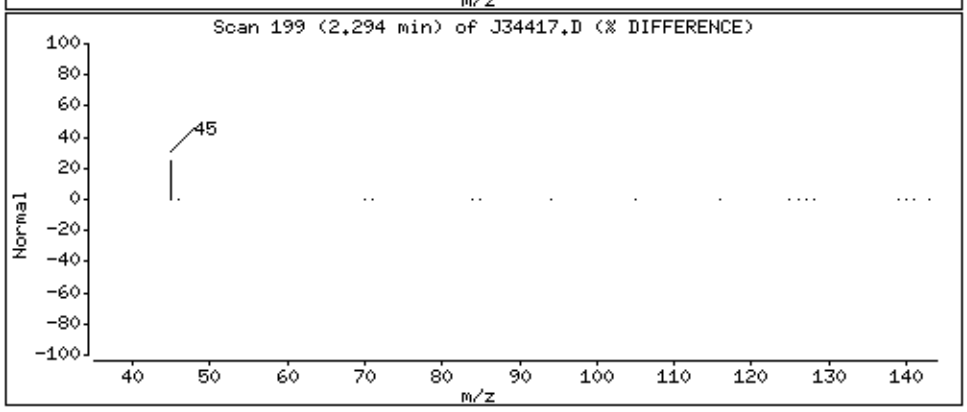
Concentration: 42.2 ug/L

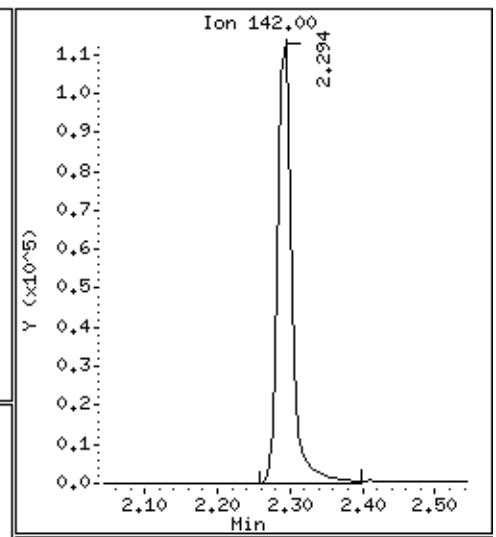
Review Code:

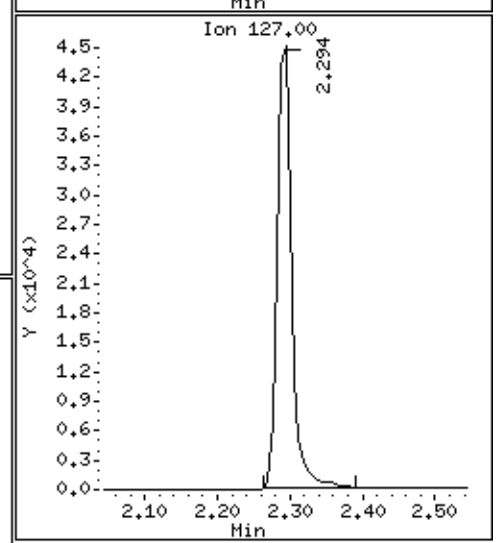












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D

Date : 25-APR-2017 19:07

Client ID: MW-3CMS

Instrument: 70msv6.i

Sample Info: 103081, 15067:1.25

Purge Volume: 5.0

Operator: KGG

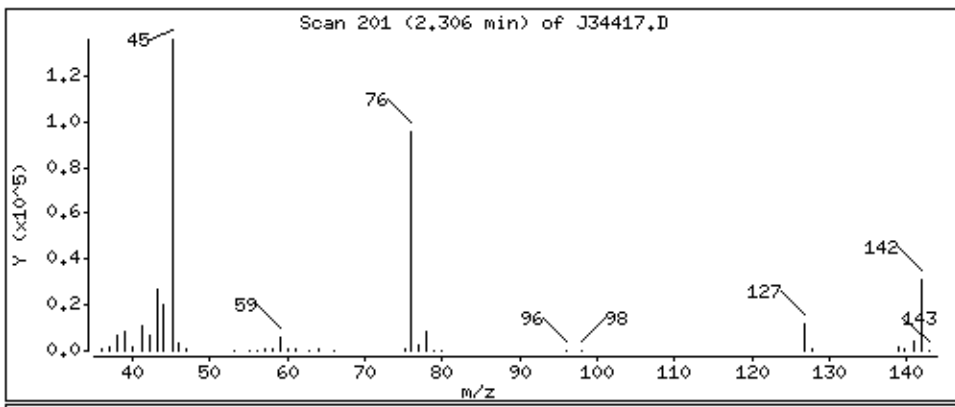
Column phase: RTX-624

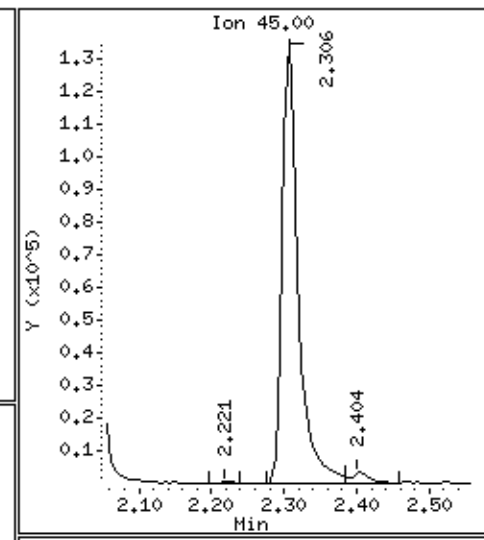
Column diameter: 0.18

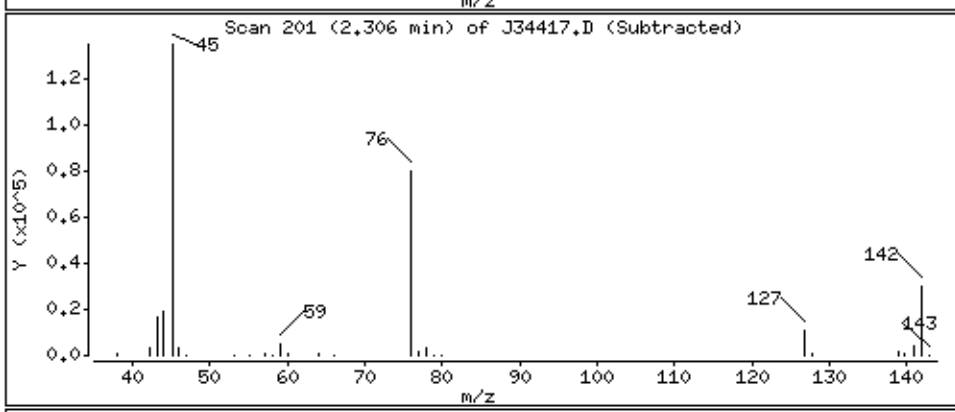
19 2-Propanol

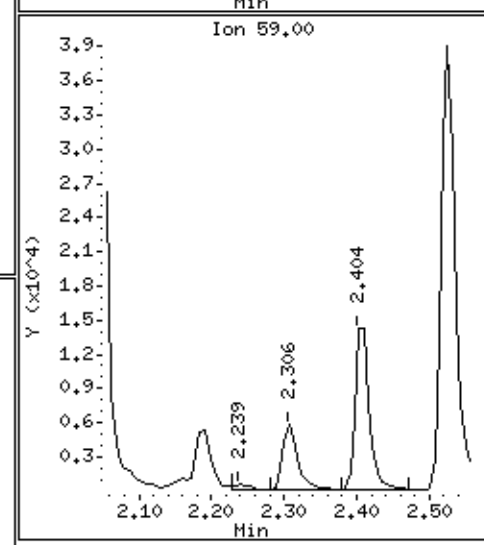
Concentration: 842 ug/L

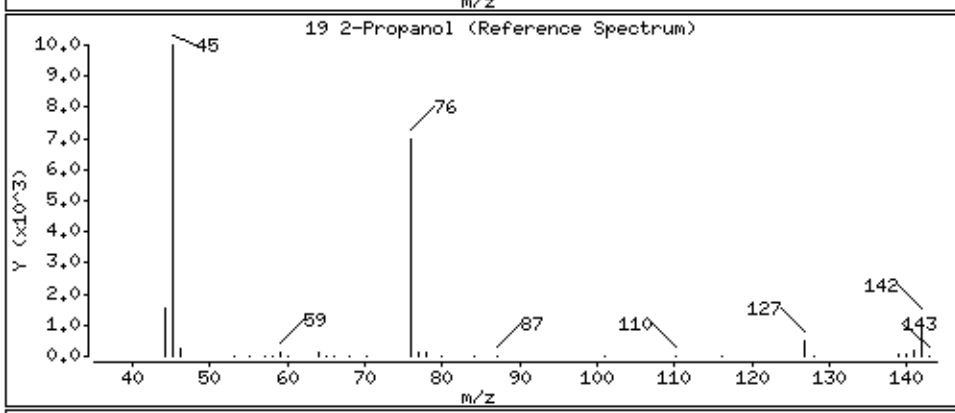
Review Code:

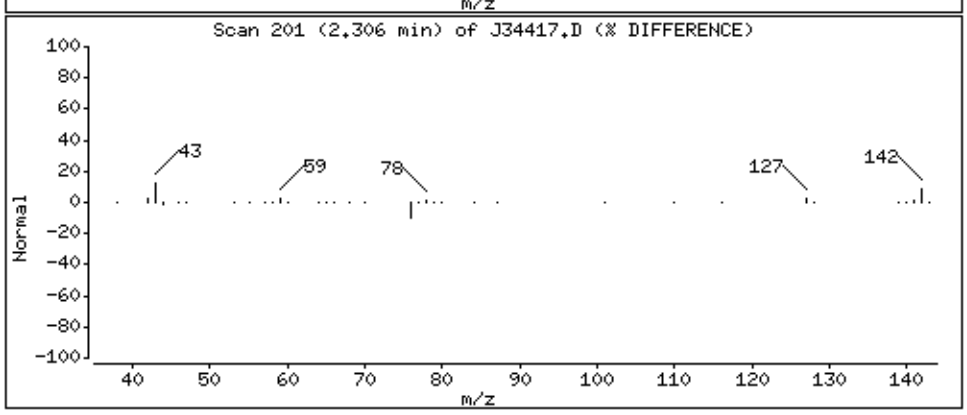












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D

Date : 25-APR-2017 19:07

Client ID: MW-3CMS

Instrument: 70msv6.i

Sample Info: 103081, 15067:1.25

Purge Volume: 5.0

Operator: KGG

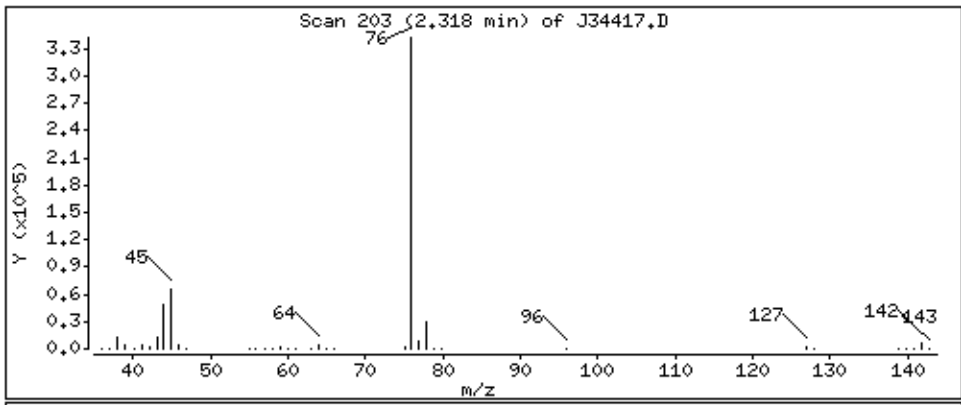
Column phase: RTX-624

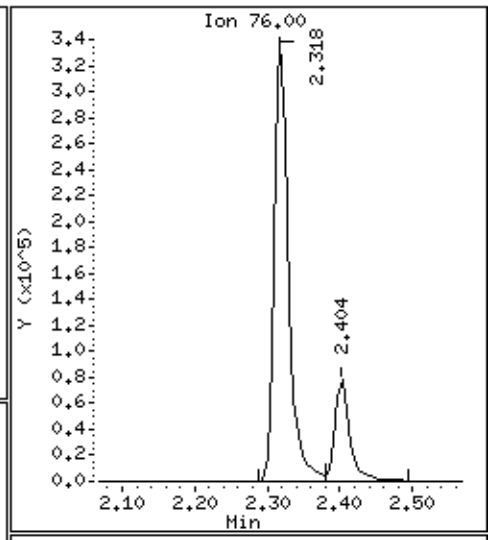
Column diameter: 0.18

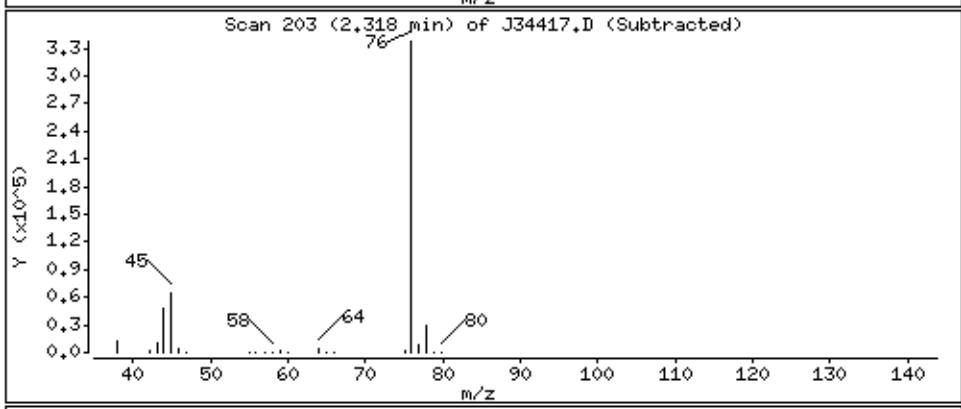
20 Carbon disulfide

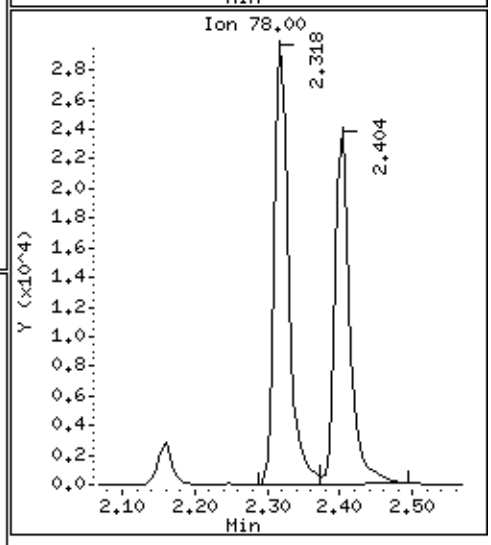
Concentration: 49.7 ug/L

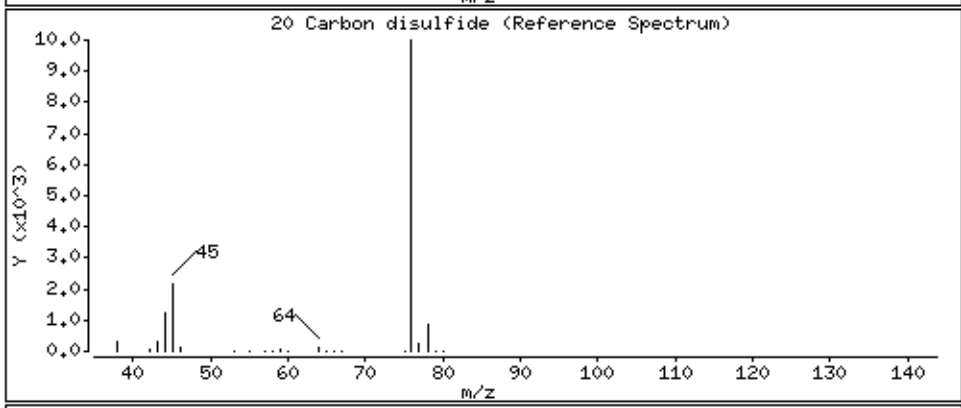
Review Code:

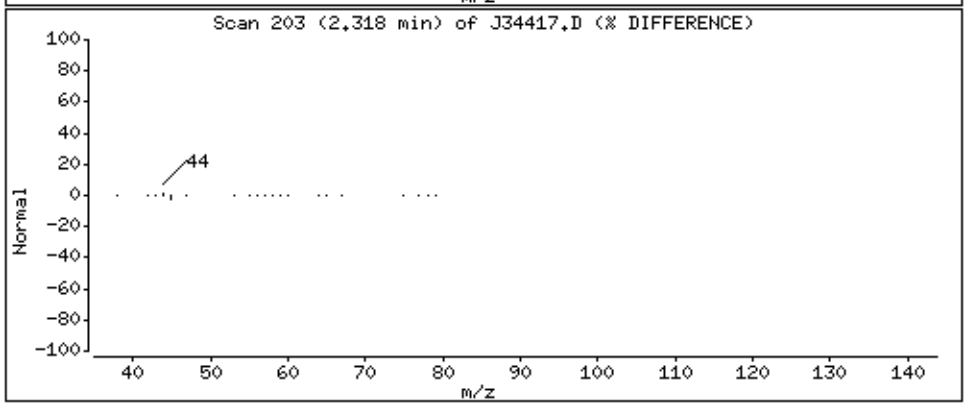












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D

Date : 25-APR-2017 19:07

Client ID: MW-3CMS

Instrument: 70msv6.i

Sample Info: 103081, 15067:1.25

Purge Volume: 5.0

Operator: KGG

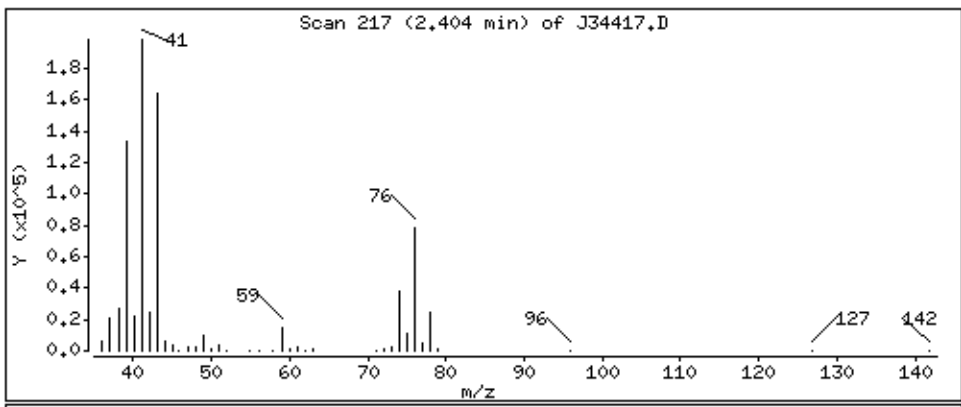
Column phase: RTX-624

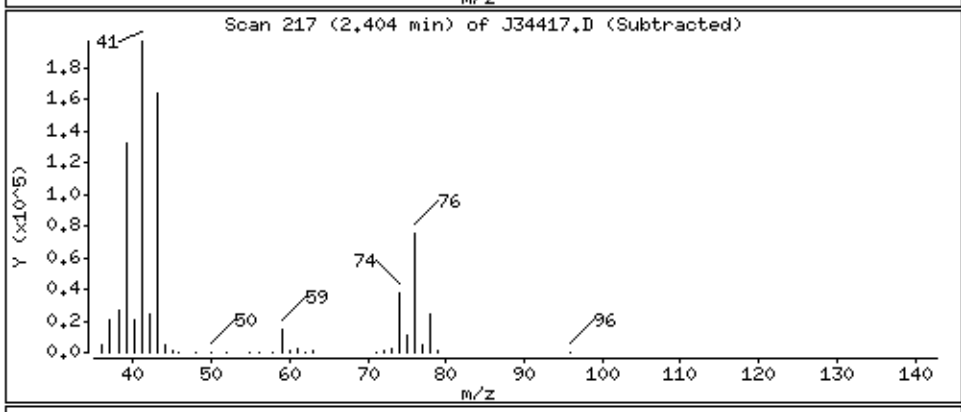
Column diameter: 0.18

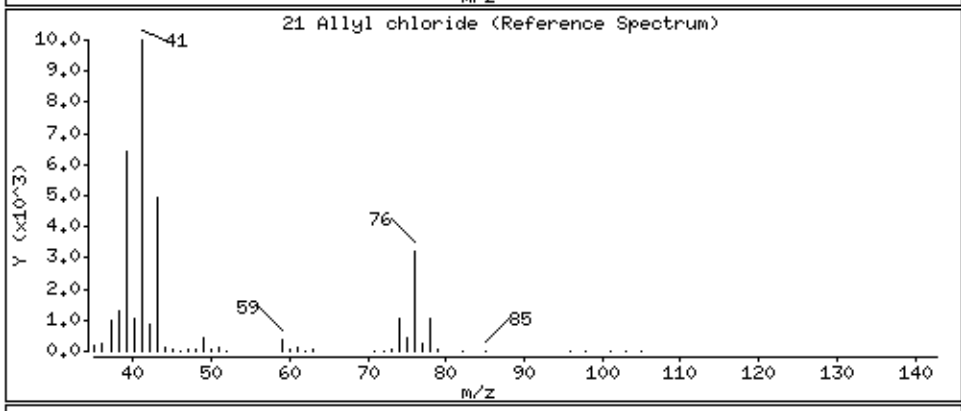
21 Allyl chloride

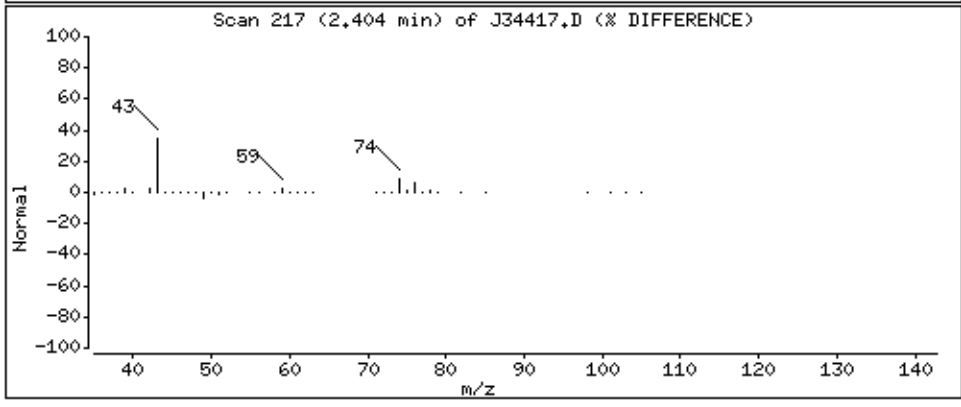
Concentration: 50.1 ug/L

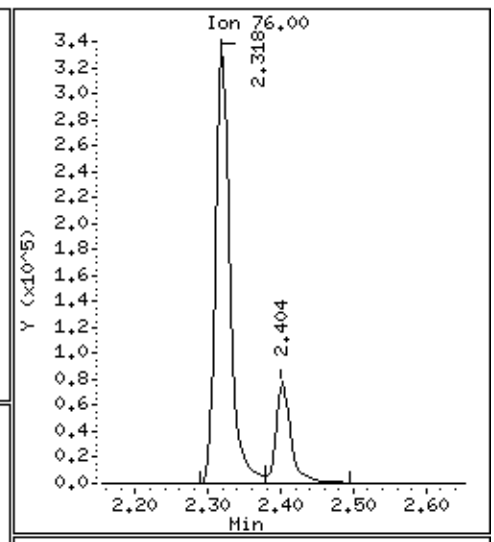
Review Code:

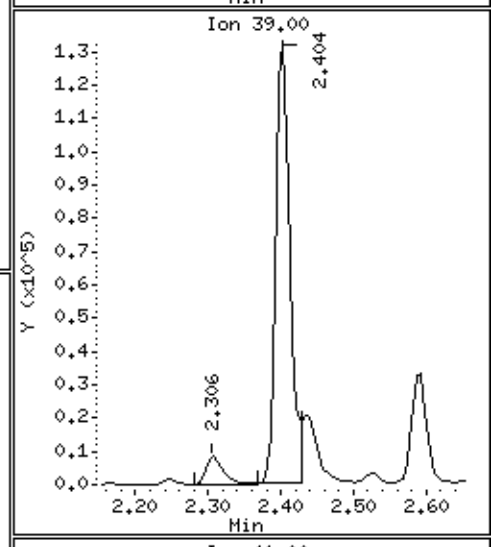


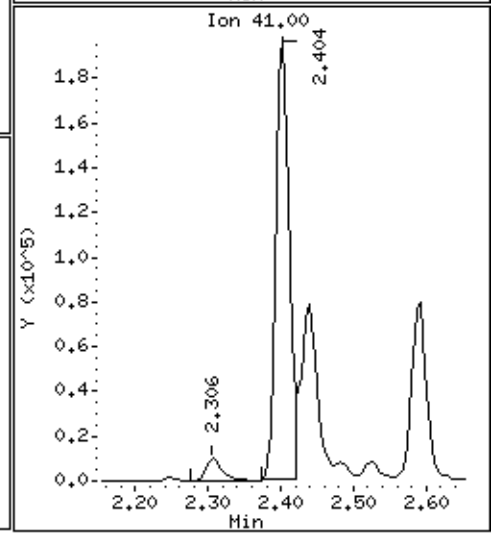












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D

Date : 25-APR-2017 19:07

Client ID: MW-3CMS

Instrument: 70msv6.i

Sample Info: 103081, 15067:1.25

Purge Volume: 5.0

Operator: KGG

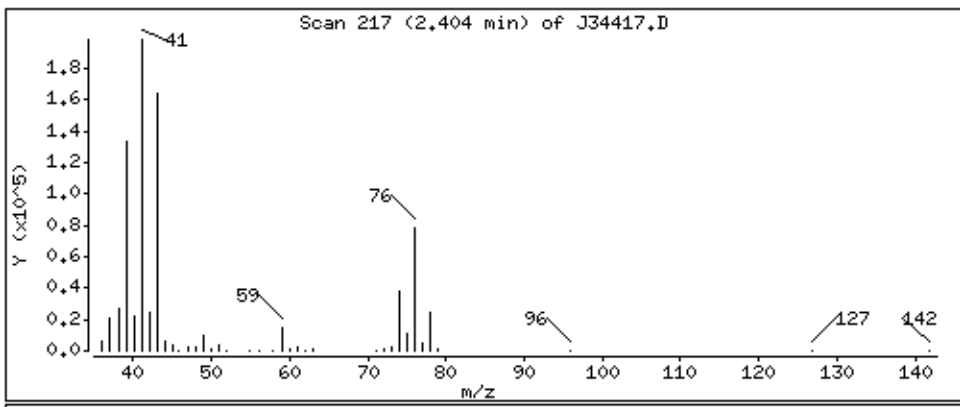
Column phase: RTX-624

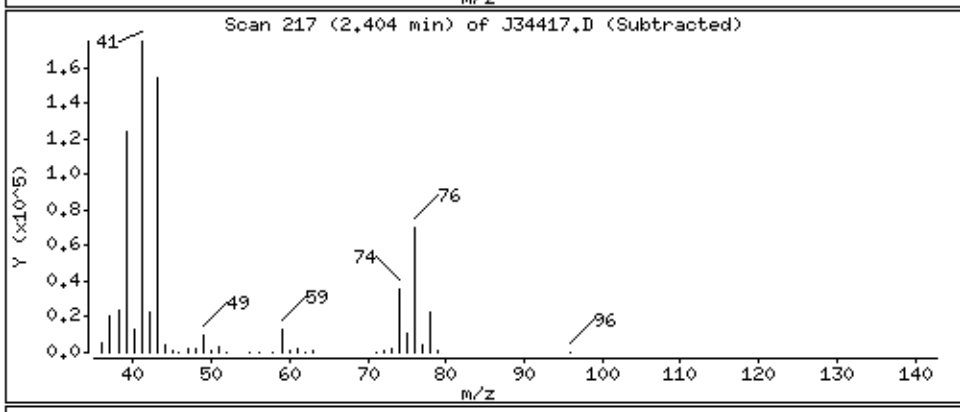
Column diameter: 0.18

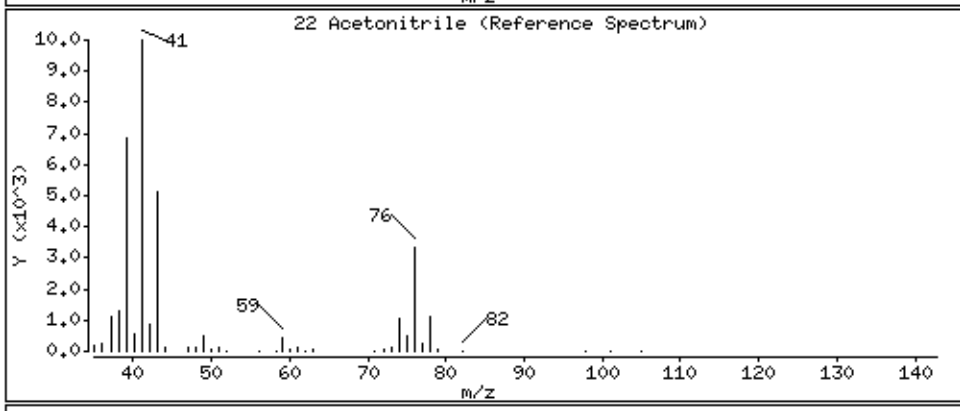
22 Acetonitrile

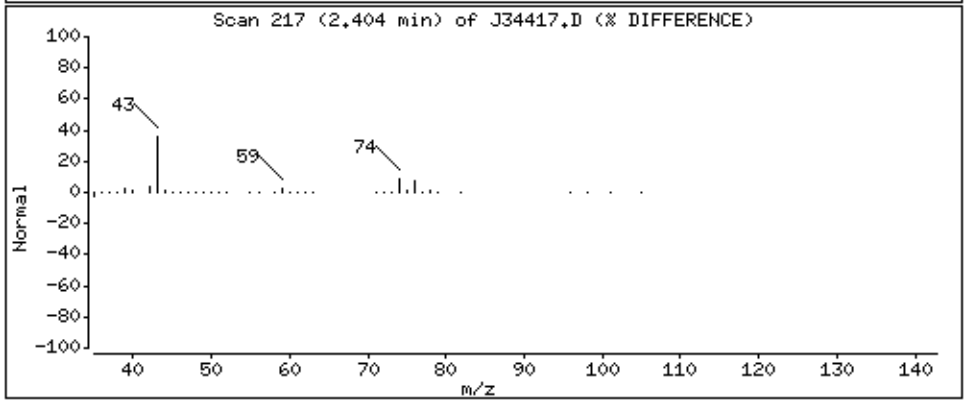
Concentration: 170 ug/L

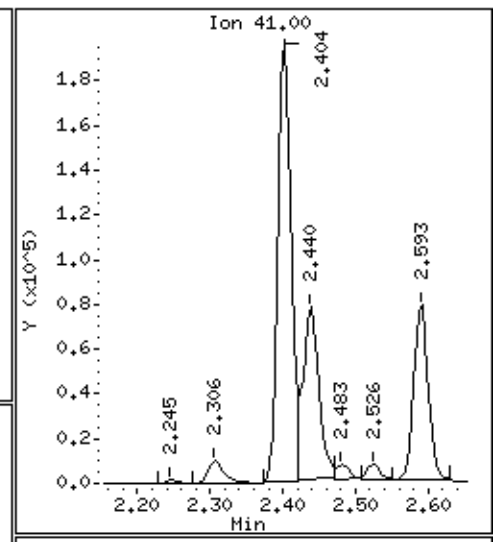
Review Code:

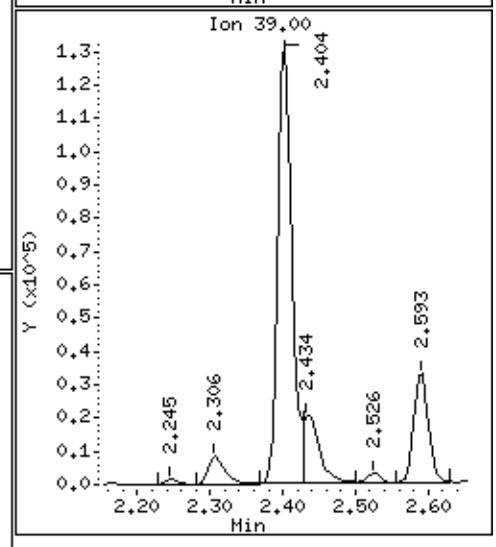












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D

Date : 25-APR-2017 19:07

Client ID: MW-3CMS

Instrument: 70msv6.i

Sample Info: 103081, 15067:1.25

Purge Volume: 5.0

Operator: KGG

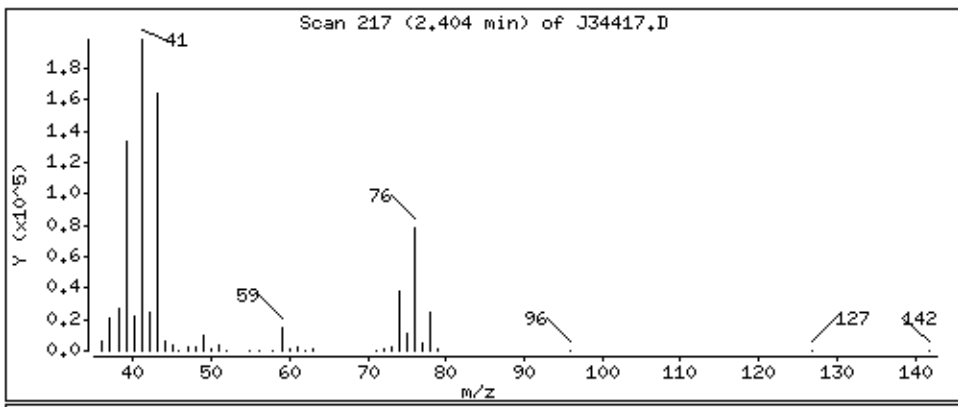
Column phase: RTX-624

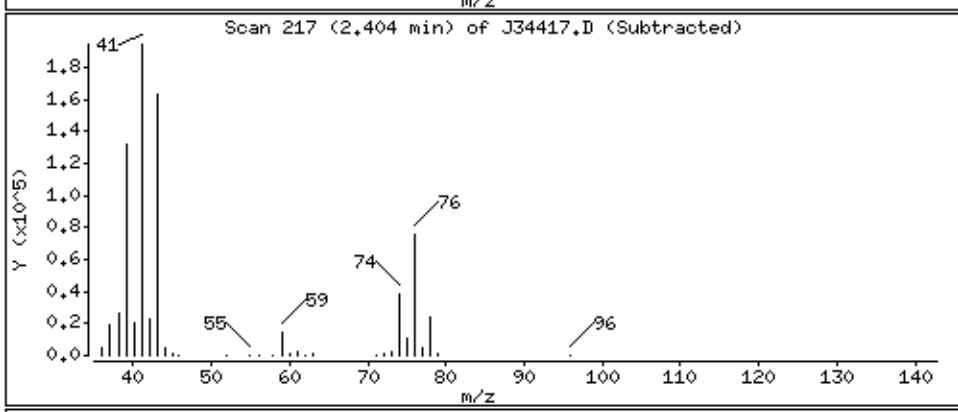
Column diameter: 0.18

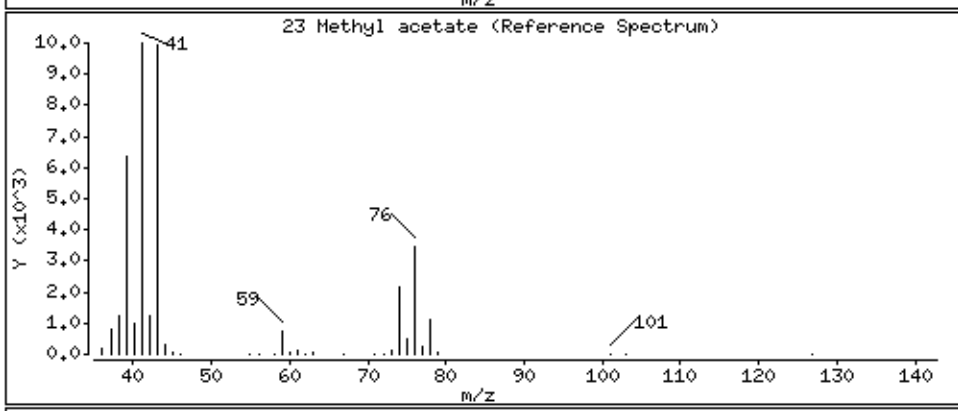
23 Methyl acetate

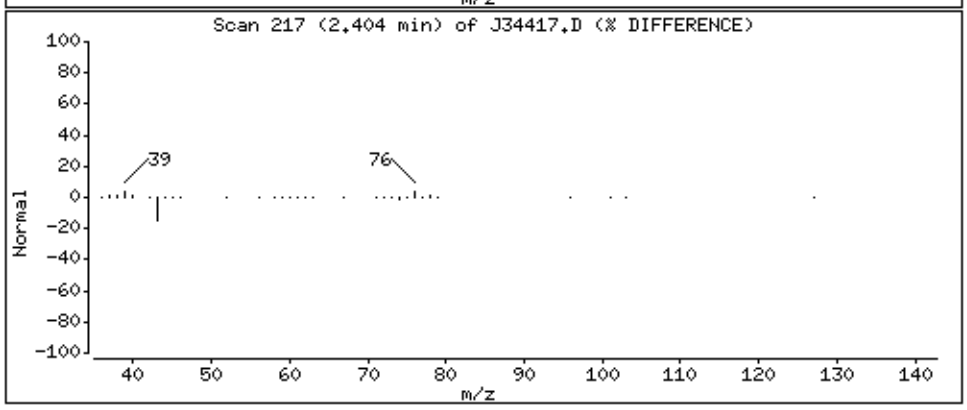
Concentration: 36.9 ug/L

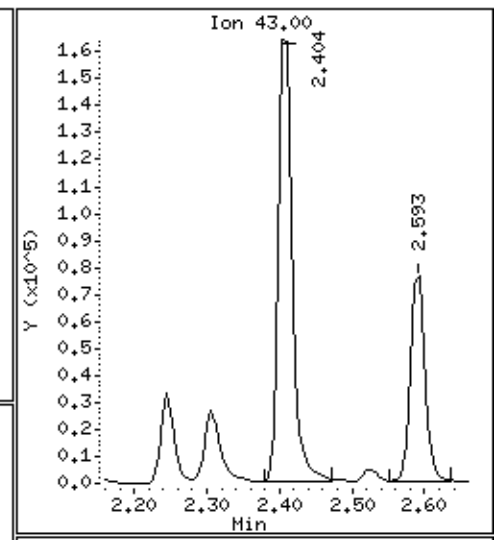
Review Code:

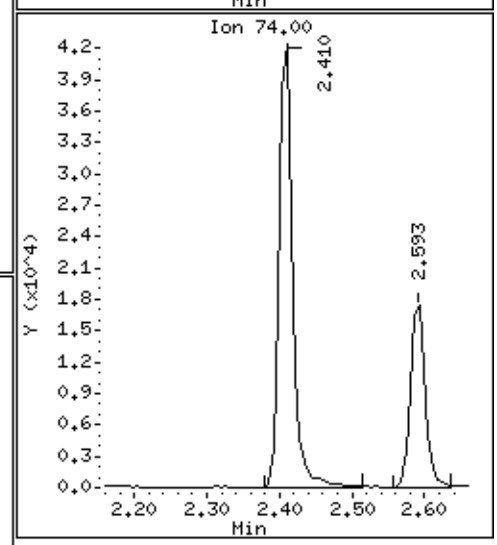












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D

Date : 25-APR-2017 19:07

Client ID: MW-3CMS

Instrument: 70msv6.i

Sample Info: 103081, 15067:1.25

Purge Volume: 5.0

Operator: KGG

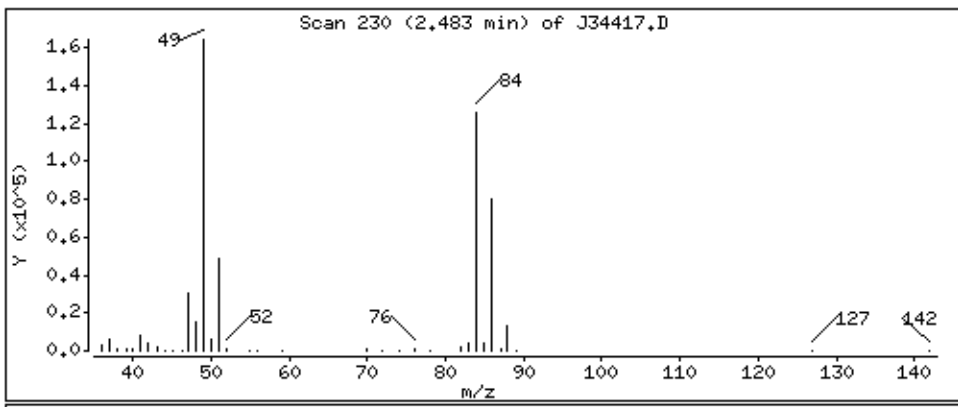
Column phase: RTX-624

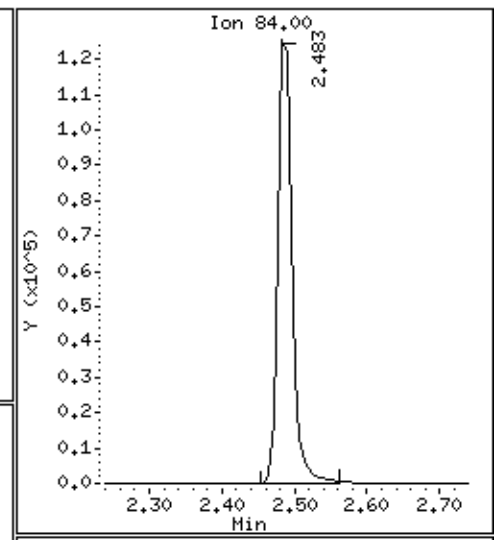
Column diameter: 0.18

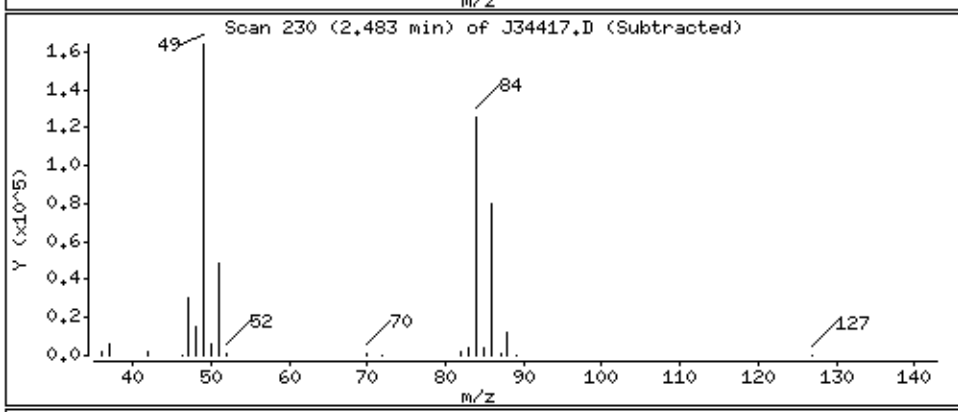
24 Methylene Chloride

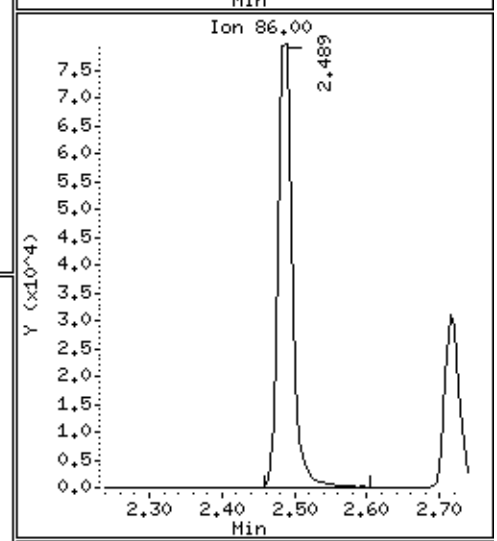
Concentration: 47.0 ug/L

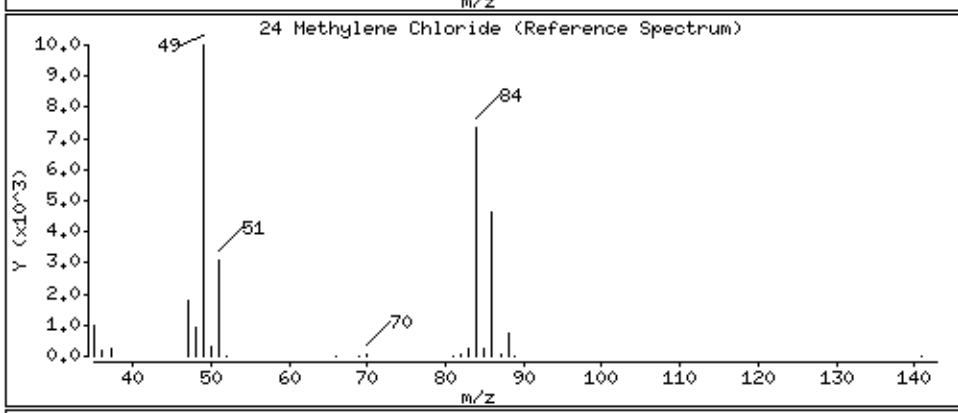
Review Code:

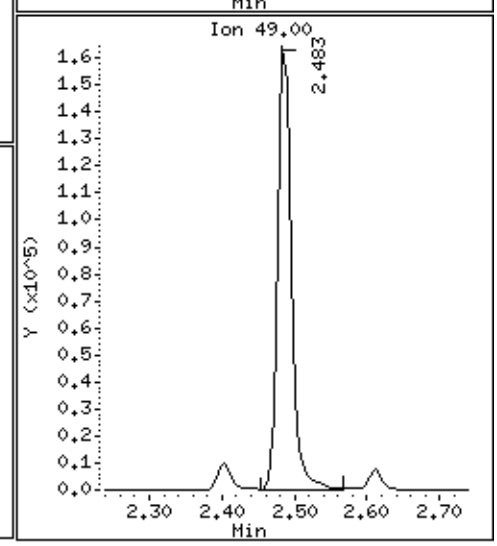


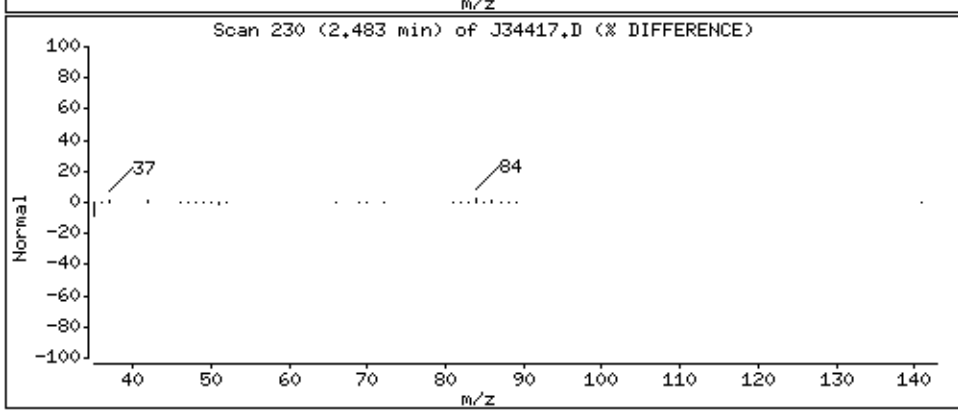












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D

Date : 25-APR-2017 19:07

Client ID: MW-3CMS

Instrument: 70msv6.i

Sample Info: 103081, 15067:1.25

Purge Volume: 5.0

Operator: KGG

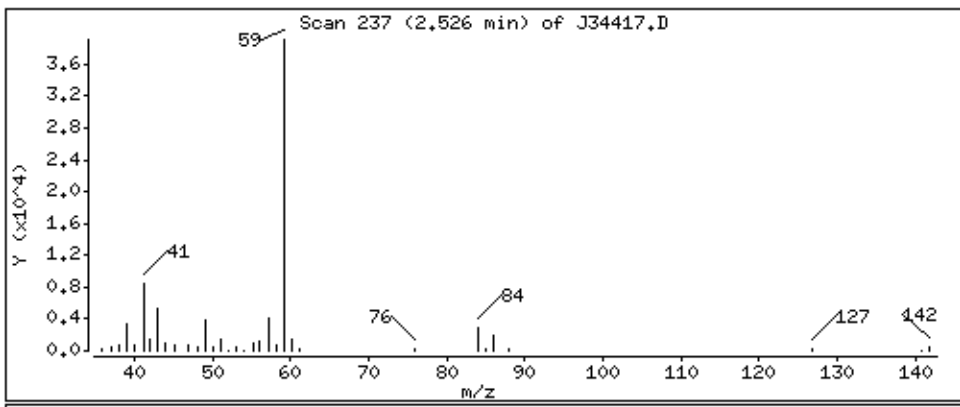
Column phase: RTX-624

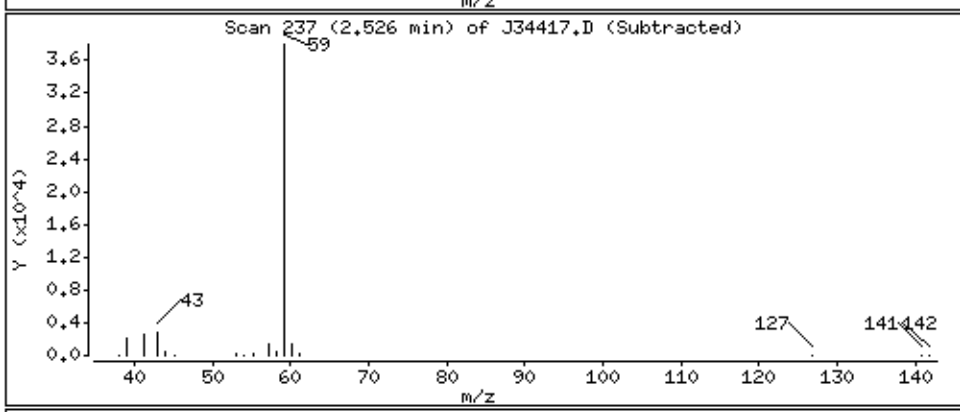
Column diameter: 0.18

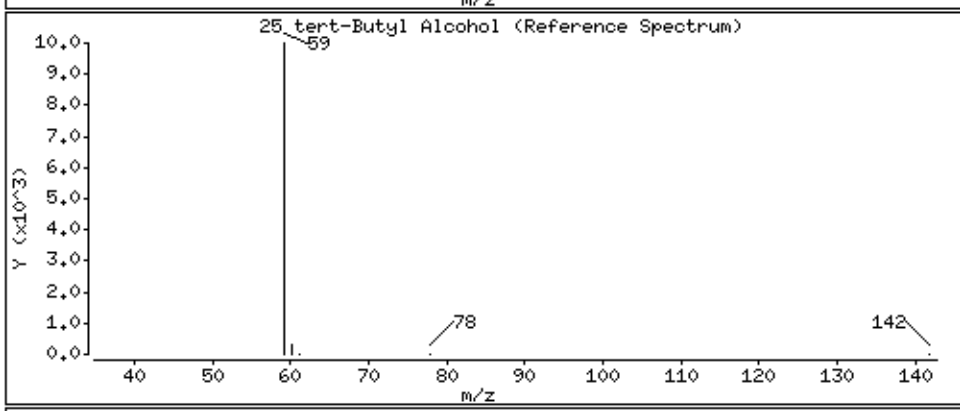
25 tert-Butyl Alcohol

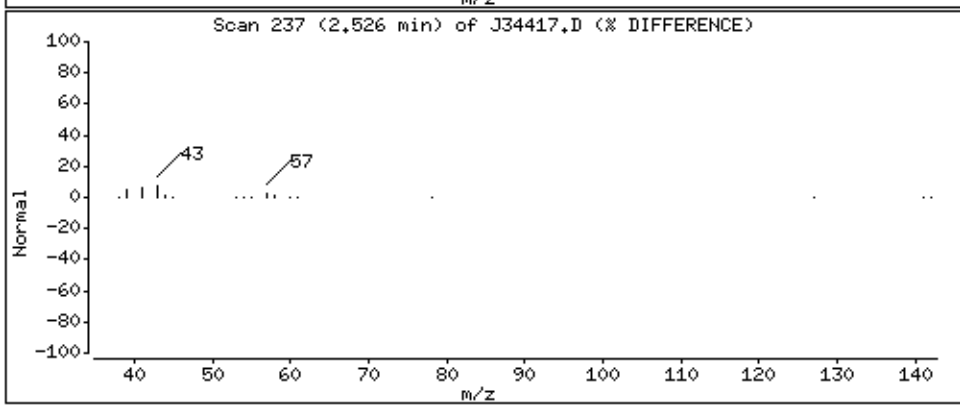
Concentration: 201 ug/L

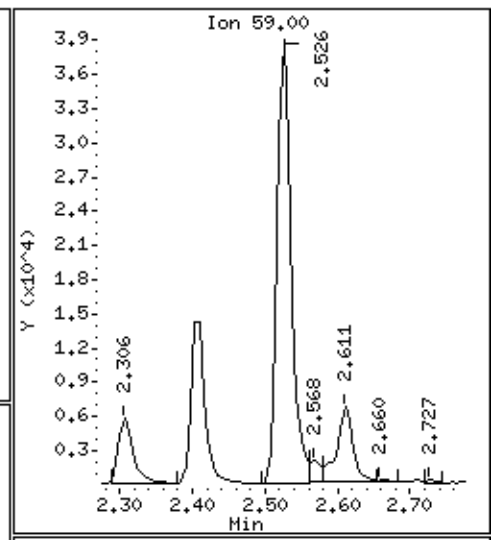
Review Code:

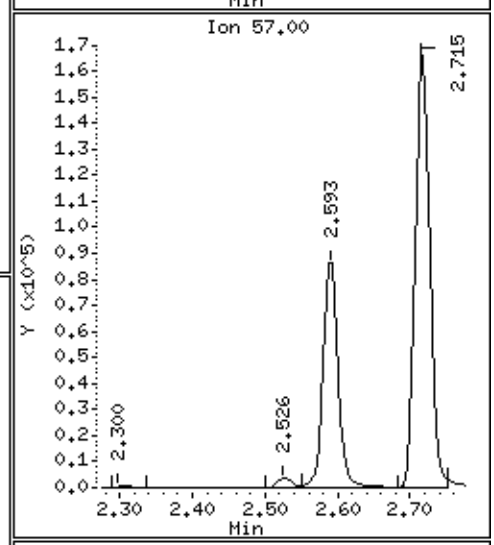


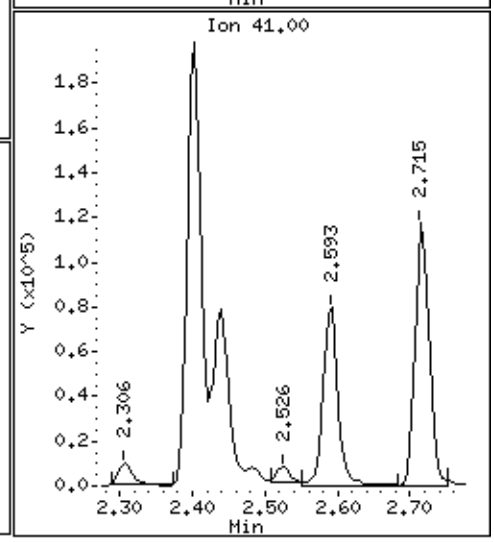












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D

Date : 25-APR-2017 19:07

Client ID: MW-3CMS

Instrument: 70msv6.i

Sample Info: 103081, 15067:1.25

Purge Volume: 5.0

Operator: KGG

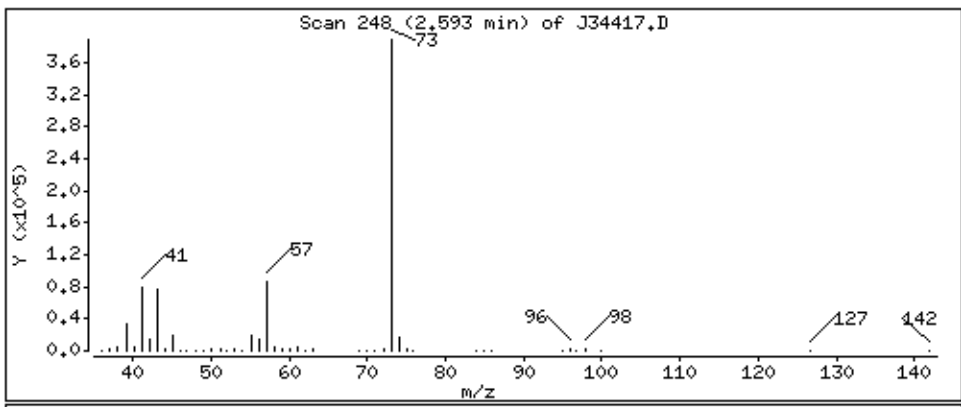
Column phase: RTX-624

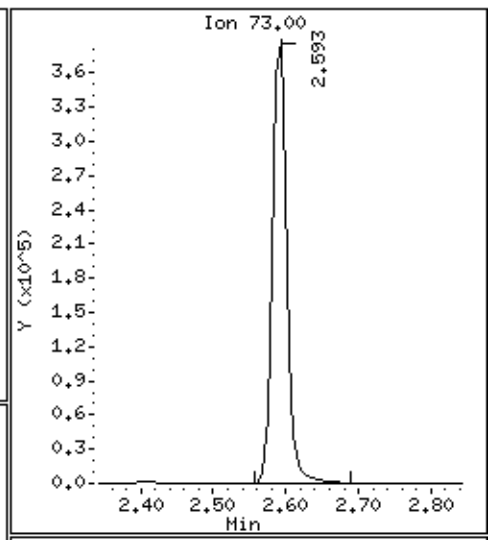
Column diameter: 0.18

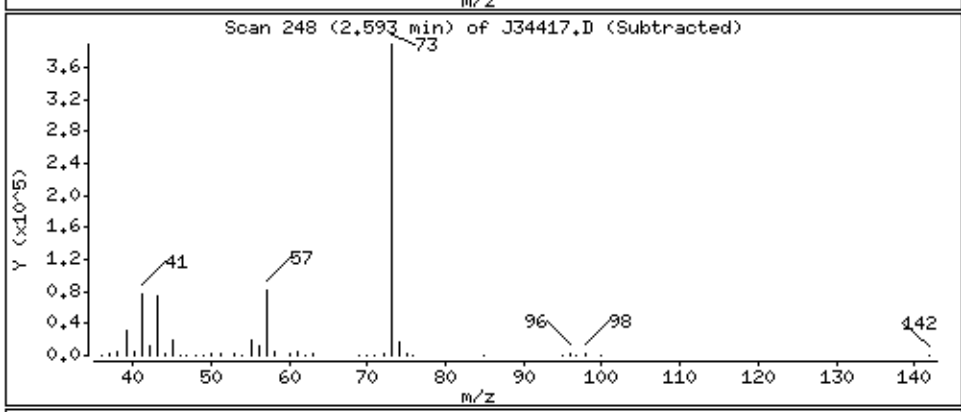
28 Methyl-tert-butyl ether

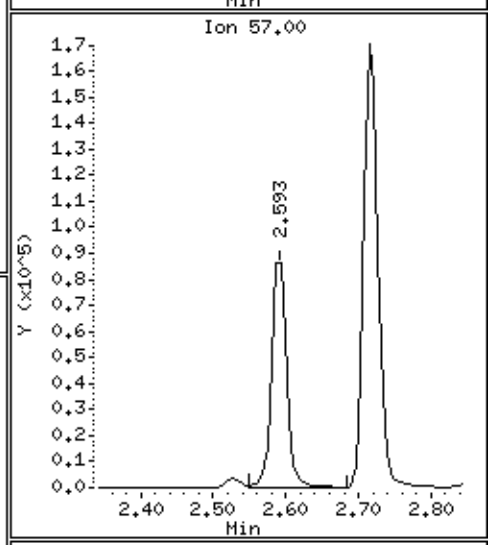
Concentration: 41.8 ug/L

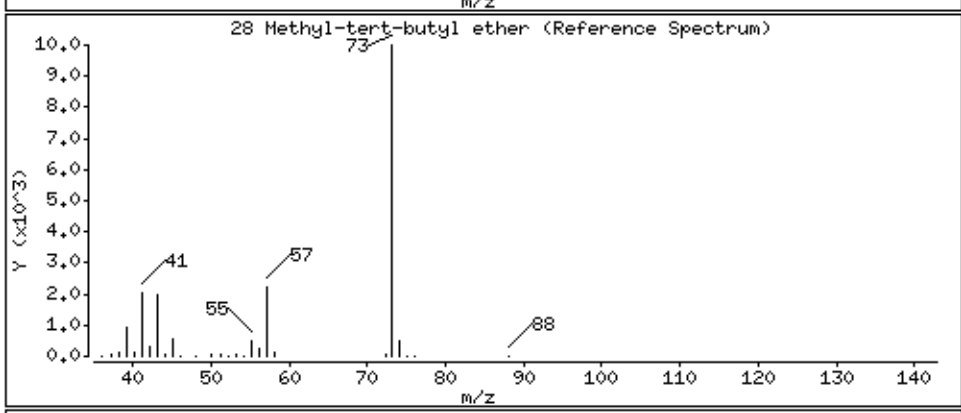
Review Code:

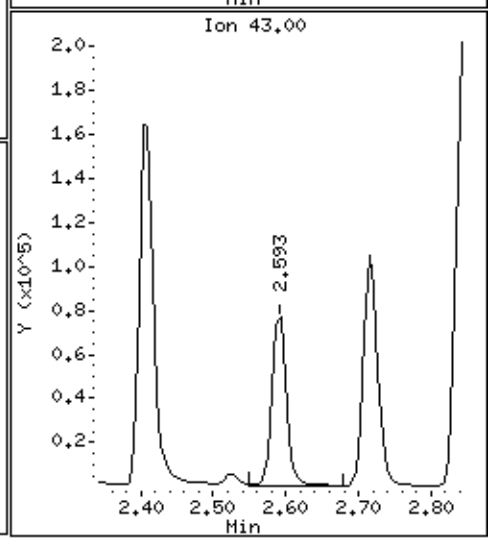


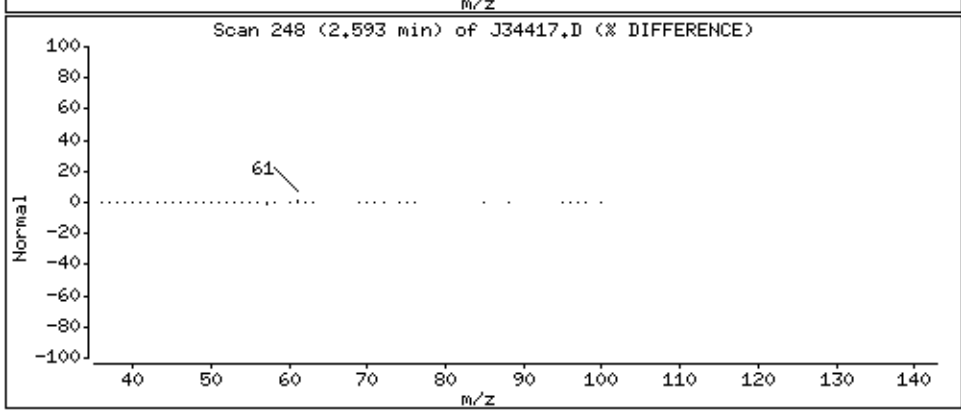












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D

Date : 25-APR-2017 19:07

Client ID: MW-3CMS

Instrument: 70msv6.i

Sample Info: 103081, 15067:1.25

Purge Volume: 5.0

Operator: KGG

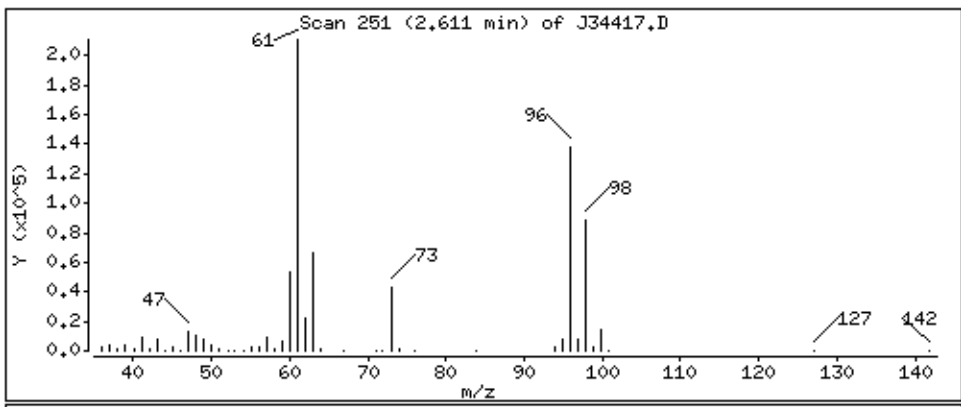
Column phase: RTX-624

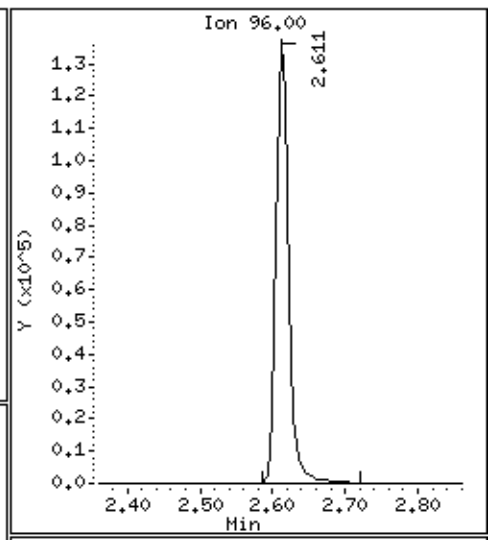
Column diameter: 0.18

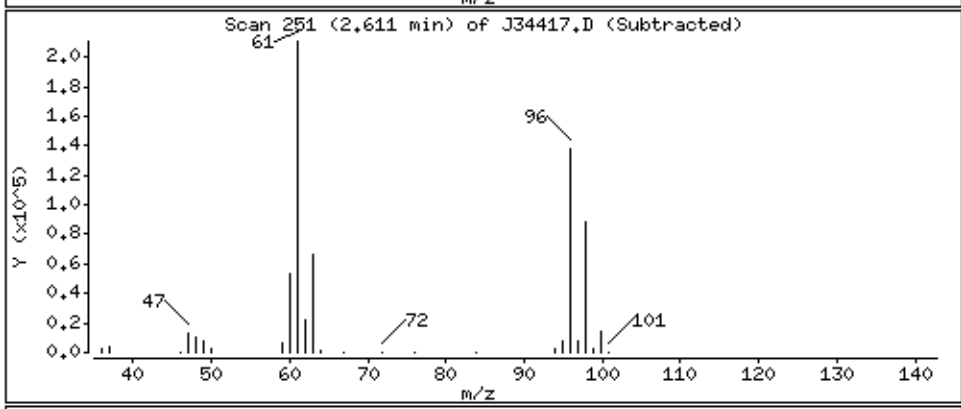
27 trans-1,2-Dichloroethene

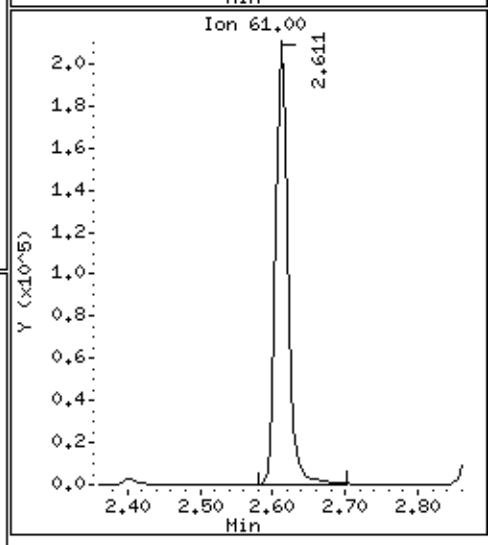
Concentration: 48.1 ug/L

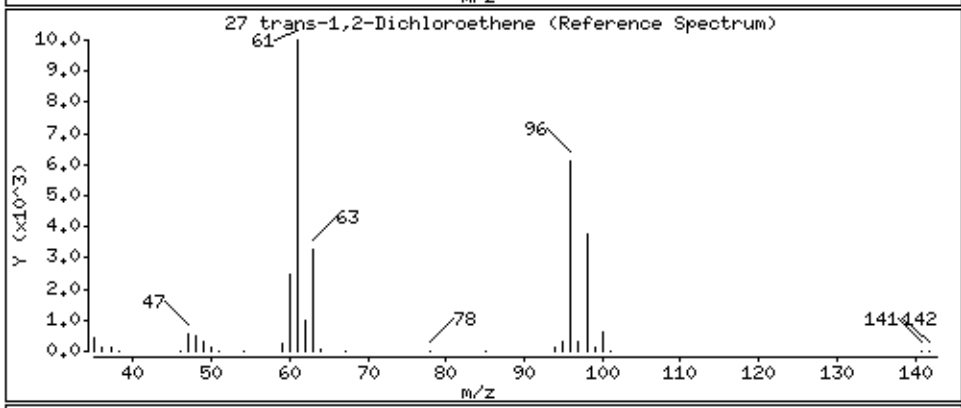
Review Code:

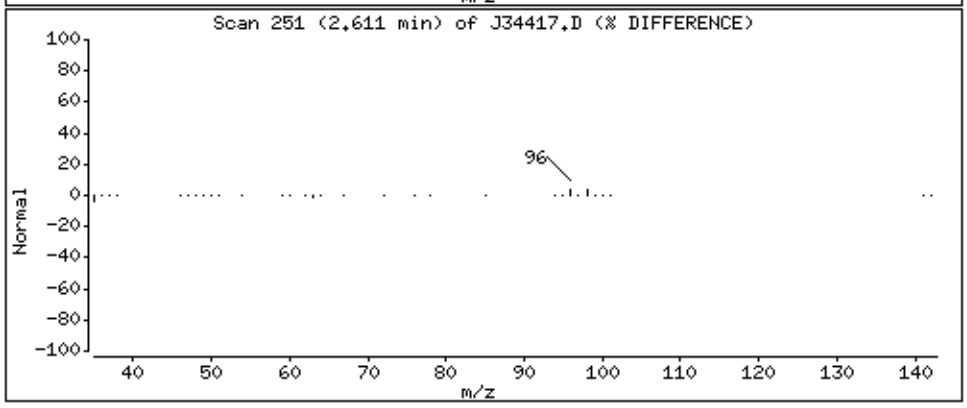












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D

Date : 25-APR-2017 19:07

Client ID: MW-3CMS

Instrument: 70msv6.i

Sample Info: 103081, 15067:1.25

Purge Volume: 5.0

Operator: KGG

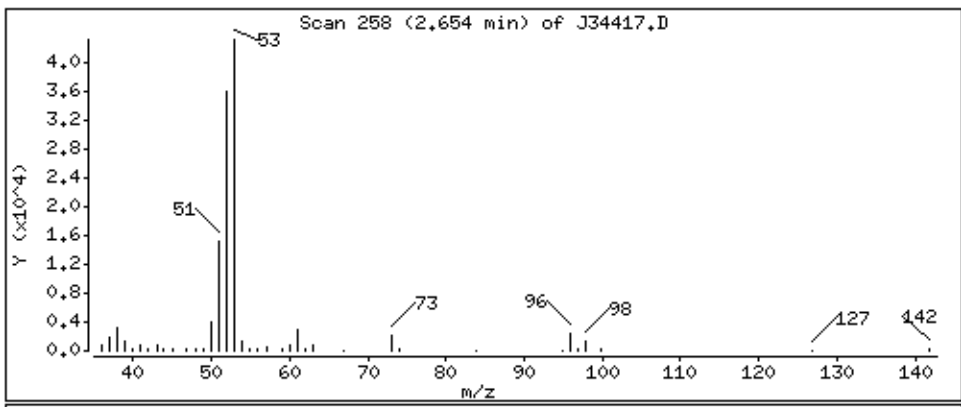
Column phase: RTX-624

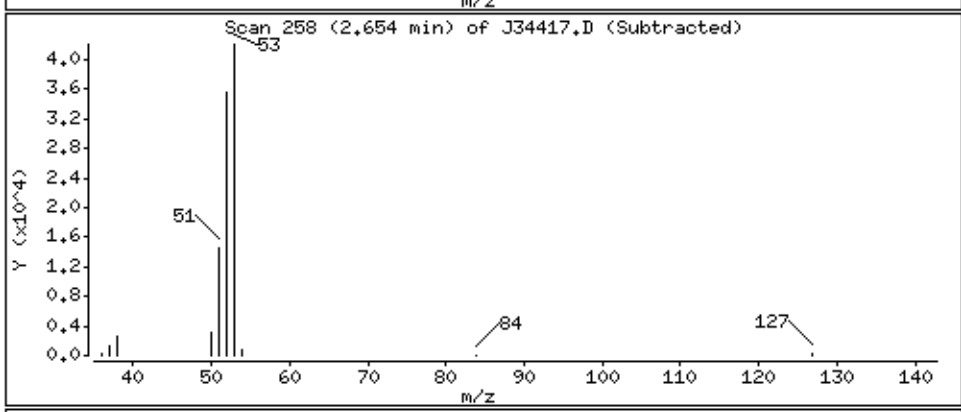
Column diameter: 0.18

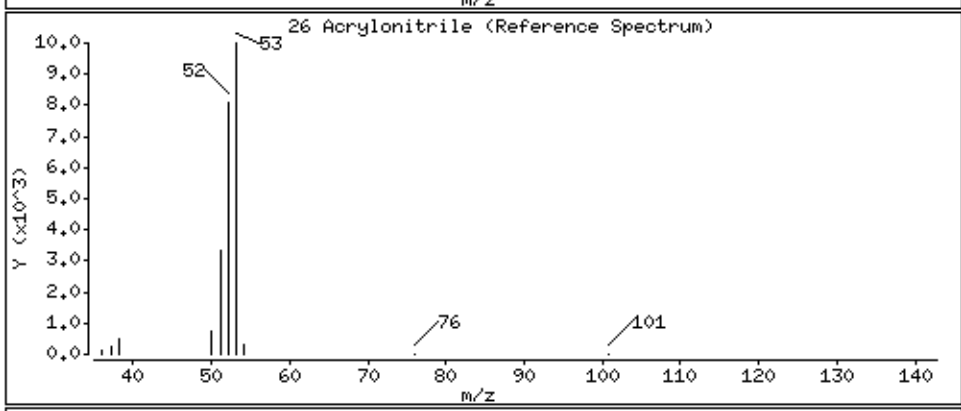
26 Acrylonitrile

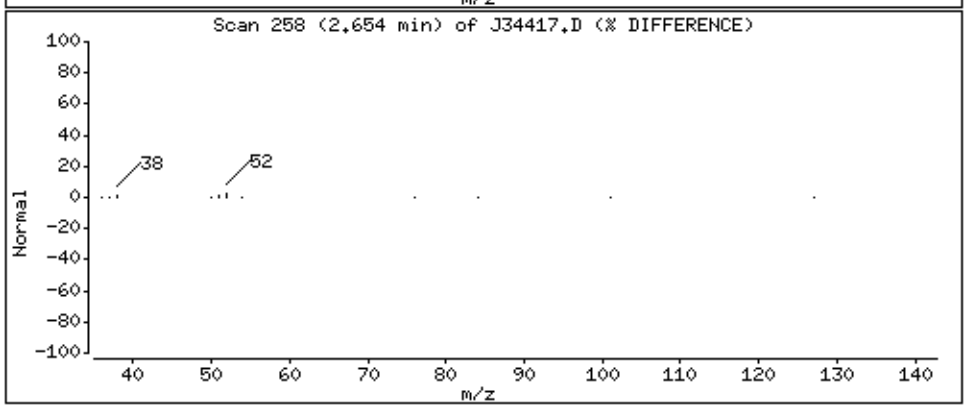
Concentration: 35.6 ug/L

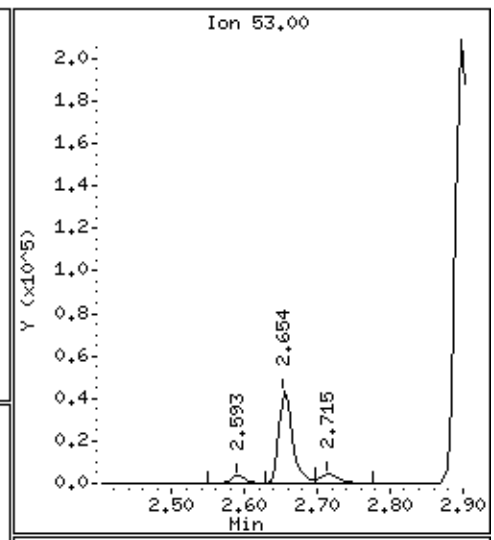
Review Code:

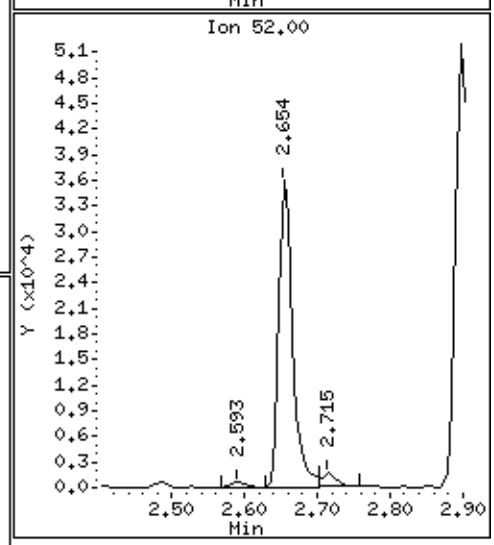












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D

Date : 25-APR-2017 19:07

Client ID: MW-3CMS

Instrument: 70msv6.i

Sample Info: 103081, 15067:1.25

Purge Volume: 5.0

Operator: KGG

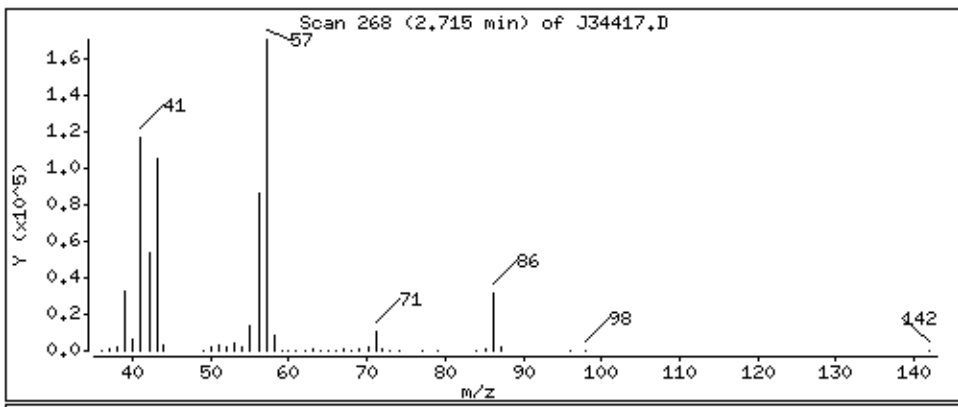
Column phase: RTX-624

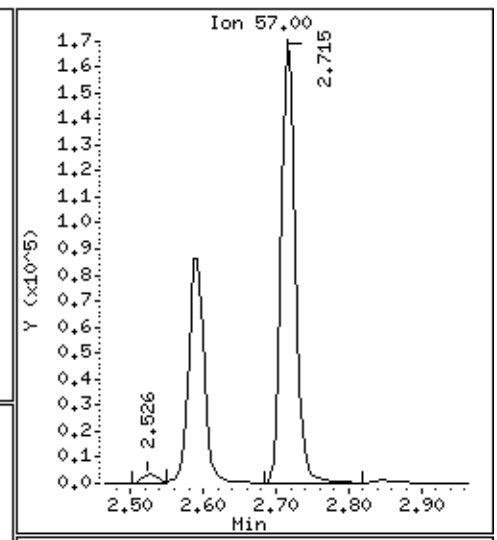
Column diameter: 0.18

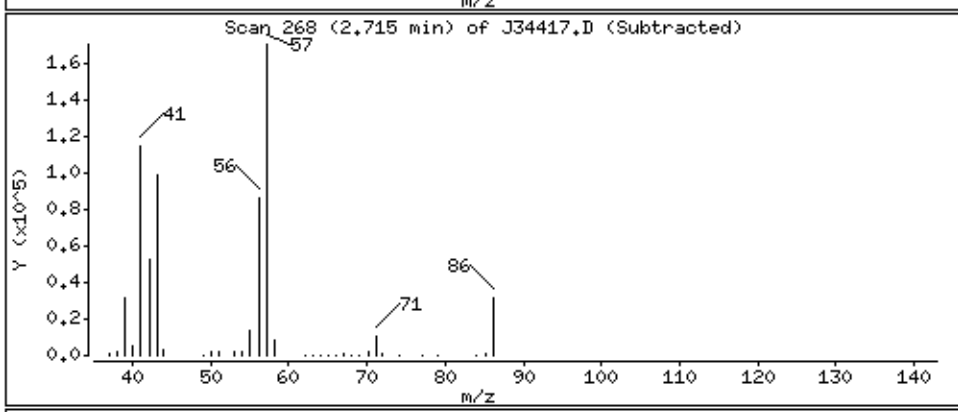
30 n-Hexane

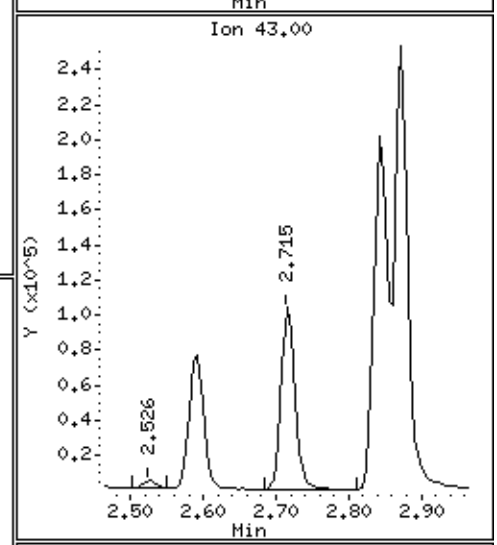
Concentration: 49.4 ug/L

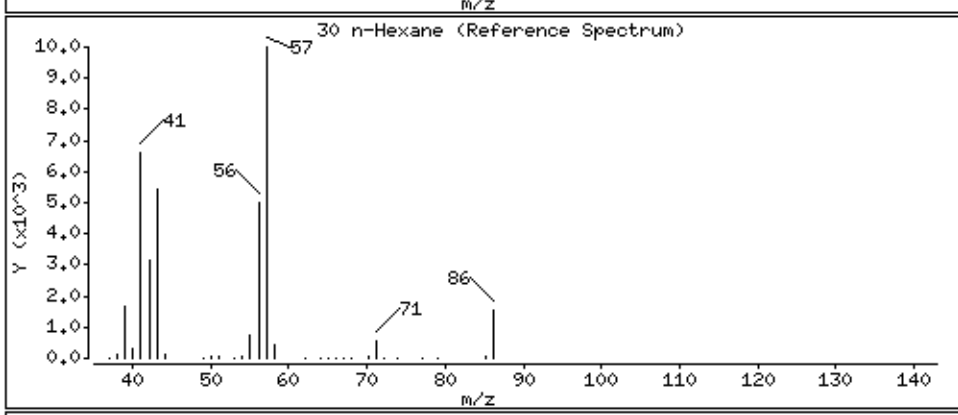
Review Code:

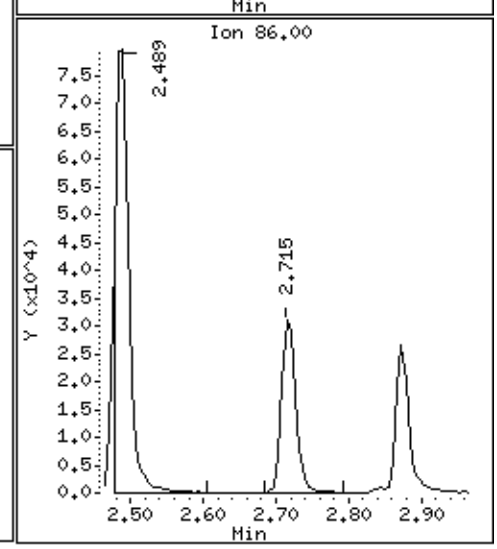


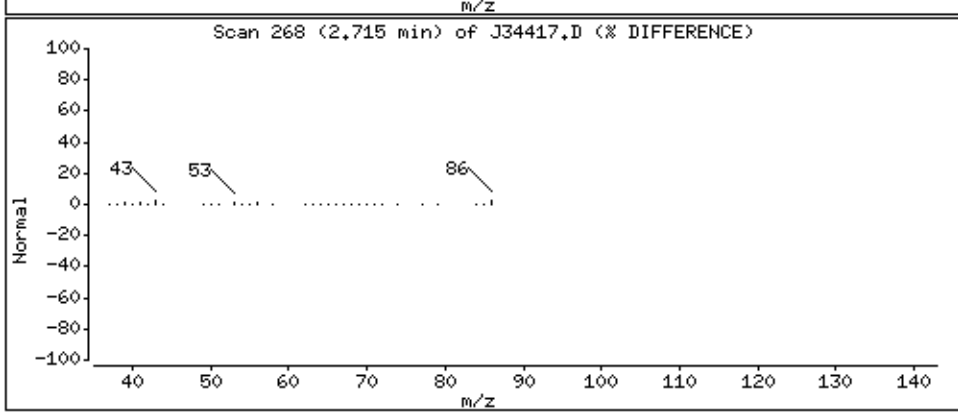












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D

Date : 25-APR-2017 19:07

Client ID: MW-3CMS

Instrument: 70msv6.i

Sample Info: 103081, 15067:1.25

Purge Volume: 5.0

Operator: KGG

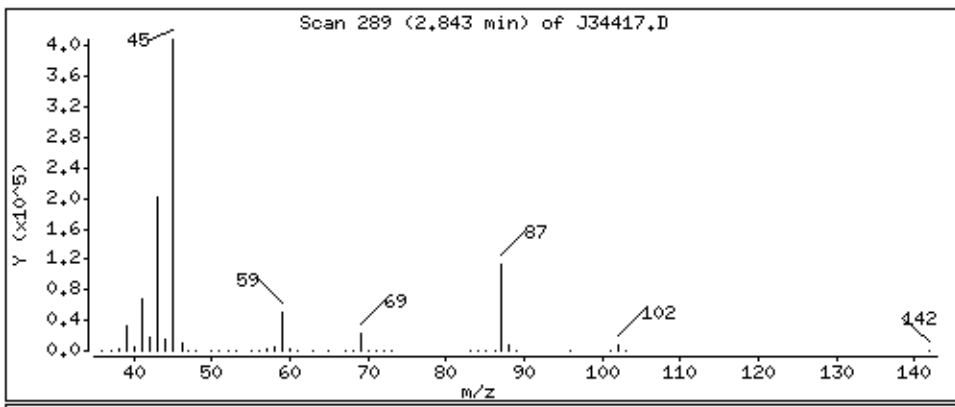
Column phase: RTX-624

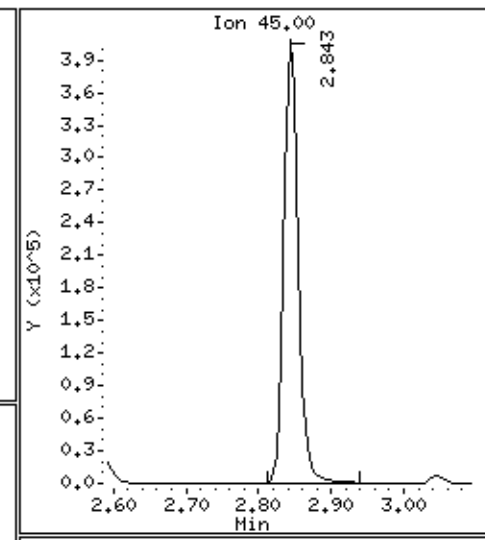
Column diameter: 0.18

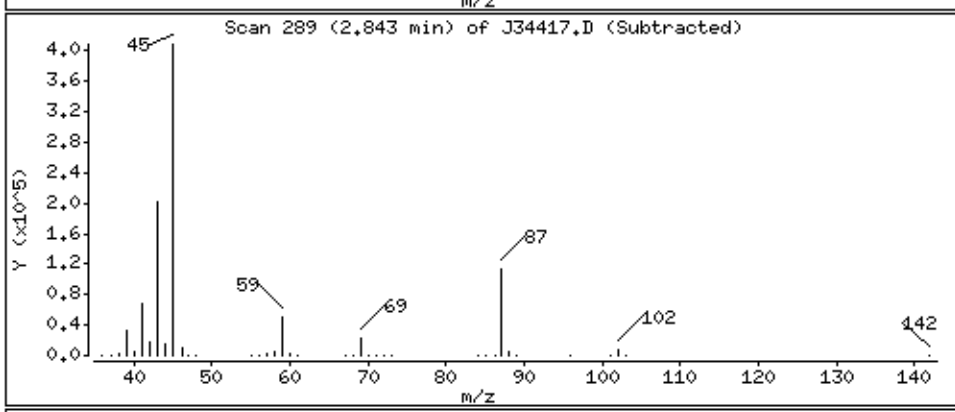
29 Diisopropyl ether

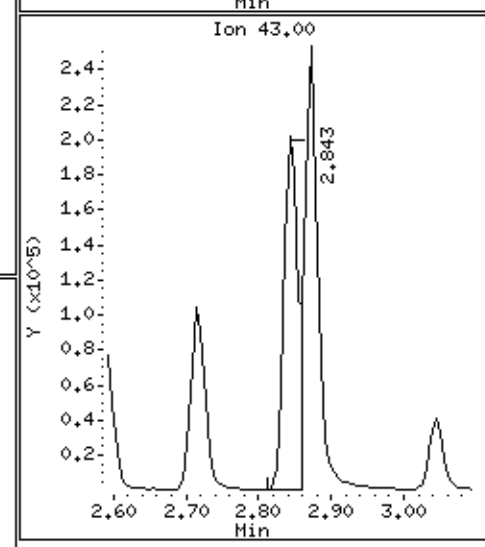
Concentration: 35.0 ug/L

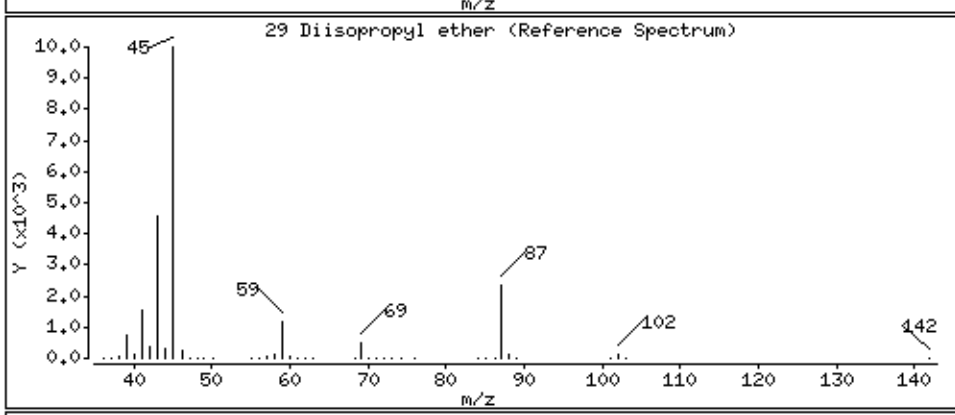
Review Code:

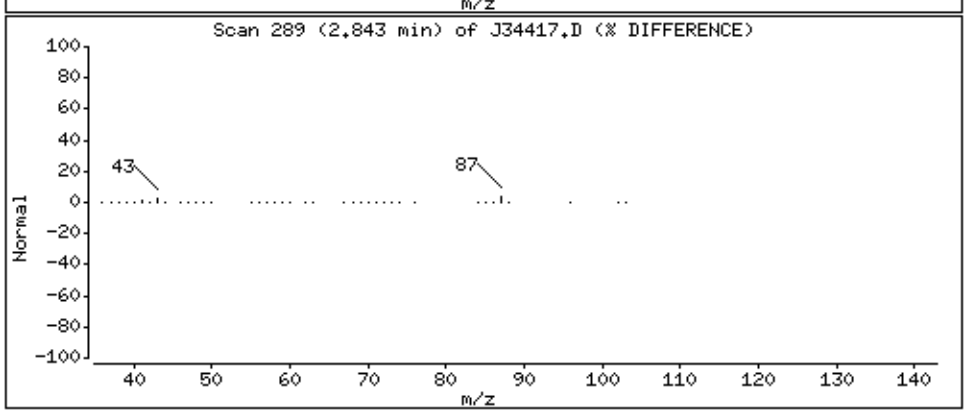












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D

Date : 25-APR-2017 19:07

Client ID: MW-3CMS

Instrument: 70msv6.i

Sample Info: 103081, 15067:1.25

Purge Volume: 5.0

Operator: KGG

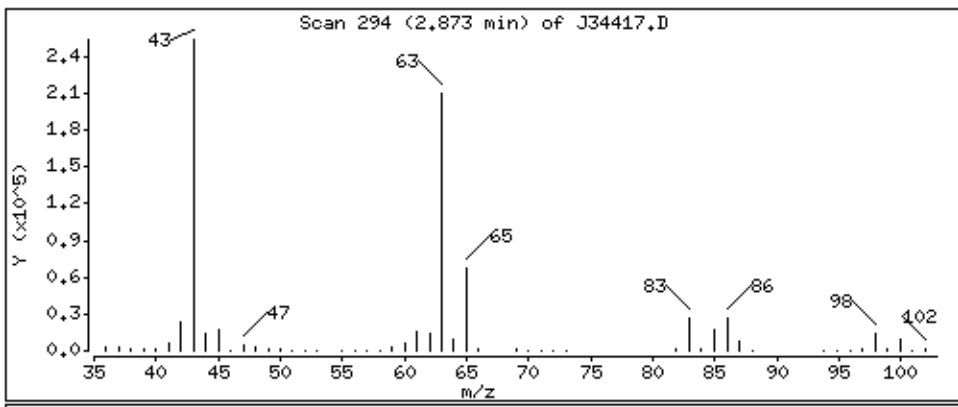
Column phase: RTX-624

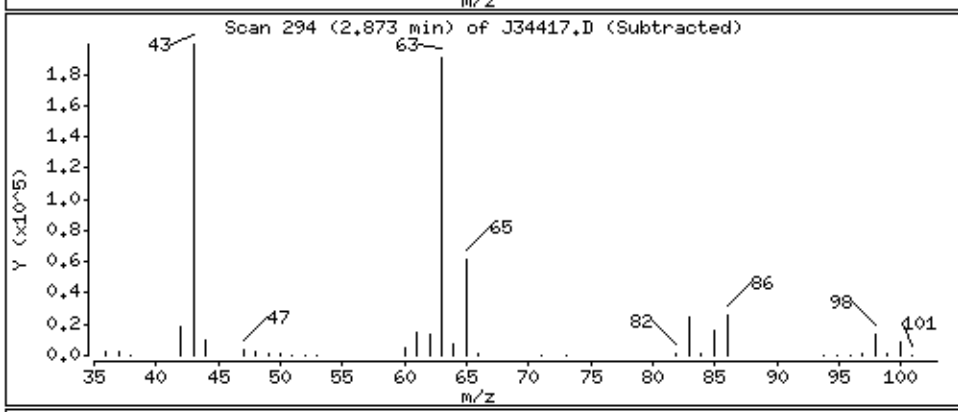
Column diameter: 0.18

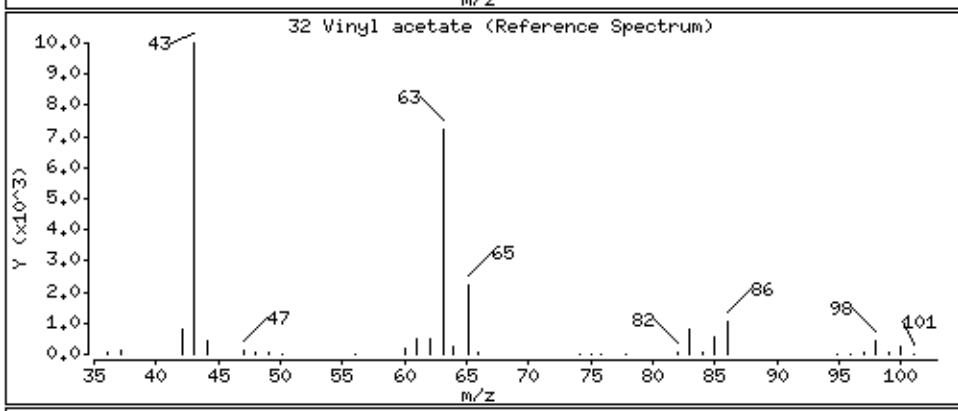
32 Vinyl acetate

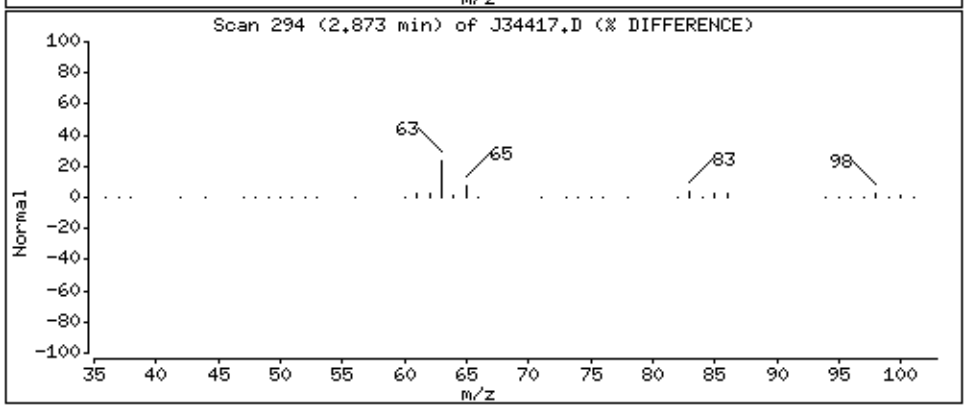
Concentration: 43.4 ug/L

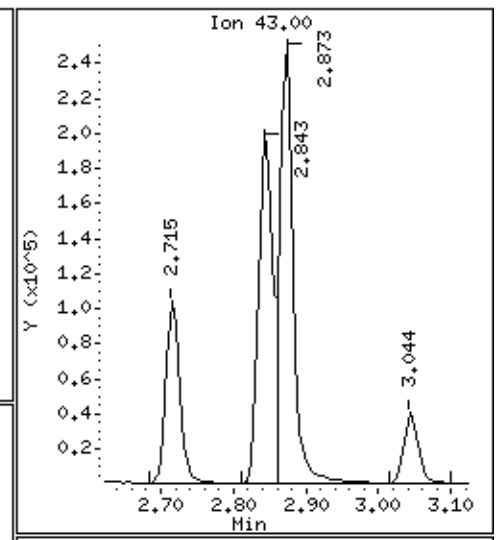
Review Code:

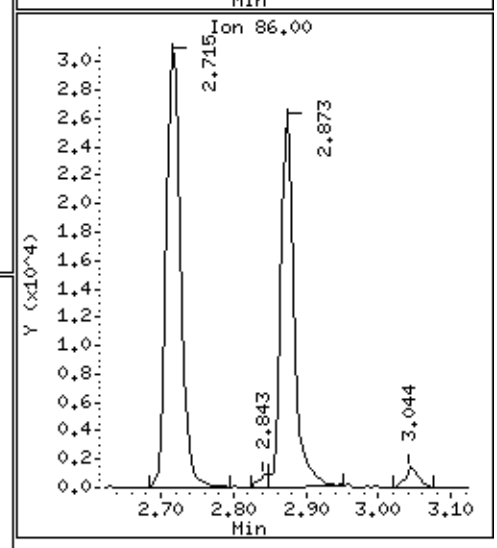












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D

Date : 25-APR-2017 19:07

Client ID: MW-3CMS

Instrument: 70msv6.i

Sample Info: 103081, 15067:1.25

Purge Volume: 5.0

Operator: KGG

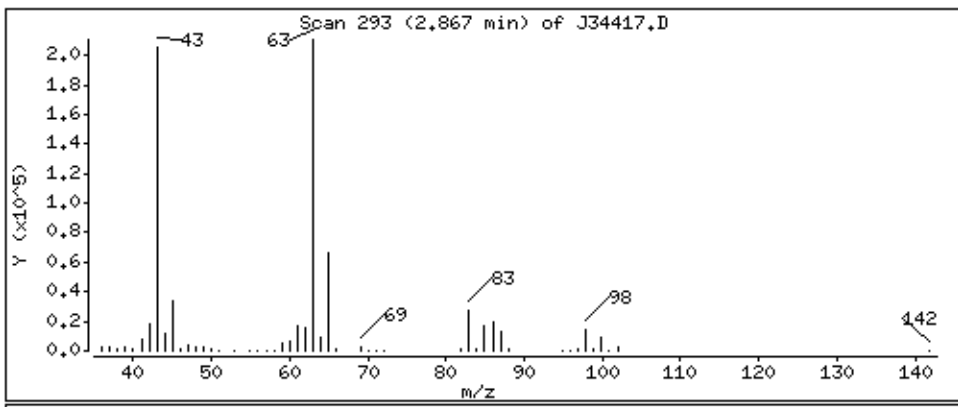
Column phase: RTX-624

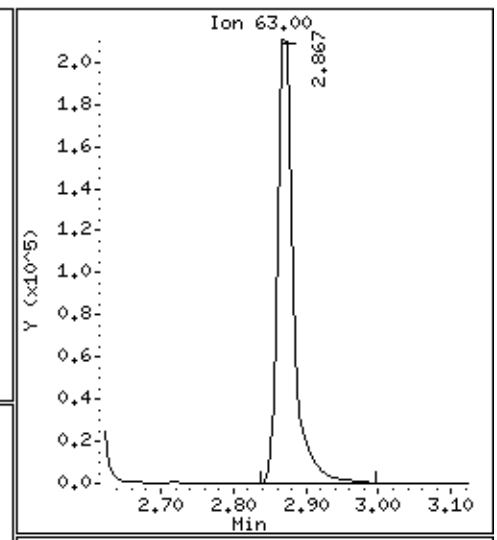
Column diameter: 0.18

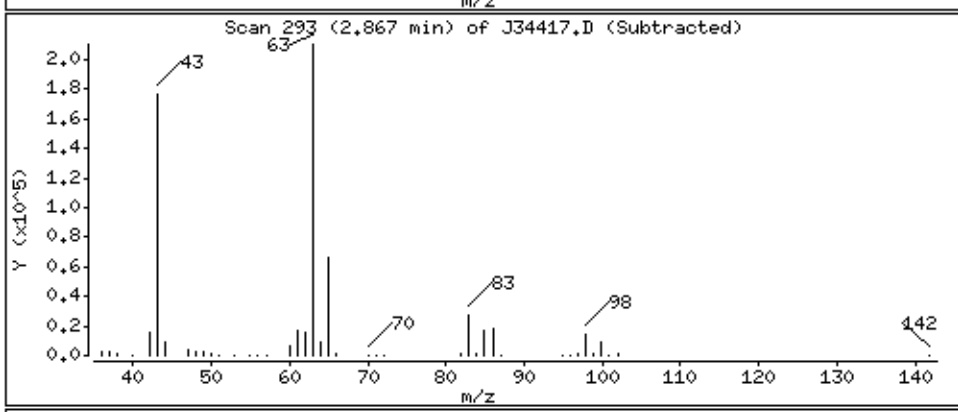
31 1,1-Dichloroethane

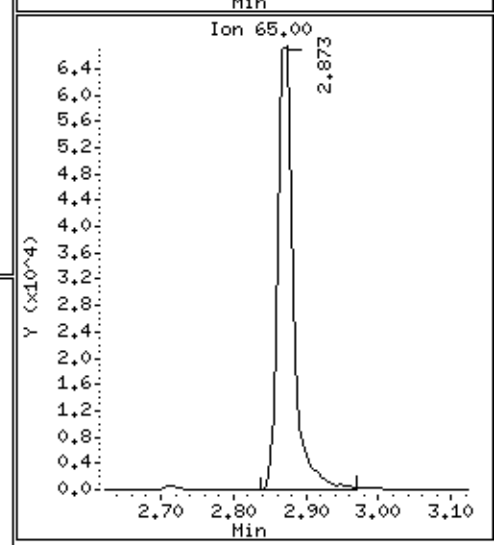
Concentration: 41.2 ug/L

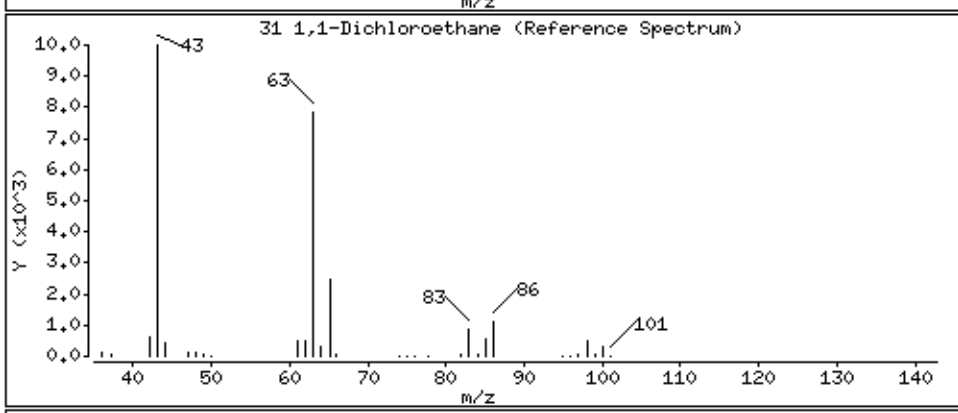
Review Code:

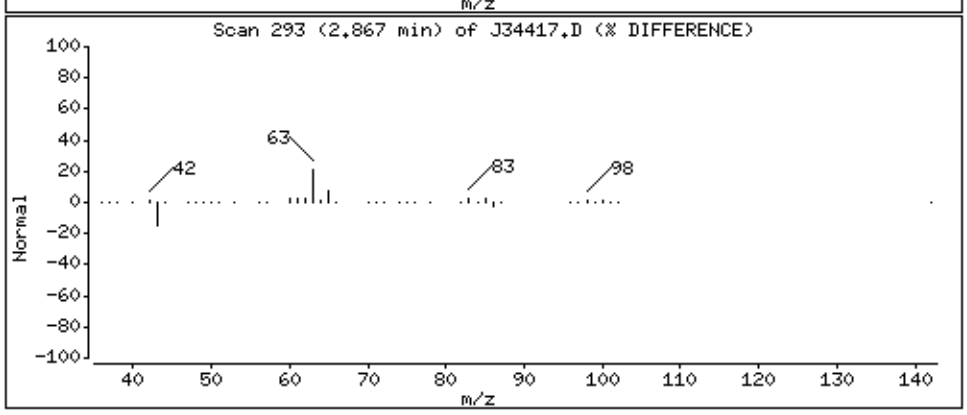












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D

Date : 25-APR-2017 19:07

Client ID: MW-3CMS

Instrument: 70msv6.i

Sample Info: 103081, 15067:1.25

Purge Volume: 5.0

Operator: KGG

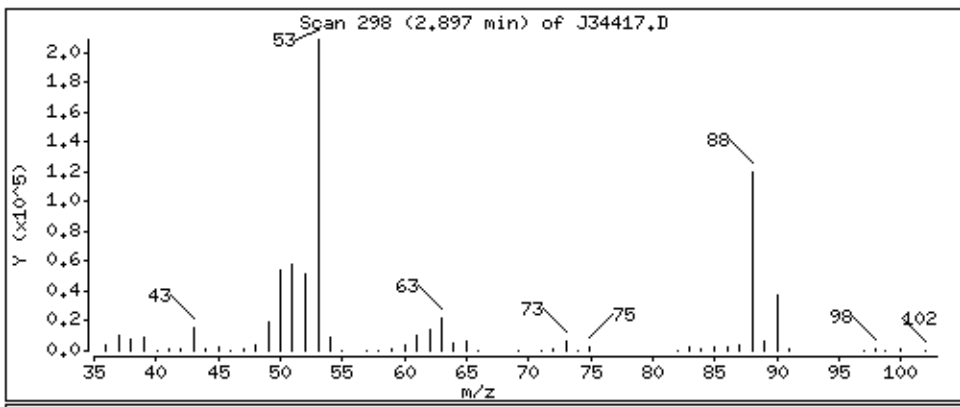
Column phase: RTX-624

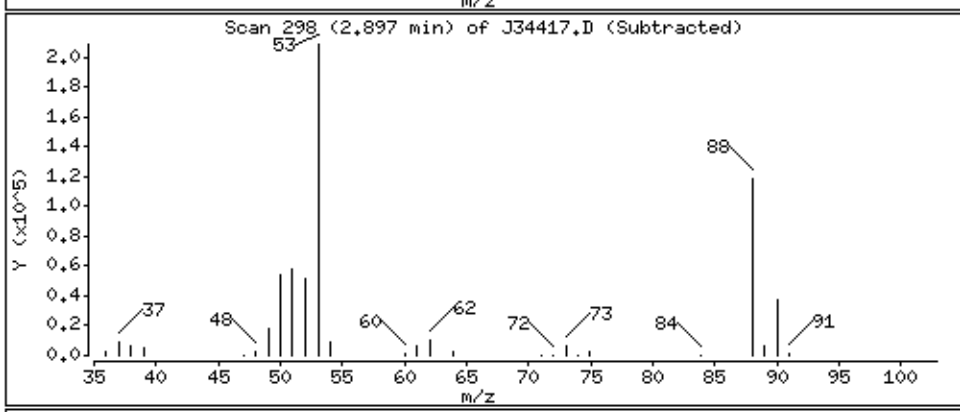
Column diameter: 0.18

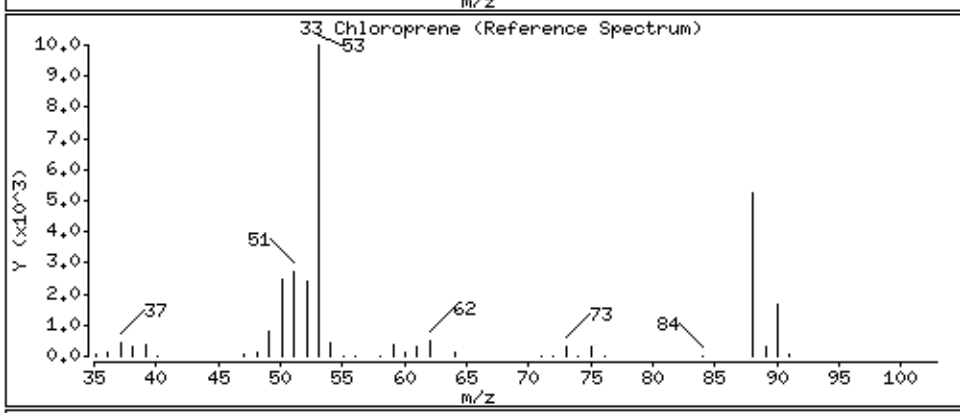
33 Chloroprene

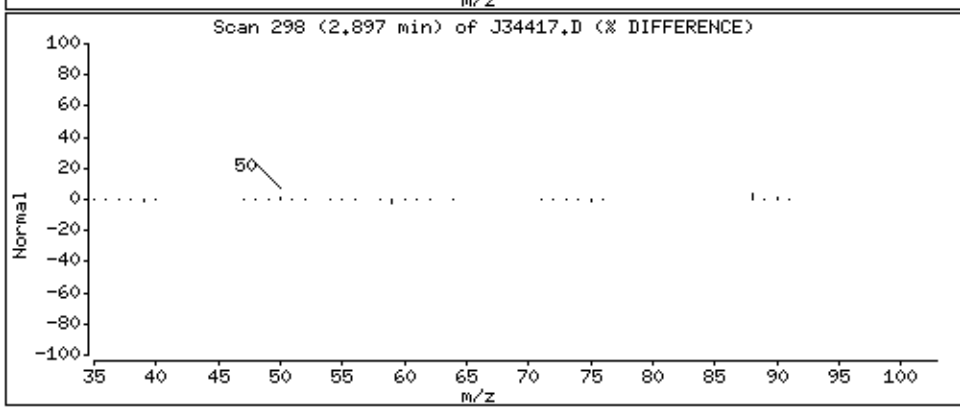
Concentration: 39.9 ug/L

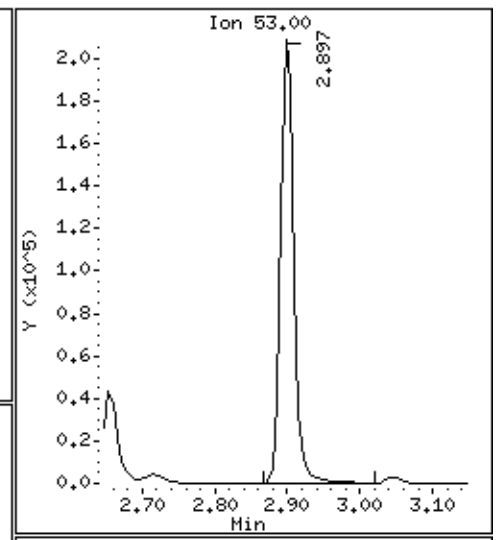
Review Code:

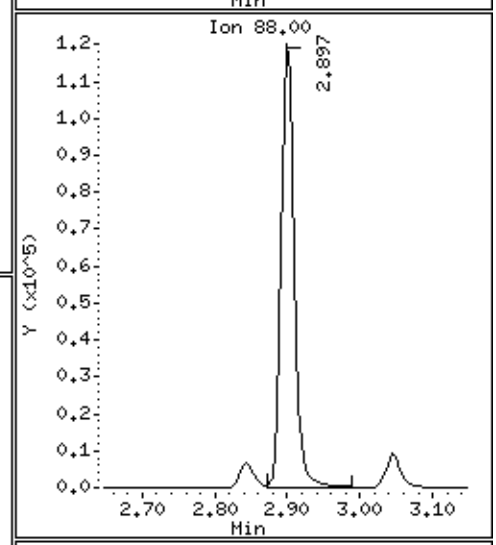


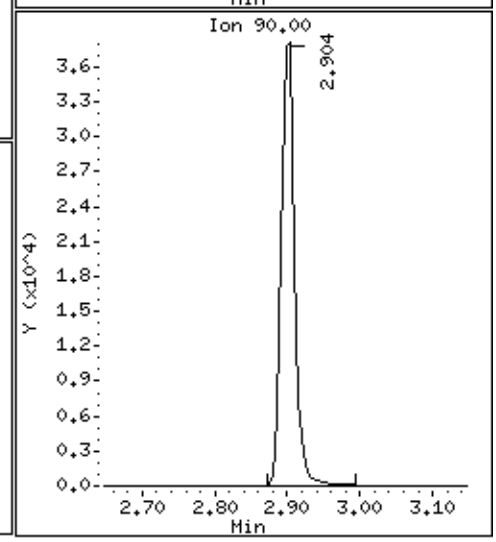












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D

Date : 25-APR-2017 19:07

Client ID: MW-3CMS

Instrument: 70msv6.i

Sample Info: 103081, 15067:1.25

Purge Volume: 5.0

Operator: KGG

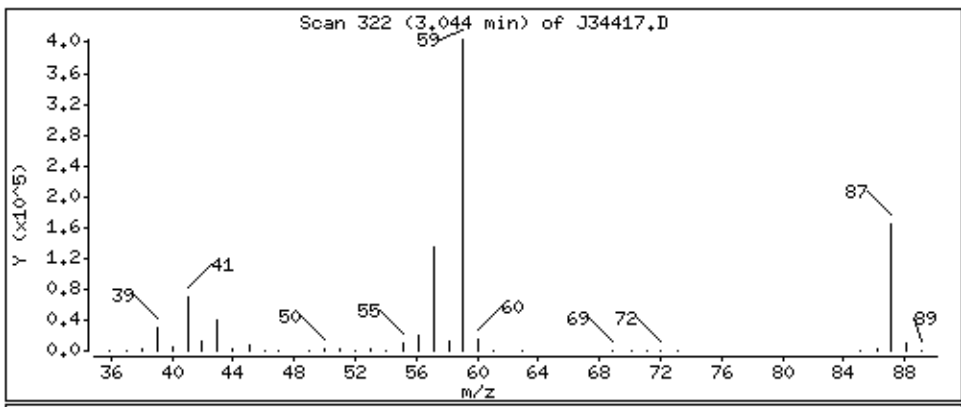
Column phase: RTX-624

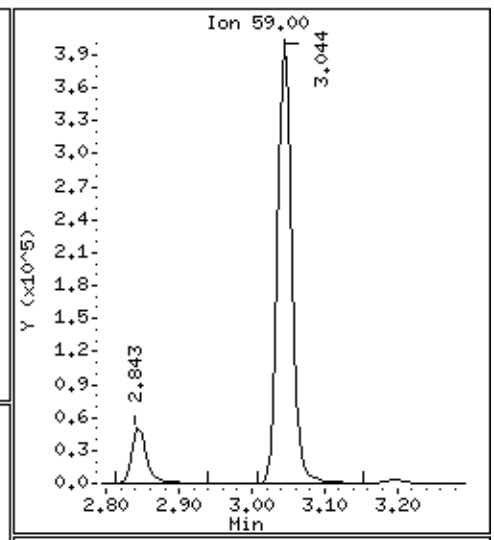
Column diameter: 0.18

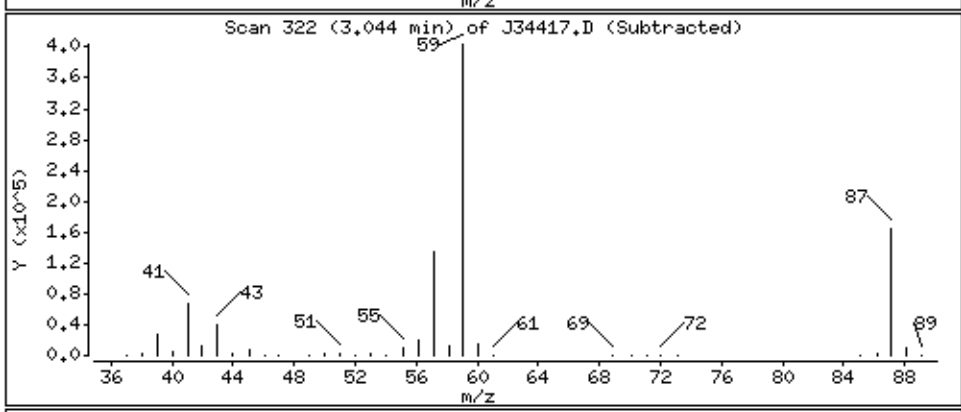
34 Ethyl-tert-butyl ether

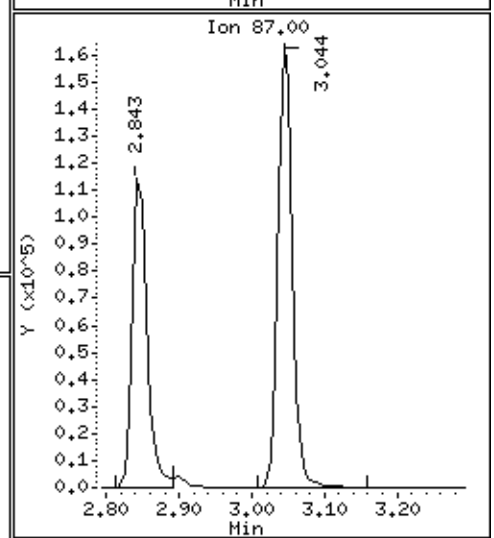
Concentration: 42.5 ug/L

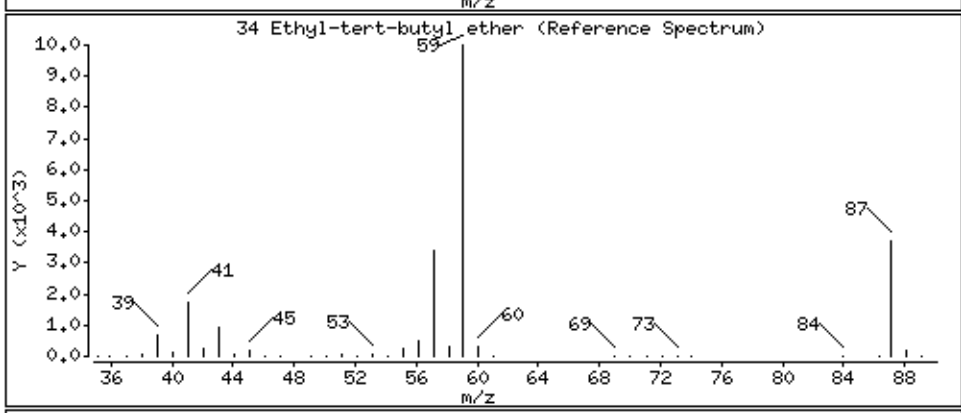
Review Code:

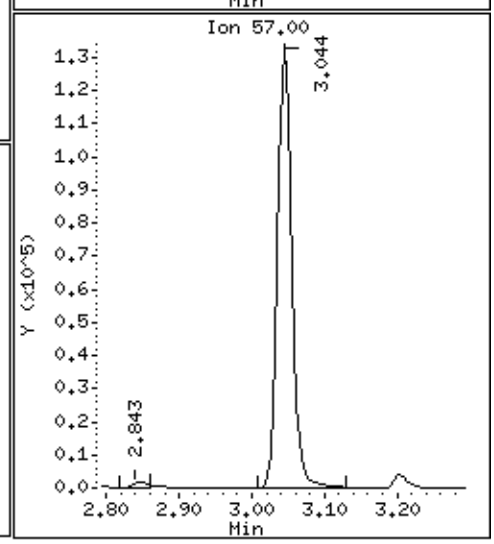


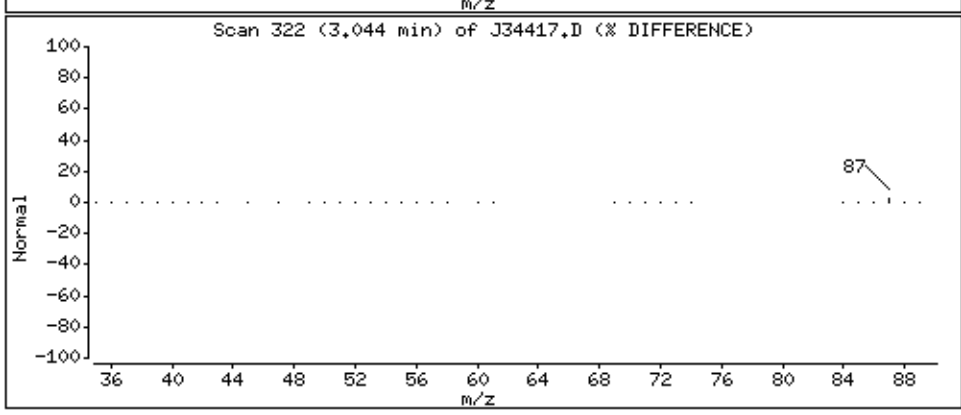












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D

Date : 25-APR-2017 19:07

Client ID: MW-3CMS

Instrument: 70msv6.i

Sample Info: 103081, 15067:1.25

Purge Volume: 5.0

Operator: KGG

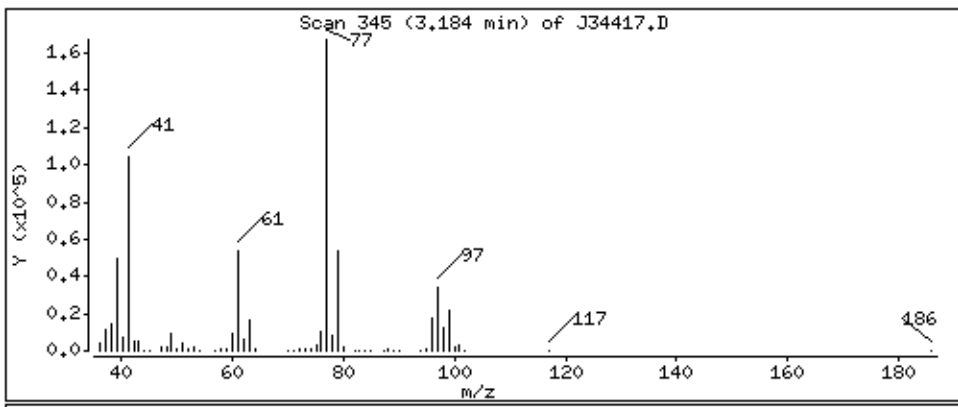
Column phase: RTX-624

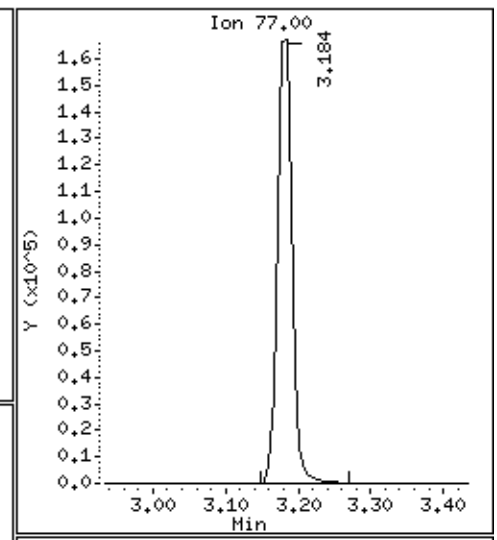
Column diameter: 0.18

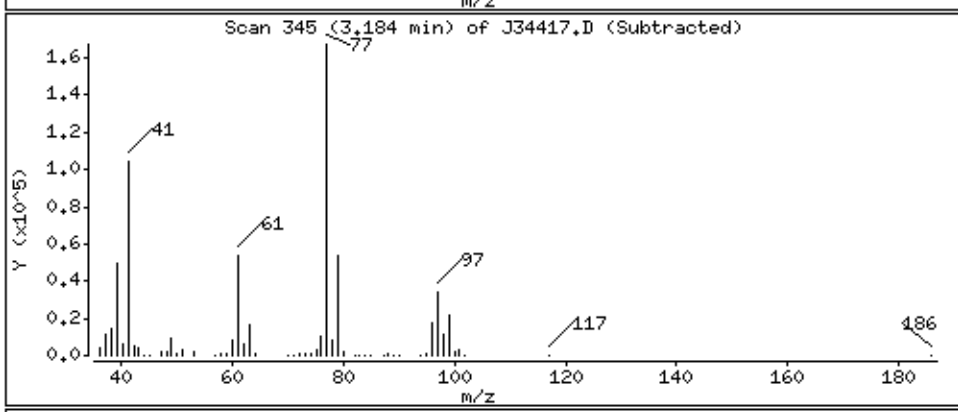
36 2,2-Dichloropropane

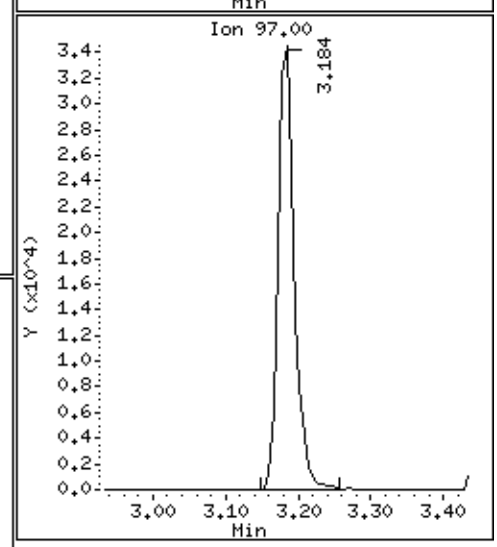
Concentration: 56.6 ug/L

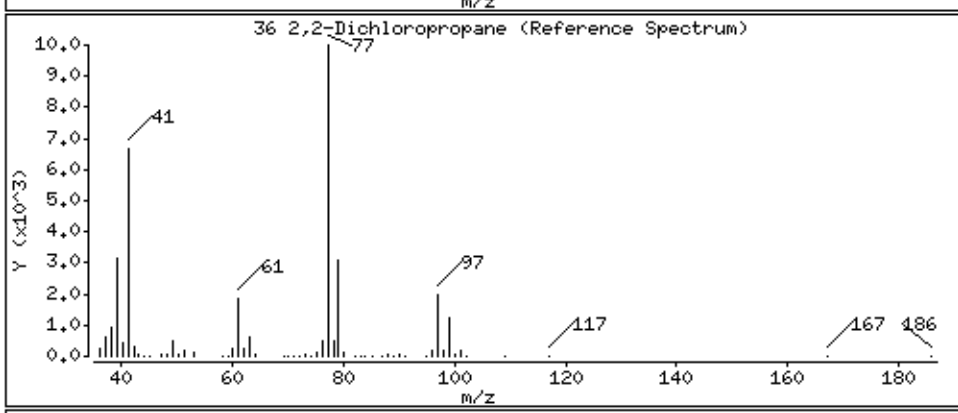
Review Code:

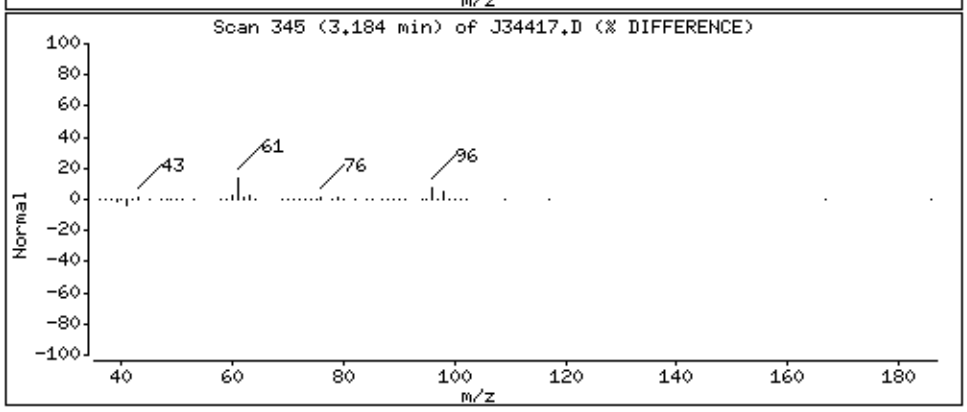












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D

Date : 25-APR-2017 19:07

Client ID: MW-3CMS

Instrument: 70msv6.i

Sample Info: 103081, 15067:1.25

Purge Volume: 5.0

Operator: KGG

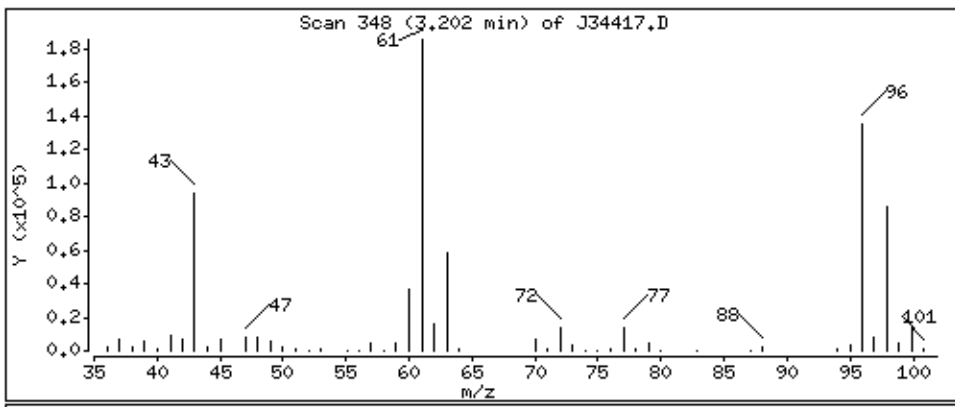
Column phase: RTX-624

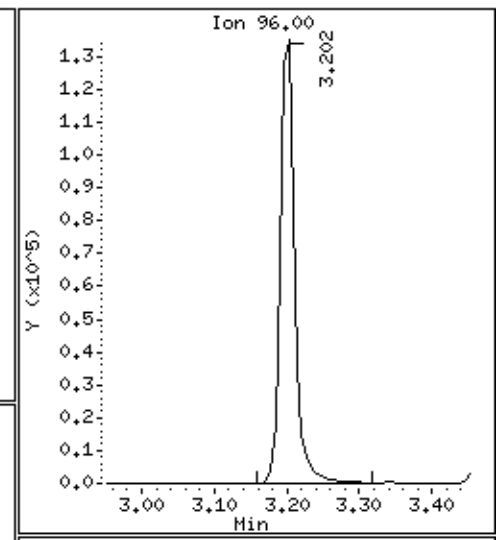
Column diameter: 0.18

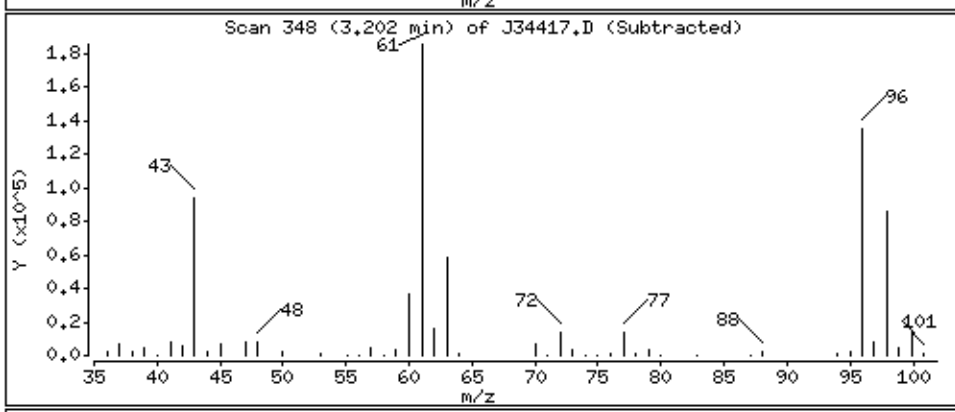
35 cis-1,2-Dichloroethene

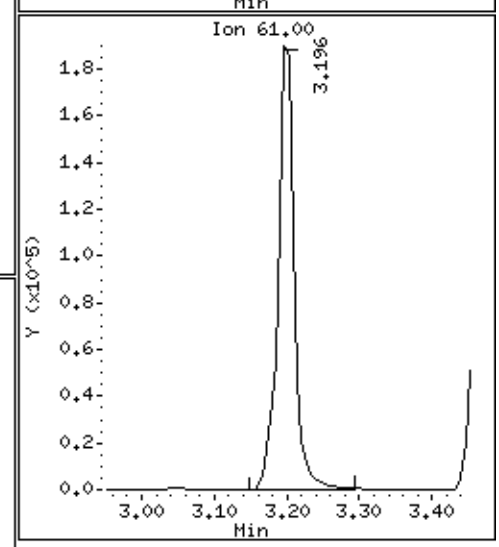
Concentration: 46.2 ug/L

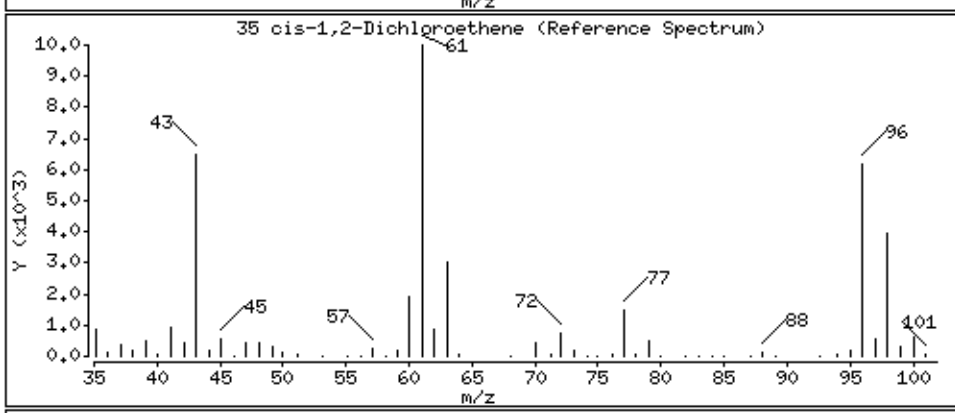
Review Code:

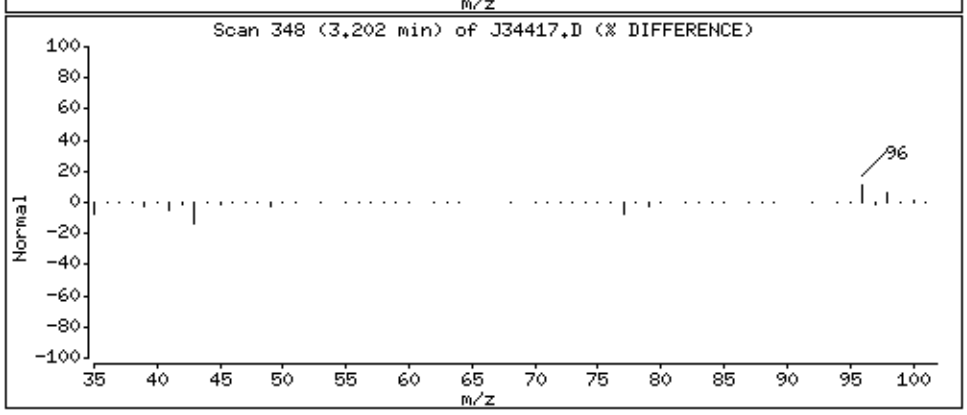












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D

Date : 25-APR-2017 19:07

Client ID: MW-3CMS

Instrument: 70msv6.i

Sample Info: 103081, 15067:1.25

Purge Volume: 5.0

Operator: KGG

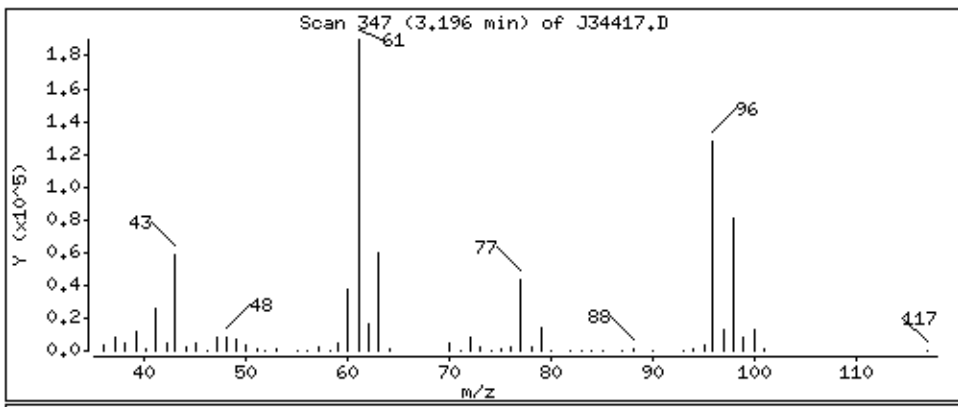
Column phase: RTX-624

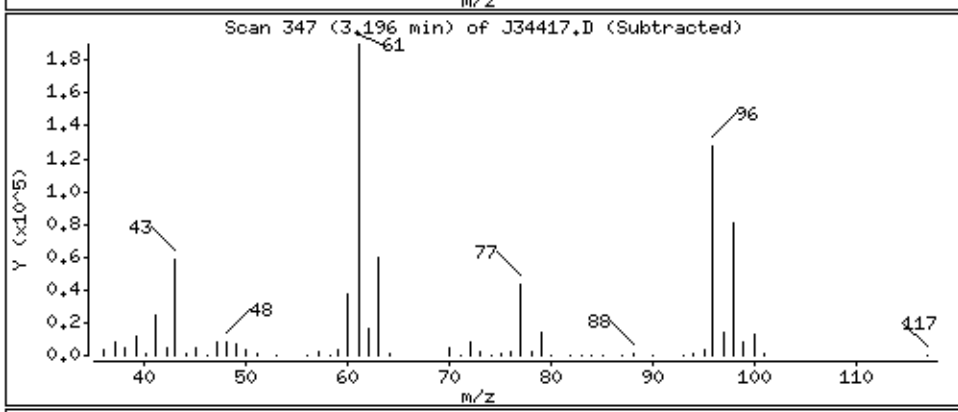
Column diameter: 0.18

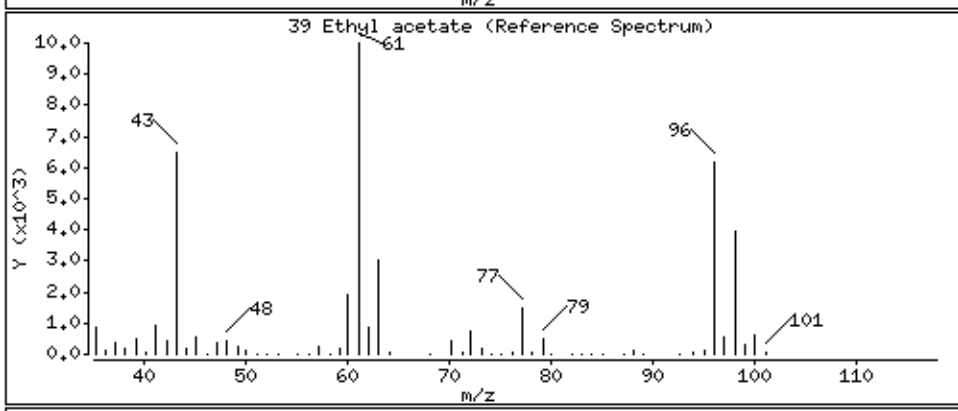
39 Ethyl acetate

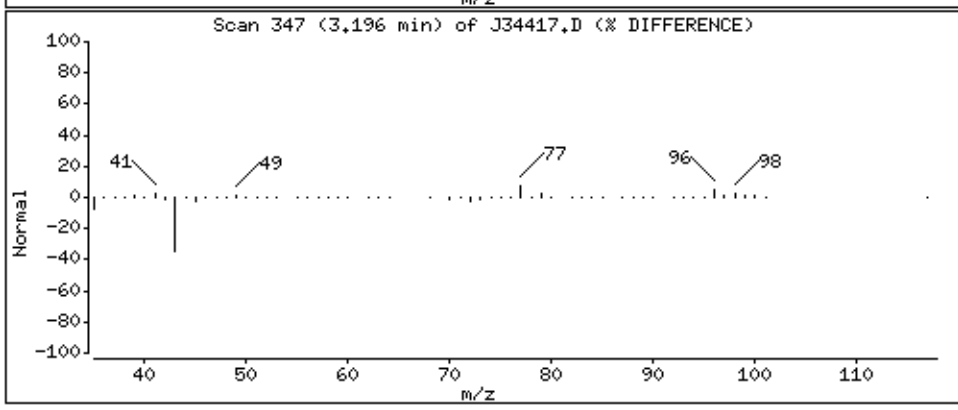
Concentration: 40.8 ug/L

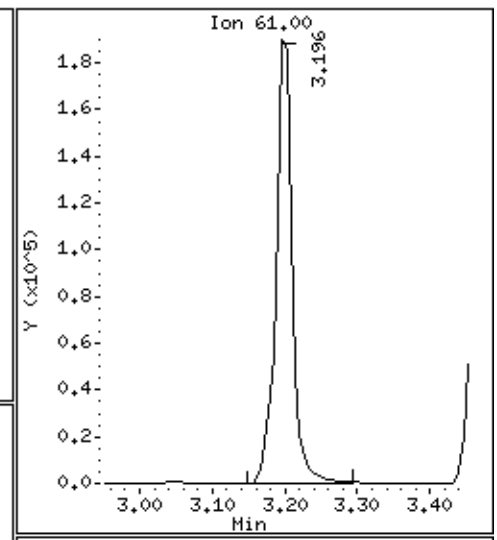
Review Code:

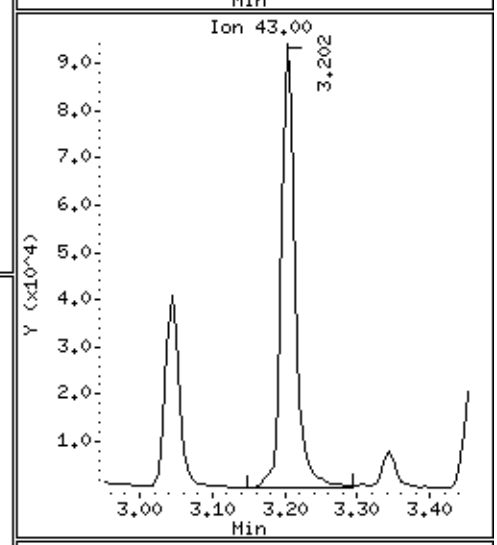


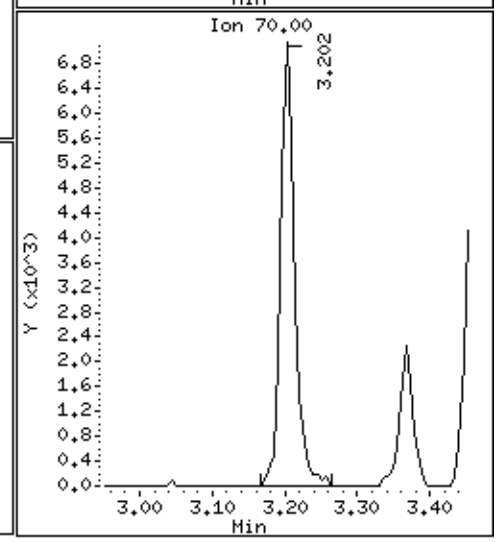












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D

Date : 25-APR-2017 19:07

Client ID: MW-3CMS

Instrument: 70msv6.i

Sample Info: 103081, 15067:1.25

Purge Volume: 5.0

Operator: KGG

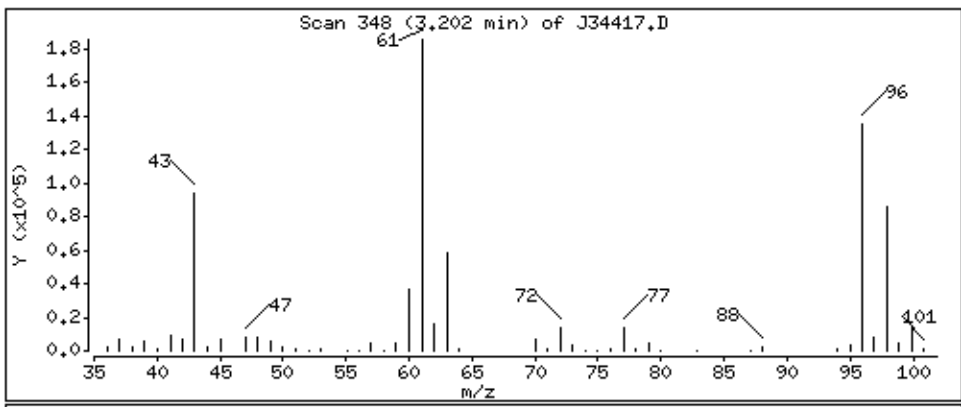
Column phase: RTX-624

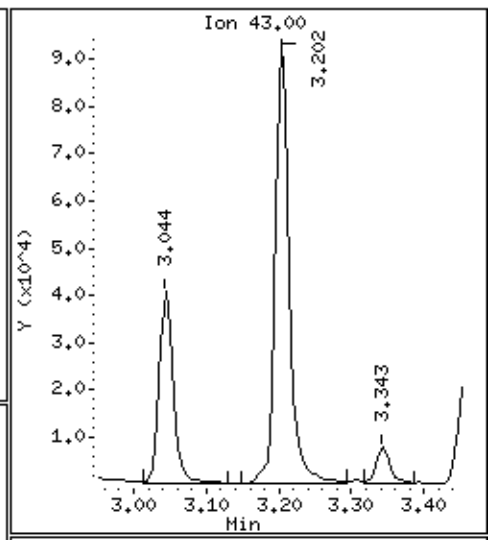
Column diameter: 0.18

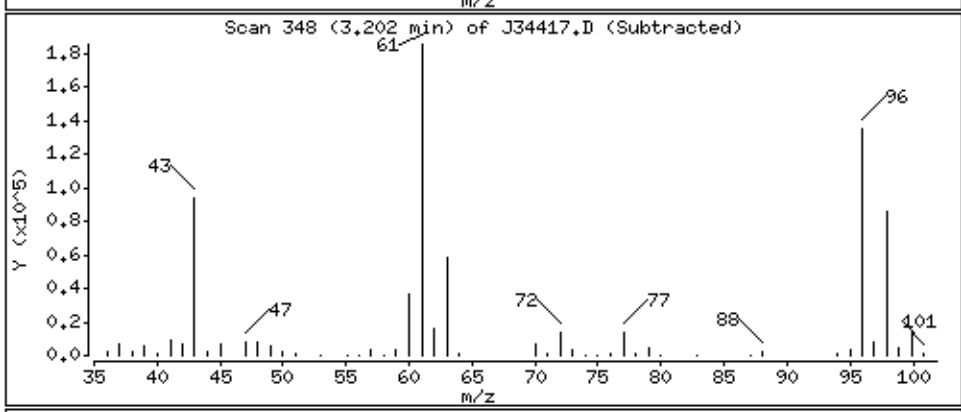
37 2-Butanone (MEK)

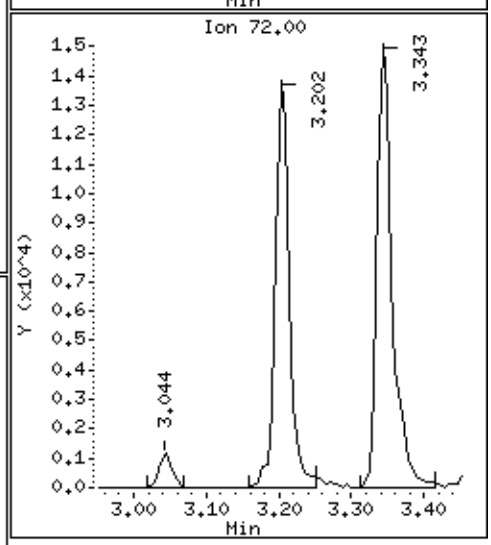
Concentration: 33.9 ug/L

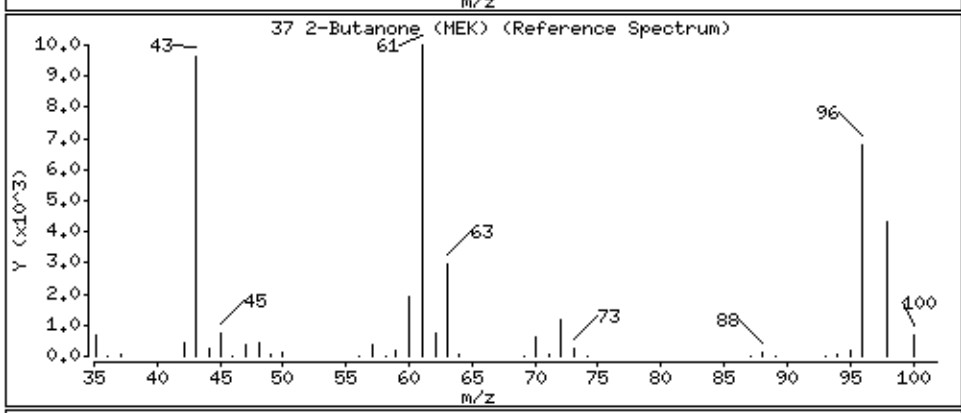
Review Code:

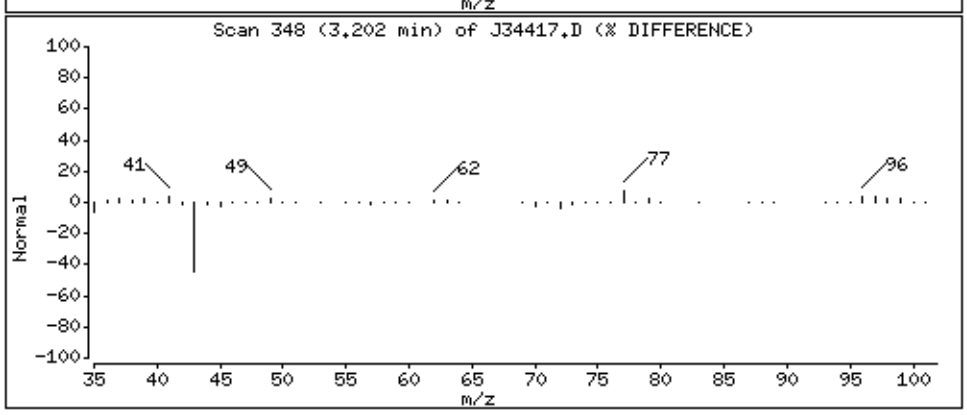












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D

Date : 25-APR-2017 19:07

Client ID: MW-3CMS

Instrument: 70msv6.i

Sample Info: 103081, 15067:1.25

Purge Volume: 5.0

Operator: KGG

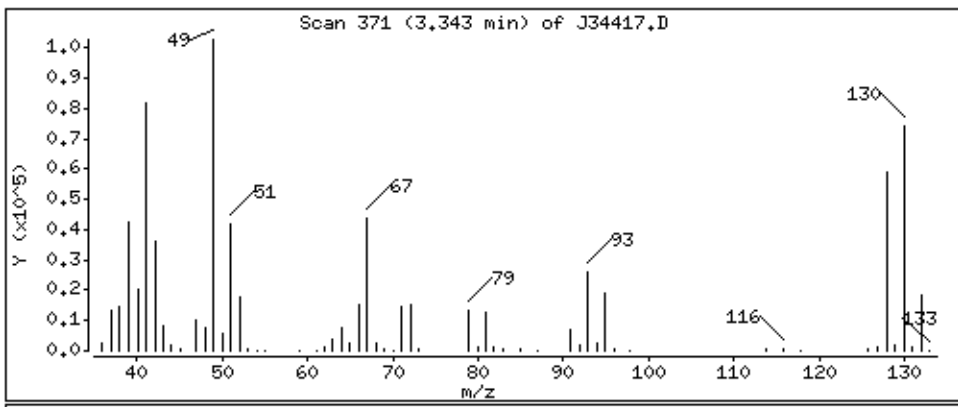
Column phase: RTX-624

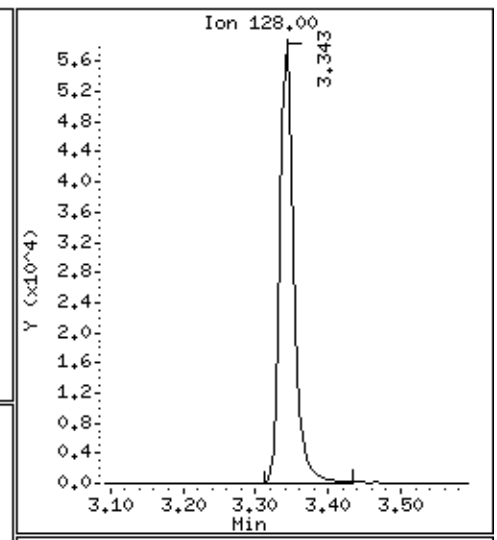
Column diameter: 0.18

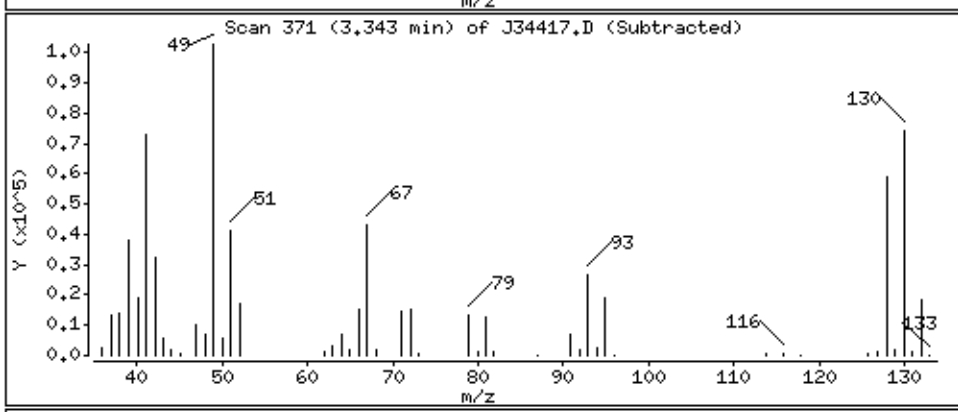
41 Bromochloromethane

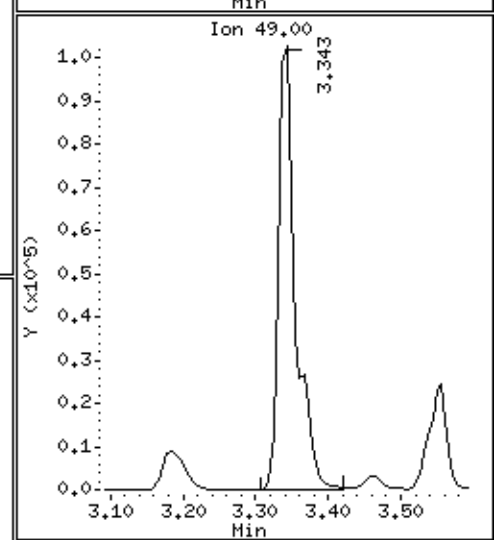
Concentration: 45.8 ug/L

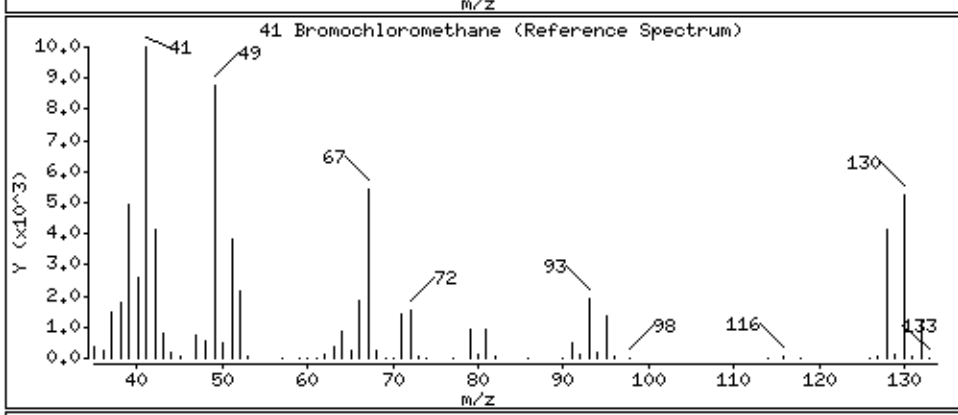
Review Code:

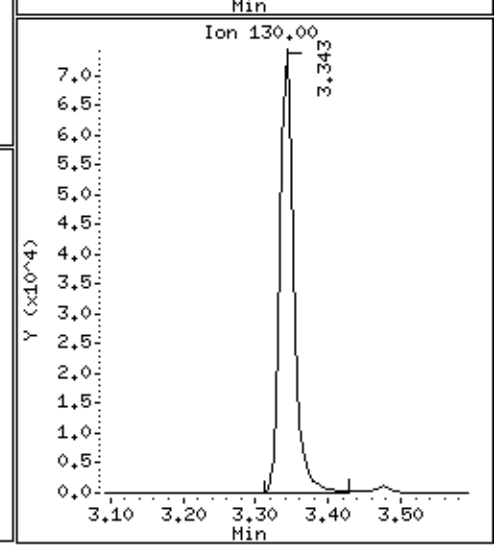


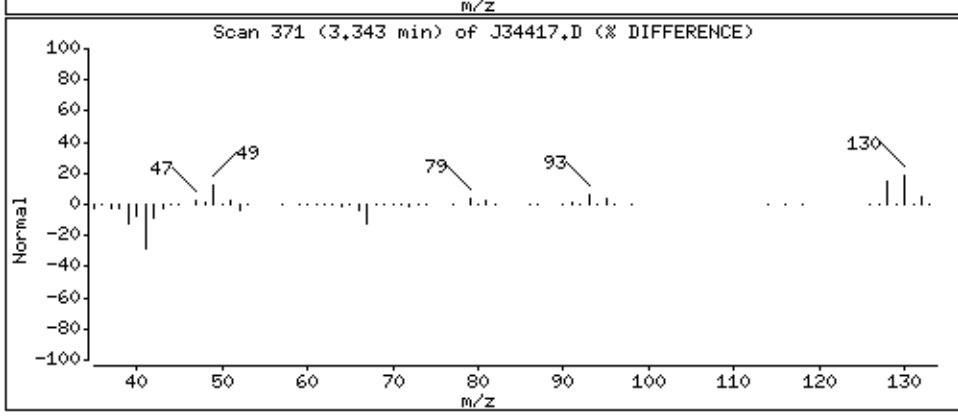












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D

Date : 25-APR-2017 19:07

Client ID: MW-3CMS

Instrument: 70msv6.i

Sample Info: 103081, 15067:1.25

Purge Volume: 5.0

Operator: KGG

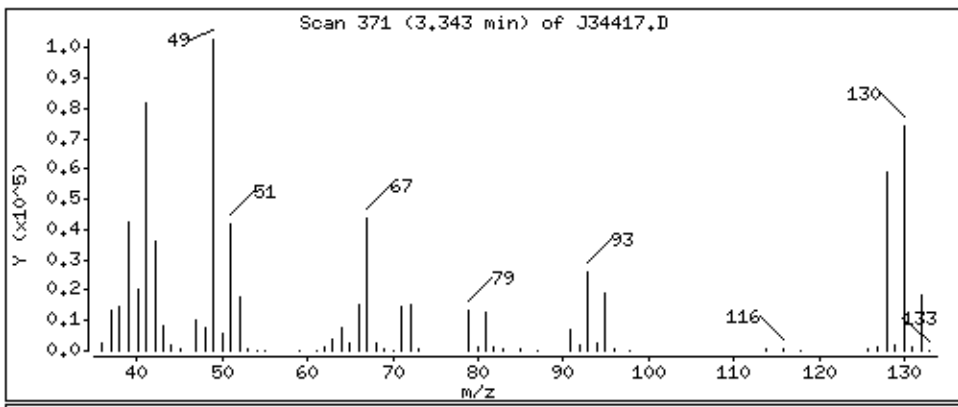
Column phase: RTX-624

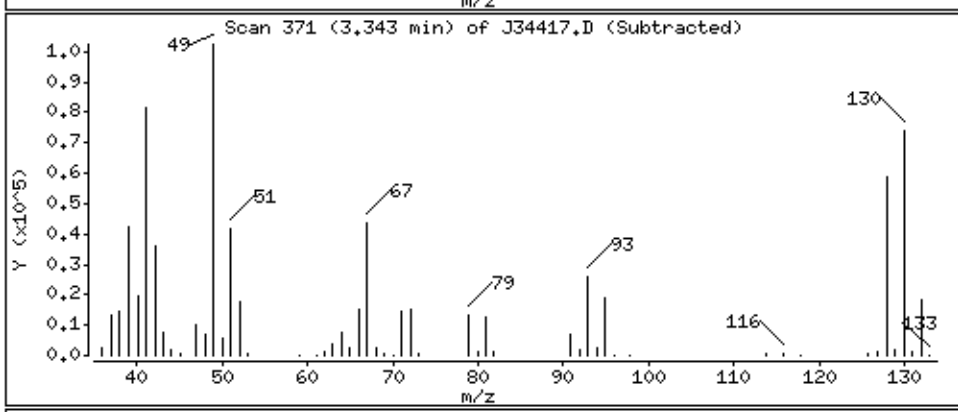
Column diameter: 0.18

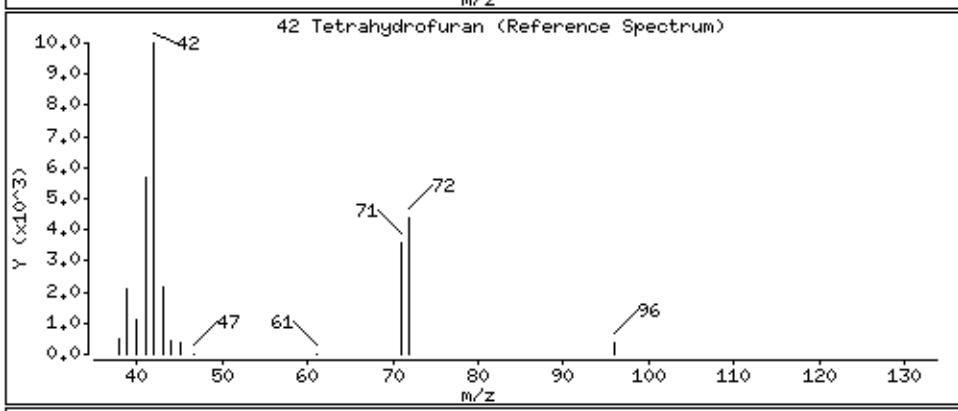
42 Tetrahydrofuran

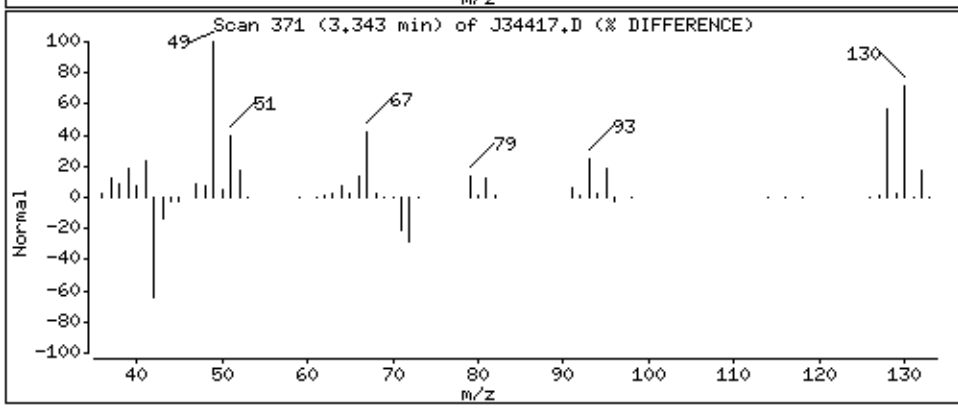
Concentration: 32.0 ug/L

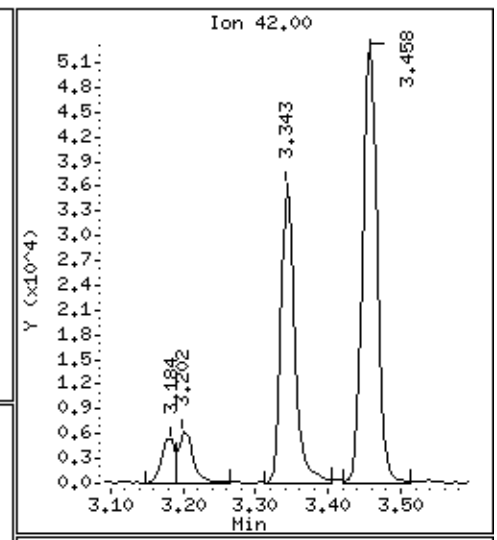
Review Code:

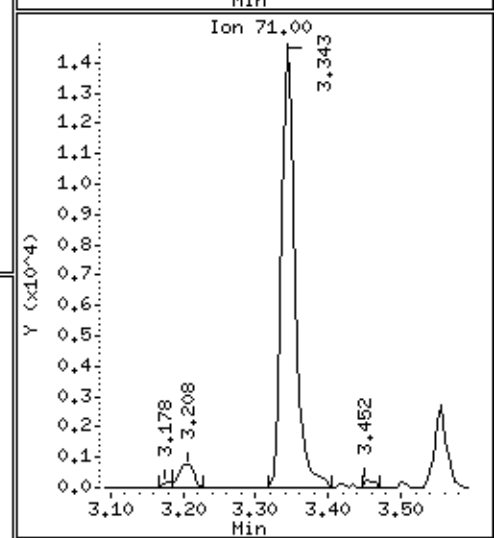


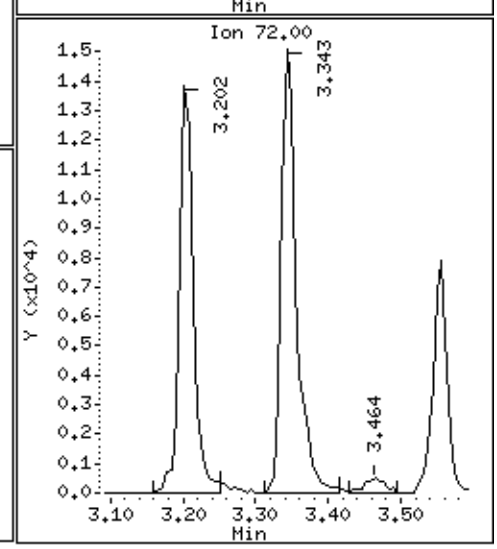












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D

Date : 25-APR-2017 19:07

Client ID: MW-3CMS

Instrument: 70msv6.i

Sample Info: 103081, 15067:1.25

Purge Volume: 5.0

Operator: KGG

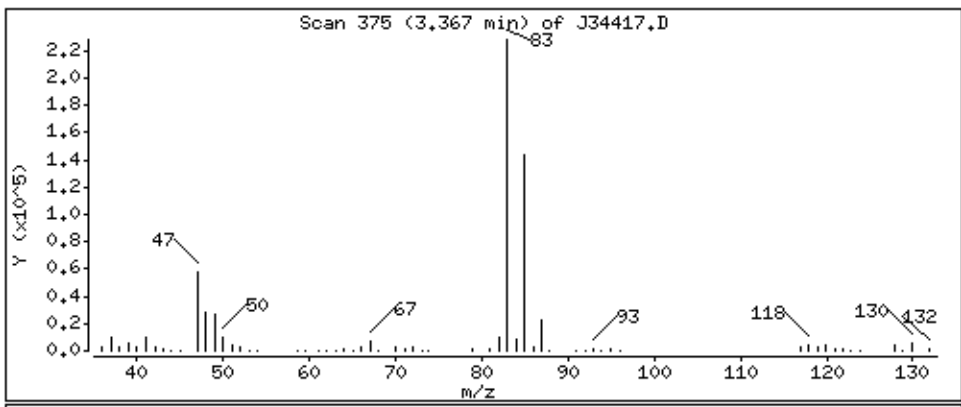
Column phase: RTX-624

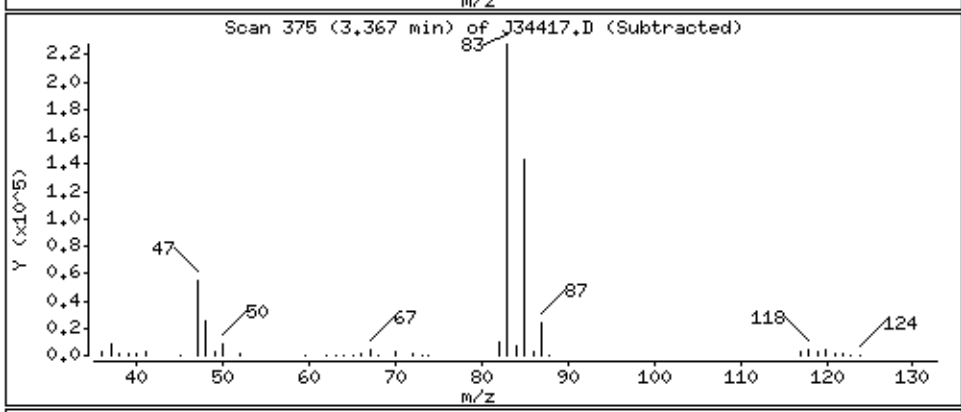
Column diameter: 0.18

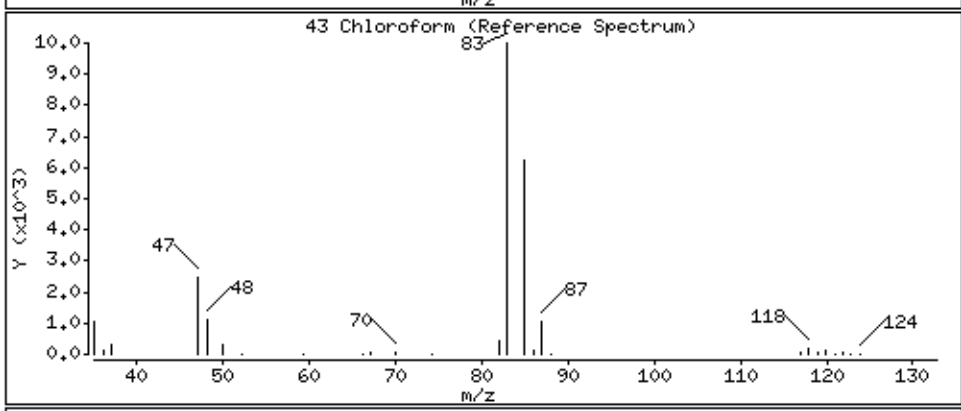
43 Chloroform

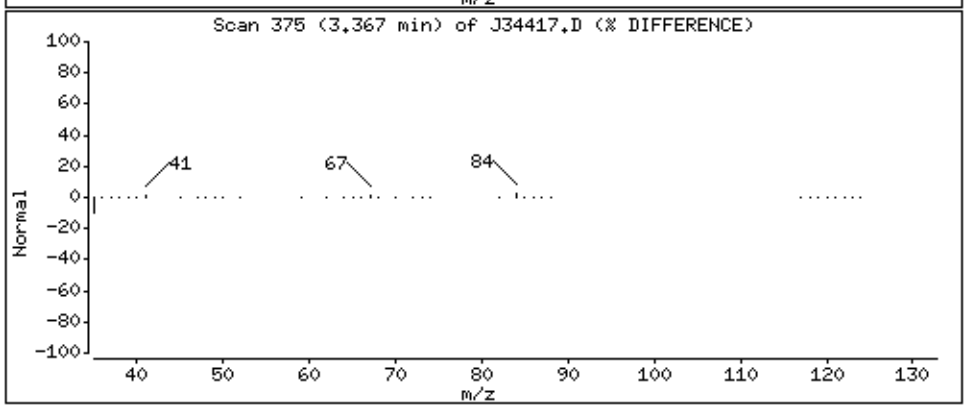
Concentration: 43.6 ug/L

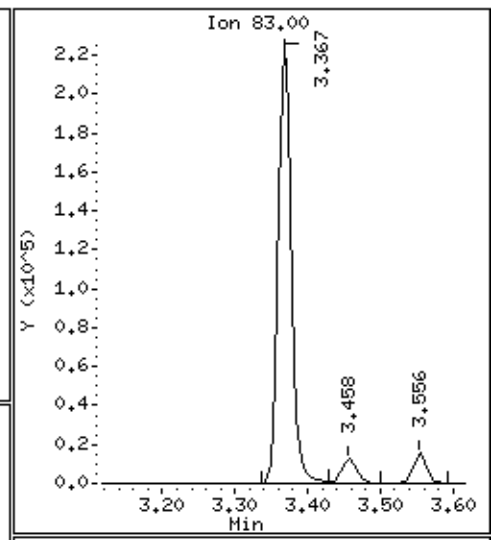
Review Code:

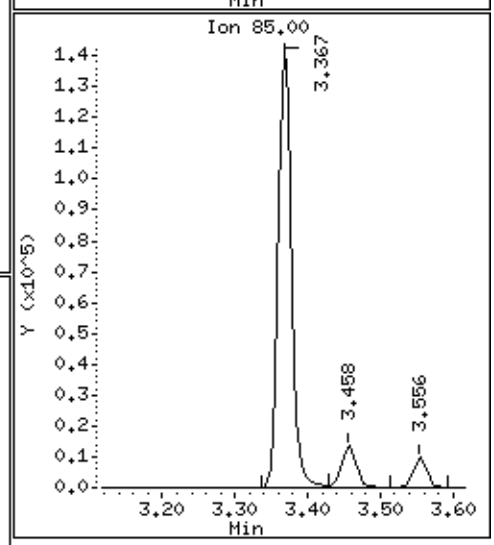












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D

Date : 25-APR-2017 19:07

Client ID: MW-3CMS

Instrument: 70msv6.i

Sample Info: 103081, 15067:1.25

Purge Volume: 5.0

Operator: KGG

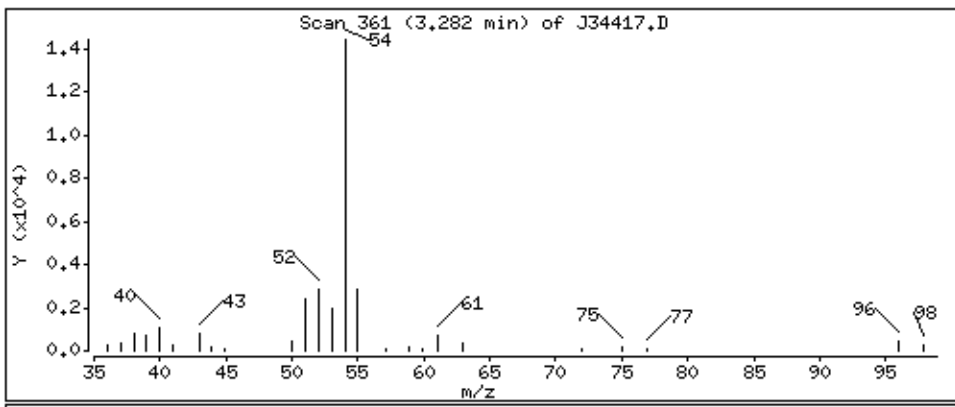
Column phase: RTX-624

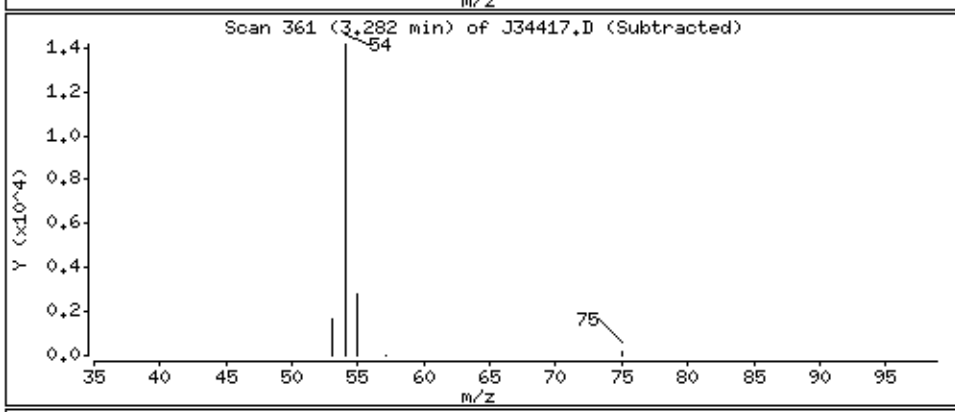
Column diameter: 0.18

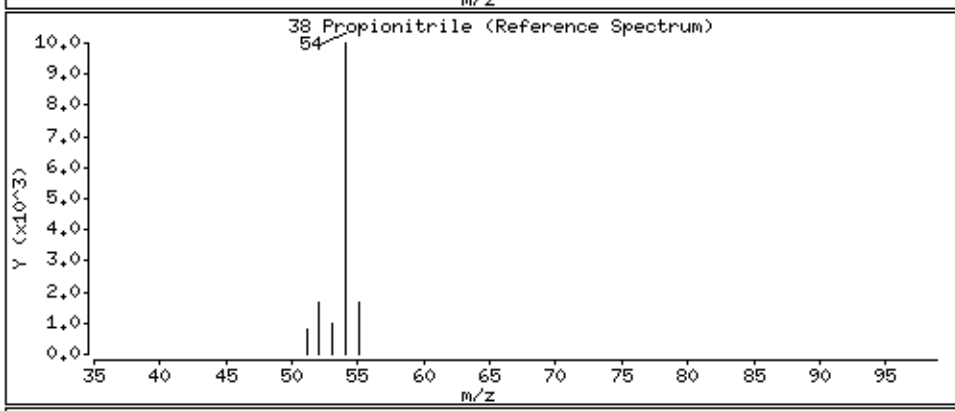
38 Propionitrile

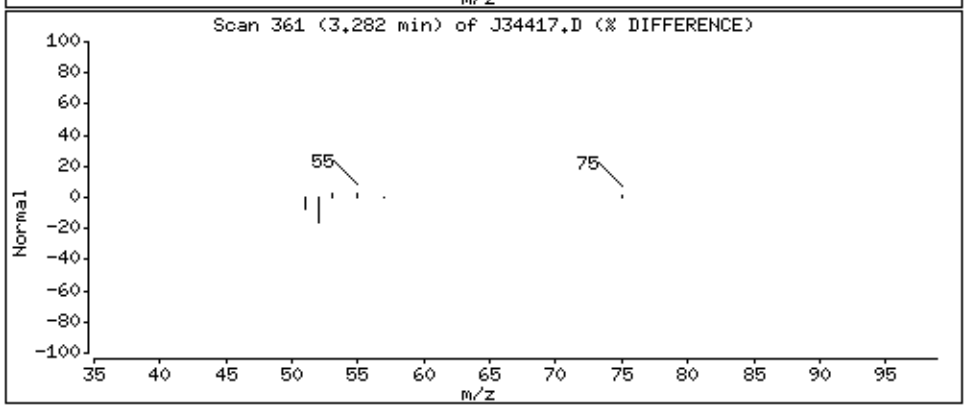
Concentration: 37.2 ug/L

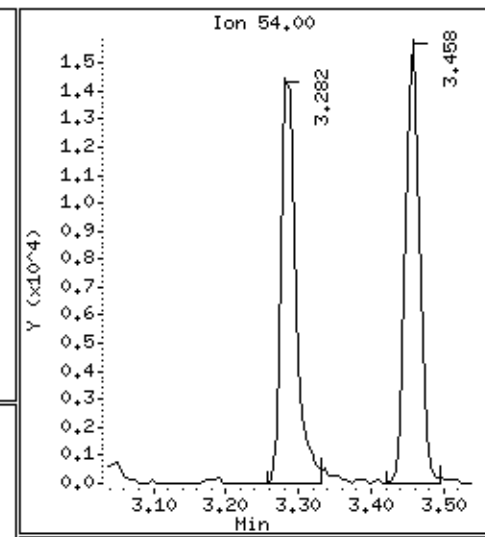
Review Code:

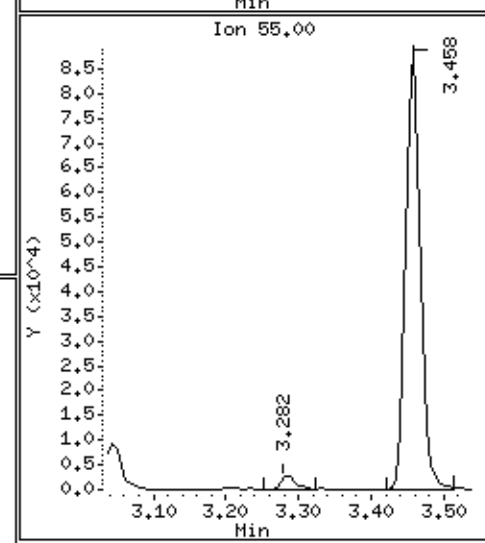












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D

Date : 25-APR-2017 19:07

Client ID: MW-3CMS

Instrument: 70msv6.i

Sample Info: 103081, 15067:1.25

Purge Volume: 5.0

Operator: KGG

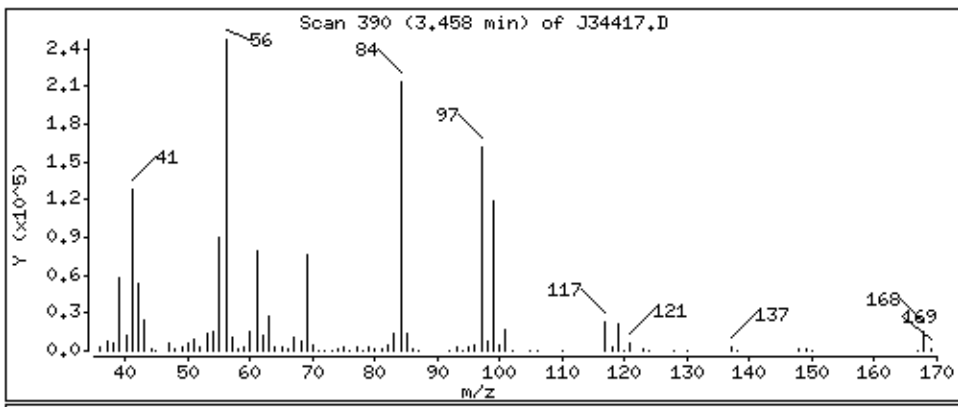
Column phase: RTX-624

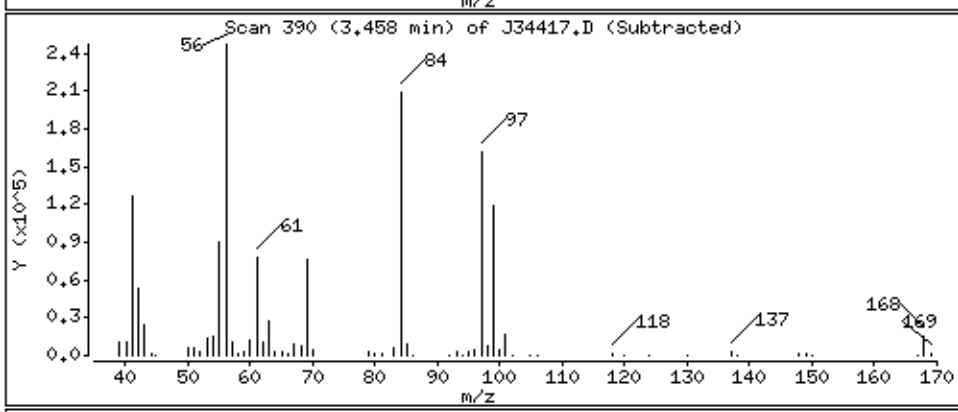
Column diameter: 0.18

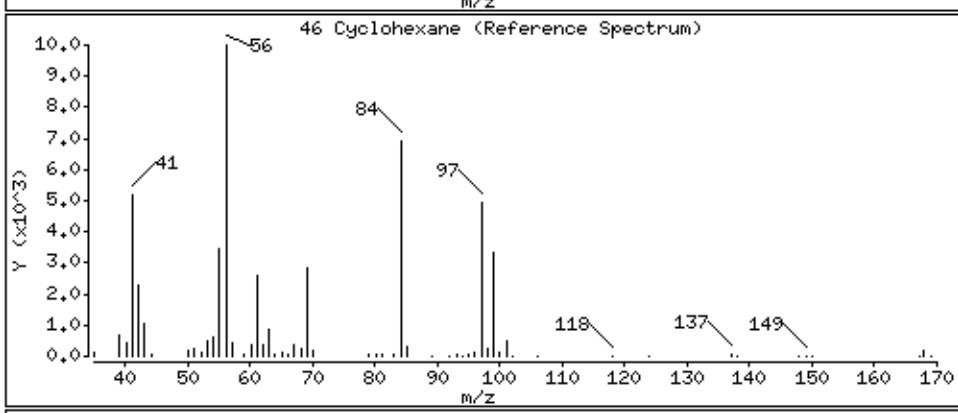
46 Cyclohexane

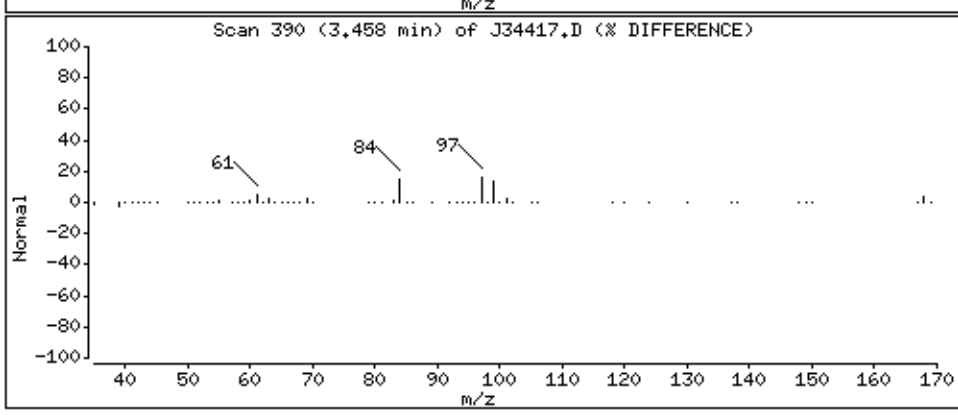
Concentration: 46.5 ug/L

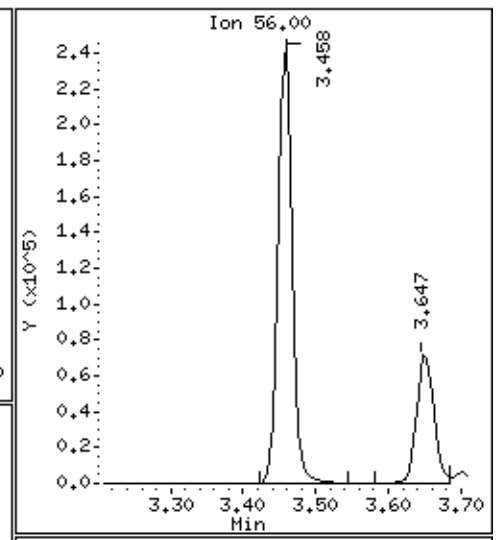
Review Code:

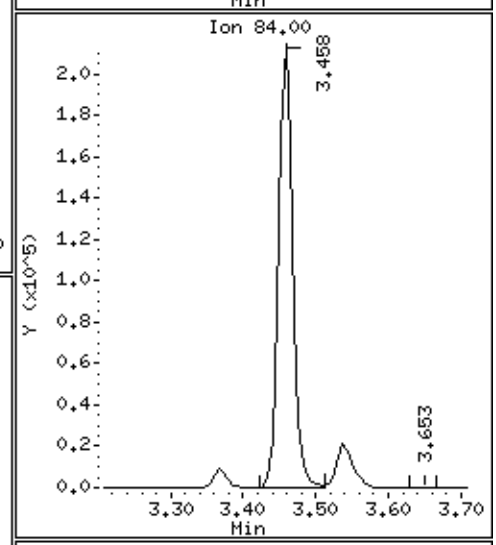


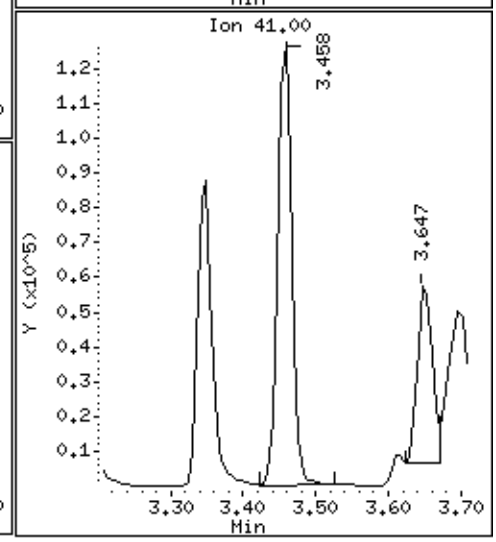












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D

Date : 25-APR-2017 19:07

Client ID: MW-3CMS

Instrument: 70msv6.i

Sample Info: 103081, 15067:1.25

Purge Volume: 5.0

Operator: KGG

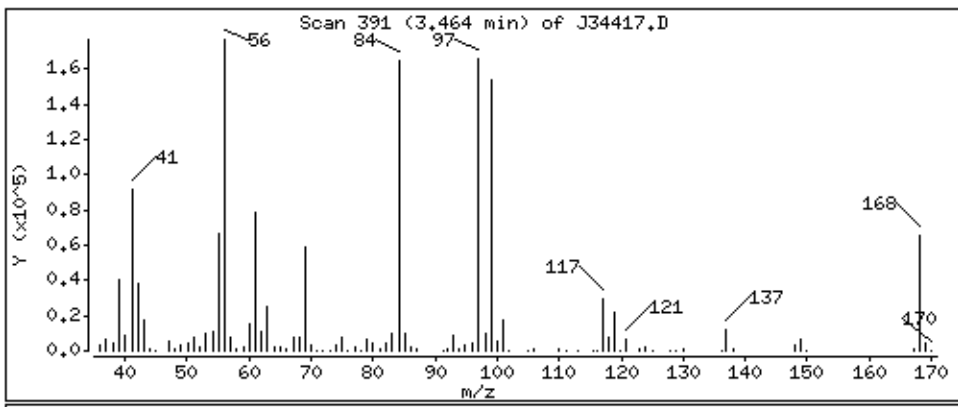
Column phase: RTX-624

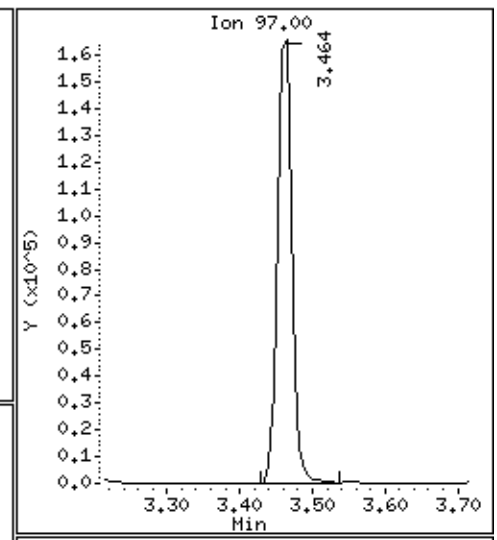
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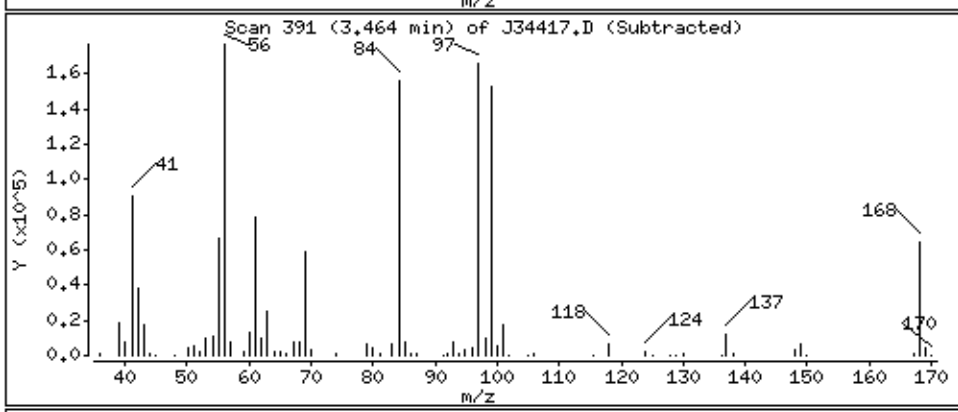
45 1,1,1-Trichloroethane

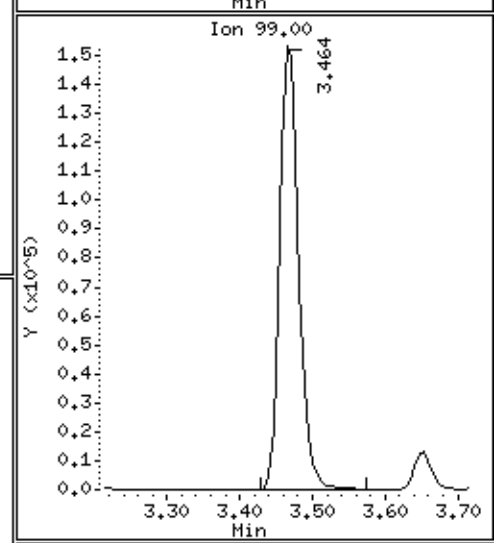
Concentration: 48.2 ug/L

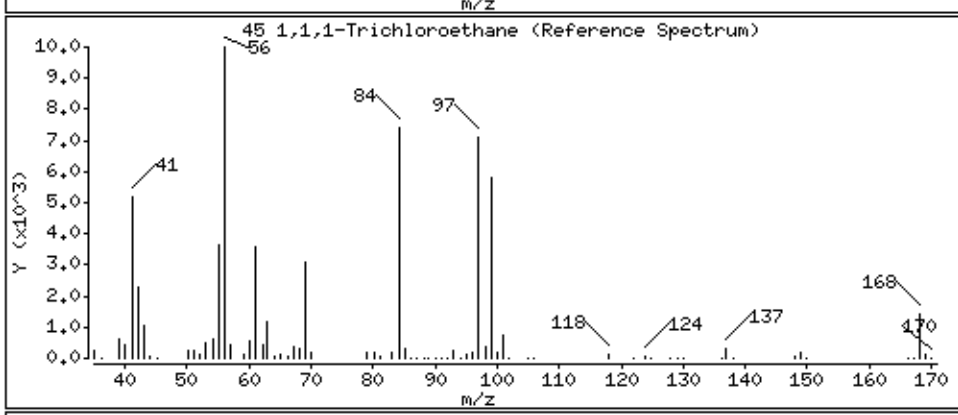
Review Code:

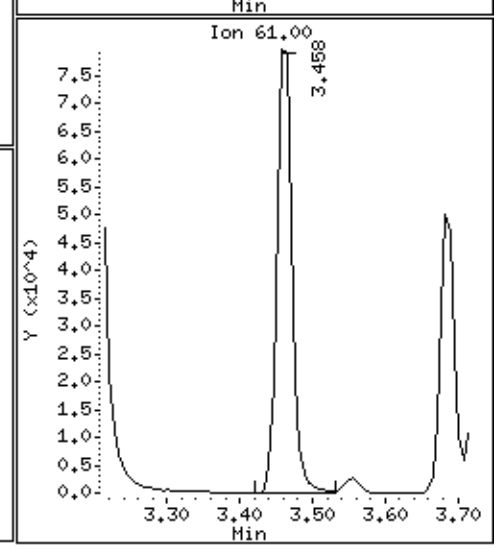


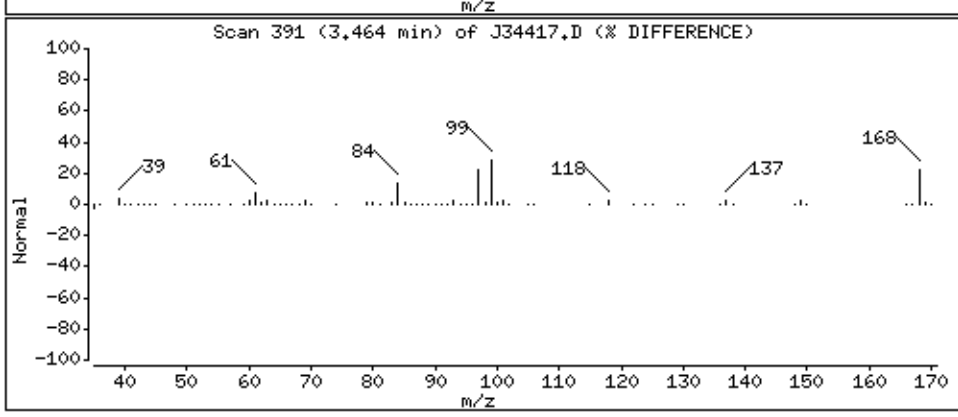












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D

Date : 25-APR-2017 19:07

Client ID: MW-3CMS

Instrument: 70msv6.i

Sample Info: 103081, 15067:1.25

Purge Volume: 5.0

Operator: KGG

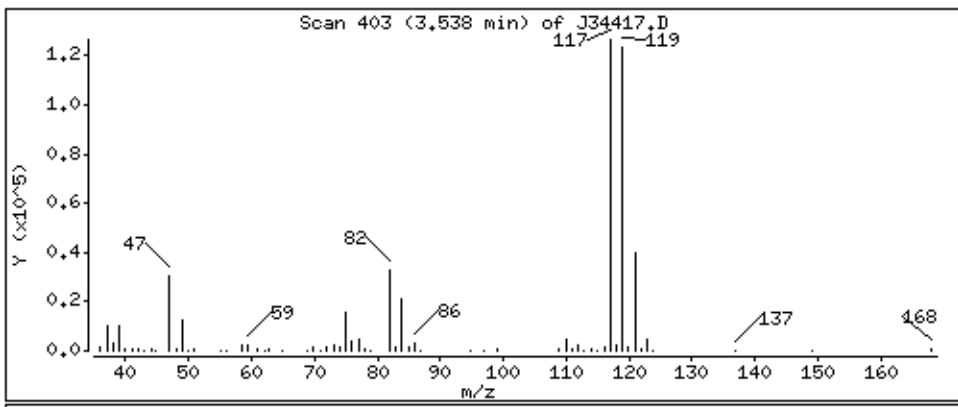
Column phase: RTX-624

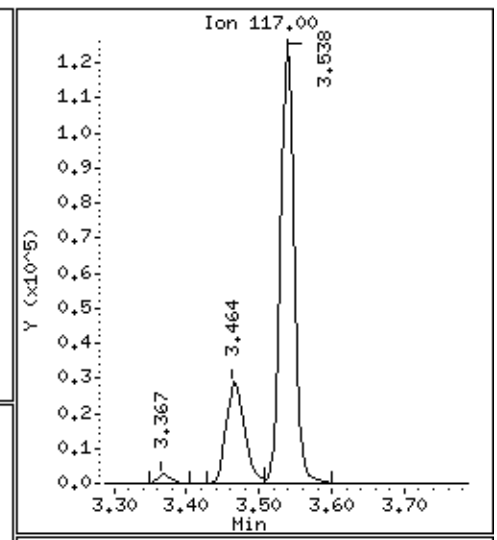
Column diameter: 0.18

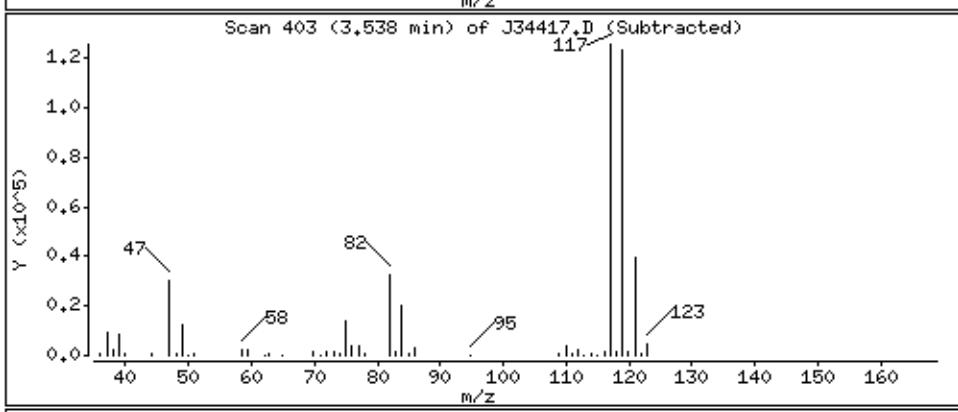
48 Carbon tetrachloride

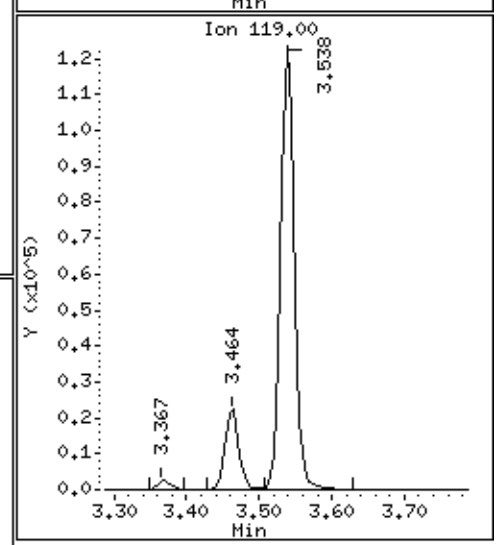
Concentration: 57.0 ug/L

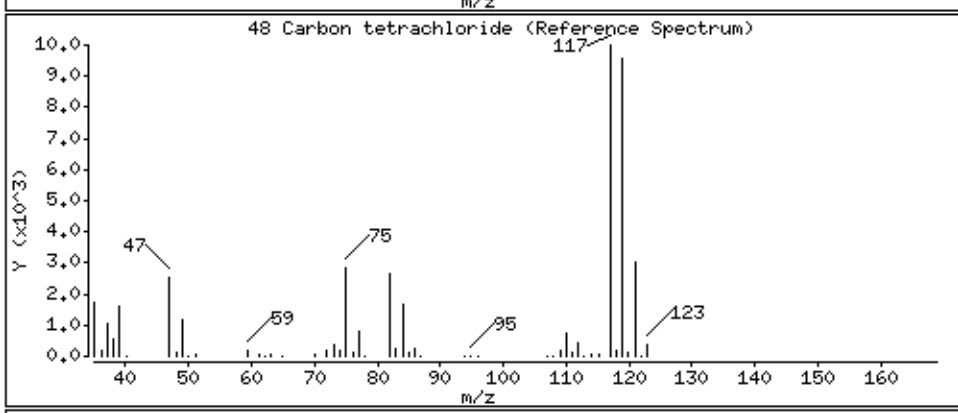
Review Code:

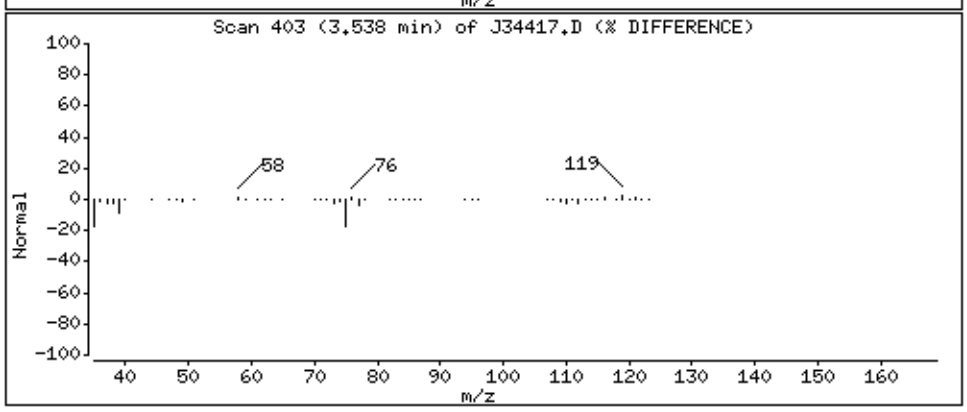












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D

Date : 25-APR-2017 19:07

Client ID: MW-3CMS

Instrument: 70msv6.i

Sample Info: 103081, 15067:1.25

Purge Volume: 5.0

Operator: KGG

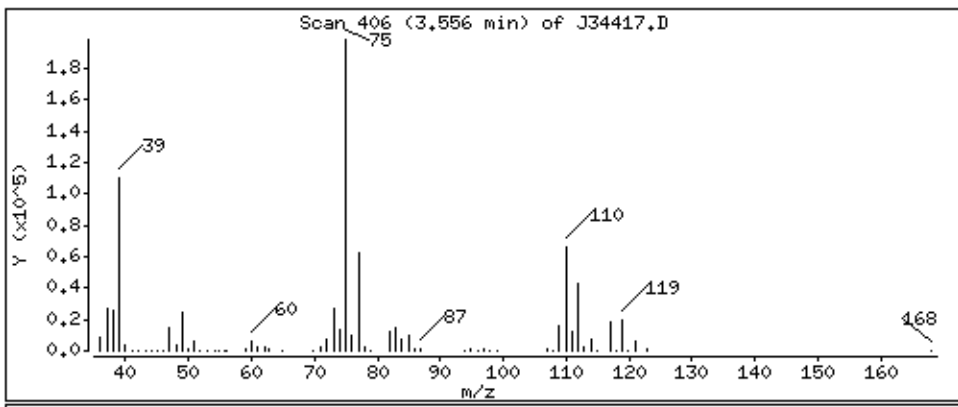
Column phase: RTX-624

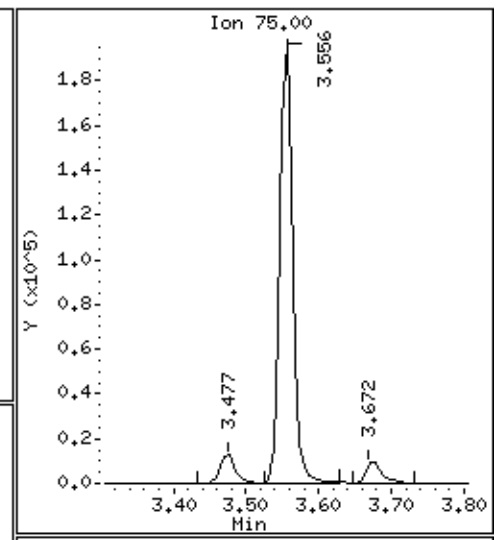
Column diameter: 0.18

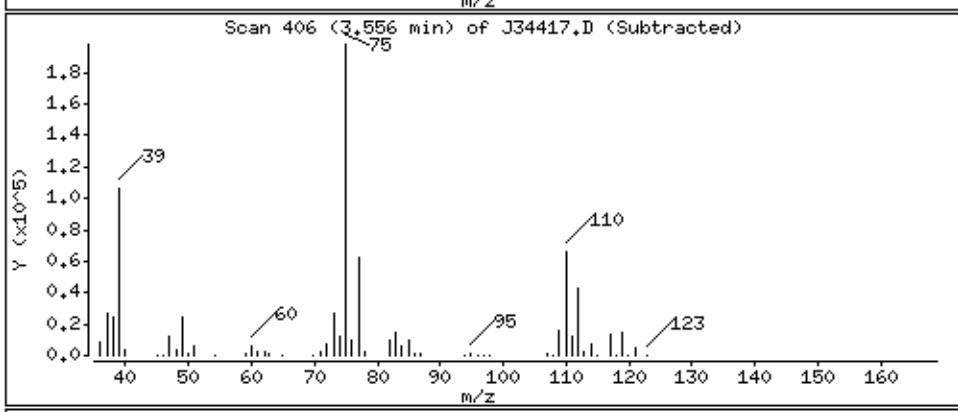
47 1,1-Dichloropropene

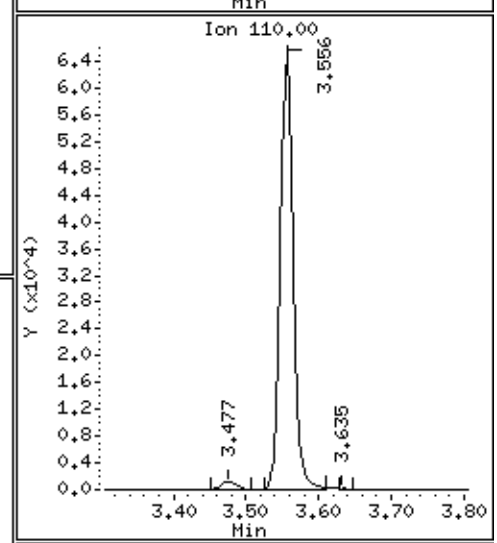
Concentration: 44.3 ug/L

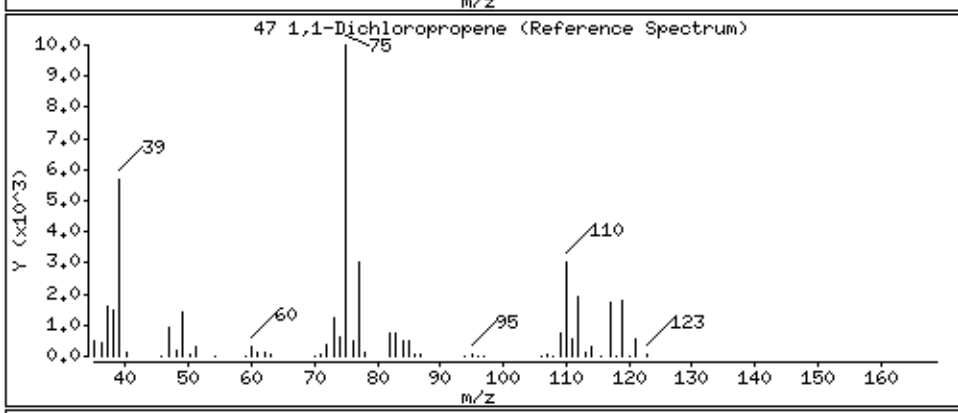
Review Code:

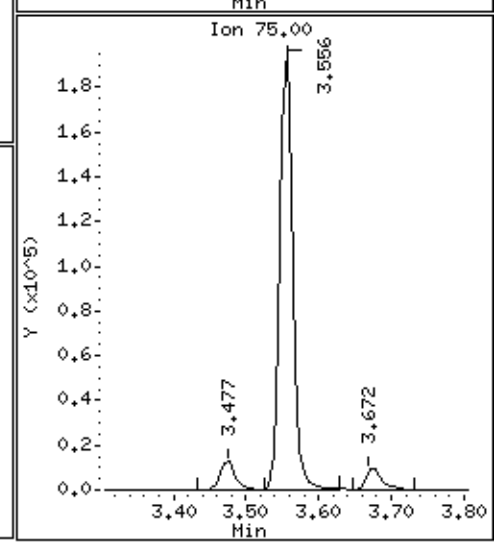


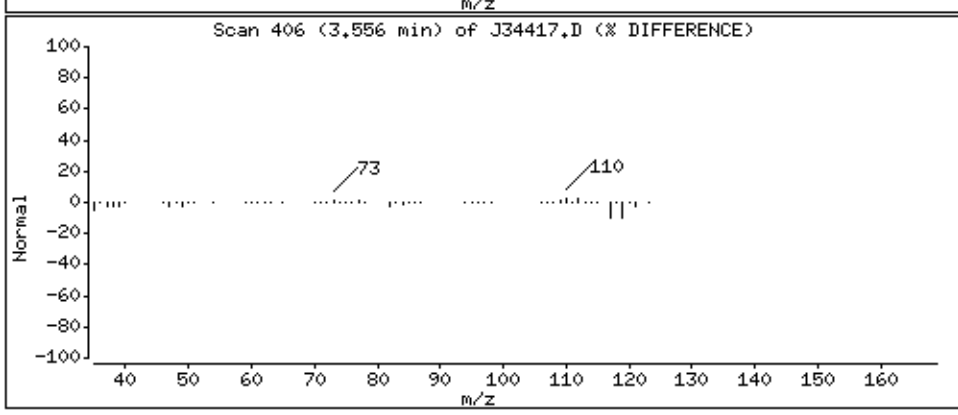












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D

Date : 25-APR-2017 19:07

Client ID: MW-3CMS

Instrument: 70msv6.i

Sample Info: 103081, 15067:1.25

Purge Volume: 5.0

Operator: KGG

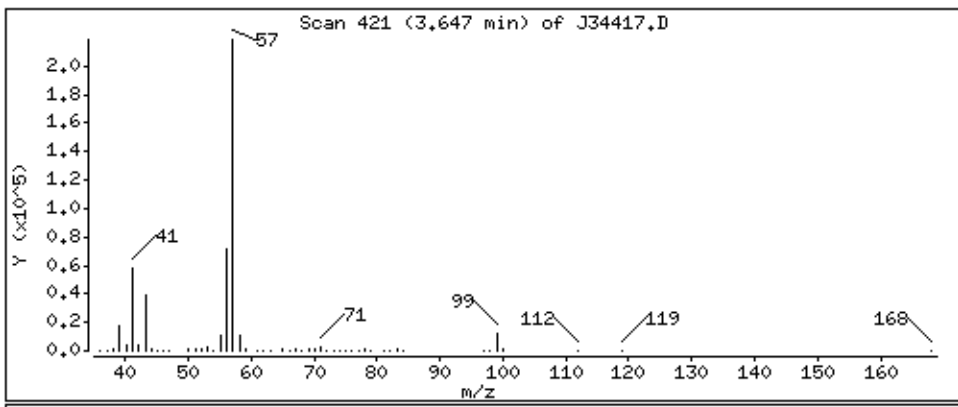
Column phase: RTX-624

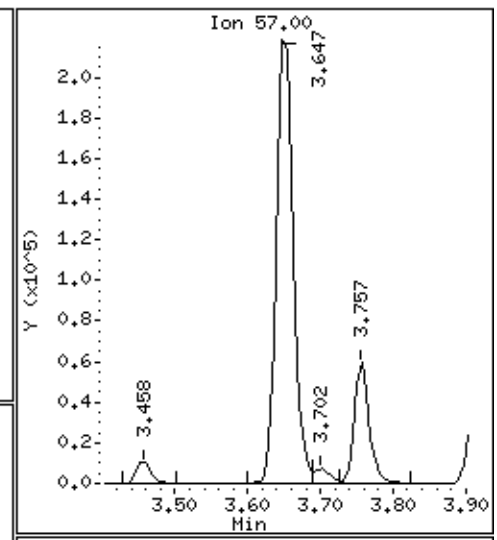
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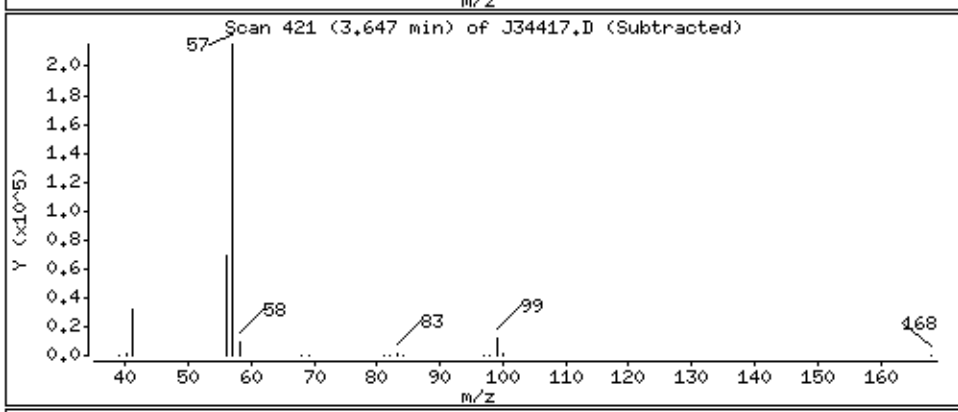
55 2,2,4-Trimethylpentane

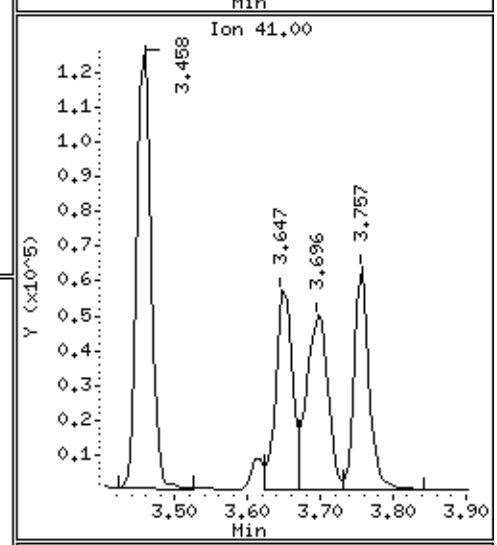
Concentration: 47.2 ug/L

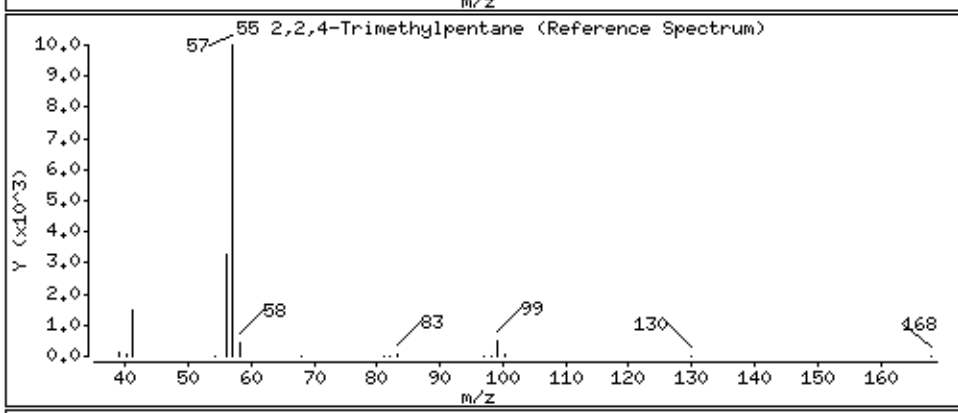
Review Code:

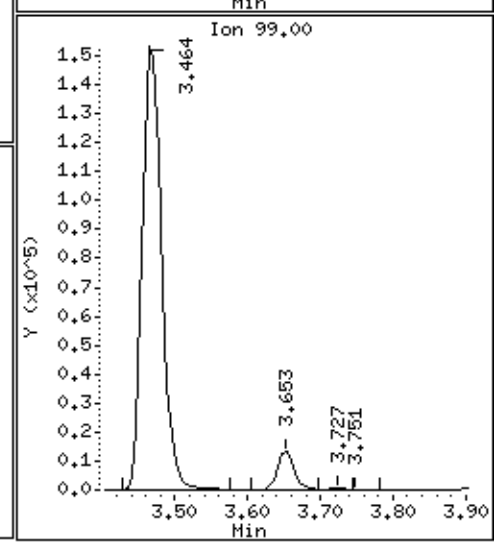


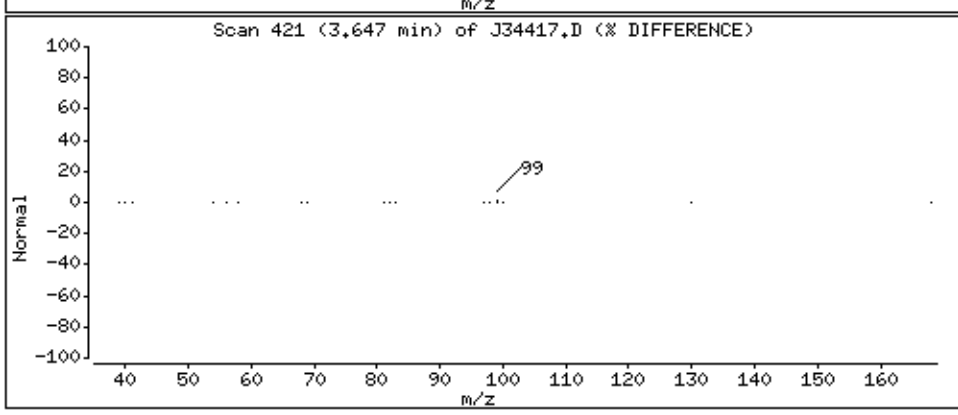












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D

Date : 25-APR-2017 19:07

Client ID: MW-3CMS

Instrument: 70msv6.i

Sample Info: 103081, 15067:1.25

Purge Volume: 5.0

Operator: KGG

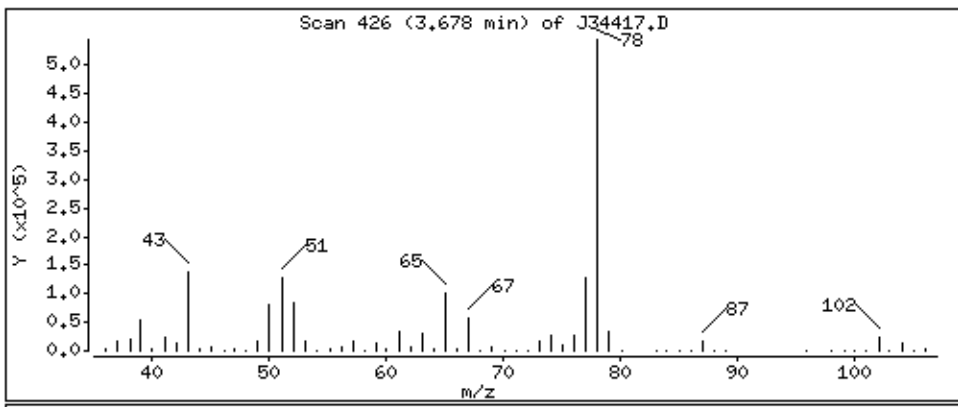
Column phase: RTX-624

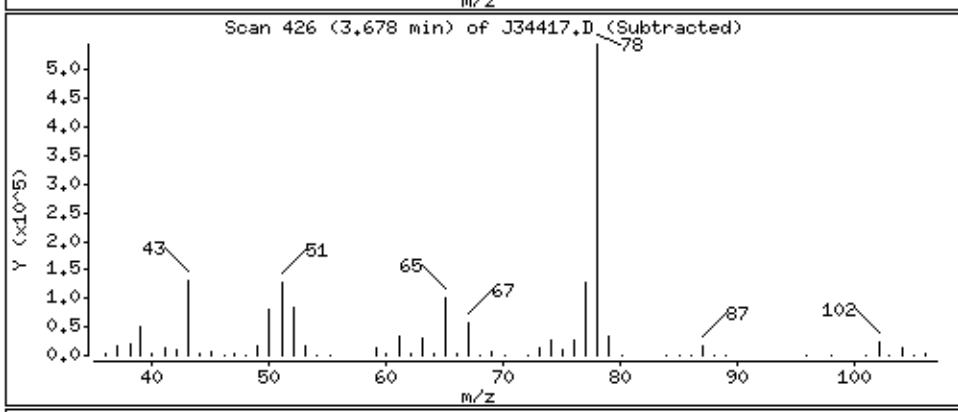
Column diameter: 0.18

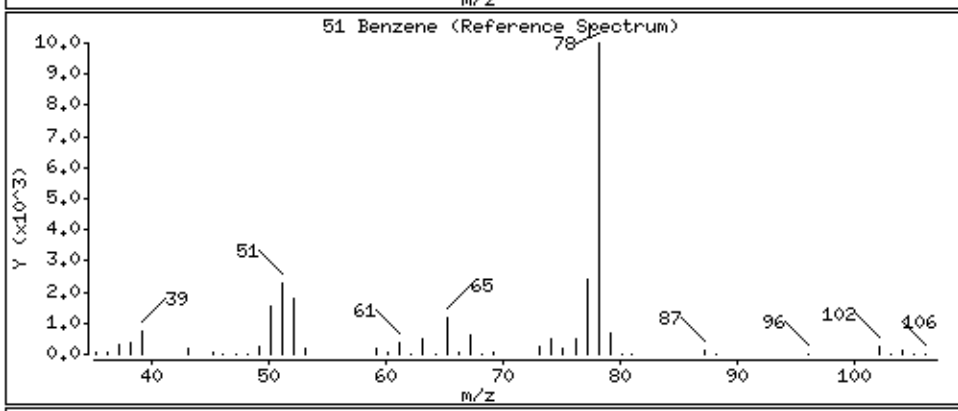
51 Benzene

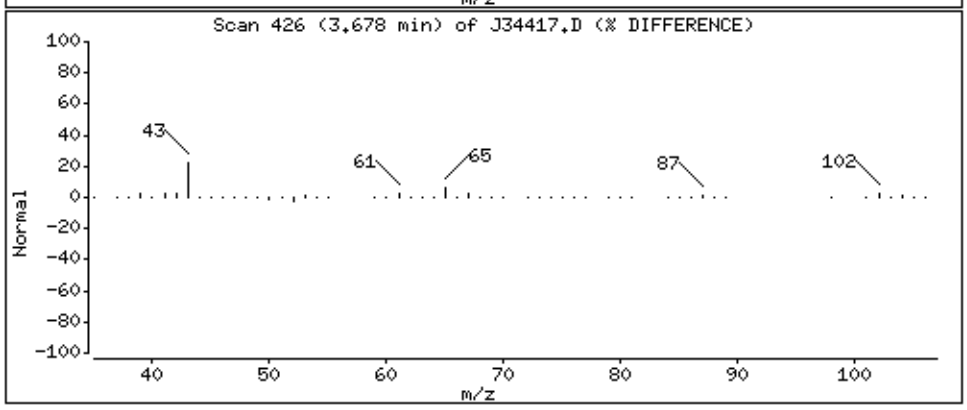
Concentration: 44.9 ug/L

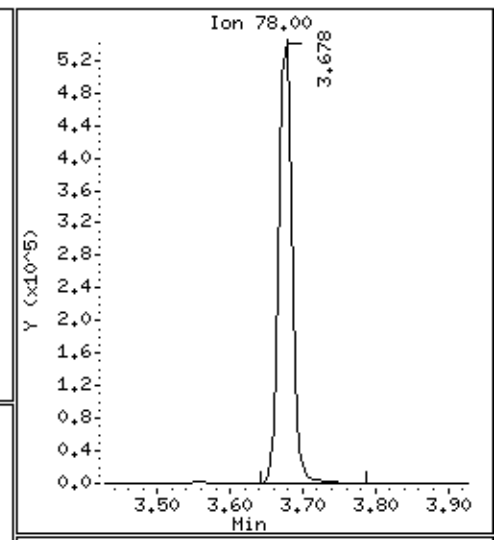
Review Code:

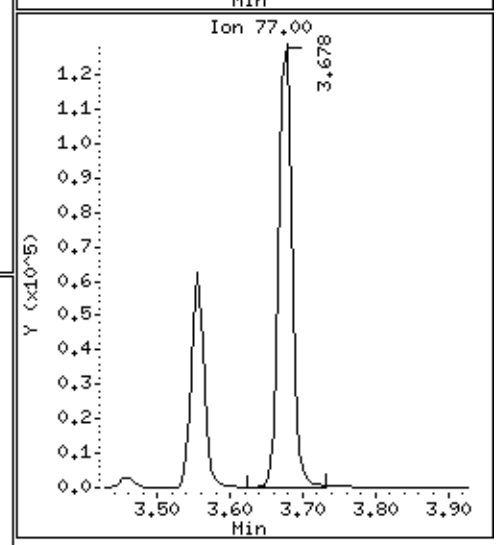












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D

Date : 25-APR-2017 19:07

Client ID: MW-3CMS

Instrument: 70msv6.i

Sample Info: 103081, 15067:1.25

Purge Volume: 5.0

Operator: KGG

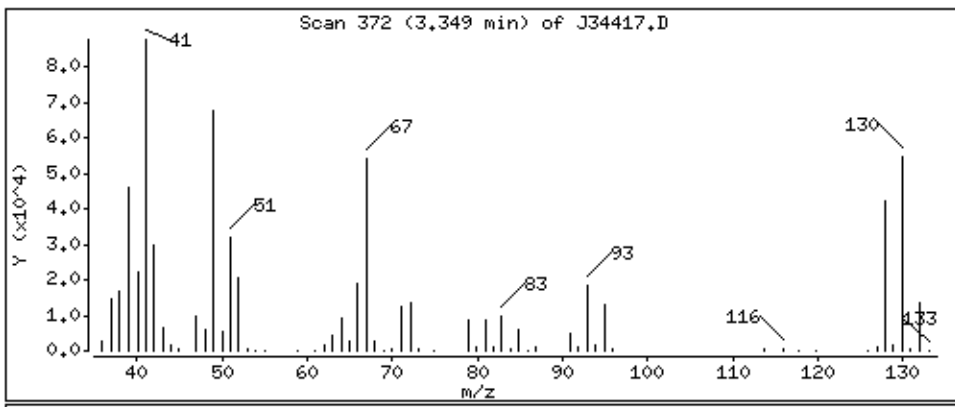
Column phase: RTX-624

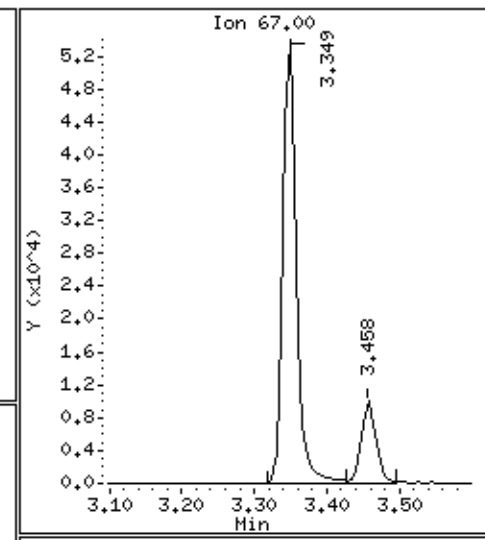
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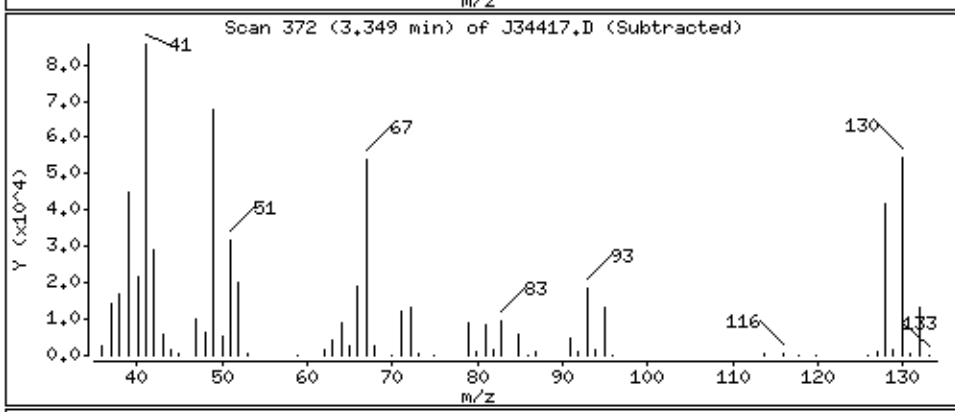
40 Methacrylonitrile

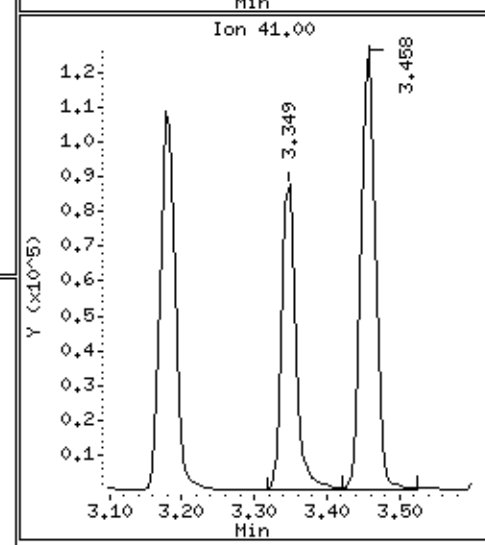
Concentration: 40.1 ug/L

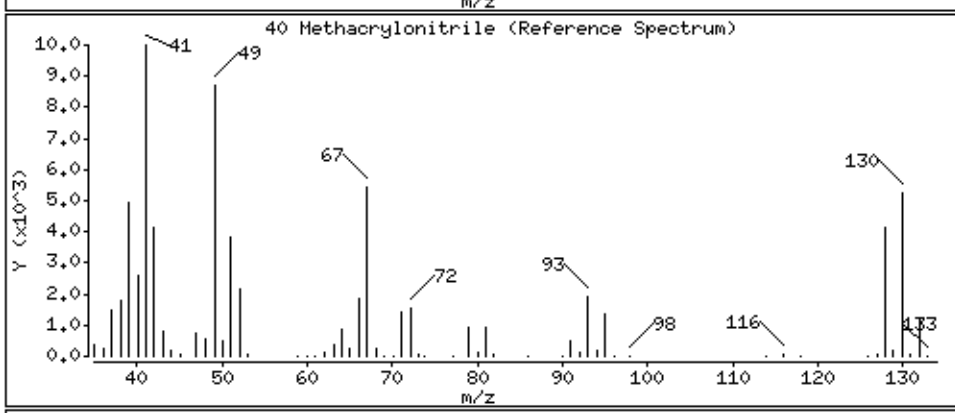
Review Code:

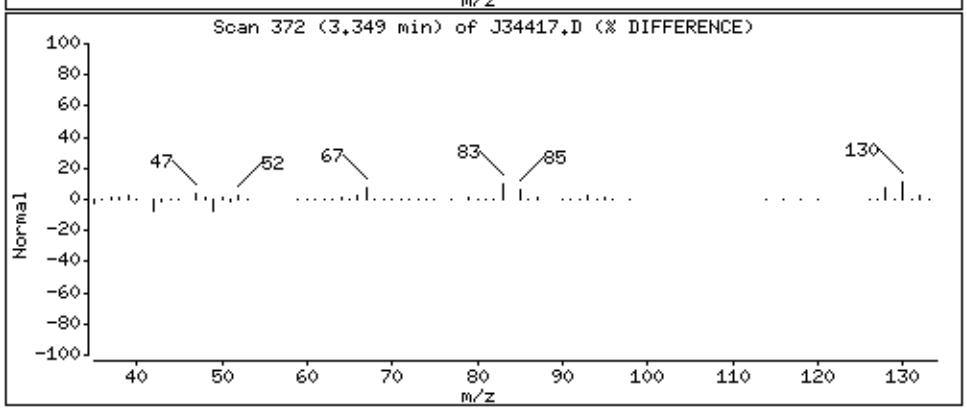












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D

Date : 25-APR-2017 19:07

Client ID: MW-3CMS

Instrument: 70msv6.i

Sample Info: 103081, 15067:1.25

Purge Volume: 5.0

Operator: KGG

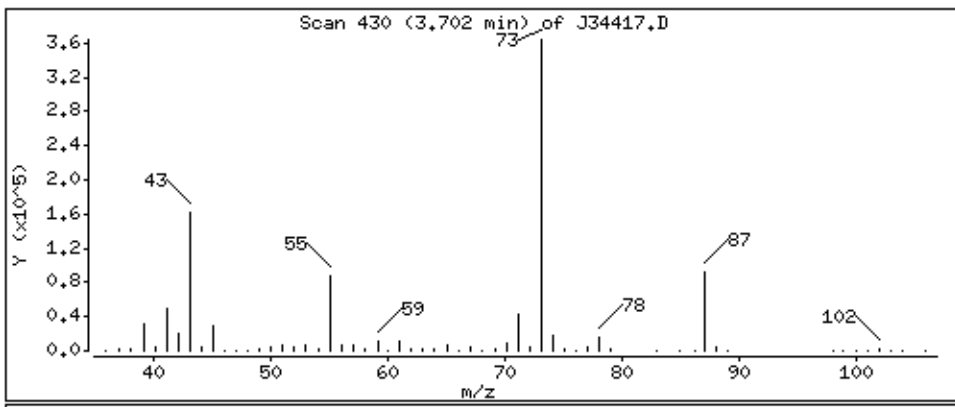
Column phase: RTX-624

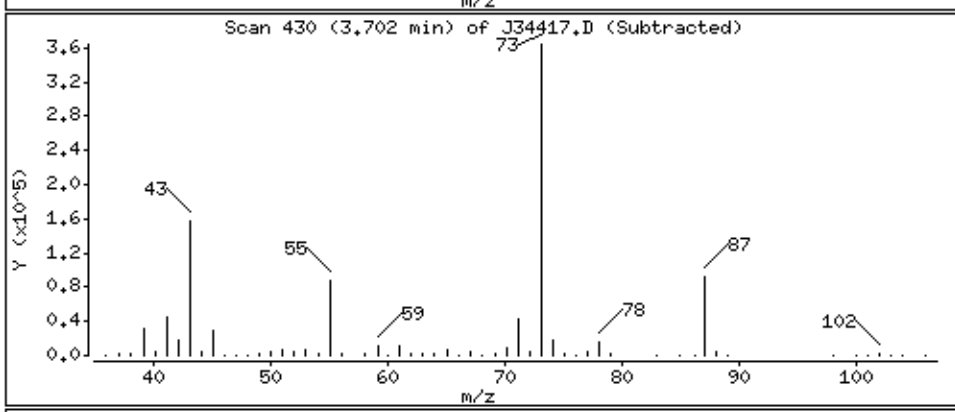
Column diameter: 0.18

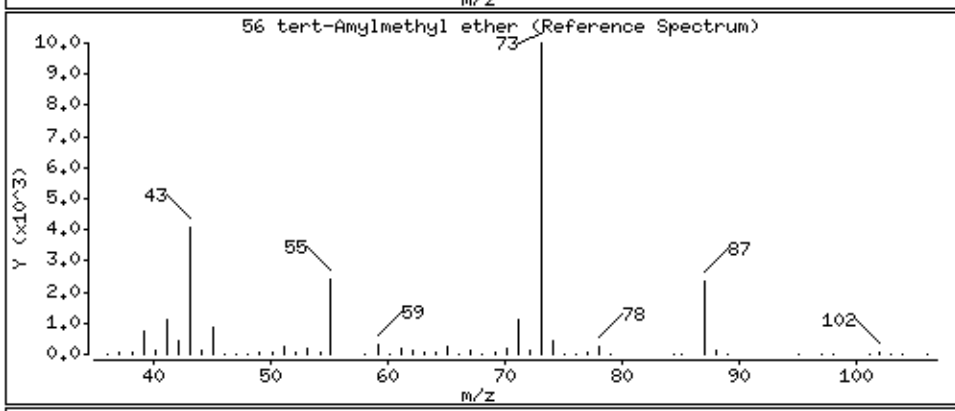
56 tert-Amylmethyl ether

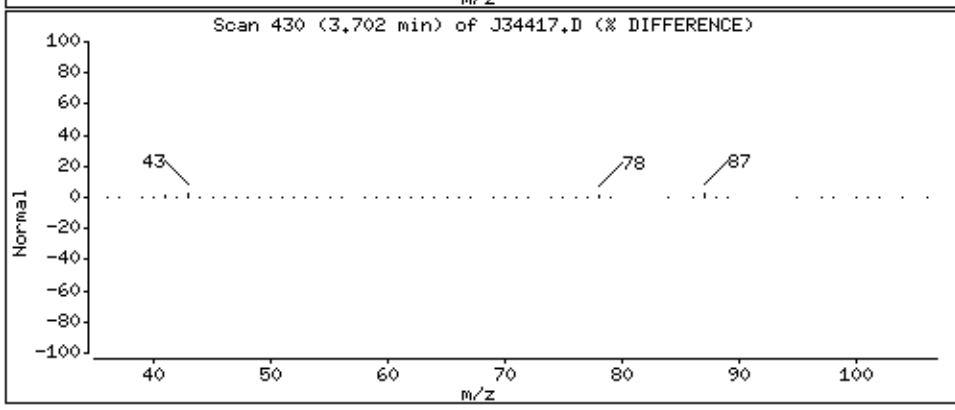
Concentration: 43.8 ug/L

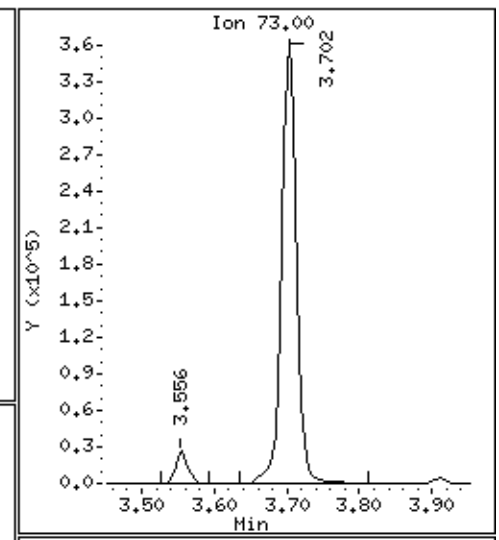
Review Code:

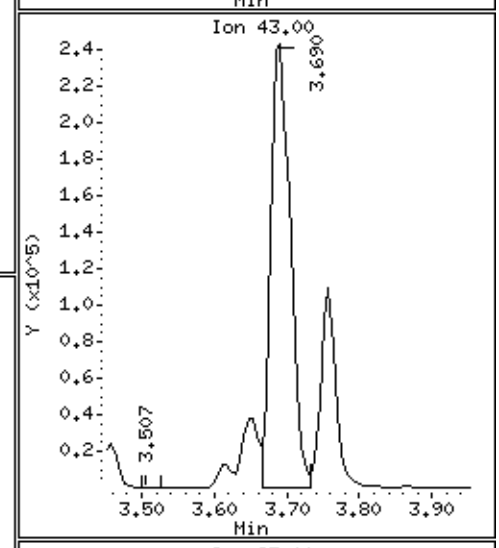


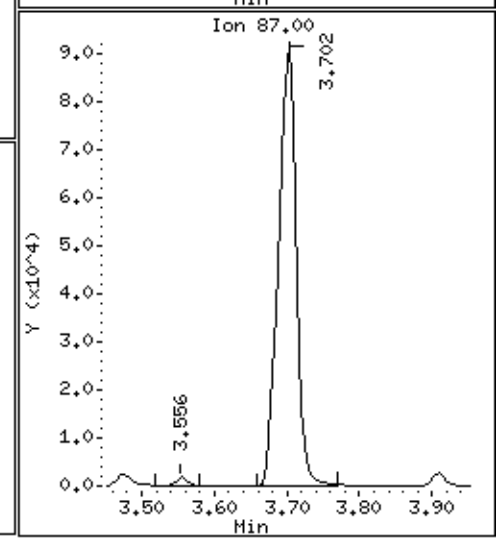












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D

Date : 25-APR-2017 19:07

Client ID: MW-3CMS

Instrument: 70msv6.i

Sample Info: 103081, 15067:1.25

Purge Volume: 5.0

Operator: KGG

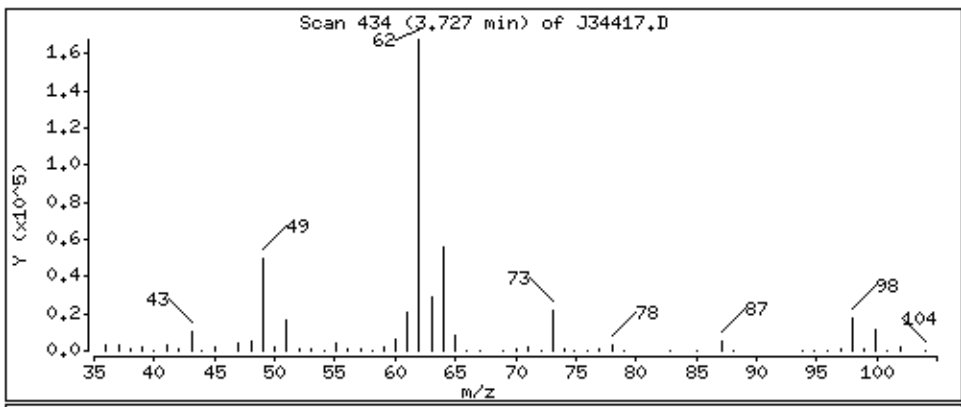
Column phase: RTX-624

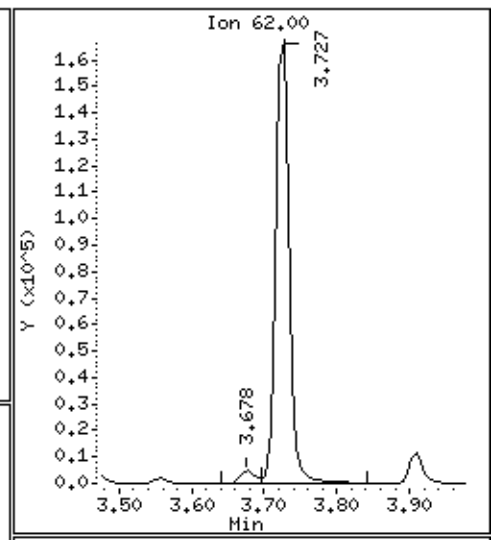
Column diameter: 0.18

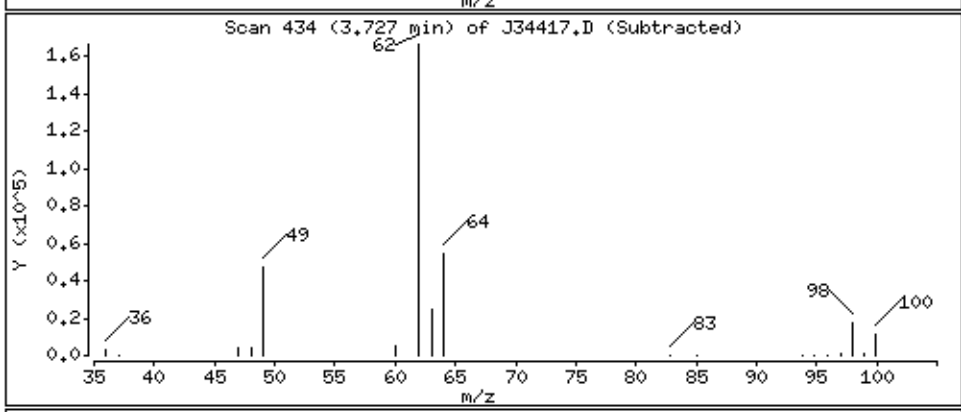
52 1,2-Dichloroethane

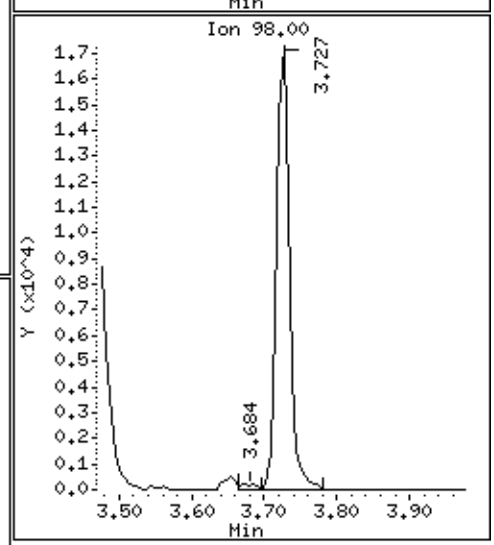
Concentration: 37.5 ug/L

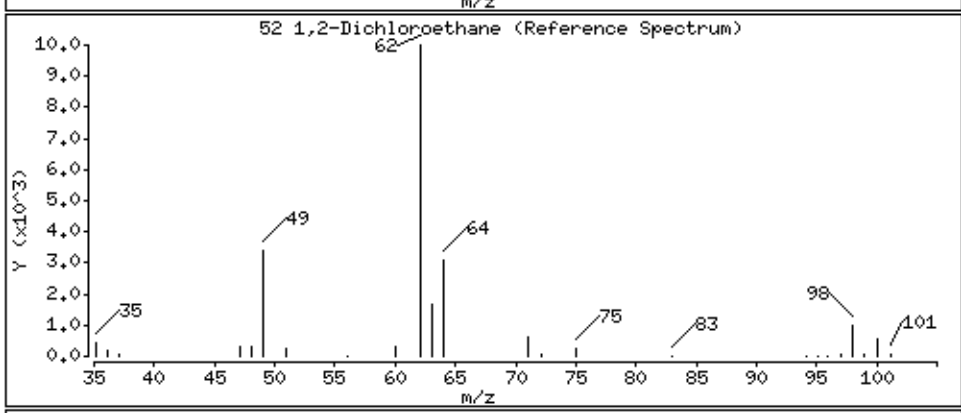
Review Code:

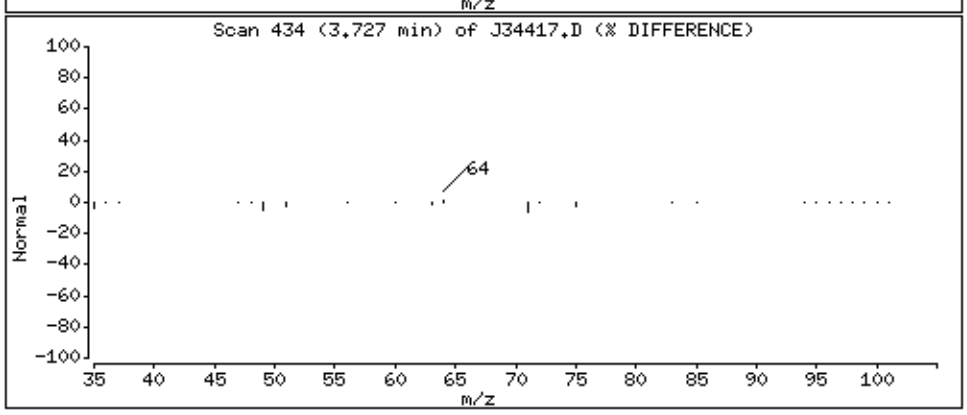












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D

Date : 25-APR-2017 19:07

Client ID: MW-3CMS

Instrument: 70msv6.i

Sample Info: 103081, 15067:1.25

Purge Volume: 5.0

Operator: KGG

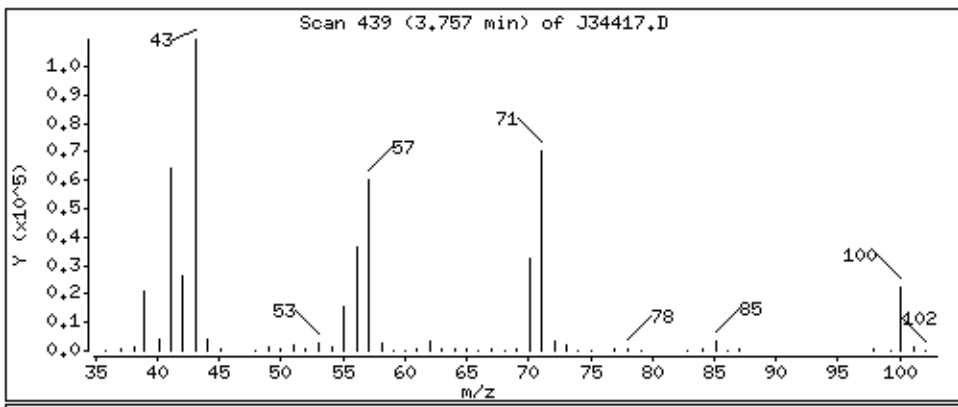
Column phase: RTX-624

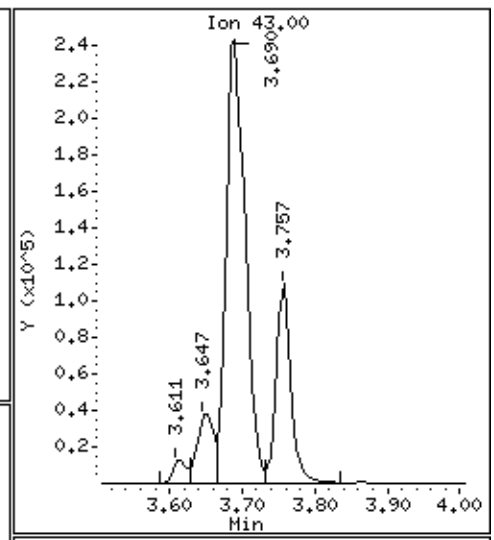
Column diameter: 0.18

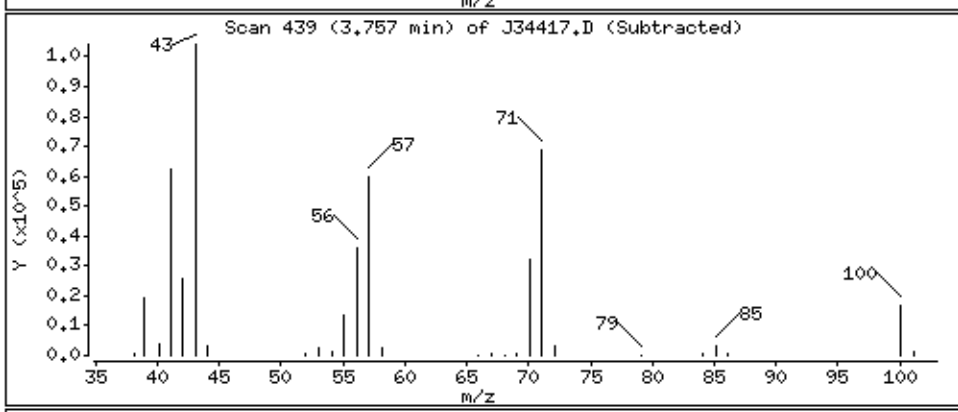
57 n-Heptane

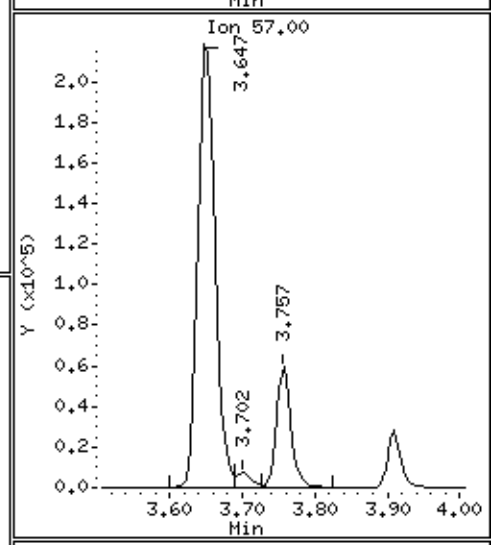
Concentration: 41.6 ug/L

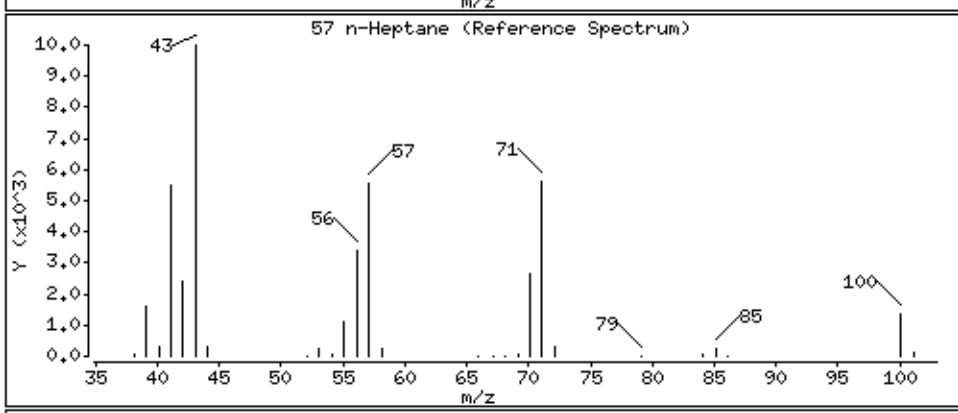
Review Code:

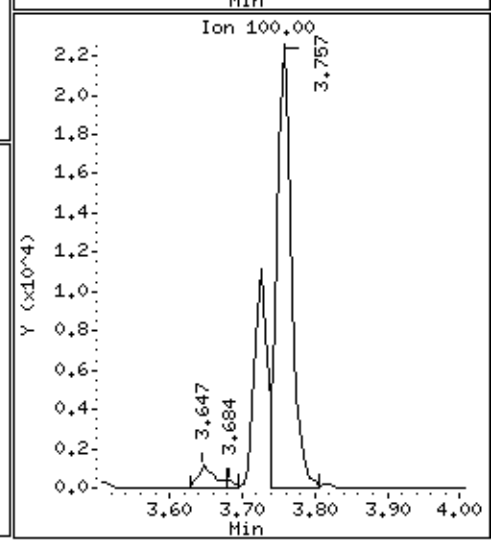


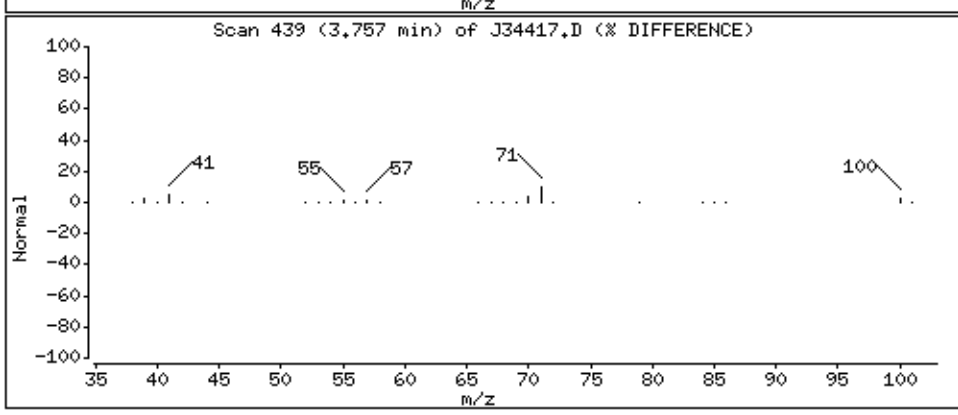












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D

Date : 25-APR-2017 19:07

Client ID: MW-3CMS

Instrument: 70msv6.i

Sample Info: 103081, 15067:1.25

Purge Volume: 5.0

Operator: KGG

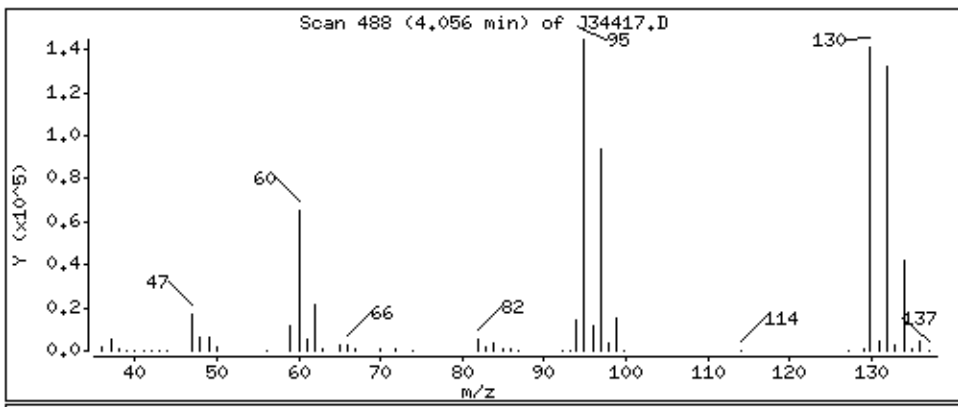
Column phase: RTX-624

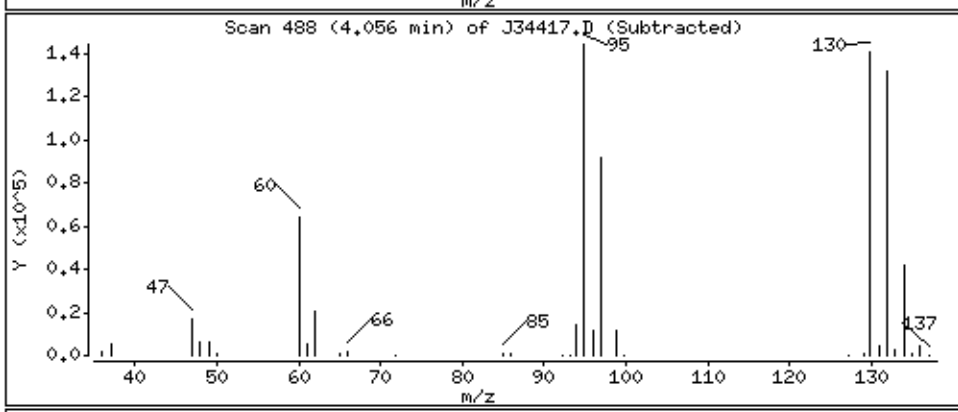
Column diameter: 0.18

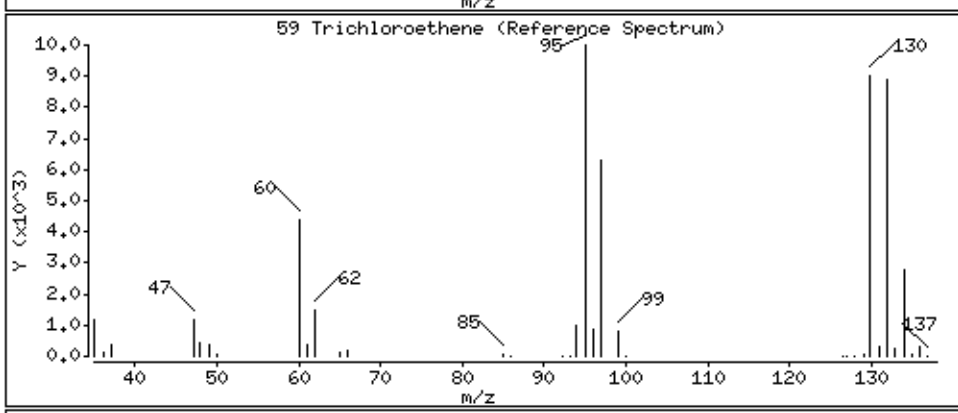
59 Trichloroethene

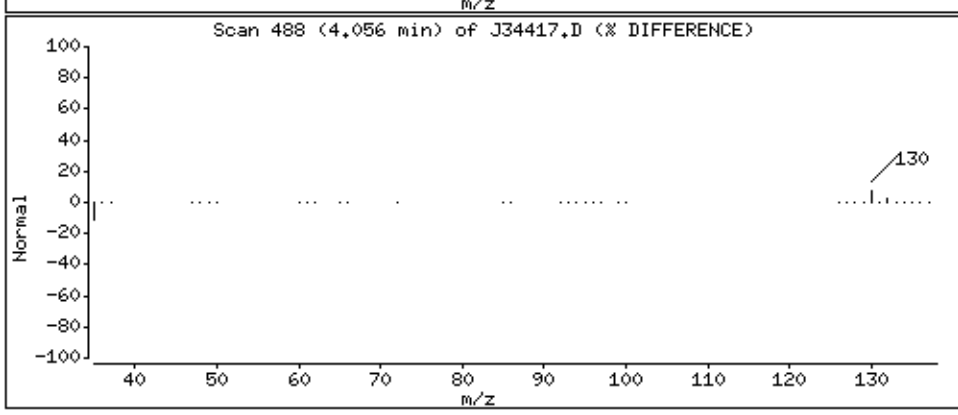
Concentration: 47.3 ug/L

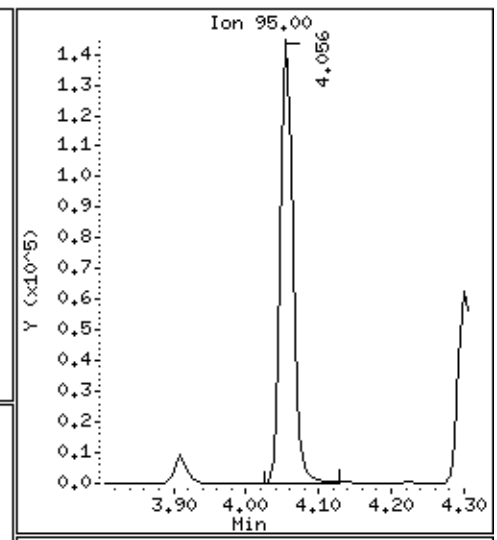
Review Code:

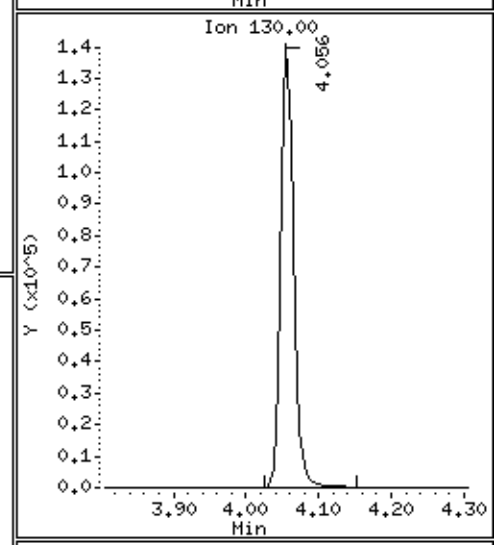


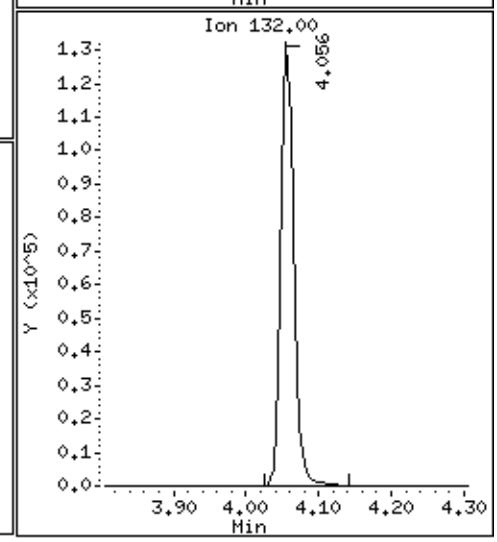












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D

Date : 25-APR-2017 19:07

Client ID: MW-3CMS

Instrument: 70msv6.i

Sample Info: 103081, 15067:1.25

Purge Volume: 5.0

Operator: KGG

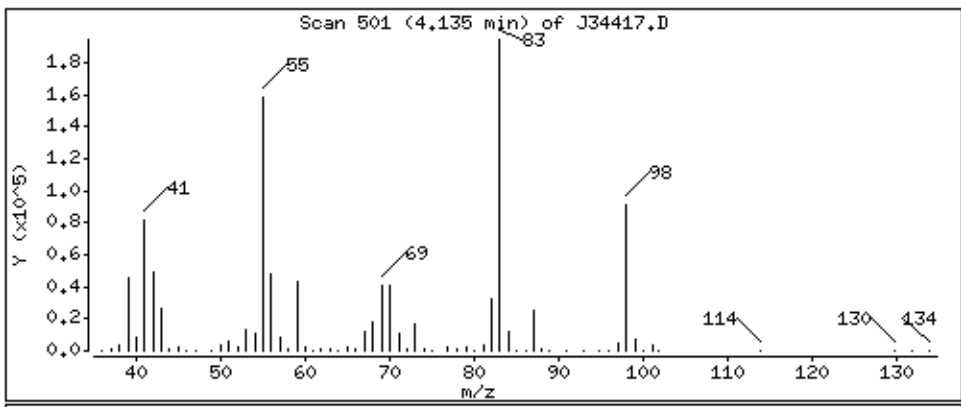
Column phase: RTX-624

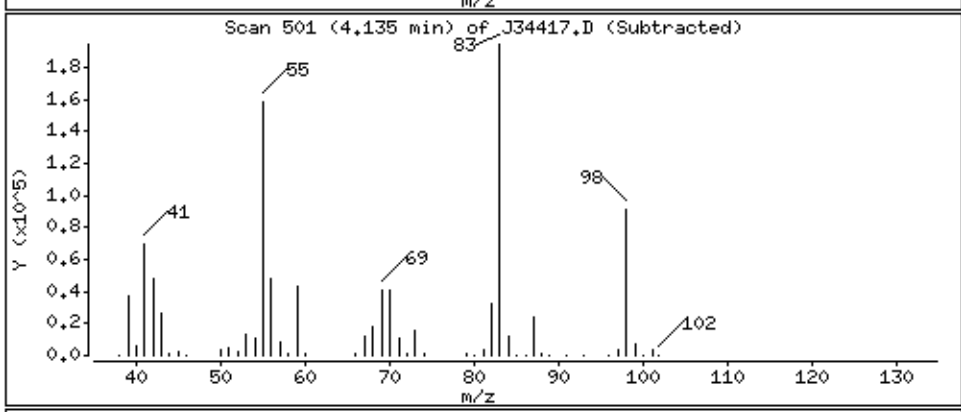
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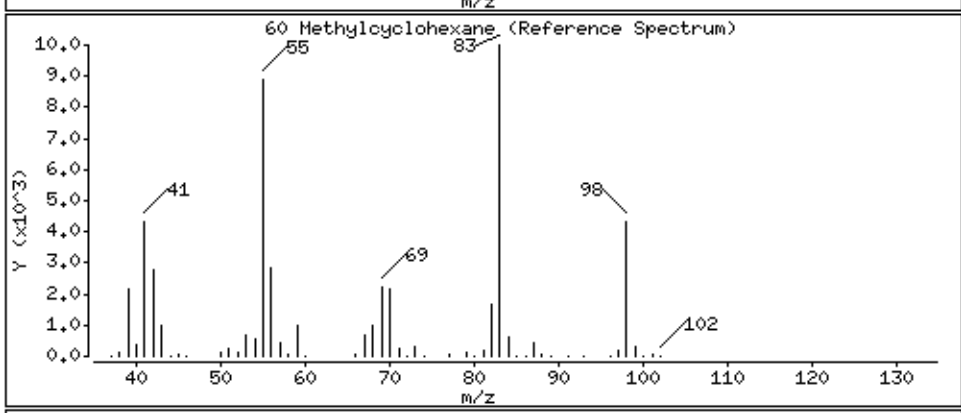
60 Methylcyclohexane

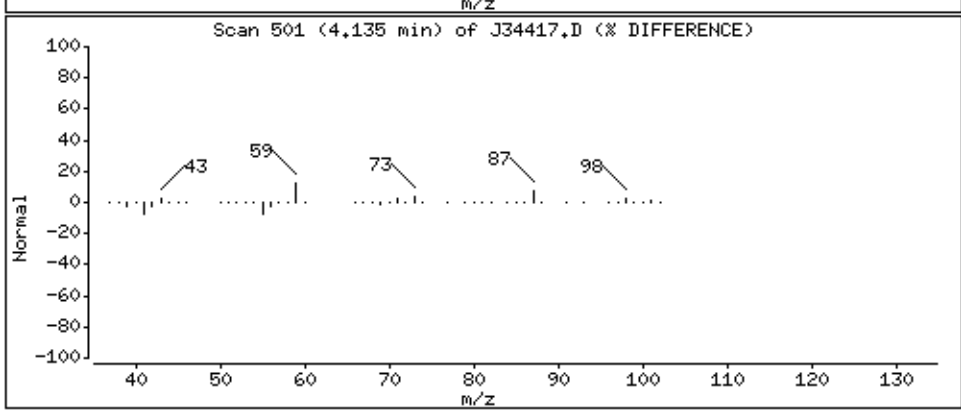
Concentration: 55.8 ug/L

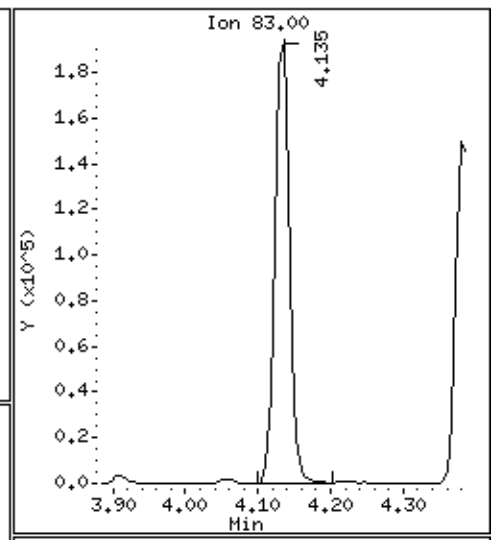
Review Code:

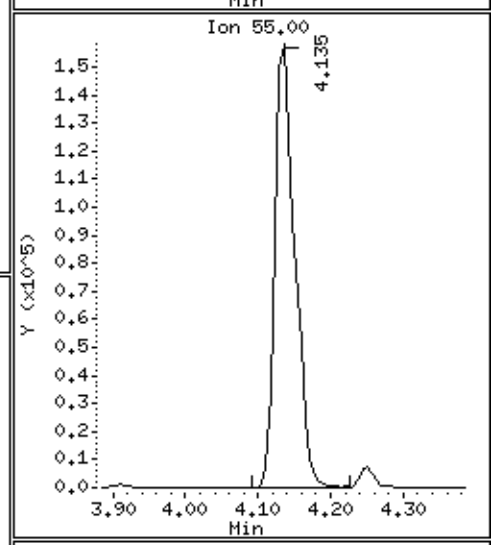


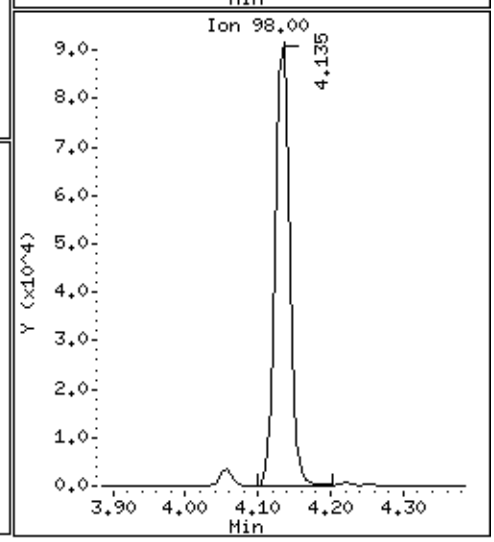












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D

Date : 25-APR-2017 19:07

Client ID: MW-3CMS

Instrument: 70msv6.i

Sample Info: 103081, 15067:1.25

Purge Volume: 5.0

Operator: KGG

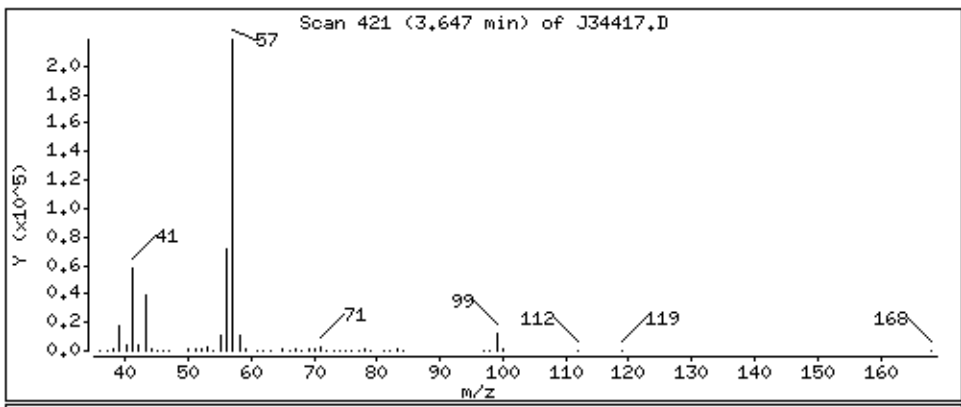
Column phase: RTX-624

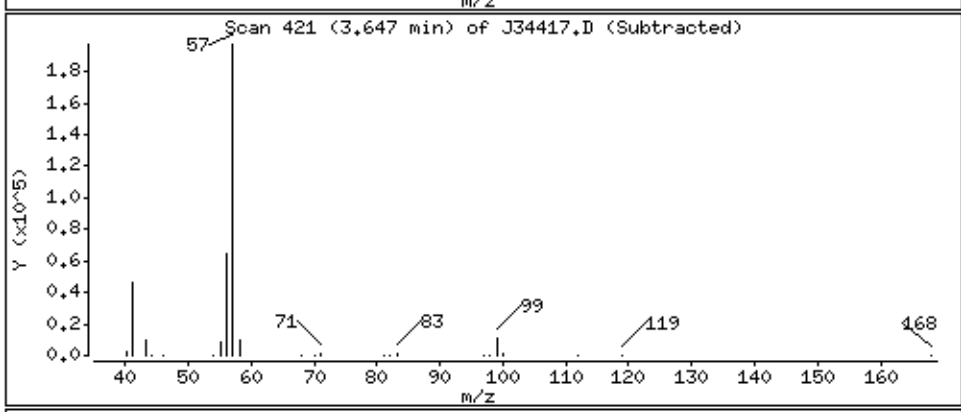
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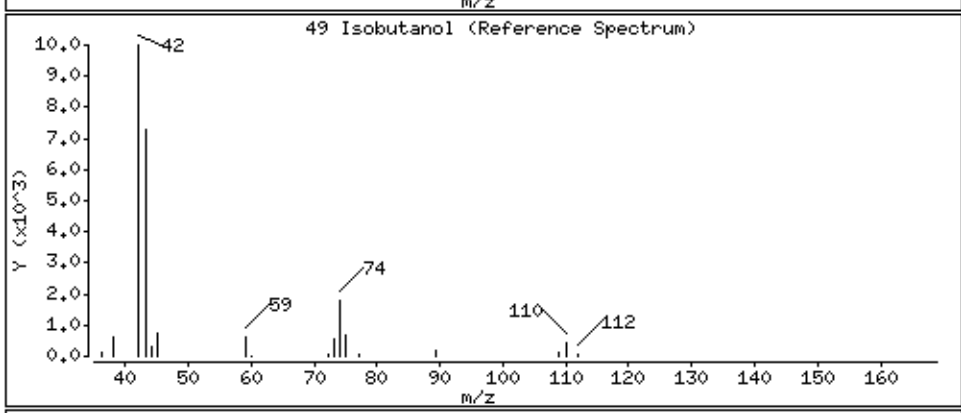
49 Isobutanol

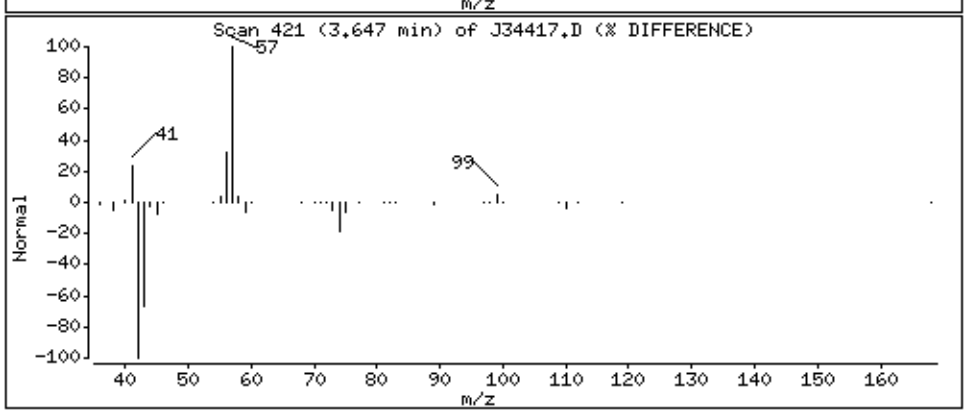
Concentration: 203 ug/L

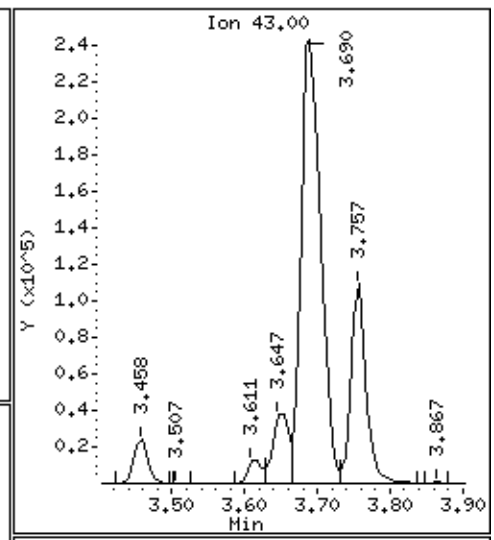
Review Code:

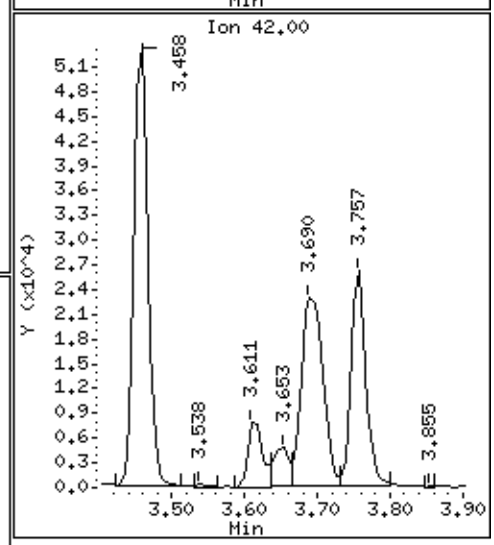












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D

Date : 25-APR-2017 19:07

Client ID: MW-3CMS

Instrument: 70msv6.i

Sample Info: 103081, 15067:1.25

Purge Volume: 5.0

Operator: KGG

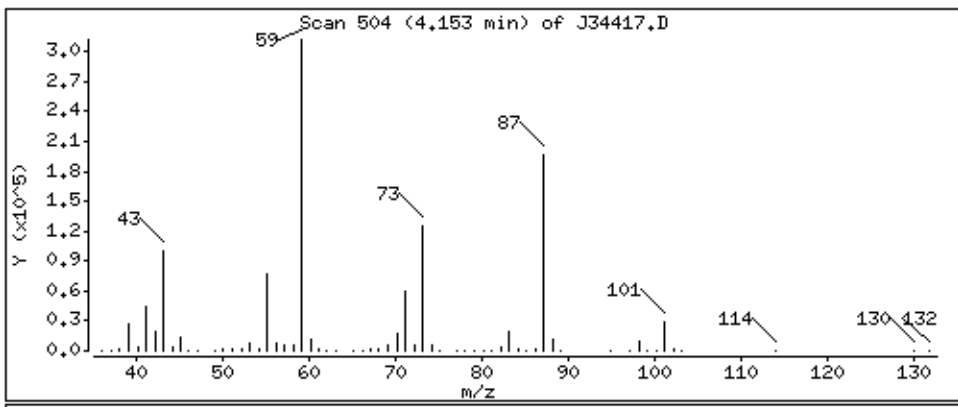
Column phase: RTX-624

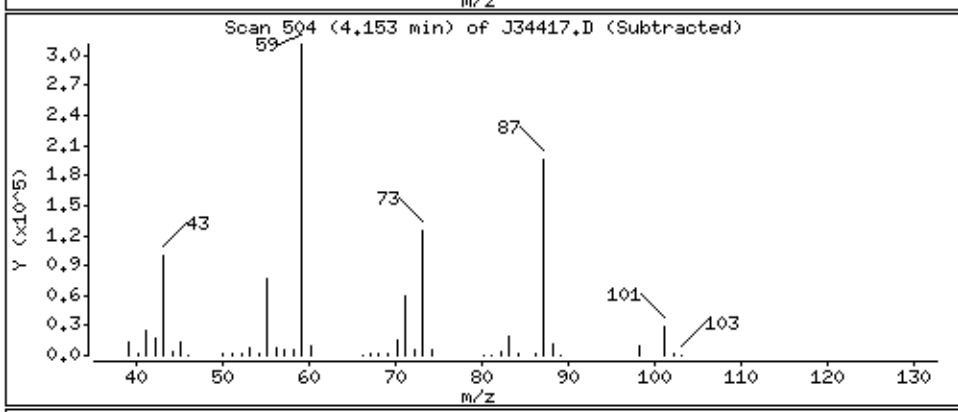
Column diameter: 0.18

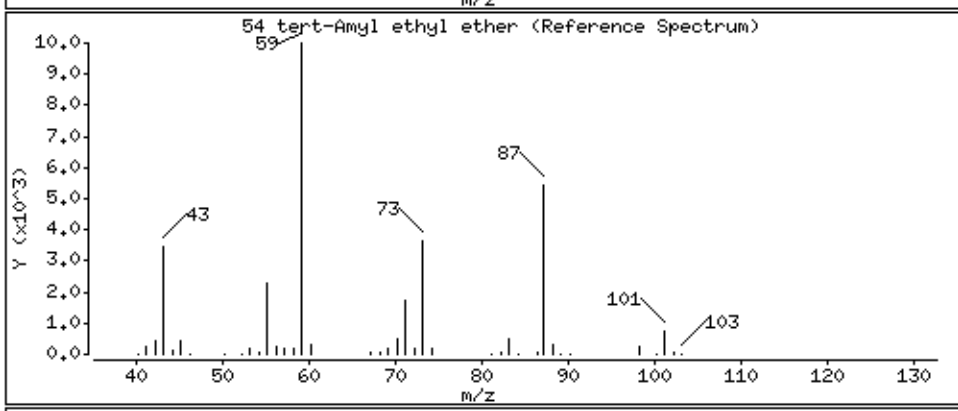
54 tert-Amyl ethyl ether

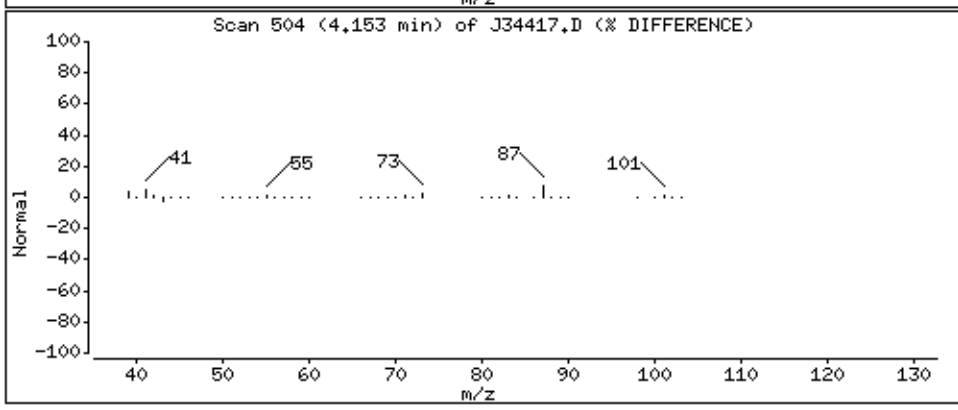
Concentration: 48.4 ug/L

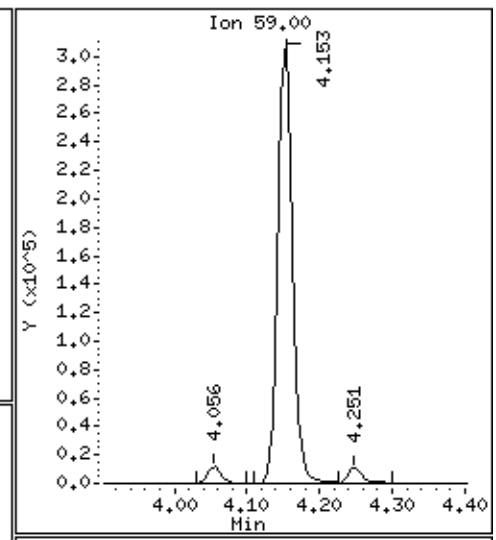
Review Code:

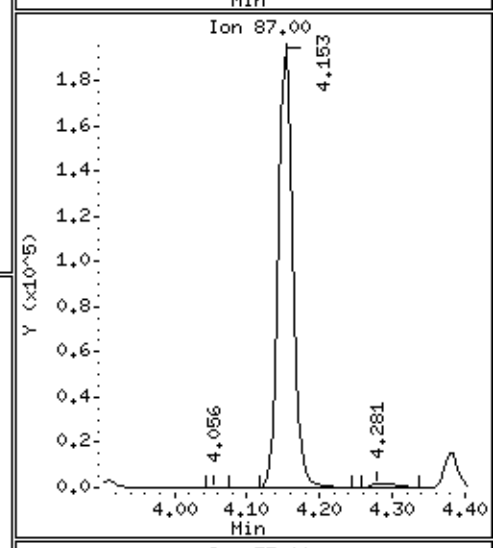


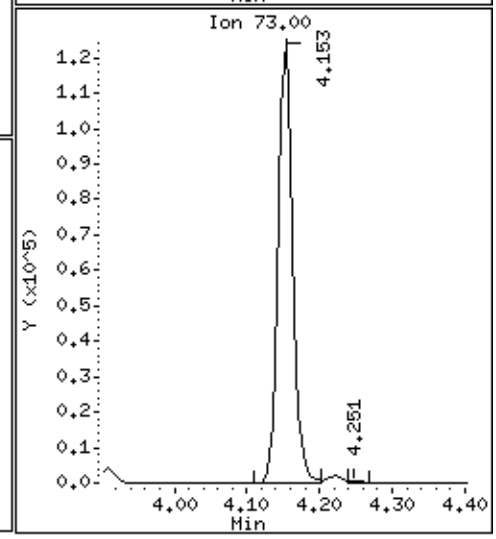












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D

Date : 25-APR-2017 19:07

Client ID: MW-3CMS

Instrument: 70msv6.i

Sample Info: 103081, 15067:1.25

Purge Volume: 5.0

Operator: KGG

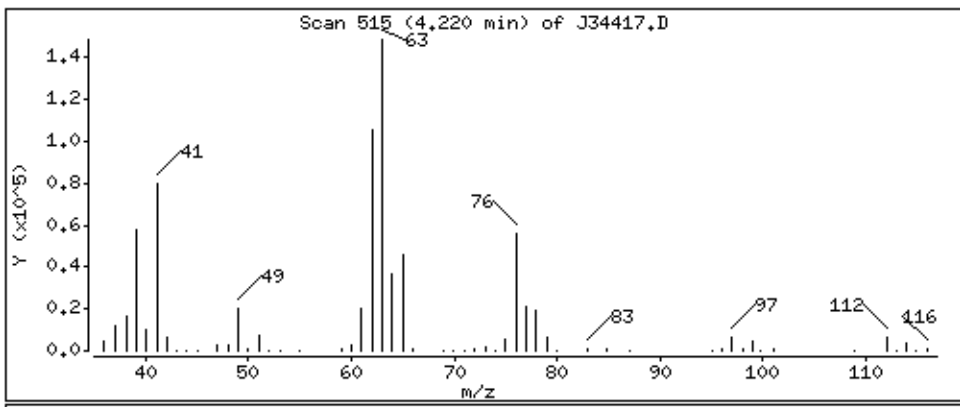
Column phase: RTX-624

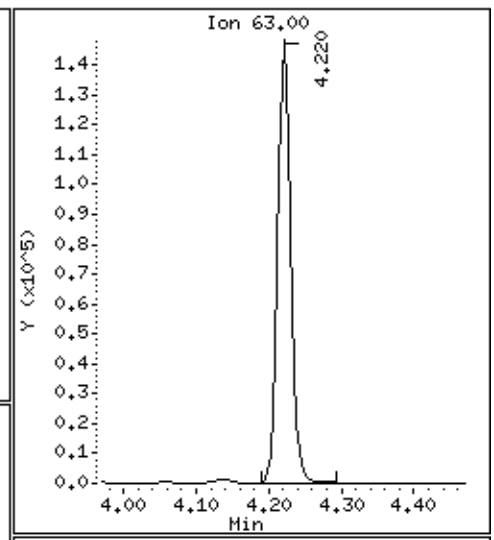
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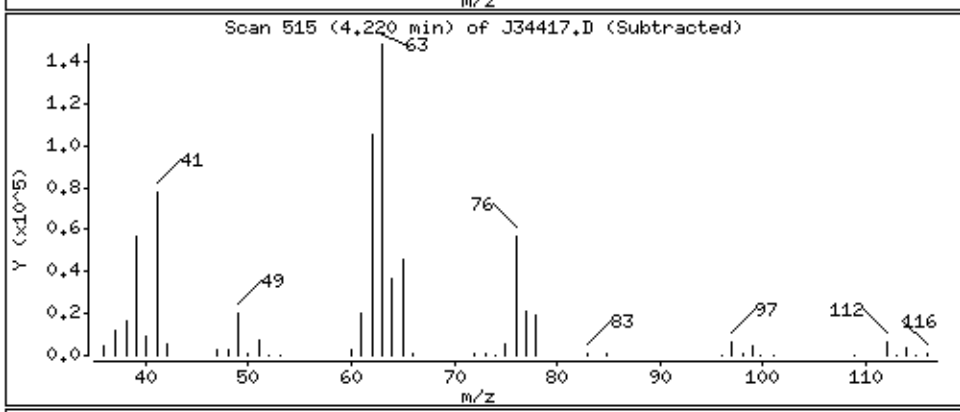
61 1,2-Dichloropropane

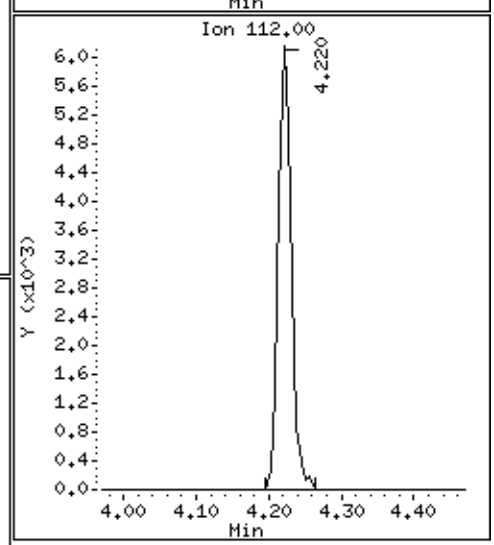
Concentration: 39.8 ug/L

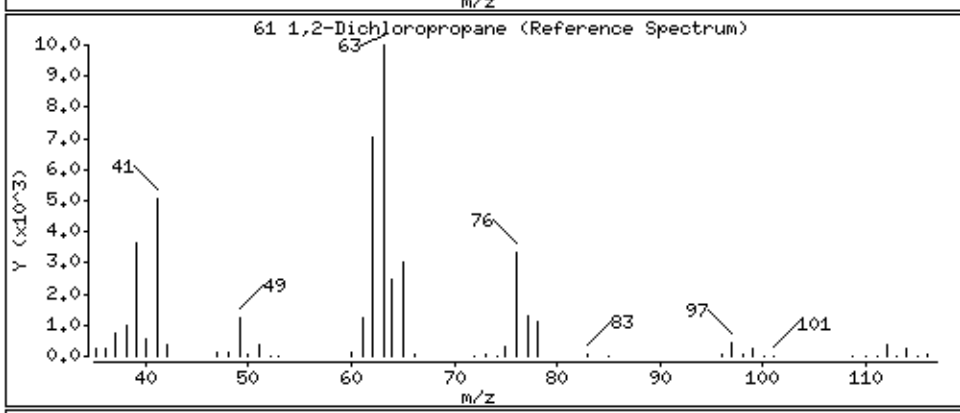
Review Code:

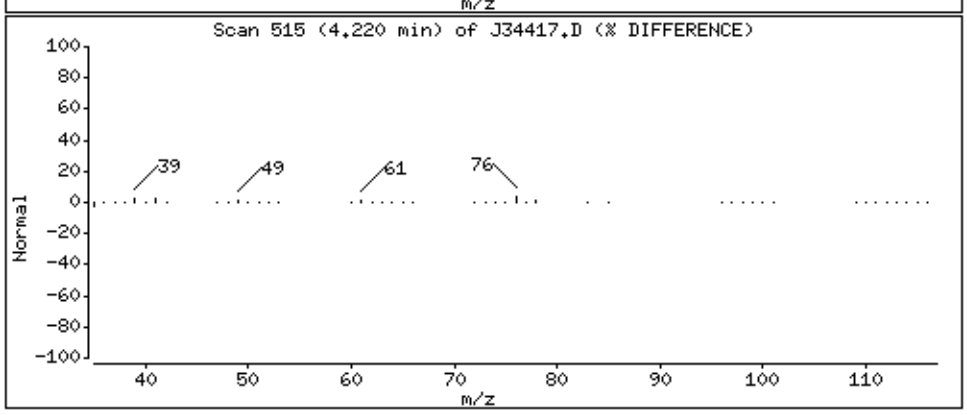












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D

Date : 25-APR-2017 19:07

Client ID: MW-3CMS

Instrument: 70msv6.i

Sample Info: 103081, 15067:1.25

Purge Volume: 5.0

Operator: KGG

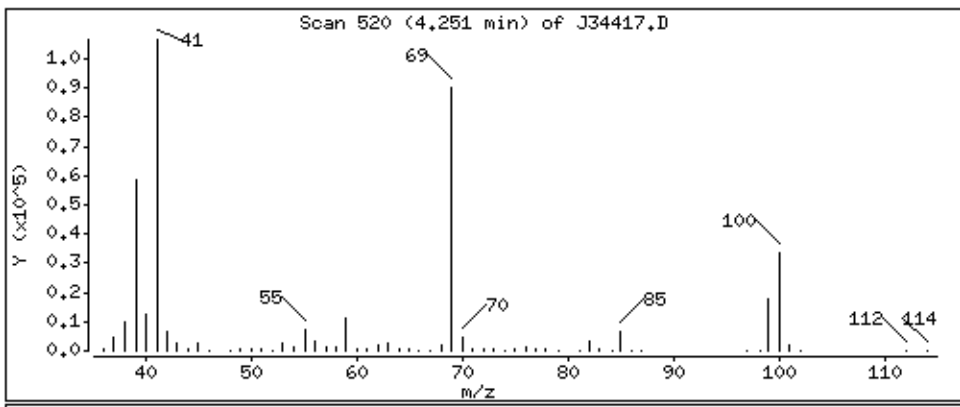
Column phase: RTX-624

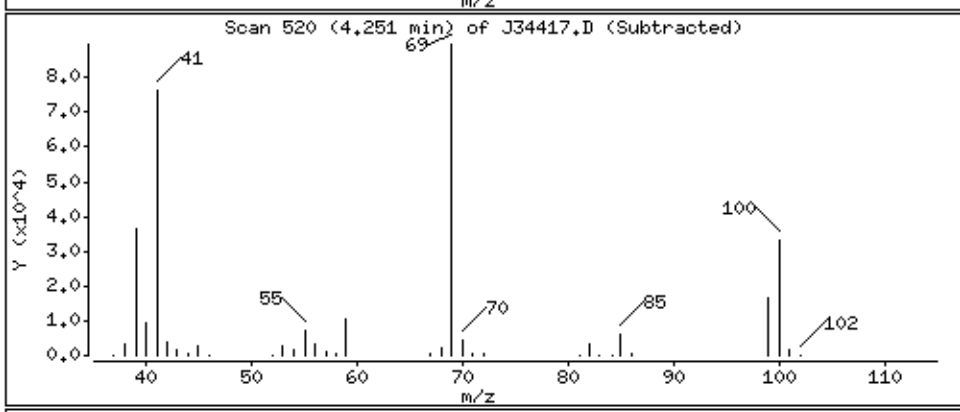
Column diameter: 0.18

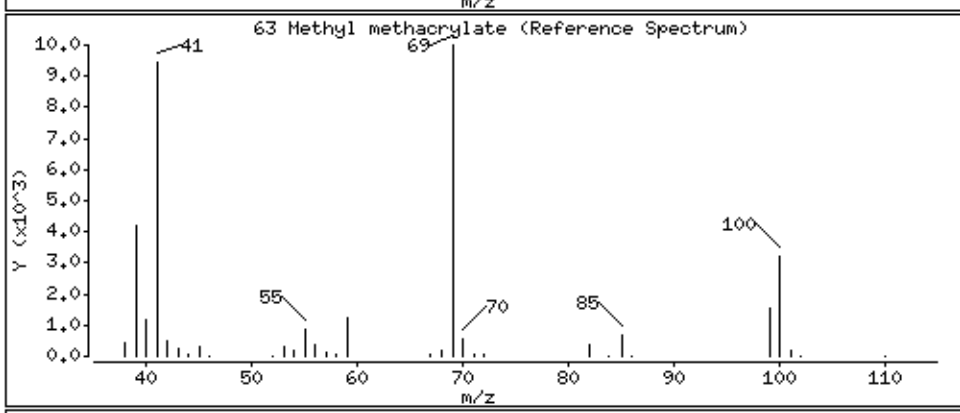
63 Methyl methacrylate

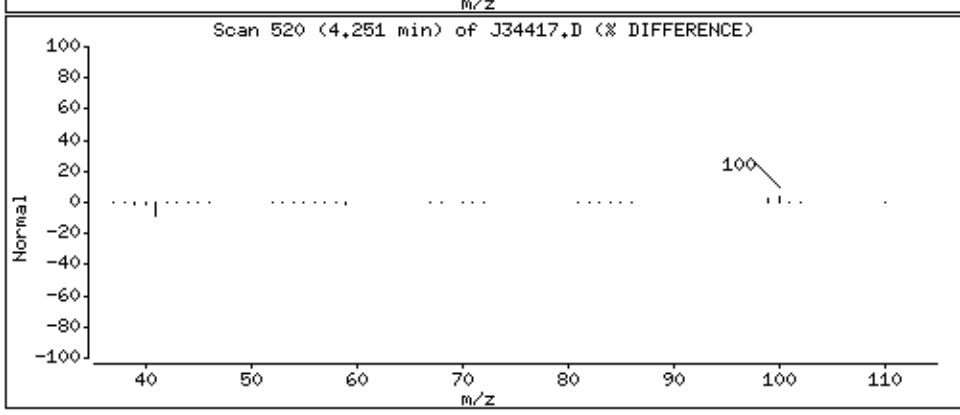
Concentration: 51.7 ug/L

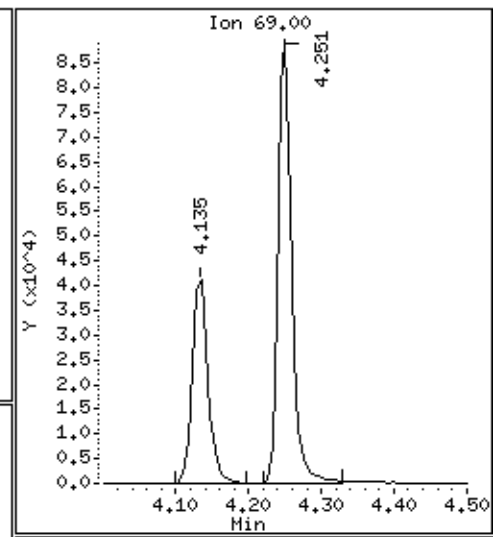
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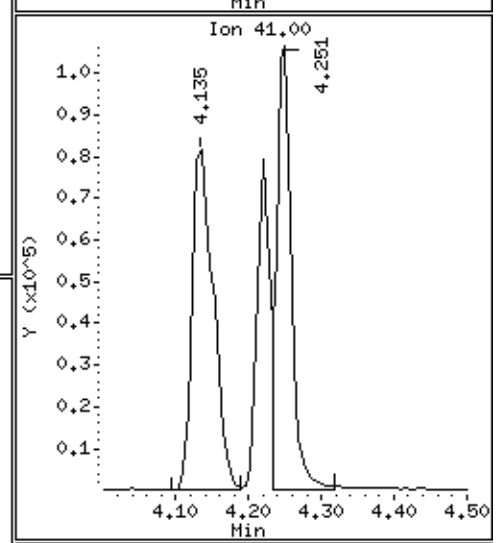


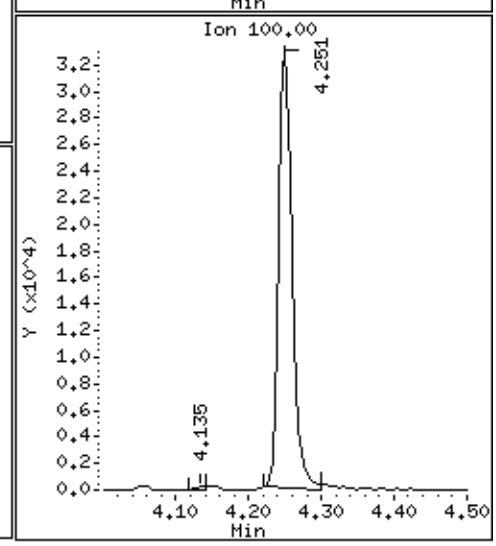












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D

Date : 25-APR-2017 19:07

Client ID: MW-3CMS

Instrument: 70msv6.i

Sample Info: 103081, 15067:1.25

Purge Volume: 5.0

Operator: KGG

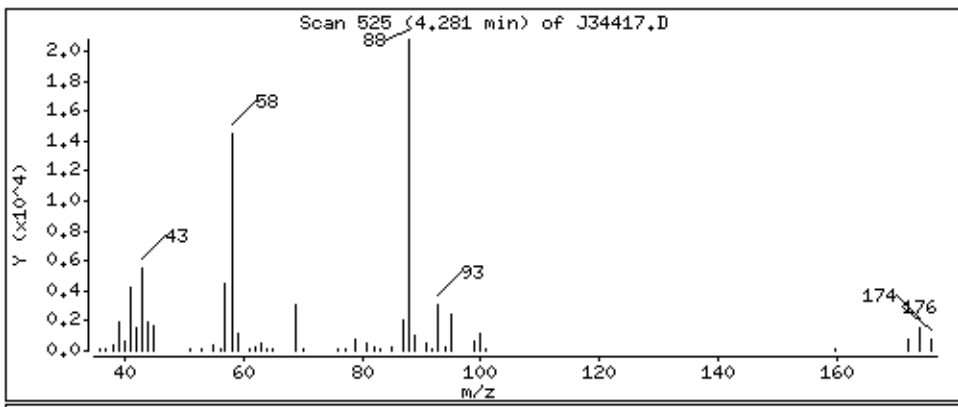
Column phase: RTX-624

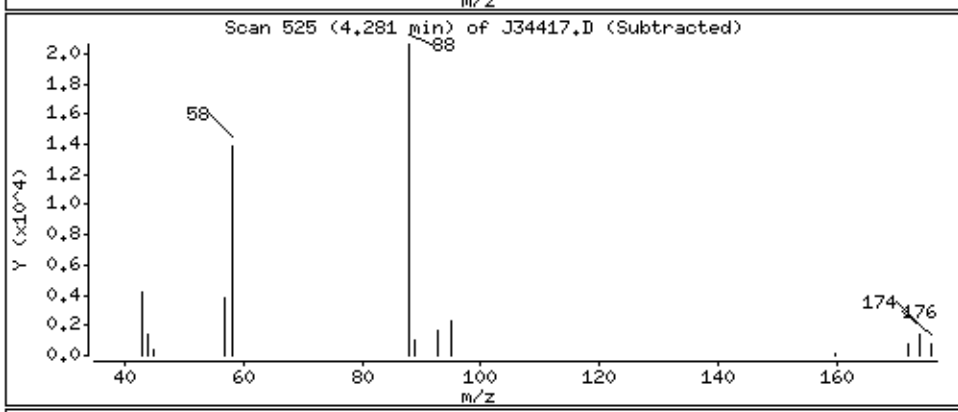
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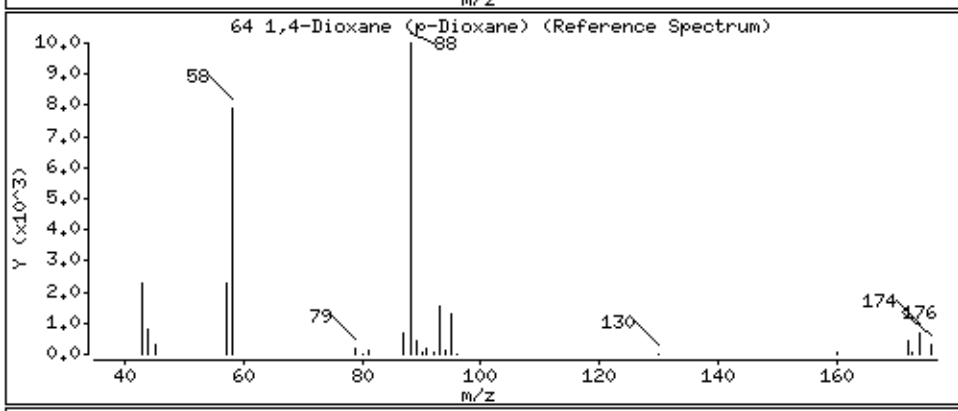
64 1,4-Dioxane (p-Dioxane)

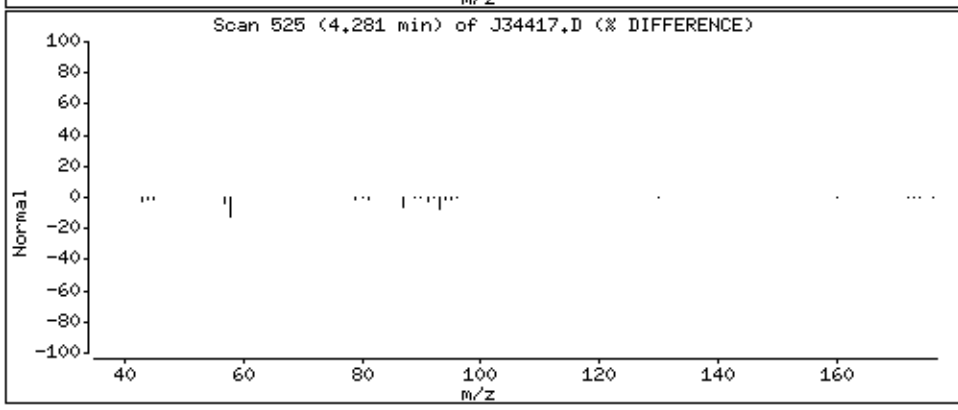
Concentration: 957 ug/L

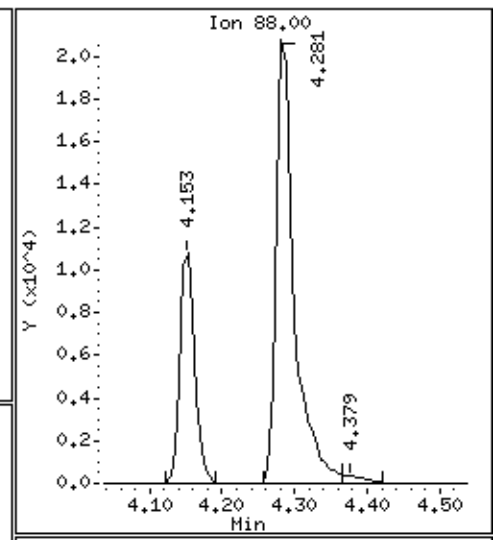
Review Code:

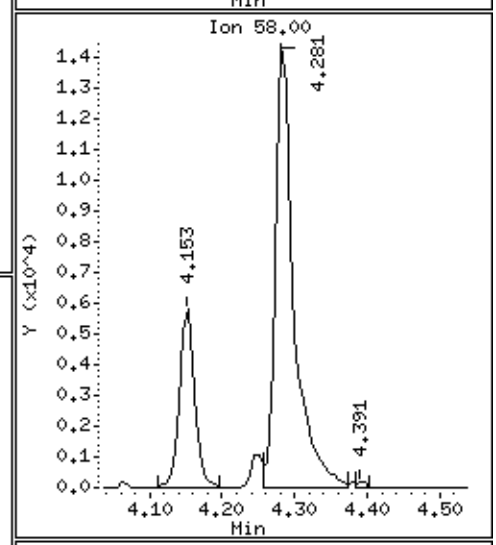


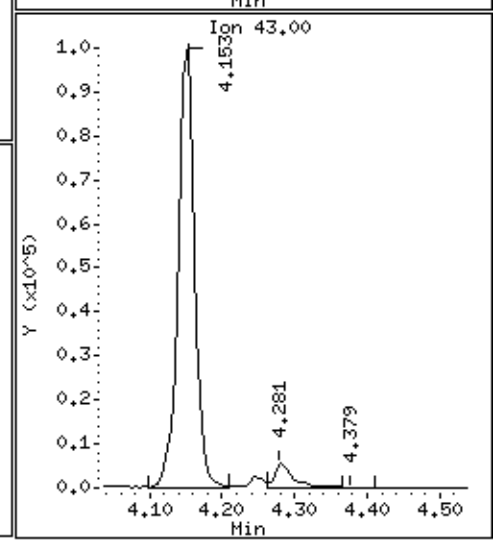












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D

Date : 25-APR-2017 19:07

Client ID: MW-3CMS

Instrument: 70msv6.i

Sample Info: 103081, 15067:1.25

Purge Volume: 5.0

Operator: KGG

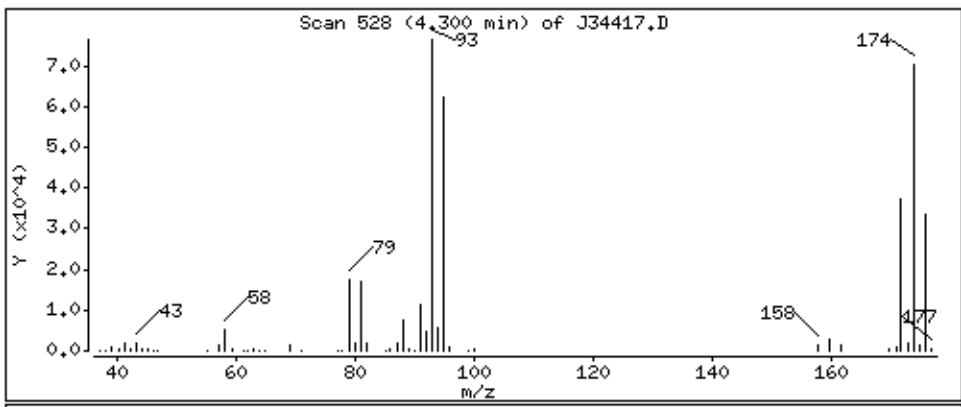
Column phase: RTX-624

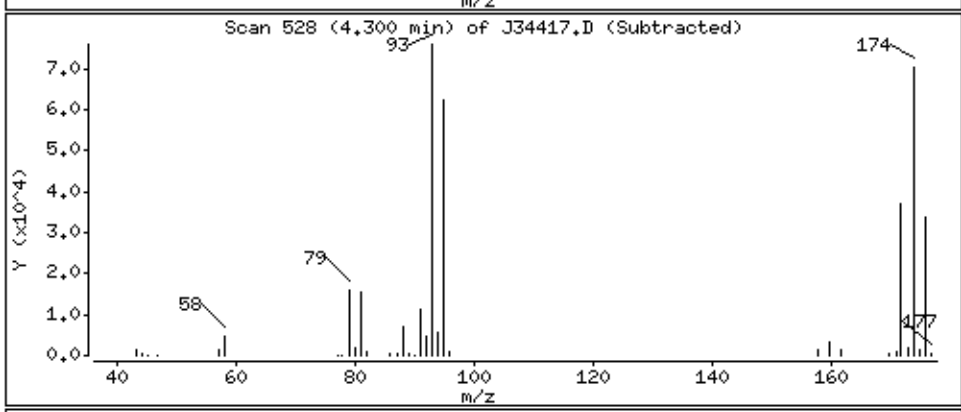
Column diameter: 0.18

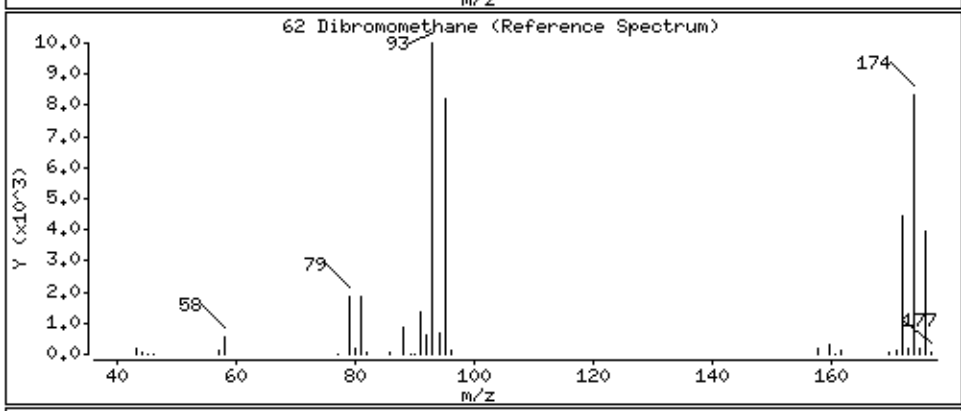
62 Dibromomethane

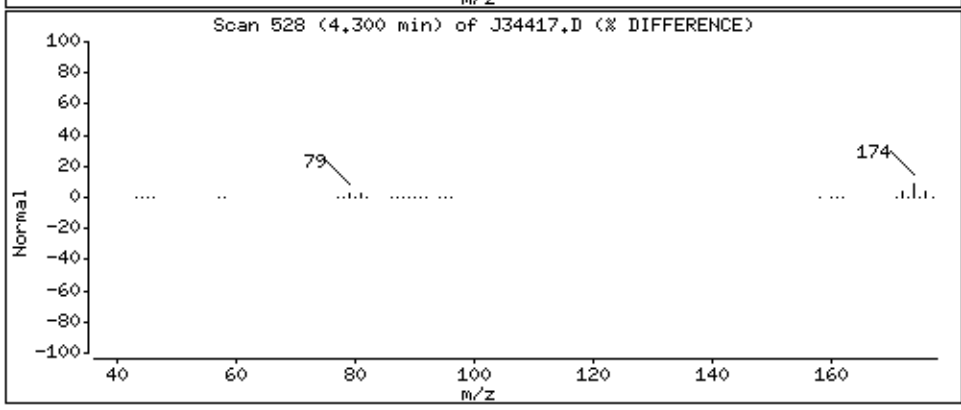
Concentration: 42.7 ug/L

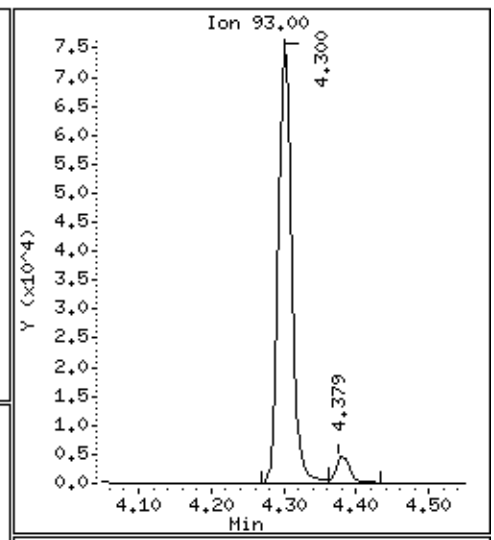
Review Code:

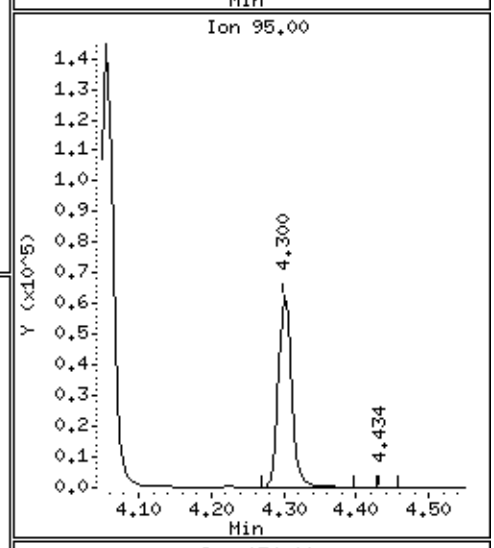


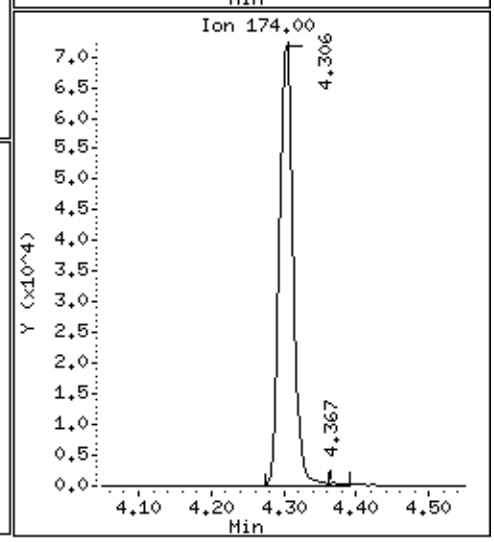












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D

Date : 25-APR-2017 19:07

Client ID: MW-3CMS

Instrument: 70msv6.i

Sample Info: 103081, 15067:1.25

Purge Volume: 5.0

Operator: KGG

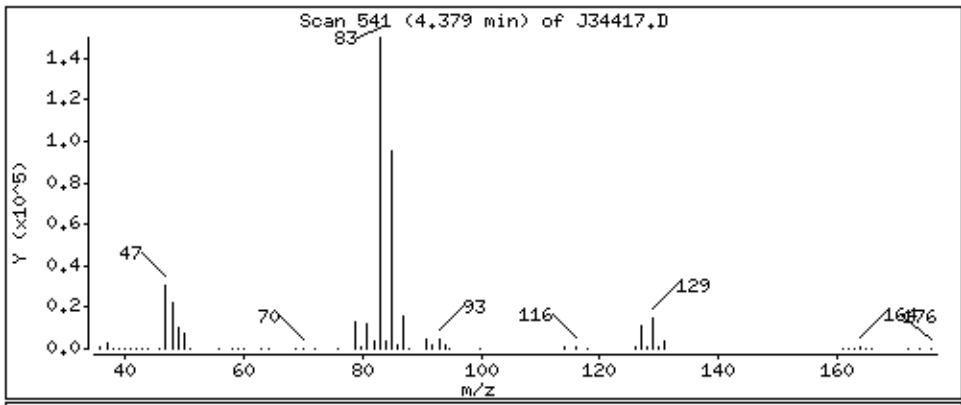
Column phase: RTX-624

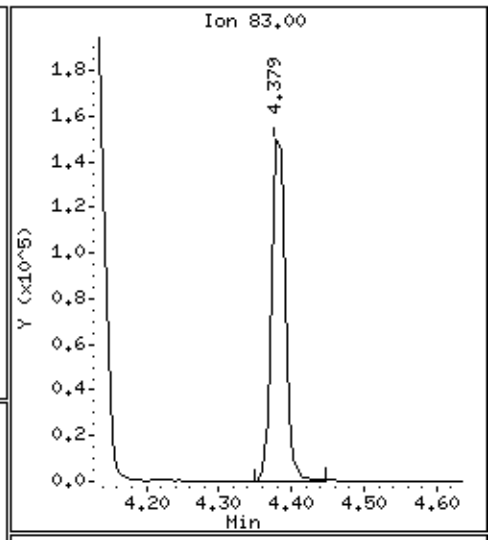
Column diameter: 0.18

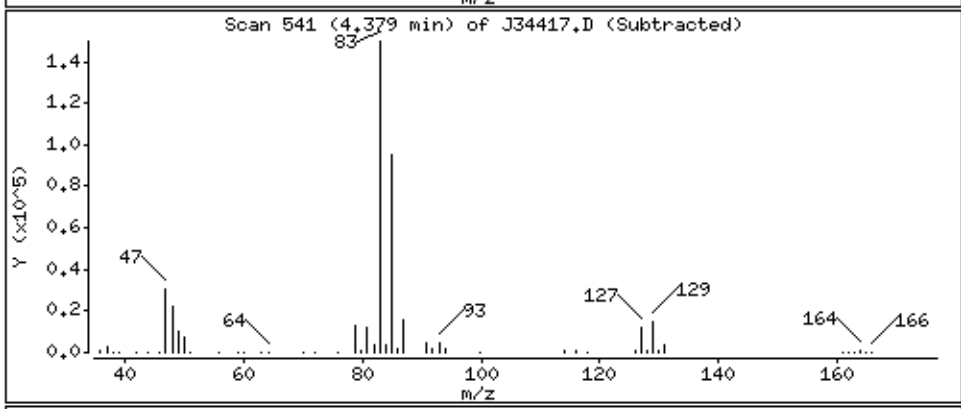
65 Bromodichloromethane

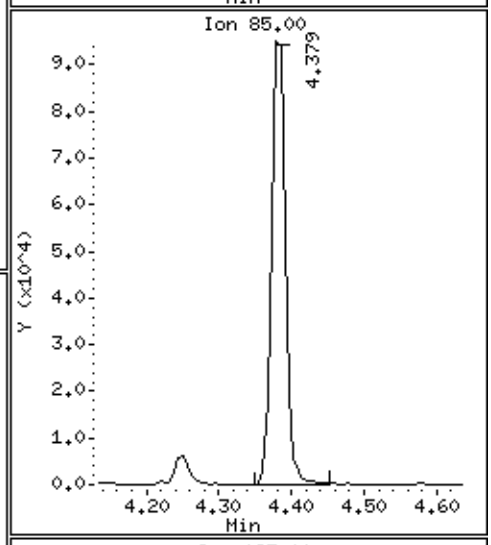
Concentration: 46.2 ug/L

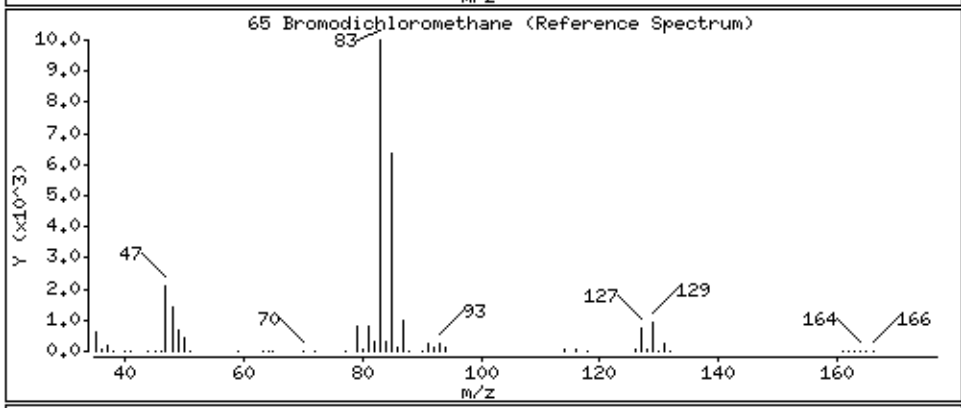
Review Code:

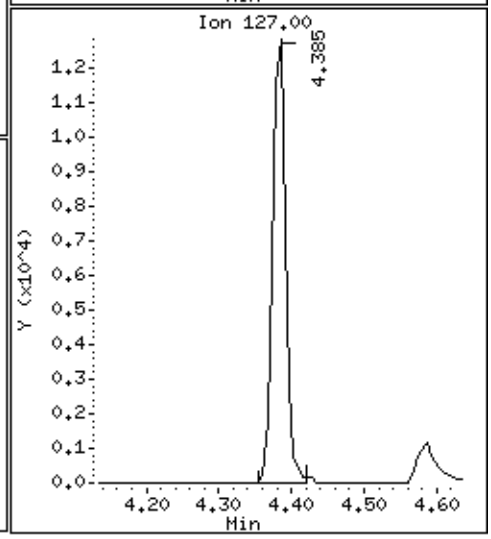


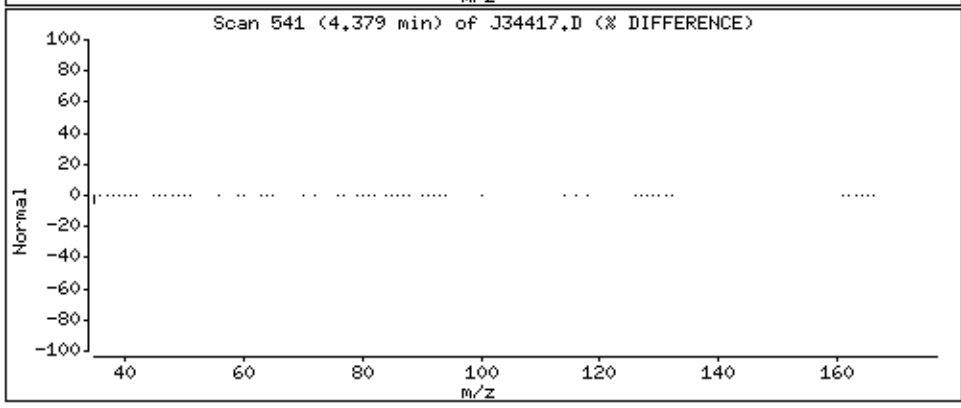












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D

Date : 25-APR-2017 19:07

Client ID: MW-3CMS

Instrument: 70msv6.i

Sample Info: 103081, 15067:1.25

Purge Volume: 5.0

Operator: KGG

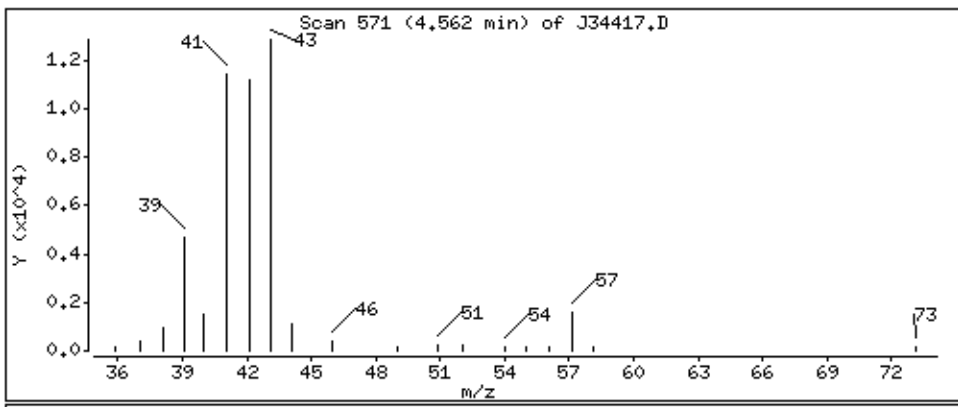
Column phase: RTX-624

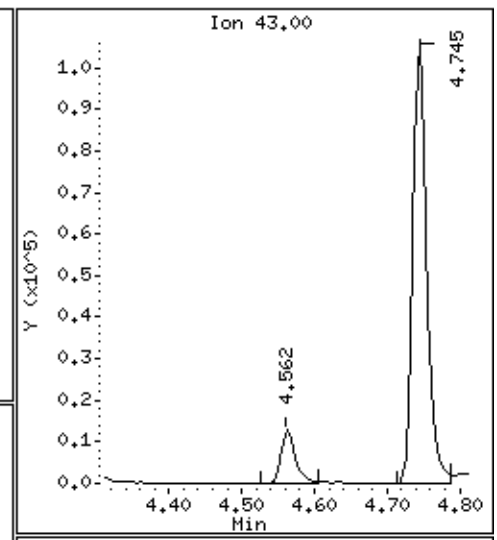
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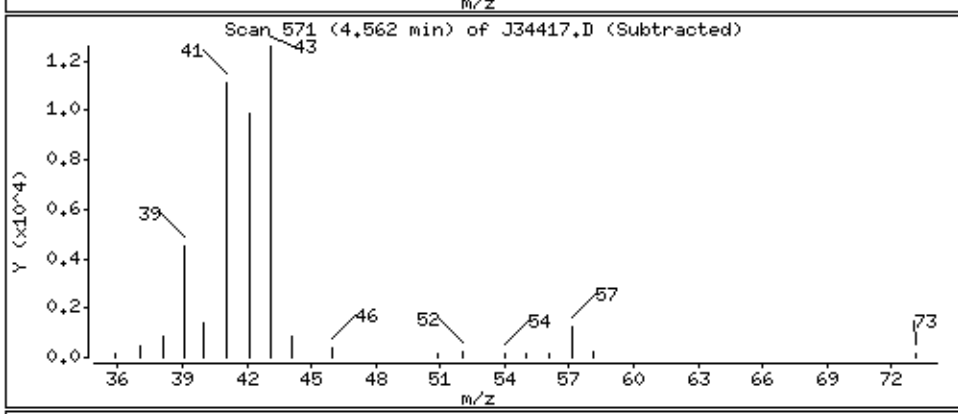
66 2-Nitropropane

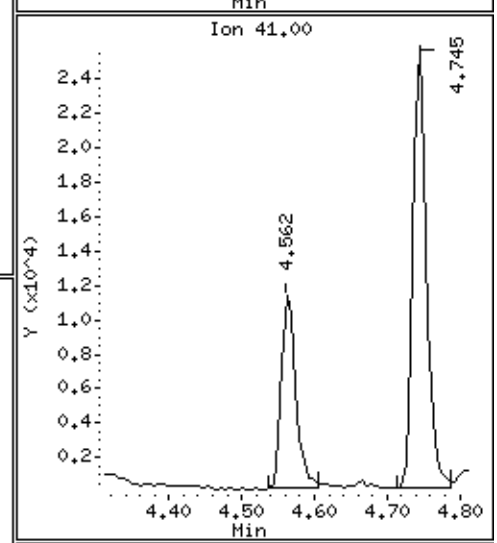
Concentration: 8.35 ug/L

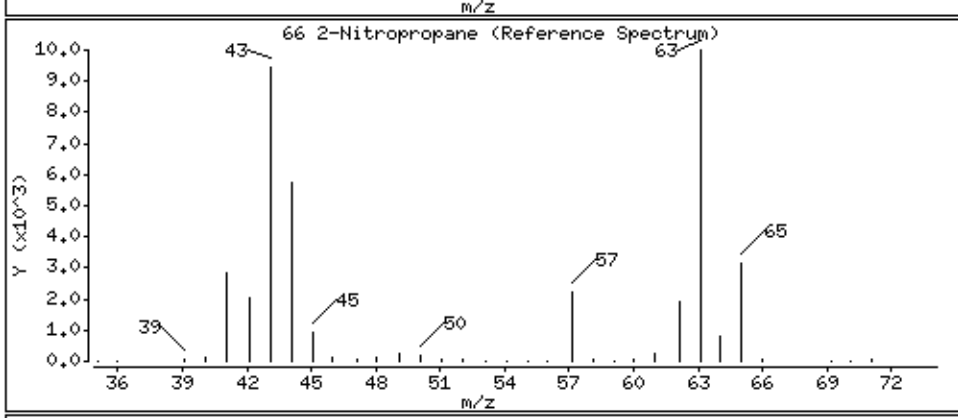
Review Code:

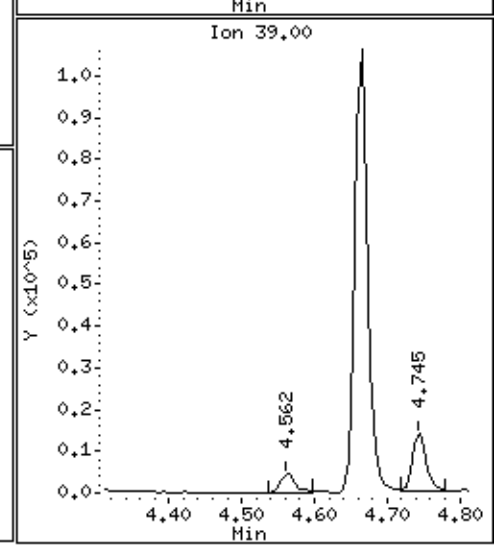


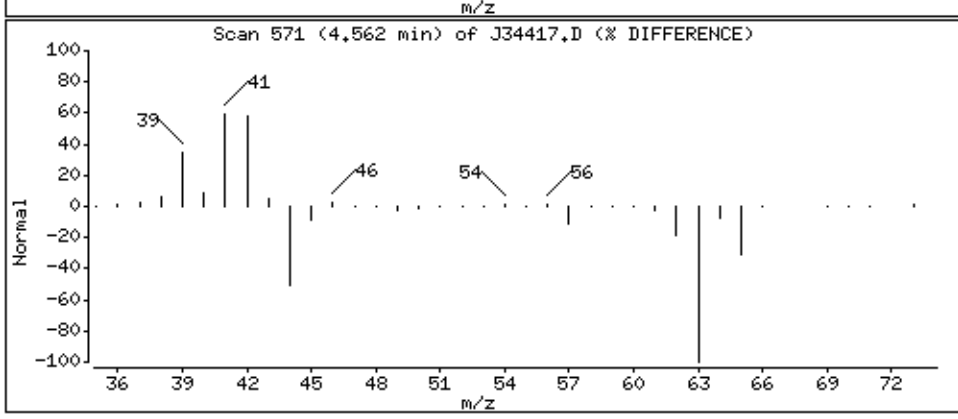












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D

Date : 25-APR-2017 19:07

Client ID: MW-3CMS

Instrument: 70msv6.i

Sample Info: 103081, 15067:1.25

Purge Volume: 5.0

Operator: KGG

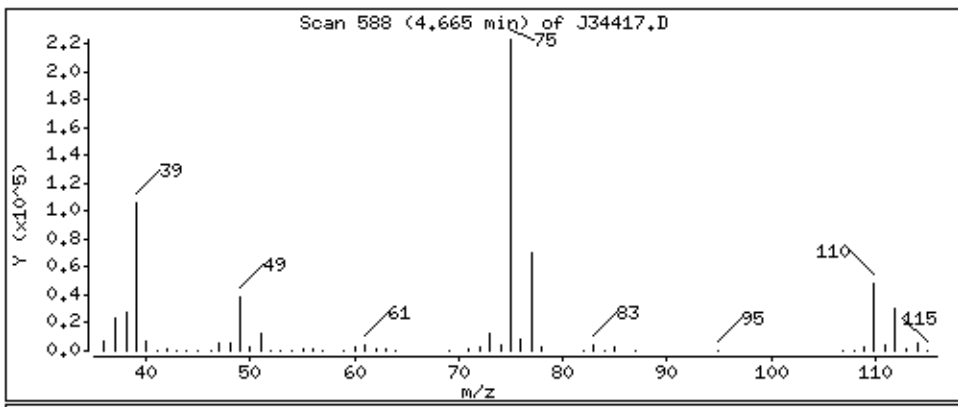
Column phase: RTX-624

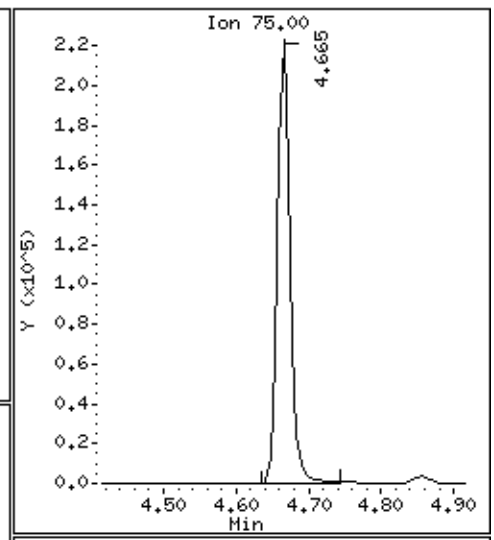
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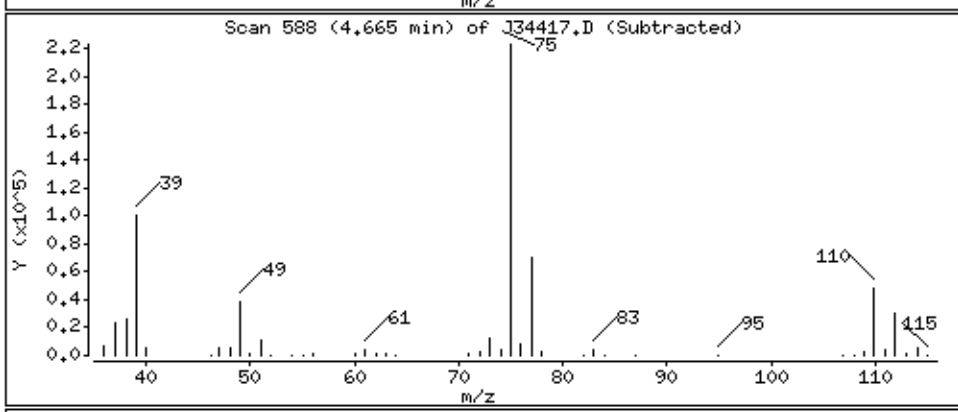
68 cis-1,3-Dichloropropene

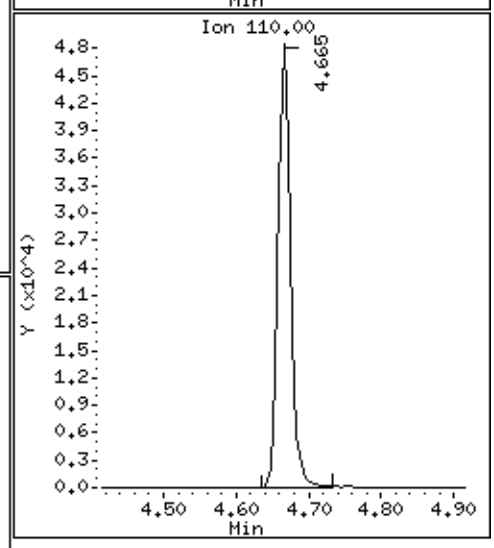
Concentration: 46.5 ug/L

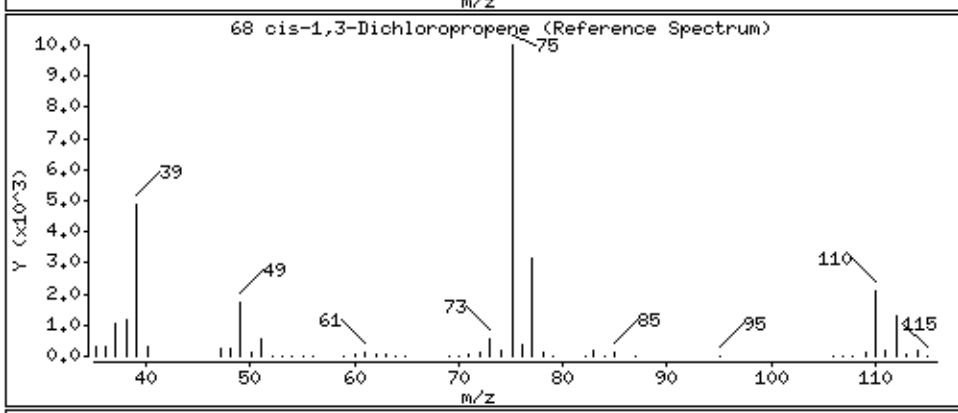
Review Code:

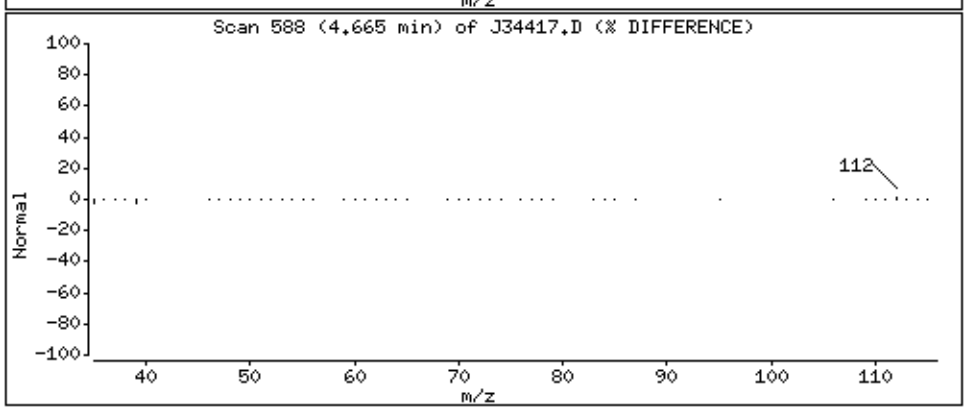












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D

Date : 25-APR-2017 19:07

Client ID: MW-3CMS

Instrument: 70msv6.i

Sample Info: 103081, 15067:1.25

Purge Volume: 5.0

Operator: KGG

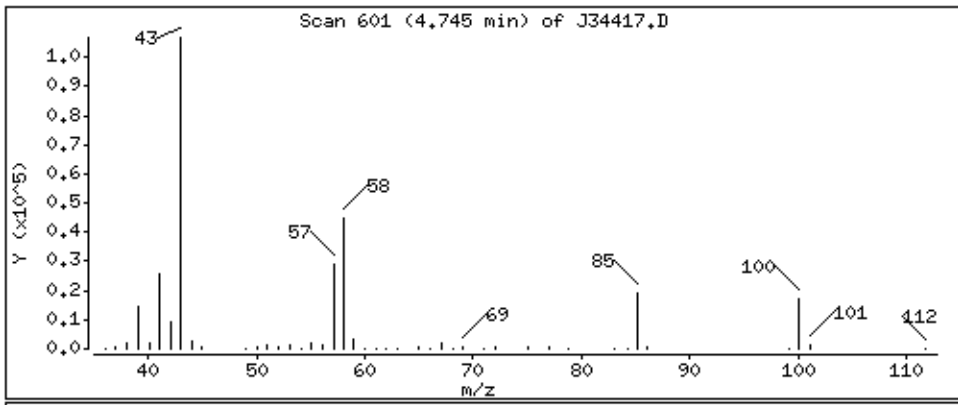
Column phase: RTX-624

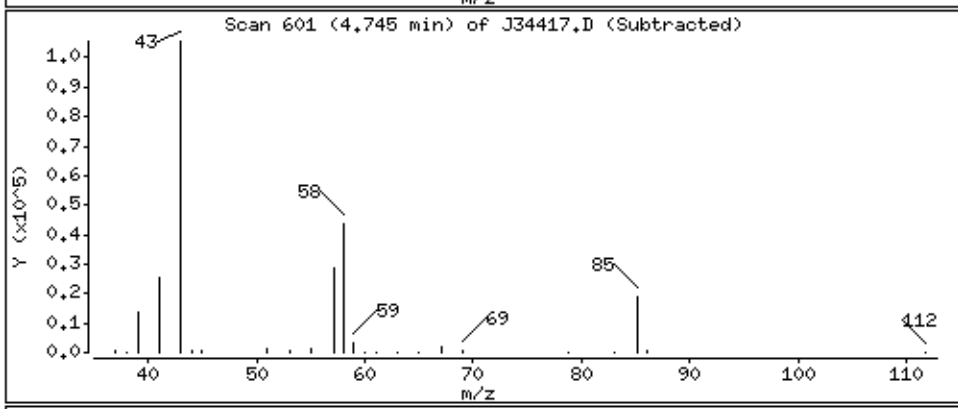
Column diameter: 0.18

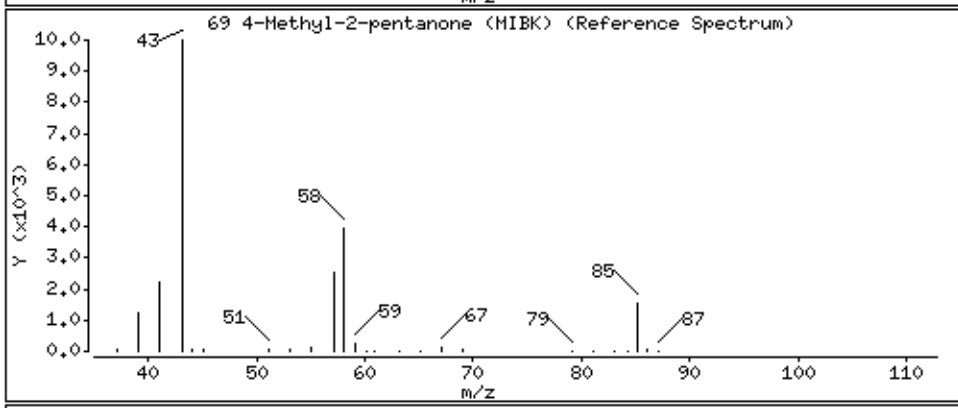
69 4-Methyl-2-pentanone (MIBK)

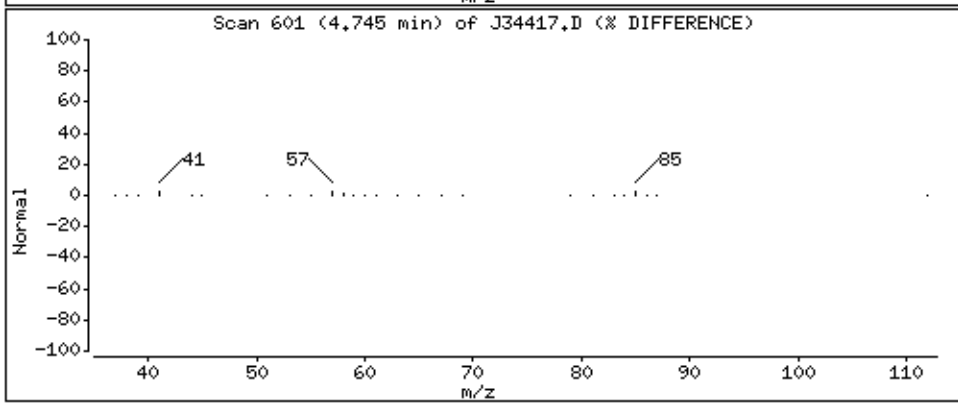
Concentration: 33.9 ug/L

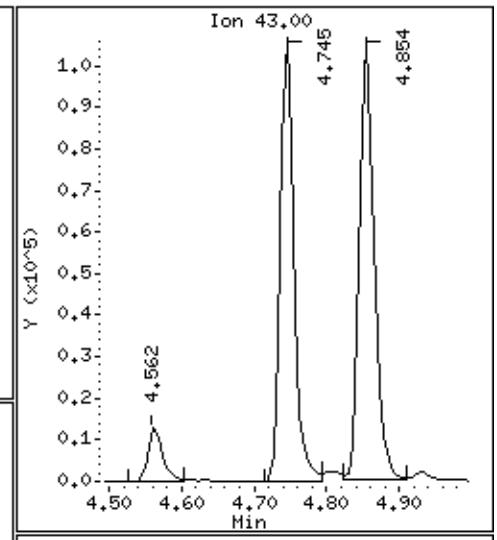
Review Code:

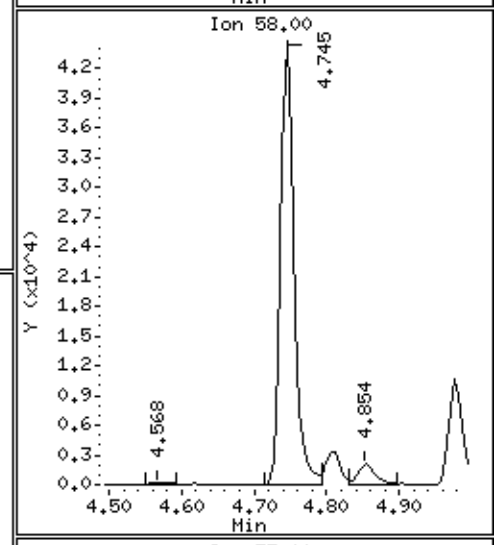


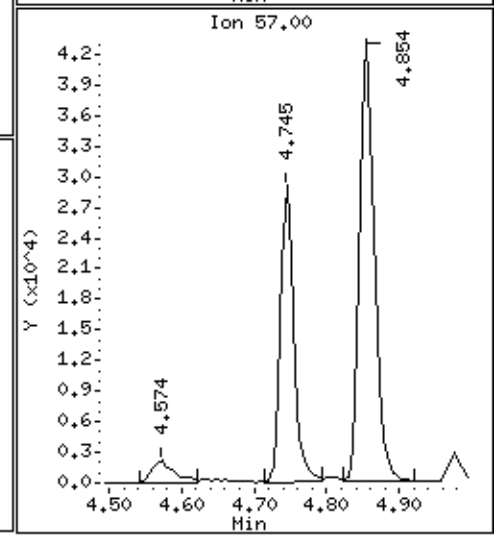












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D

Date : 25-APR-2017 19:07

Client ID: MW-3CMS

Instrument: 70msv6.i

Sample Info: 103081, 15067:1.25

Purge Volume: 5.0

Operator: KGG

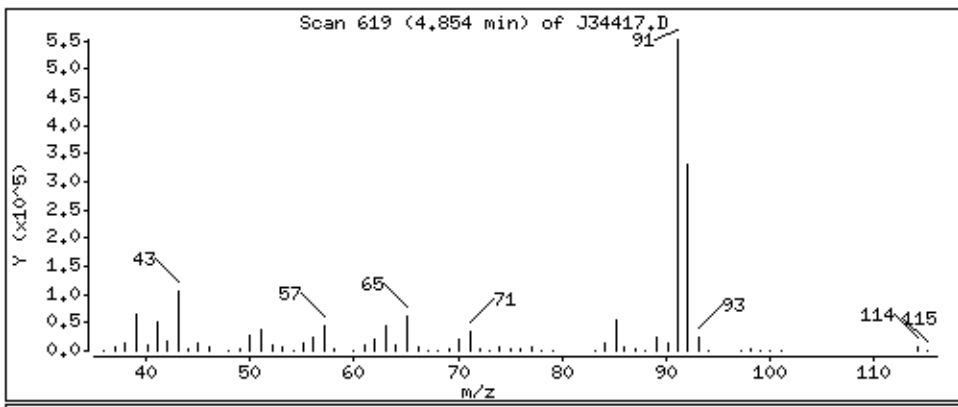
Column phase: RTX-624

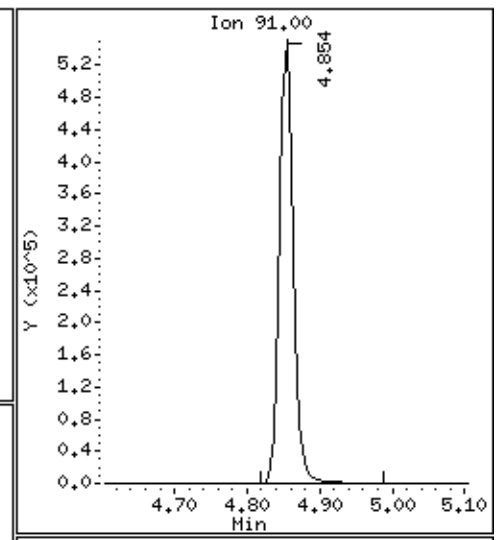
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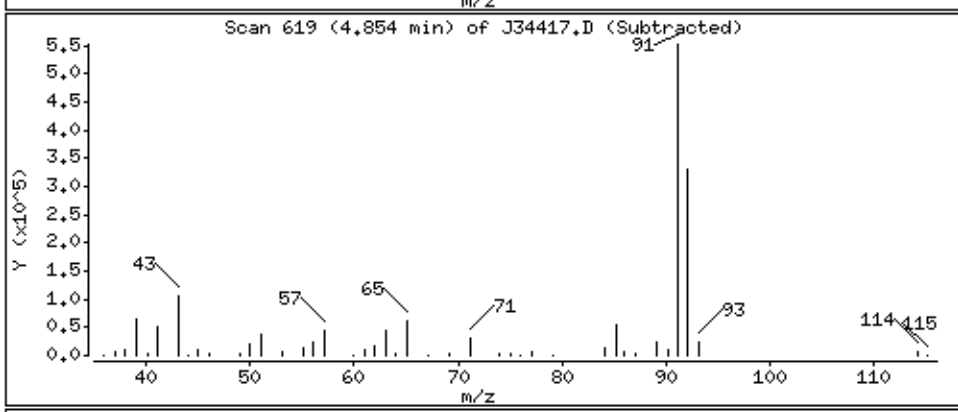
71 Toluene

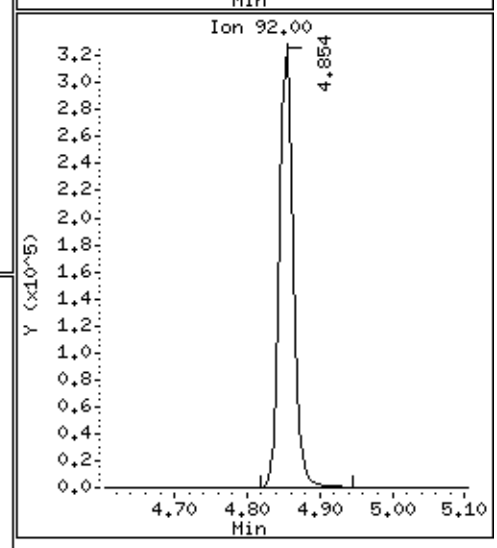
Concentration: 45.6 ug/L

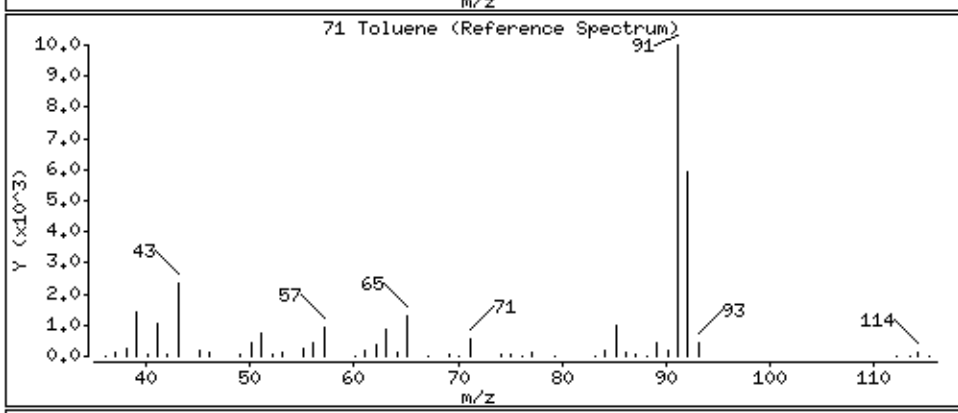
Review Code:

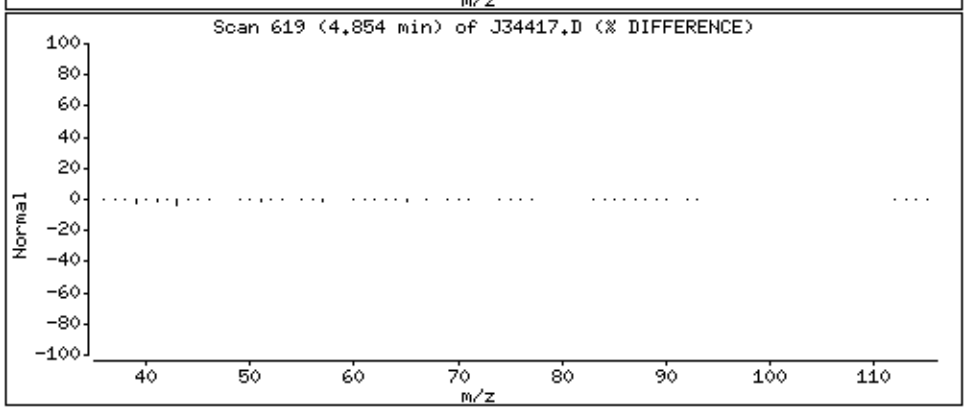












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D

Date : 25-APR-2017 19:07

Client ID: MW-3CMS

Instrument: 70msv6.i

Sample Info: 103081, 15067:1.25

Purge Volume: 5.0

Operator: KGG

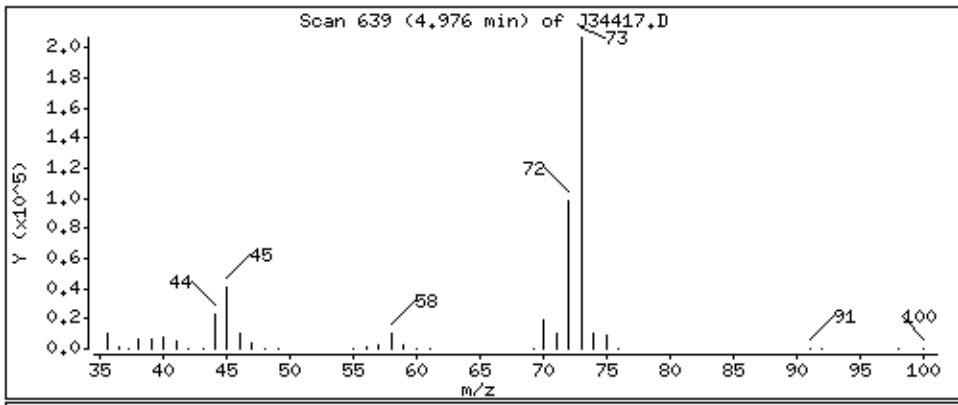
Column phase: RTX-624

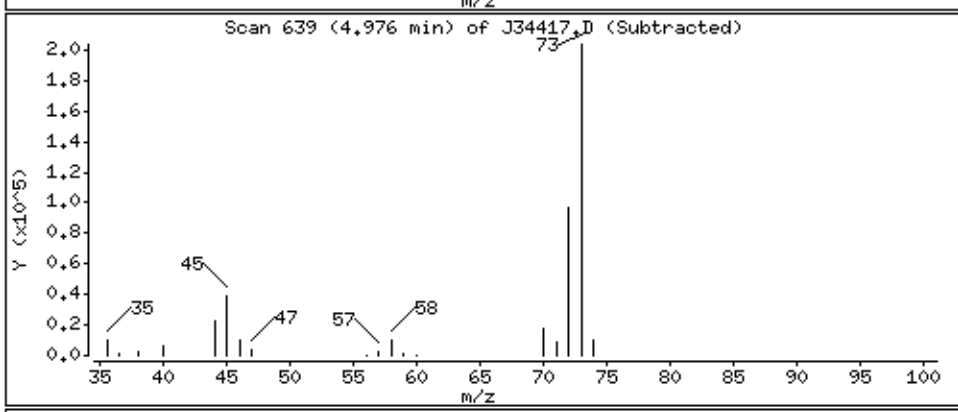
Column diameter: 0.18

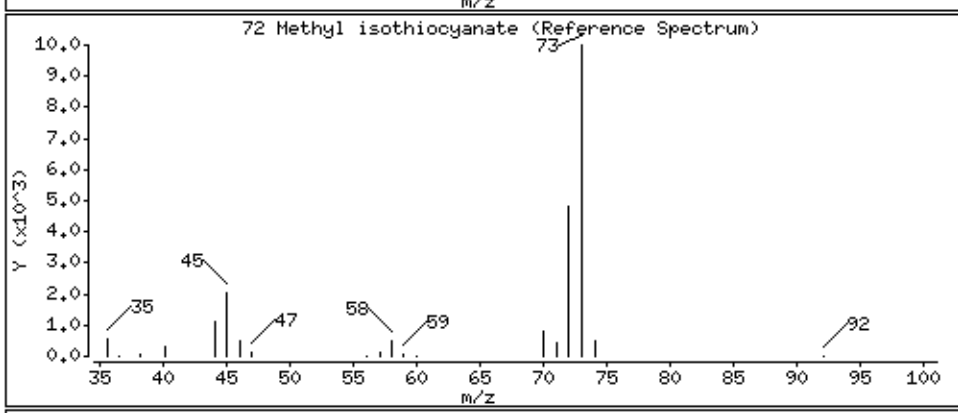
72 Methyl isothiocyanate

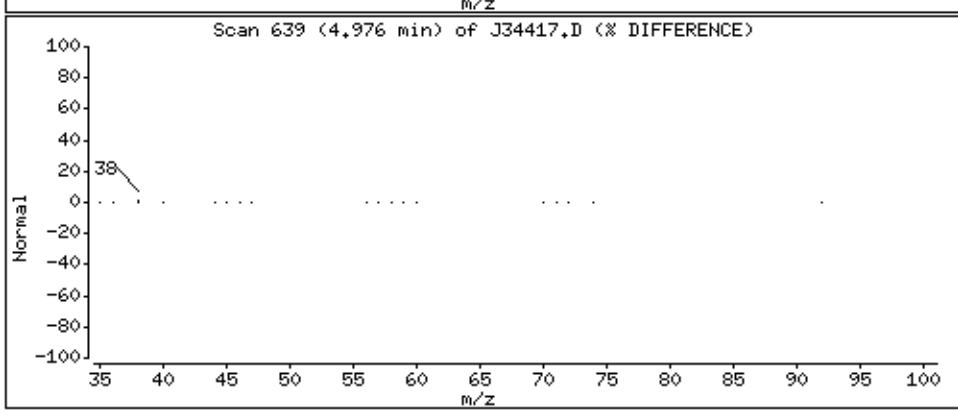
Concentration: 114 ug/L

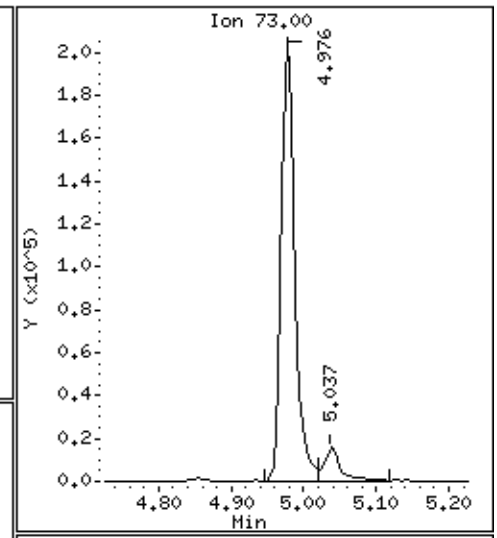
Review Code:

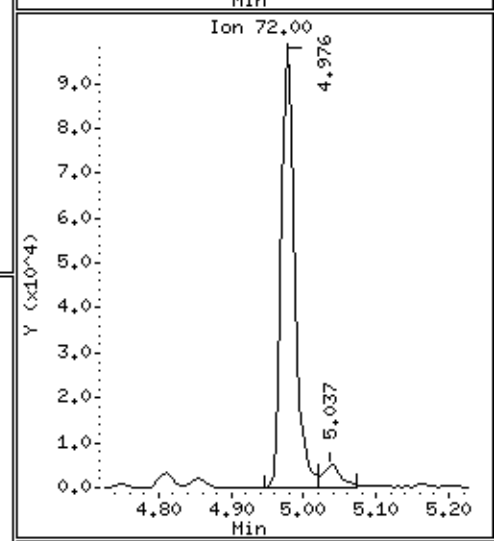


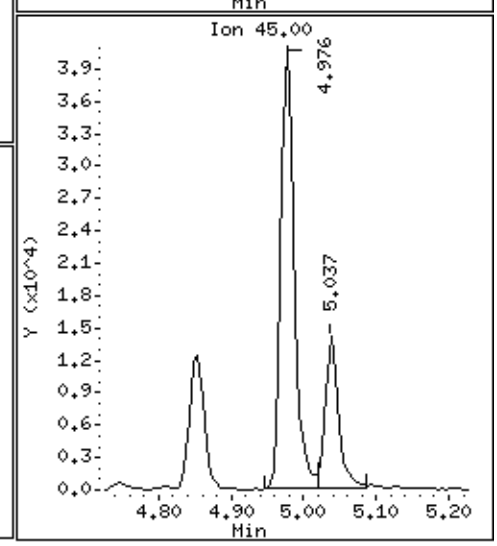












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D

Date : 25-APR-2017 19:07

Client ID: MW-3CMS

Instrument: 70msv6.i

Sample Info: 103081, 15067:1.25

Purge Volume: 5.0

Operator: KGG

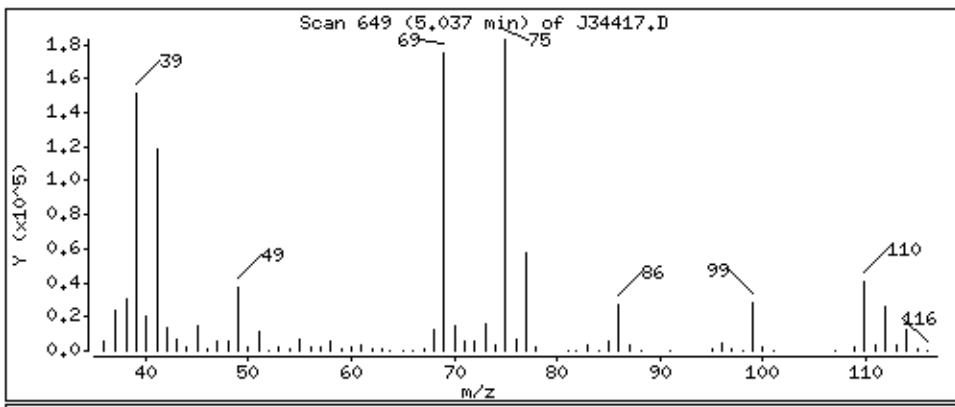
Column phase: RTX-624

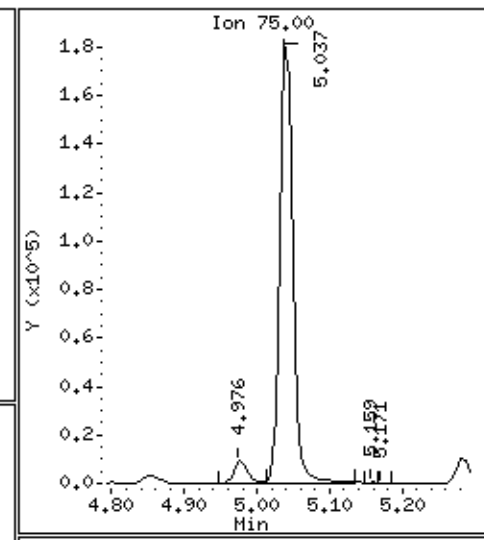
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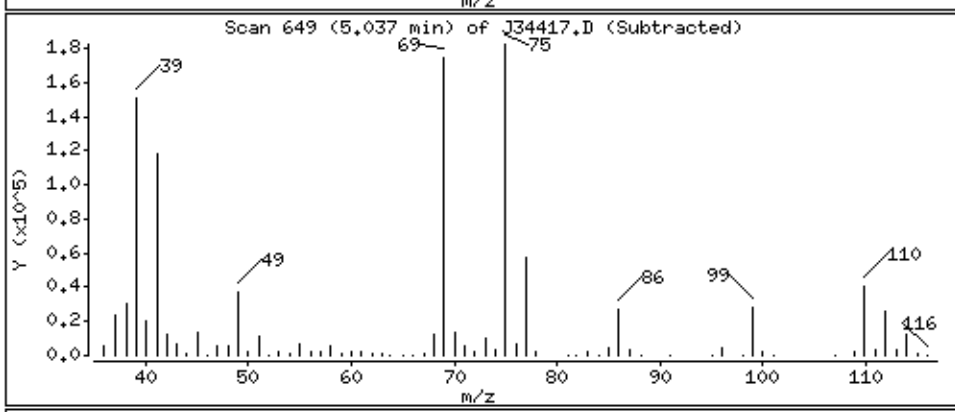
74 trans-1,3-Dichloropropene

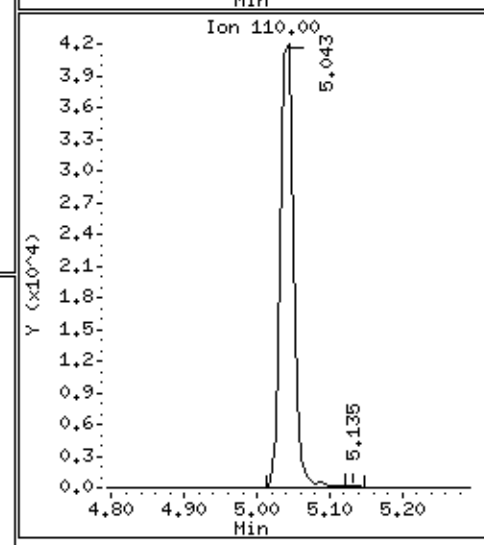
Concentration: 41.2 ug/L

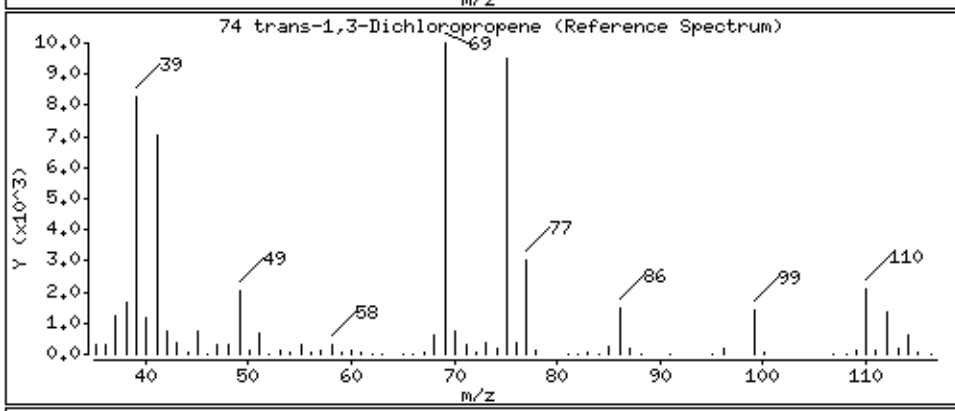
Review Code:

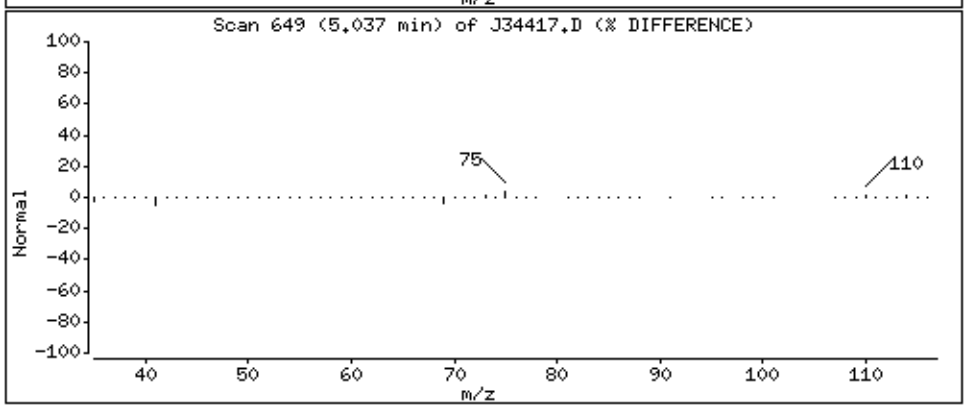












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D

Date : 25-APR-2017 19:07

Client ID: MW-3CMS

Instrument: 70msv6.i

Sample Info: 103081, 15067:1.25

Purge Volume: 5.0

Operator: KGG

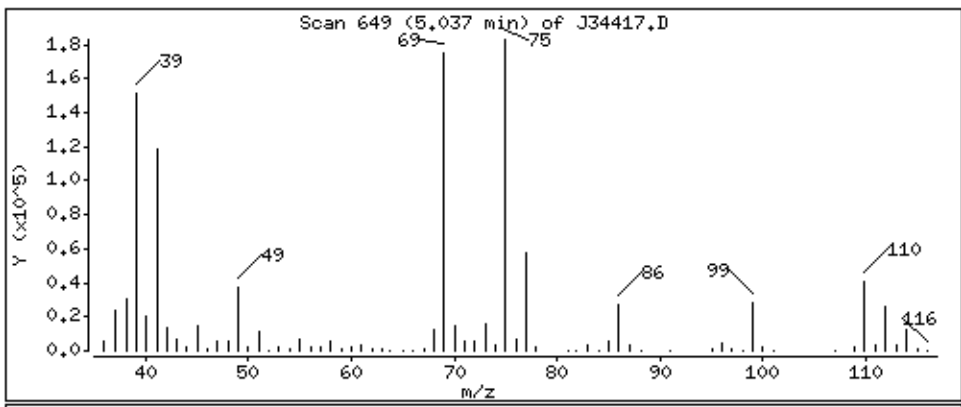
Column phase: RTX-624

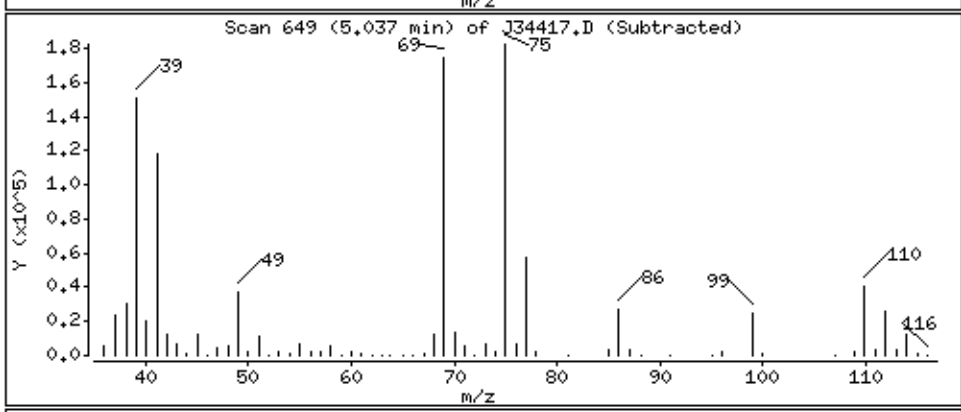
Column diameter: 0.18

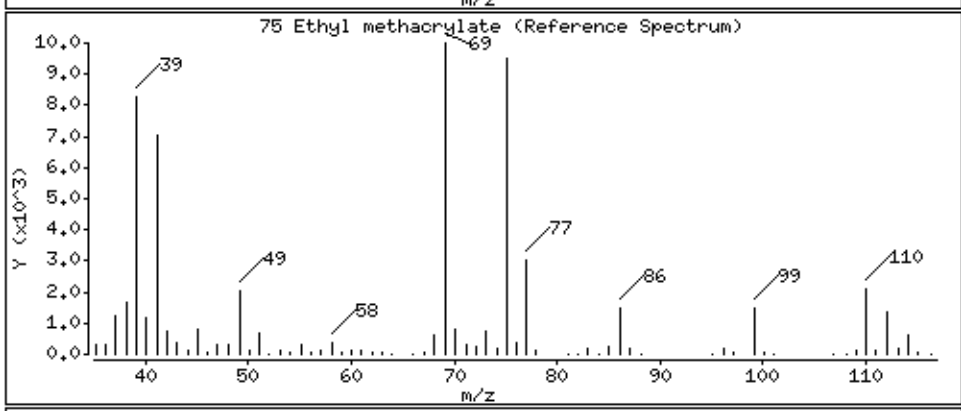
75 Ethyl methacrylate

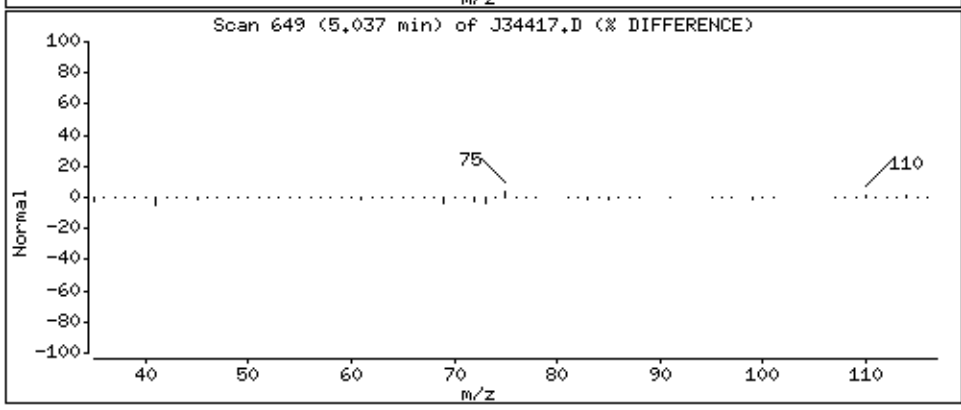
Concentration: 46.1 ug/L

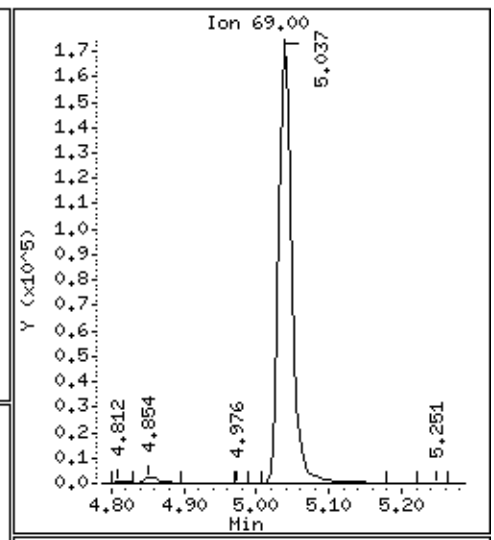
Review Code:

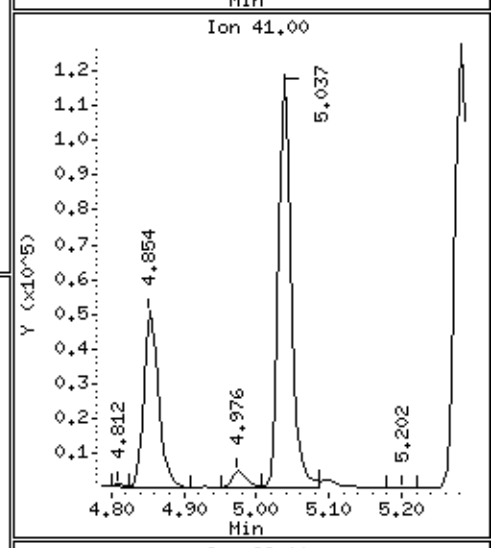


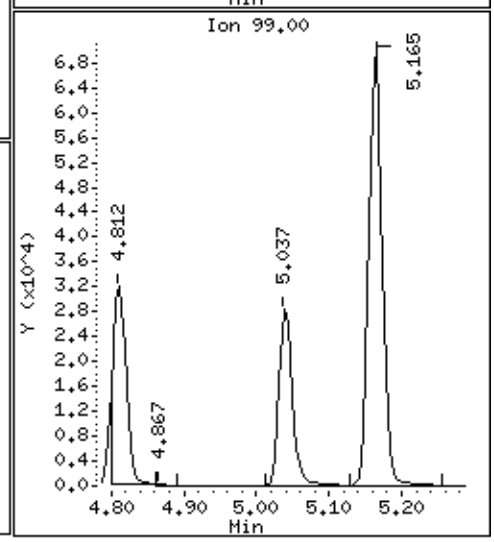












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D

Date : 25-APR-2017 19:07

Client ID: MW-3CMS

Instrument: 70msv6.i

Sample Info: 103081, 15067:1.25

Purge Volume: 5.0

Operator: KGG

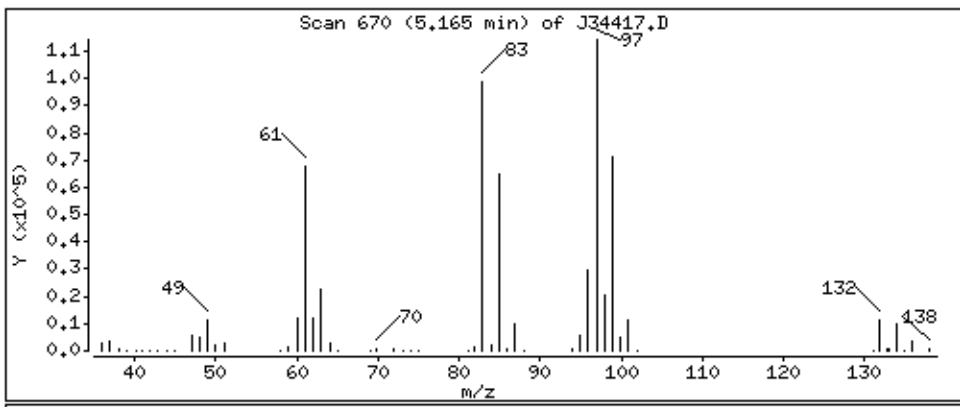
Column phase: RTX-624

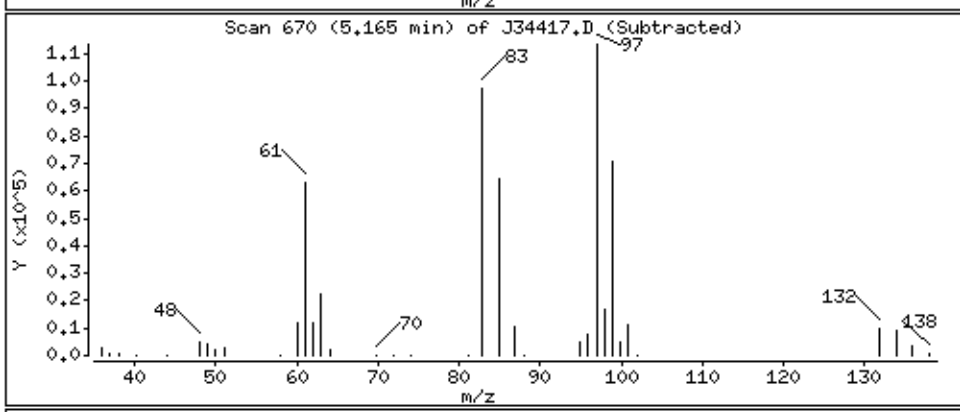
Column diameter: 0.18

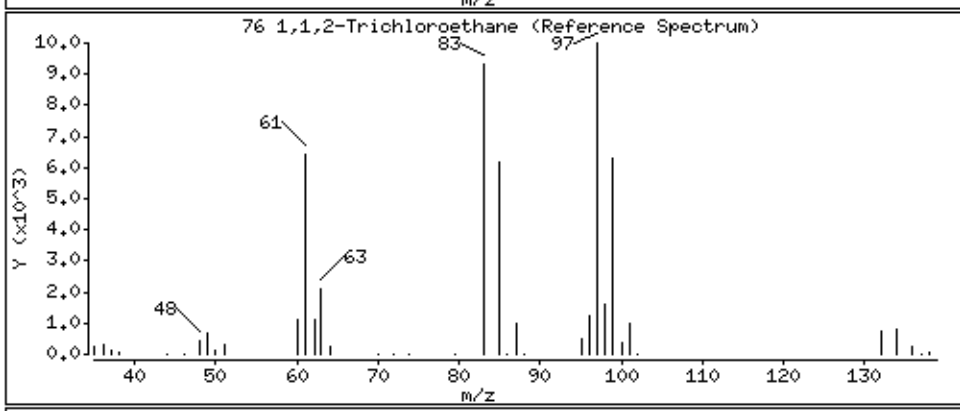
76 1,1,2-Trichloroethane

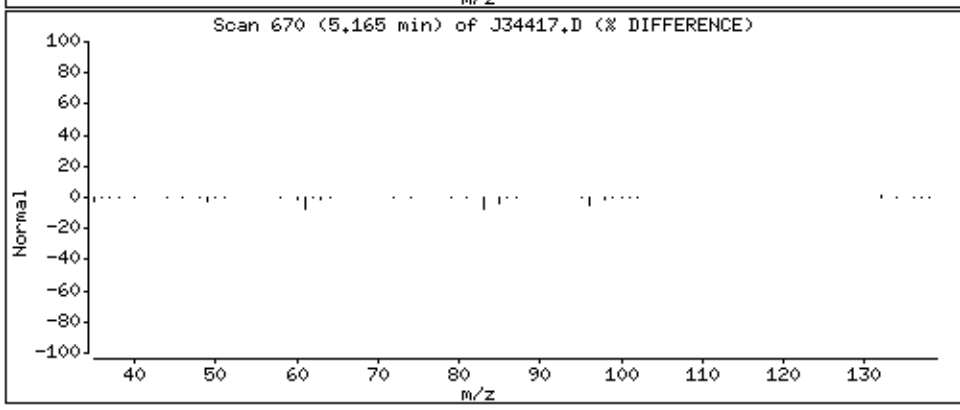
Concentration: 44.5 ug/L

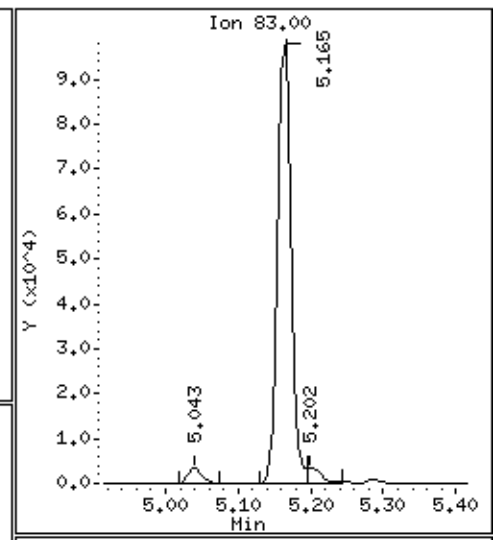
Review Code:

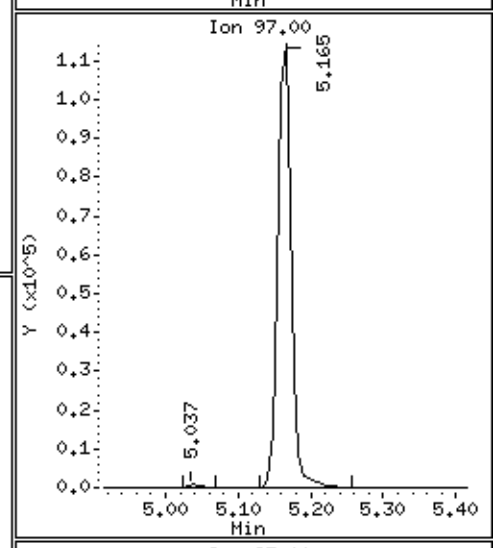


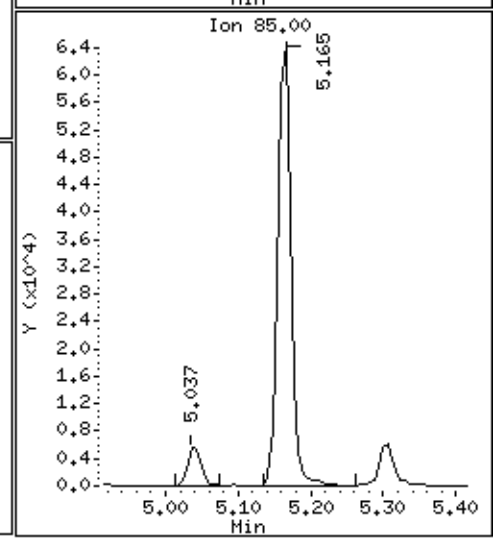












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D

Date : 25-APR-2017 19:07

Client ID: MW-3CMS

Instrument: 70msv6.i

Sample Info: 103081, 15067:1.25

Purge Volume: 5.0

Operator: KGG

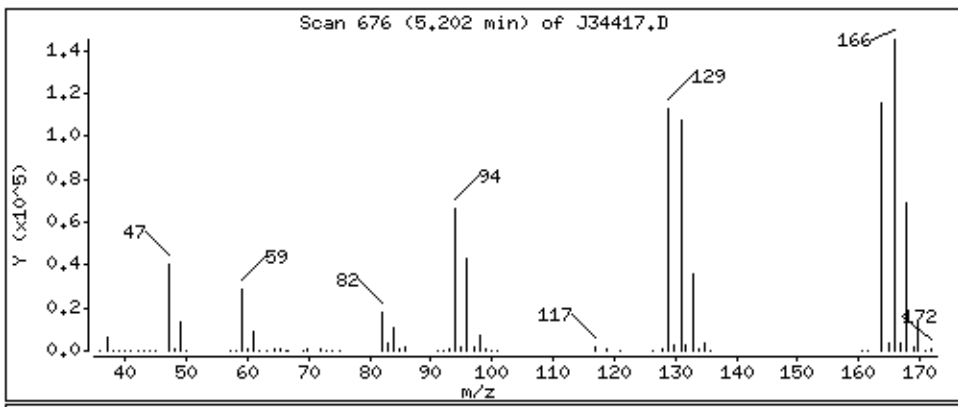
Column phase: RTX-624

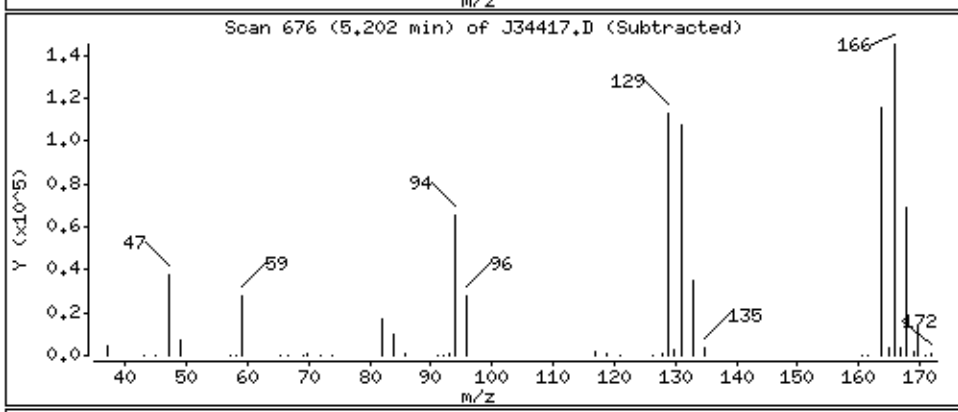
Column diameter: 0.18

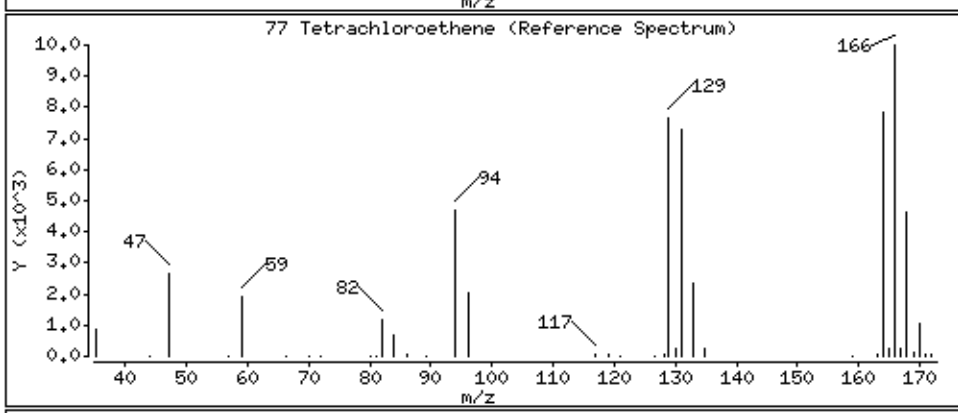
77 Tetrachloroethene

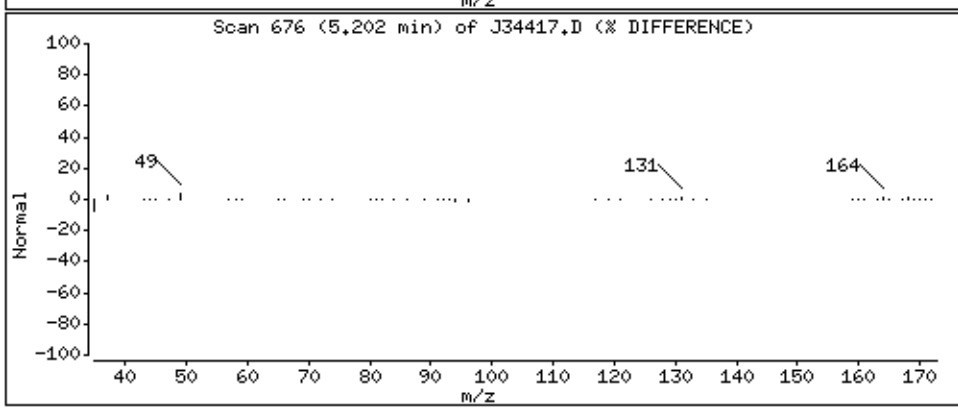
Concentration: 54.3 ug/L

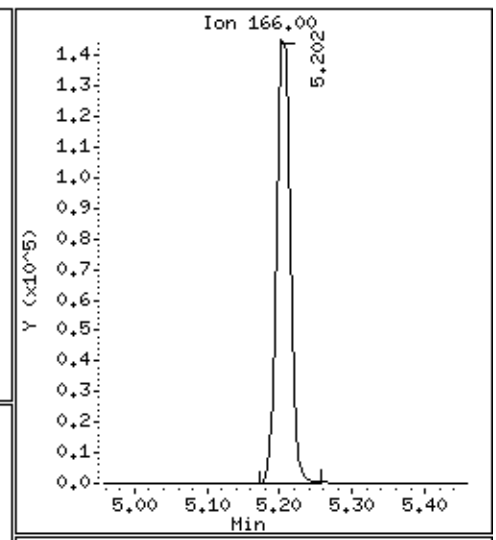
Review Code:

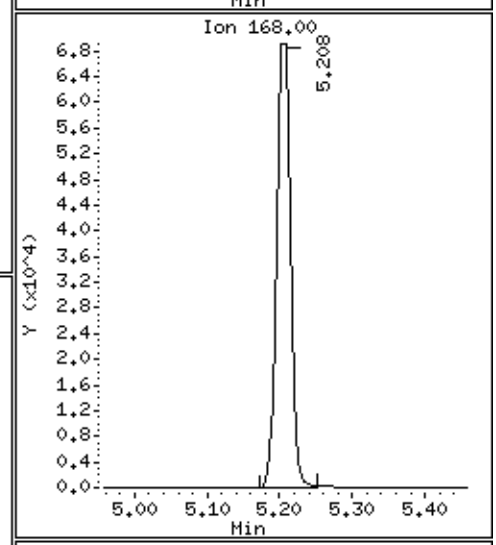


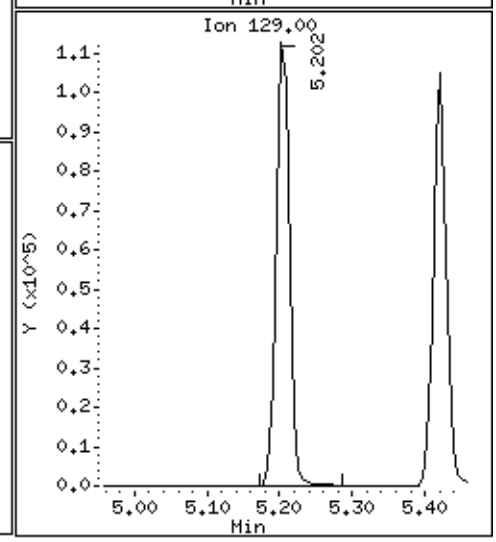












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D

Date : 25-APR-2017 19:07

Client ID: MW-3CMS

Instrument: 70msv6.i

Sample Info: 103081, 15067:1.25

Purge Volume: 5.0

Operator: KGG

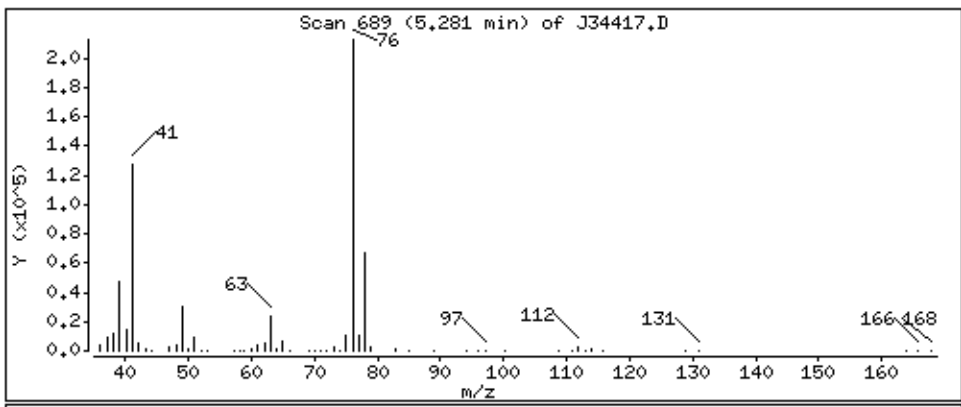
Column phase: RTX-624

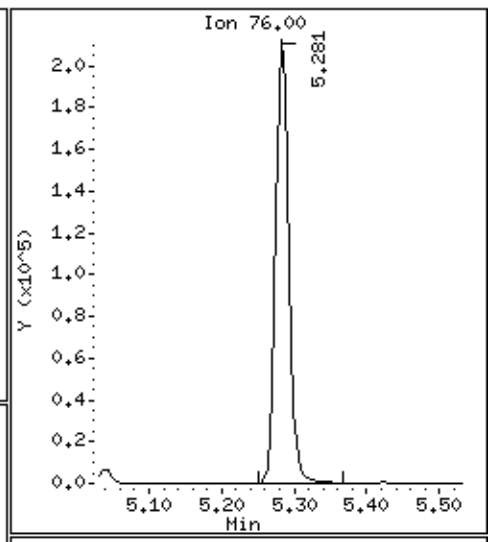
Column diameter: 0.18

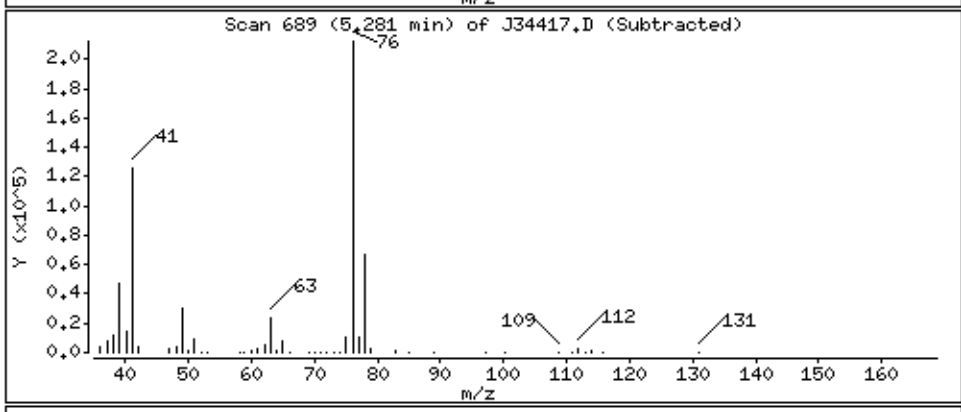
78 1,3-Dichloropropane

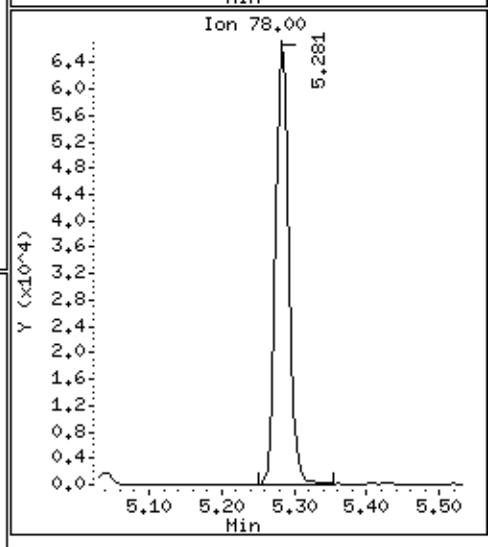
Concentration: 43.8 ug/L

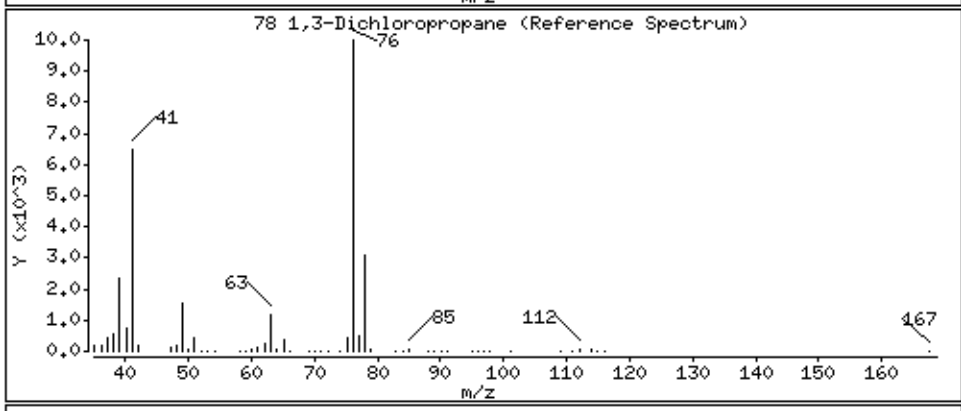
Review Code:

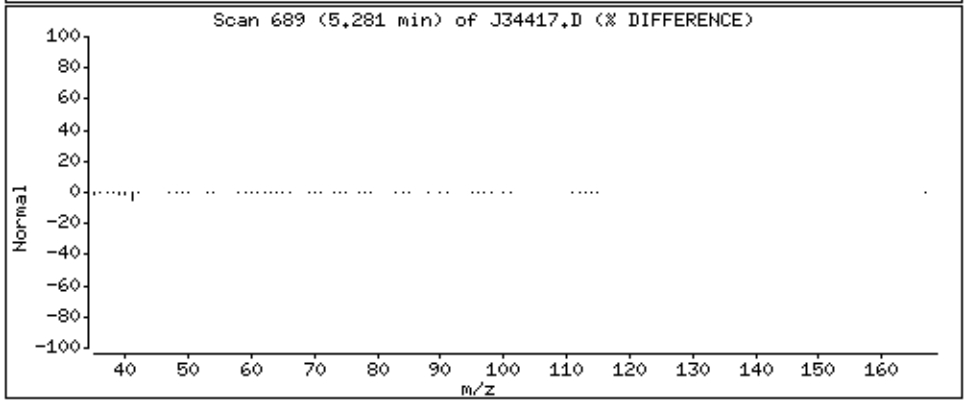












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D

Date : 25-APR-2017 19:07

Client ID: MW-3CMS

Instrument: 70msv6.i

Sample Info: 103081, 15067:1.25

Purge Volume: 5.0

Operator: KGG

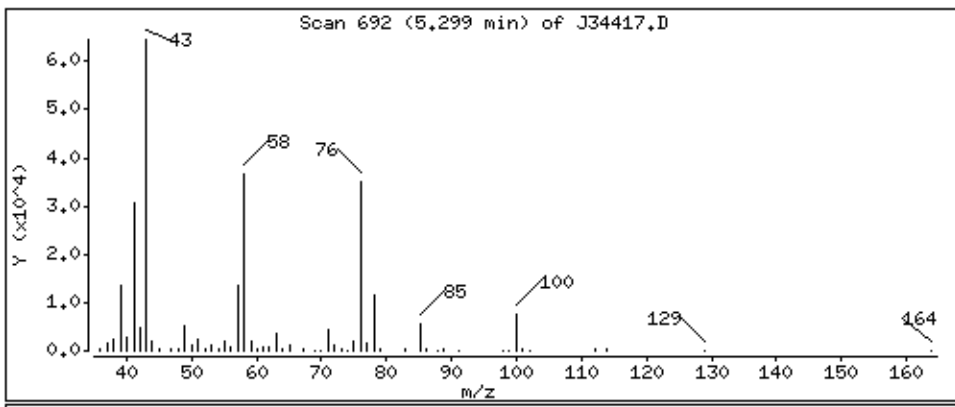
Column phase: RTX-624

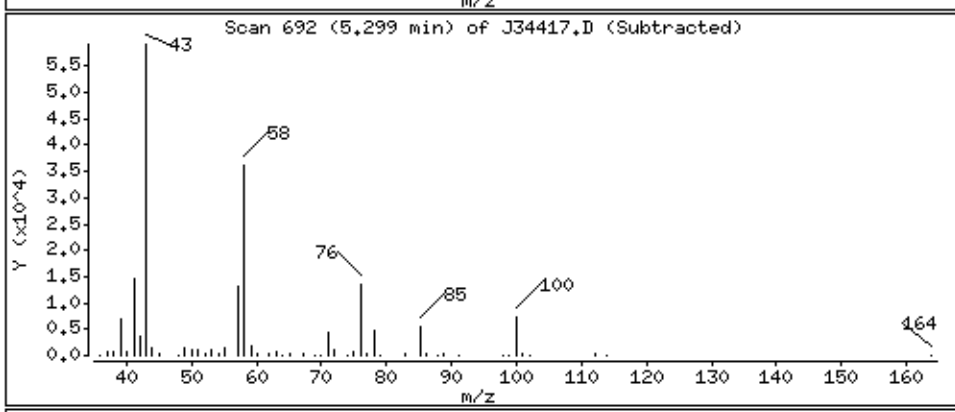
Column diameter: 0.18

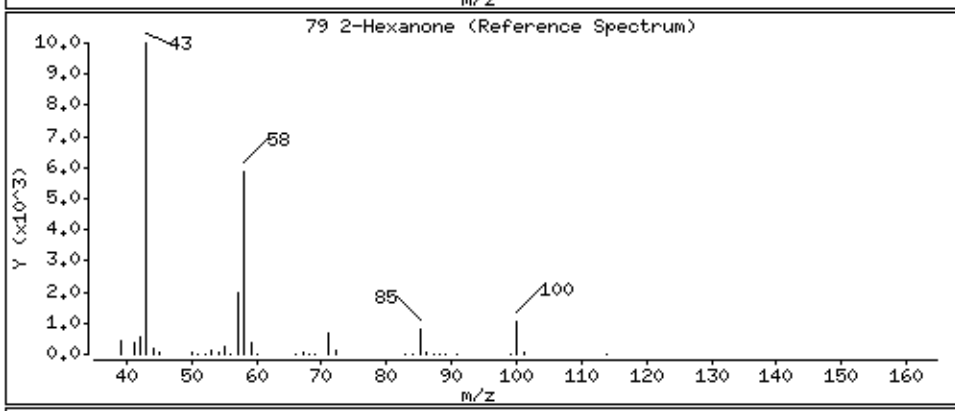
79 2-Hexanone

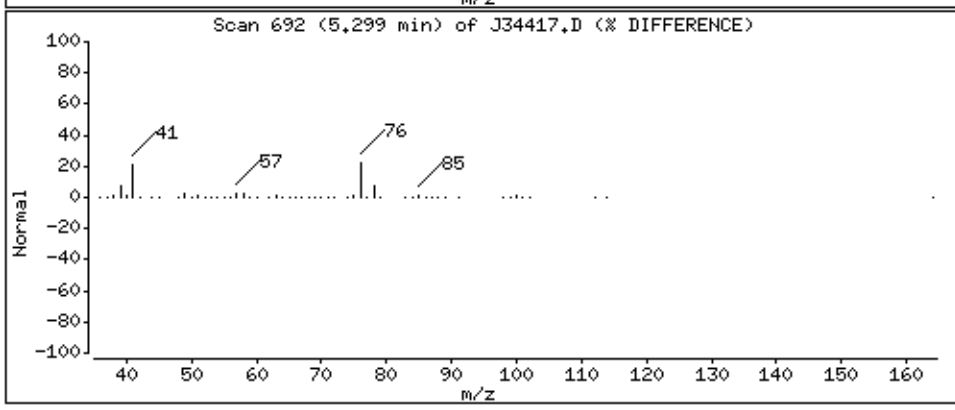
Concentration: 30.3 ug/L

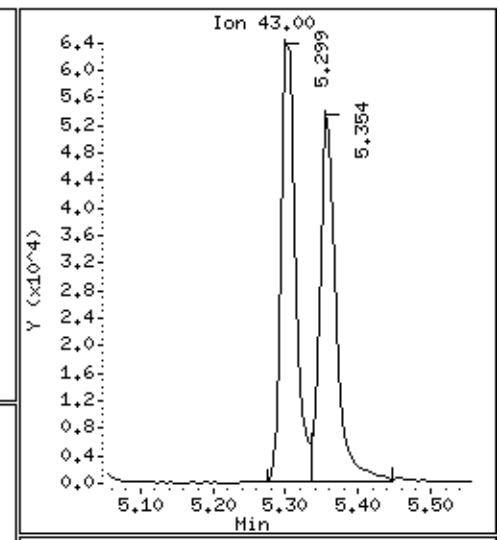
Review Code:

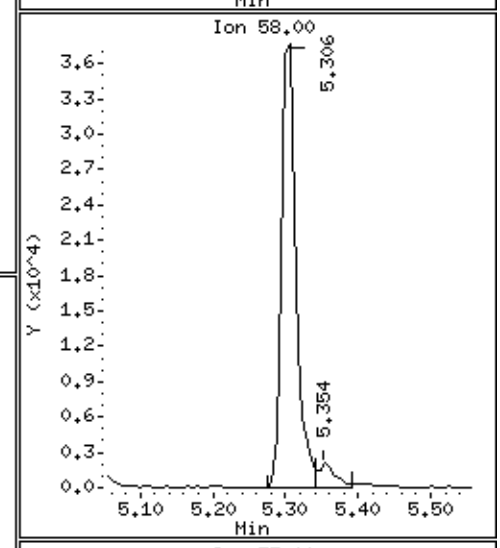


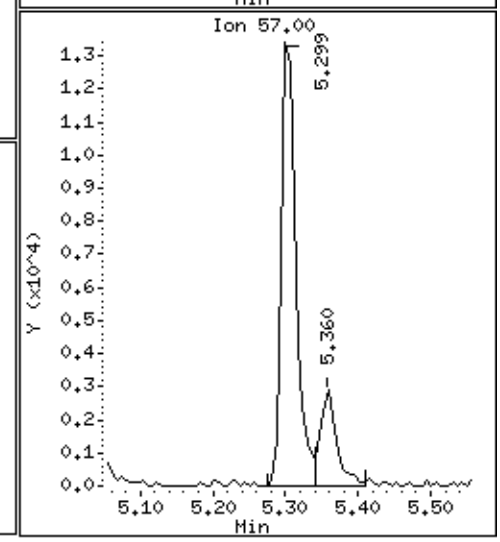












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D

Date : 25-APR-2017 19:07

Client ID: MW-3CMS

Instrument: 70msv6.i

Sample Info: 103081, 15067:1.25

Purge Volume: 5.0

Operator: KGG

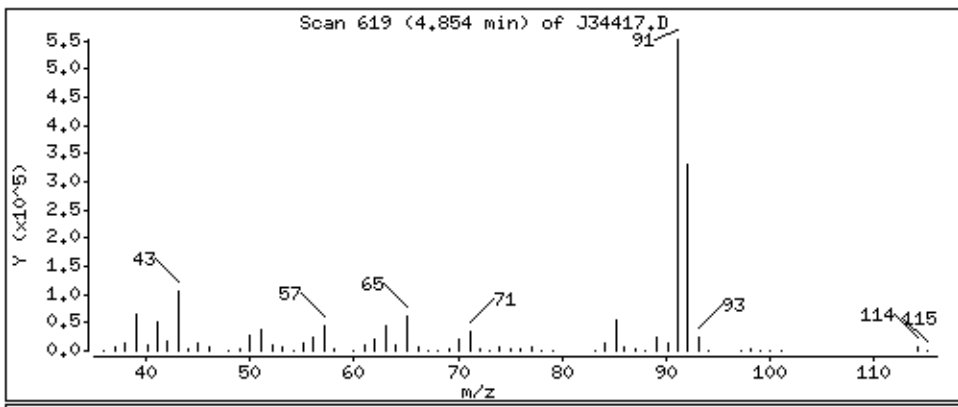
Column phase: RTX-624

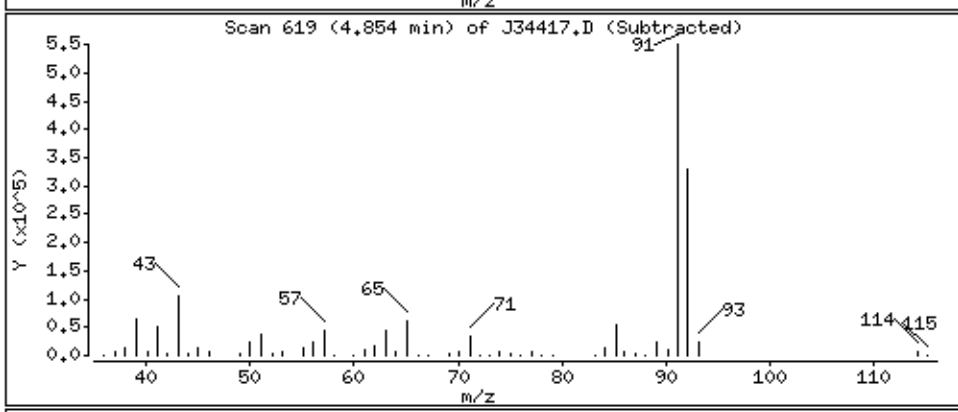
Column diameter: 0.18

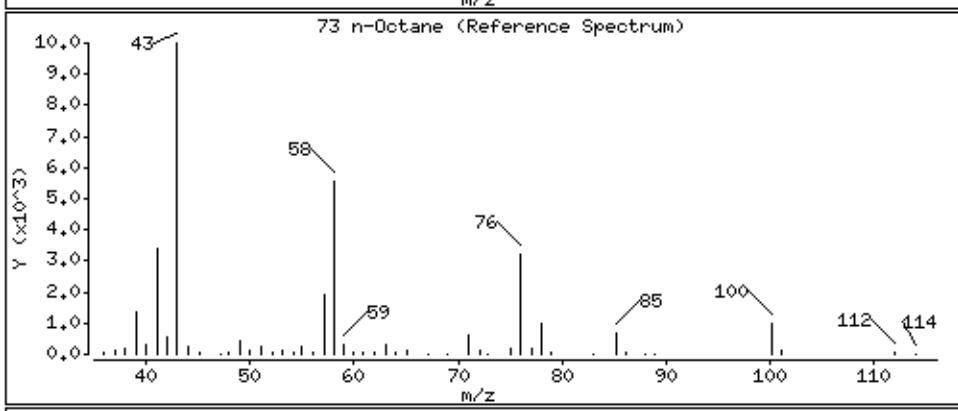
73 n-Octane

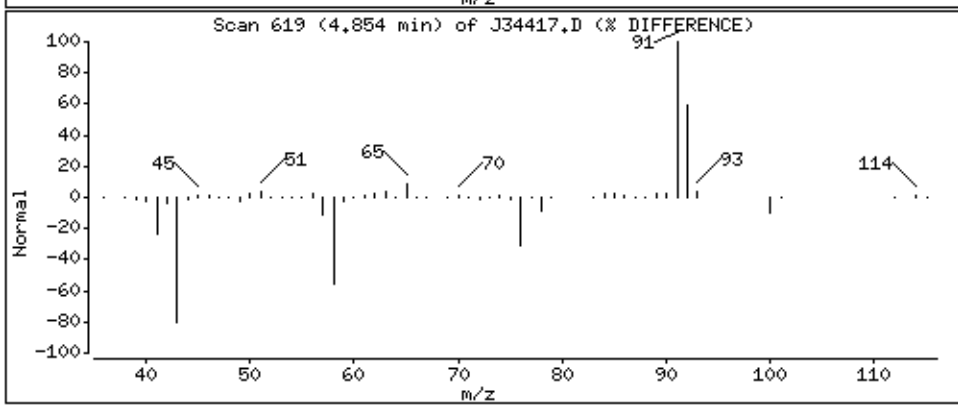
Concentration: 39.8 ug/L

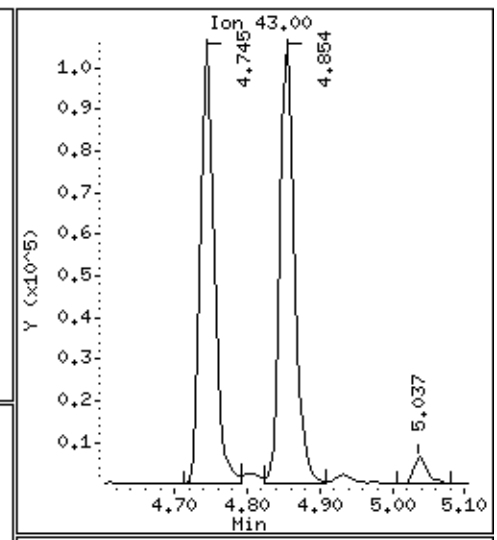
Review Code:

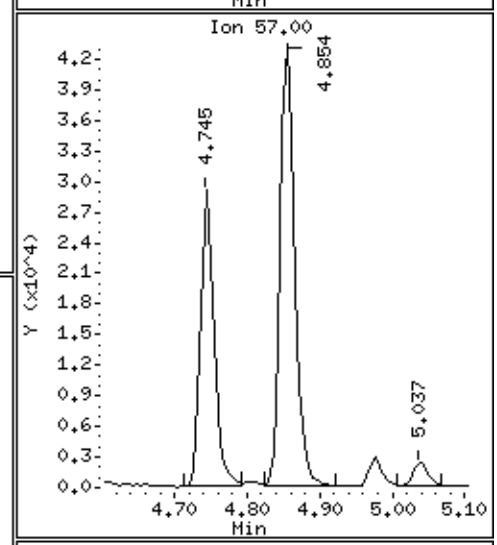


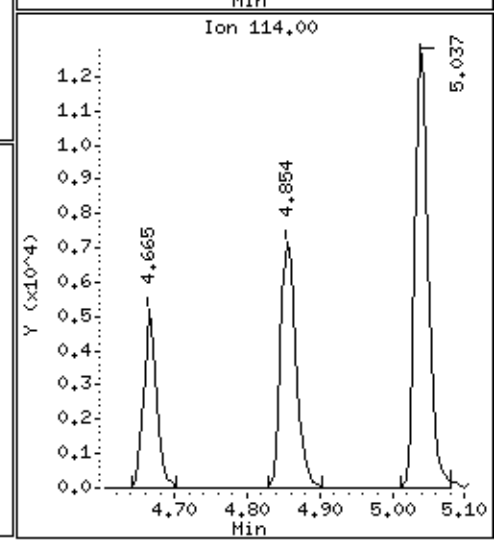












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D

Date : 25-APR-2017 19:07

Client ID: MW-3CMS

Instrument: 70msv6.i

Sample Info: 103081, 15067:1.25

Purge Volume: 5.0

Operator: KGG

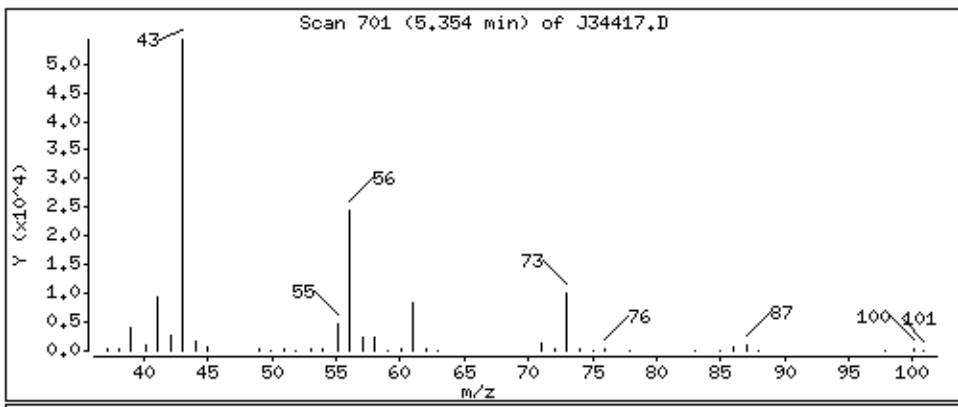
Column phase: RTX-624

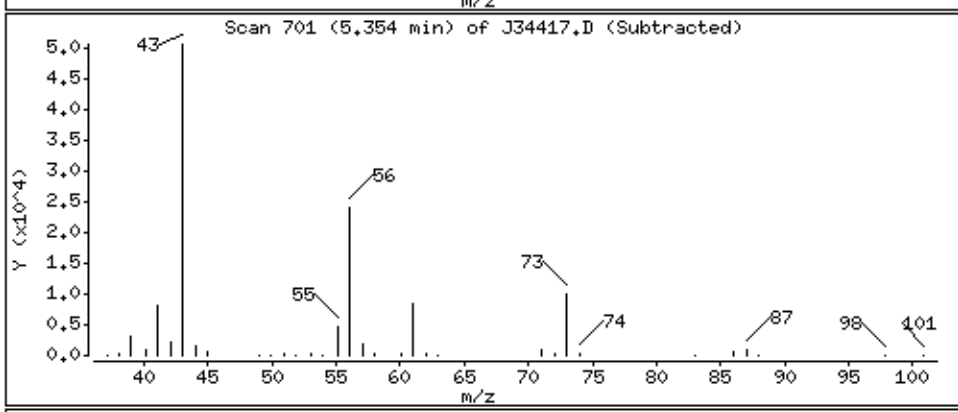
Column diameter: 0.18

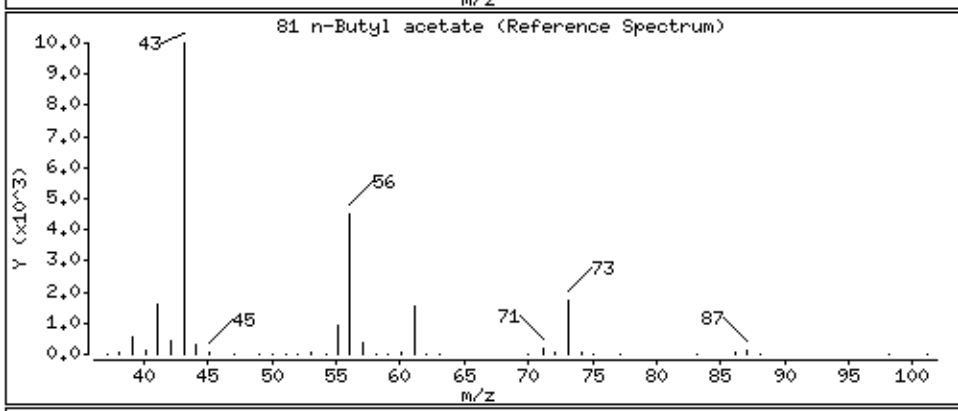
81 n-Butyl acetate

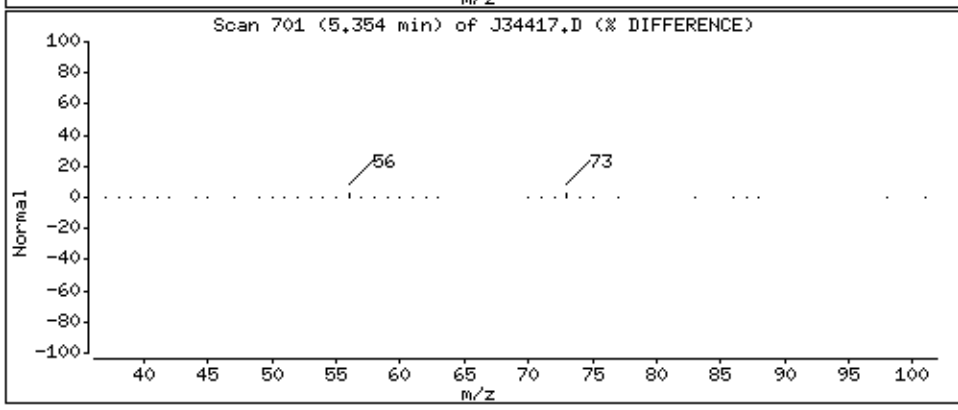
Concentration: 37.0 ug/L

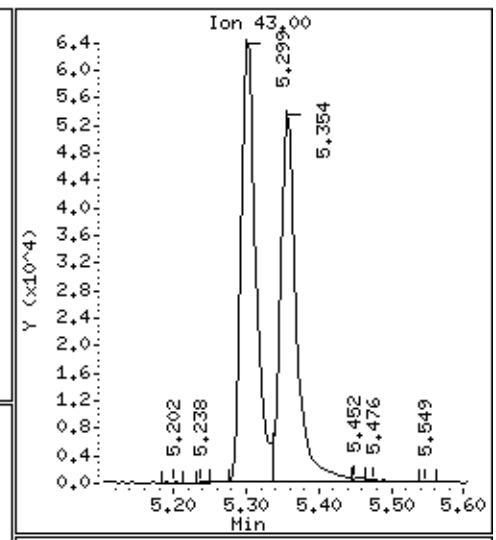
Review Code:

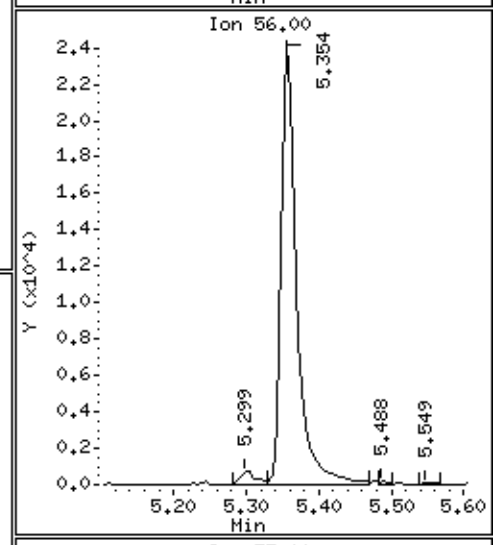


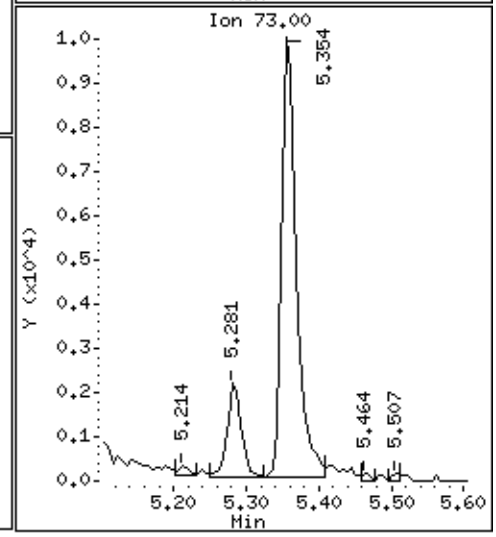












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D

Date : 25-APR-2017 19:07

Client ID: MW-3CMS

Instrument: 70msv6.i

Sample Info: 103081, 15067:1.25

Purge Volume: 5.0

Operator: KGG

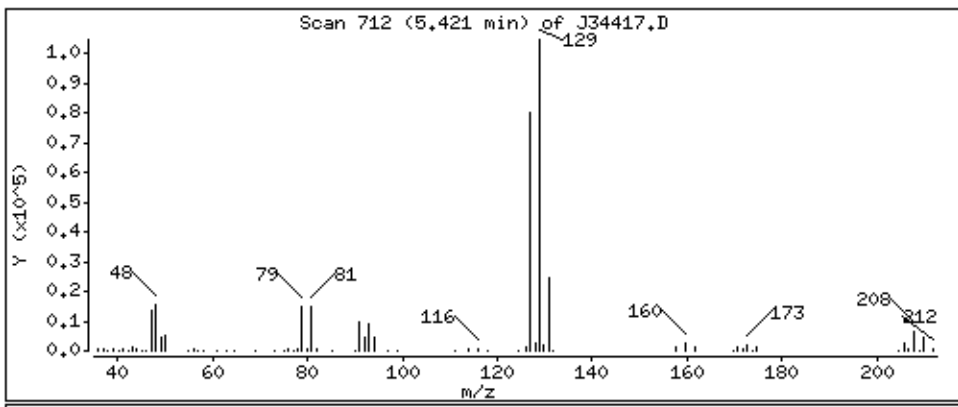
Column phase: RTX-624

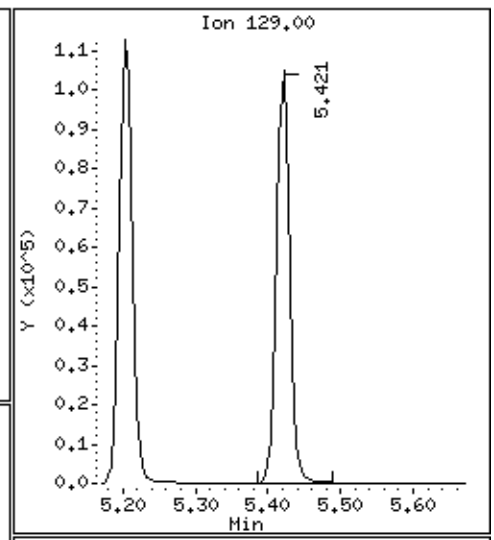
Column diameter: 0.18

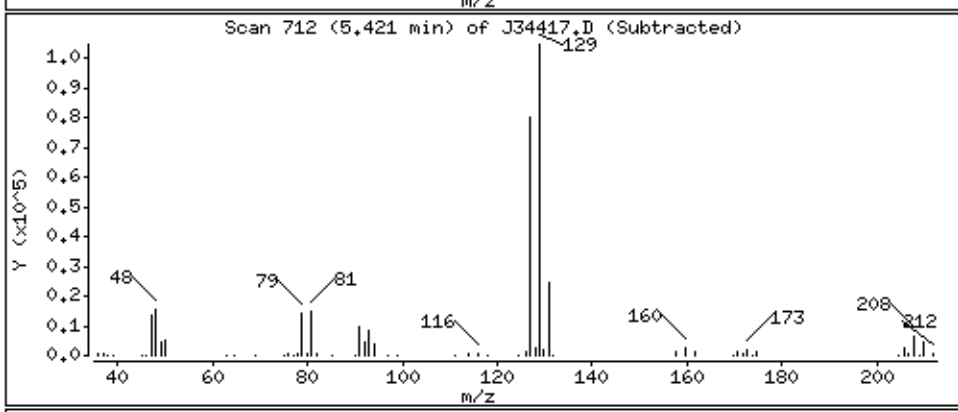
80 Dibromochloromethane

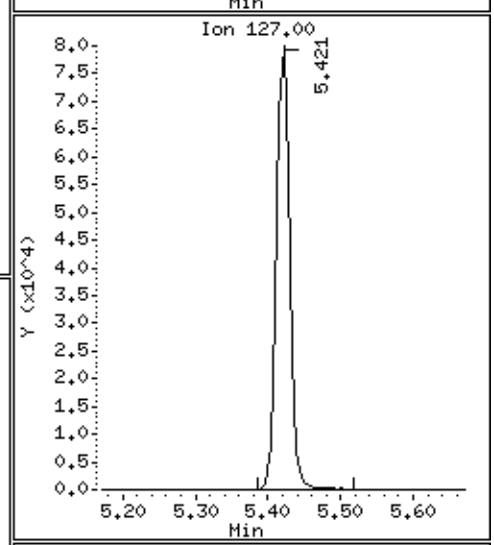
Concentration: 56.3 ug/L

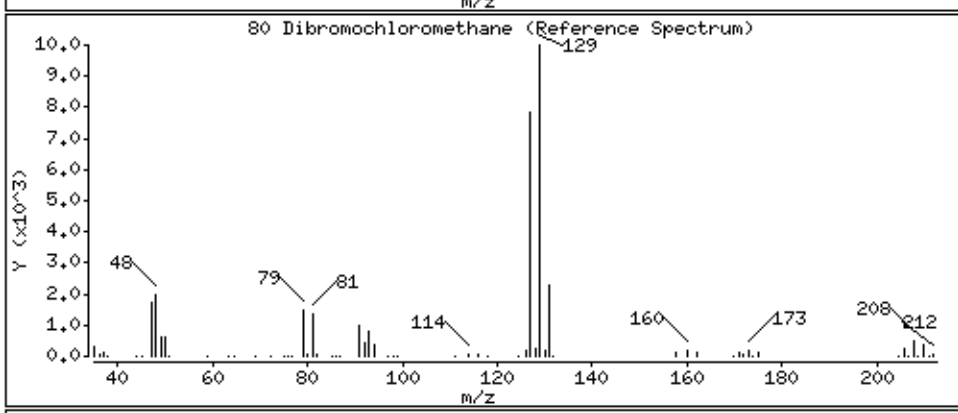
Review Code:

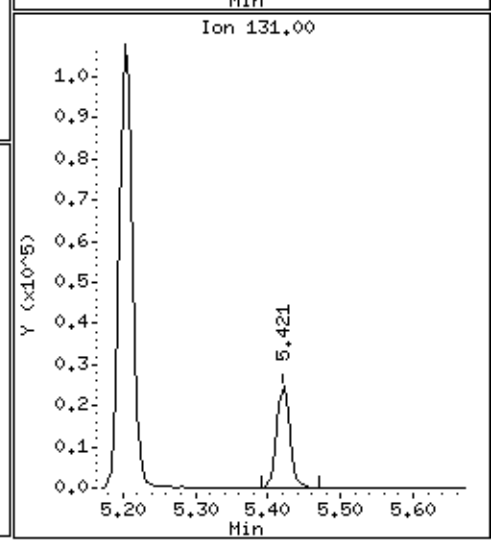


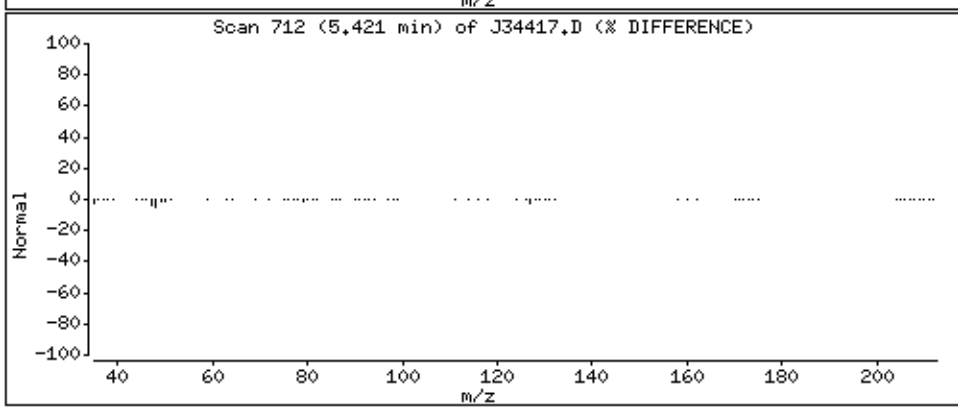












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D

Date : 25-APR-2017 19:07

Client ID: MW-3CMS

Instrument: 70msv6.i

Sample Info: 103081, 15067:1.25

Purge Volume: 5.0

Operator: KGG

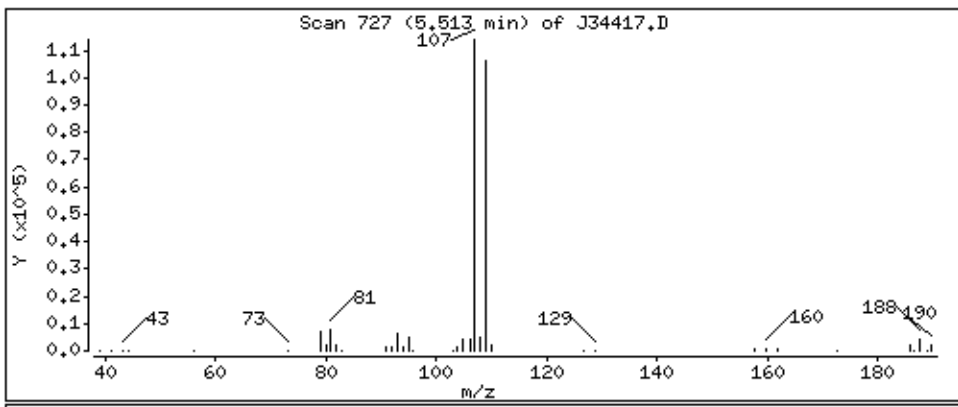
Column phase: RTX-624

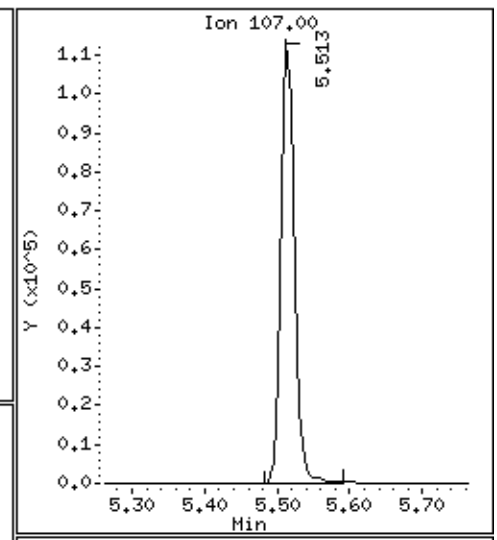
Column diameter: 0.18

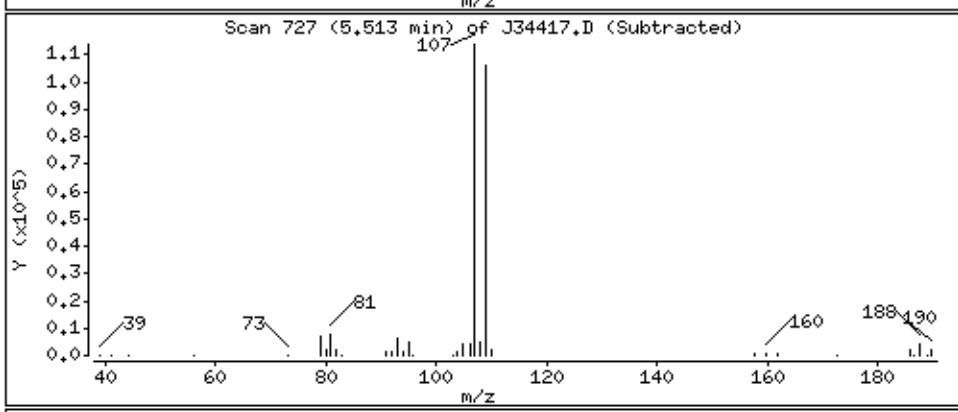
82 1,2-Dibromoethane (EDB)

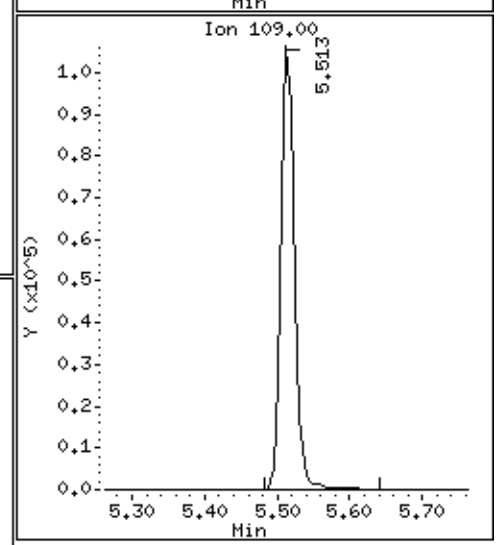
Concentration: 56.9 ug/L

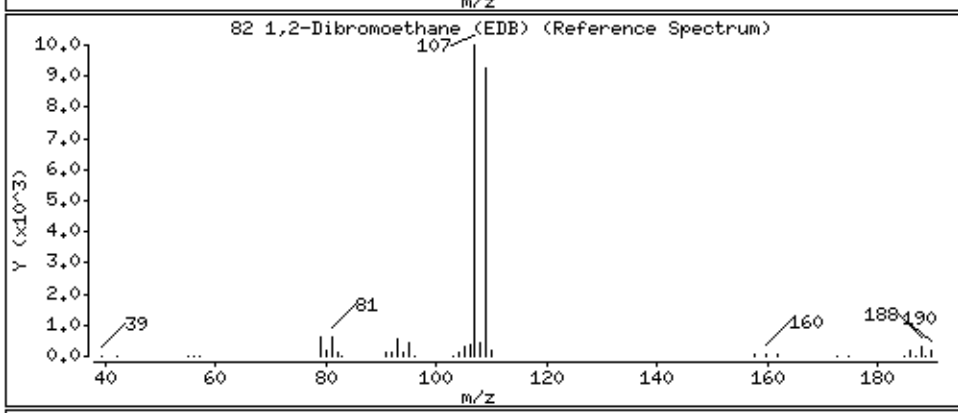
Review Code:

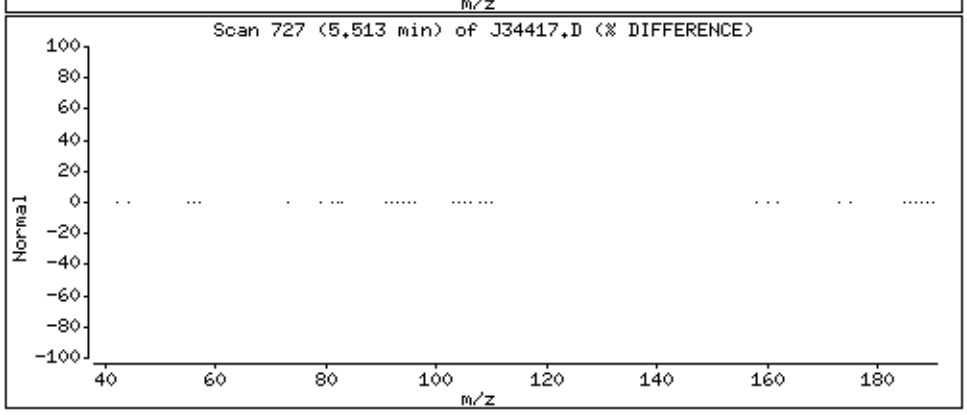












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D

Date : 25-APR-2017 19:07

Client ID: MW-3CMS

Instrument: 70msv6.i

Sample Info: 103081, 15067:1.25

Purge Volume: 5.0

Operator: KGG

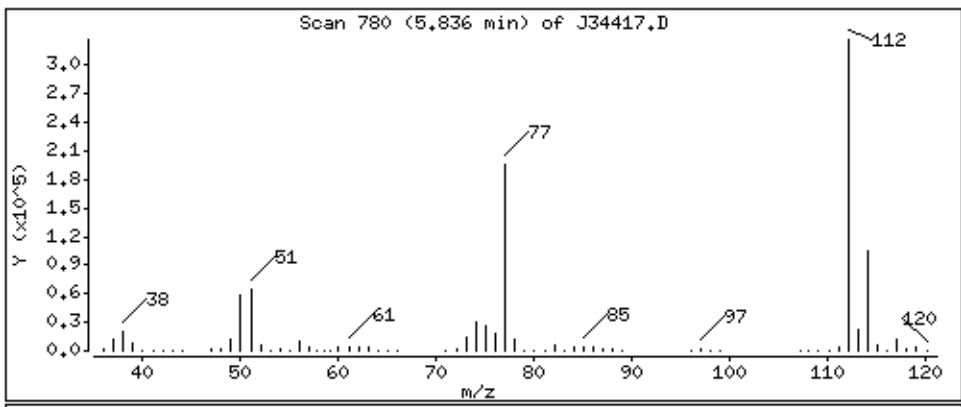
Column phase: RTX-624

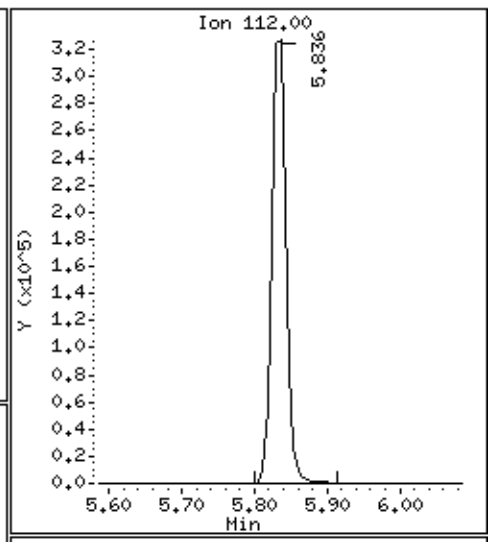
Column diameter: 0.18

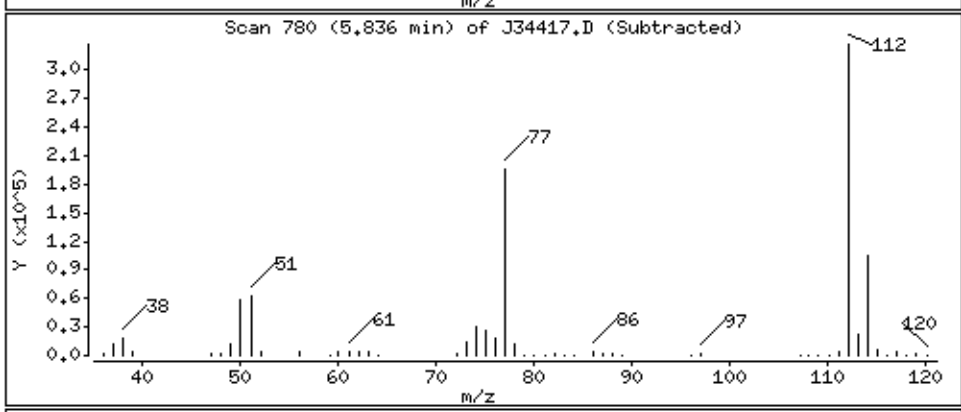
84 Chlorobenzene

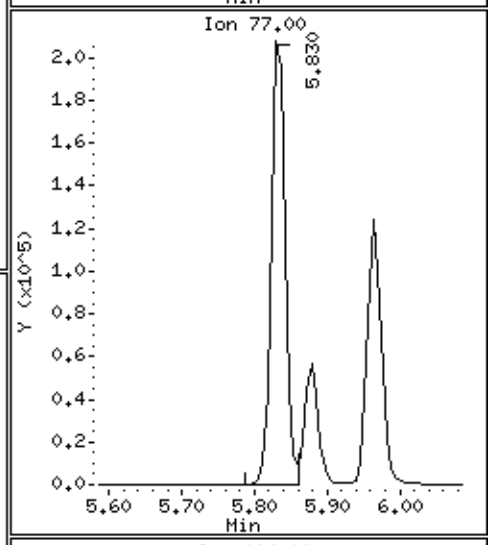
Concentration: 47.4 ug/L

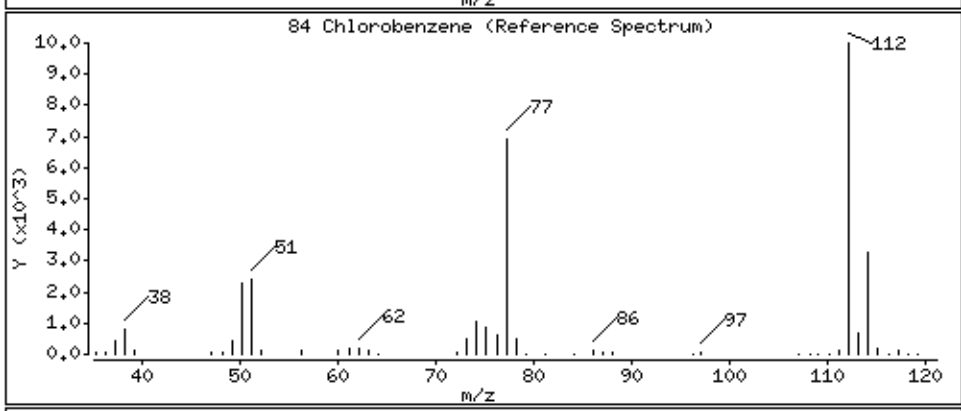
Review Code:

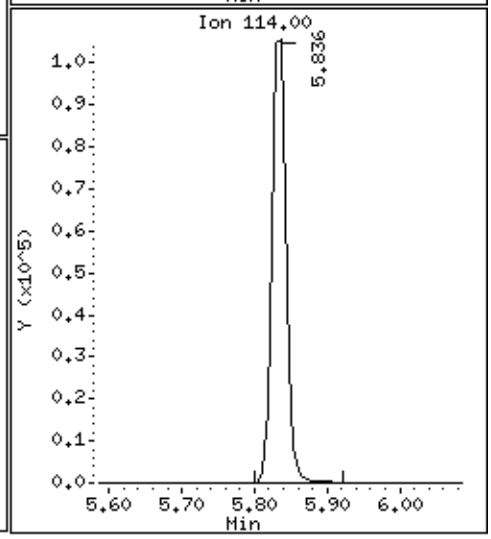


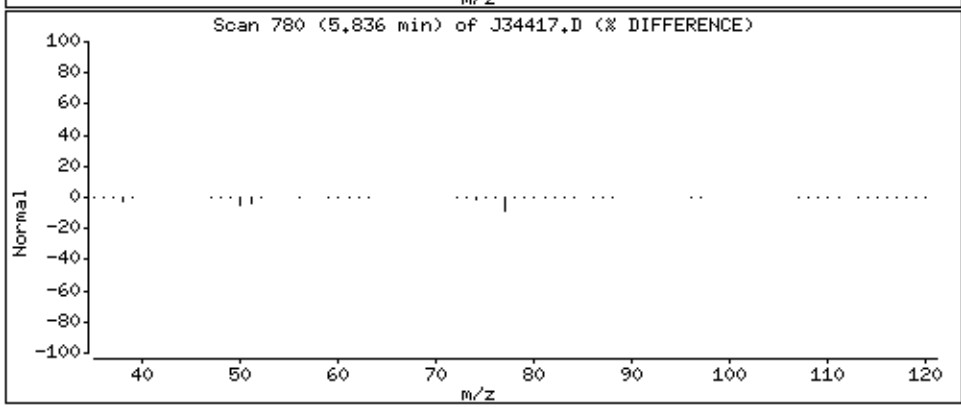












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D

Date : 25-APR-2017 19:07

Client ID: MW-3CMS

Instrument: 70msv6.i

Sample Info: 103081, 15067:1.25

Purge Volume: 5.0

Operator: KGG

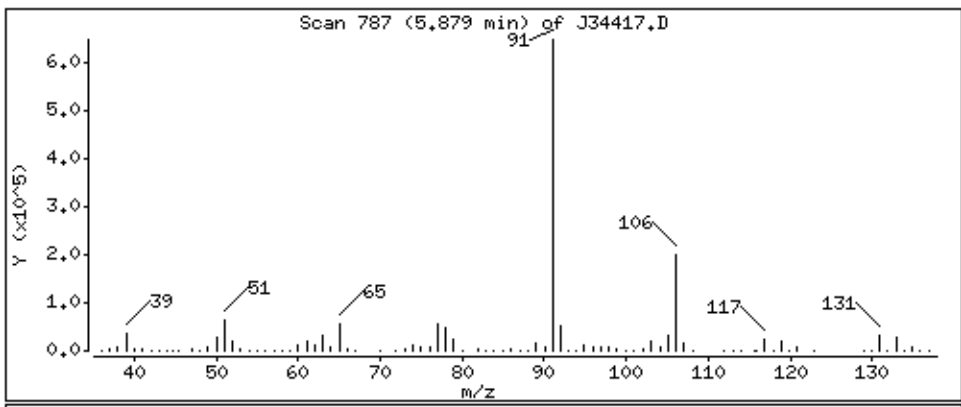
Column phase: RTX-624

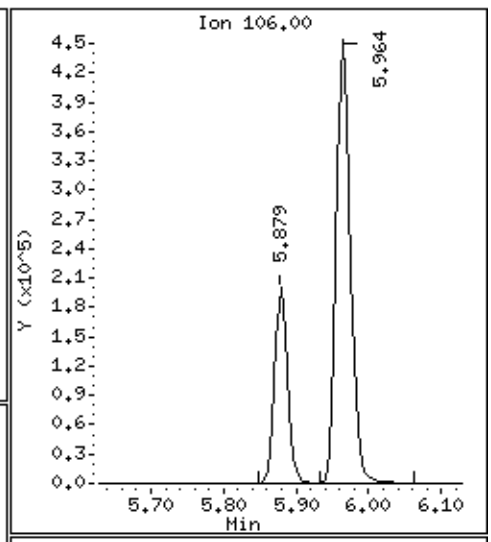
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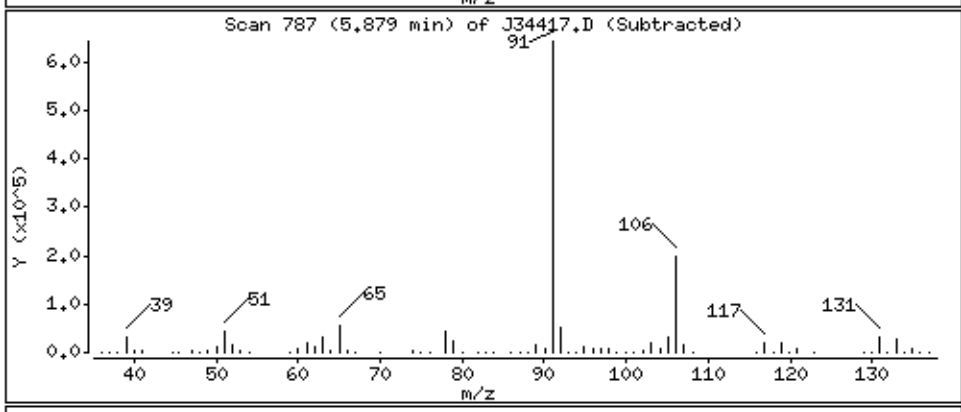
86 Ethylbenzene

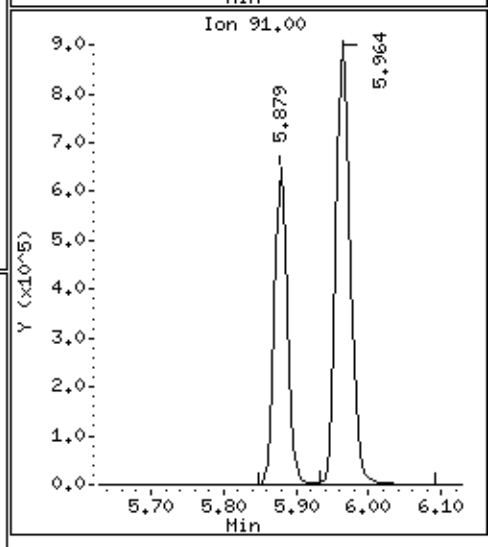
Concentration: 49.3 ug/L

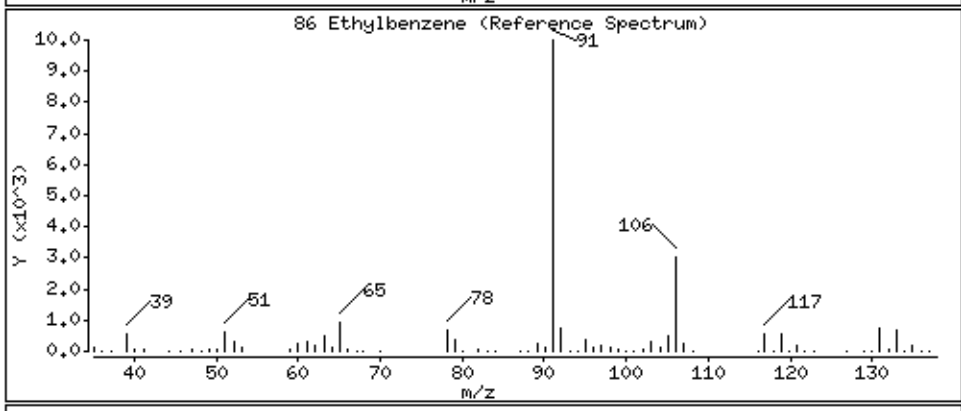
Review Code:

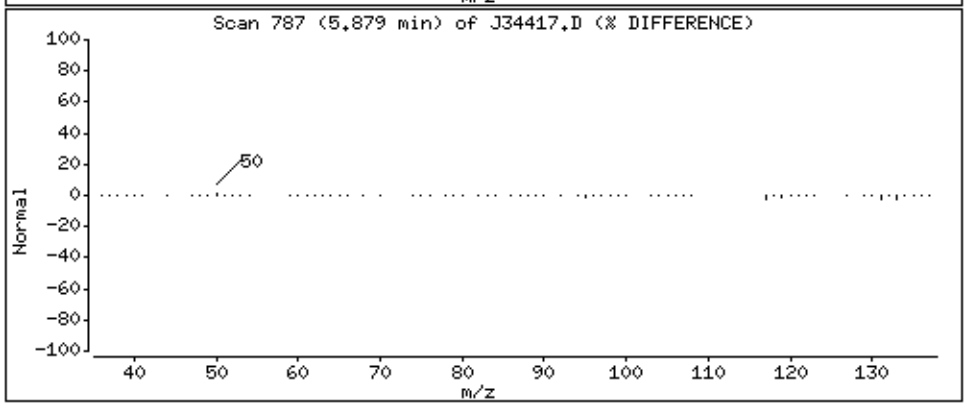












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D

Date : 25-APR-2017 19:07

Client ID: MW-3CMS

Instrument: 70msv6.i

Sample Info: 103081, 15067:1.25

Purge Volume: 5.0

Operator: KGG

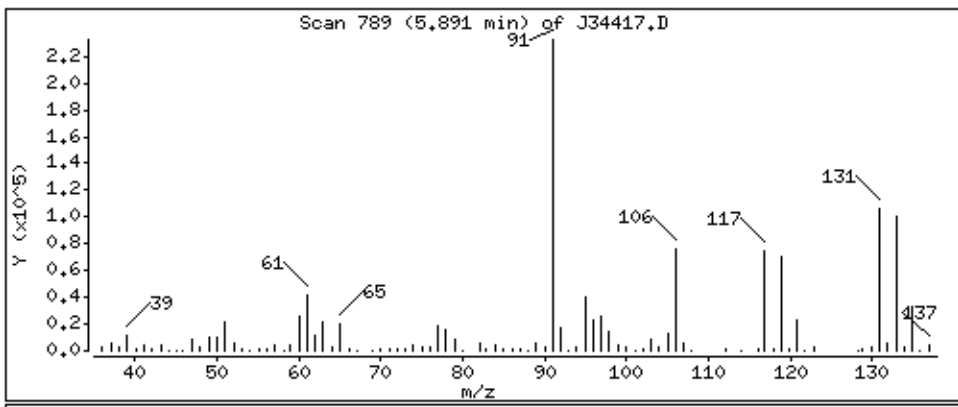
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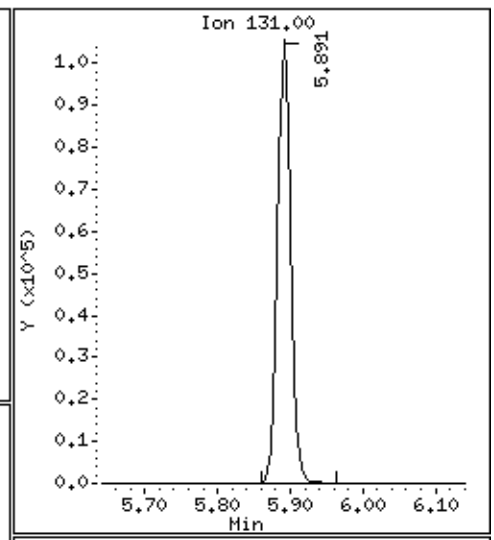
Column diameter: 0.18

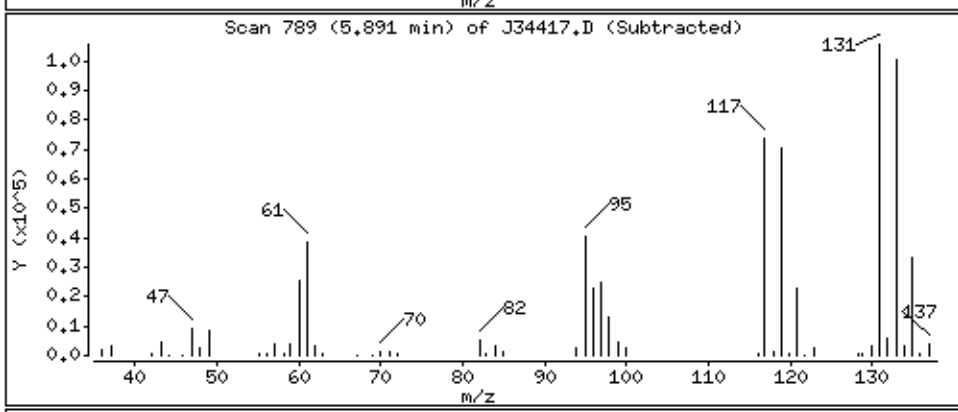
85 1,1,1,2-Tetrachloroethane

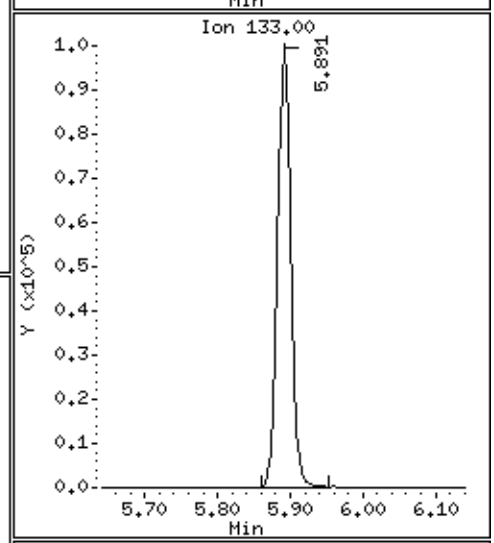
Concentration: 48.8 ug/L

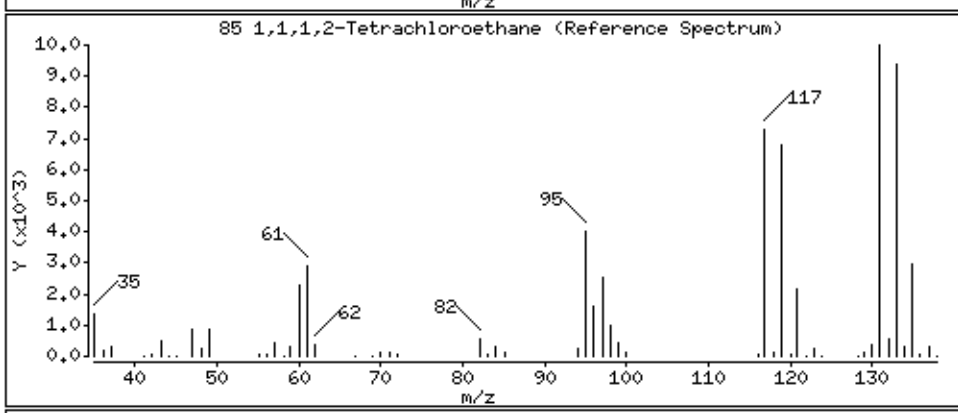
Review Code:

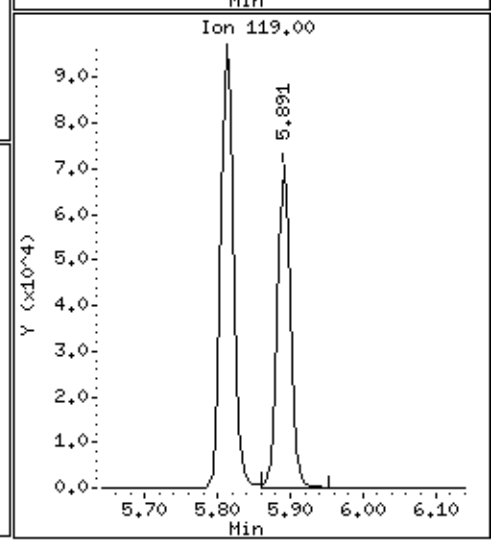


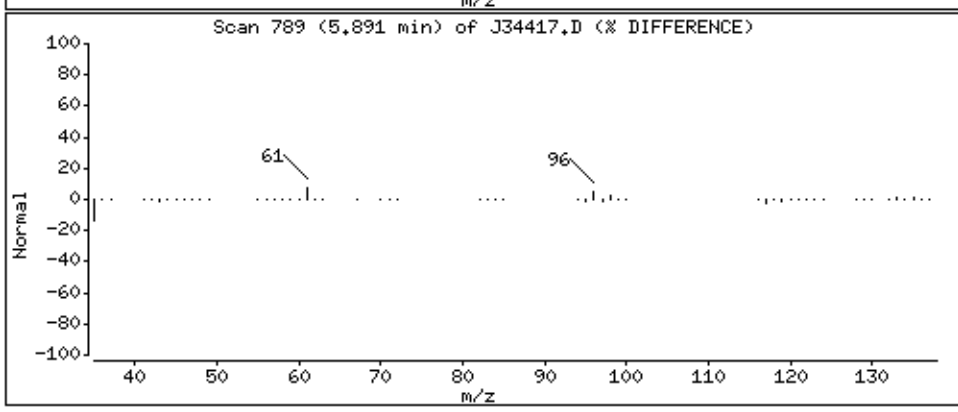












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D

Date : 25-APR-2017 19:07

Client ID: MW-3CMS

Instrument: 70msv6.i

Sample Info: 103081, 15067:1.25

Purge Volume: 5.0

Operator: KGG

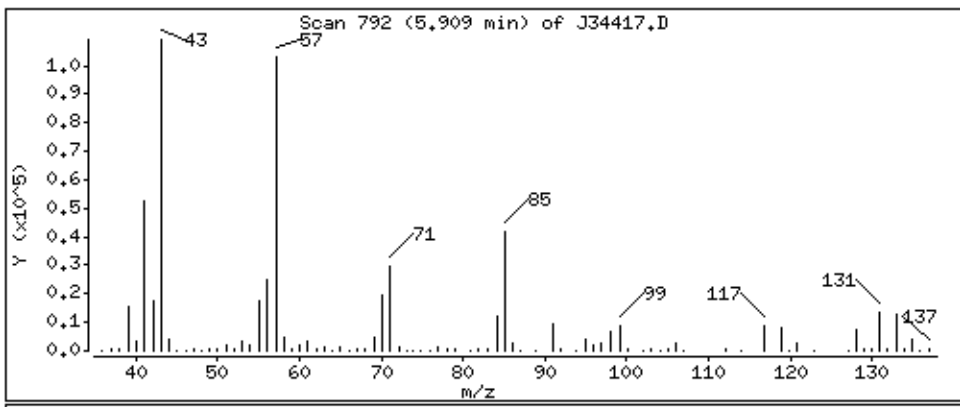
Column phase: RTX-624

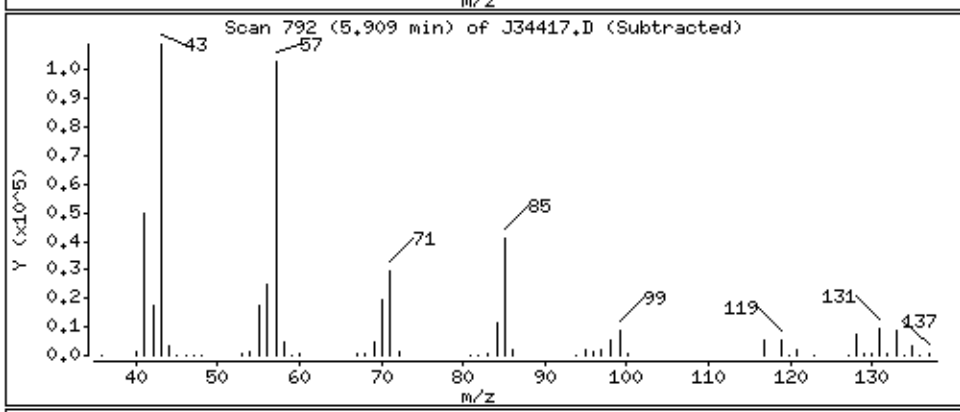
Column diameter: 0.18

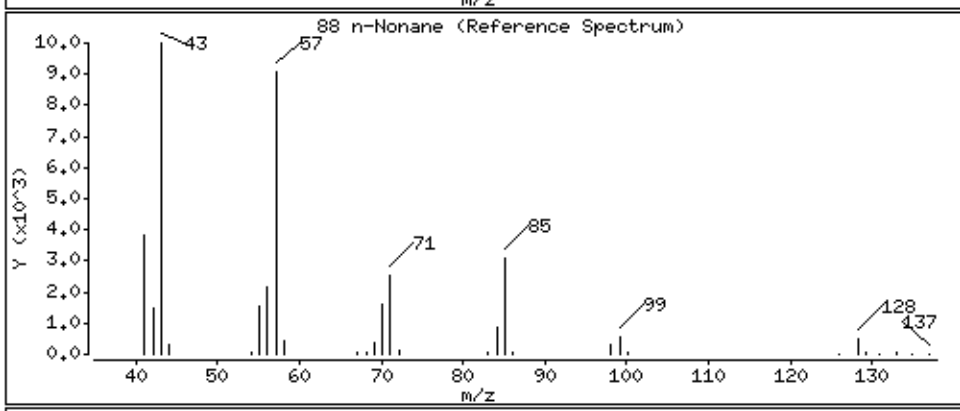
88 n-Nonane

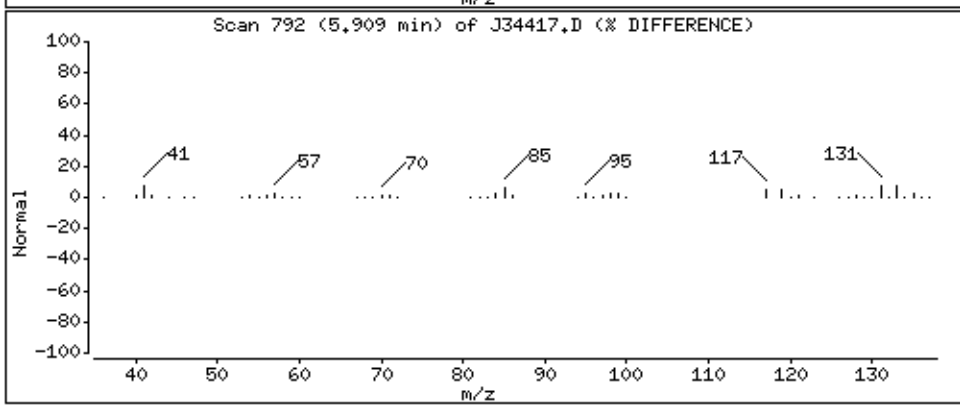
Concentration: 52.8 ug/L

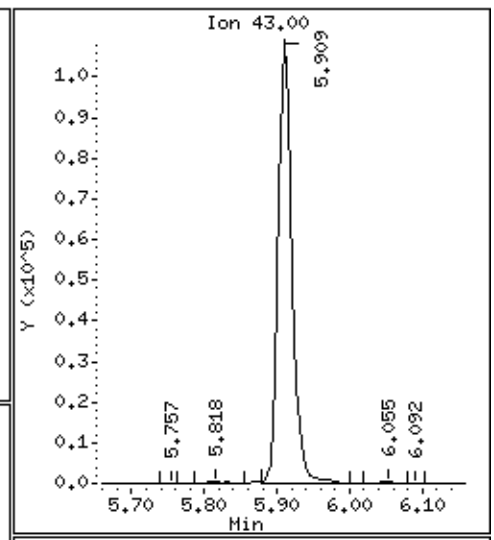
Review Code:

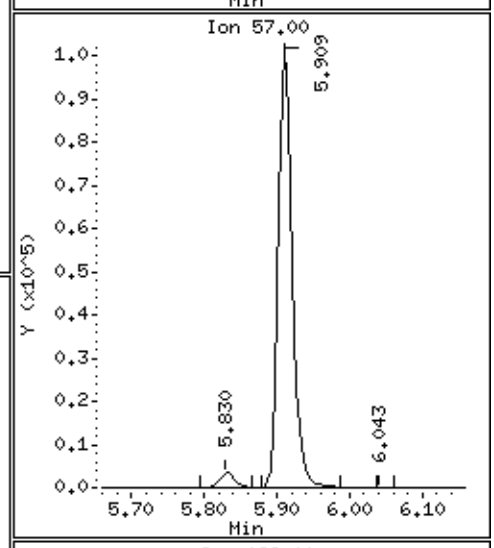


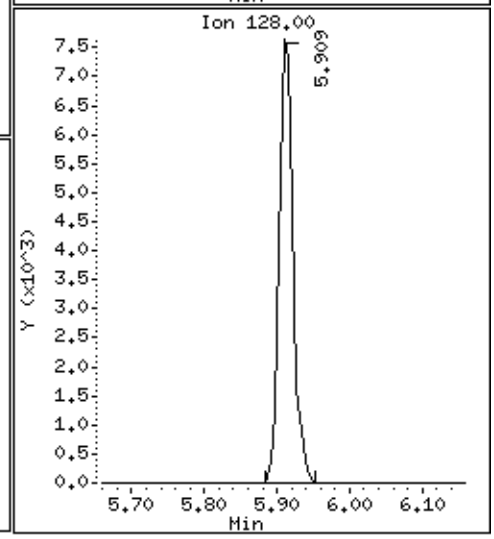












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D

Date : 25-APR-2017 19:07

Client ID: MW-3CMS

Instrument: 70msv6.i

Sample Info: 103081, 15067:1.25

Purge Volume: 5.0

Operator: KGG

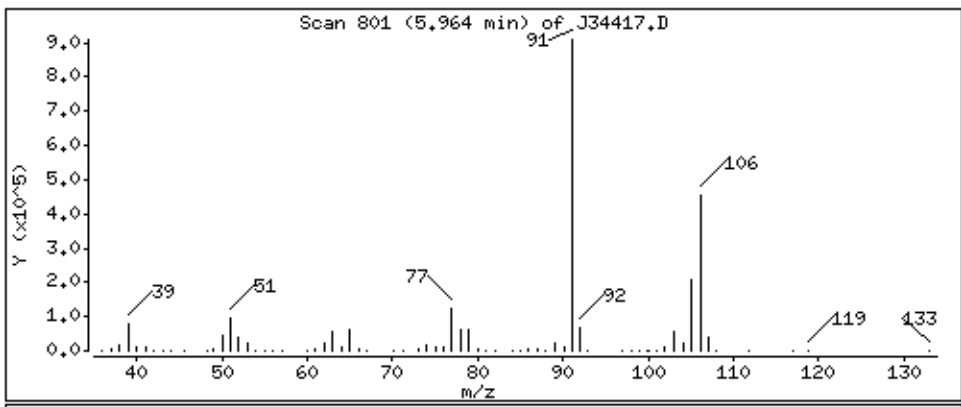
Column phase: RTX-624

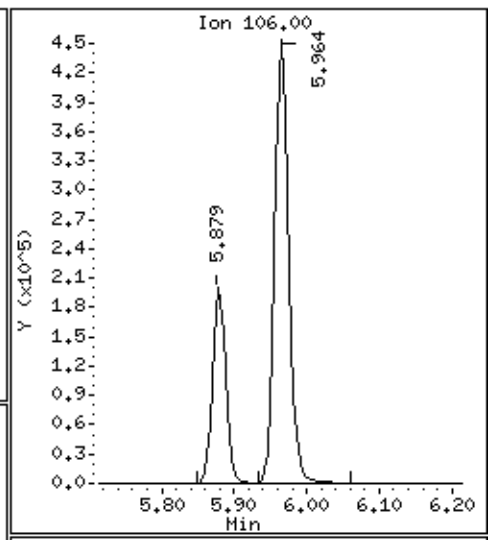
Column diameter: 0.18

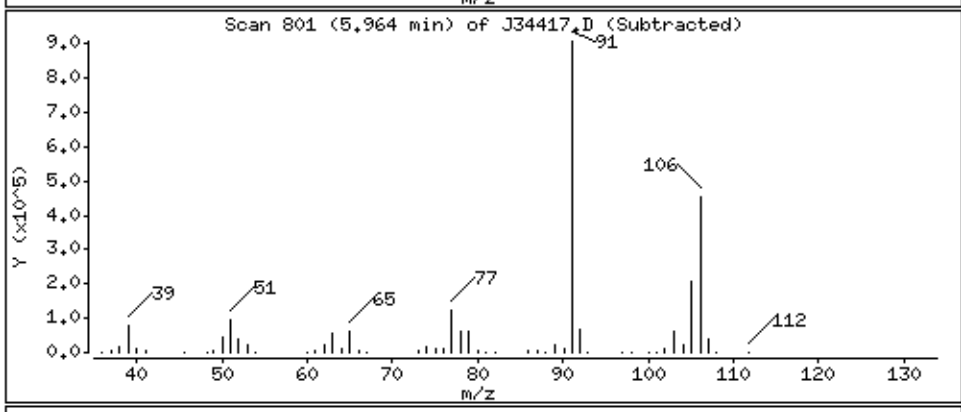
87 m&p-Xylene

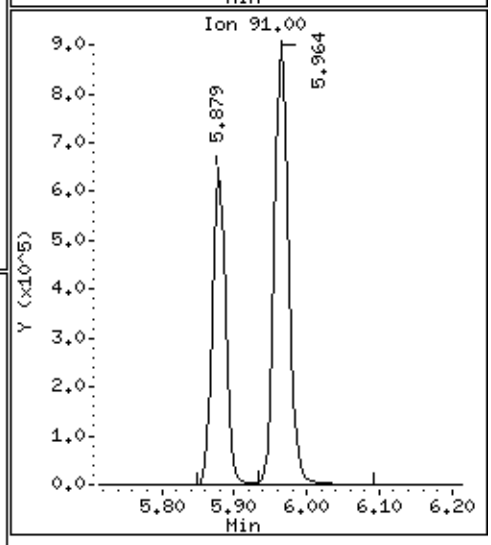
Concentration: 97.6 ug/L

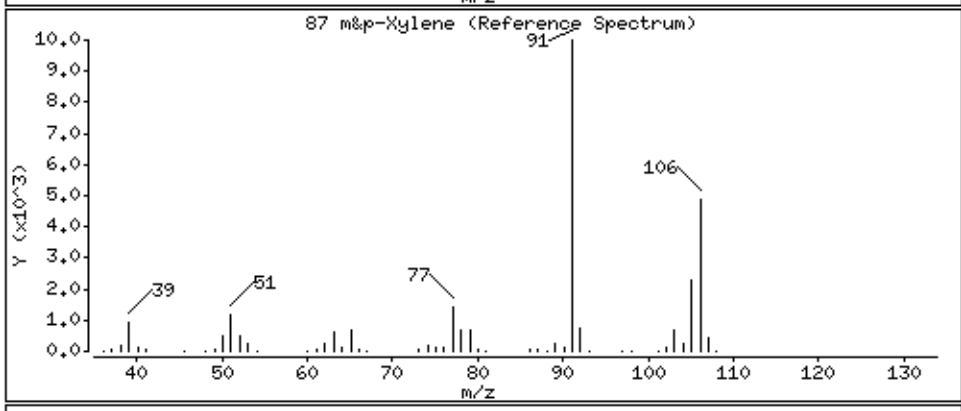
Review Code:

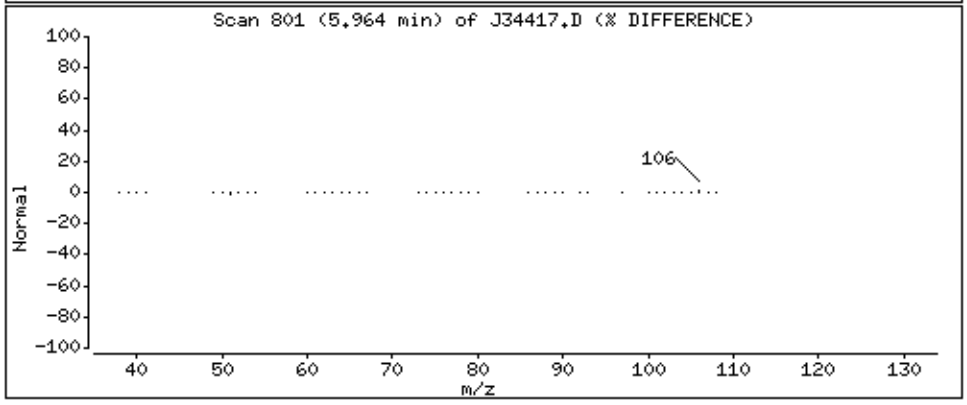












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D

Date : 25-APR-2017 19:07

Client ID: MW-3CMS

Instrument: 70msv6.i

Sample Info: 103081, 15067:1.25

Purge Volume: 5.0

Operator: KGG

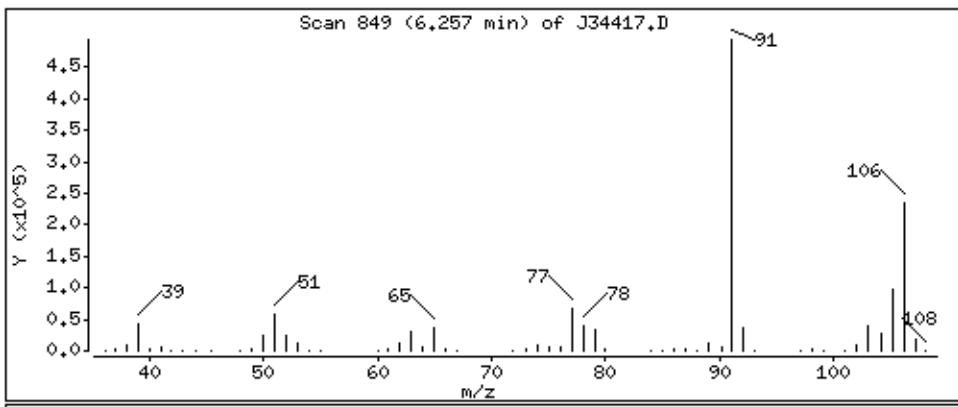
Column phase: RTX-624

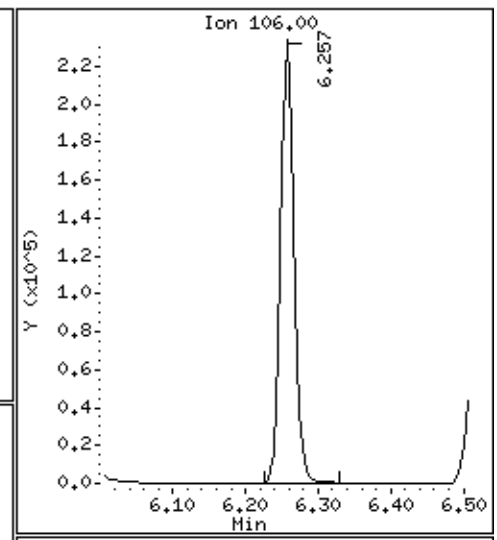
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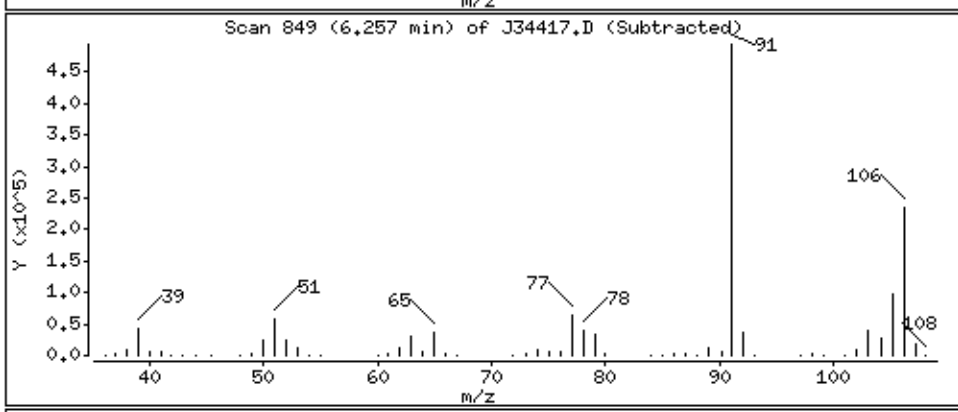
89 o-Xylene

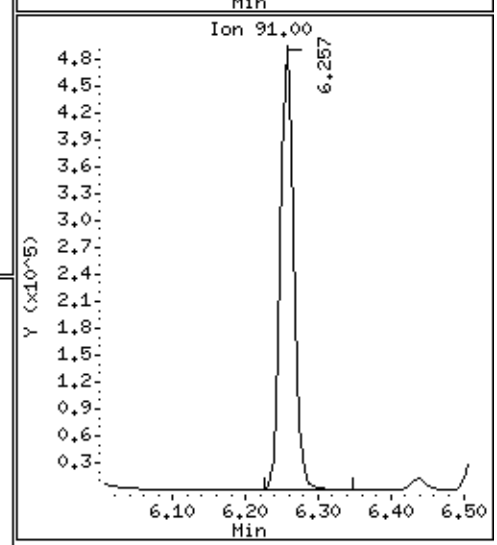
Concentration: 48.3 ug/L

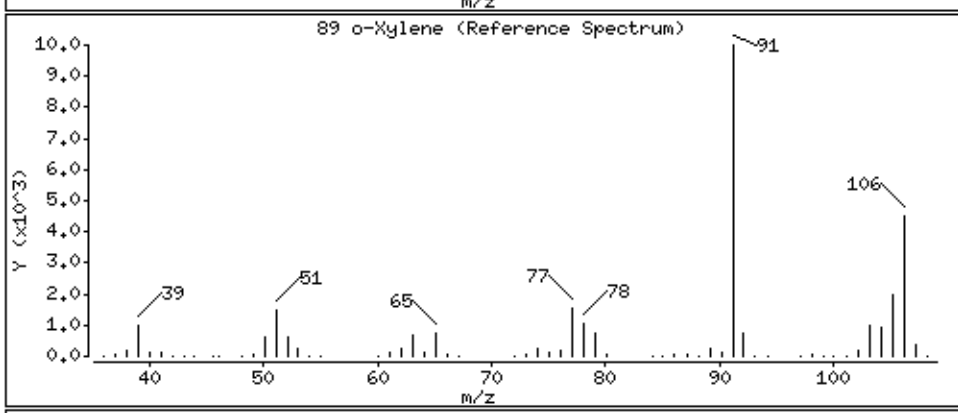
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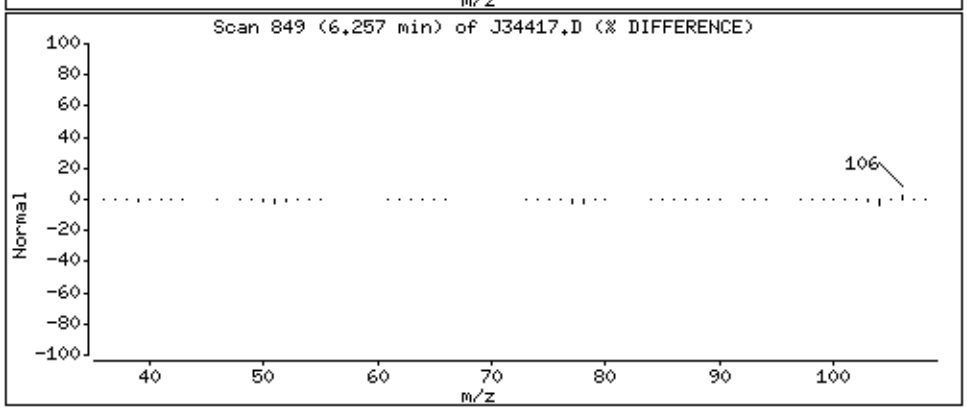












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D

Date : 25-APR-2017 19:07

Client ID: MW-3CMS

Instrument: 70msv6.i

Sample Info: 103081, 15067:1.25

Purge Volume: 5.0

Operator: KGG

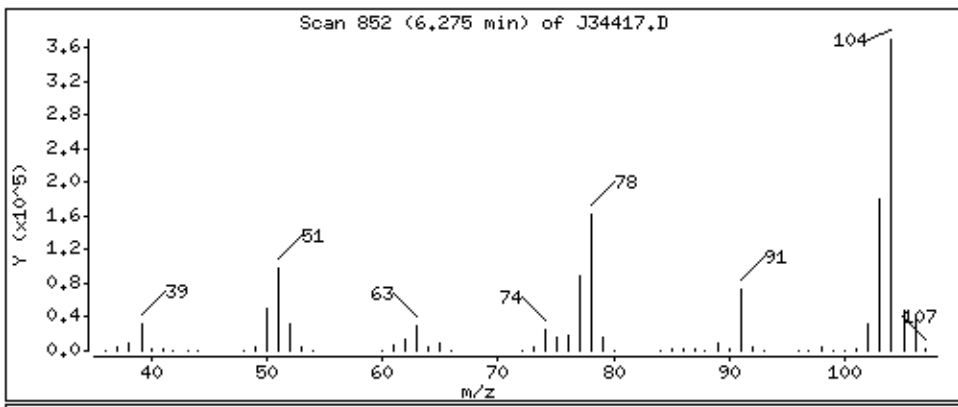
Column phase: RTX-624

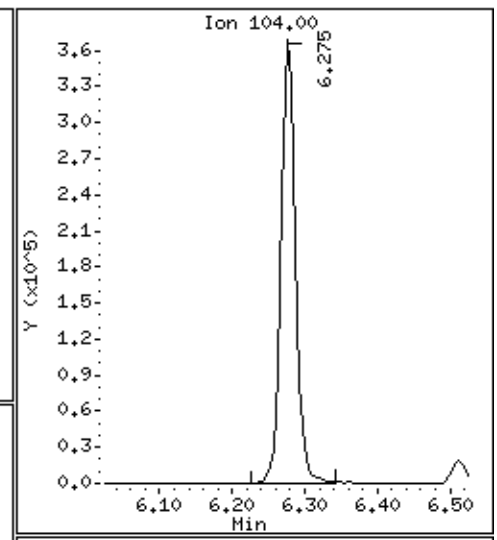
Column diameter: 0.18

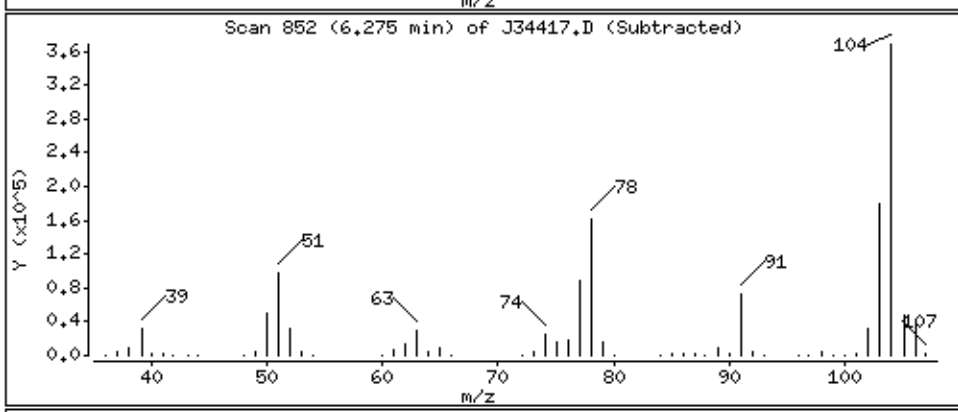
90 Styrene

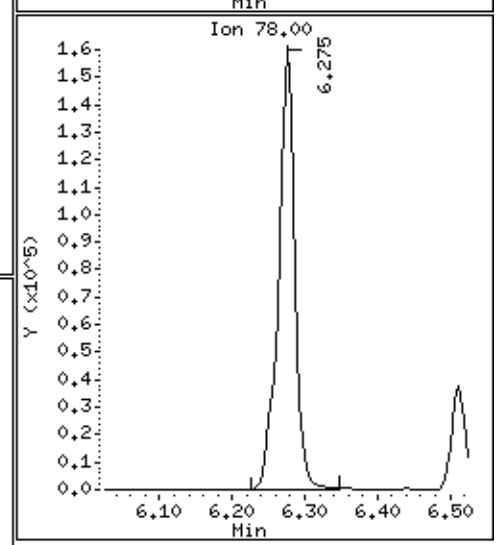
Concentration: 48.0 ug/L

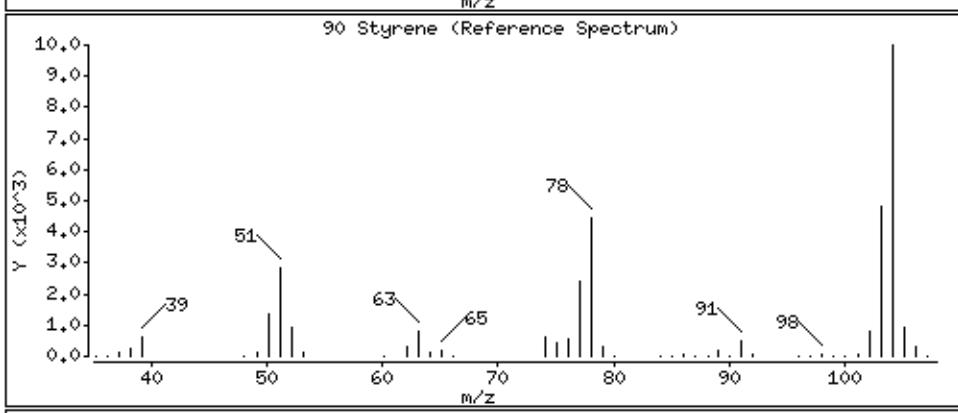
Review Code:

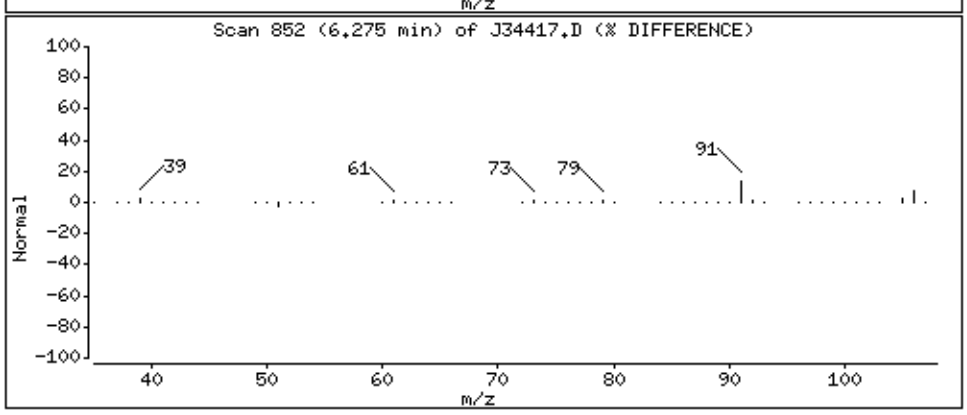












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D

Date : 25-APR-2017 19:07

Client ID: MW-3CMS

Instrument: 70msv6.i

Sample Info: 103081, 15067:1.25

Purge Volume: 5.0

Operator: KGG

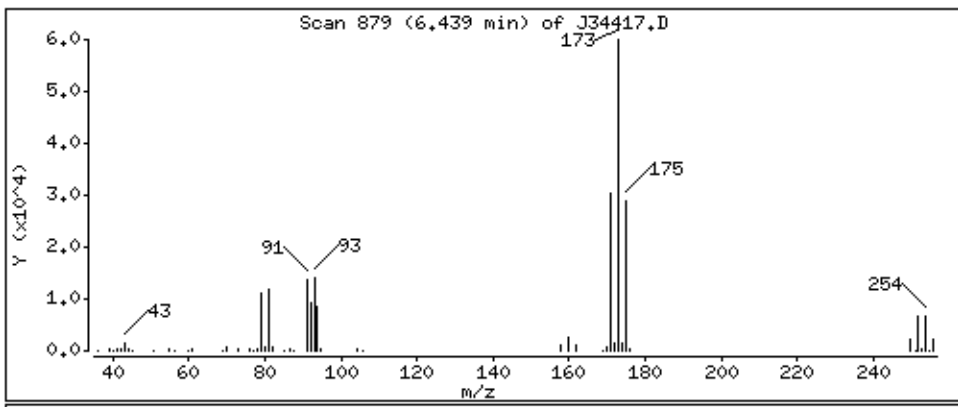
Column phase: RTX-624

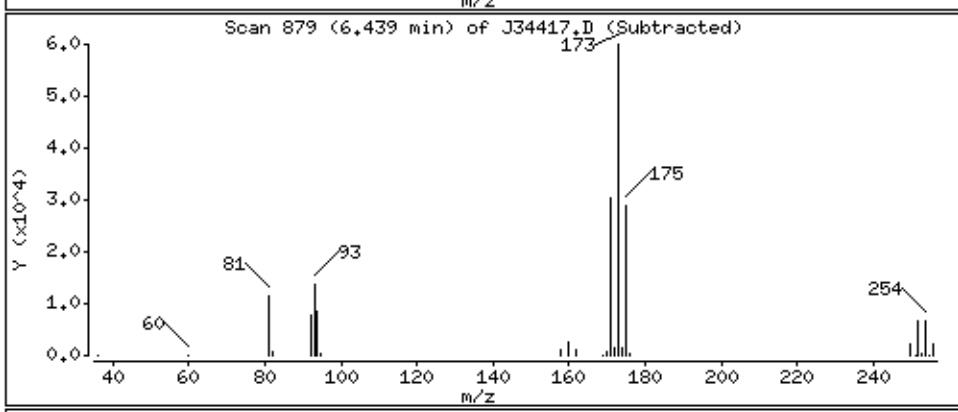
Column diameter: 0.18

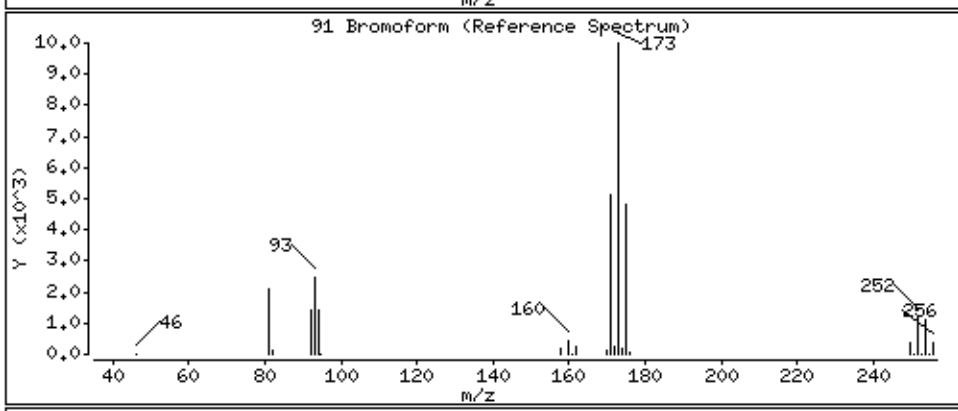
91 Bromoform

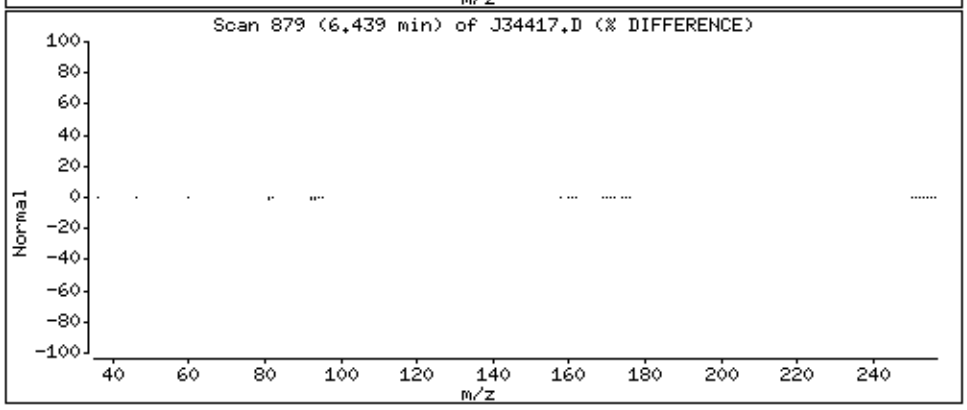
Concentration: 46.6 ug/L

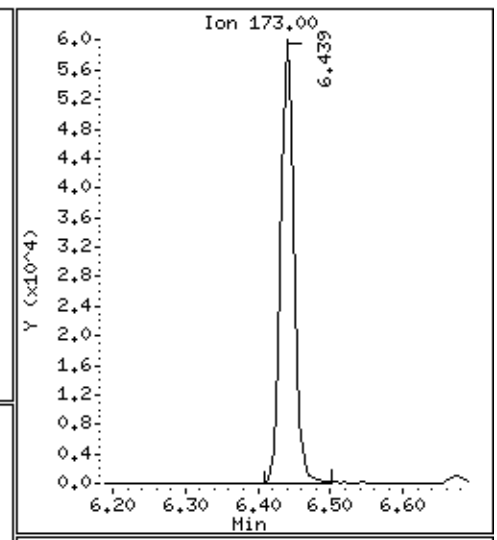
Review Code:

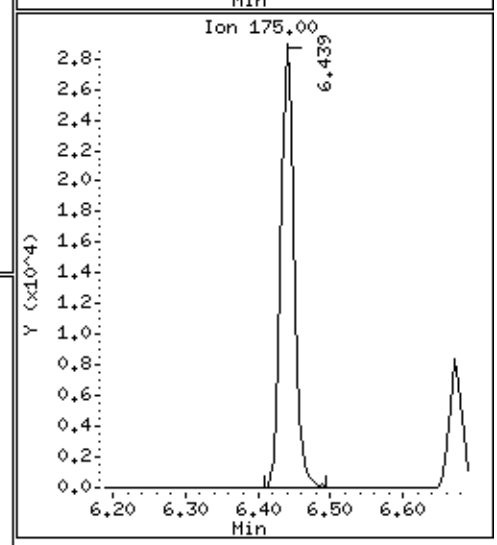












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D

Date : 25-APR-2017 19:07

Client ID: MW-3CMS

Instrument: 70msv6.i

Sample Info: 103081, 15067:1.25

Purge Volume: 5.0

Operator: KGG

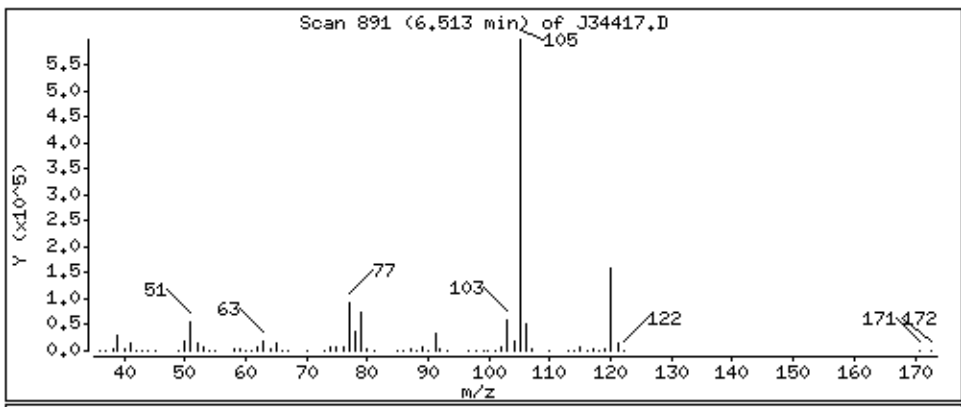
Column phase: RTX-624

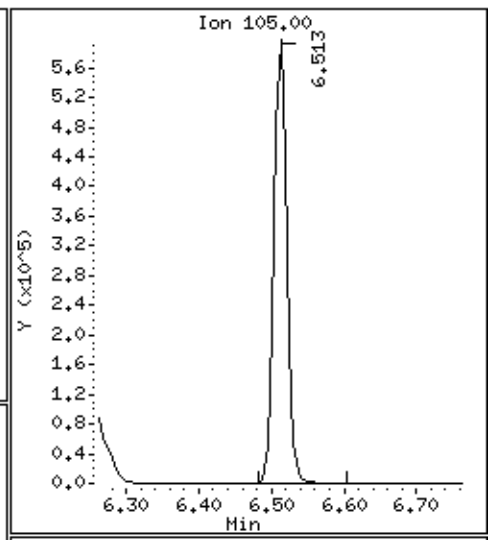
Column diameter: 0.18

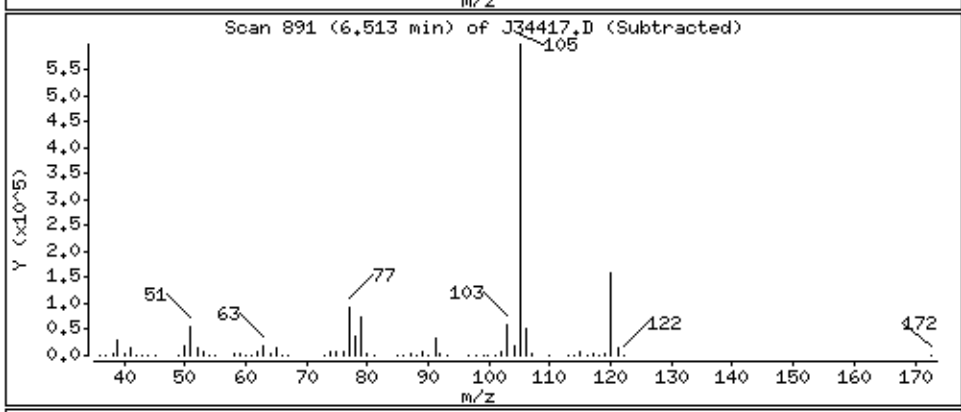
92 Isopropylbenzene (Cumene)

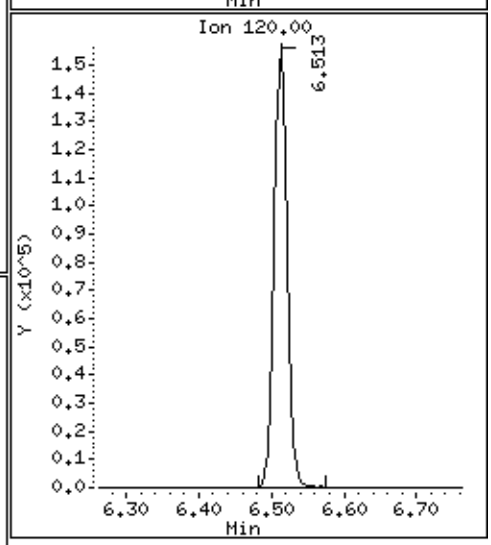
Concentration: 45.4 ug/L

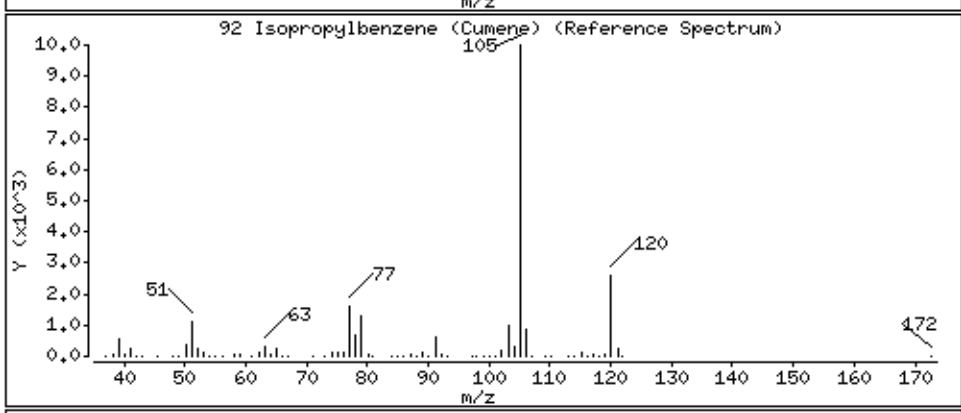
Review Code:

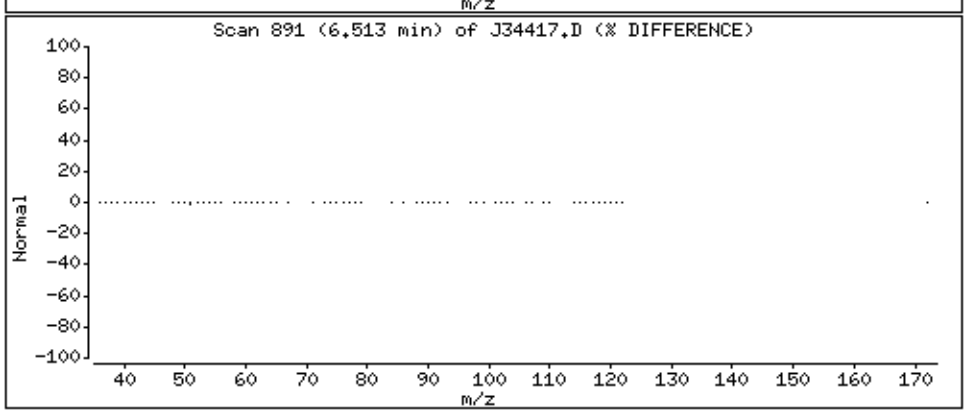












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D

Date : 25-APR-2017 19:07

Client ID: MW-3CMS

Instrument: 70msv6.i

Sample Info: 103081, 15067:1.25

Purge Volume: 5.0

Operator: KGG

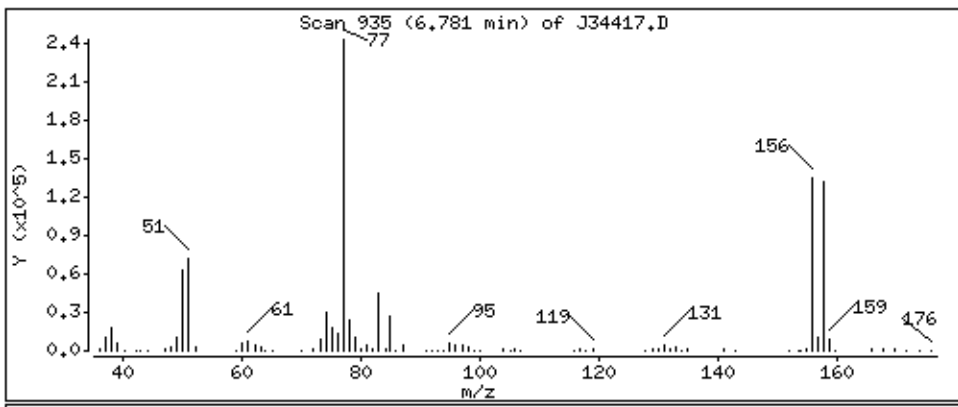
Column phase: RTX-624

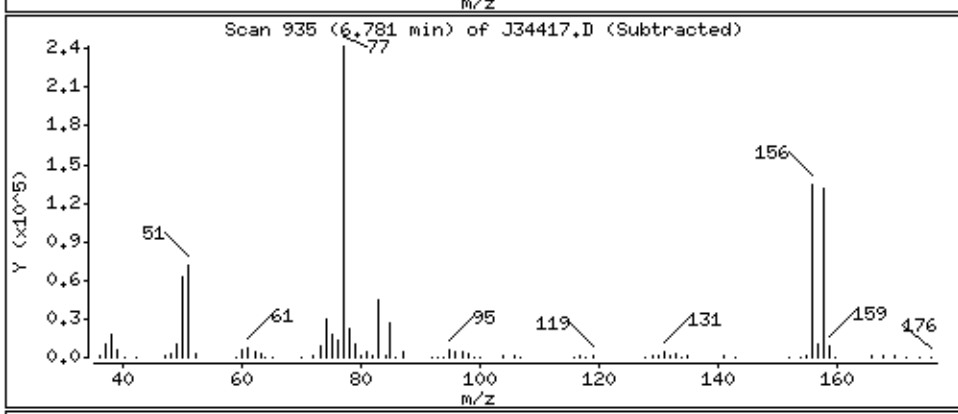
Column diameter: 0.18

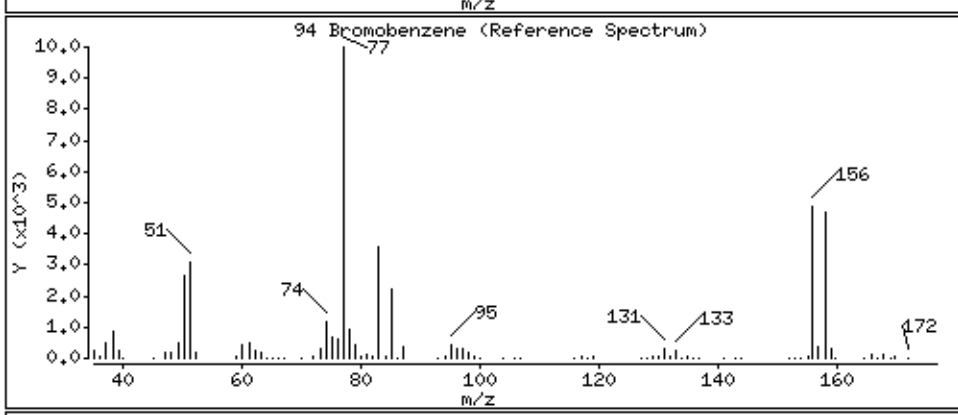
94 Bromobenzene

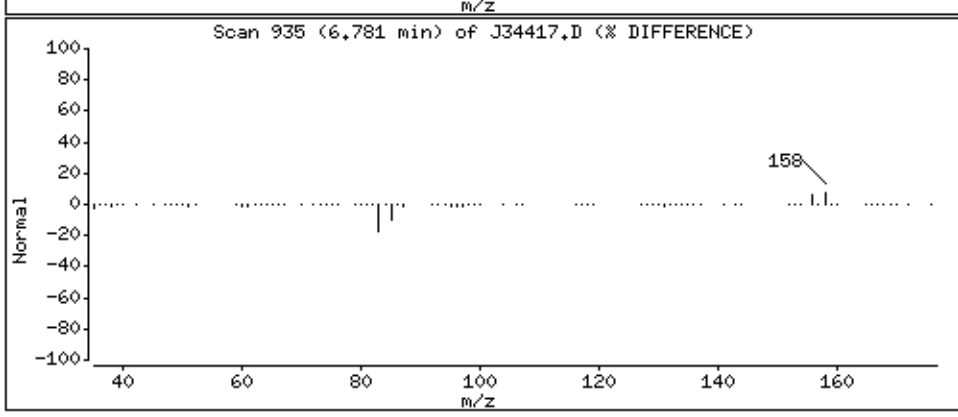
Concentration: 42.4 ug/L

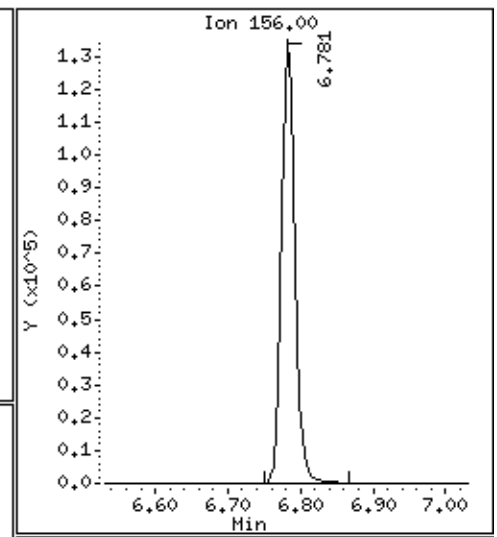
Review Code:

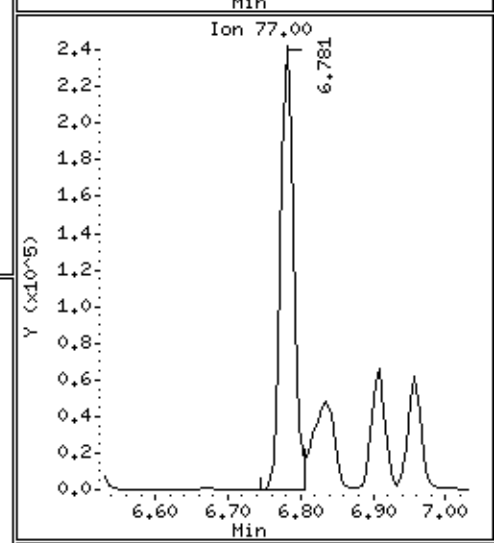


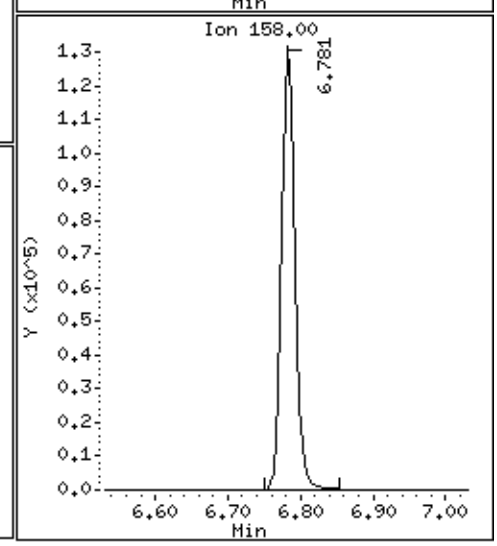












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D

Date : 25-APR-2017 19:07

Client ID: MW-3CMS

Instrument: 70msv6.i

Sample Info: 103081, 15067:1.25

Purge Volume: 5.0

Operator: KGG

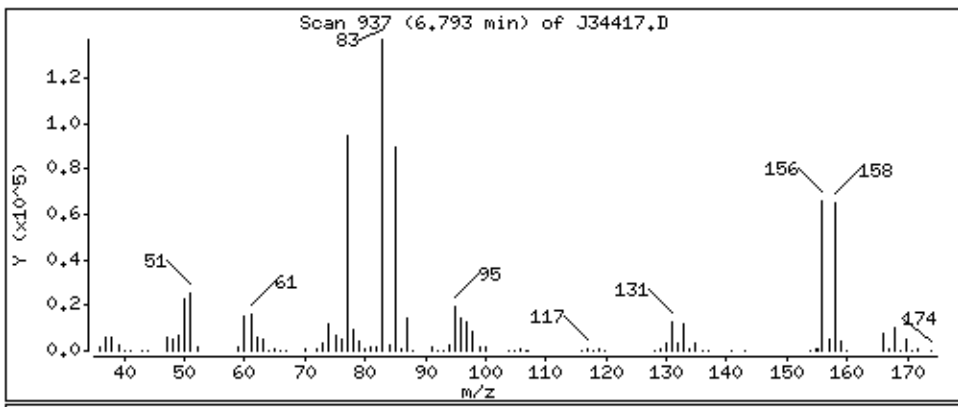
Column phase: RTX-624

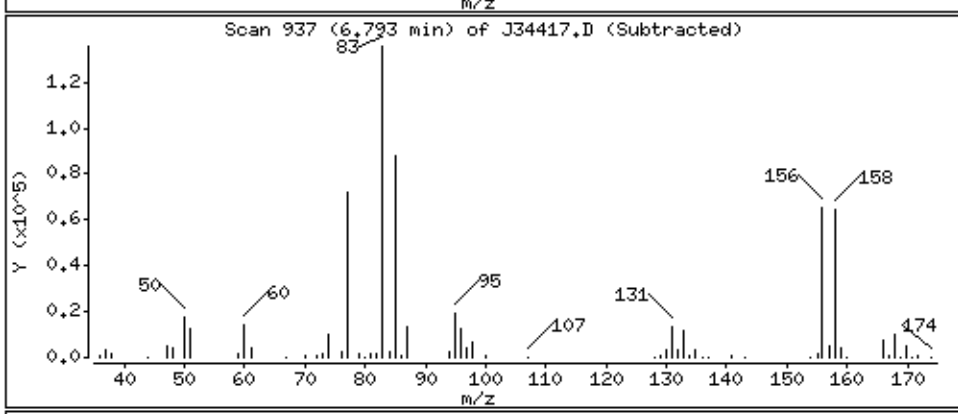
Column diameter: 0.18

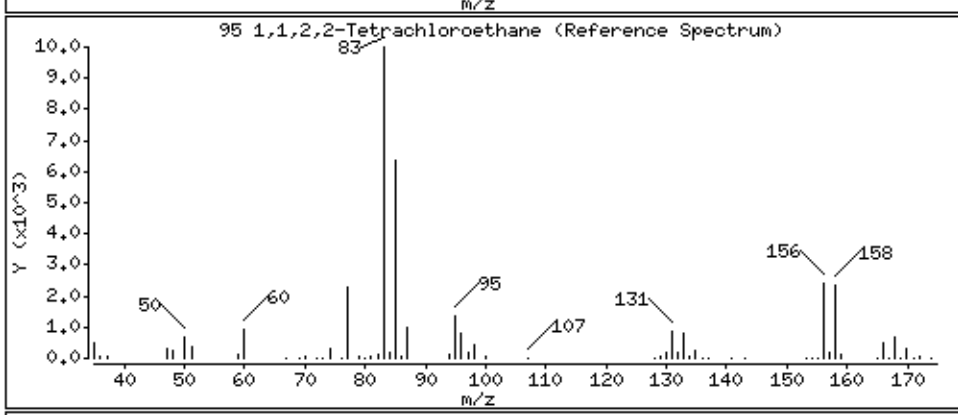
95 1,1,2,2-Tetrachloroethane

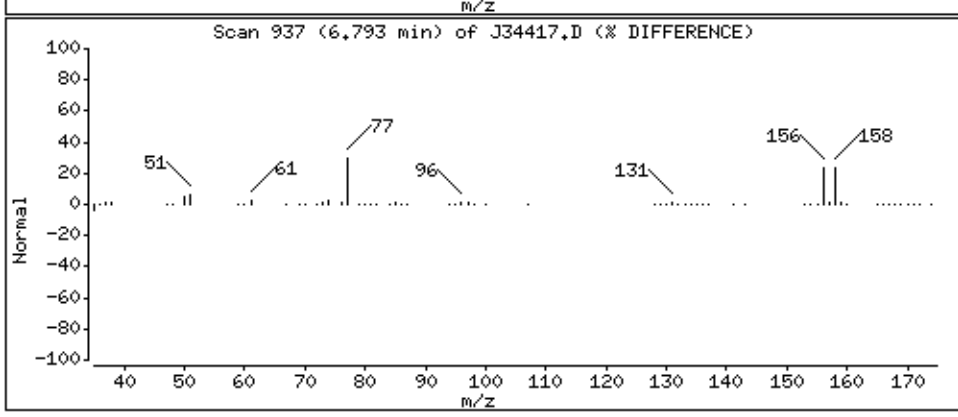
Concentration: 38.3 ug/L

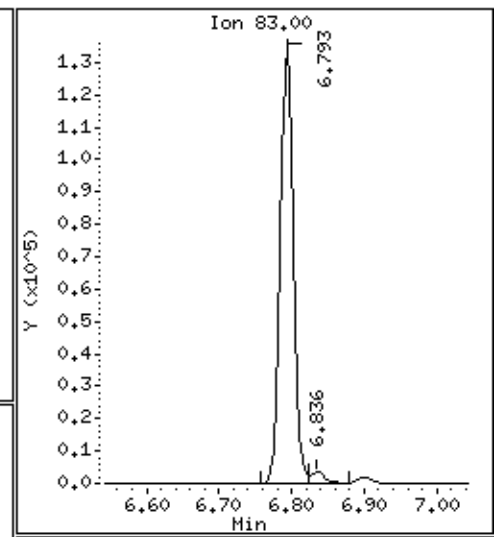
Review Code:

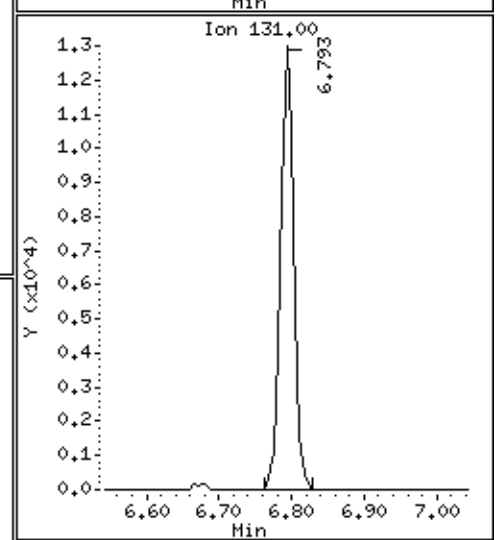


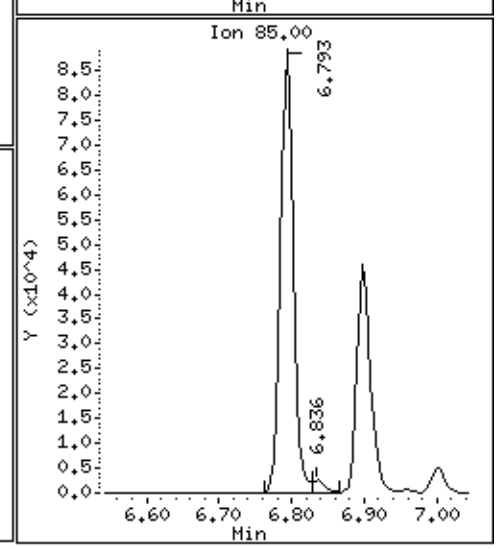












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D

Date : 25-APR-2017 19:07

Client ID: MW-3CMS

Instrument: 70msv6.i

Sample Info: 103081, 15067:1.25

Purge Volume: 5.0

Operator: KGG

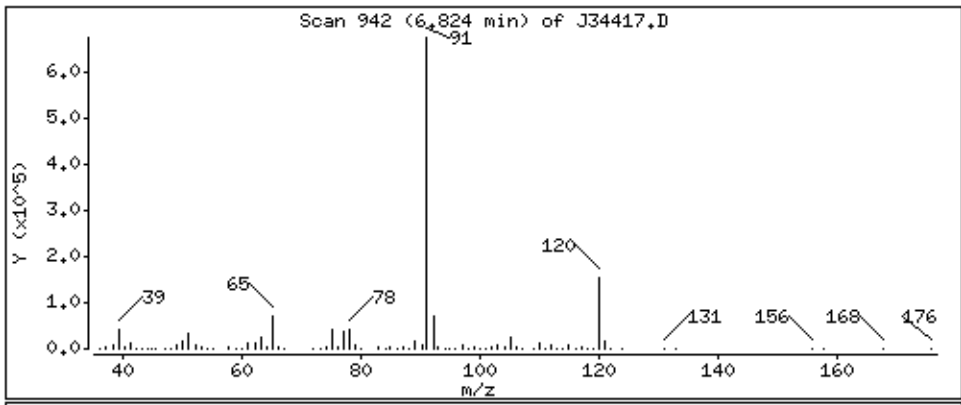
Column phase: RTX-624

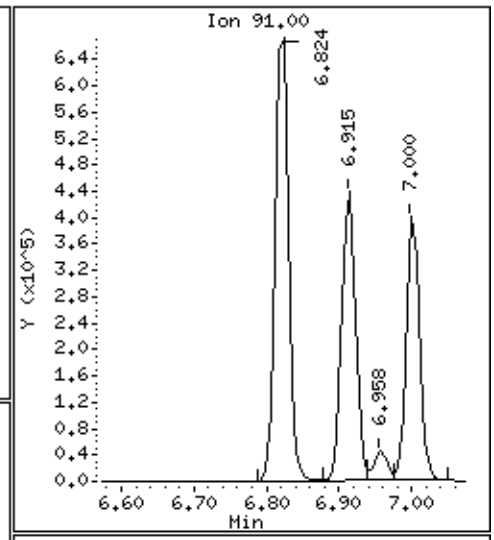
Column diameter: 0.18

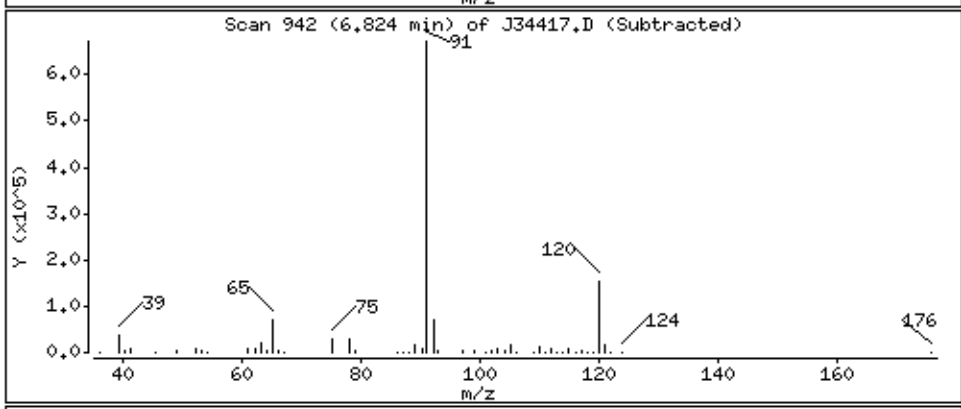
98 n-Propylbenzene

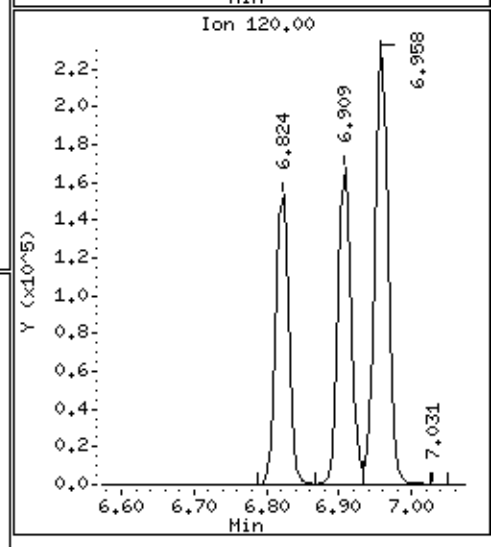
Concentration: 45.1 ug/L

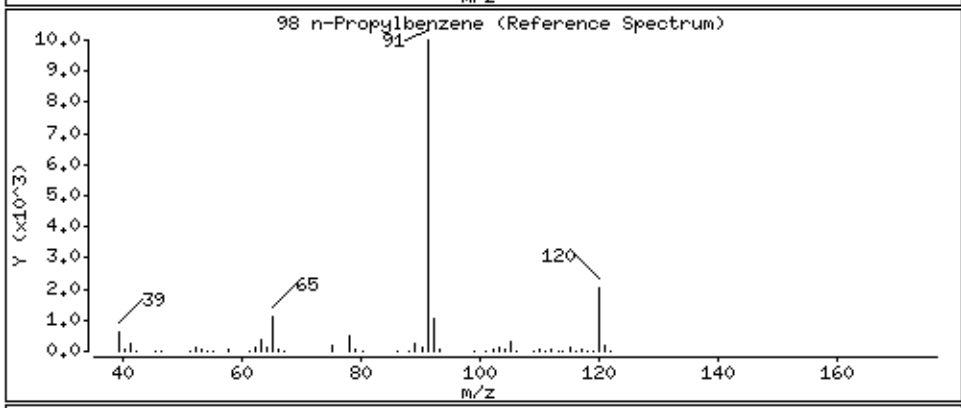
Review Code:

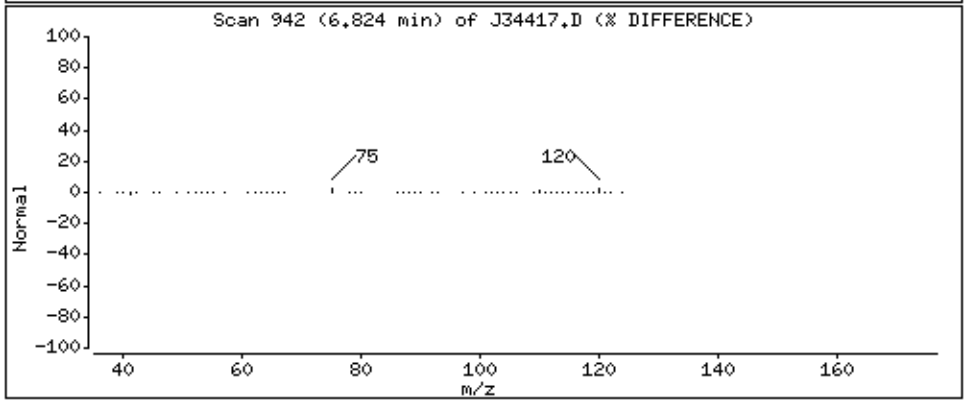












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D

Date : 25-APR-2017 19:07

Client ID: MW-3CMS

Instrument: 70msv6.i

Sample Info: 103081, 15067:1.25

Purge Volume: 5.0

Operator: KGG

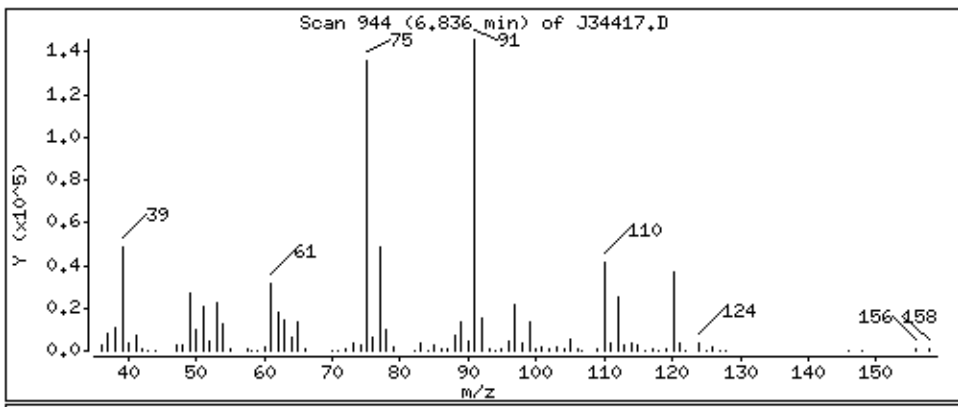
Column phase: RTX-624

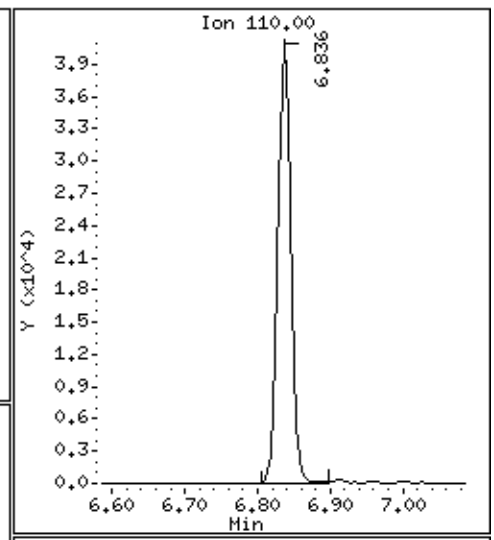
Column diameter: 0.18

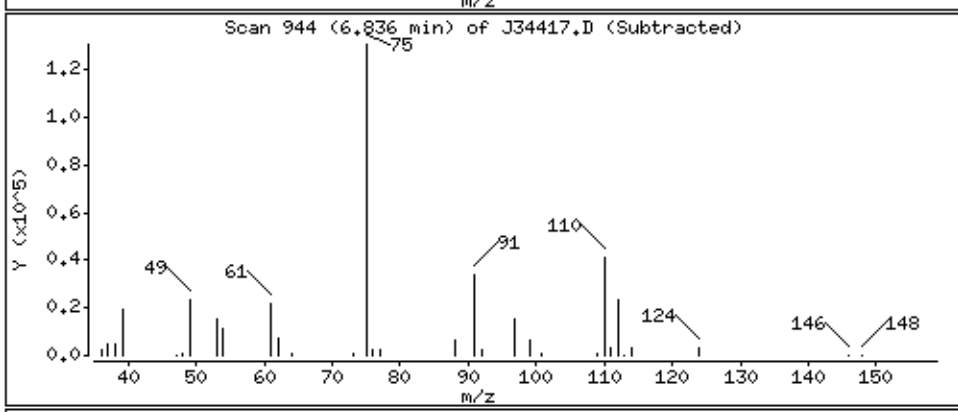
96 1,2,3-Trichloropropane

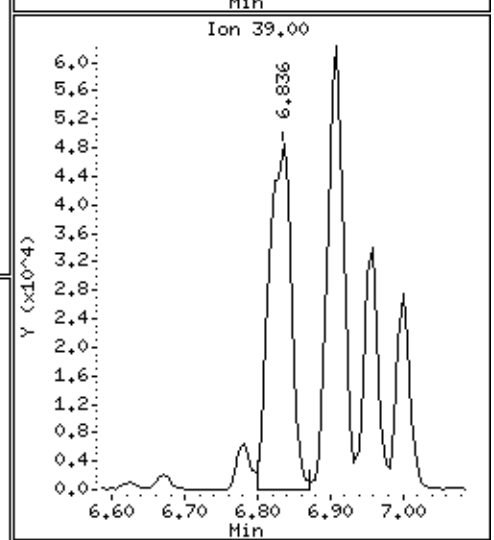
Concentration: 40.4 ug/L

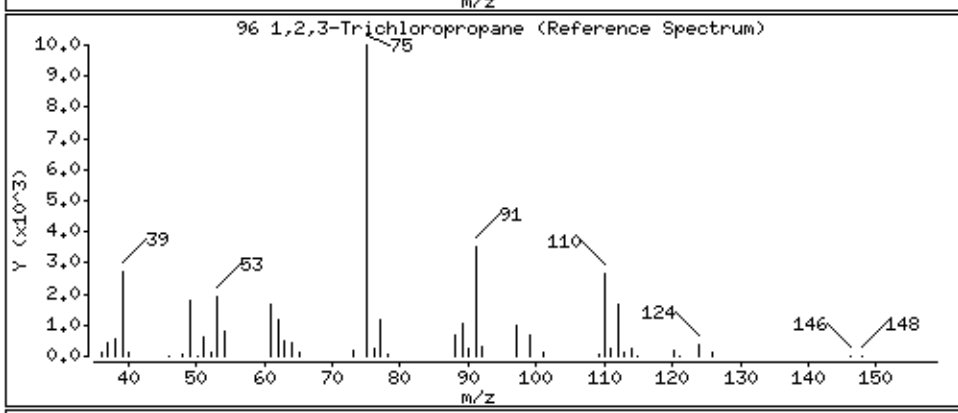
Review Code:

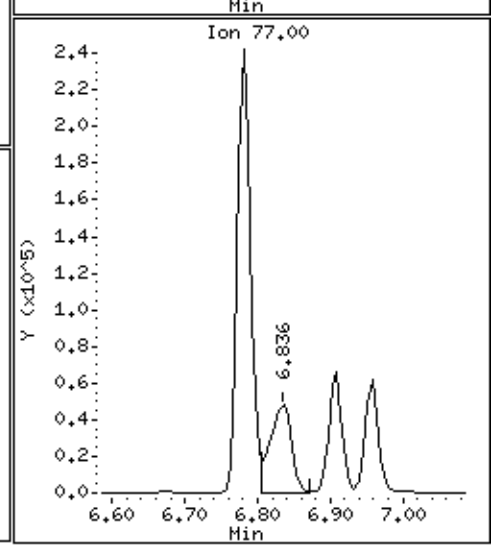


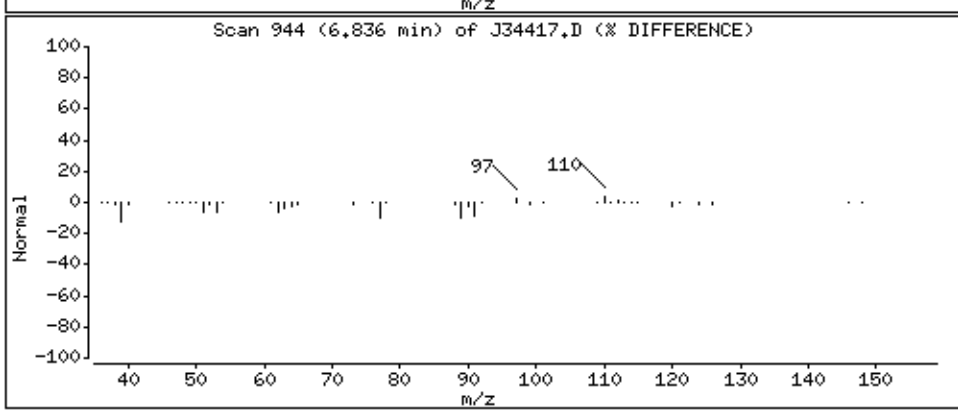












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D

Date : 25-APR-2017 19:07

Client ID: MW-3CMS

Instrument: 70msv6.i

Sample Info: 103081, 15067:1.25

Purge Volume: 5.0

Operator: KGG

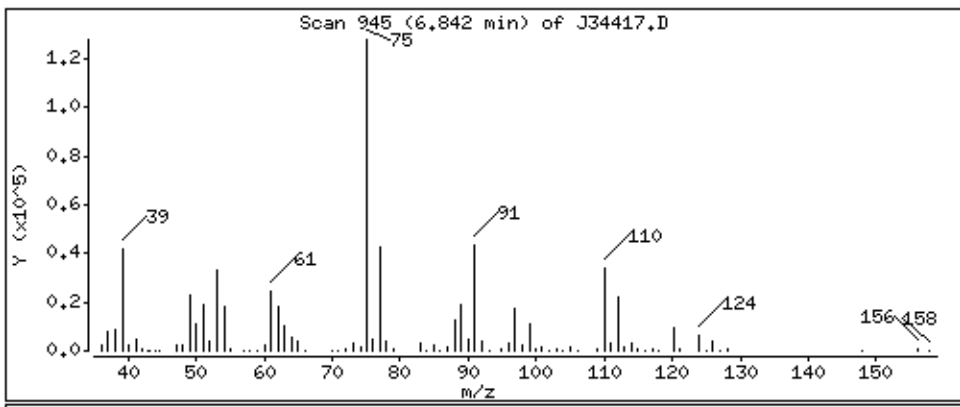
Column phase: RTX-624

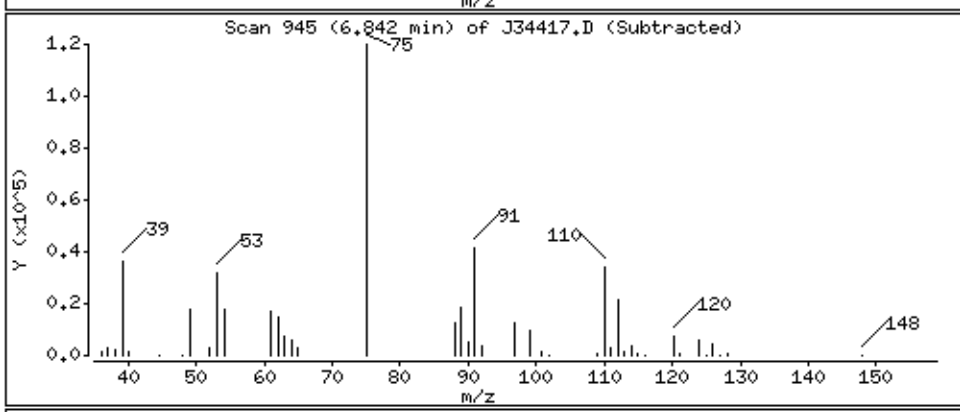
Column diameter: 0.18

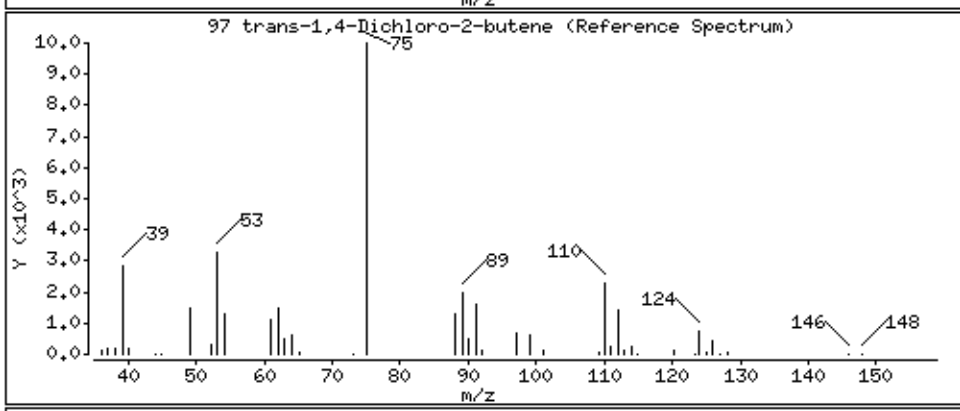
97 trans-1,4-Dichloro-2-butene

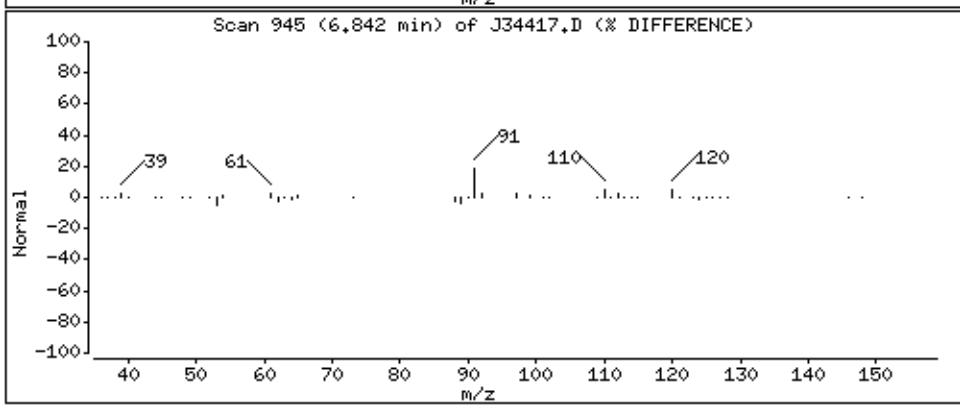
Concentration: 34.8 ug/L

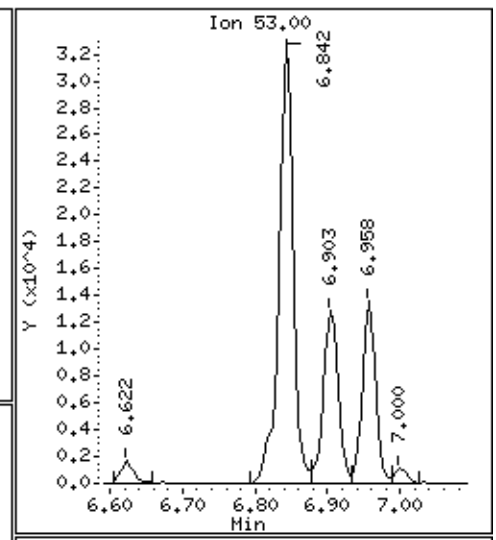
Review Code:

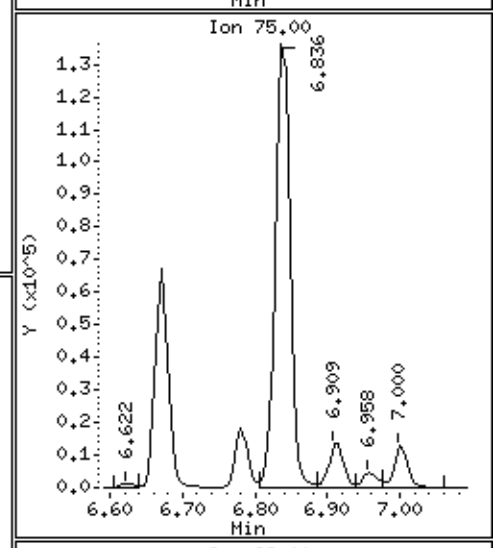


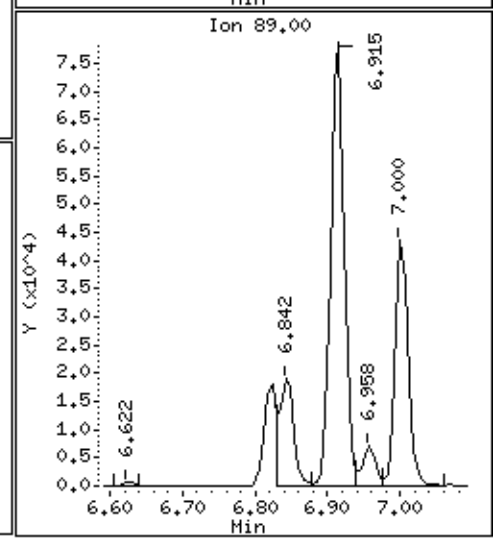












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D

Date : 25-APR-2017 19:07

Client ID: MW-3CMS

Instrument: 70msv6.i

Sample Info: 103081, 15067:1.25

Purge Volume: 5.0

Operator: KGG

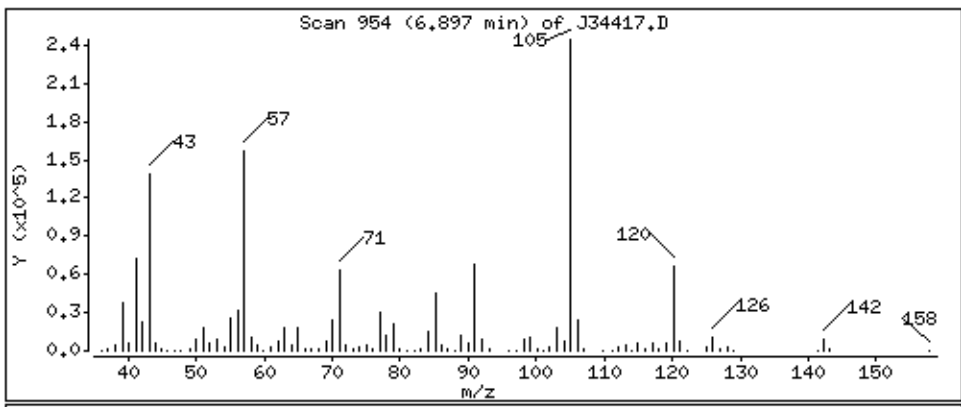
Column phase: RTX-624

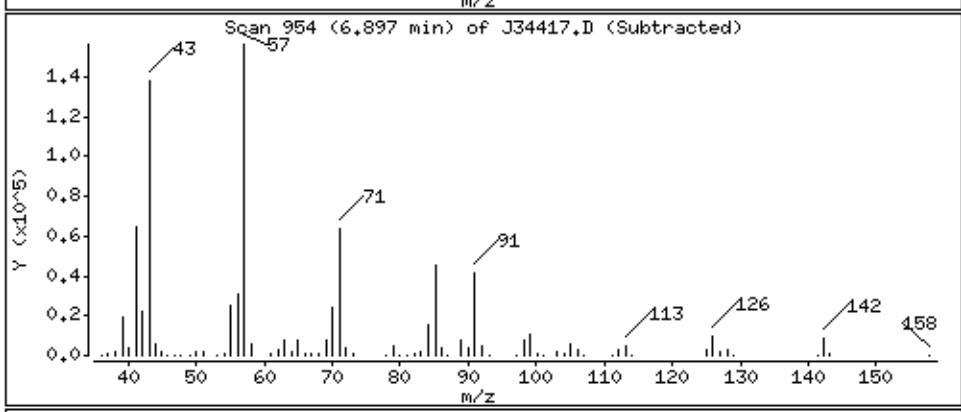
Column diameter: 0.18

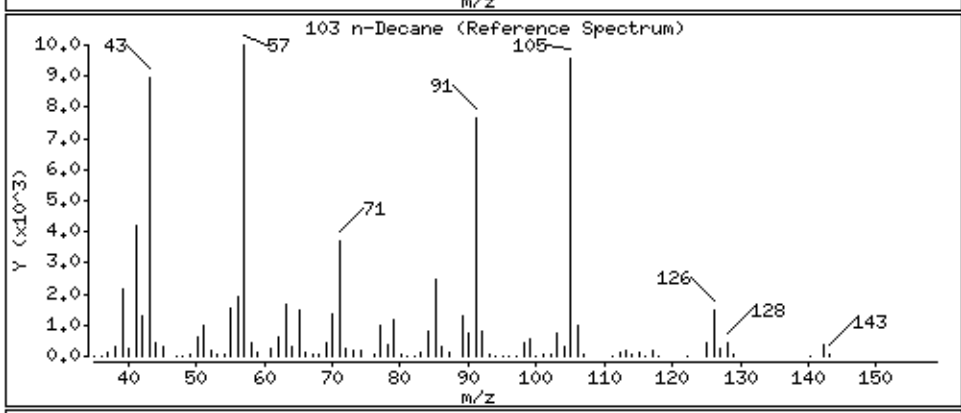
103 n-Decane

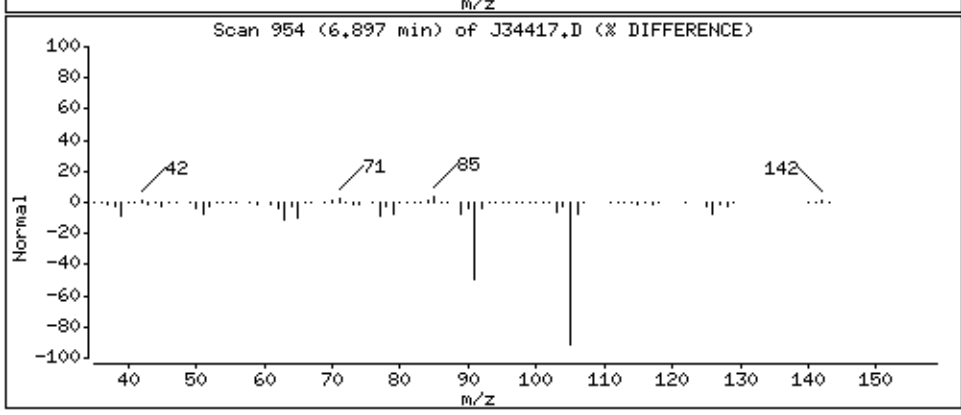
Concentration: 52.9 ug/L

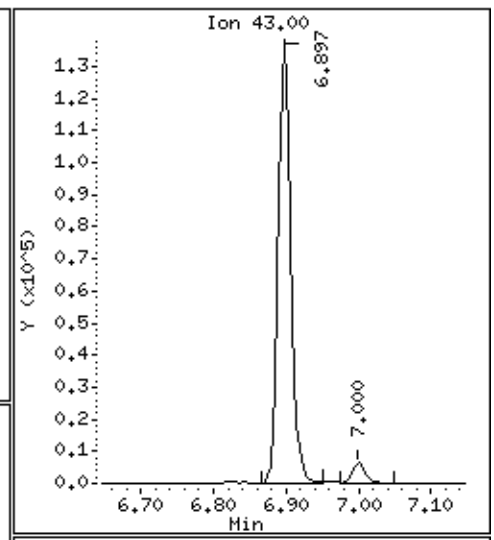
Review Code:

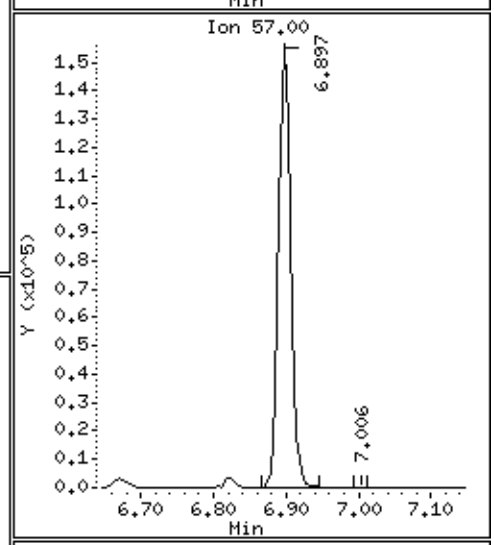


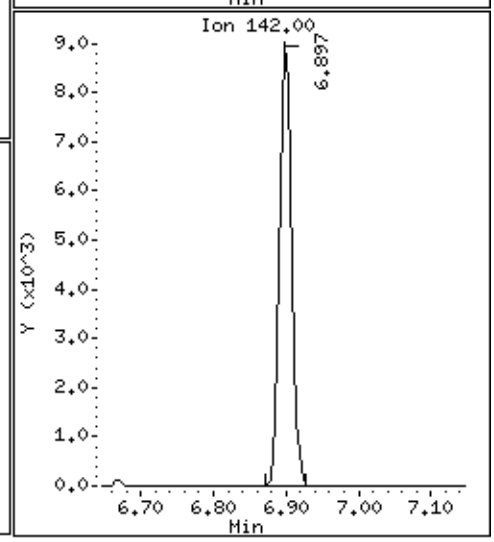












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D

Date : 25-APR-2017 19:07

Client ID: MW-3CMS

Instrument: 70msv6.i

Sample Info: 103081, 15067:1.25

Purge Volume: 5.0

Operator: KGG

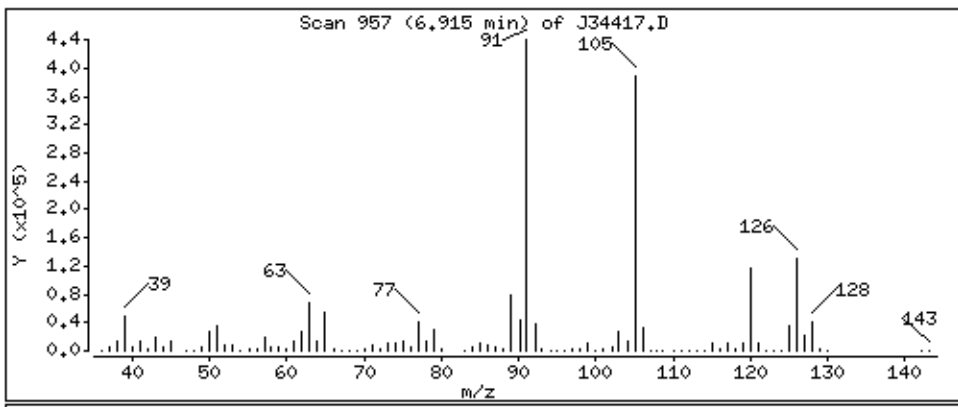
Column phase: RTX-624

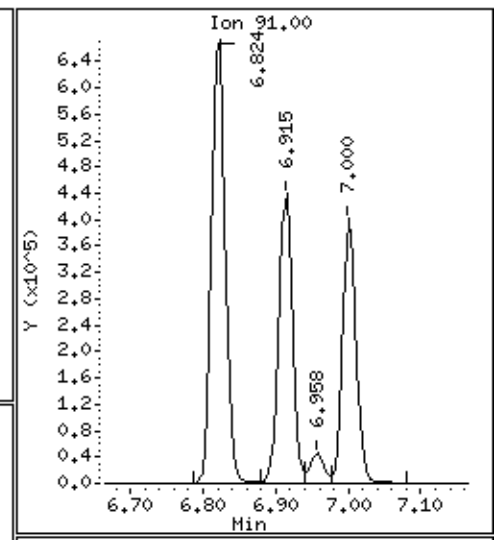
Column diameter: 0.18

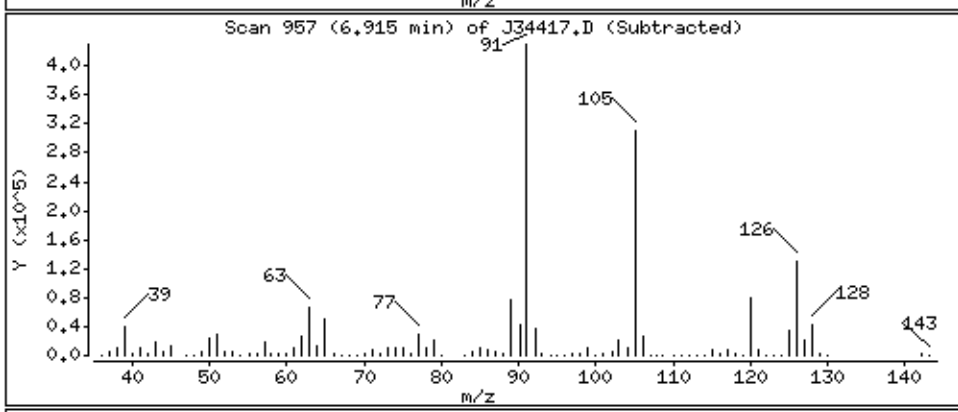
99 2-Chlorotoluene

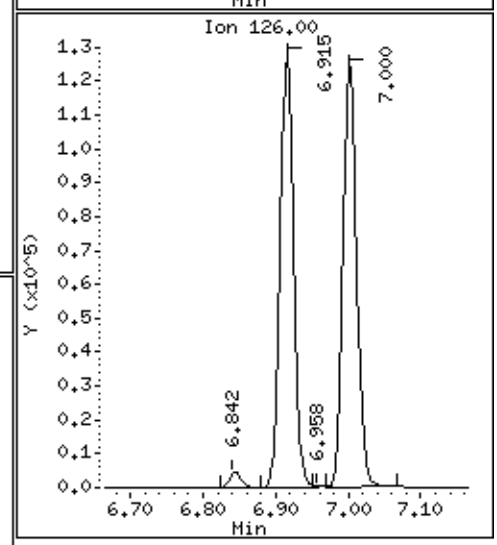
Concentration: 42.1 ug/L

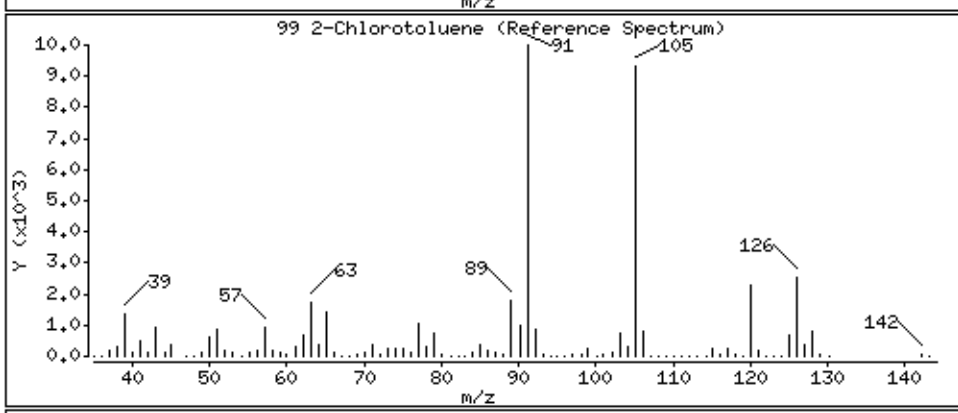
Review Code:

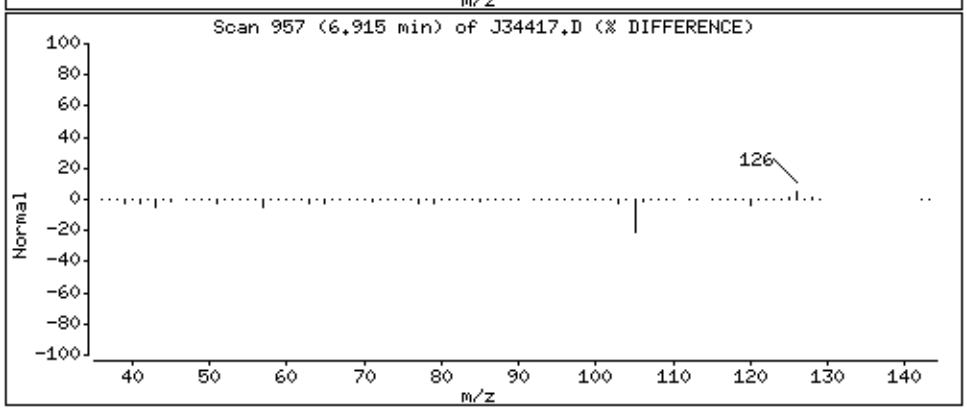












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D

Date : 25-APR-2017 19:07

Client ID: MW-3CMS

Instrument: 70msv6.i

Sample Info: 103081, 15067:1.25

Purge Volume: 5.0

Operator: KGG

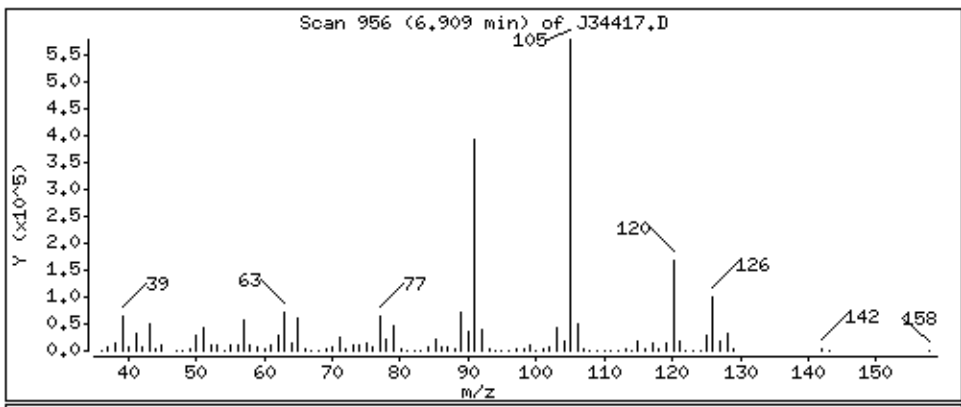
Column phase: RTX-624

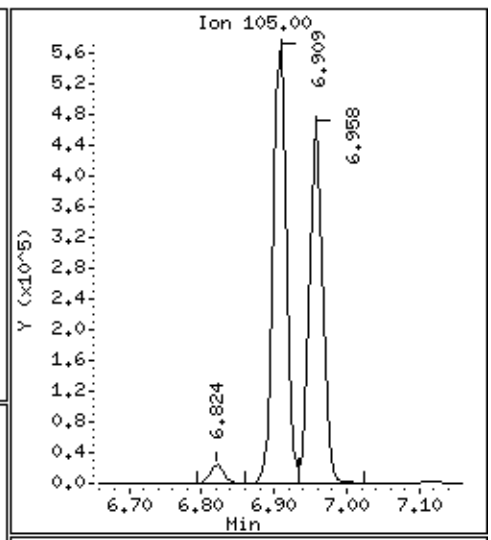
Column diameter: 0.18

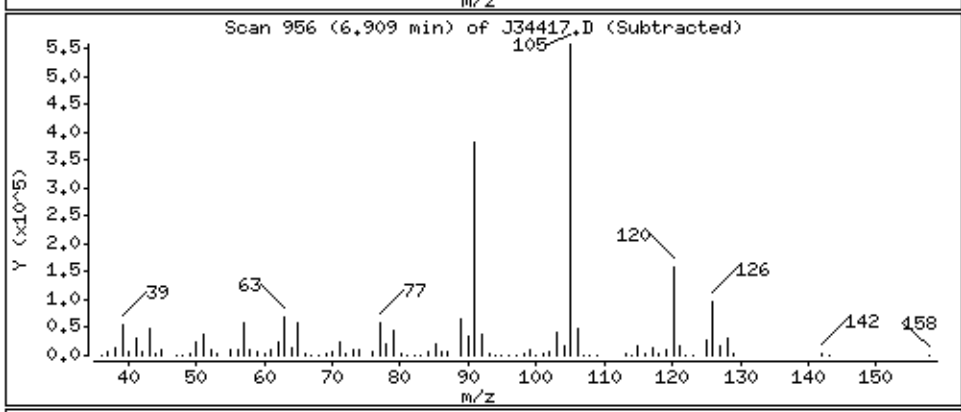
100 4-Ethyltoluene

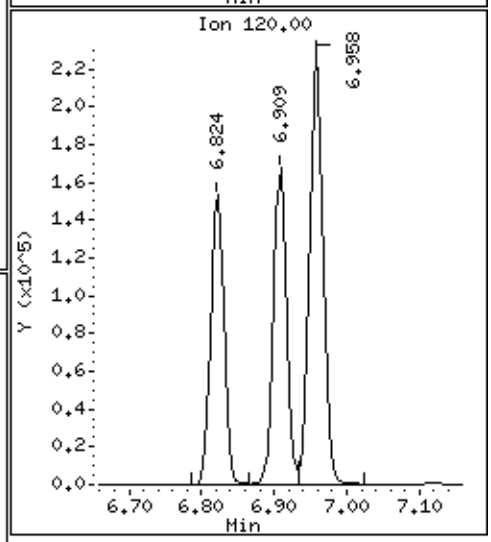
Concentration: 45.2 ug/L

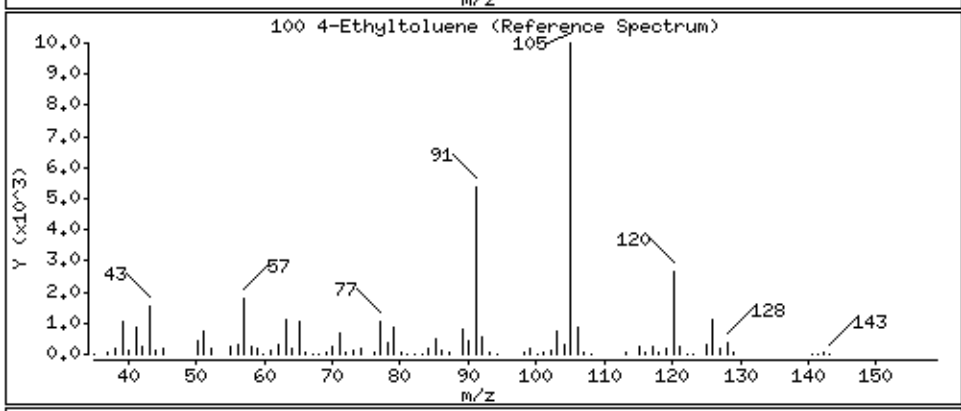
Review Code:

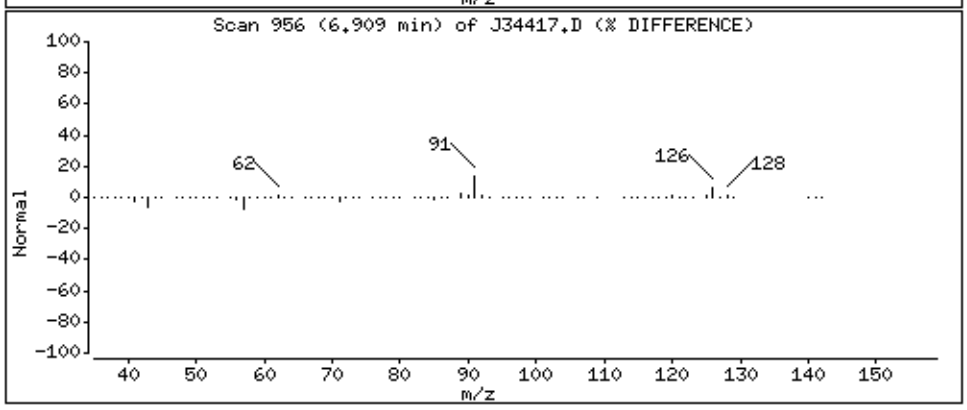












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D

Date : 25-APR-2017 19:07

Client ID: MW-3CMS

Instrument: 70msv6.i

Sample Info: 103081, 15067:1.25

Purge Volume: 5.0

Operator: KGG

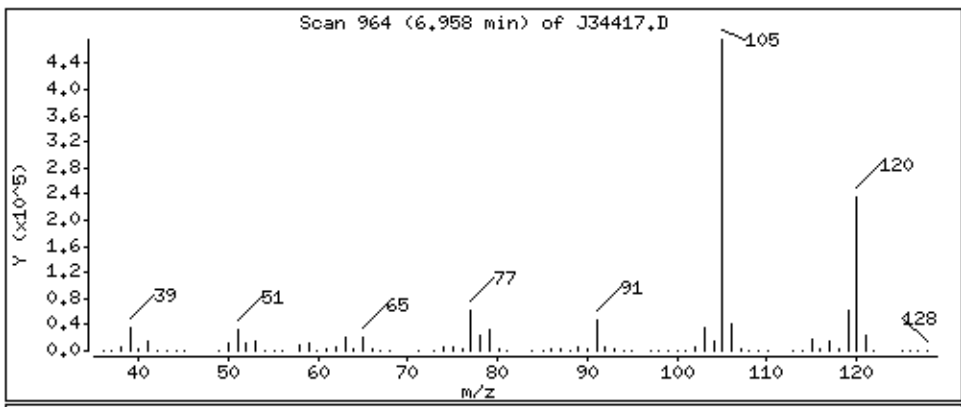
Column phase: RTX-624

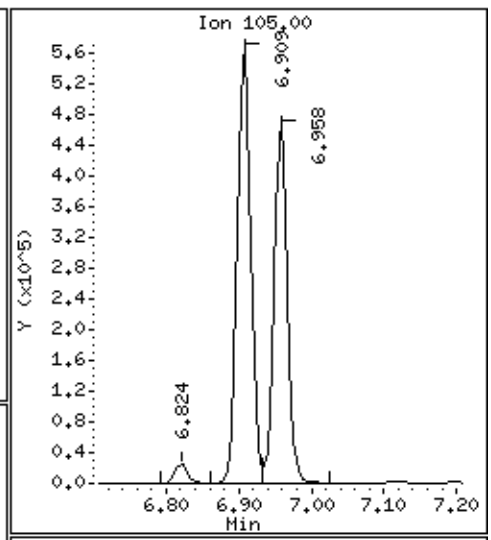
Column diameter: 0.18

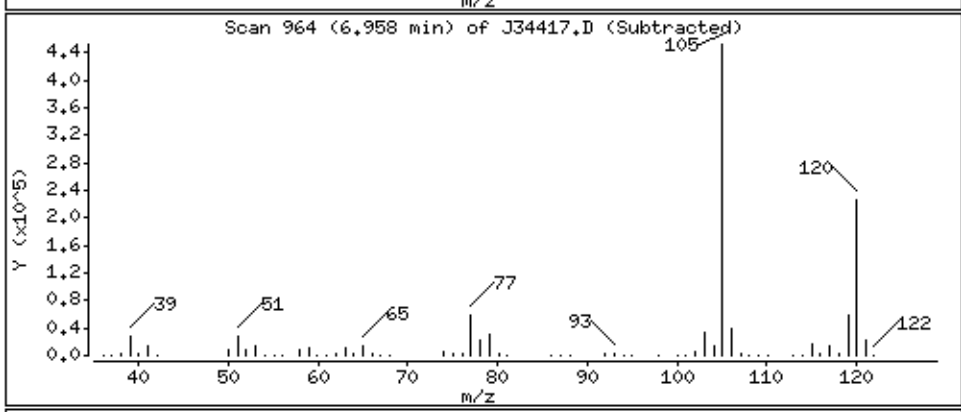
101 1,3,5-Trimethylbenzene

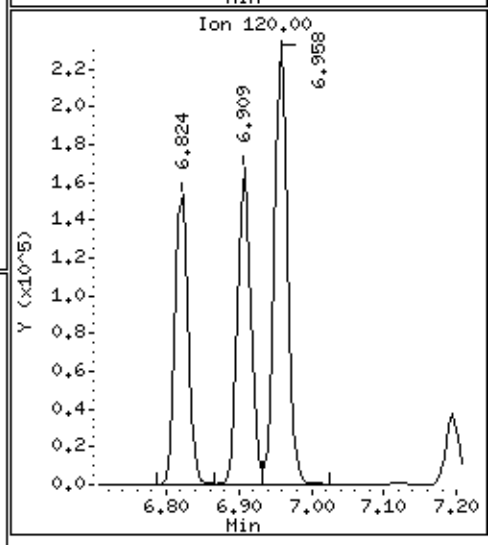
Concentration: 44.7 ug/L

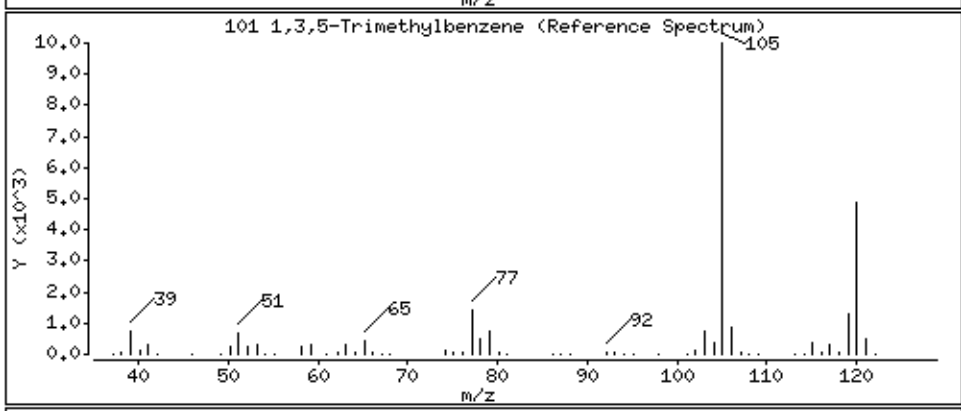
Review Code:

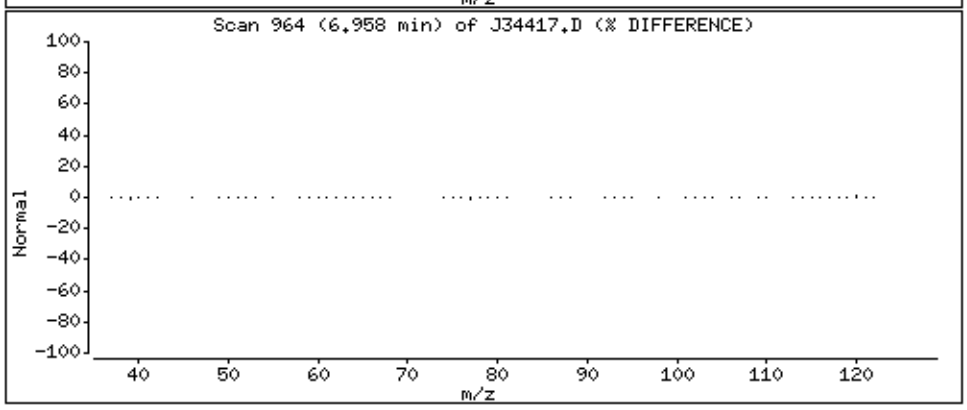












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D

Date : 25-APR-2017 19:07

Client ID: MW-3CMS

Instrument: 70msv6.i

Sample Info: 103081, 15067:1.25

Purge Volume: 5.0

Operator: KGG

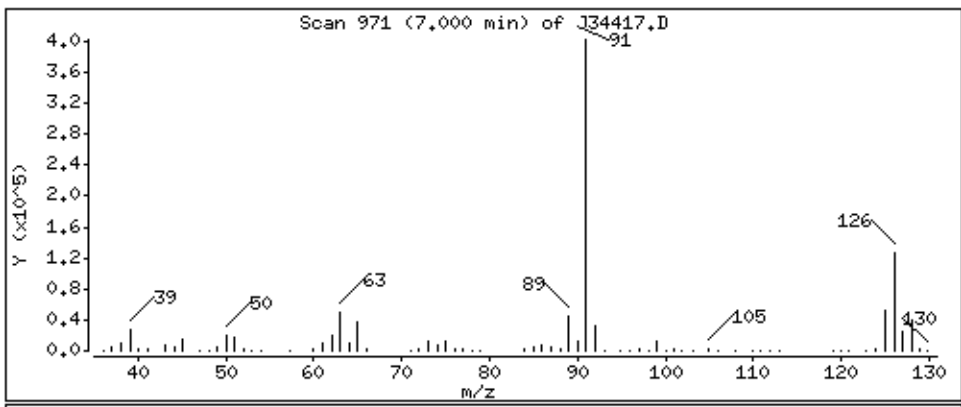
Column phase: RTX-624

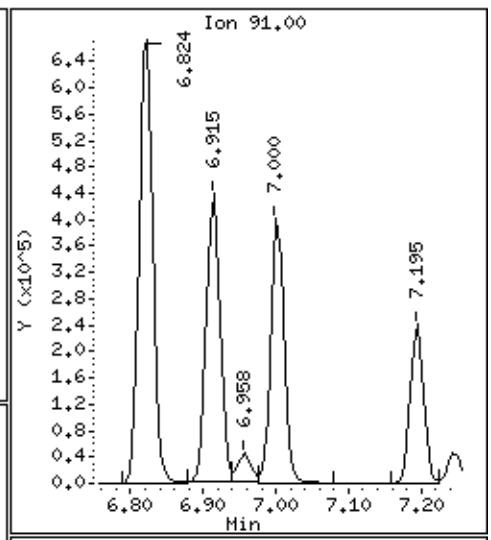
Column diameter: 0.18

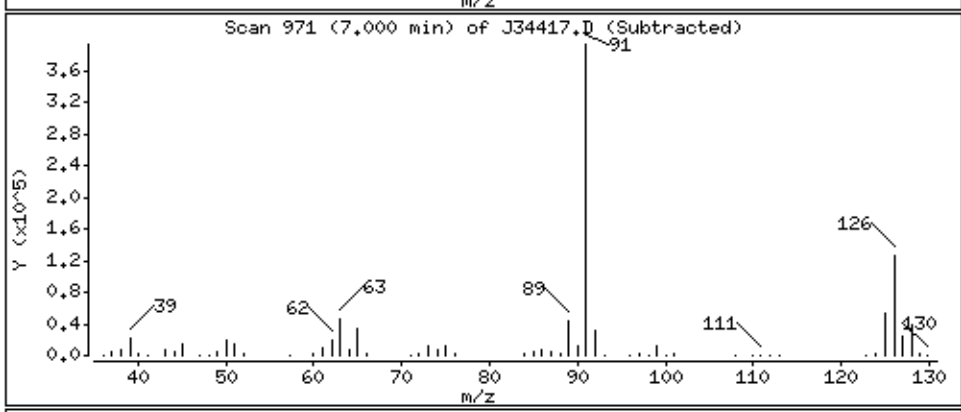
102 4-Chlorotoluene

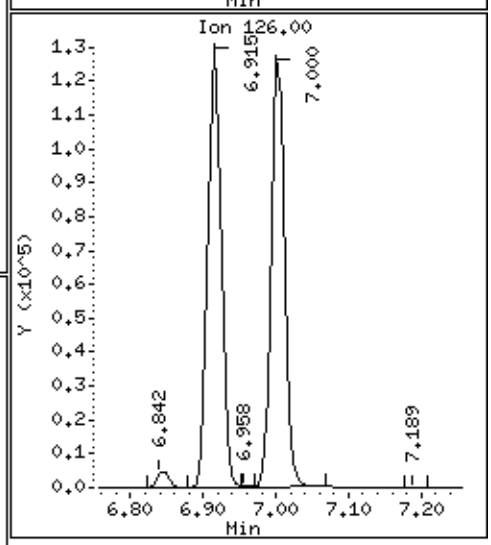
Concentration: 40.2 ug/L

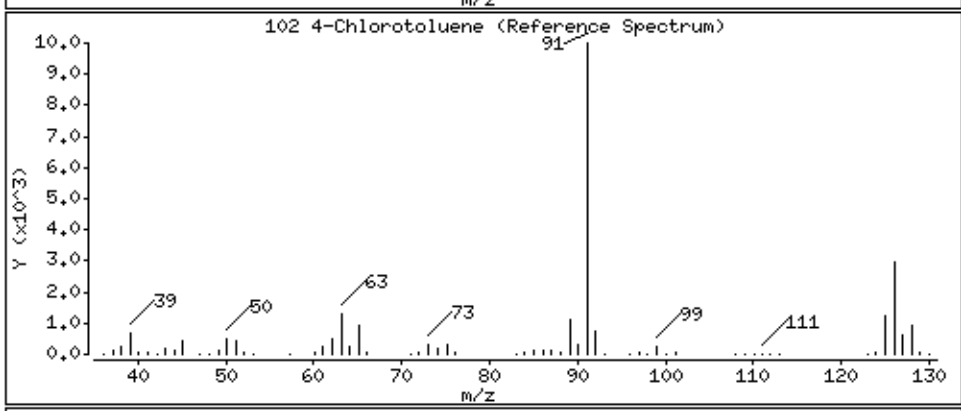
Review Code:

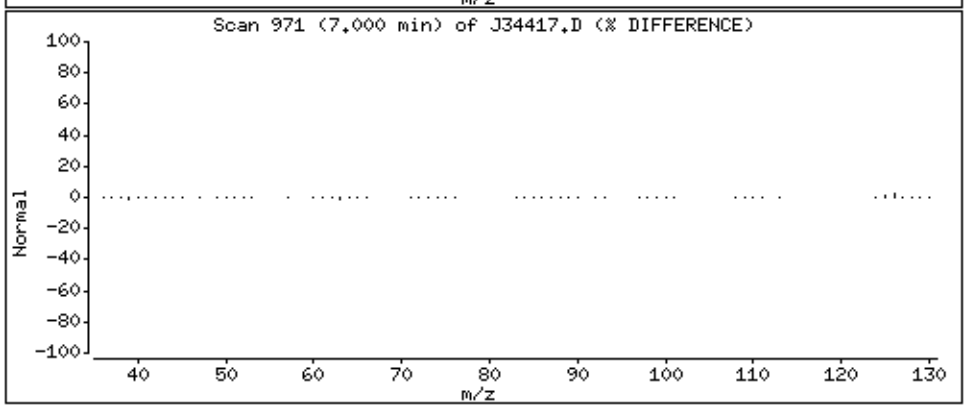












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D

Date : 25-APR-2017 19:07

Client ID: MW-3CMS

Instrument: 70msv6.i

Sample Info: 103081, 15067:1.25

Purge Volume: 5.0

Operator: KGG

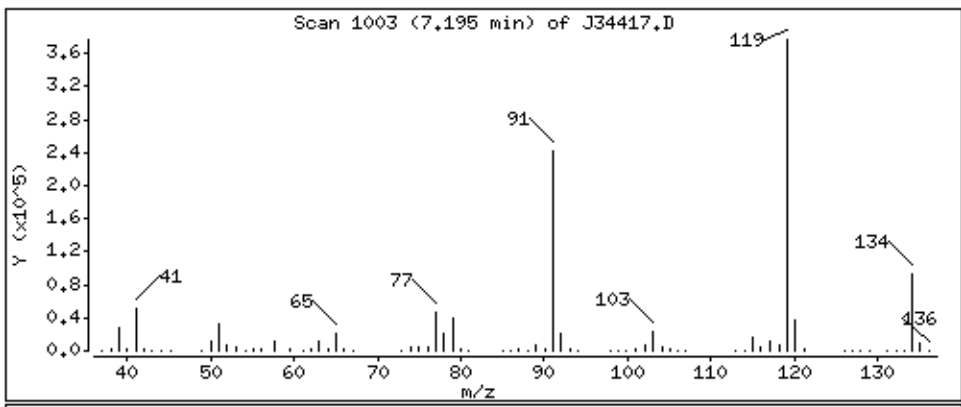
Column phase: RTX-624

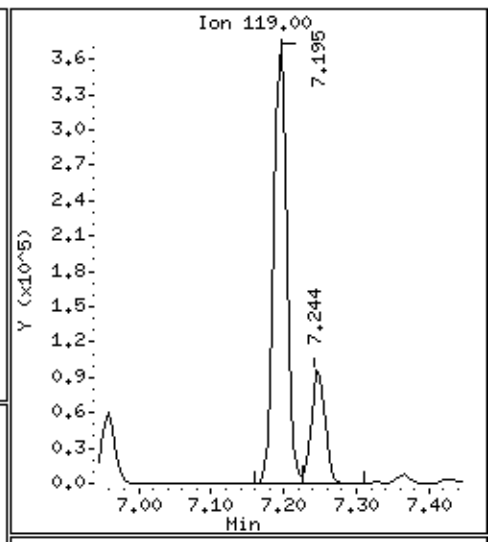
Column diameter: 0.18

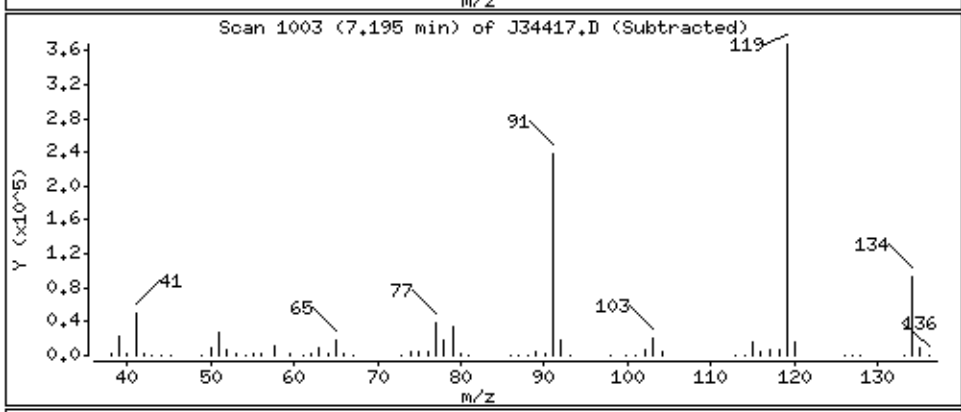
104 tert-Butylbenzene

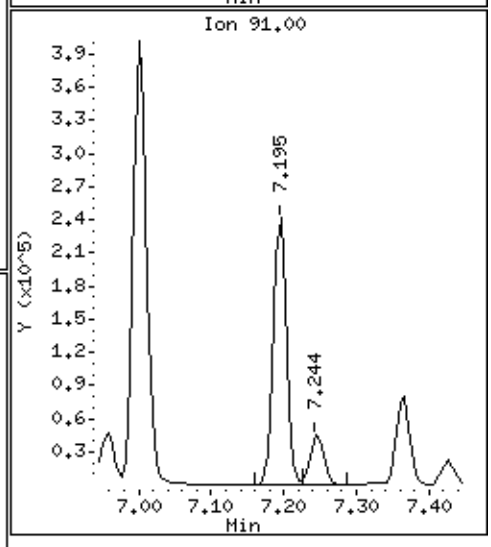
Concentration: 46.1 ug/L

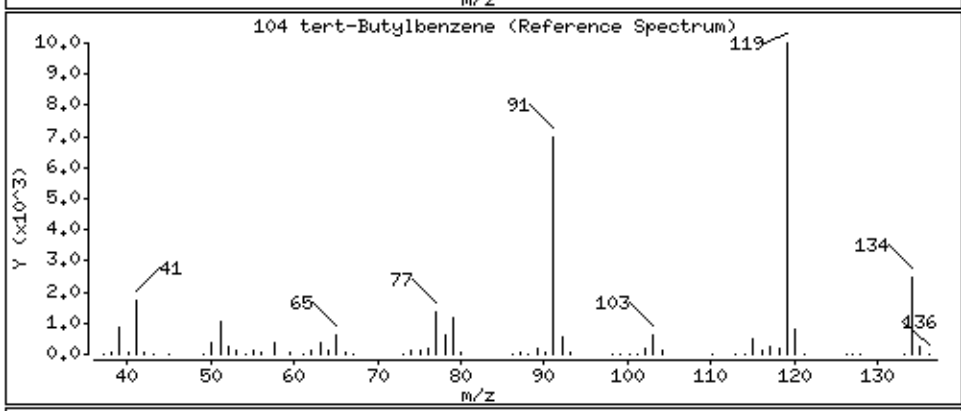
Review Code:

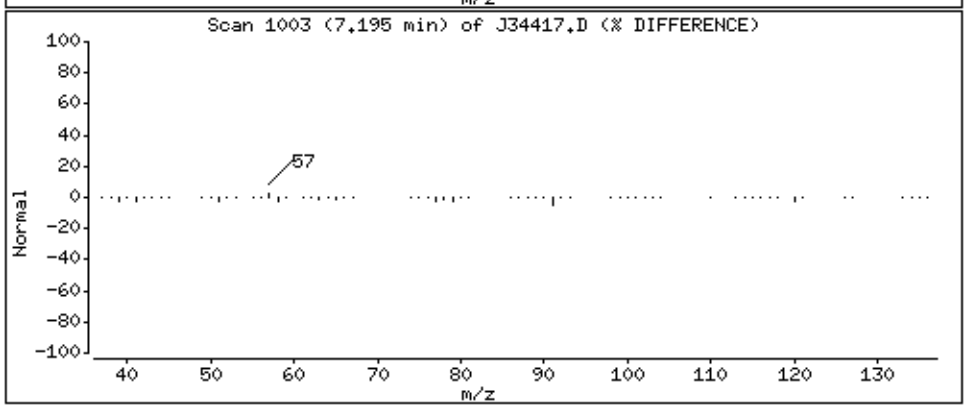












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D

Date : 25-APR-2017 19:07

Client ID: MW-3CMS

Instrument: 70msv6.i

Sample Info: 103081, 15067:1.25

Purge Volume: 5.0

Operator: KGG

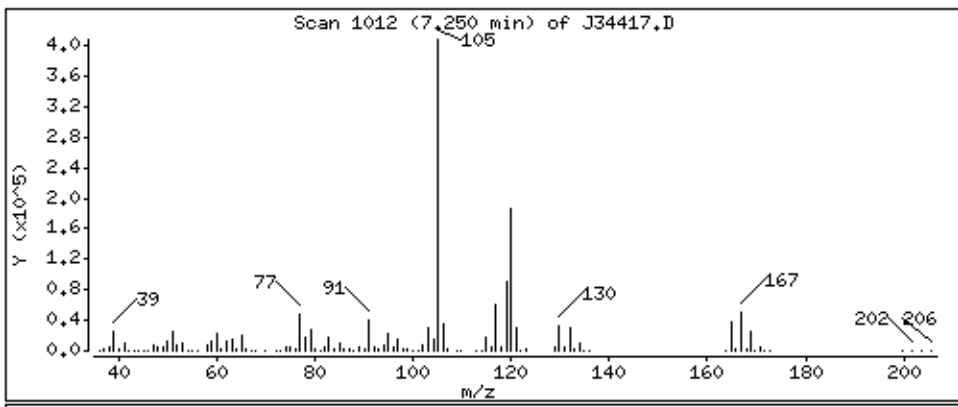
Column phase: RTX-624

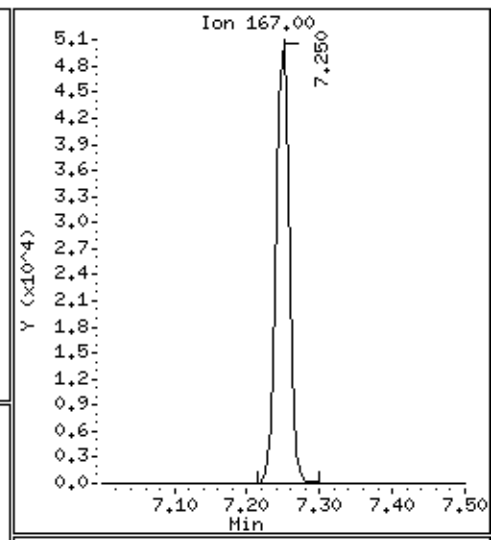
Column diameter: 0.18

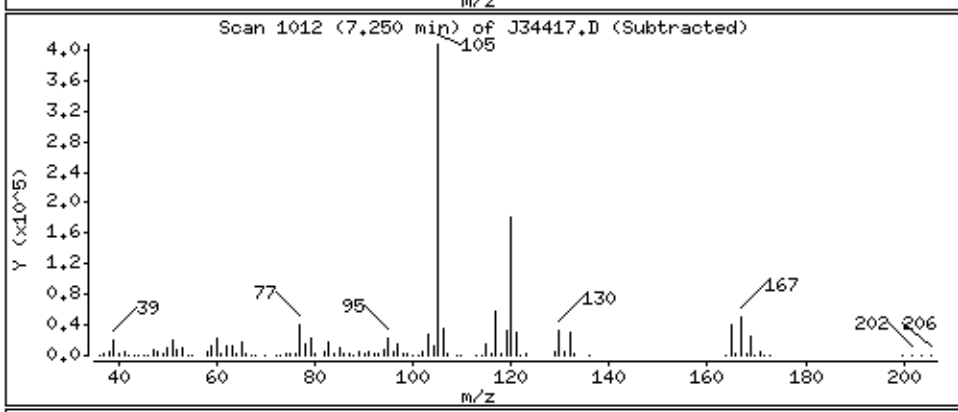
105 Pentachloroethane

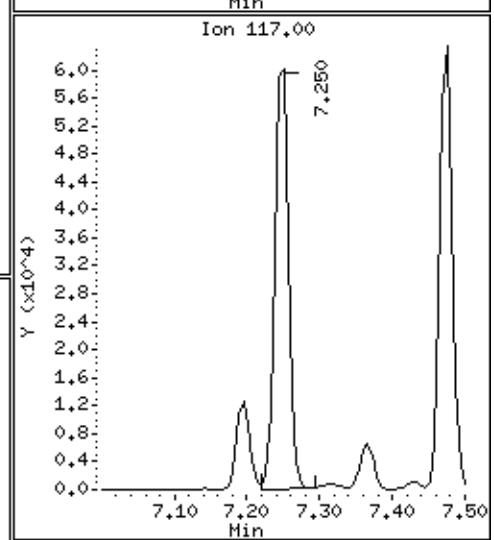
Concentration: 48.8 ug/L

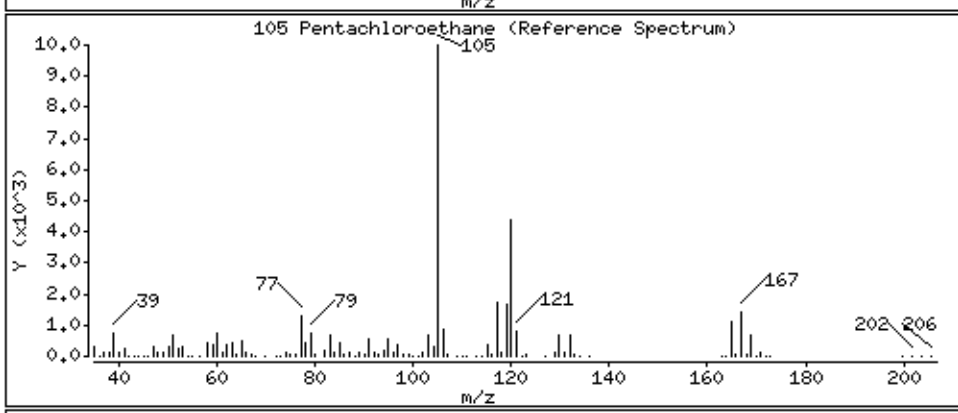
Review Code:

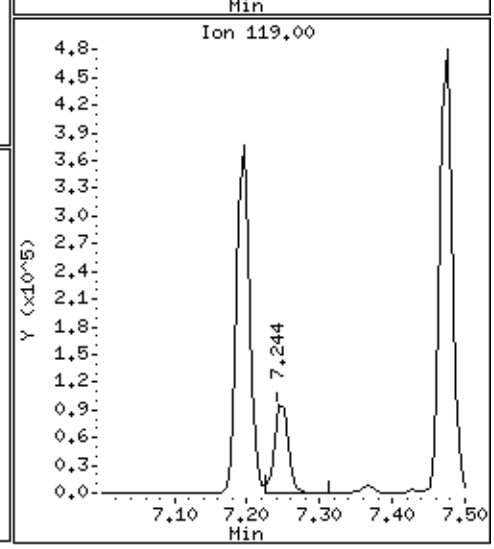


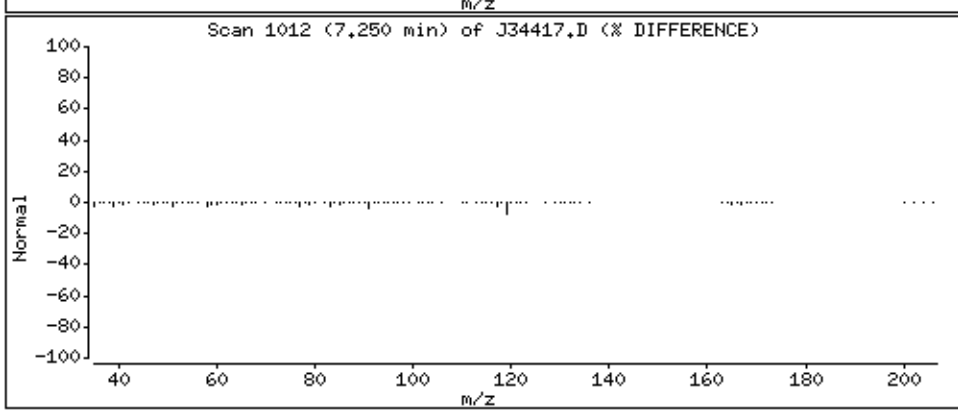












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D

Date : 25-APR-2017 19:07

Client ID: MW-3CMS

Instrument: 70msv6.i

Sample Info: 103081, 15067:1.25

Purge Volume: 5.0

Operator: KGG

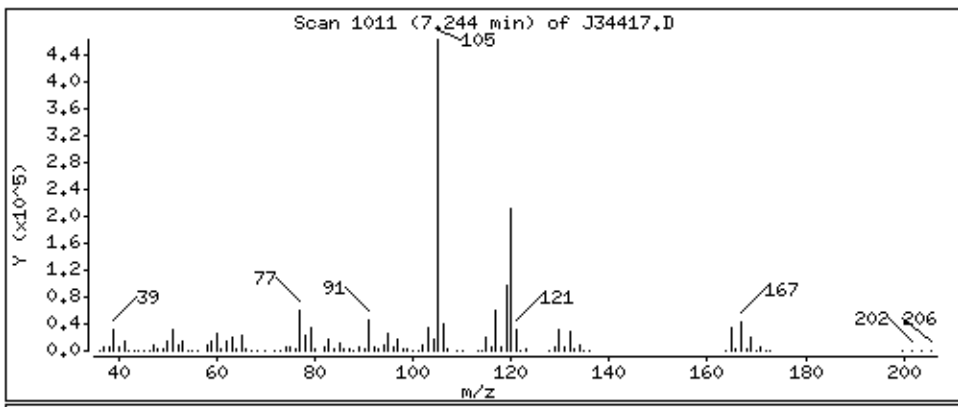
Column phase: RTX-624

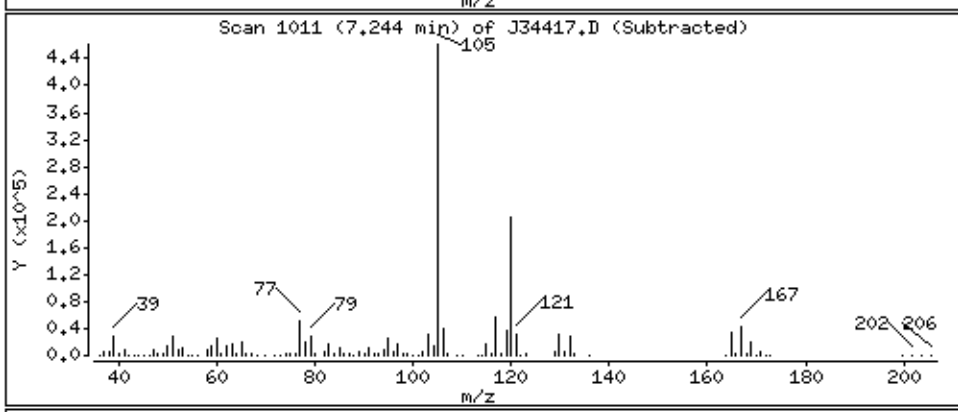
Column diameter: 0.18

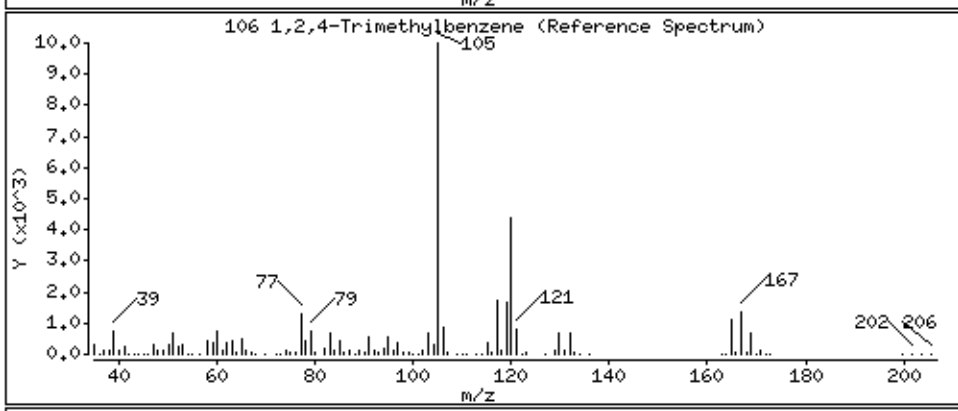
106 1,2,4-Trimethylbenzene

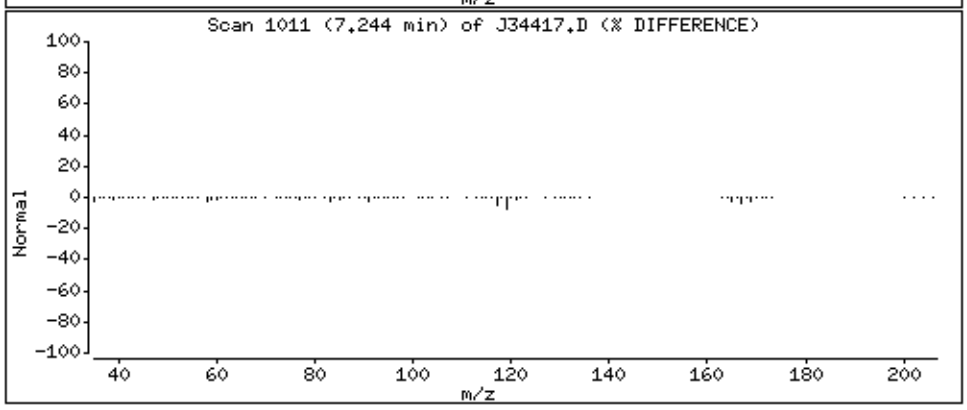
Concentration: 43.5 ug/L

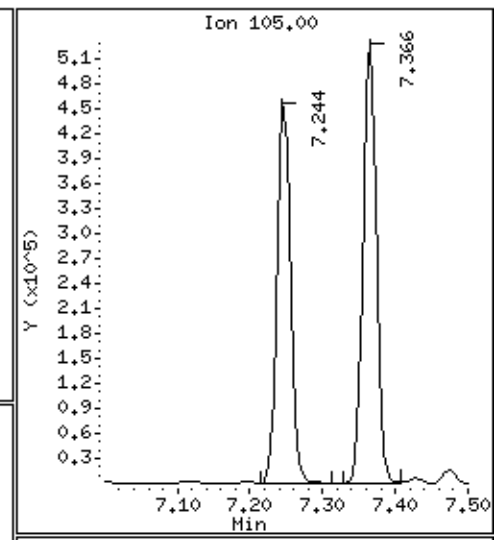
Review Code:

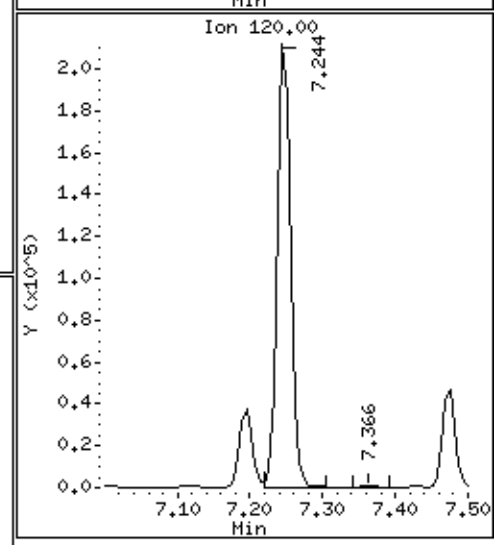












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D

Date : 25-APR-2017 19:07

Client ID: MW-3CMS

Instrument: 70msv6.i

Sample Info: 103081, 15067:1.25

Purge Volume: 5.0

Operator: KGG

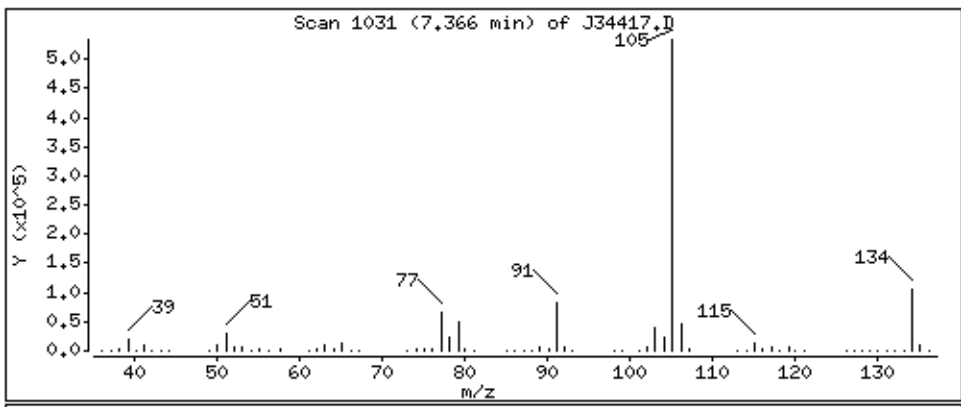
Column phase: RTX-624

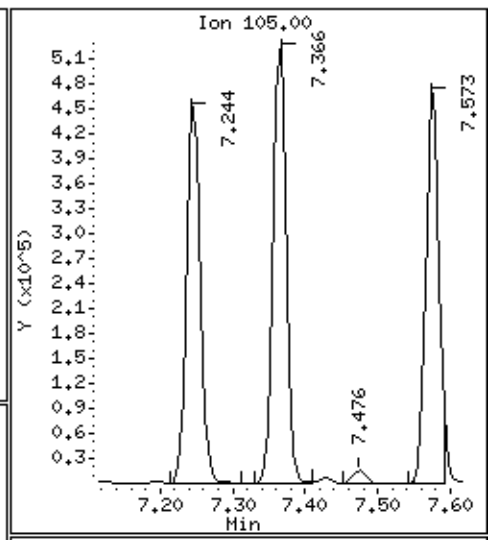
Column diameter: 0.18

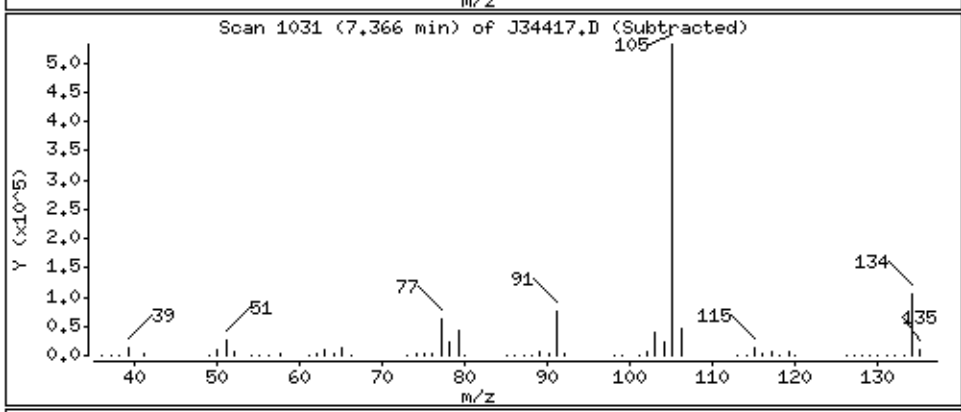
107 sec-Butylbenzene

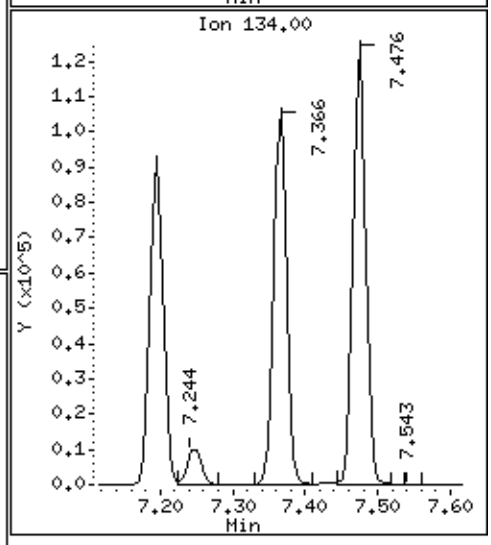
Concentration: 47.6 ug/L

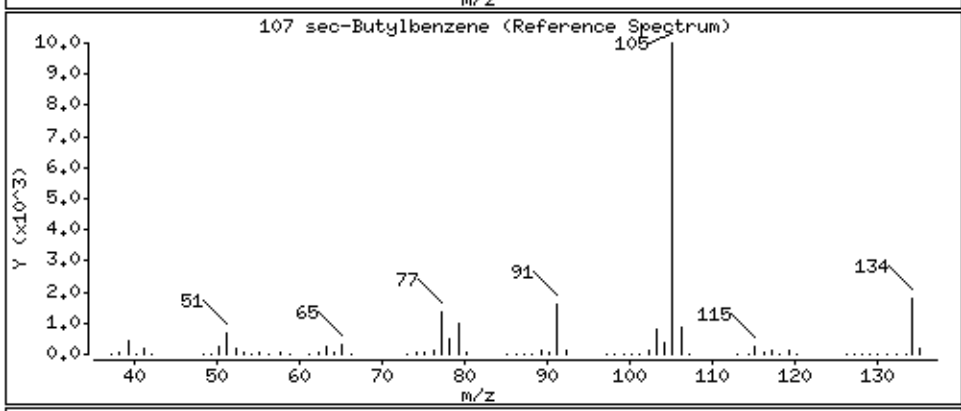
Review Code:

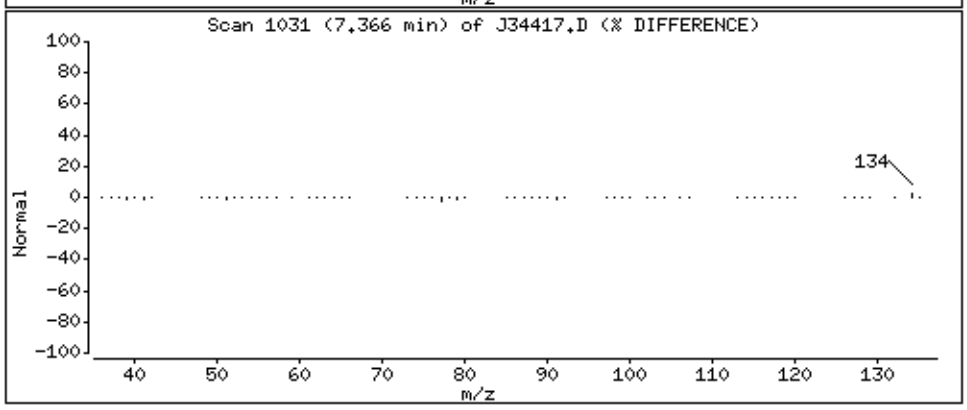












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D

Date : 25-APR-2017 19:07

Client ID: MW-3CMS

Instrument: 70msv6.i

Sample Info: 103081, 15067:1.25

Purge Volume: 5.0

Operator: KGG

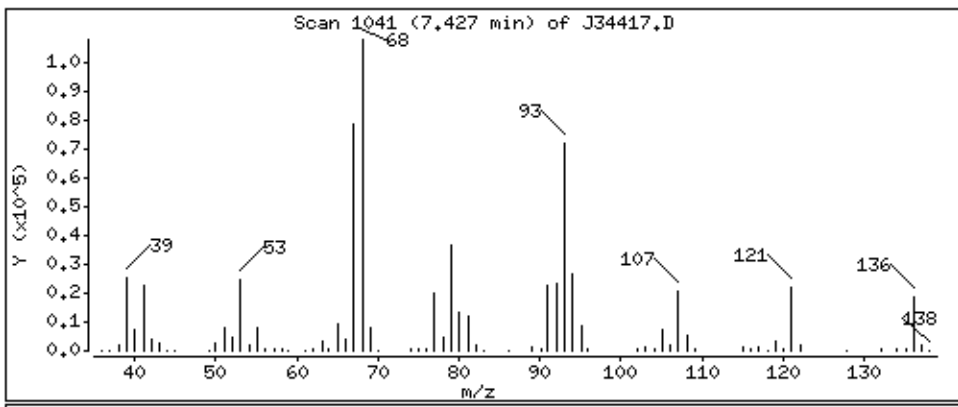
Column phase: RTX-624

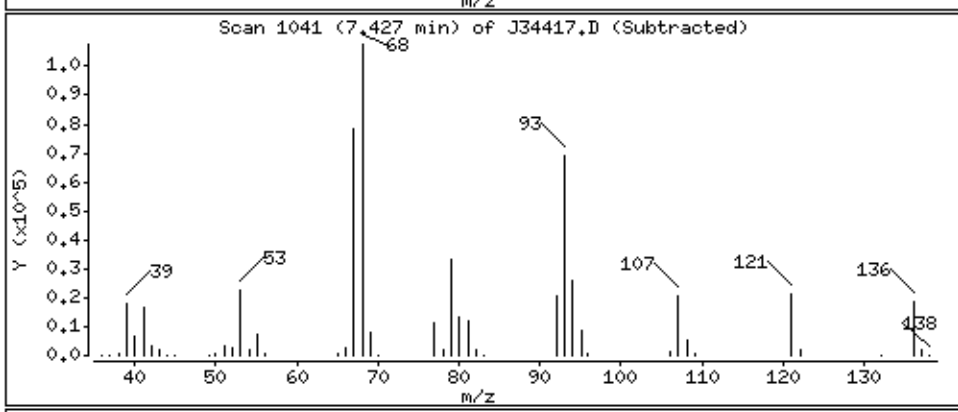
Column diameter: 0.18

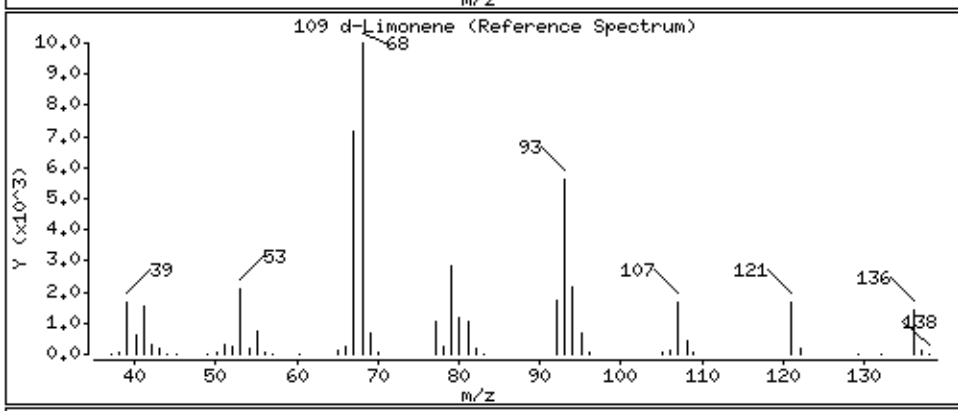
109 d-Limonene

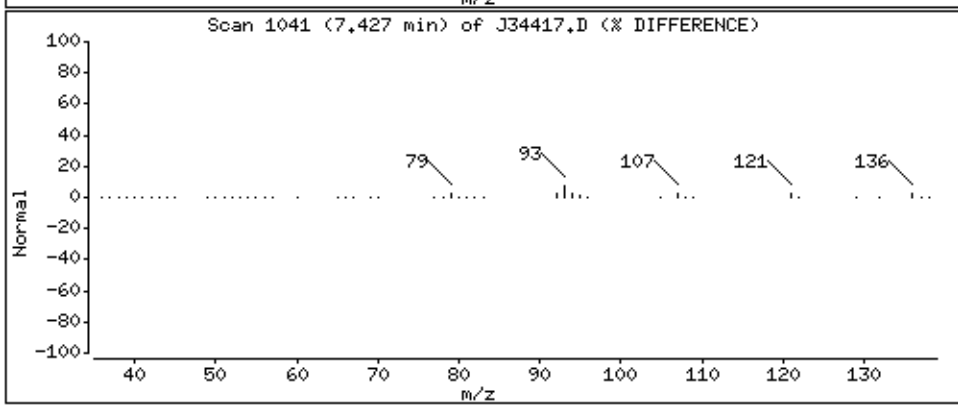
Concentration: 46.2 ug/L

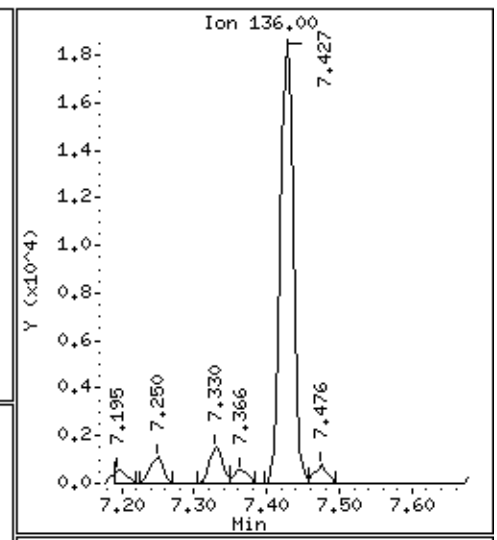
Review Code:

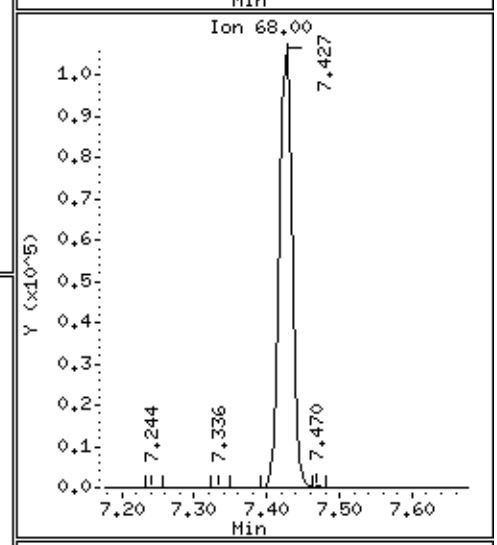


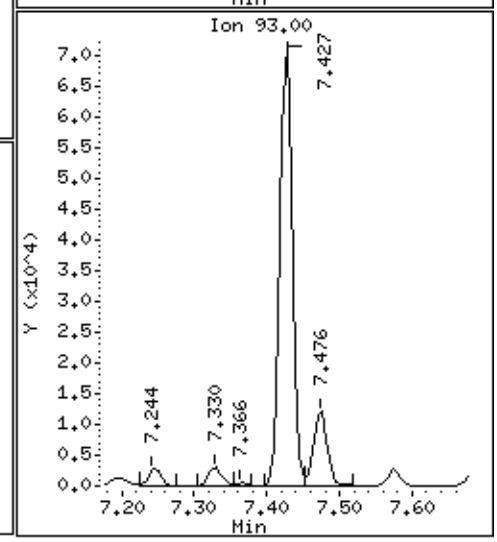












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D

Date : 25-APR-2017 19:07

Client ID: MW-3CMS

Instrument: 70msv6.i

Sample Info: 103081, 15067:1.25

Purge Volume: 5.0

Operator: KGG

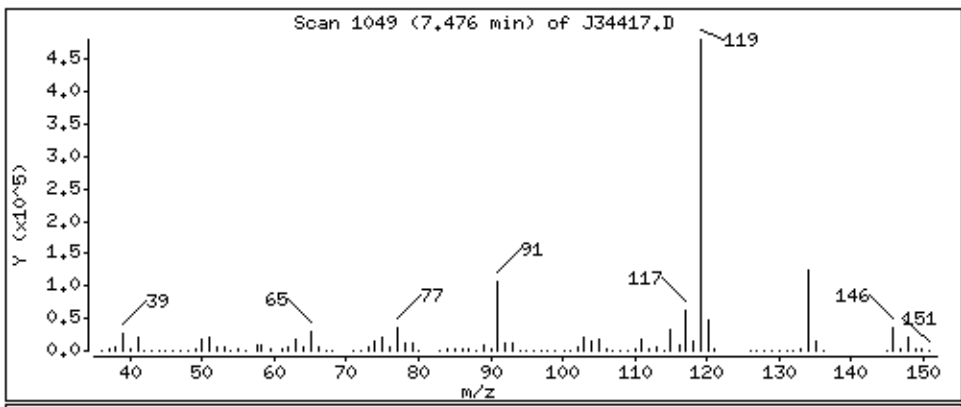
Column phase: RTX-624

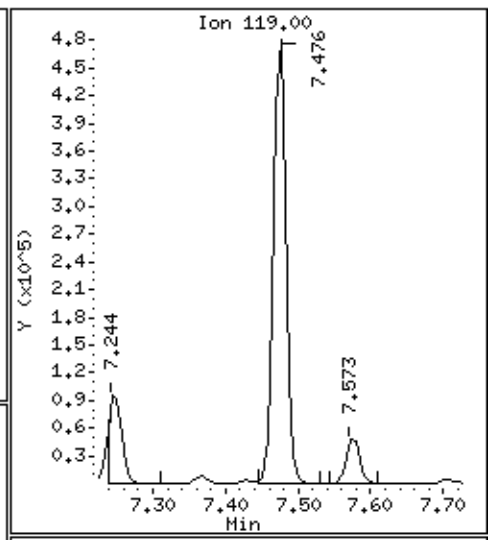
Column diameter: 0.18

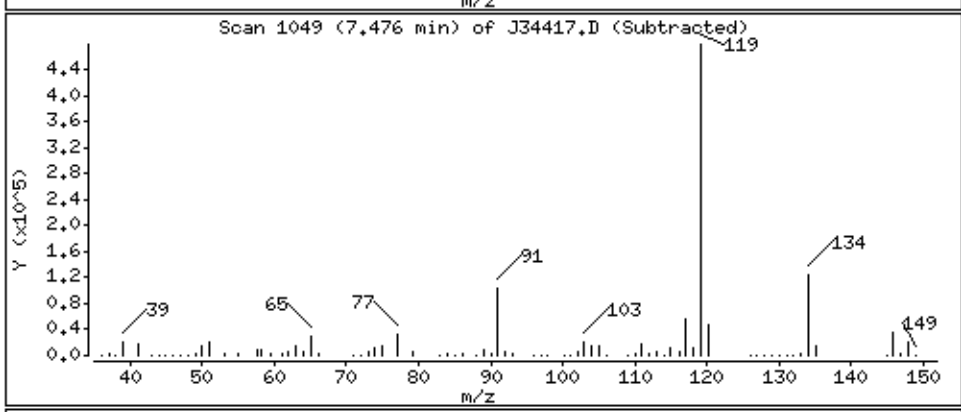
110 p-Isopropyltoluene

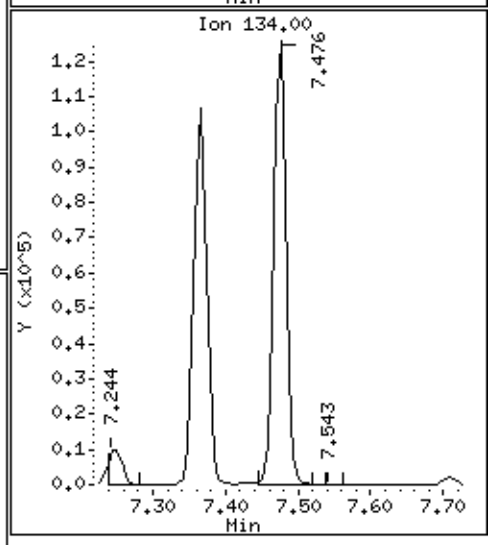
Concentration: 48.0 ug/L

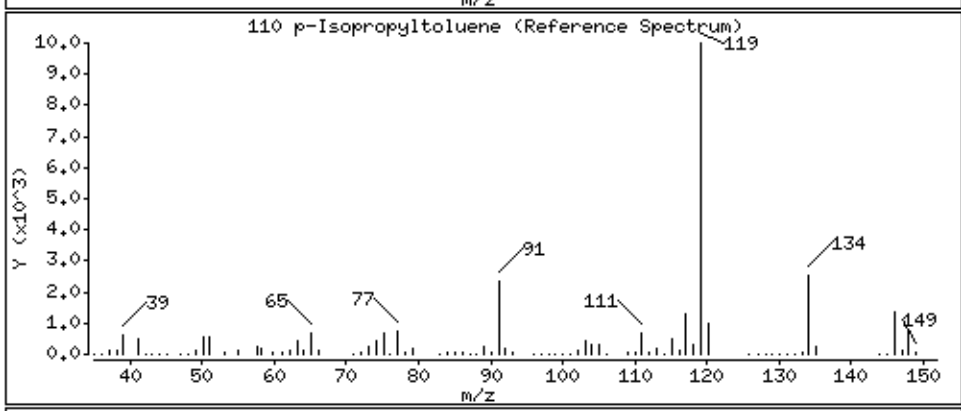
Review Code:

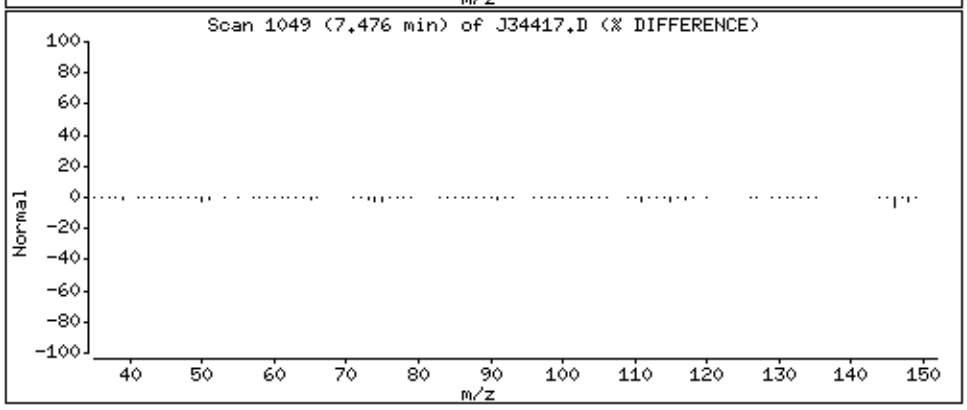












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D

Date : 25-APR-2017 19:07

Client ID: MW-3CMS

Instrument: 70msv6.i

Sample Info: 103081, 15067:1.25

Purge Volume: 5.0

Operator: KGG

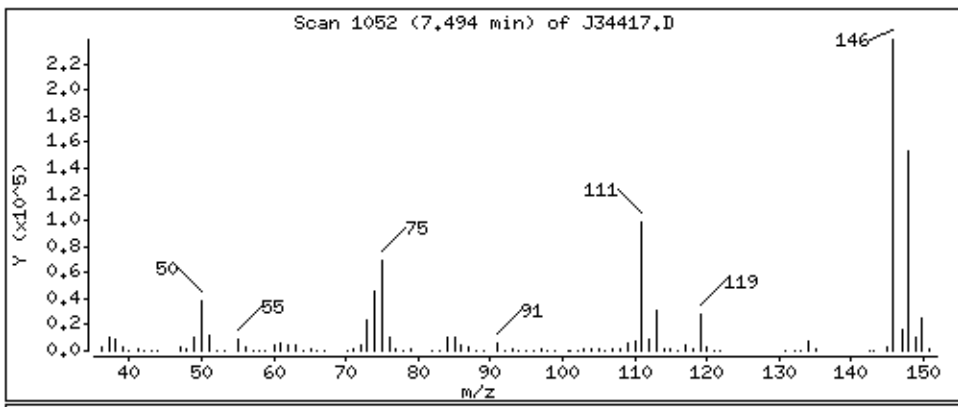
Column phase: RTX-624

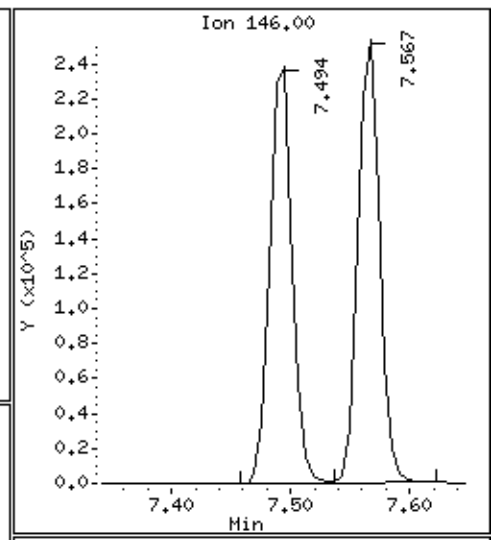
Column diameter: 0.18

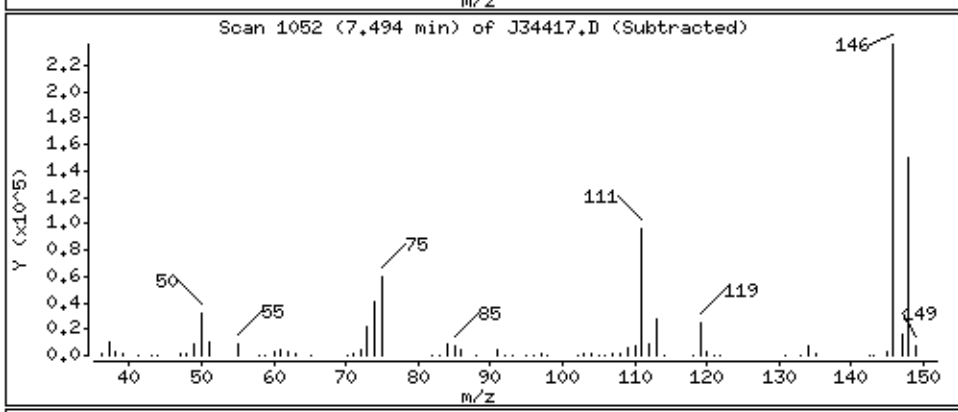
108 1,3-Dichlorobenzene

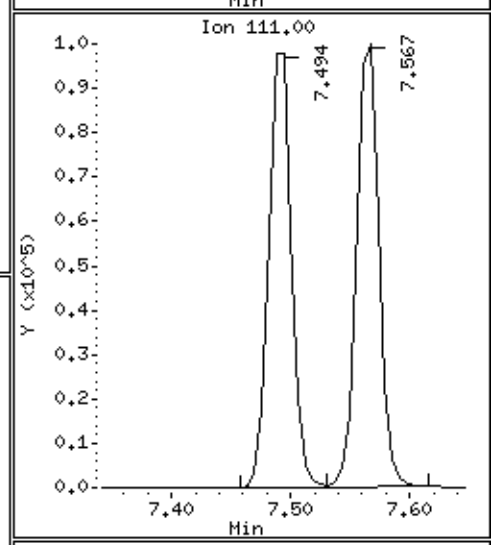
Concentration: 44.0 ug/L

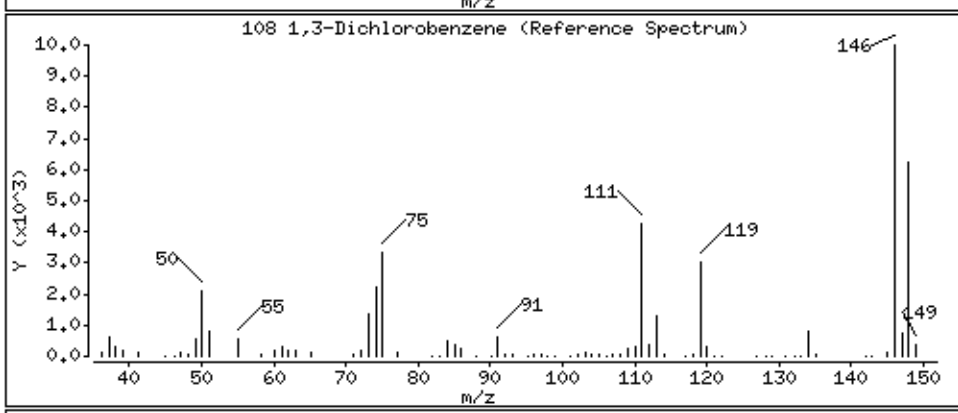
Review Code:

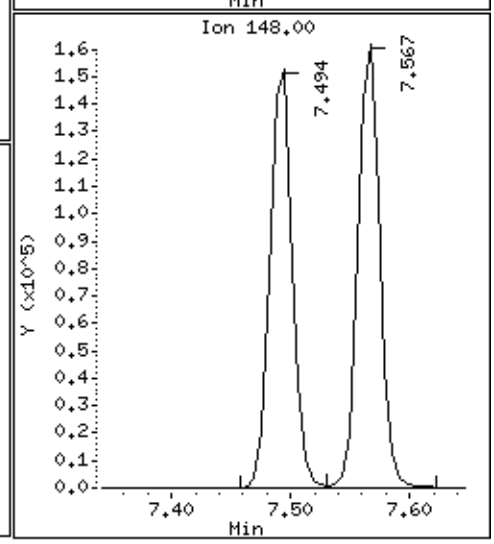


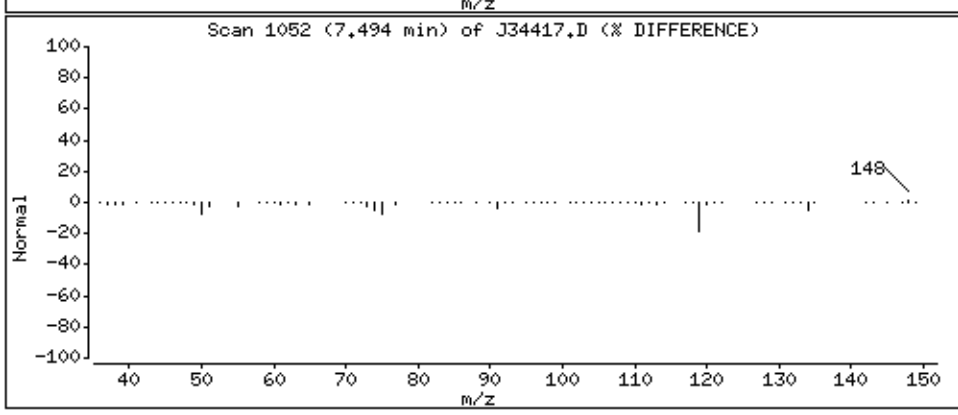












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D

Date : 25-APR-2017 19:07

Client ID: MW-3CMS

Instrument: 70msv6.i

Sample Info: 103081, 15067:1.25

Purge Volume: 5.0

Operator: KGG

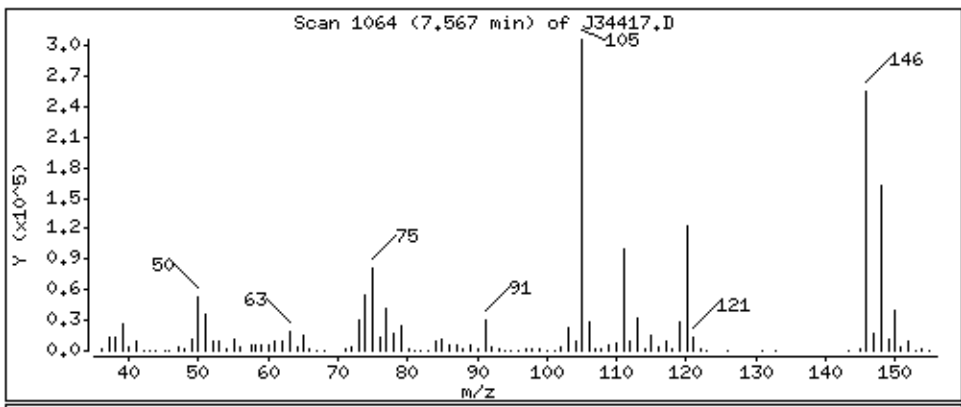
Column phase: RTX-624

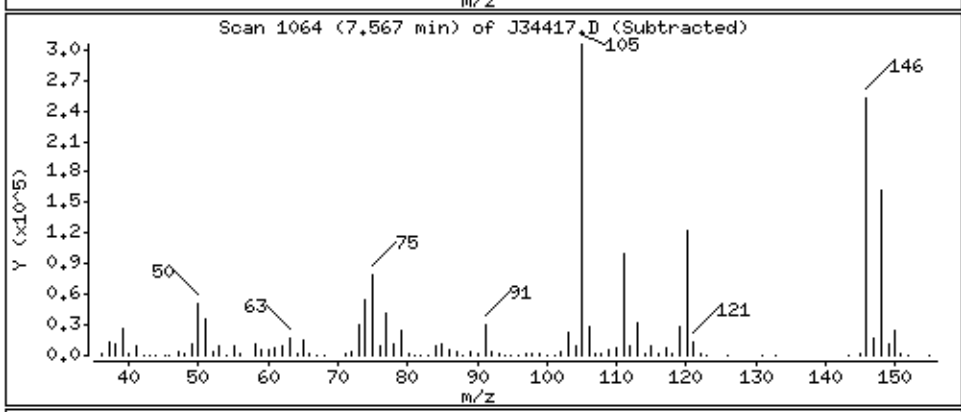
Column diameter: 0.18

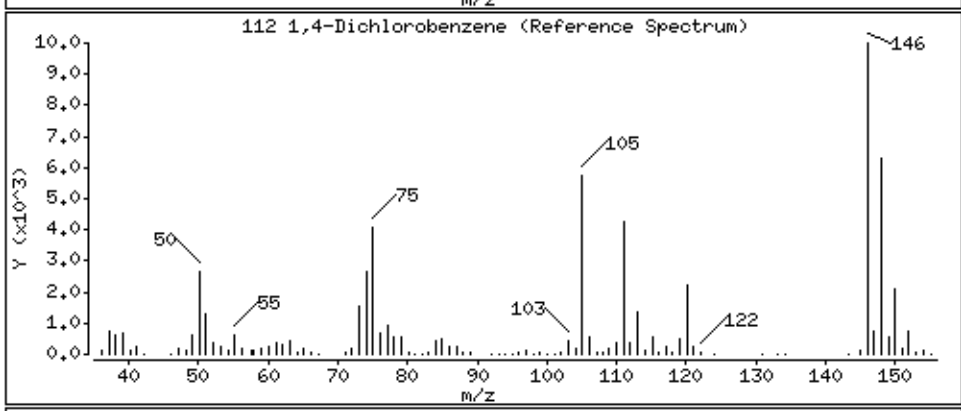
112 1,4-Dichlorobenzene

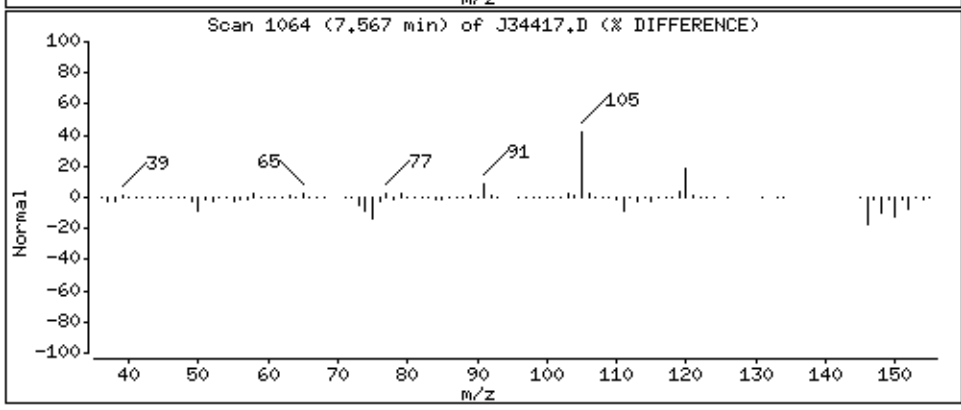
Concentration: 43.4 ug/L

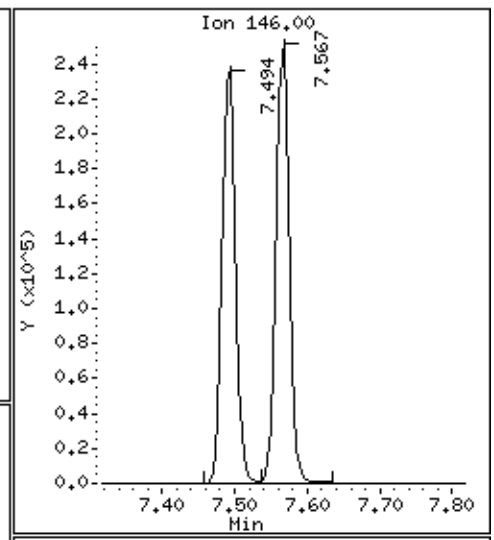
Review Code:

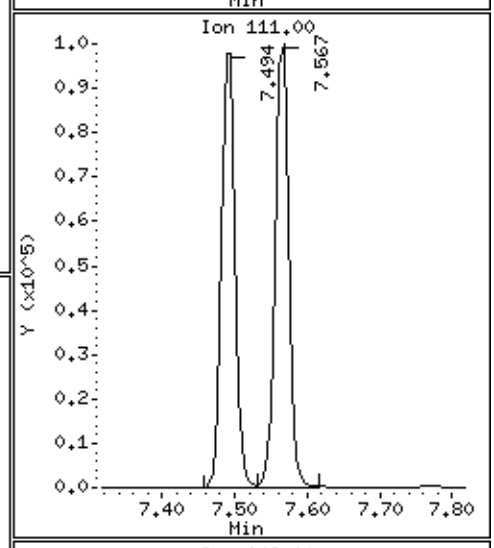


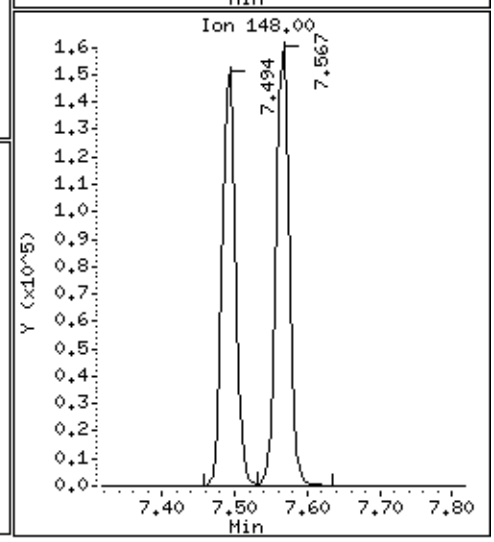












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D

Date : 25-APR-2017 19:07

Client ID: MW-3CMS

Instrument: 70msv6.i

Sample Info: 103081, 15067:1.25

Purge Volume: 5.0

Operator: KGG

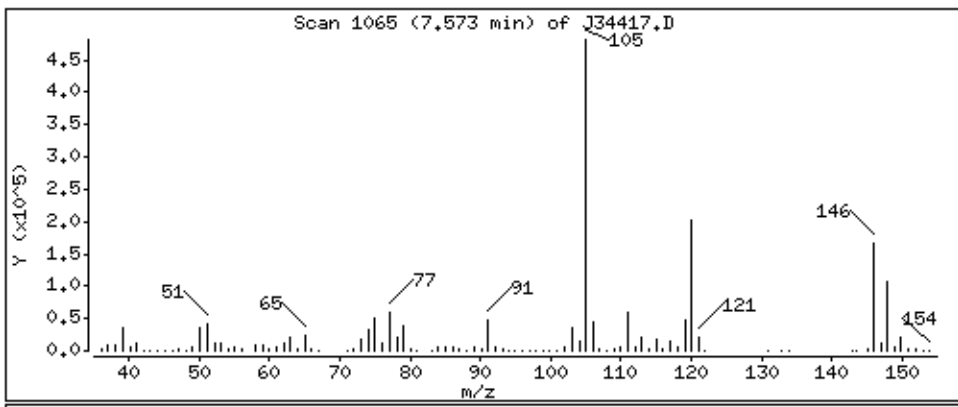
Column phase: RTX-624

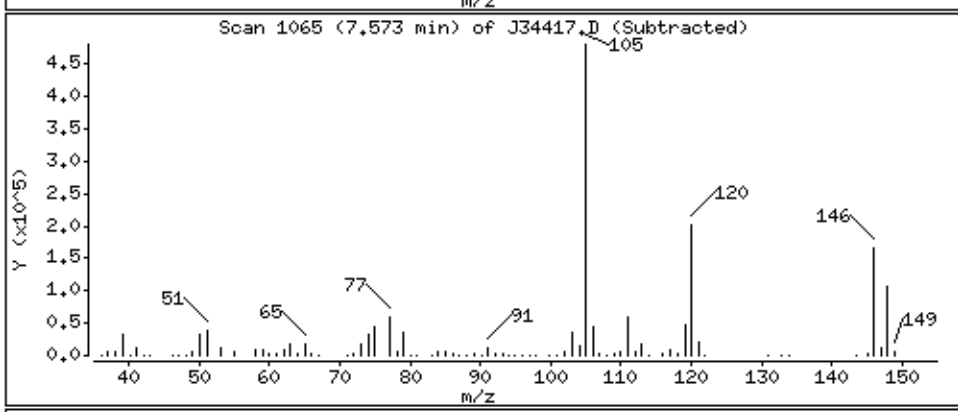
Column diameter: 0.18

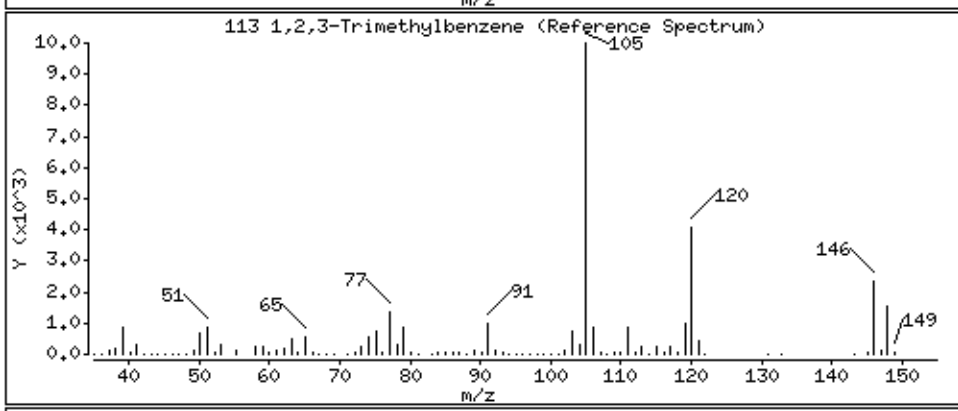
113 1,2,3-Trimethylbenzene

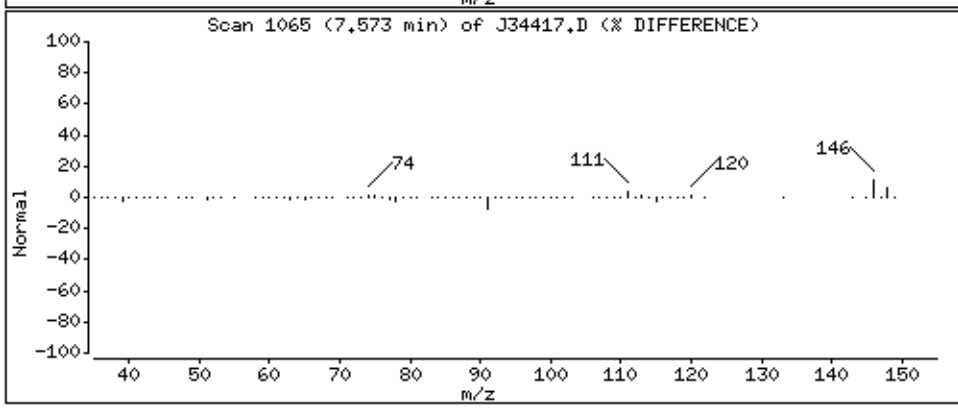
Concentration: 43.3 ug/L

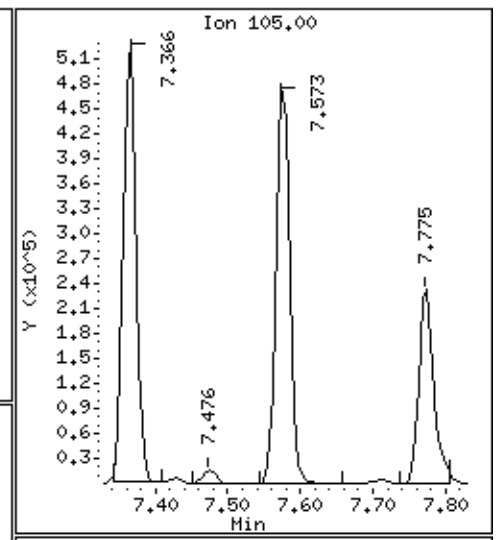
Review Code:

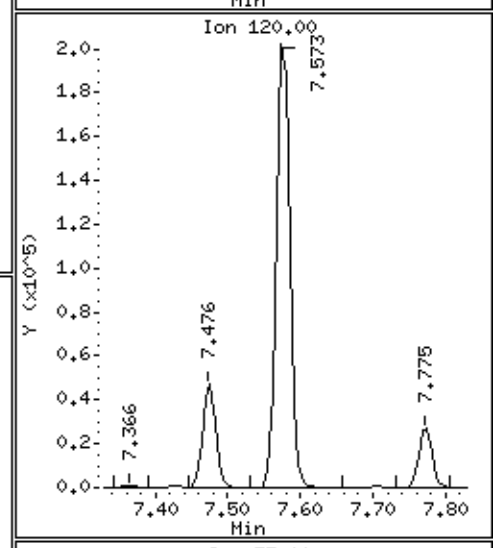


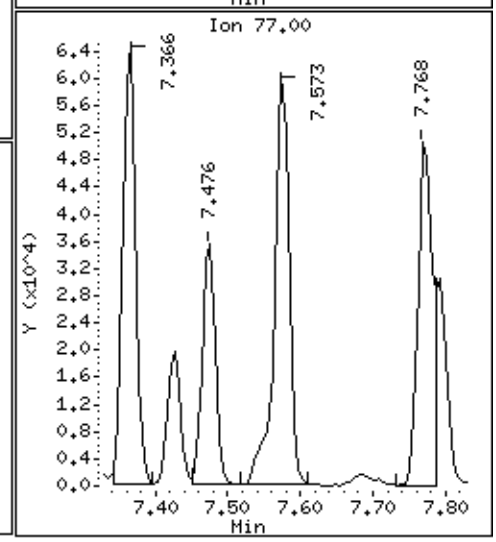












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D

Date : 25-APR-2017 19:07

Client ID: MW-3CMS

Instrument: 70msv6.i

Sample Info: 103081, 15067:1.25

Purge Volume: 5.0

Operator: KGG

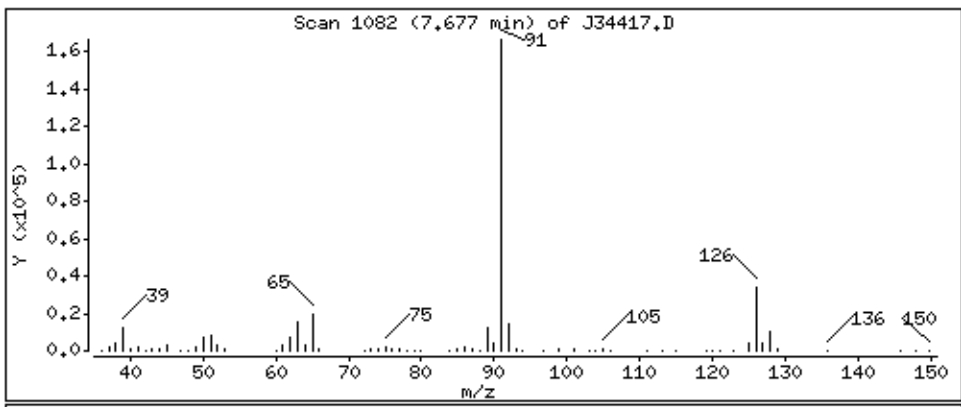
Column phase: RTX-624

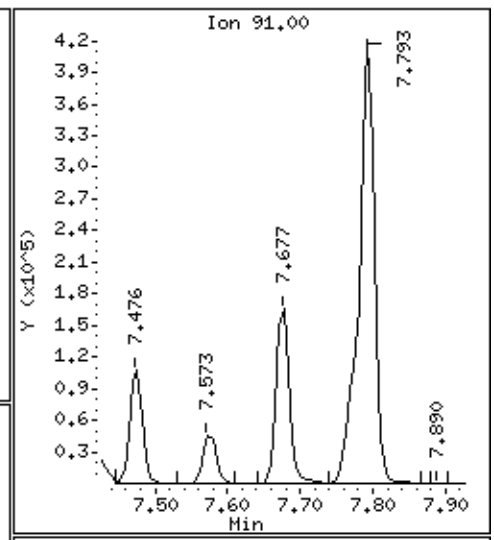
Column diameter: 0.18

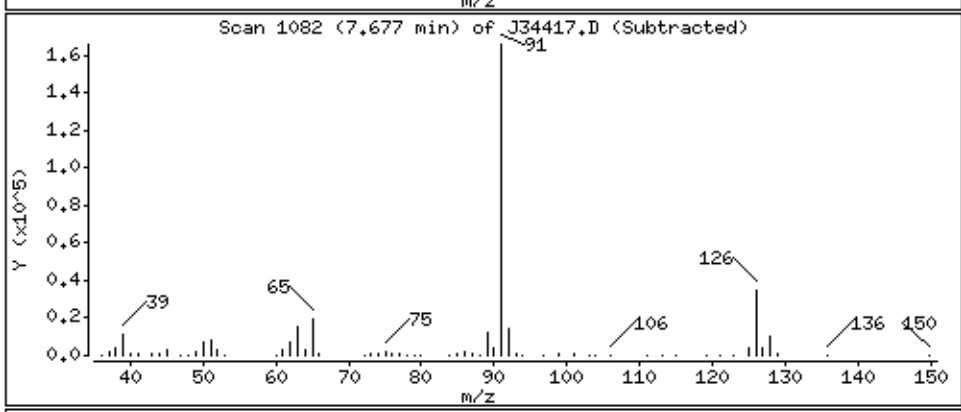
114 Benzyl chloride

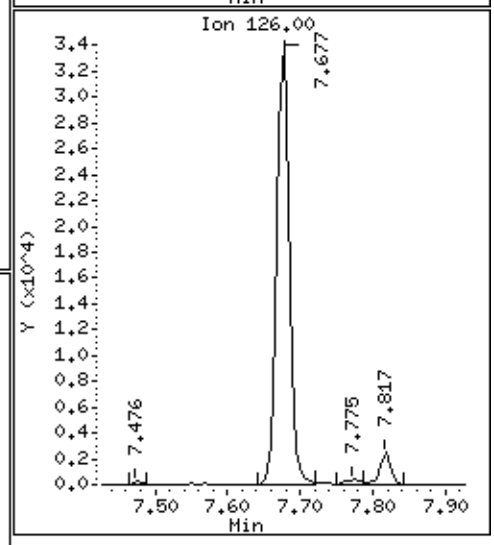
Concentration: 34.8 ug/L

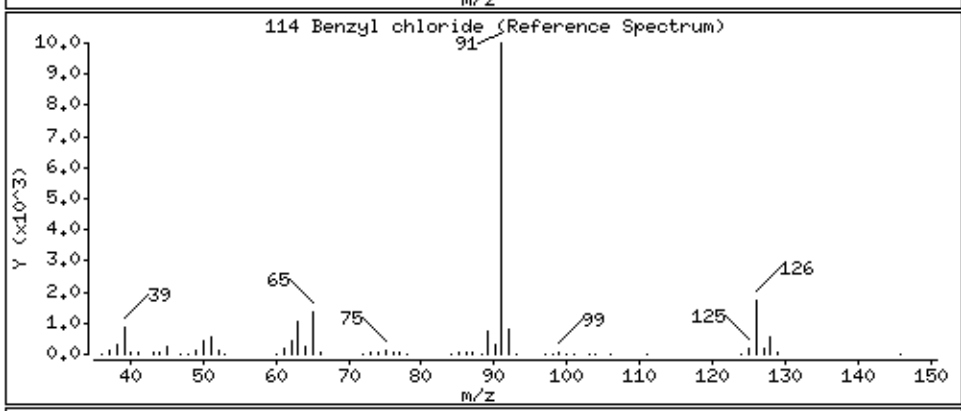
Review Code:

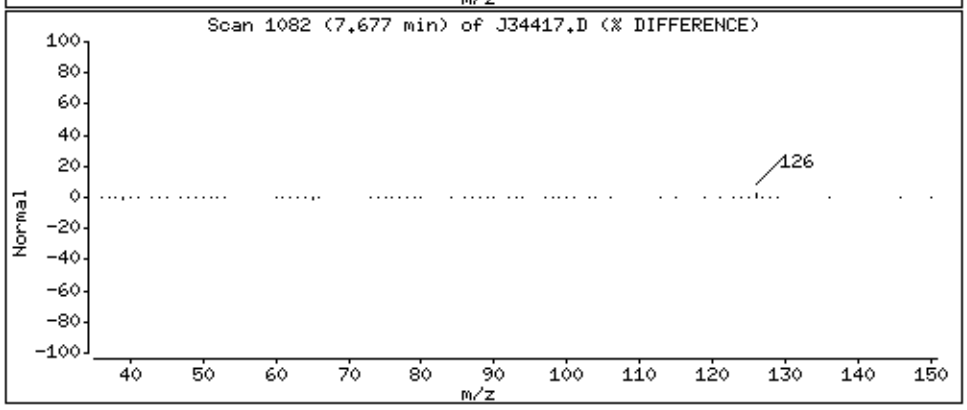












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D

Date : 25-APR-2017 19:07

Client ID: MW-3CMS

Instrument: 70msv6.i

Sample Info: 103081, 15067:1.25

Purge Volume: 5.0

Operator: KGG

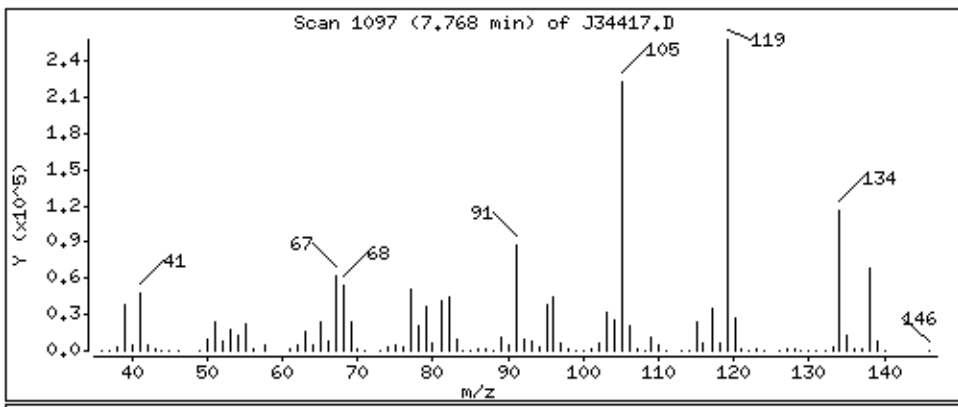
Column phase: RTX-624

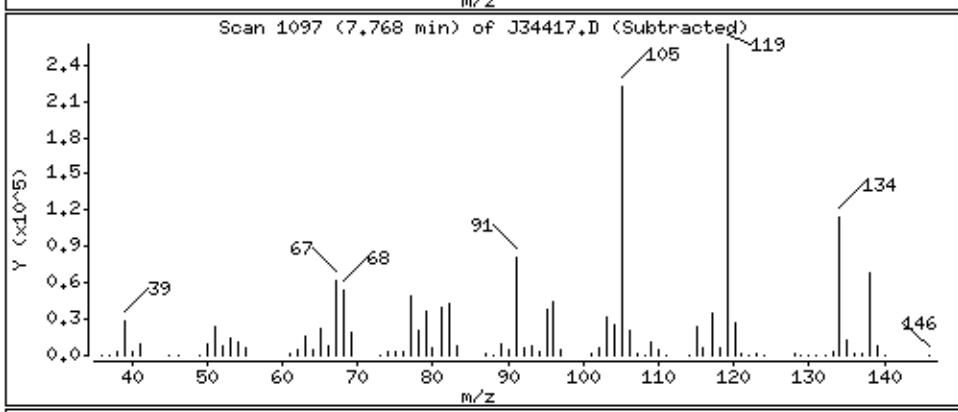
Column diameter: 0.18

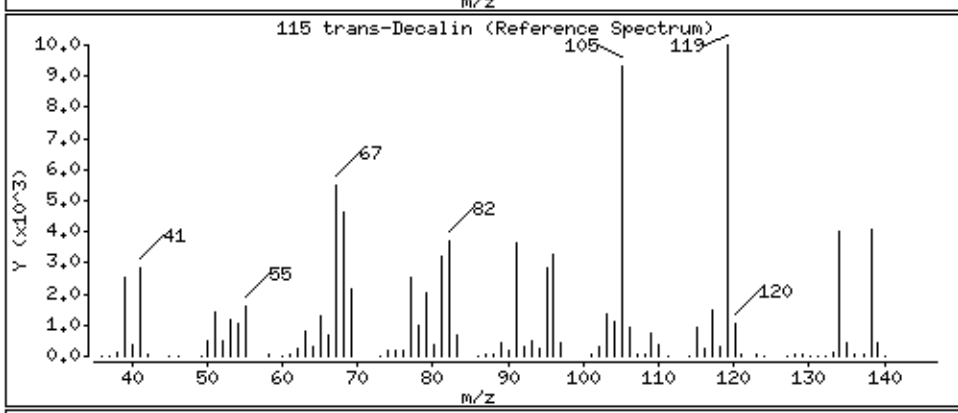
115 trans-Decalin

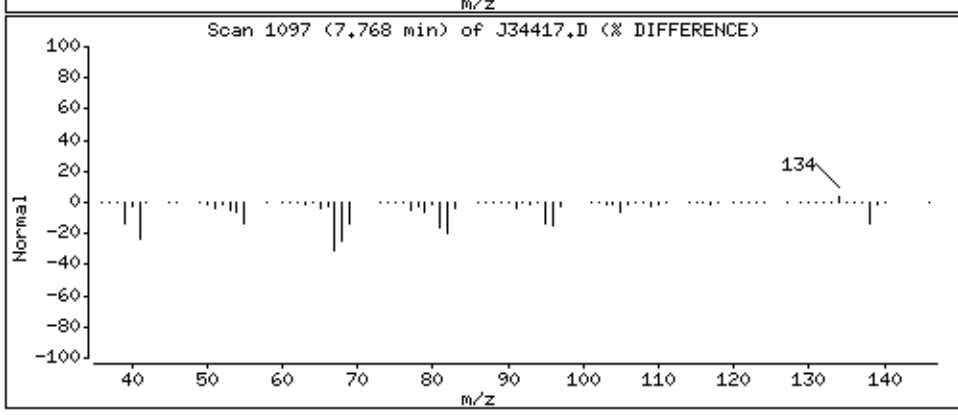
Concentration: 53.7 ug/L

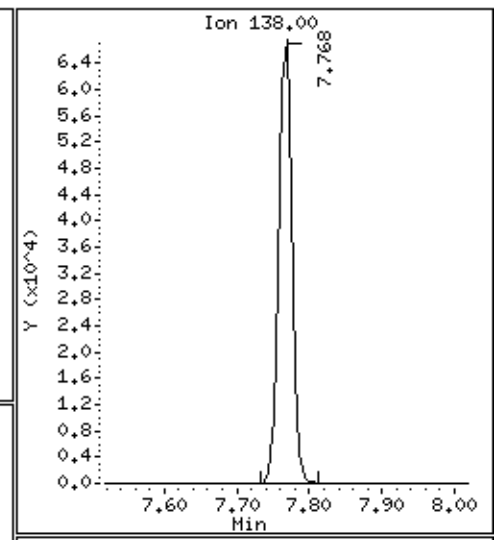
Review Code:

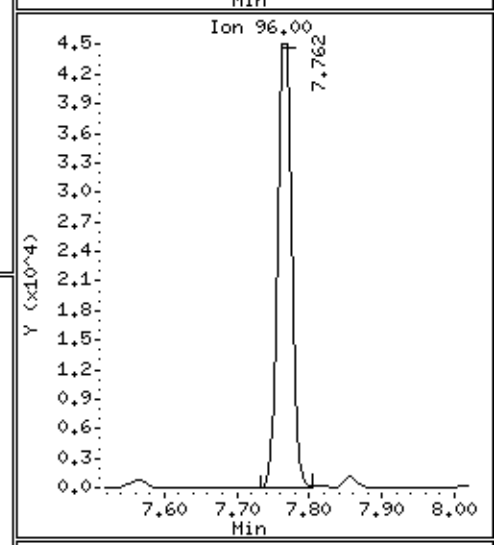


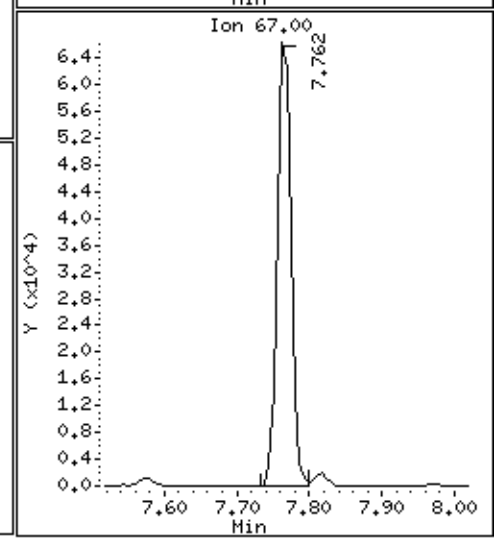












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D

Date : 25-APR-2017 19:07

Client ID: MW-3CMS

Instrument: 70msv6.i

Sample Info: 103081, 15067:1.25

Purge Volume: 5.0

Operator: KGG

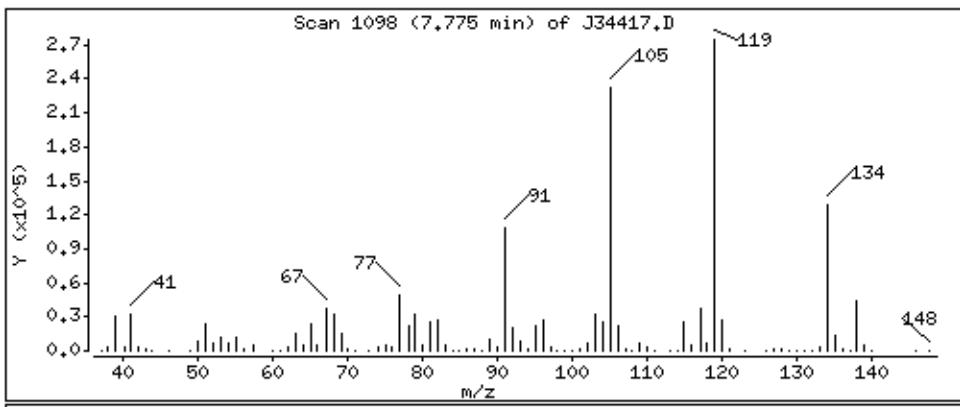
Column phase: RTX-624

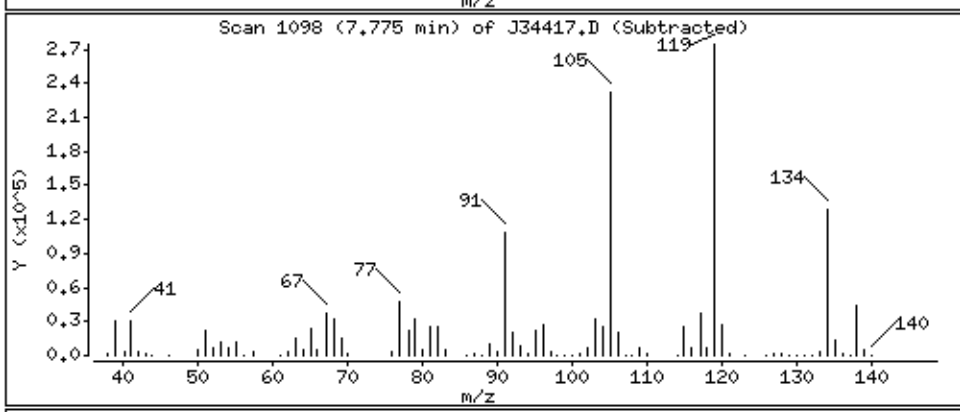
Column diameter: 0.18

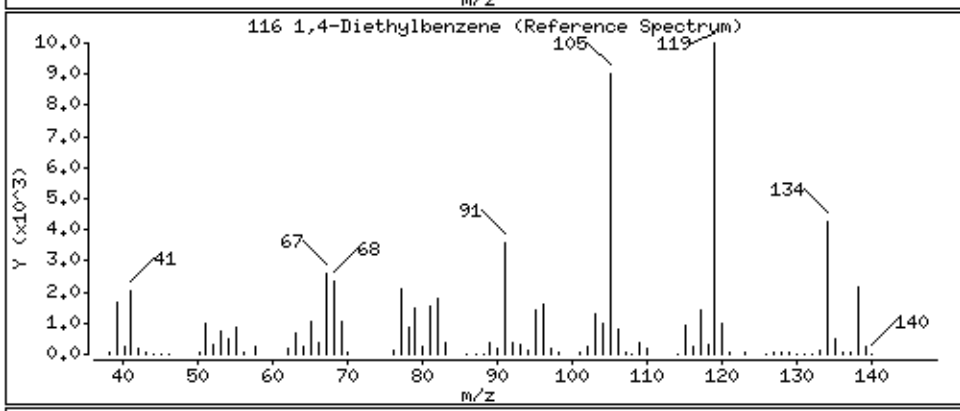
116 1,4-Diethylbenzene

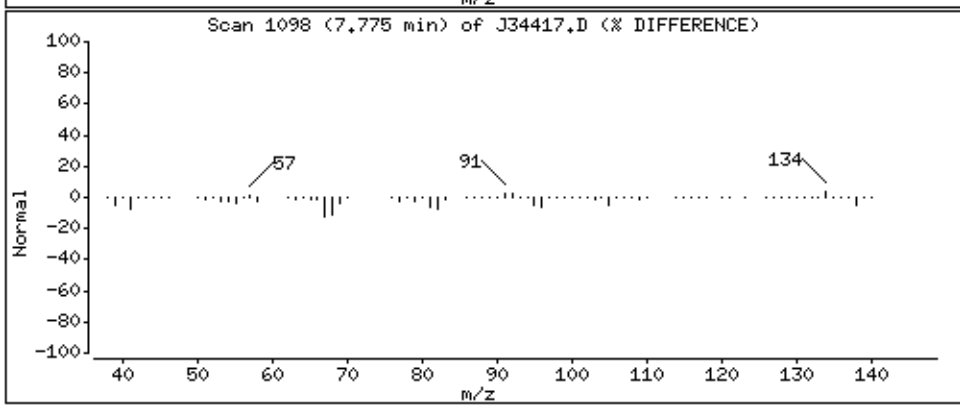
Concentration: 49.6 ug/L

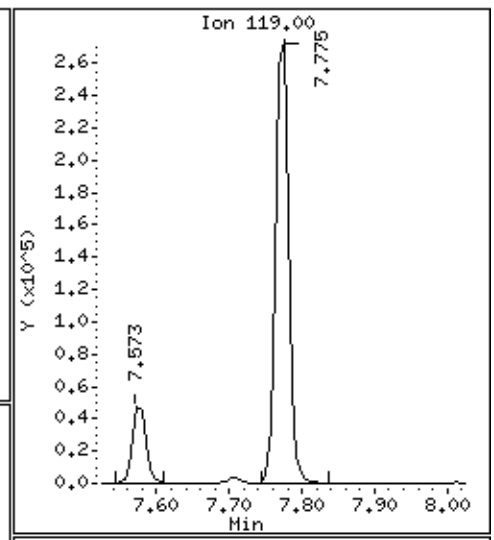
Review Code:

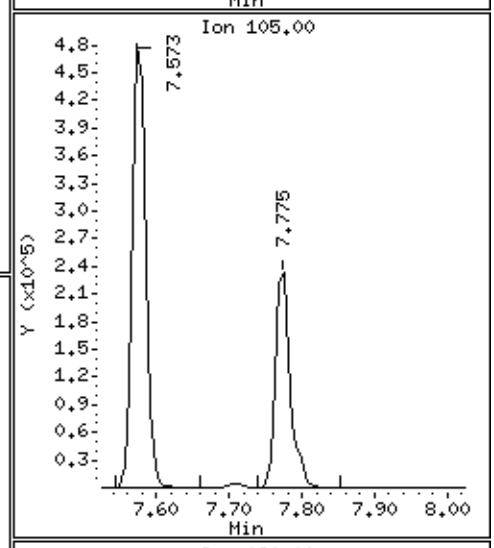


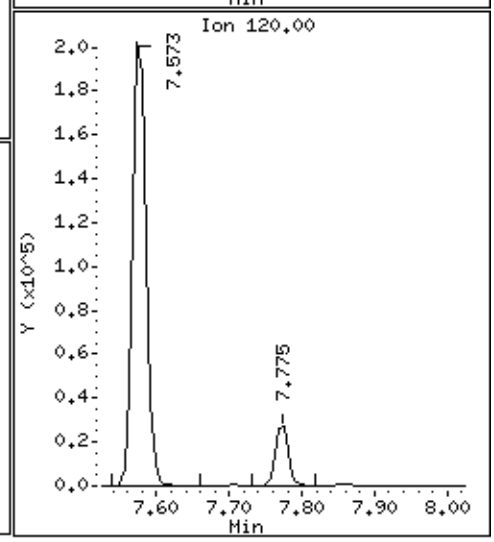












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D

Date : 25-APR-2017 19:07

Client ID: MW-3CMS

Instrument: 70msv6.i

Sample Info: 103081, 15067:1.25

Purge Volume: 5.0

Operator: KGG

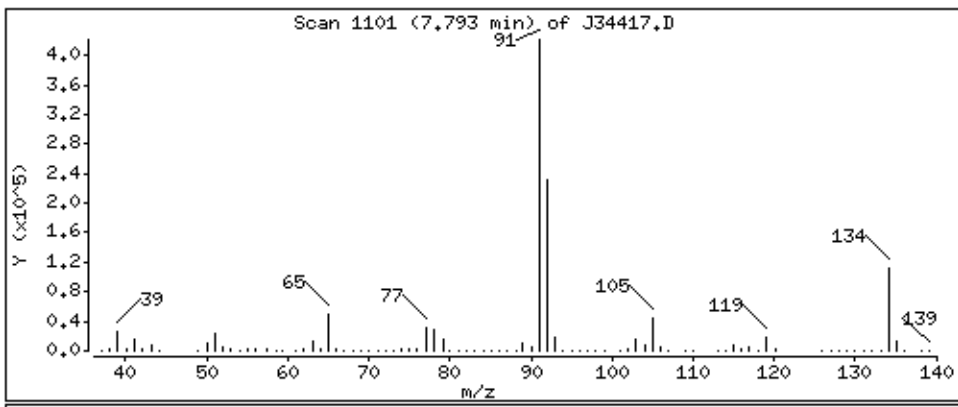
Column phase: RTX-624

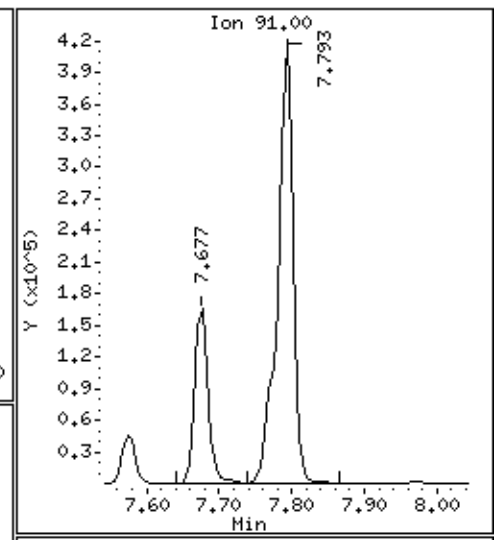
Column diameter: 0.18

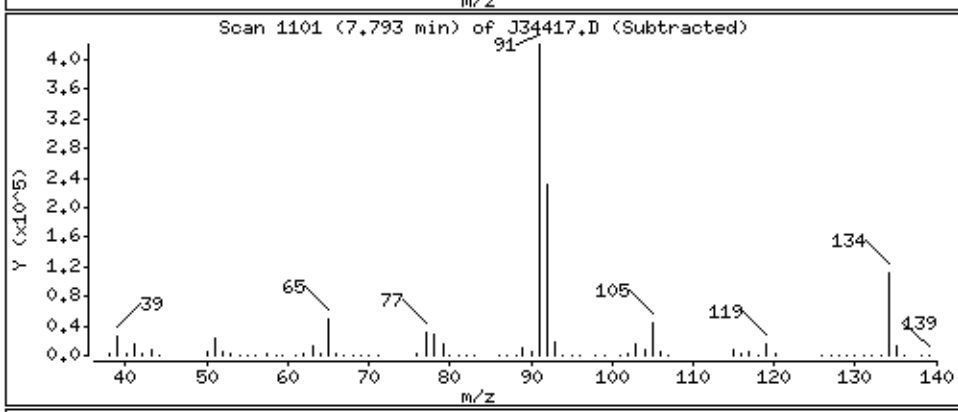
117 n-Butylbenzene

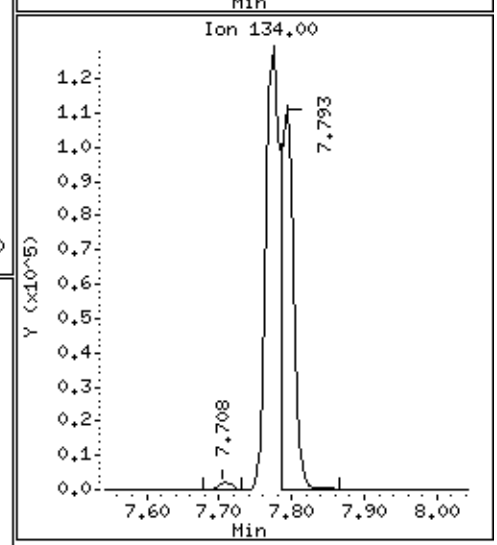
Concentration: 48.2 ug/L

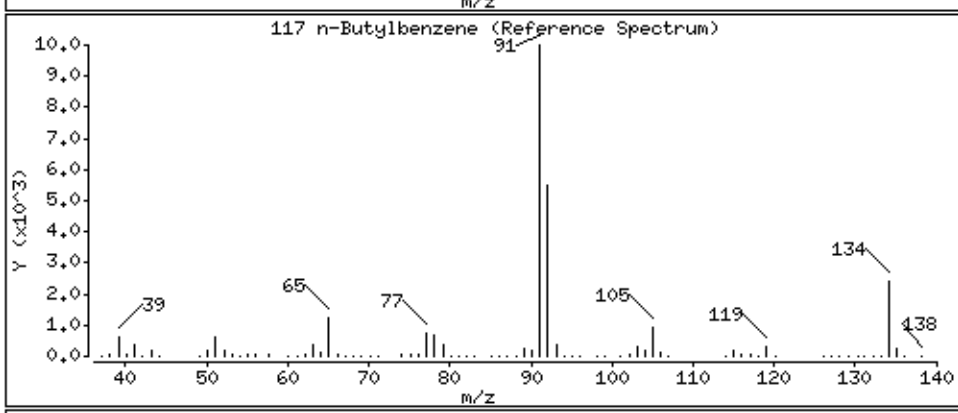
Review Code:

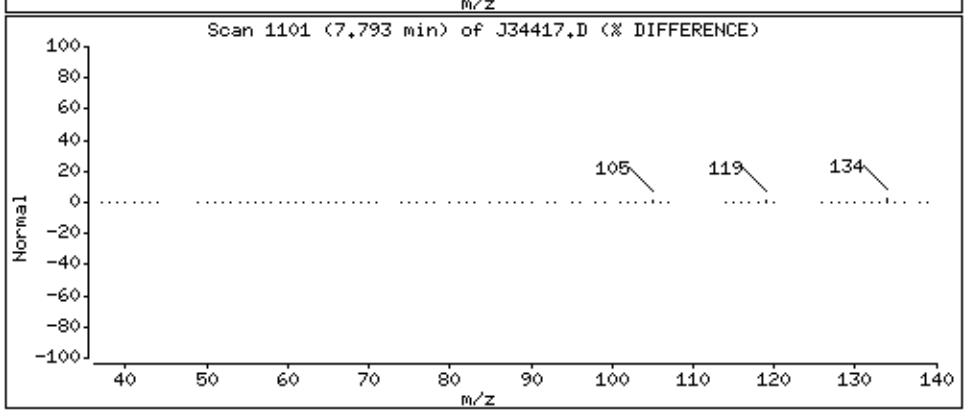












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D

Date : 25-APR-2017 19:07

Client ID: MW-3CMS

Instrument: 70msv6.i

Sample Info: 103081, 15067:1.25

Purge Volume: 5.0

Operator: KGG

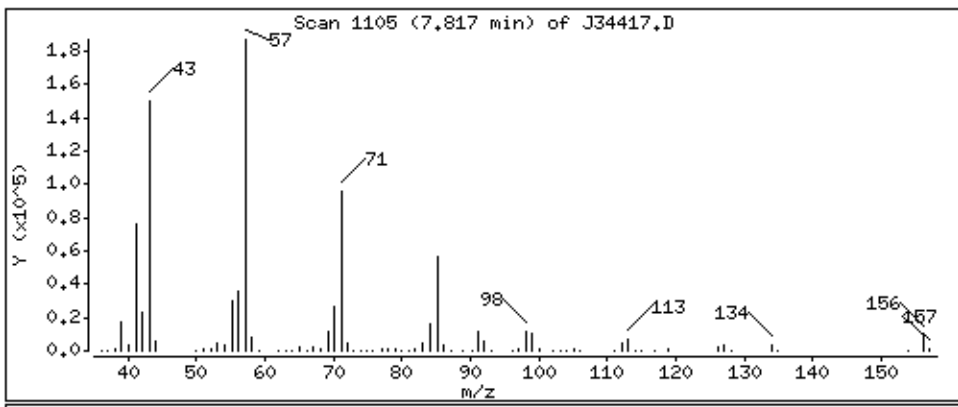
Column phase: RTX-624

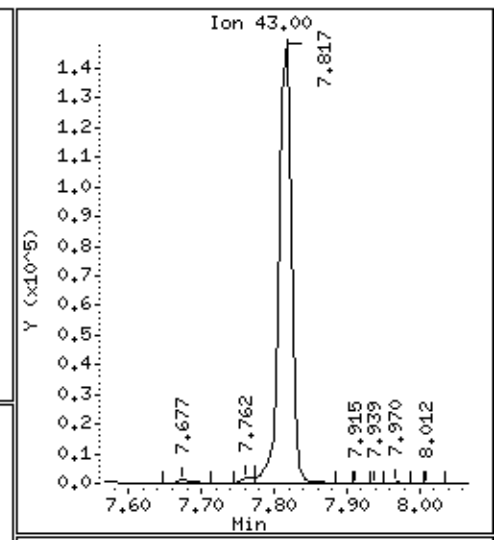
Column diameter: 0.18

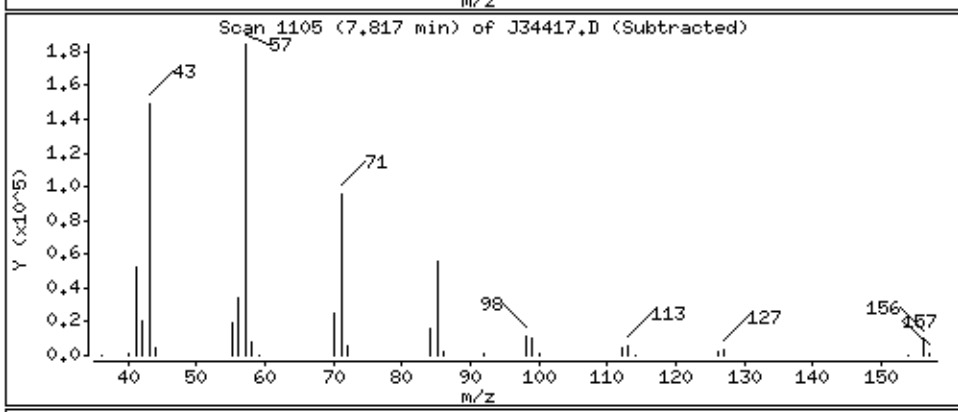
119 n-Undecane

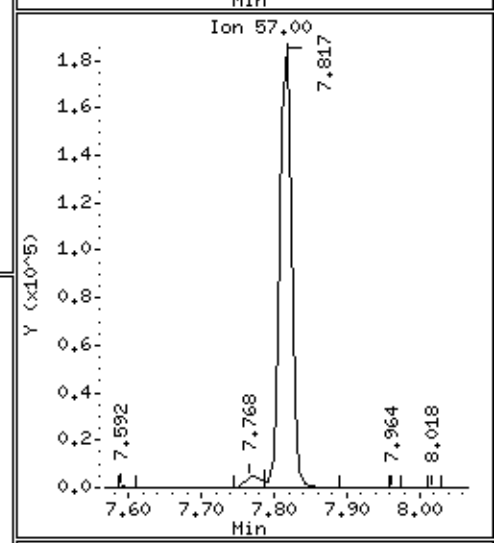
Concentration: 77.3 ug/L

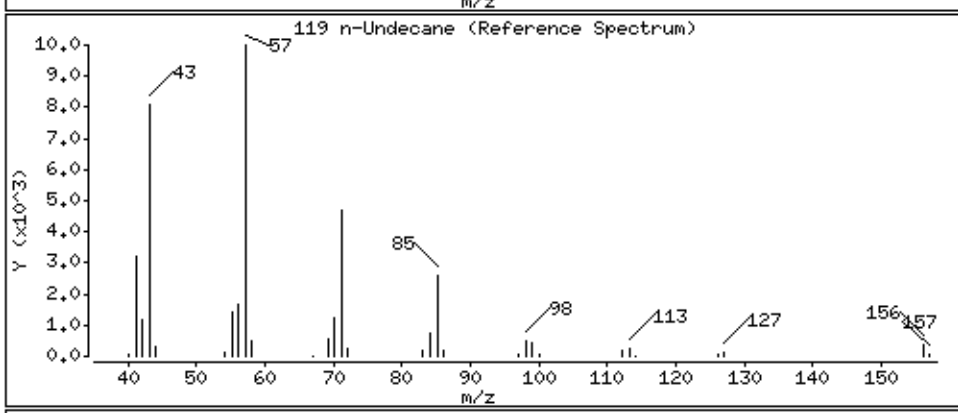
Review Code:

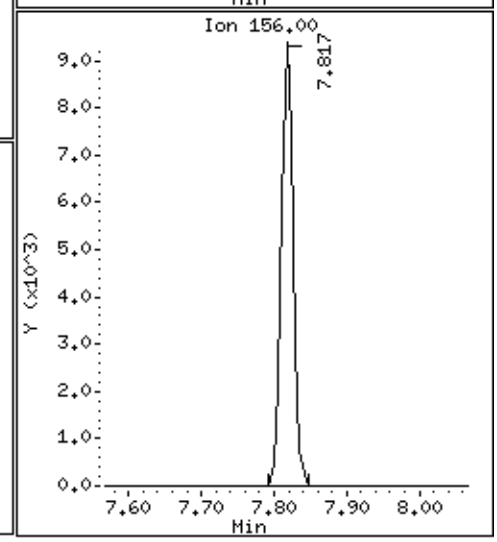


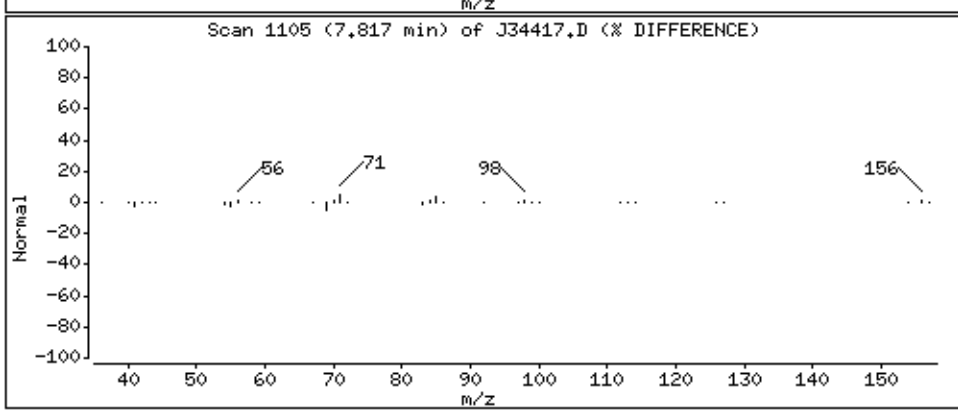












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D

Date : 25-APR-2017 19:07

Client ID: MW-3CMS

Instrument: 70msv6.i

Sample Info: 103081, 15067:1.25

Purge Volume: 5.0

Operator: KGG

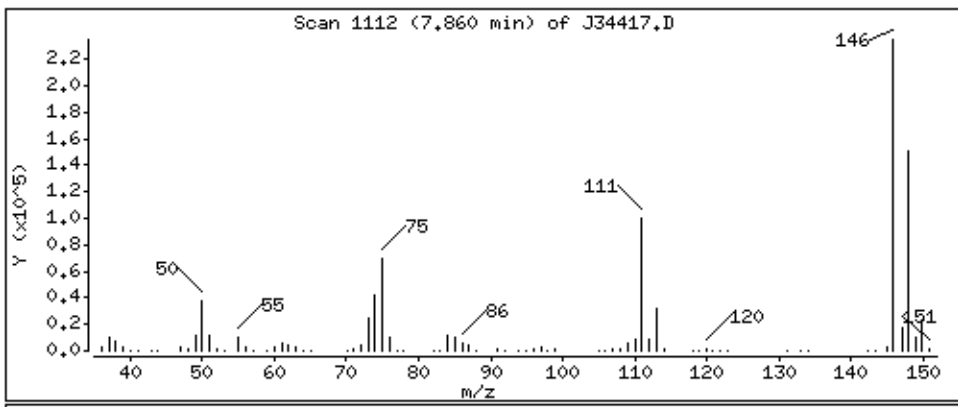
Column phase: RTX-624

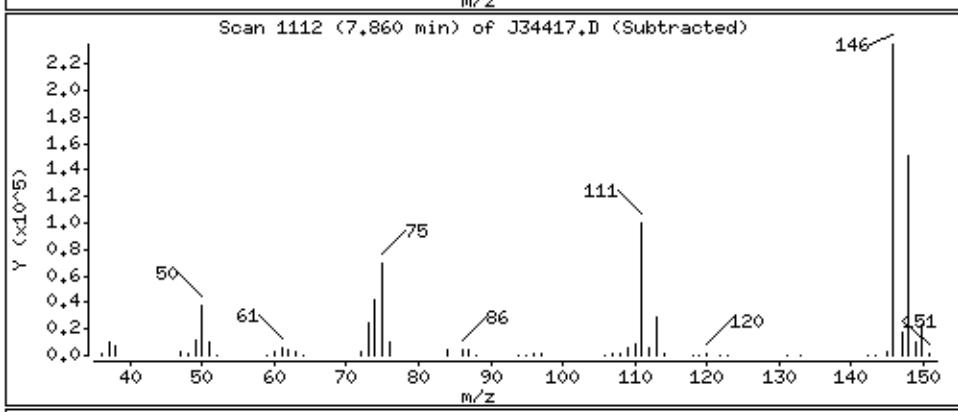
Column diameter: 0.18

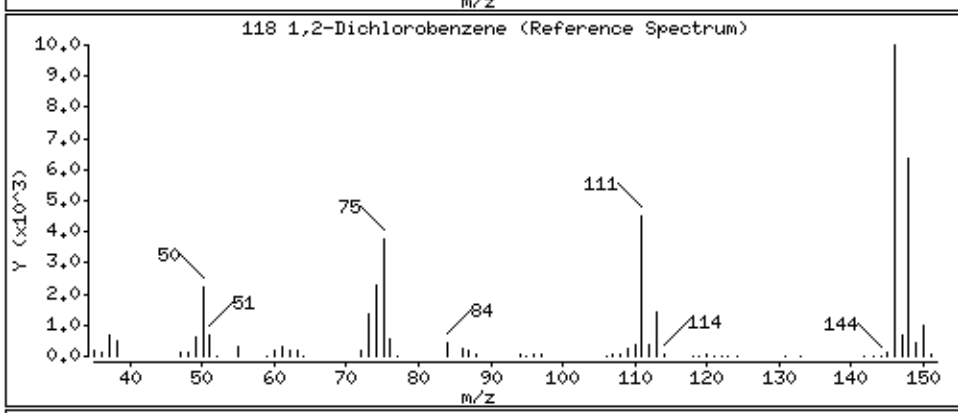
118 1,2-Dichlorobenzene

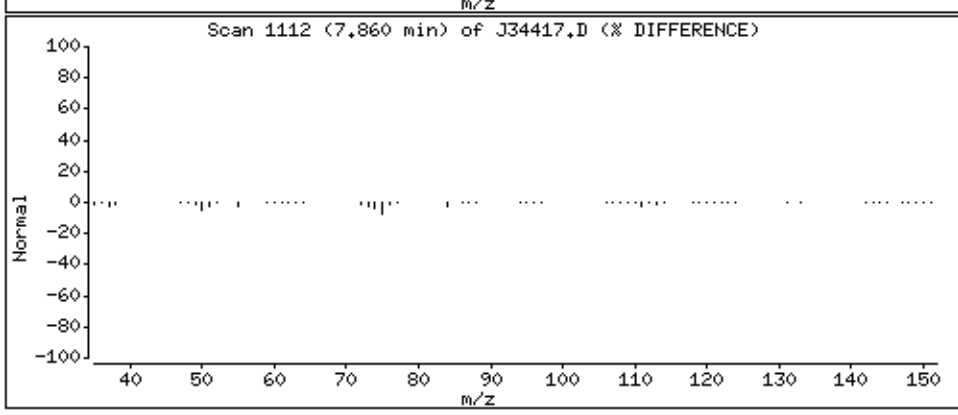
Concentration: 44.7 ug/L

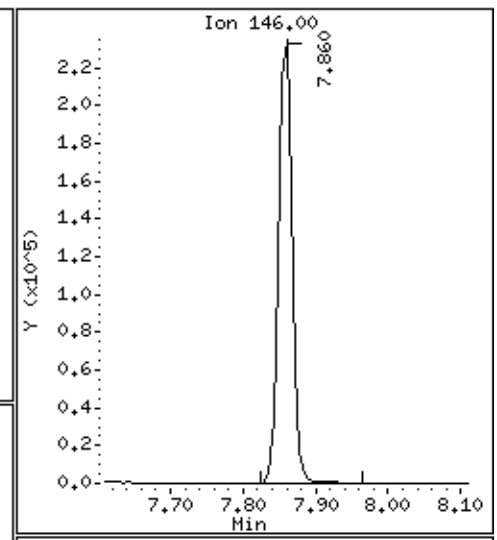
Review Code:

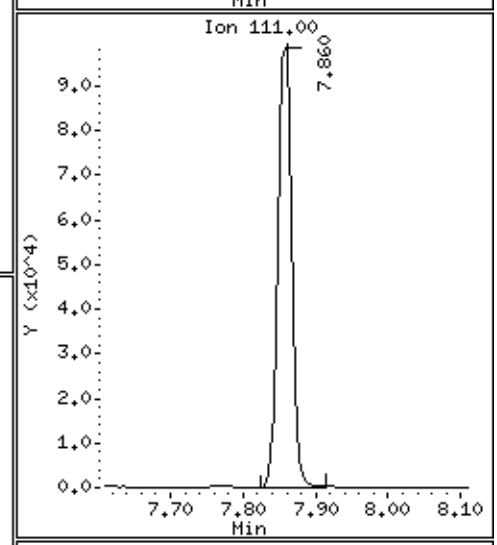


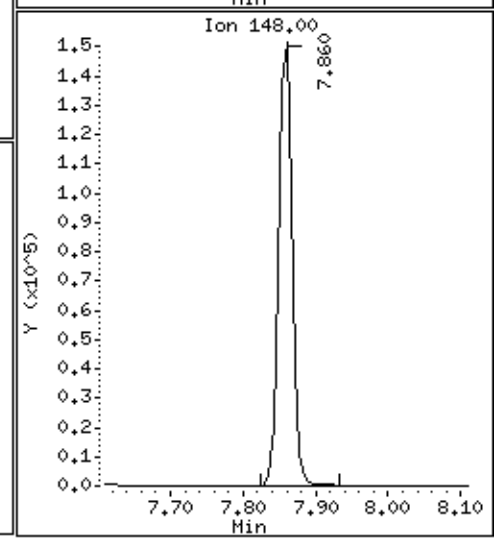












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D

Date : 25-APR-2017 19:07

Client ID: MW-3CMS

Instrument: 70msv6.i

Sample Info: 103081, 15067:1.25

Purge Volume: 5.0

Operator: KGG

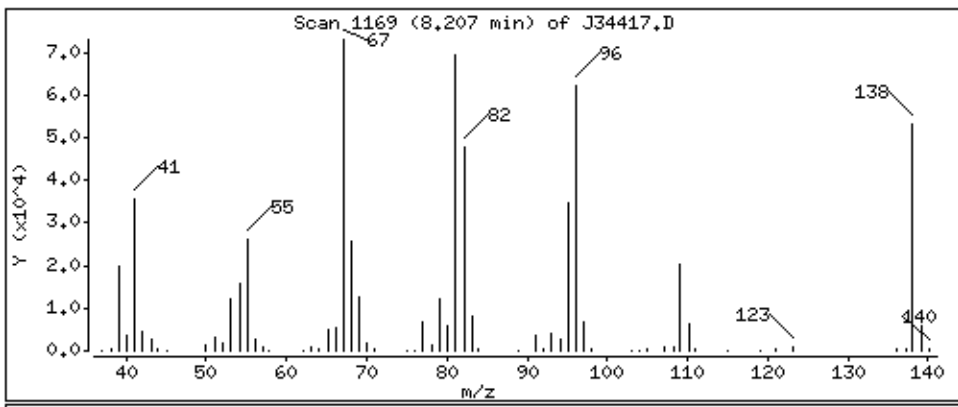
Column phase: RTX-624

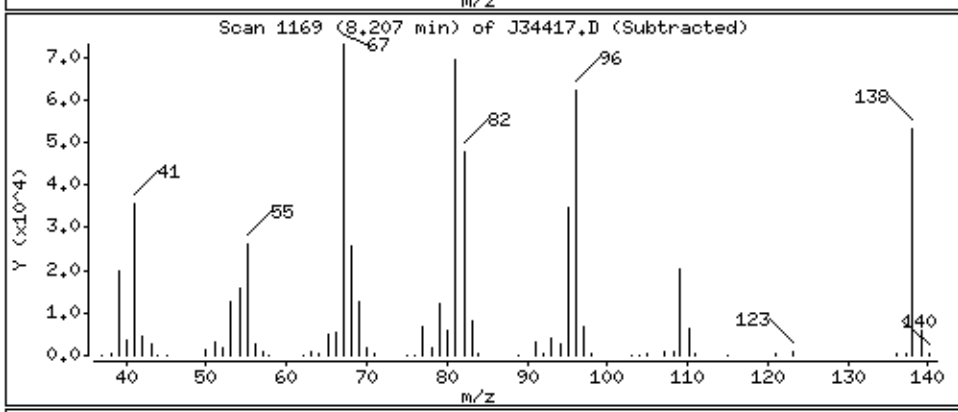
Column diameter: 0.18

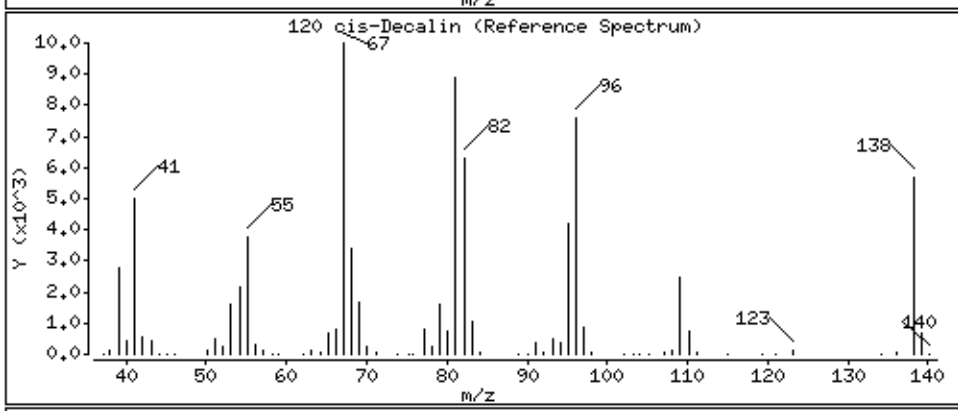
120 cis-Decalin

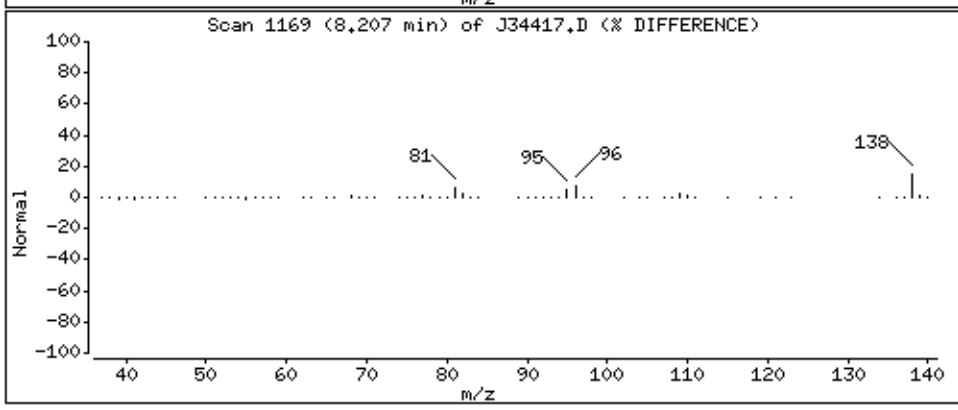
Concentration: 53.0 ug/L

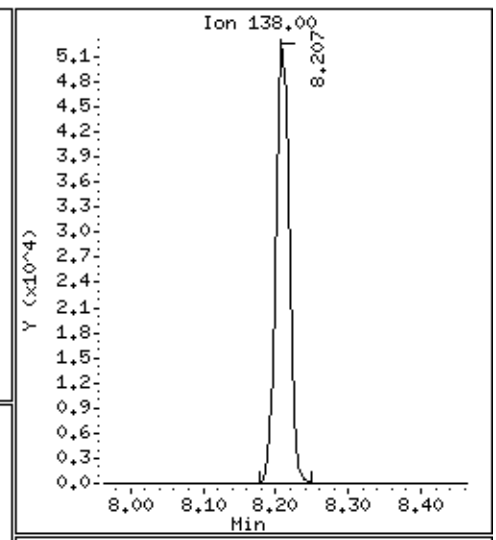
Review Code:

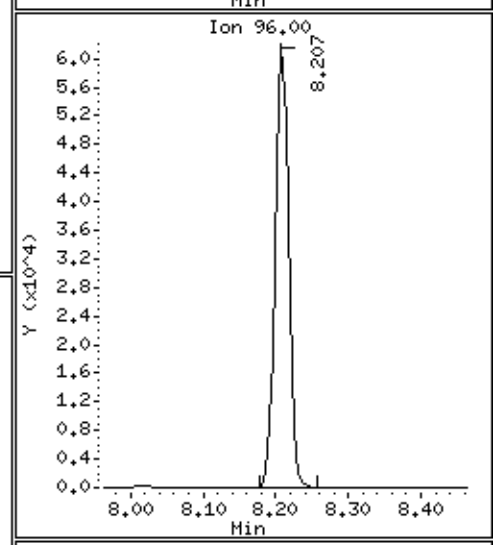


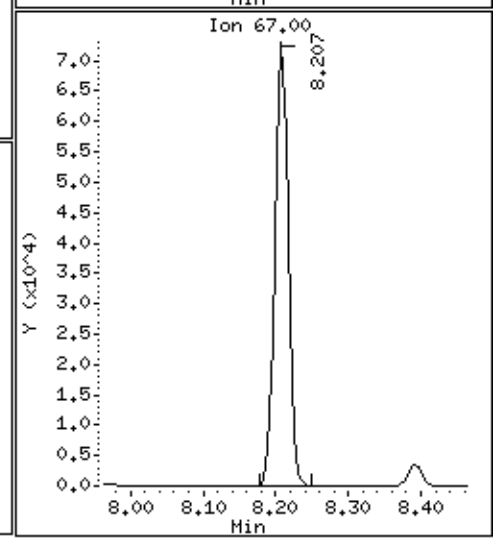












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D

Date : 25-APR-2017 19:07

Client ID: MW-3CMS

Instrument: 70msv6.i

Sample Info: 103081, 15067:1.25

Purge Volume: 5.0

Operator: KGG

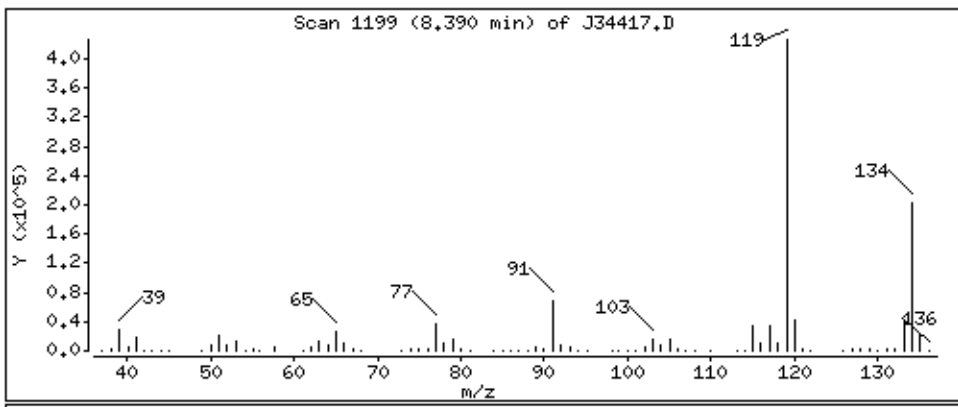
Column phase: RTX-624

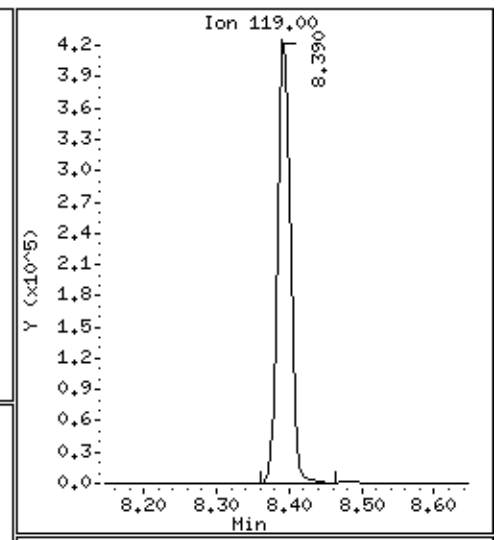
Column diameter: 0.18

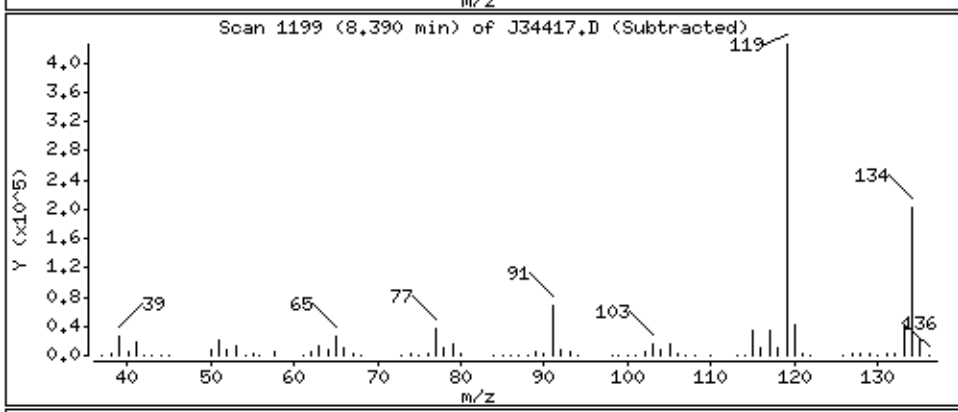
121 1,2,4,5-tetramethylbenzene

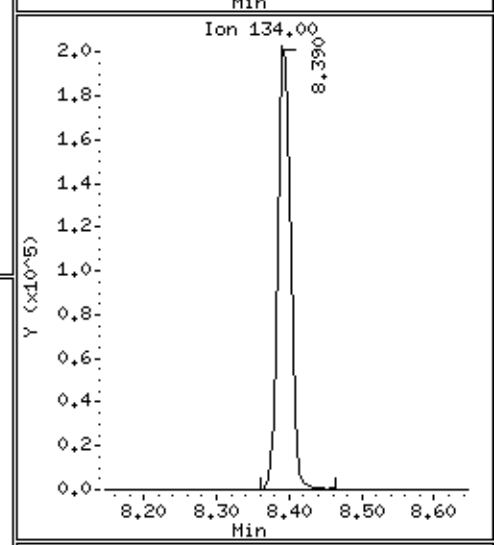
Concentration: 54.6 ug/L

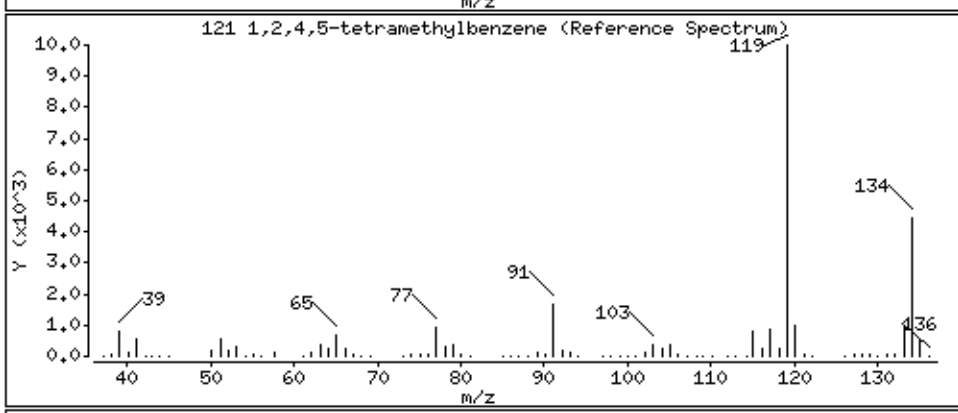
Review Code:

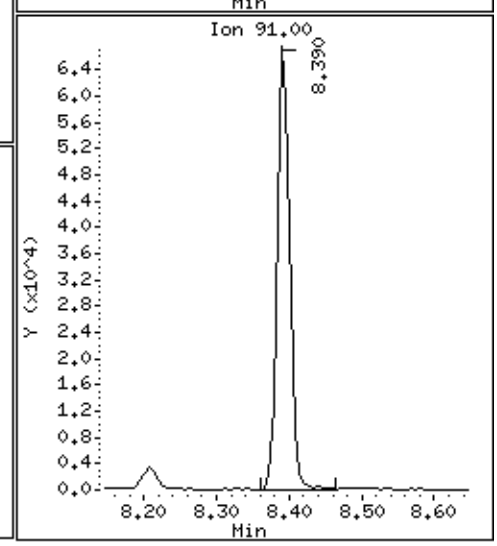


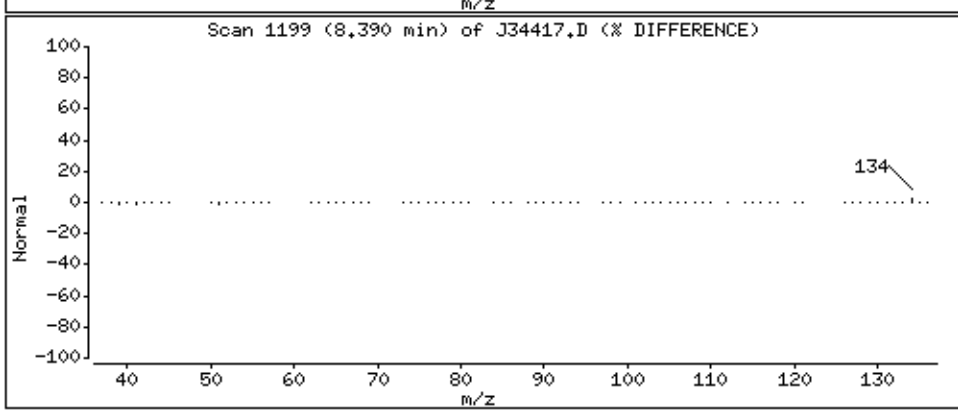












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D

Date : 25-APR-2017 19:07

Client ID: MW-3CMS

Instrument: 70msv6.i

Sample Info: 103081, 15067:1.25

Purge Volume: 5.0

Operator: KGG

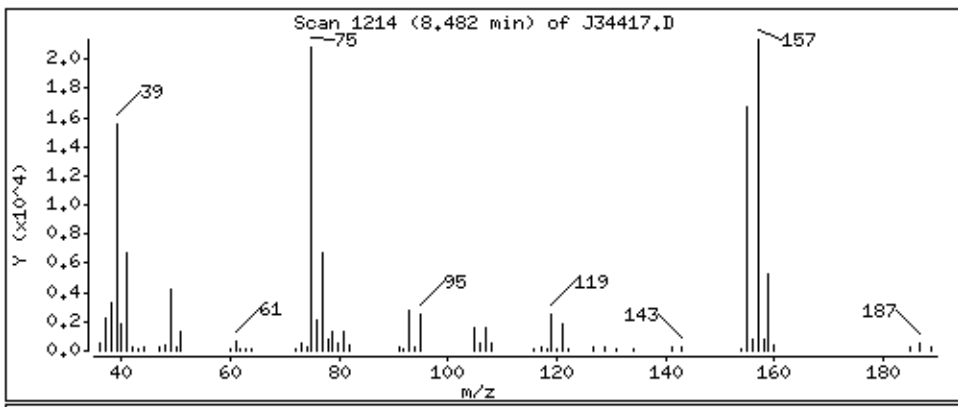
Column phase: RTX-624

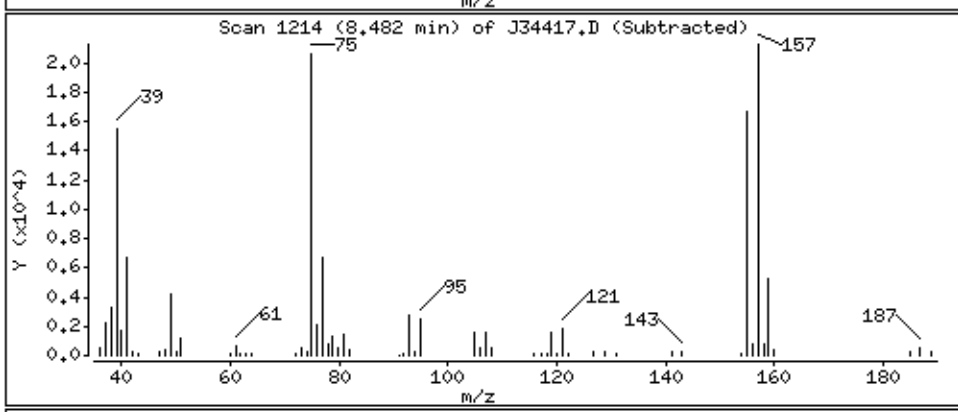
Column diameter: 0.18

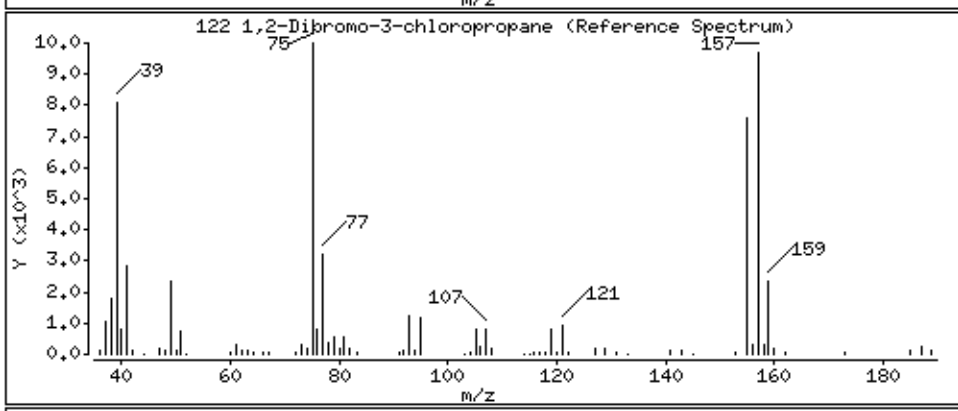
122 1,2-Dibromo-3-chloropropane

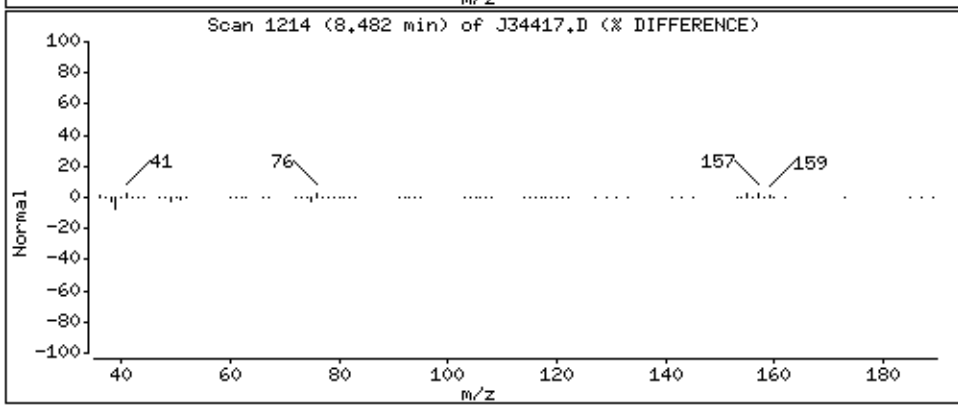
Concentration: 38.9 ug/L

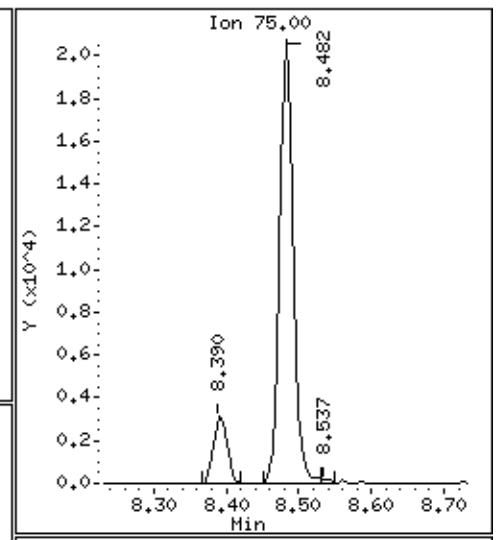
Review Code:

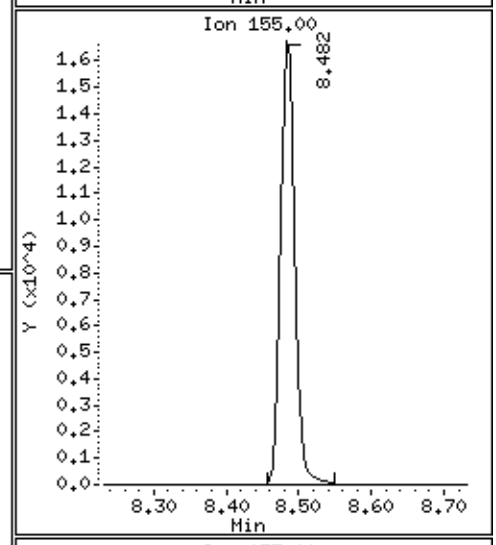


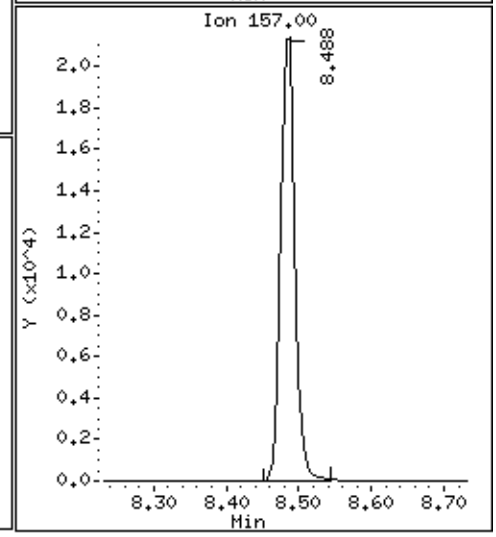












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D

Date : 25-APR-2017 19:07

Client ID: MW-3CMS

Instrument: 70msv6.i

Sample Info: 103081, 15067:1.25

Purge Volume: 5.0

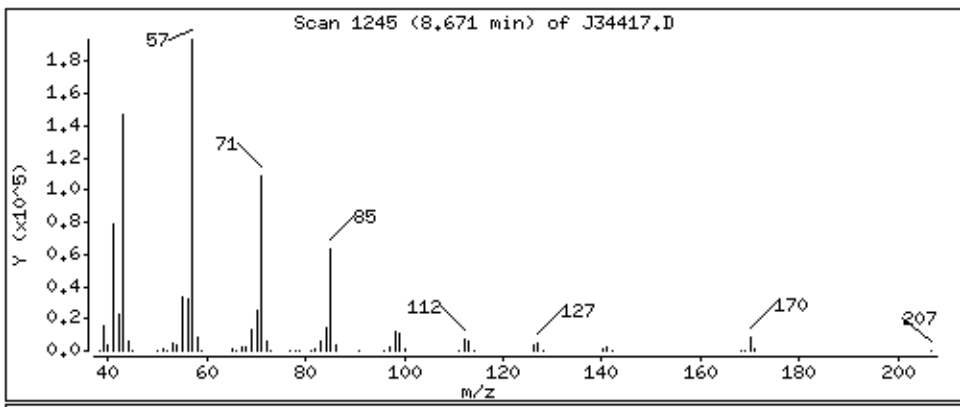
Operator: KGG

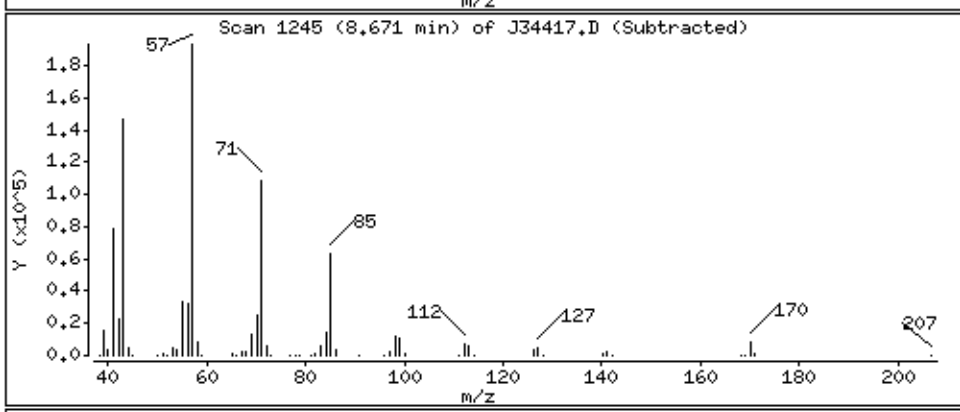
Column phase: RTX-624

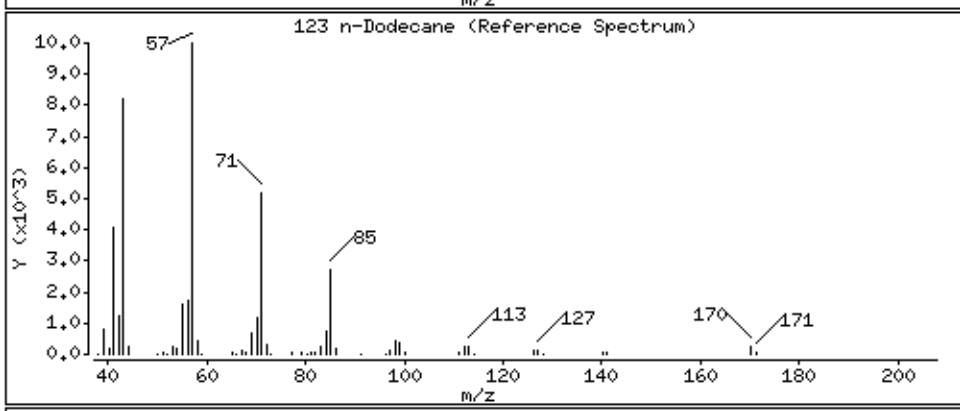
Column diameter: 0.18

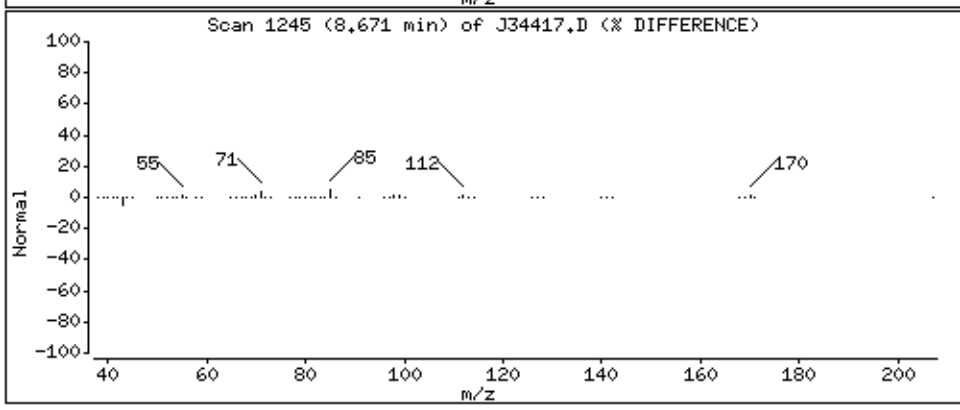
123 n-Dodecane

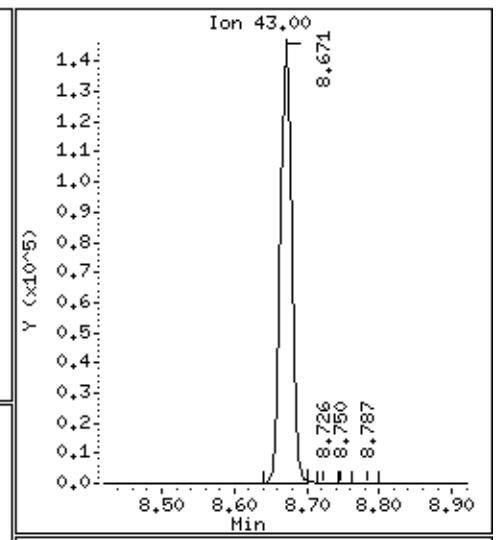
Review Code:

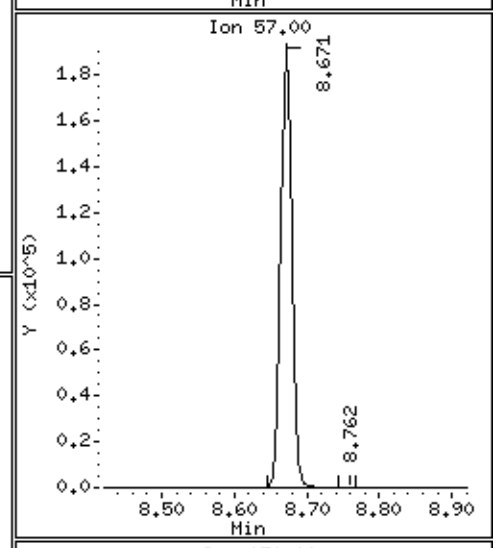


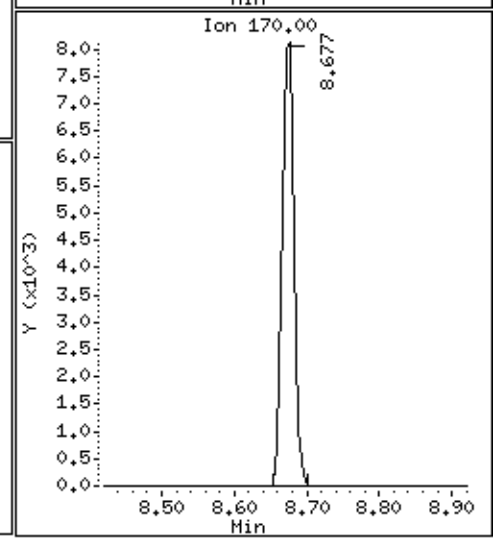












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D

Date : 25-APR-2017 19:07

Client ID: MW-3CMS

Instrument: 70msv6.i

Sample Info: 103081, 15067:1.25

Purge Volume: 5.0

Operator: KGG

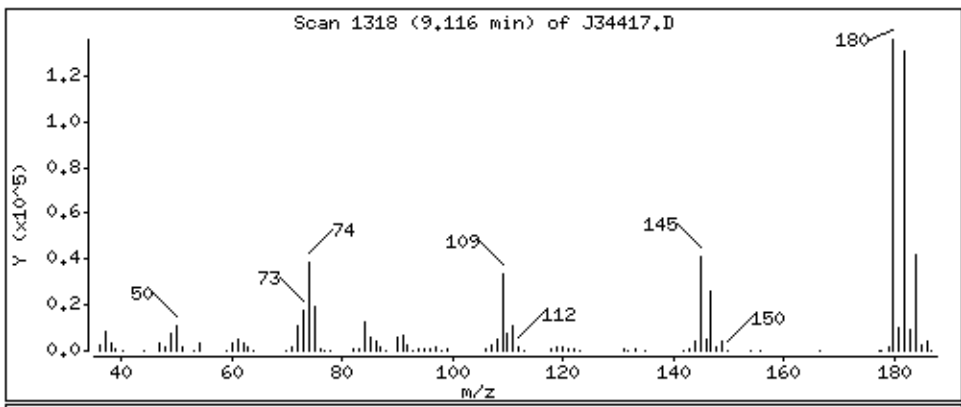
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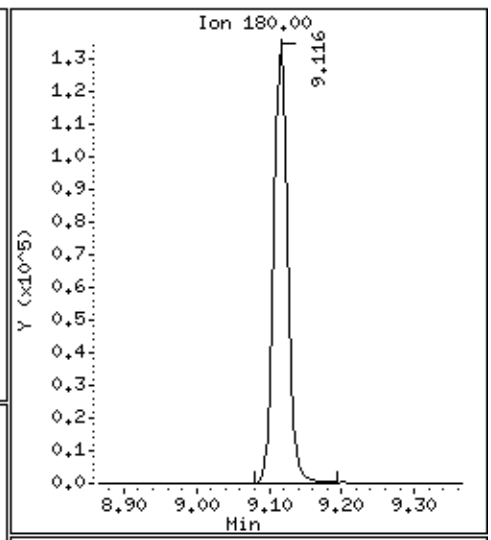
Column diameter: 0.18

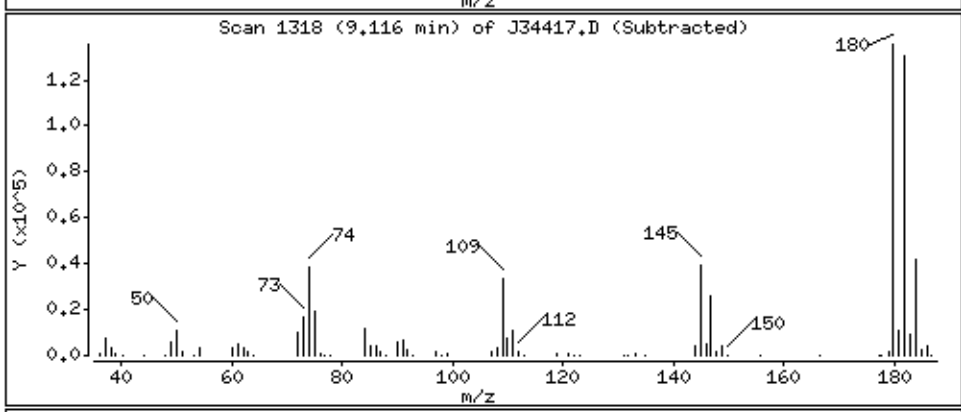
124 1,2,4-Trichlorobenzene

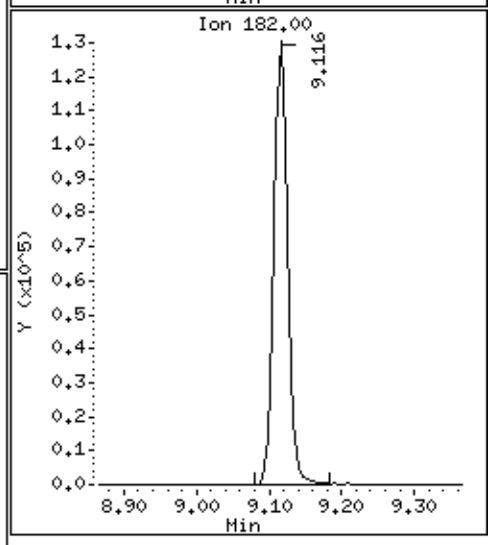
Concentration: 49.4 ug/L

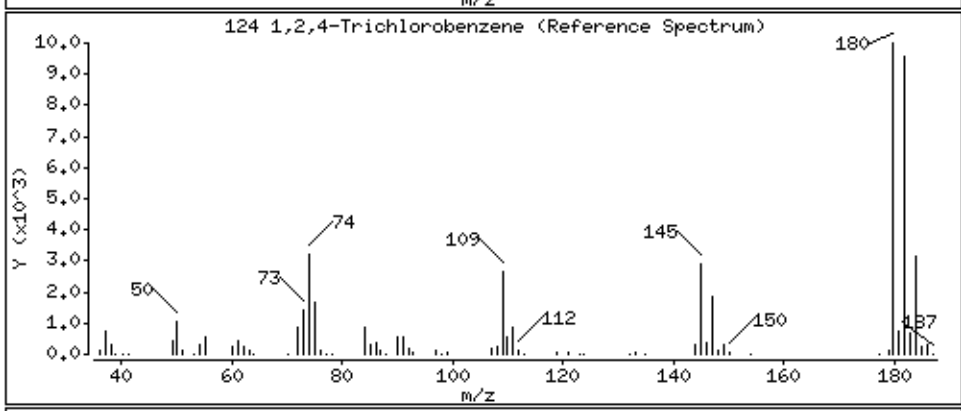
Review Code:

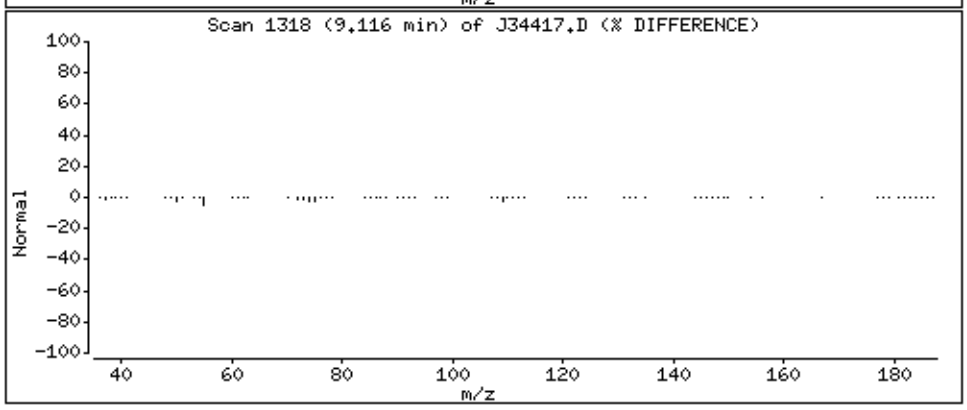












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D

Date : 25-APR-2017 19:07

Client ID: MW-3CMS

Instrument: 70msv6.i

Sample Info: 103081, 15067:1.25

Purge Volume: 5.0

Operator: KGG

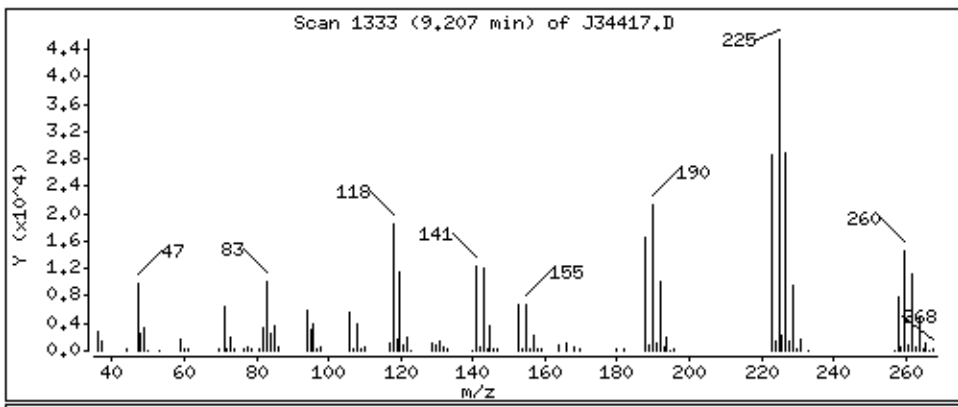
Column phase: RTX-624

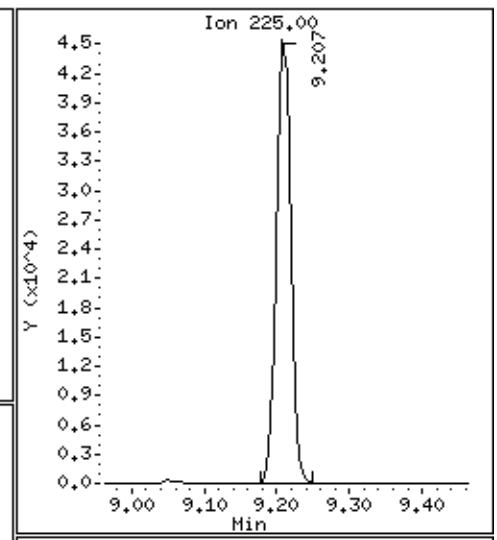
Column diameter: 0.18

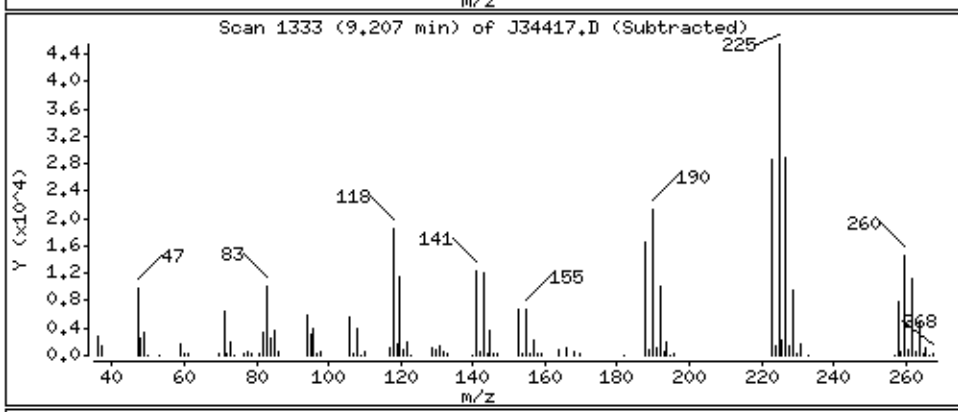
125 Hexachloro-1,3-butadiene

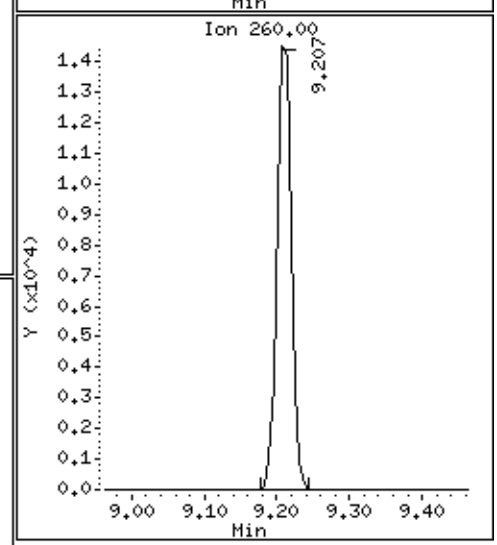
Concentration: 49.6 ug/L

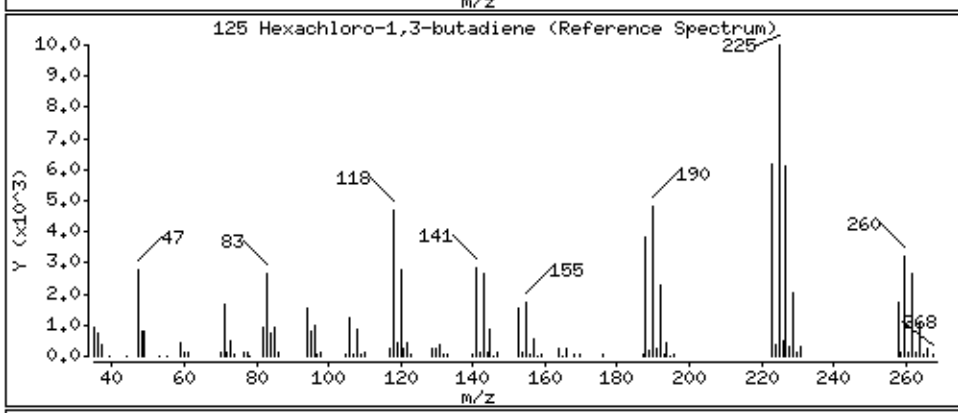
Review Code:

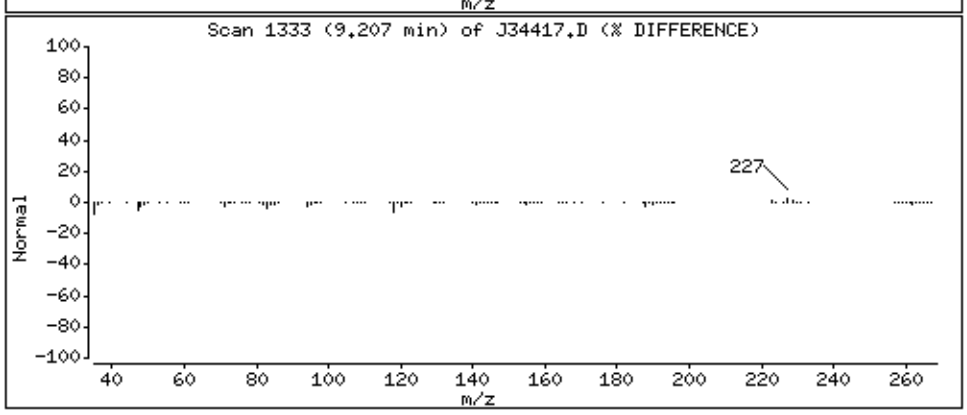












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D

Date : 25-APR-2017 19:07

Client ID: MW-3CMS

Instrument: 70msv6.i

Sample Info: 103081, 15067:1.25

Purge Volume: 5.0

Operator: KGG

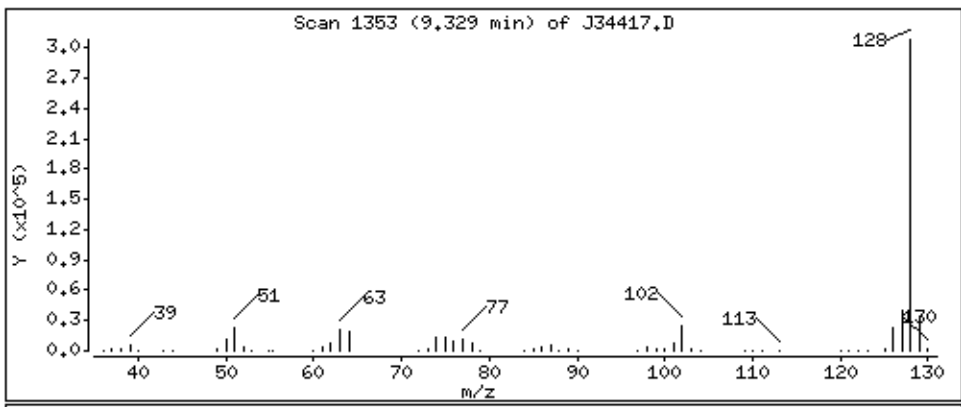
Column phase: RTX-624

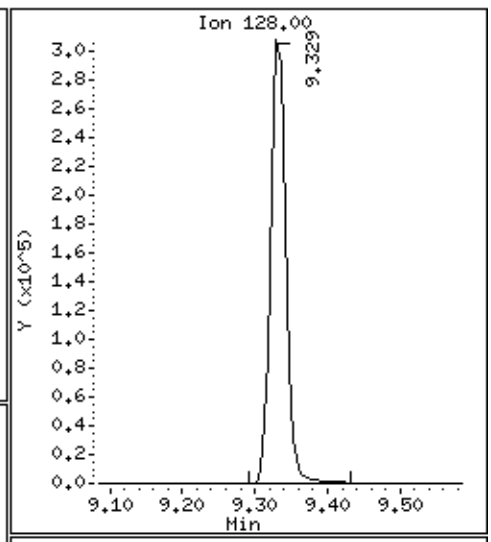
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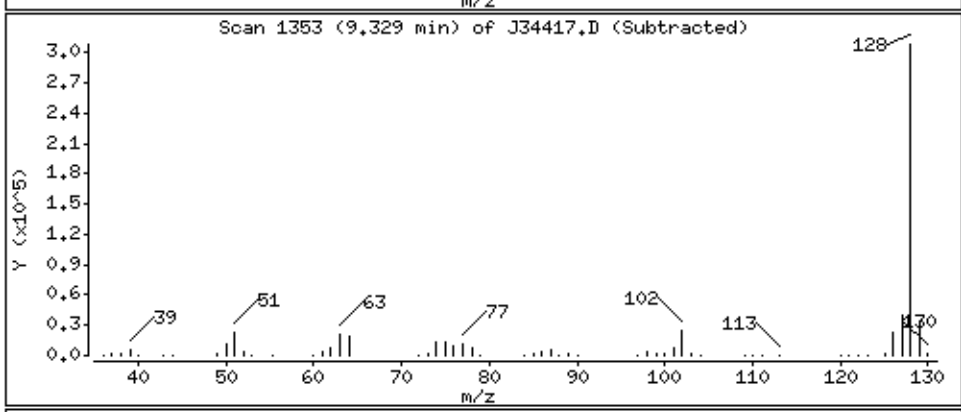
126 Naphthalene

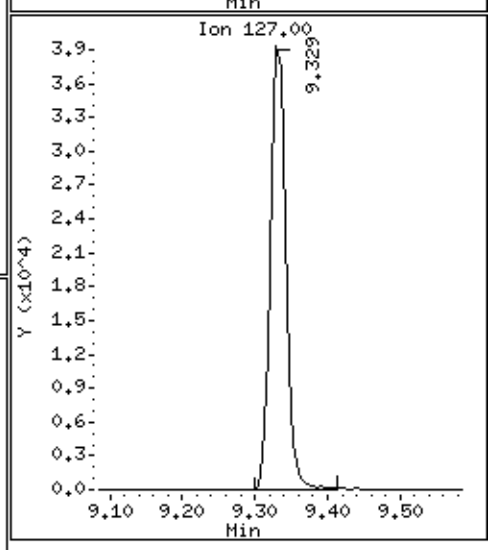
Concentration: 49.3 ug/L

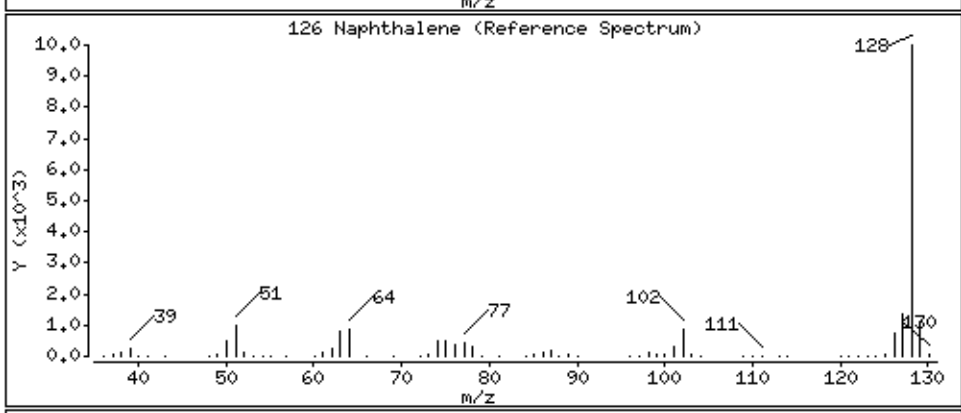
Review Code:

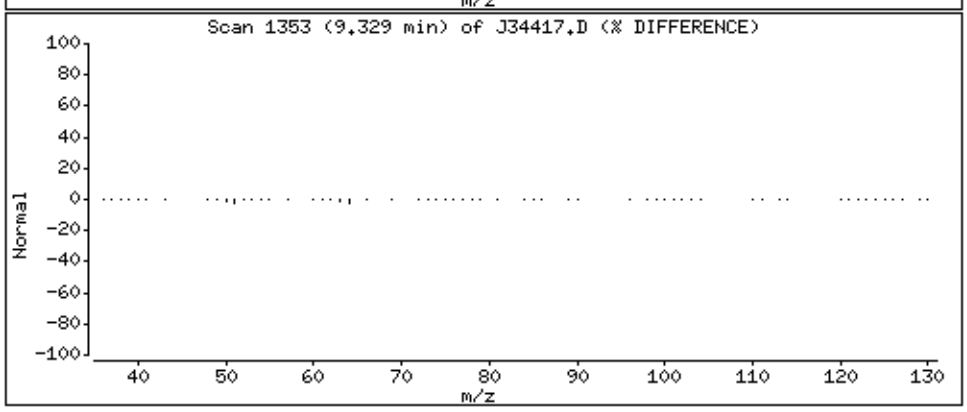












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34417.D

Date : 25-APR-2017 19:07

Client ID: MW-3CMS

Instrument: 70msv6.i

Sample Info: 103081, 15067:1.25

Purge Volume: 5.0

Operator: KGG

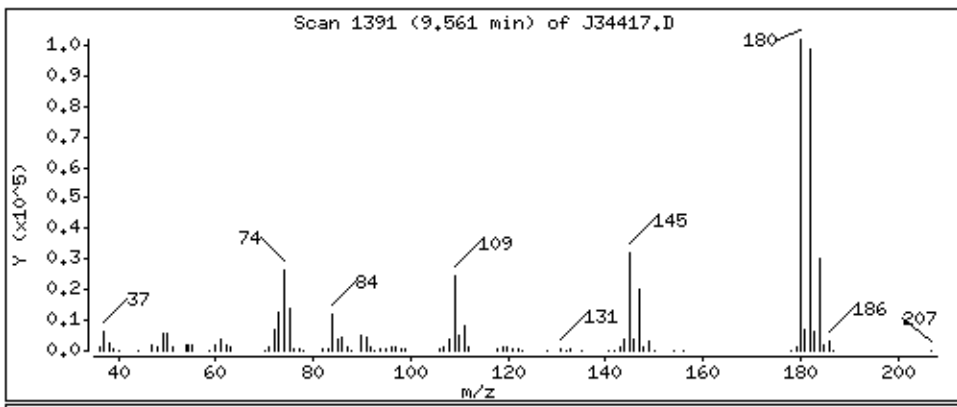
Column phase: RTX-624

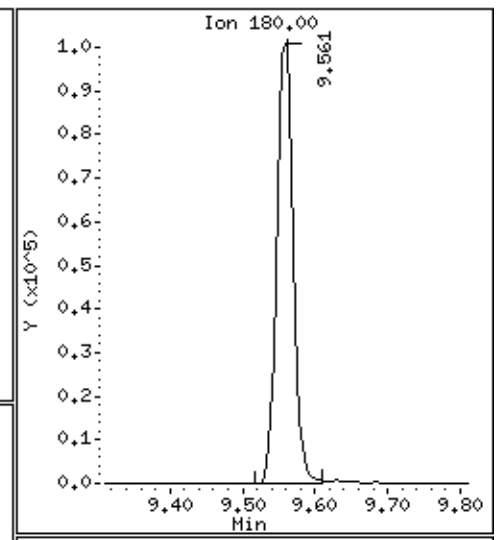
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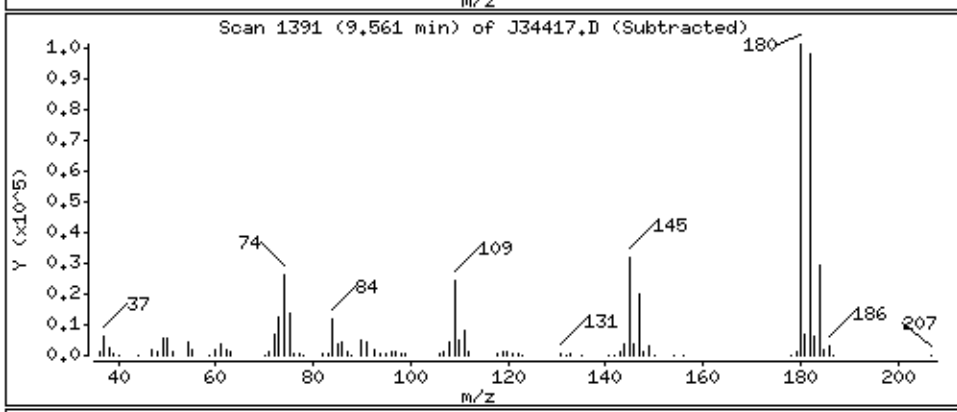
127 1,2,3-Trichlorobenzene

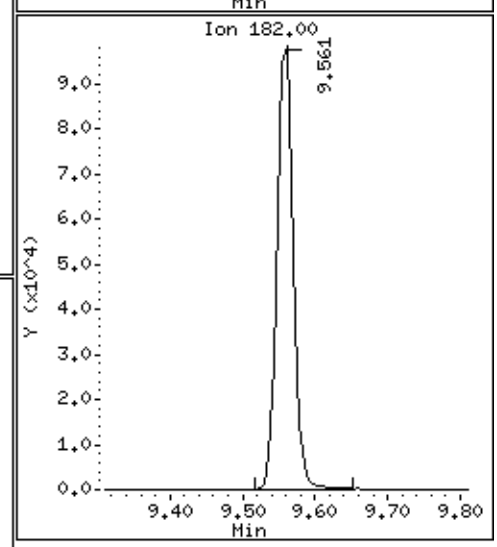
Concentration: 48.8 ug/L

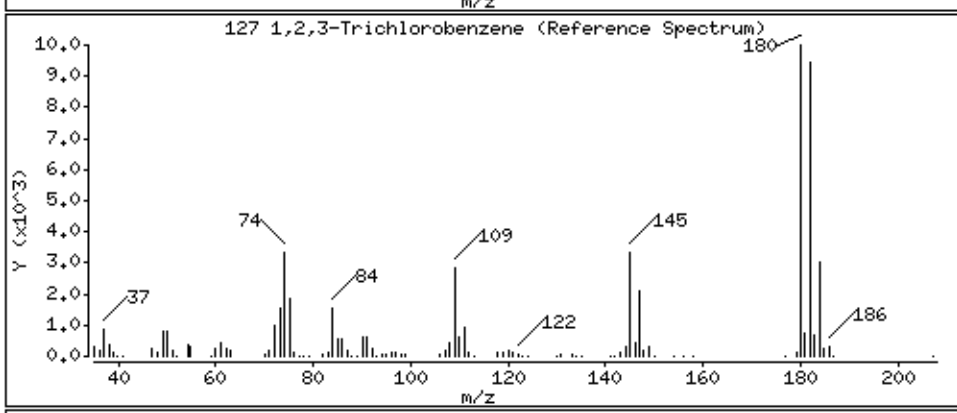
Review Code:

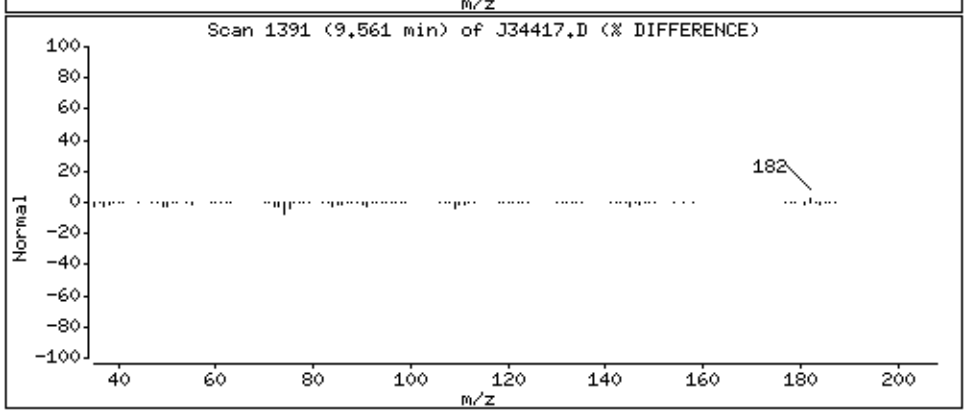












Data File: \\v70wintarget\chem\70msv6.i\042517.b/J34417.D
Injection Date: 25-APR-2017 19:07
Instrument: 70msv6.i
Lab Sample ID: 103081
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

SAMPLE NO.

MSD

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York Contract: NORTH SEA LANDFILL

Date Received: 04/21/2017 11:00 Matrix: Water SDG No.: 7016438

Date Extracted: 04/25/2017 19:25 Lab Sample ID: 103082

Date Analyzed: 04/25/2017 19:25 Lab File ID: 042517.B\J34418.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1 Instrument: 70MSV6 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	32.6	
107-13-1	Acrylonitrile	37.9	
71-43-2	Benzene	49.1	
74-97-5	Bromochloromethane	48.9	
75-27-4	Bromodichloromethane	52.2	
75-25-2	Bromoform	53.2	
74-83-9	Bromomethane	46.0	
78-93-3	2-Butanone (MEK)	34.2	
75-15-0	Carbon disulfide	49.3	
56-23-5	Carbon tetrachloride	67.0	
108-90-7	Chlorobenzene	53.0	
75-00-3	Chloroethane	50.0	
67-66-3	Chloroform	46.7	
74-87-3	Chloromethane	45.4	
96-12-8	1,2-Dibromo-3-chloropropane	42.4	
124-48-1	Dibromochloromethane	65.1	
106-93-4	1,2-Dibromoethane (EDB)	61.5	
74-95-3	Dibromomethane	46.6	
95-50-1	1,2-Dichlorobenzene	46.2	
106-46-7	1,4-Dichlorobenzene	48.7	
110-57-6	trans-1,4-Dichloro-2-butene	39.8	
75-34-3	1,1-Dichloroethane	44.6	
107-06-2	1,2-Dichloroethane	40.1	
75-35-4	1,1-Dichloroethene	59.1	
156-59-2	cis-1,2-Dichloroethene	50.4	
156-60-5	trans-1,2-Dichloroethene	52.7	
78-87-5	1,2-Dichloropropane	43.0	
10061-01-5	cis-1,3-Dichloropropene	52.4	
10061-02-6	trans-1,3-Dichloropropene	46.3	
100-41-4	Ethylbenzene	54.7	
591-78-6	2-Hexanone	33.0	
74-88-4	Iodomethane	44.1	
75-09-2	Methylene Chloride	48.4	
108-10-1	4-Methyl-2-pentanone (MIBK)	35.7	
100-42-5	Styrene	53.5	
630-20-6	1,1,1,2-Tetrachloroethane	55.2	
79-34-5	1,1,2,2-Tetrachloroethane	43.6	

SAMPLE NO.

MSD

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York Contract: NORTH SEA LANDFILL

Date Received: 04/21/2017 11:00 Matrix: Water SDG No.: 7016438

Date Extracted: 04/25/2017 19:25 Lab Sample ID: 103082

Date Analyzed: 04/25/2017 19:25 Lab File ID: 042517.B\J34418.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1 Instrument: 70MSV6 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
127-18-4	Tetrachloroethene	61.2	
108-88-3	Toluene	49.8	
71-55-6	1,1,1-Trichloroethane	53.7	
79-00-5	1,1,2-Trichloroethane	47.9	
79-01-6	Trichloroethene	52.1	
75-69-4	Trichlorofluoromethane	54.1	
96-18-4	1,2,3-Trichloropropane	45.9	
108-05-4	Vinyl acetate	52.5	
75-01-4	Vinyl chloride	54.1	
1330-20-7	Xylene (Total)	162	

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D
Report Date: 29-Apr-2017 22:54

Pace Analytical Services, Inc.

SW846-8260C/EPA 624

Data file : \\v70wintarget\chem\70msv6.i\042517.b\J34418.D
Lab Smp Id: 103082 Client Smp ID: MW-3CMSD
Inj Date : 25-APR-2017 19:25 MS Autotune Date: 17-MAR-2017 06:2
Operator : KGG Inst ID: 70msv6.i
Smp Info : 103082, 15067:1.25
Misc Info : 2005,
Comment :
Method : \\v70wintarget\chem\70msv6.i\042517.b\032717_8260W.m
Meth Date : 29-Apr-2017 22:43 blagula Quant Type: ISTD
Cal Date : 27-MAR-2017 18:25 Cal File: J33244.D
Als bottle: 20 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A
Processing Host: 70MSV4WS10B6

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)	REVIEW C
1 Chlorodifluoromethane	51	1.281	1.282	(0.369)	265131	48.9818	49.0	
2 Dichlorotetrafluoroethane	135	1.348	1.349	(0.388)	113102	71.2475	71.2	
3 Dichlorodifluoromethane	85	1.263	1.269	(0.363)	199874	63.5930	63.6(Q)	
4 Chloromethane	50	1.397	1.397	(0.402)	229771	45.3735	45.4	
5 Vinyl chloride	62	1.464	1.464	(0.421)	255186	54.0981	54.1	
6 1,3-Butadiene	54	1.482	1.483	(0.427)	243249	52.0341	52.0	
7 Acetaldehyde	44	1.550	1.550	(0.446)	44631	41.8878	41.9	
8 Bromomethane	94	1.678	1.678	(0.483)	118481	46.0308	46.0	
9 Chloroethane	64	1.739	1.745	(0.500)	151229	49.9700	50.0	
10 Dichlorofluoromethane	67	1.867	1.867	(0.537)	363908	45.4516	45.4	
11 Trichlorofluoromethane	101	1.879	1.879	(0.541)	250765	54.0620	54.1	
12 Ethanol	45	2.013	2.013	(0.579)	38556	974.468	974	
13 Diethyl ether (Ethyl ether)	59	2.043	2.044	(0.588)	161630	43.3373	43.3	
16 1,1,2-Trichlorotrifluoroethane	101	2.159	2.159	(0.621)	156628	57.4830	57.5	
14 Acrolein	56	2.159	2.165	(0.621)	9800	20.1100	20.1(QR)	
15 1,1-Dichloroethene	96	2.190	2.190	(0.630)	160438	59.0873	59.1	
17 Acetone	43	2.245	2.245	(0.646)	45199	32.5975	32.6(R)	
18 Iodomethane	142	2.293	2.294	(0.660)	168022	44.1372	44.1	
19 2-Propanol	45	2.305	2.306	(0.663)	225694	890.755	891	
20 Carbon disulfide	76	2.318	2.318	(0.667)	473381	49.3149	49.3	
21 Allyl chloride	76	2.403	2.403	(0.691)	114410	48.7103	48.7	
22 Acetonitrile	41	2.403	2.403	(0.691)	285037	181.872	182	

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D
Report Date: 29-Apr-2017 22:54

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)	REVIEW C
	23 Methyl acetate	43	2.409	2.409	(0.693)	231858	37.5852	37.6	
	24 Methylene Chloride	84	2.482	2.489	(0.714)	181095	48.4373	48.4	
	25 tert-Butyl Alcohol	59	2.525	2.525	(0.726)	61495	223.651	224	
	28 Methyl-tert-butyl ether	73	2.592	2.592	(0.746)	579862	44.0191	44.0	
	27 trans-1,2-Dichloroethene	96	2.610	2.611	(0.751)	188214	52.6995	52.7	
	26 Acrylonitrile	53	2.653	2.653	(0.763)	62449	37.8839	37.9	
	30 n-Hexane	57	2.714	2.714	(0.781)	269969	55.3788	55.4	
	29 Diisopropyl ether	45	2.842	2.842	(0.818)	623754	37.3040	37.3	
	32 Vinyl acetate	43	2.872	2.873	(0.826)	399816	52.4618	52.5	
	31 1,1-Dichloroethane	63	2.872	2.873	(0.826)	358656	44.6033	44.6	
	33 Chloroprene	53	2.897	2.897	(0.833)	294193	43.0743	43.1	
	34 Ethyl-tert-butyl ether	59	3.043	3.043	(0.875)	613167	45.7521	45.8	
	36 2,2-Dichloropropane	77	3.177	3.184	(0.914)	269663	62.9425	62.9	
	35 cis-1,2-Dichloroethene	96	3.202	3.202	(0.921)	208060	50.3524	50.4	
	39 Ethyl acetate	61	3.196	3.202	(0.919)	326435	44.1167	44.1	
	37 2-Butanone (MEK)	43	3.202	3.202	(0.921)	131181	34.2240	34.2(R)	
	41 Bromochloromethane	128	3.342	3.342	(0.961)	86434	48.8709	48.9	
	42 Tetrahydrofuran	42	3.342	3.342	(0.961)	53092	34.0405	34.0(R)	
	43 Chloroform	83	3.366	3.366	(0.968)	314284	46.6974	46.7	
	38 Propionitrile	54	3.281	3.287	(0.944)	23469	40.8335	40.8	
	46 Cyclohexane	56	3.458	3.458	(0.995)	372050	50.6969	50.7	
	45 1,1,1-Trichloroethane	97	3.458	3.464	(0.885)	262109	53.7190	53.7	
*	44 Pentafluorobenzene (IS)	168	3.476	3.476	(1.000)	234516	50.0000		
	48 Carbon tetrachloride	117	3.537	3.537	(0.905)	199119	66.9818	67.0(R)	
	47 1,1-Dichloropropene	75	3.555	3.555	(0.910)	272879	48.4015	48.4	
	55 2,2,4-Trimethylpentane	57	3.653	3.653	(1.051)	393564	50.6592	50.6	
	51 Benzene	78	3.677	3.677	(0.941)	785250	49.0506	49.0	
	40 Methacrylonitrile	67	3.348	3.348	(0.963)	76293	42.5920	42.6	
$	50 1,2-Dichloroethane-d4 (S)	65	3.677	3.677	(0.941)	129077	44.6827	44.7	
	56 tert-Amylmethyl ether	73	3.702	3.702	(1.065)	567922	46.8760	46.9	
	52 1,2-Dichloroethane	62	3.726	3.726	(1.072)	237762	40.1045	40.1	
	57 n-Heptane	43	3.756	3.757	(1.081)	177081	46.0290	46.0	
*	58 1,4-Difluorobenzene (IS)	114	3.909	3.909	(1.000)	405579	50.0000		
	59 Trichloroethene	95	4.055	4.055	(1.037)	198874	52.0741	52.1	
	60 Methylcyclohexane	83	4.134	4.135	(1.058)	313417	62.9441	62.9	
	49 Isobutanol	43	3.653	3.653	(1.051)	70291	220.694	221	
	53 tert-Amyl Alcohol	59	Compound Not Detected.						(D)
	54 tert-Amyl ethyl ether	59	4.153	4.153	(1.195)	482556	52.2754	52.3	
	61 1,2-Dichloropropane	63	4.220	4.220	(1.080)	205820	43.0490	43.0	
	63 Methyl methacrylate	69	4.250	4.250	(1.087)	130252	56.5529	56.6	
	64 1,4-Dioxane (p-Dioxane)	88	4.281	4.287	(1.095)	44000	1138.87	1140	
	62 Dibromomethane	93	4.299	4.299	(1.100)	108640	46.5632	46.6	
	65 Bromodichloromethane	83	4.378	4.385	(1.120)	229392	52.2062	52.2	
	66 2-Nitropropane	43	4.561	4.561	(1.167)	21318	9.89146	9.89(QR)	
	67 2-Chloroethylvinyl ether	63	Compound Not Detected.						
	68 cis-1,3-Dichloropropene	75	4.665	4.665	(1.193)	309780	52.4329	52.4	
	69 4-Methyl-2-pentanone (MIBK)	43	4.744	4.744	(1.214)	150178	35.7259	35.7	
$	70 Toluene-d8 (S)	98	4.811	4.811	(0.828)	477578	56.1355	56.1	
	71 Toluene	91	4.854	4.854	(1.242)	820489	49.7995	49.8	
	72 Methyl isothiocyanate	73	4.976	4.976	(1.273)	298897	125.246	125	
	74 trans-1,3-Dichloropropene	75	5.037	5.043	(1.289)	263384	46.2955	46.3	
	75 Ethyl methacrylate	69	5.037	5.037	(1.289)	244459	49.4965	49.5	
	76 1,1,2-Trichloroethane	83	5.165	5.165	(1.321)	140817	47.8861	47.9	
	77 Tetrachloroethene	166	5.201	5.208	(0.895)	218681	61.1772	61.2	

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D
Report Date: 29-Apr-2017 22:54

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)	REVIEW C
78	1,3-Dichloropropane	76	5.280	5.281	(0.909)	300105	47.9482	47.9	
79	2-Hexanone	43	5.299	5.305	(0.912)	99102	33.0399	33.0(R)	
73	n-Octane	43	4.854	4.854	(1.242)	159065	41.7857	41.8(Q)	
81	n-Butyl acetate	43	5.354	5.354	(1.370)	92229	39.8435	39.8	
80	Dibromochloromethane	129	5.421	5.421	(0.933)	156258	65.0802	65.1(R)	
82	1,2-Dibromoethane (EDB)	107	5.512	5.512	(1.410)	162599	61.4927	61.5	
* 83	Chlorobenzene-d5 (IS)	82	5.811	5.811	(1.000)	223336	50.0000		
84	Chlorobenzene	112	5.835	5.836	(1.004)	506871	52.9810	53.0	
86	Ethylbenzene	106	5.878	5.878	(1.012)	281133	54.7312	54.7	
85	1,1,1,2-Tetrachloroethane	131	5.890	5.890	(1.014)	156401	55.2057	55.2	
88	n-Nonane	43	5.908	5.909	(1.017)	152869	54.4240	54.4(Q)	
87	m&p-Xylene	106	5.963	5.964	(1.026)	694116	108.692	109	
89	o-Xylene	106	6.256	6.256	(1.077)	339326	53.7185	53.7	
90	Styrene	104	6.274	6.274	(1.080)	579200	53.4550	53.4	
91	Bromoform	173	6.439	6.439	(1.108)	90583	53.2320	53.2	
92	Isopropylbenzene (Cumene)	105	6.512	6.512	(0.863)	850857	52.4509	52.4	
$ 93	4-Bromofluorobenzene (S)	95	6.670	6.671	(1.148)	179797	59.3092	59.3	
94	Bromobenzene	156	6.780	6.780	(0.898)	202446	49.7511	49.8	
95	1,1,2,2-Tetrachloroethane	83	6.792	6.793	(0.900)	191581	43.5567	43.6	
98	n-Propylbenzene	91	6.823	6.823	(0.904)	1013366	52.8211	52.8	
96	1,2,3-Trichloropropane	110	6.835	6.835	(0.905)	58287	45.9368	45.9	
97	trans-1,4-Dichloro-2-butene	53	6.841	6.841	(0.906)	51066	39.8473	39.8	
103	n-Decane	43	6.896	6.896	(1.187)	181506	57.3513	57.4(Q)	
99	2-Chlorotoluene	91	6.914	6.915	(0.916)	676830	48.9780	49.0	
100	4-Ethyltoluene	105	6.908	6.908	(0.915)	845367	52.7412	52.7	
101	1,3,5-Trimethylbenzene	105	6.957	6.957	(0.922)	691672	52.4318	52.4	
102	4-Chlorotoluene	91	7.000	7.006	(0.927)	613276	48.7622	48.8	
104	tert-Butylbenzene	119	7.195	7.195	(0.953)	548381	54.4640	54.5	
105	Pentachloroethane	167	7.250	7.250	(0.960)	75618	55.7977	55.8	
106	1,2,4-Trimethylbenzene	105	7.244	7.250	(0.960)	677276	50.3925	50.4	
107	sec-Butylbenzene	105	7.365	7.366	(0.976)	761490	55.0756	55.1	
109	d-Limonene	136	7.426	7.427	(1.278)	26398	51.1992	51.2	
110	p-Isopropyltoluene	119	7.475	7.475	(0.990)	656281	55.0987	55.1	
108	1,3-Dichlorobenzene	146	7.493	7.494	(0.993)	351434	50.0715	50.1	
* 111	1,4-Dichlorobenzene-d4 (IS)	152	7.548	7.549	(1.000)	181617	50.0000		
112	1,4-Dichlorobenzene	146	7.567	7.567	(1.002)	357600	48.7144	48.7	
113	1,2,3-Trimethylbenzene	105	7.573	7.579	(1.003)	695229	48.8323	48.8	
114	Benzyl chloride	91	7.676	7.677	(1.017)	251013	40.3576	40.4	
115	trans-Decalin	138	7.768	7.768	(1.029)	82080	51.6440	51.6	
116	1,4-Diethylbenzene	119	7.774	7.774	(1.030)	362897	52.6701	52.7	
117	n-Butylbenzene	91	7.792	7.792	(1.032)	640192	50.7263	50.7	
119	n-Undecane	43	7.817	7.817	(1.036)	190478	81.5650	81.6(Q)	
118	1,2-Dichlorobenzene	146	7.859	7.859	(1.041)	312700	46.1981	46.2	
120	cis-Decalin	138	8.207	8.213	(1.087)	65827	52.0644	52.1	
121	1,2,4,5-tetramethylbenzene	119	8.390	8.396	(1.111)	565471	58.3009	58.3	
122	1,2-Dibromo-3-chloropropane	75	8.481	8.481	(1.124)	29600	42.4135	42.4	
123	n-Dodecane	43	Compound Not Detected.						(Q)
124	1,2,4-Trichlorobenzene	180	9.115	9.115	(1.208)	199270	54.8051	54.8	
125	Hexachloro-1,3-butadiene	225	9.207	9.213	(1.220)	68751	54.7376	54.7	
126	Naphthalene	128	9.328	9.335	(1.236)	489309	53.9305	53.9	
127	1,2,3-Trichlorobenzene	180	9.560	9.560	(1.267)	177836	55.1225	55.1	

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D
Report Date: 29-Apr-2017 22:54

QC Flag Legend

Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.
D - User disabled compound identification.

Review Codes Legend

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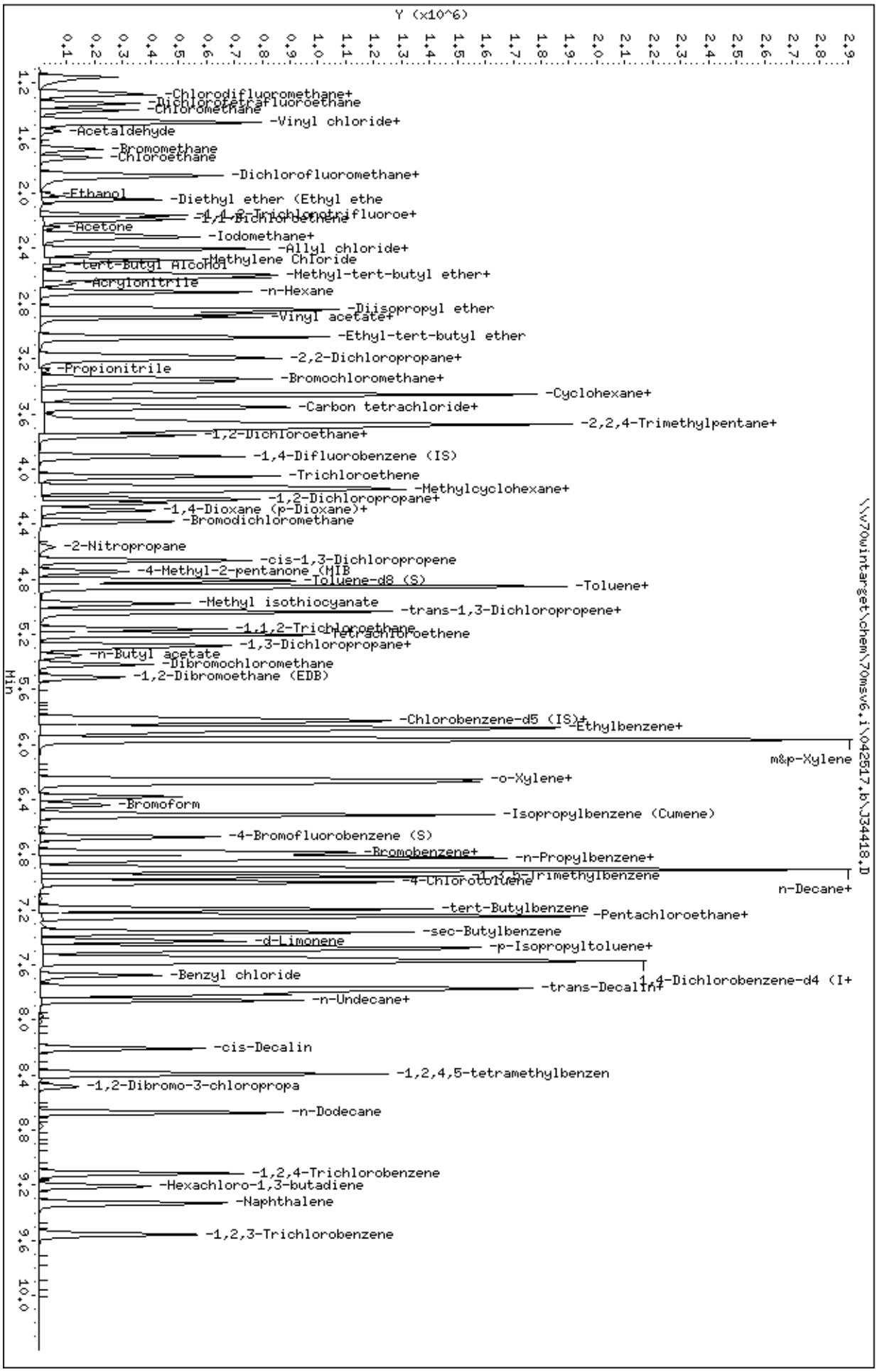
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Report Date: 29-Apr-2017 22:54

Pace Analytical Services, Inc.

SW846-8260C/EPA 624

Data file : \\v70wintarget\chem\70msv6.i\042517.b\J34418.D
Lab Smp Id: 103082 Client Smp ID: MW-3CMSD
Inj Date : 25-APR-2017 19:25 MS Autotune Date: 17-MAR-2017 06:2
Operator : KGG Inst ID: 70msv6.i
Smp Info : 103082, 15067:1.25
Misc Info : 2005,
Comment :
Method : \\v70wintarget\chem\70msv6.i\042517.b\032717_8260W.m
Meth Date : 29-Apr-2017 22:43 blagula Quant Type: ISTD
Cal Date : 27-MAR-2017 18:25 Cal File: J33244.D
Als bottle: 20 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: RC10A
Processing Host: 70MSV4WS10B6

- NO TENTATIVELY IDENTIFIED COMPOUNDS -


Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D
Date : 25-APR-2017 19:25
Client ID: MW-3CHSD
Sample Info: 103082, 15067:1.25
Purge Volume: 5.0
Column phase: RTX-624
Instrument: 70msv6.i
Operator: KGC
Column diameter: 0.18
Y (x10^6)
Min
-Chlorodifluoromethane+
-Dichlorotetrafluoroethane
-Chloromethane
-Vinyl chloride+
-Acetaldehyde
-Bromomethane
-Chloroethane
-Dichlorofluoromethane+
-Ethanol
-Diethyl ether (Ethyl ethe
-1,1-Dichloroethene
-Acetone
-Iodomethane+
-Allyl chloride+
-Methylene Chloride
-tert-Butyl Alcohol
-Methyl-tert-butyl ether+
-Acrylonitrile
-n-Hexane
-Diisopropyl ether
-Vinyl acetate+
-Ethyl-tert-butyl ether
-2,2-Dichloropropane+
-Propionitrile
-Bromochloromethane+
-Cyclohexane+
-Carbon tetrachloride+
-2,2,4-Trimethylpentane+
-1,2-Dichloroethane+
-1,4-Difluorobenzene (IS)
-Trichloroethene
-Methylcyclohexane+
-1,2-Dichloropropane+
-1,4-Dioxane (p-Dioxane)+
-Bromodichloromethane
-2-Nitropropane
-cis-1,3-Dichloropropene
-4-Methyl-2-pentanone (MIB
-Toluene-d8 (S)
-Toluene+
-Methyl isothiocyanate
-trans-1,3-Dichloropropene+
-1,1,2-Trichloroethane
-Tetrachloroethene
-1,3-Dichloropropane+
-n-Butyl acetate
-Dibromochloromethane
-1,2-Dibromoethane (EDB)
-Chlorobenzene-d5 (IS)+
-Ethylbenzene+
m&p-Xylene
-o-Xylene+
-Bromoform
-Isopropylbenzene (Cumene)
-4-Bromofluorobenzene (S)
-Bromobenzene+
-n-Propylbenzene+
-1,3,5-Trimethylbenzene
-4-Chlorotoluene
n-Decane+
-tert-Butylbenzene
-Pentachloroethane+
-sec-Butylbenzene
-d-Limonene
-p-Isopropyltoluene+
-Benzyl chloride
1,4-Dichlorobenzene-d4 (I+
-trans-Decalin+
-n-Undecane+
-cis-Decalin
-1,2,4,5-tetramethylbenzen
-1,2-Dibromo-3-chloropropa
-n-Dodecane
-1,2,4-Trichlorobenzene
-Hexachloro-1,3-butadiene
-Naphthalene
-1,2,3-Trichlorobenzene

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D

Date : 25-APR-2017 19:25

Client ID: MW-3CMSD

Instrument: 70msv6.i

Sample Info: 103082, 15067:1.25

Purge Volume: 5.0

Operator: KGG

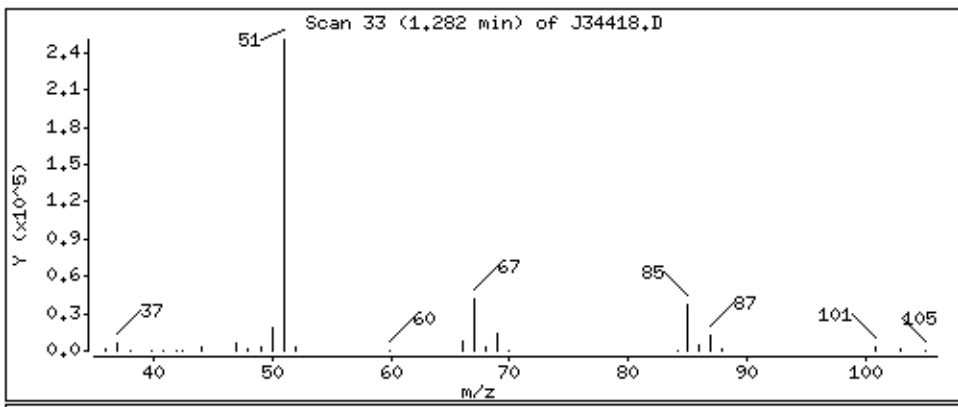
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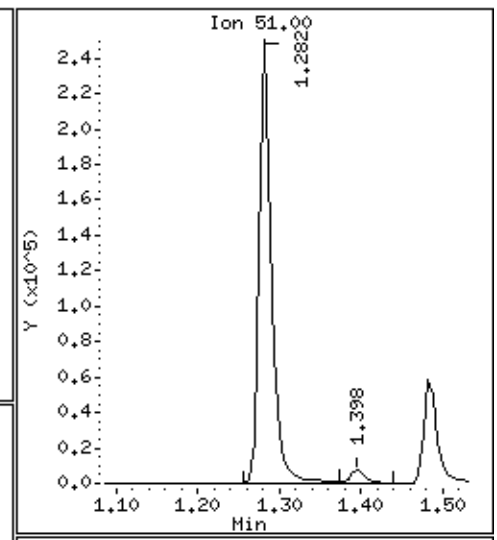
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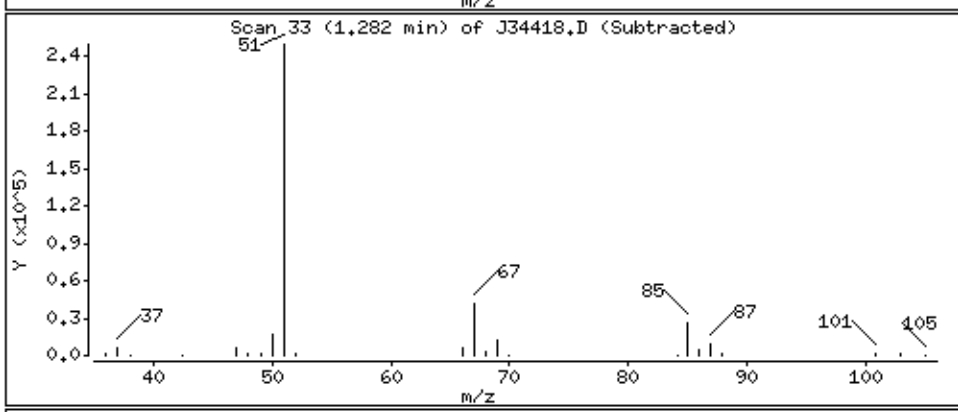
1 Chlorodifluoromethane

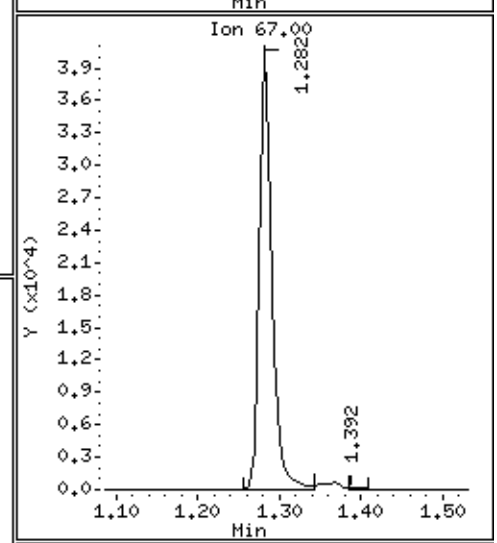
Concentration: 49.0 ug/L

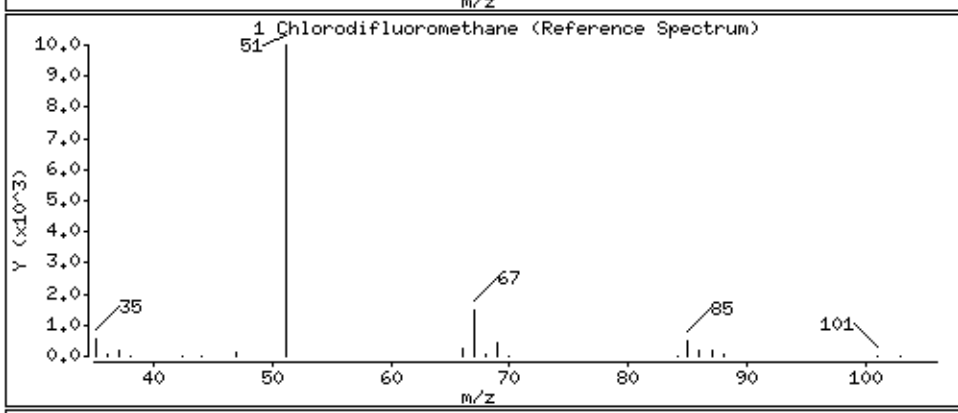
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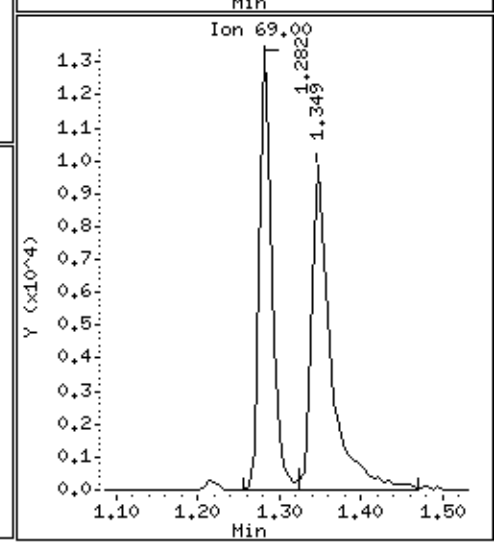


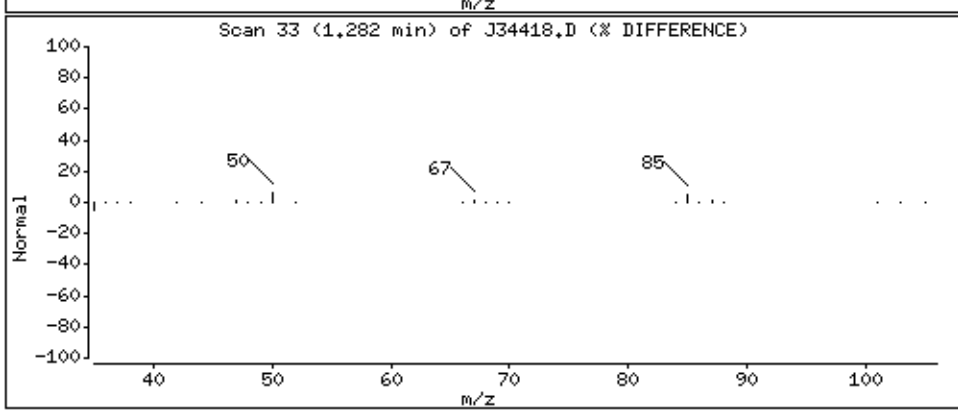












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D

Date : 25-APR-2017 19:25

Client ID: MW-3CMSD

Instrument: 70msv6.i

Sample Info: 103082, 15067:1.25

Purge Volume: 5.0

Operator: KGG

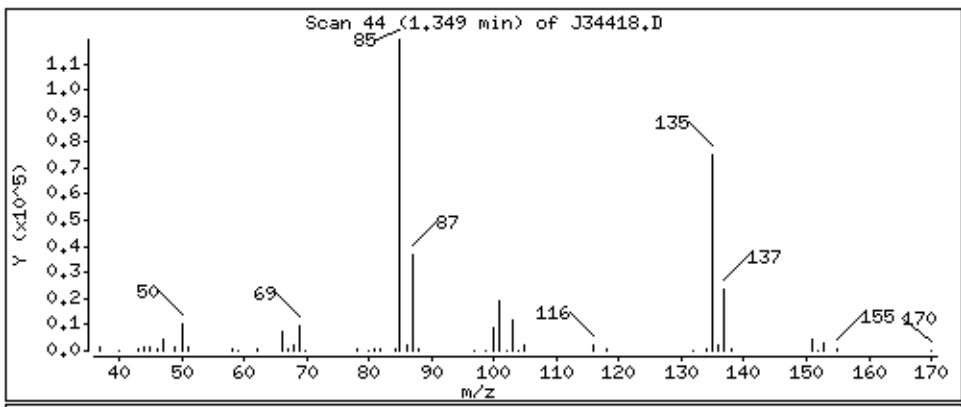
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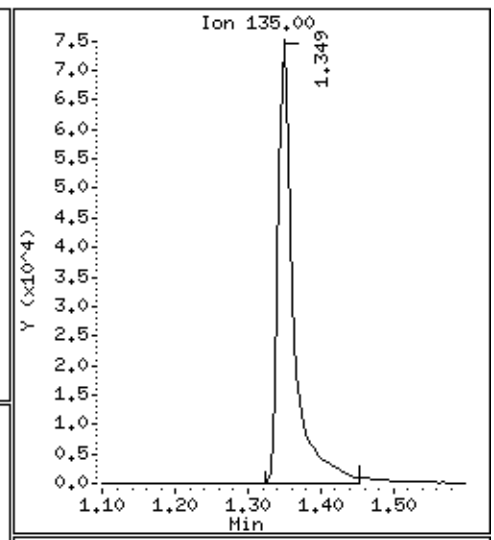
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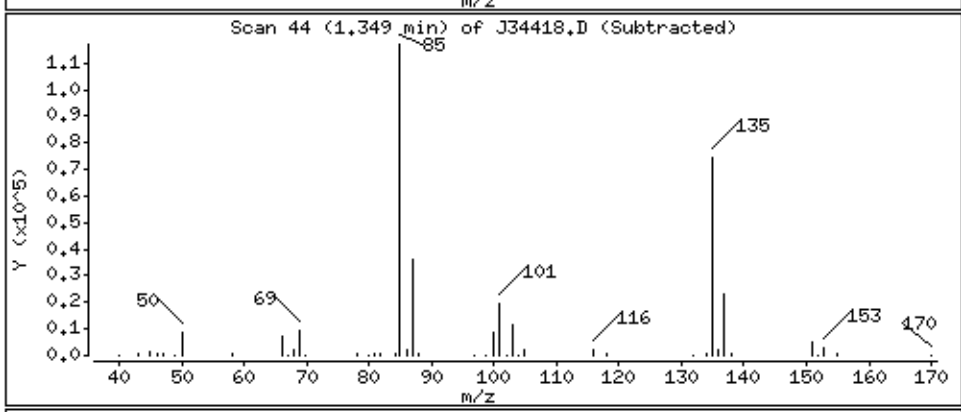
2 Dichlorotetrafluoroethane

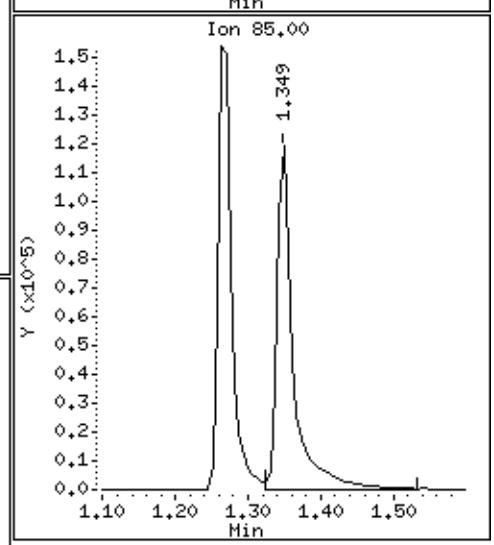
Concentration: 71.2 ug/L

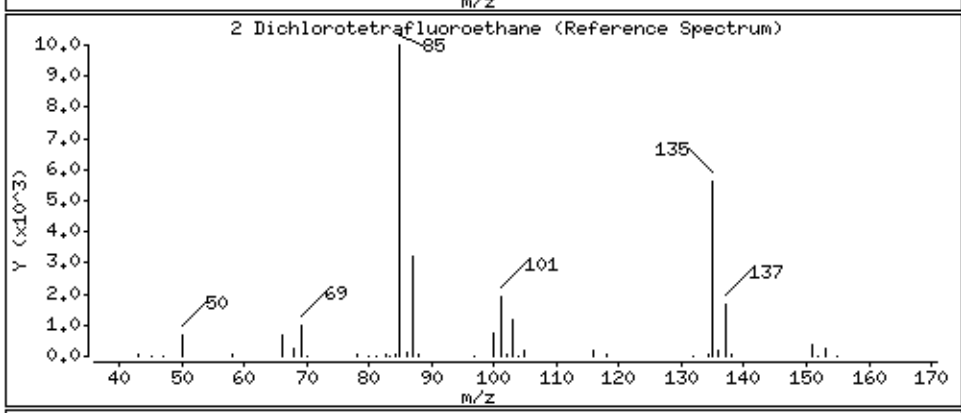
Review Code:

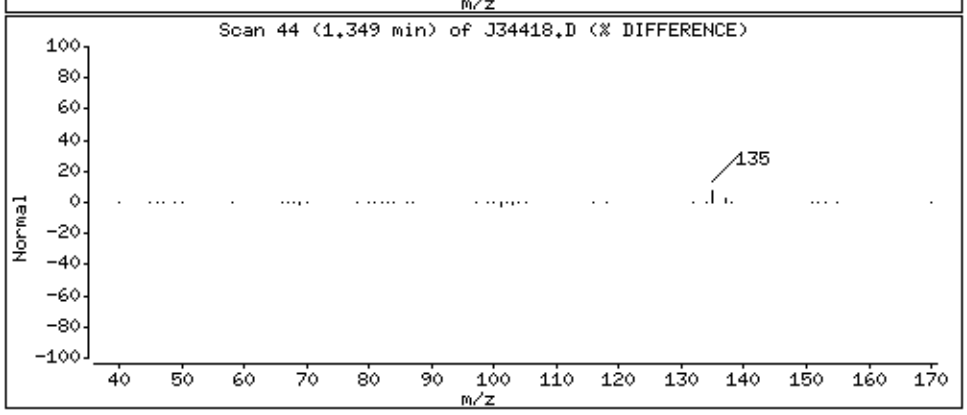












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D

Date : 25-APR-2017 19:25

Client ID: MW-3CMSD

Instrument: 70msv6.i

Sample Info: 103082, 15067:1.25

Purge Volume: 5.0

Operator: KGG

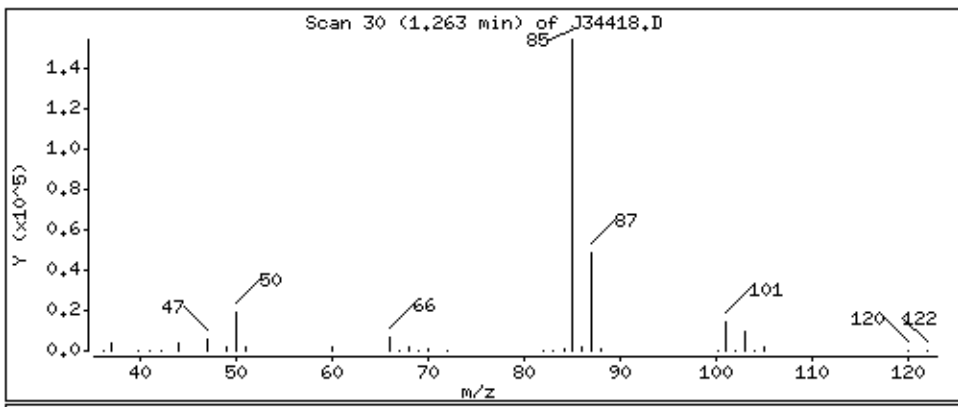
Column phase: RTX-624

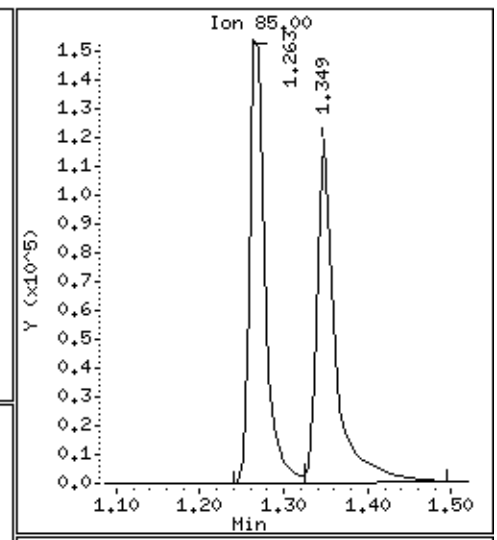
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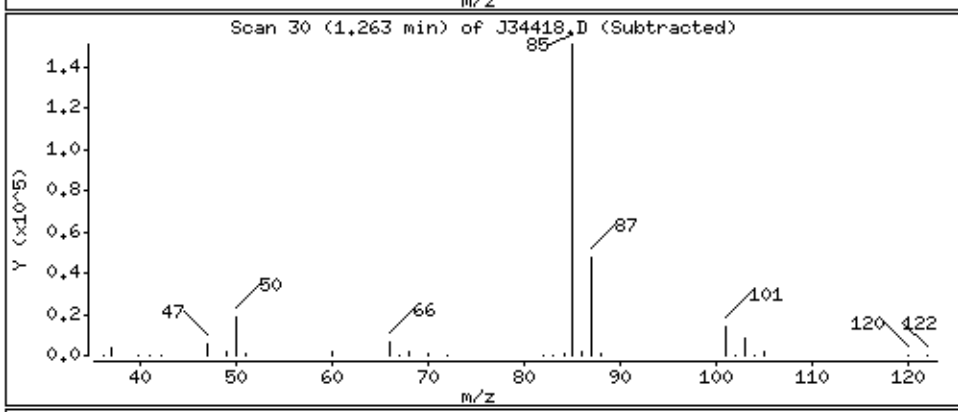
3 Dichlorodifluoromethane

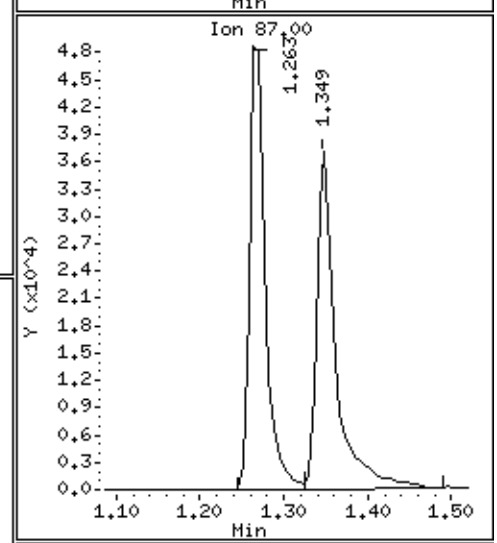
Concentration: 63.6 ug/L

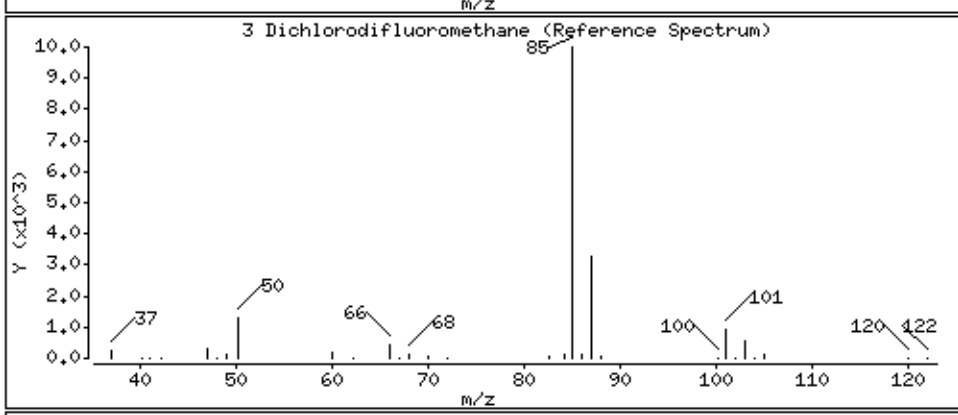
Review Code:

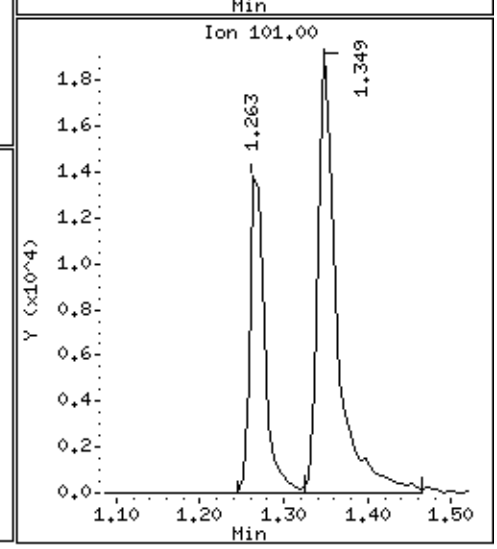


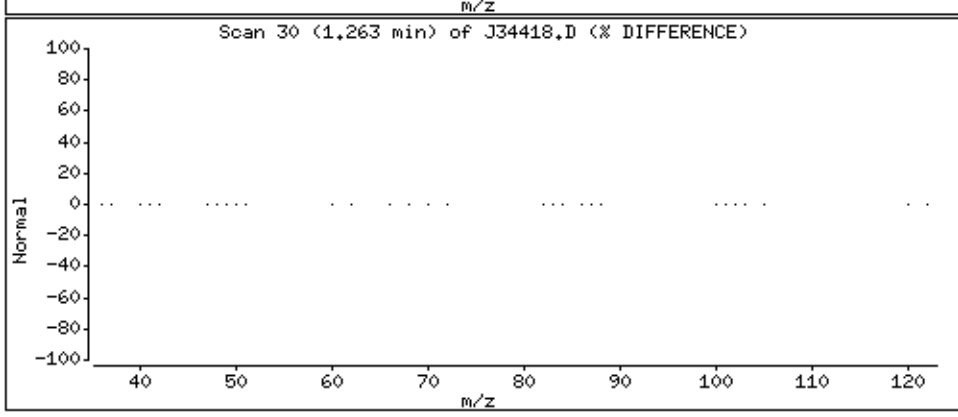












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D

Date : 25-APR-2017 19:25

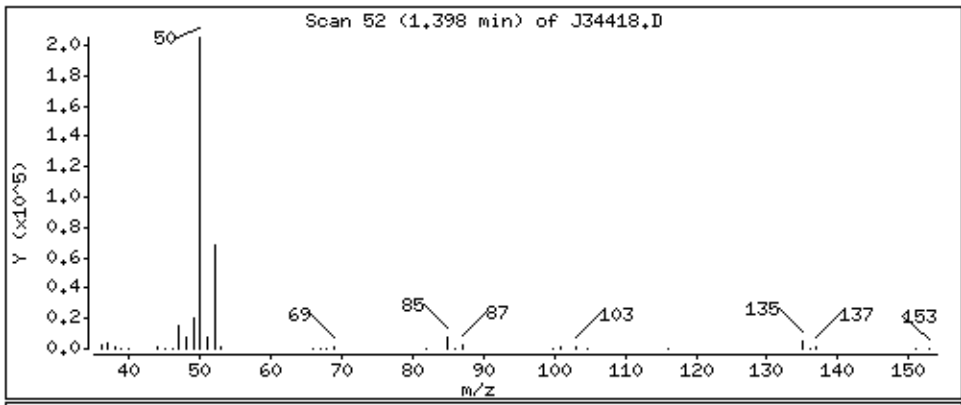
Client ID: MW-3CMSD | Instrument: 70msv6.i

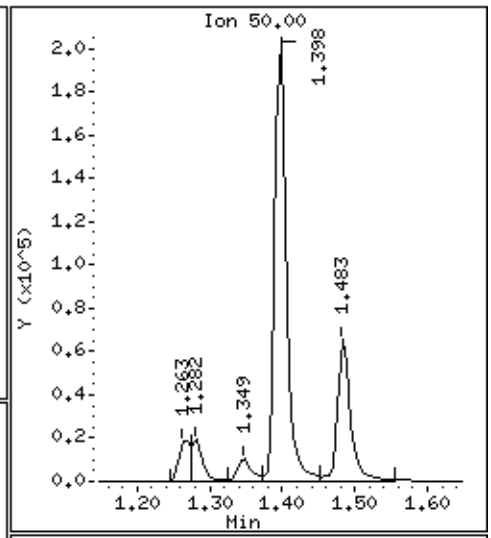
Sample Info: 103082, 15067:1.25

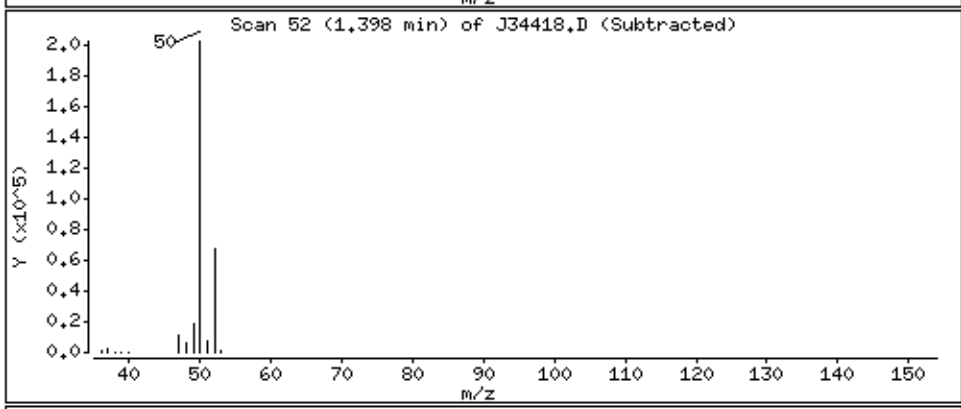
Purge Volume: 5.0 | Operator: KGG

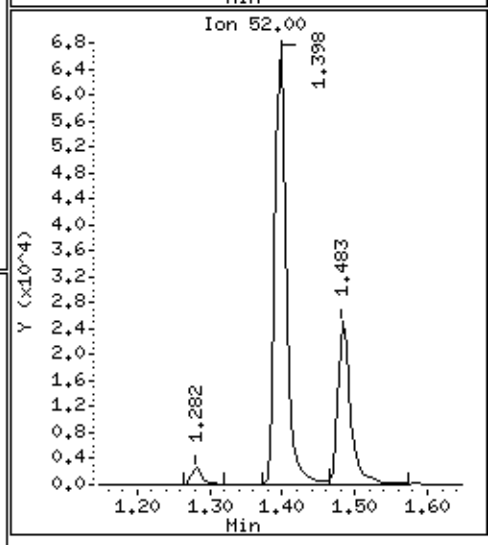
Column phase: RTX-624 | Column diameter: 0.18

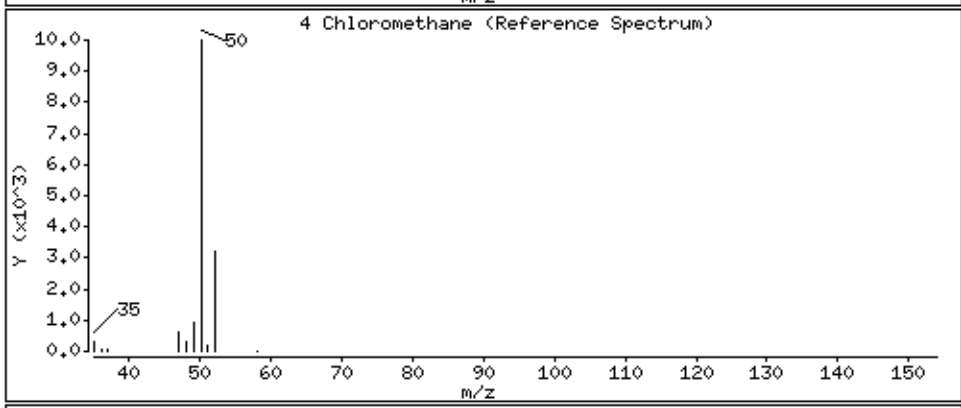
4 Chloromethane | Concentration: 45.4 ug/L | Review Code:

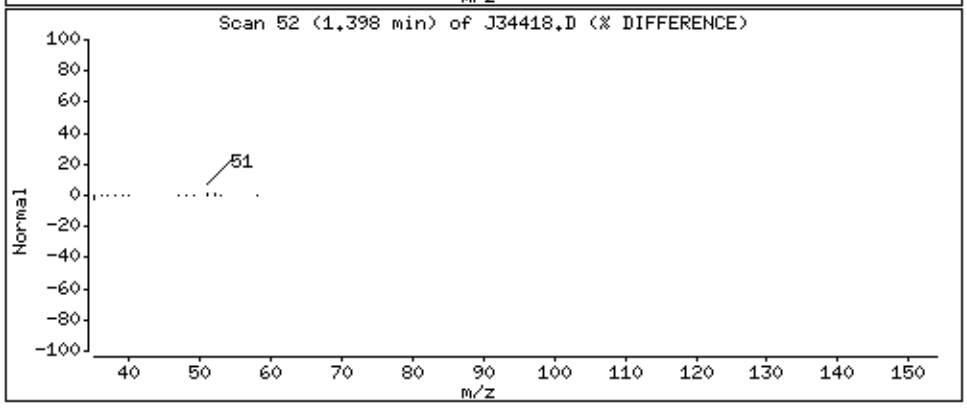












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D

Date : 25-APR-2017 19:25

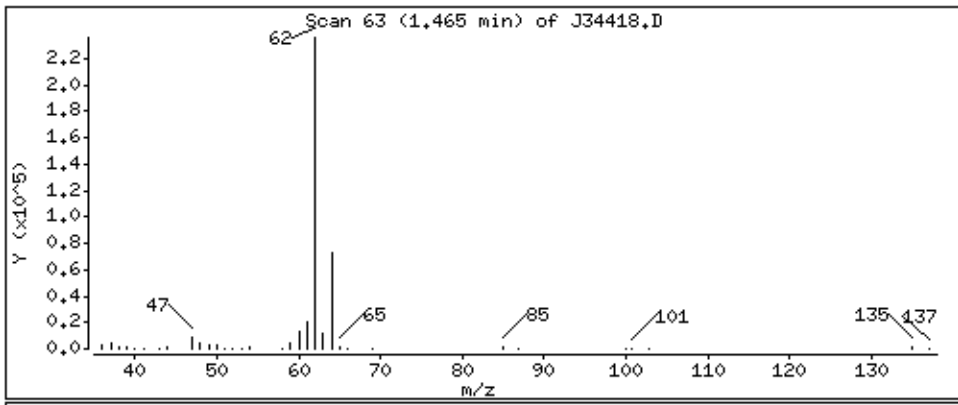
Client ID: MW-3CMSD | Instrument: 70msv6.i

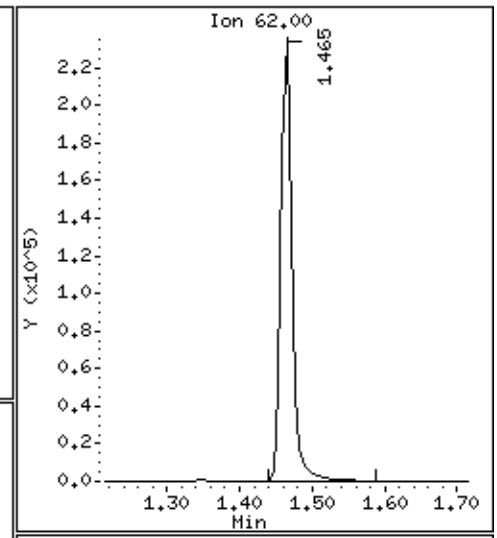
Sample Info: 103082, 15067:1.25

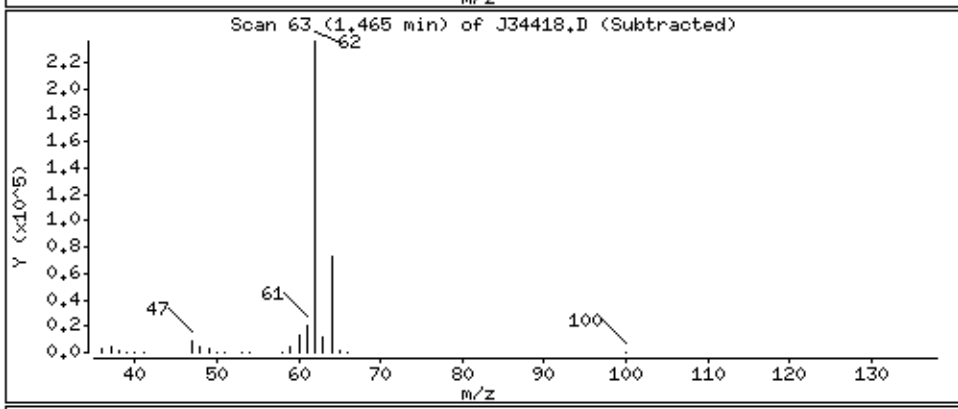
Purge Volume: 5.0 | Operator: KGG

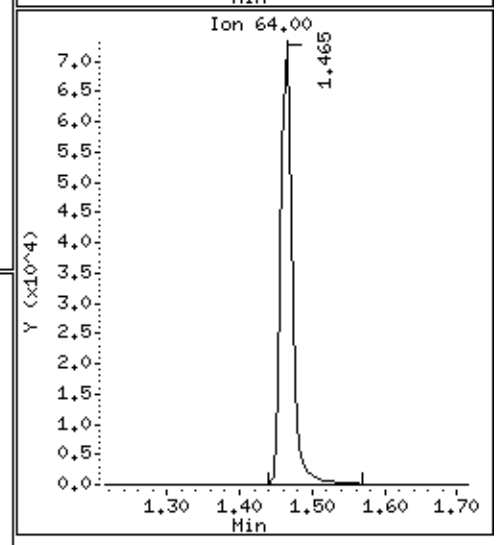
Column phase: RTX-624 | Column diameter: 0.18

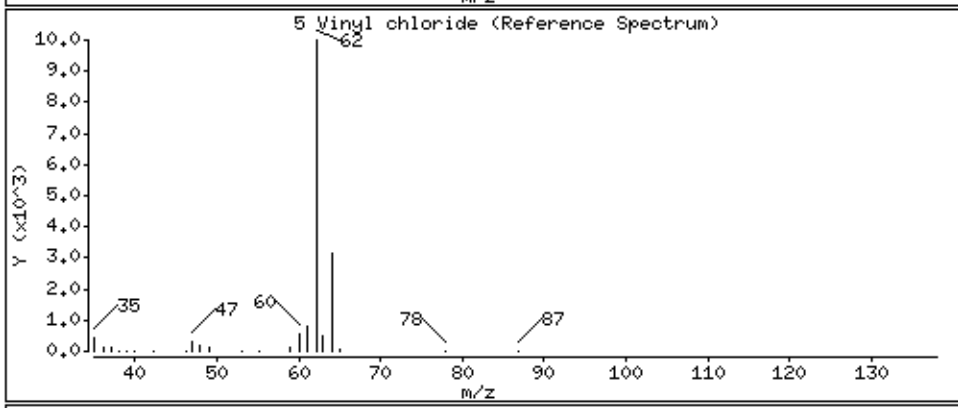
5 Vinyl chloride | Concentration: 54.1 ug/L | Review Code:

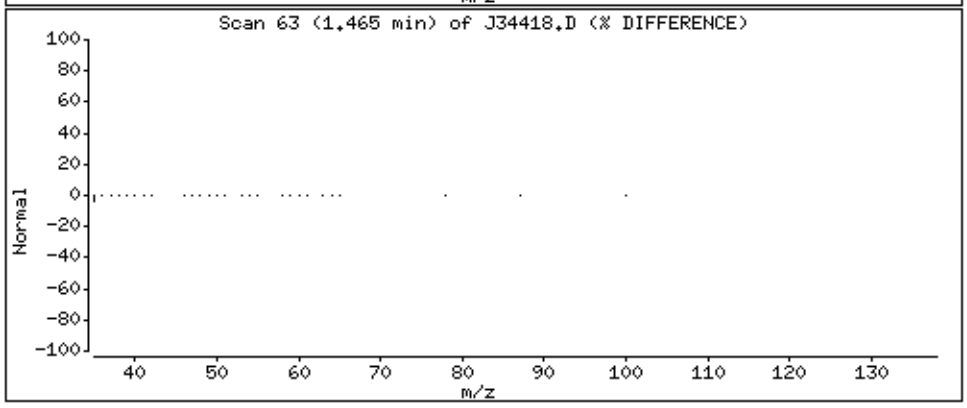












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D

Date : 25-APR-2017 19:25

Client ID: MW-3CMSD

Instrument: 70msv6.i

Sample Info: 103082, 15067:1.25

Purge Volume: 5.0

Operator: KGG

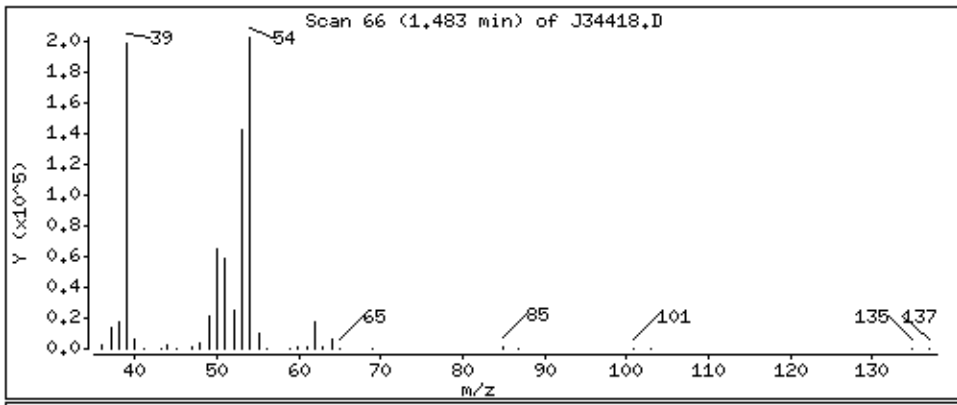
Column phase: RTX-624

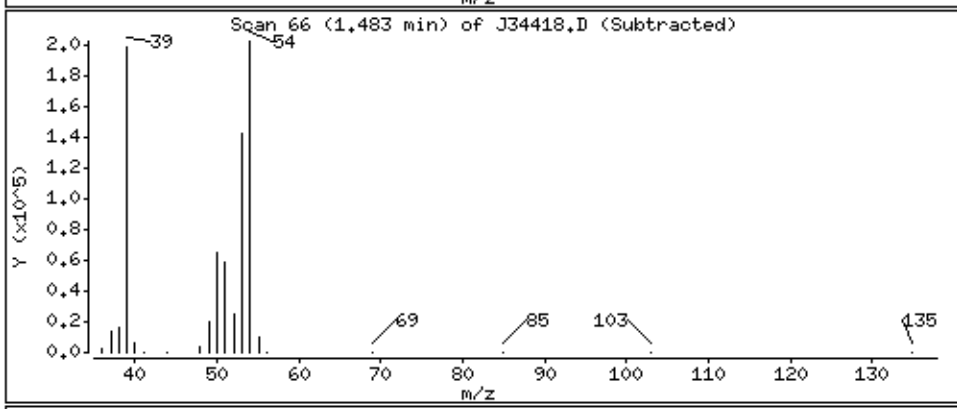
Column diameter: 0.18

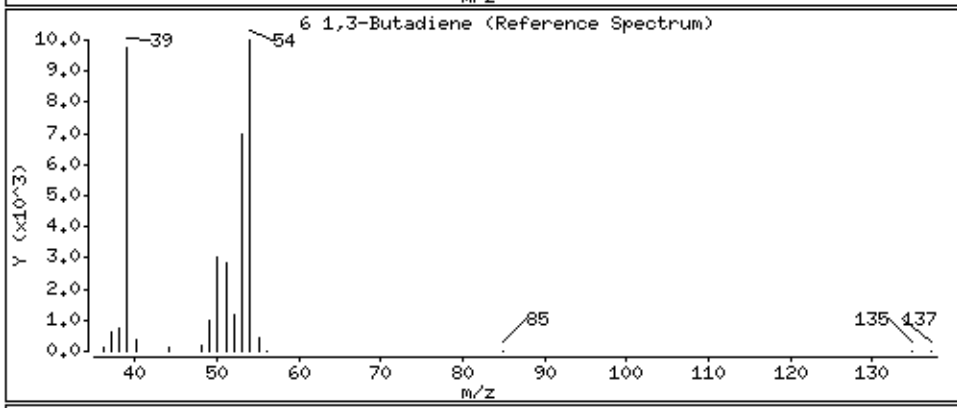
6 1,3-Butadiene

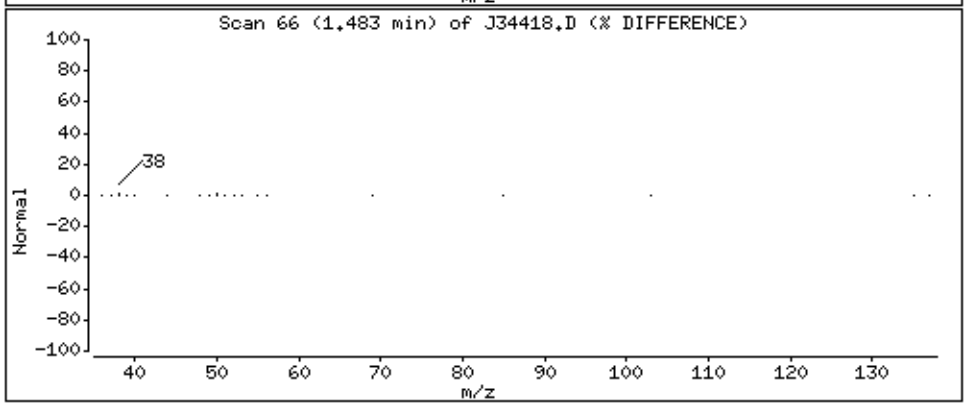
Concentration: 52.0 ug/L

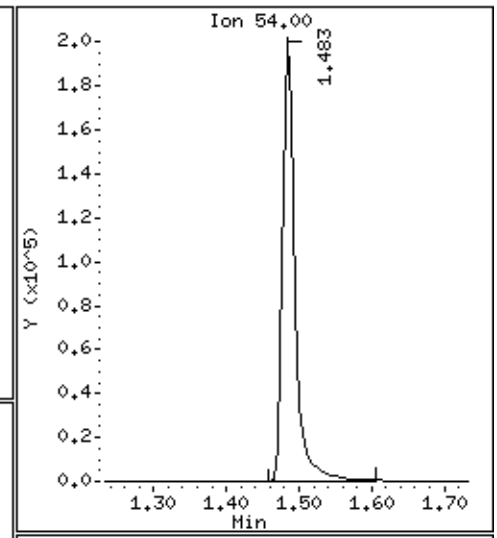
Review Code:

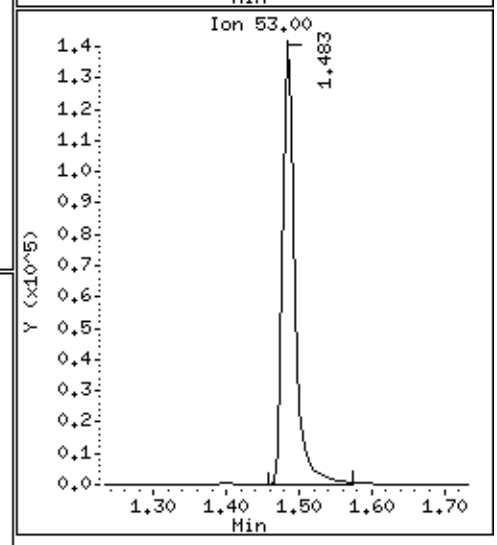












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D

Date : 25-APR-2017 19:25

Client ID: MW-3CMSD

Instrument: 70msv6.i

Sample Info: 103082, 15067:1.25

Purge Volume: 5.0

Operator: KGG

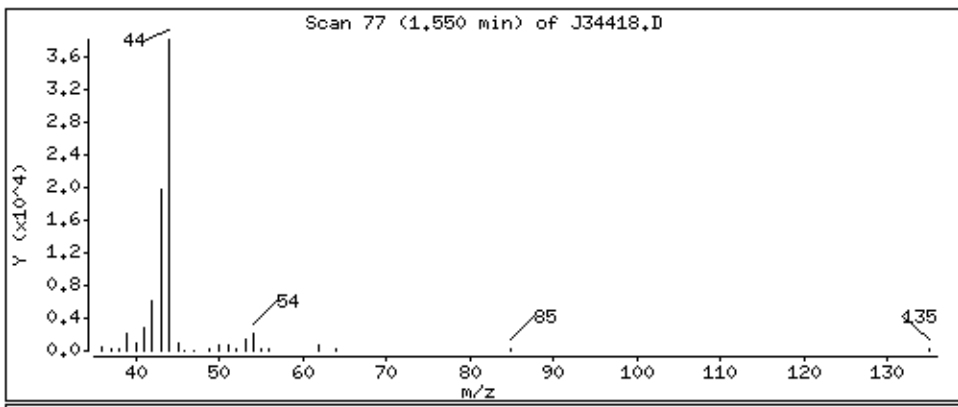
Column phase: RTX-624

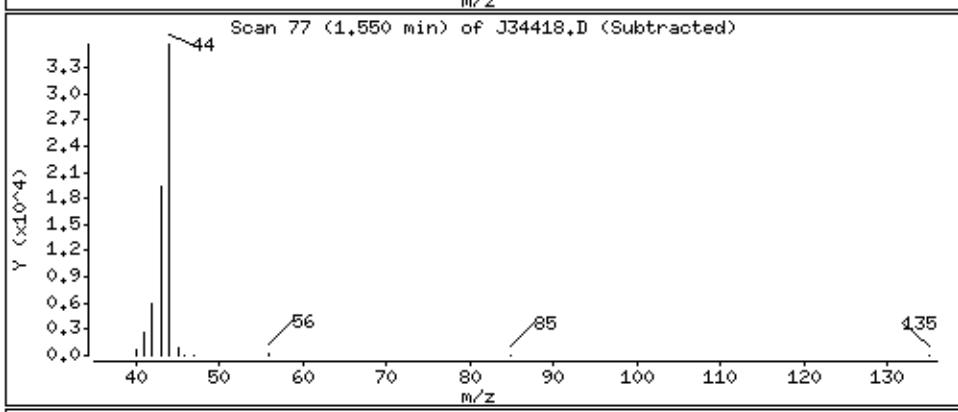
Column diameter: 0.18

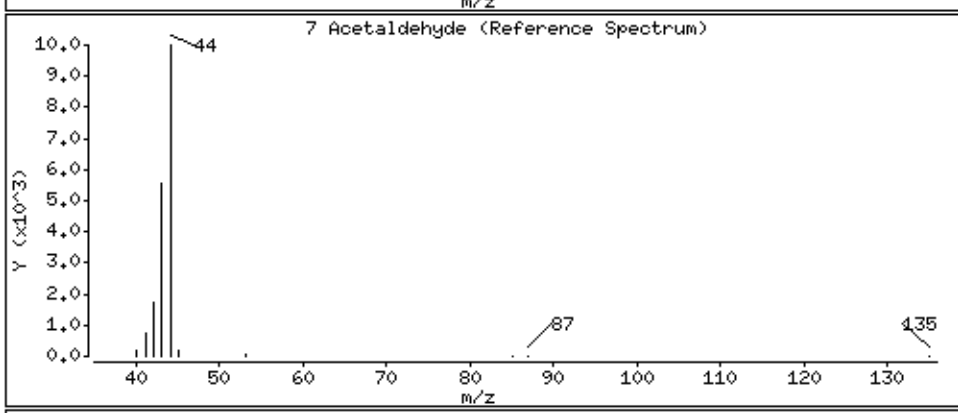
7 Acetaldehyde

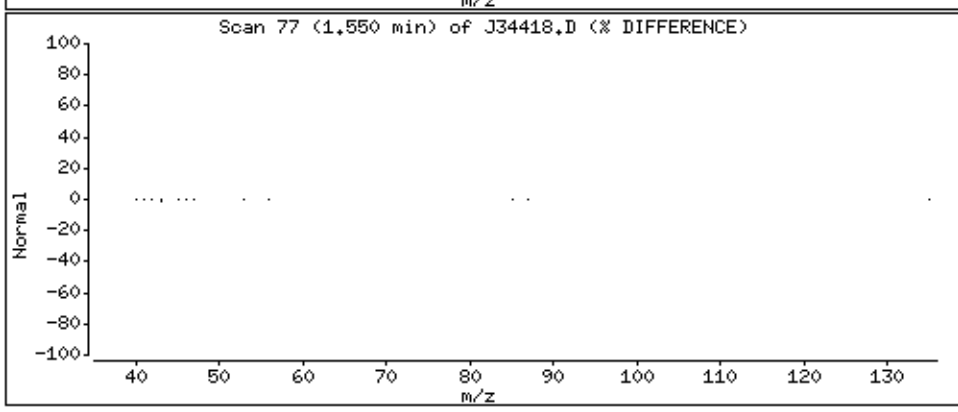
Concentration: 41.9 ug/L

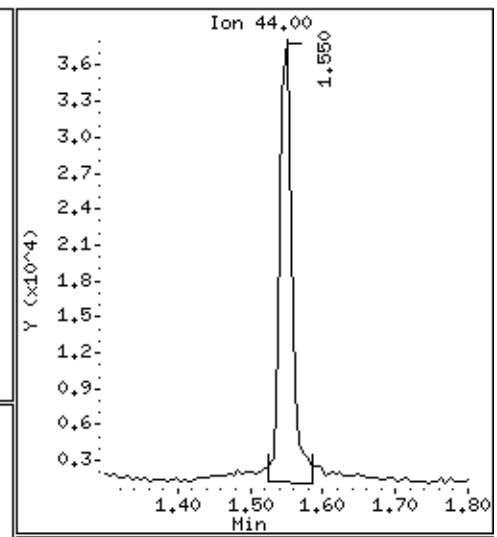
Review Code:

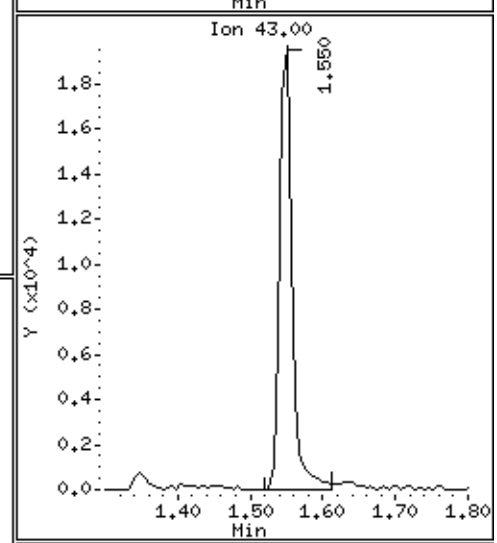


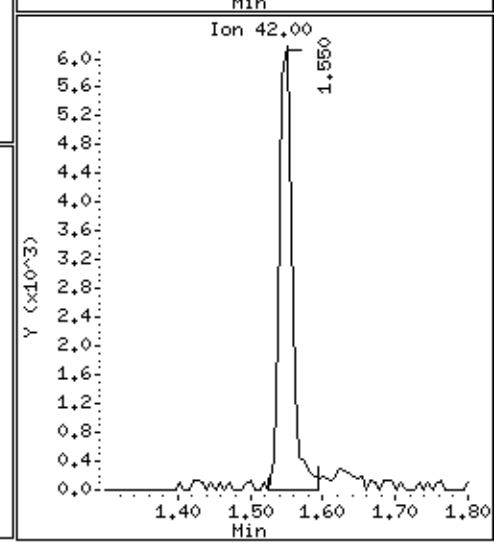












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D

Date : 25-APR-2017 19:25

Client ID: MW-3CMSD

Instrument: 70msv6.i

Sample Info: 103082, 15067:1.25

Purge Volume: 5.0

Operator: KGG

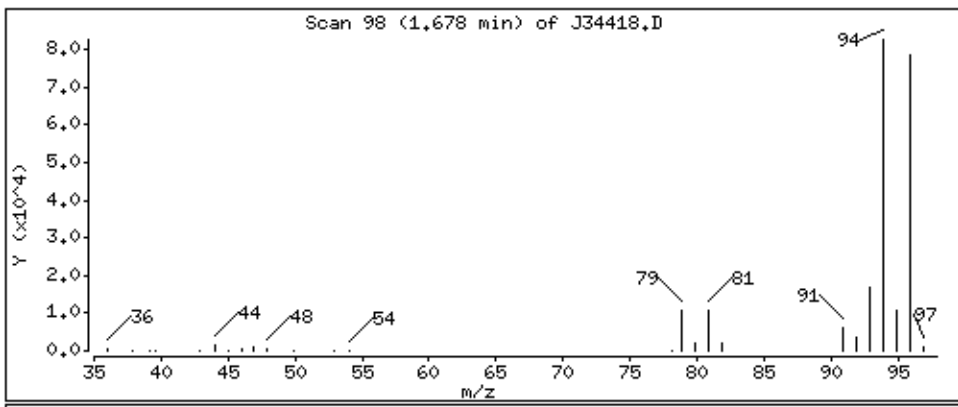
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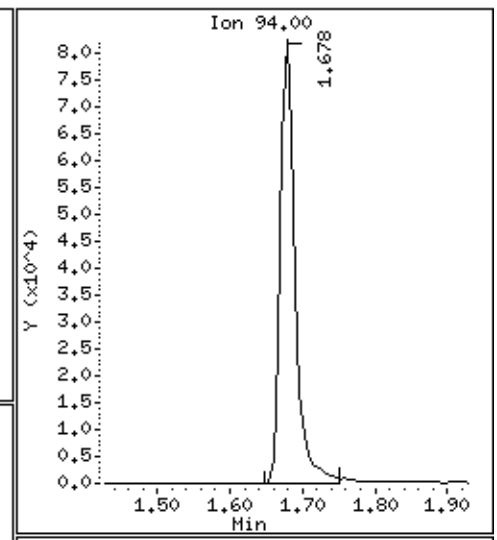
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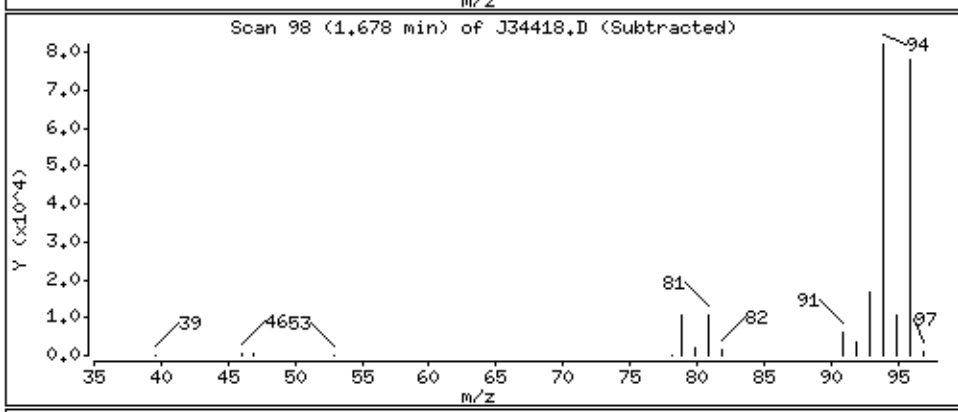
8 Bromomethane

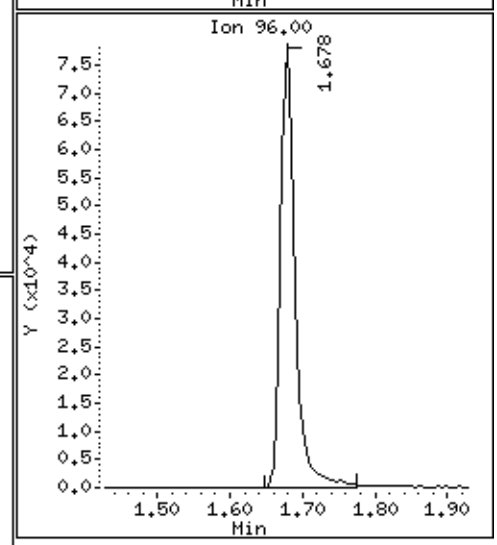
Concentration: 46.0 ug/L

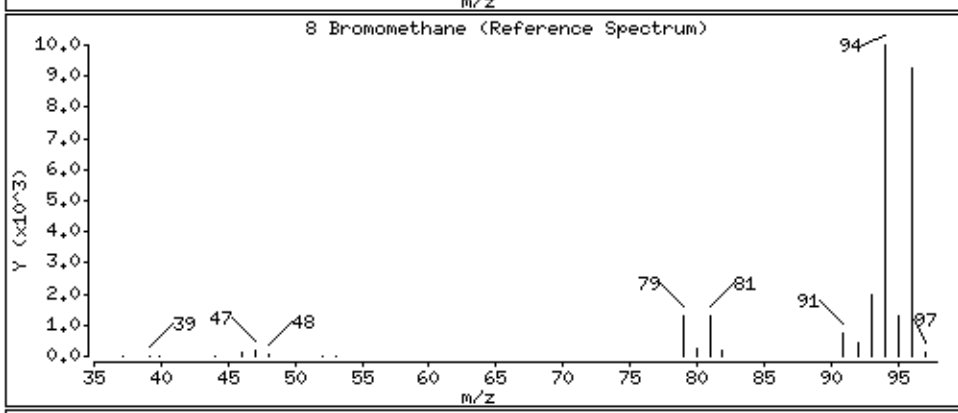
Review Code:

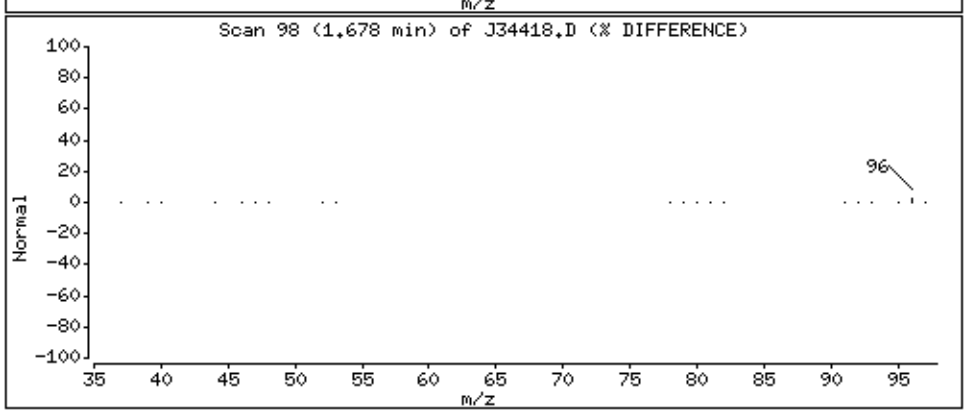












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D

Date : 25-APR-2017 19:25

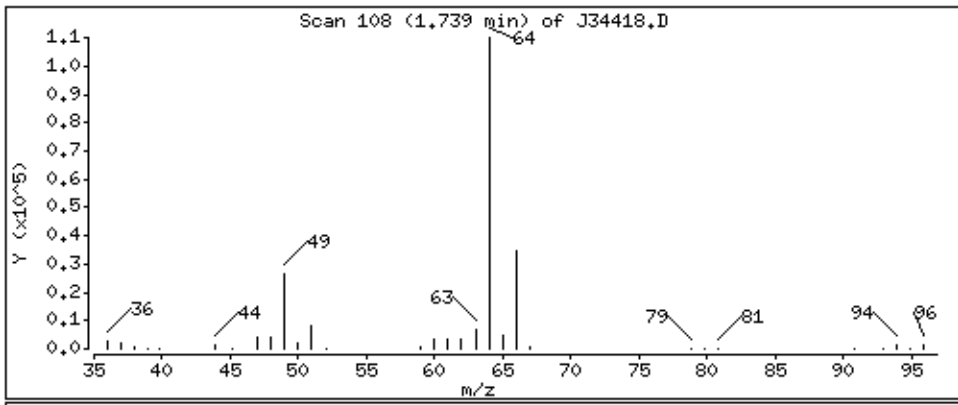
Client ID: MW-3CMSD | Instrument: 70msv6.i

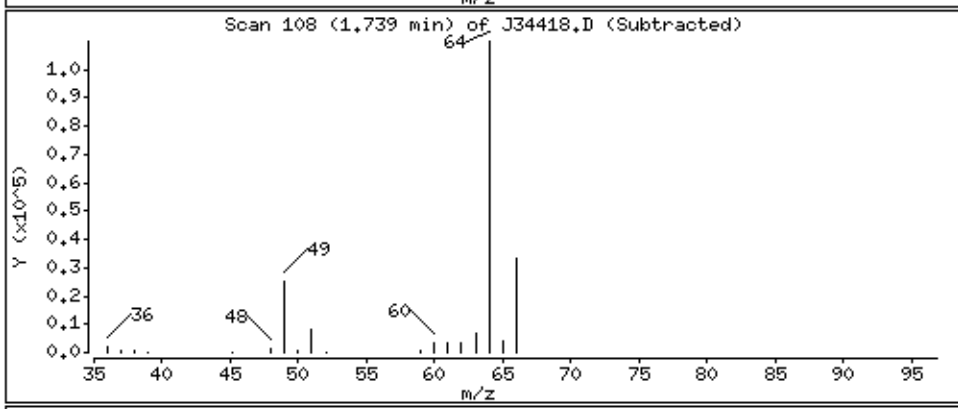
Sample Info: 103082, 15067:1.25

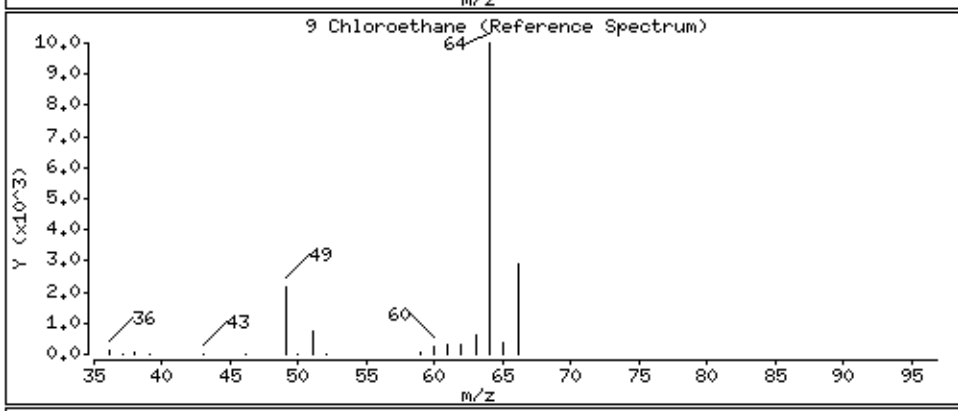
Purge Volume: 5.0 | Operator: KGG

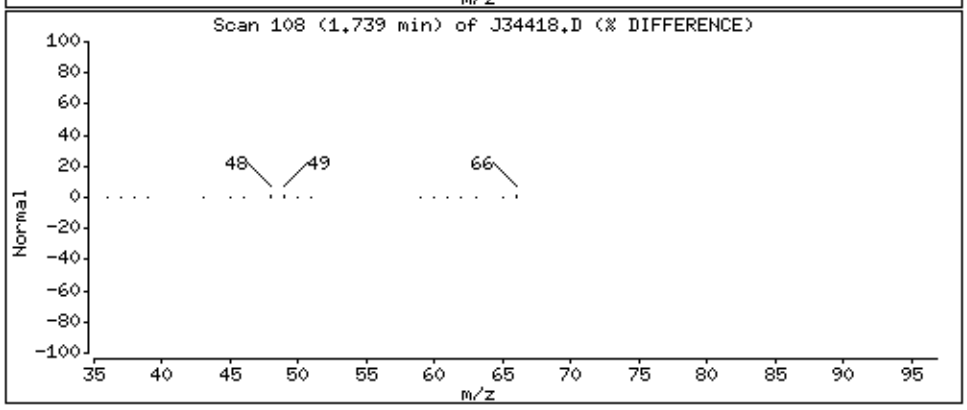
Column phase: RTX-624 | Column diameter: 0.18

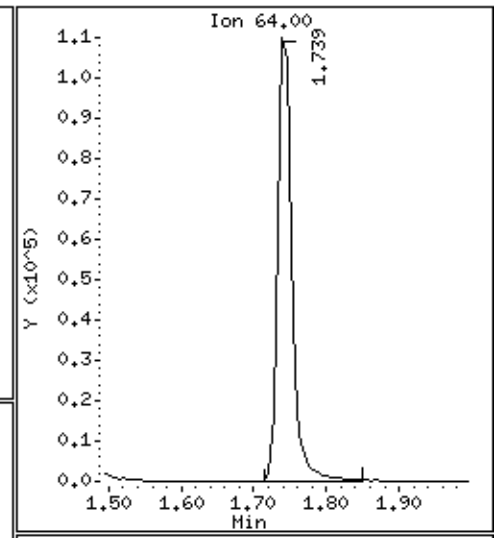
9 Chloroethane | Concentration: 50.0 ug/L | Review Code:

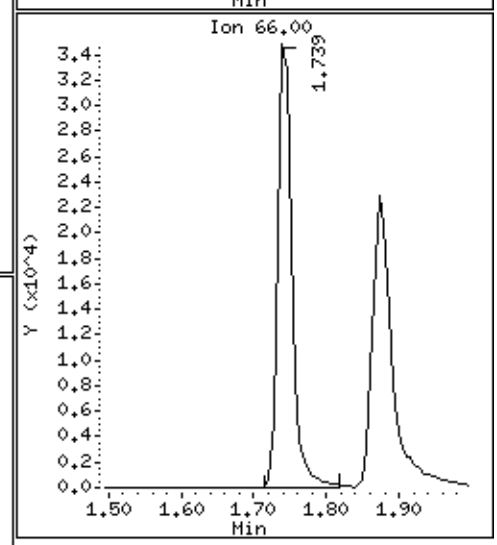












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D

Date : 25-APR-2017 19:25

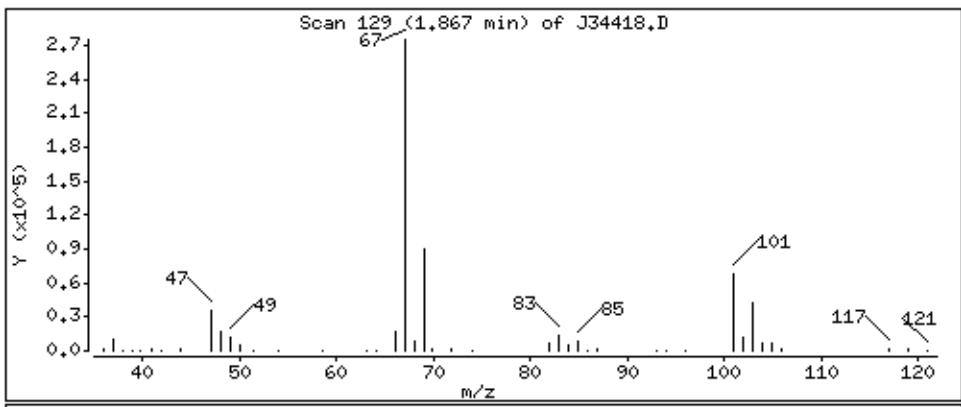
Client ID: MW-3CMSD | Instrument: 70msv6.i

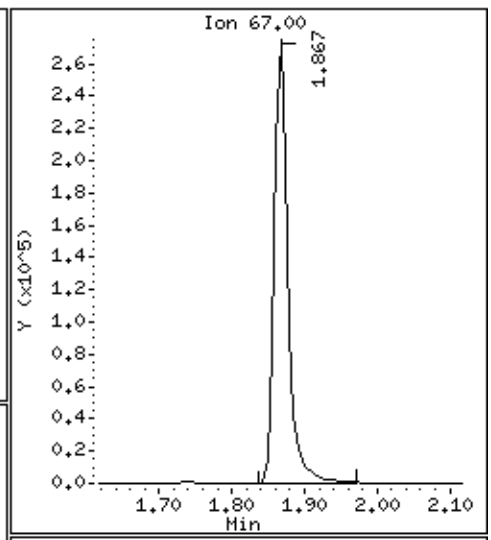
Sample Info: 103082, 15067:1.25

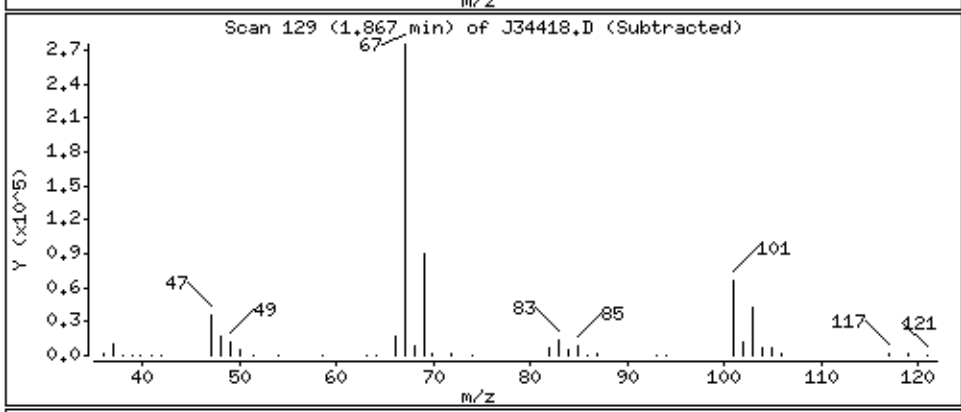
Purge Volume: 5.0 | Operator: KGG

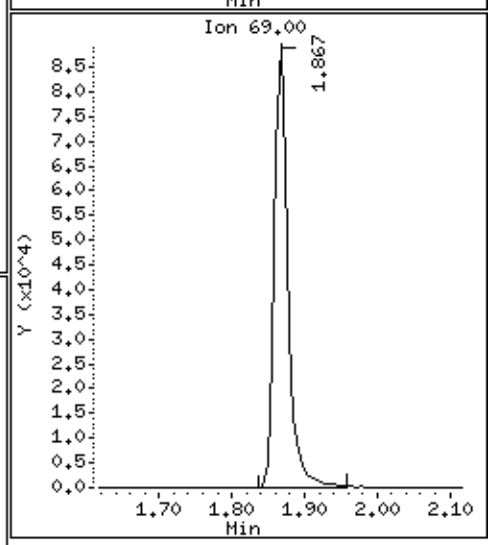
Column phase: RTX-624 | Column diameter: 0.18

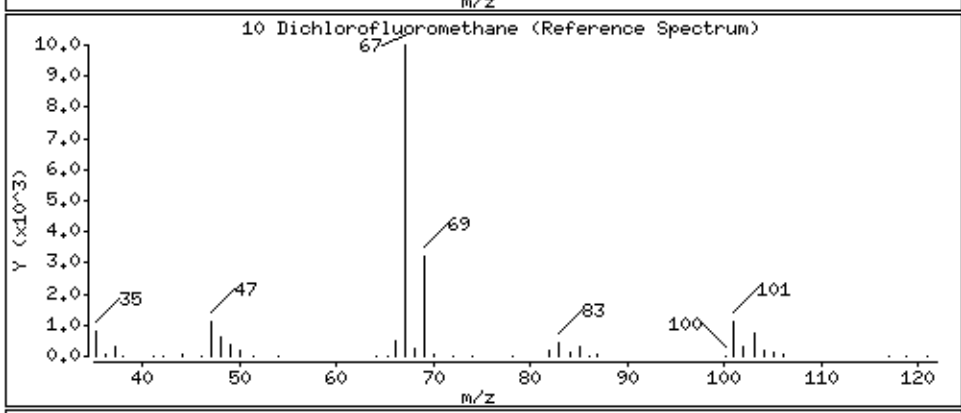
10 Dichlorofluoromethane | Concentration: 45.4 ug/L | Review Code:

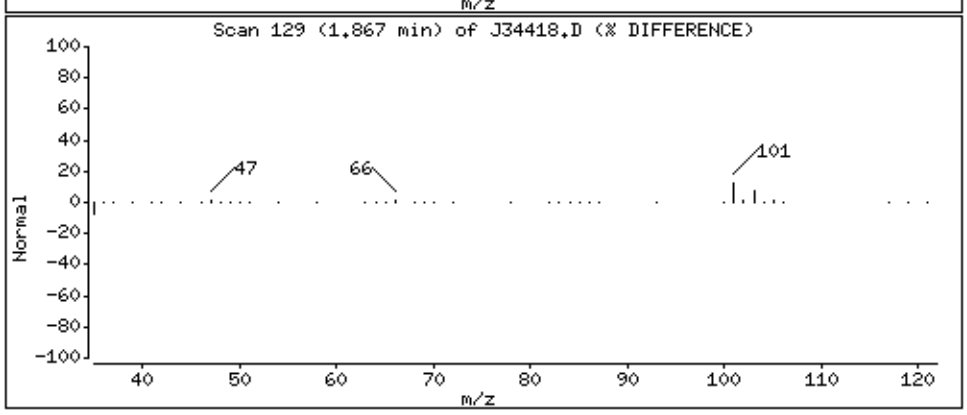












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D

Date : 25-APR-2017 19:25

Client ID: MW-3CMSD

Instrument: 70msv6.i

Sample Info: 103082, 15067:1.25

Purge Volume: 5.0

Operator: KGG

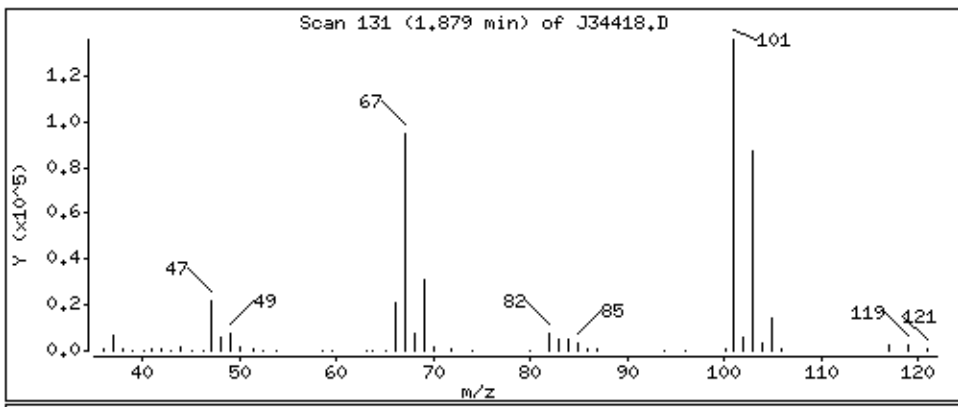
Column phase: RTX-624

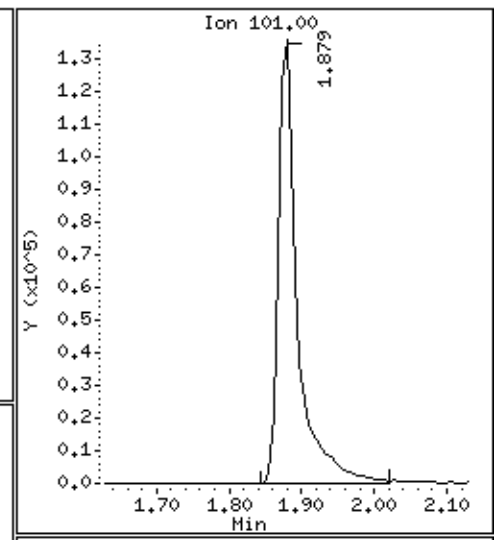
Column diameter: 0.18

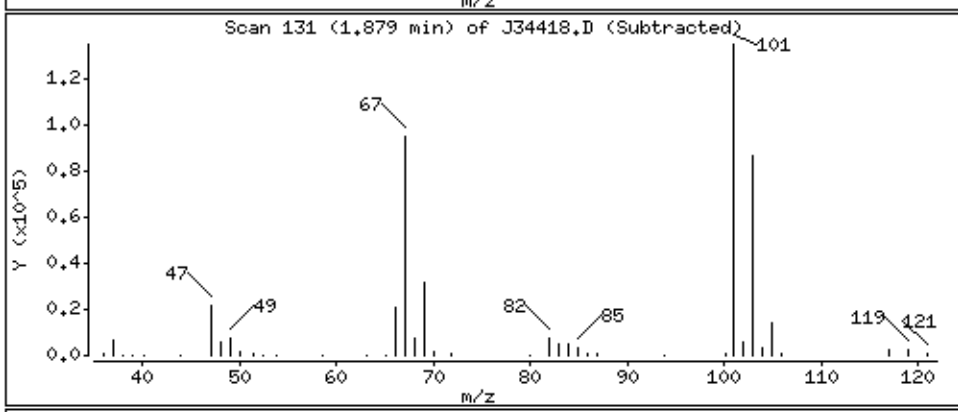
11 Trichlorofluoromethane

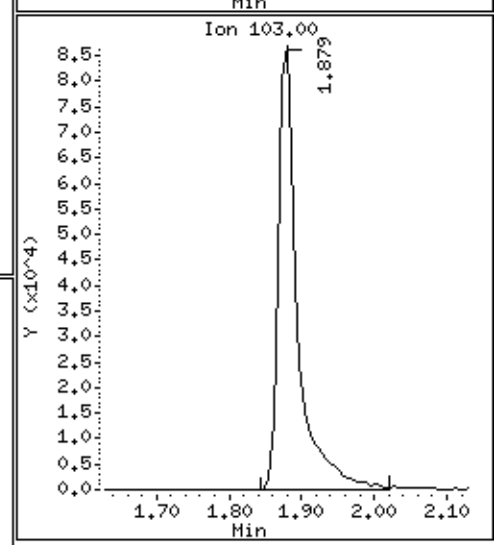
Concentration: 54.1 ug/L

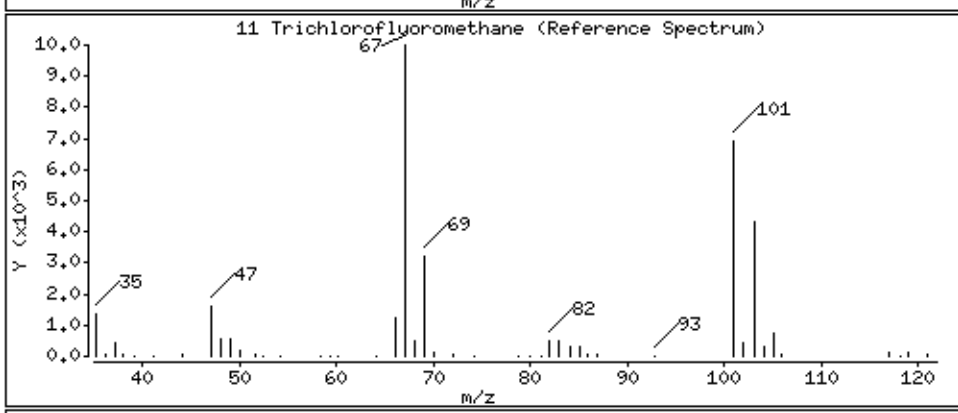
Review Code:

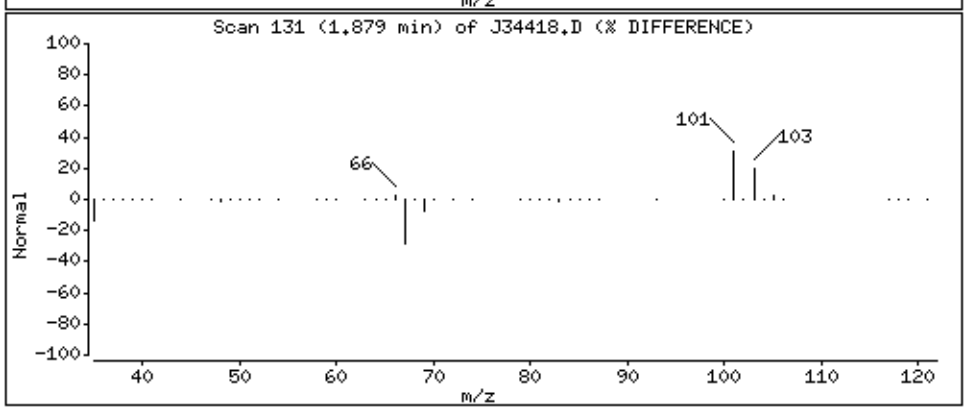












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D

Date : 25-APR-2017 19:25

Client ID: MW-3CMSD

Instrument: 70msv6.i

Sample Info: 103082, 15067:1.25

Purge Volume: 5.0

Operator: KGG

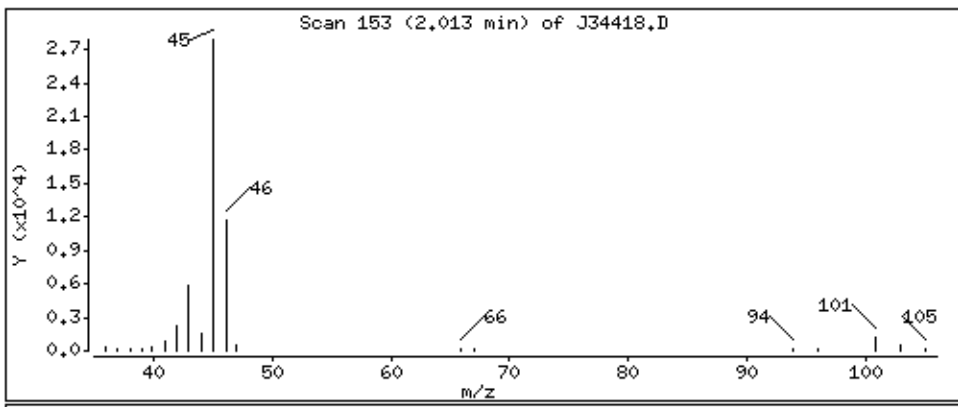
Column phase: RTX-624

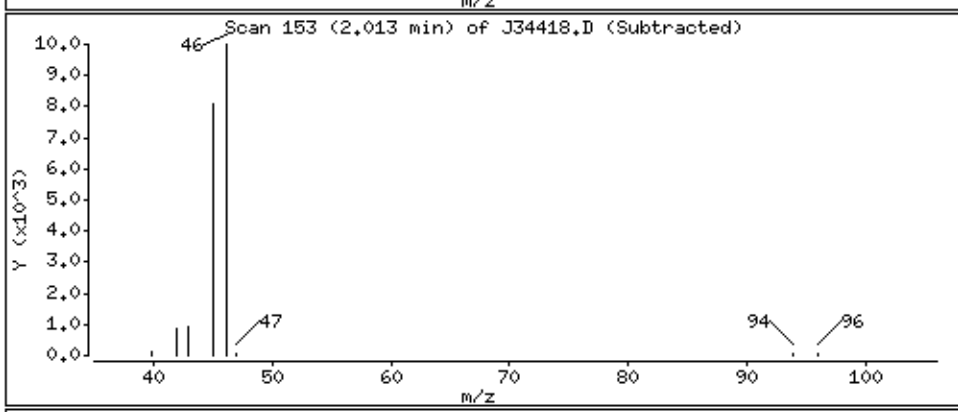
Column diameter: 0.18

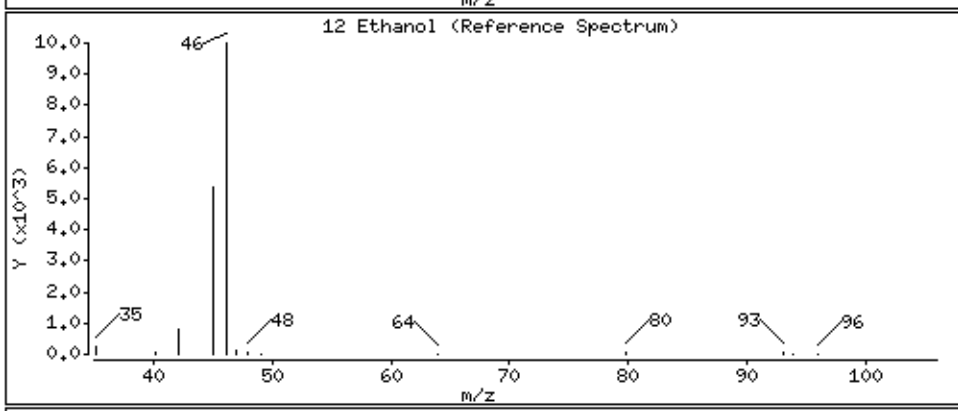
12 Ethanol

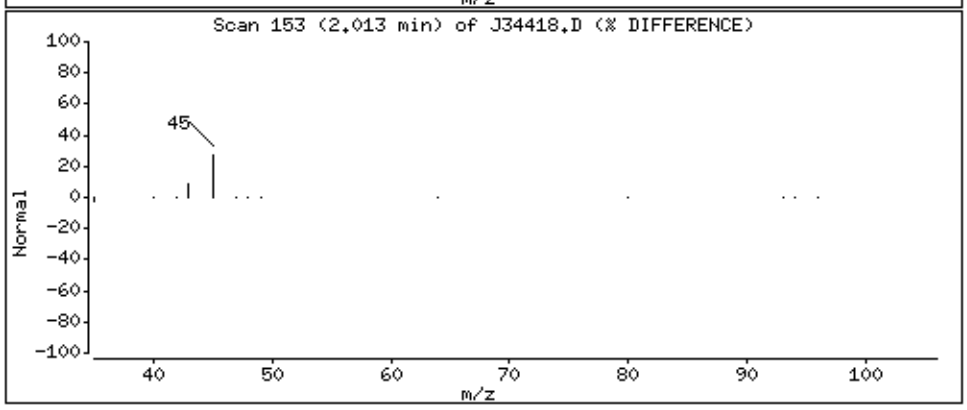
Concentration: 974 ug/L

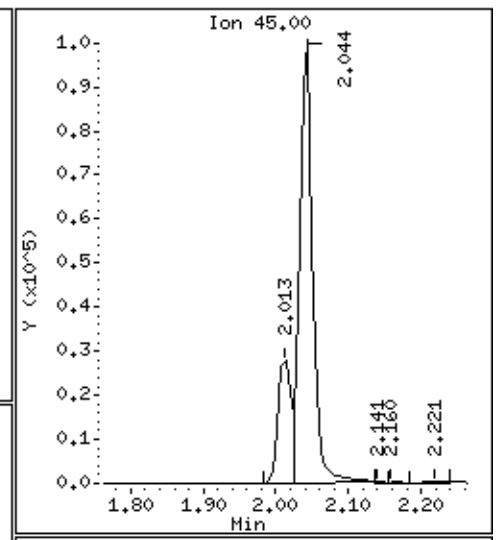
Review Code:

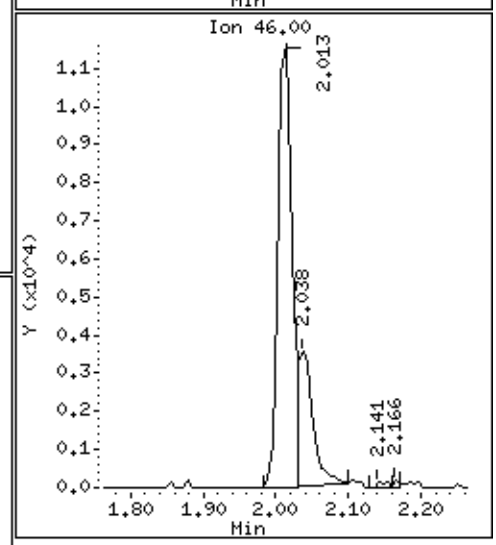












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D

Date : 25-APR-2017 19:25

Client ID: MW-3CMSD

Instrument: 70msv6.i

Sample Info: 103082, 15067:1.25

Purge Volume: 5.0

Operator: KGG

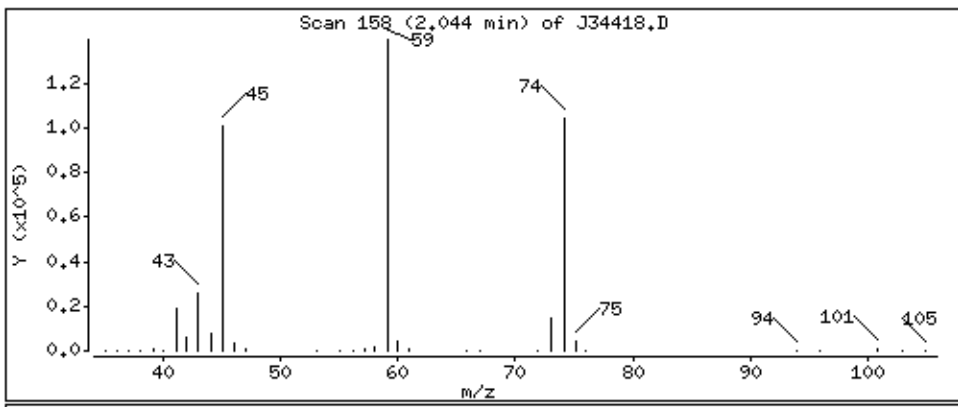
Column phase: RTX-624

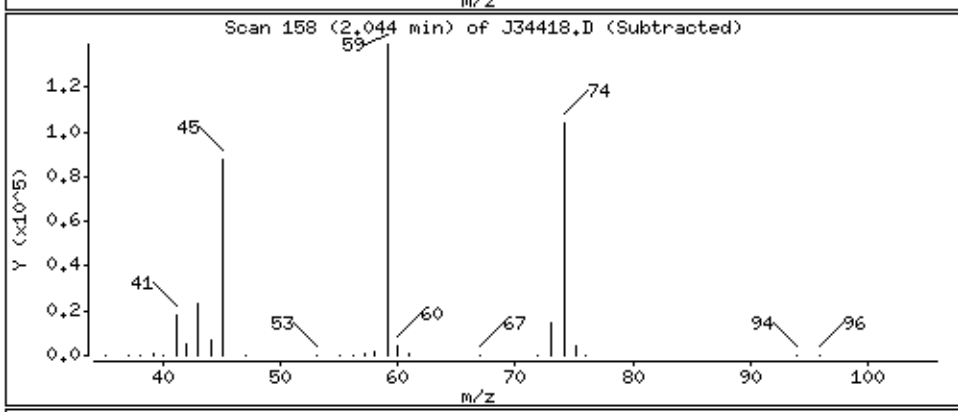
Column diameter: 0.18

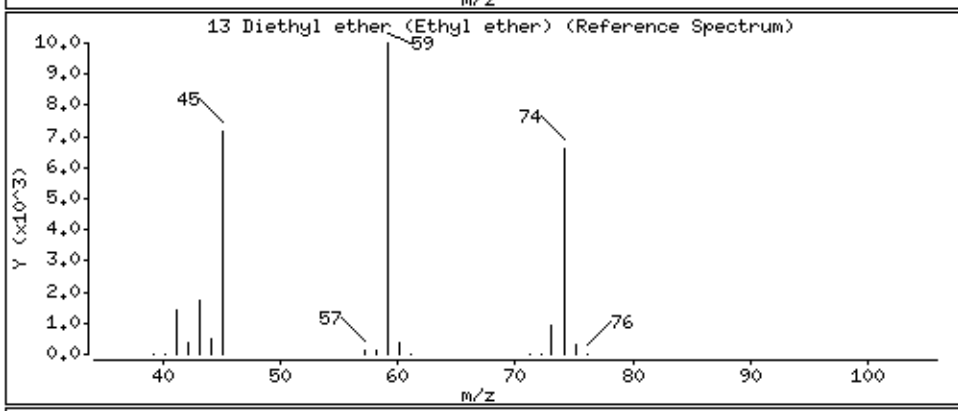
13 Diethyl ether (Ethyl ether)

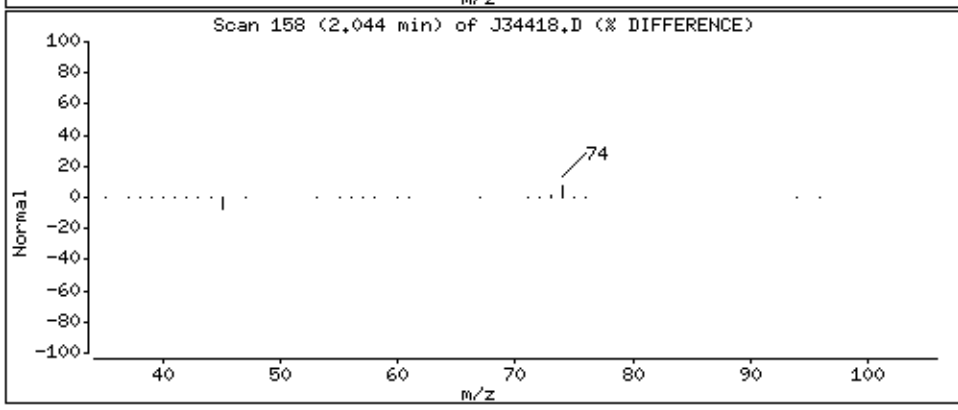
Concentration: 43.3 ug/L

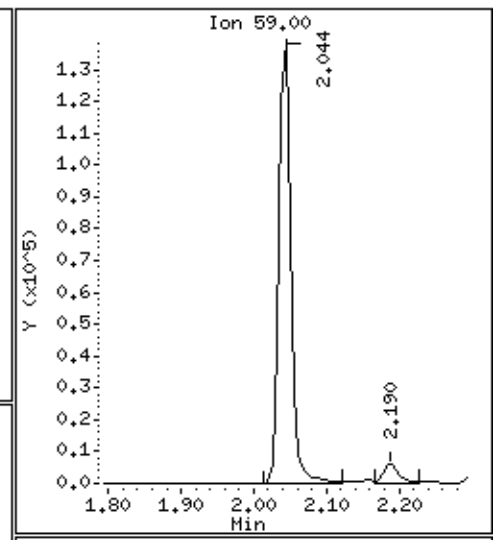
Review Code:

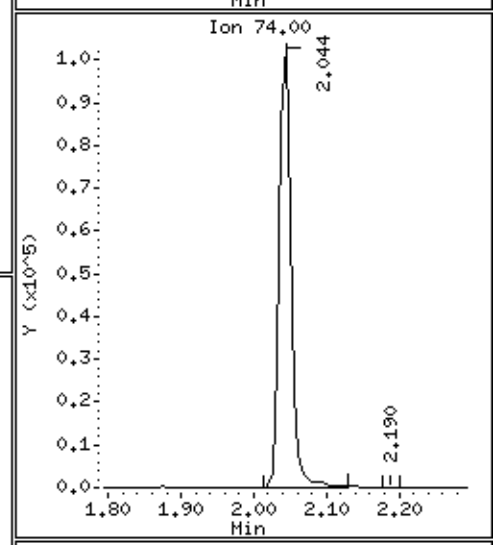


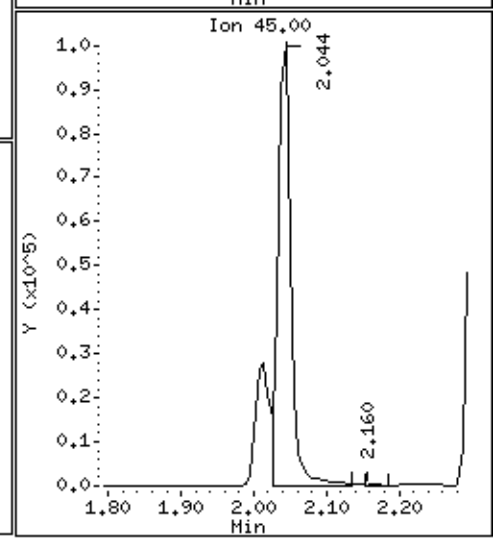












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D

Date : 25-APR-2017 19:25

Client ID: MW-3CMSD

Instrument: 70msv6.i

Sample Info: 103082, 15067:1.25

Purge Volume: 5.0

Operator: KGG

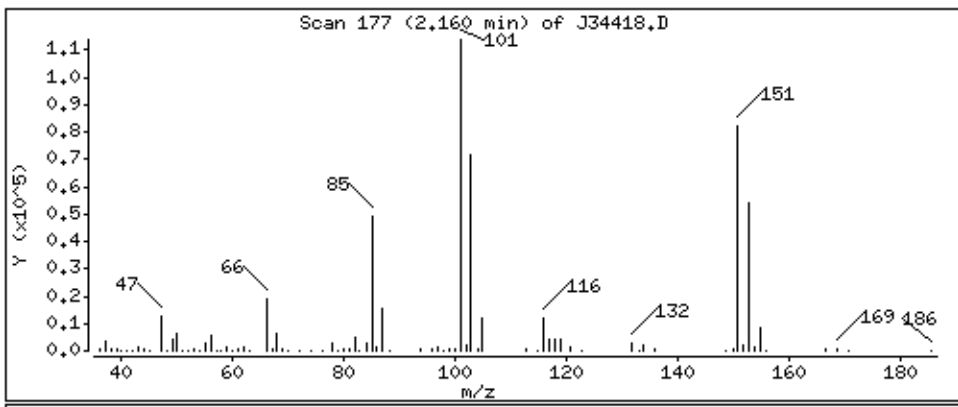
Column phase: RTX-624

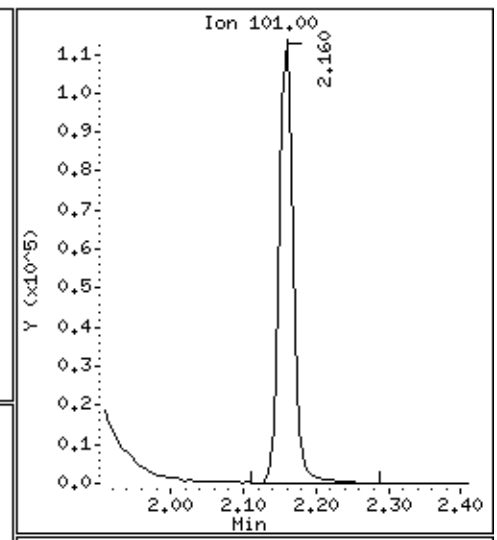
Column diameter: 0.18

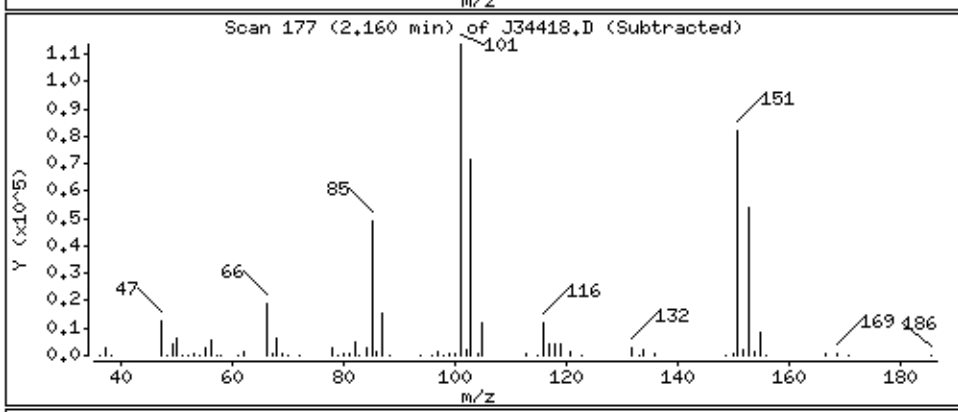
16 1,1,2-Trichlorotrifluoroethane

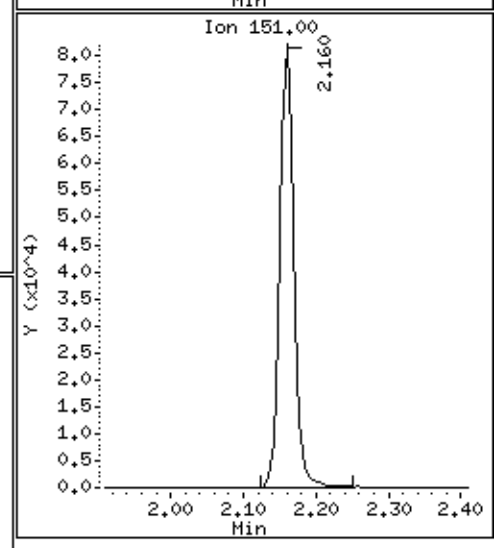
Concentration: 57.5 ug/L

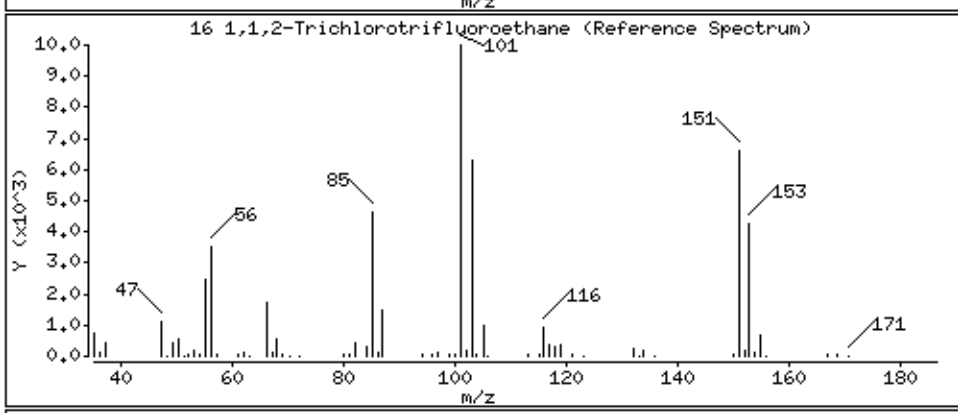
Review Code:

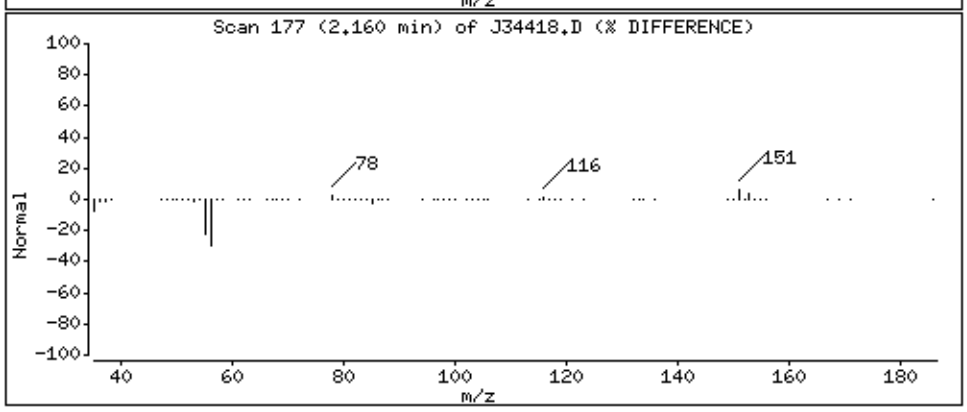












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D

Date : 25-APR-2017 19:25

Client ID: MW-3CMSD

Instrument: 70msv6.i

Sample Info: 103082, 15067:1.25

Purge Volume: 5.0

Operator: KGG

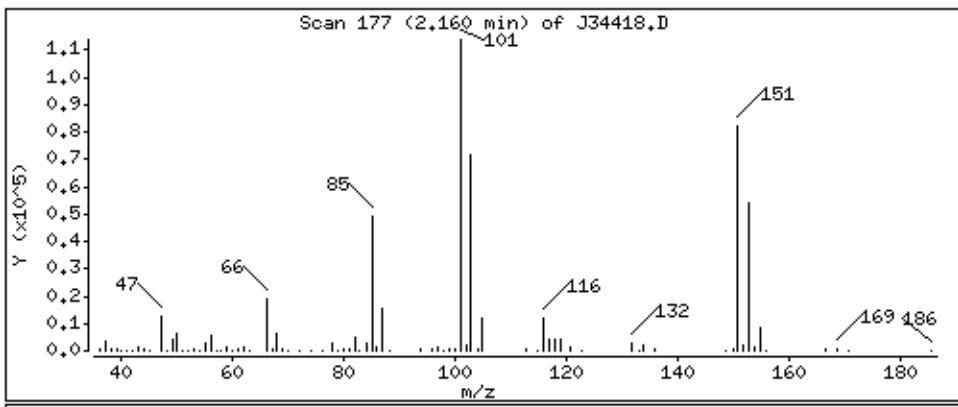
Column phase: RTX-624

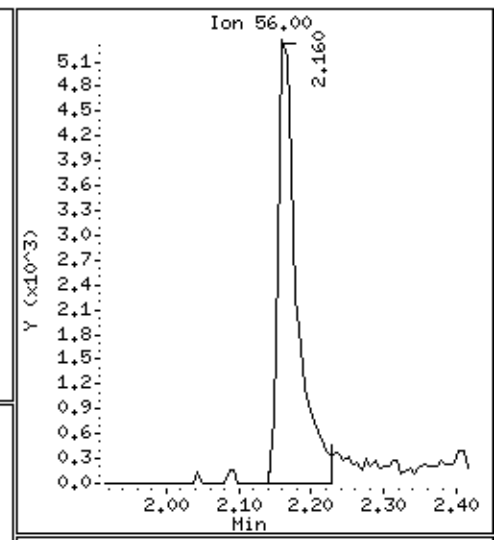
Column diameter: 0.18

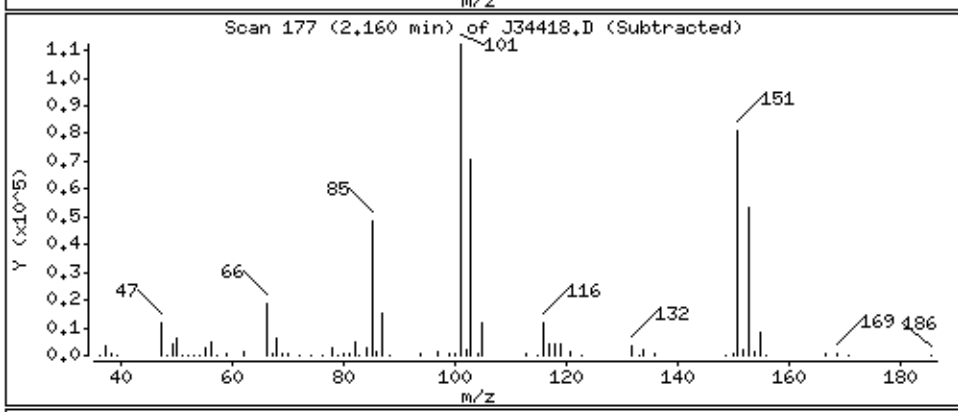
14 Acrolein

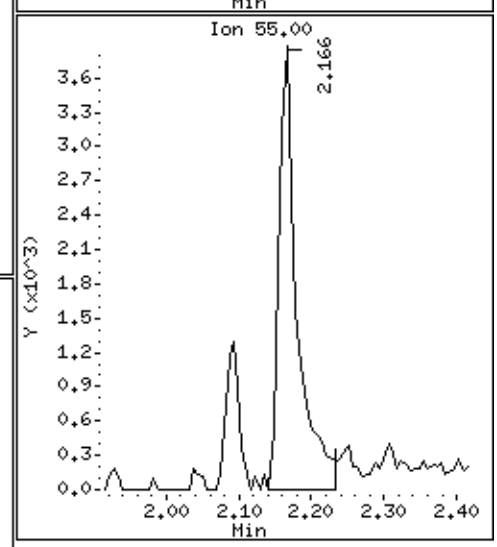
Concentration: 20.1 ug/L

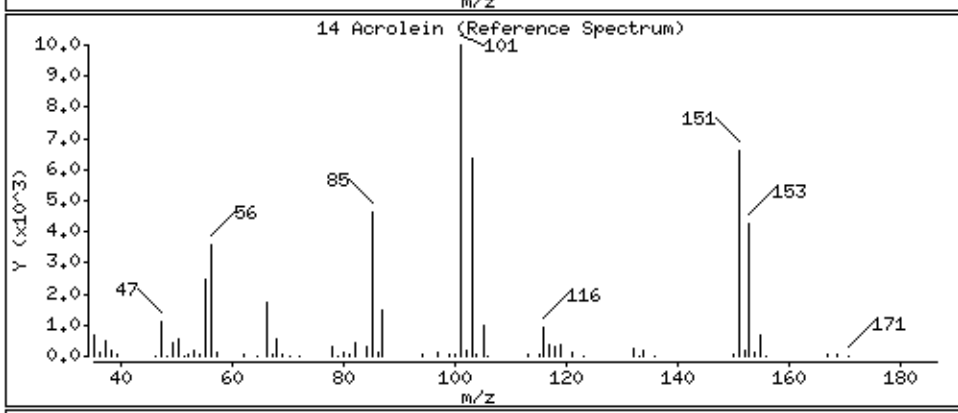
Review Code:

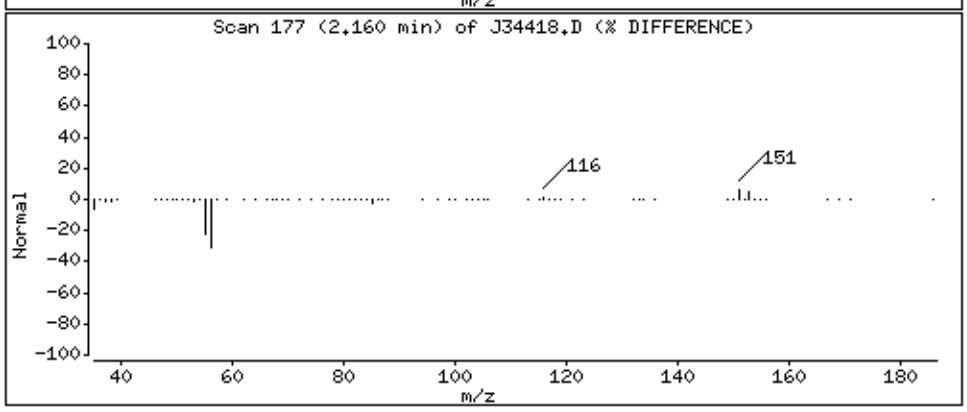












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D

Date : 25-APR-2017 19:25

Client ID: MW-3CMSD

Instrument: 70msv6.i

Sample Info: 103082, 15067:1.25

Purge Volume: 5.0

Operator: KGG

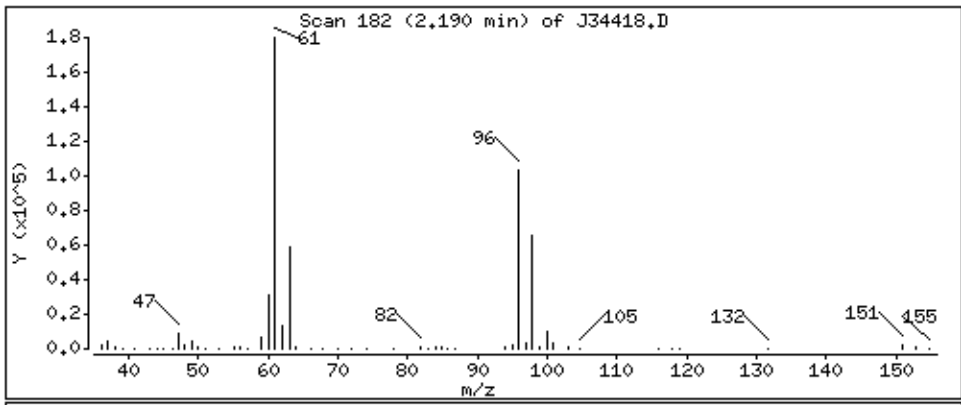
Column phase: RTX-624

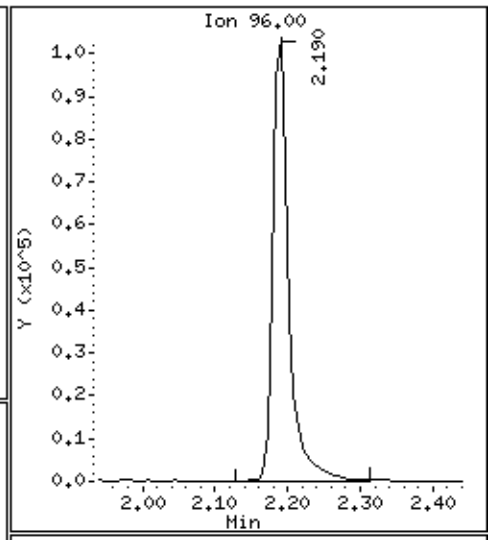
Column diameter: 0.18

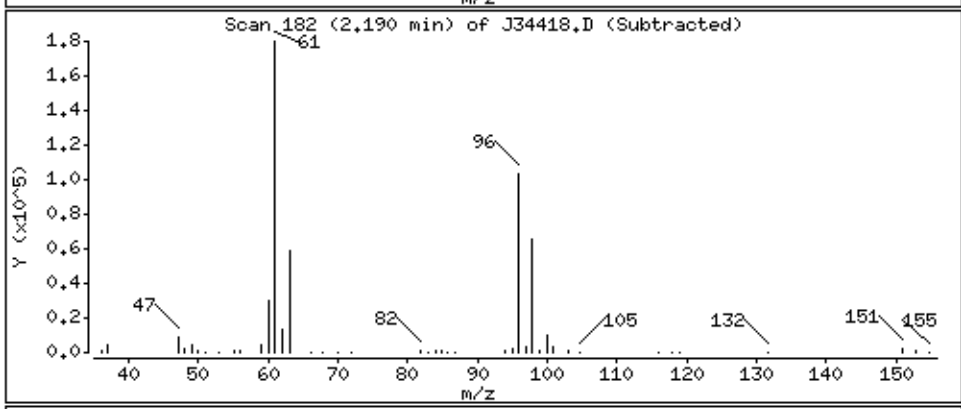
15 1,1-Dichloroethene

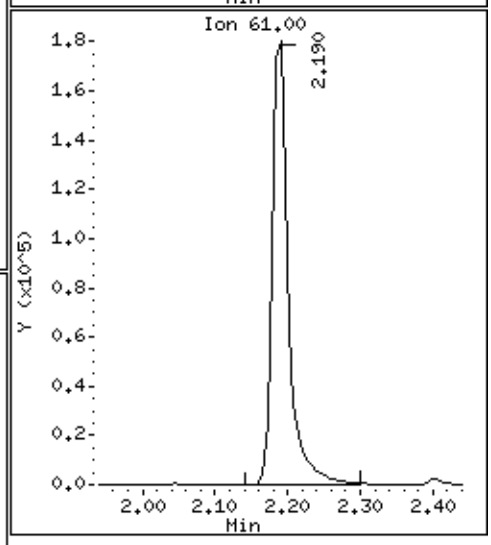
Concentration: 59.1 ug/L

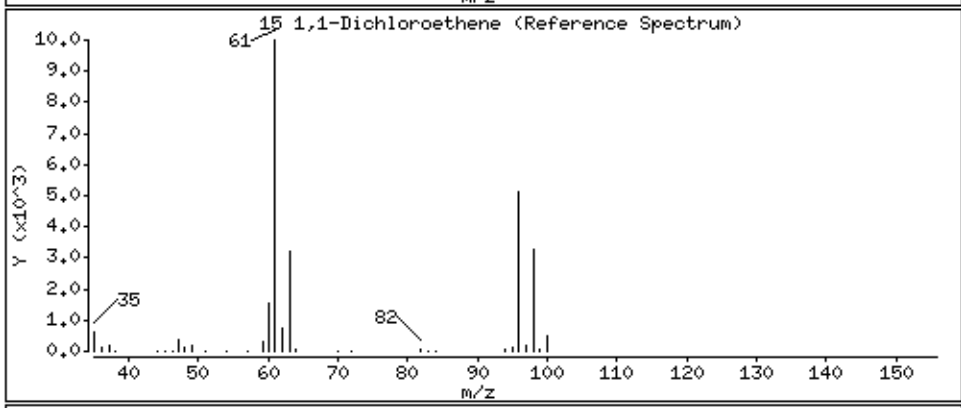
Review Code:

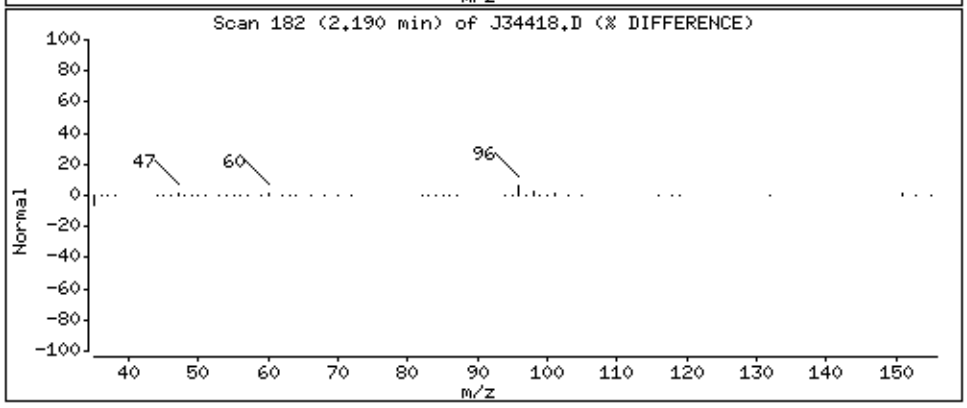












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D

Date : 25-APR-2017 19:25

Client ID: MW-3CMSD

Instrument: 70msv6.i

Sample Info: 103082, 15067:1.25

Purge Volume: 5.0

Operator: KGG

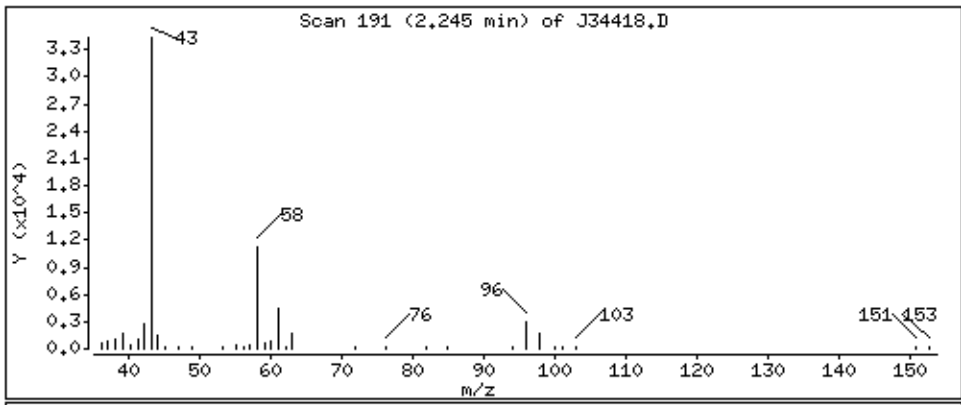
Column phase: RTX-624

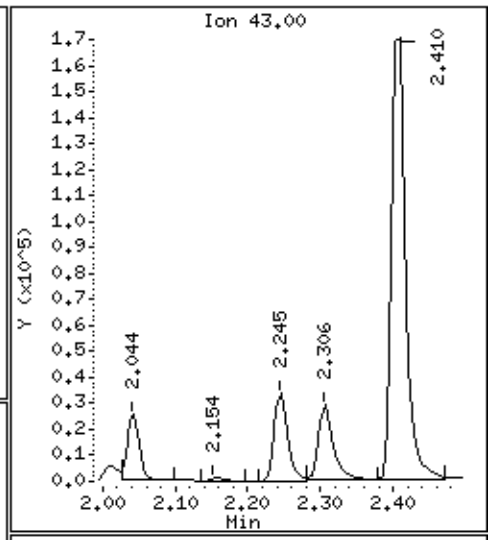
Column diameter: 0.18

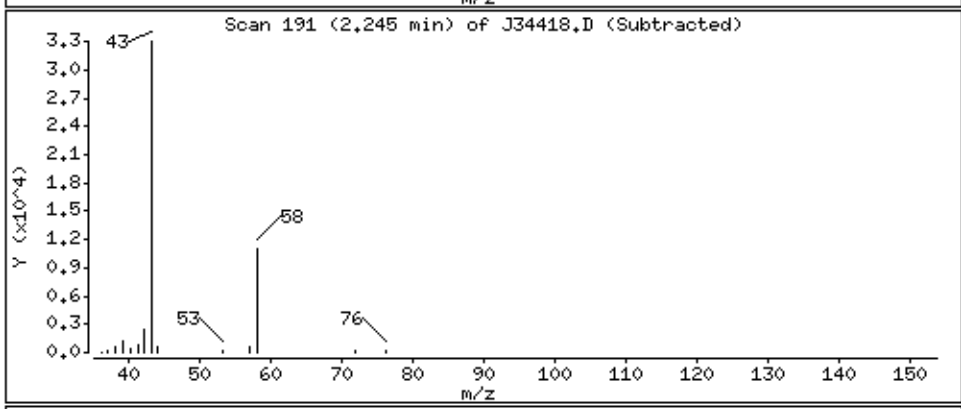
17 Acetone

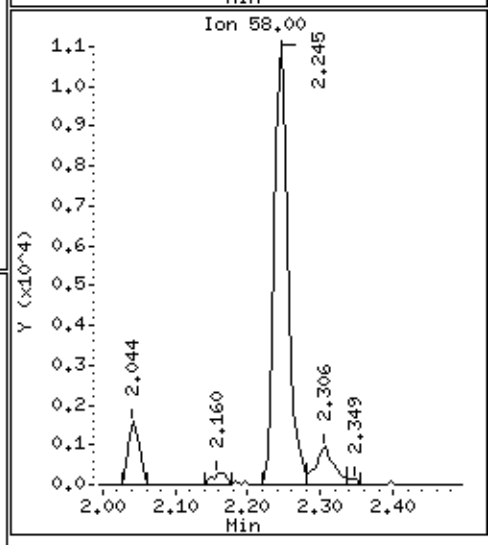
Concentration: 32.6 ug/L

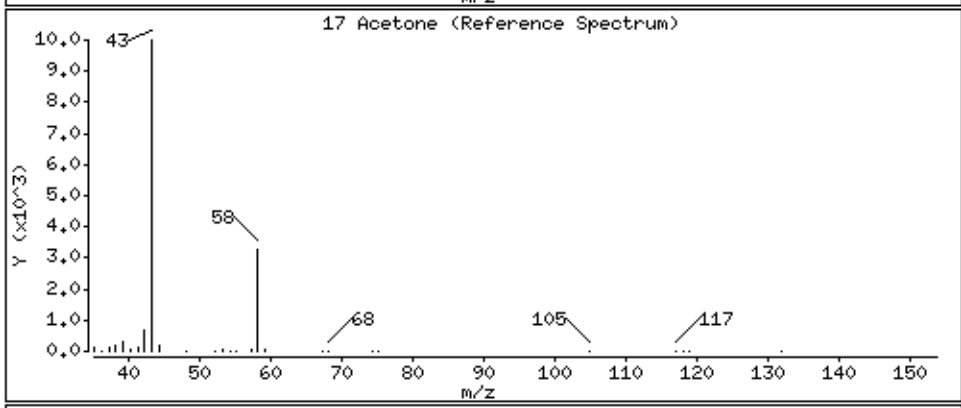
Review Code:

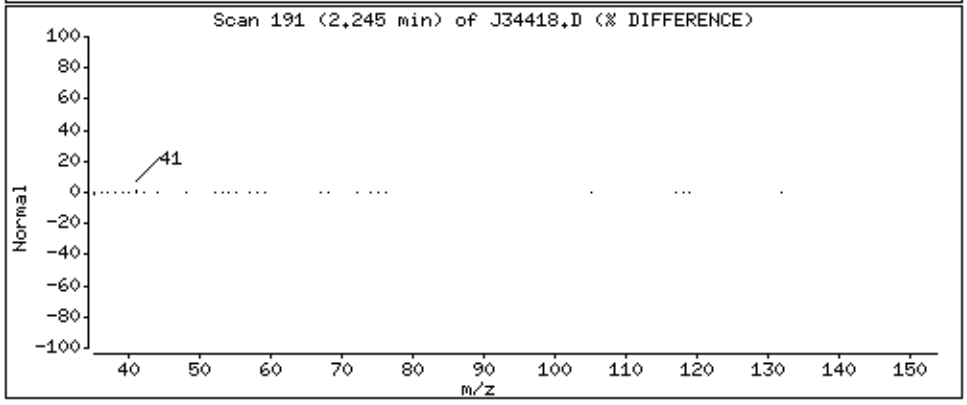












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D

Date : 25-APR-2017 19:25

Client ID: MW-3CMSD

Instrument: 70msv6.i

Sample Info: 103082, 15067:1.25

Purge Volume: 5.0

Operator: KGG

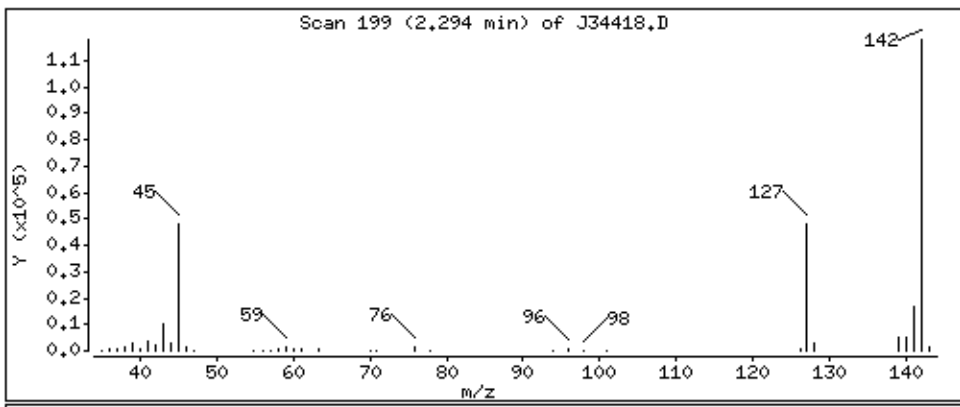
Column phase: RTX-624

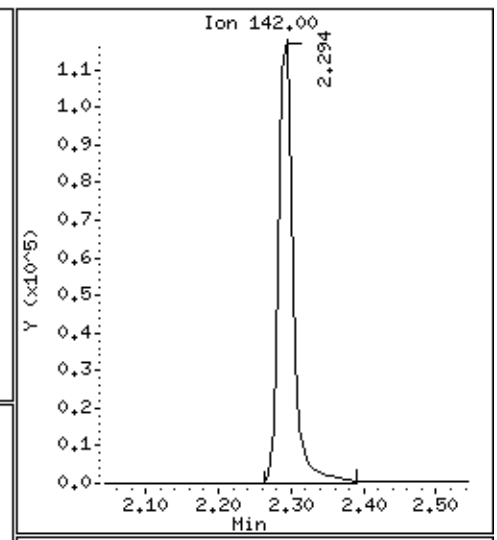
Column diameter: 0.18

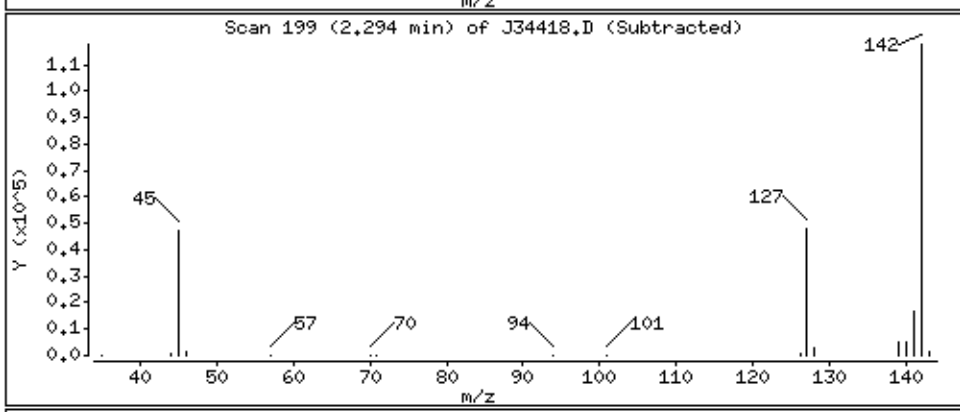
18 Iodomethane

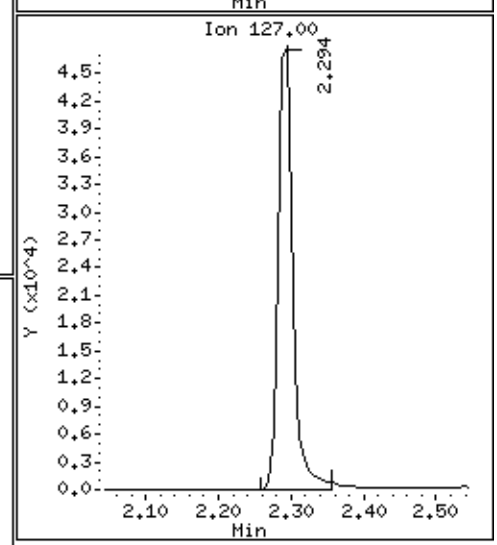
Concentration: 44.1 ug/L

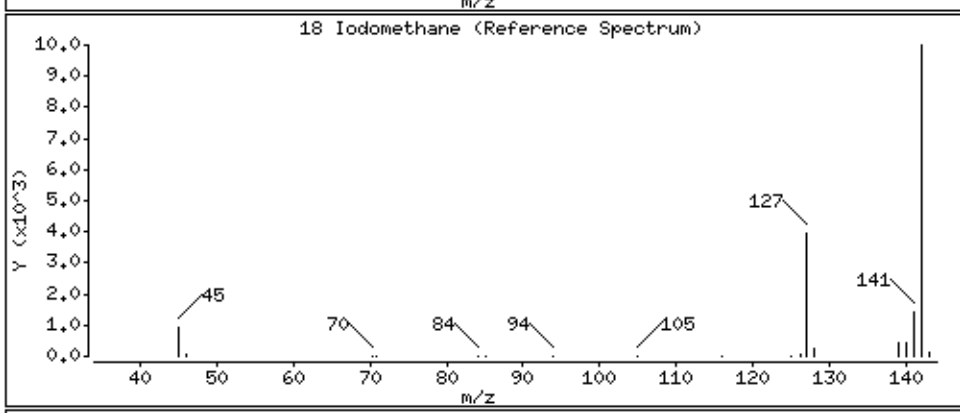
Review Code:

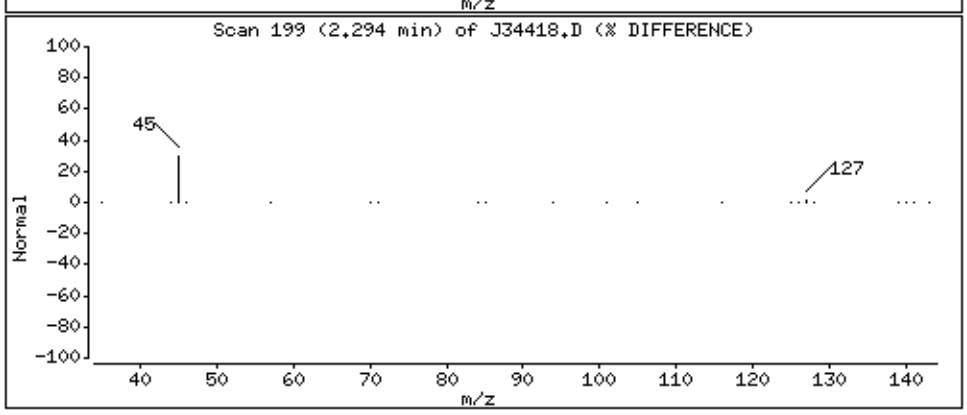












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D

Date : 25-APR-2017 19:25

Client ID: MW-3CMSD

Instrument: 70msv6.i

Sample Info: 103082, 15067:1.25

Purge Volume: 5.0

Operator: KGG

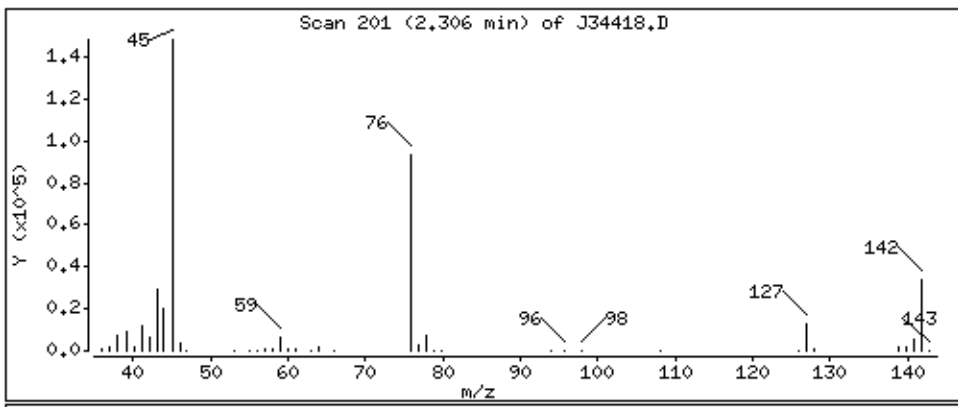
Column phase: RTX-624

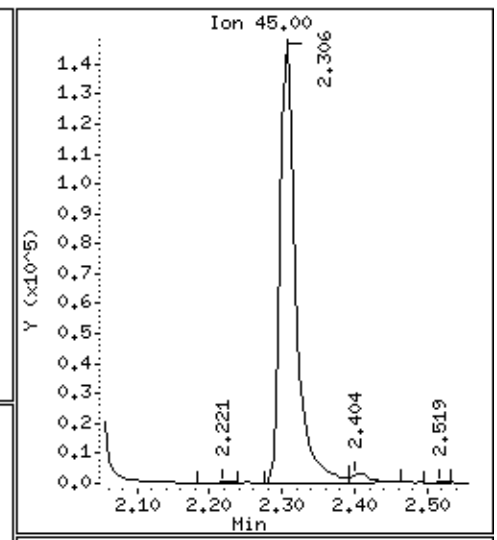
Column diameter: 0.18

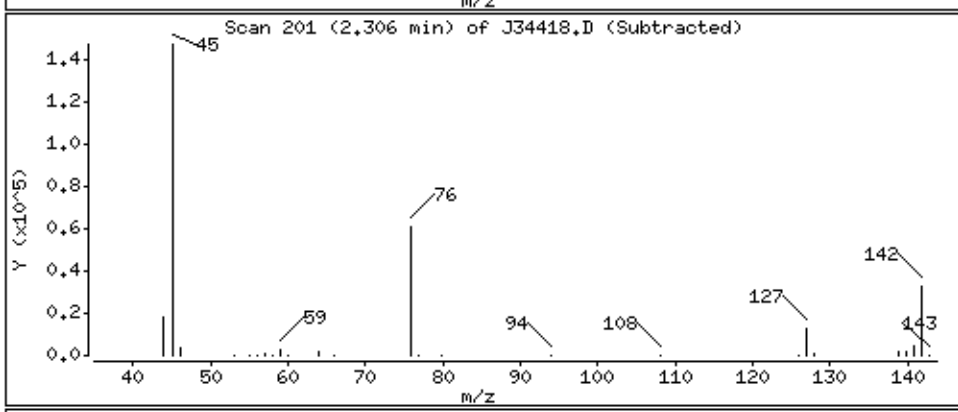
19 2-Propanol

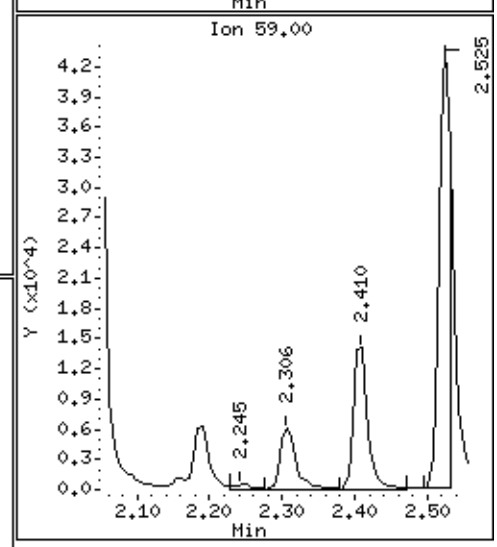
Concentration: 891 ug/L

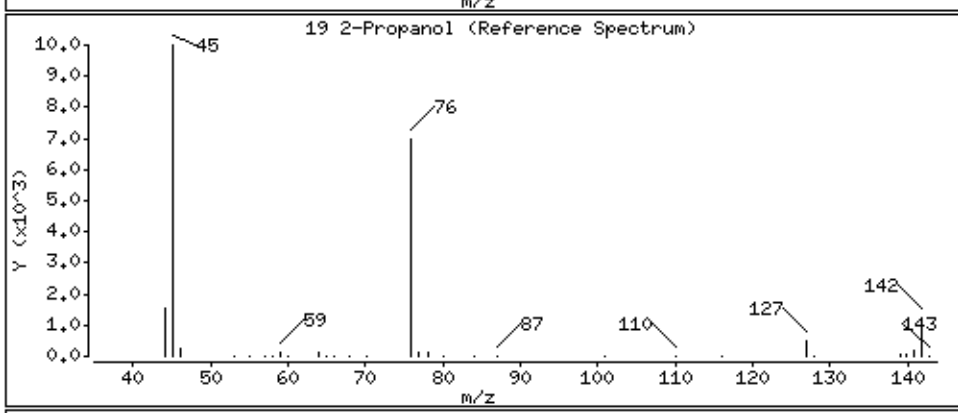
Review Code:

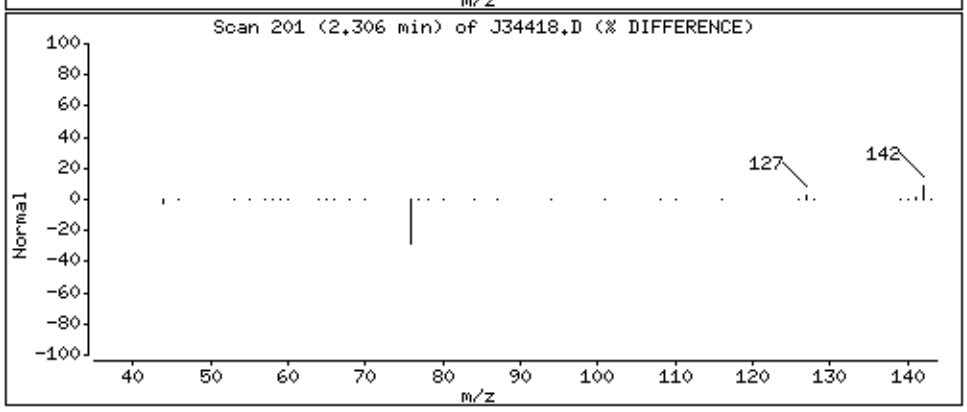












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D

Date : 25-APR-2017 19:25

Client ID: MW-3CMSD

Instrument: 70msv6.i

Sample Info: 103082, 15067:1.25

Purge Volume: 5.0

Operator: KGG

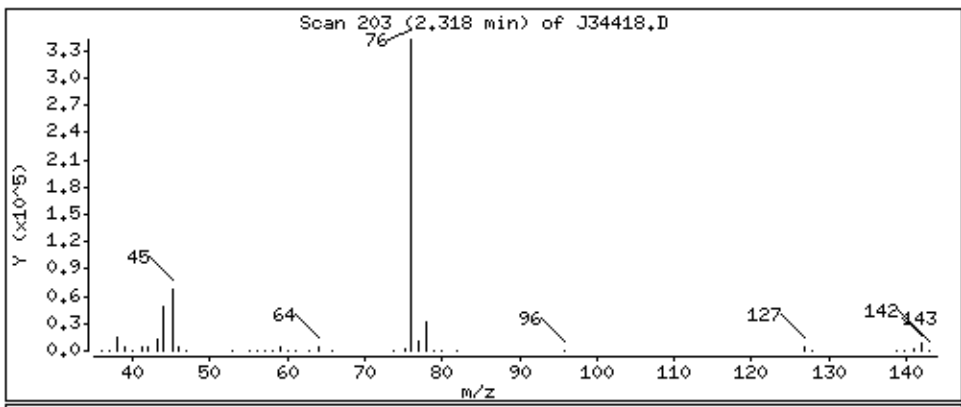
Column phase: RTX-624

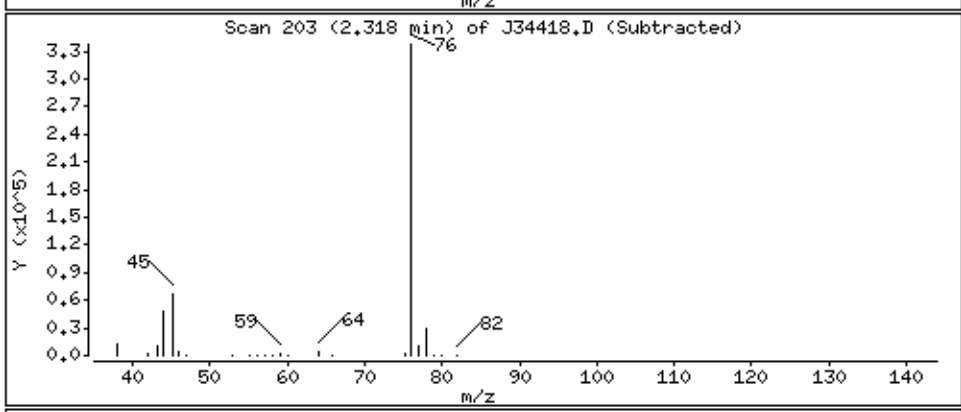
Column diameter: 0.18

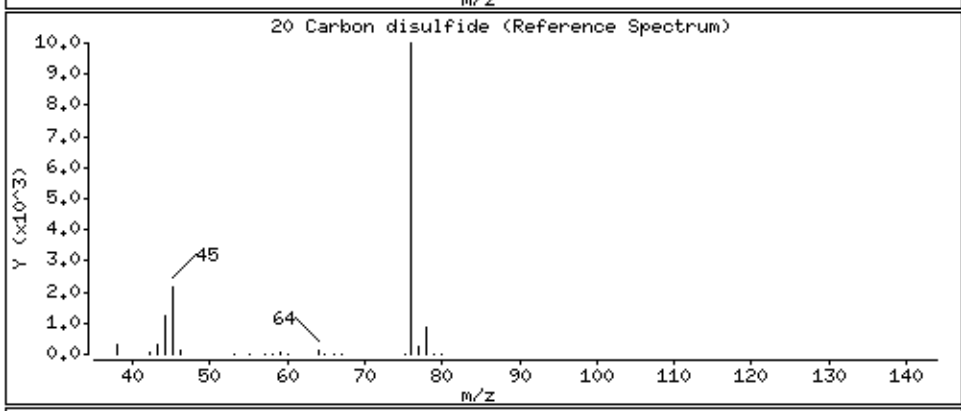
20 Carbon disulfide

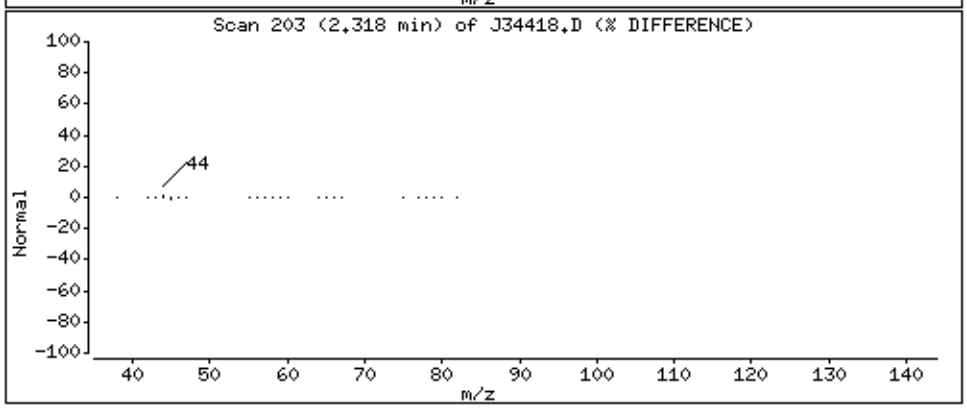
Concentration: 49.3 ug/L

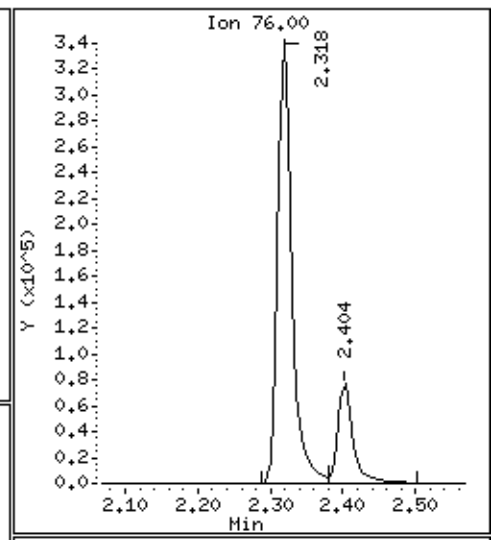
Review Code:

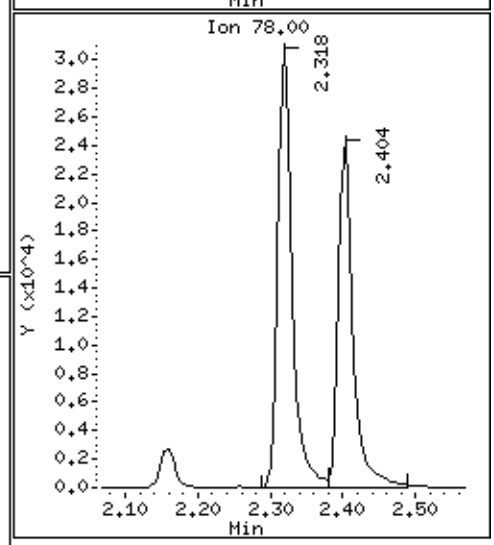












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D

Date : 25-APR-2017 19:25

Client ID: MW-3CMSD

Instrument: 70msv6.i

Sample Info: 103082, 15067:1.25

Purge Volume: 5.0

Operator: KGG

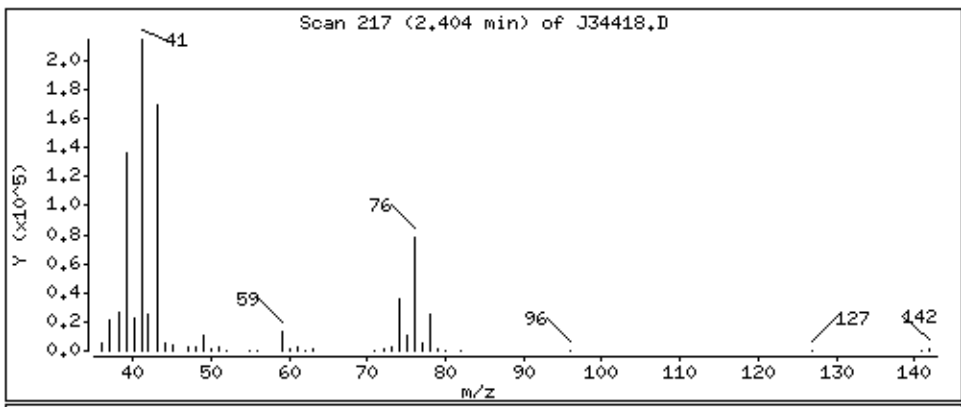
Column phase: RTX-624

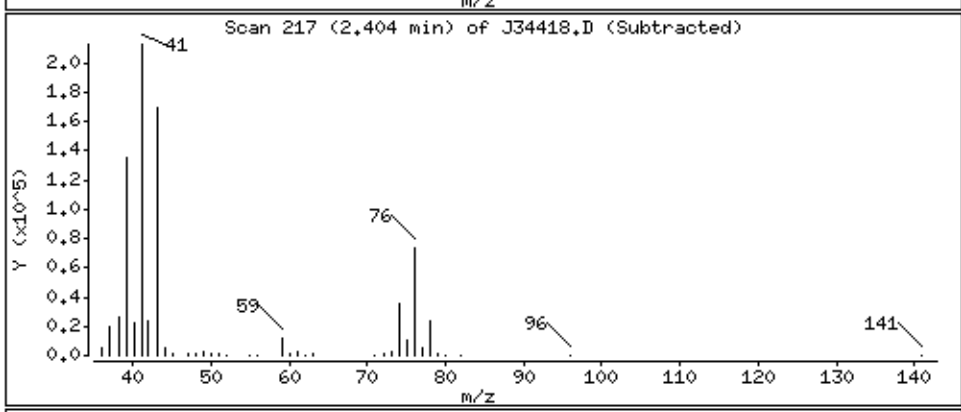
Column diameter: 0.18

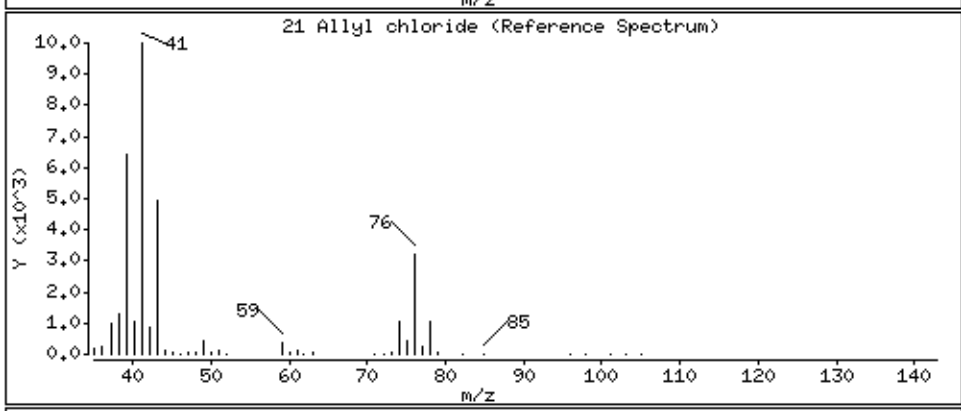
21 Allyl chloride

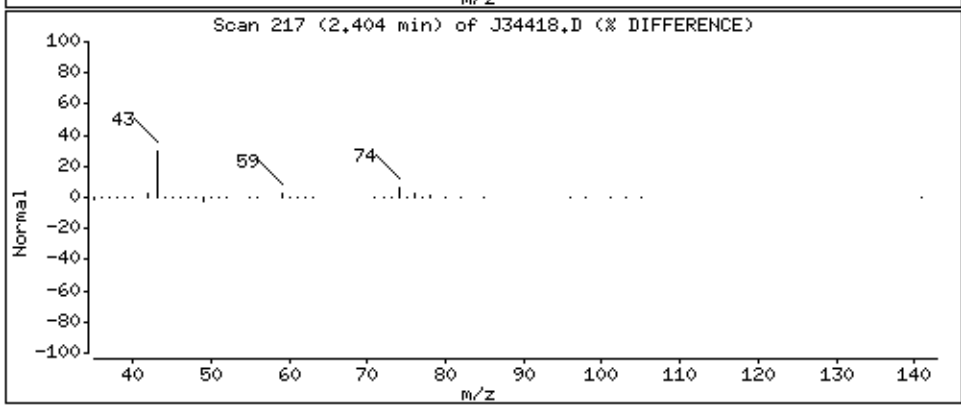
Concentration: 48.7 ug/L

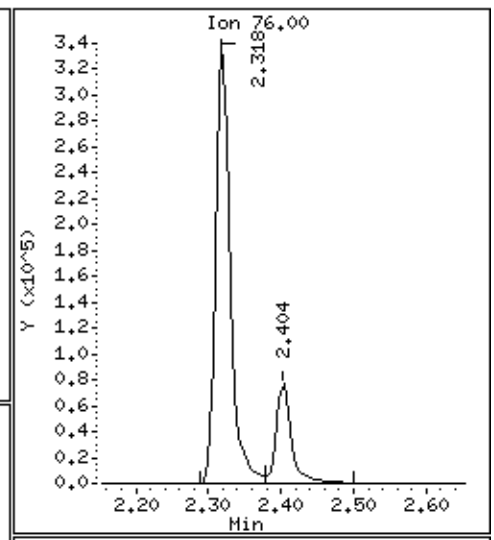
Review Code:

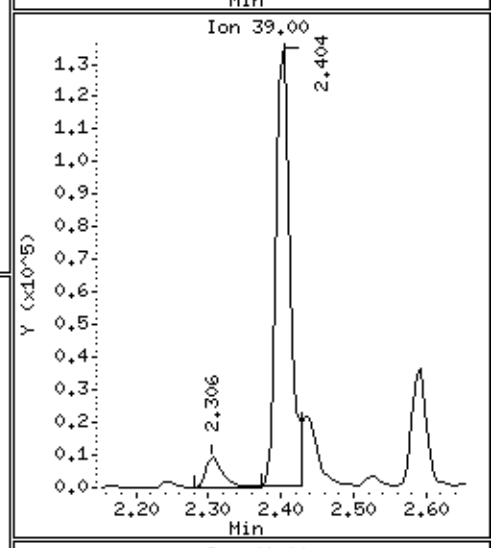


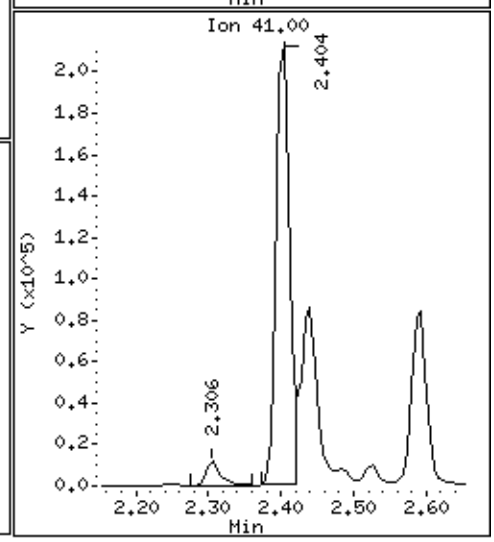












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D

Date : 25-APR-2017 19:25

Client ID: MW-3CMSD

Instrument: 70msv6.i

Sample Info: 103082, 15067:1.25

Purge Volume: 5.0

Operator: KGG

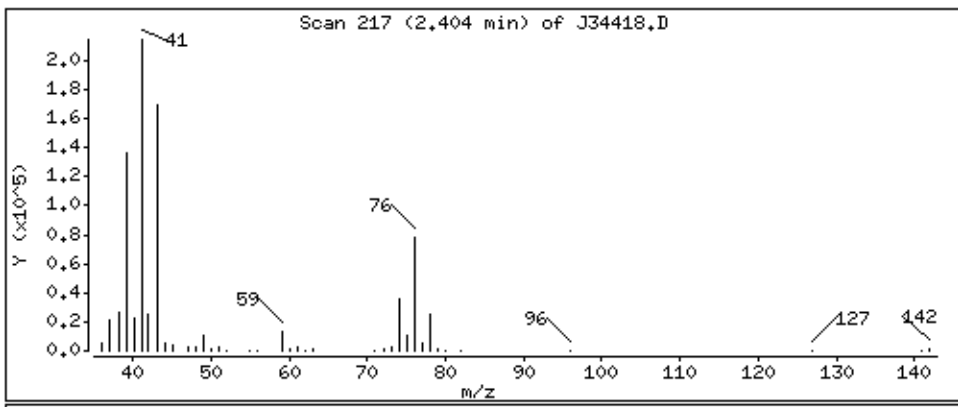
Column phase: RTX-624

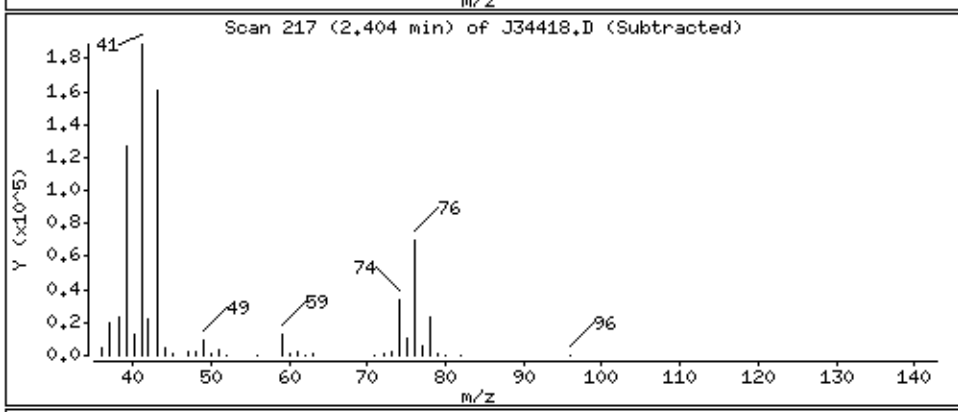
Column diameter: 0.18

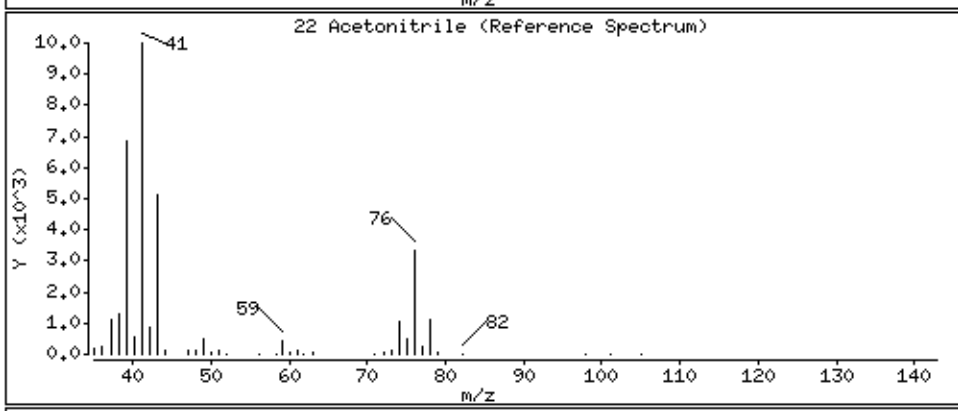
22 Acetonitrile

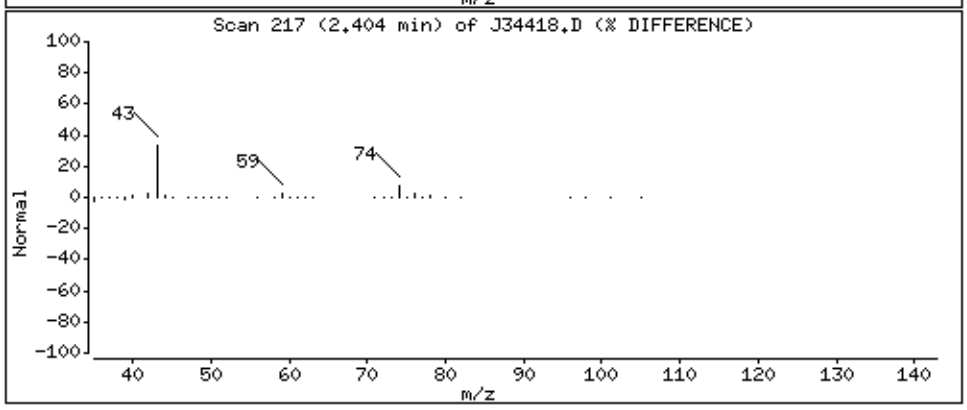
Concentration: 182 ug/L

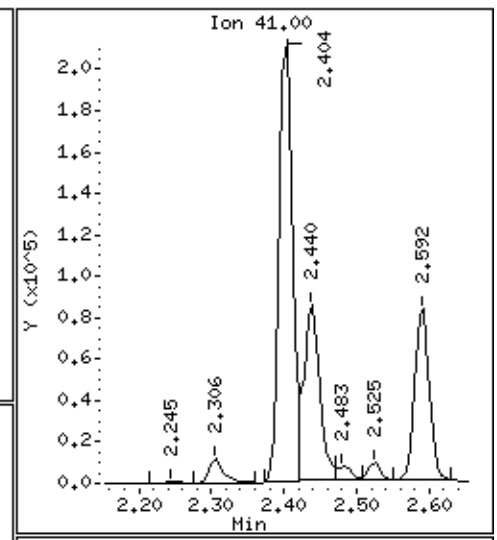
Review Code:

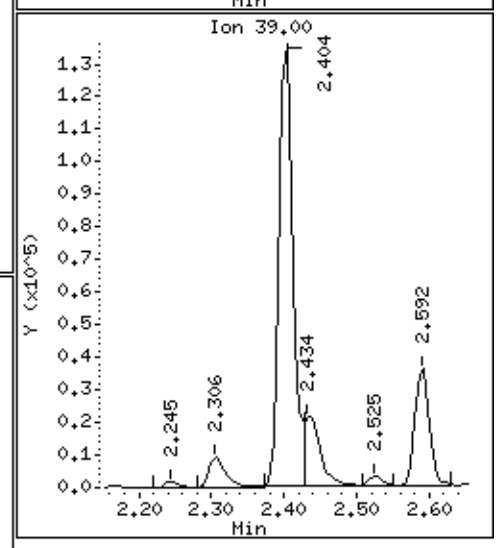












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D

Date : 25-APR-2017 19:25

Client ID: MW-3CMSD

Instrument: 70msv6.i

Sample Info: 103082, 15067:1.25

Purge Volume: 5.0

Operator: KGG

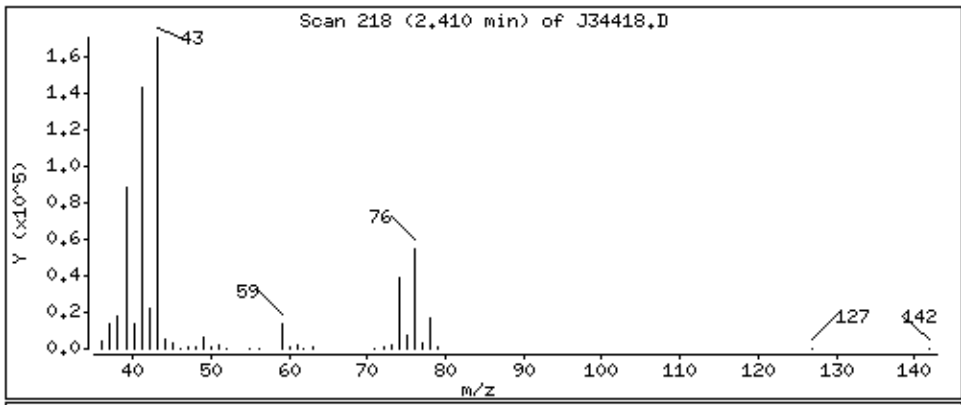
Column phase: RTX-624

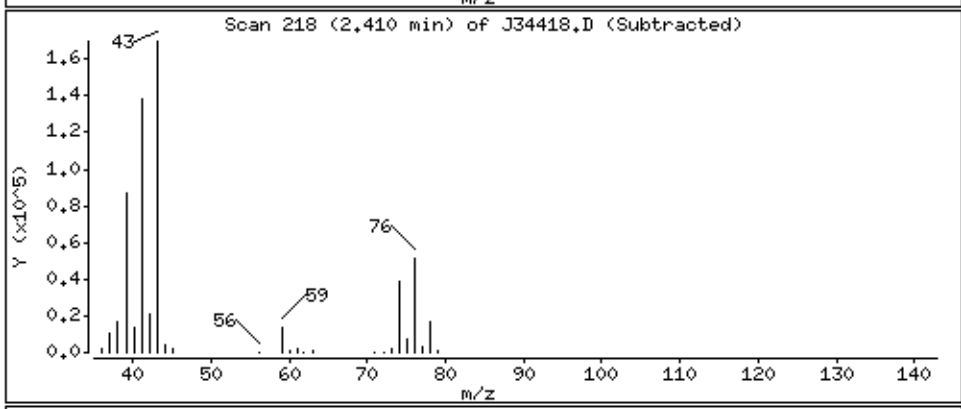
Column diameter: 0.18

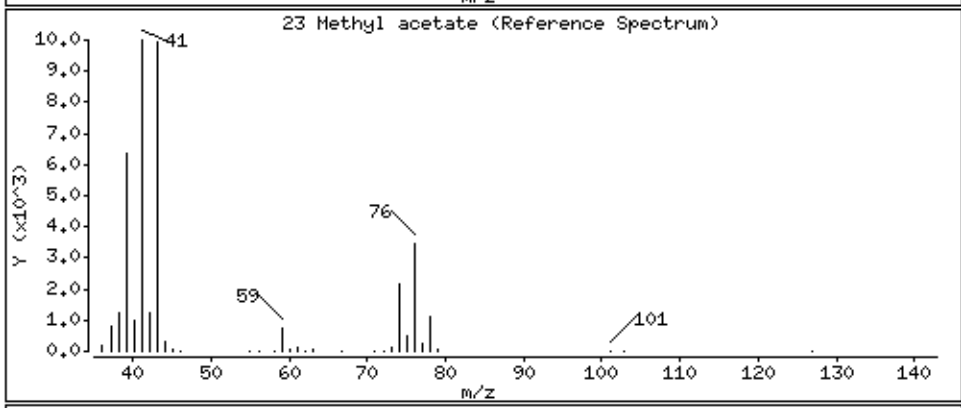
23 Methyl acetate

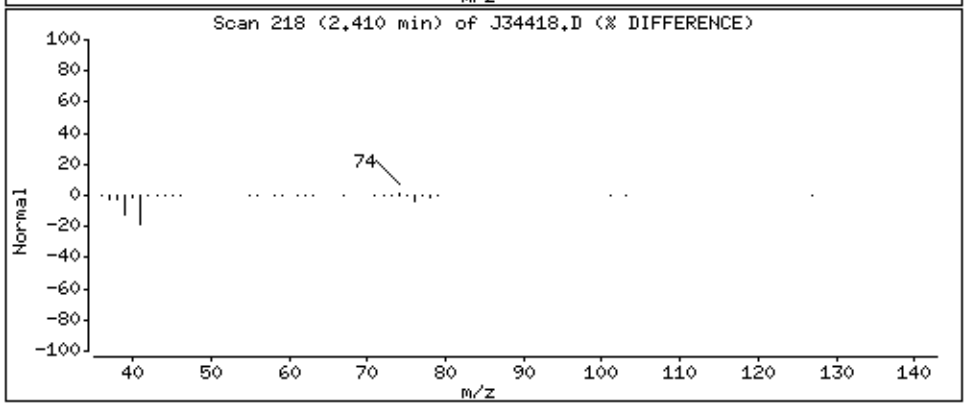
Concentration: 37.6 ug/L

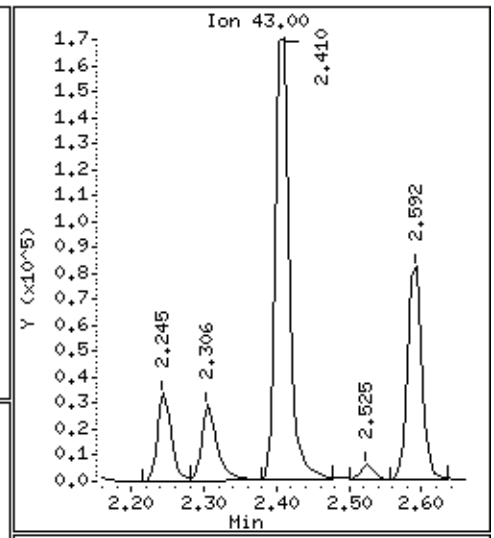
Review Code:

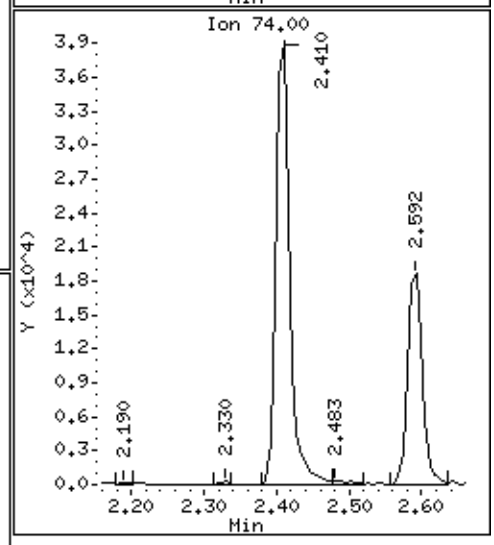












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D

Date : 25-APR-2017 19:25

Client ID: MW-3CMSD

Instrument: 70msv6.i

Sample Info: 103082, 15067:1.25

Purge Volume: 5.0

Operator: KGG

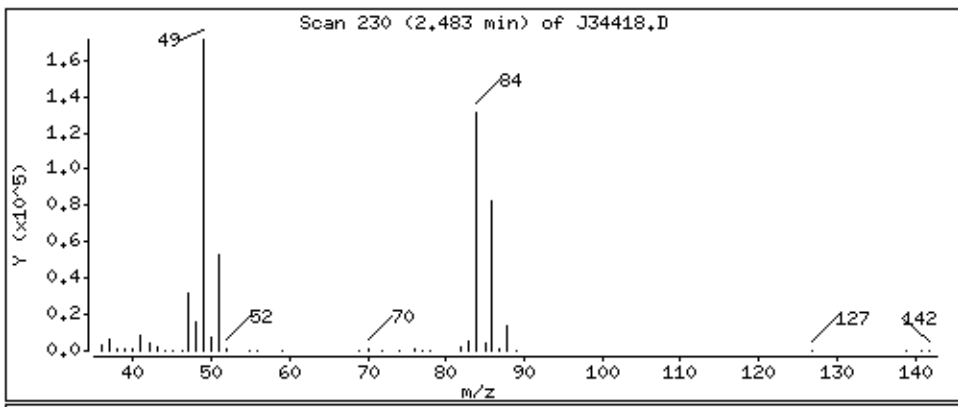
Column phase: RTX-624

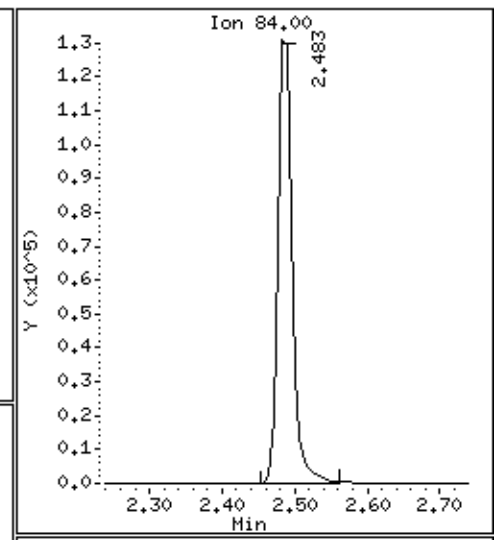
Column diameter: 0.18

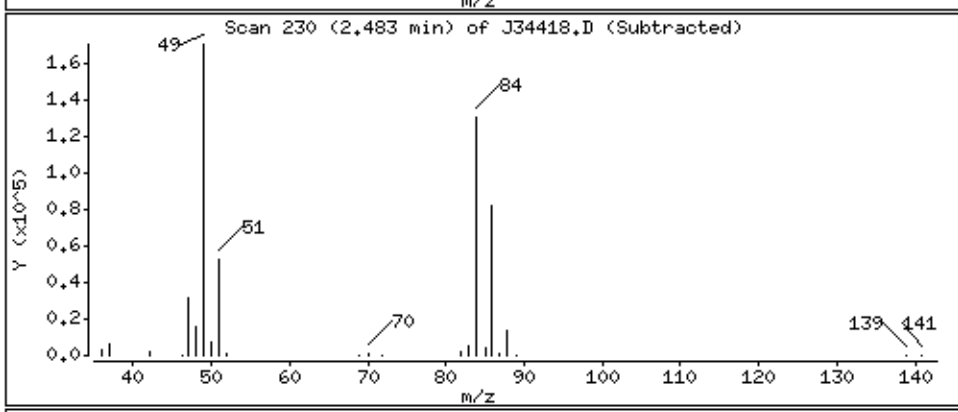
24 Methylene Chloride

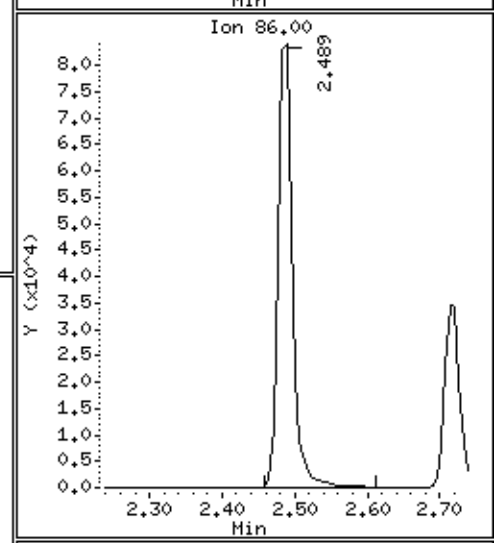
Concentration: 48.4 ug/L

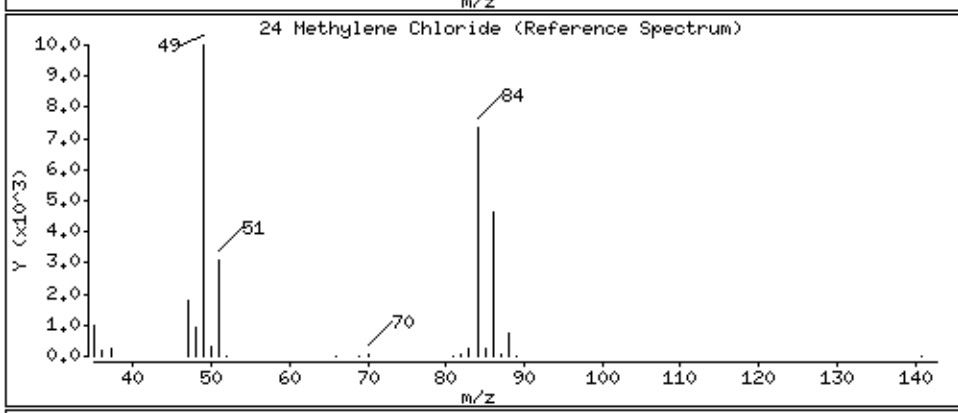
Review Code:

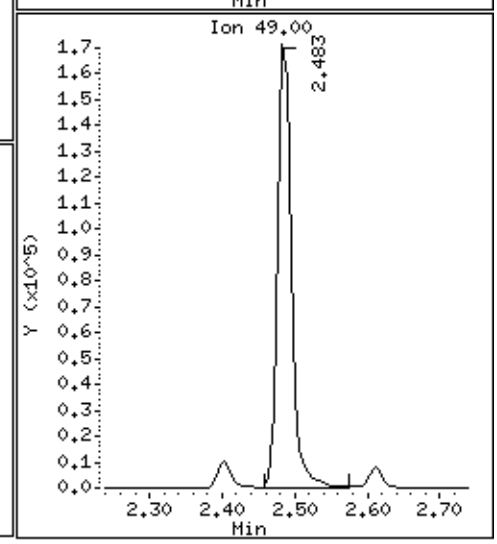


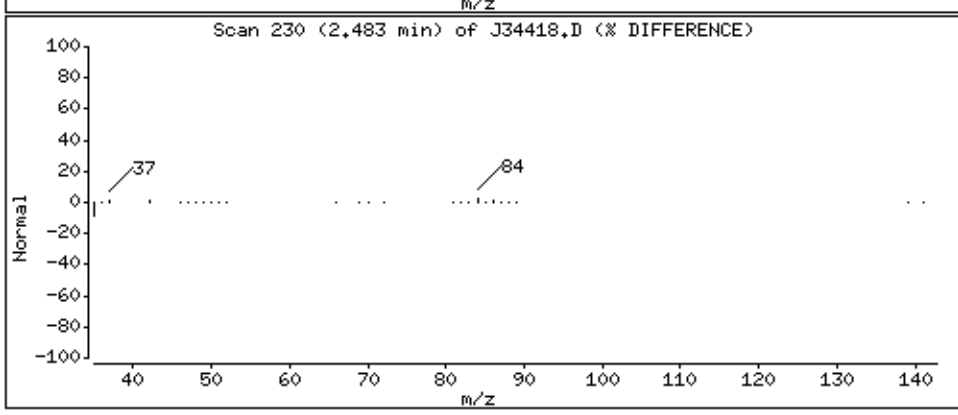












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D

Date : 25-APR-2017 19:25

Client ID: MW-3CMSD

Instrument: 70msv6.i

Sample Info: 103082, 15067:1.25

Purge Volume: 5.0

Operator: KGG

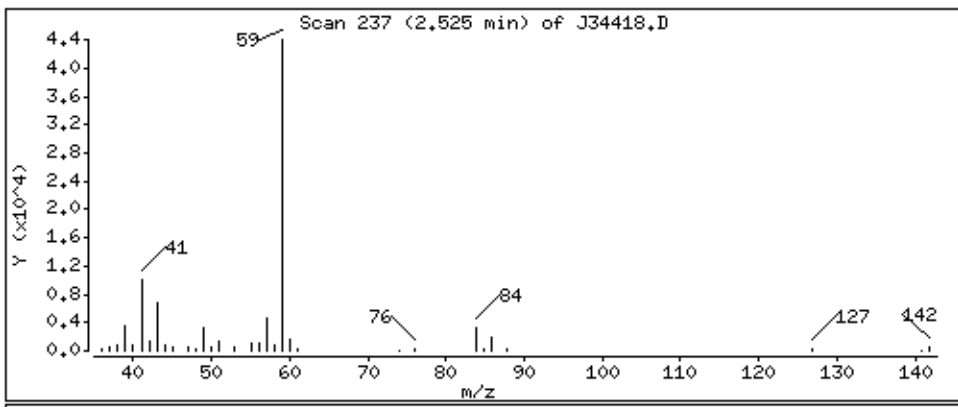
Column phase: RTX-624

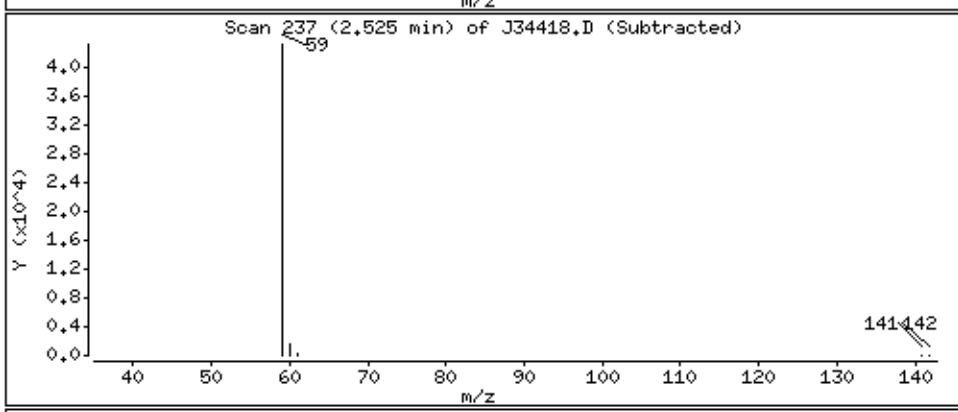
Column diameter: 0.18

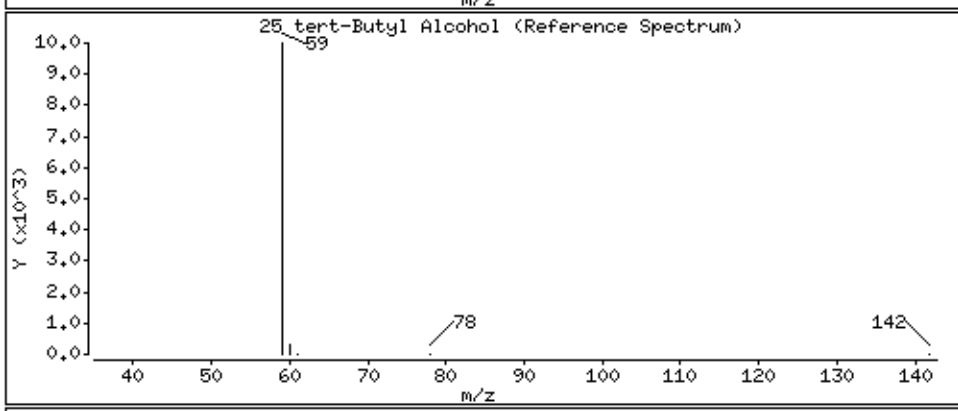
25 tert-Butyl Alcohol

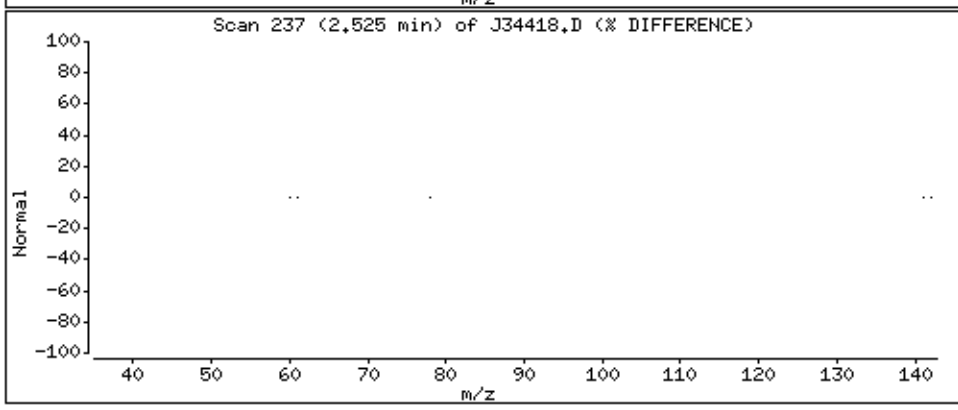
Concentration: 224 ug/L

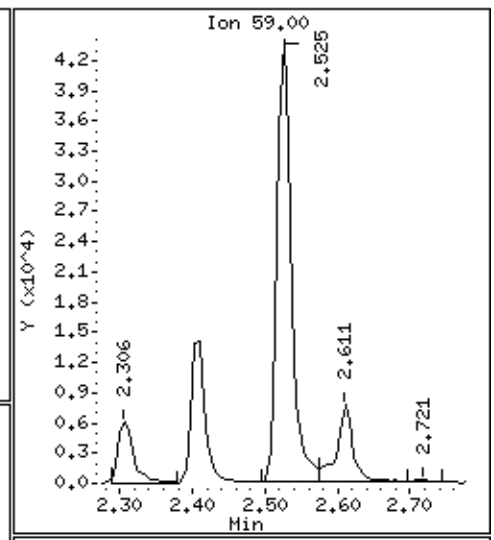
Review Code:

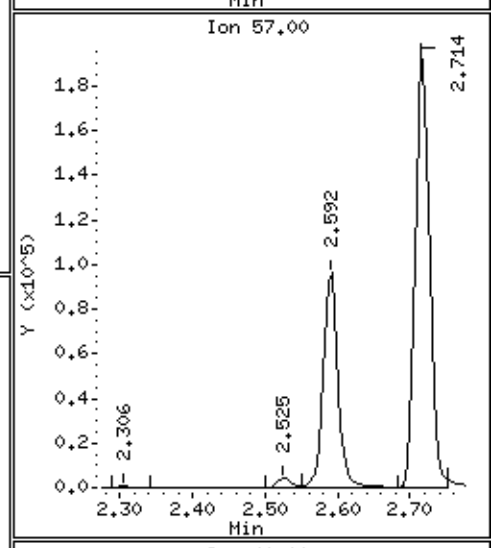


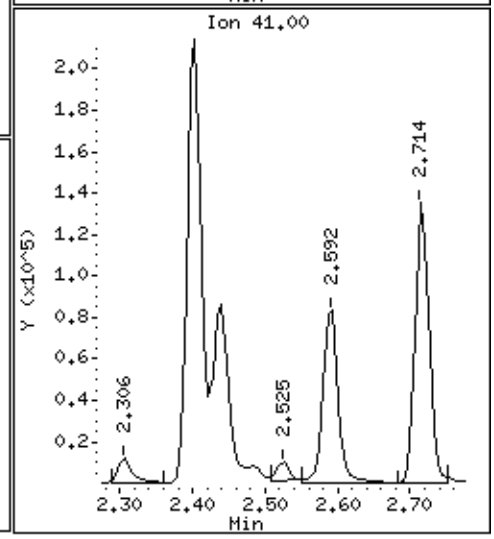












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D

Date : 25-APR-2017 19:25

Client ID: MW-3CMSD

Instrument: 70msv6.i

Sample Info: 103082, 15067:1.25

Purge Volume: 5.0

Operator: KGG

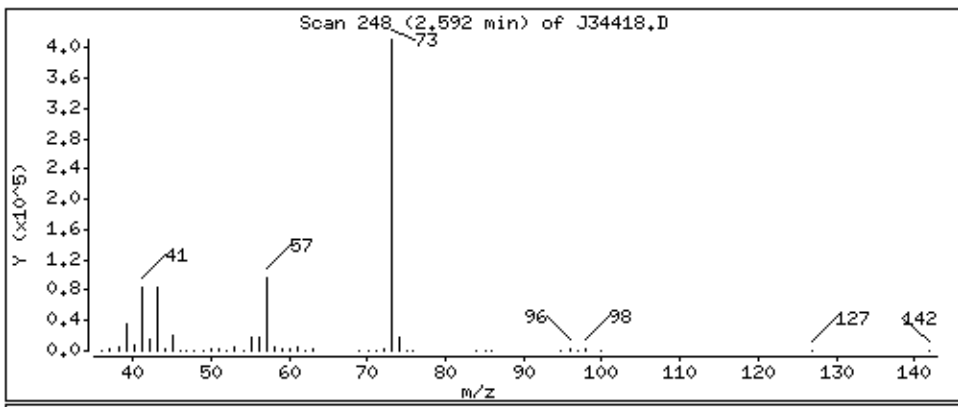
Column phase: RTX-624

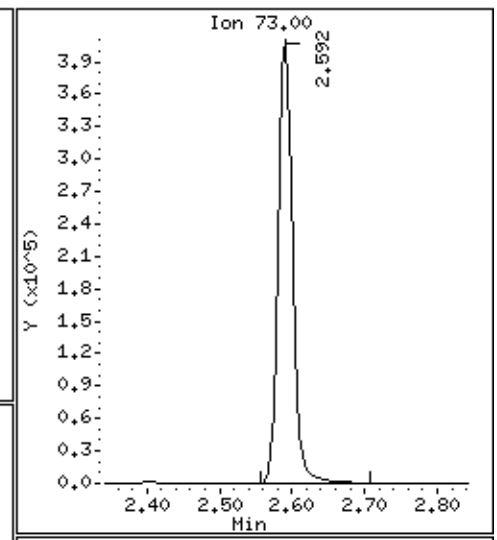
Column diameter: 0.18

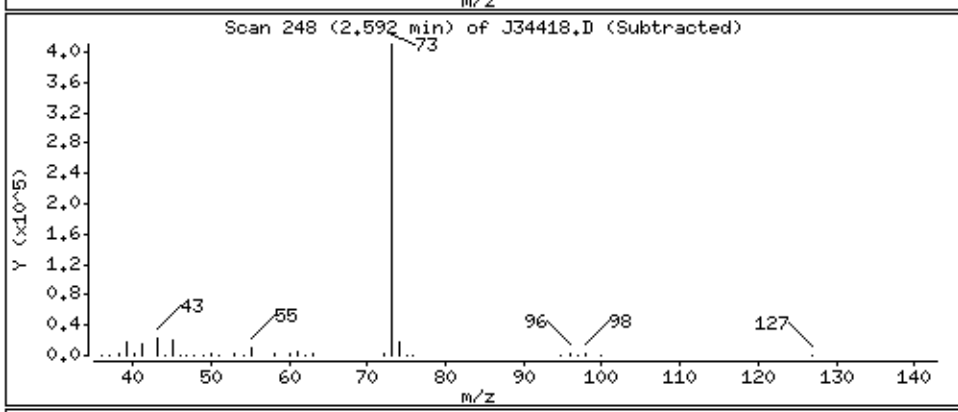
28 Methyl-tert-butyl ether

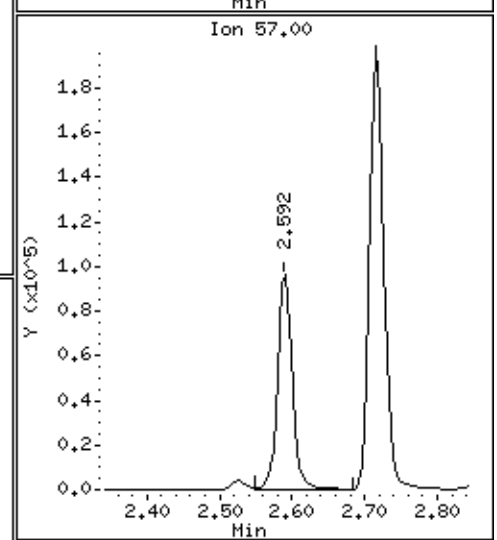
Concentration: 44.0 ug/L

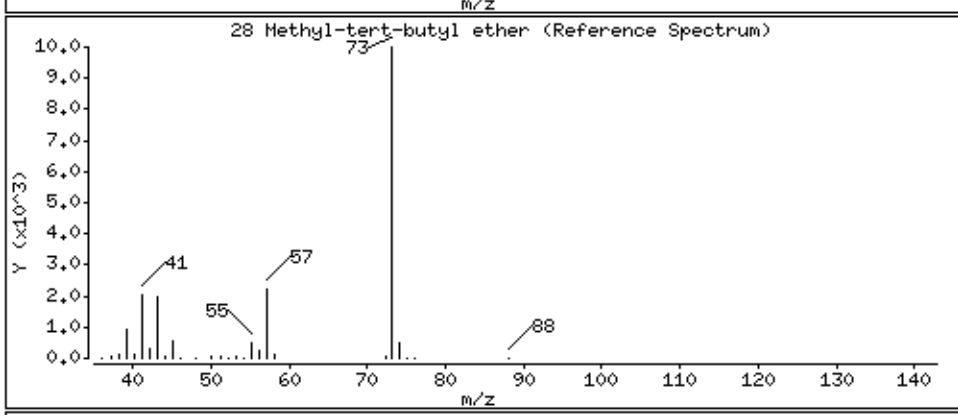
Review Code:

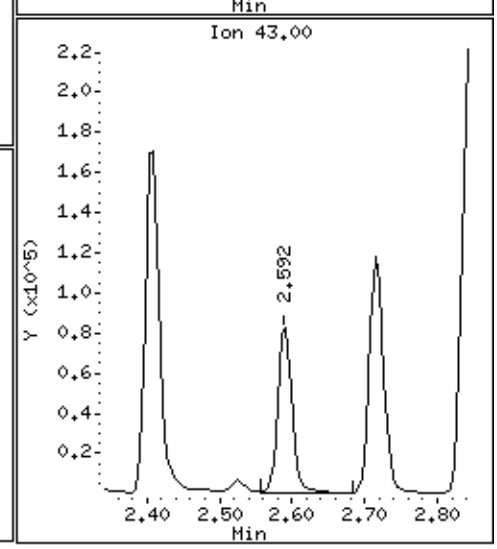


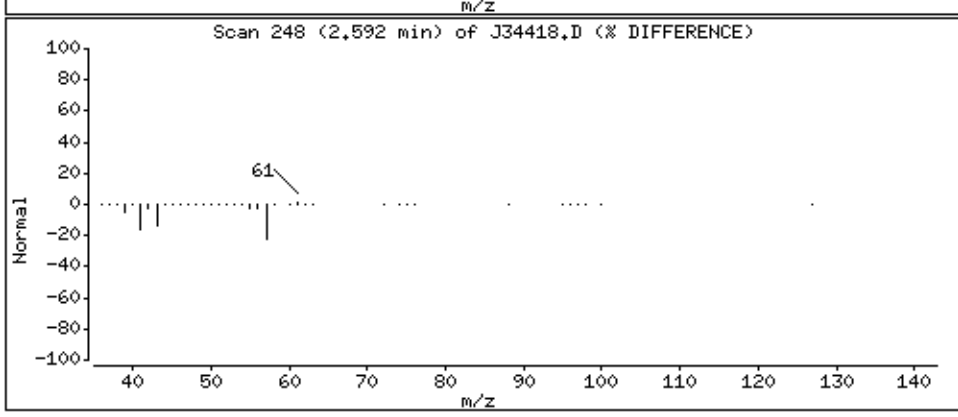












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D

Date : 25-APR-2017 19:25

Client ID: MW-3CMSD

Instrument: 70msv6.i

Sample Info: 103082, 15067:1.25

Purge Volume: 5.0

Operator: KGG

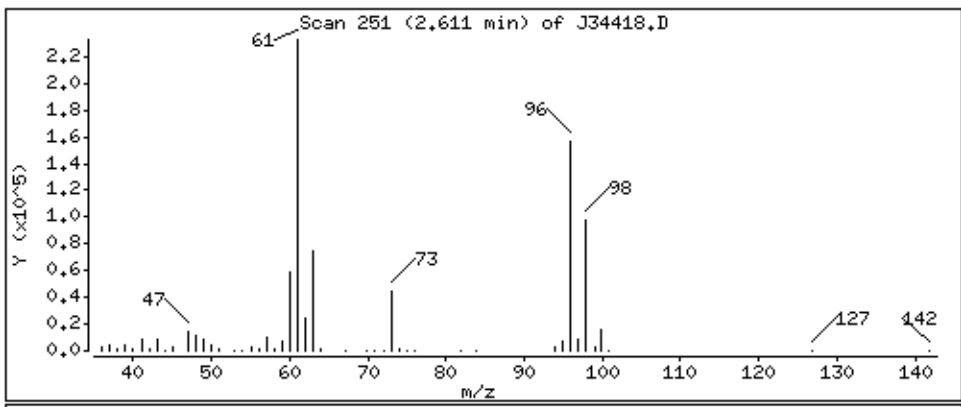
Column phase: RTX-624

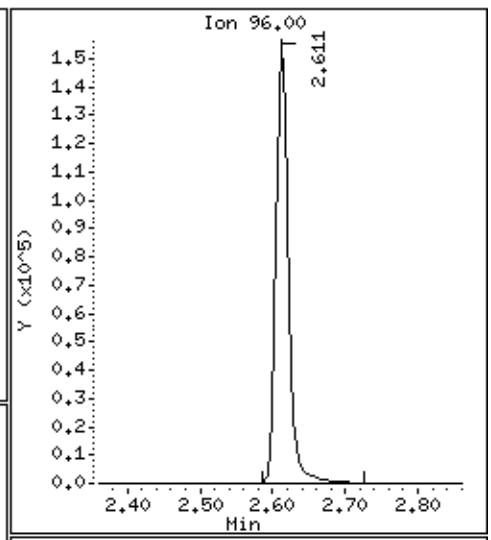
Column diameter: 0.18

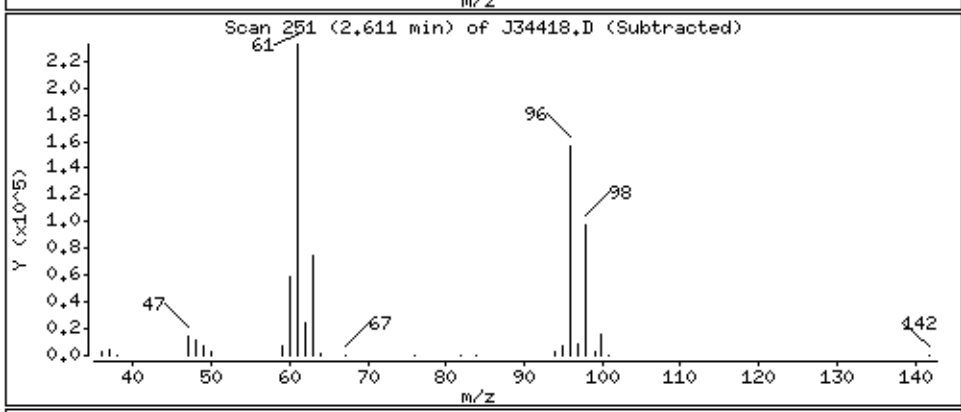
27 trans-1,2-Dichloroethene

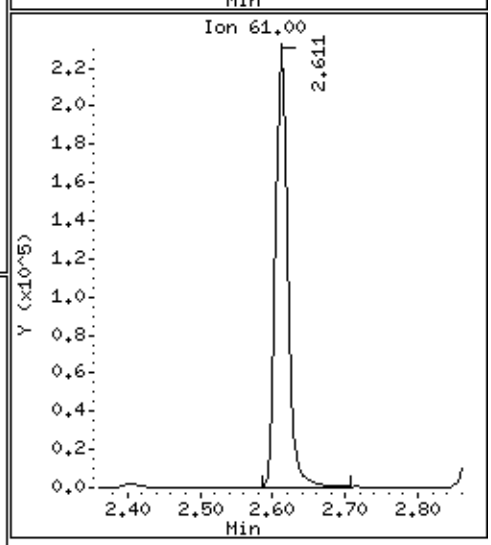
Concentration: 52.7 ug/L

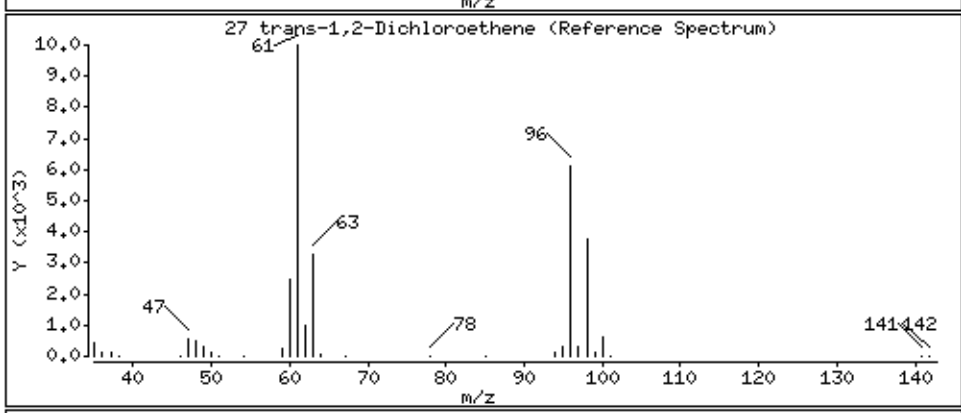
Review Code:

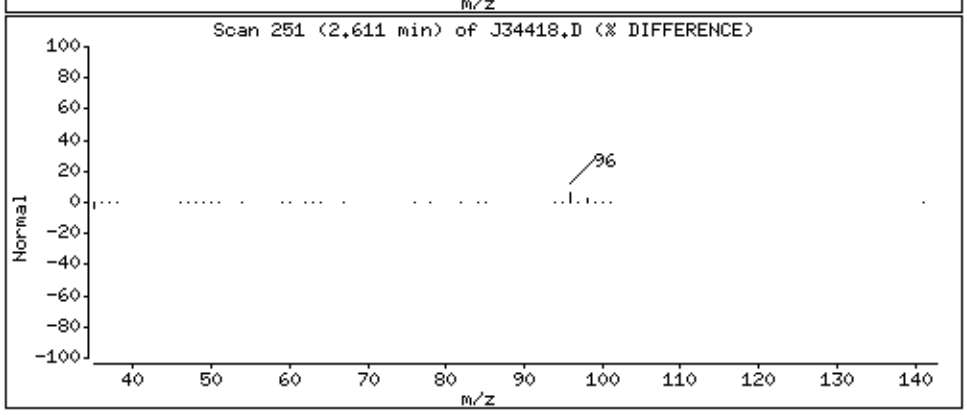












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D

Date : 25-APR-2017 19:25

Client ID: MW-3CMSD

Instrument: 70msv6.i

Sample Info: 103082, 15067:1.25

Purge Volume: 5.0

Operator: KGG

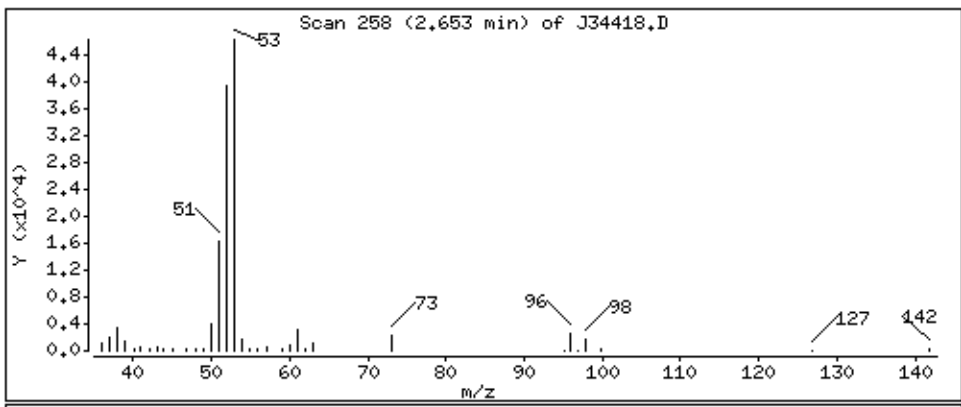
Column phase: RTX-624

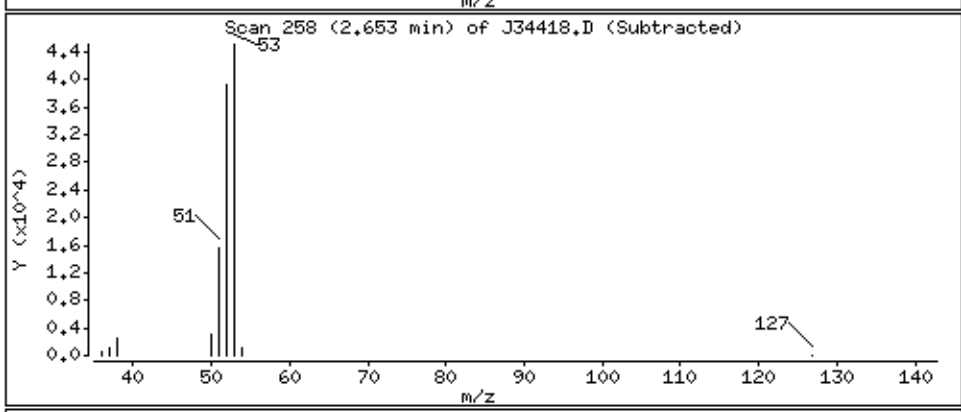
Column diameter: 0.18

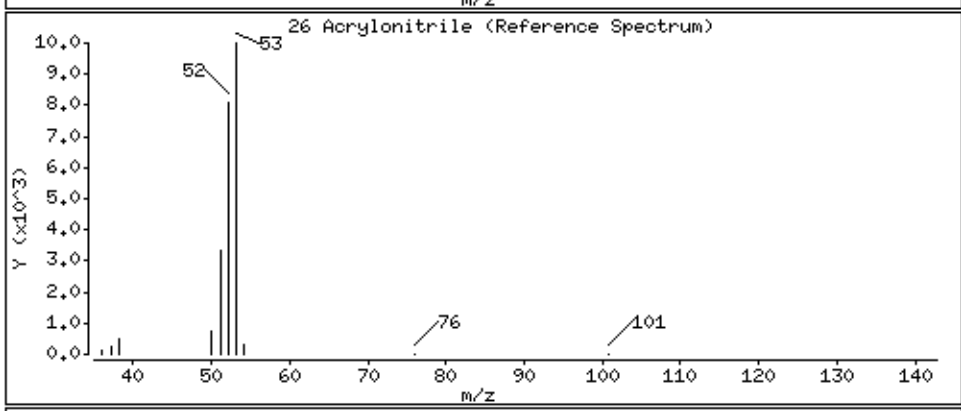
26 Acrylonitrile

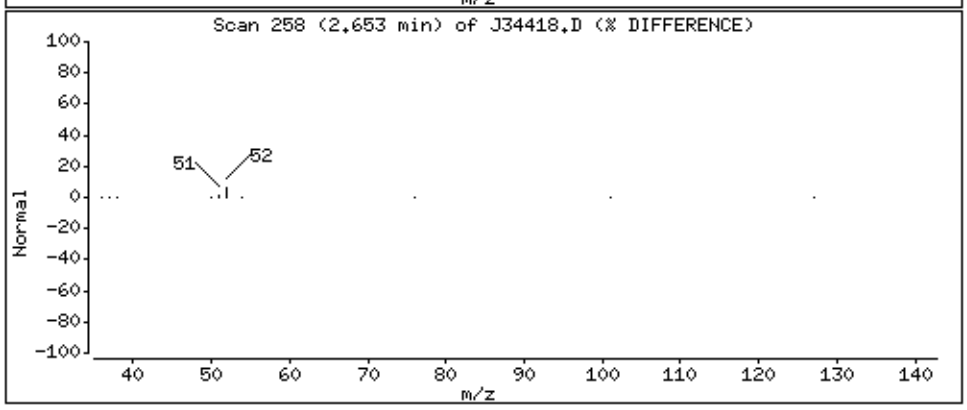
Concentration: 37.9 ug/L

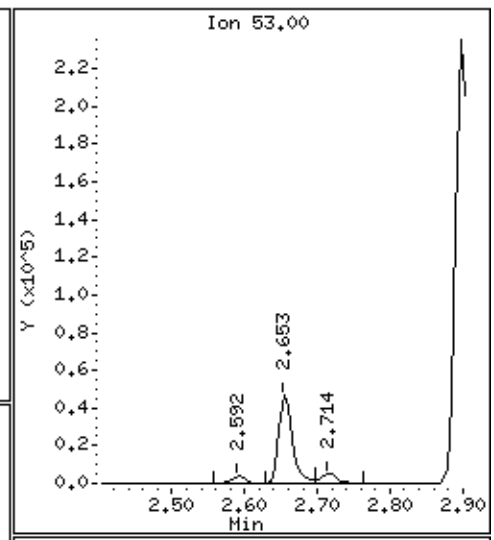
Review Code:

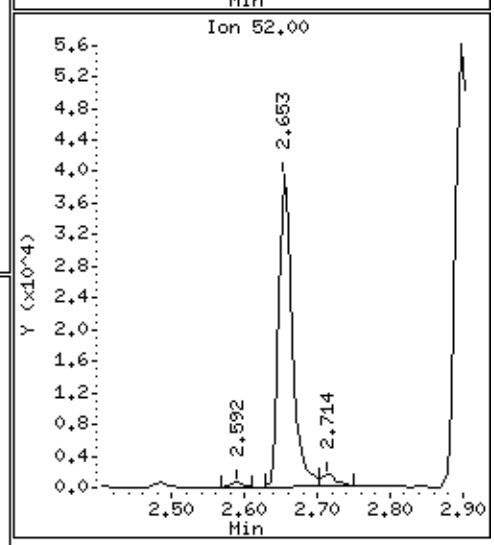












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D

Date : 25-APR-2017 19:25

Client ID: MW-3CMSD

Instrument: 70msv6.i

Sample Info: 103082, 15067:1.25

Purge Volume: 5.0

Operator: KGG

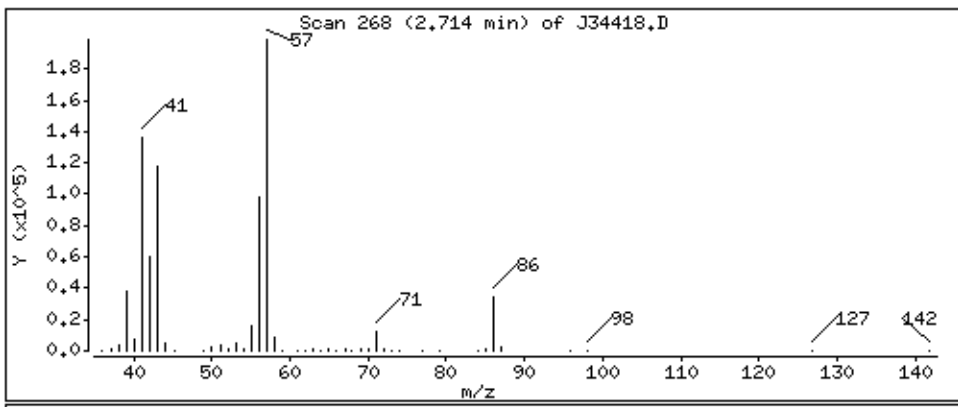
Column phase: RTX-624

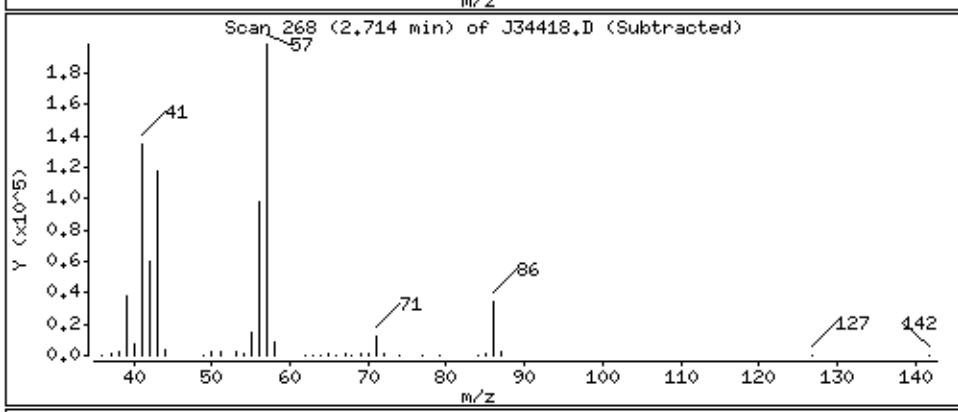
Column diameter: 0.18

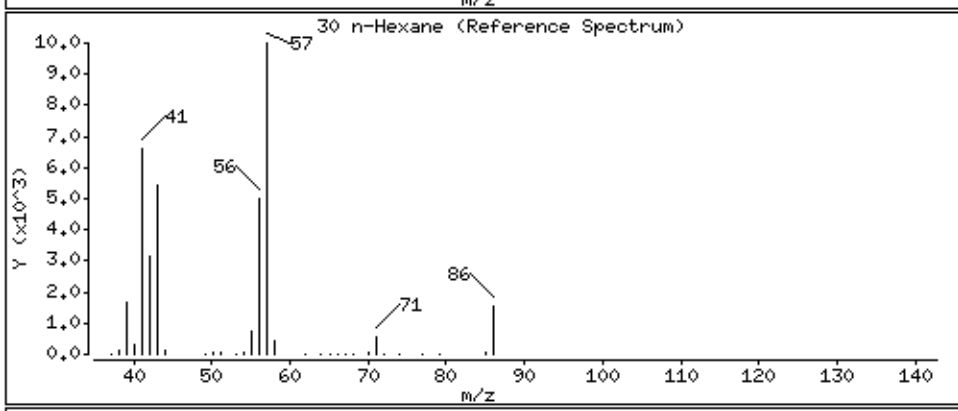
30 n-Hexane

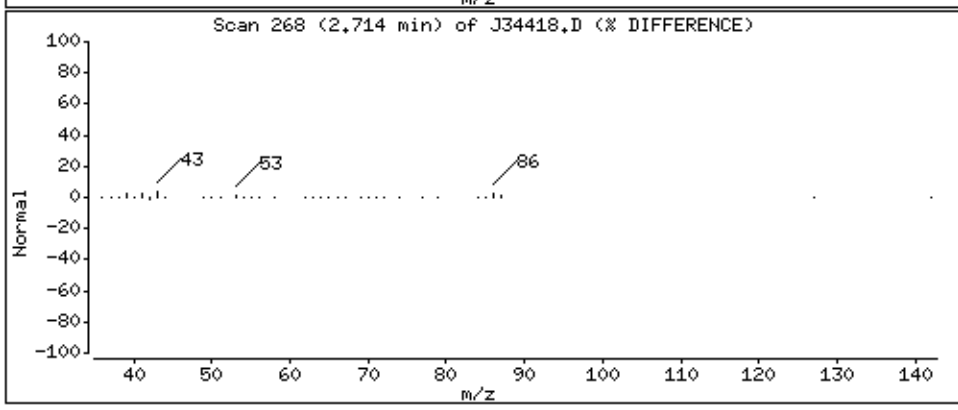
Concentration: 55.4 ug/L

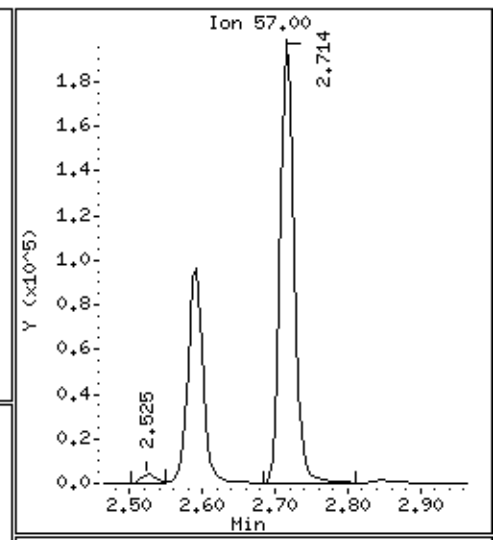
Review Code:

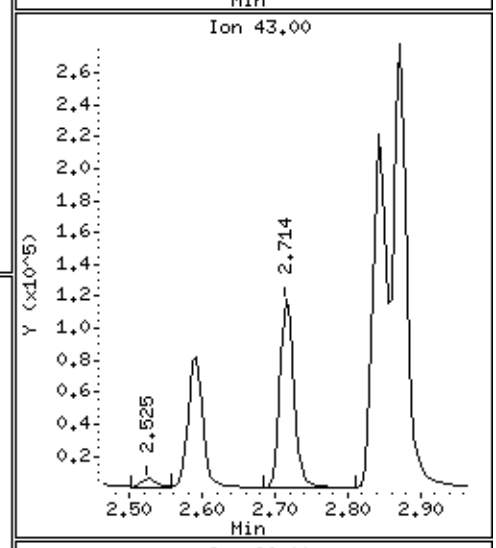


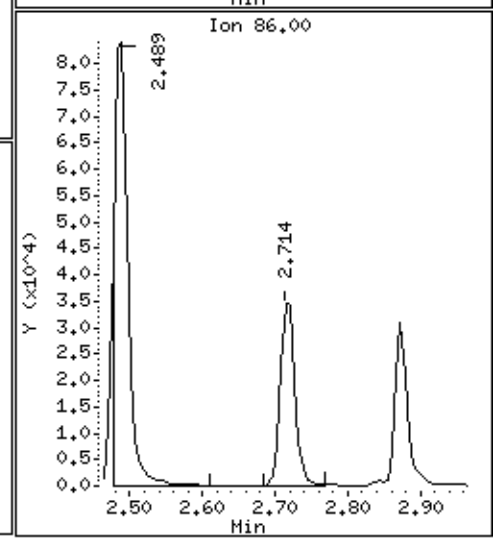












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D

Date : 25-APR-2017 19:25

Client ID: MW-3CMSD

Instrument: 70msv6.i

Sample Info: 103082, 15067:1.25

Purge Volume: 5.0

Operator: KGG

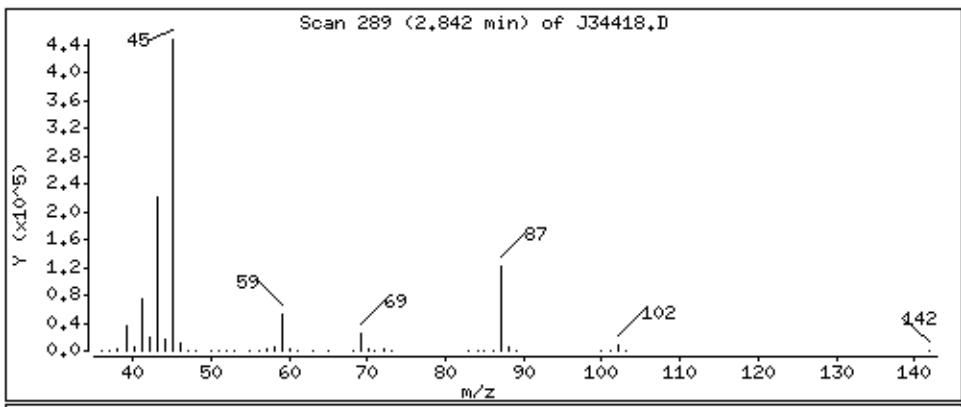
Column phase: RTX-624

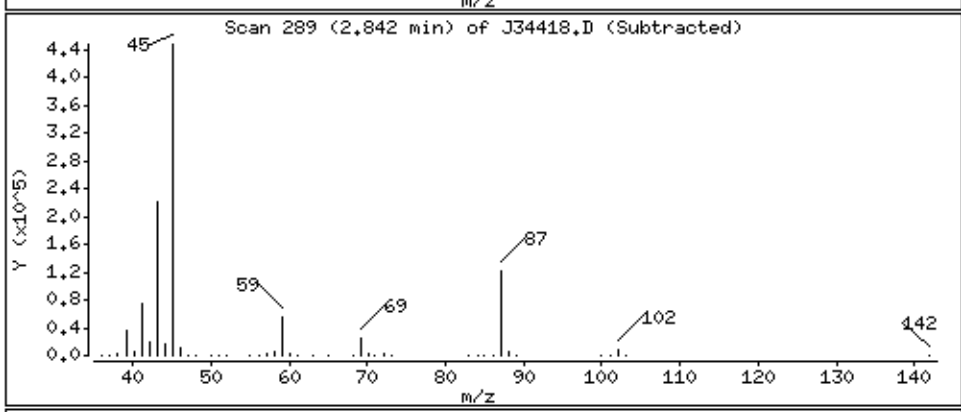
Column diameter: 0.18

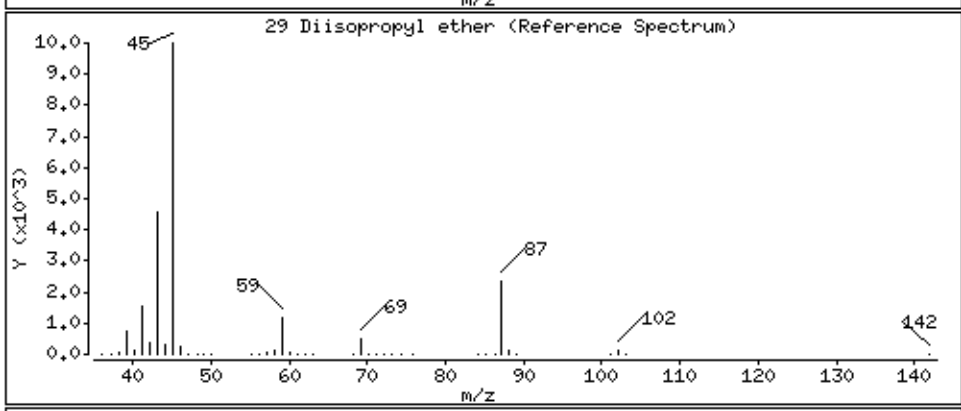
29 Diisopropyl ether

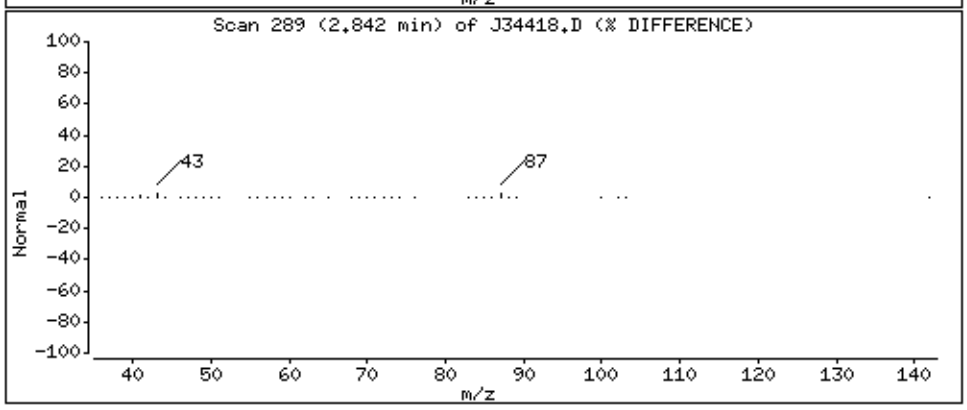
Concentration: 37.3 ug/L

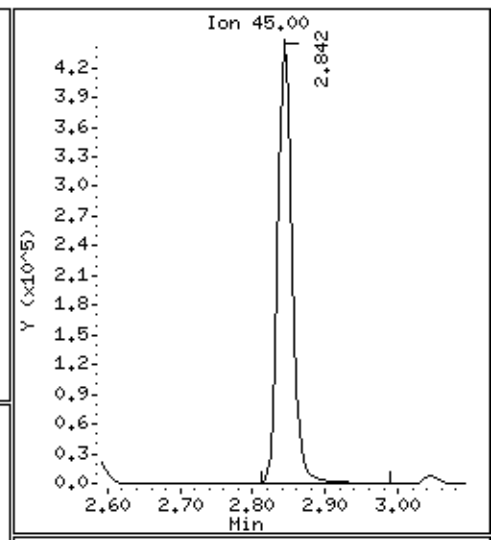
Review Code:

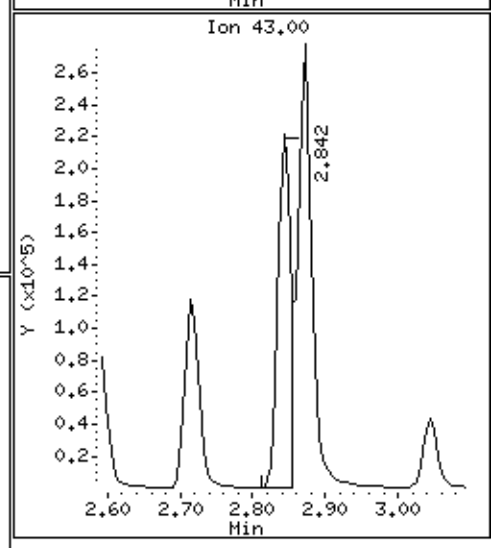












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D

Date : 25-APR-2017 19:25

Client ID: MW-3CMSD

Instrument: 70msv6.i

Sample Info: 103082, 15067:1.25

Purge Volume: 5.0

Operator: KGG

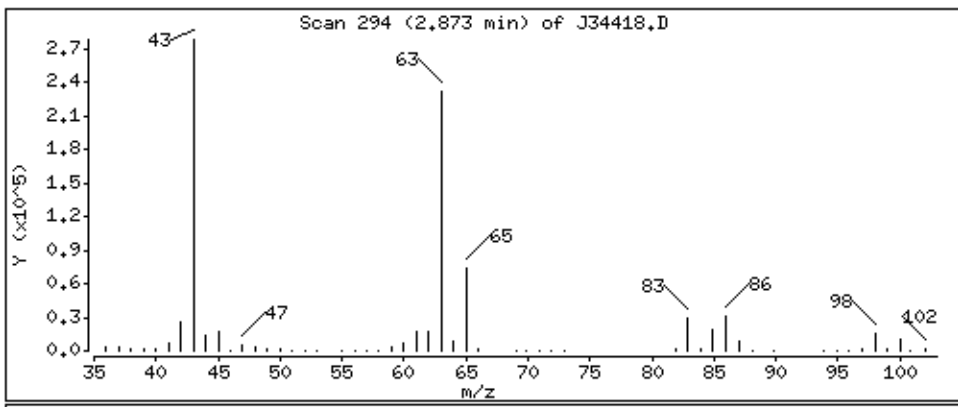
Column phase: RTX-624

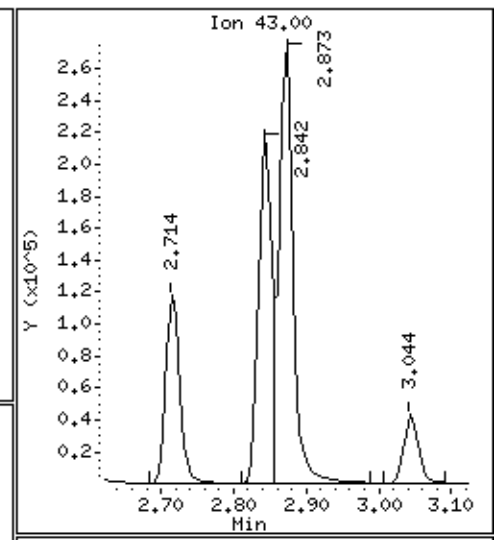
Column diameter: 0.18

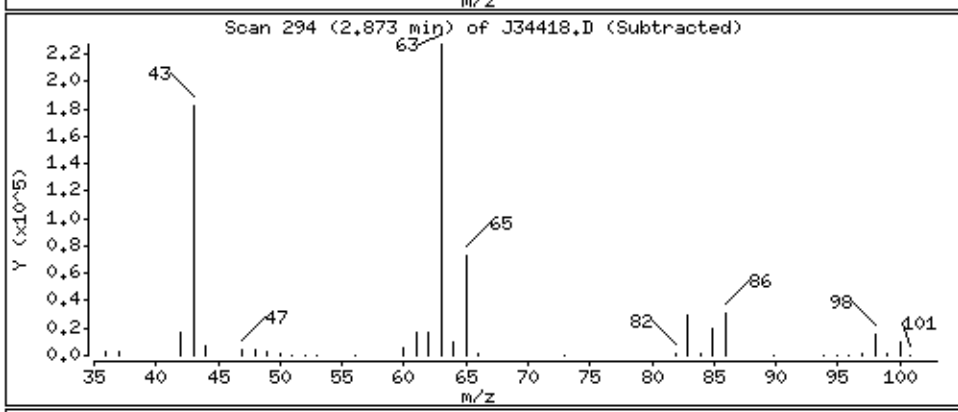
32 Vinyl acetate

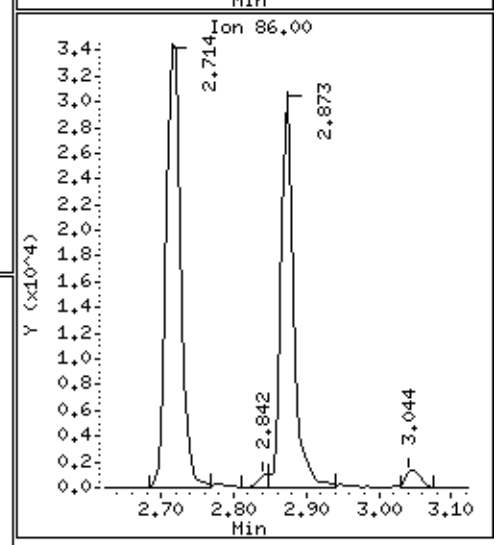
Concentration: 52.5 ug/L

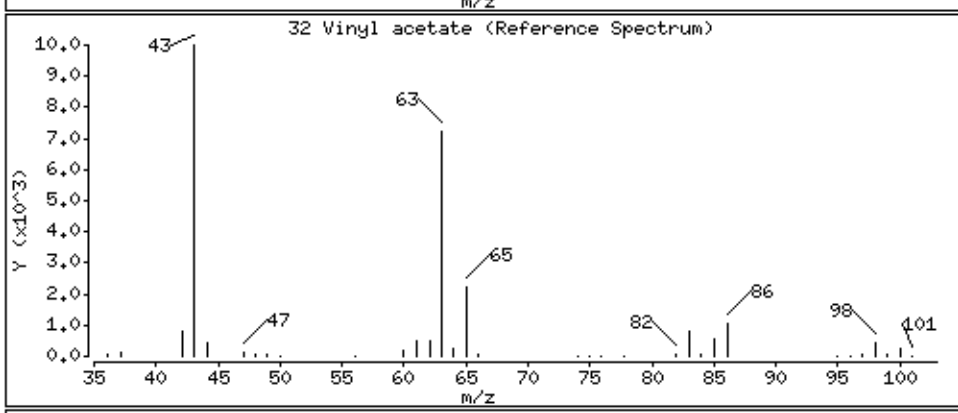
Review Code:

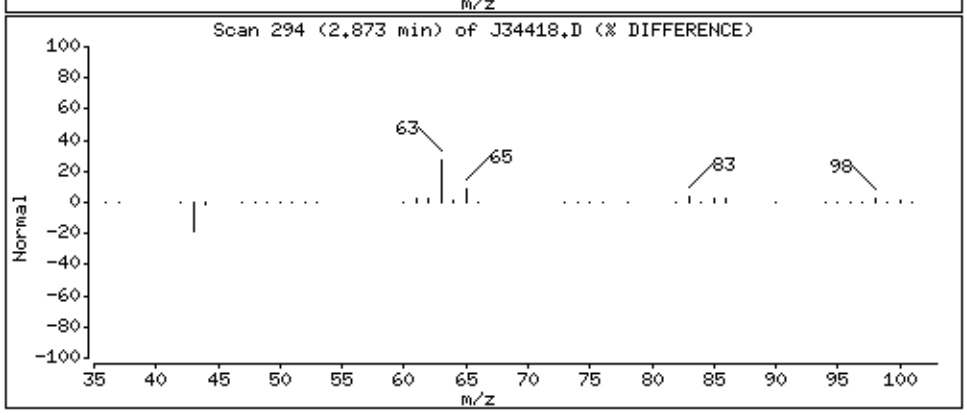












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D

Date : 25-APR-2017 19:25

Client ID: MW-3CMSD

Instrument: 70msv6.i

Sample Info: 103082, 15067:1.25

Purge Volume: 5.0

Operator: KGG

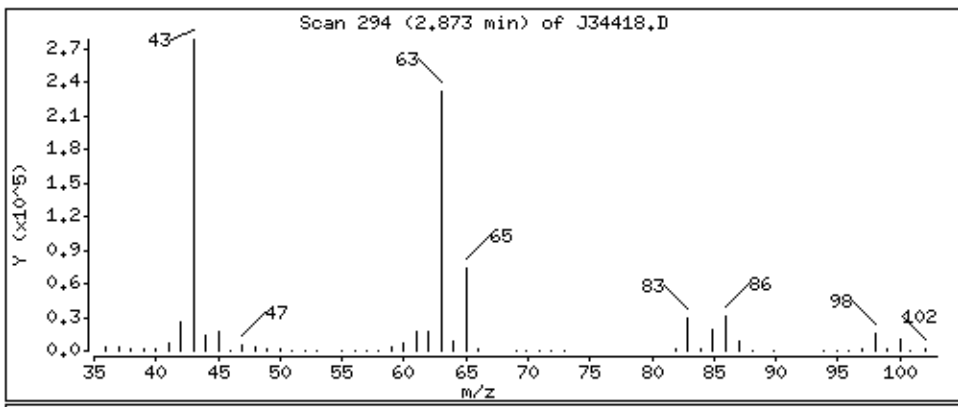
Column phase: RTX-624

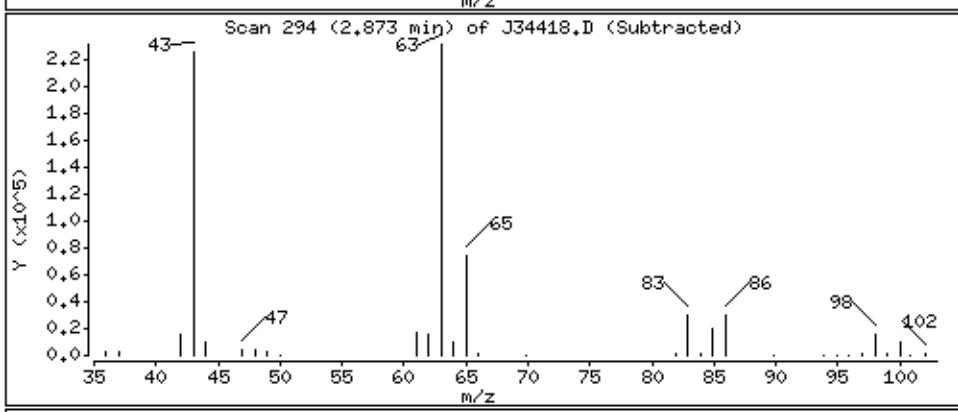
Column diameter: 0.18

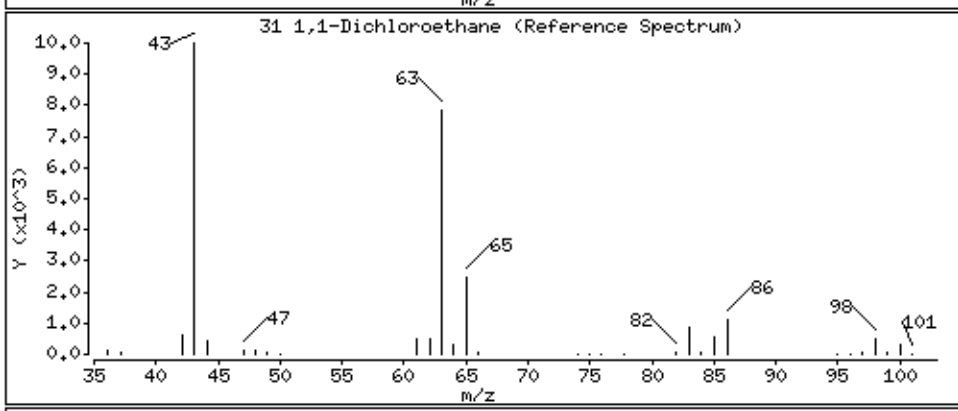
31 1,1-Dichloroethane

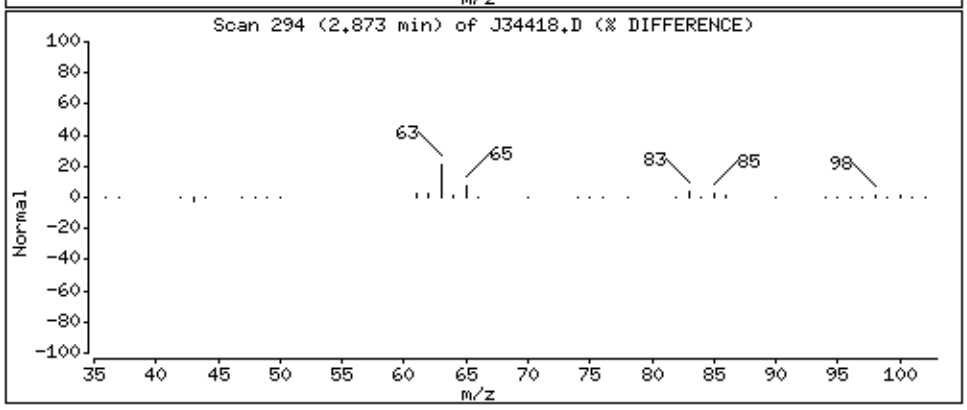
Concentration: 44.6 ug/L

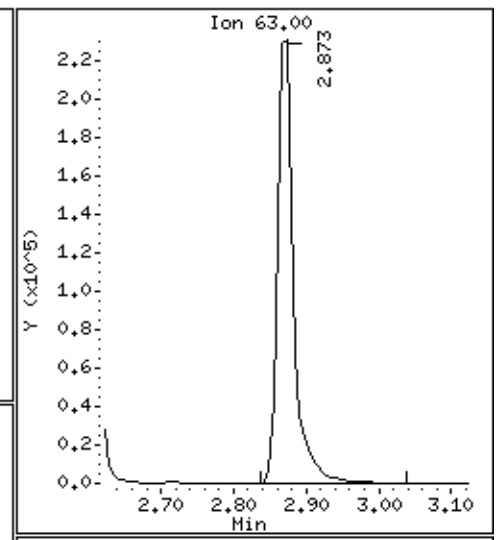
Review Code:

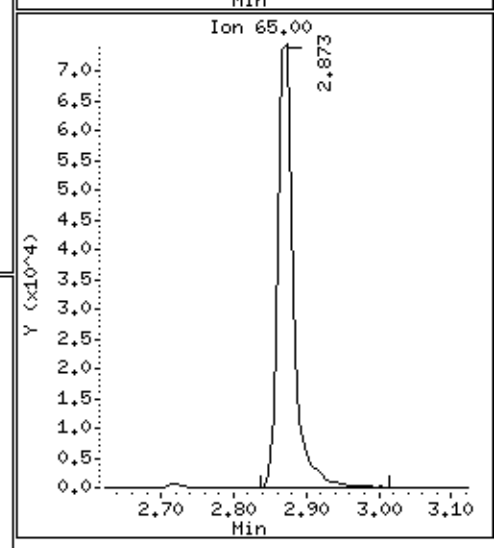












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D

Date : 25-APR-2017 19:25

Client ID: MW-3CMSD

Instrument: 70msv6.i

Sample Info: 103082, 15067:1.25

Purge Volume: 5.0

Operator: KGG

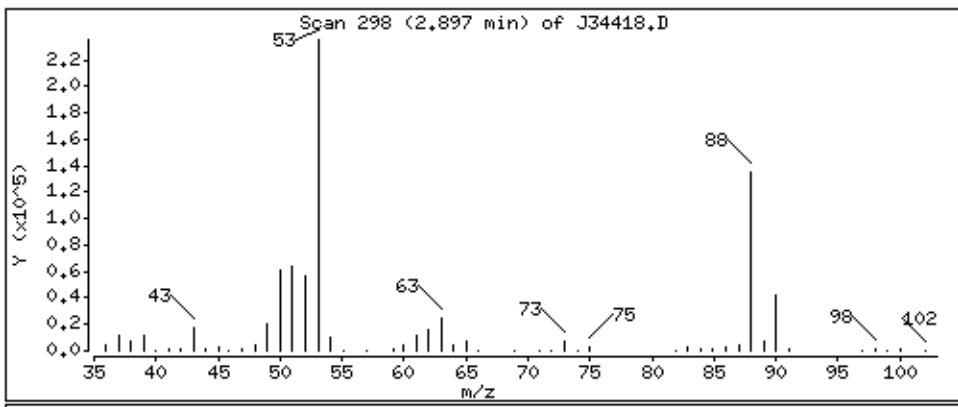
Column phase: RTX-624

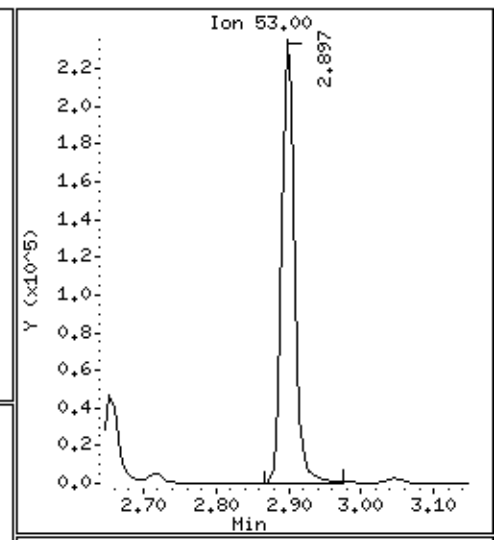
Column diameter: 0.18

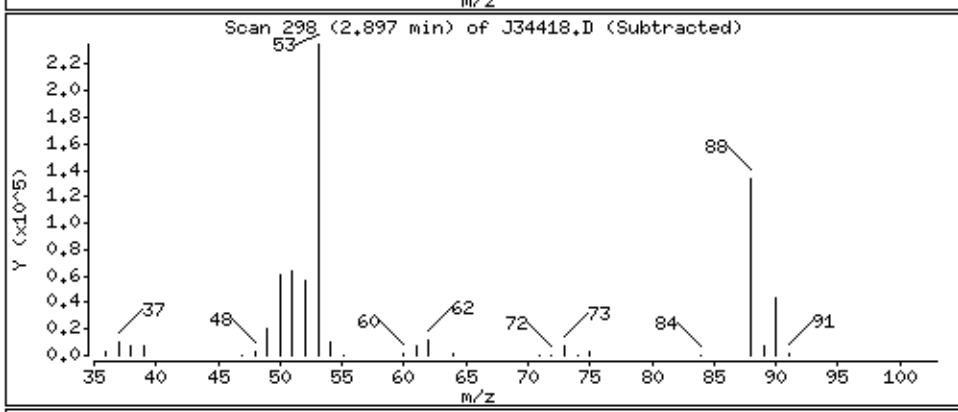
33 Chloroprene

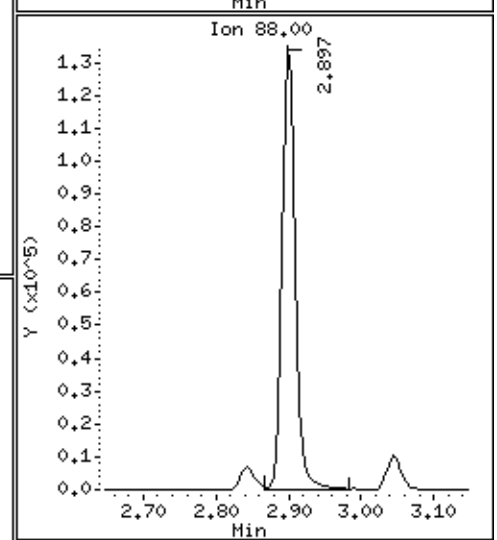
Concentration: 43.1 ug/L

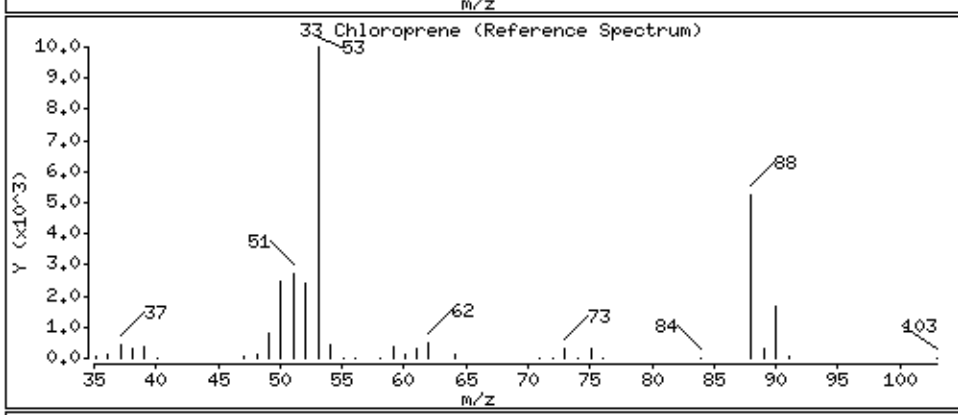
Review Code:

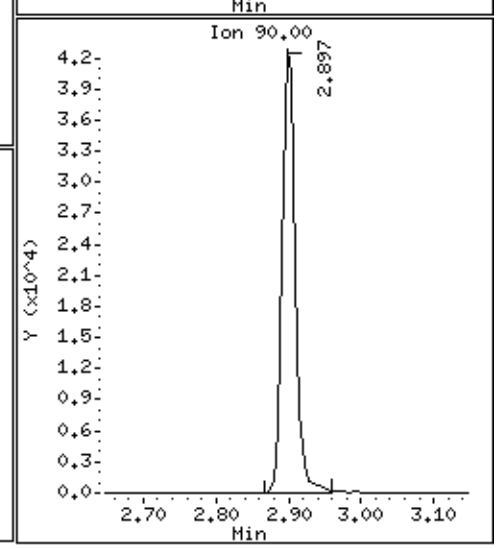


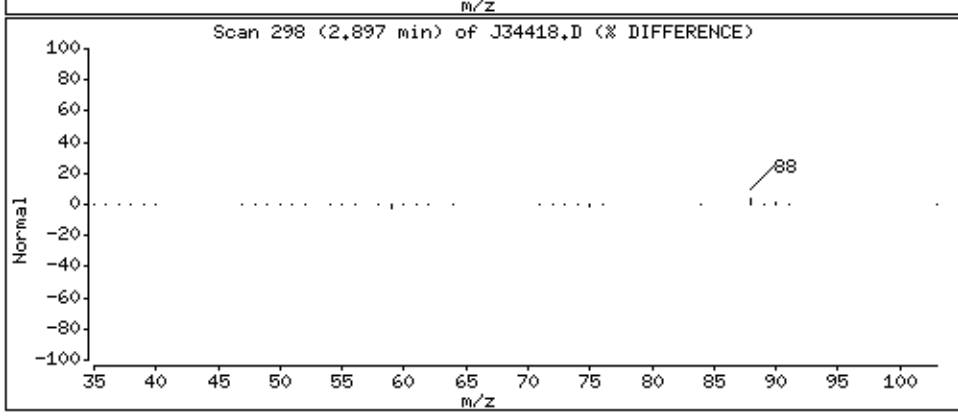












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D

Date : 25-APR-2017 19:25

Client ID: MW-3CMSD

Instrument: 70msv6.i

Sample Info: 103082, 15067:1.25

Purge Volume: 5.0

Operator: KGG

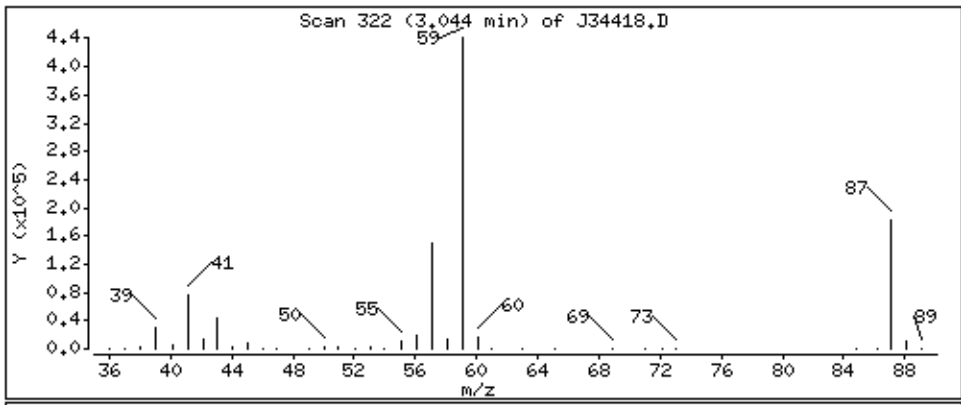
Column phase: RTX-624

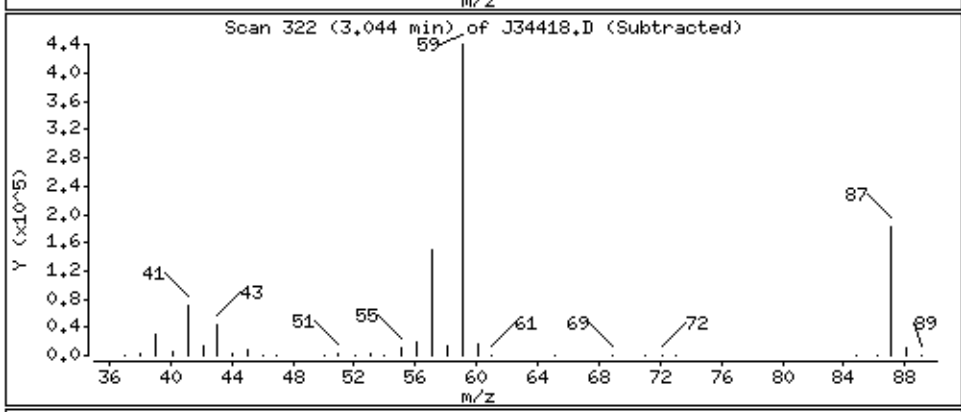
Column diameter: 0.18

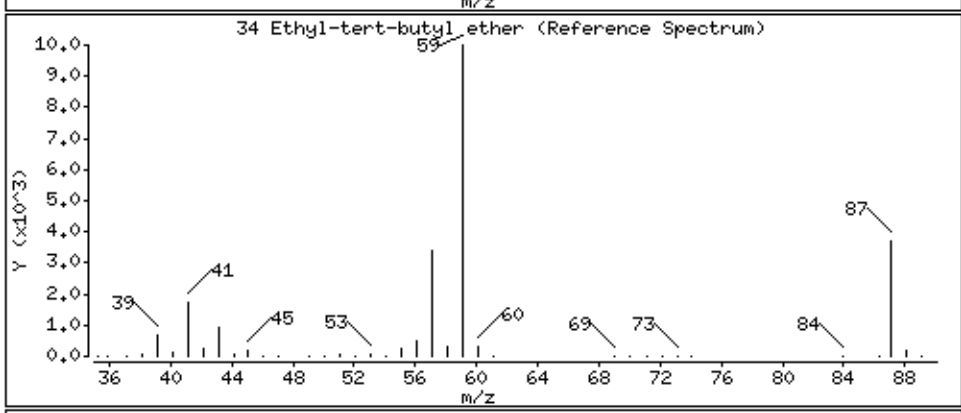
34 Ethyl-tert-butyl ether

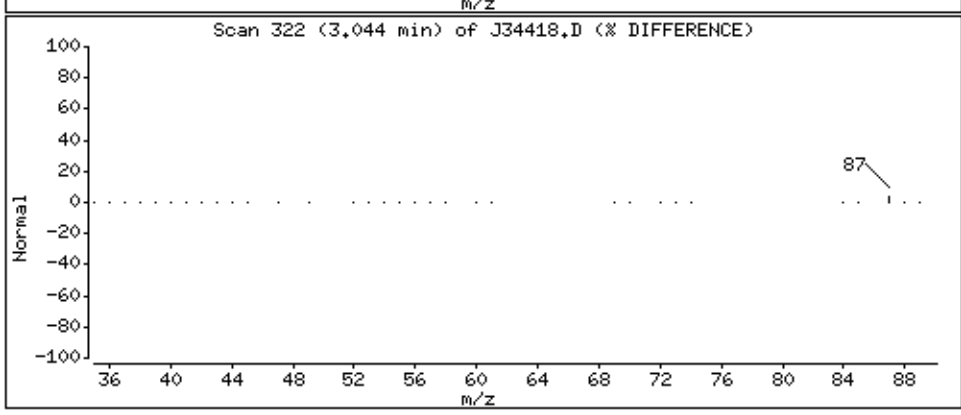
Concentration: 45.8 ug/L

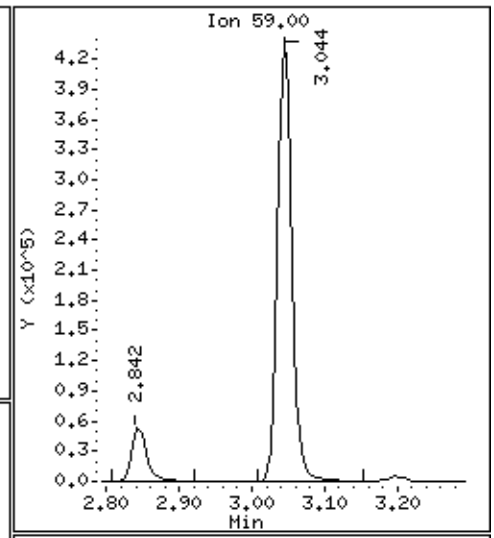
Review Code:

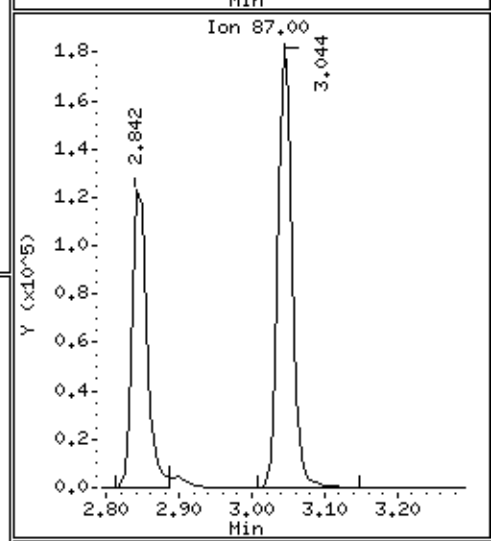


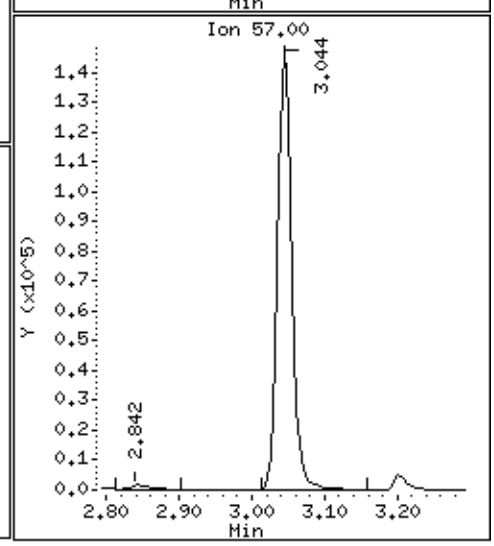












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D

Date : 25-APR-2017 19:25

Client ID: MW-3CMSD

Instrument: 70msv6.i

Sample Info: 103082, 15067:1.25

Purge Volume: 5.0

Operator: KGG

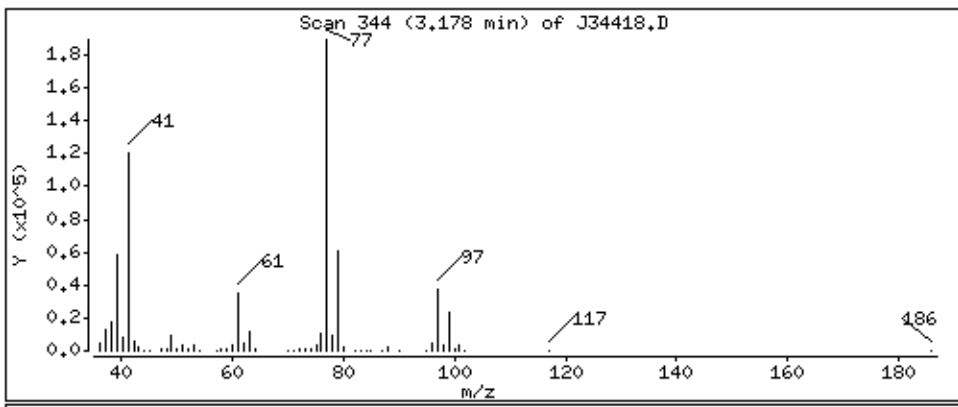
Column phase: RTX-624

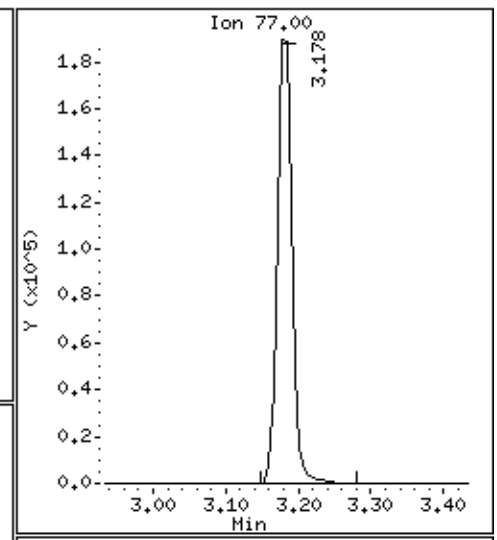
Column diameter: 0.18

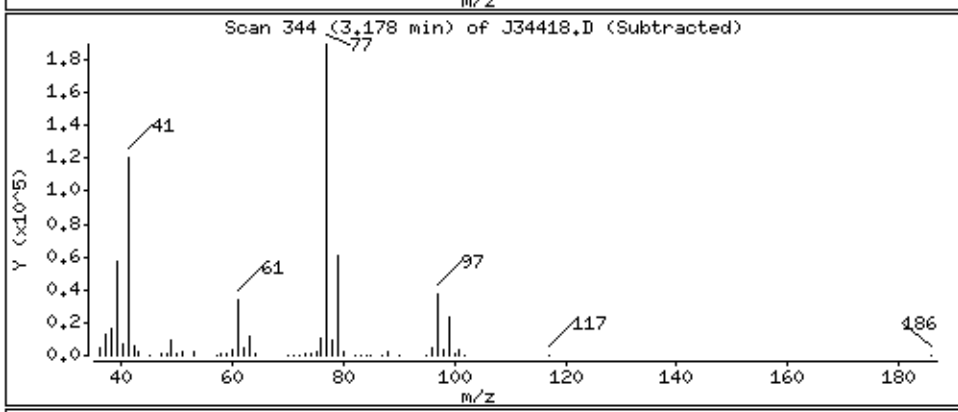
36 2,2-Dichloropropane

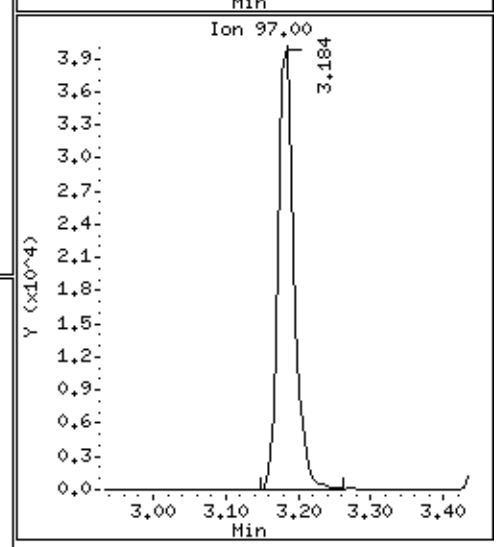
Concentration: 62.9 ug/L

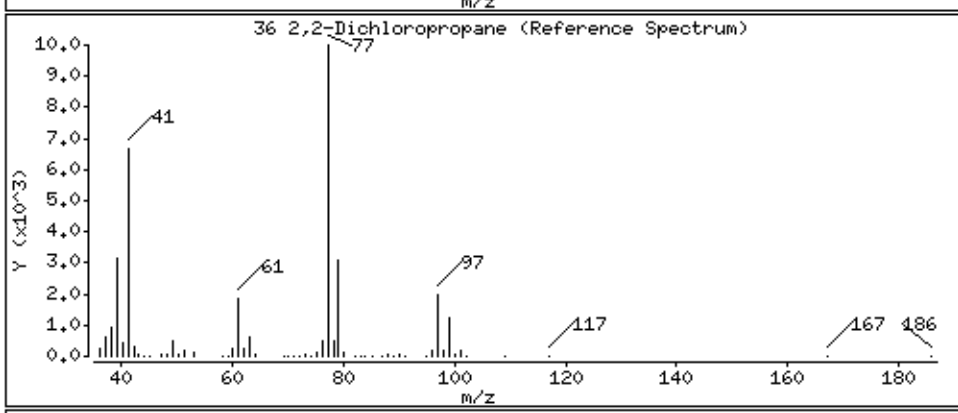
Review Code:

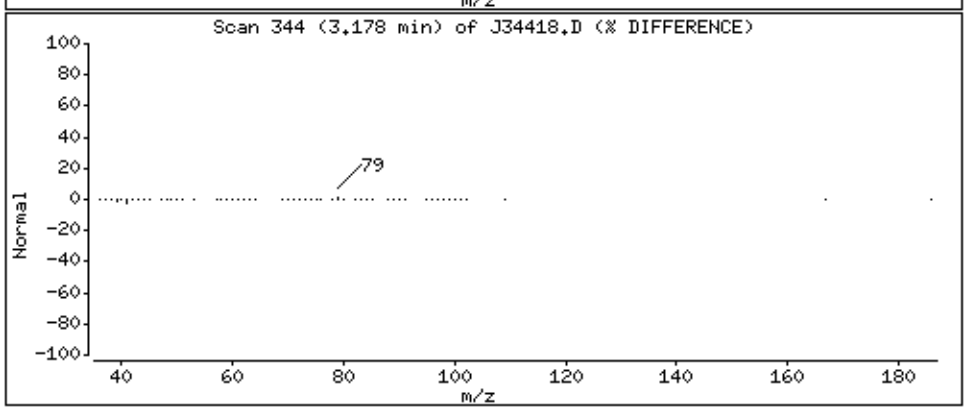












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D

Date : 25-APR-2017 19:25

Client ID: MW-3CMSD

Instrument: 70msv6.i

Sample Info: 103082, 15067:1.25

Purge Volume: 5.0

Operator: KGG

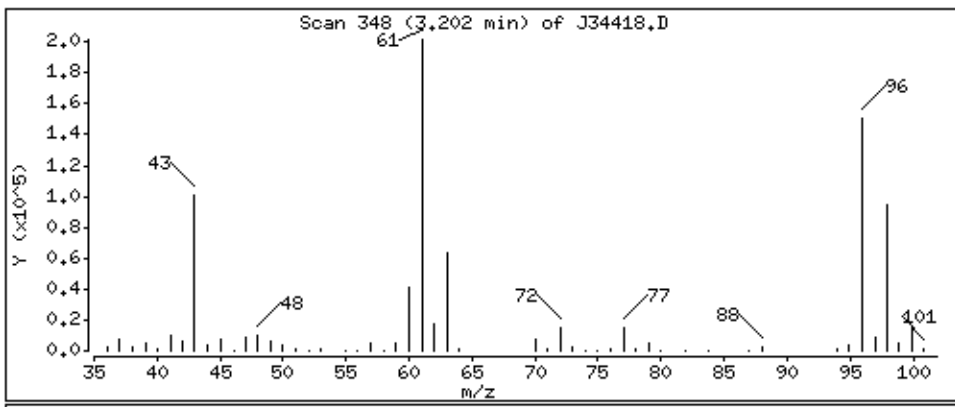
Column phase: RTX-624

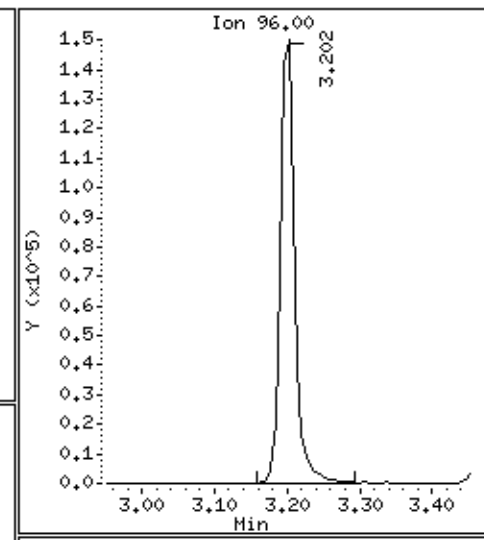
Column diameter: 0.18

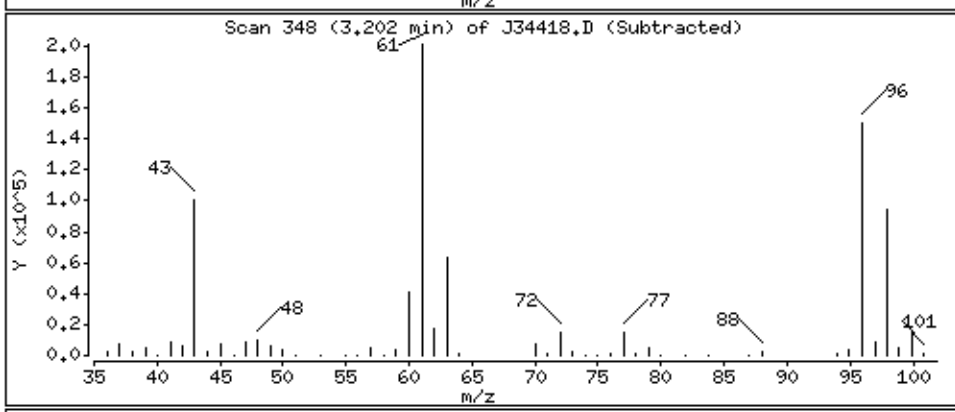
35 cis-1,2-Dichloroethene

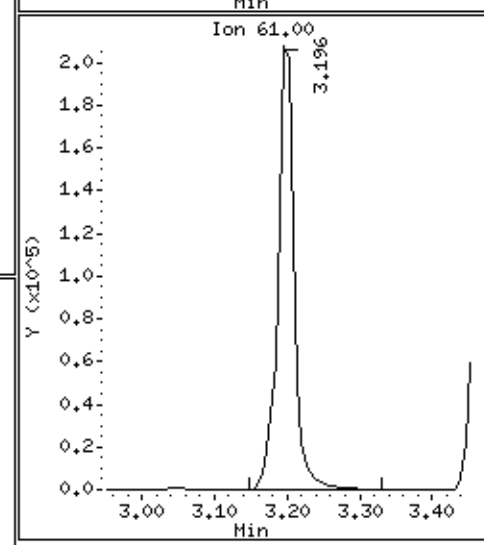
Concentration: 50.4 ug/L

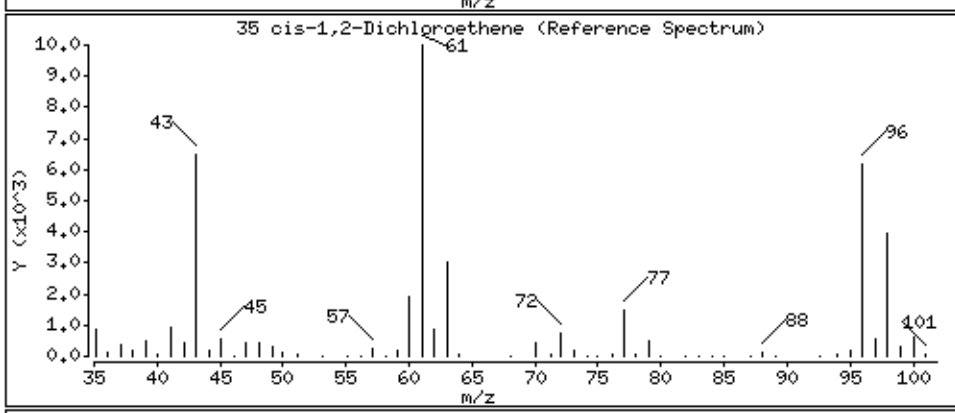
Review Code:

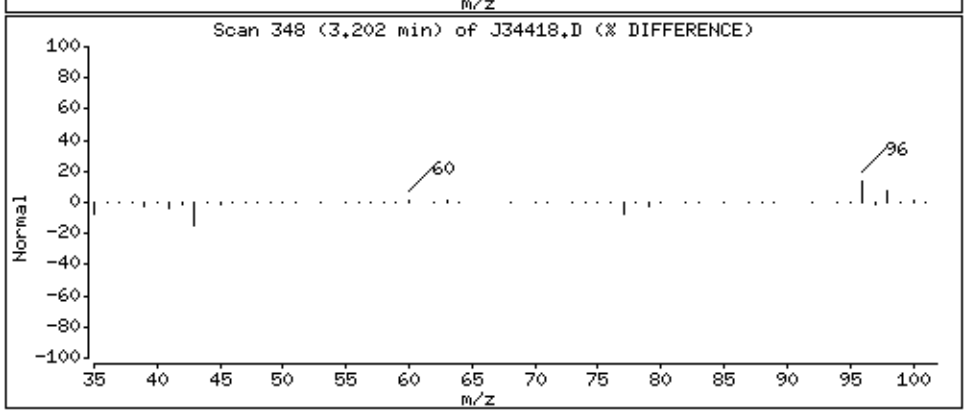












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D

Date : 25-APR-2017 19:25

Client ID: MW-3CMSD

Instrument: 70msv6.i

Sample Info: 103082, 15067:1.25

Purge Volume: 5.0

Operator: KGG

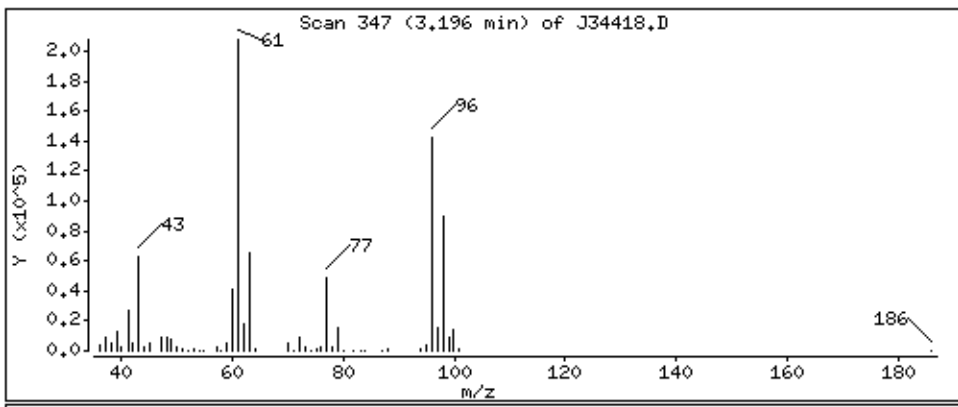
Column phase: RTX-624

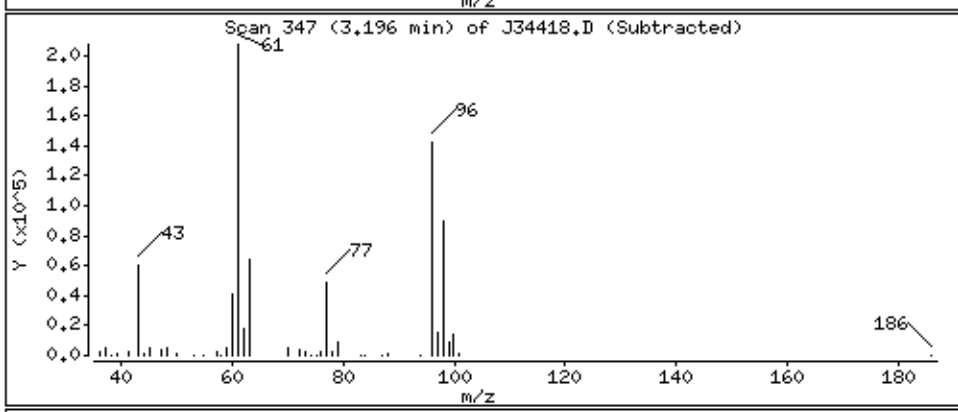
Column diameter: 0.18

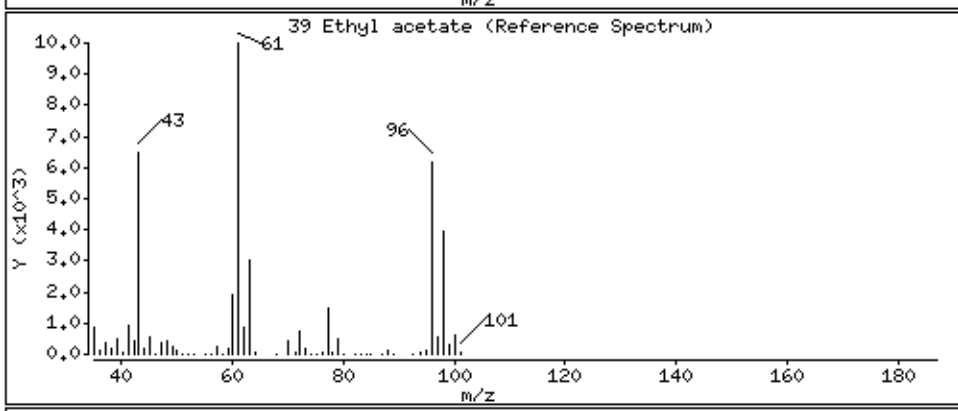
39 Ethyl acetate

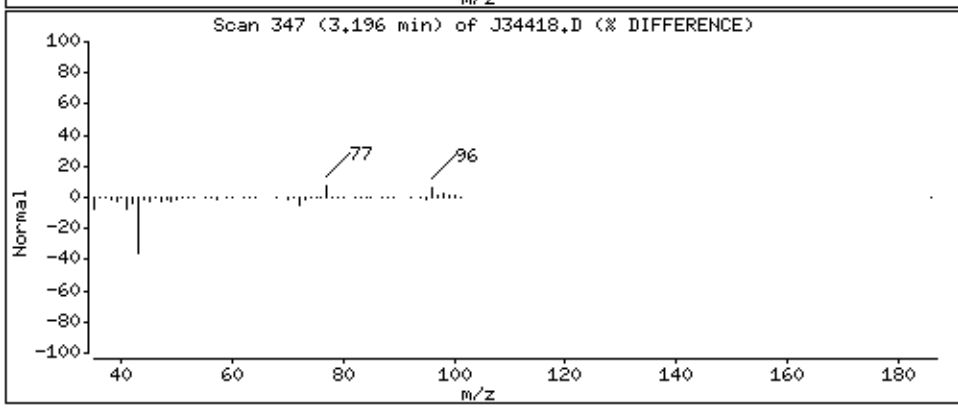
Concentration: 44.1 ug/L

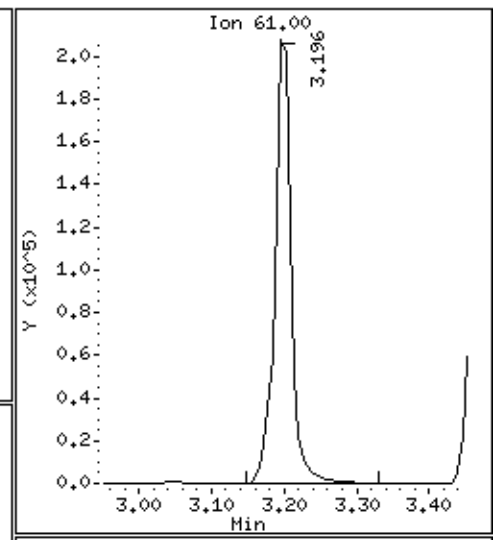
Review Code:

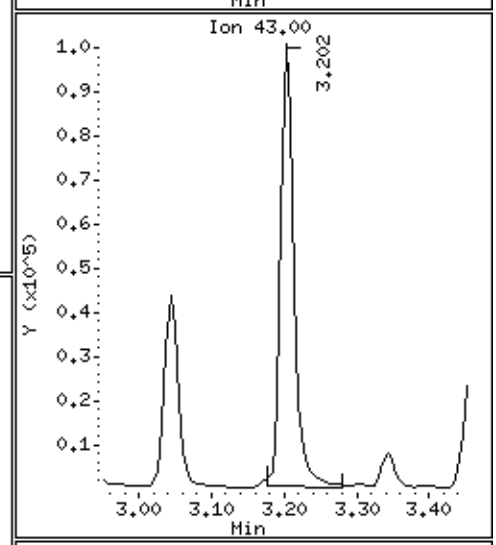


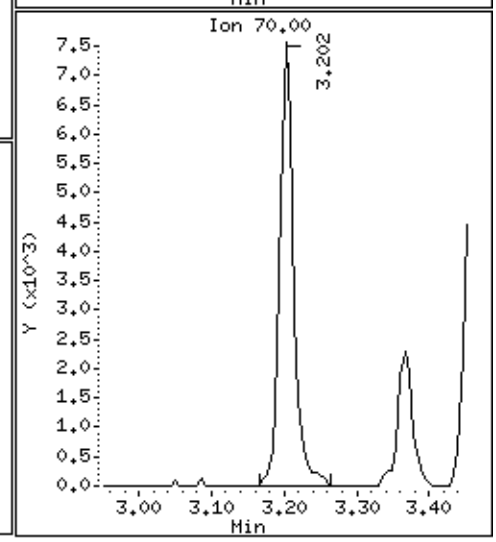












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D

Date : 25-APR-2017 19:25

Client ID: MW-3CMSD

Instrument: 70msv6.i

Sample Info: 103082, 15067:1.25

Purge Volume: 5.0

Operator: KGG

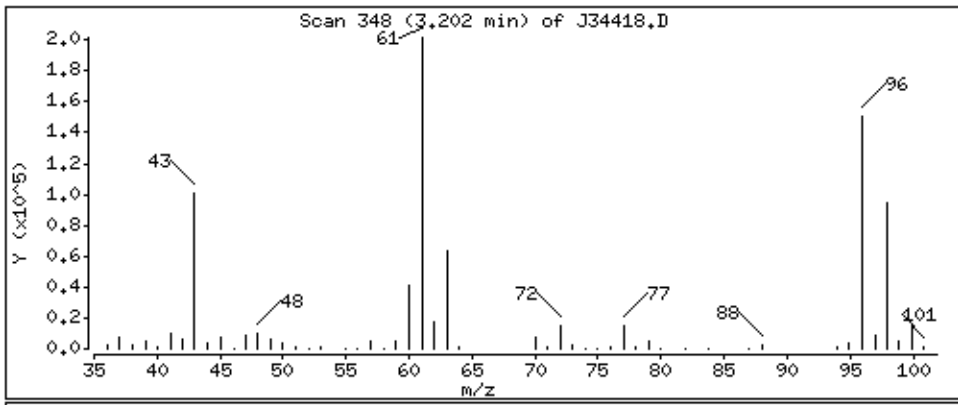
Column phase: RTX-624

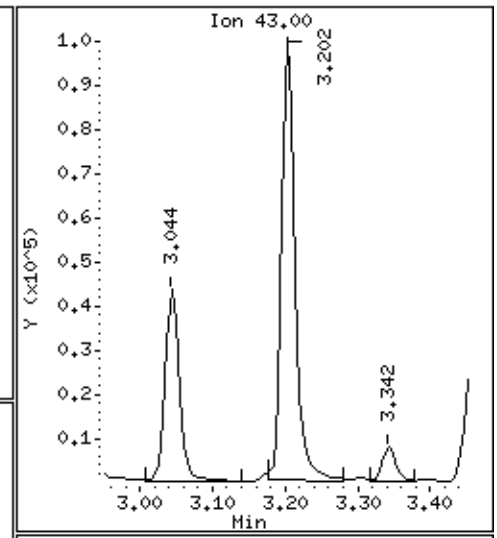
Column diameter: 0.18

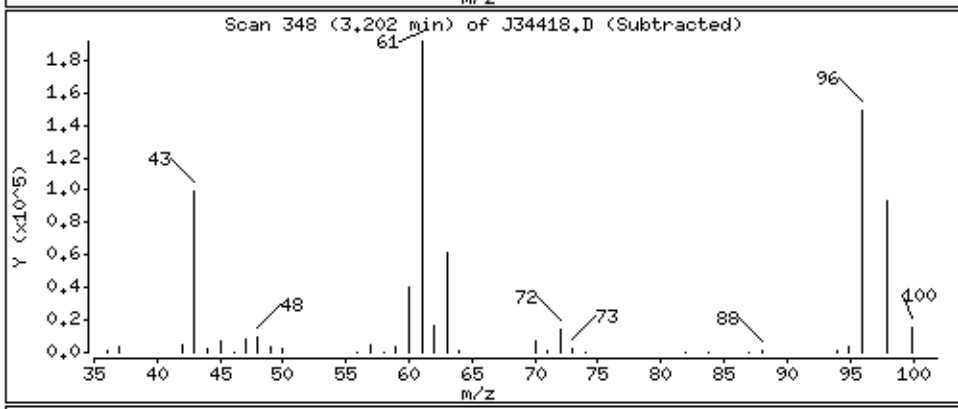
37 2-Butanone (MEK)

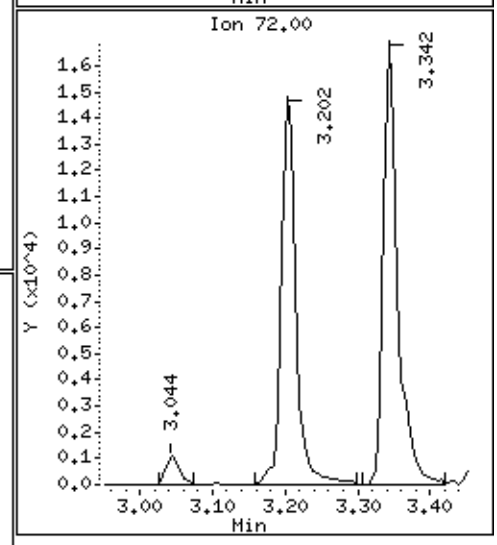
Concentration: 34.2 ug/L

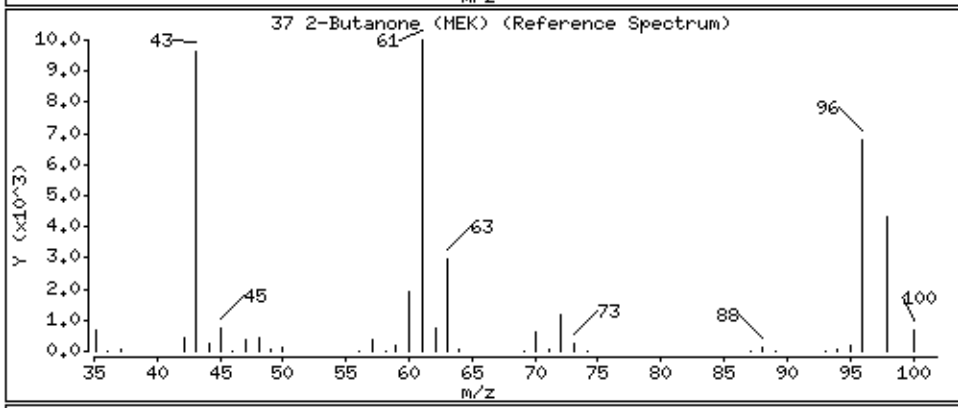
Review Code:

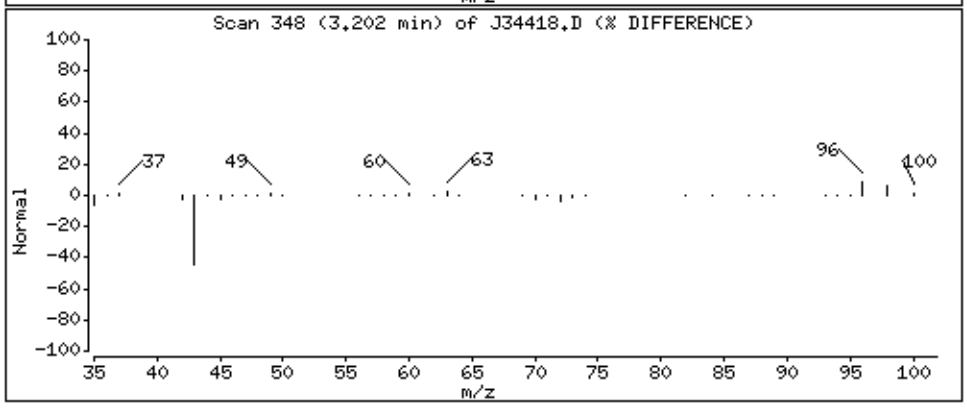












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D

Date : 25-APR-2017 19:25

Client ID: MW-3CMSD

Instrument: 70msv6.i

Sample Info: 103082, 15067:1.25

Purge Volume: 5.0

Operator: KGG

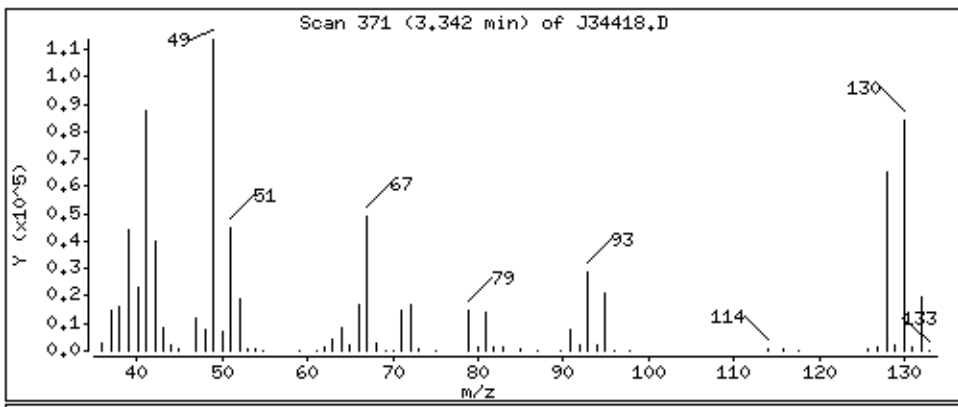
Column phase: RTX-624

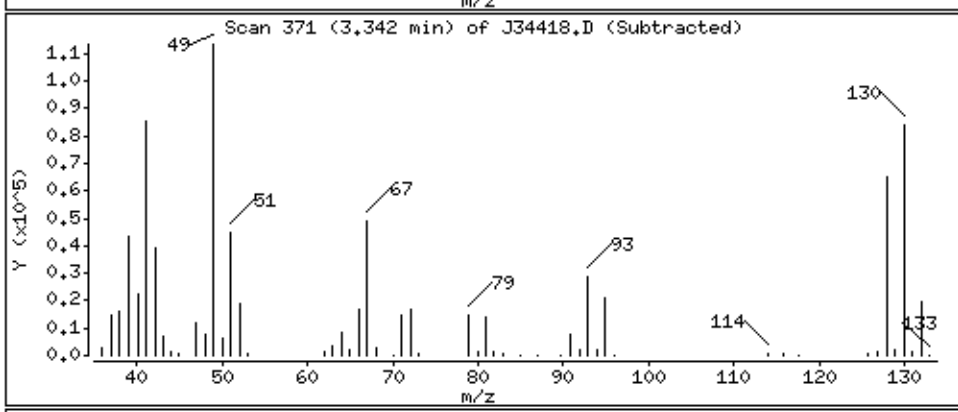
Column diameter: 0.18

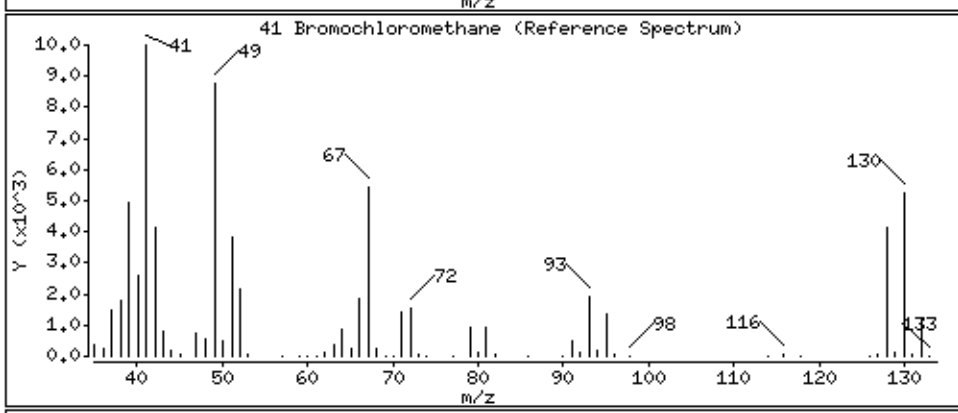
41 Bromochloromethane

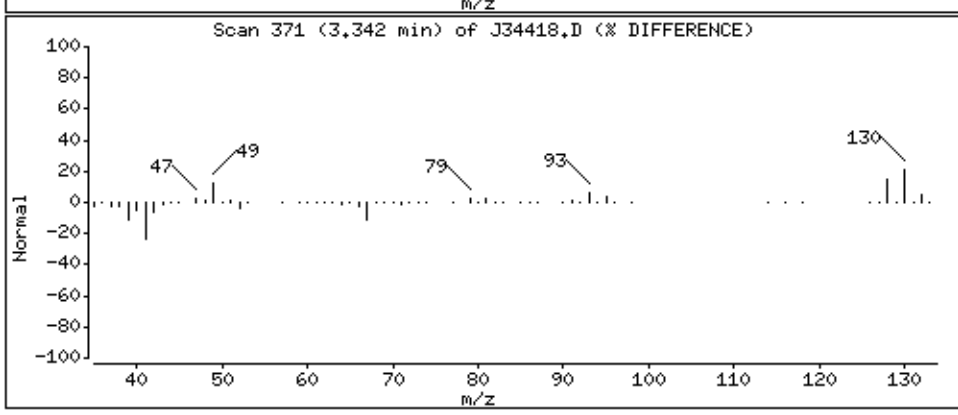
Concentration: 48.9 ug/L

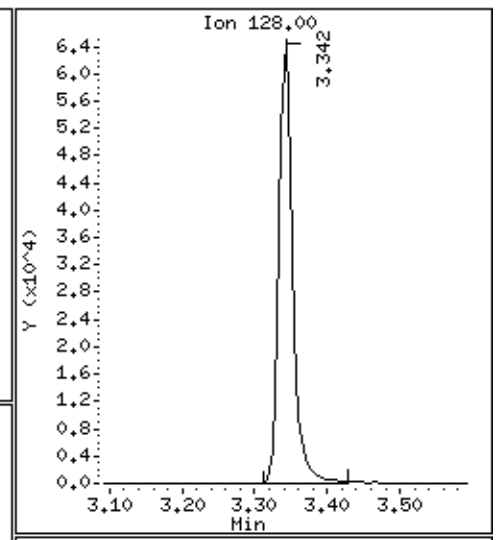
Review Code:

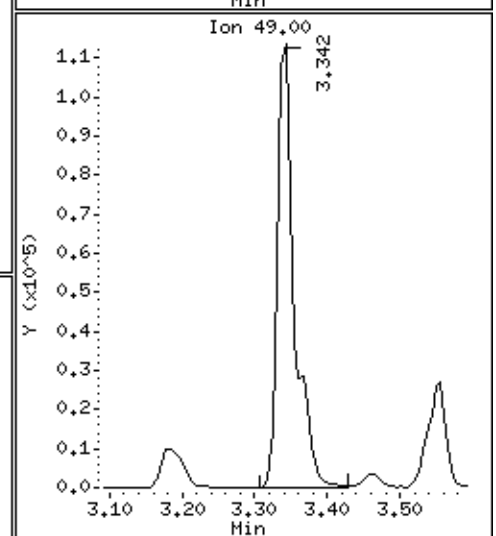


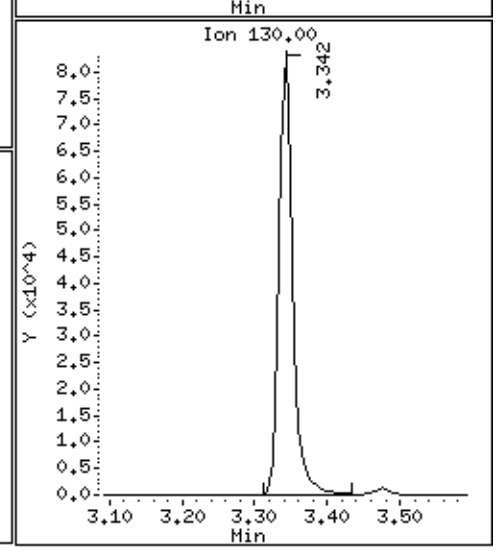












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D

Date : 25-APR-2017 19:25

Client ID: MW-3CMSD

Instrument: 70msv6.i

Sample Info: 103082, 15067:1.25

Purge Volume: 5.0

Operator: KGG

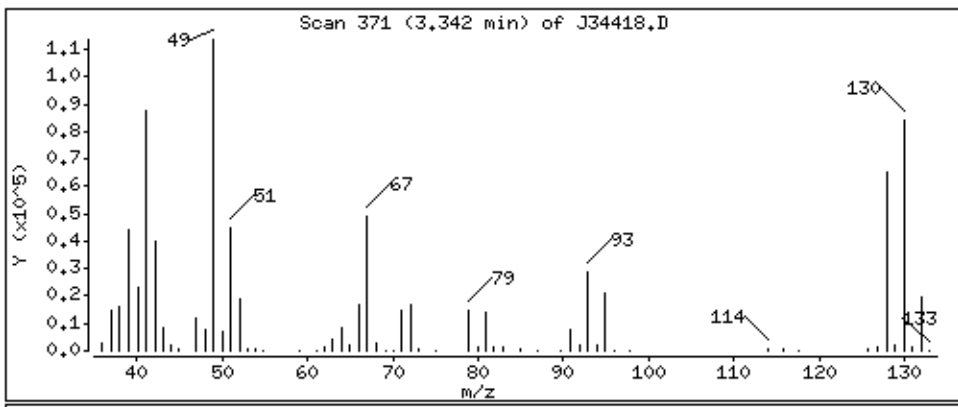
Column phase: RTX-624

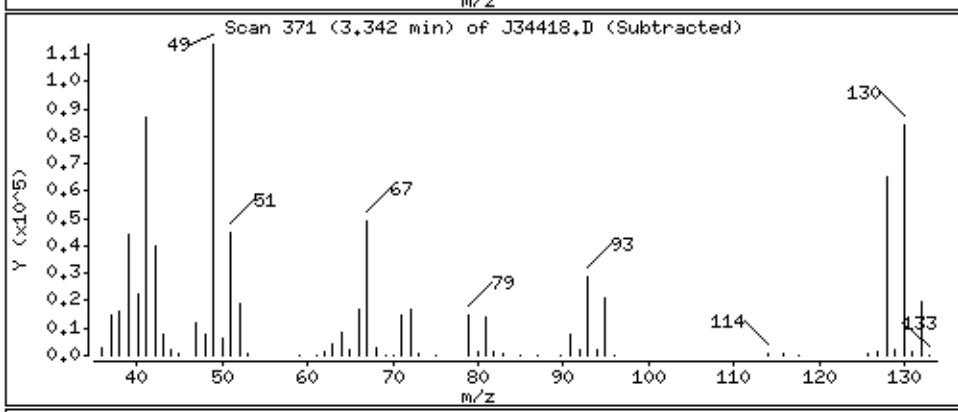
Column diameter: 0.18

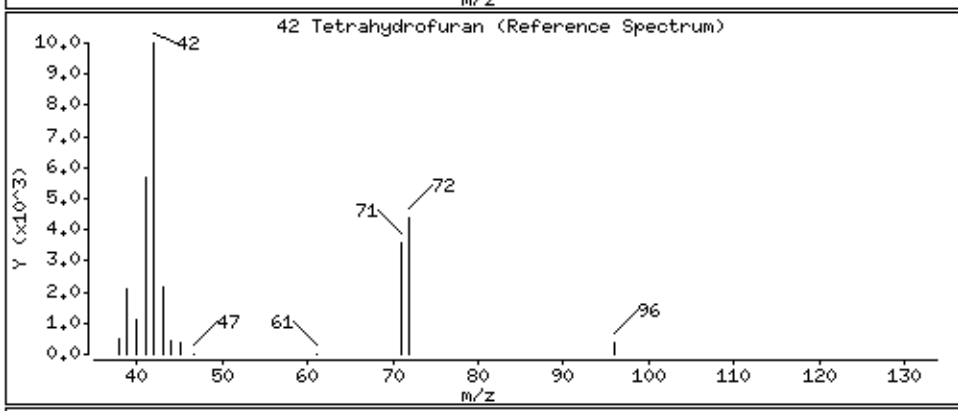
42 Tetrahydrofuran

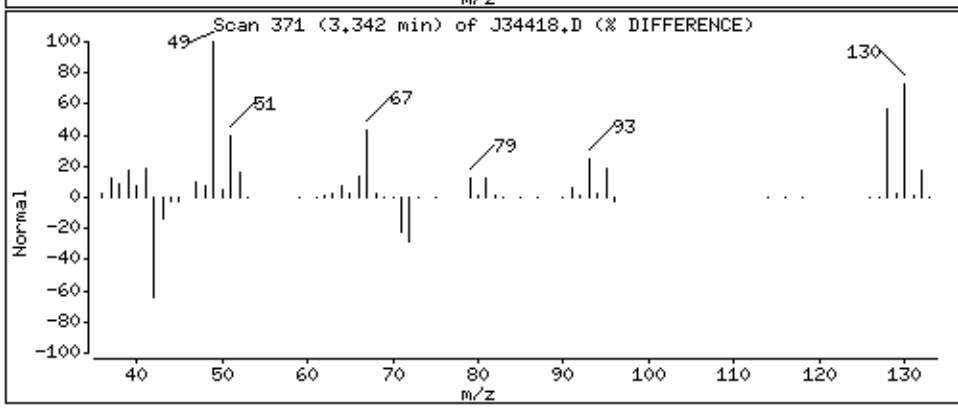
Concentration: 34.0 ug/L

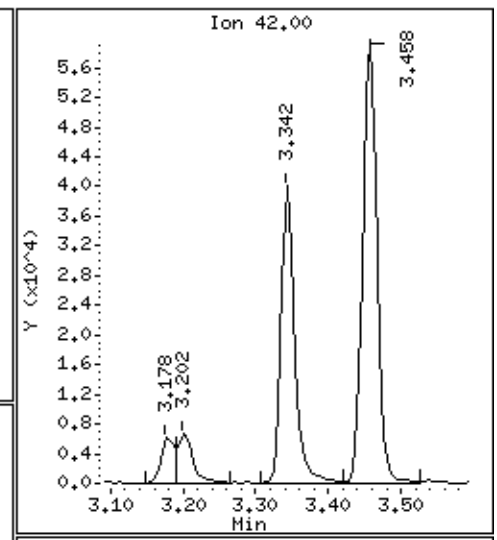
Review Code:

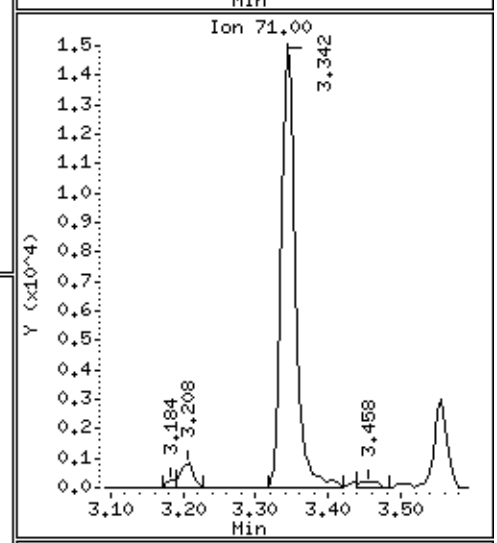


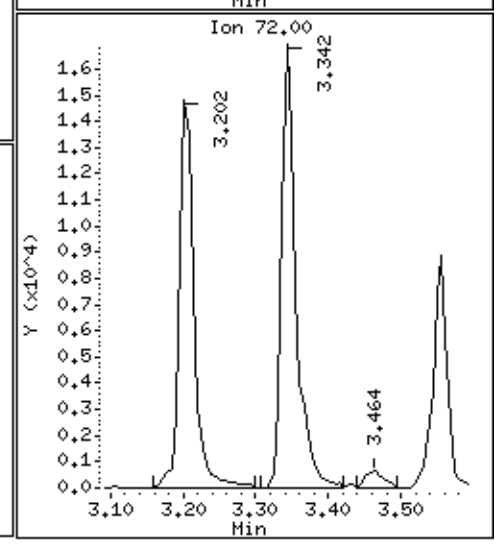












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D

Date : 25-APR-2017 19:25

Client ID: MW-3CMSD

Instrument: 70msv6.i

Sample Info: 103082, 15067:1.25

Purge Volume: 5.0

Operator: KGG

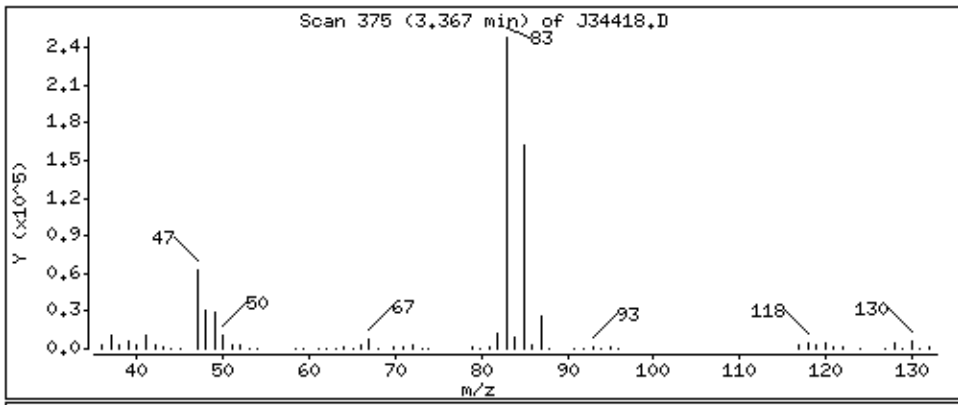
Column phase: RTX-624

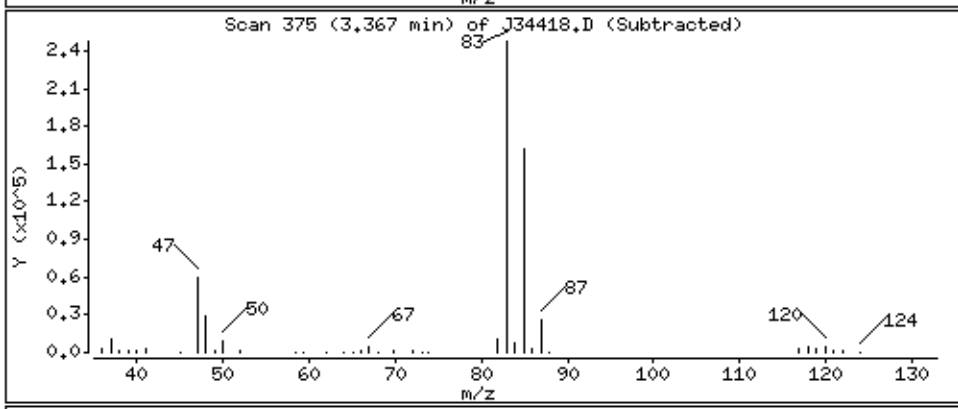
Column diameter: 0.18

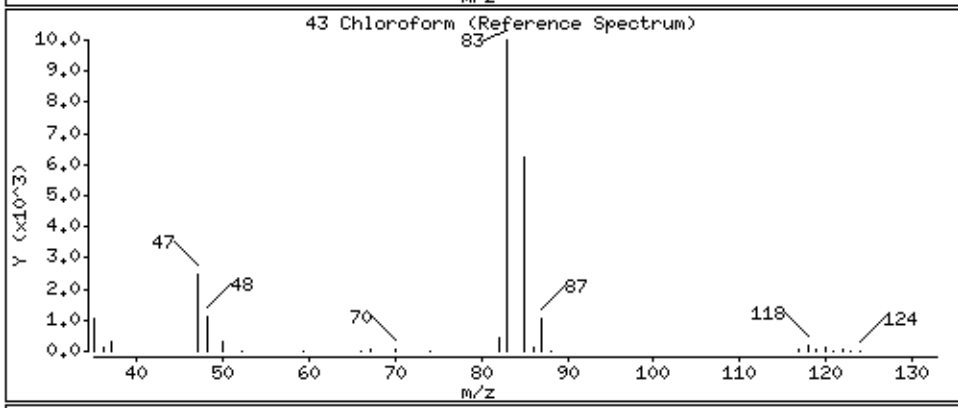
43 Chloroform

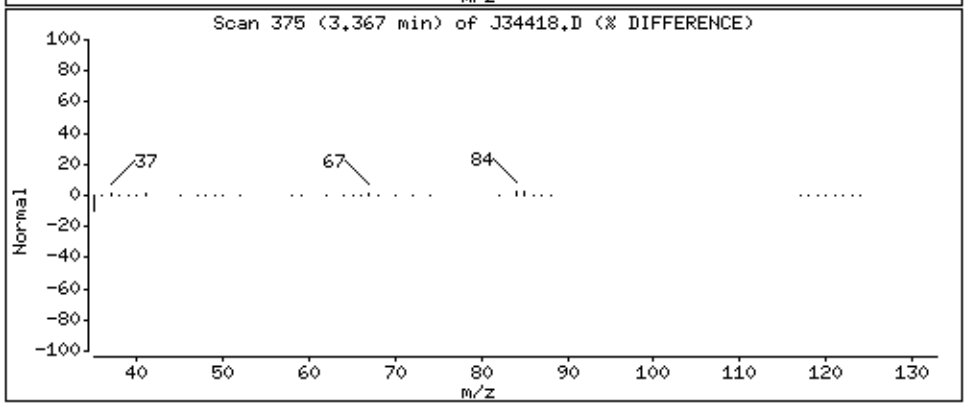
Concentration: 46.7 ug/L

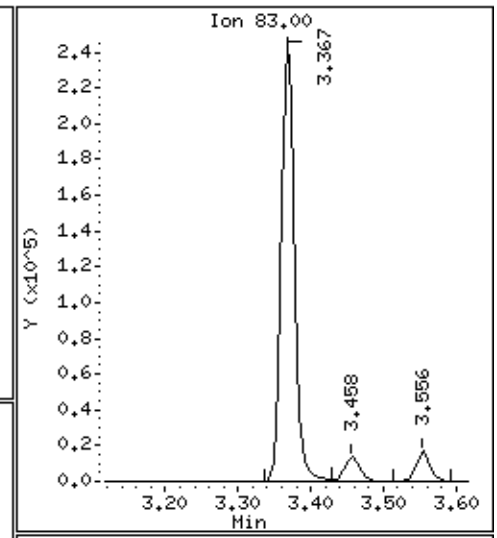
Review Code:

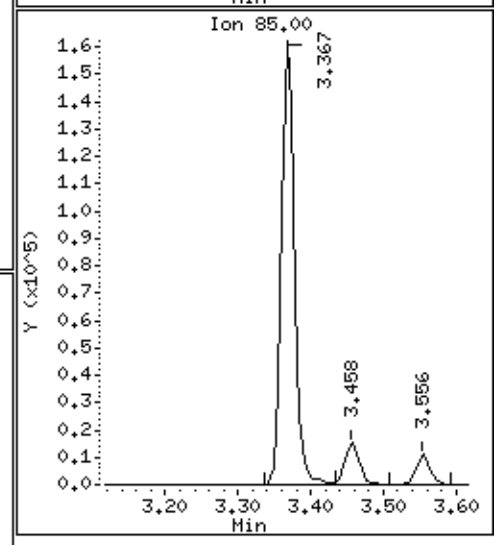












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D

Date : 25-APR-2017 19:25

Client ID: MW-3CMSD

Instrument: 70msv6.i

Sample Info: 103082, 15067:1.25

Purge Volume: 5.0

Operator: KGG

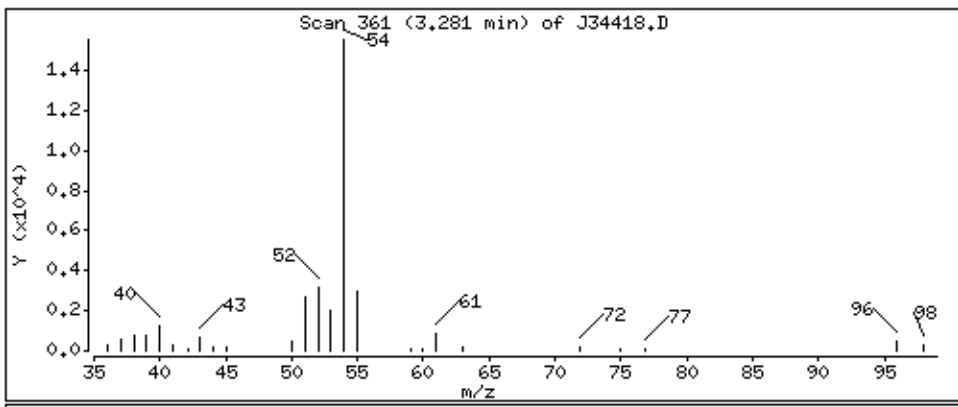
Column phase: RTX-624

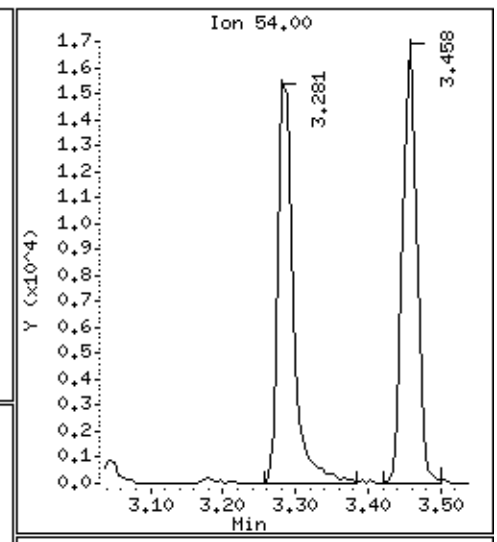
Column diameter: 0.18

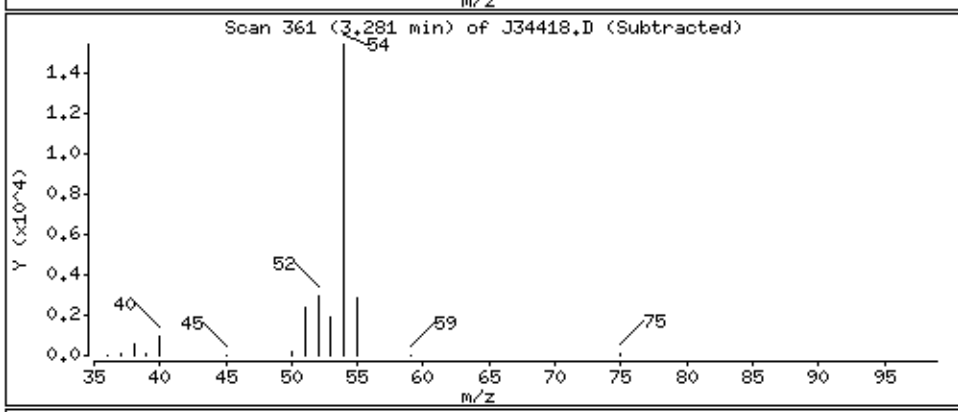
38 Propionitrile

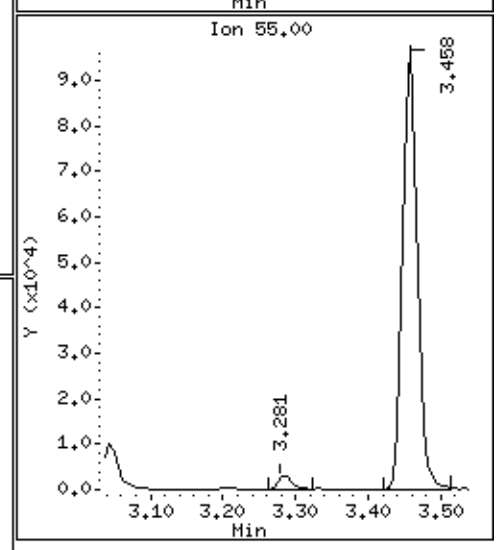
Concentration: 40.8 ug/L

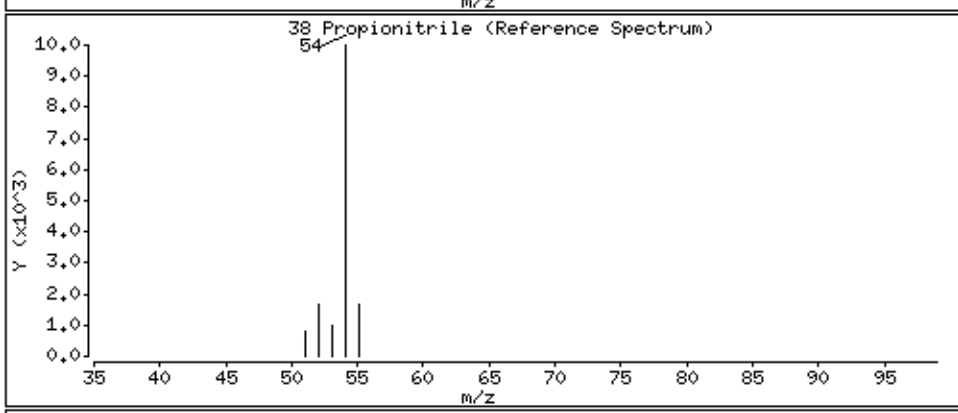
Review Code:

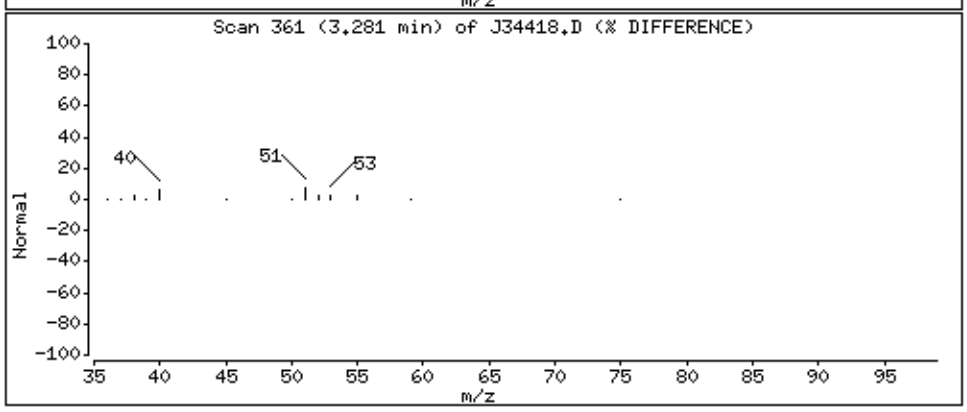












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D

Date : 25-APR-2017 19:25

Client ID: MW-3CMSD

Instrument: 70msv6.i

Sample Info: 103082, 15067:1.25

Purge Volume: 5.0

Operator: KGG

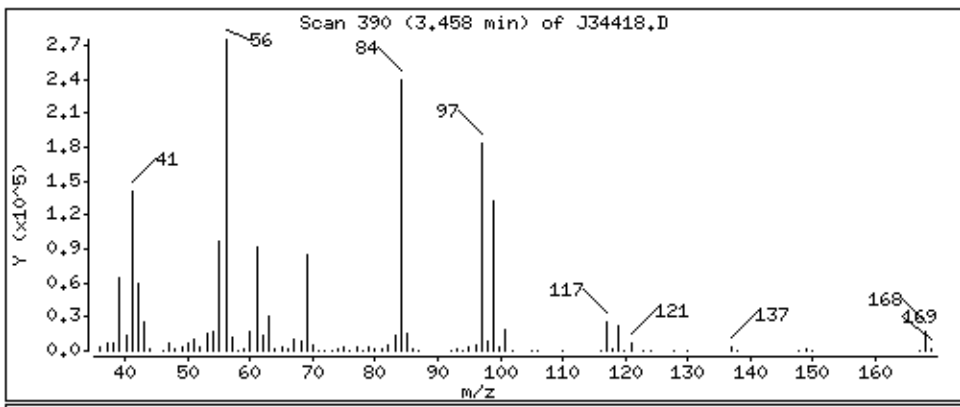
Column phase: RTX-624

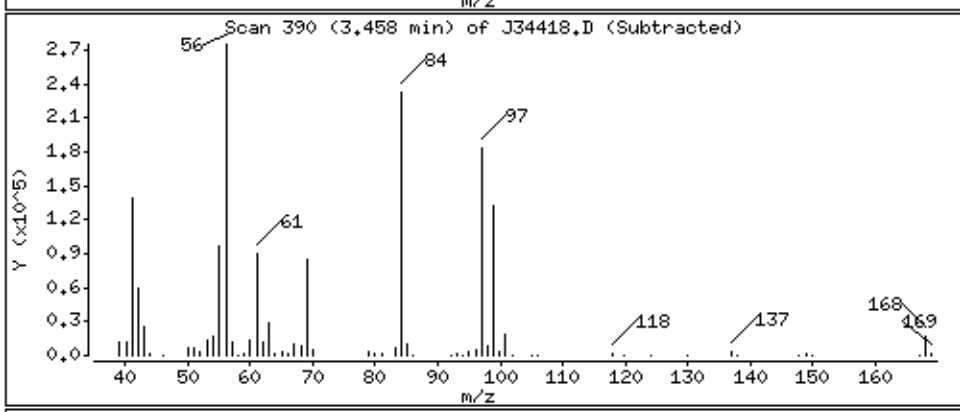
Column diameter: 0.18

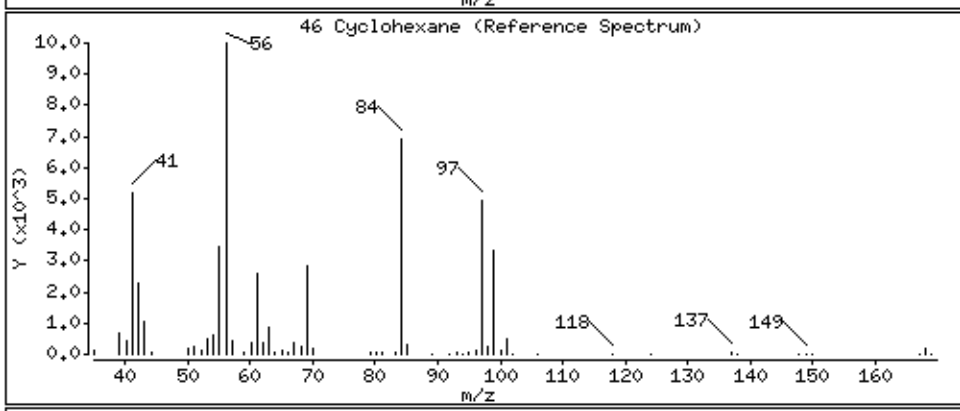
46 Cyclohexane

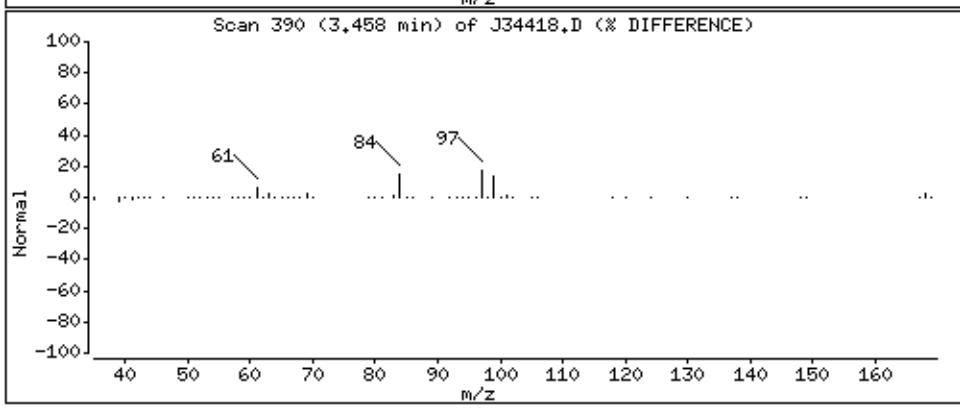
Concentration: 50.7 ug/L

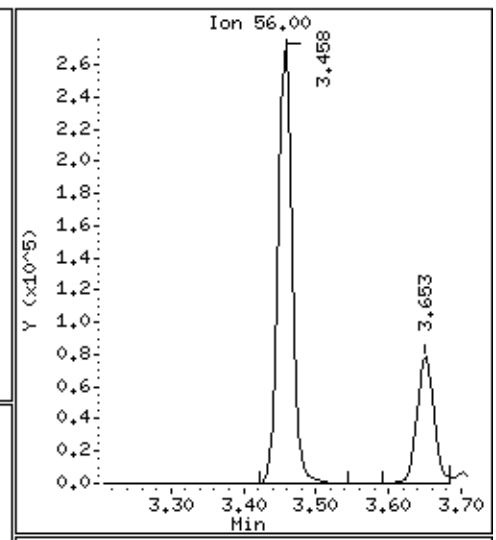
Review Code:

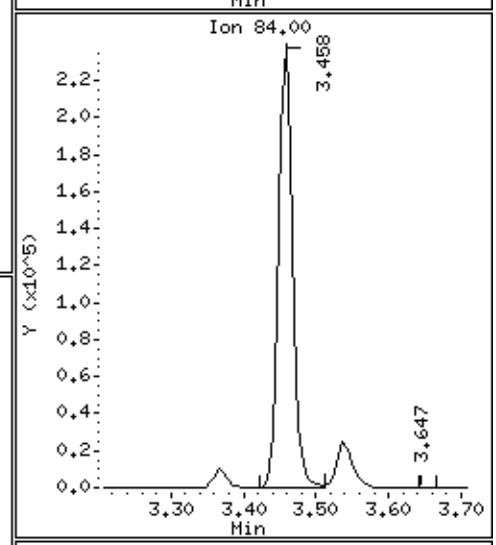


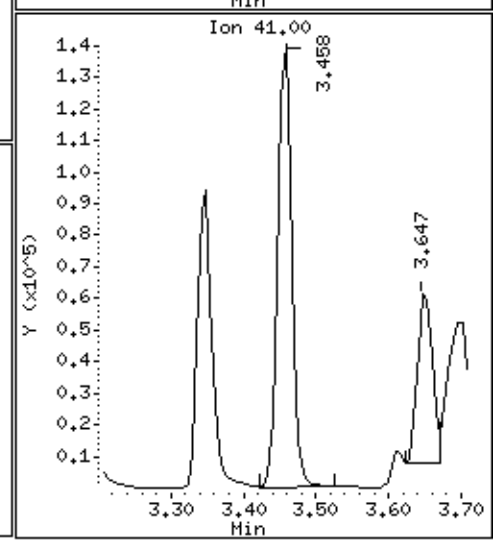












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D

Date : 25-APR-2017 19:25

Client ID: MW-3CMSD

Instrument: 70msv6.i

Sample Info: 103082, 15067:1.25

Purge Volume: 5.0

Operator: KGG

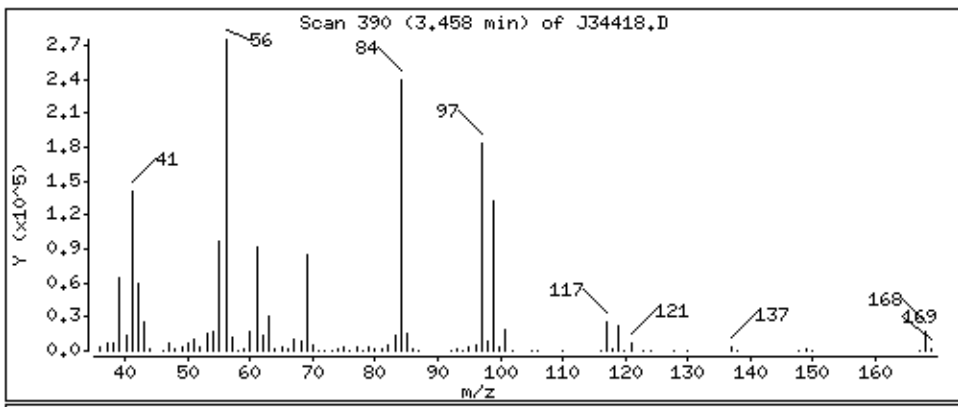
Column phase: RTX-624

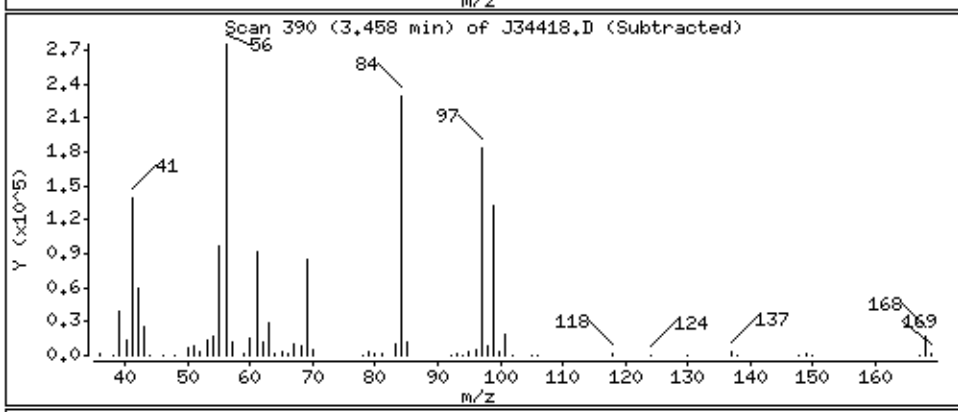
Column diameter: 0.18

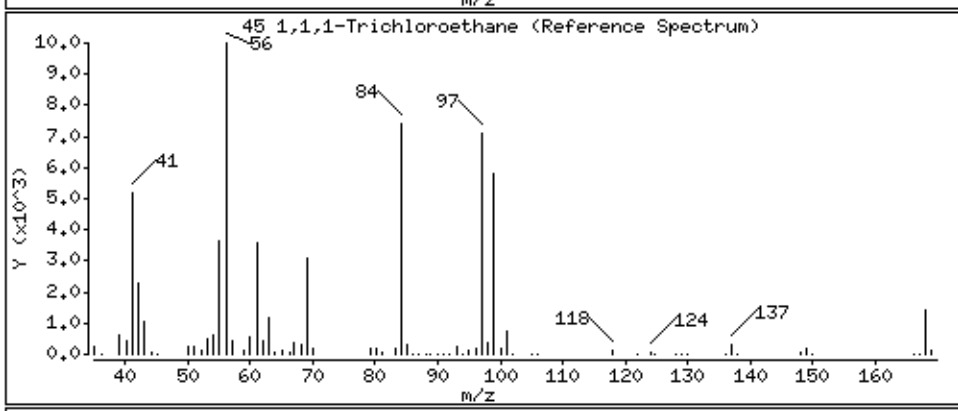
45 1,1,1-Trichloroethane

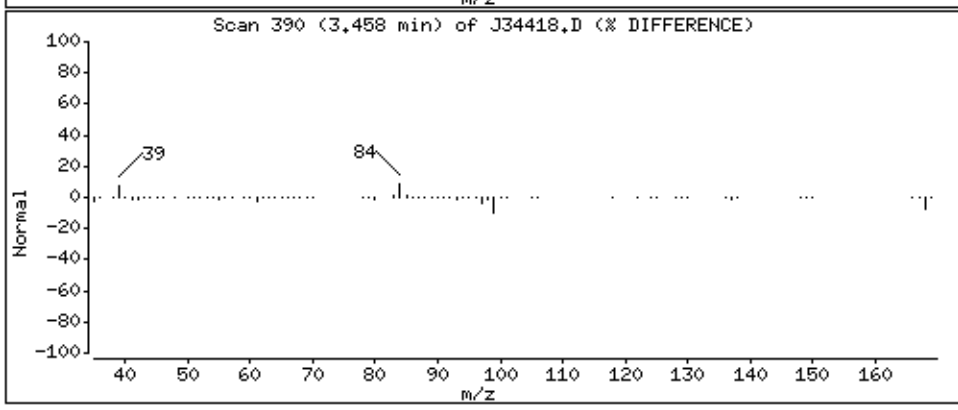
Concentration: 53.7 ug/L

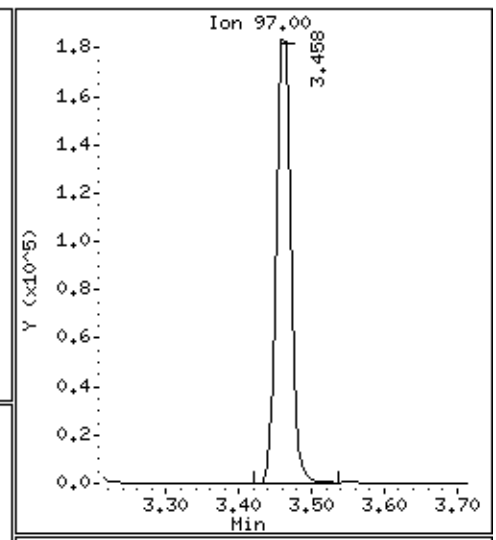
Review Code:

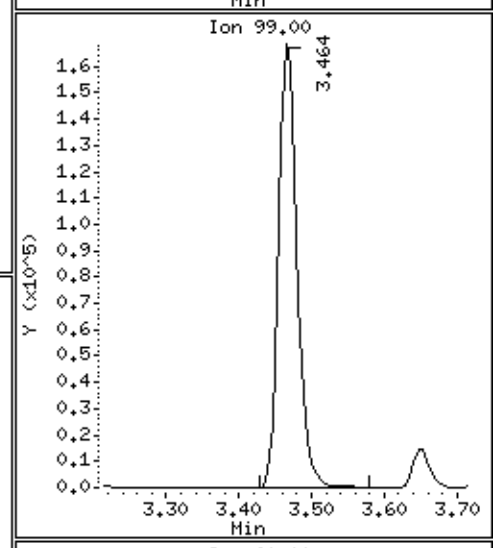


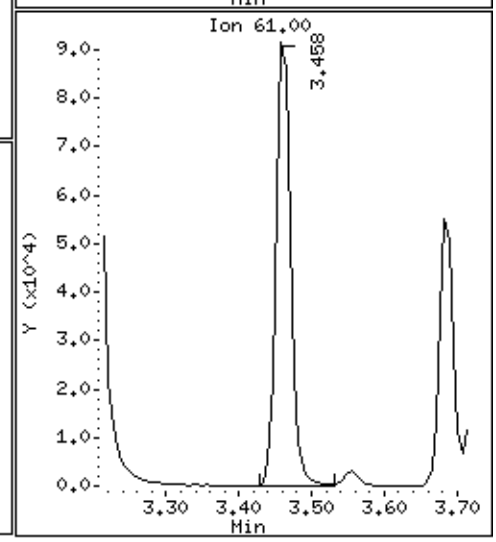












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D

Date : 25-APR-2017 19:25

Client ID: MW-3CMSD

Instrument: 70msv6.i

Sample Info: 103082, 15067:1.25

Purge Volume: 5.0

Operator: KGG

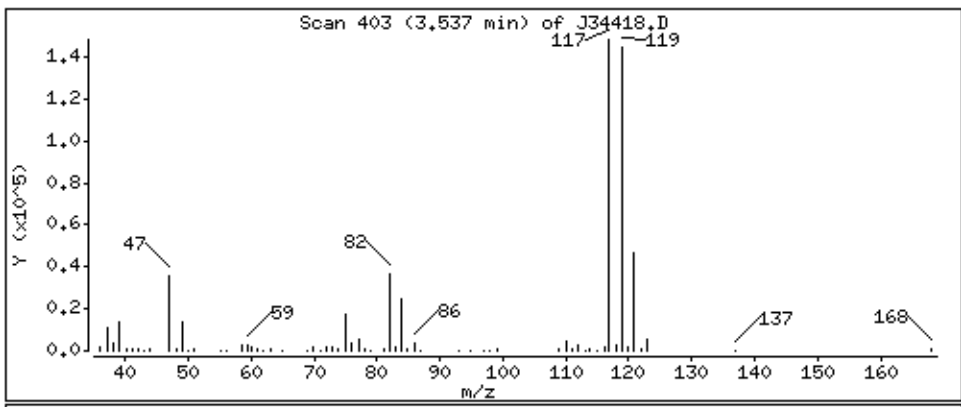
Column phase: RTX-624

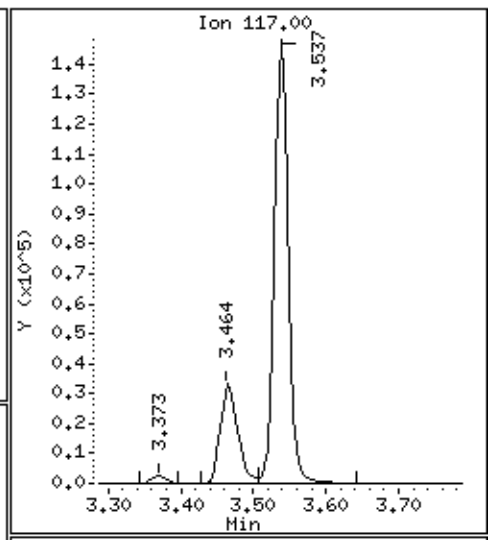
Column diameter: 0.18

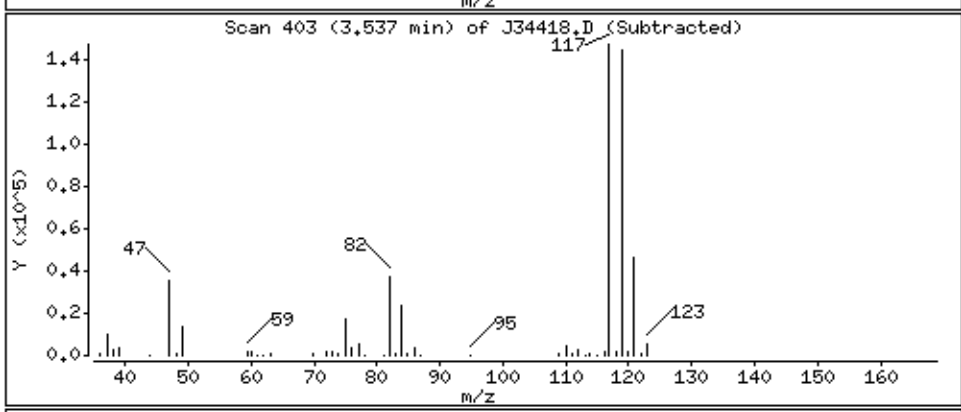
48 Carbon tetrachloride

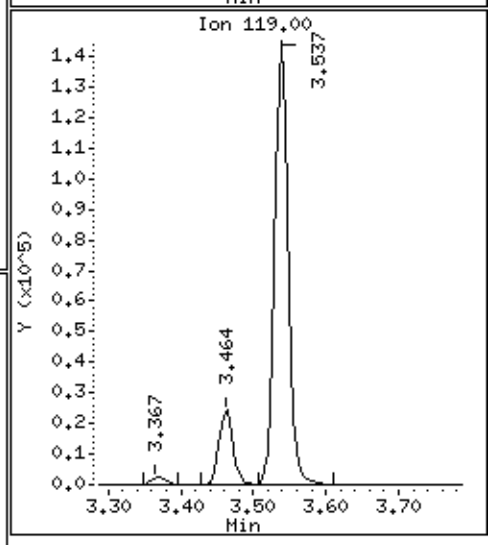
Concentration: 67.0 ug/L

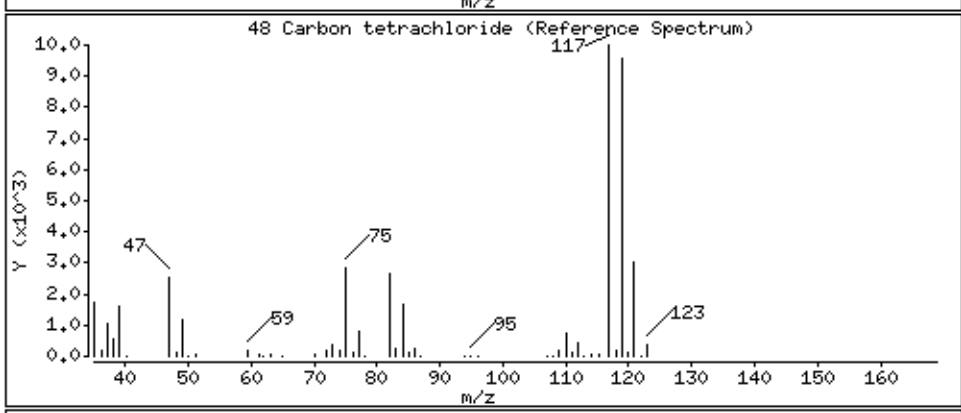
Review Code:

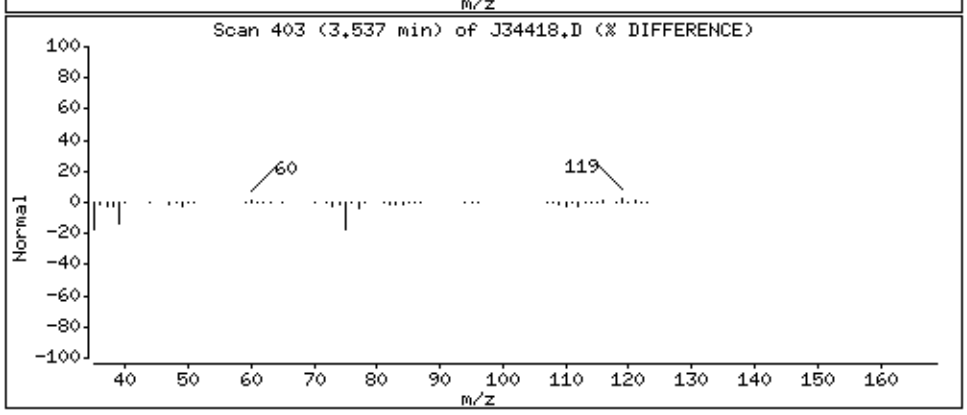












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D

Date : 25-APR-2017 19:25

Client ID: MW-3CMSD

Instrument: 70msv6.i

Sample Info: 103082, 15067:1.25

Purge Volume: 5.0

Operator: KGG

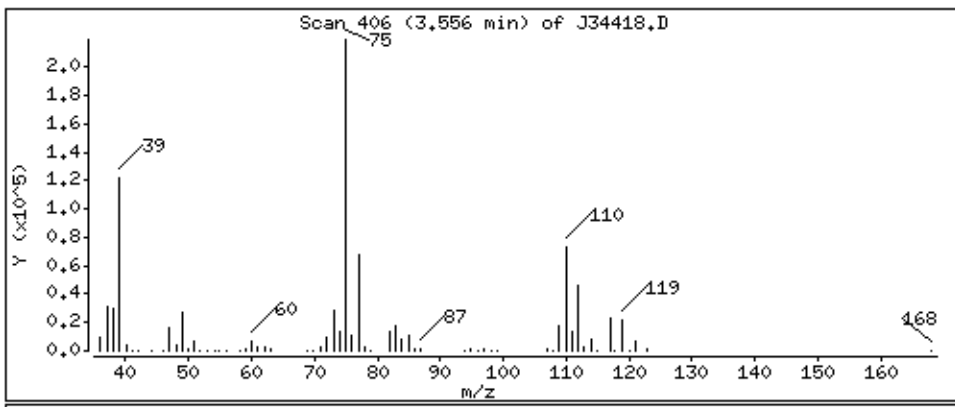
Column phase: RTX-624

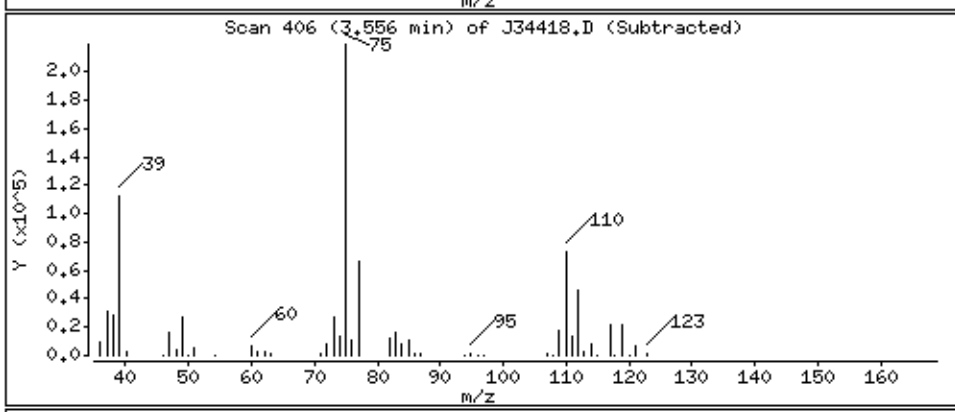
Column diameter: 0.18

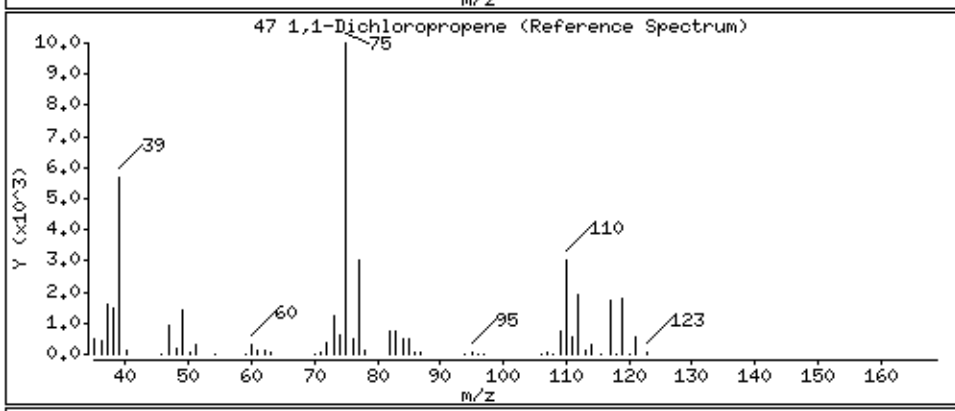
47 1,1-Dichloropropene

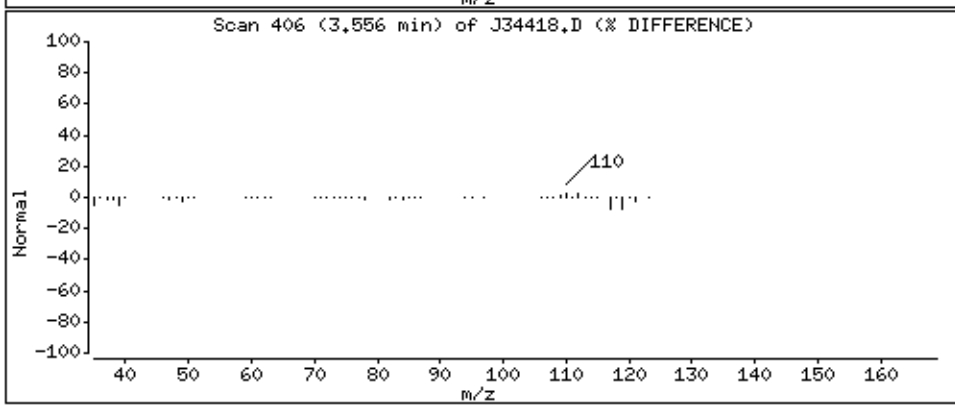
Concentration: 48.4 ug/L

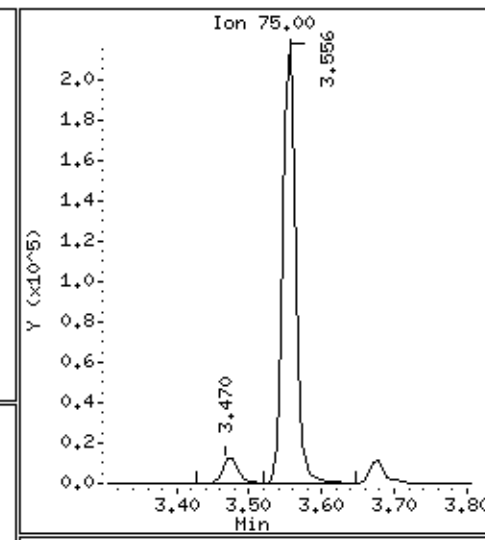
Review Code:

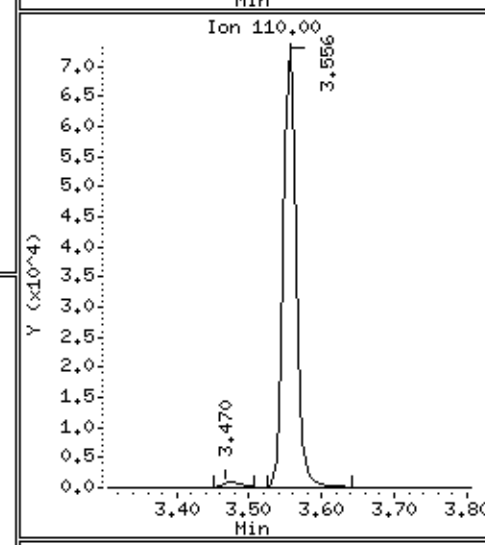


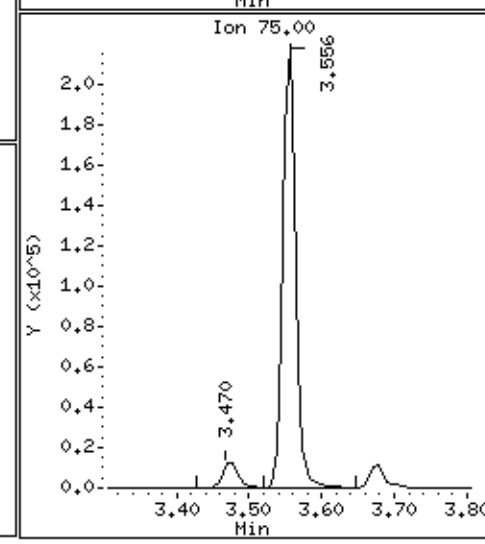












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D

Date : 25-APR-2017 19:25

Client ID: MW-3CMSD

Instrument: 70msv6.i

Sample Info: 103082, 15067:1.25

Purge Volume: 5.0

Operator: KGG

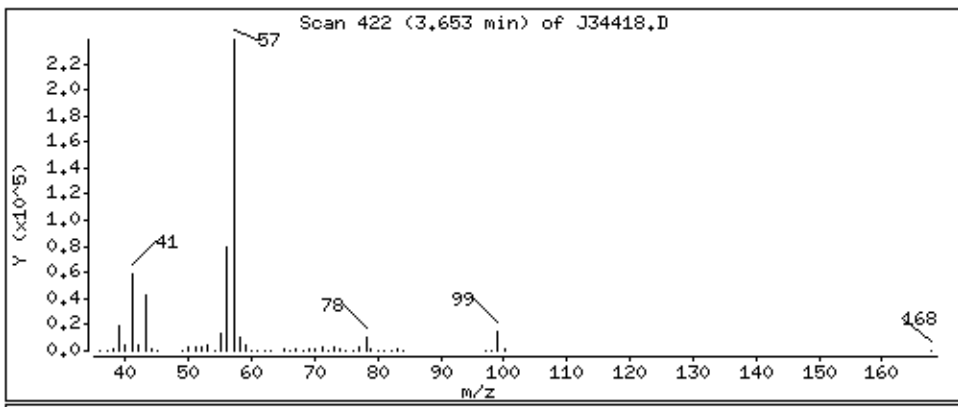
Column phase: RTX-624

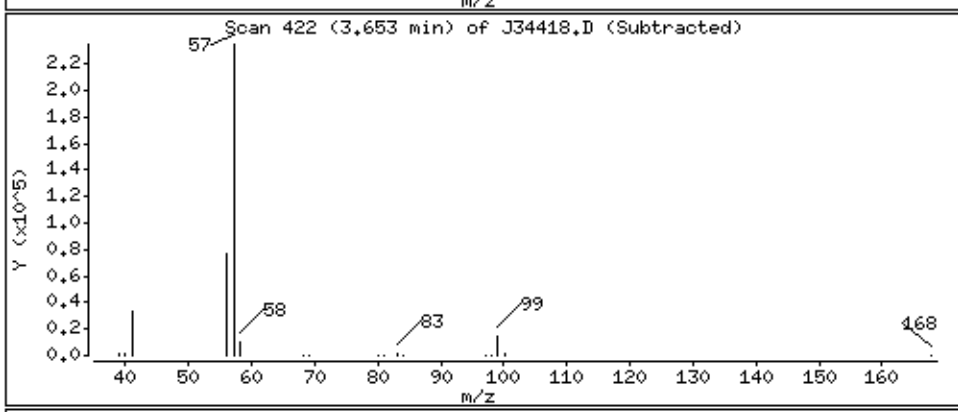
Column diameter: 0.18

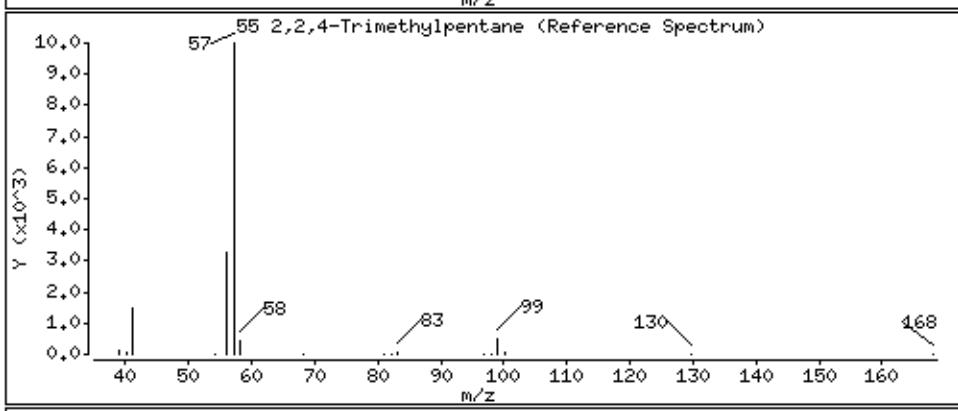
55 2,2,4-Trimethylpentane

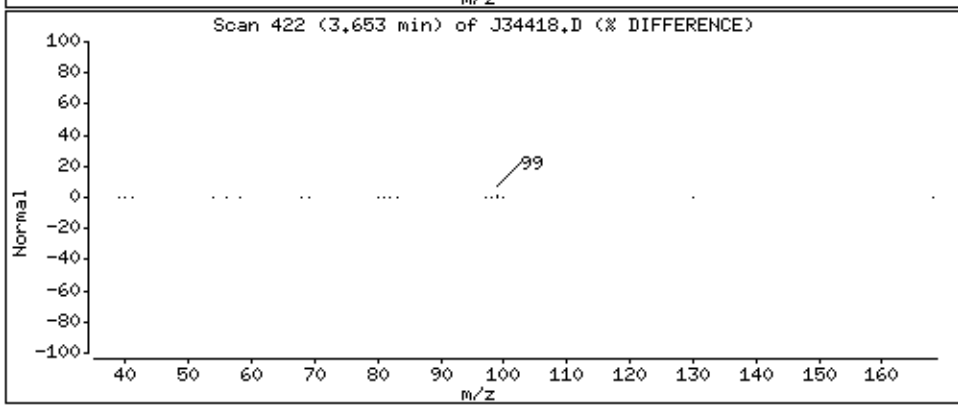
Concentration: 50.6 ug/L

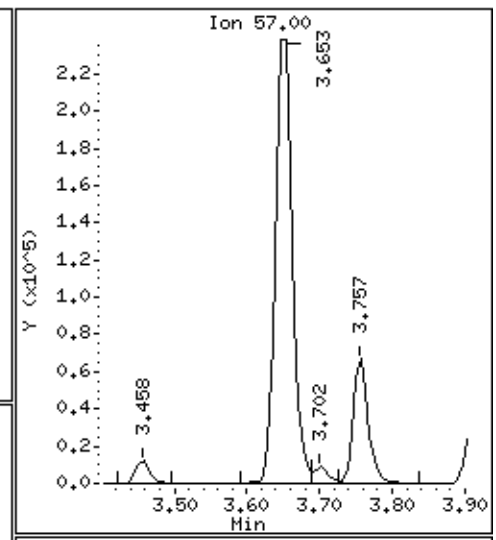
Review Code:

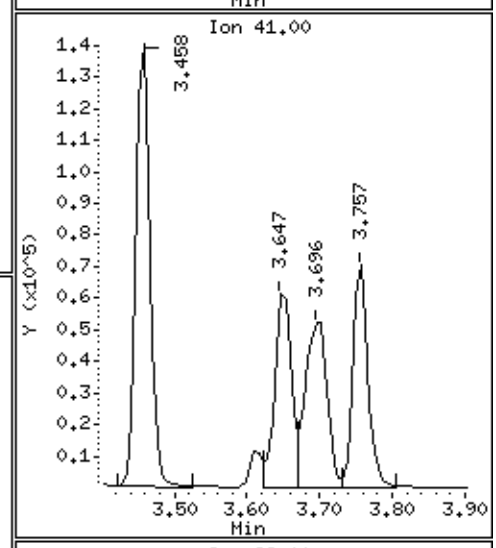


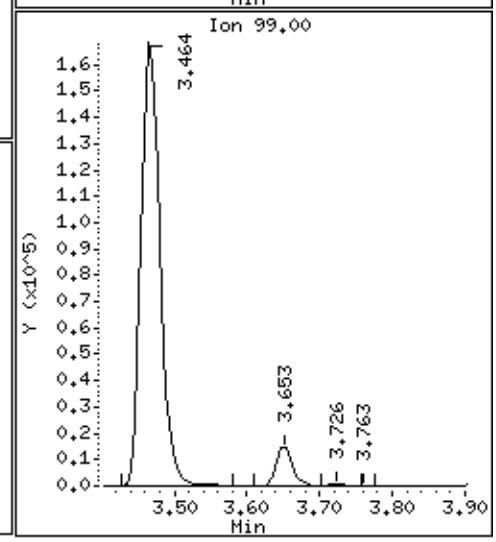












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D

Date : 25-APR-2017 19:25

Client ID: MW-3CMSD

Instrument: 70msv6.i

Sample Info: 103082, 15067:1.25

Purge Volume: 5.0

Operator: KGG

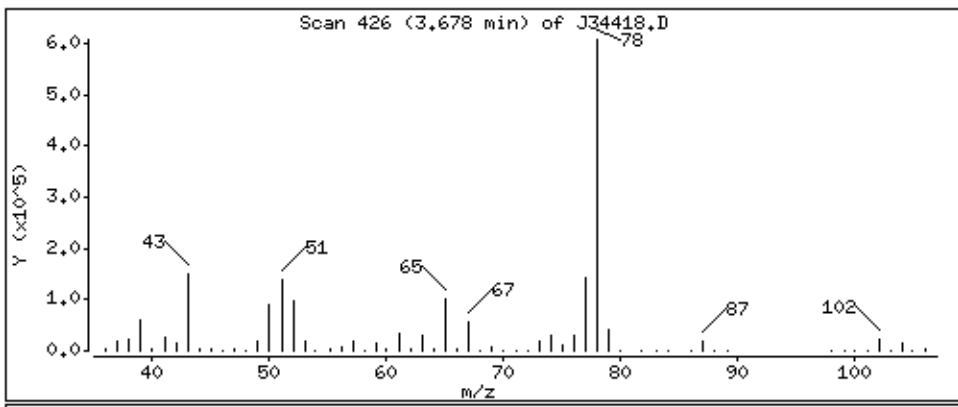
Column phase: RTX-624

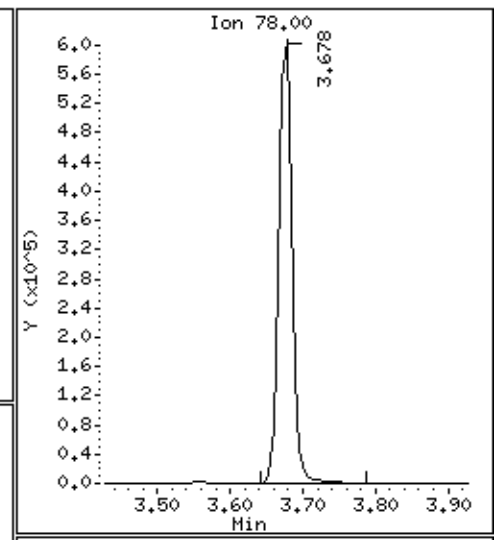
Column diameter: 0.18

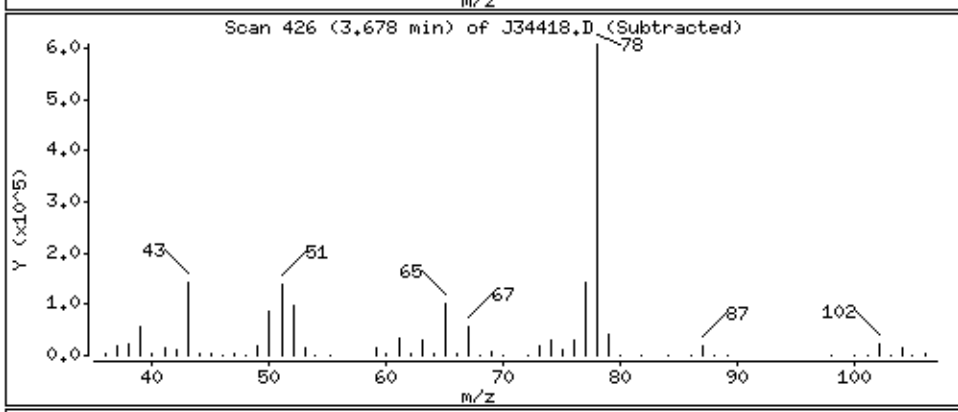
51 Benzene

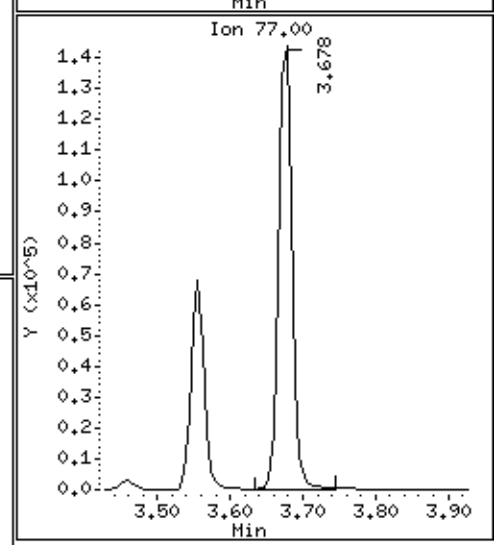
Concentration: 49.0 ug/L

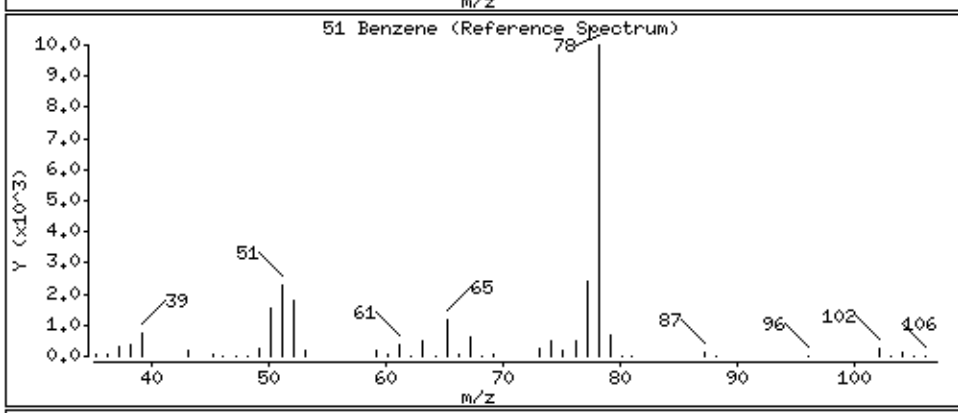
Review Code:

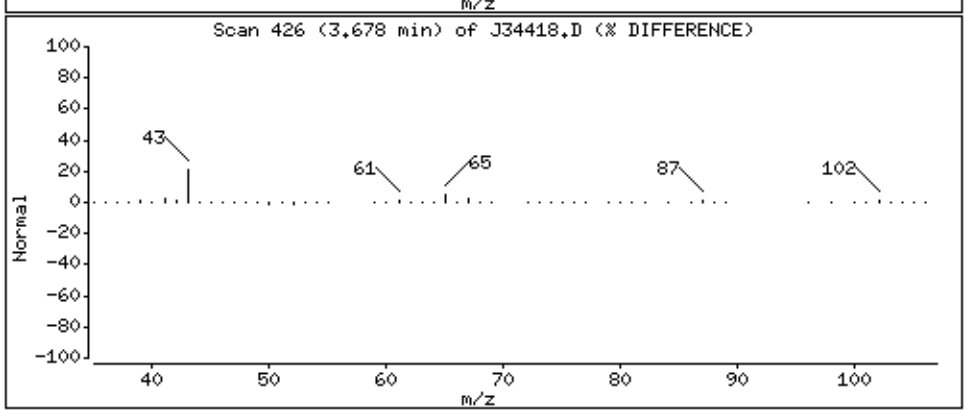












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D

Date : 25-APR-2017 19:25

Client ID: MW-3CMSD

Instrument: 70msv6.i

Sample Info: 103082, 15067:1.25

Purge Volume: 5.0

Operator: KGG

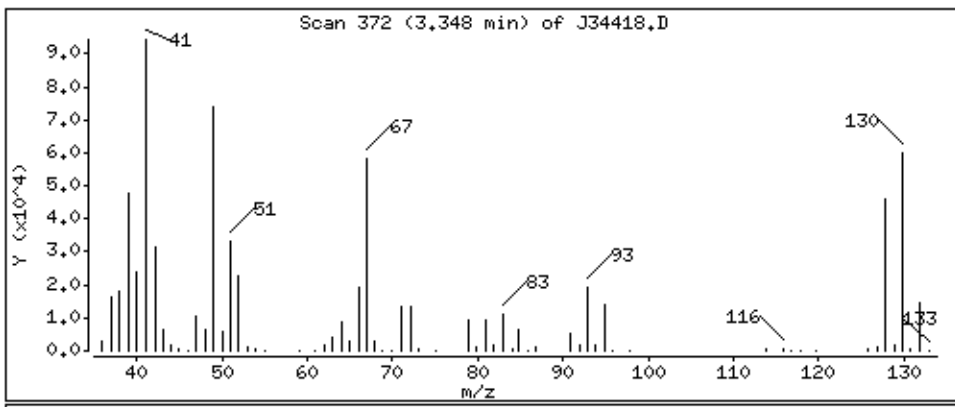
Column phase: RTX-624

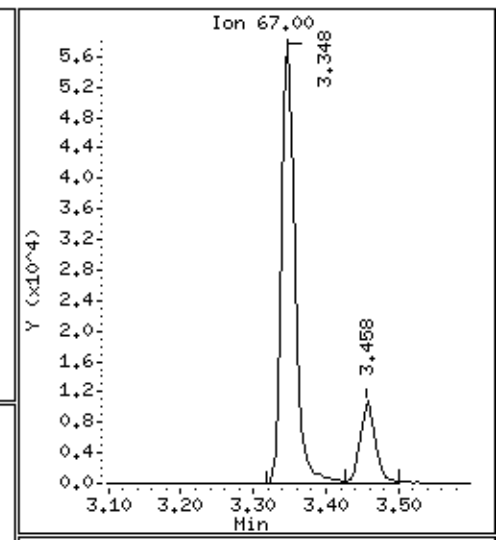
Column diameter: 0.18

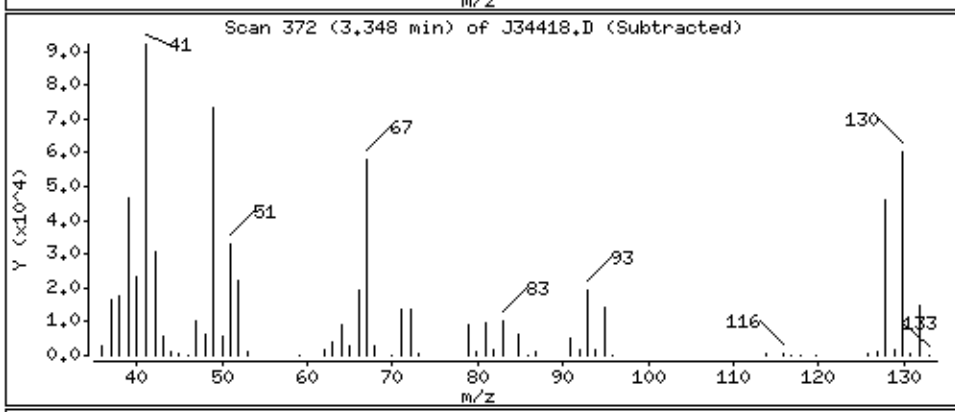
40 Methacrylonitrile

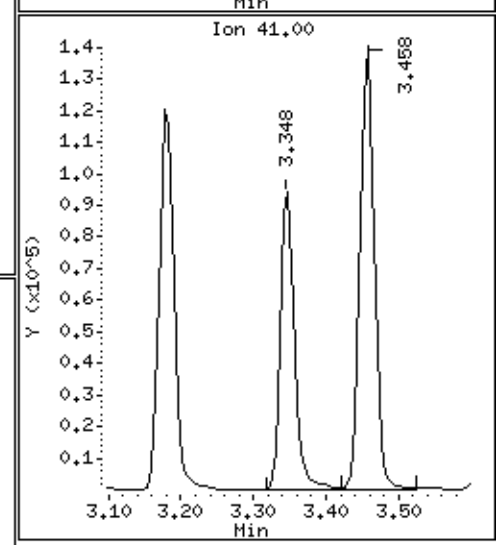
Concentration: 42.6 ug/L

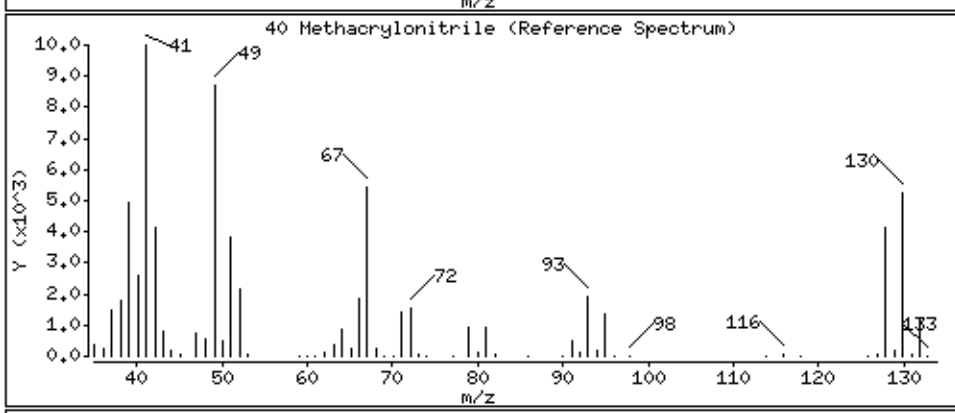
Review Code:

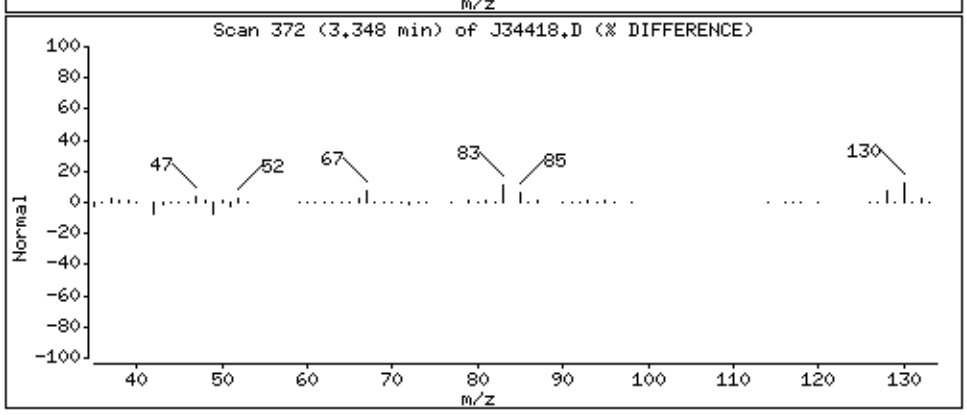












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D

Date : 25-APR-2017 19:25

Client ID: MW-3CMSD

Instrument: 70msv6.i

Sample Info: 103082, 15067:1.25

Purge Volume: 5.0

Operator: KGG

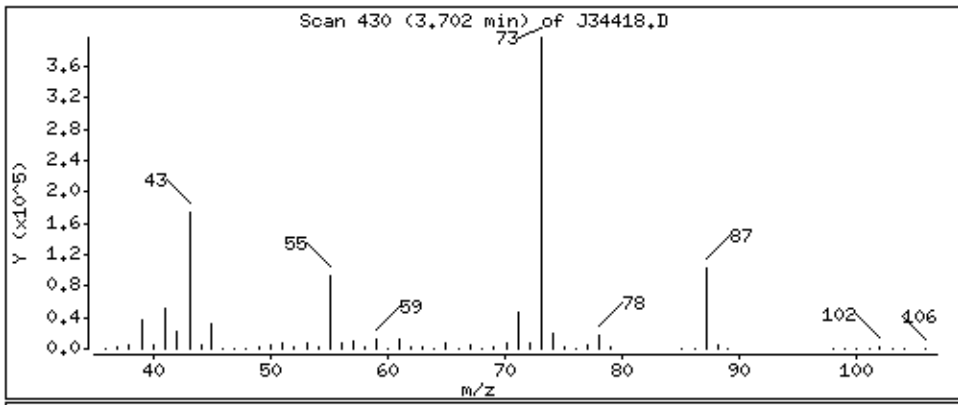
Column phase: RTX-624

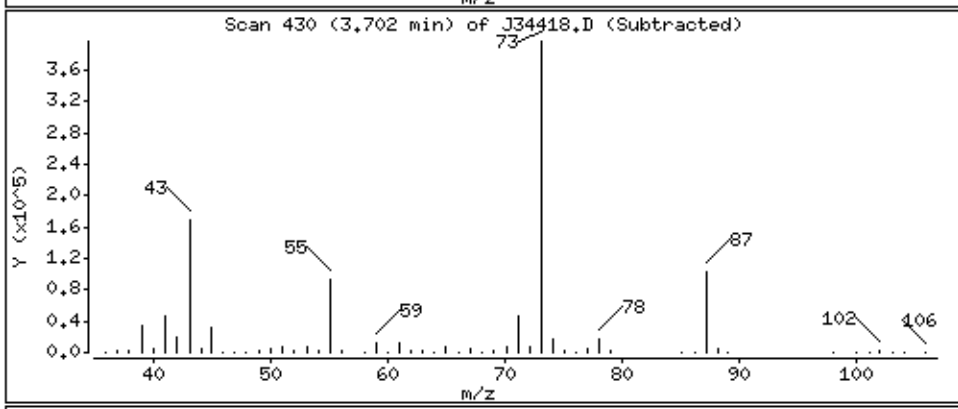
Column diameter: 0.18

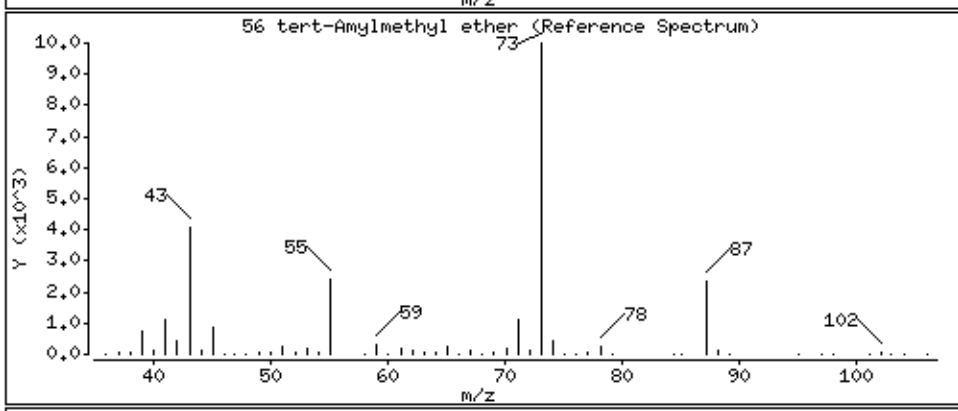
56 tert-Amylmethyl ether

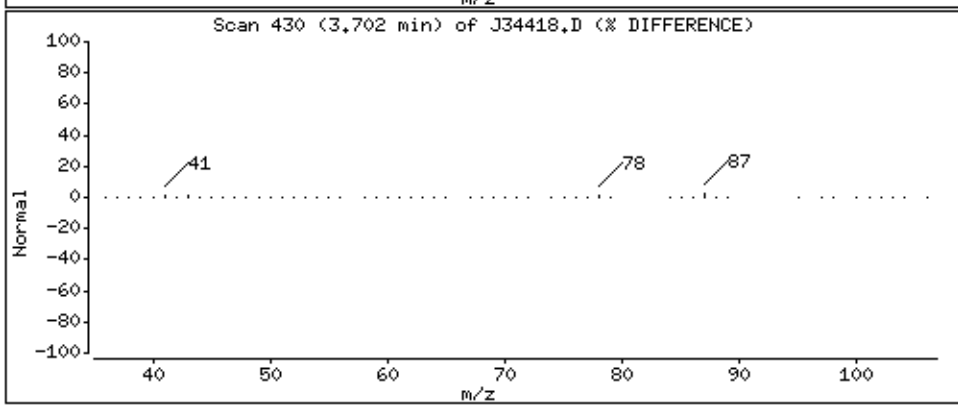
Concentration: 46.9 ug/L

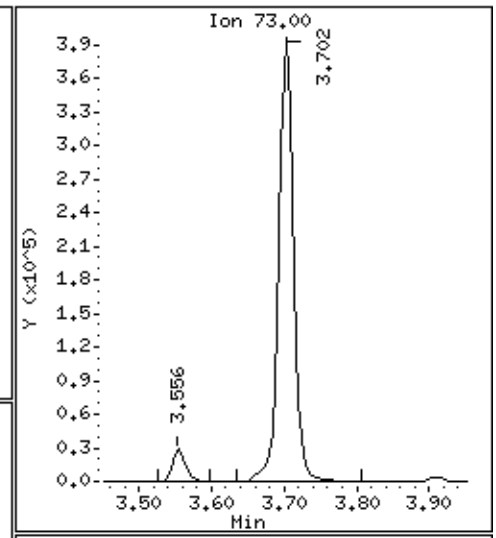
Review Code:

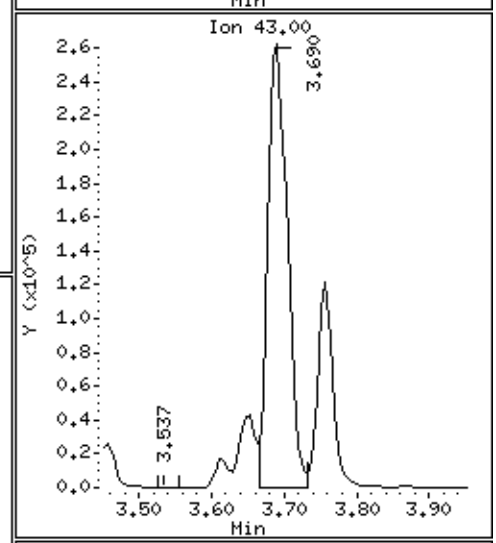


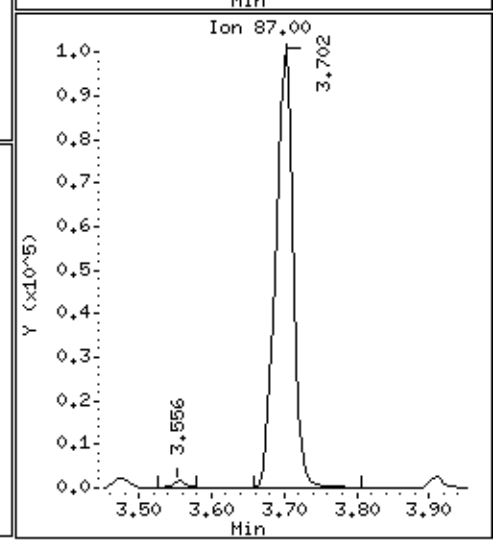












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D

Date : 25-APR-2017 19:25

Client ID: MW-3CMSD

Instrument: 70msv6.i

Sample Info: 103082, 15067:1.25

Purge Volume: 5.0

Operator: KGG

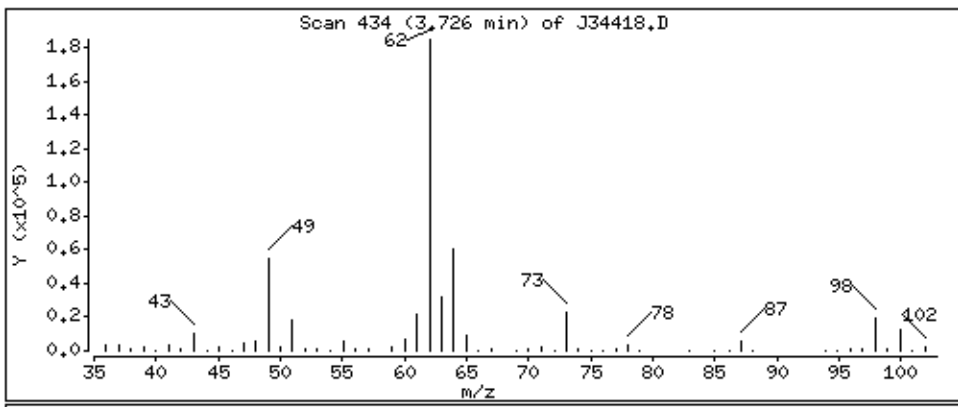
Column phase: RTX-624

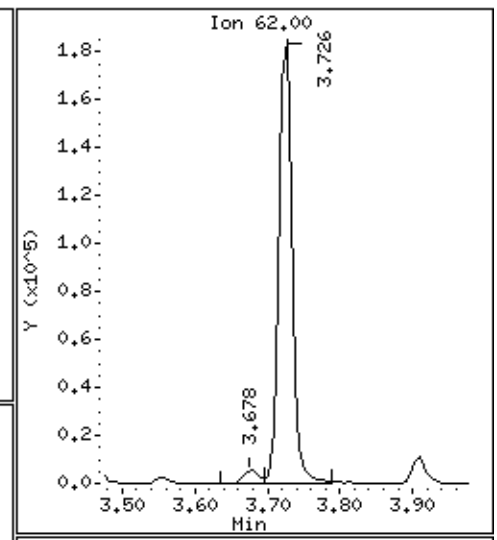
Column diameter: 0.18

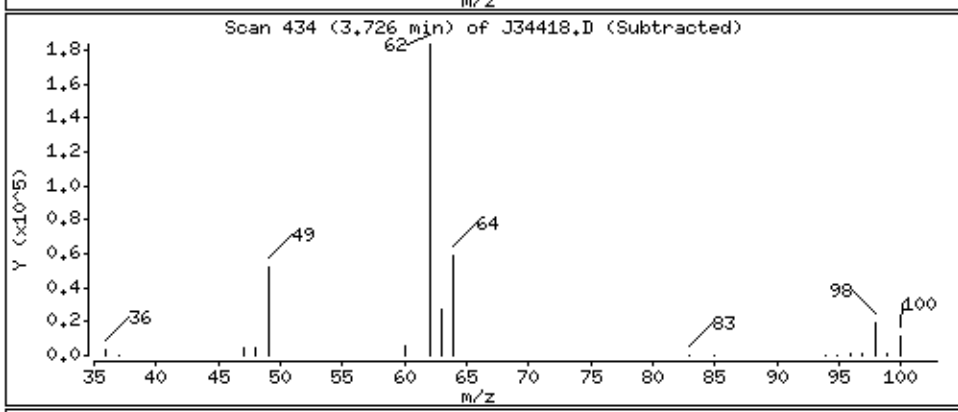
52 1,2-Dichloroethane

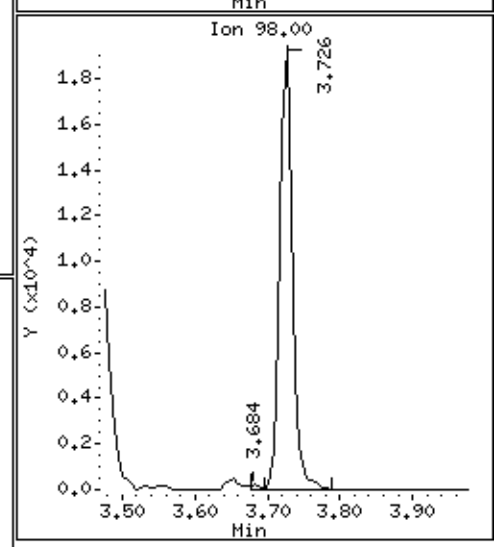
Concentration: 40.1 ug/L

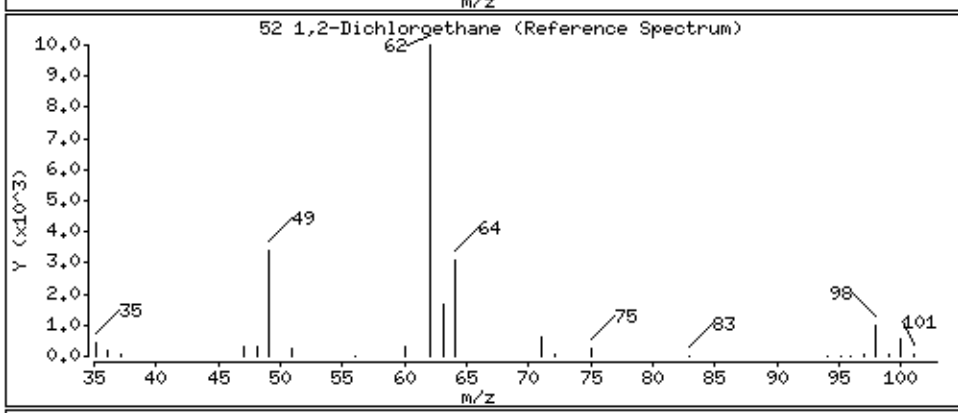
Review Code:

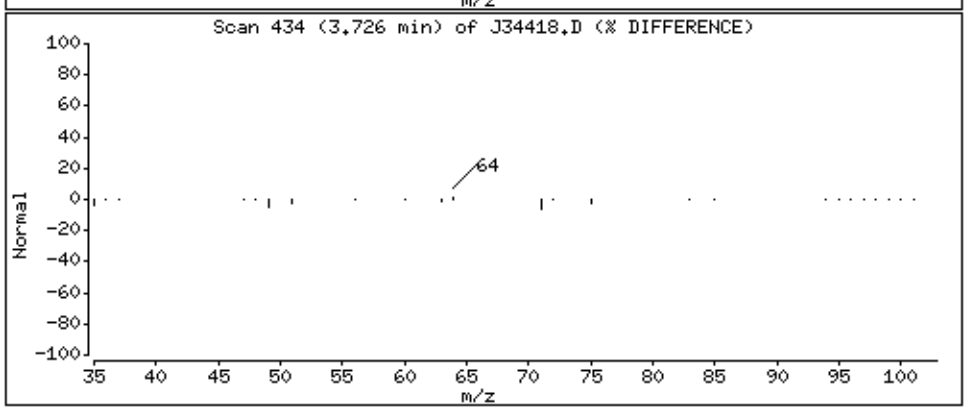












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D

Date : 25-APR-2017 19:25

Client ID: MW-3CMSD

Instrument: 70msv6.i

Sample Info: 103082, 15067:1.25

Purge Volume: 5.0

Operator: KGG

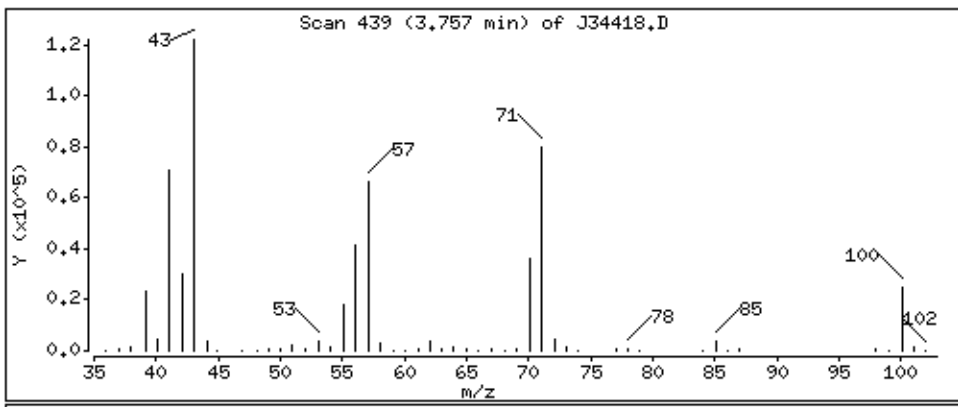
Column phase: RTX-624

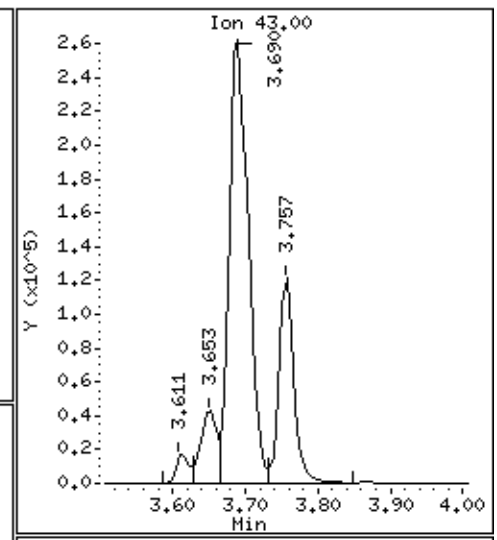
Column diameter: 0.18

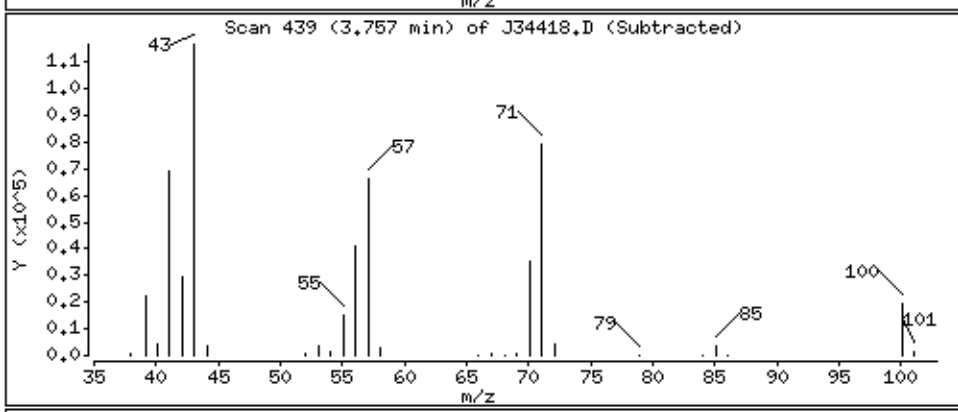
57 n-Heptane

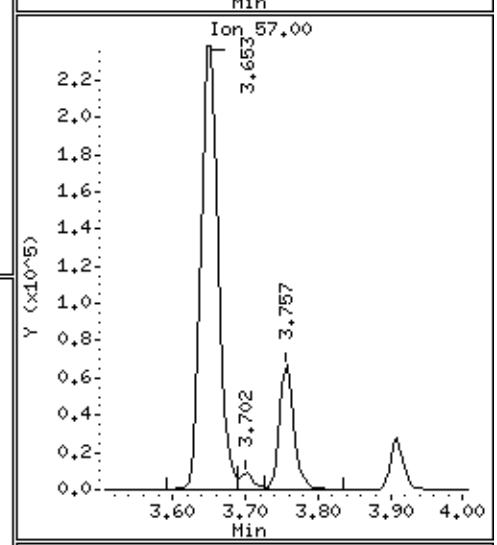
Concentration: 46.0 ug/L

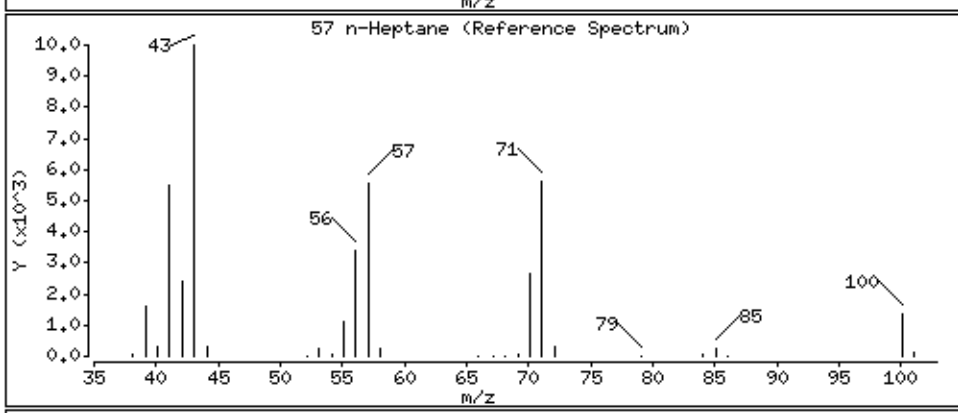
Review Code:

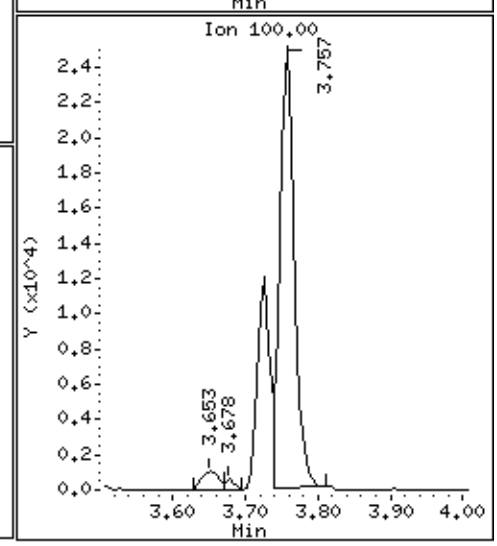


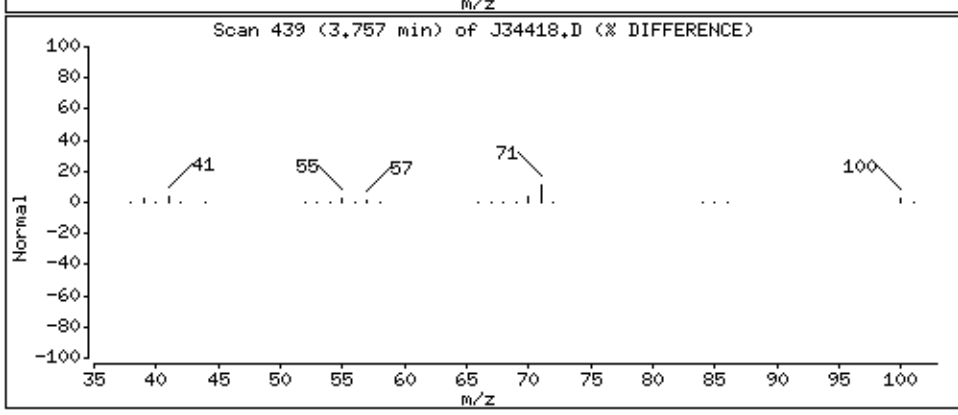












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D

Date : 25-APR-2017 19:25

Client ID: MW-3CMSD

Instrument: 70msv6.i

Sample Info: 103082, 15067:1.25

Purge Volume: 5.0

Operator: KGG

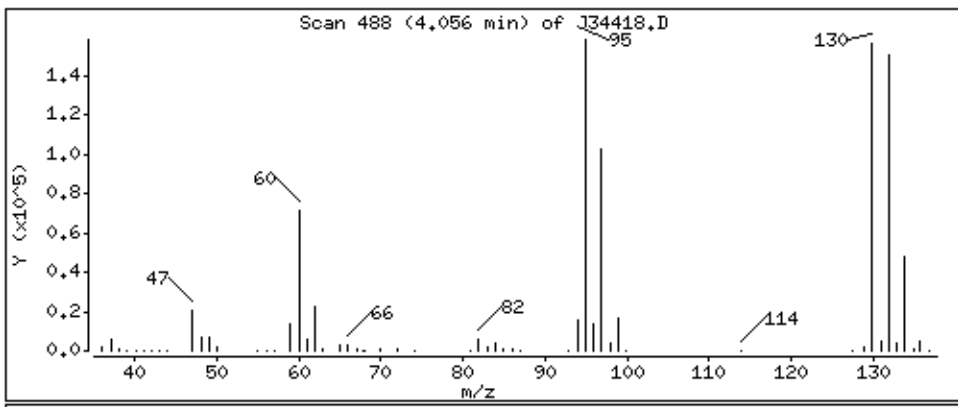
Column phase: RTX-624

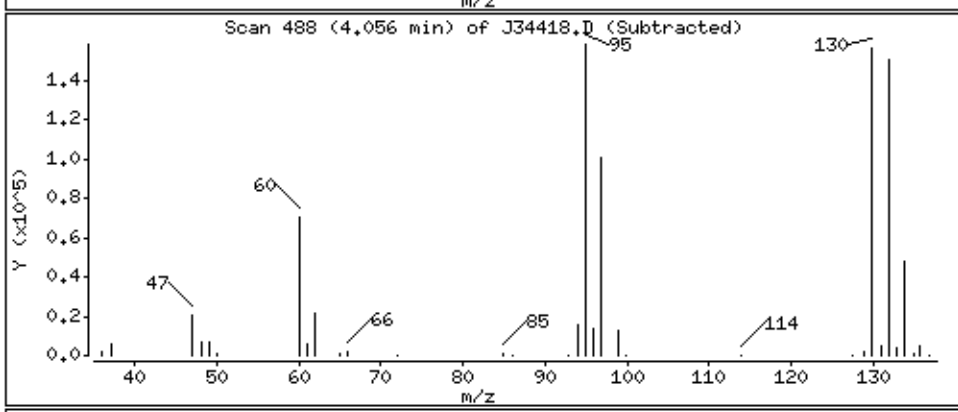
Column diameter: 0.18

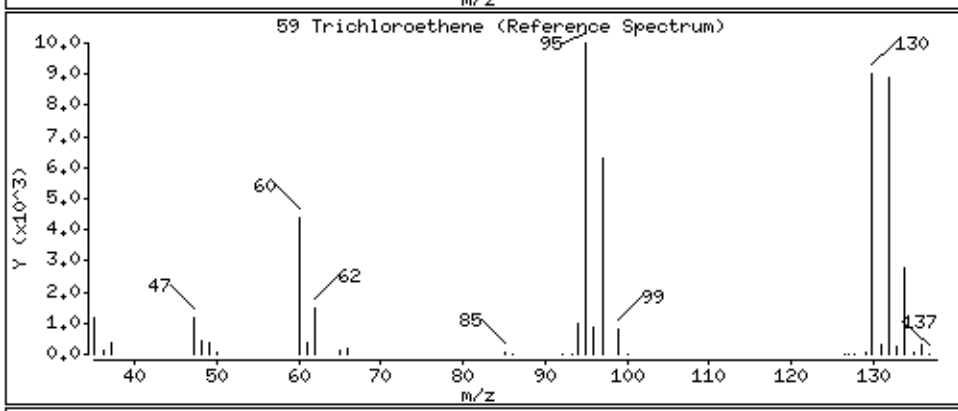
59 Trichloroethene

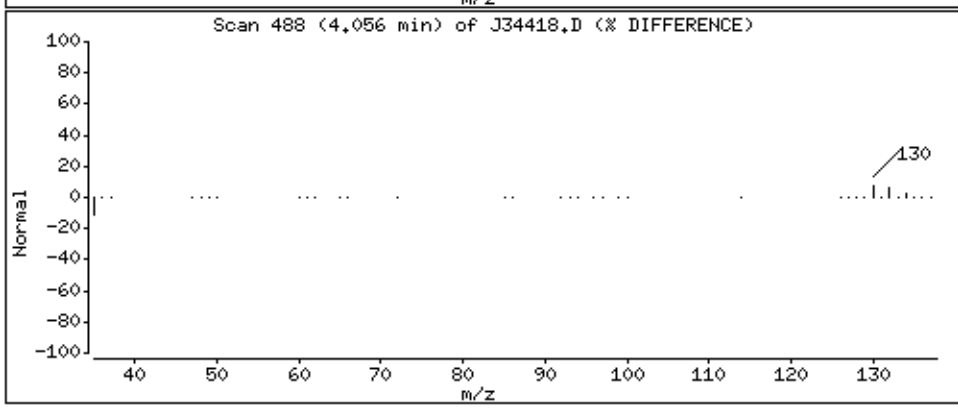
Concentration: 52.1 ug/L

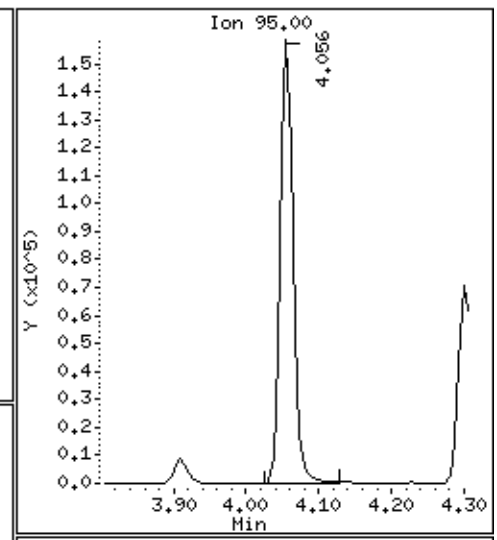
Review Code:

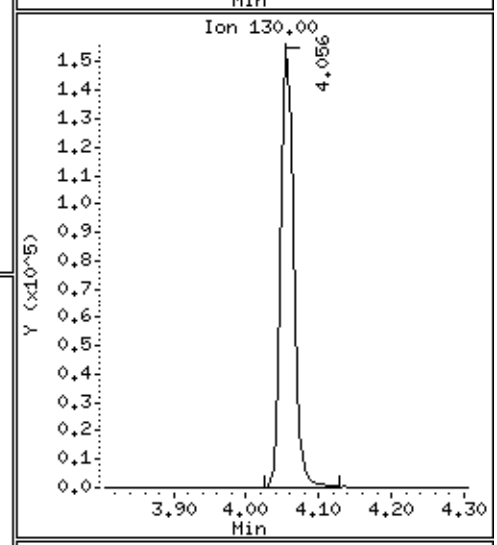


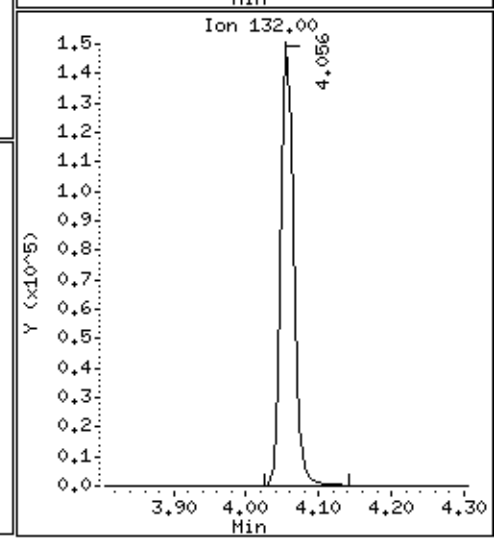












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D

Date : 25-APR-2017 19:25

Client ID: MW-3CMSD

Instrument: 70msv6.i

Sample Info: 103082, 15067:1.25

Purge Volume: 5.0

Operator: KGG

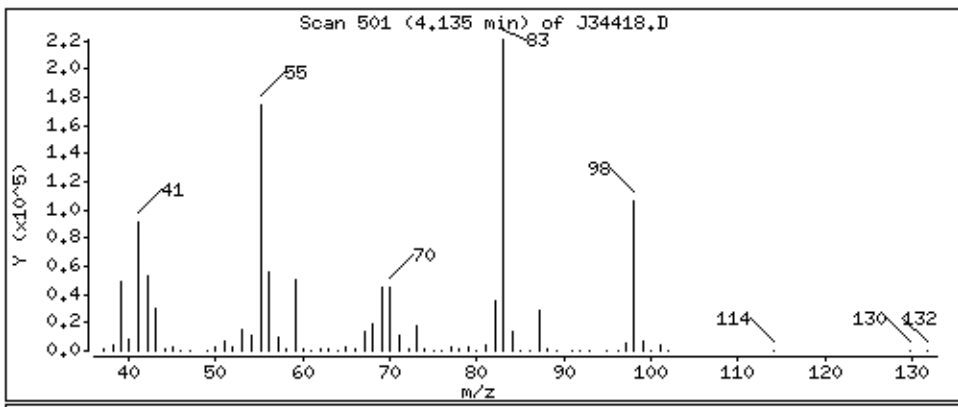
Column phase: RTX-624

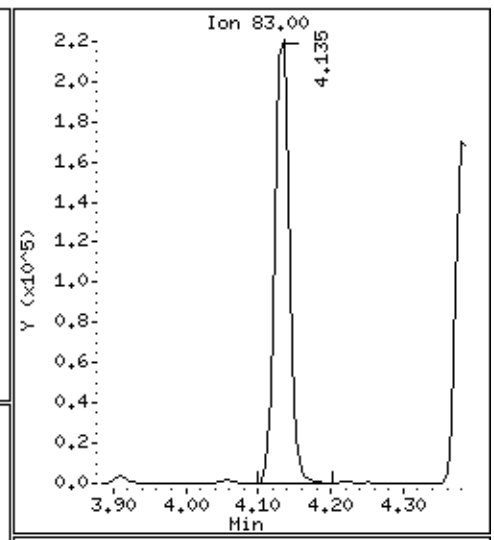
Column diameter: 0.18

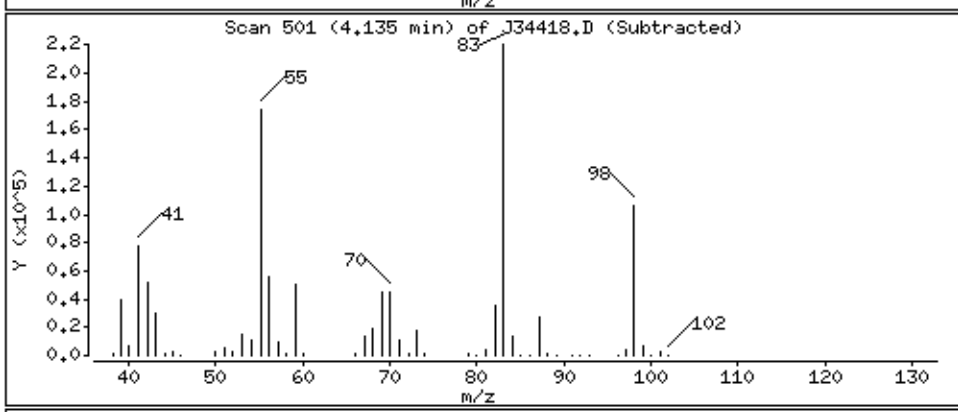
60 Methylcyclohexane

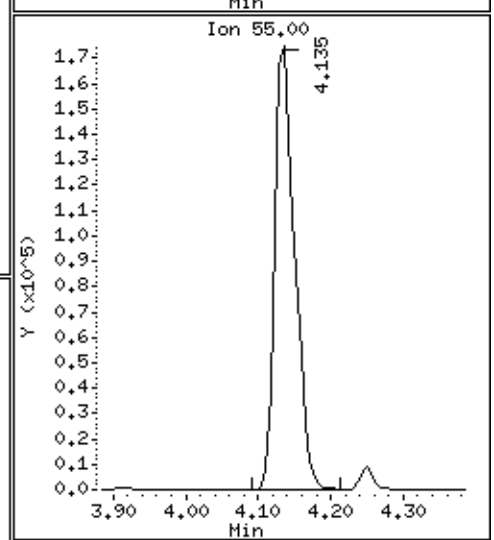
Concentration: 62.9 ug/L

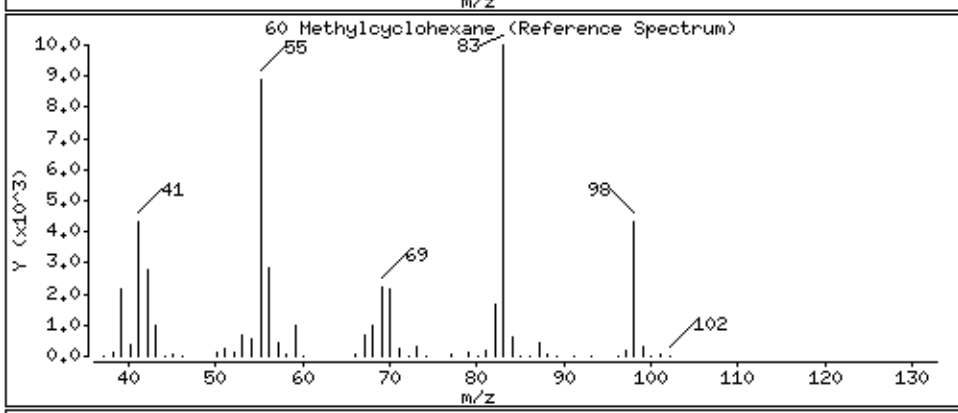
Review Code:

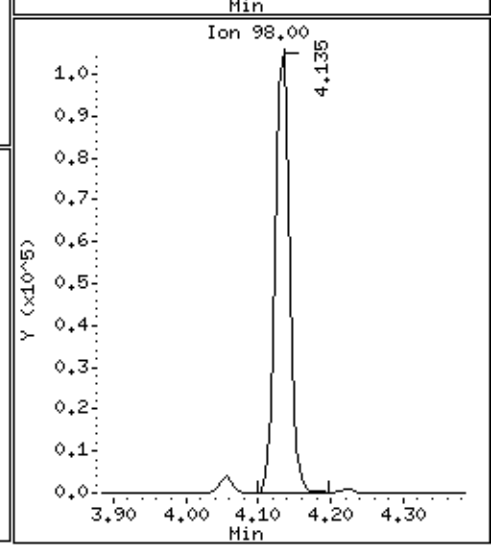


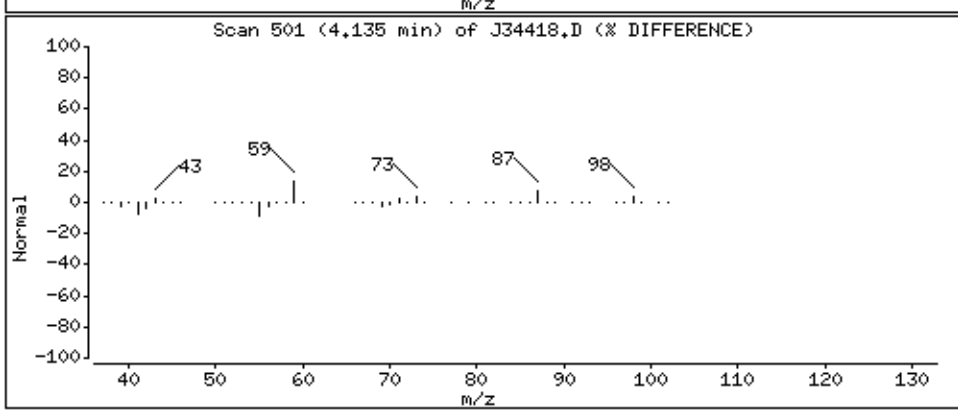












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D

Date : 25-APR-2017 19:25

Client ID: MW-3CMSD

Instrument: 70msv6.i

Sample Info: 103082, 15067:1.25

Purge Volume: 5.0

Operator: KGG

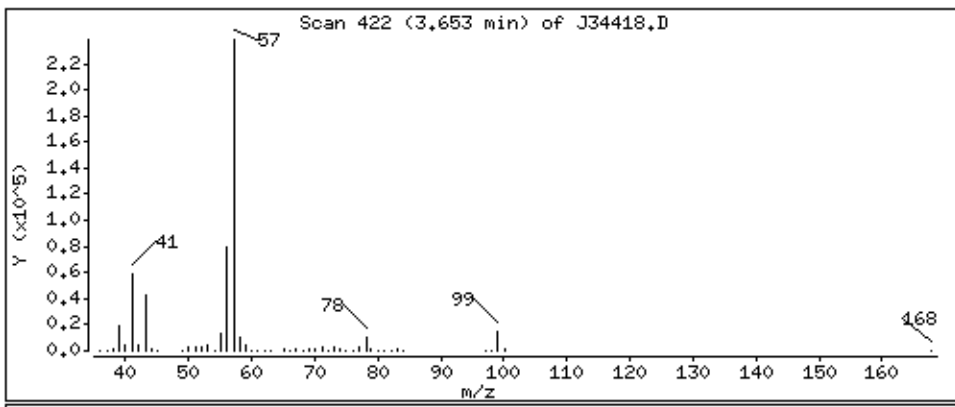
Column phase: RTX-624

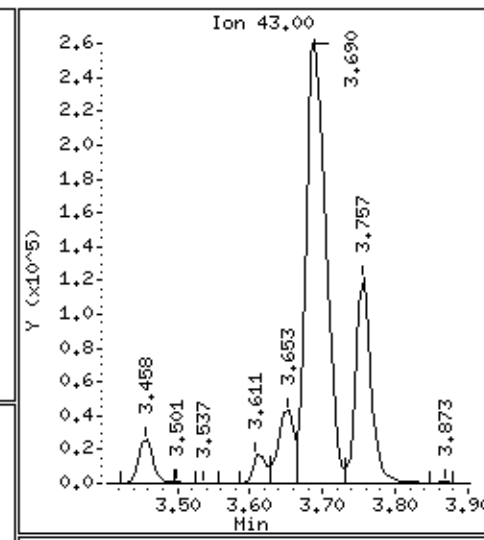
Column diameter: 0.18

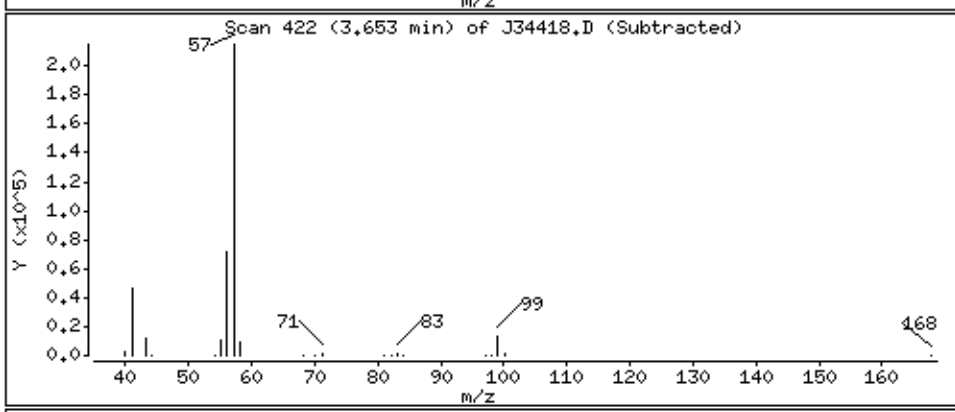
49 Isobutanol

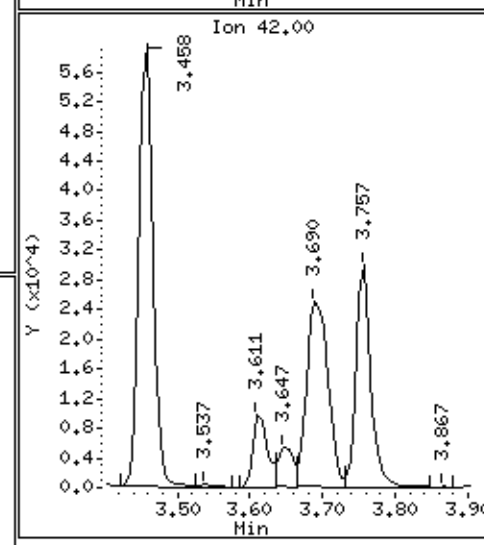
Concentration: 221 ug/L

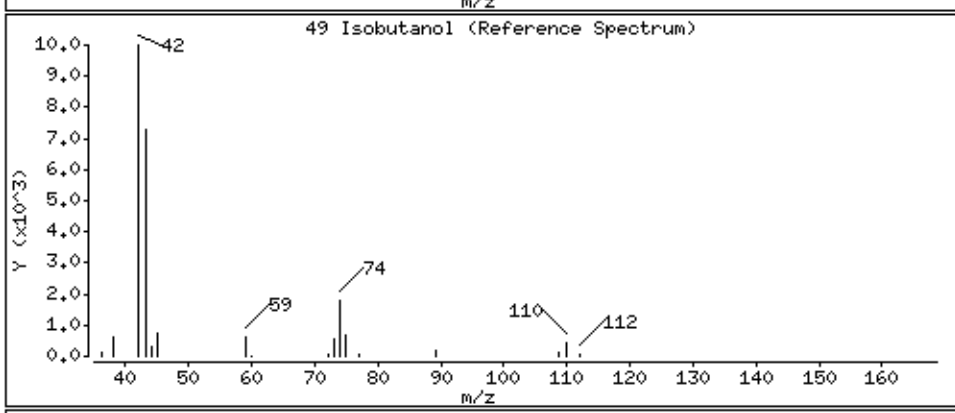
Review Code:

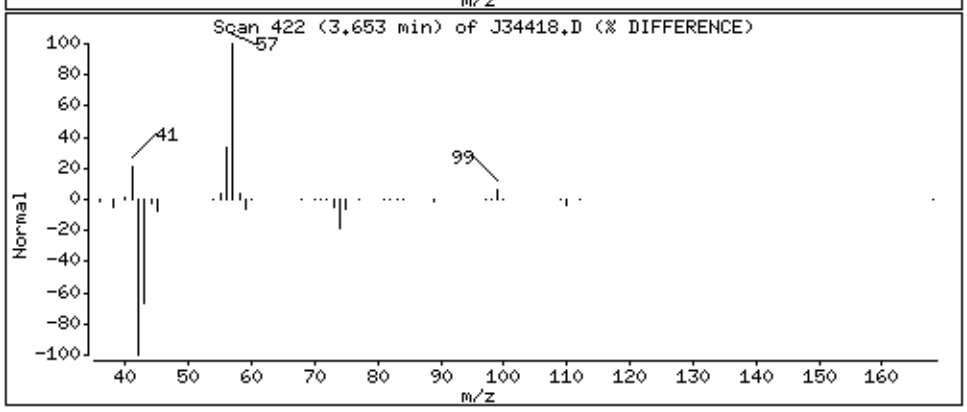












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D

Date : 25-APR-2017 19:25

Client ID: MW-3CMSD

Instrument: 70msv6.i

Sample Info: 103082, 15067:1.25

Purge Volume: 5.0

Operator: KGG

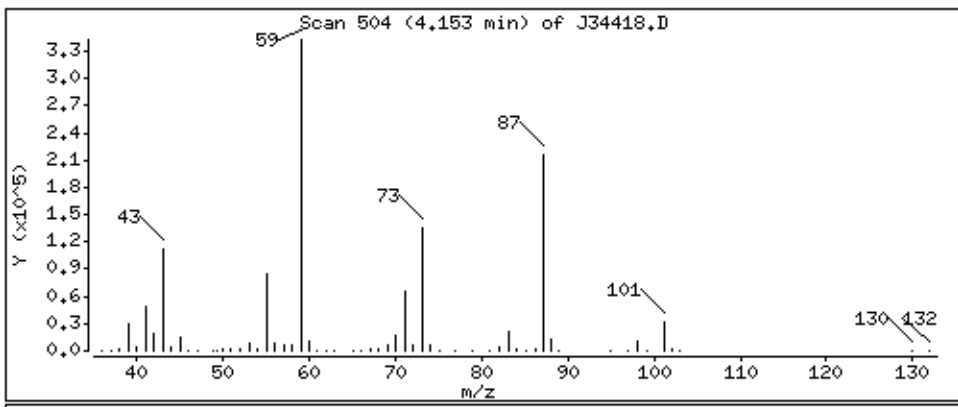
Column phase: RTX-624

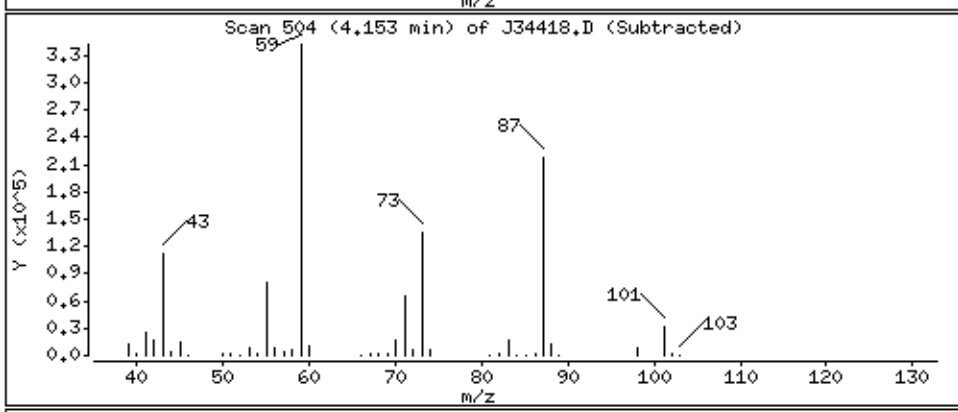
Column diameter: 0.18

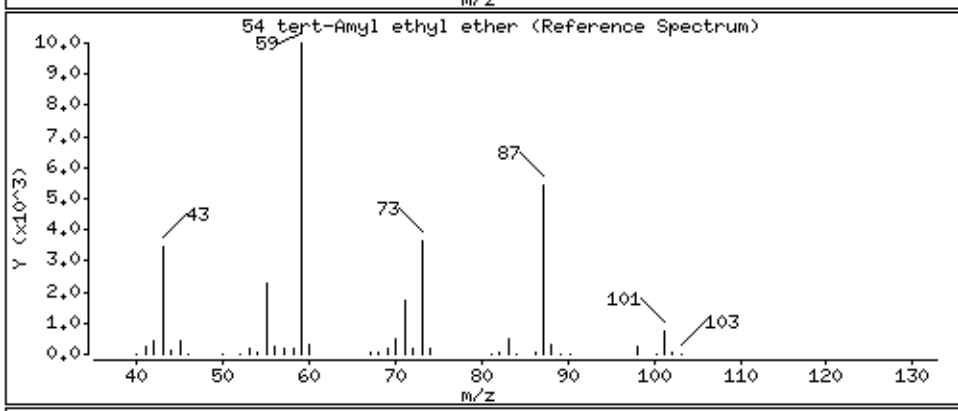
54 tert-Amyl ethyl ether

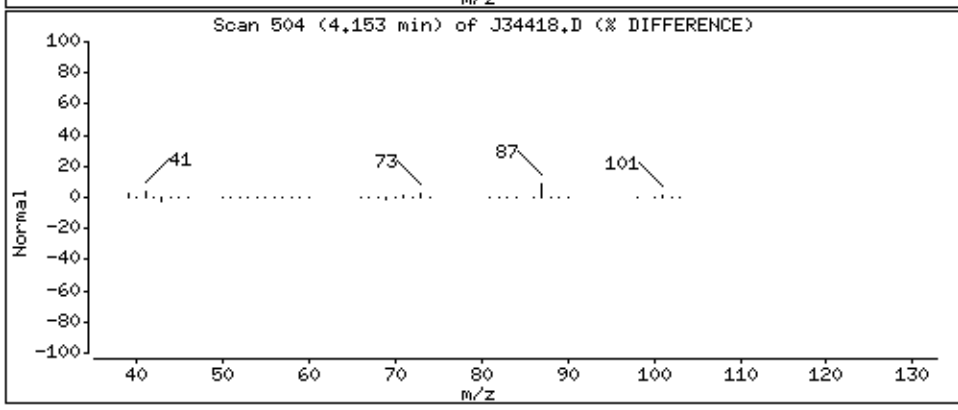
Concentration: 52.3 ug/L

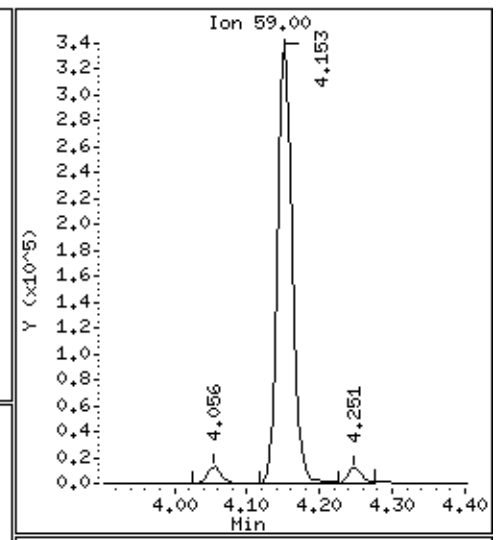
Review Code:

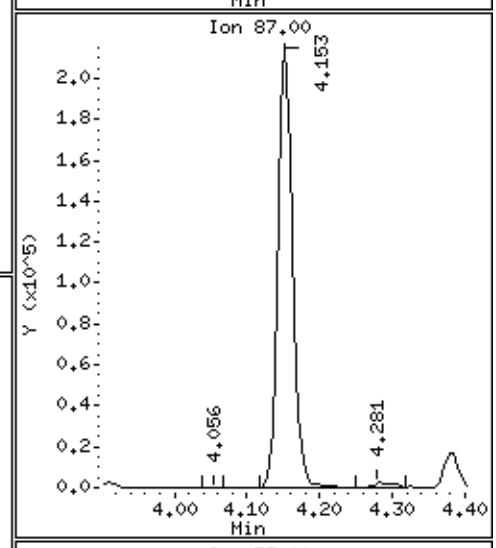


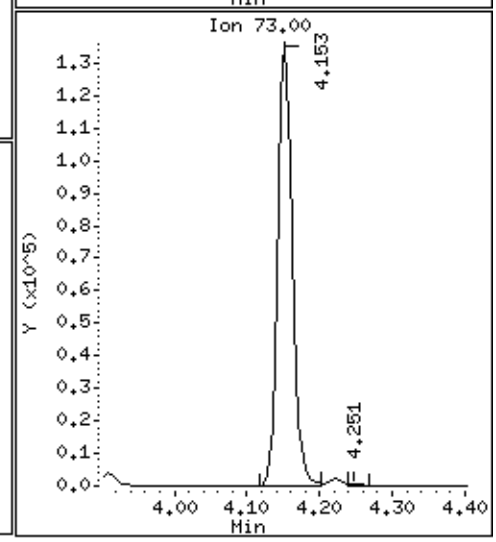












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D

Date : 25-APR-2017 19:25

Client ID: MW-3CMSD

Instrument: 70msv6.i

Sample Info: 103082, 15067:1.25

Purge Volume: 5.0

Operator: KGG

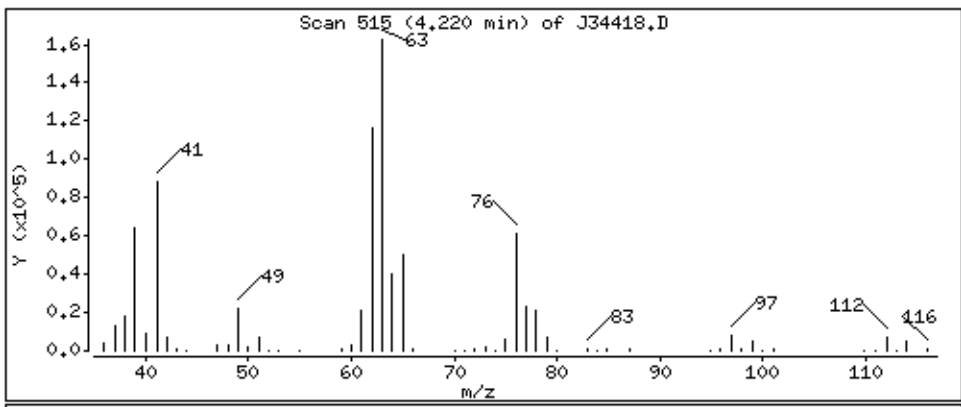
Column phase: RTX-624

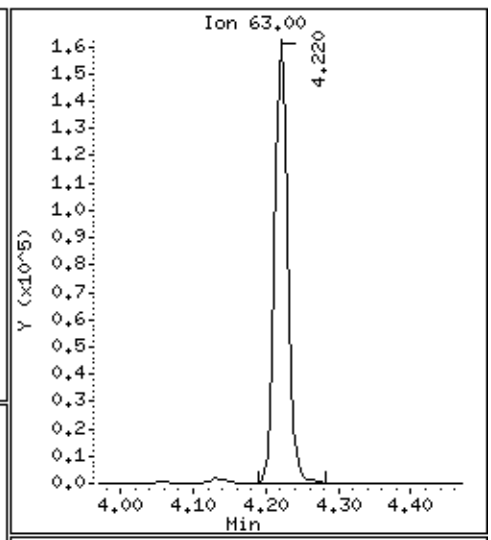
Column diameter: 0.18

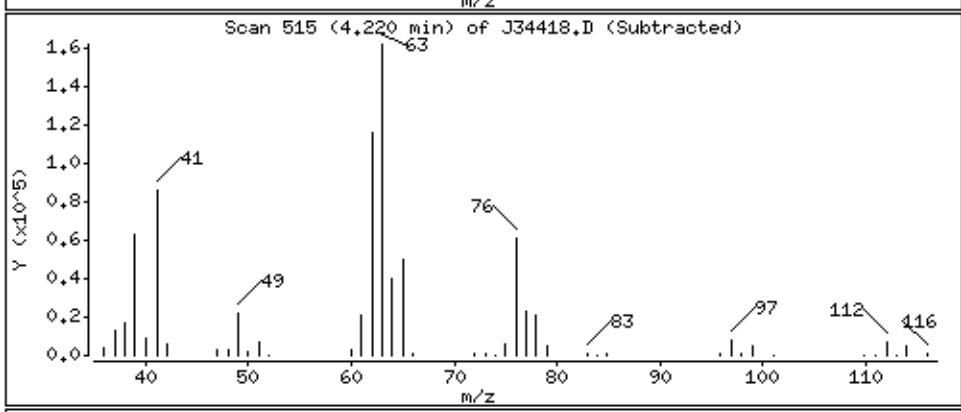
61 1,2-Dichloropropane

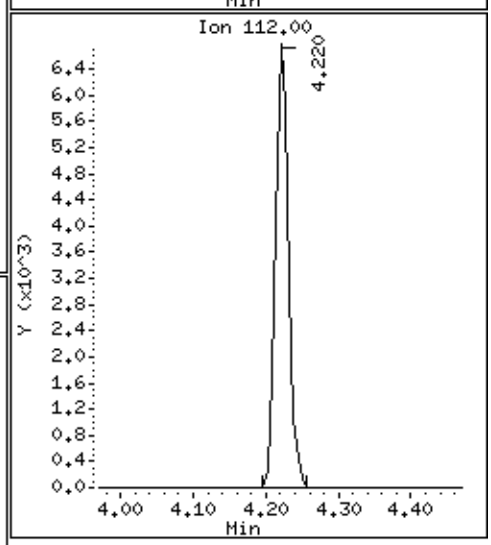
Concentration: 43.0 ug/L

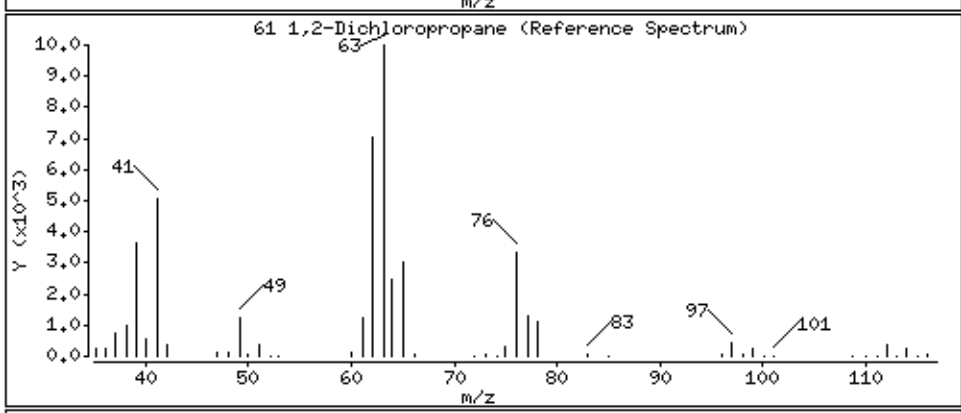
Review Code:

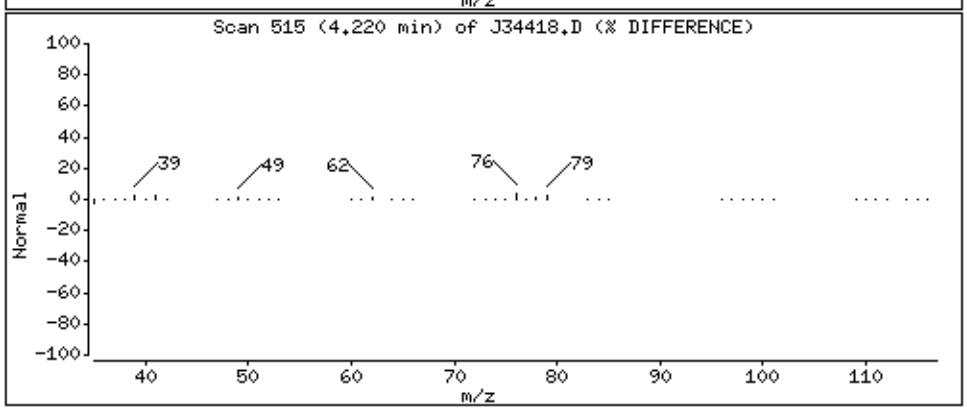












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D

Date : 25-APR-2017 19:25

Client ID: MW-3CMSD

Instrument: 70msv6.i

Sample Info: 103082, 15067:1.25

Purge Volume: 5.0

Operator: KGG

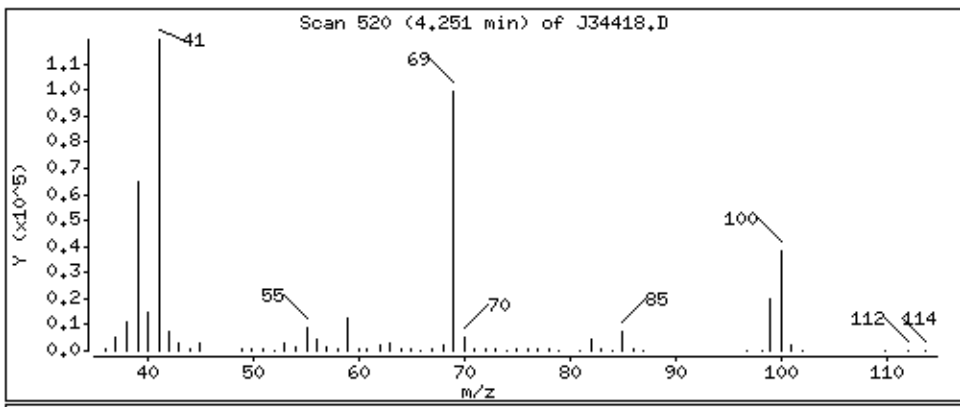
Column phase: RTX-624

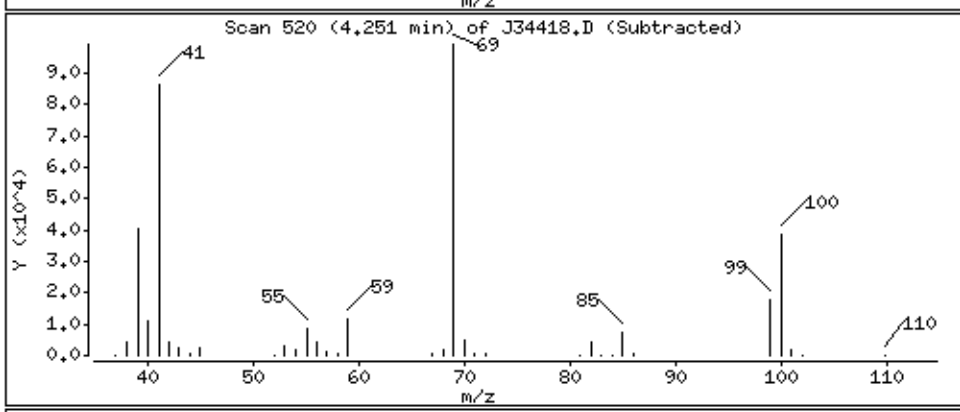
Column diameter: 0.18

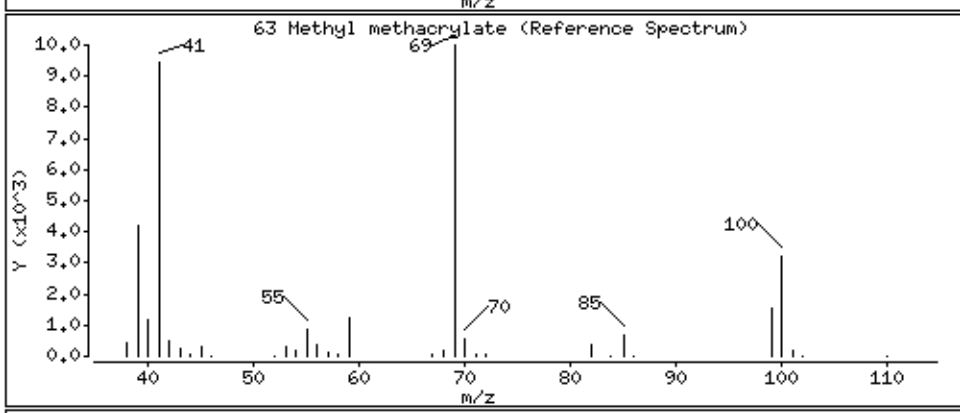
63 Methyl methacrylate

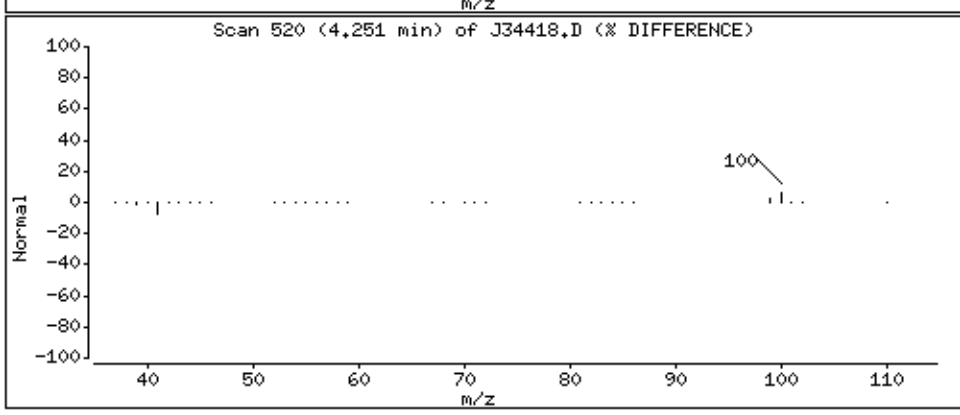
Concentration: 56.6 ug/L

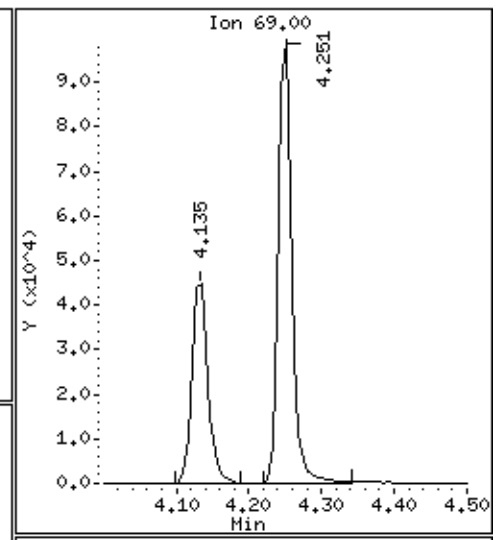
Review Code:

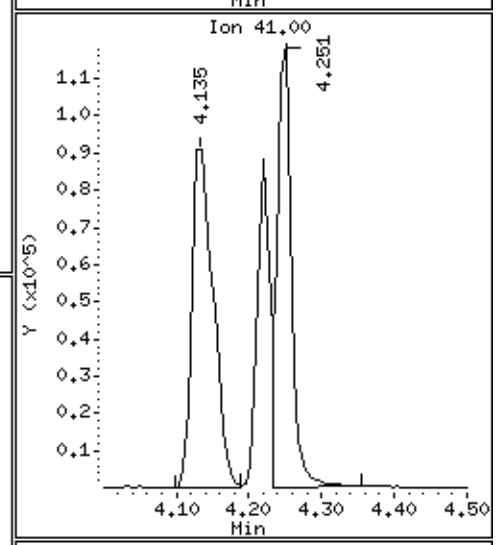


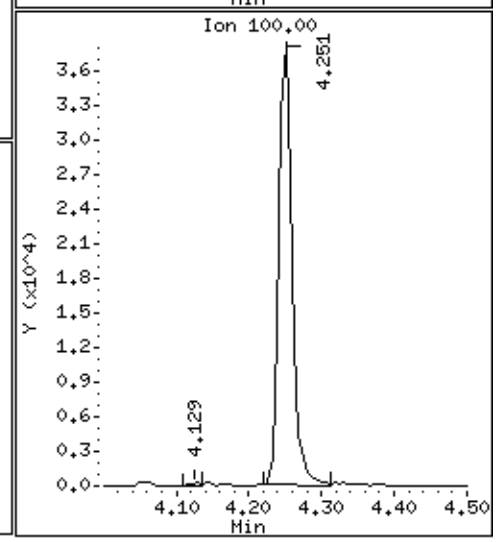












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D

Date : 25-APR-2017 19:25

Client ID: MW-3CMSD

Instrument: 70msv6.i

Sample Info: 103082, 15067:1.25

Purge Volume: 5.0

Operator: KGG

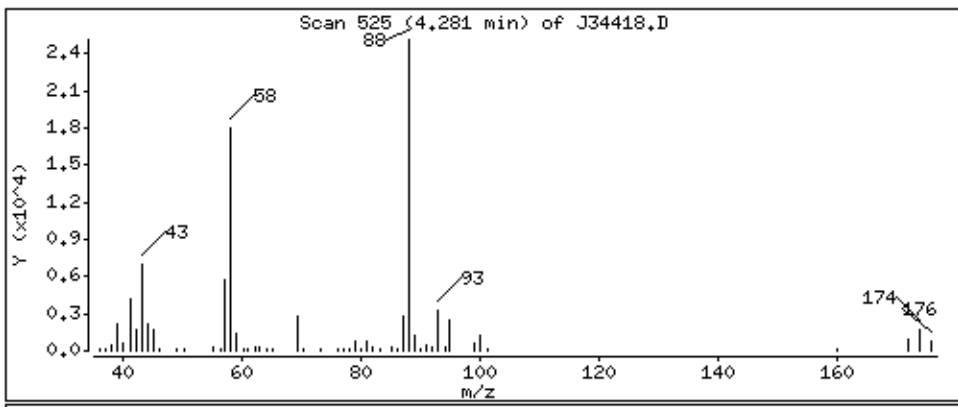
Column phase: RTX-624

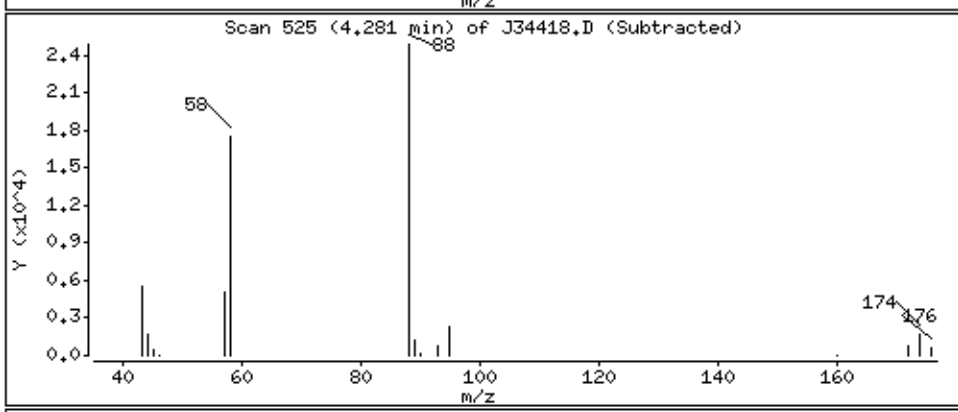
Column diameter: 0.18

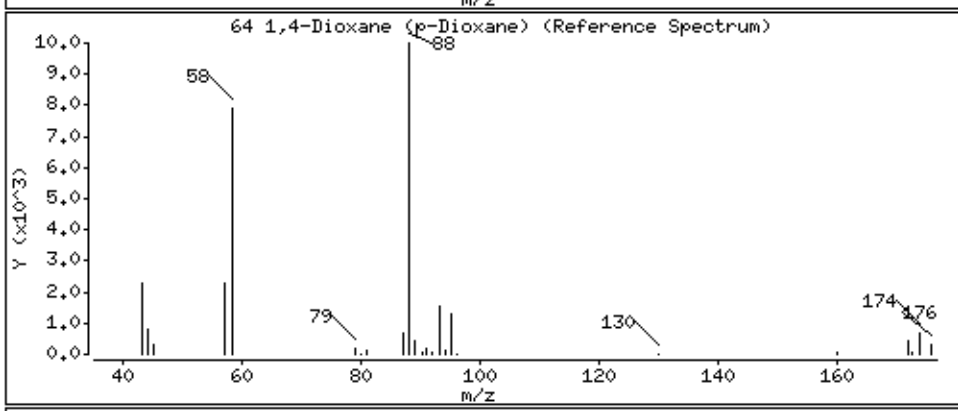
64 1,4-Dioxane (p-Dioxane)

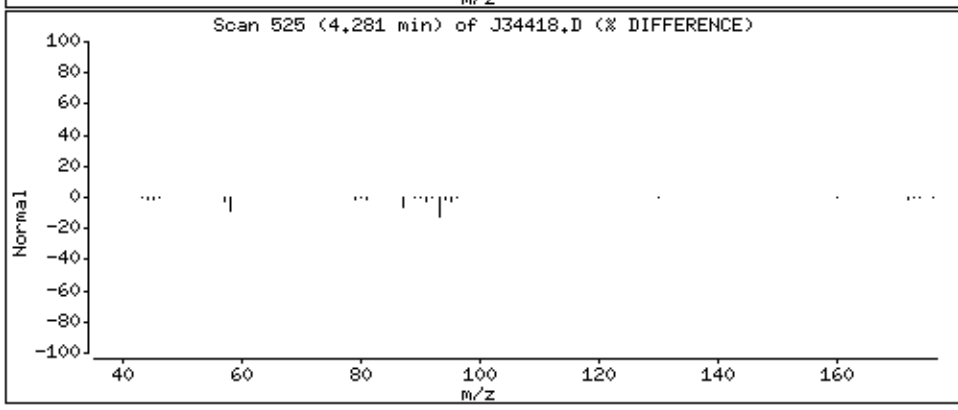
Concentration: 1140 ug/L

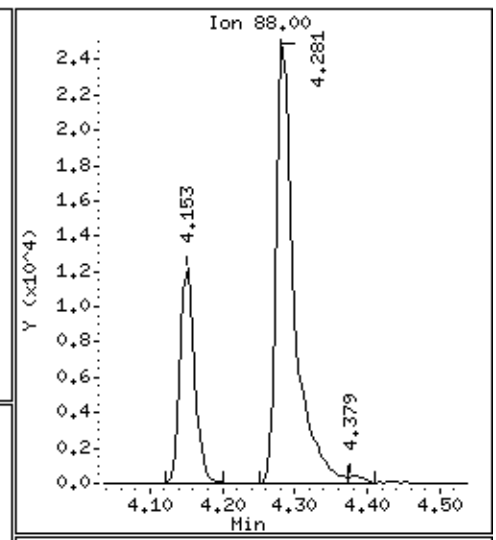
Review Code:

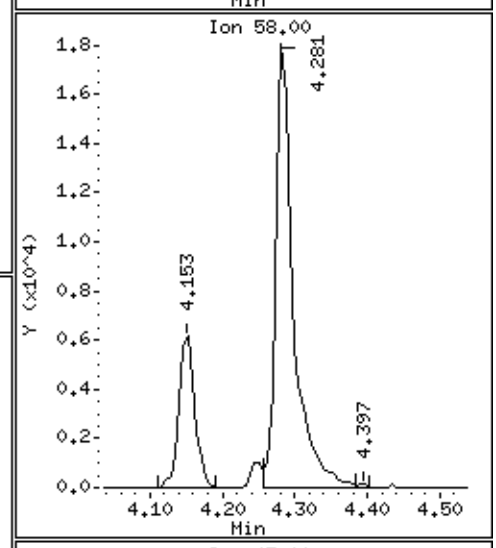


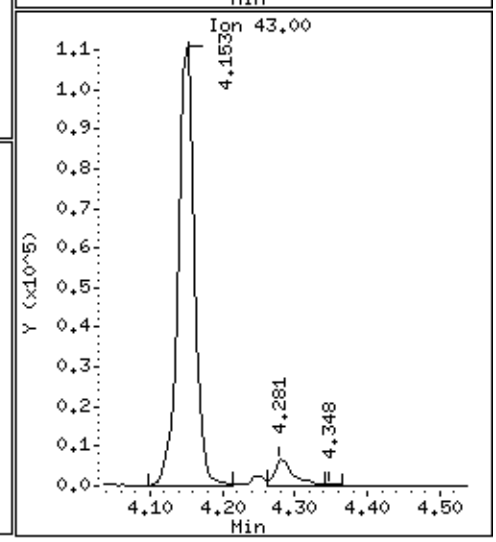












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D

Date : 25-APR-2017 19:25

Client ID: MW-3CMSD

Instrument: 70msv6.i

Sample Info: 103082, 15067:1.25

Purge Volume: 5.0

Operator: KGG

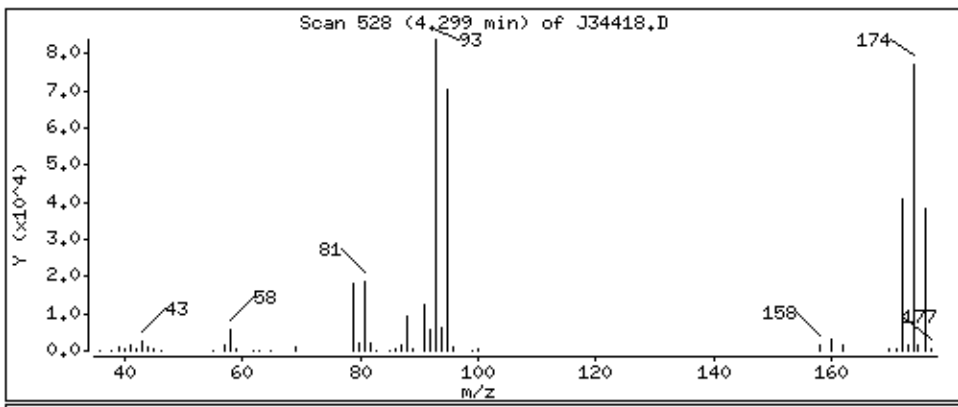
Column phase: RTX-624

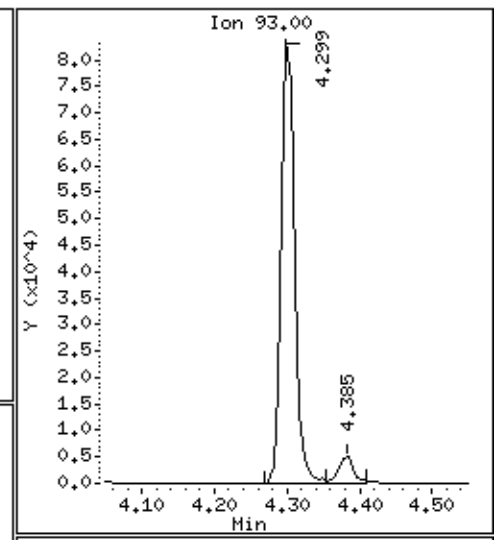
Column diameter: 0.18

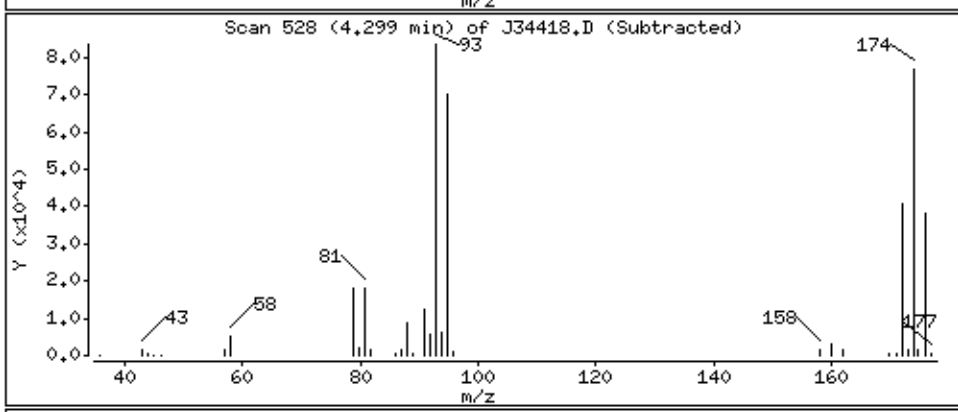
62 Dibromomethane

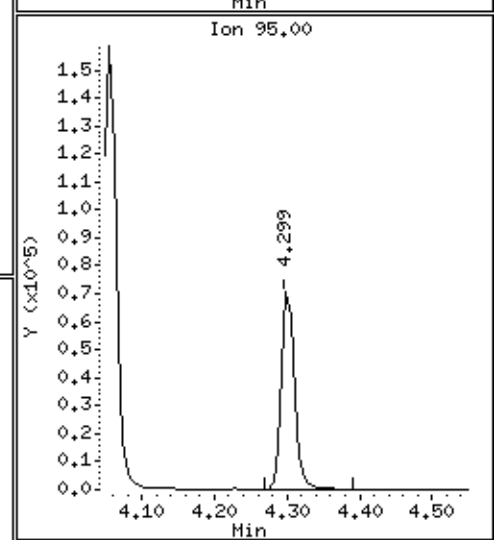
Concentration: 46.6 ug/L

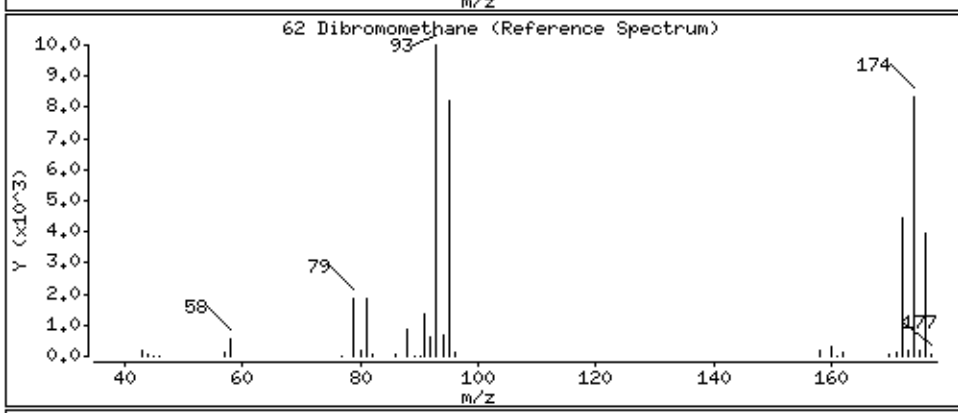
Review Code:

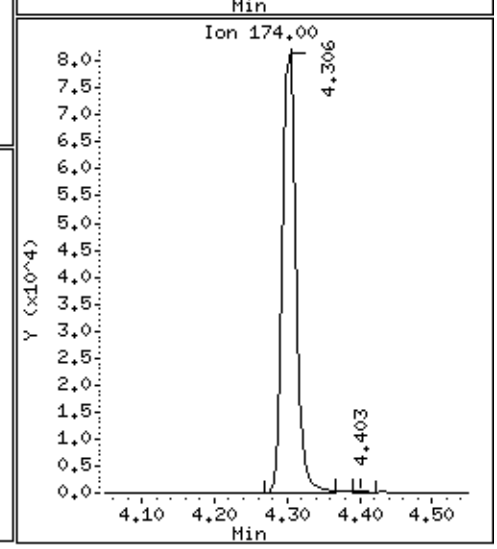


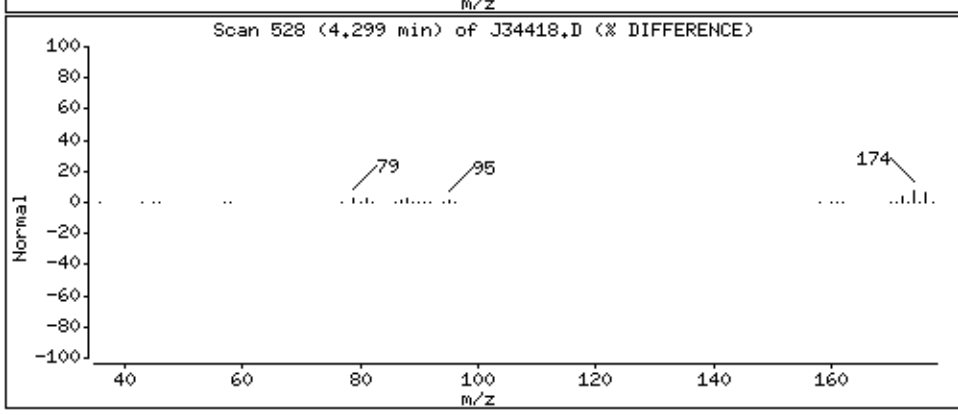












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D

Date : 25-APR-2017 19:25

Client ID: MW-3CMSD

Instrument: 70msv6.i

Sample Info: 103082, 15067:1.25

Purge Volume: 5.0

Operator: KGG

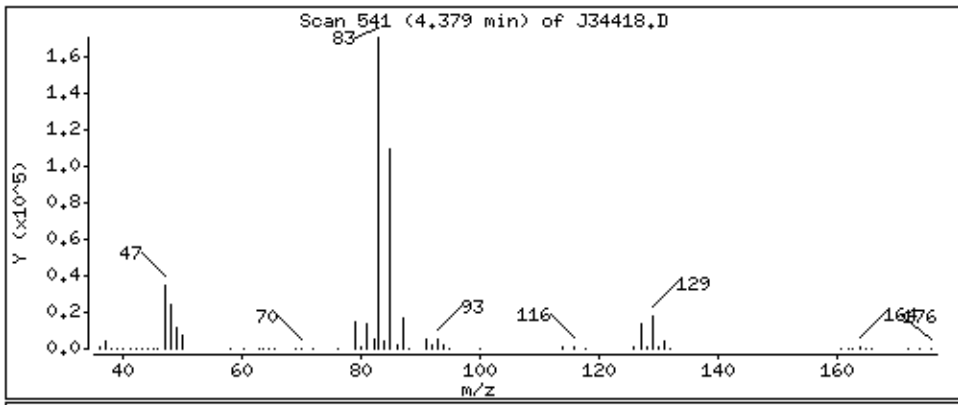
Column phase: RTX-624

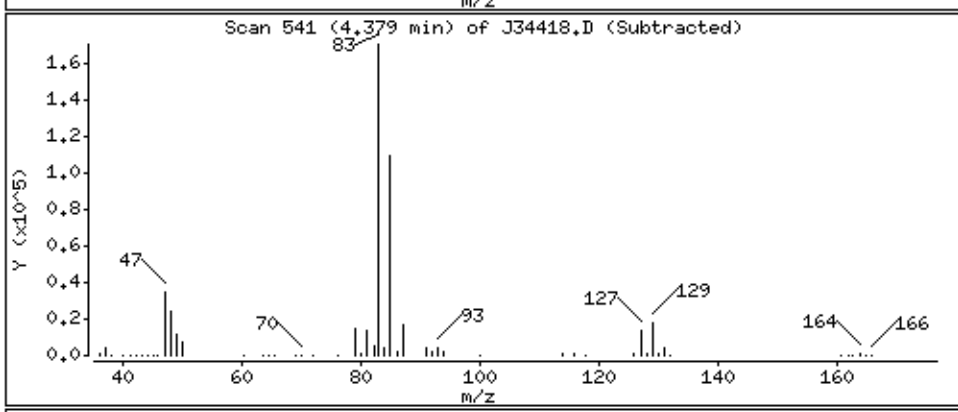
Column diameter: 0.18

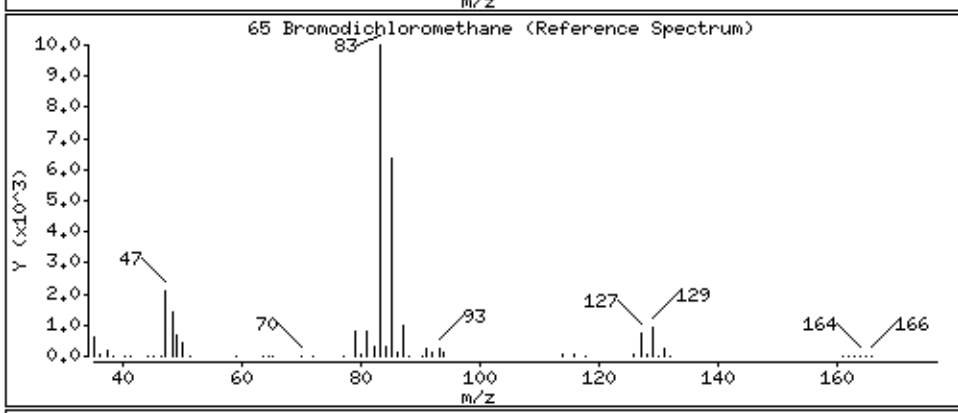
65 Bromodichloromethane

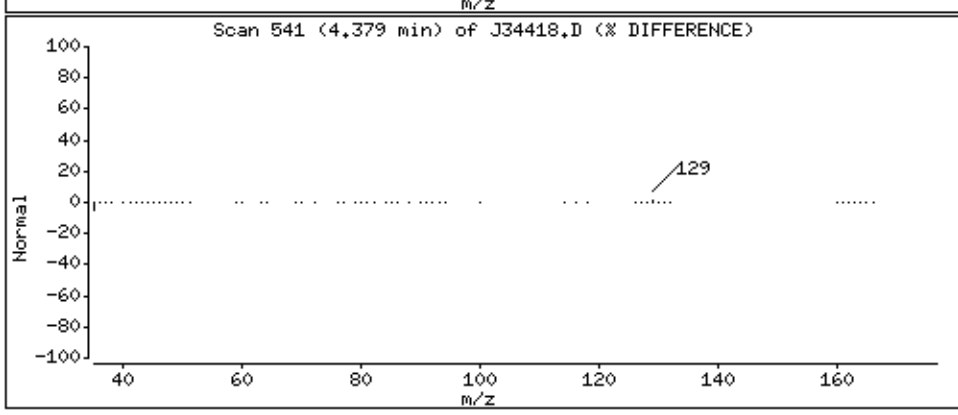
Concentration: 52.2 ug/L

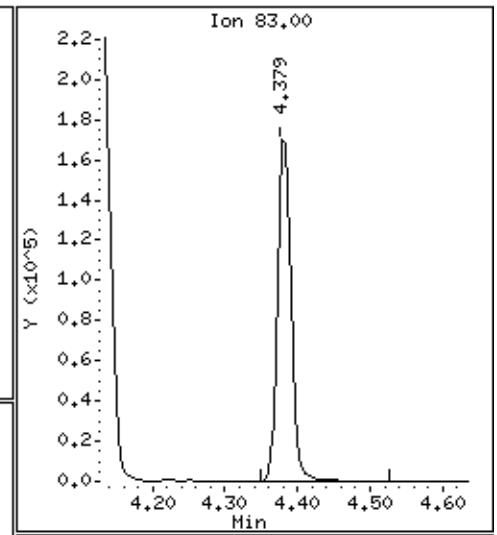
Review Code:

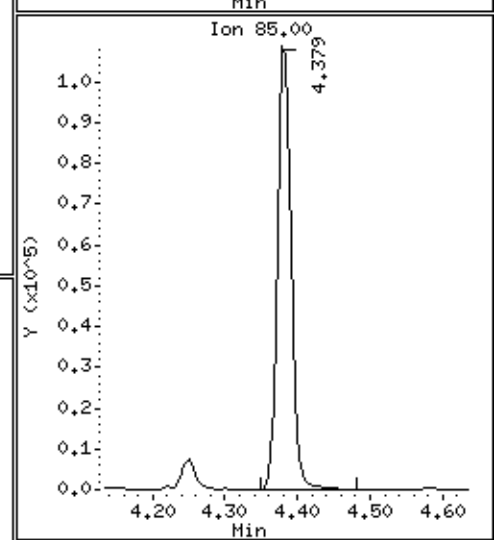


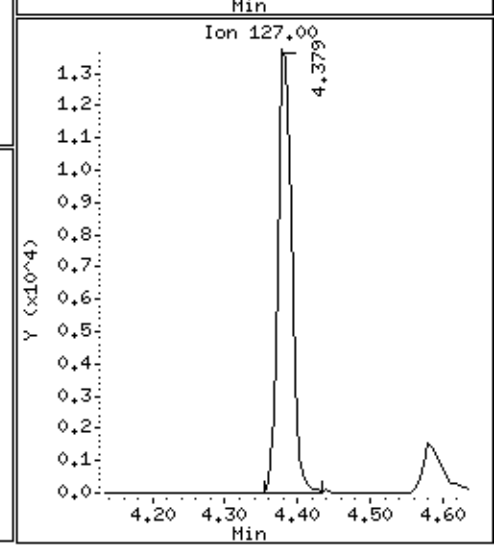












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D

Date : 25-APR-2017 19:25

Client ID: MW-3CMSD

Instrument: 70msv6.i

Sample Info: 103082, 15067:1.25

Purge Volume: 5.0

Operator: KGG

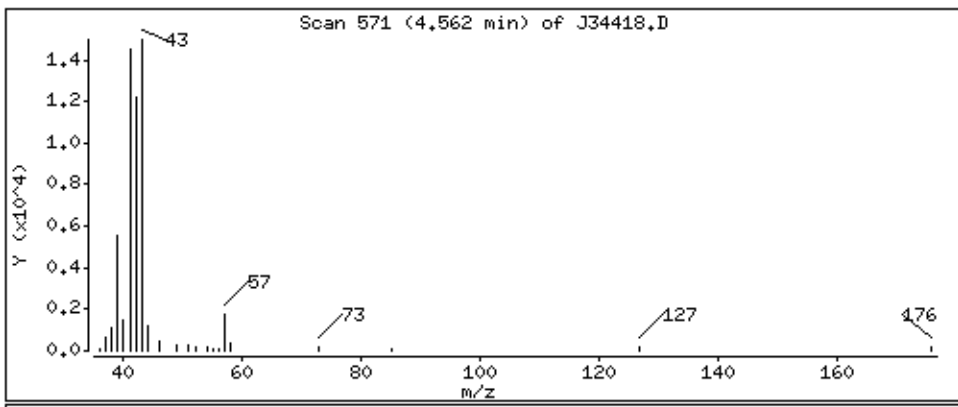
Column phase: RTX-624

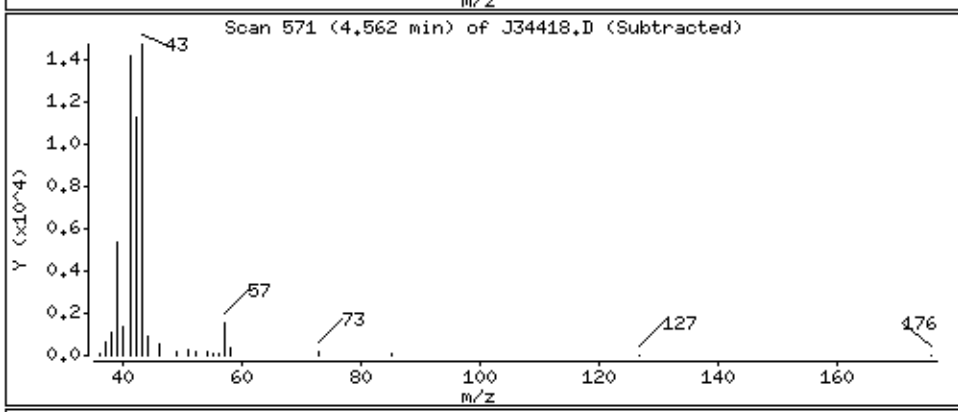
Column diameter: 0.18

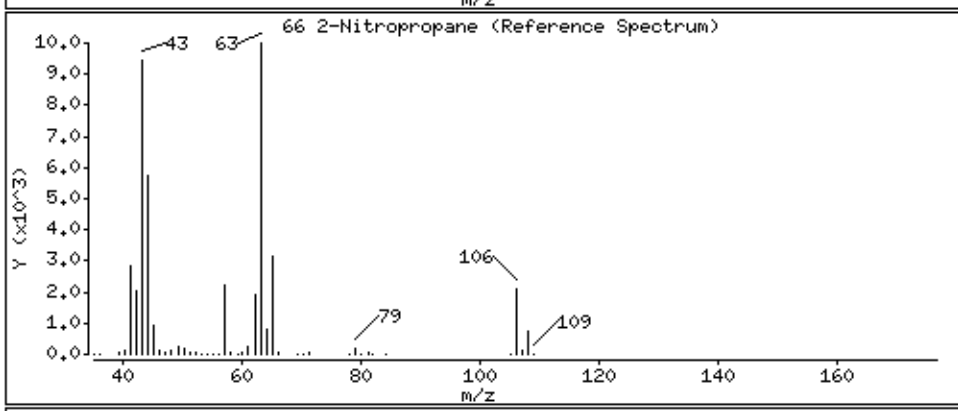
66 2-Nitropropane

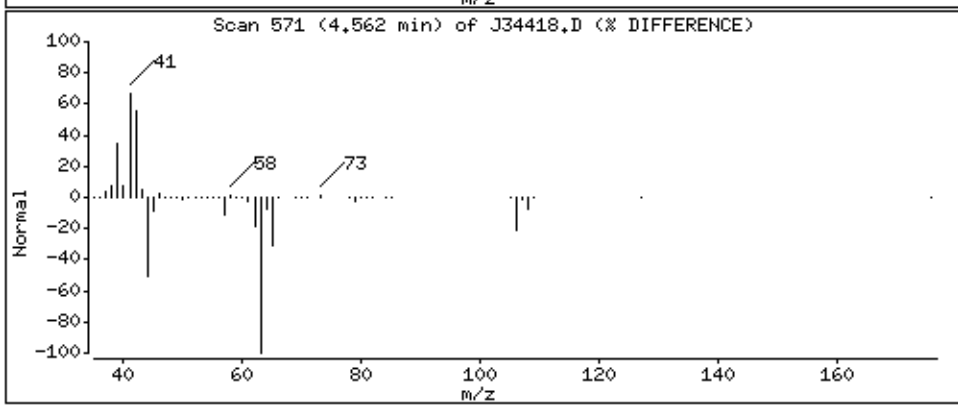
Concentration: 9.89 ug/L

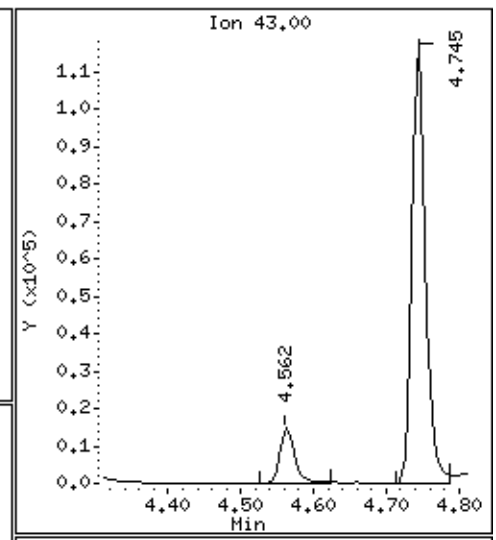
Review Code:

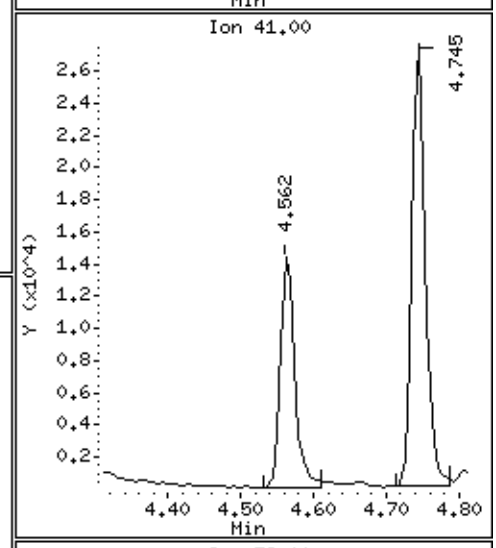


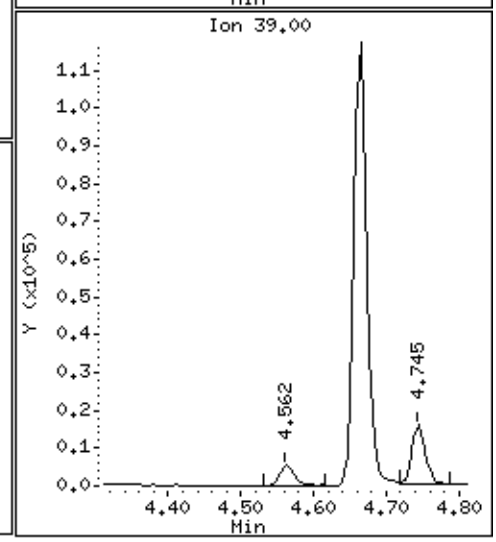












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D

Date : 25-APR-2017 19:25

Client ID: MW-3CMSD

Instrument: 70msv6.i

Sample Info: 103082, 15067:1.25

Purge Volume: 5.0

Operator: KGG

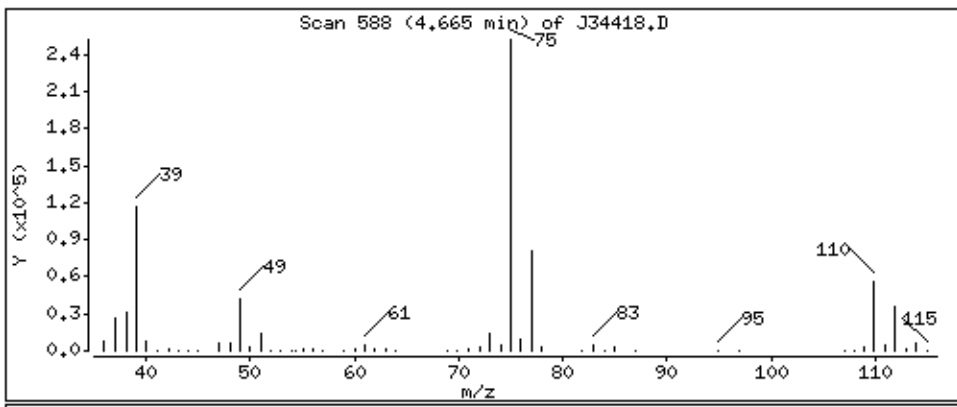
Column phase: RTX-624

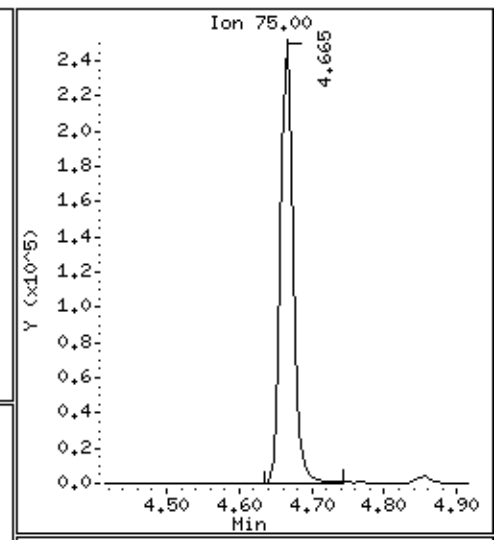
Column diameter: 0.18

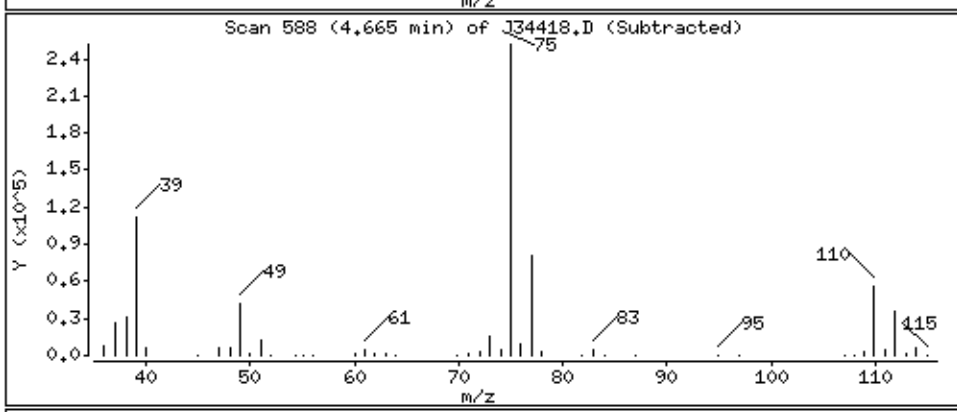
68 cis-1,3-Dichloropropene

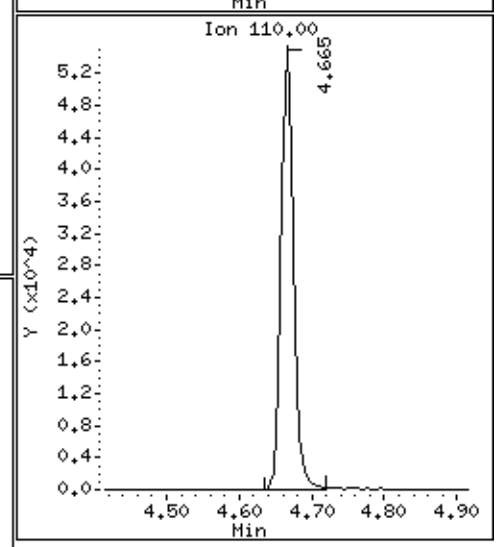
Concentration: 52.4 ug/L

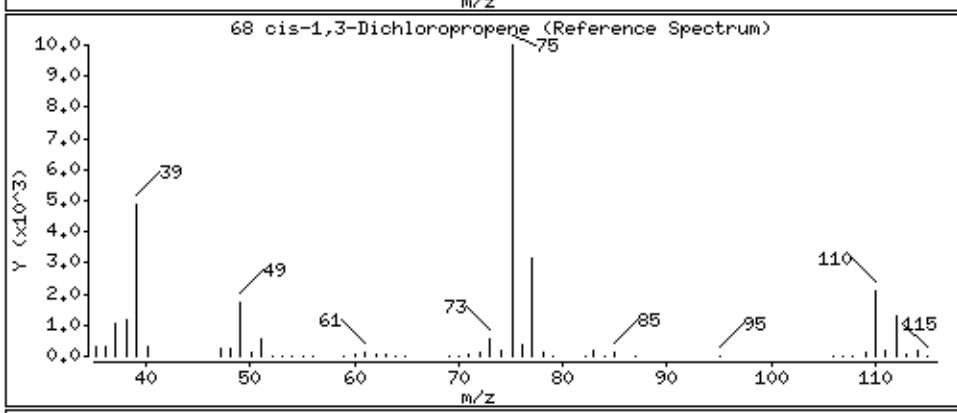
Review Code:

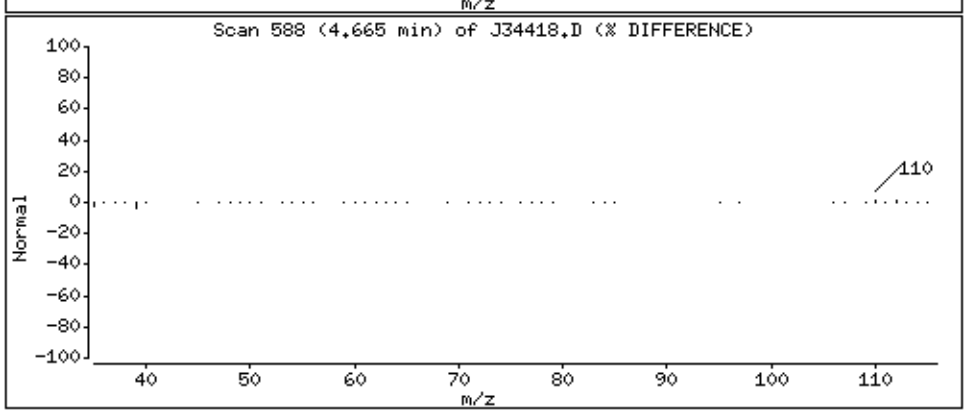












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D

Date : 25-APR-2017 19:25

Client ID: MW-3CMSD

Instrument: 70msv6.i

Sample Info: 103082, 15067:1.25

Purge Volume: 5.0

Operator: KGG

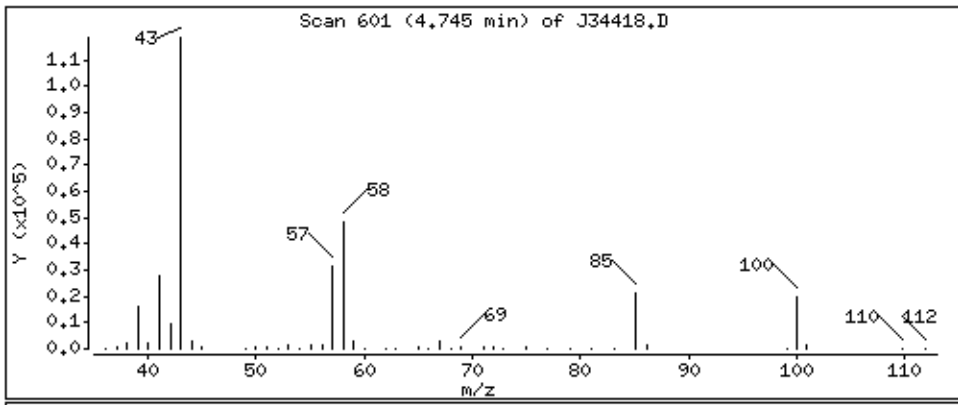
Column phase: RTX-624

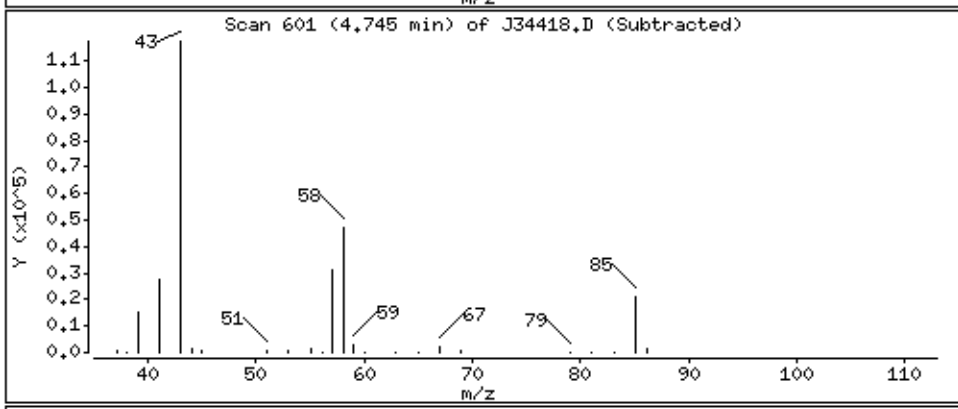
Column diameter: 0.18

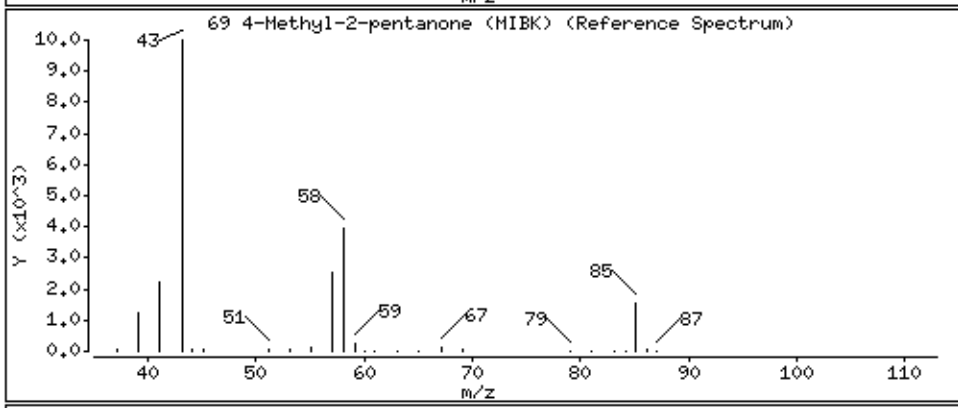
69 4-Methyl-2-pentanone (MIBK)

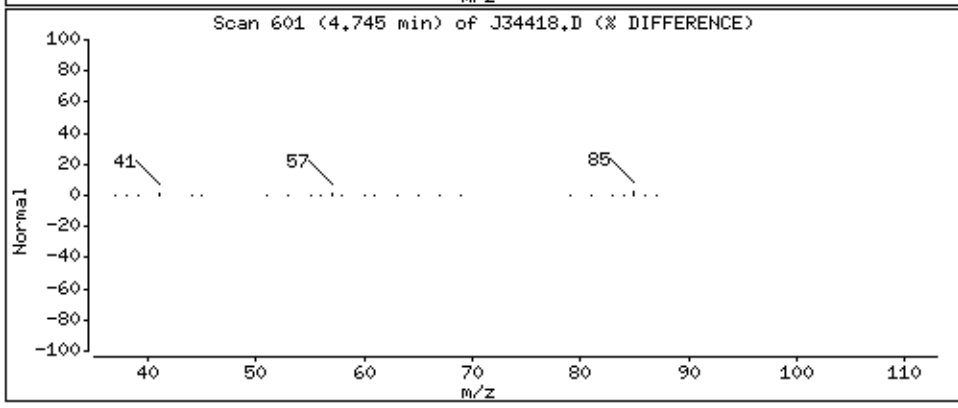
Concentration: 35.7 ug/L

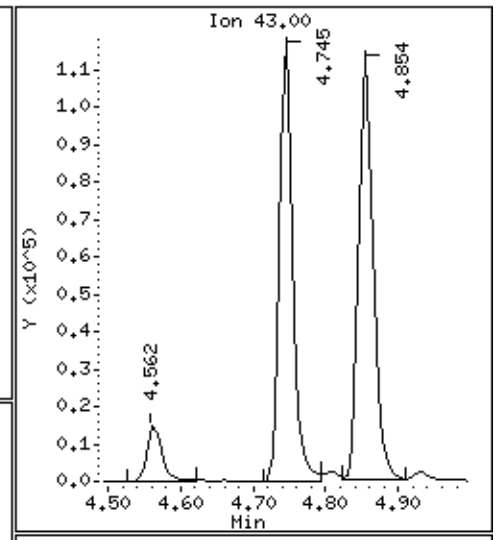
Review Code:

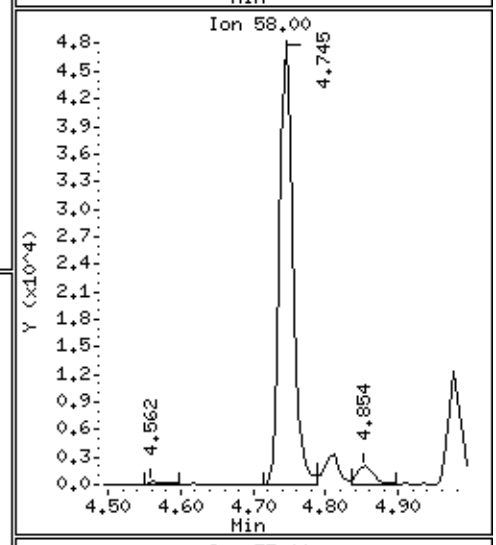


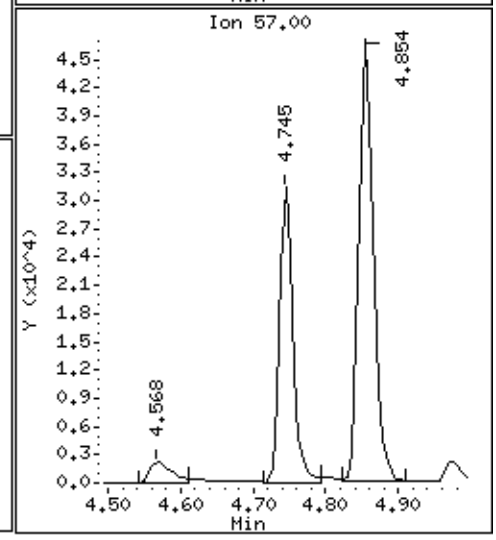












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D

Date : 25-APR-2017 19:25

Client ID: MW-3CMSD

Instrument: 70msv6.i

Sample Info: 103082, 15067:1.25

Purge Volume: 5.0

Operator: KGG

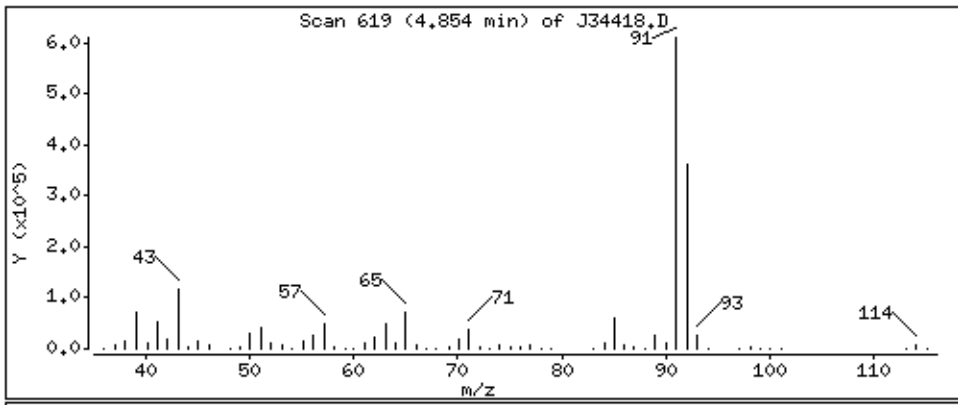
Column phase: RTX-624

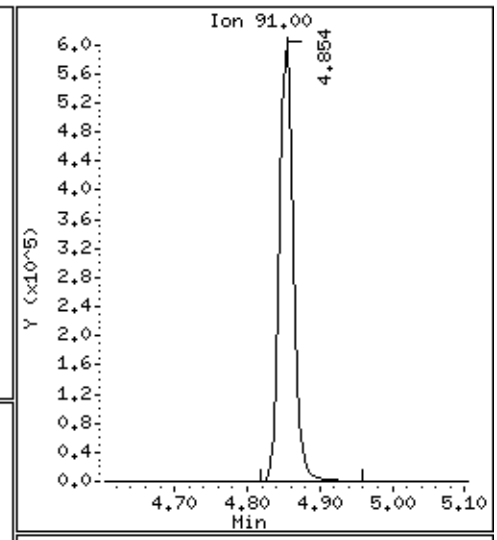
Column diameter: 0.18

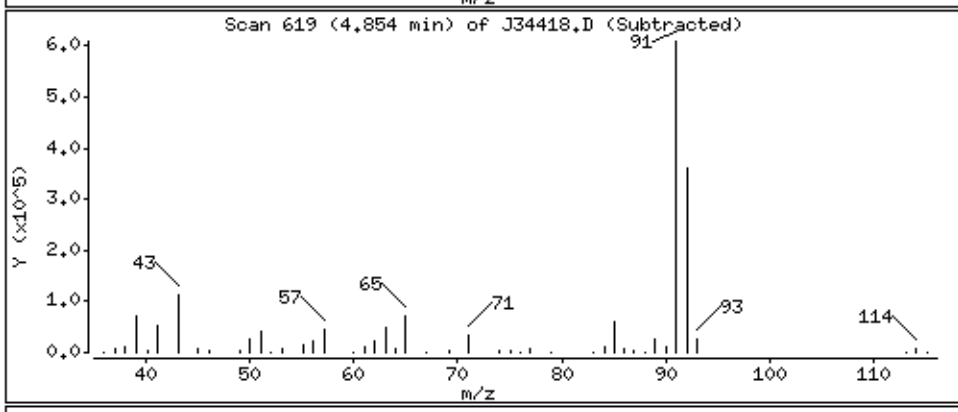
71 Toluene

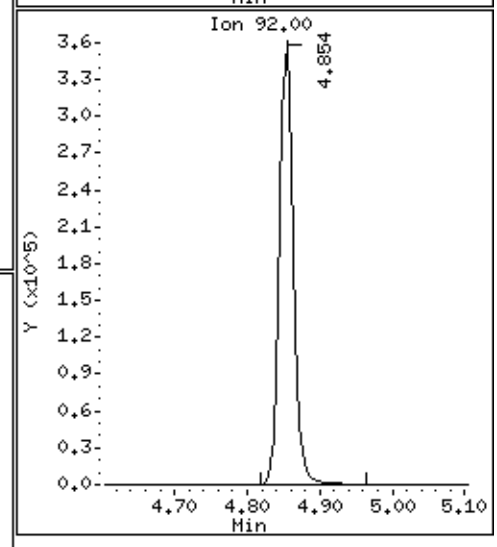
Concentration: 49.8 ug/L

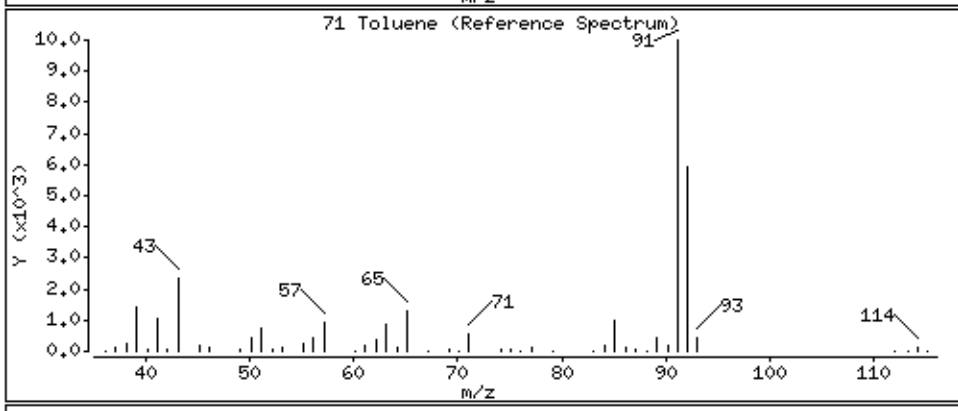
Review Code:

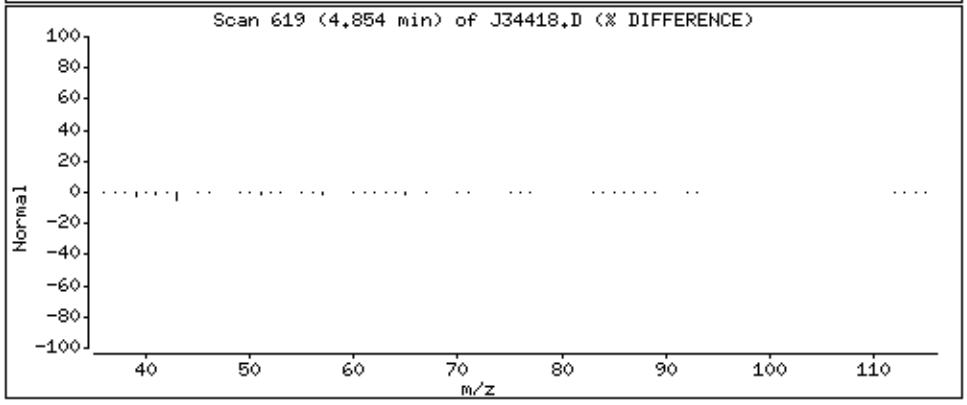












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D

Date : 25-APR-2017 19:25

Client ID: MW-3CMSD

Instrument: 70msv6.i

Sample Info: 103082, 15067:1.25

Purge Volume: 5.0

Operator: KGG

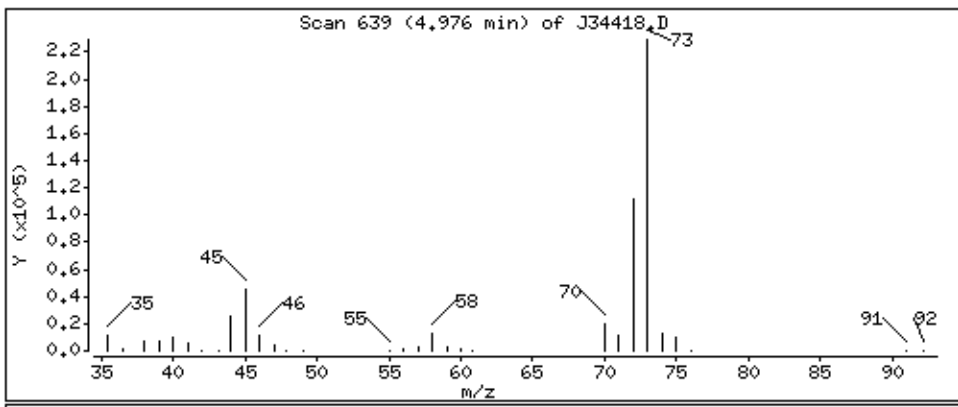
Column phase: RTX-624

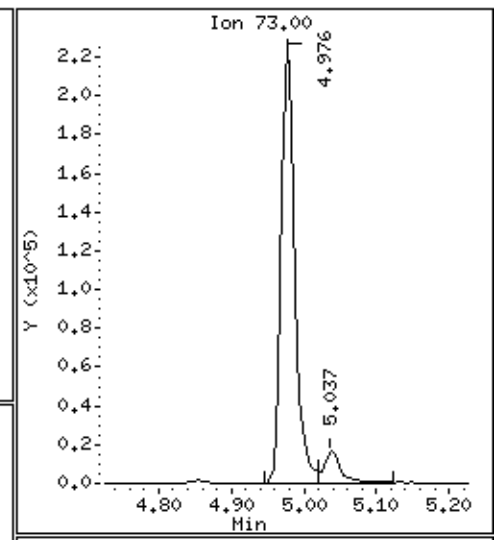
Column diameter: 0.18

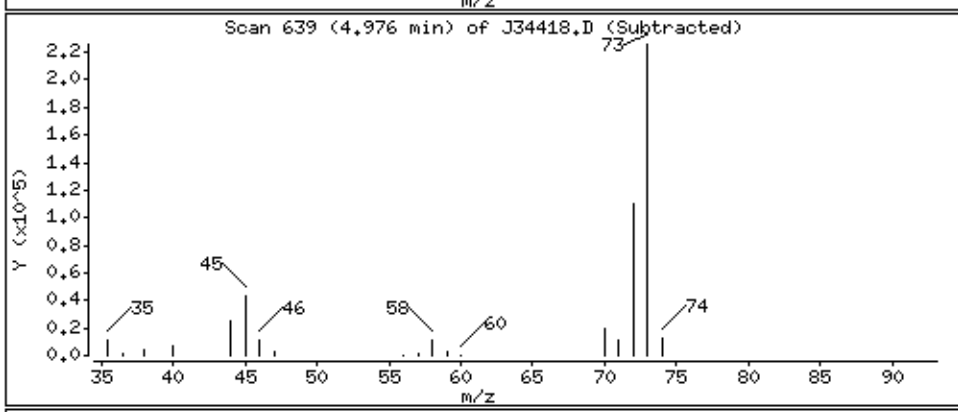
72 Methyl isothiocyanate

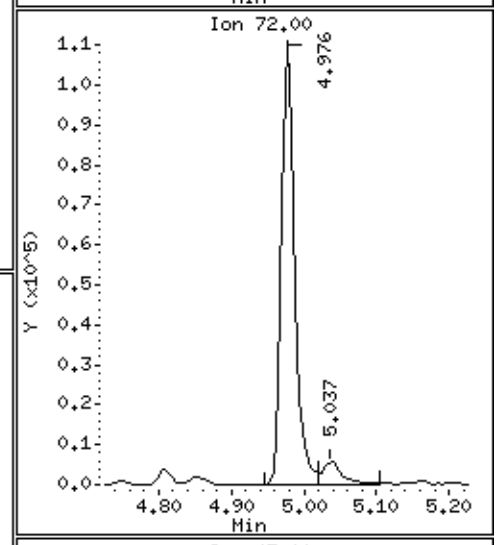
Concentration: 125 ug/L

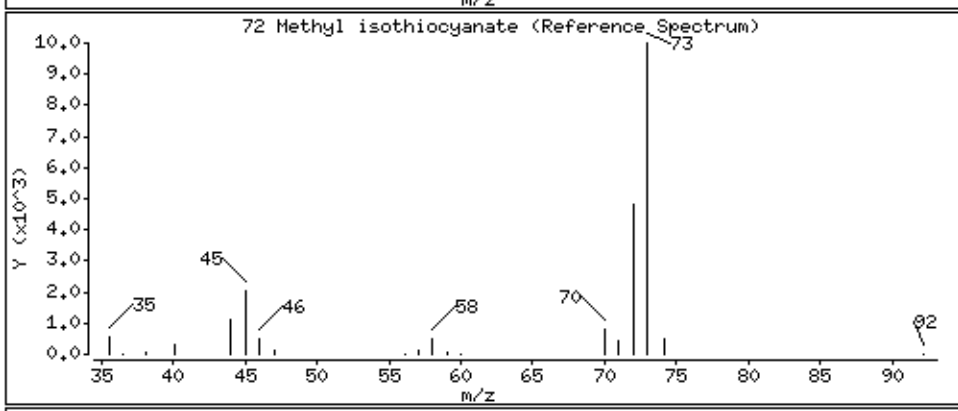
Review Code:

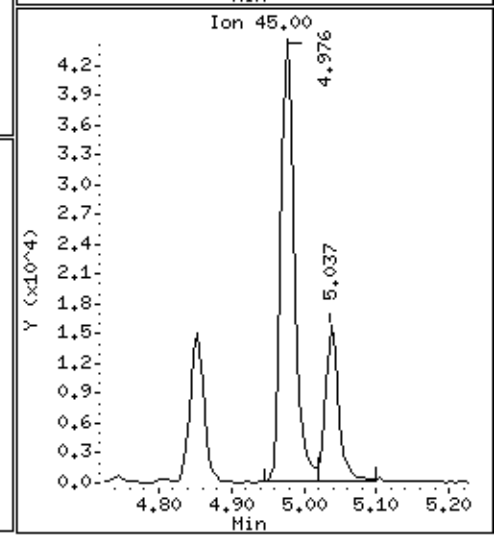


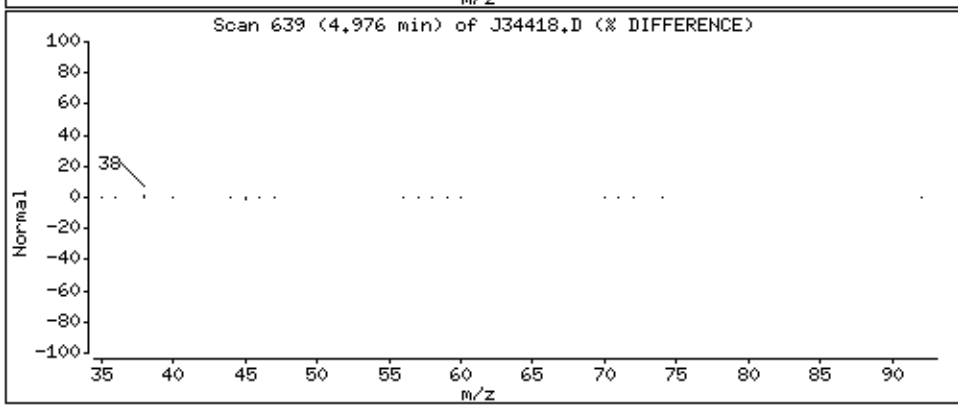












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D

Date : 25-APR-2017 19:25

Client ID: MW-3CMSD

Instrument: 70msv6.i

Sample Info: 103082, 15067:1.25

Purge Volume: 5.0

Operator: KGG

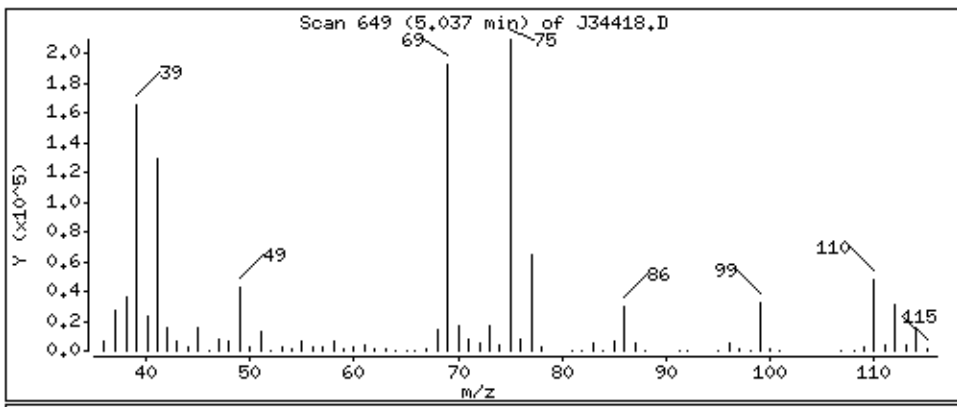
Column phase: RTX-624

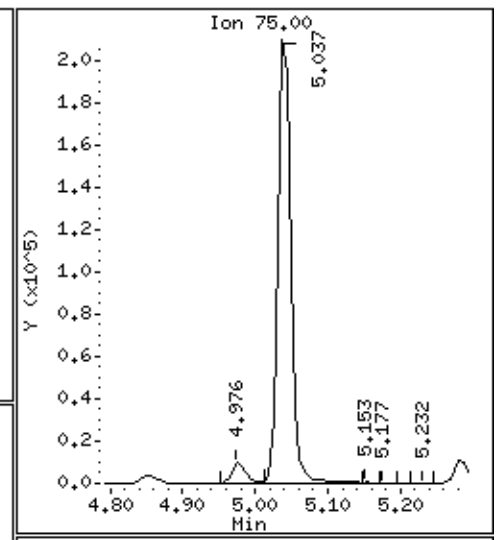
Column diameter: 0.18

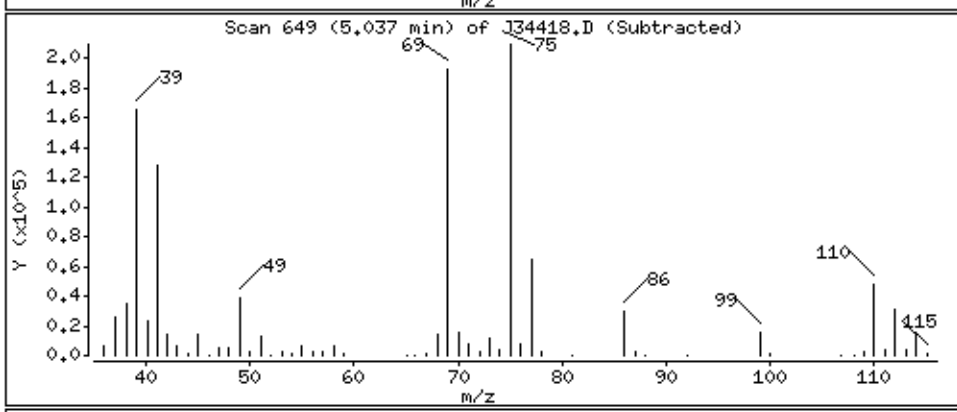
74 trans-1,3-Dichloropropene

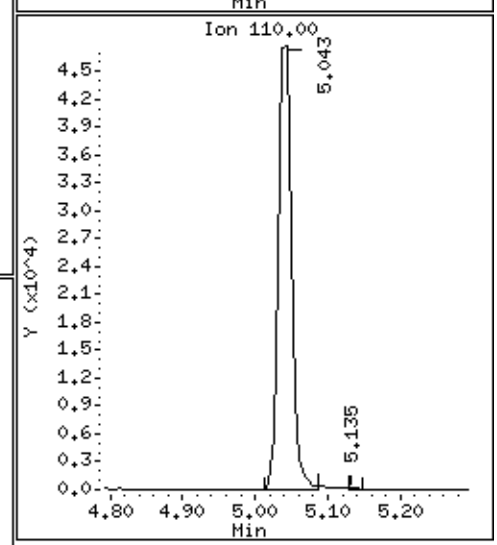
Concentration: 46.3 ug/L

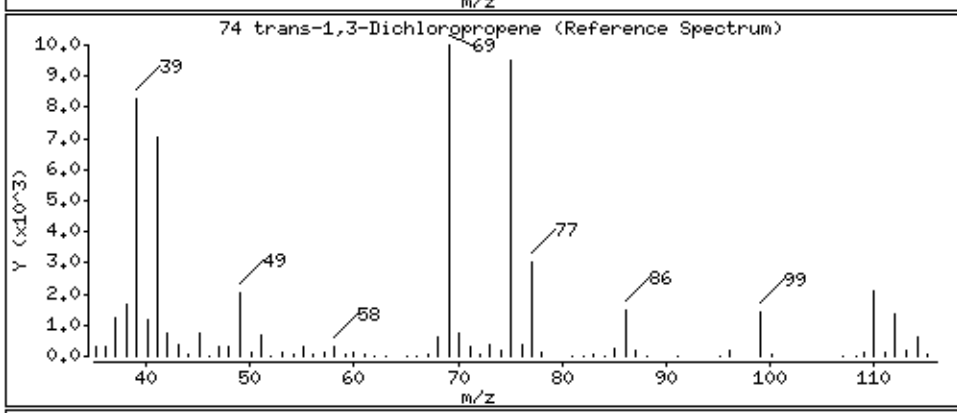
Review Code:

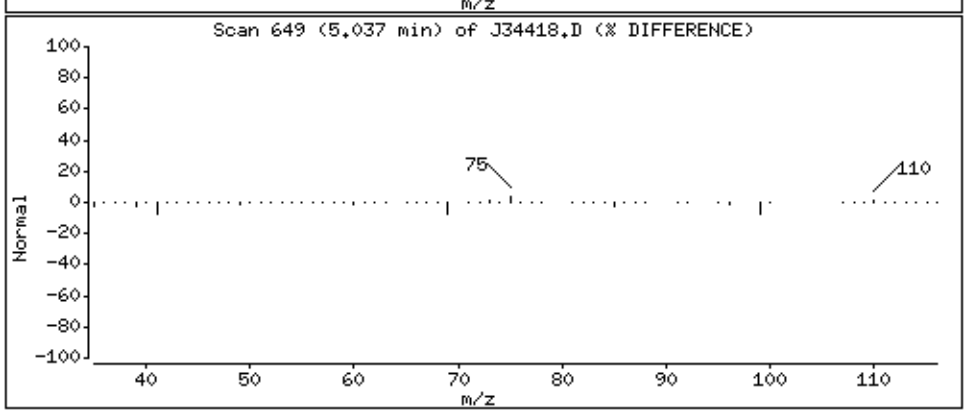












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D

Date : 25-APR-2017 19:25

Client ID: MW-3CMSD

Instrument: 70msv6.i

Sample Info: 103082, 15067:1.25

Purge Volume: 5.0

Operator: KGG

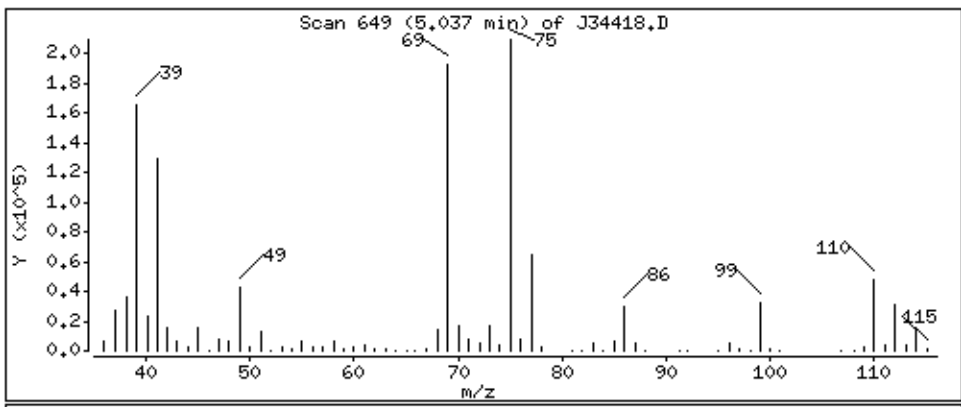
Column phase: RTX-624

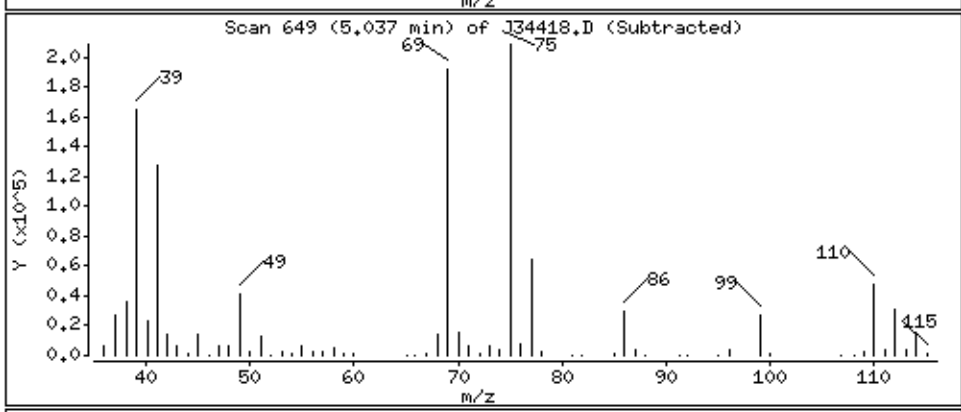
Column diameter: 0.18

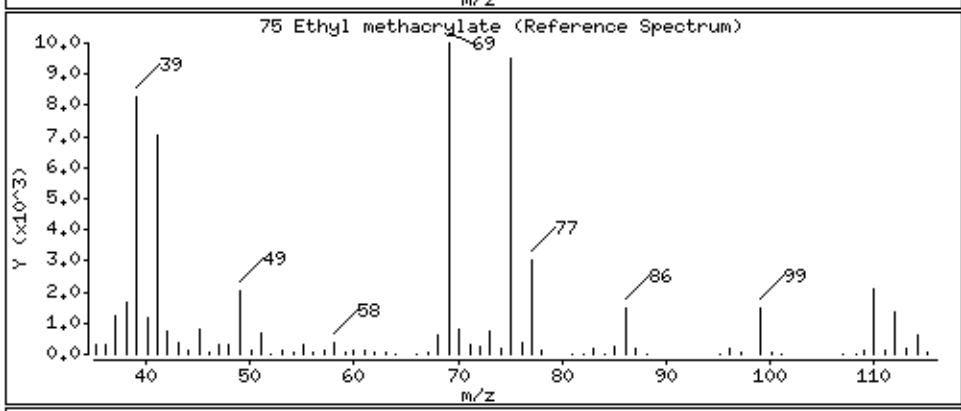
75 Ethyl methacrylate

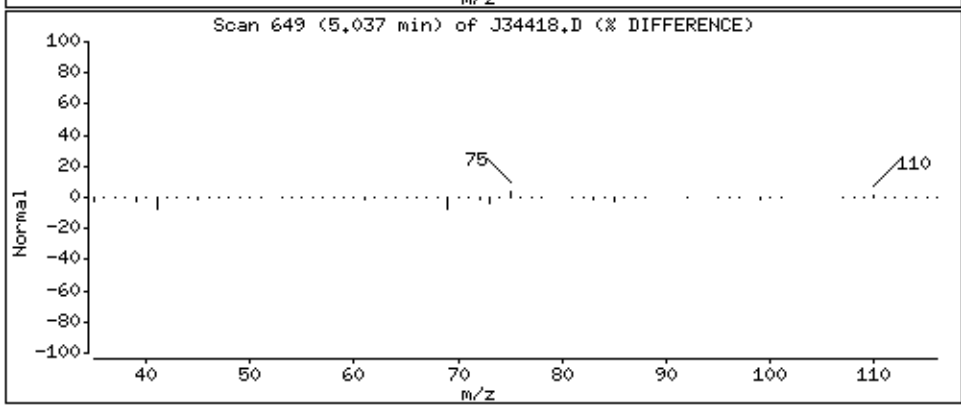
Concentration: 49.5 ug/L

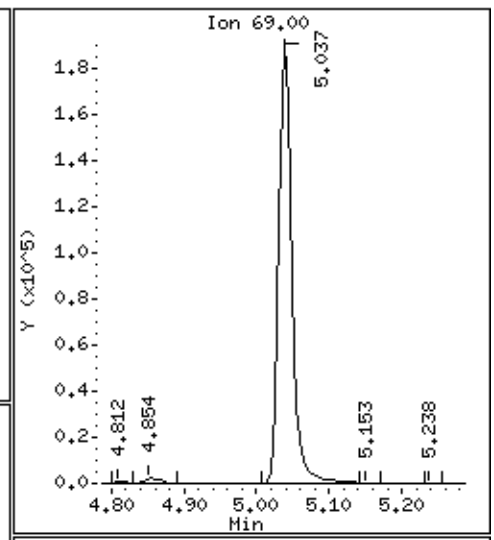
Review Code:

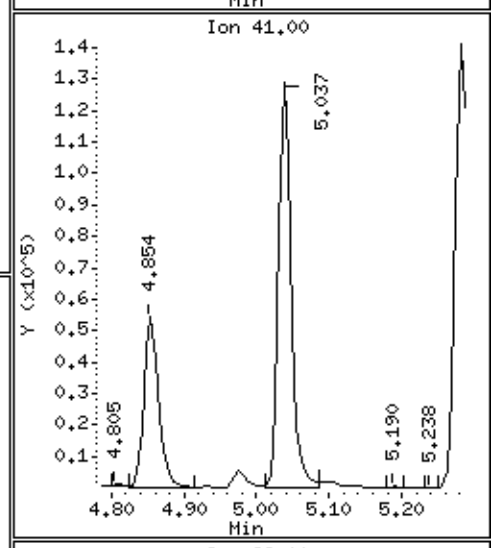


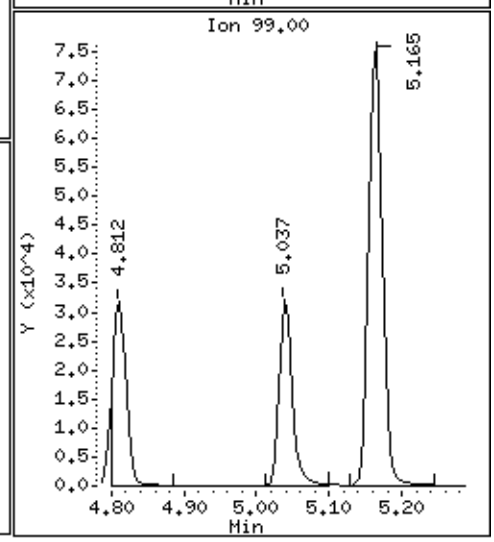












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D

Date : 25-APR-2017 19:25

Client ID: MW-3CMSD

Instrument: 70msv6.i

Sample Info: 103082, 15067:1.25

Purge Volume: 5.0

Operator: KGG

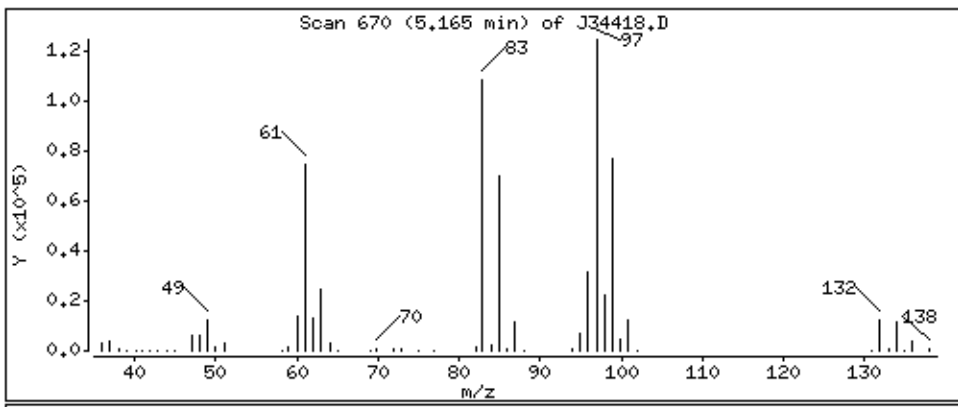
Column phase: RTX-624

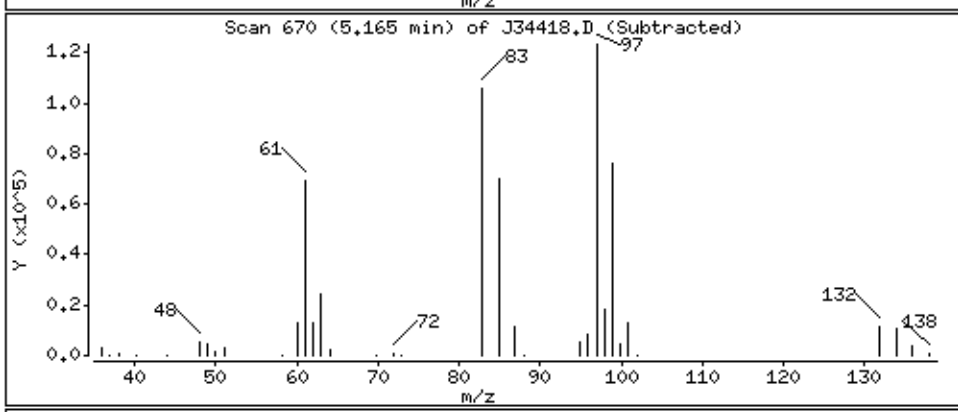
Column diameter: 0.18

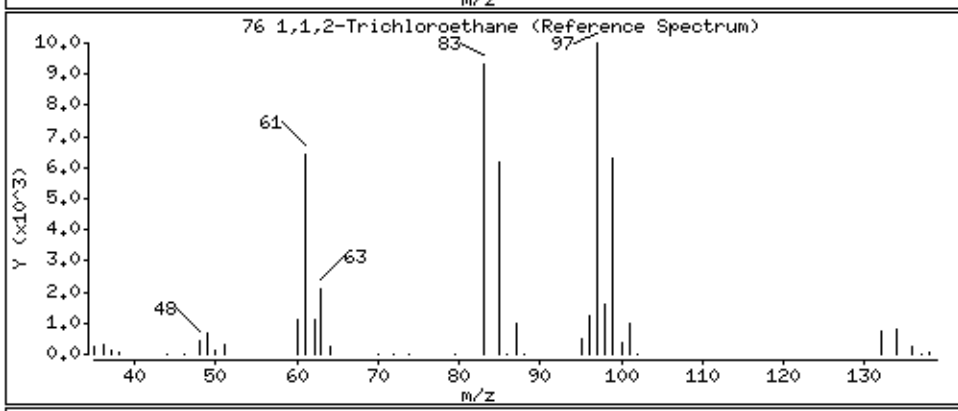
76 1,1,2-Trichloroethane

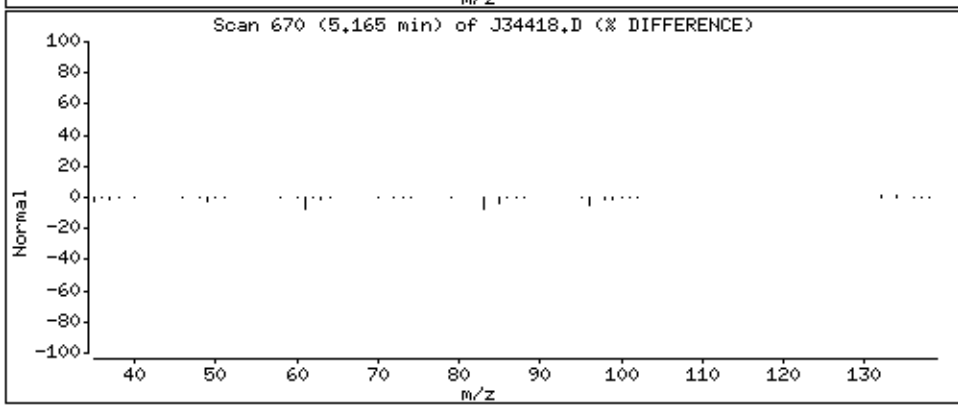
Concentration: 47.9 ug/L

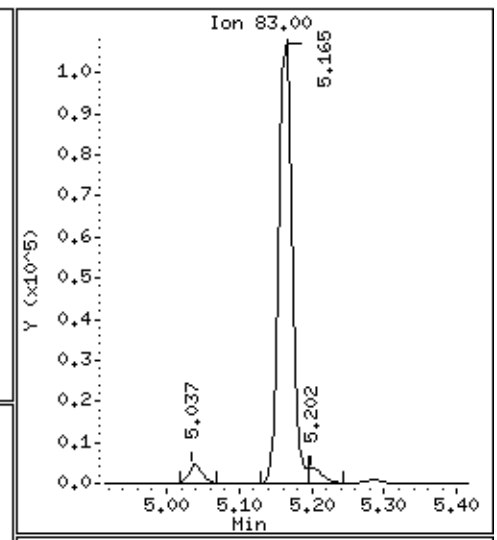
Review Code:

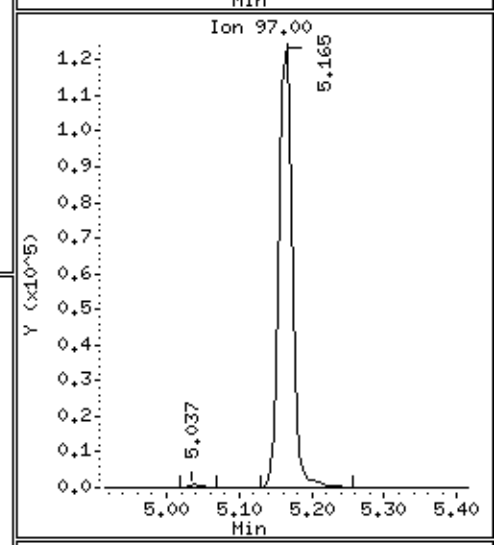


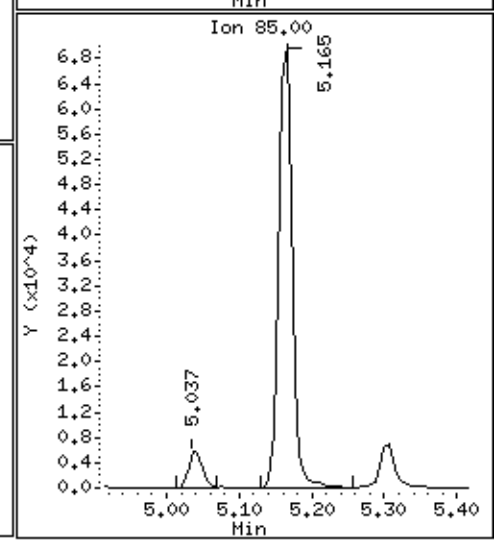












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D

Date : 25-APR-2017 19:25

Client ID: MW-3CMSD

Instrument: 70msv6.i

Sample Info: 103082, 15067:1.25

Purge Volume: 5.0

Operator: KGG

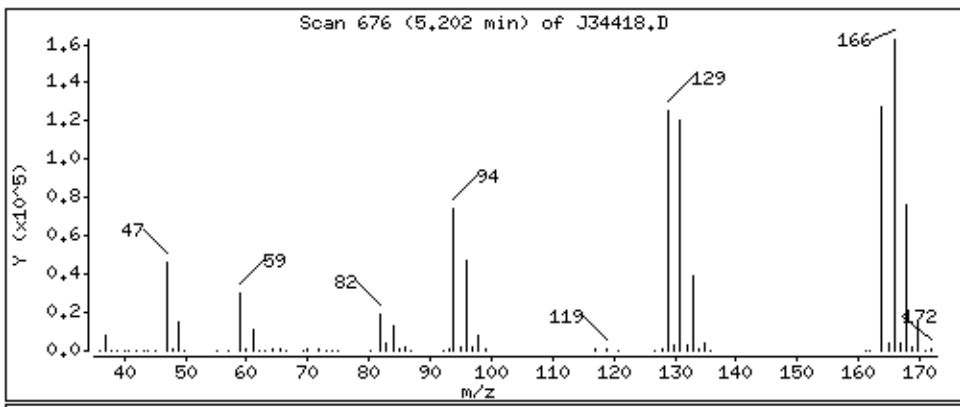
Column phase: RTX-624

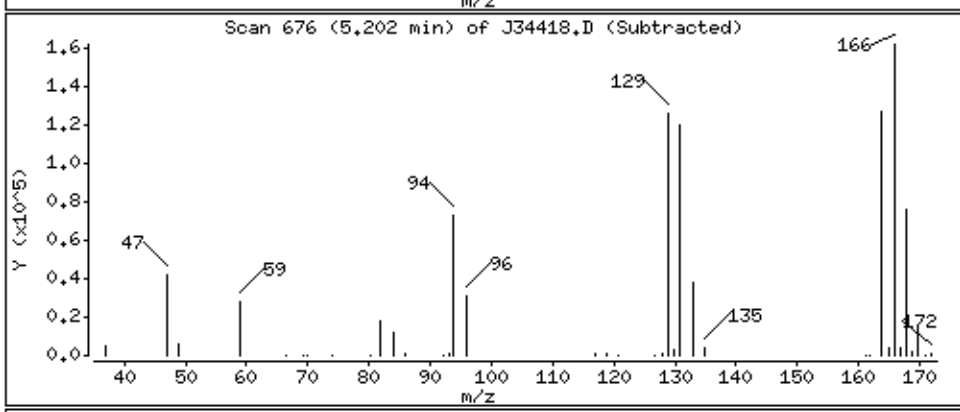
Column diameter: 0.18

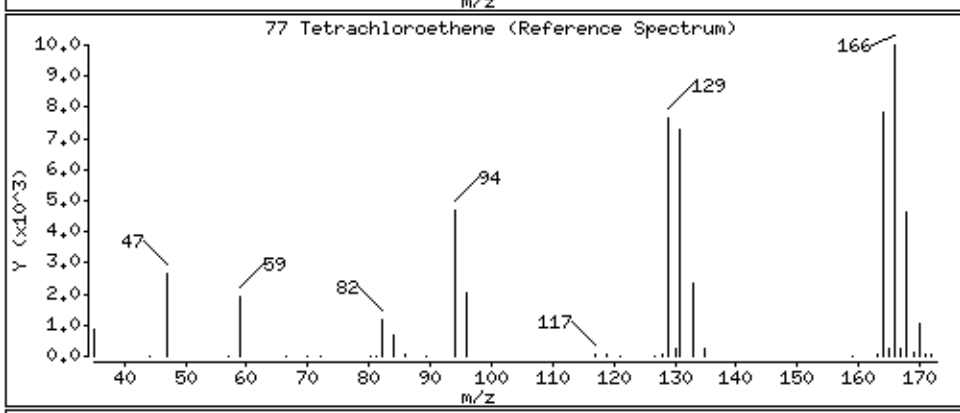
77 Tetrachloroethene

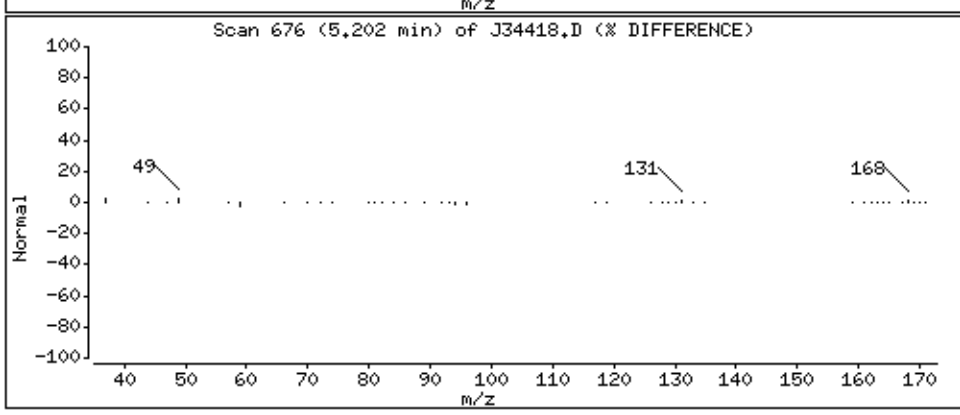
Concentration: 61.2 ug/L

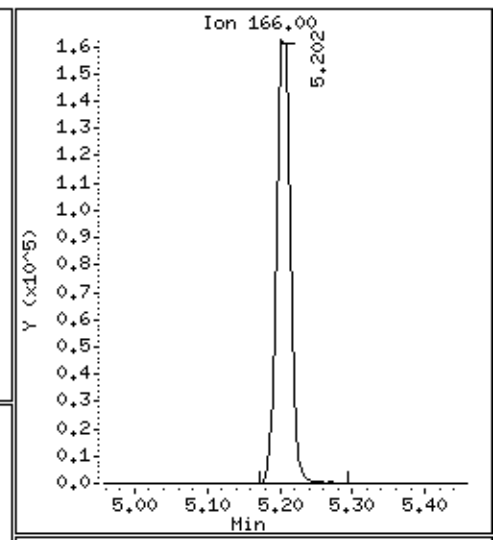
Review Code:

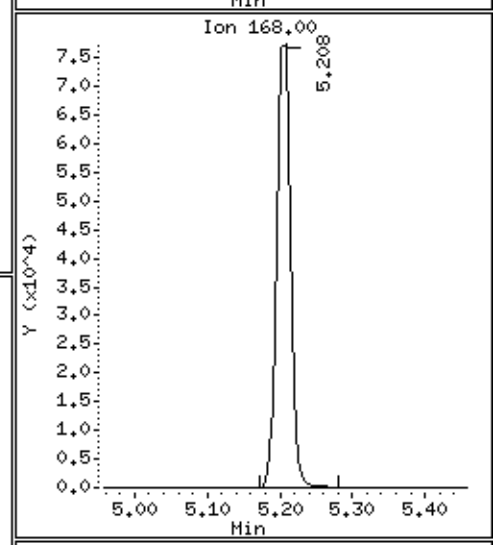


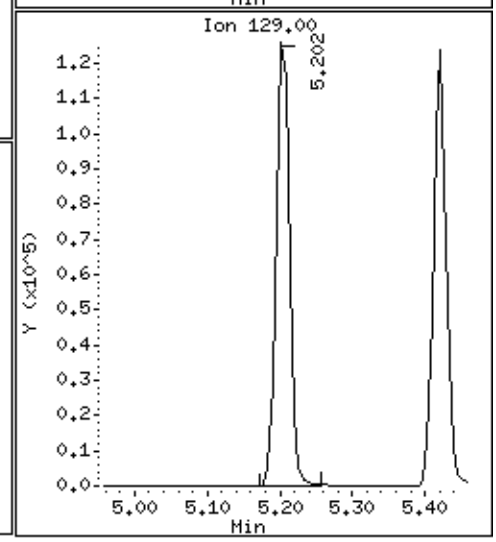












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D

Date : 25-APR-2017 19:25

Client ID: MW-3CMSD

Instrument: 70msv6.i

Sample Info: 103082, 15067:1.25

Purge Volume: 5.0

Operator: KGG

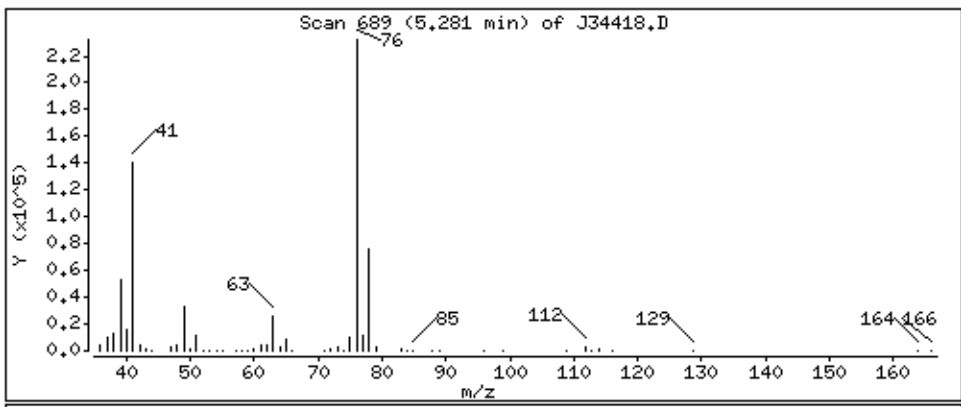
Column phase: RTX-624

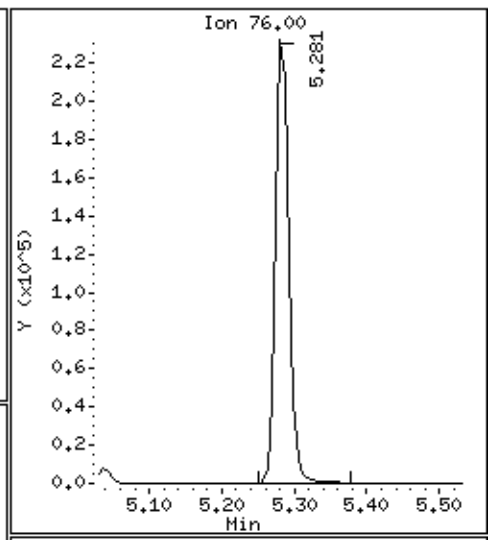
Column diameter: 0.18

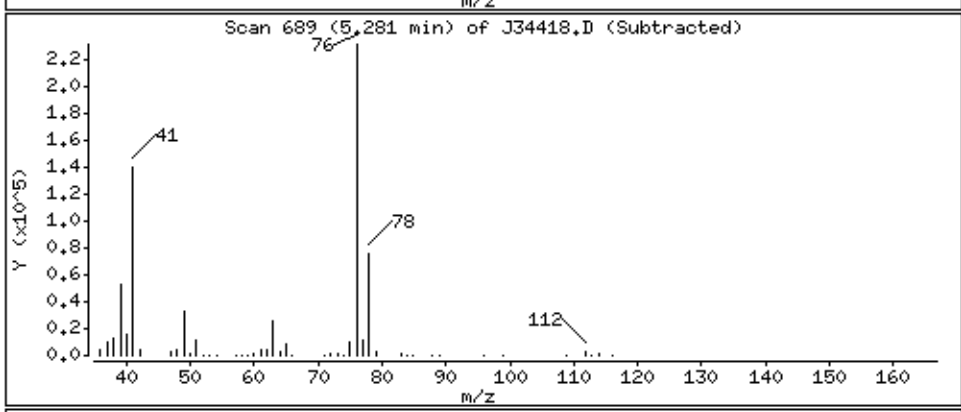
78 1,3-Dichloropropane

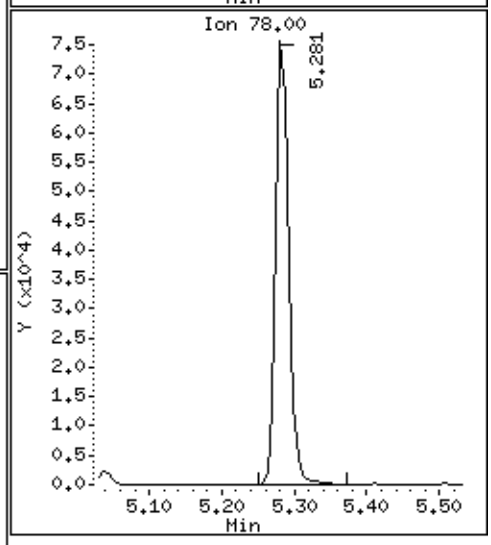
Concentration: 47.9 ug/L

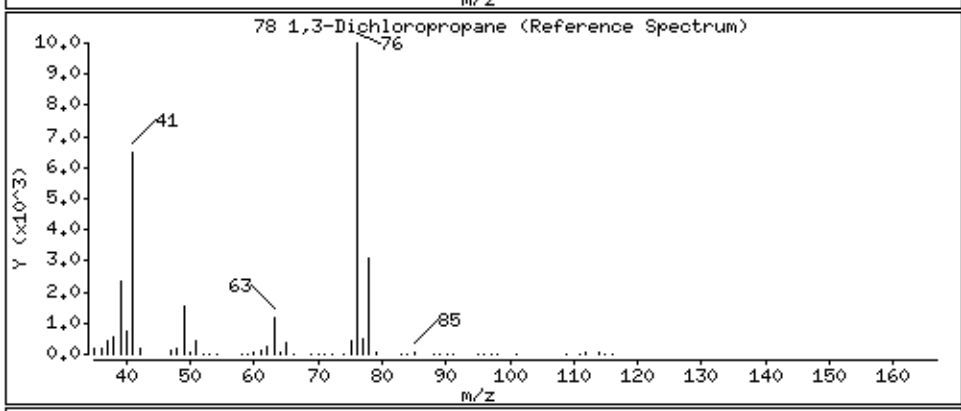
Review Code:

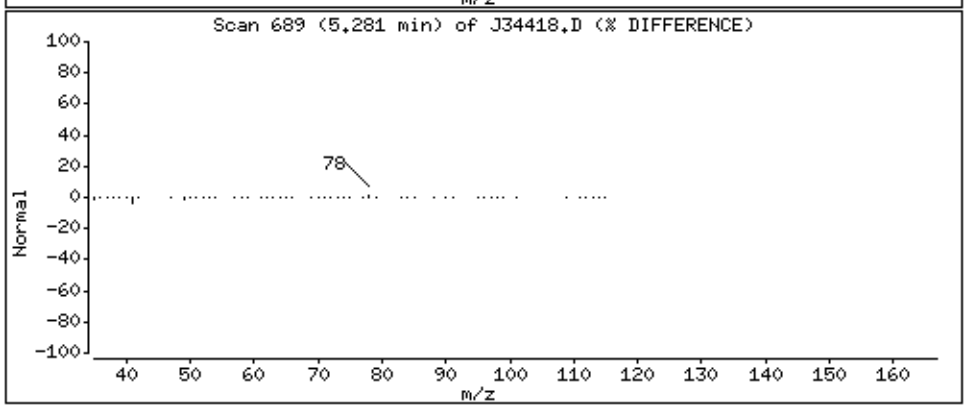












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D

Date : 25-APR-2017 19:25

Client ID: MW-3CMSD

Instrument: 70msv6.i

Sample Info: 103082, 15067:1.25

Purge Volume: 5.0

Operator: KGG

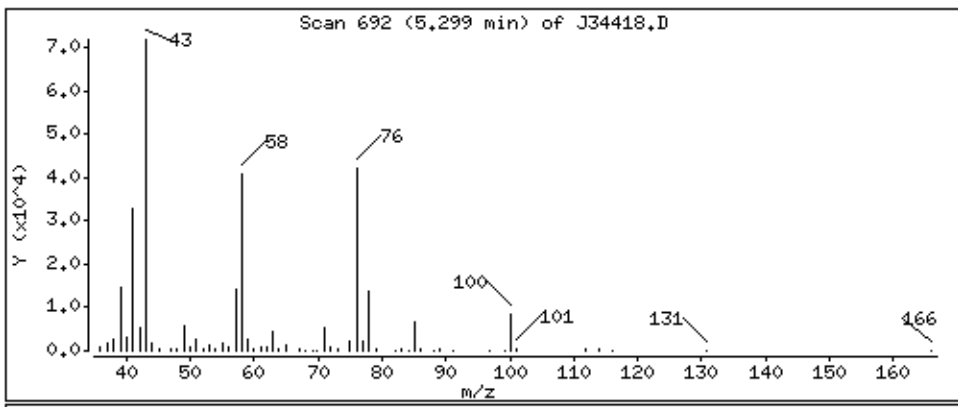
Column phase: RTX-624

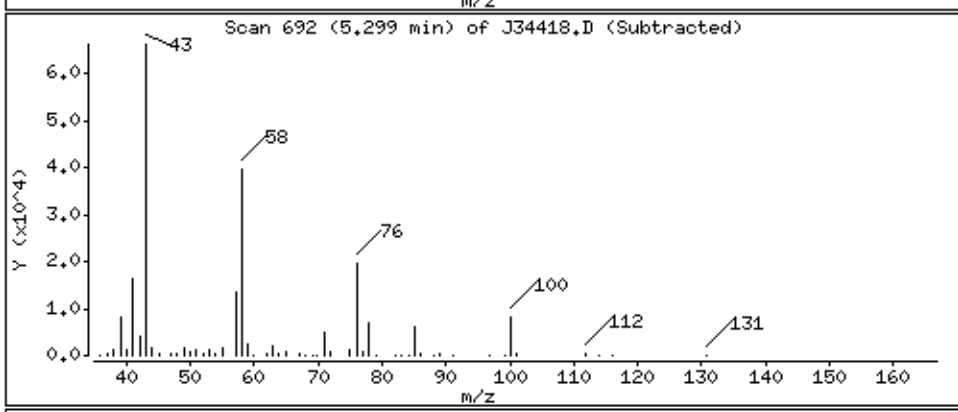
Column diameter: 0.18

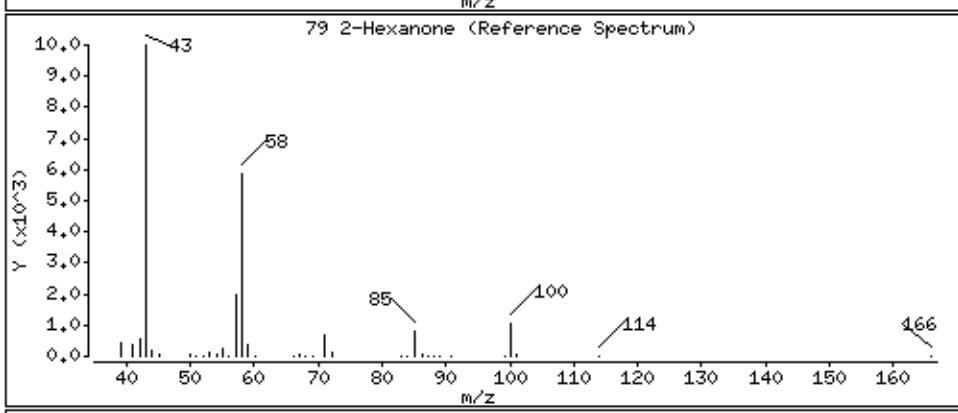
79 2-Hexanone

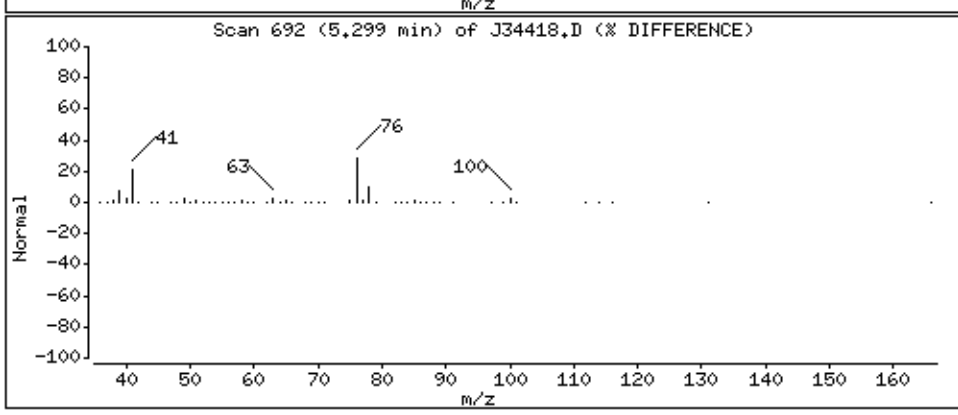
Concentration: 33.0 ug/L

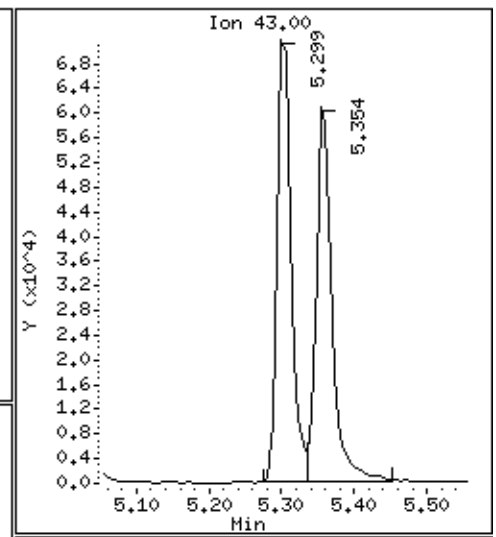
Review Code:

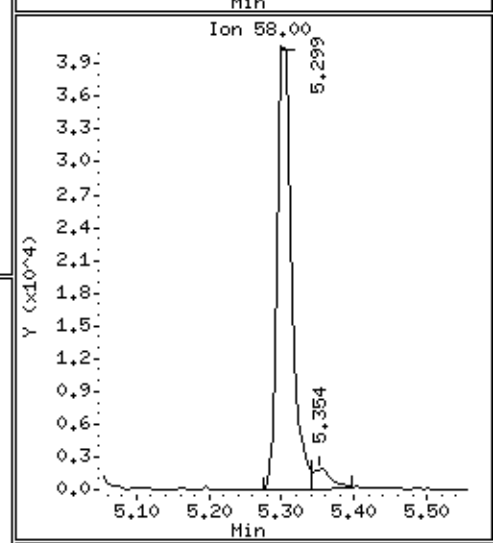


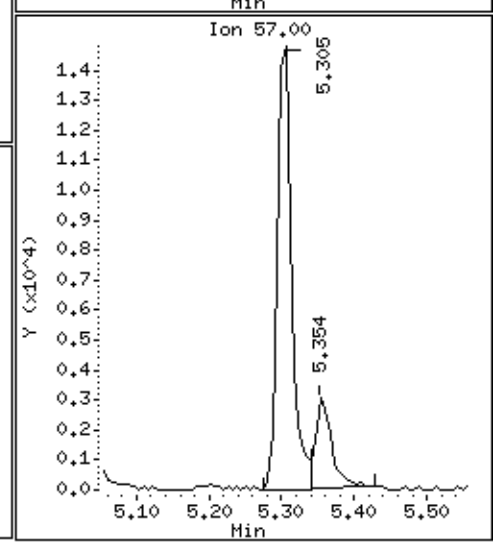












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D

Date : 25-APR-2017 19:25

Client ID: MW-3CMSD

Instrument: 70msv6.i

Sample Info: 103082, 15067:1.25

Purge Volume: 5.0

Operator: KGG

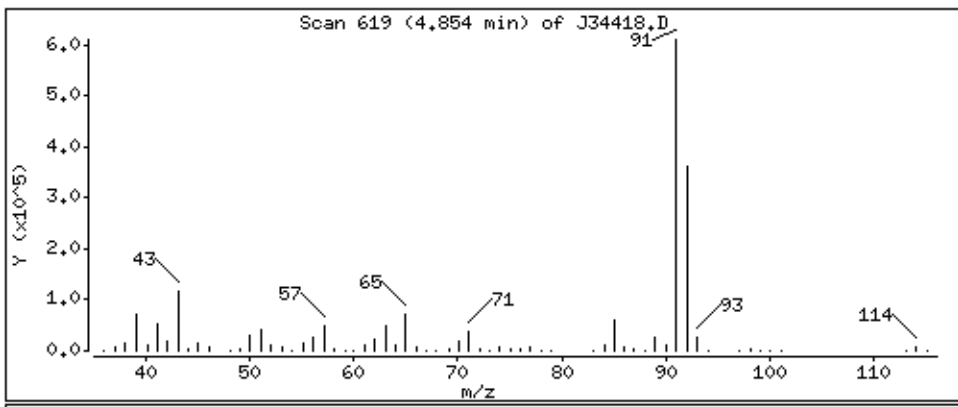
Column phase: RTX-624

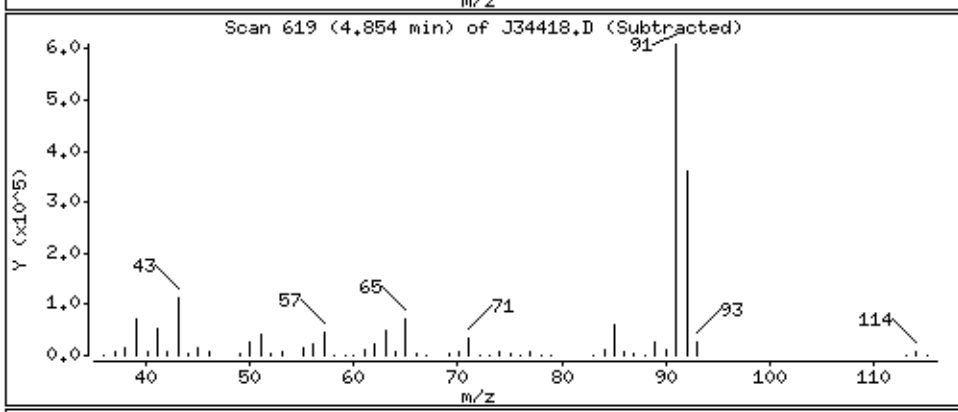
Column diameter: 0.18

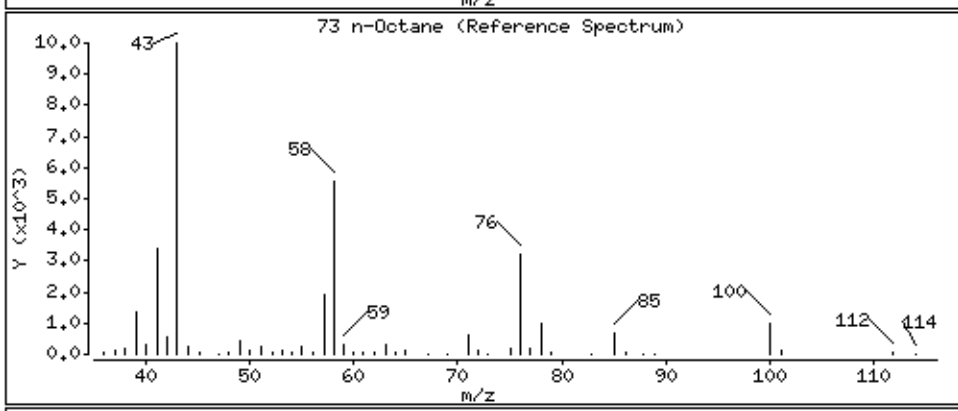
73 n-Octane

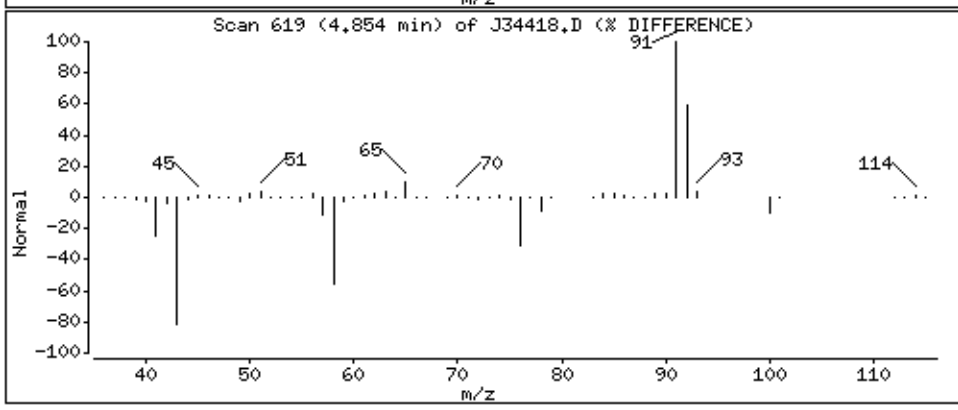
Concentration: 41.8 ug/L

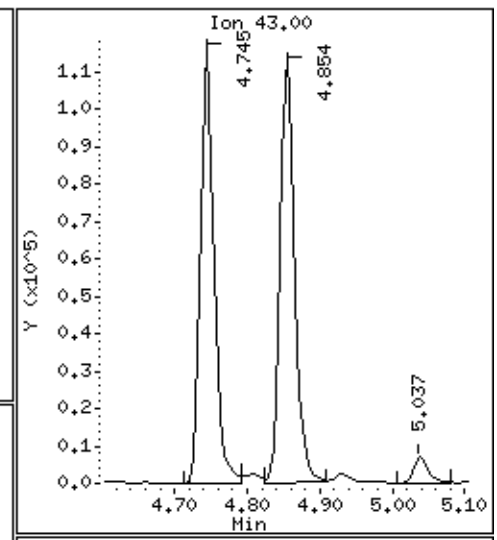
Review Code:

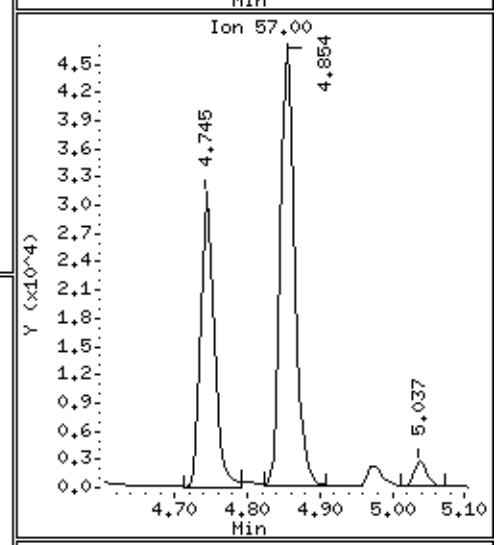


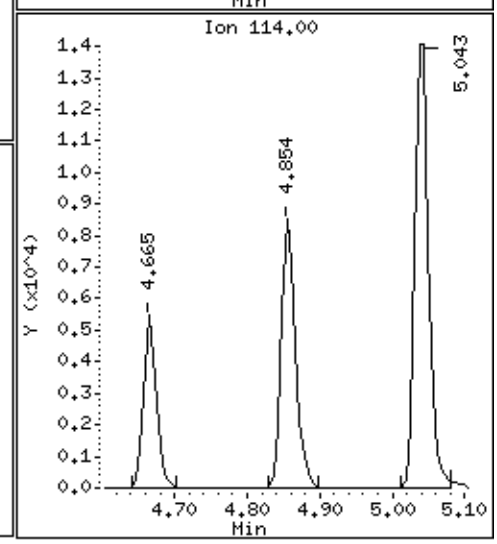












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D

Date : 25-APR-2017 19:25

Client ID: MW-3CMSD

Instrument: 70msv6.i

Sample Info: 103082, 15067:1.25

Purge Volume: 5.0

Operator: KGG

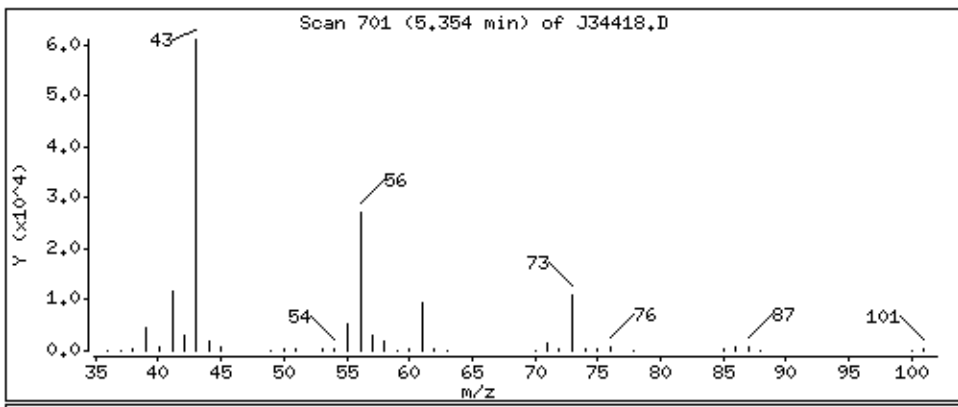
Column phase: RTX-624

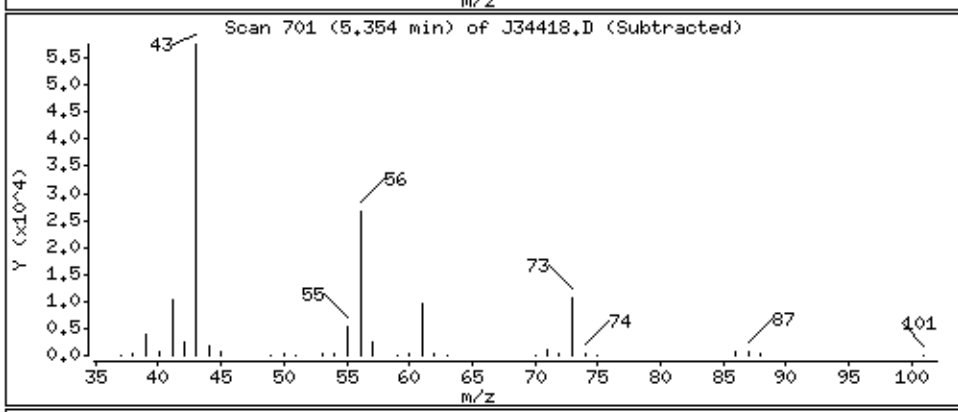
Column diameter: 0.18

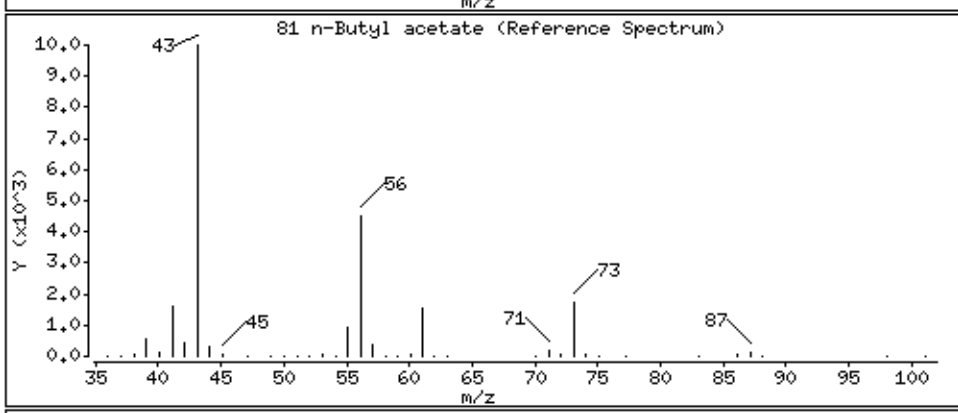
81 n-Butyl acetate

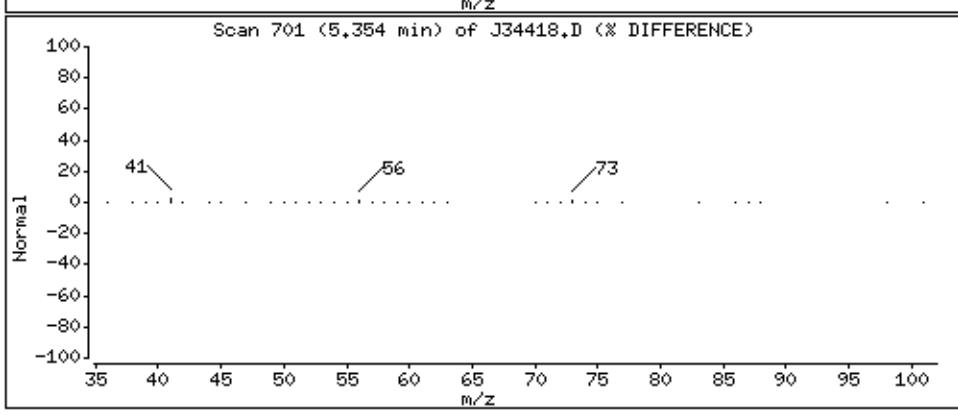
Concentration: 39.8 ug/L

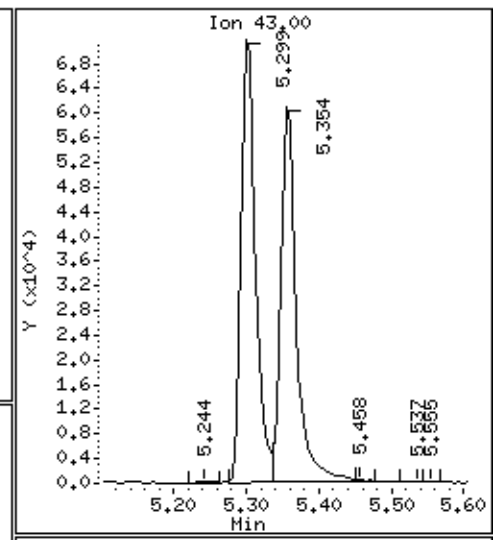
Review Code:

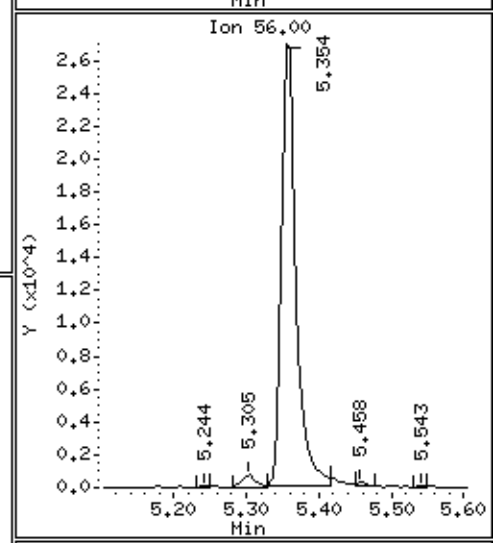


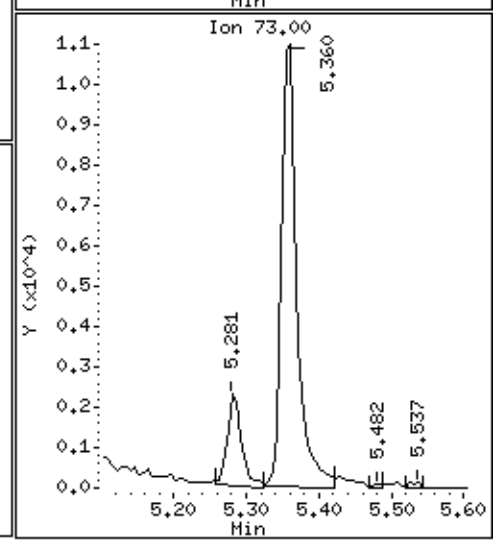












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D

Date : 25-APR-2017 19:25

Client ID: MW-3CMSD

Instrument: 70msv6.i

Sample Info: 103082, 15067:1.25

Purge Volume: 5.0

Operator: KGG

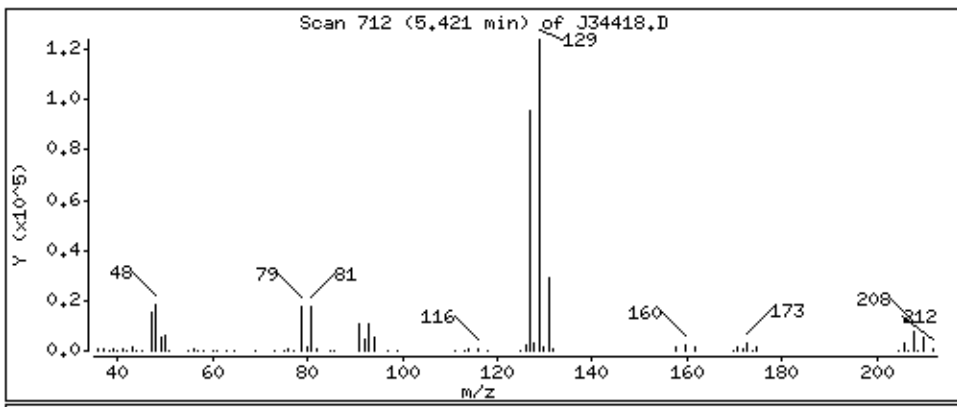
Column phase: RTX-624

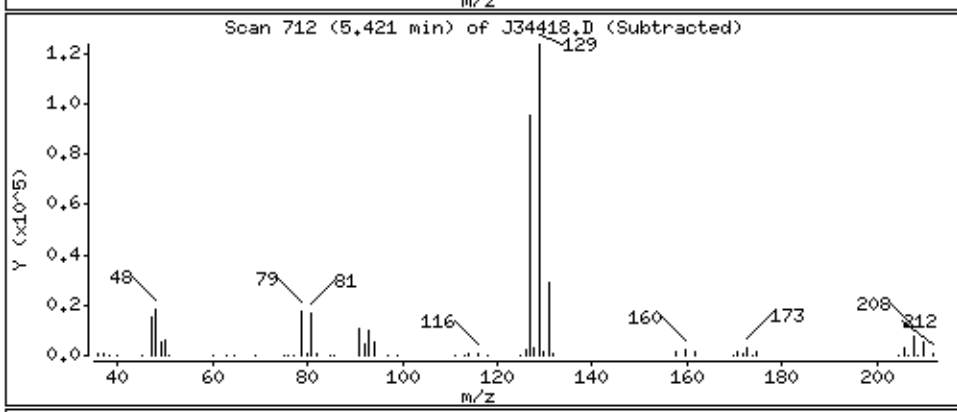
Column diameter: 0.18

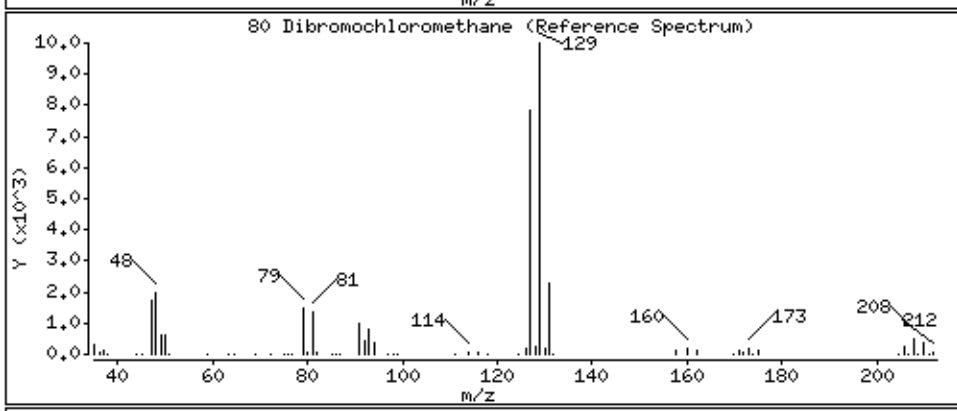
80 Dibromochloromethane

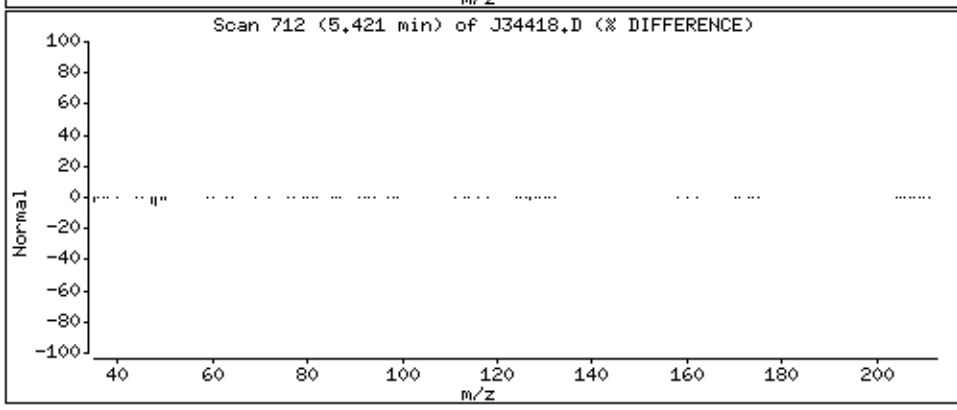
Concentration: 65.1 ug/L

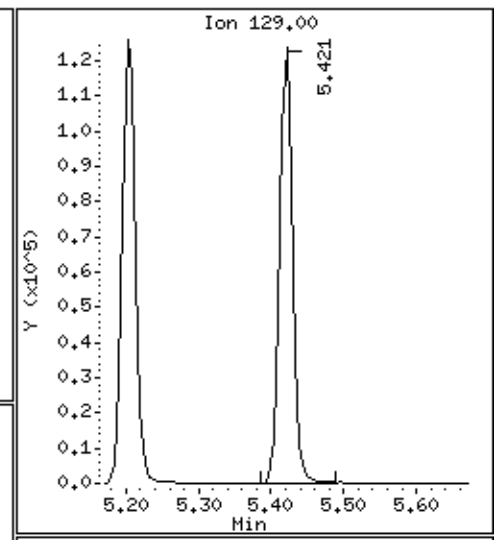
Review Code:

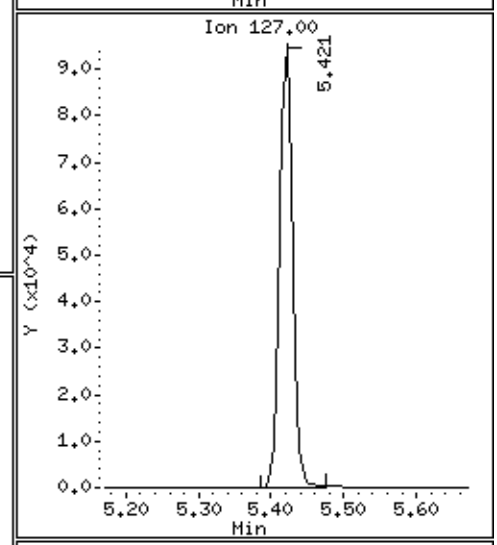


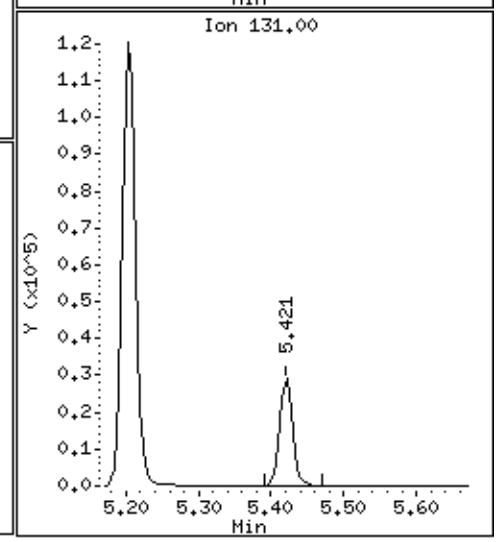












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D

Date : 25-APR-2017 19:25

Client ID: MW-3CMSD

Instrument: 70msv6.i

Sample Info: 103082, 15067:1.25

Purge Volume: 5.0

Operator: KGG

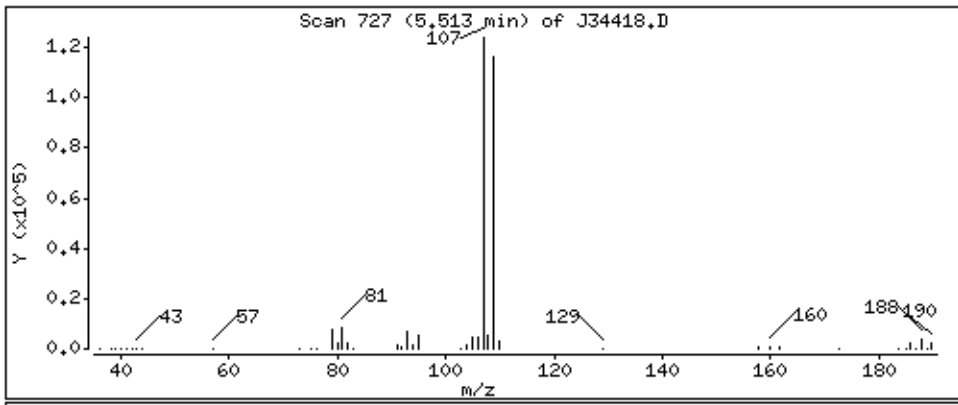
Column phase: RTX-624

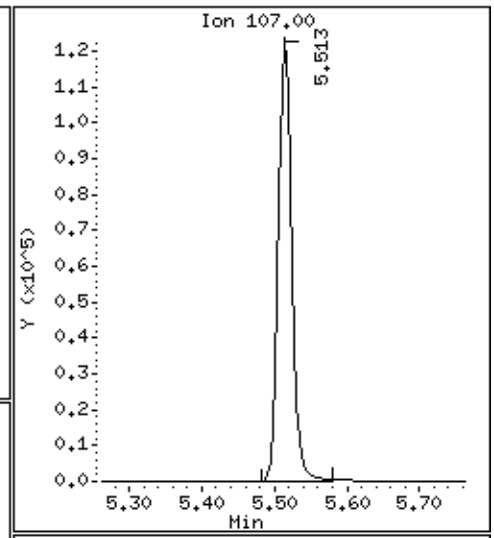
Column diameter: 0.18

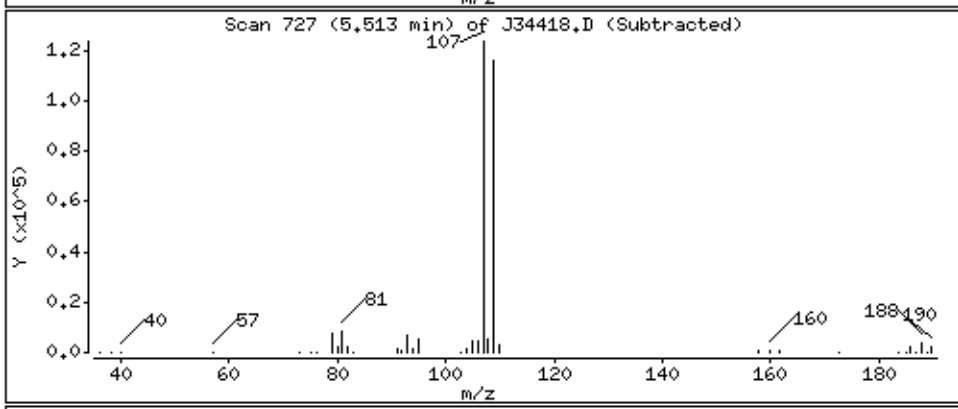
82 1,2-Dibromoethane (EDB)

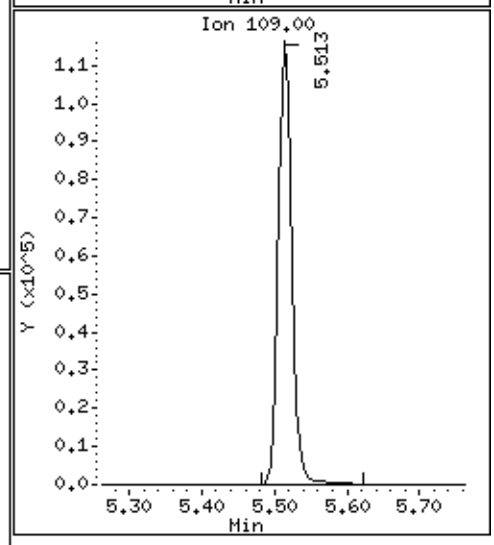
Concentration: 61.5 ug/L

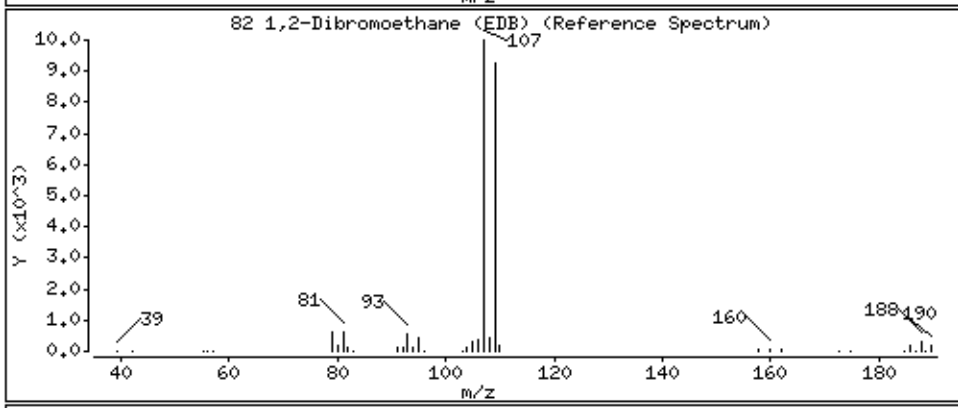
Review Code:

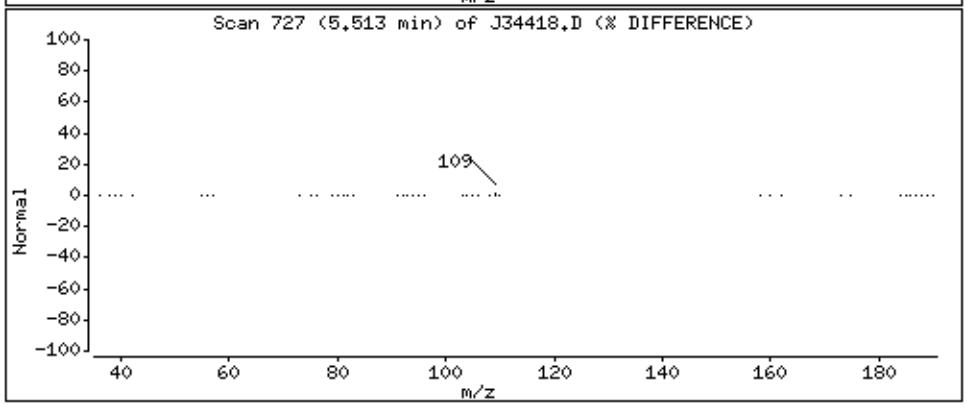












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D

Date : 25-APR-2017 19:25

Client ID: MW-3CMSD

Instrument: 70msv6.i

Sample Info: 103082, 15067:1.25

Purge Volume: 5.0

Operator: KGG

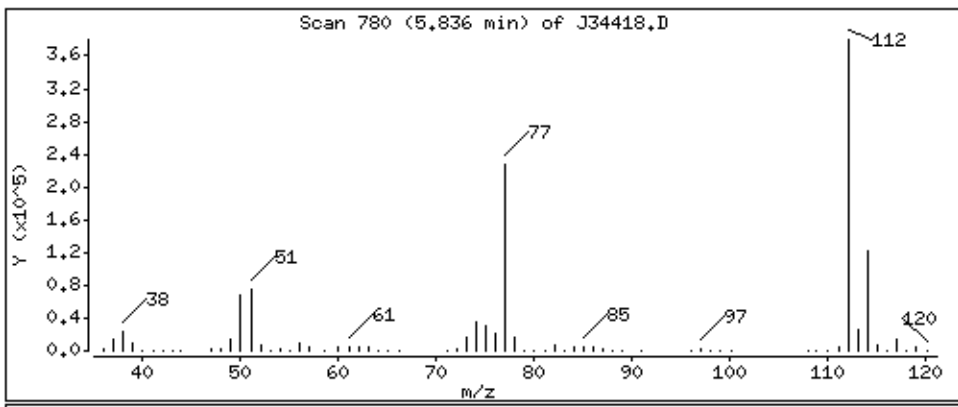
Column phase: RTX-624

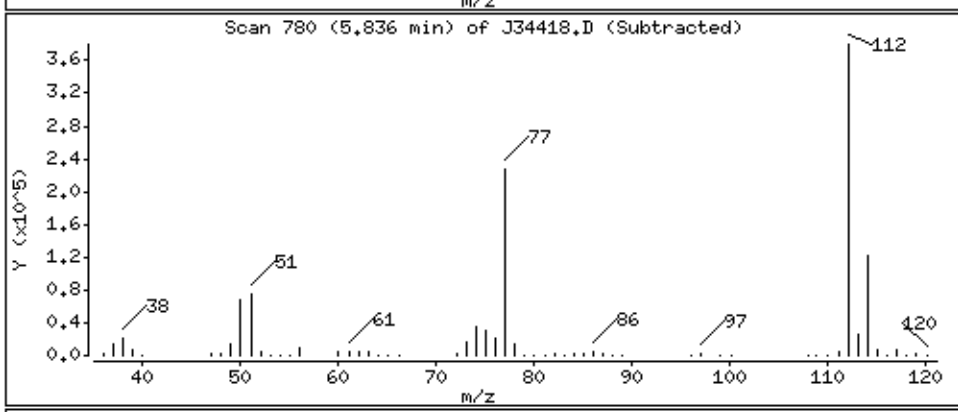
Column diameter: 0.18

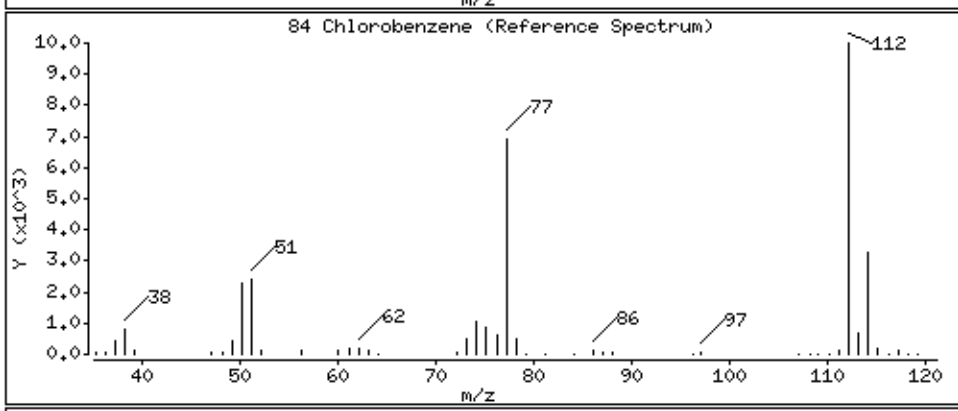
84 Chlorobenzene

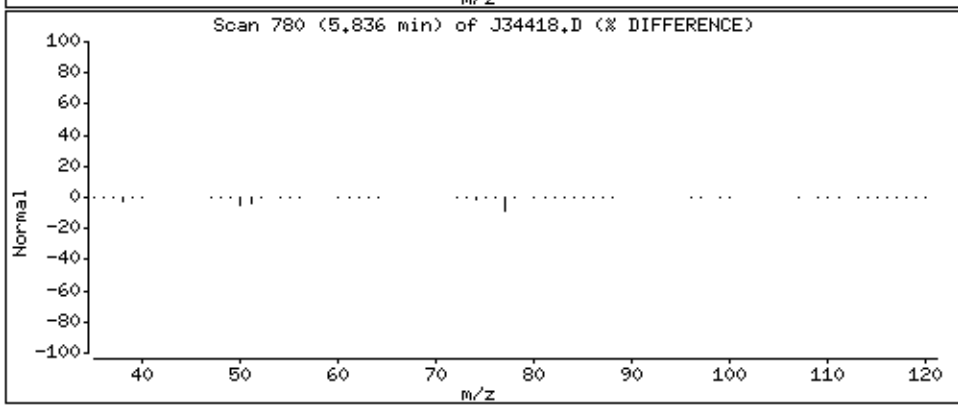
Concentration: 53.0 ug/L

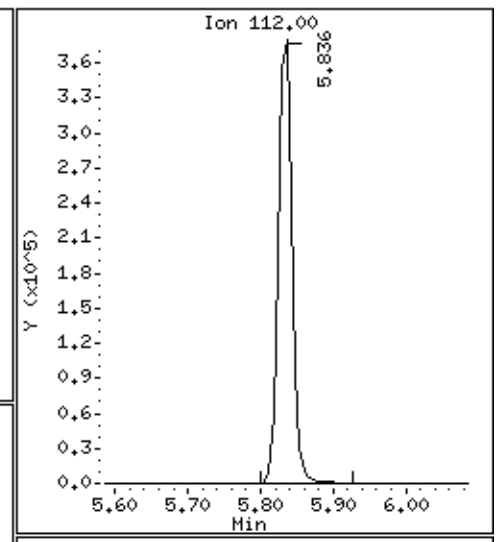
Review Code:

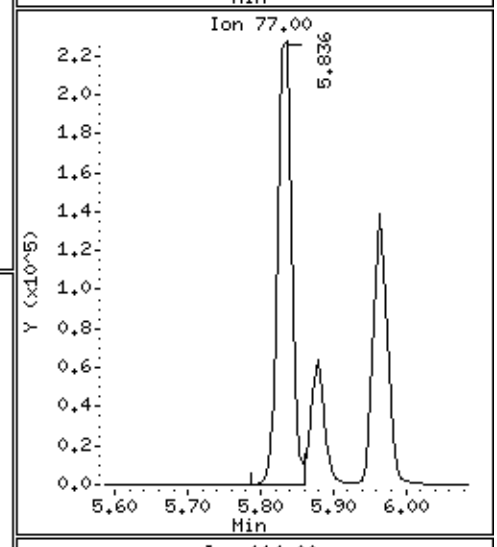


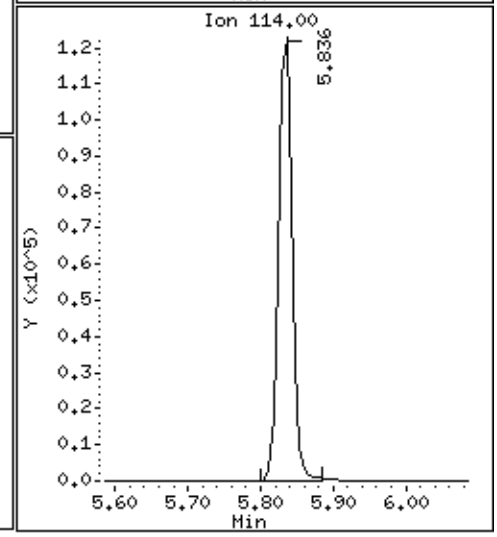












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D

Date : 25-APR-2017 19:25

Client ID: MW-3CMSD

Instrument: 70msv6.i

Sample Info: 103082, 15067:1.25

Purge Volume: 5.0

Operator: KGG

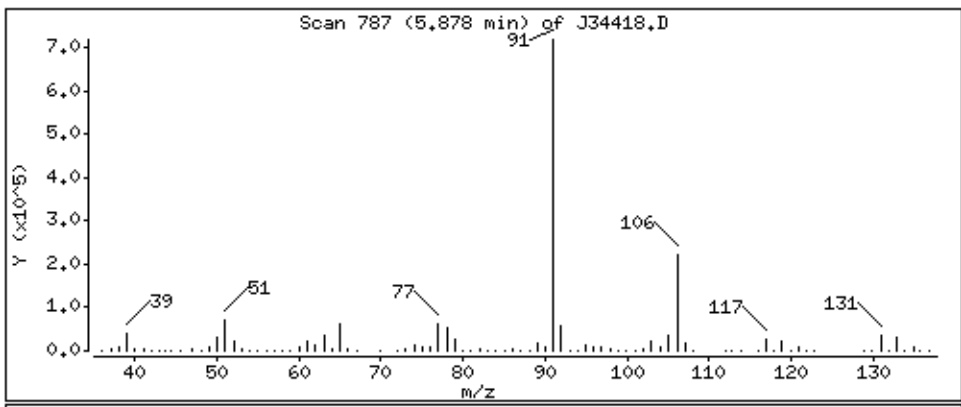
Column phase: RTX-624

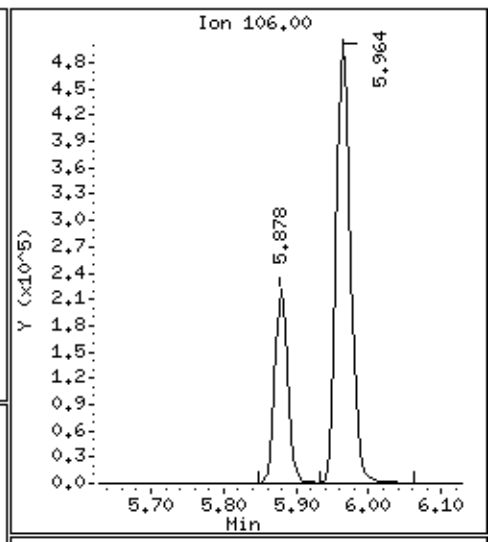
Column diameter: 0.18

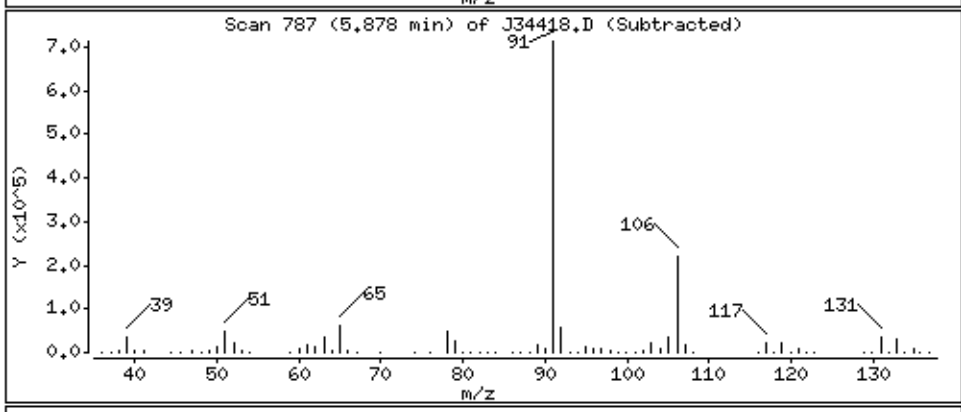
86 Ethylbenzene

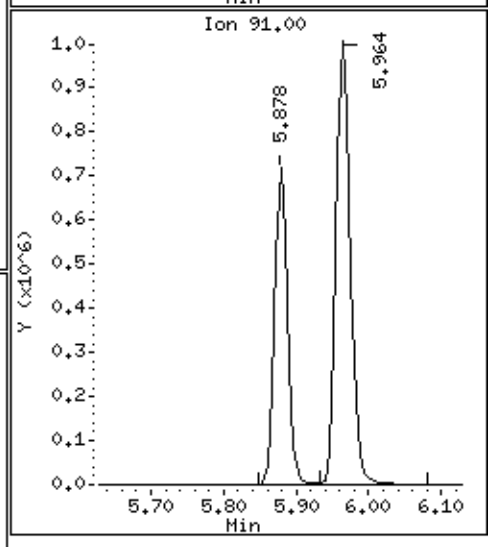
Concentration: 54.7 ug/L

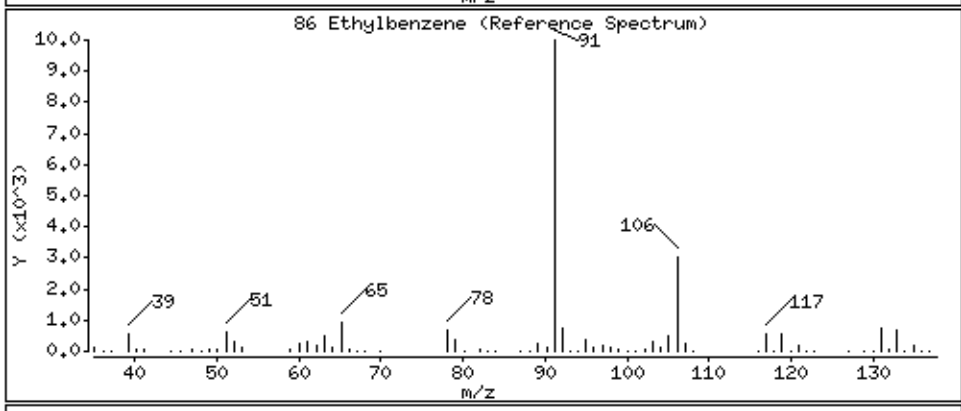
Review Code:

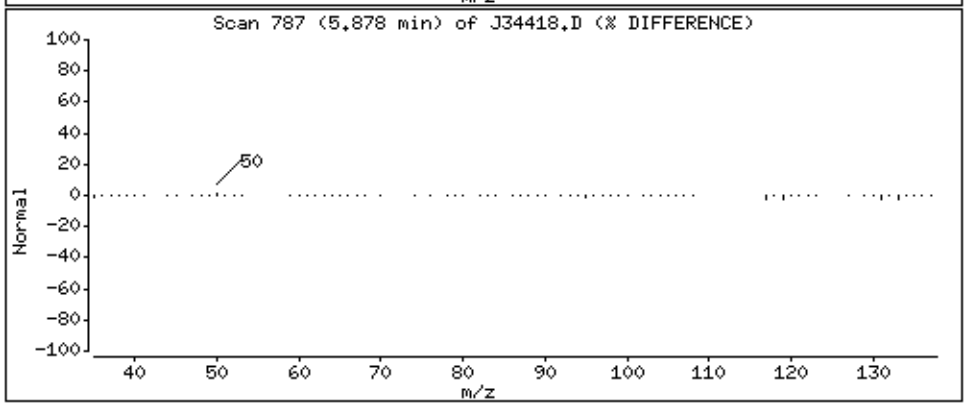












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D

Date : 25-APR-2017 19:25

Client ID: MW-3CMSD

Instrument: 70msv6.i

Sample Info: 103082, 15067:1.25

Purge Volume: 5.0

Operator: KGG

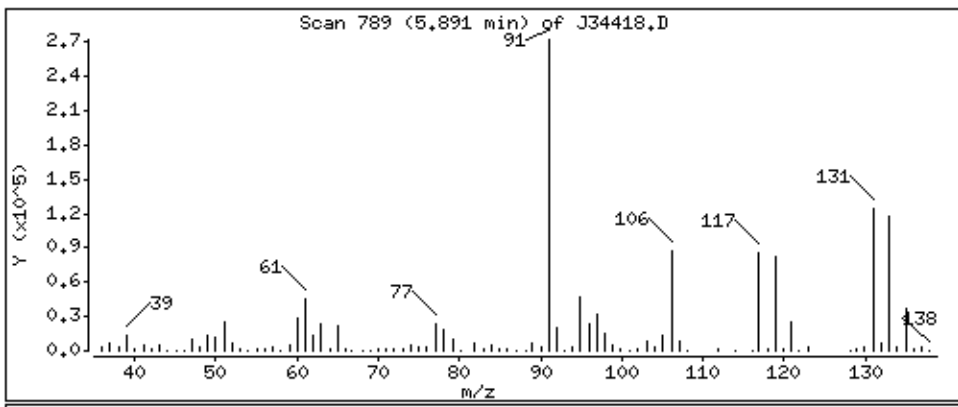
Column phase: RTX-624

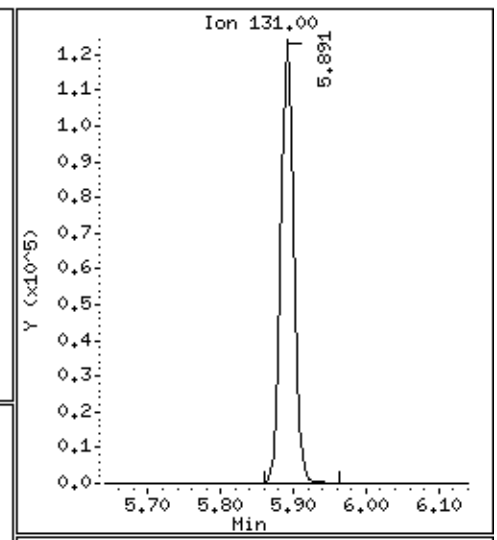
Column diameter: 0.18

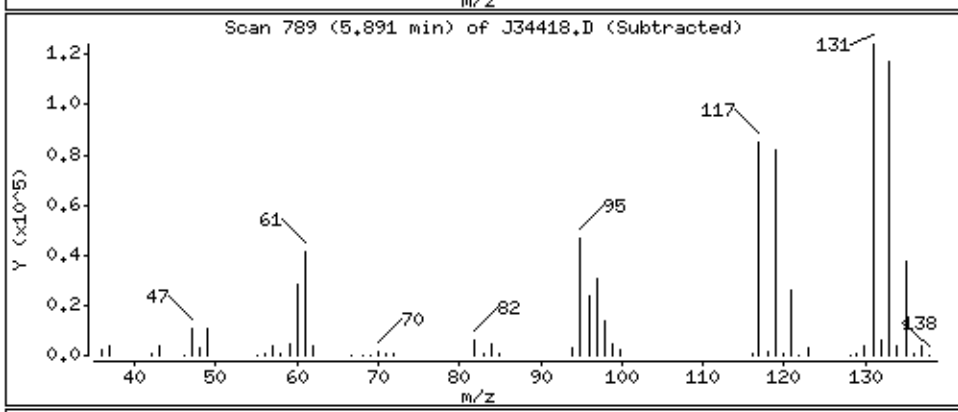
85 1,1,1,2-Tetrachloroethane

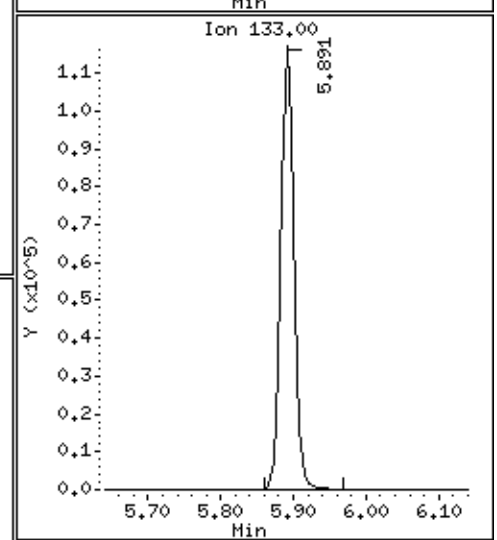
Concentration: 55.2 ug/L

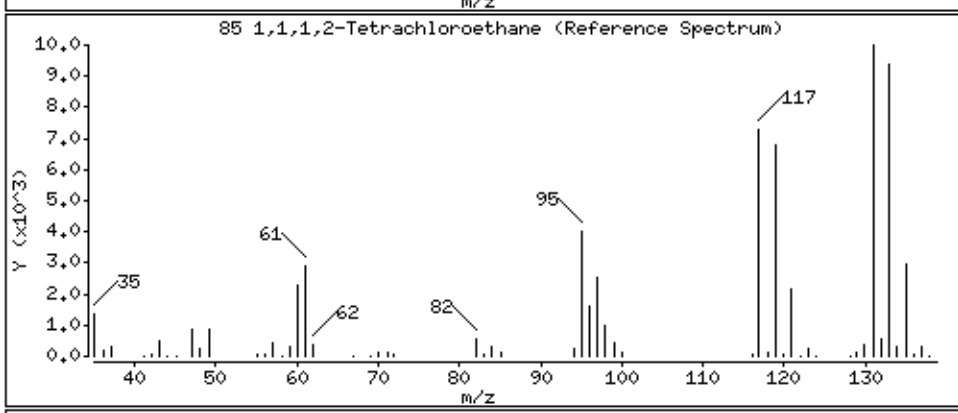
Review Code:

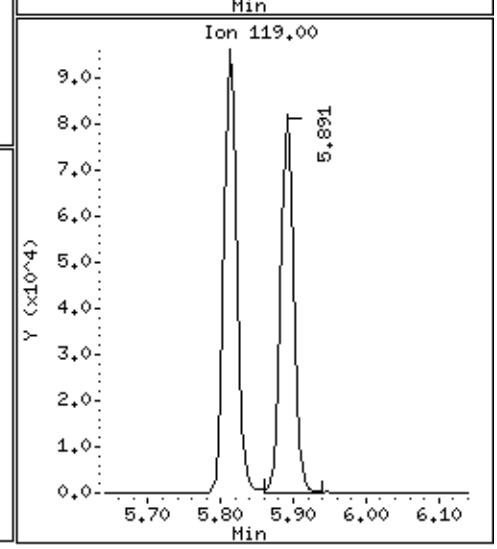


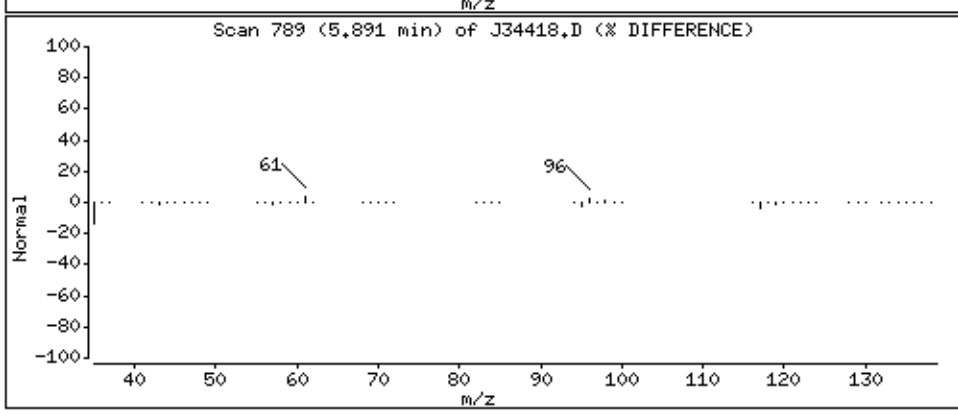












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D

Date : 25-APR-2017 19:25

Client ID: MW-3CMSD

Instrument: 70msv6.i

Sample Info: 103082, 15067:1.25

Purge Volume: 5.0

Operator: KGG

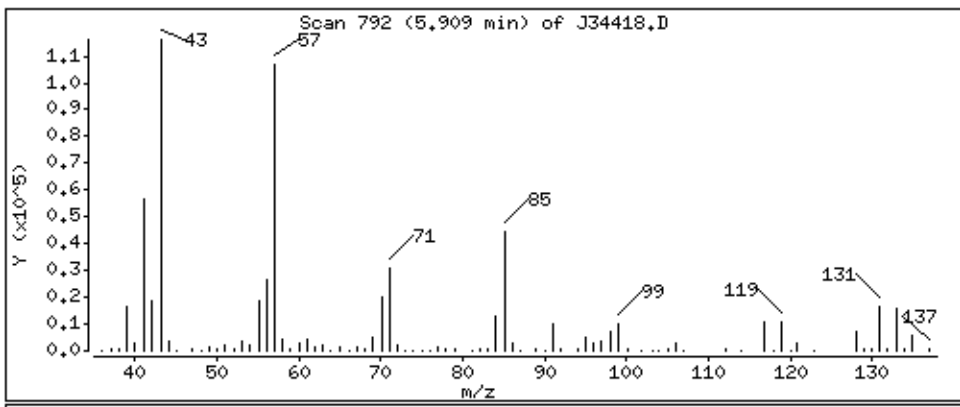
Column phase: RTX-624

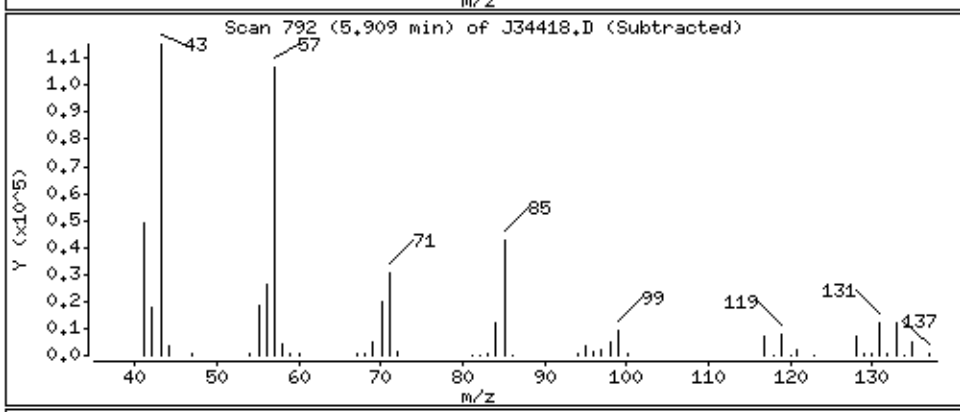
Column diameter: 0.18

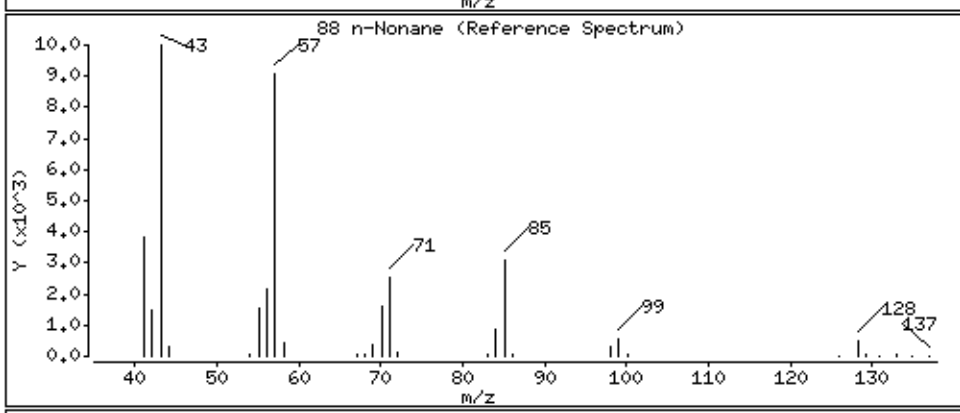
88 n-Nonane

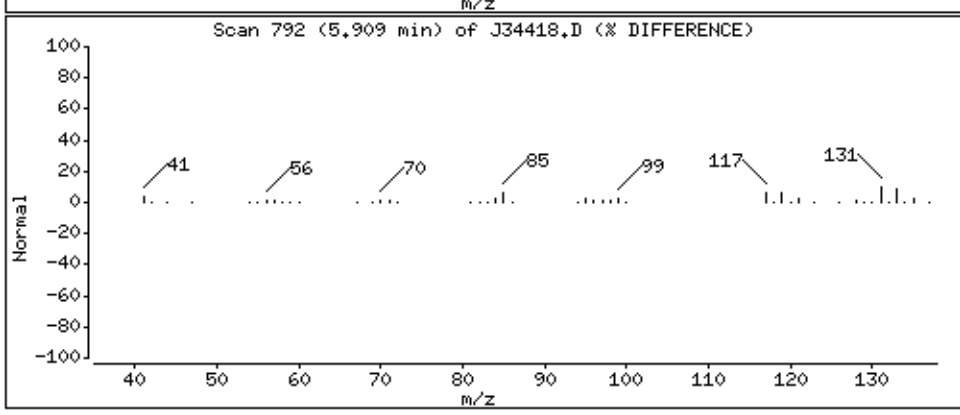
Concentration: 54.4 ug/L

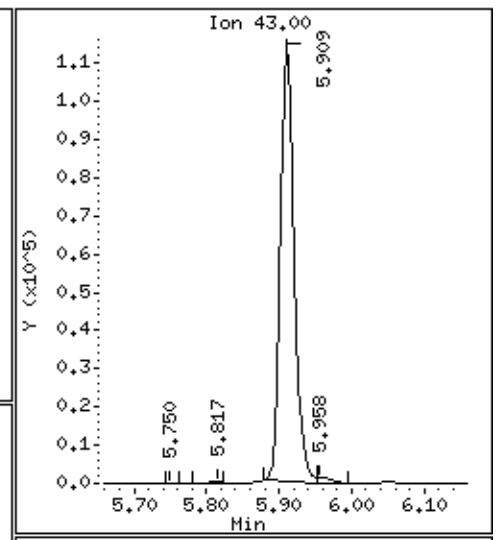
Review Code:

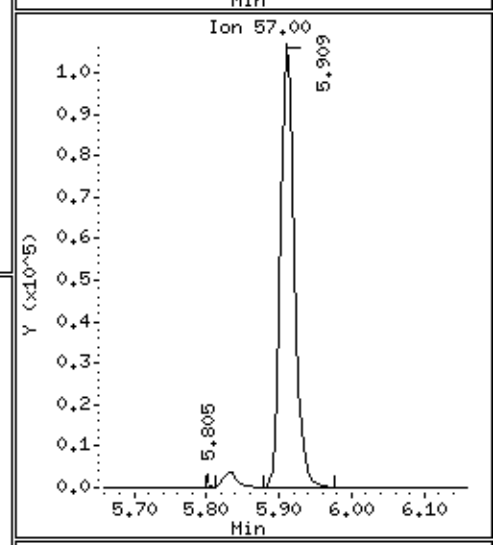


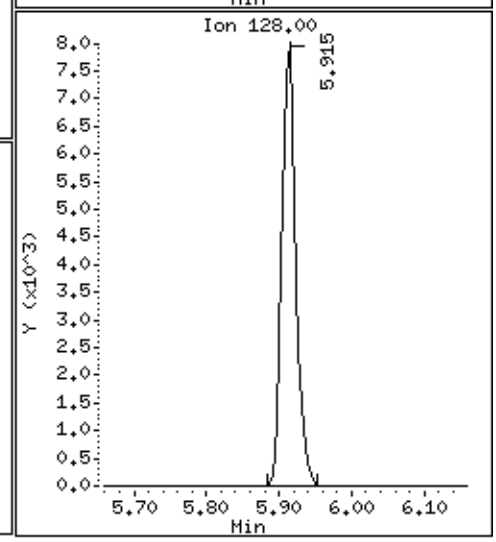












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D

Date : 25-APR-2017 19:25

Client ID: MW-3CMSD

Instrument: 70msv6.i

Sample Info: 103082, 15067:1.25

Purge Volume: 5.0

Operator: KGG

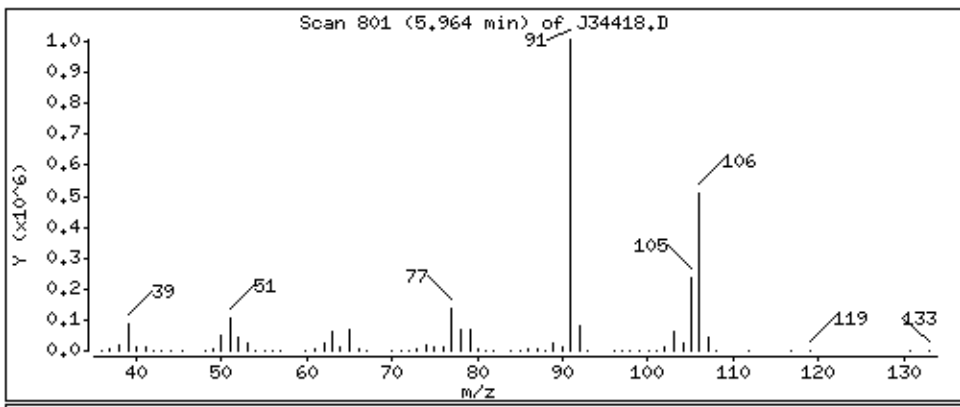
Column phase: RTX-624

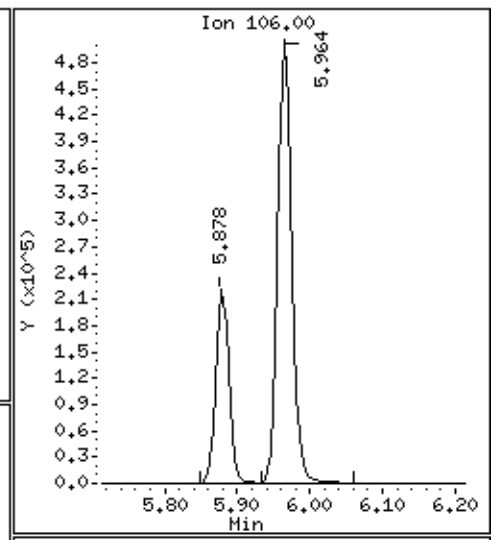
Column diameter: 0.18

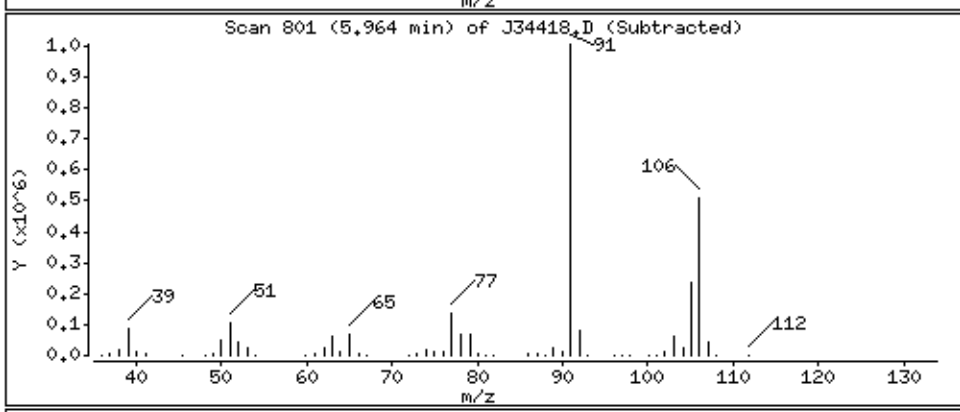
87 m&p-Xylene

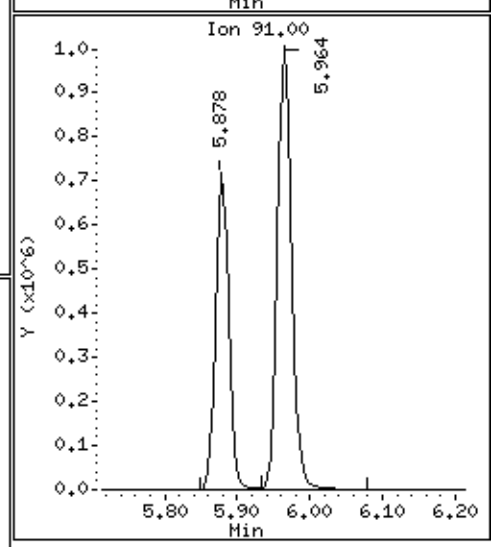
Concentration: 109 ug/L

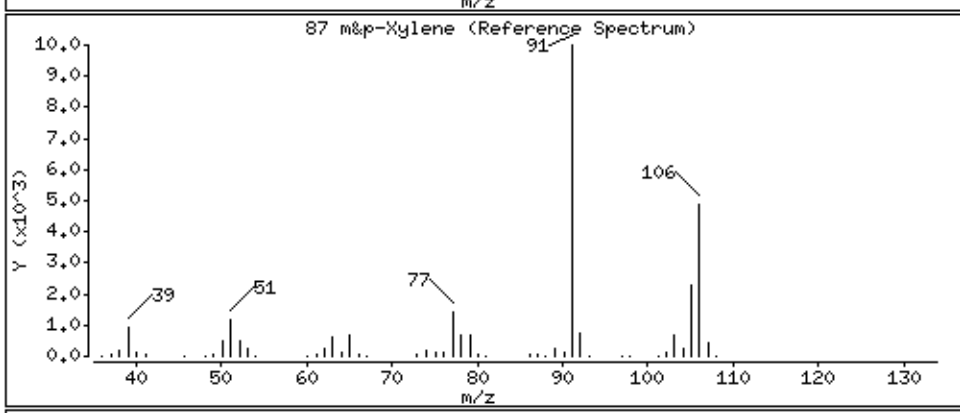
Review Code:

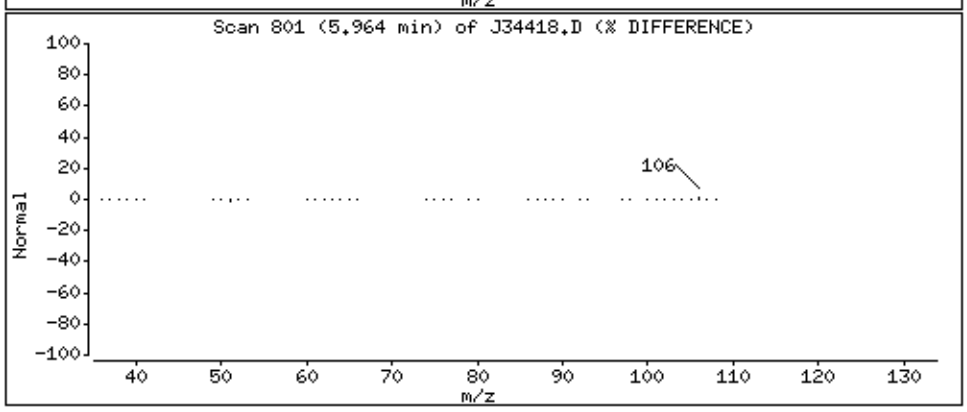












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D

Date : 25-APR-2017 19:25

Client ID: MW-3CMSD

Instrument: 70msv6.i

Sample Info: 103082, 15067:1.25

Purge Volume: 5.0

Operator: KGG

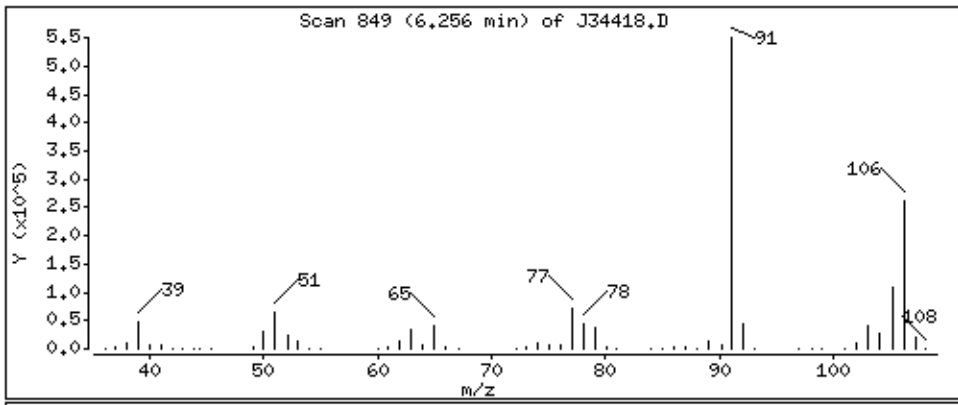
Column phase: RTX-624

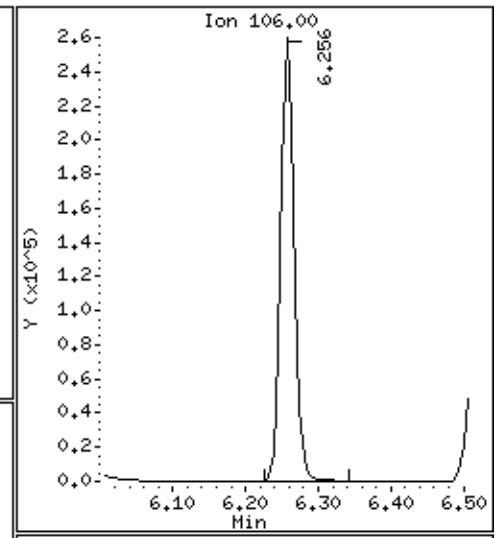
Column diameter: 0.18

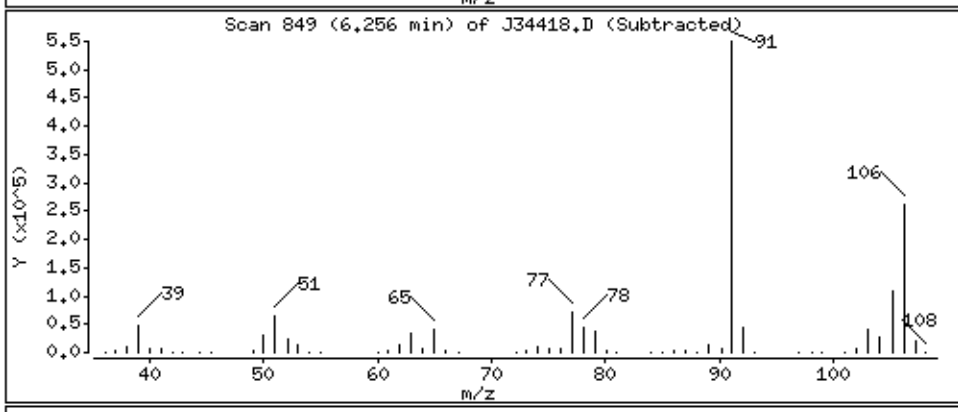
89 o-Xylene

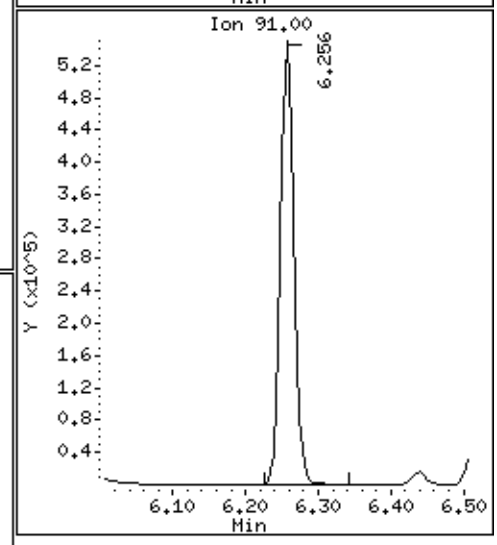
Concentration: 53.7 ug/L

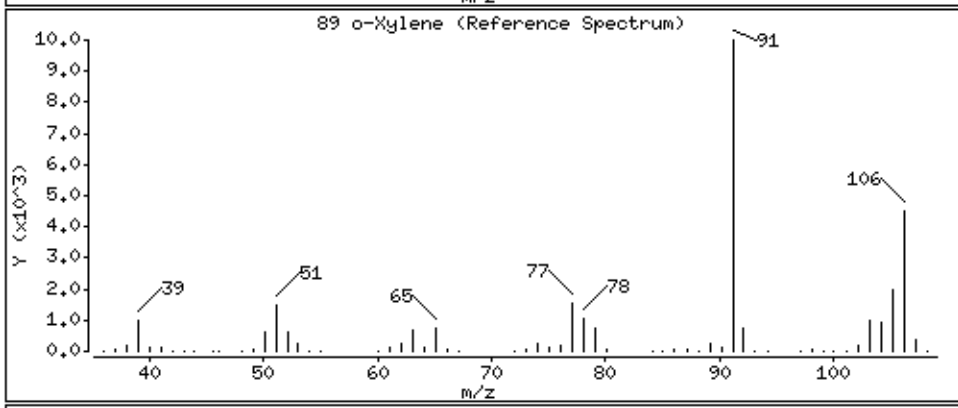
Review Code:

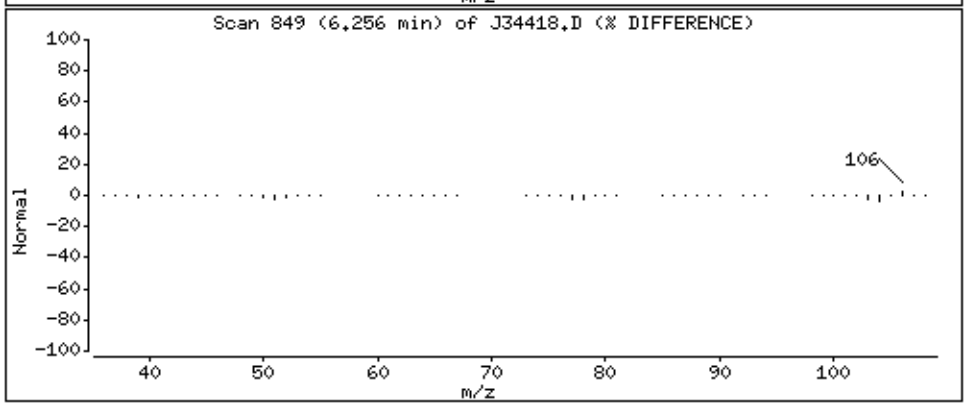












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D

Date : 25-APR-2017 19:25

Client ID: MW-3CMSD

Instrument: 70msv6.i

Sample Info: 103082, 15067:1.25

Purge Volume: 5.0

Operator: KGG

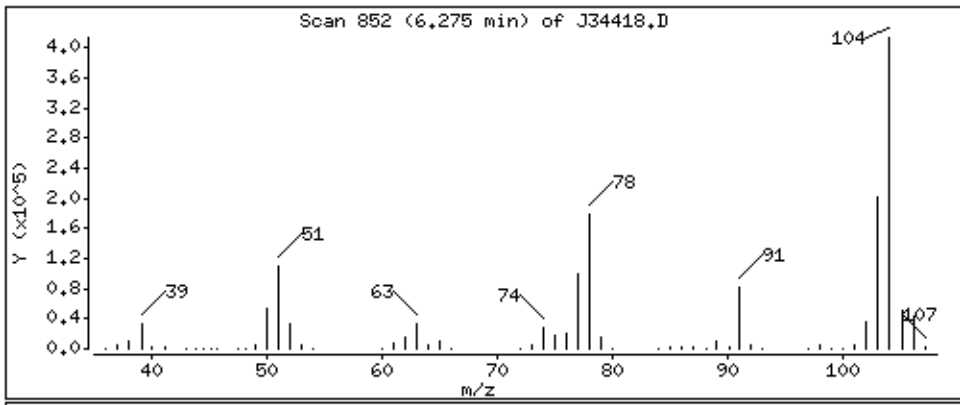
Column phase: RTX-624

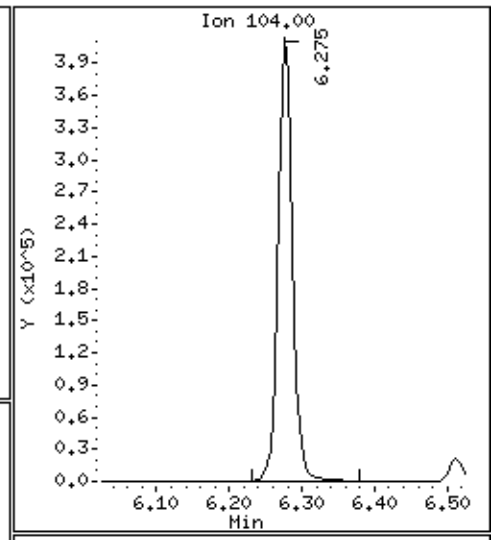
Column diameter: 0.18

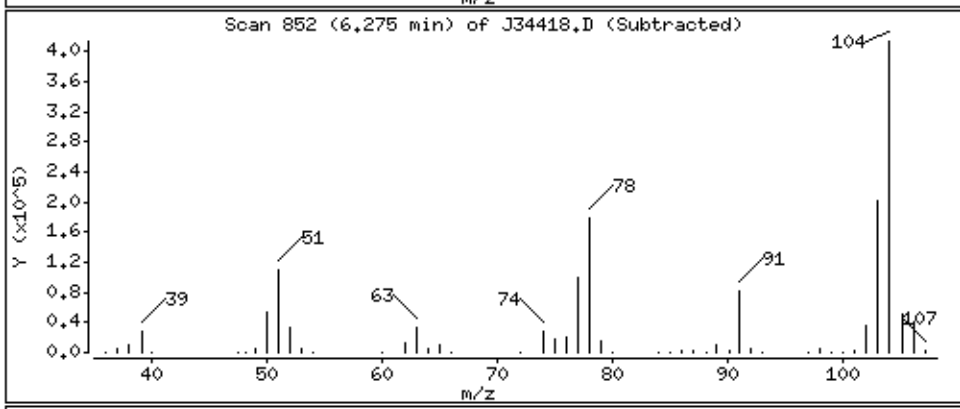
90 Styrene

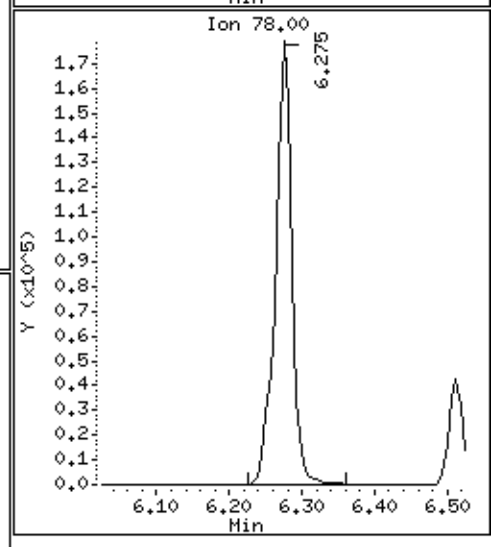
Concentration: 53.4 ug/L

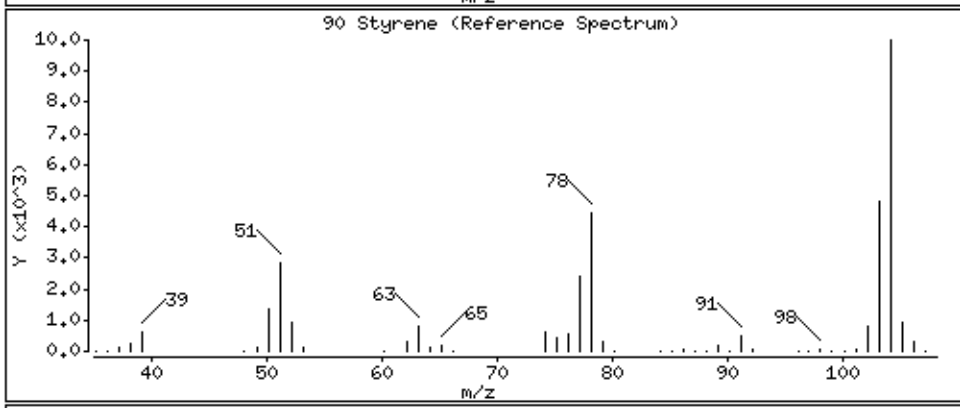
Review Code:

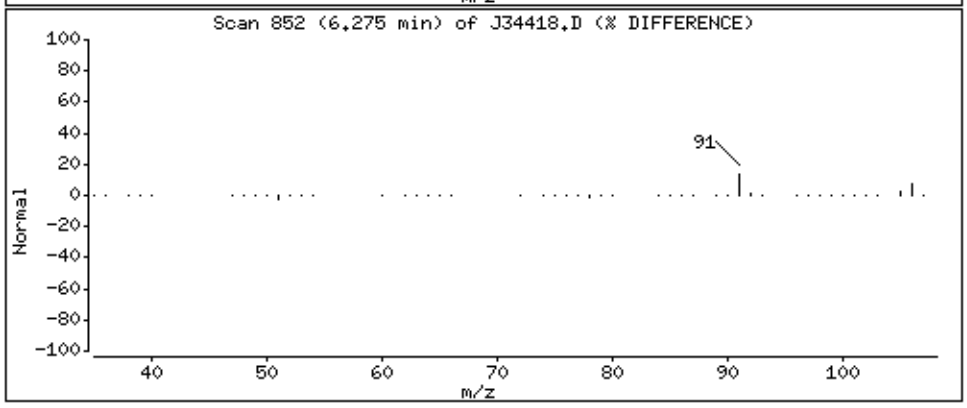












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D

Date : 25-APR-2017 19:25

Client ID: MW-3CMSD

Instrument: 70msv6.i

Sample Info: 103082, 15067:1.25

Purge Volume: 5.0

Operator: KGG

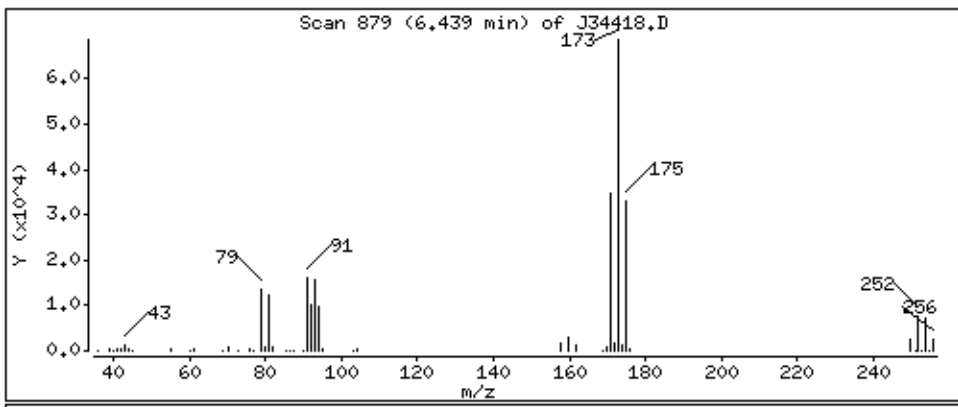
Column phase: RTX-624

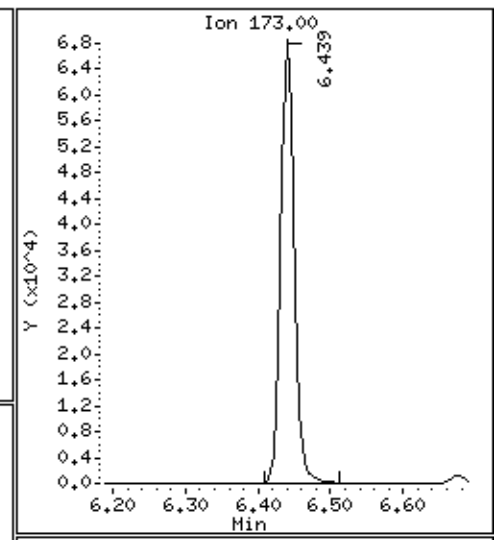
Column diameter: 0.18

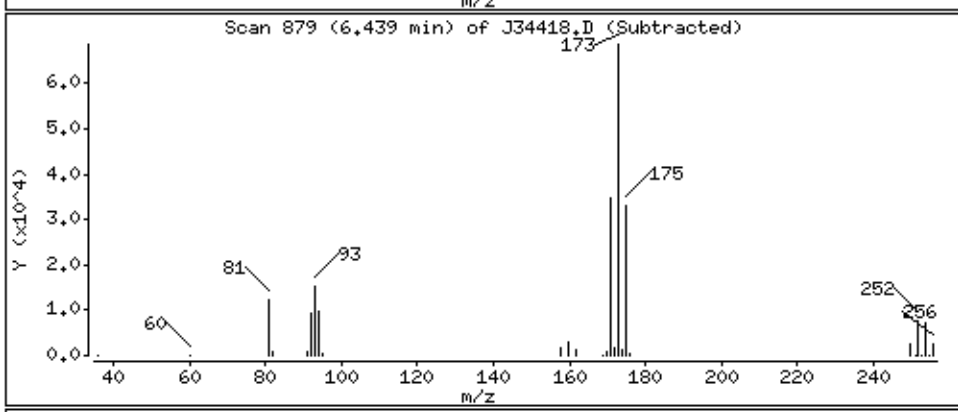
91 Bromoform

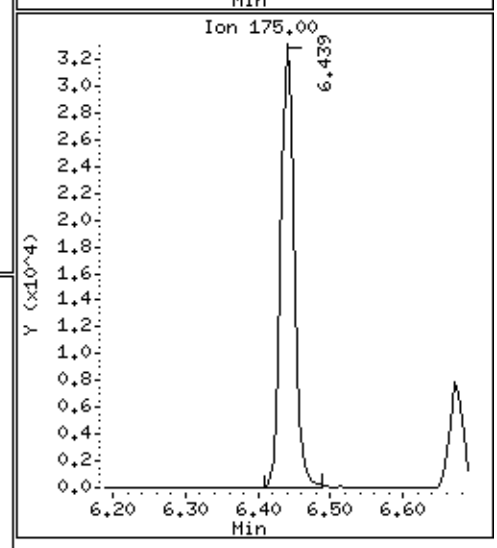
Concentration: 53.2 ug/L

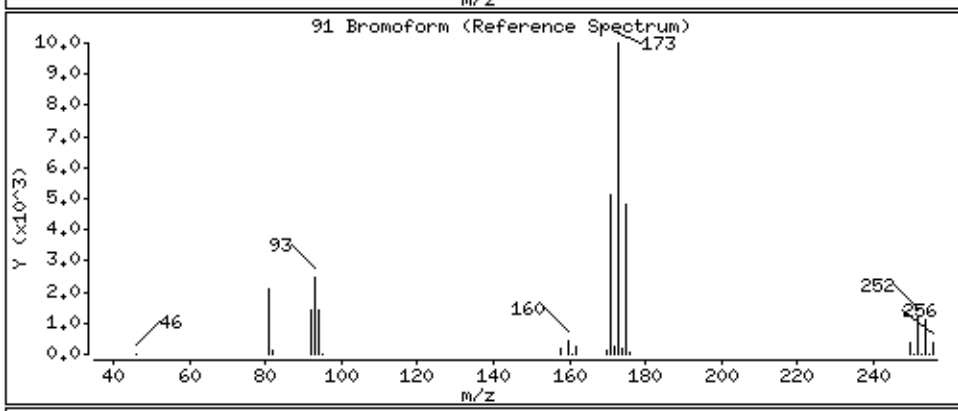
Review Code:

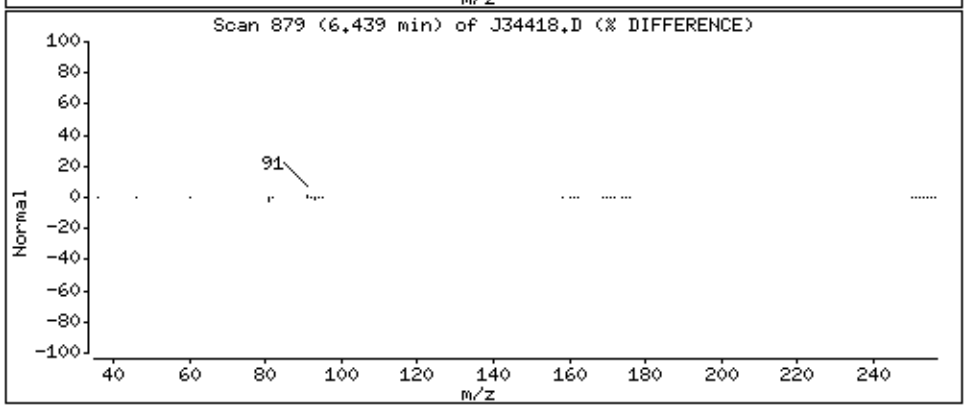












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D

Date : 25-APR-2017 19:25

Client ID: MW-3CMSD

Instrument: 70msv6.i

Sample Info: 103082, 15067:1.25

Purge Volume: 5.0

Operator: KGG

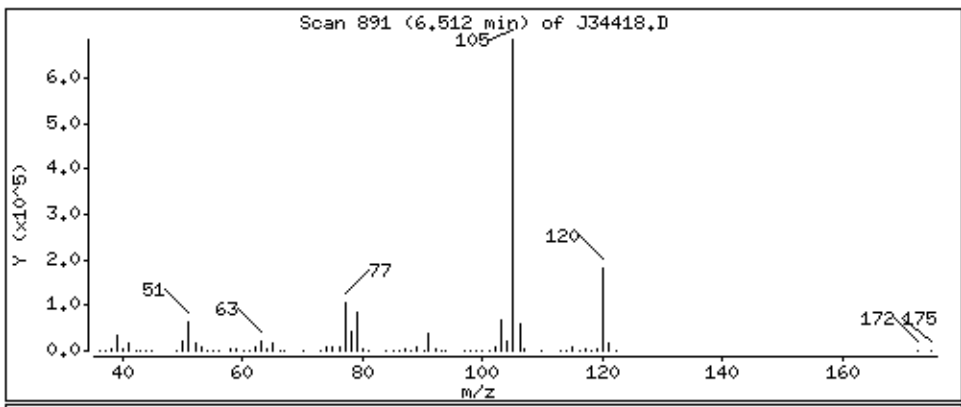
Column phase: RTX-624

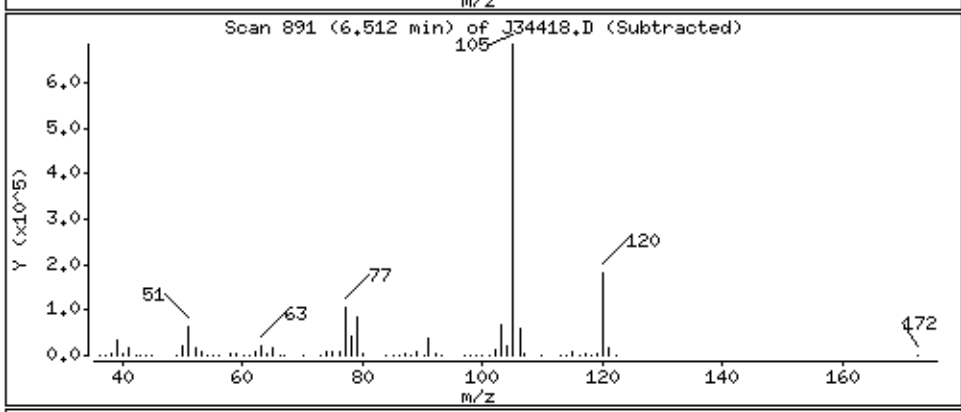
Column diameter: 0.18

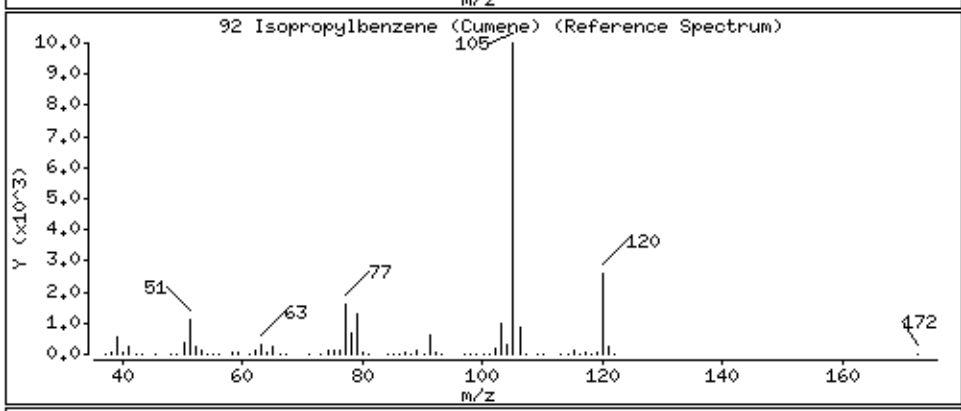
92 Isopropylbenzene (Cumene)

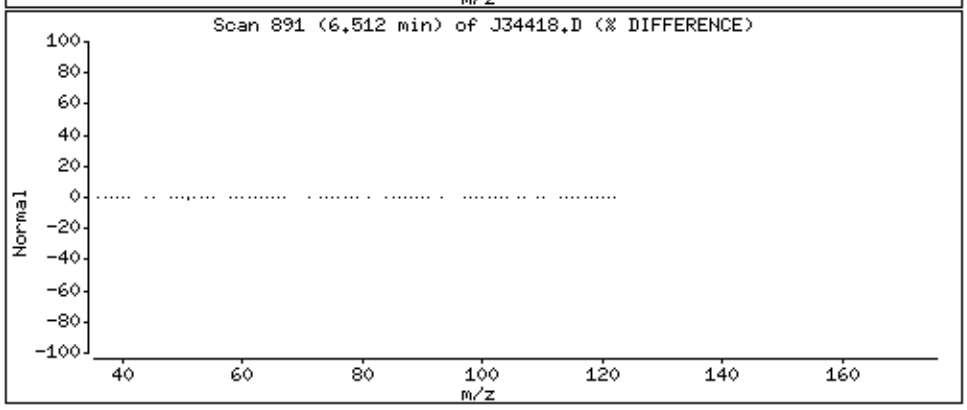
Concentration: 52.4 ug/L

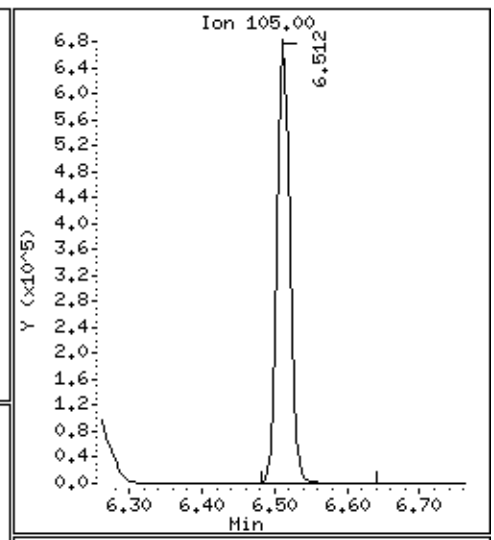
Review Code:

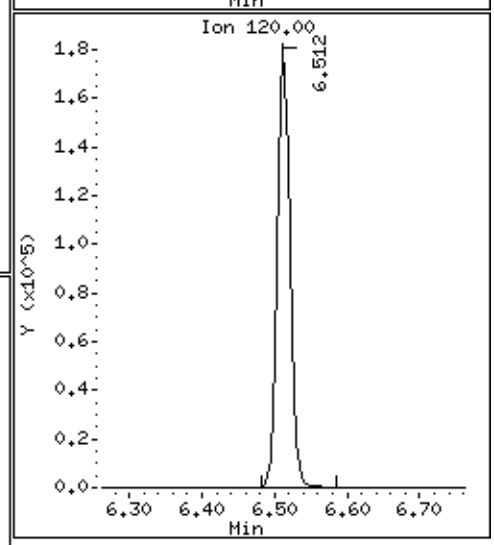












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D

Date : 25-APR-2017 19:25

Client ID: MW-3CMSD

Instrument: 70msv6.i

Sample Info: 103082, 15067:1.25

Purge Volume: 5.0

Operator: KGG

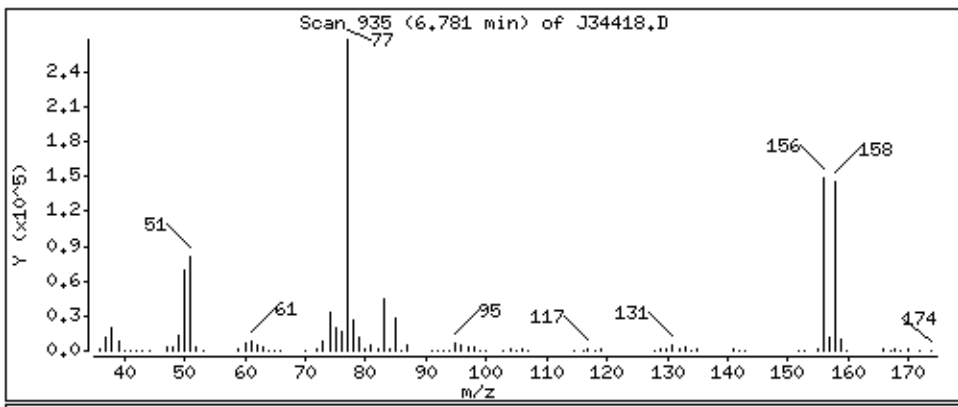
Column phase: RTX-624

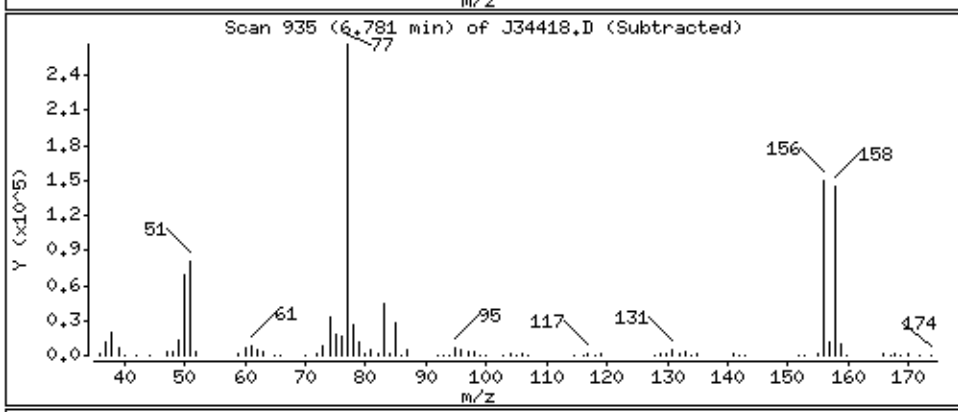
Column diameter: 0.18

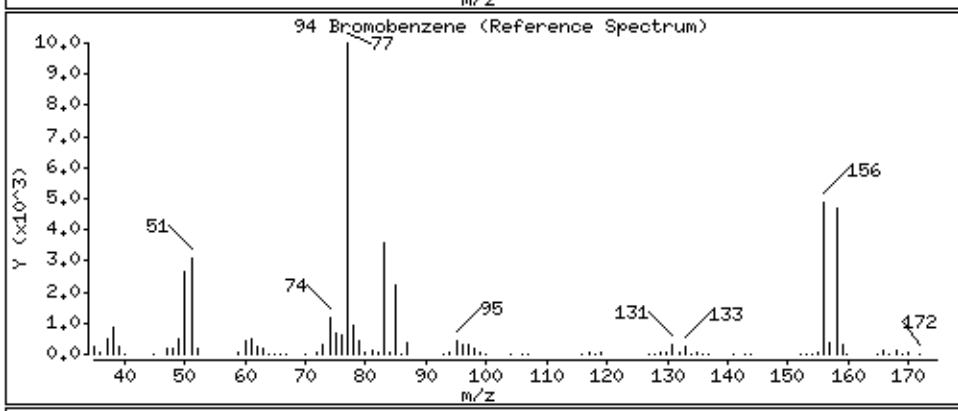
94 Bromobenzene

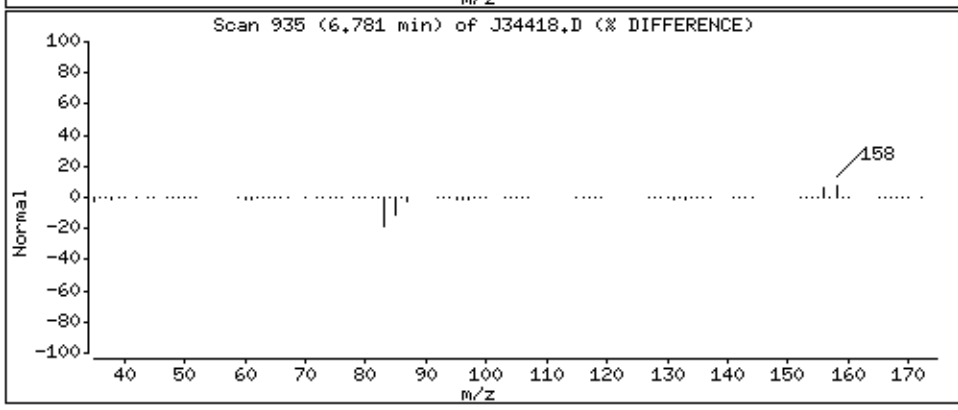
Concentration: 49.8 ug/L

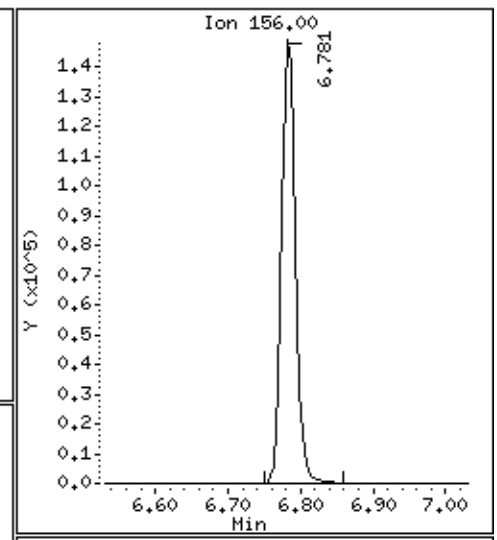
Review Code:

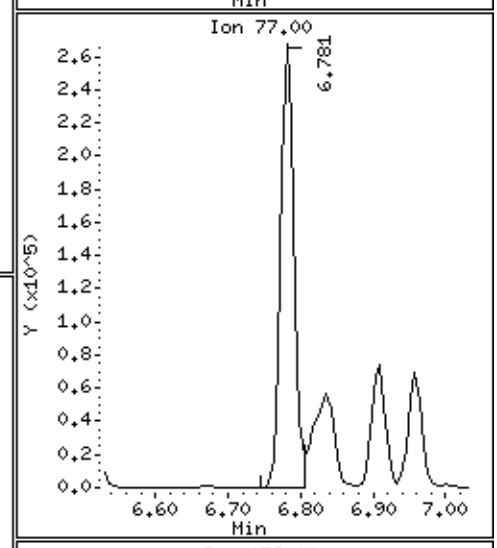


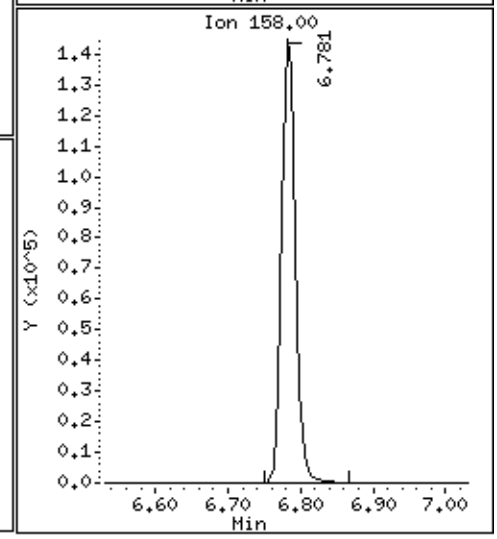












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D

Date : 25-APR-2017 19:25

Client ID: MW-3CMSD

Instrument: 70msv6.i

Sample Info: 103082, 15067:1.25

Purge Volume: 5.0

Operator: KGG

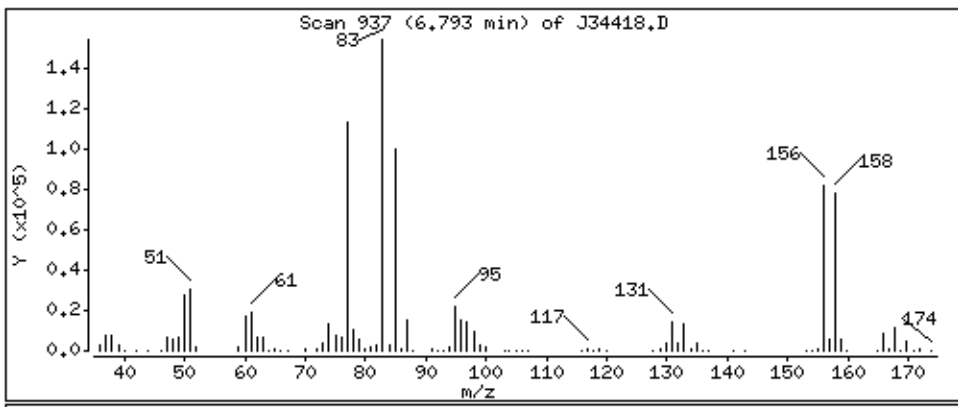
Column phase: RTX-624

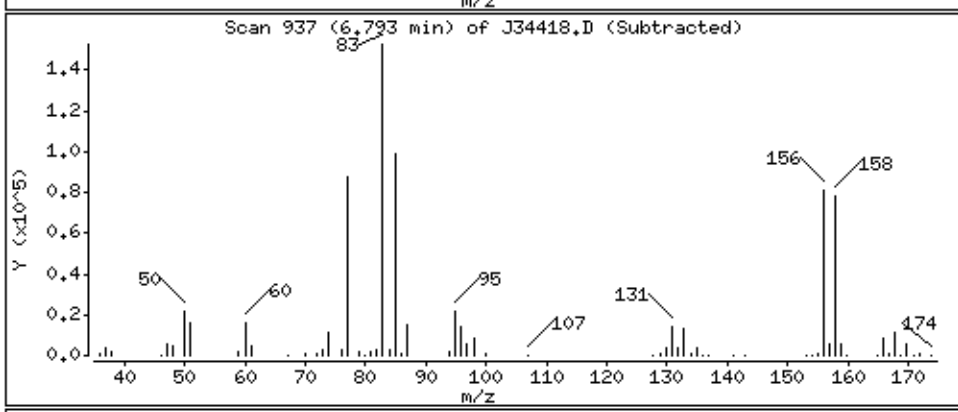
Column diameter: 0.18

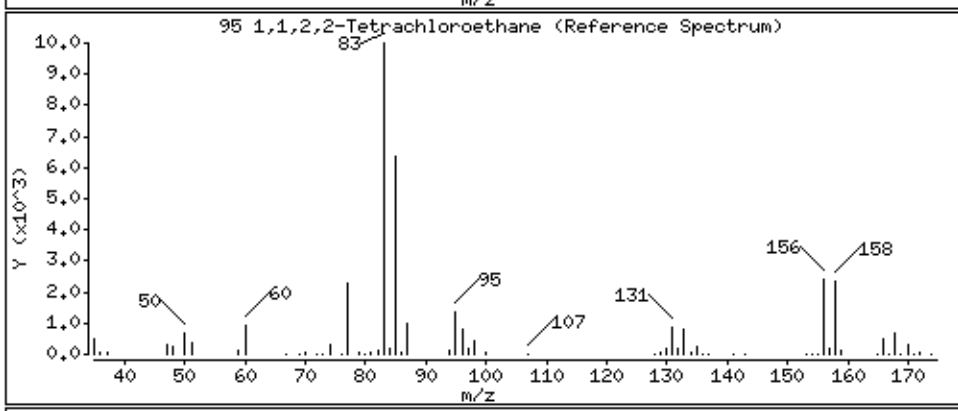
95 1,1,2,2-Tetrachloroethane

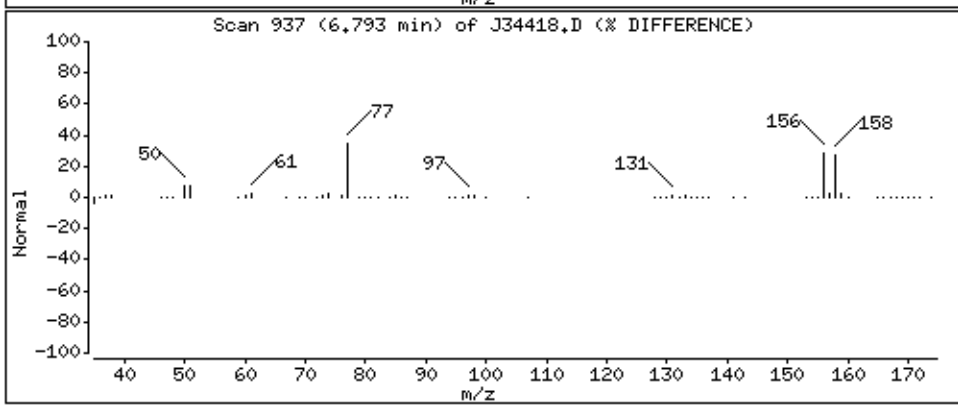
Concentration: 43.6 ug/L

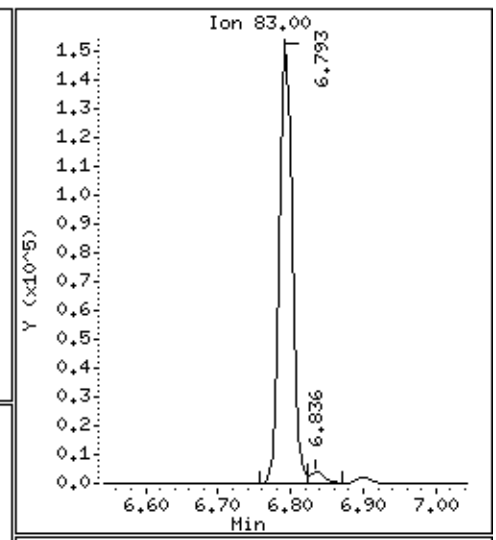
Review Code:

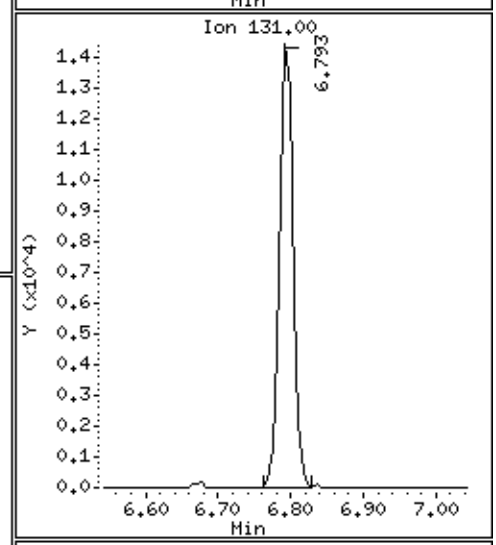


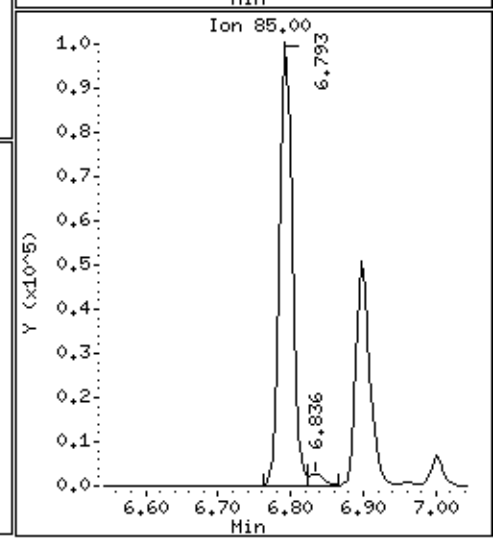












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D

Date : 25-APR-2017 19:25

Client ID: MW-3CMSD

Instrument: 70msv6.i

Sample Info: 103082, 15067:1.25

Purge Volume: 5.0

Operator: KGG

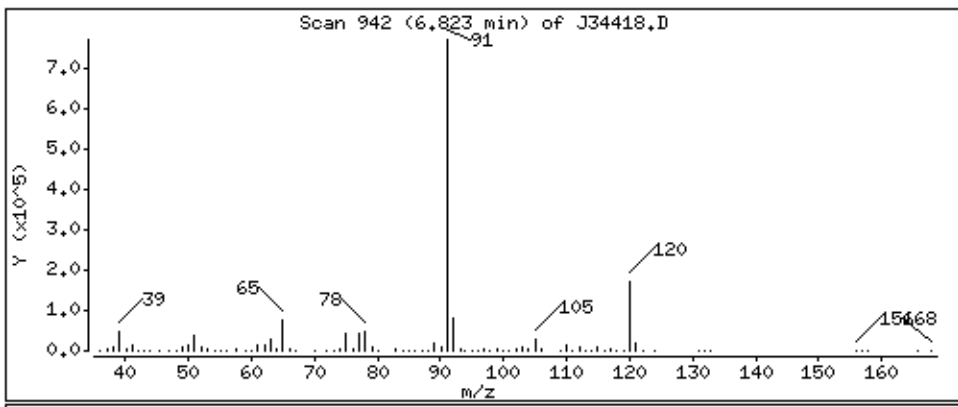
Column phase: RTX-624

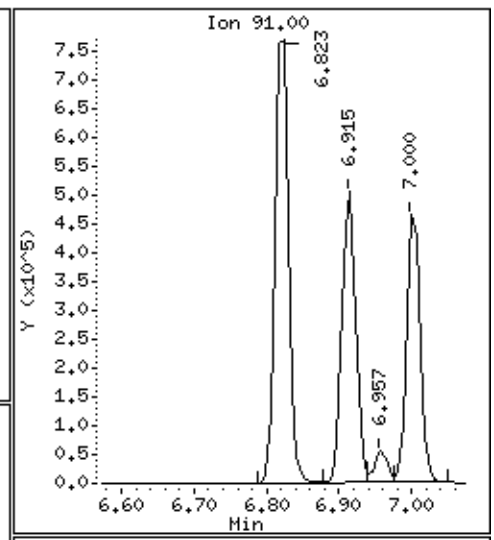
Column diameter: 0.18

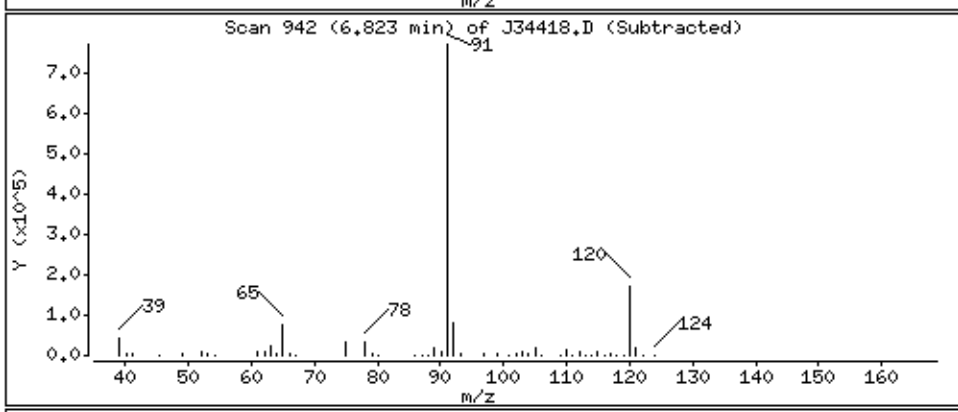
98 n-Propylbenzene

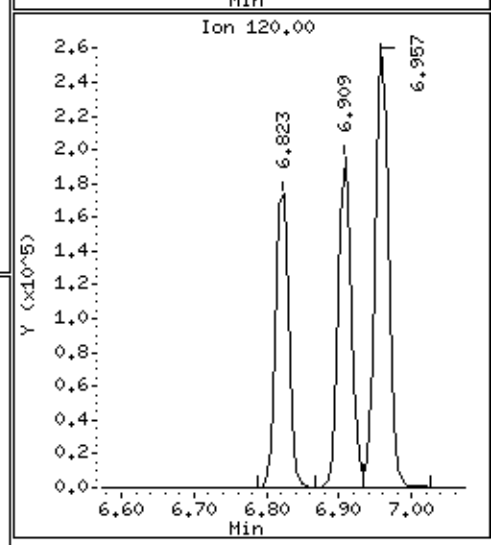
Concentration: 52.8 ug/L

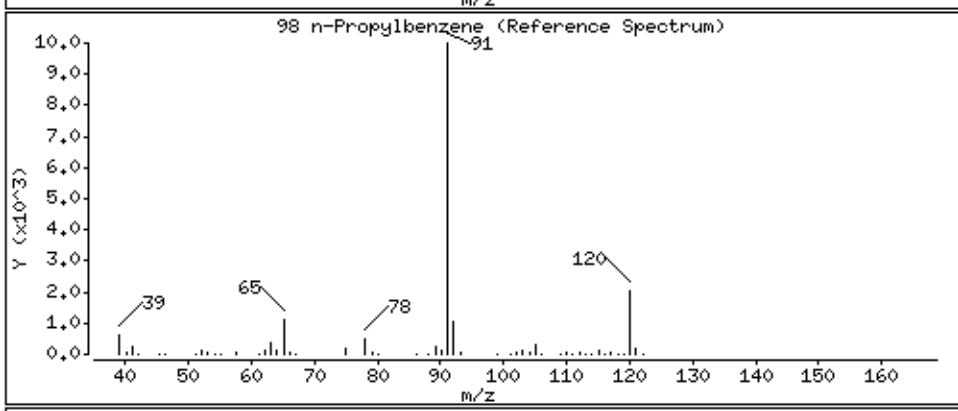
Review Code:

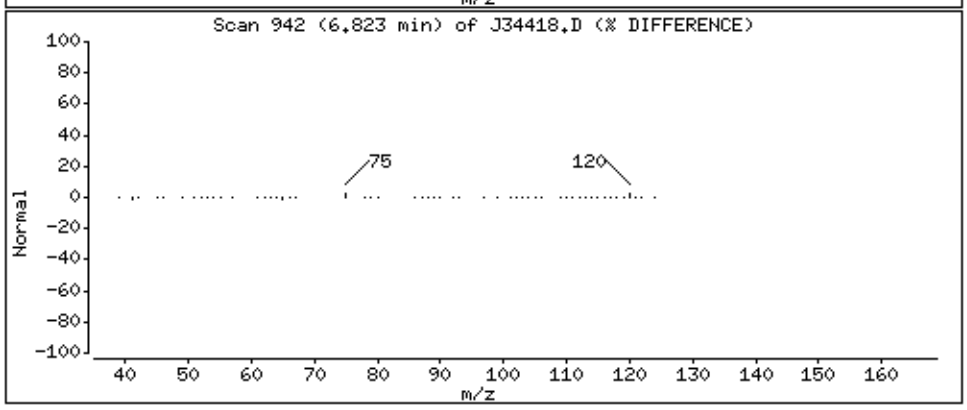












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D

Date : 25-APR-2017 19:25

Client ID: MW-3CMSD

Instrument: 70msv6.i

Sample Info: 103082, 15067:1.25

Purge Volume: 5.0

Operator: KGG

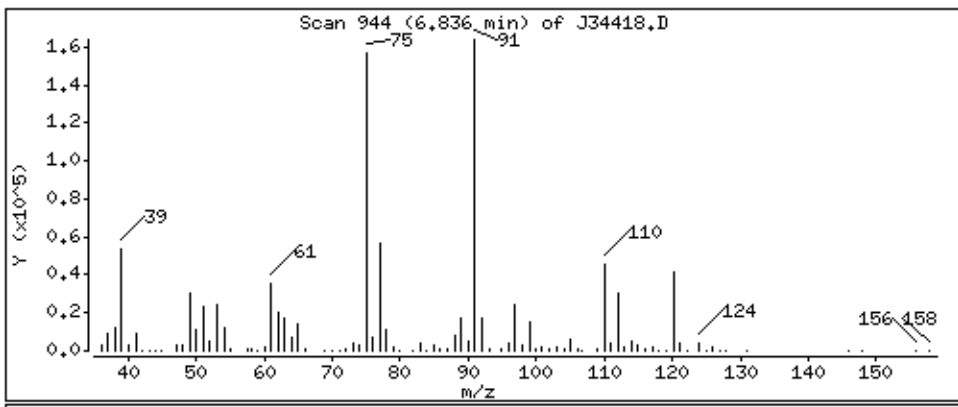
Column phase: RTX-624

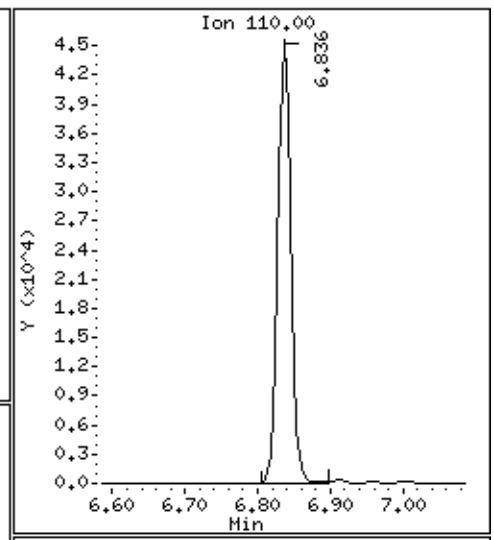
Column diameter: 0.18

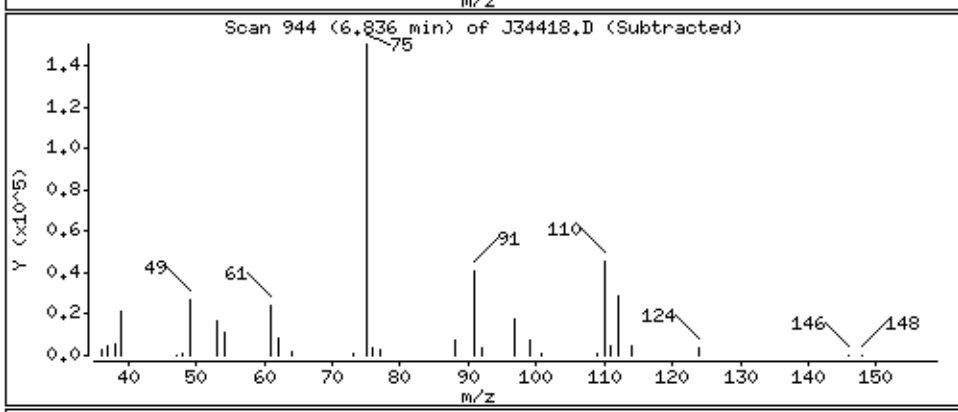
96 1,2,3-Trichloropropane

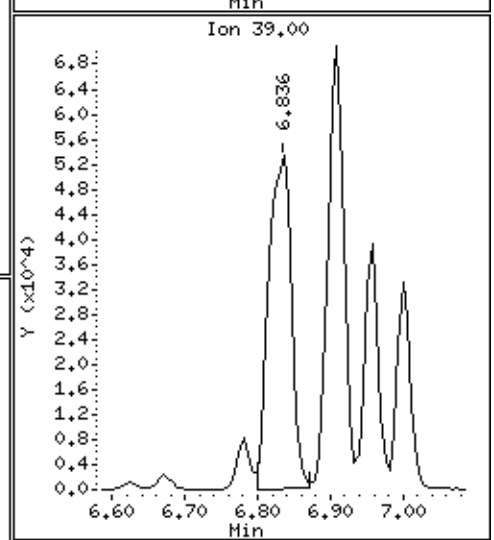
Concentration: 45.9 ug/L

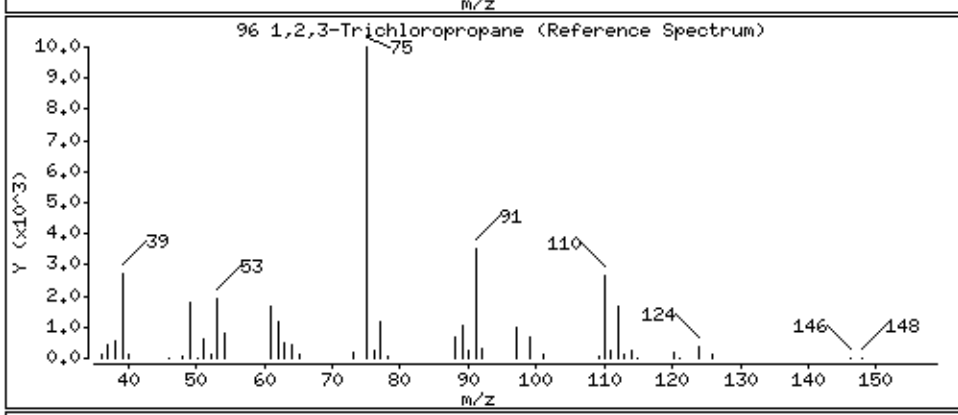
Review Code:

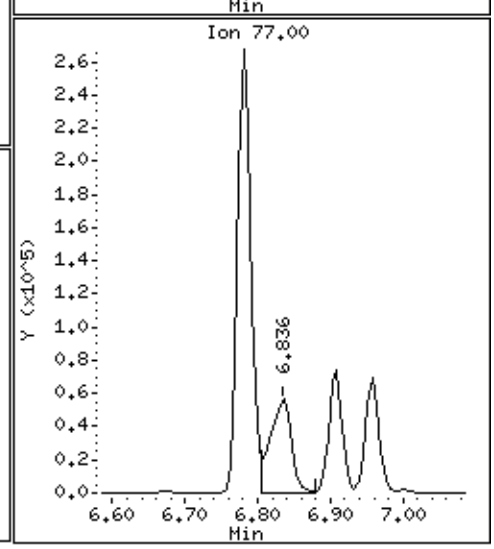


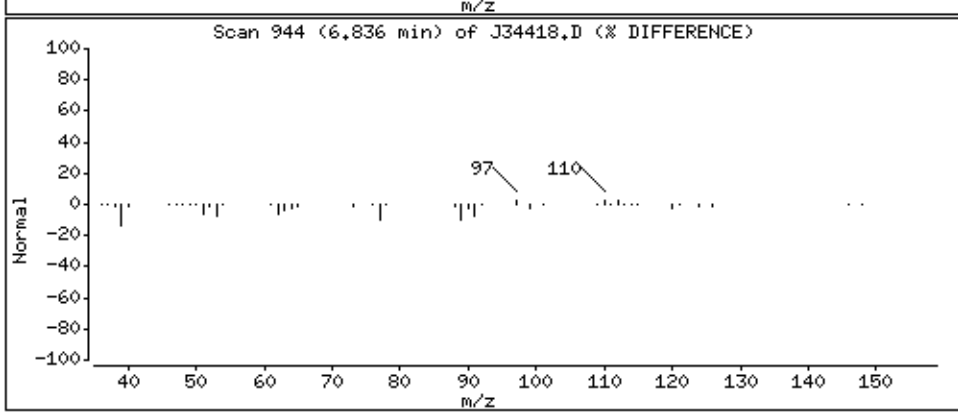












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D

Date : 25-APR-2017 19:25

Client ID: MW-3CMSD

Instrument: 70msv6.i

Sample Info: 103082, 15067:1.25

Purge Volume: 5.0

Operator: KGG

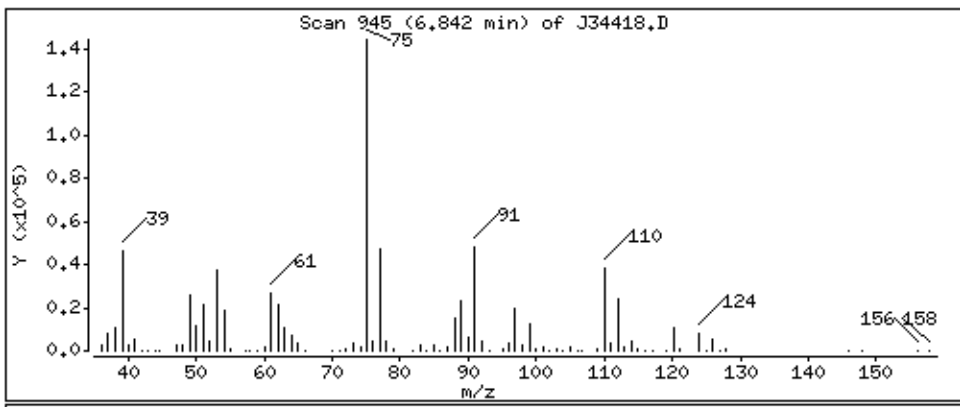
Column phase: RTX-624

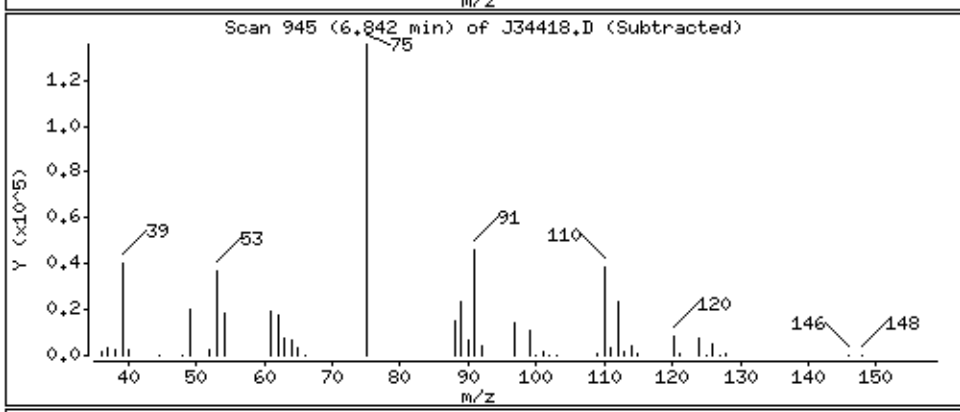
Column diameter: 0.18

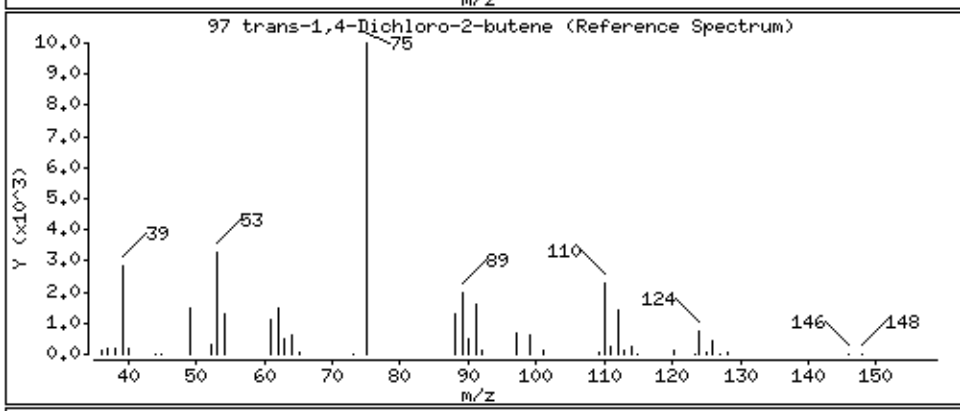
97 trans-1,4-Dichloro-2-butene

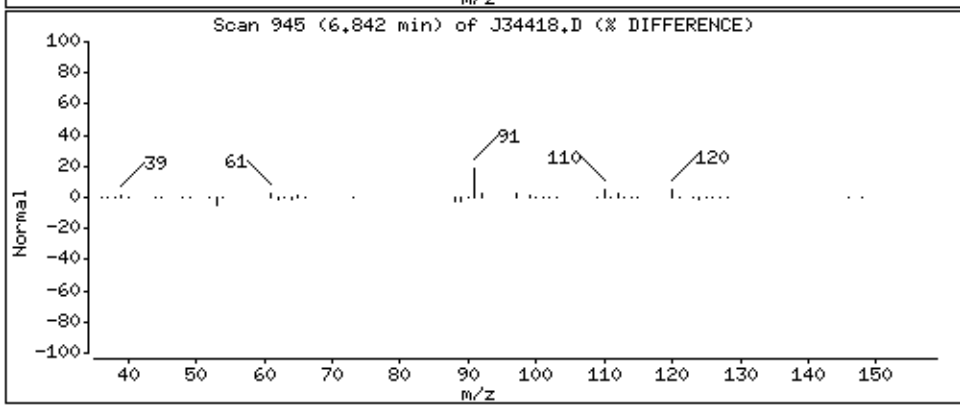
Concentration: 39.8 ug/L

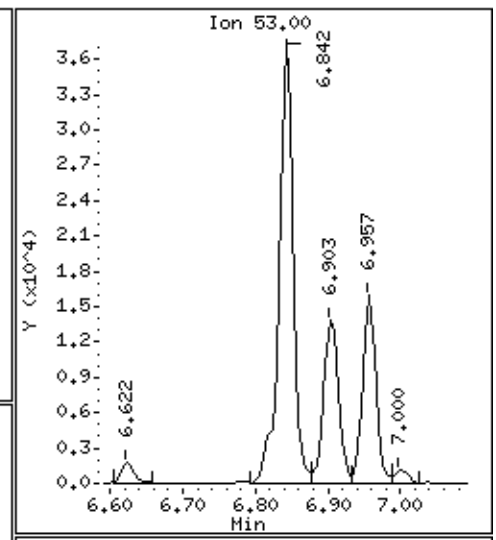
Review Code:

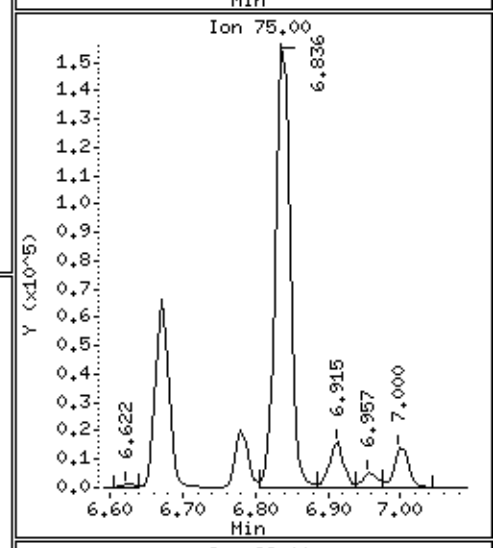


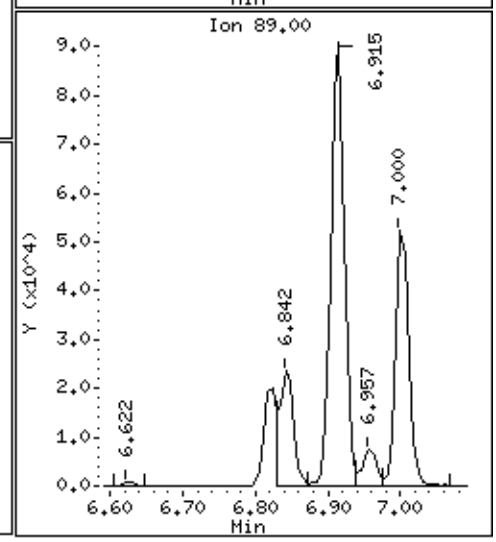












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D

Date : 25-APR-2017 19:25

Client ID: MW-3CMSD

Instrument: 70msv6.i

Sample Info: 103082, 15067:1.25

Purge Volume: 5.0

Operator: KGG

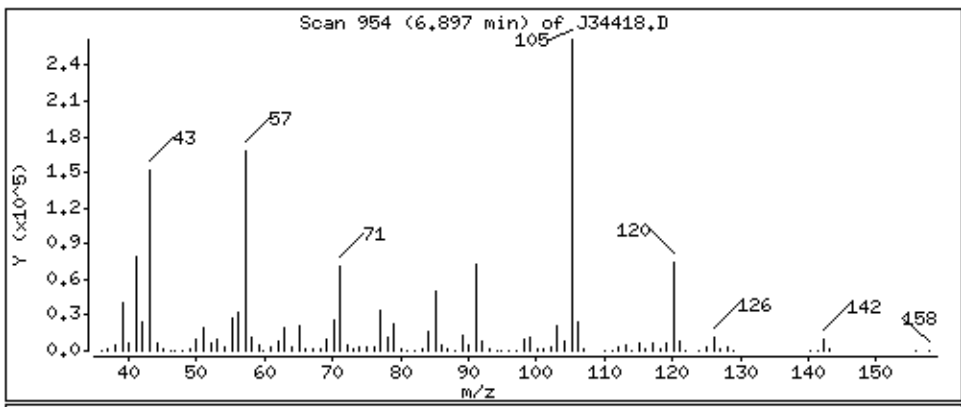
Column phase: RTX-624

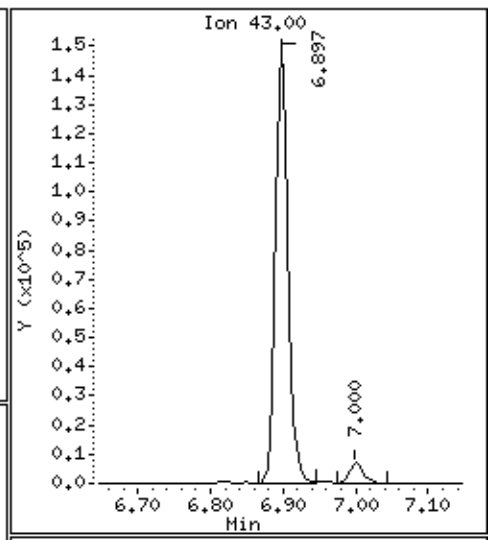
Column diameter: 0.18

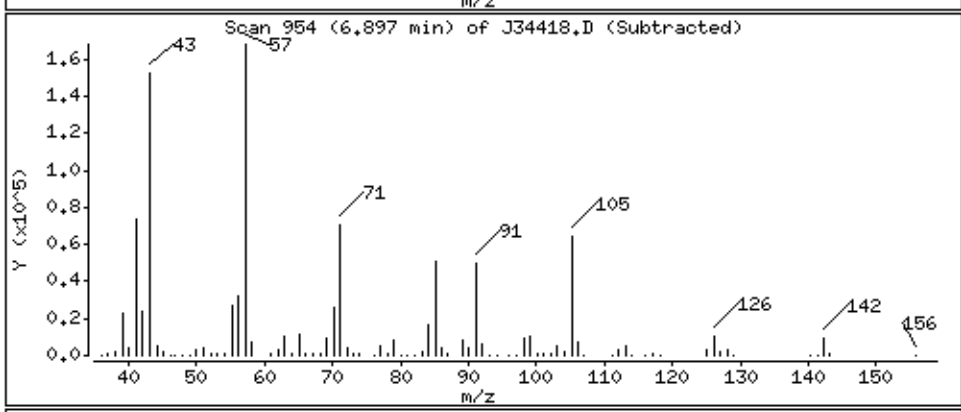
103 n-Decane

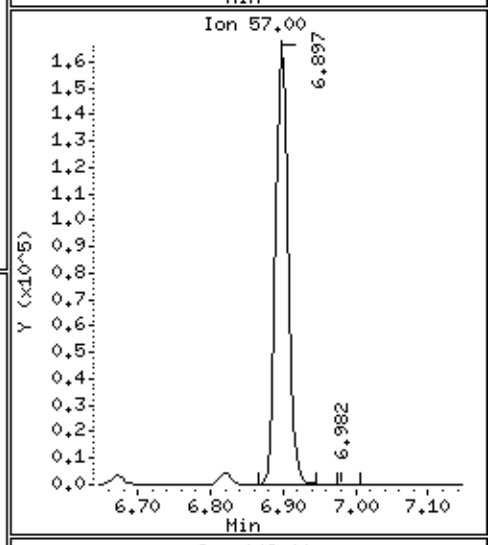
Concentration: 57.4 ug/L

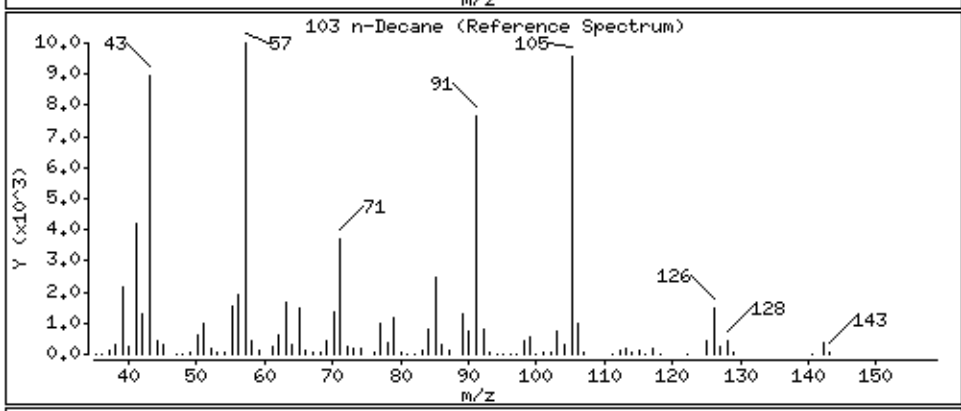
Review Code:

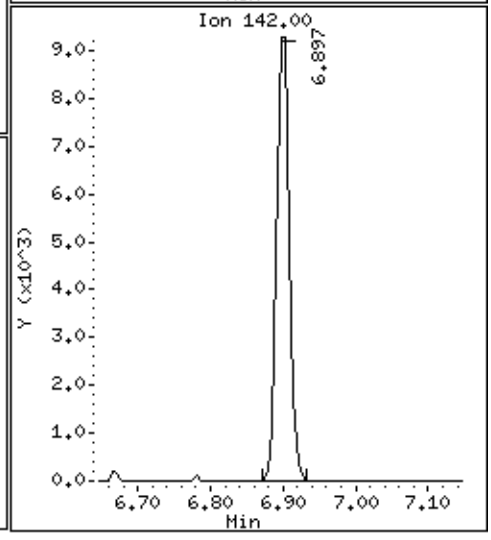


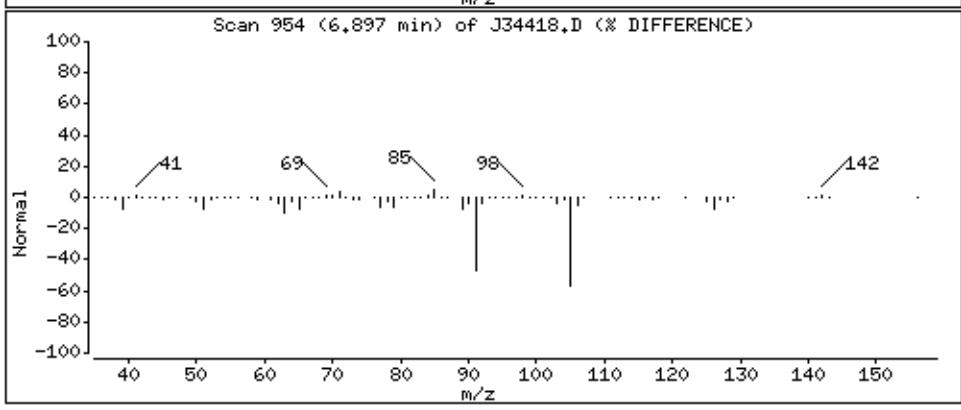












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D

Date : 25-APR-2017 19:25

Client ID: MW-3CMSD

Instrument: 70msv6.i

Sample Info: 103082, 15067:1.25

Purge Volume: 5.0

Operator: KGG

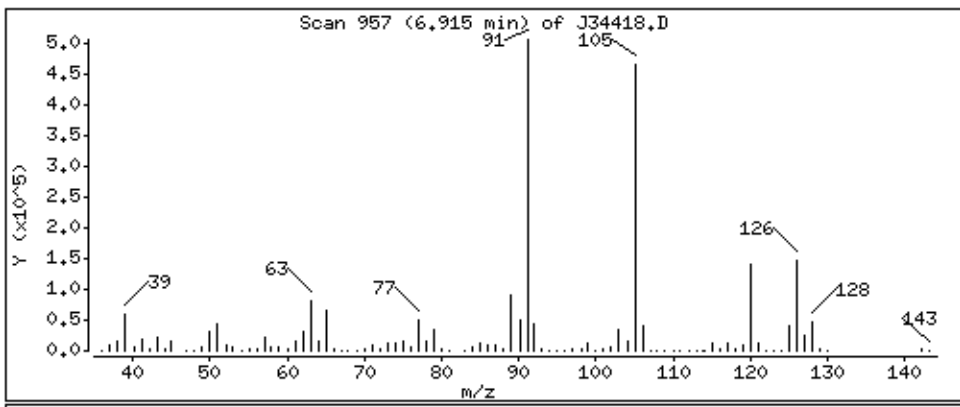
Column phase: RTX-624

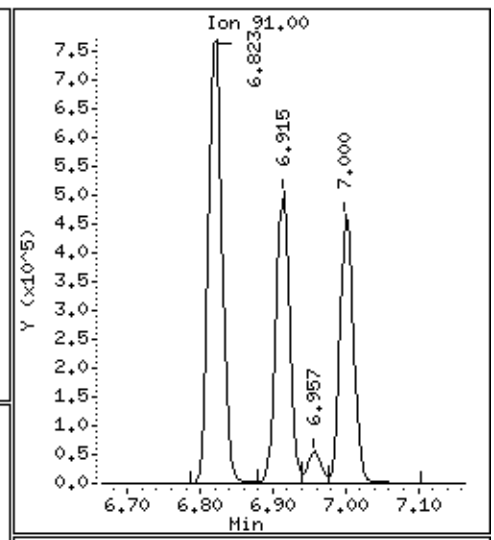
Column diameter: 0.18

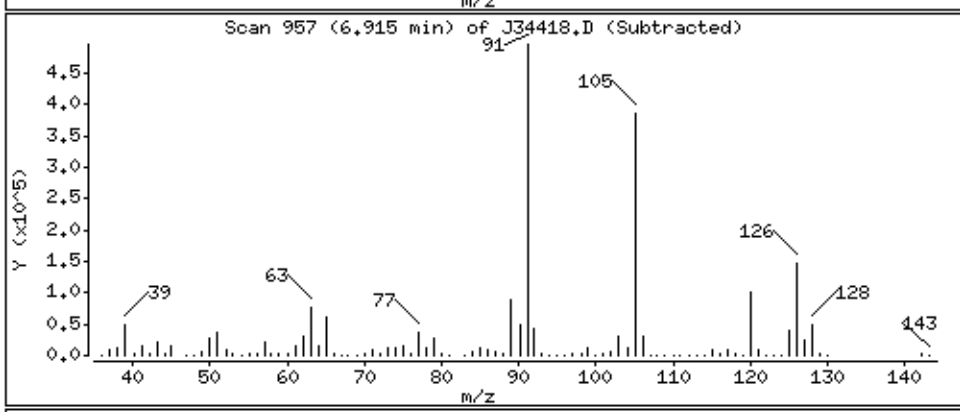
99 2-Chlorotoluene

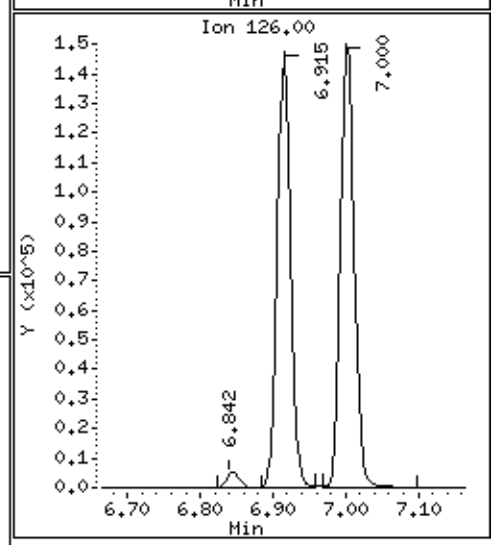
Concentration: 49.0 ug/L

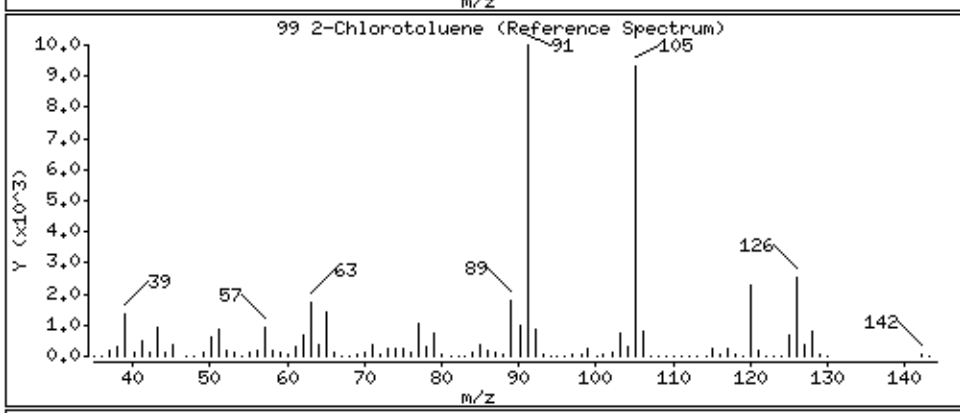
Review Code:

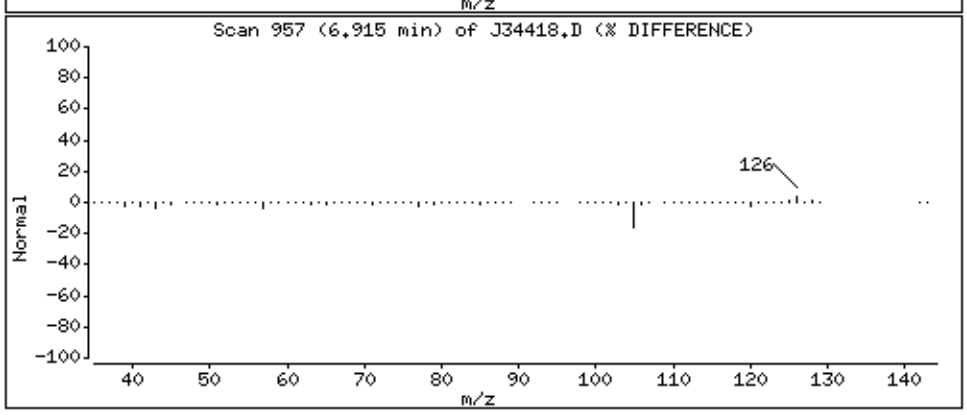












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D

Date : 25-APR-2017 19:25

Client ID: MW-3CMSD

Instrument: 70msv6.i

Sample Info: 103082, 15067:1.25

Purge Volume: 5.0

Operator: KGG

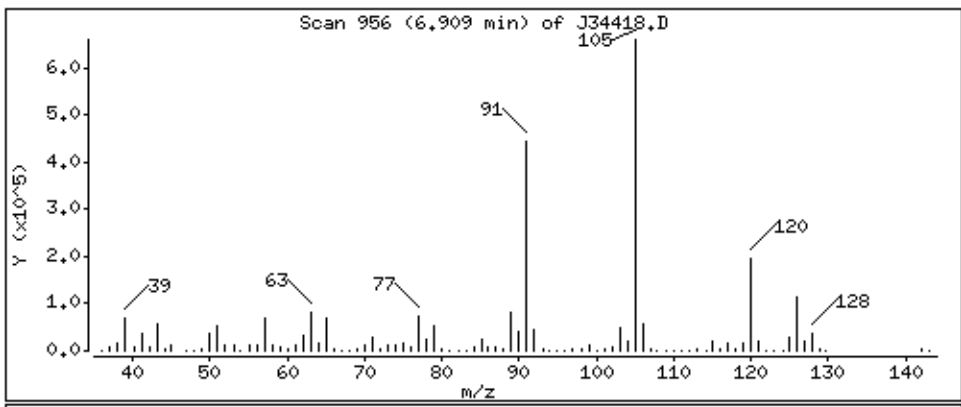
Column phase: RTX-624

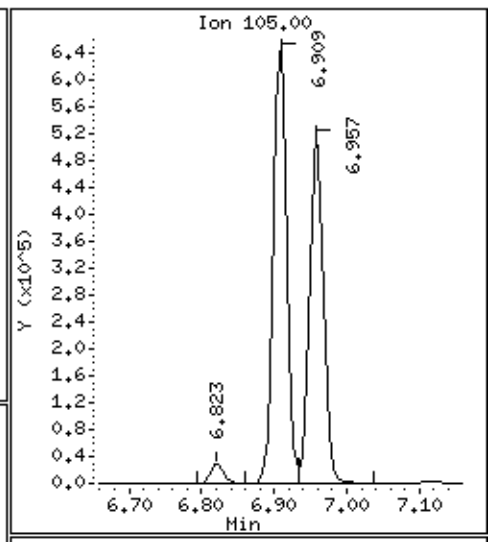
Column diameter: 0.18

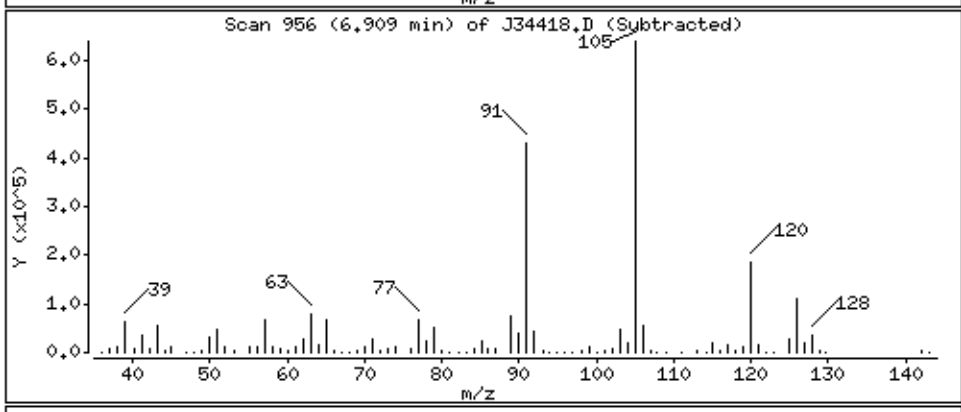
100 4-Ethyltoluene

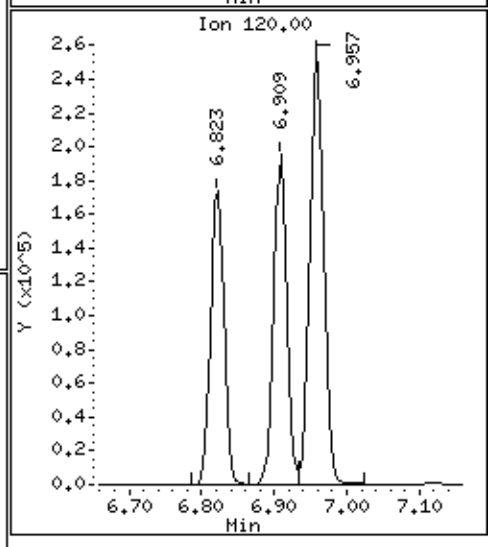
Concentration: 52.7 ug/L

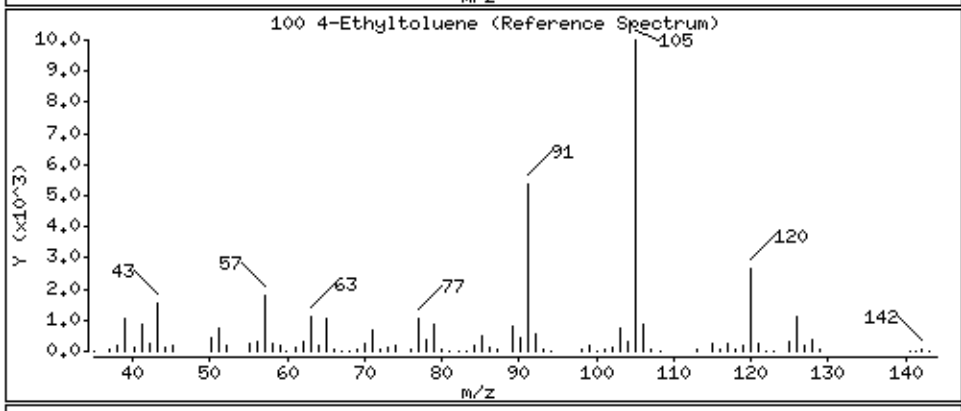
Review Code:

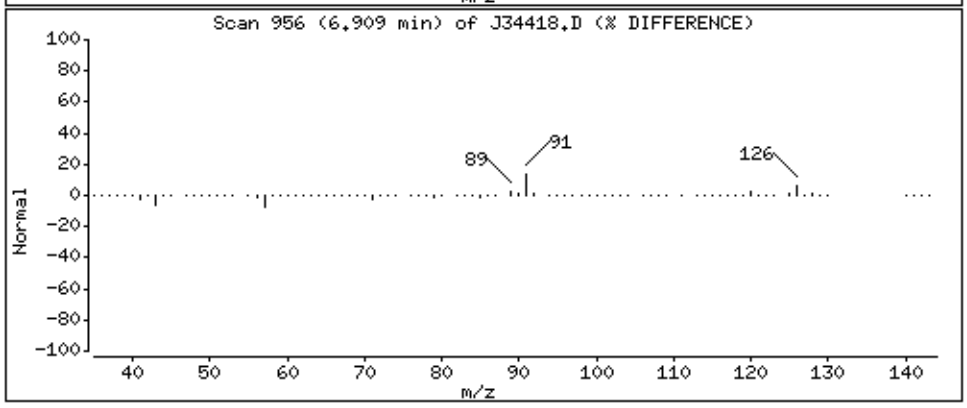












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D

Date : 25-APR-2017 19:25

Client ID: MW-3CMSD

Instrument: 70msv6.i

Sample Info: 103082, 15067:1.25

Purge Volume: 5.0

Operator: KGG

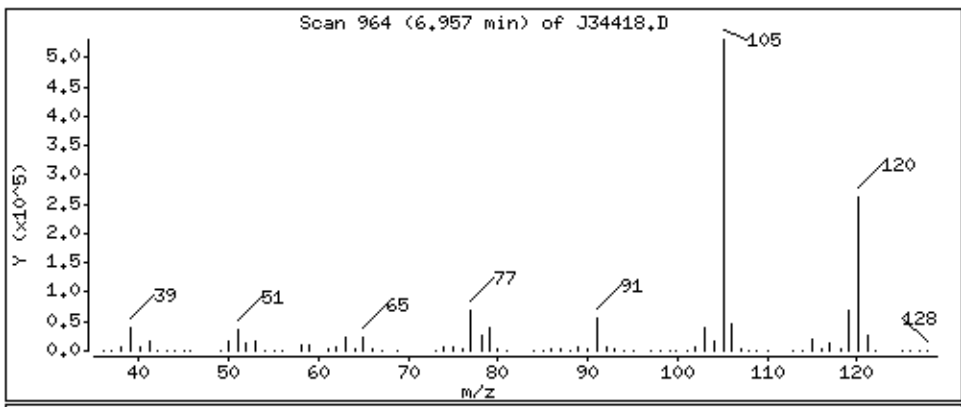
Column phase: RTX-624

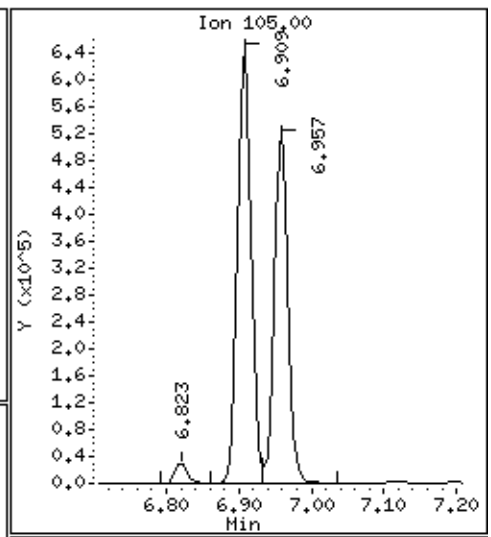
Column diameter: 0.18

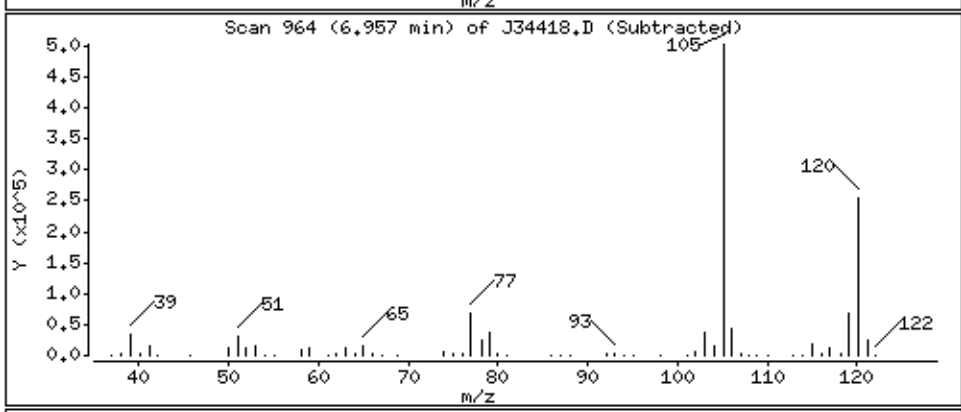
101 1,3,5-Trimethylbenzene

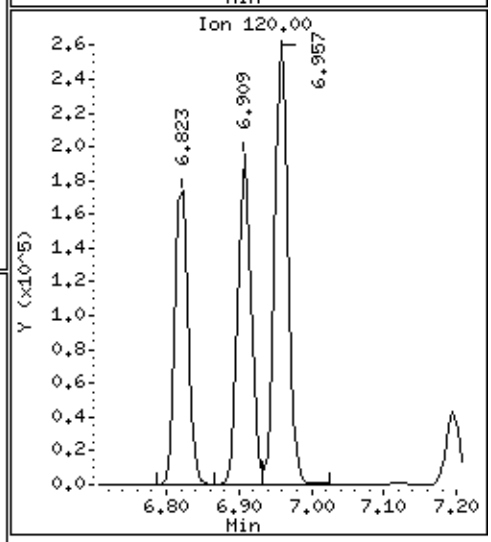
Concentration: 52.4 ug/L

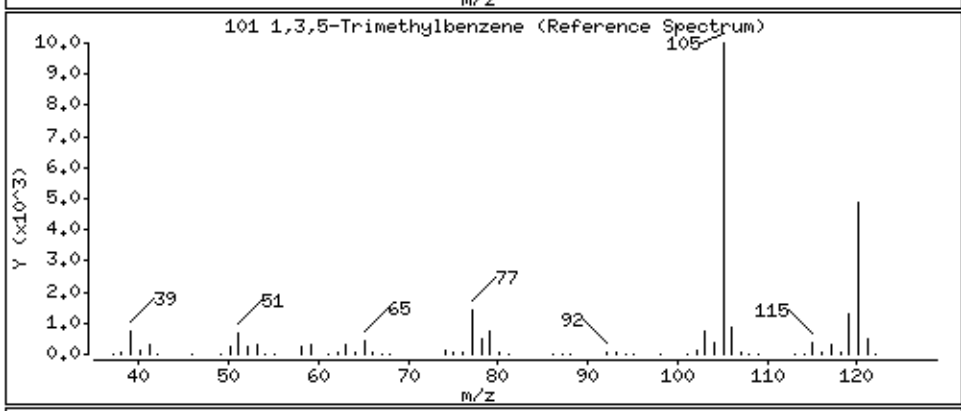
Review Code:

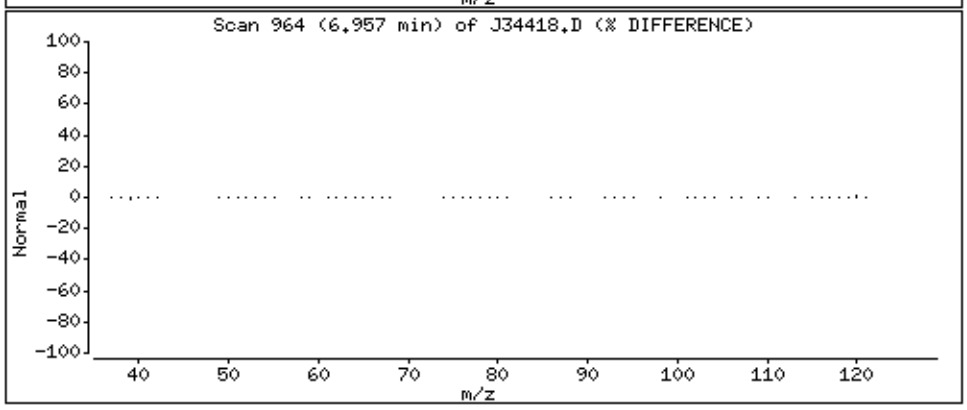












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D

Date : 25-APR-2017 19:25

Client ID: MW-3CMSD

Instrument: 70msv6.i

Sample Info: 103082, 15067:1.25

Purge Volume: 5.0

Operator: KGG

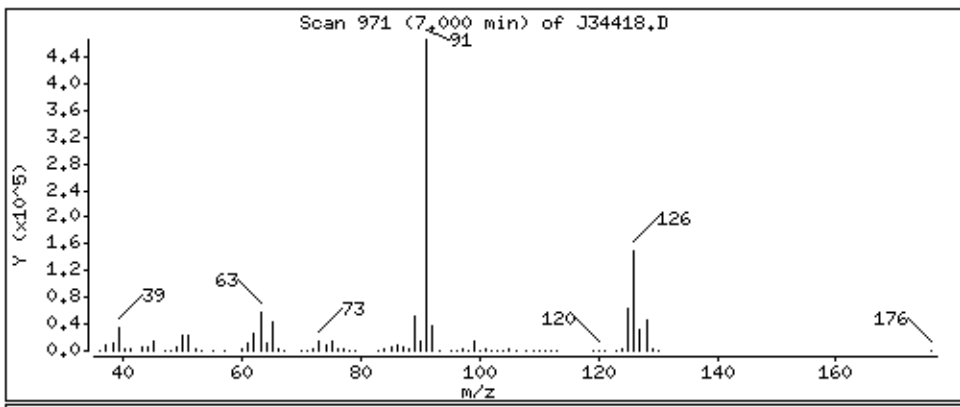
Column phase: RTX-624

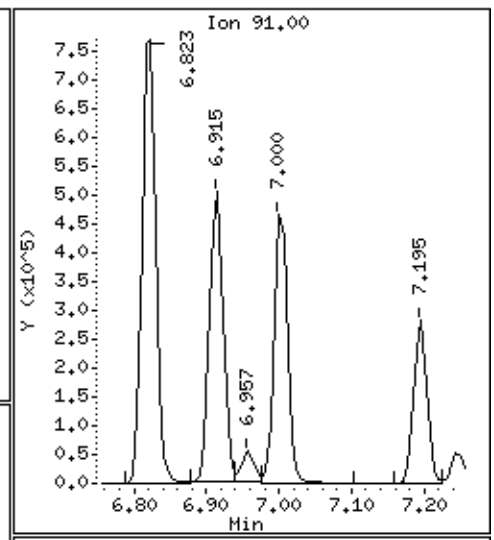
Column diameter: 0.18

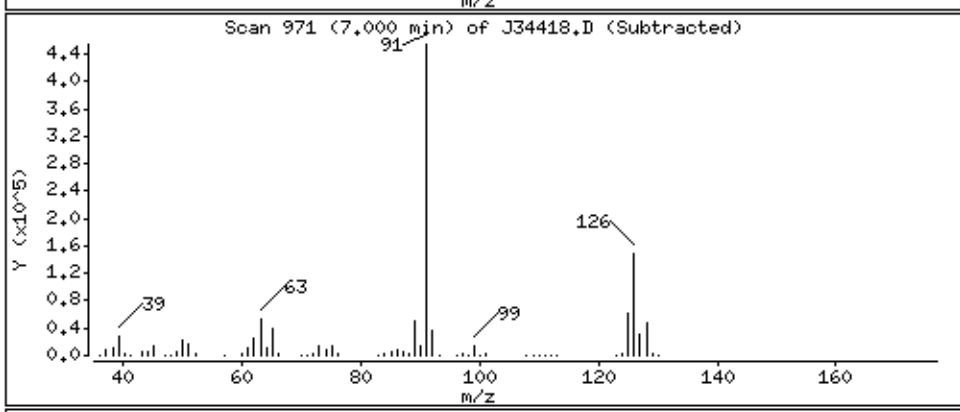
102 4-Chlorotoluene

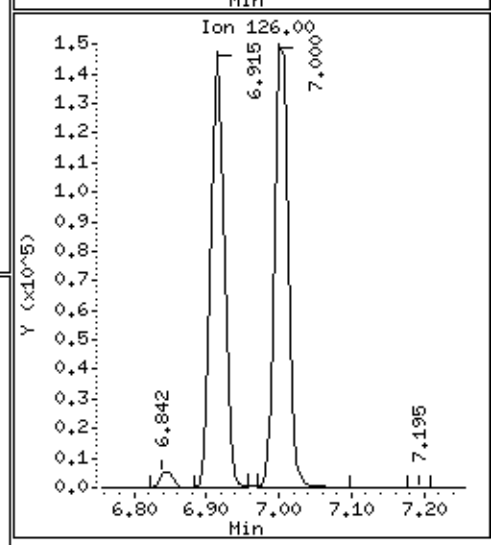
Concentration: 48.8 ug/L

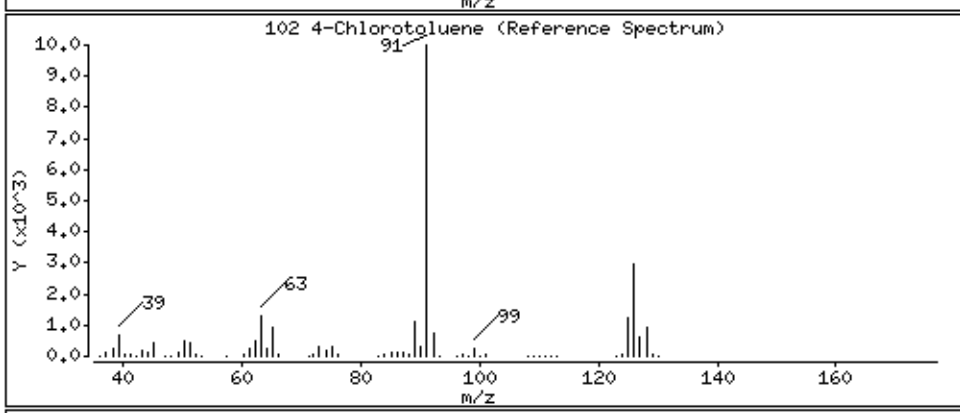
Review Code:

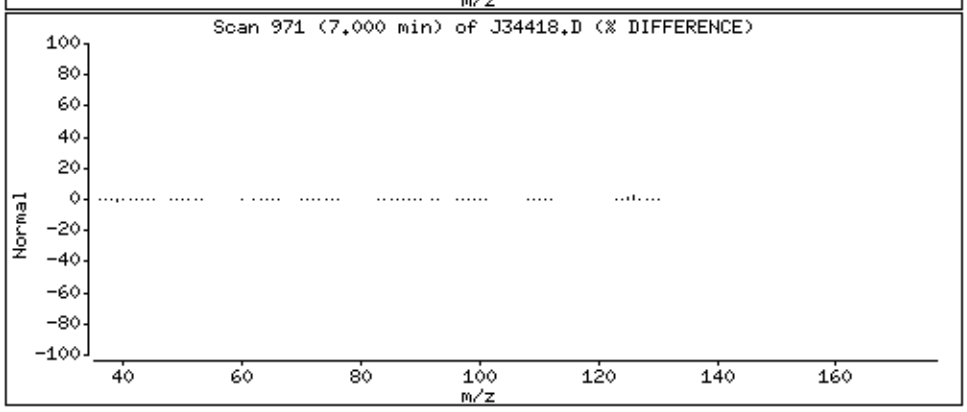












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D

Date : 25-APR-2017 19:25

Client ID: MW-3CMSD

Instrument: 70msv6.i

Sample Info: 103082, 15067:1.25

Purge Volume: 5.0

Operator: KGG

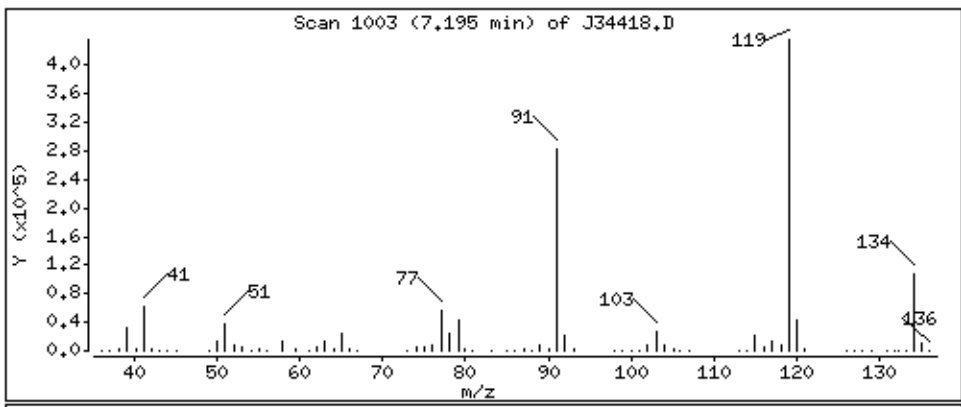
Column phase: RTX-624

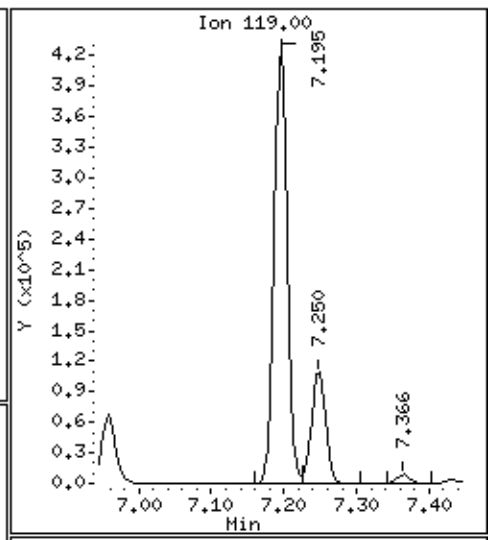
Column diameter: 0.18

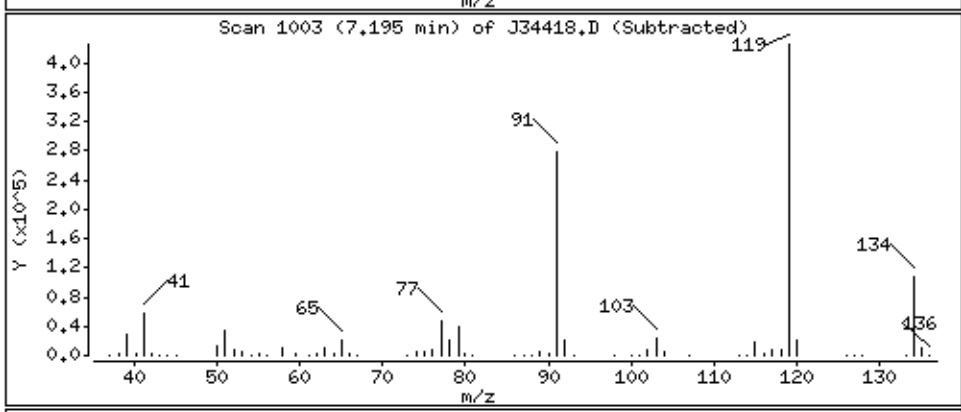
104 tert-Butylbenzene

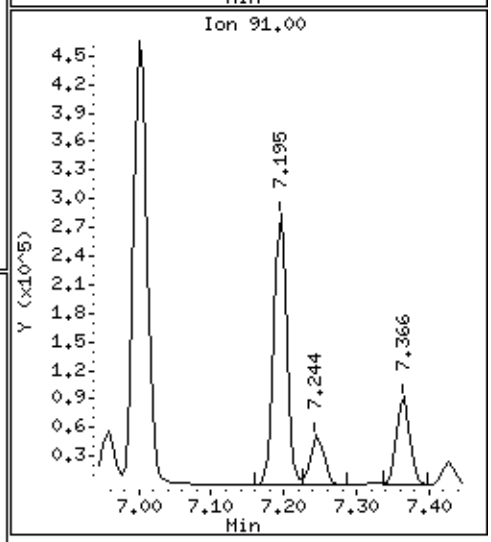
Concentration: 54.5 ug/L

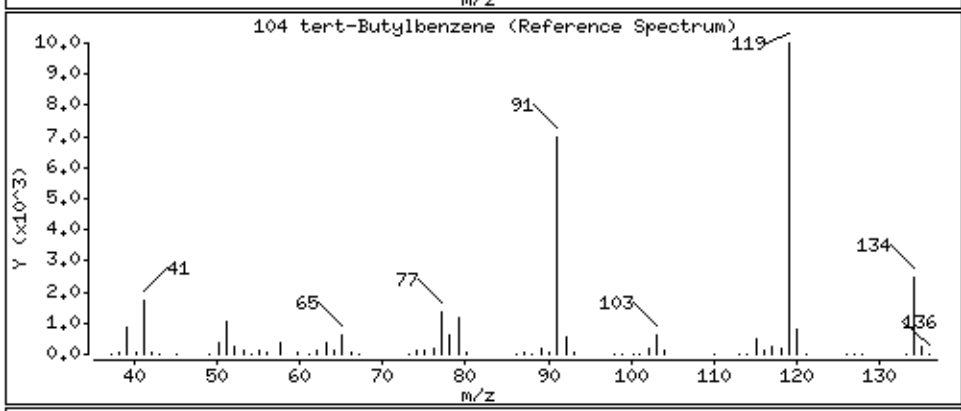
Review Code:

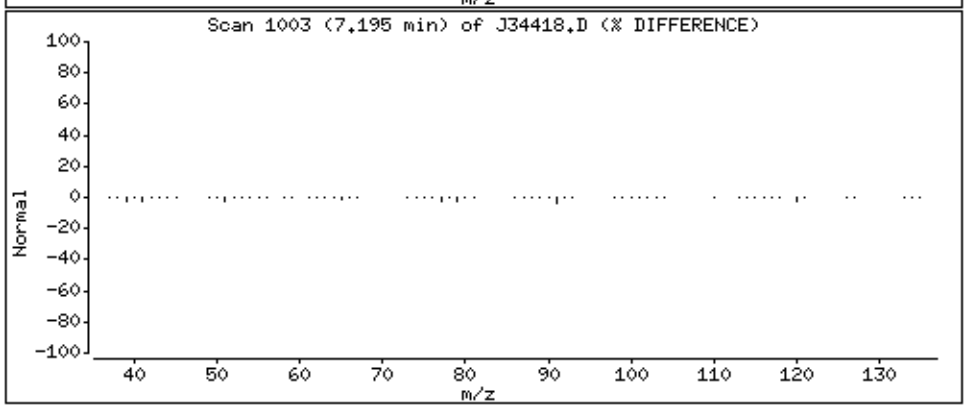












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D

Date : 25-APR-2017 19:25

Client ID: MW-3CMSD

Instrument: 70msv6.i

Sample Info: 103082, 15067:1.25

Purge Volume: 5.0

Operator: KGG

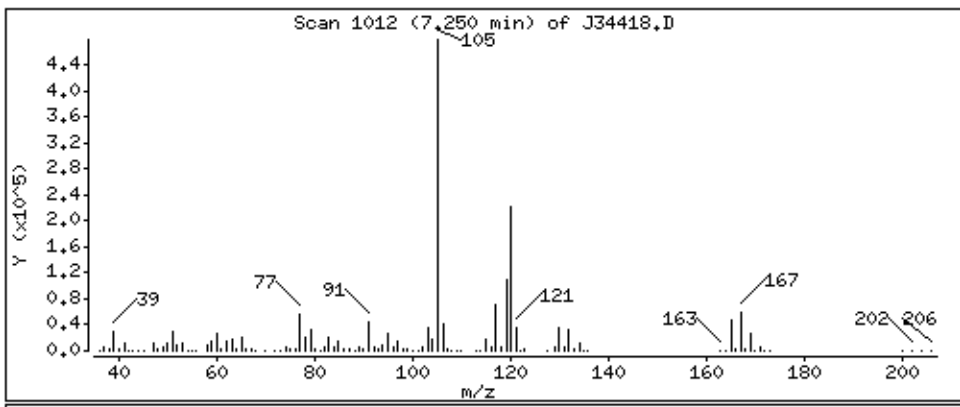
Column phase: RTX-624

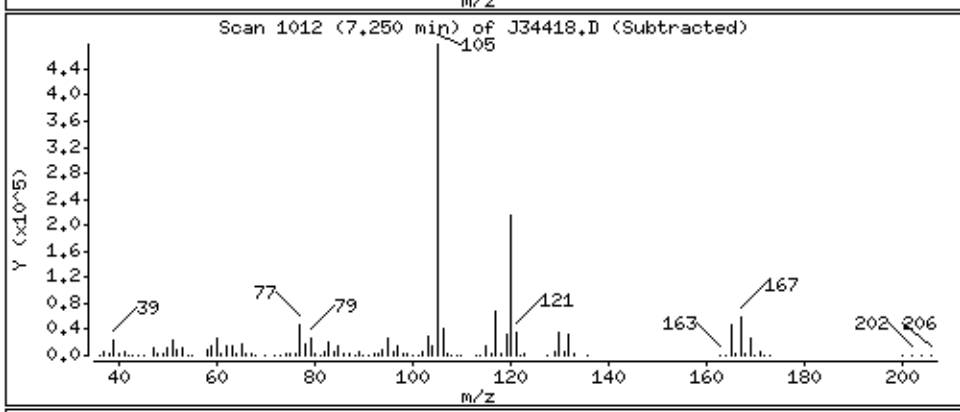
Column diameter: 0.18

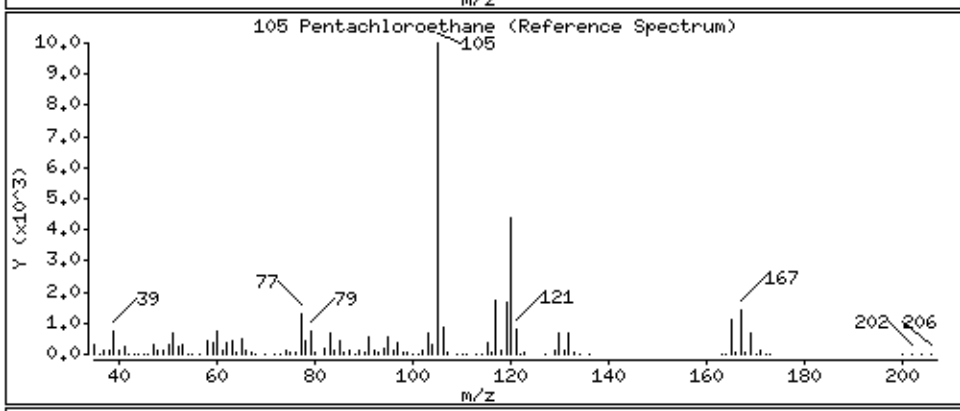
105 Pentachloroethane

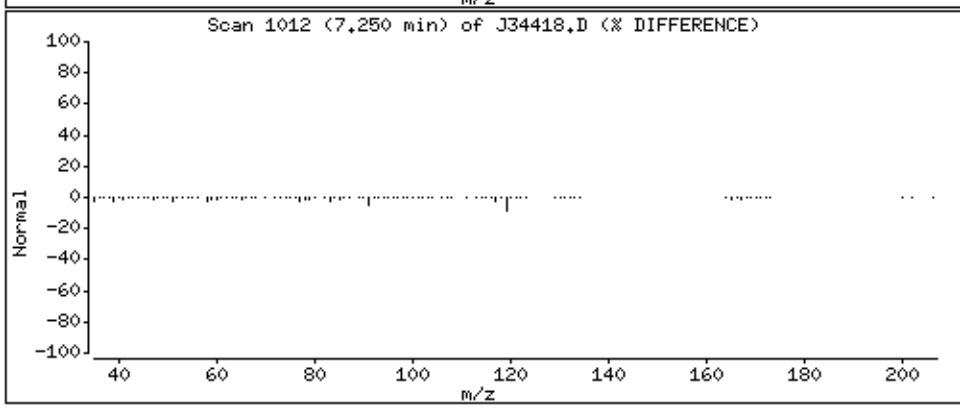
Concentration: 55.8 ug/L

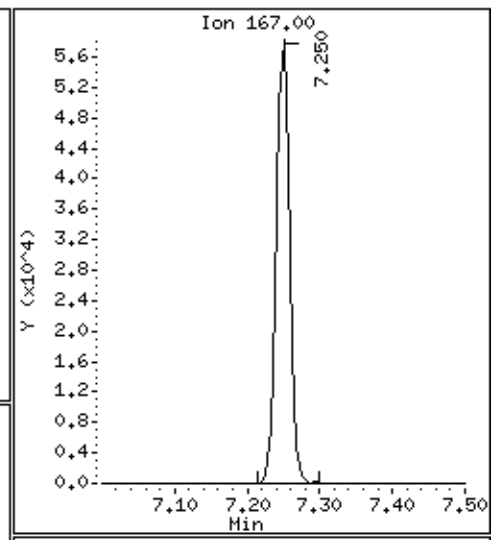
Review Code:

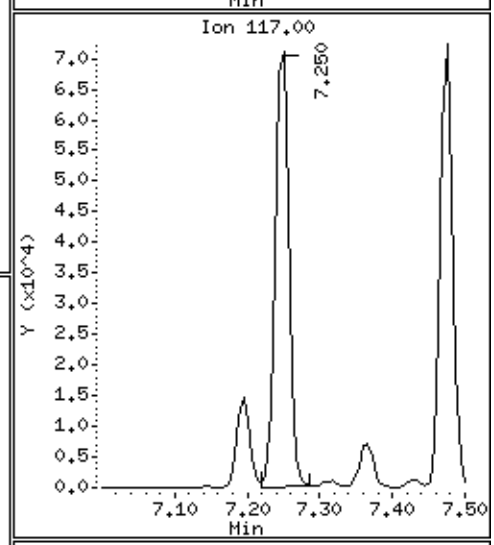


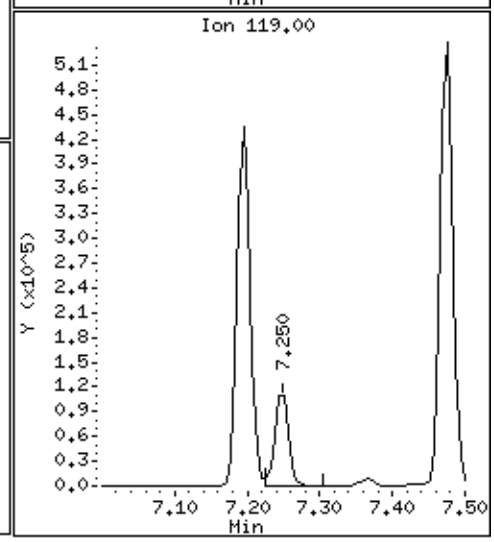












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D

Date : 25-APR-2017 19:25

Client ID: MW-3CMSD

Instrument: 70msv6.i

Sample Info: 103082, 15067:1.25

Purge Volume: 5.0

Operator: KGG

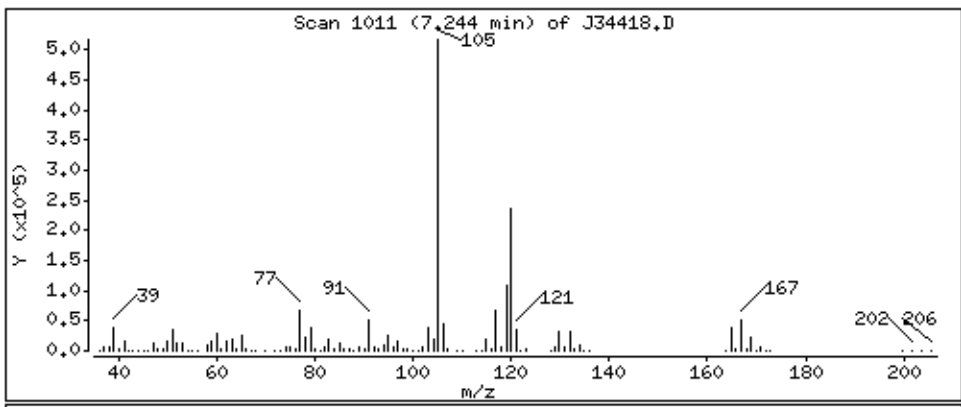
Column phase: RTX-624

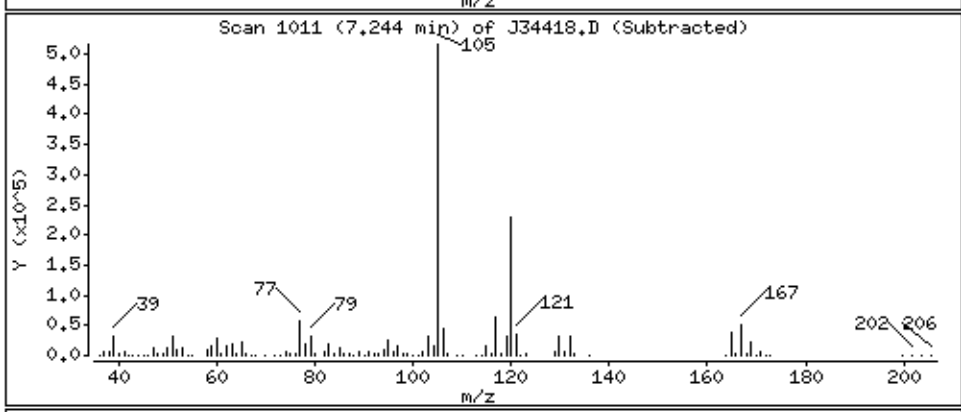
Column diameter: 0.18

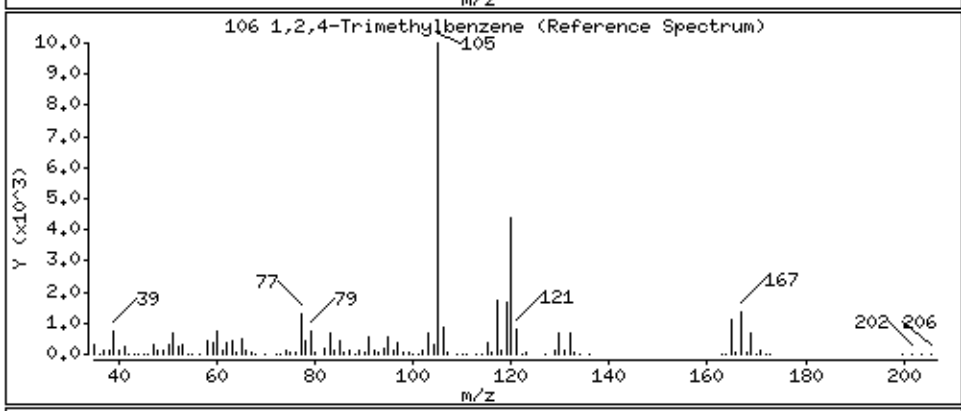
106 1,2,4-Trimethylbenzene

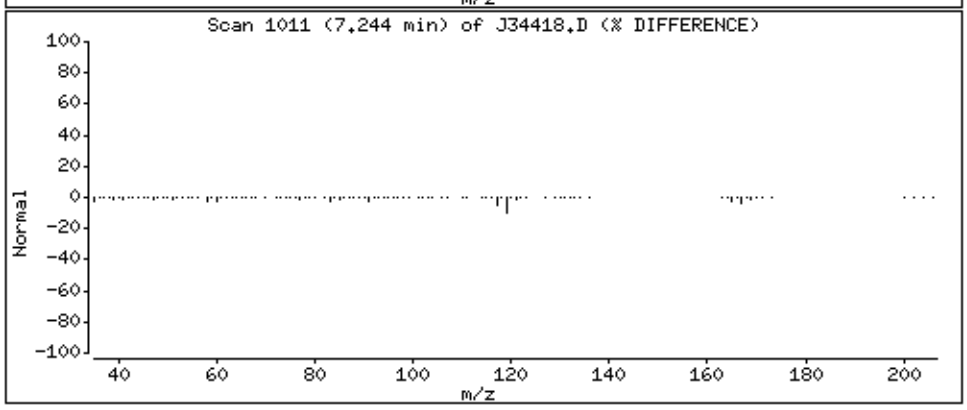
Concentration: 50.4 ug/L

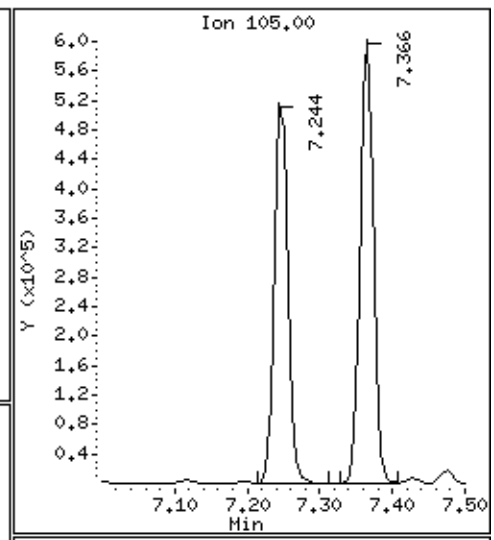
Review Code:

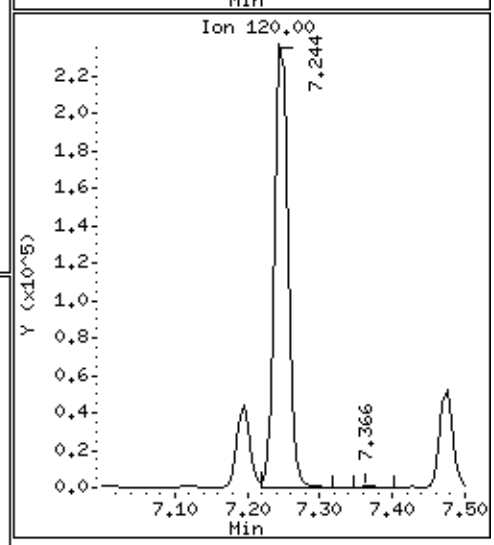












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D

Date : 25-APR-2017 19:25

Client ID: MW-3CMSD

Instrument: 70msv6.i

Sample Info: 103082, 15067:1.25

Purge Volume: 5.0

Operator: KGG

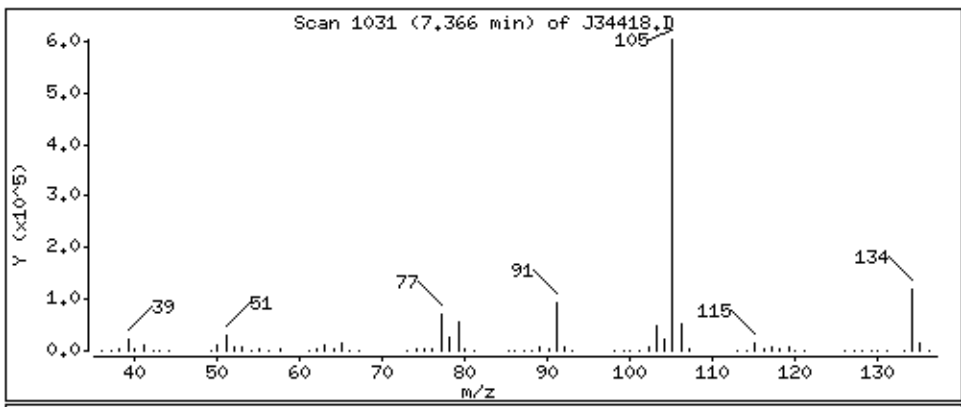
Column phase: RTX-624

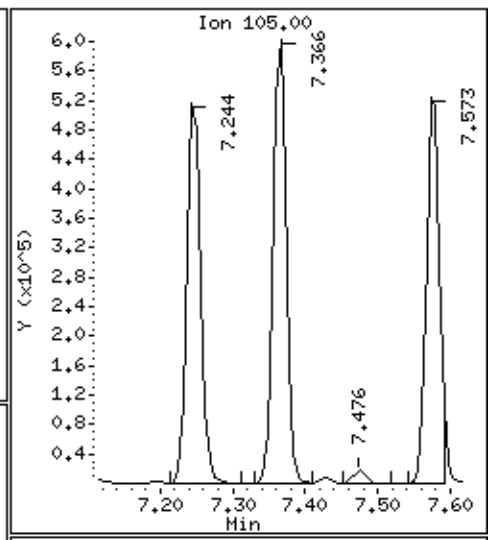
Column diameter: 0.18

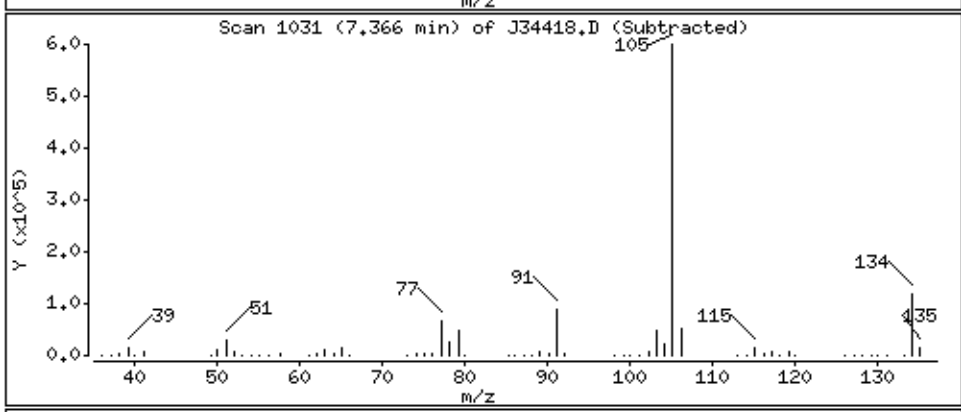
107 sec-Butylbenzene

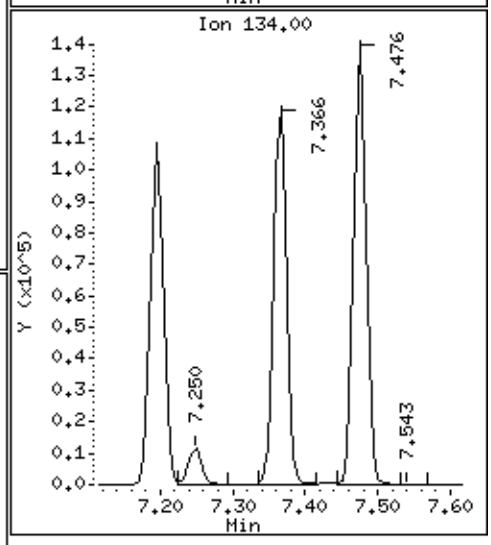
Concentration: 55.1 ug/L

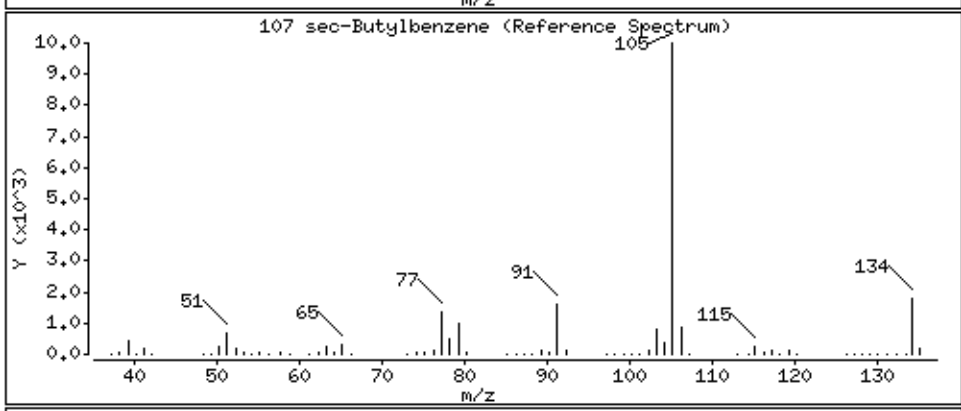
Review Code:

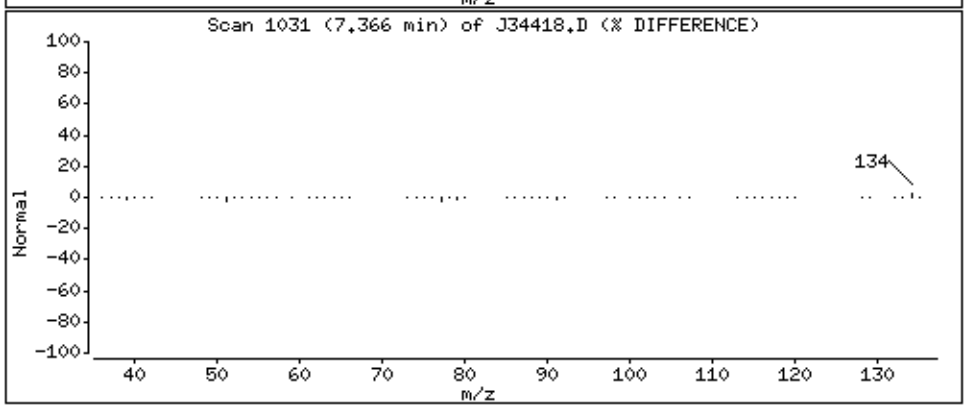












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D

Date : 25-APR-2017 19:25

Client ID: MW-3CMSD

Instrument: 70msv6.i

Sample Info: 103082, 15067:1.25

Purge Volume: 5.0

Operator: KGG

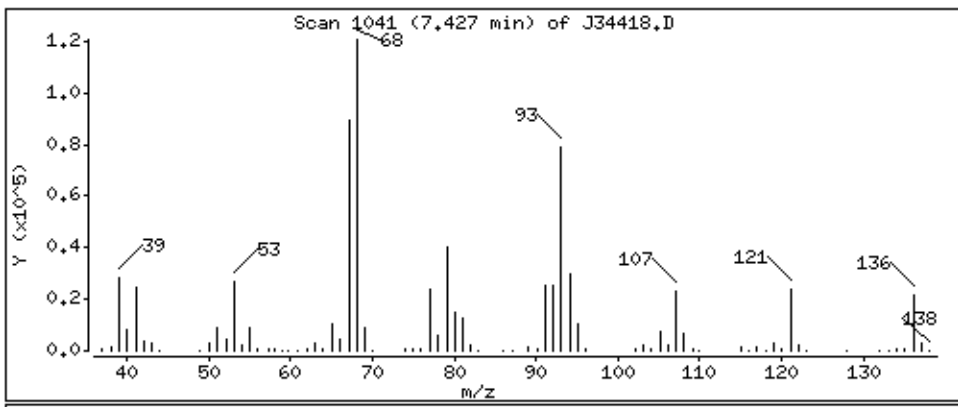
Column phase: RTX-624

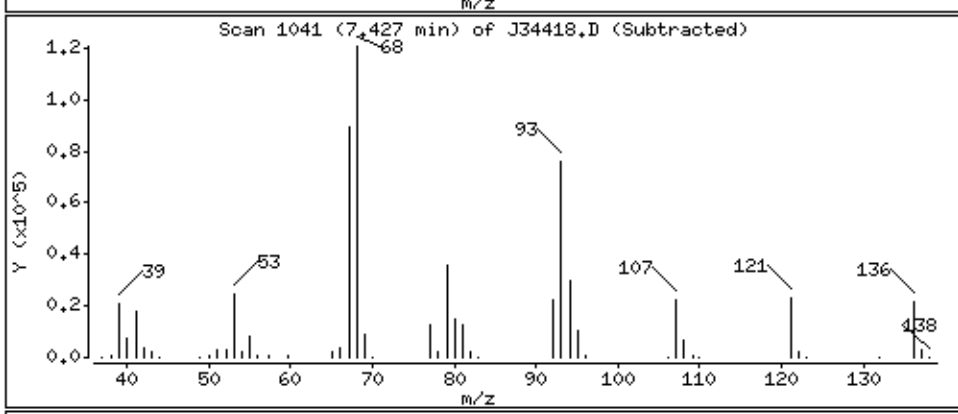
Column diameter: 0.18

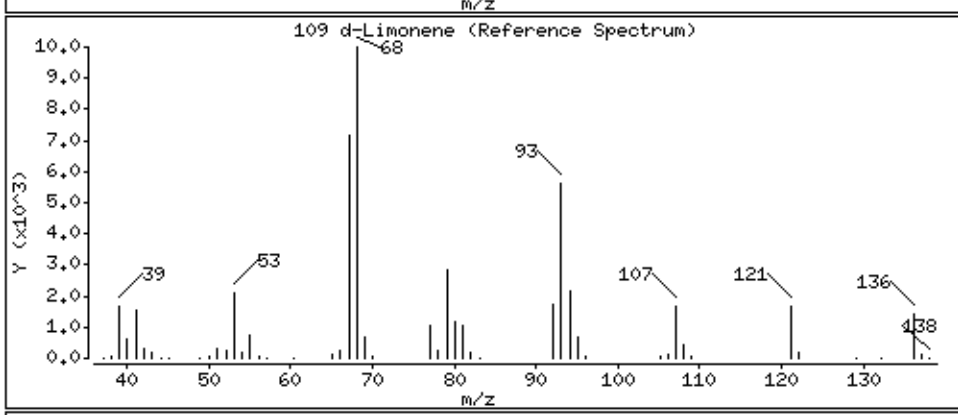
109 d-Limonene

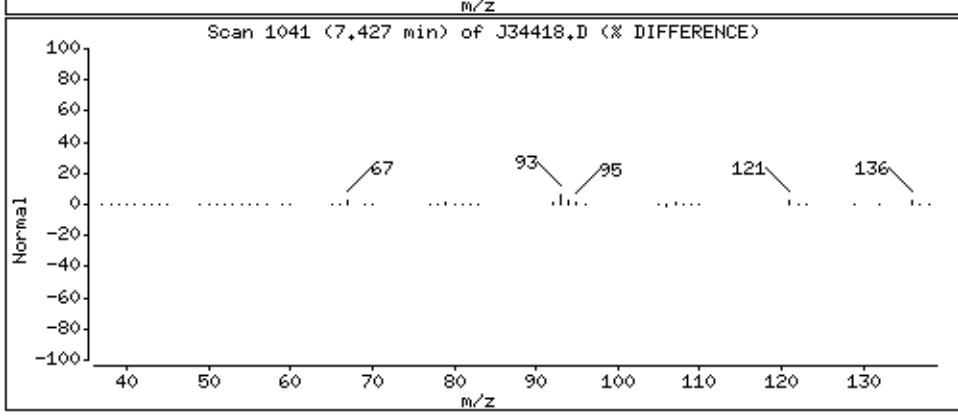
Concentration: 51.2 ug/L

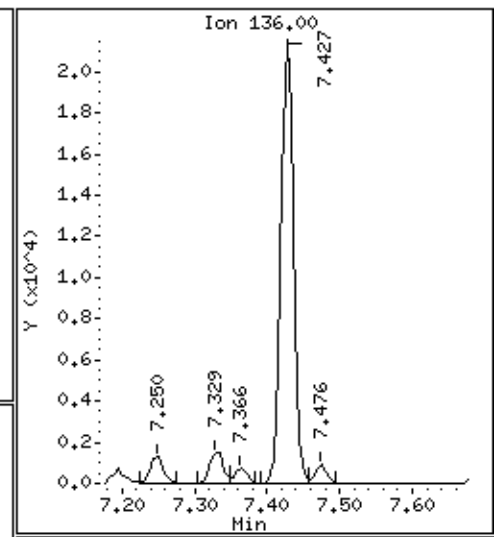
Review Code:

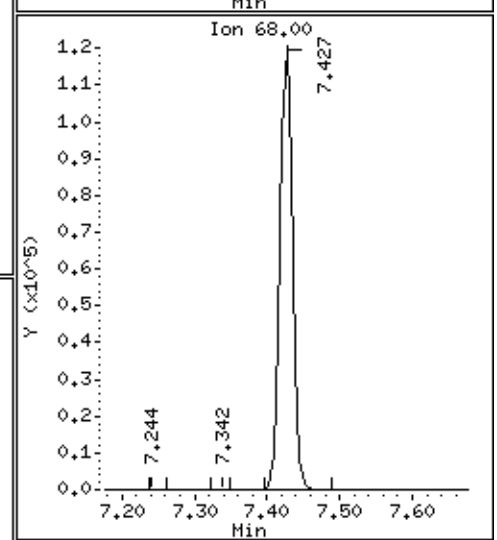


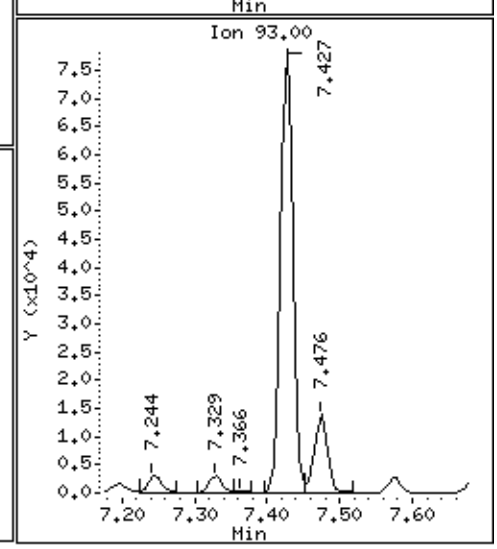












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D

Date : 25-APR-2017 19:25

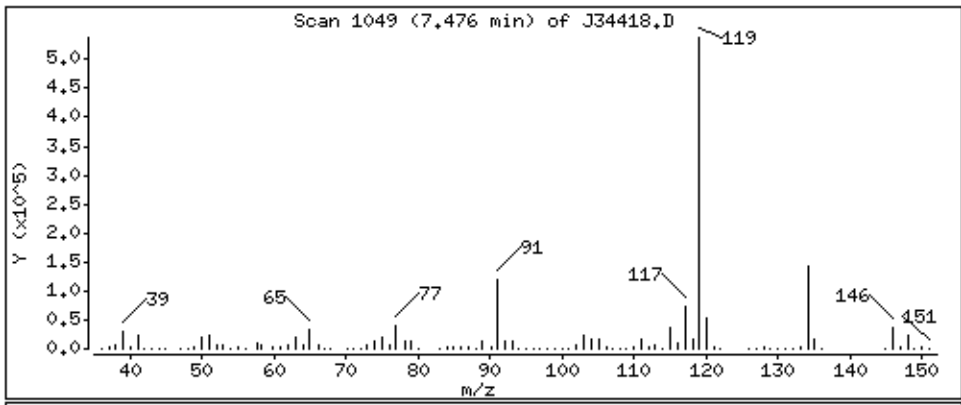
Client ID: MW-3CMSD | Instrument: 70msv6.i

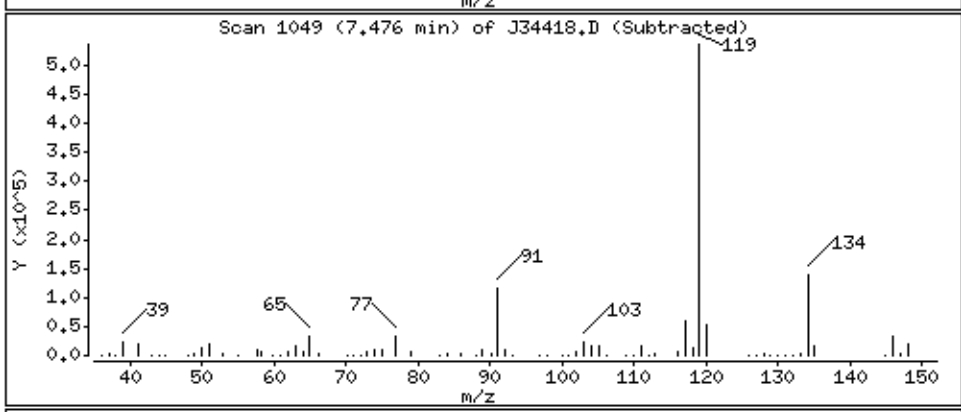
Sample Info: 103082, 15067:1.25

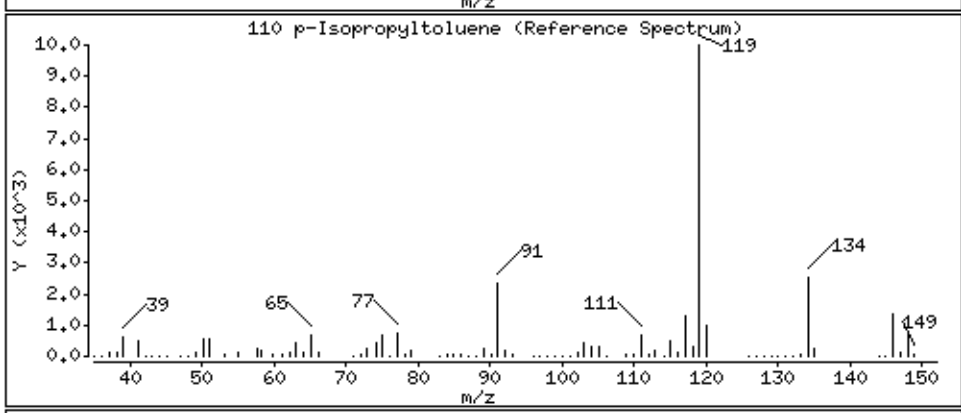
Purge Volume: 5.0 | Operator: KGG

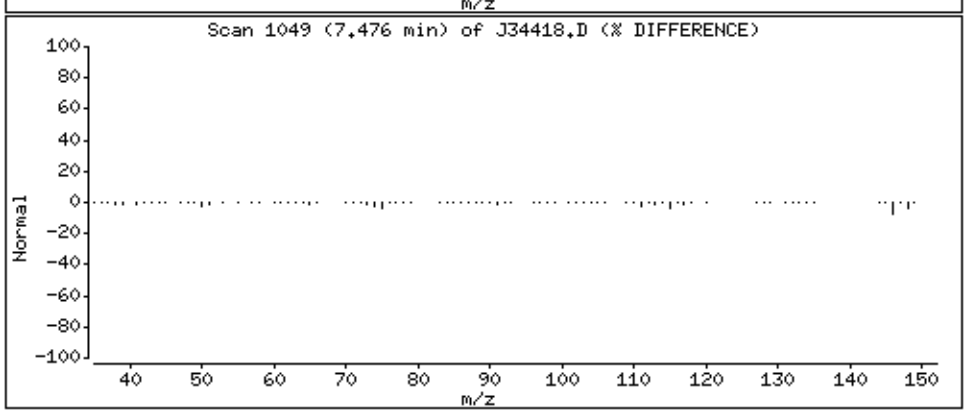
Column phase: RTX-624 | Column diameter: 0.18

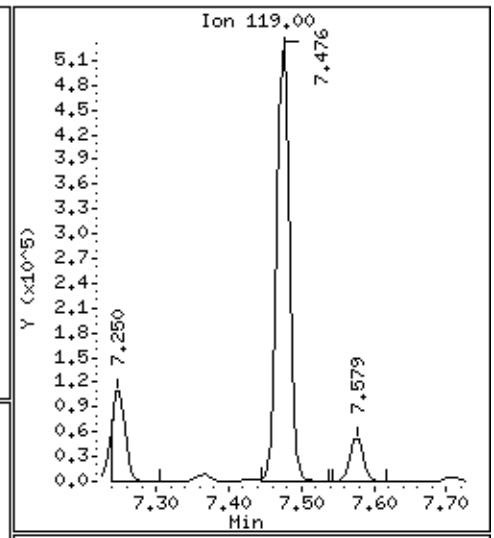
110 p-Isopropyltoluene | Concentration: 55.1 ug/L | Review Code:

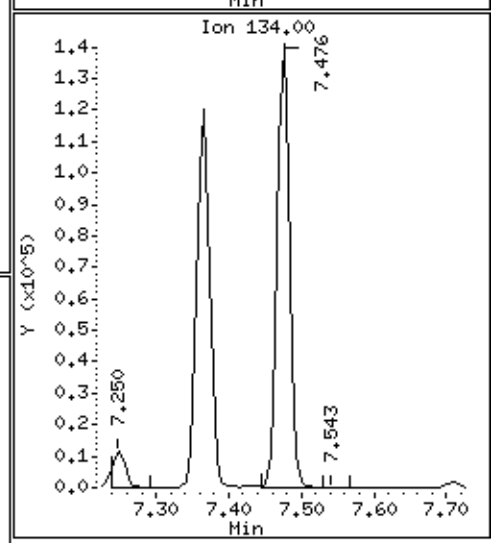












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D

Date : 25-APR-2017 19:25

Client ID: MW-3CMSD

Instrument: 70msv6.i

Sample Info: 103082, 15067:1.25

Purge Volume: 5.0

Operator: KGG

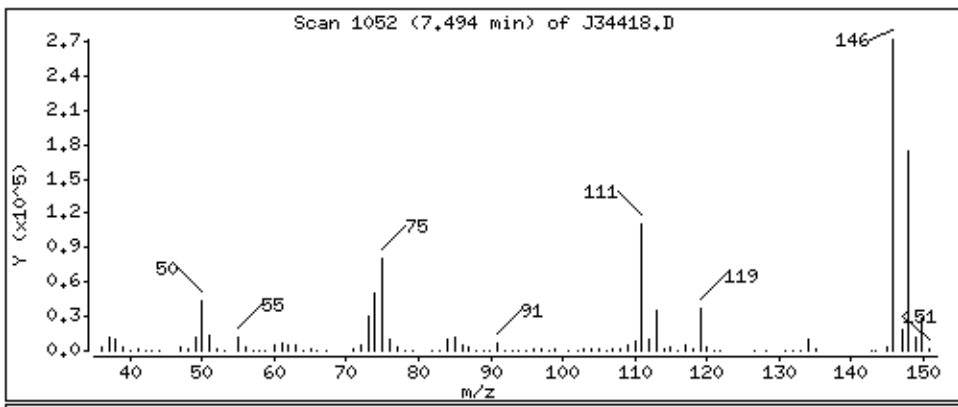
Column phase: RTX-624

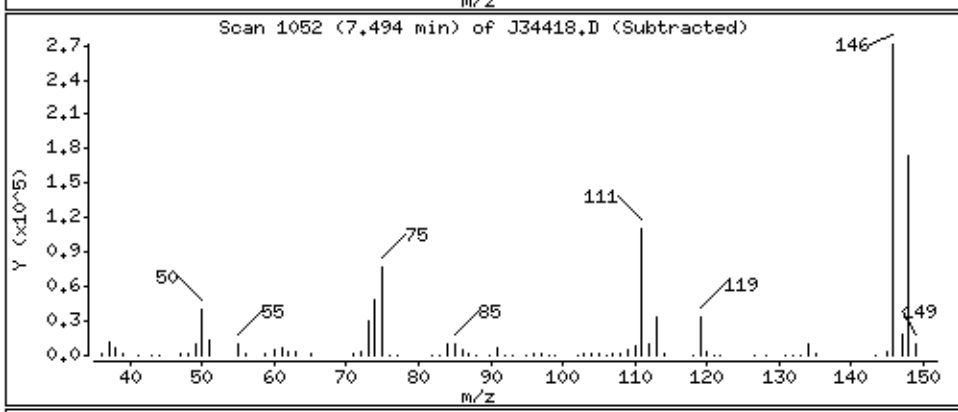
Column diameter: 0.18

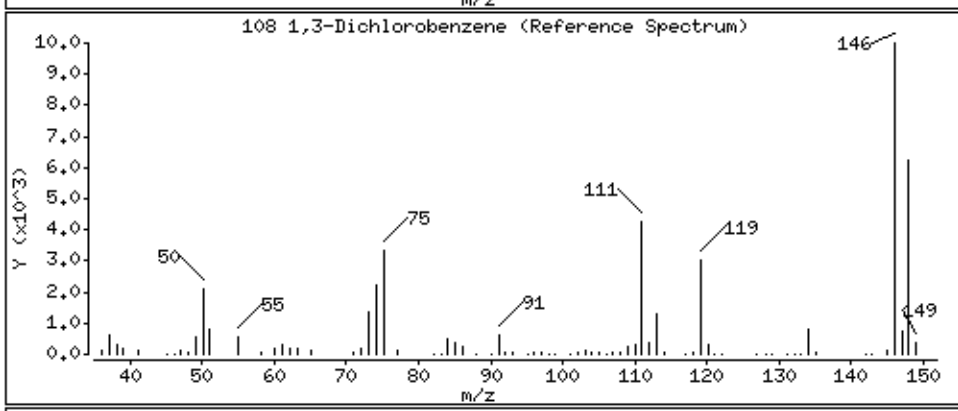
108 1,3-Dichlorobenzene

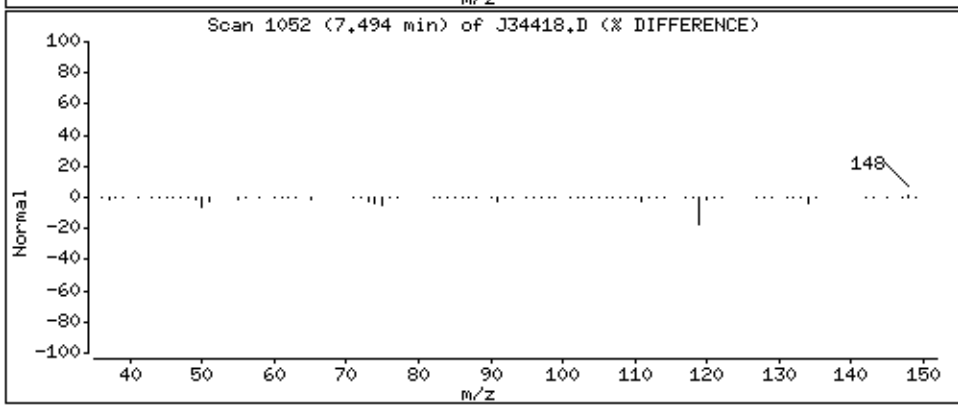
Concentration: 50.1 ug/L

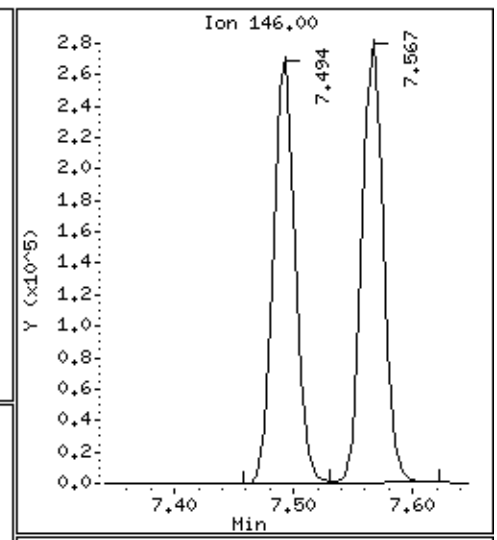
Review Code:

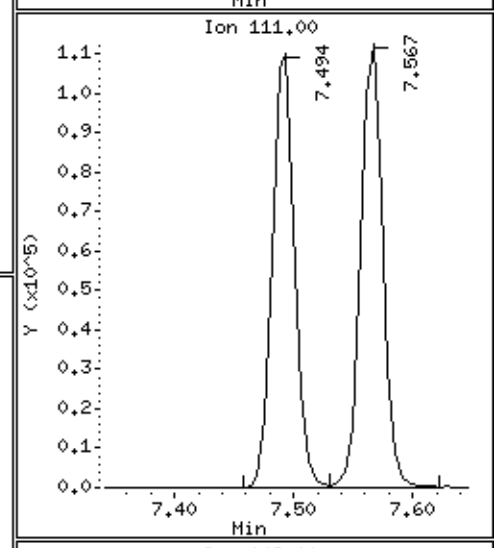


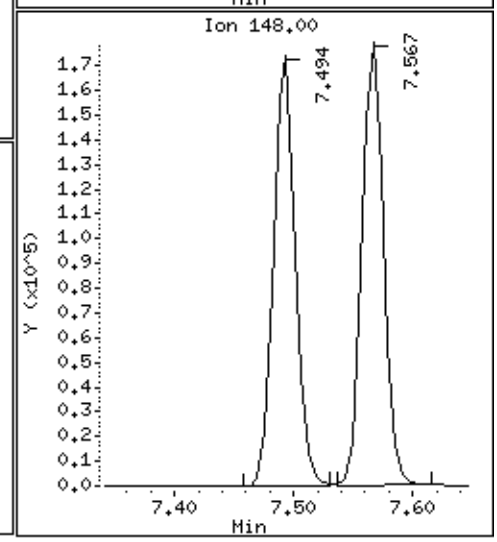












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D

Date : 25-APR-2017 19:25

Client ID: MW-3CMSD

Instrument: 70msv6.i

Sample Info: 103082, 15067:1.25

Purge Volume: 5.0

Operator: KGG

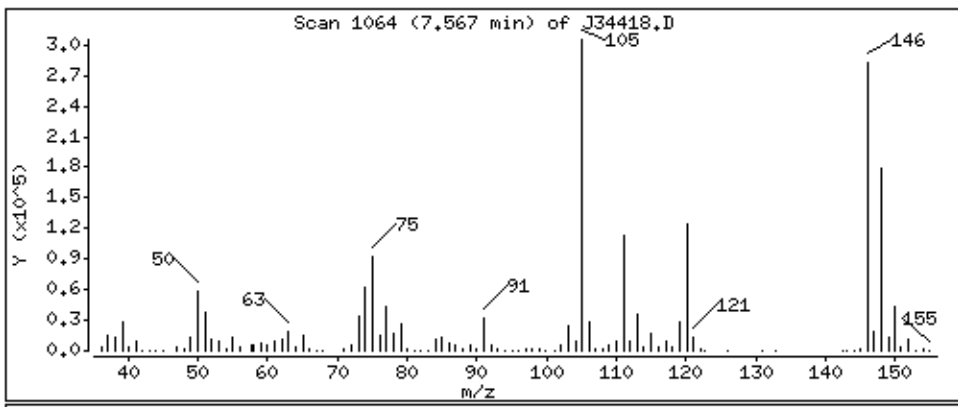
Column phase: RTX-624

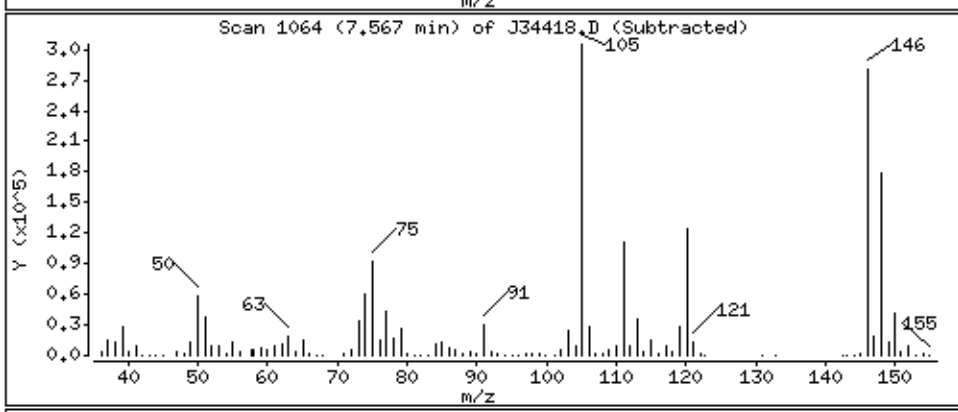
Column diameter: 0.18

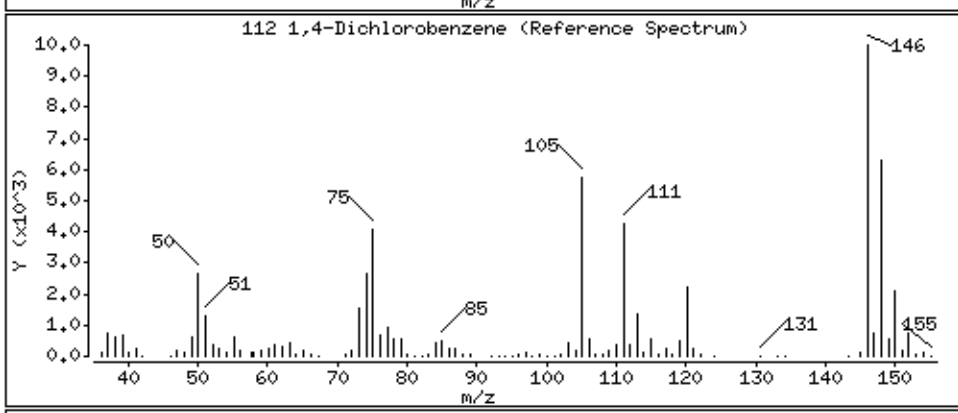
112 1,4-Dichlorobenzene

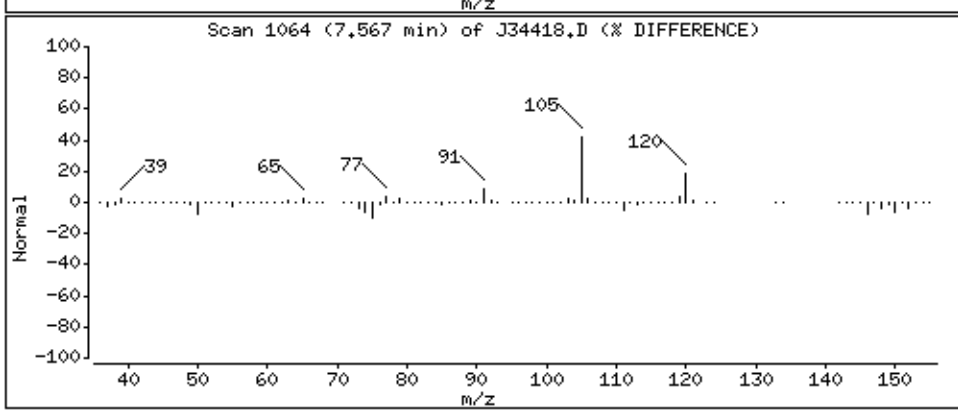
Concentration: 48.7 ug/L

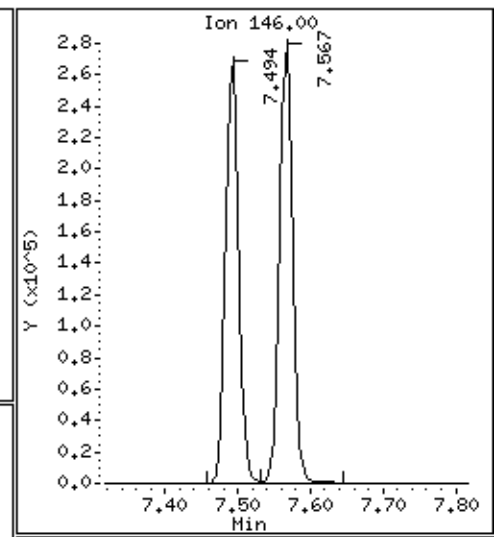
Review Code:

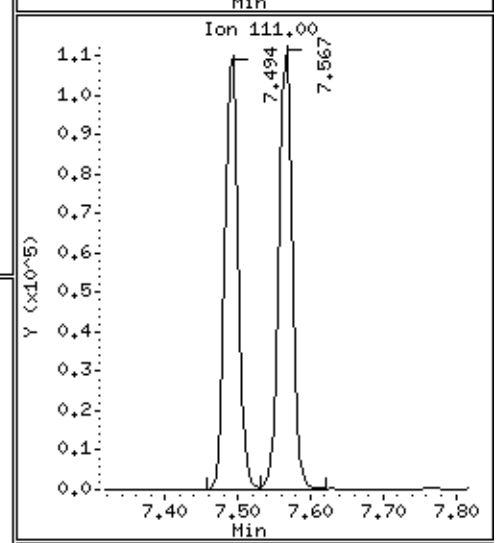


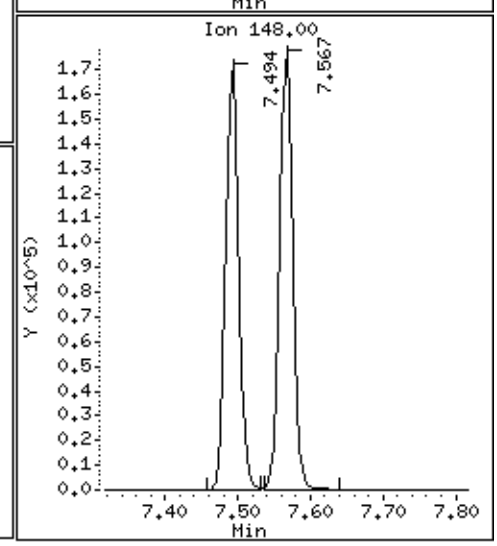












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D

Date : 25-APR-2017 19:25

Client ID: MW-3CMSD

Instrument: 70msv6.i

Sample Info: 103082, 15067:1.25

Purge Volume: 5.0

Operator: KGG

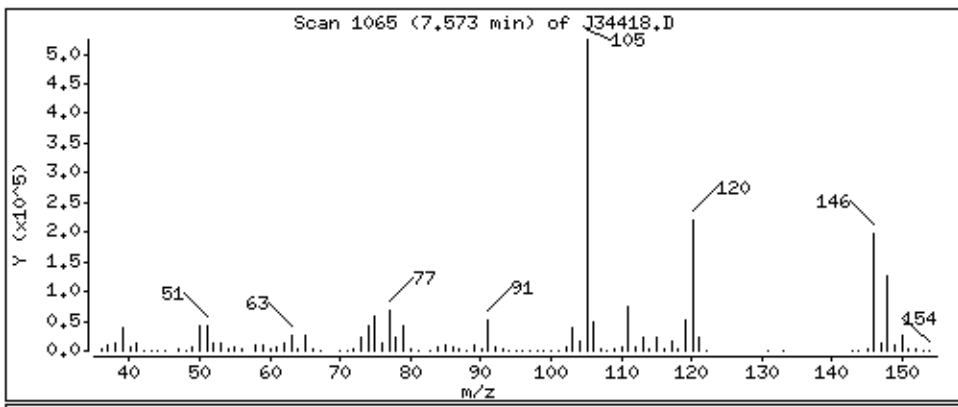
Column phase: RTX-624

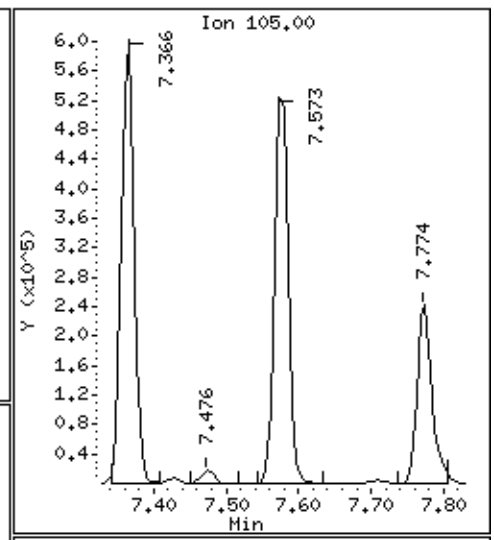
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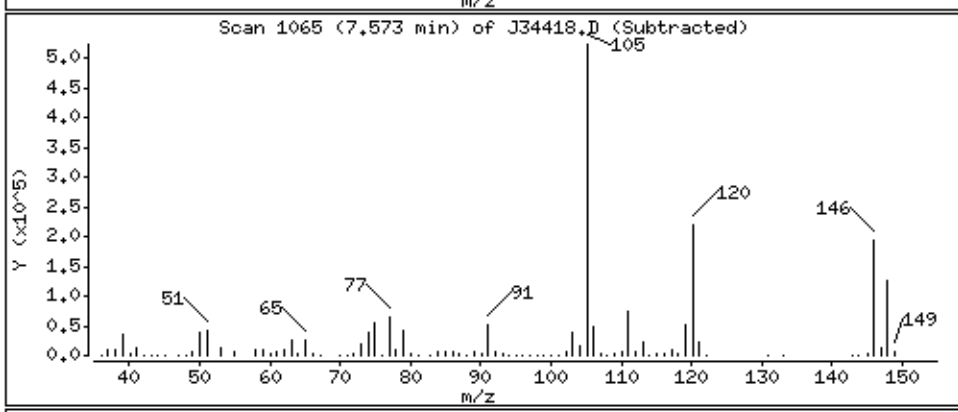
113 1,2,3-Trimethylbenzene

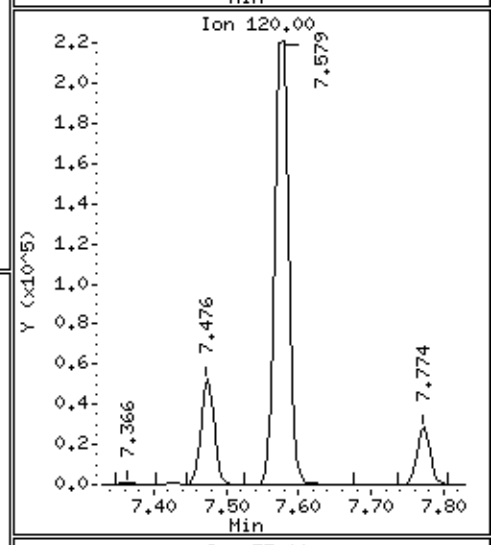
Concentration: 48.8 ug/L

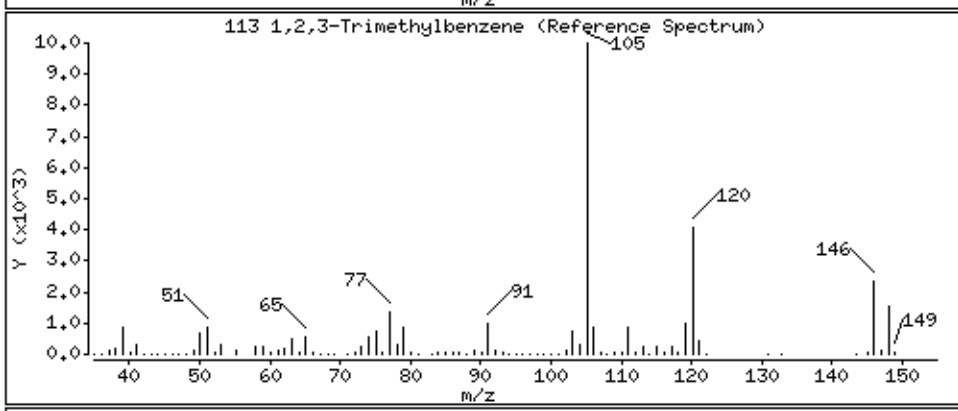
Review Code:

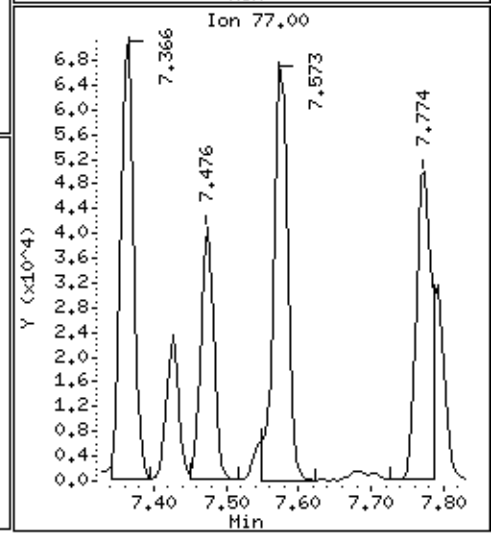


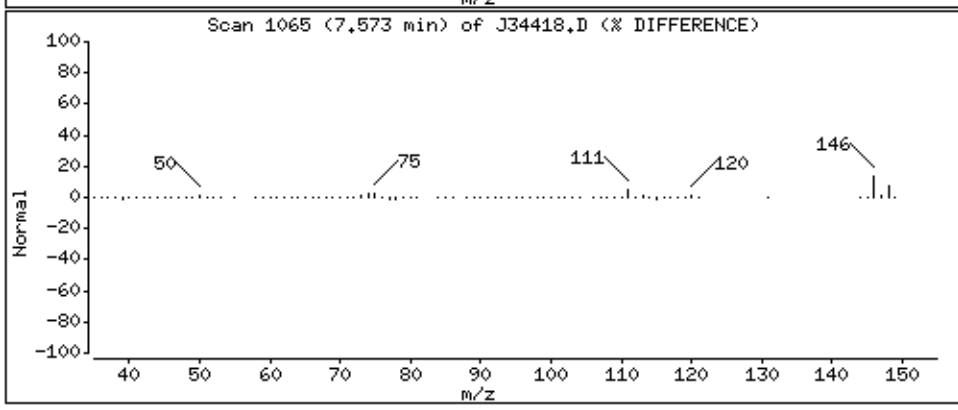












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D

Date : 25-APR-2017 19:25

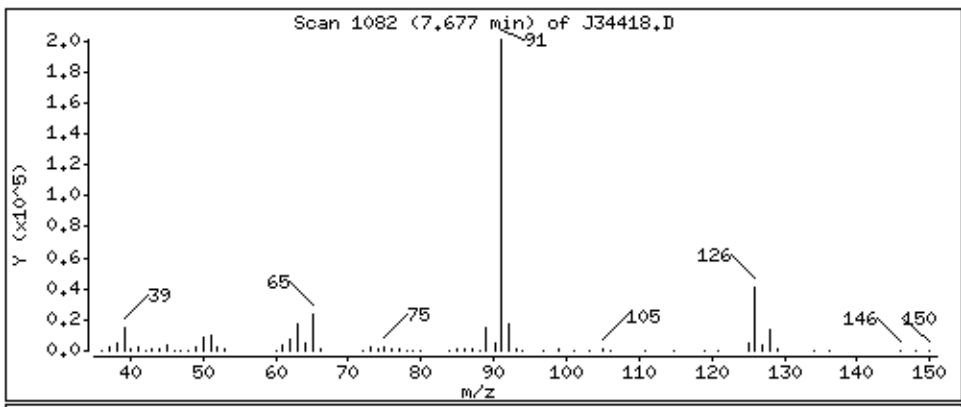
Client ID: MW-3CMSD | Instrument: 70msv6.i

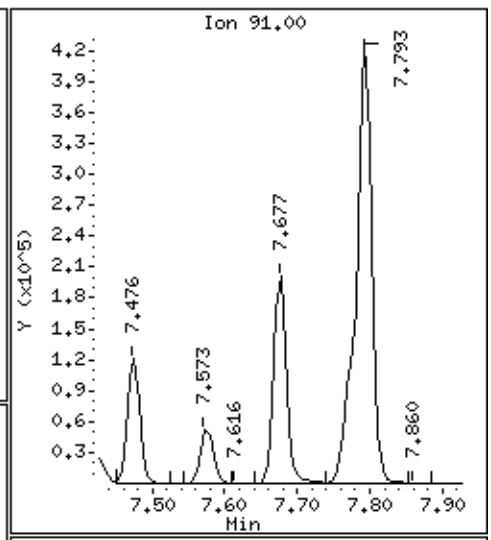
Sample Info: 103082, 15067:1.25

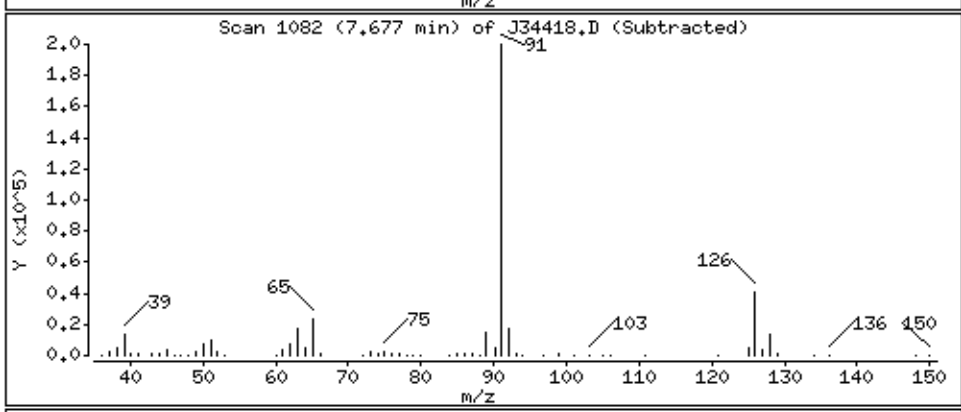
Purge Volume: 5.0 | Operator: KGG

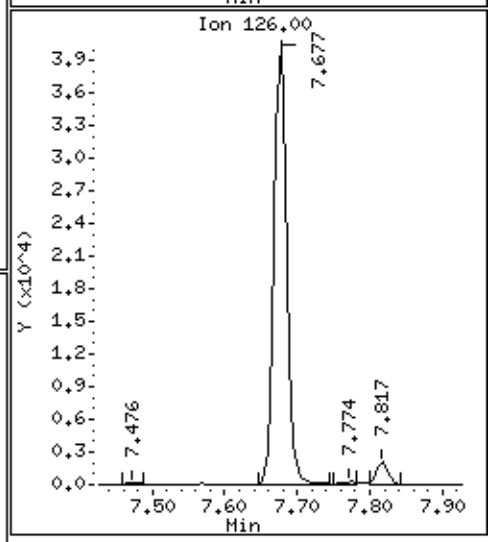
Column phase: RTX-624 | Column diameter: 0.18

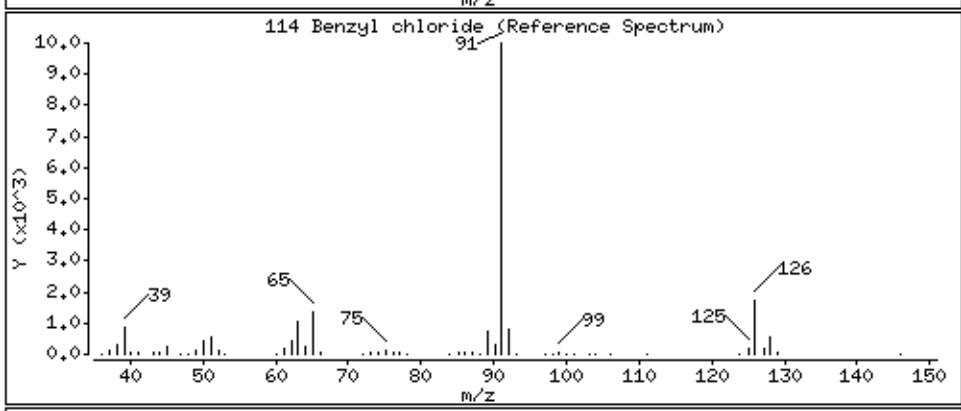
114 Benzyl chloride | Concentration: 40.4 ug/L | Review Code:

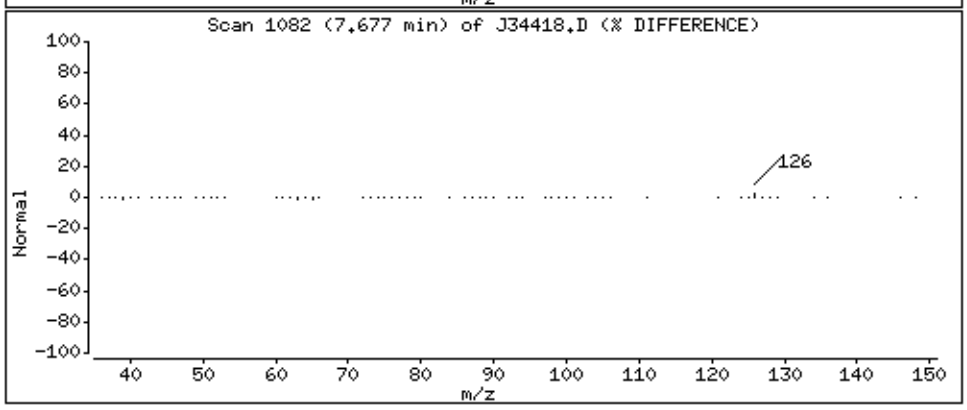












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D

Date : 25-APR-2017 19:25

Client ID: MW-3CMSD

Instrument: 70msv6.i

Sample Info: 103082, 15067:1.25

Purge Volume: 5.0

Operator: KGG

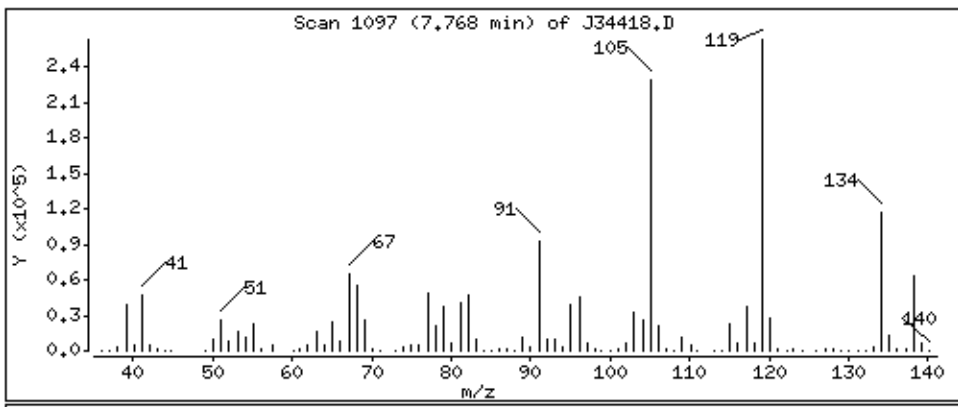
Column phase: RTX-624

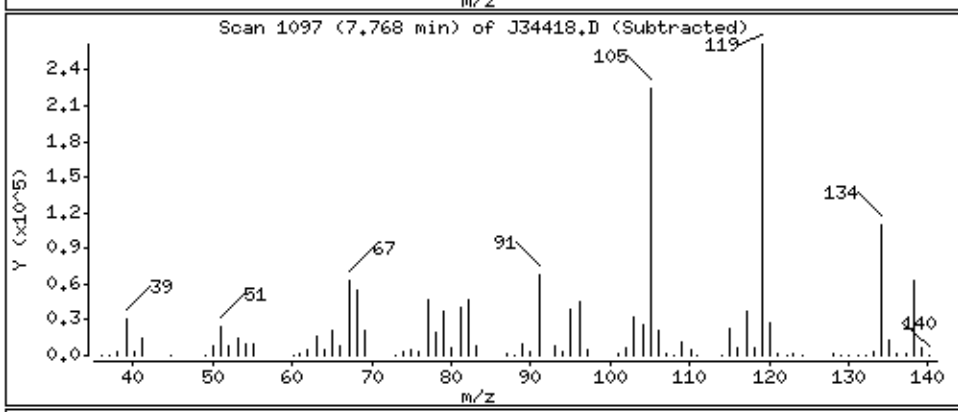
Column diameter: 0.18

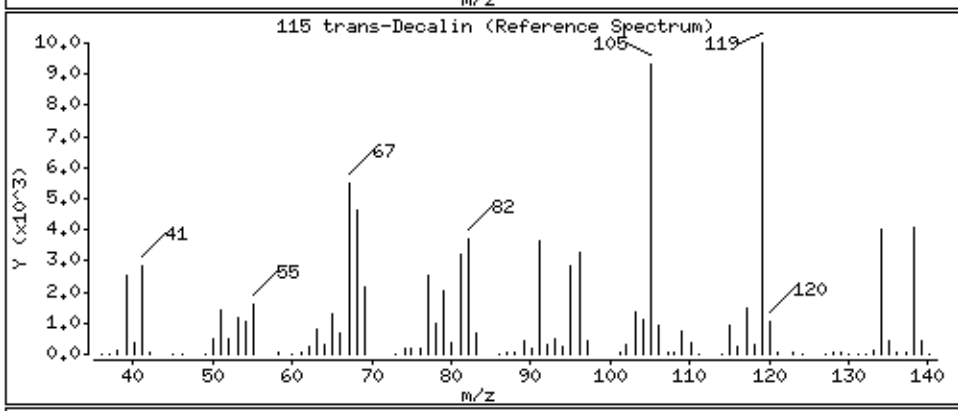
115 trans-Decalin

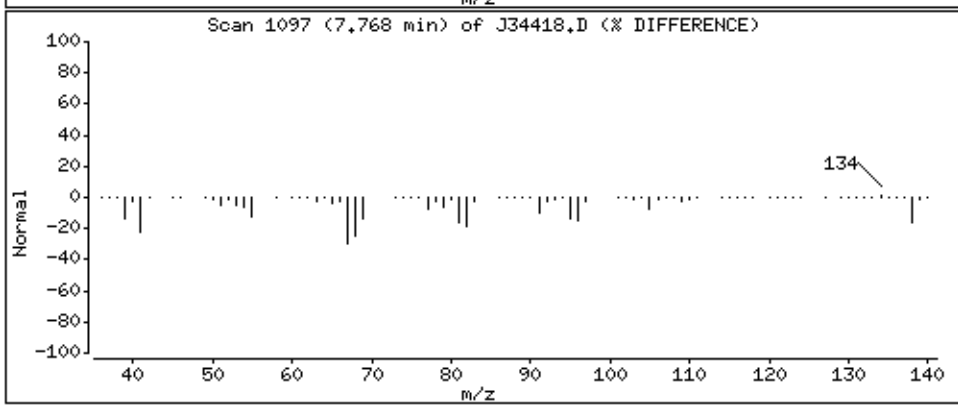
Concentration: 51.6 ug/L

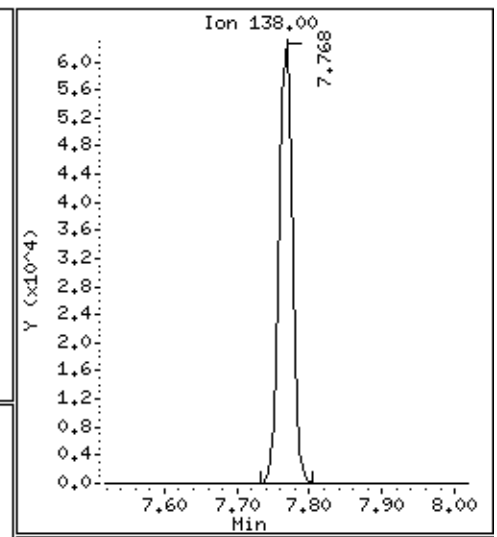
Review Code:

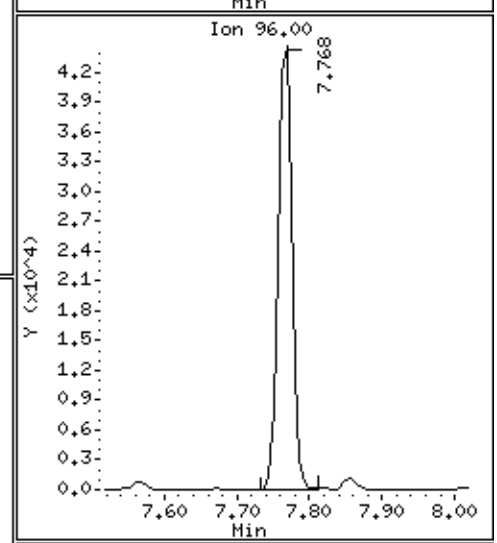


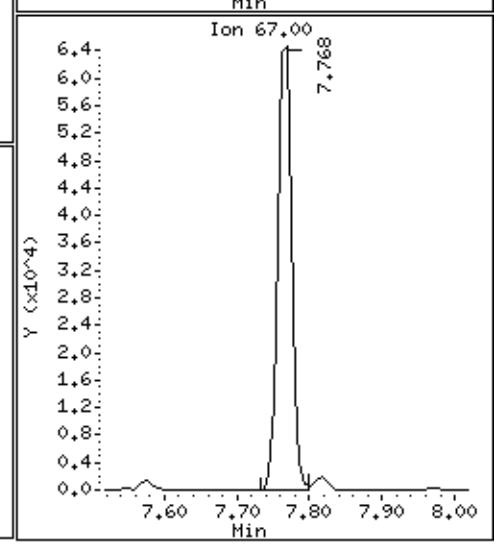












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D

Date : 25-APR-2017 19:25

Client ID: MW-3CMSD

Instrument: 70msv6.i

Sample Info: 103082, 15067:1.25

Purge Volume: 5.0

Operator: KGG

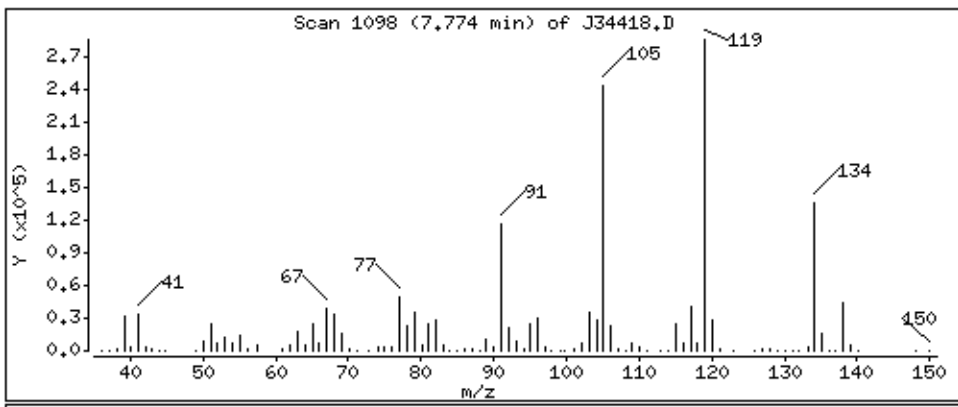
Column phase: RTX-624

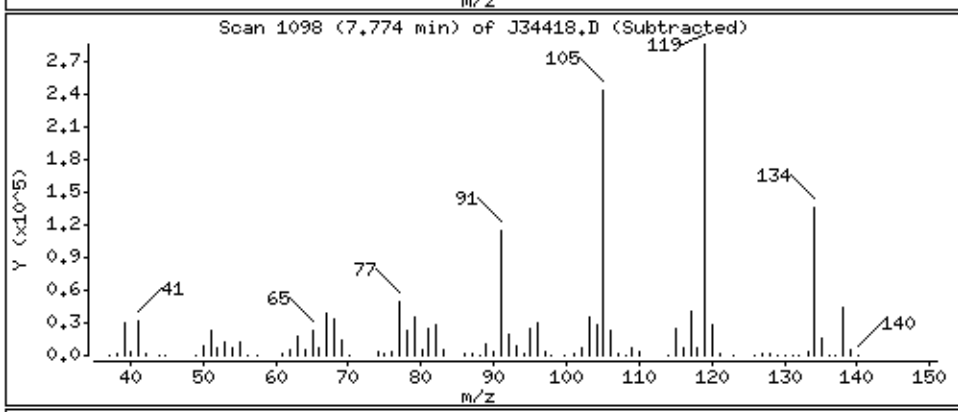
Column diameter: 0.18

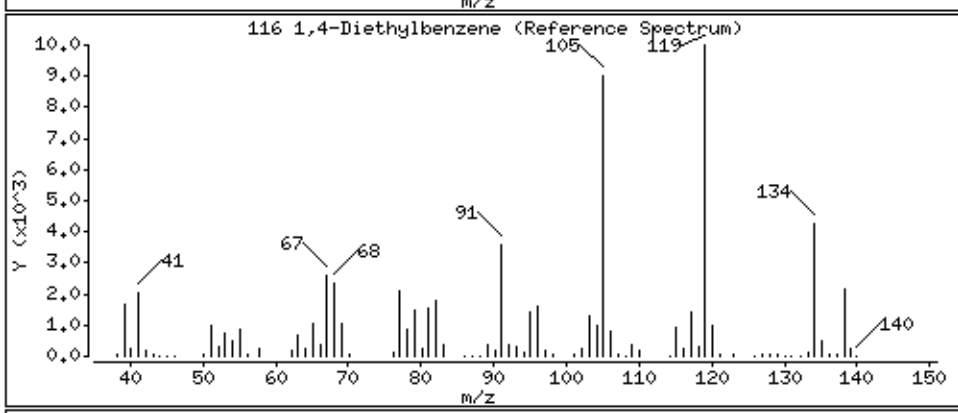
116 1,4-Diethylbenzene

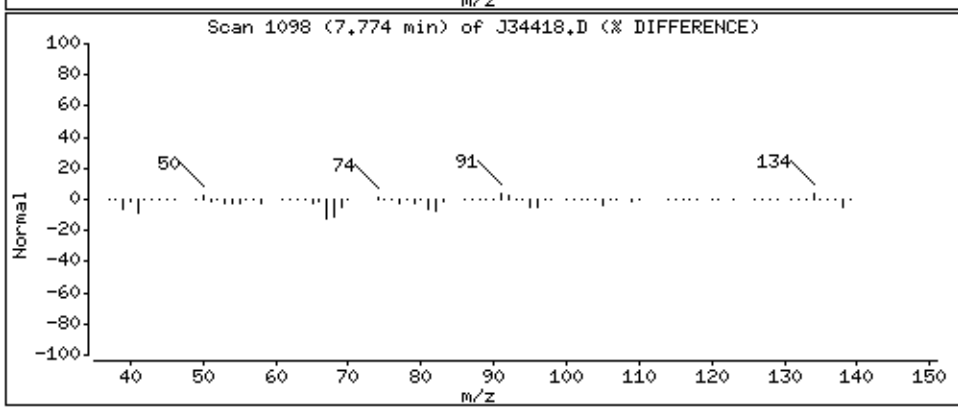
Concentration: 52.7 ug/L

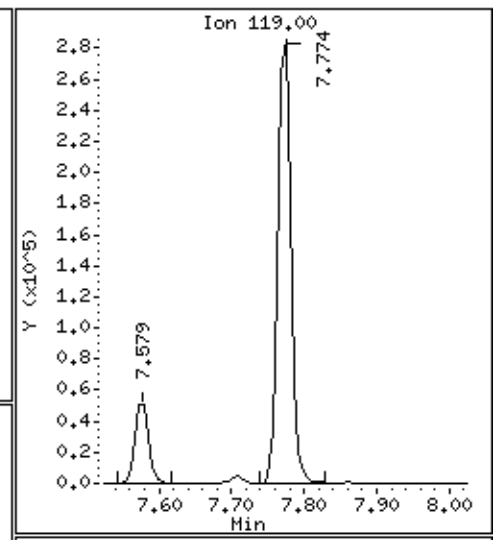
Review Code:

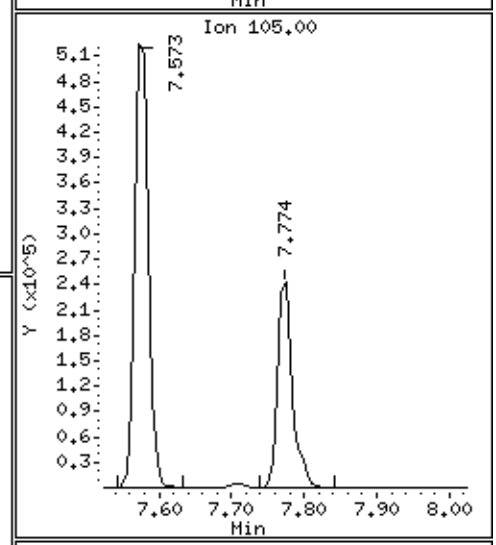


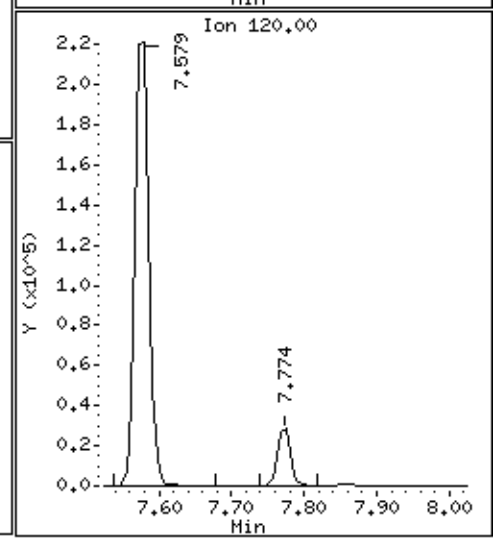












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D

Date : 25-APR-2017 19:25

Client ID: MW-3CMSD

Instrument: 70msv6.i

Sample Info: 103082, 15067:1.25

Purge Volume: 5.0

Operator: KGG

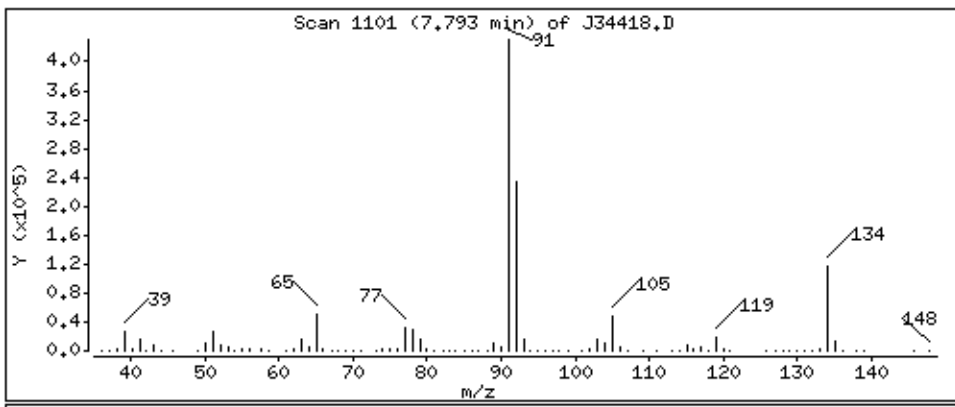
Column phase: RTX-624

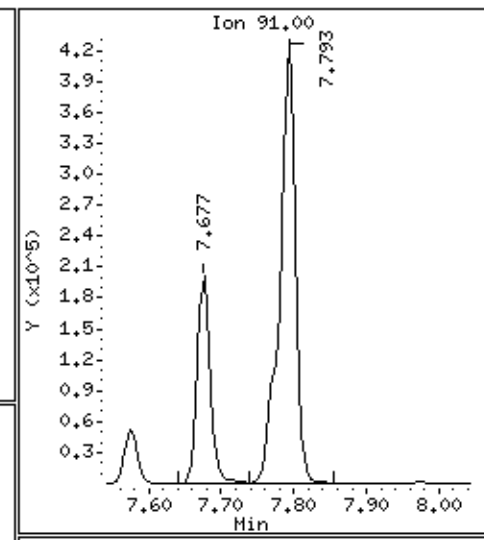
Column diameter: 0.18

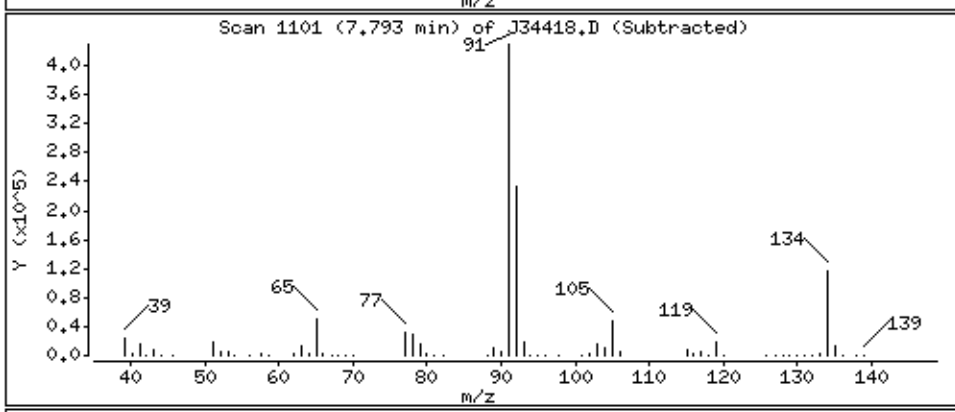
117 n-Butylbenzene

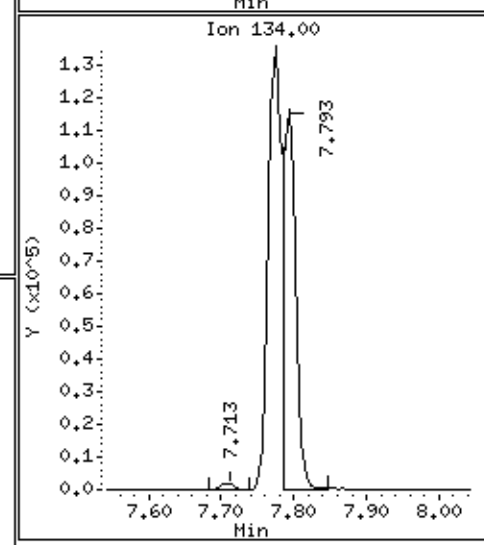
Concentration: 50.7 ug/L

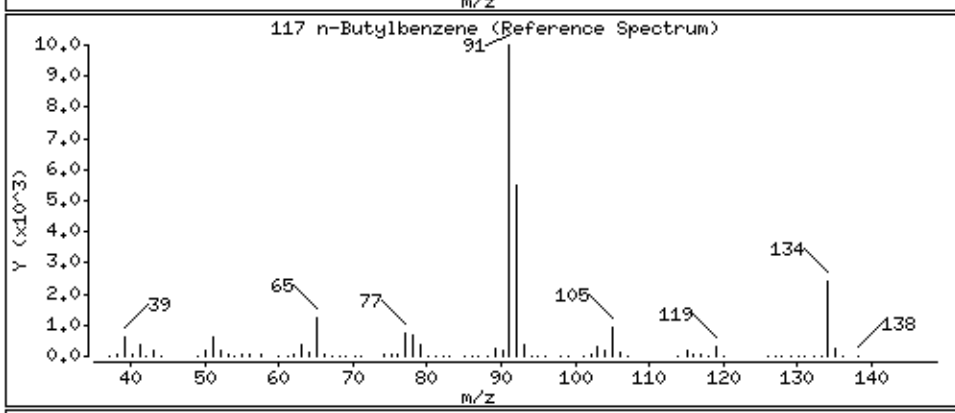
Review Code:

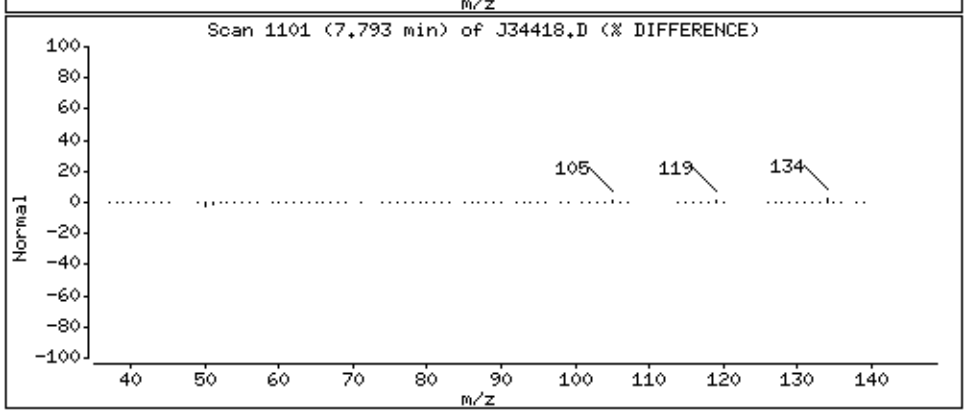












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D

Date : 25-APR-2017 19:25

Client ID: MW-3CMSD

Instrument: 70msv6.i

Sample Info: 103082, 15067:1.25

Purge Volume: 5.0

Operator: KGG

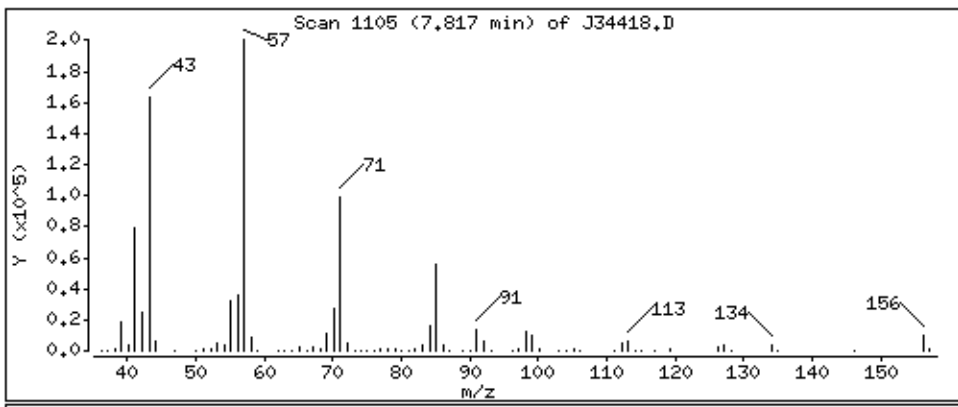
Column phase: RTX-624

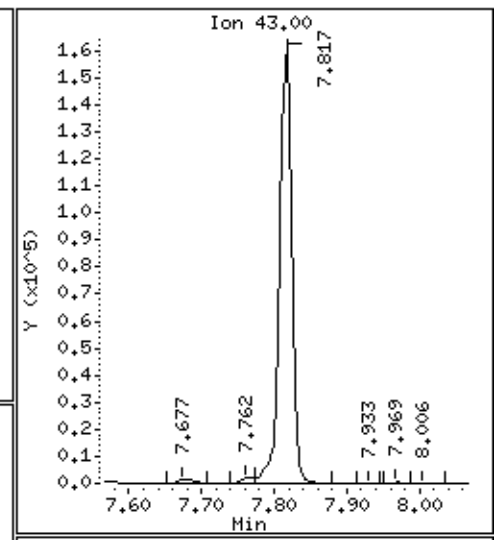
Column diameter: 0.18

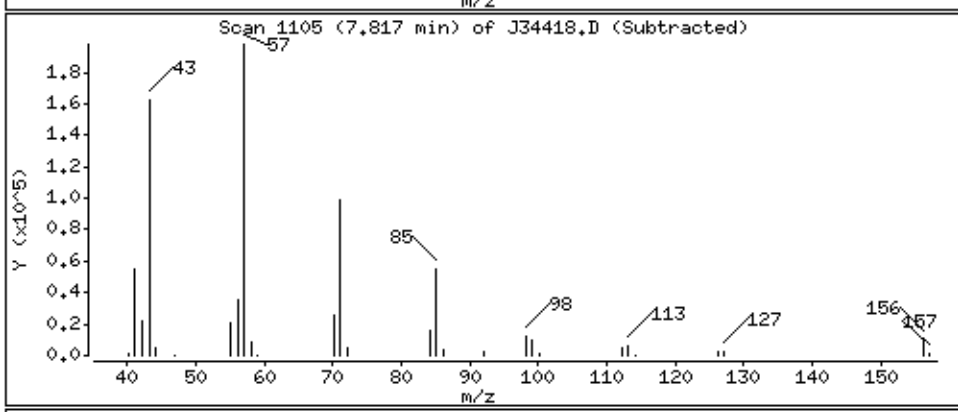
119 n-Undecane

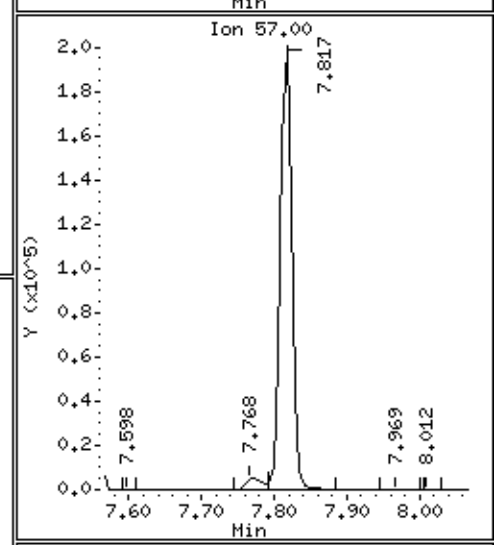
Concentration: 81.6 ug/L

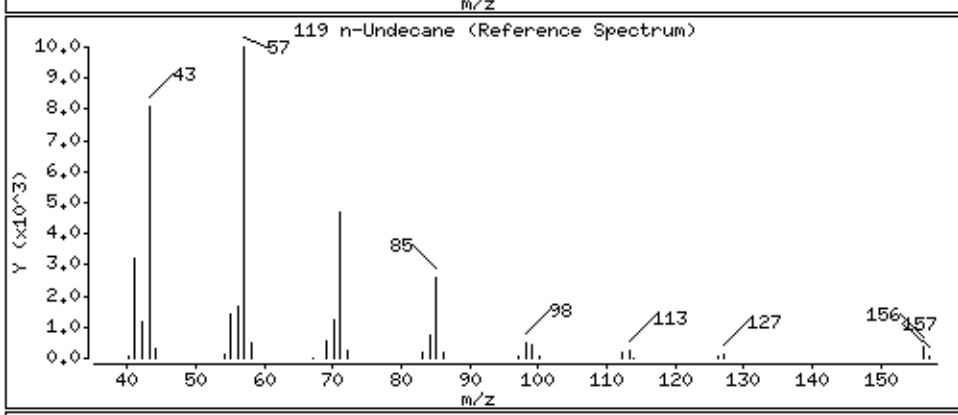
Review Code:

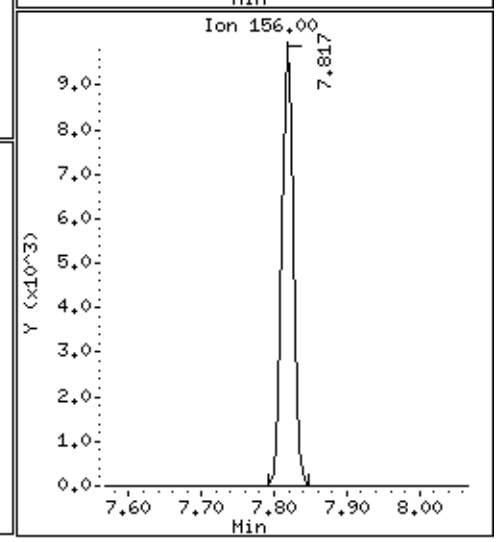


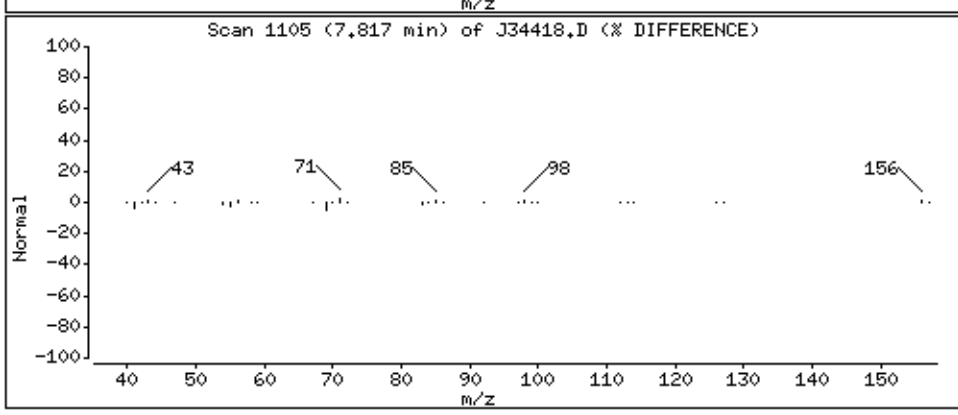












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D

Date : 25-APR-2017 19:25

Client ID: MW-3CMSD

Instrument: 70msv6.i

Sample Info: 103082, 15067:1.25

Purge Volume: 5.0

Operator: KGG

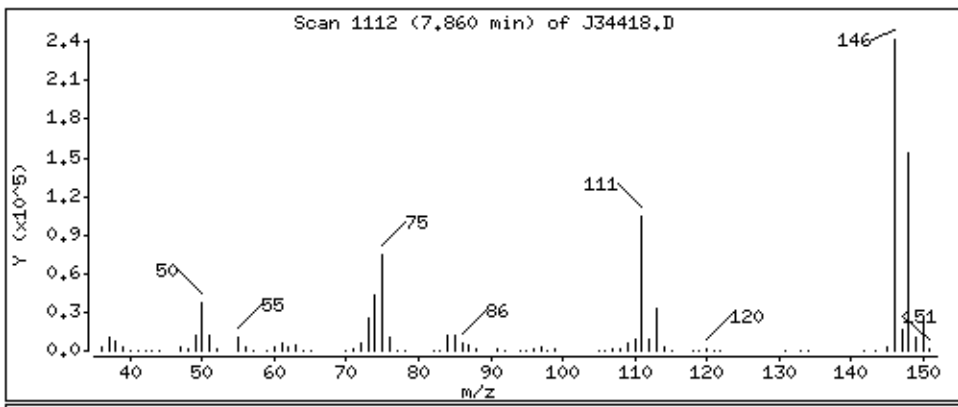
Column phase: RTX-624

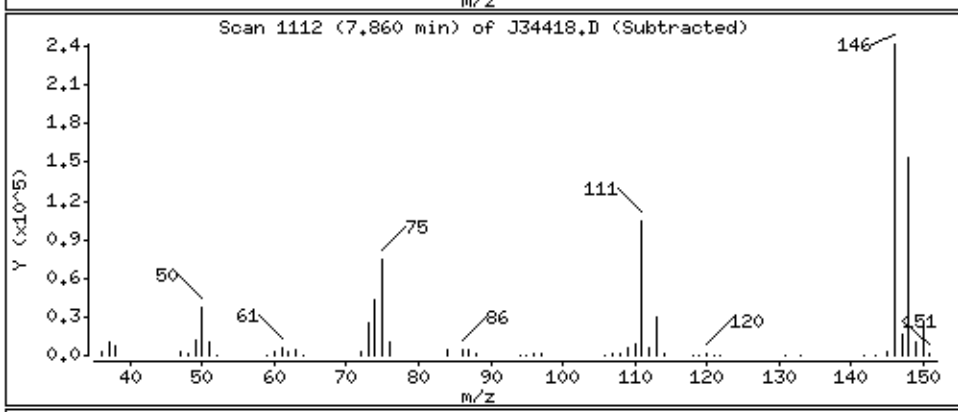
Column diameter: 0.18

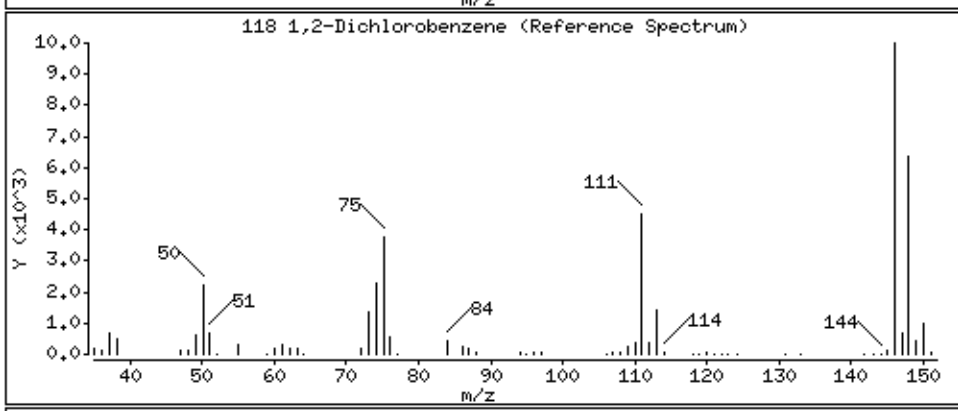
118 1,2-Dichlorobenzene

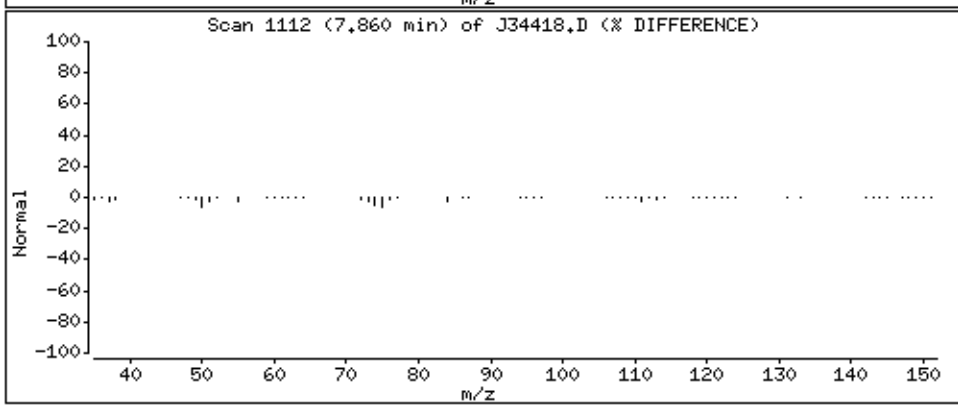
Concentration: 46.2 ug/L

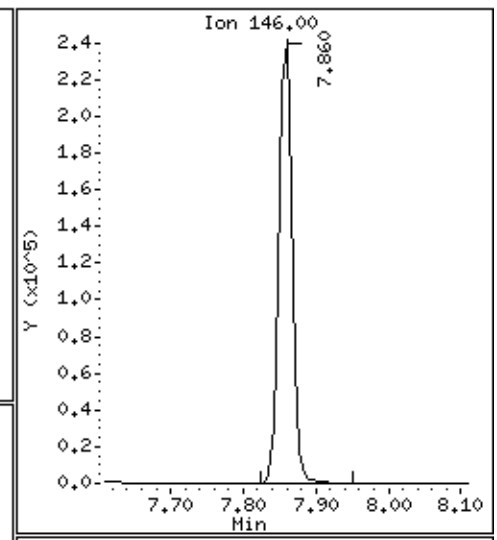
Review Code:

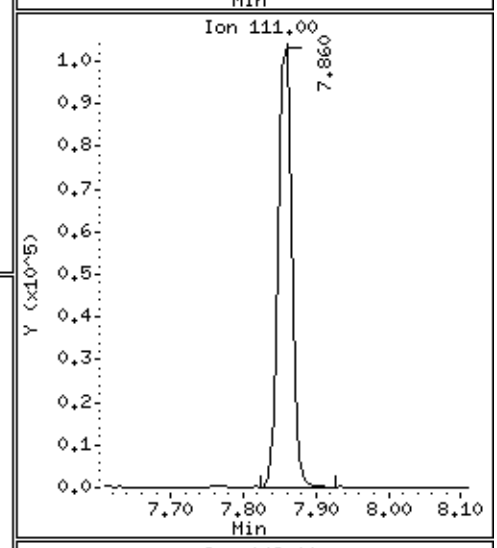


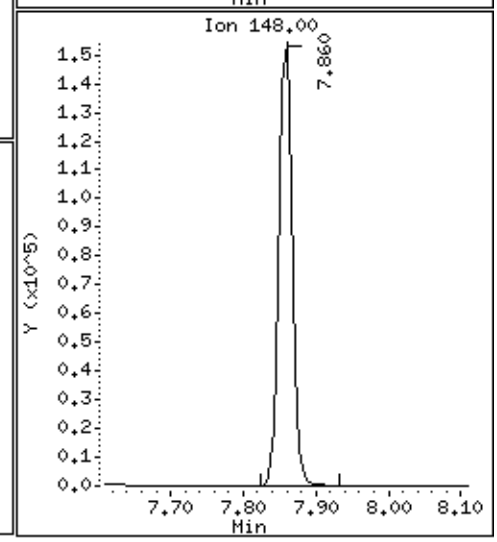












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D

Date : 25-APR-2017 19:25

Client ID: MW-3CMSD

Instrument: 70msv6.i

Sample Info: 103082, 15067:1.25

Purge Volume: 5.0

Operator: KGG

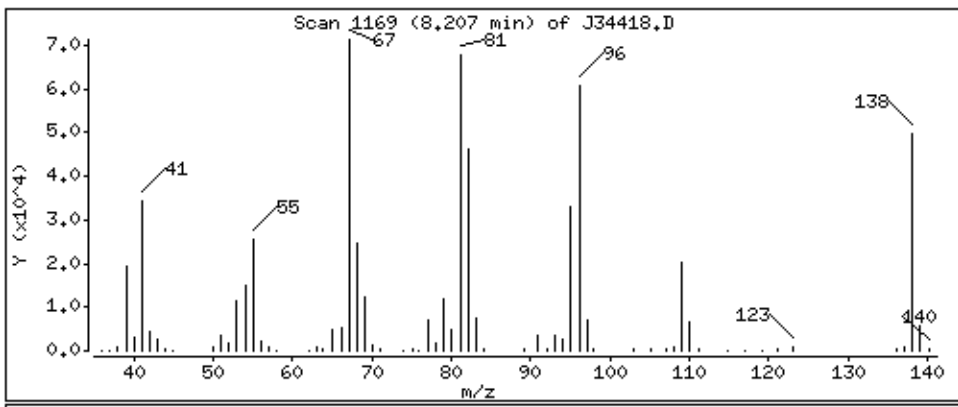
Column phase: RTX-624

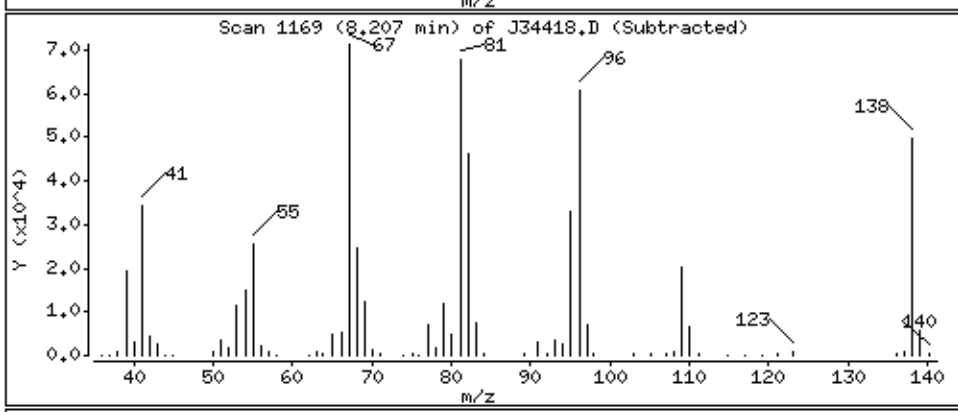
Column diameter: 0.18

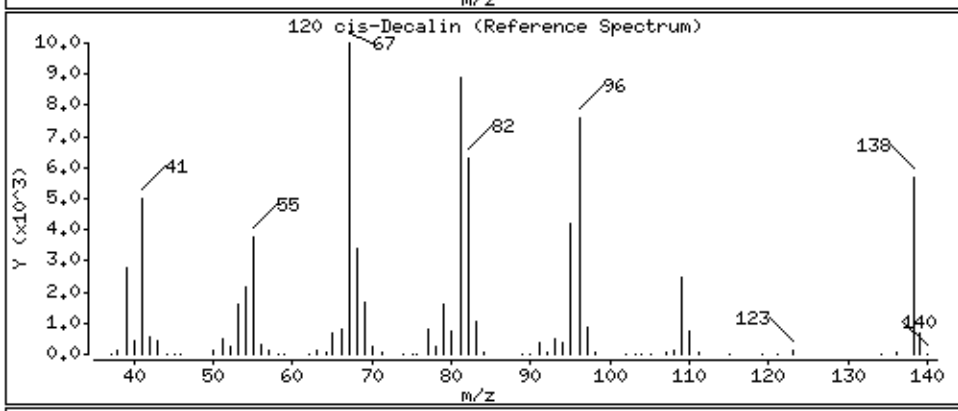
120 cis-Decalin

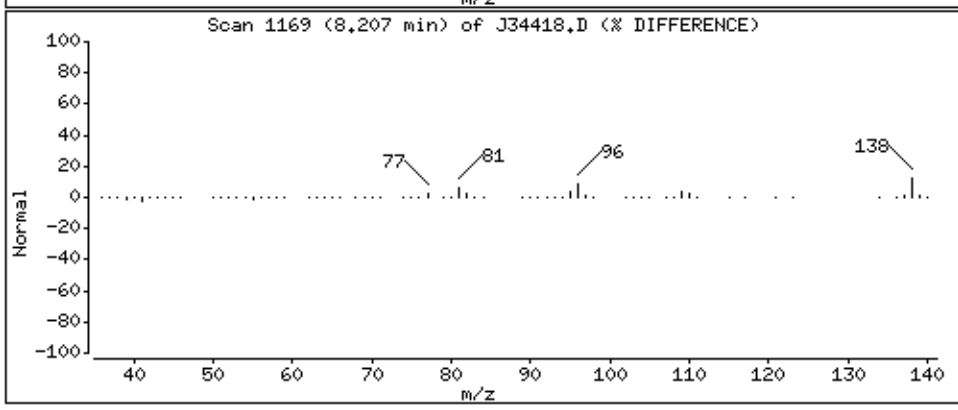
Concentration: 52.1 ug/L

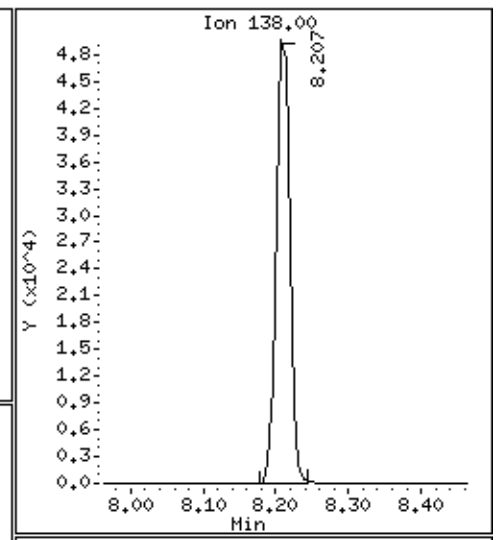
Review Code:

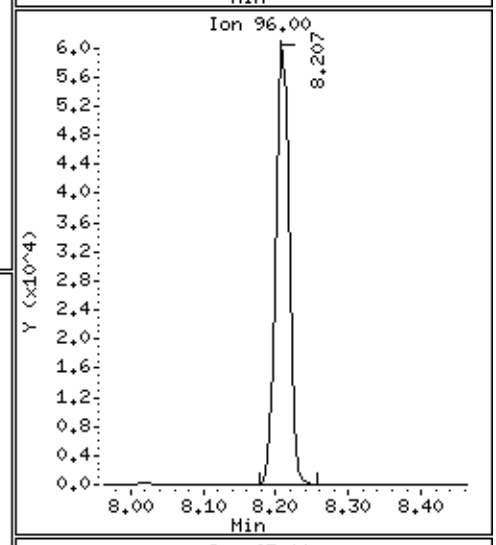


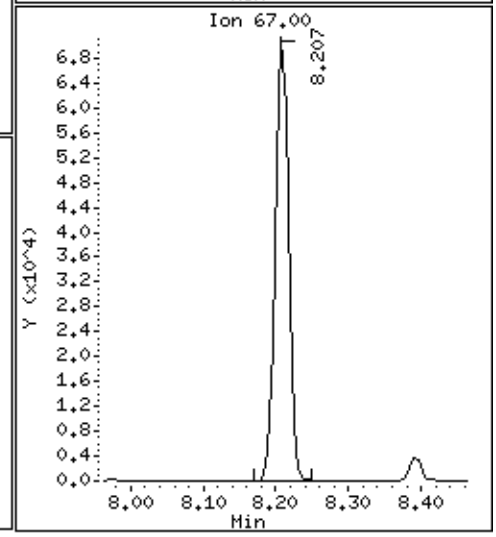












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D

Date : 25-APR-2017 19:25

Client ID: MW-3CMSD

Instrument: 70msv6.i

Sample Info: 103082, 15067:1.25

Purge Volume: 5.0

Operator: KGG

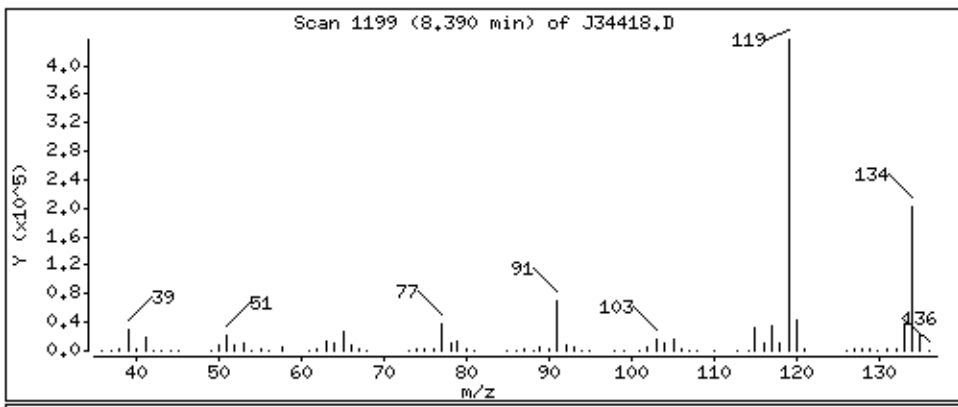
Column phase: RTX-624

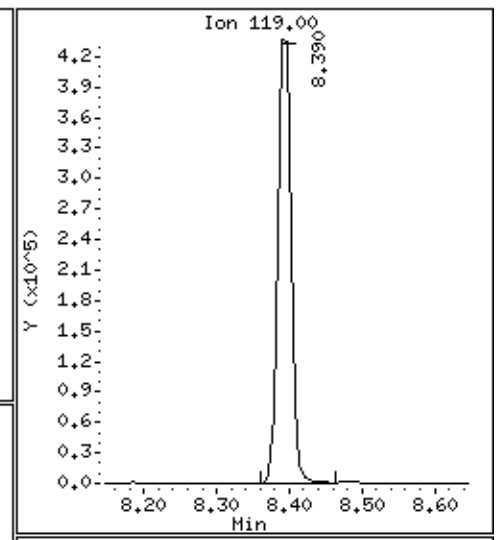
Column diameter: 0.18

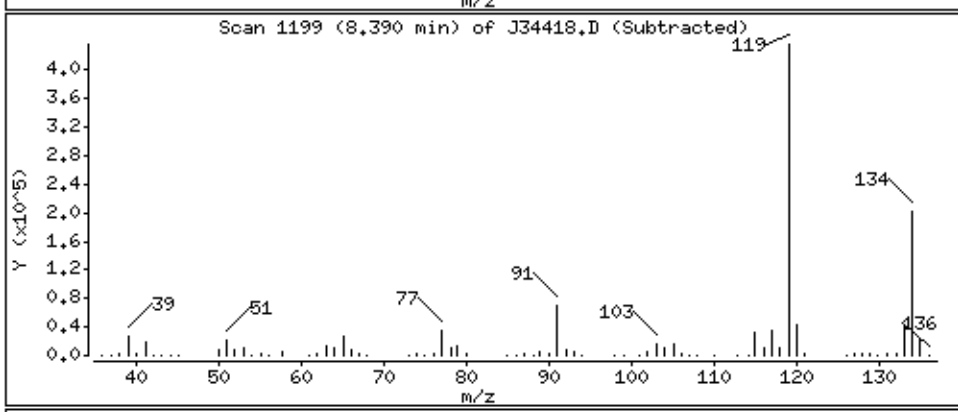
121 1,2,4,5-tetramethylbenzene

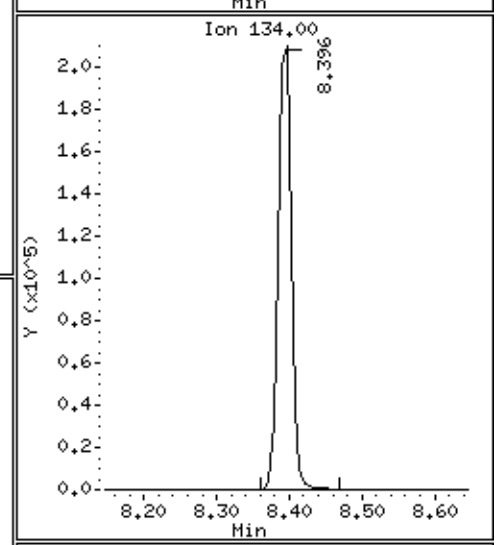
Concentration: 58.3 ug/L

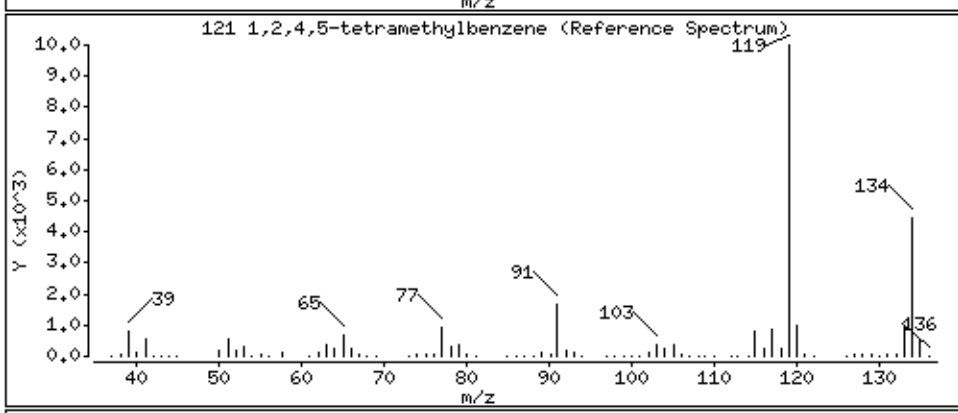
Review Code:

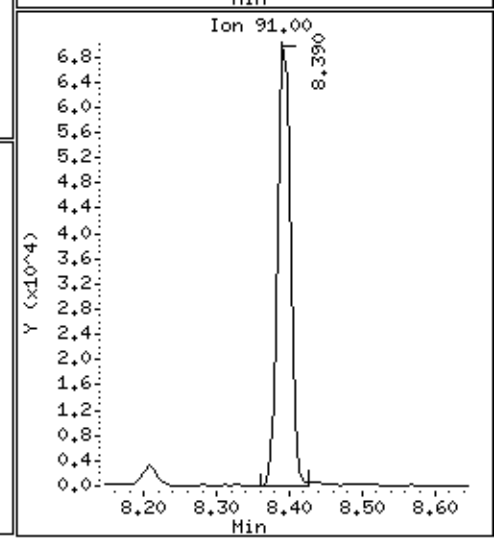


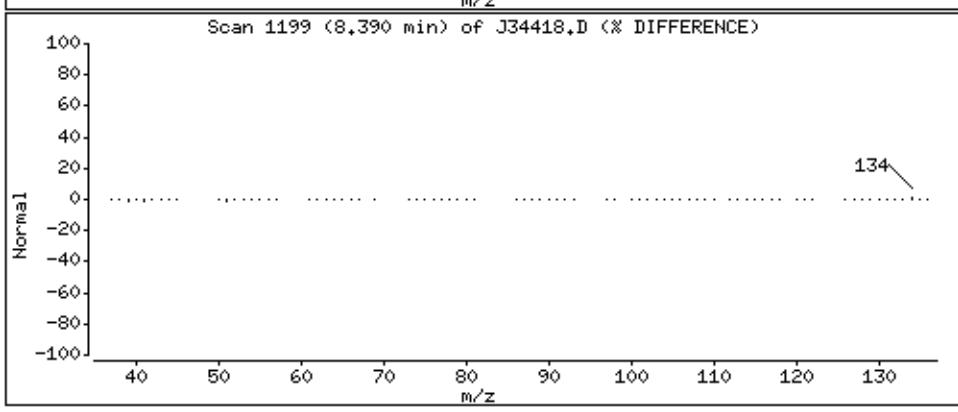












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D

Date : 25-APR-2017 19:25

Client ID: MW-3CMSD

Instrument: 70msv6.i

Sample Info: 103082, 15067:1.25

Purge Volume: 5.0

Operator: KGG

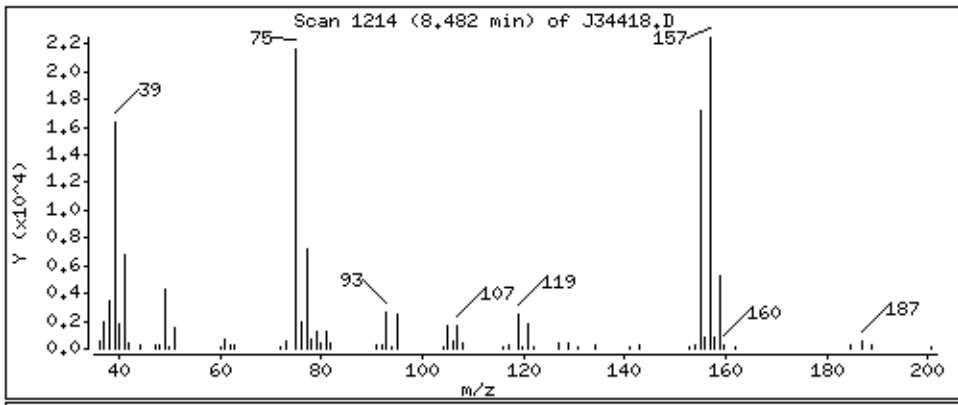
Column phase: RTX-624

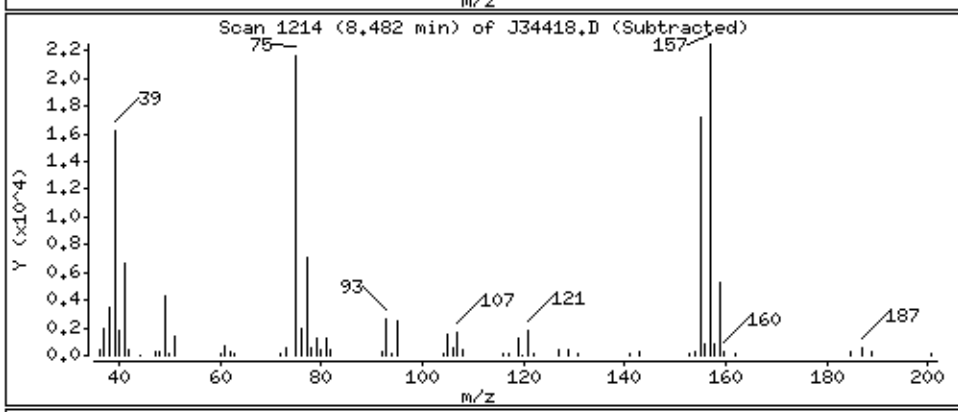
Column diameter: 0.18

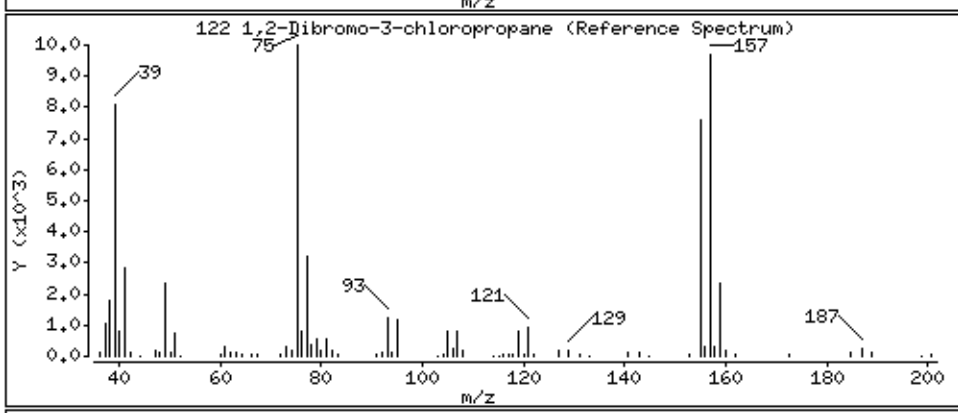
122 1,2-Dibromo-3-chloropropane

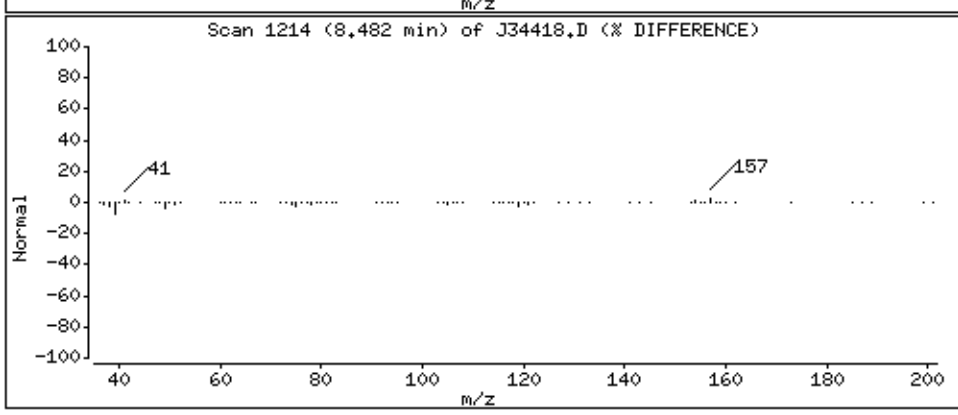
Concentration: 42.4 ug/L

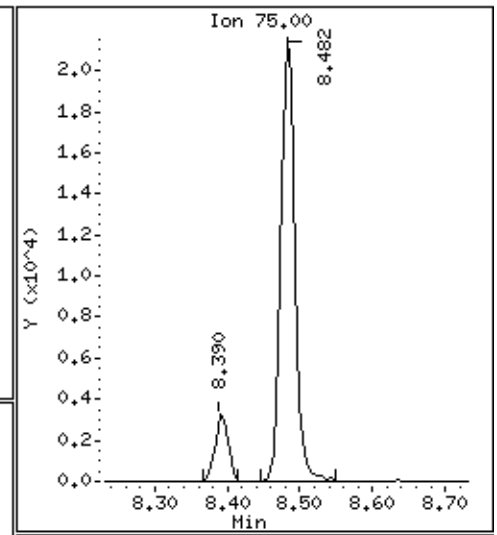
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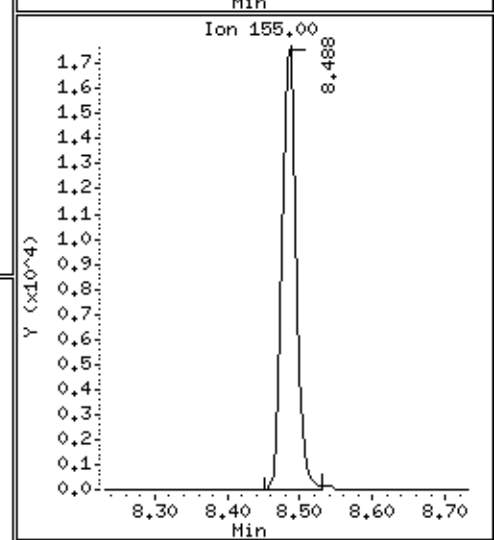


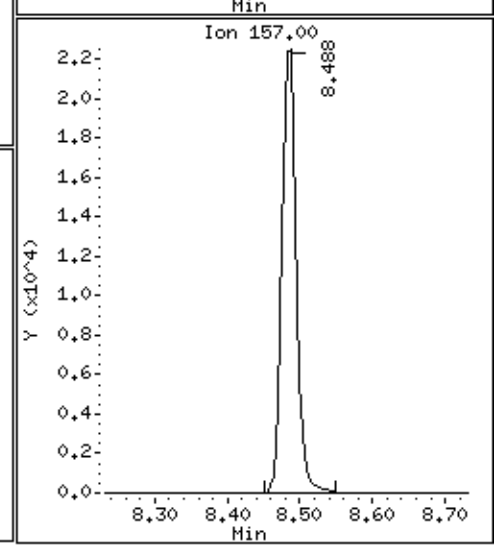












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D

Date : 25-APR-2017 19:25

Client ID: MW-3CMSD

Instrument: 70msv6.i

Sample Info: 103082, 15067:1.25

Purge Volume: 5.0

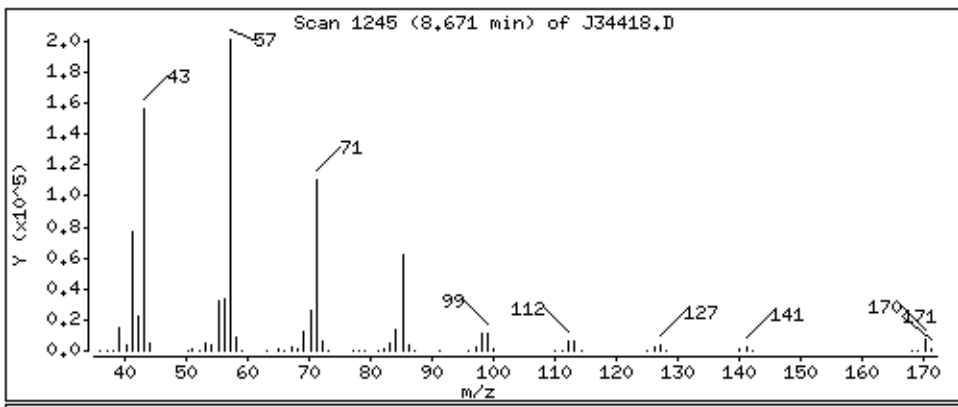
Operator: KGG

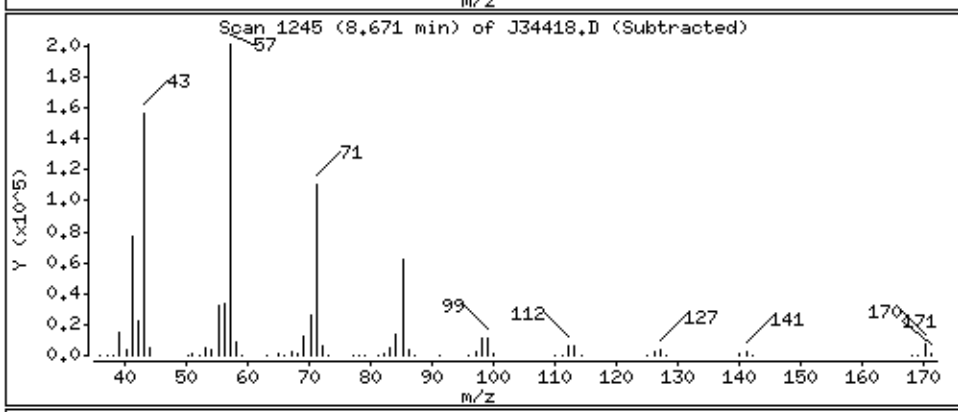
Column phase: RTX-624

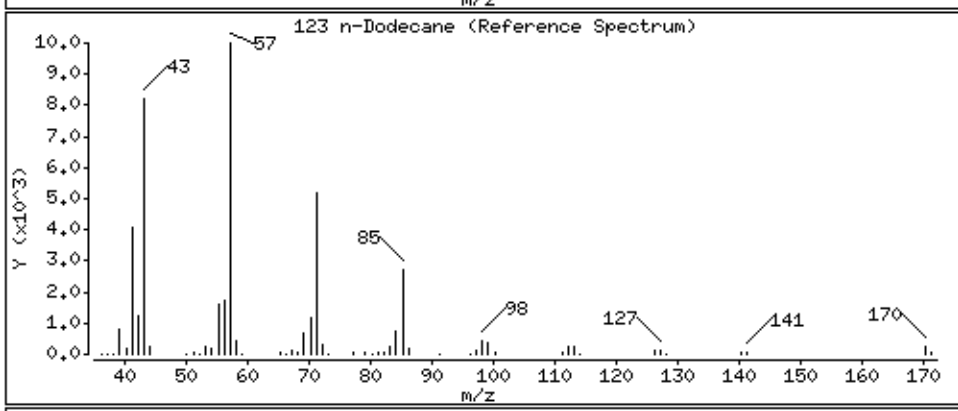
Column diameter: 0.18

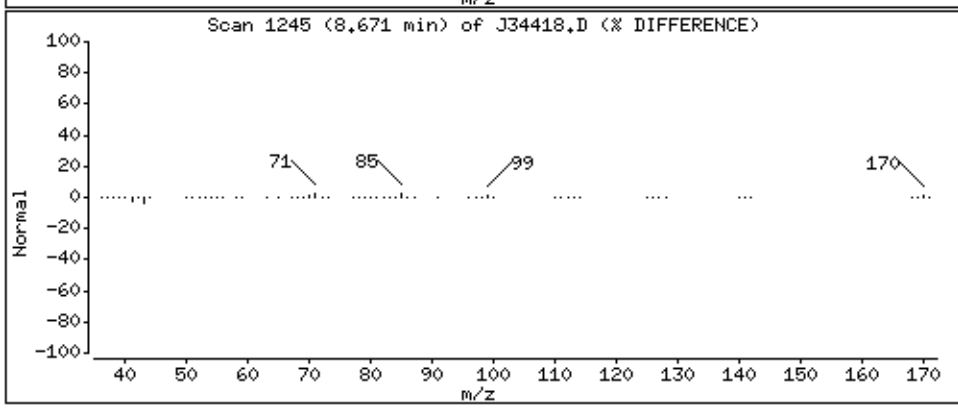
123 n-Dodecane

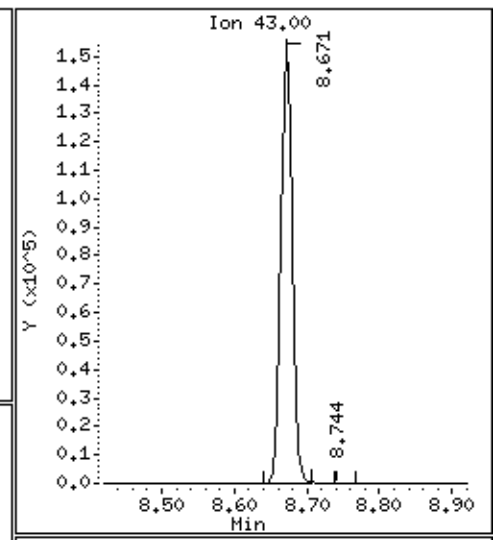
Review Code:

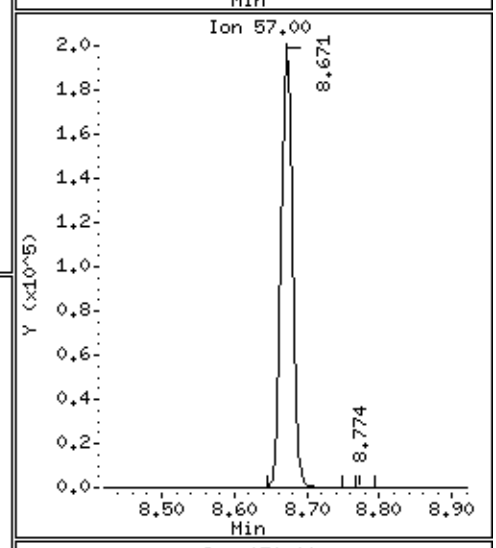


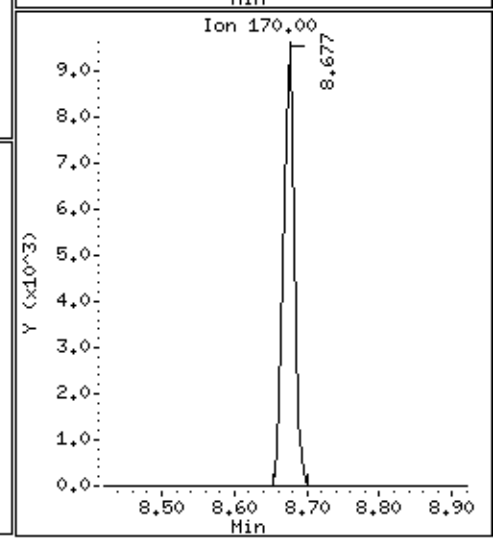












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D

Date : 25-APR-2017 19:25

Client ID: MW-3CMSD

Instrument: 70msv6.i

Sample Info: 103082, 15067:1.25

Purge Volume: 5.0

Operator: KGG

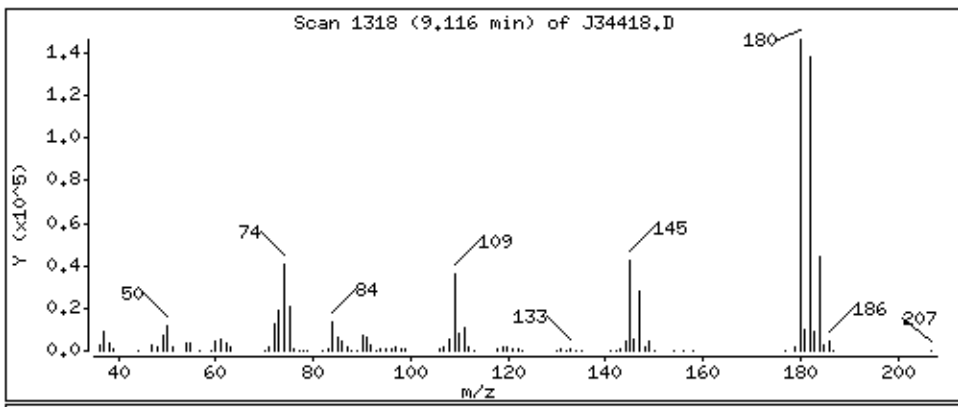
Column phase: RTX-624

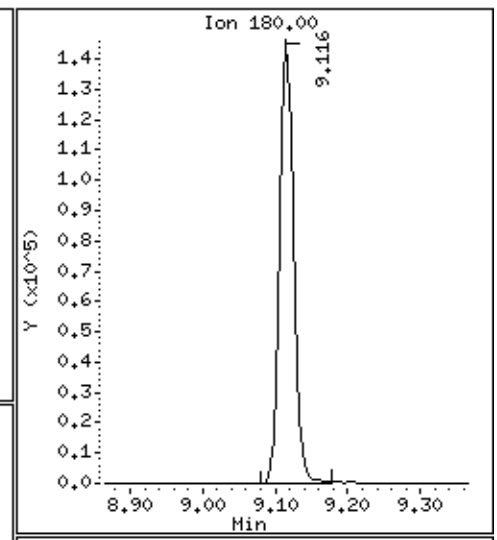
Column diameter: 0.18

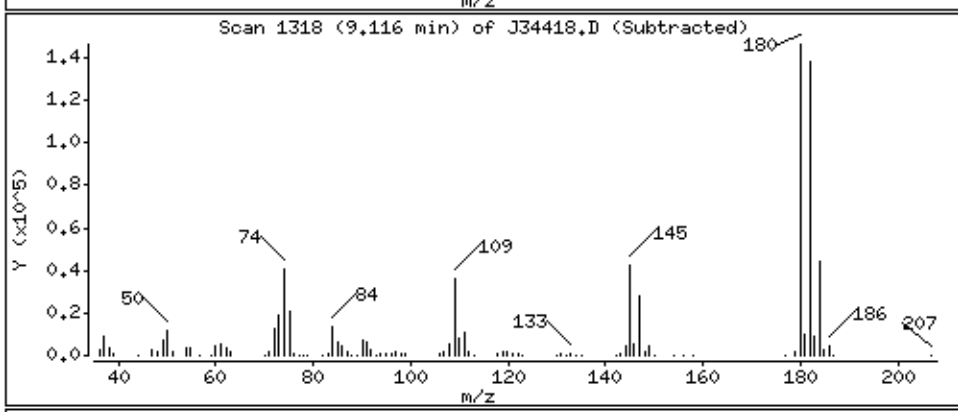
124 1,2,4-Trichlorobenzene

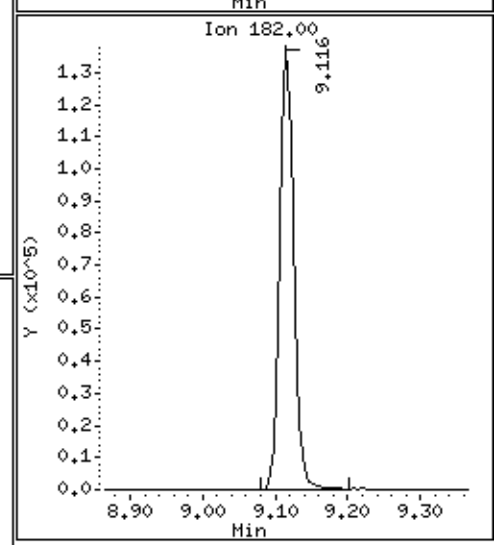
Concentration: 54.8 ug/L

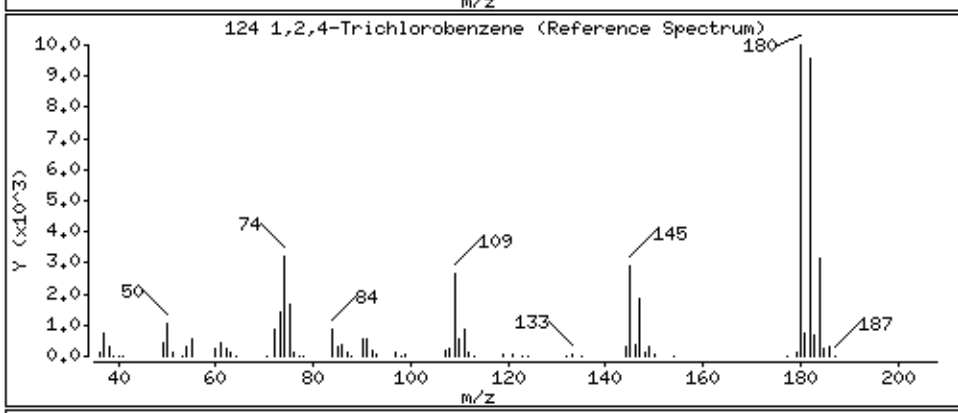
Review Code:

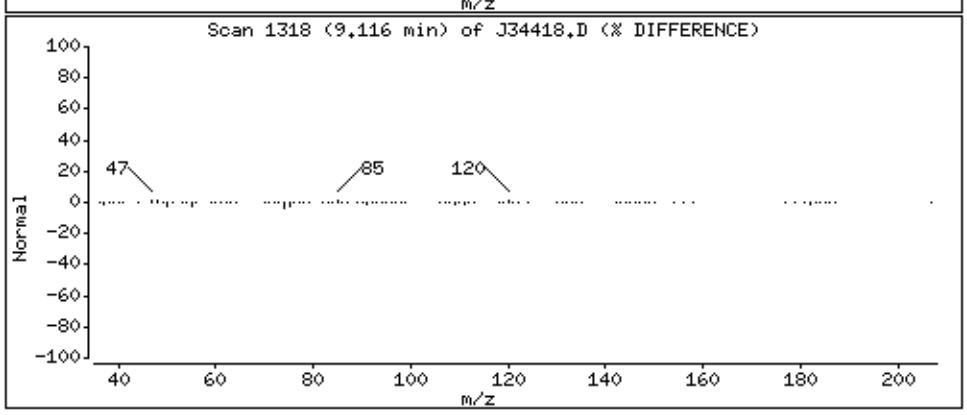












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D

Date : 25-APR-2017 19:25

Client ID: MW-3CMSD

Instrument: 70msv6.i

Sample Info: 103082, 15067:1.25

Purge Volume: 5.0

Operator: KGG

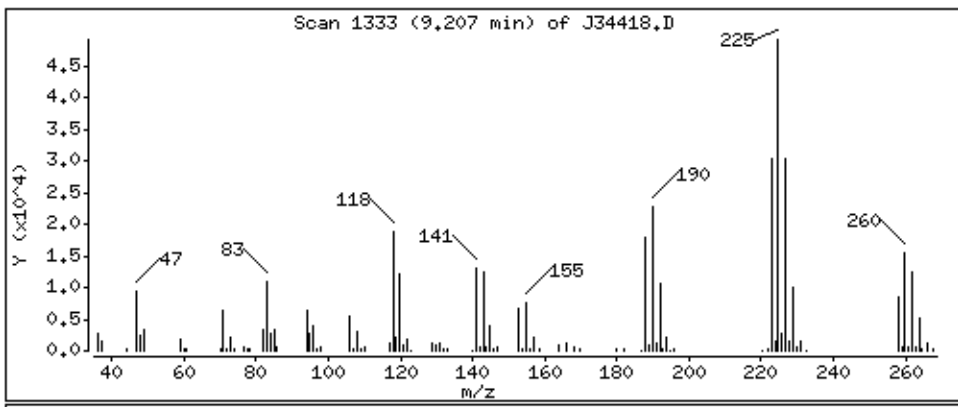
Column phase: RTX-624

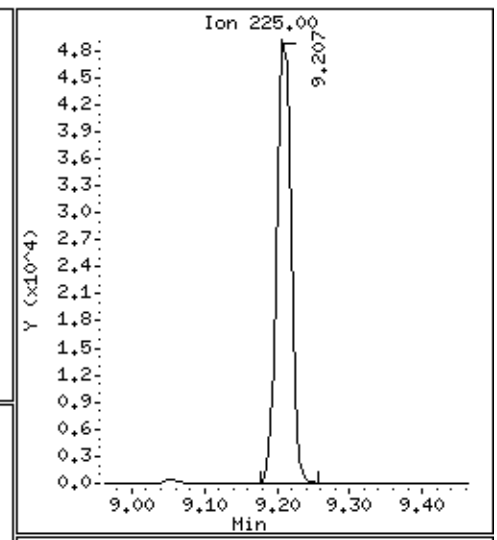
Column diameter: 0.18

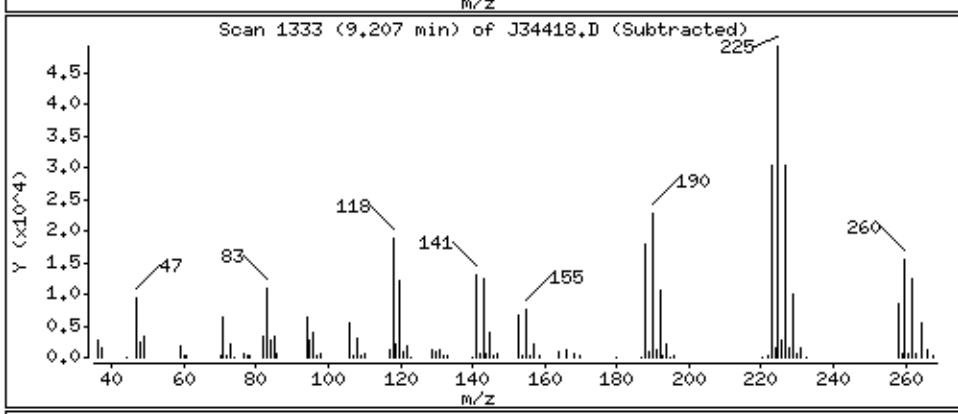
125 Hexachloro-1,3-butadiene

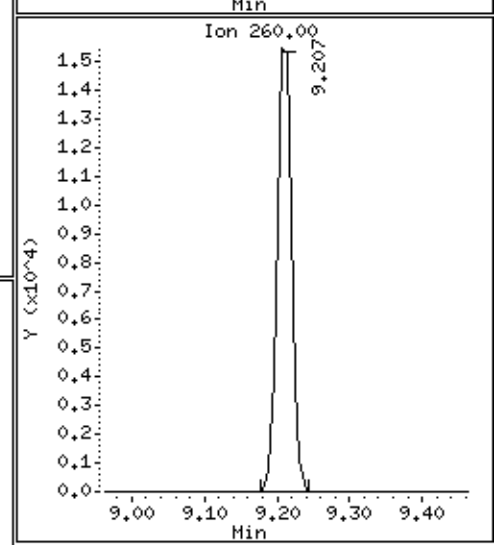
Concentration: 54.7 ug/L

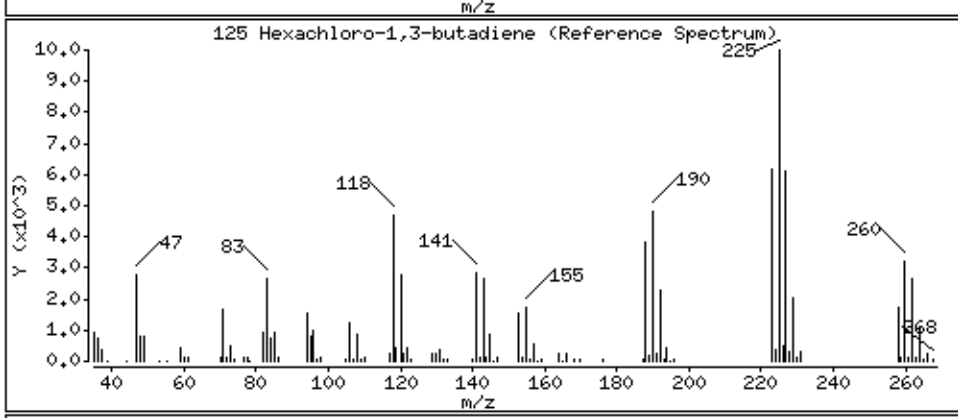
Review Code:

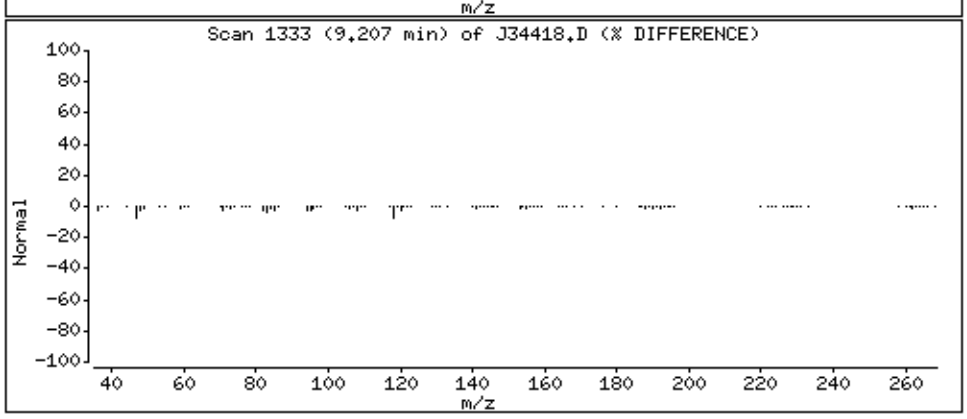












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D

Date : 25-APR-2017 19:25

Client ID: MW-3CMSD

Instrument: 70msv6.i

Sample Info: 103082, 15067:1.25

Purge Volume: 5.0

Operator: KGG

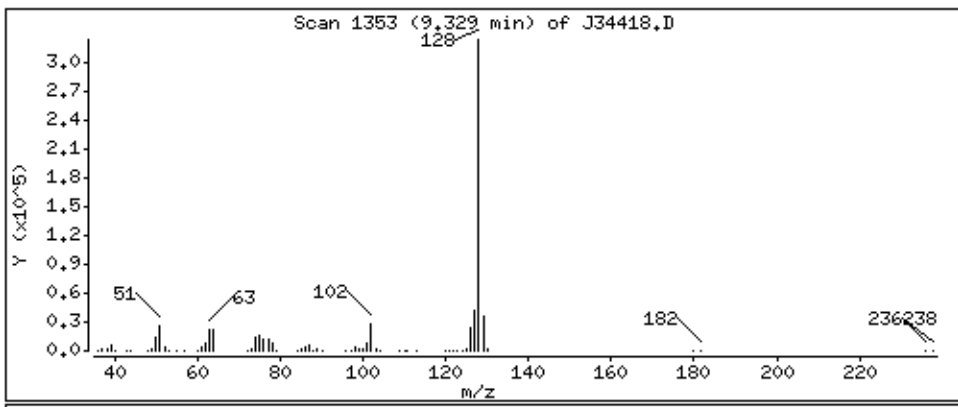
Column phase: RTX-624

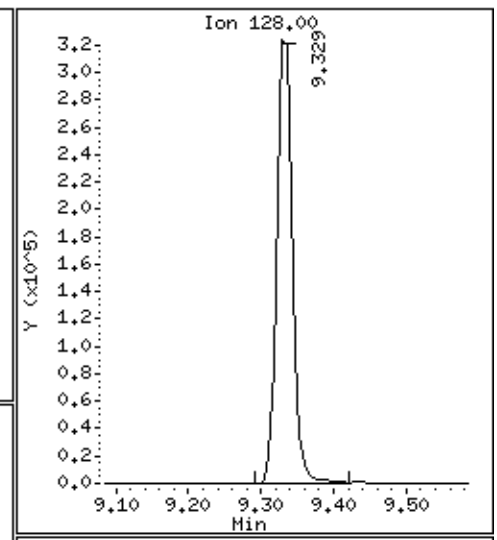
Column diameter: 0.18

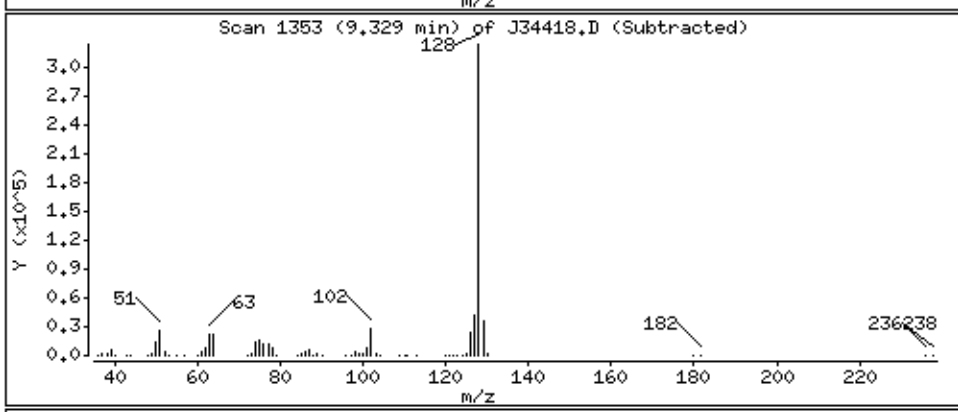
126 Naphthalene

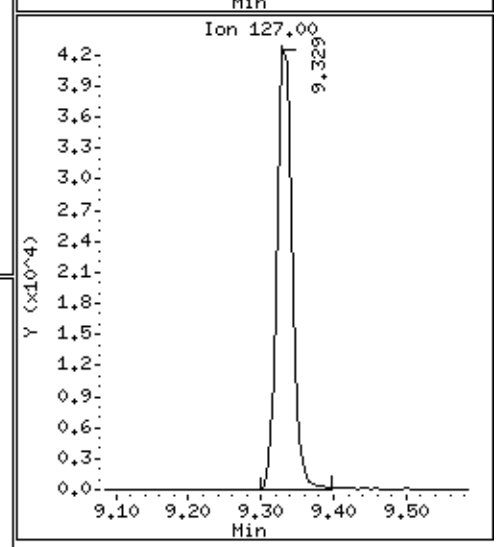
Concentration: 53.9 ug/L

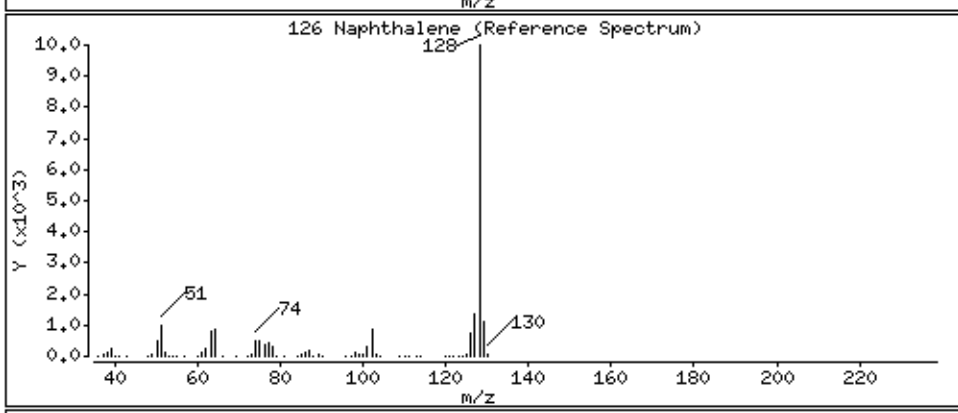
Review Code:

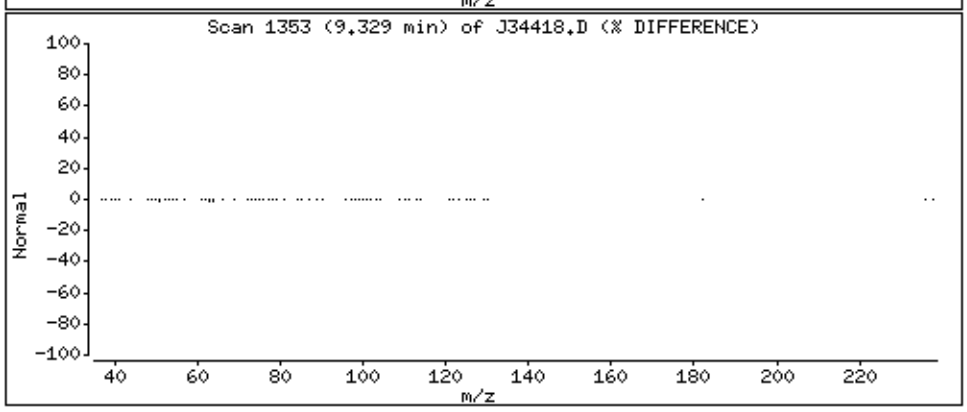












Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34418.D

Date : 25-APR-2017 19:25

Client ID: MW-3CMSD

Instrument: 70msv6.i

Sample Info: 103082, 15067:1.25

Purge Volume: 5.0

Operator: KGG

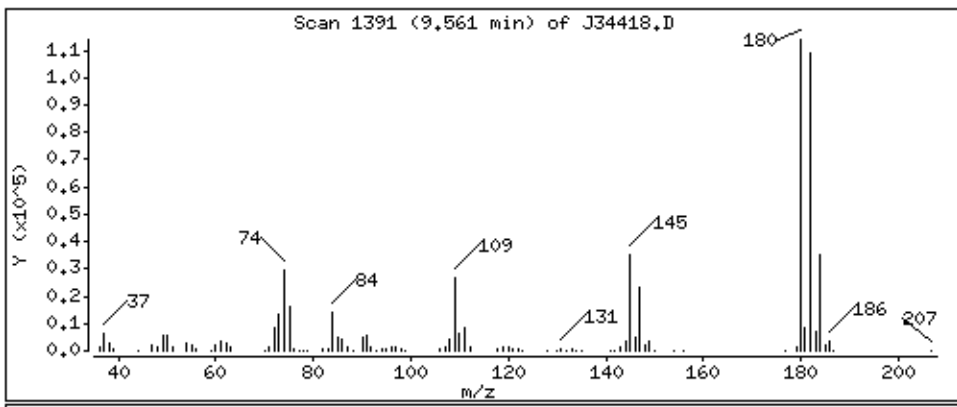
Column phase: RTX-624

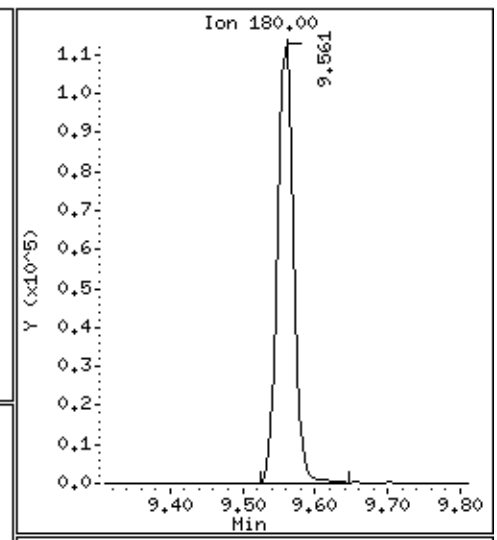
Column diameter: 0.18

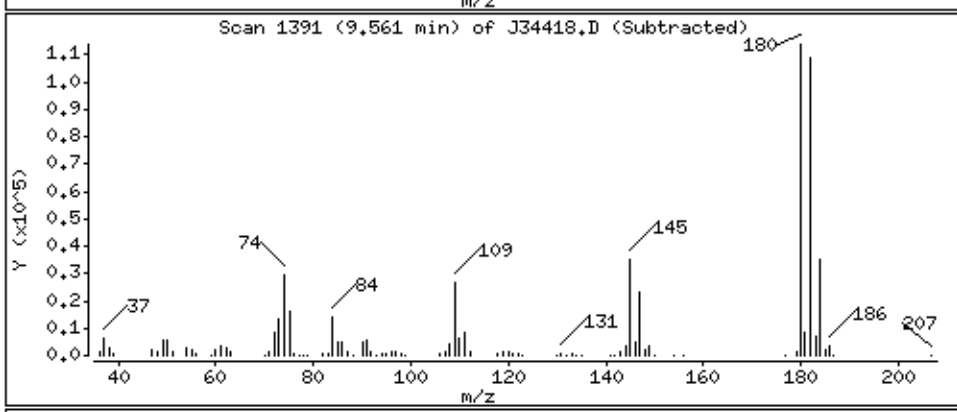
127 1,2,3-Trichlorobenzene

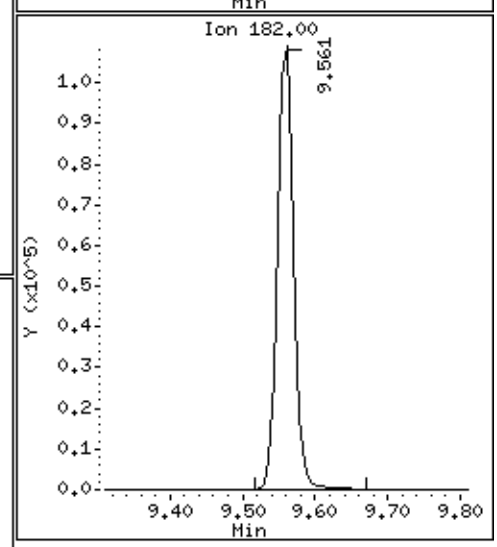
Concentration: 55.1 ug/L

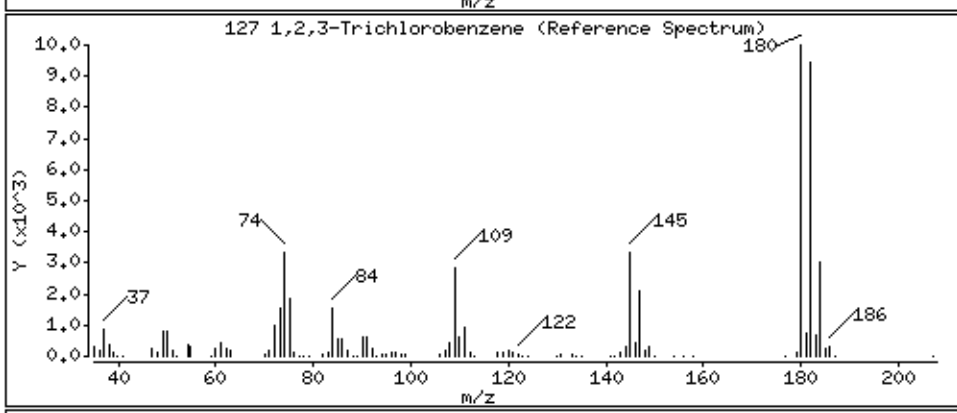
Review Code:

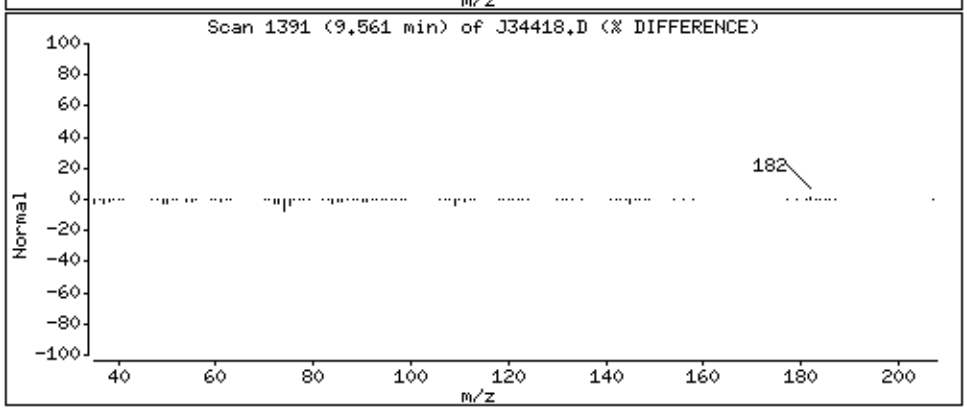








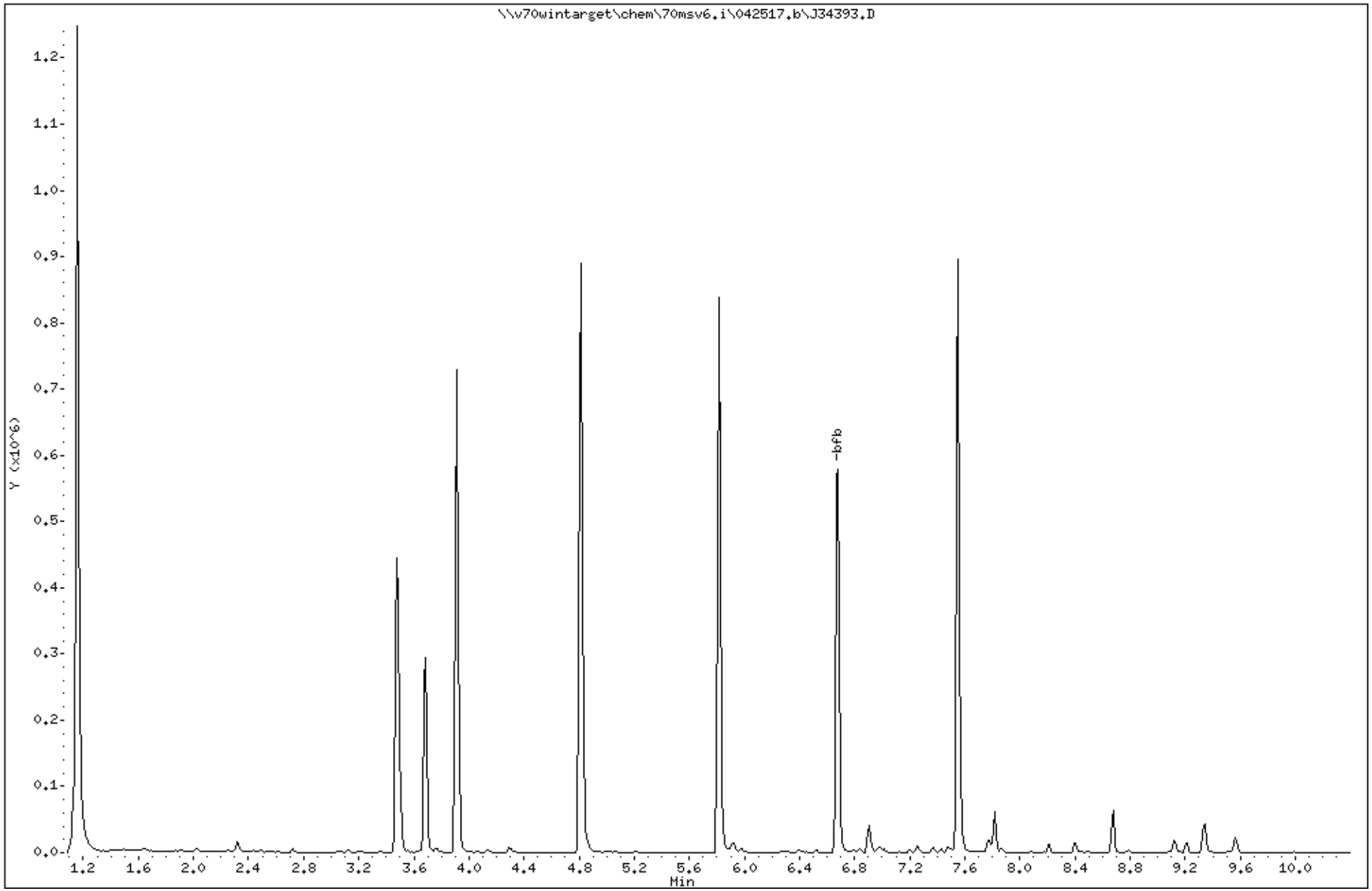




Data File: \\v70wintarget\chem\70msv6.i\042517.b/J34418.D
Injection Date: 25-APR-2017 19:25
Instrument: 70msv6.i
Lab Sample ID: 103082
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34393.D
Date : 25-APR-2017 07:23
Client ID: TUNE
Sample Info: TUNE, 15066:1

Instrument: 70msv6.i
Operator: KGG
Column phase: DB-624
Column diameter: 0.18



Data File: \\v70wintarget\chem\70msv6.i\042517.b\J34393.D

Date : 25-APR-2017 07:23

Client ID: TUNE

Instrument: 70msv6.i

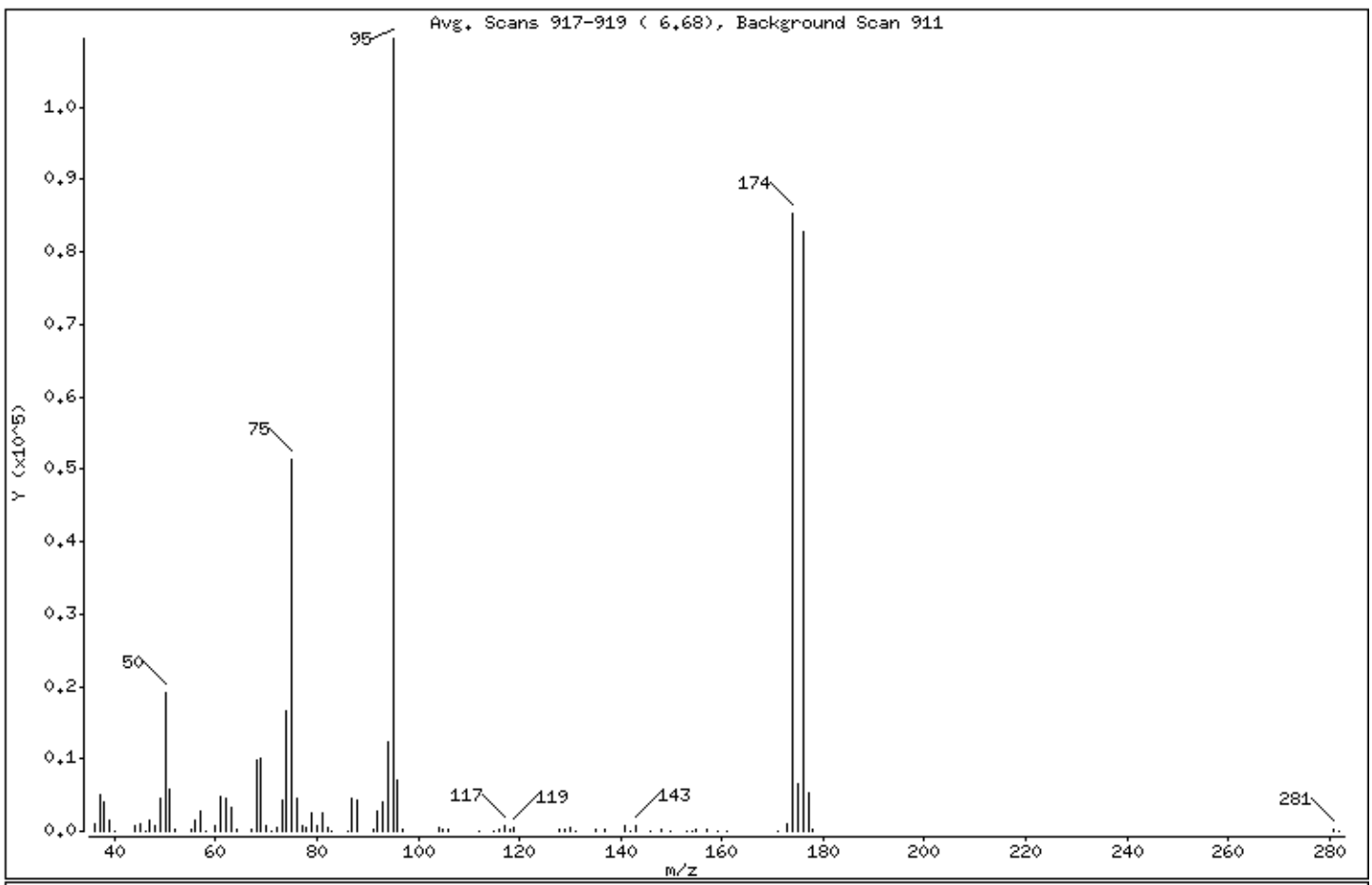
Sample Info: TUNE, 15066:1

Operator: KGG

Column phase: DB-624

Column diameter: 0.18

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	17.49
75	30.00 - 60.00% of mass 95	46.96
96	5.00 - 9.00% of mass 95	6.45
173	Less than 2.00% of mass 174	0.89 (1.14)
174	50.00 - 100.00% of mass 95	78.01
175	5.00 - 9.00% of mass 174	6.02 (7.71)
176	95.00 - 101.00% of mass 174	75.64 (96.97)
177	5.00 - 9.00% of mass 176	4.86 (6.43)

Date : 25-APR-2017 07:23

Client ID: TUNE Instrument: 70msv6.i

Sample Info: TUNE, 15066:1

Operator: KGG

Column phase: DB-624 Column diameter: 0.18

Data File: J34393.D
Spectrum: Avg. Scans 917-919 (6.68), Background Scan 911
Location of Maximum: 95.00
Number of points: 86

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	999	64.00	232	92.00	2844	142.00	78
37.00	4970	67.00	322	93.00	4152	143.00	876
38.00	4102	68.00	9886	94.00	12365	146.00	92
39.00	1613	69.00	10075	95.00	109496	148.00	241
40.00	90	70.00	800	96.00	7066	150.00	35
44.00	637	71.00	41	97.00	210	153.00	42
45.00	953	72.00	566	104.00	434	154.00	36
46.00	81	73.00	4403	105.00	159	155.00	251
47.00	1437	74.00	16544	106.00	365	157.00	166
48.00	647	75.00	51416	112.00	33	159.00	87
49.00	4429	76.00	4444	115.00	88	161.00	67
50.00	19152	77.00	676	116.00	329	171.00	34
51.00	5911	78.00	490	117.00	643	173.00	972
52.00	265	79.00	2395	118.00	315	174.00	85416
55.00	301	80.00	642	119.00	463	175.00	6589
56.00	1445	81.00	2411	128.00	359	176.00	82824
57.00	2732	82.00	476	129.00	145	177.00	5325
58.00	100	83.00	88	130.00	383	178.00	198
60.00	834	86.00	88	131.00	72	281.00	338
61.00	4876	87.00	4489	135.00	144	282.00	57
62.00	4651	88.00	4404	137.00	167		
63.00	3297	91.00	346	141.00	800		

INSTRUMENT RUN LOG
Pace Analytical Services, Inc.

Instrument: 70msv6.i
Column RTX-624 20m X 0.18mm Helium
Misc. Prep Info [L]:
ISTD lot:
Lot:
Tune std: _____

Method: SW846-8260C/EPA 624
Surr. lot: 13481:5
Cal. std: _____

Path/File	Smp Info	Mtrx/Batch	Type	DF	pH	Method/Sublist	Date	Time	Oper	Comments
1/J33242.D	TUNE, 13481:1	L/1823	BFB	1	7	DBFB/all	3/27/17	17:19	BBL	✓
1/J33243.D	CAL1, 13484:1	L/1823	CALIB_1	1	< 2	032717_8260W/a	3/27/17	18:07	BBL	✓
1/J33244.D	CAL2, 13485:1	L/1823	CALIB_2	1	< 2	032717_8260W/a	3/27/17	18:25	BBL	✓
1/J33245.D	CAL3, 13486:1	L/1823	CALIB_3	1	< 2	032717_8260W/a	3/27/17	18:42	BBL	✓
1/J33246.D	CAL4, 13487:1	L/1823	CALIB_4	1	< 2	032717_8260W/a	3/27/17	19:00	BBL	✓
1/J33247.D	CAL5, 13488:1	L/1823	CALIB_5	1	< 2	032717_8260W/a	3/27/17	19:18	BBL	✓
1/J33248.D	CAL6, 13489:1	L/1823	CALIB_6	1	< 2	032717_8260W/a	3/27/17	19:36	BBL	✓
1/J33249.D	CAL7, 13490:1	L/1823	CALIB_7	1	< 2	032717_8260W/a	3/27/17	19:54	BBL	✓
1/J33250.D	CAL8, 13491:1	L/1823	CALIB_8	1	< 2	032717_8260W/a	3/27/17	20:12	BBL	✓
1/J33251.D	VBLK	L/	SAMPLE	1	< 2	032717_8260W/a	3/27/17	20:37	BBL	
1/J33252.D	ICV, 13492:1	L/1823	CCALIB_6	1	< 2	032717_8260W/a	3/27/17	20:55	BBL	
1/J33253.D	ICV, 13492:1	L/1823	CCALIB_6	1	< 2	032717_8260W/a	3/27/17	21:57	BBL	✓

Comments: All water samples have a pH below 2 unless otherwise noted.
Check Maintenance Items Performed:

___ Changed septum
___ Cleaned liner
___ Replaced/Cleaned gold seal
___ Clipped column
___ Changed trap (lot #_____)
___ Cleaned MS source
___ Changed column (lot #_____)
___ Other minor parts replaced _____
___ No maintenance performed today

Additional Comments:

Run Order Verified: BBL 3/28/17

File Path 1: \\v70wintarget\chem\70msv6.i\032717.b
Matrix Codes: [B]iota, [G]as, [L]iquid, [S]olid, [N]one
Report Date: 20:06 03/28/2017

Reviewed By/Date: BBL 3/28/17 Page: 1 of 1

INSTRUMENT RUN LOG
Pace Analytical Services, Inc.

Instrument: 70msv6.i
Column RTX-624 20m X 0.18mm Helium
Misc. Prep Info [L]:
ISTD lot:
Lot:
Tune std: _____

Method: SW846-8260C/EPA 624
Surr. lot: 15066:5
Cal. std: _____

Path/File	Smp Info	Mtrx/Batch	Type	DF	pH	Method/Sublist	Date	Time	Oper	Comments
1/J34346.D	TUNE, 15066:1	L/1823	BFB	1	7	DBFB/all	4/24/17	10:10	KGG	
1/J34347.D	CCV, 15616:1	L/1823	CCALIB_6	1	< 2	032717_8260W/a	4/24/17	10:58	KGG	
1/J34348.D	102184,	L/1991	BLANK	1	< 2	032717_8260W/a	4/24/17	11:55	KGG	
1/J34349.D	102185, 15067:1.	L/1991	LCS	1	< 2	032717_8260W/a	4/24/17	12:15	KGG	
1/J34350.D	7016373002,	L/1991	SAMPLE	1	< 2	032717_8260W/a	4/24/17	13:03	KGG	
1/J34351.D	7016373004,	L/1991	SAMPLE	1	< 2	032717_8260W/a	4/24/17	13:21	KGG	
1/J34352.D	7016373016,	L/1991	SAMPLE	1	< 2	032717_8260W/a	4/24/17	13:39	KGG	
1/J34353.D	7016373003,	L/1991	SAMPLE	1	< 2	032717_8260W/a	4/24/17	13:58	KGG	
1/J34354.D	7016373015,	L/1991	SAMPLE	1	< 2	032717_8260W/a	4/24/17	14:16	KGG	
1/J34355.D	7016373003X3,	L/1991	SAMPLE	3	< 2	032717_8260W/a	4/24/17	14:34	KGG	
1/J34356.D	7016373013X10,	L/1991	SAMPLE	10	< 2	032717_8260W/a	4/24/17	14:52	KGG	
1/J34357.D	7016373014X10,	L/1991	SAMPLE	10	< 2	032717_8260W/a	4/24/17	15:09	KGG	
1/J34358.D	7016373013X100,	L/1991	SAMPLE	100	< 2	032717_8260W/a	4/24/17	15:27	KGG	
1/J34359.D	7016373001X10,	L/1991	SAMPLE	10	< 2	032717_8260W/a	4/24/17	15:45	KGG	
1/J34360.D	7016373012X10,	L/1991	SAMPLE	10	< 2	032717_8260W/a	4/24/17	16:03	KGG	
1/J34361.D	7016373014X50,	L/1991	SAMPLE	50	< 2	032717_8260W/a	4/24/17	16:20	KGG	
1/J34362.D	7016373010X50,	L/1987	SAMPLE	50	< 2	032717_8260W/a	4/24/17	16:38	KGG	
1/J34363.D	7016373001,	L/1991	SAMPLE	1	5	032717_8260W/a	4/24/17	16:56	KGG	surr out!
1/J34364.D	7016373015X2,	L/1991	SAMPLE	2	< 2	032717_8260W/a	4/24/17	17:14	KGG	
1/J34365.D	7016373012X20,	L/1987	SAMPLE	20	< 2	032717_8260W/a	4/24/17	17:32	KGG	
1/J34366.D	7016373011X50,	L/1987	SAMPLE	50	< 2	032717_8260W/a	4/24/17	17:50	KGG	
1/J34367.D	7016373014X50,	L/1987	SAMPLE	50	< 2	032717_8260W/a	4/24/17	18:07	KGG	
1/J34368.D	7016373007X10,	L/1987	SAMPLE	10	< 2	032717_8260W/a	4/24/17	18:25	KGG	
1/J34369.D	105685,	L/1991	FIELDDUP	1	< 2	032717_8260W/a	4/24/17	18:46	KGG	
1/J34370.D	105686, 15067:1.	L/1991	MS	1	< 2	032717_8260W/a	4/24/17	19:18	KGG	
1/J34371.D	TUNE, 15066:1	L/1823	BFB	1	7	DBFB/all	4/24/17	19:40	KGG	
1/J34372.D	CCV, 15616:1	L/1823	CCALIB_6	1	< 2	032717_8260W/S	4/24/17	19:58	KGG	
1/J34373.D	VBLK	L/	SAMPLE	1	< 2	032717_8260W/S	4/24/17	20:19	KGG	
1/J34374.D	102776,	L/2001	BLANK	1	< 2	032717_8260W/S	4/24/17	20:37	KGG	
1/J34375.D	102777, 15067:1.	L/2001	LCS	1	< 2	032717_8260W/S	4/24/17	20:54	KGG	
1/J34376.D	VBLK	L/	SAMPLE	1	< 2	032717_8260W/S	4/24/17	21:12	KGG	

Comments: All water samples have a pH below 2 unless otherwise noted.
Check Maintenance Items Performed:

___ Changed septum
___ Cleaned liner
___ Replaced/Cleaned gold seal
___ Clipped column
___ Changed trap (lot #_____)
___ Cleaned MS source
___ Changed column (lot #_____)
___ Other minor parts replaced _____
___ No maintenance performed today

Additional Comments:

Run Order Verified: GKB 5/4/17

pH-208516

File Path 1: \\v70wintarget\chem\70msv6.i\042417.b
Matrix Codes: [B]iota, [G]as, [L]iquid, [S]olid, [N]one
Report Date: 20:28 04/29/2017

Reviewed By/Date: BRL 4/27/17 Page: 1 of 2

INSTRUMENT RUN LOG

Pace Analytical Services, Inc.

Instrument: 70msv6.i
Column RTX-624 20m X 0.18mm Helium Method: SW846-8260C/EPA 624
Misc. Prep Info [L]:
ISTD lot: Surr. lot: 15066:5
Lot:
Tune std: _____ Cal. std: _____

Path/File	Smp Info	Mtrx/Batch	Type	DF	pH	Method/Sublist	Date	Time	Oper	Comments
1/J34377.D	7016630001,	L/2001	SAMPLE	1	< 2	032717_8260W/S	4/24/17	21:30	KGG	✓
1/J34378.D	7016630002,	L/2001	SAMPLE	1	< 2	032717_8260W/S	4/24/17	21:48	KGG	✓
1/J34379.D	7016630003,	L/2001	SAMPLE	1	< 2	032717_8260W/S	4/24/17	22:06	KGG	✓
1/J34380.D	7016630004,	L/2001	SAMPLE	1	< 2	032717_8260W/S	4/24/17	22:24	KGG	
1/J34381.D	103405,	L/2001	FIELDDUP	1	< 2	032717_8260W/S	4/24/17	22:42	KGG	✓
1/J34382.D	7016630006,	L/2001	SAMPLE	1	< 2	032717_8260W/S	4/24/17	22:59	KGG	✓
1/J34383.D	7016630007,	L/2001	SAMPLE	1	< 2	032717_8260W/S	4/24/17	23:17	KGG	✓
1/J34384.D	7016630008,	L/2001	SAMPLE	1	< 2	032717_8260W/S	4/24/17	23:35	KGG	✓
1/J34385.D	7016630009,	L/2001	SAMPLE	1	< 2	032717_8260W/S	4/24/17	23:53	KGG	✓
1/J34386.D	7016630010,	L/2001	SAMPLE	1	< 2	032717_8260W/S	4/25/17	00:11	KGG	✓
1/J34387.D	7016630011,	L/2001	SAMPLE	1	< 2	032717_8260W/S	4/25/17	00:29	KGG	✓
1/J34388.D	7016630012,	L/2001	SAMPLE	1	< 2	032717_8260W/S	4/25/17	00:46	KGG	✓
1/J34389.D	7016630013,	L/2001	SAMPLE	1	< 2	032717_8260W/S	4/25/17	01:04	KGG	✓
1/J34390.D	7016630005	L/2001	SAMPLE	1	< 2	032717_8260W/S	4/25/17	06:13	KGG	✓
1/J34391.D	7016630004x5,	L/2001	SAMPLE	5	< 2	032717_8260W/S	4/25/17	06:31	KGG	✓
1/J34392.D	103406, 15067:1.	L/2001	MS	1	< 2	032717_8260W/S	4/25/17	06:49	KGG	✓

pH 20485/6

Comments: All water samples have a pH below 2 unless otherwise noted.

GKB 5/4/17

File Path 1: \\v70wintarget\chem\70msv6.i\042417.b
Matrix Codes: [B]iota, [G]as, [L]iquid, [S]olid, [N]one
Report Date: 20:28 04/29/2017

Reviewed By/Date: BBL 4/29/17 Page: 2 of 2

INSTRUMENT RUN LOG
Pace Analytical Services, Inc.

Instrument: 70msv6.i
Column RTX-624 20m X 0.18mm Helium — Method: SW846-8260C/EPA 624
Misc. Prep Info [L]:
ISTD lot: — Surr. lot: 15066:5
Lot:
Tune std: _____ — Cal. std: _____

Path/File	Smp Info	Mtrx/Batch	Type	DF	pH	Method/Sublist	Date	Time	Oper	Comments
1/J34393.D	TUNE, 15066:1	L/2010	BFB	1	7	DBFB/all	4/25/17	07:23	KGG	
1/J34394.D	CCV, 15707:1	L/1823	CCALIB_6	1	< 2	032717_8260W/a	4/25/17	07:59	KGG	
1/J34394A.D	TUNE,15066:1	L/1823	BFB	1	7	DBFB/all	4/25/17	07:59	KGG	
1/J34396.D	CCV,15744:1	L/2010	CCALIB_5	1	< 2	032717_624W/62	4/25/17	12:13	KGG	
1/J34397.D	103008,	L/2005	BLANK	1	< 2	032717_8260W/a	4/25/17	13:06	KGG	
1/J34398.D	103009, 15067:1.	L/2005	LCS	1	< 2	032717_8260W/a	4/25/17	13:27	KGG	
1/J34399.D	7016438012,	L/2005	SAMPLE	1	< 2	032717_8260W/a	4/25/17	13:46	KGG	
1/J34400.D	7016438013,	L/2005	SAMPLE	1	< 2	032717_8260W/a	4/25/17	14:03	KGG	
1/J34401.D	7016438009,	L/2005	SAMPLE	1	< 2	032717_8260W/a	4/25/17	14:21	KGG	
1/J34402.D	7016438021,	L/2005	SAMPLE	1	< 2	032717_8260W/a	4/25/17	14:39	KGG	
1/J34403.D	7016438014,	L/2005	SAMPLE	1	< 2	032717_8260W/a	4/25/17	14:57	KGG	
1/J34404.D	7016438001,	L/2005	SAMPLE	1	< 2	032717_8260W/a	4/25/17	15:15	KGG	
1/J34405.D	7016438002,	L/2005	SAMPLE	1	< 2	032717_8260W/a	4/25/17	15:33	KGG	
1/J34406.D	7016438003,	L/2005	SAMPLE	1	< 2	032717_8260W/a	4/25/17	15:50	KGG	
1/J34407.D	7016438005,	L/2005	SAMPLE	1	< 2	032717_8260W/a	4/25/17	16:08	KGG	
1/J34408.D	7016438006,	L/2005	SAMPLE	1	< 2	032717_8260W/a	4/25/17	16:26	KGG	
1/J34409.D	7016438007,	L/2005	SAMPLE	1	< 2	032717_8260W/a	4/25/17	16:44	KGG	
1/J34410.D	7016438008,	L/2005	SAMPLE	1	< 2	032717_8260W/a	4/25/17	17:02	KGG	
1/J34411.D	7016438015,	L/2005	SAMPLE	1	< 2	032717_8260W/a	4/25/17	17:20	KGG	
1/J34412.D	7016438016,	L/2005	SAMPLE	1	< 2	032717_8260W/a	4/25/17	17:37	KGG	
1/J34413.D	7016438017,	L/2005	SAMPLE	1	< 2	032717_8260W/a	4/25/17	17:55	KGG	
1/J34414.D	7016438018,	L/2005	SAMPLE	1	< 2	032717_8260W/a	4/25/17	18:13	KGG	
1/J34415.D	7016438019,	L/2005	SAMPLE	1	< 2	032717_8260W/a	4/25/17	18:31	KGG	
1/J34416.D	7016438020,	L/2005	SAMPLE	1	< 2	032717_8260W/a	4/25/17	18:49	KGG	
1/J34417.D	103081, 15067:1.	L/2005	MS	1	< 2	032717_8260W/a	4/25/17	19:07	KGG	
1/J34418.D	103082, 15067:1.	L/2005	MSD	1	< 2	032717_8260W/a	4/25/17	19:25	KGG	
1/J34420.D	103478,	L/2011	BLANK	1	< 2	032717_624W/62	4/25/17	20:00	KGG	
1/J34420A.D	105691,	L/2042	BLANK	1	< 2	032717_624W/62	4/25/17	20:00	KGG	
1/J34421.D	103479, 15067:0.	L/2011	LCS	1	< 2	032717_624W/62	4/25/17	20:18	KGG	
1/J34421A.D	105692,15067:.5	L/2042	LCS	1	< 2	032717_624W/62	4/25/17	20:18	KGG	
1/J34422.D	7016790006,	L/2011	SAMPLE	1	6	032717_624W/62	4/25/17	20:36	KGG	

Comments: All water samples have a pH below 2 unless otherwise noted. 208516

Check Maintenance Items Performed:

___ Changed septum
___ Cleaned liner
___ Replaced/Cleaned gold seal
___ Clipped column
___ Changed trap (lot #_____)
___ Cleaned MS source
___ Changed column (lot #_____)
___ Other minor parts replaced _____
___ No maintenance performed today

Additional Comments:

Run Order Verified: _____

File Path 1: \\v70wintarget\chem\70msv6.i\042517.b
Matrix Codes: [B]iota, [G]as, [L]iquid, [S]olid, [N]one
Report Date: 13:35 05/26/2017

Reviewed By/Date: MF 5/26/17 Page: 1 of 2

INSTRUMENT RUN LOG

Pace Analytical Services, Inc.

Instrument: 70msv6.i

Column RTX-624 20m X 0.18mm Helium Method: SW846-8260C/EPA 624

Misc. Prep Info [L]:

ISTD lot: Surr. lot: 15066:5

Lot:

Tune std: _____ Cal. std: _____

Path/File	Smp Info	Mtrx/Batch	Type	DF	pH	Method/Sublist	Date	Time	Oper	Comments
1/J34423.D	7016794006,	L/2011	SAMPLE	1	6	032717_624W/62	4/25/17	20:54	KGG	
1/J34424.D	7016790001,	L/2011	SAMPLE	1	7	032717_624W/62	4/25/17	21:11	KGG	
1/J34425.D	7016790002,	L/2011	SAMPLE	1	7	032717_624W/62	4/25/17	21:29	KGG	
1/J34426.D	7016790003,	L/2011	SAMPLE	1	7	032717_624W/62	4/25/17	21:47	KGG	
1/J34427.D	7016790005,	L/2011	SAMPLE	1	7	032717_624W/62	4/25/17	22:05	KGG	
1/J34428.D	7016794001,	L/2011	SAMPLE	1	7	032717_624W/62	4/25/17	22:23	KGG	
1/J34429.D	7016794003,	L/2011	SAMPLE	1	7	032717_624W/62	4/25/17	22:41	KGG	
1/J34430.D	7016794002,	L/2011	SAMPLE	1	7	032717_624W/62	4/25/17	22:59	KGG	
1/J34431.D	7016794005,	L/2011	SAMPLE	1	7	032717_624W/62	4/25/17	23:17	KGG	
1/J34432.D	104039	L/2011	FIELDDUP	1	7	032717_624W/62	4/25/17	23:35	KGG	
1/J34433.D	7016790005x2,	L/2011	SAMPLE	2	7	032717_624W/62	4/25/17	23:53	KGG	
1/J34434.D	7016794005x2,	L/2011	SAMPLE	2	7	032717_624W/62	4/26/17	00:11	KGG	
1/J34435.D	104038, 15067:0	L/2011	MS	1	7	032717_624W/62	4/26/17	00:28	KGG	
1/J34437.D	103548,	L/2012	BLANK	1	7	032717_624W/62	4/26/17	01:04	KGG	
1/J34438.D	103549, 15067:0	L/2012	LCS	1	7	032717_624W/62	4/26/17	01:22	KGG	
1/J34439.D	vblk	L/	SAMPLE	1	< 2	032717_624W/al	4/26/17	01:40	KGG	X
1/J34440.D	7016611001,	L/2012	SAMPLE	1	< 2	032717_624W/62	4/26/17	01:58	KGG	
1/J34441.D	7016611002,	L/2012	SAMPLE	1	< 2	032717_624W/62	4/26/17	02:16	KGG	
1/J34442.D	7016611003,	L/2012	SAMPLE	1	< 2	032717_624W/62	4/26/17	02:34	KGG	
1/J34443.D	7016611004,	L/2012	SAMPLE	1	< 2	032717_624W/62	4/26/17	02:52	KGG	
1/J34444.D	7016611005,	L/2012	SAMPLE	1	< 2	032717_624W/62	4/26/17	03:10	KGG	
1/J34445.D	7016611006,	L/2012	SAMPLE	1	< 2	032717_624W/62	4/26/17	03:28	KGG	
1/J34446.D	7016611007,	L/2012	SAMPLE	1	< 2	032717_624W/62	4/26/17	03:46	KGG	
1/J34447.D	7016611008,	L/2012	SAMPLE	1	< 2	032717_624W/62	4/26/17	04:04	KGG	
1/J34448.D	7016611009,	L/2012	SAMPLE	1	< 2	032717_624W/62	4/26/17	04:22	KGG	
1/J34449.D	7016611010,	L/2012	SAMPLE	1	< 2	032717_624W/62	4/26/17	04:40	KGG	
1/J34450.D	30216551003,	L/2012	SAMPLE	1	< 2	032717_624W/62	4/26/17	04:58	KGG	
1/J34451.D	7016694001,	L/2012	SAMPLE	1	< 2	032717_624W/62	4/26/17	05:16	KGG	
1/J34452.D	7016695002,	L/2012	SAMPLE	1	< 2	032717_624W/62	4/26/17	05:34	KGG	
1/J34453.D	7016752002,	L/2012	SAMPLE	1	< 2	032717_624W/62	4/26/17	05:52	KGG	
1/J34454.D	30216551001,	L/2012	SAMPLE	1	< 2	032717_624W/62	4/26/17	06:10	KGG	

Comments: All water samples have a pH below 2 unless otherwise noted. 208516

File Path 1: \\v70wintarget\chem\70msv6.i\042517.b

Matrix Codes: [B]iota, [G]as, [L]iquid, [S]olid, [N]one

Report Date: 13:36 05/26/2017

Reviewed By/Date: MF 5/26/17 Page: 2 of 2

INSTRUMENT RUN LOG

Pace Analytical Services, Inc.

Instrument: 70msv6.i

Column RTX-624 20m X 0.18mm Helium Method: SW846-8260C/EPA 624

Misc. Prep Info [L]:

ISTD lot: Surr. lot: 15066:5

Lot:

Tune std: _____ Cal. std: _____

Path/File	Smp Info	Mtrx/Batch	Type	DF	pH	Method/Sublist	Date	Time	Oper	Comments
1/J34455.D	104378,	L/2012	FIELDDUP	1	< 2	032717_624W/62	4/26/17	06:28	KGG	
1/J34456.D	7016781001x50,	L/2042	SAMPLE	50	7	032717_624W/62	4/26/17	06:46	KGG	
1/J34457.D	104385, 15067:0.	L/2012	MS	1	< 2	032717_624W/62	4/26/17	07:04	KGG	

Comments: All water samples have a pH below 2 unless otherwise noted. 208516

File Path 1: \\v70wintarget\chem\70msv6.i\042517.b

Matrix Codes: [B]iota, [G]as, [L]iquid, [S]olid, [N]one

Report Date: 13:36 05/26/2017

Reviewed By/Date: MF 5/26/17

SAMPLE NO.

MW-1A

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Lab Sample ID: 7016438001 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7429-90-5	Aluminum	57.6	J	ug/L	1	05/03/2017 15:31
7440-36-0	Antimony	<60.0	U	ug/L	1	05/03/2017 15:31
7440-38-2	Arsenic	<10.0	U	ug/L	1	05/03/2017 15:31
7440-39-3	Barium	23.9	J	ug/L	1	05/03/2017 15:31
7440-41-7	Beryllium	<5.0	U	ug/L	1	05/03/2017 15:31
7440-42-8	Boron	17.8	J	ug/L	1	05/03/2017 15:31
7440-43-9	Cadmium	<2.5	U	ug/L	1	05/03/2017 15:31
7440-70-2	Calcium	8440		ug/L	1	05/03/2017 15:31
7440-47-3	Chromium	8.2	J	ug/L	1	05/03/2017 15:31
7440-48-4	Cobalt	2.1	J	ug/L	1	05/03/2017 15:31
7440-50-8	Copper	4.8	J	ug/L	1	05/03/2017 15:31
7439-89-6	Iron	527		ug/L	1	05/03/2017 15:31
7439-92-1	Lead	1.5	J	ug/L	1	05/03/2017 15:31
7439-95-4	Magnesium	3280		ug/L	1	05/03/2017 15:31
7439-96-5	Manganese	290		ug/L	1	05/03/2017 15:31
7440-02-0	Nickel	4.2	J	ug/L	1	05/03/2017 15:31
7440-09-7	Potassium	2930	J	ug/L	1	05/03/2017 15:31
7782-49-2	Selenium	<10.0	U	ug/L	1	05/03/2017 15:31
7440-22-4	Silver	<10.0	U	ug/L	1	05/03/2017 15:31
7440-23-5	Sodium	8470		ug/L	1	05/03/2017 15:31
7440-28-0	Thallium	<10.0	U	ug/L	1	05/03/2017 15:31
7440-62-2	Vanadium	<50.0	U	ug/L	1	05/03/2017 15:31
7440-66-6	Zinc	<20.0	U	ug/L	1	05/03/2017 15:31

SAMPLE NO.

MW-1B

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Lab Sample ID: 7016438002 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7429-90-5	Aluminum	<200	U	ug/L	1	05/03/2017 15:36
7440-36-0	Antimony	<60.0	U	ug/L	1	05/03/2017 15:36
7440-38-2	Arsenic	<10.0	U	ug/L	1	05/03/2017 15:36
7440-39-3	Barium	9.7	J	ug/L	1	05/03/2017 15:36
7440-41-7	Beryllium	<5.0	U	ug/L	1	05/03/2017 15:36
7440-42-8	Boron	10	J	ug/L	1	05/03/2017 15:36
7440-43-9	Cadmium	<2.5	U	ug/L	1	05/03/2017 15:36
7440-70-2	Calcium	3970		ug/L	1	05/03/2017 15:36
7440-47-3	Chromium	2.9	J	ug/L	1	05/03/2017 15:36
7440-48-4	Cobalt	<50.0	U	ug/L	1	05/03/2017 15:36
7440-50-8	Copper	2.6	J	ug/L	1	05/03/2017 15:36
7439-89-6	Iron	<100	U	ug/L	1	05/03/2017 15:36
7439-92-1	Lead	<5.0	U	ug/L	1	05/03/2017 15:36
7439-95-4	Magnesium	1830		ug/L	1	05/03/2017 15:36
7439-96-5	Manganese	1.3	J	ug/L	1	05/03/2017 15:36
7440-02-0	Nickel	10	J	ug/L	1	05/03/2017 15:36
7440-09-7	Potassium	<5000	U	ug/L	1	05/03/2017 15:36
7782-49-2	Selenium	<10.0	U	ug/L	1	05/03/2017 15:36
7440-22-4	Silver	<10.0	U	ug/L	1	05/03/2017 15:36
7440-23-5	Sodium	7860		ug/L	1	05/03/2017 15:36
7440-28-0	Thallium	<10.0	U	ug/L	1	05/03/2017 15:36
7440-62-2	Vanadium	<50.0	U	ug/L	1	05/03/2017 15:36
7440-66-6	Zinc	<20.0	U	ug/L	1	05/03/2017 15:36

SAMPLE NO.

MW-1C

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Lab Sample ID: 7016438003 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7429-90-5	Aluminum	<200	U	ug/L	1	05/03/2017 15:41
7440-36-0	Antimony	<60.0	U	ug/L	1	05/03/2017 15:41
7440-38-2	Arsenic	<10.0	U	ug/L	1	05/03/2017 15:41
7440-39-3	Barium	9.2	J	ug/L	1	05/03/2017 15:41
7440-41-7	Beryllium	<5.0	U	ug/L	1	05/03/2017 15:41
7440-42-8	Boron	11.5	J	ug/L	1	05/03/2017 15:41
7440-43-9	Cadmium	<2.5	U	ug/L	1	05/03/2017 15:41
7440-70-2	Calcium	4440		ug/L	1	05/03/2017 15:41
7440-47-3	Chromium	4.1	J	ug/L	1	05/03/2017 15:41
7440-48-4	Cobalt	<50.0	U	ug/L	1	05/03/2017 15:41
7440-50-8	Copper	<25.0	U	ug/L	1	05/03/2017 15:41
7439-89-6	Iron	<100	U	ug/L	1	05/03/2017 15:41
7439-92-1	Lead	<5.0	U	ug/L	1	05/03/2017 15:41
7439-95-4	Magnesium	2380		ug/L	1	05/03/2017 15:41
7439-96-5	Manganese	0.79	J	ug/L	1	05/03/2017 15:41
7440-02-0	Nickel	24.8	J	ug/L	1	05/03/2017 15:41
7440-09-7	Potassium	<5000	U	ug/L	1	05/03/2017 15:41
7782-49-2	Selenium	<10.0	U	ug/L	1	05/03/2017 15:41
7440-22-4	Silver	<10.0	U	ug/L	1	05/03/2017 15:41
7440-23-5	Sodium	7770		ug/L	1	05/03/2017 15:41
7440-28-0	Thallium	<10.0	U	ug/L	1	05/03/2017 15:41
7440-62-2	Vanadium	<50.0	U	ug/L	1	05/03/2017 15:41
7440-66-6	Zinc	<20.0	U	ug/L	1	05/03/2017 15:41

SAMPLE NO.

MW-11B

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Lab Sample ID: 7016438005 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7429-90-5	Aluminum	902		ug/L	1	05/03/2017 15:46
7429-90-5	Aluminum, Dissolved	<200	U	ug/L	1	05/03/2017 20:47
7440-36-0	Antimony	<60.0	U	ug/L	1	05/03/2017 15:46
7440-36-0	Antimony, Dissolved	<60.0	U	ug/L	1	05/03/2017 20:47
7440-38-2	Arsenic	<10.0	U	ug/L	1	05/03/2017 15:46
7440-38-2	Arsenic, Dissolved	<10.0	U	ug/L	1	05/03/2017 20:47
7440-39-3	Barium	26.0	J	ug/L	1	05/03/2017 15:46
7440-39-3	Barium, Dissolved	7.8	J	ug/L	1	05/03/2017 20:47
7440-41-7	Beryllium	<5.0	U	ug/L	1	05/03/2017 15:46
7440-41-7	Beryllium, Dissolved	<5.0	U	ug/L	1	05/03/2017 20:47
7440-42-8	Boron	18.6	J	ug/L	1	05/03/2017 15:46
7440-42-8	Boron, Dissolved	19.8	J	ug/L	1	05/03/2017 20:47
7440-43-9	Cadmium	0.099	J	ug/L	1	05/03/2017 15:46
7440-43-9	Cadmium, Dissolved	0.081	J	ug/L	1	05/03/2017 20:47
7440-70-2	Calcium	13600		ug/L	1	05/03/2017 15:46
7440-70-2	Calcium, Dissolved	10000		ug/L	1	05/03/2017 20:47
7440-47-3	Chromium	17.0		ug/L	1	05/03/2017 15:46
7440-47-3	Chromium, Dissolved	<10.0	U	ug/L	1	05/03/2017 20:47
7440-48-4	Cobalt	0.88	J	ug/L	1	05/03/2017 15:46
7440-48-4	Cobalt, Dissolved	<50.0	U	ug/L	1	05/03/2017 20:47
7440-50-8	Copper	7.3	J	ug/L	1	05/03/2017 15:46
7440-50-8	Copper, Dissolved	4.0	J	ug/L	1	05/03/2017 20:47
7439-89-6	Iron	9950		ug/L	1	05/03/2017 15:46
7439-89-6	Iron, Dissolved	<100	U	ug/L	1	05/03/2017 20:47
7439-92-1	Lead	6.3		ug/L	1	05/03/2017 15:46
7439-92-1	Lead, Dissolved	<5.0	U	ug/L	1	05/03/2017 20:47
7439-95-4	Magnesium	4640		ug/L	1	05/03/2017 15:46
7439-95-4	Magnesium, Dissolved	3420		ug/L	1	05/03/2017 20:47
7439-96-5	Manganese	345		ug/L	1	05/03/2017 15:46
7439-96-5	Manganese, Dissolved	7.6	J	ug/L	1	05/03/2017 20:47
7440-02-0	Nickel	9.9	J	ug/L	1	05/03/2017 15:46
7440-02-0	Nickel, Dissolved	1.9	J	ug/L	1	05/03/2017 20:47
7440-09-7	Potassium	1650	J	ug/L	1	05/03/2017 15:46
7440-09-7	Potassium, Dissolved	1240	J	ug/L	1	05/03/2017 20:47
7782-49-2	Selenium	<10.0	U	ug/L	1	05/03/2017 15:46
7782-49-2	Selenium, Dissolved	<10.0	U	ug/L	1	05/03/2017 20:47
7440-22-4	Silver	<10.0	U	ug/L	1	05/03/2017 15:46
7440-22-4	Silver, Dissolved	<10.0	U	ug/L	1	05/03/2017 20:47
7440-23-5	Sodium	8300		ug/L	1	05/03/2017 15:46
7440-23-5	Sodium, Dissolved	7630		ug/L	1	05/03/2017 20:47

SAMPLE NO.

MW-11B

FORM I INORGANIC-2

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Lab Sample ID: 7016438005 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-28-0	Thallium	<10.0	U	ug/L	1	05/03/2017 15:46
7440-28-0	Thallium, Dissolved	<10.0	U	ug/L	1	05/03/2017 20:47
7440-62-2	Vanadium	2.3	J	ug/L	1	05/03/2017 15:46
7440-62-2	Vanadium, Dissolved	<50.0	U	ug/L	1	05/03/2017 20:47
7440-66-6	Zinc	8.9	J	ug/L	1	05/03/2017 15:46
7440-66-6	Zinc, Dissolved	<20.0	U	ug/L	1	05/03/2017 20:47

SAMPLE NO.

MW-12A

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Lab Sample ID: 7016438006 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7429-90-5	Aluminum	44.9	J	ug/L	1	05/03/2017 16:01
7429-90-5	Aluminum, Dissolved	<200	U	ug/L	1	05/03/2017 21:07
7440-36-0	Antimony	<60.0	U	ug/L	1	05/03/2017 16:01
7440-36-0	Antimony, Dissolved	<60.0	U	ug/L	1	05/03/2017 21:07
7440-38-2	Arsenic	<10.0	U	ug/L	1	05/03/2017 16:01
7440-38-2	Arsenic, Dissolved	<10.0	U	ug/L	1	05/03/2017 21:07
7440-39-3	Barium	29.0	J	ug/L	1	05/03/2017 16:01
7440-39-3	Barium, Dissolved	23.8	J	ug/L	1	05/03/2017 21:07
7440-41-7	Beryllium	<5.0	U	ug/L	1	05/03/2017 16:01
7440-41-7	Beryllium, Dissolved	<5.0	U	ug/L	1	05/03/2017 21:07
7440-42-8	Boron	40.7	J	ug/L	1	05/03/2017 16:01
7440-42-8	Boron, Dissolved	38.9	J	ug/L	1	05/03/2017 21:07
7440-43-9	Cadmium	<2.5	U	ug/L	1	05/03/2017 16:01
7440-43-9	Cadmium, Dissolved	0.64	J	ug/L	1	05/03/2017 21:07
7440-70-2	Calcium	15100		ug/L	1	05/03/2017 16:01
7440-70-2	Calcium, Dissolved	13800		ug/L	1	05/03/2017 21:07
7440-47-3	Chromium	2.1	J	ug/L	1	05/03/2017 16:01
7440-47-3	Chromium, Dissolved	<10.0	U	ug/L	1	05/03/2017 21:07
7440-48-4	Cobalt	4.6	J	ug/L	1	05/03/2017 16:01
7440-48-4	Cobalt, Dissolved	2.5	J	ug/L	1	05/03/2017 21:07
7440-50-8	Copper	2.7	J	ug/L	1	05/03/2017 16:01
7440-50-8	Copper, Dissolved	7.8	J	ug/L	1	05/03/2017 21:07
7439-89-6	Iron	1560		ug/L	1	05/03/2017 16:01
7439-89-6	Iron, Dissolved	<100	U	ug/L	1	05/03/2017 21:07
7439-92-1	Lead	<5.0	U	ug/L	1	05/03/2017 16:01
7439-92-1	Lead, Dissolved	<5.0	U	ug/L	1	05/03/2017 21:07
7439-95-4	Magnesium	4240		ug/L	1	05/03/2017 16:01
7439-95-4	Magnesium, Dissolved	3680		ug/L	1	05/03/2017 21:07
7439-96-5	Manganese	2690		ug/L	1	05/03/2017 16:01
7439-96-5	Manganese, Dissolved	2230		ug/L	1	05/03/2017 21:07
7440-02-0	Nickel	5.5	J	ug/L	1	05/03/2017 16:01
7440-02-0	Nickel, Dissolved	7.1	J	ug/L	1	05/03/2017 21:07
7440-09-7	Potassium	3980	J	ug/L	1	05/03/2017 16:01
7440-09-7	Potassium, Dissolved	3800	J	ug/L	1	05/03/2017 21:07
7782-49-2	Selenium	<10.0	U	ug/L	1	05/03/2017 16:01
7782-49-2	Selenium, Dissolved	<10.0	U	ug/L	1	05/03/2017 21:07
7440-22-4	Silver	<10.0	U	ug/L	1	05/03/2017 16:01
7440-22-4	Silver, Dissolved	<10.0	U	ug/L	1	05/03/2017 21:07
7440-23-5	Sodium	8650		ug/L	1	05/03/2017 16:01
7440-23-5	Sodium, Dissolved	8250		ug/L	1	05/03/2017 21:07

SAMPLE NO.

MW-12A

FORM I INORGANIC-2

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Lab Sample ID: 7016438006 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-28-0	Thallium	4.1	J	ug/L	1	05/03/2017 16:01
7440-28-0	Thallium, Dissolved	<10.0	U	ug/L	1	05/03/2017 21:07
7440-62-2	Vanadium	1.3	J	ug/L	1	05/03/2017 16:01
7440-62-2	Vanadium, Dissolved	<50.0	U	ug/L	1	05/03/2017 21:07
7440-66-6	Zinc	1.2	J	ug/L	1	05/03/2017 16:01
7440-66-6	Zinc, Dissolved	8.3	J	ug/L	1	05/03/2017 21:07

SAMPLE NO.

MW-12B

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Lab Sample ID: 7016438007 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7429-90-5	Aluminum	13.6	J	ug/L	1	05/03/2017 16:06
7440-36-0	Antimony	<60.0	U	ug/L	1	05/03/2017 16:06
7440-38-2	Arsenic	<10.0	U	ug/L	1	05/03/2017 16:06
7440-39-3	Barium	17.0	J	ug/L	1	05/03/2017 16:06
7440-41-7	Beryllium	<5.0	U	ug/L	1	05/03/2017 16:06
7440-42-8	Boron	32.8	J	ug/L	1	05/03/2017 16:06
7440-43-9	Cadmium	<2.5	U	ug/L	1	05/03/2017 16:06
7440-70-2	Calcium	11300		ug/L	1	05/03/2017 16:06
7440-47-3	Chromium	<10.0	U	ug/L	1	05/03/2017 16:06
7440-48-4	Cobalt	<50.0	U	ug/L	1	05/03/2017 16:06
7440-50-8	Copper	<25.0	U	ug/L	1	05/03/2017 16:06
7439-89-6	Iron	39.3	J	ug/L	1	05/03/2017 16:06
7439-92-1	Lead	<5.0	U	ug/L	1	05/03/2017 16:06
7439-95-4	Magnesium	3920		ug/L	1	05/03/2017 16:06
7439-96-5	Manganese	93.7		ug/L	1	05/03/2017 16:06
7440-02-0	Nickel	2.6	J	ug/L	1	05/03/2017 16:06
7440-09-7	Potassium	2620	J	ug/L	1	05/03/2017 16:06
7782-49-2	Selenium	<10.0	U	ug/L	1	05/03/2017 16:06
7440-22-4	Silver	<10.0	U	ug/L	1	05/03/2017 16:06
7440-23-5	Sodium	8930		ug/L	1	05/03/2017 16:06
7440-28-0	Thallium	<10.0	U	ug/L	1	05/03/2017 16:06
7440-62-2	Vanadium	<50.0	U	ug/L	1	05/03/2017 16:06
7440-66-6	Zinc	<20.0	U	ug/L	1	05/03/2017 16:06

SAMPLE NO.

DUP001

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Lab Sample ID: 7016438008 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7429-90-5	Aluminum	<200	U	ug/L	1	05/03/2017 16:11
7440-36-0	Antimony	<60.0	U	ug/L	1	05/03/2017 16:11
7440-38-2	Arsenic	<10.0	U	ug/L	1	05/03/2017 16:11
7440-39-3	Barium	8.9	J	ug/L	1	05/03/2017 16:11
7440-41-7	Beryllium	<5.0	U	ug/L	1	05/03/2017 16:11
7440-42-8	Boron	11.0	J	ug/L	1	05/03/2017 16:11
7440-43-9	Cadmium	<2.5	U	ug/L	1	05/03/2017 16:11
7440-70-2	Calcium	4320		ug/L	1	05/03/2017 16:11
7440-47-3	Chromium	6.3	J	ug/L	1	05/03/2017 16:11
7440-48-4	Cobalt	<50.0	U	ug/L	1	05/03/2017 16:11
7440-50-8	Copper	<25.0	U	ug/L	1	05/03/2017 16:11
7439-89-6	Iron	14.2	J	ug/L	1	05/03/2017 16:11
7439-92-1	Lead	1.5	J	ug/L	1	05/03/2017 16:11
7439-95-4	Magnesium	2240		ug/L	1	05/03/2017 16:11
7439-96-5	Manganese	1.4	J	ug/L	1	05/03/2017 16:11
7440-02-0	Nickel	22.9	J	ug/L	1	05/03/2017 16:11
7440-09-7	Potassium	<5000	U	ug/L	1	05/03/2017 16:11
7782-49-2	Selenium	<10.0	U	ug/L	1	05/03/2017 16:11
7440-22-4	Silver	<10.0	U	ug/L	1	05/03/2017 16:11
7440-23-5	Sodium	7510		ug/L	1	05/03/2017 16:11
7440-28-0	Thallium	<10.0	U	ug/L	1	05/03/2017 16:11
7440-62-2	Vanadium	<50.0	U	ug/L	1	05/03/2017 16:11
7440-66-6	Zinc	<20.0	U	ug/L	1	05/03/2017 16:11

SAMPLE NO.

FB

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Lab Sample ID: 7016438009 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7429-90-5	Aluminum	<200	U	ug/L	1	05/03/2017 16:16
7440-36-0	Antimony	<60.0	U	ug/L	1	05/03/2017 16:16
7440-38-2	Arsenic	<10.0	U	ug/L	1	05/03/2017 16:16
7440-39-3	Barium	<200	U	ug/L	1	05/03/2017 16:16
7440-41-7	Beryllium	<5.0	U	ug/L	1	05/03/2017 16:16
7440-42-8	Boron	<50.0	U	ug/L	1	05/03/2017 16:16
7440-43-9	Cadmium	<2.5	U	ug/L	1	05/03/2017 16:16
7440-70-2	Calcium	<200	U	ug/L	1	05/03/2017 16:16
7440-47-3	Chromium	<10.0	U	ug/L	1	05/03/2017 16:16
7440-48-4	Cobalt	<50.0	U	ug/L	1	05/03/2017 16:16
7440-50-8	Copper	<25.0	U	ug/L	1	05/03/2017 16:16
7439-89-6	Iron	<100	U	ug/L	1	05/03/2017 16:16
7439-92-1	Lead	<5.0	U	ug/L	1	05/03/2017 16:16
7439-95-4	Magnesium	<200	U	ug/L	1	05/03/2017 16:16
7439-96-5	Manganese	4.0	J	ug/L	1	05/03/2017 16:16
7440-02-0	Nickel	<40.0	U	ug/L	1	05/03/2017 16:16
7440-09-7	Potassium	<5000	U	ug/L	1	05/03/2017 16:16
7782-49-2	Selenium	<10.0	U	ug/L	1	05/03/2017 16:16
7440-22-4	Silver	<10.0	U	ug/L	1	05/03/2017 16:16
7440-23-5	Sodium	<5000	U	ug/L	1	05/03/2017 16:16
7440-28-0	Thallium	<10.0	U	ug/L	1	05/03/2017 16:16
7440-62-2	Vanadium	<50.0	U	ug/L	1	05/03/2017 16:16
7440-66-6	Zinc	<20.0	U	ug/L	1	05/03/2017 16:16

SAMPLE NO.

LEA-PRI

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Lab Sample ID: 7016438010 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-43-9	Cadmium	0.21	J	ug/L	1	05/03/2017 16:21
7440-70-2	Calcium	60200		ug/L	1	05/03/2017 16:21
7439-89-6	Iron	29900		ug/L	1	05/03/2017 16:21
7439-92-1	Lead	1.4	J	ug/L	1	05/03/2017 16:21
7439-95-4	Magnesium	8930		ug/L	1	05/03/2017 16:21
7439-96-5	Manganese	2200		ug/L	1	05/03/2017 16:21
7440-09-7	Potassium	18000		ug/L	1	05/03/2017 16:21
7440-23-5	Sodium	37900		ug/L	1	05/03/2017 16:21

SAMPLE NO.

LEA-SEC

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Lab Sample ID: 7016438011 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-43-9	Cadmium	0.22	J	ug/L	1	05/03/2017 16:26
7440-70-2	Calcium	73000		ug/L	1	05/03/2017 16:26
7439-89-6	Iron	32400		ug/L	1	05/03/2017 16:26
7439-92-1	Lead	1.5	J	ug/L	1	05/03/2017 16:26
7439-95-4	Magnesium	12600		ug/L	1	05/03/2017 16:26
7439-96-5	Manganese	8160		ug/L	1	05/03/2017 16:26
7440-09-7	Potassium	31900		ug/L	1	05/03/2017 16:26
7440-23-5	Sodium	62200		ug/L	1	05/03/2017 16:26

SAMPLE NO.

MW-11A

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Lab Sample ID: 7016438014 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7429-90-5	Aluminum	1010		ug/L	1	05/03/2017 01:46
7429-90-5	Aluminum, Dissolved	<200	U	ug/L	1	05/03/2017 21:12
7440-36-0	Antimony	<60.0	U	ug/L	1	05/03/2017 01:46
7440-36-0	Antimony, Dissolved	<60.0	U	ug/L	1	05/03/2017 21:12
7440-38-2	Arsenic	75.9		ug/L	1	05/03/2017 01:46
7440-38-2	Arsenic, Dissolved	<10.0	U	ug/L	1	05/03/2017 21:12
7440-39-3	Barium	1100		ug/L	1	05/03/2017 01:46
7440-39-3	Barium, Dissolved	41.6	J	ug/L	1	05/03/2017 21:12
7440-41-7	Beryllium	<5.0	U	ug/L	1	05/03/2017 01:46
7440-41-7	Beryllium, Dissolved	<5.0	U	ug/L	1	05/03/2017 21:12
7440-42-8	Boron	38.7	J	ug/L	1	05/03/2017 01:46
7440-42-8	Boron, Dissolved	37.8	J	ug/L	1	05/03/2017 21:12
7440-43-9	Cadmium	27.8		ug/L	1	05/03/2017 01:46
7440-43-9	Cadmium, Dissolved	0.063	J	ug/L	1	05/03/2017 21:12
7440-70-2	Calcium	56600		ug/L	1	05/03/2017 01:46
7440-70-2	Calcium, Dissolved	35500		ug/L	1	05/03/2017 21:12
7440-47-3	Chromium	41.8	J	ug/L	10	05/04/2017 16:21
7440-47-3	Chromium, Dissolved	<10.0	U	ug/L	1	05/03/2017 21:12
7440-48-4	Cobalt	18.3	J	ug/L	1	05/03/2017 01:46
7440-48-4	Cobalt, Dissolved	<50.0	U	ug/L	1	05/03/2017 21:12
7440-50-8	Copper	70.7		ug/L	1	05/03/2017 01:46
7440-50-8	Copper, Dissolved	17.9	J	ug/L	1	05/03/2017 21:12
7439-89-6	Iron	775000		ug/L	10	05/04/2017 16:21
7439-89-6	Iron, Dissolved	<100	U	ug/L	1	05/03/2017 21:12
7439-92-1	Lead	19.3		ug/L	1	05/03/2017 01:46
7439-92-1	Lead, Dissolved	<5.0	U	ug/L	1	05/03/2017 21:12
7439-95-4	Magnesium	11200		ug/L	1	05/03/2017 01:46
7439-95-4	Magnesium, Dissolved	9920		ug/L	1	05/03/2017 21:12
7439-96-5	Manganese	35900		ug/L	10	05/04/2017 16:21
7439-96-5	Manganese, Dissolved	34.6		ug/L	1	05/03/2017 21:12
7440-02-0	Nickel	<40.0	U	ug/L	1	05/03/2017 01:46
7440-02-0	Nickel, Dissolved	7.0	J	ug/L	1	05/03/2017 21:12
7440-09-7	Potassium	14300		ug/L	1	05/03/2017 01:46
7440-09-7	Potassium, Dissolved	3480	J	ug/L	1	05/03/2017 21:12
7782-49-2	Selenium	8.5	J	ug/L	1	05/03/2017 01:46
7782-49-2	Selenium, Dissolved	<10.0	U	ug/L	1	05/03/2017 21:12
7440-22-4	Silver	<10.0	U	ug/L	1	05/03/2017 01:46
7440-22-4	Silver, Dissolved	<10.0	U	ug/L	1	05/03/2017 21:12
7440-23-5	Sodium	18700		ug/L	1	05/03/2017 01:46
7440-23-5	Sodium, Dissolved	9950		ug/L	1	05/03/2017 21:12

SAMPLE NO.

MW-11A

FORM I INORGANIC-2

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Lab Sample ID: 7016438014 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-28-0	Thallium	43.8	J	ug/L	10	05/04/2017 16:21
7440-28-0	Thallium, Dissolved	<10.0	U	ug/L	1	05/03/2017 21:12
7440-62-2	Vanadium	20.6	J	ug/L	1	05/03/2017 01:46
7440-62-2	Vanadium, Dissolved	<50.0	U	ug/L	1	05/03/2017 21:12
7440-66-6	Zinc	66.4		ug/L	1	05/03/2017 01:46
7440-66-6	Zinc, Dissolved	50.8		ug/L	1	05/03/2017 21:12

SAMPLE NO.

MW-3A

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Lab Sample ID: 7016438015 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7429-90-5	Aluminum	22.0	J	ug/L	1	05/05/2017 14:05
7429-90-5	Aluminum, Dissolved	<200	U	ug/L	1	05/03/2017 21:27
7440-36-0	Antimony	<60.0	U	ug/L	1	05/05/2017 14:05
7440-36-0	Antimony, Dissolved	<60.0	U	ug/L	1	05/03/2017 21:27
7440-38-2	Arsenic	<10.0	U	ug/L	1	05/05/2017 14:05
7440-38-2	Arsenic, Dissolved	<10.0	U	ug/L	1	05/03/2017 21:27
7440-39-3	Barium	74.4	J	ug/L	1	05/05/2017 14:05
7440-39-3	Barium, Dissolved	57.9	J	ug/L	1	05/03/2017 21:27
7440-41-7	Beryllium	<5.0	U	ug/L	1	05/05/2017 14:05
7440-41-7	Beryllium, Dissolved	<5.0	U	ug/L	1	05/03/2017 21:27
7440-42-8	Boron	21.1	J	ug/L	1	05/05/2017 14:05
7440-42-8	Boron, Dissolved	25.3	J	ug/L	1	05/03/2017 21:27
7440-43-9	Cadmium	0.27	J	ug/L	1	05/05/2017 14:05
7440-43-9	Cadmium, Dissolved	0.096	J	ug/L	1	05/03/2017 21:27
7440-70-2	Calcium	20800		ug/L	1	05/05/2017 14:05
7440-70-2	Calcium, Dissolved	18000		ug/L	1	05/03/2017 21:27
7440-47-3	Chromium	1660		ug/L	1	05/05/2017 14:05
7440-47-3	Chromium, Dissolved	14.1		ug/L	1	05/03/2017 21:27
7440-48-4	Cobalt	4.9	J	ug/L	1	05/05/2017 14:05
7440-48-4	Cobalt, Dissolved	<50.0	U	ug/L	1	05/03/2017 21:27
7440-50-8	Copper	24.0	J	ug/L	1	05/05/2017 14:05
7440-50-8	Copper, Dissolved	7.8	J	ug/L	1	05/03/2017 21:27
7439-89-6	Iron	6520		ug/L	1	05/05/2017 14:05
7439-89-6	Iron, Dissolved	<100	U	ug/L	1	05/03/2017 21:27
7439-92-1	Lead	<5.0	U	ug/L	1	05/05/2017 14:05
7439-92-1	Lead, Dissolved	<5.0	U	ug/L	1	05/03/2017 21:27
7439-95-4	Magnesium	5510		ug/L	1	05/05/2017 14:05
7439-95-4	Magnesium, Dissolved	5010		ug/L	1	05/03/2017 21:27
7439-96-5	Manganese	359		ug/L	1	05/05/2017 14:05
7439-96-5	Manganese, Dissolved	51.8		ug/L	1	05/03/2017 21:27
7440-02-0	Nickel	132		ug/L	1	05/05/2017 14:05
7440-02-0	Nickel, Dissolved	89.3		ug/L	1	05/03/2017 21:27
7440-09-7	Potassium	5830		ug/L	1	05/05/2017 14:05
7440-09-7	Potassium, Dissolved	4880	J	ug/L	1	05/03/2017 21:27
7782-49-2	Selenium	<10.0	U	ug/L	1	05/05/2017 14:05
7782-49-2	Selenium, Dissolved	<10.0	U	ug/L	1	05/03/2017 21:27
7440-22-4	Silver	<10.0	U	ug/L	1	05/05/2017 14:05
7440-22-4	Silver, Dissolved	<10.0	U	ug/L	1	05/03/2017 21:27
7440-23-5	Sodium	82900		ug/L	1	05/05/2017 14:05
7440-23-5	Sodium, Dissolved	70200		ug/L	1	05/03/2017 21:27

SAMPLE NO.

MW-3A

FORM I INORGANIC-2

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Lab Sample ID: 7016438015 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-28-0	Thallium	<10.0	U	ug/L	1	05/05/2017 14:05
7440-28-0	Thallium, Dissolved	<10.0	U	ug/L	1	05/03/2017 21:27
7440-62-2	Vanadium	2.3	J	ug/L	1	05/05/2017 14:05
7440-62-2	Vanadium, Dissolved	<50.0	U	ug/L	1	05/03/2017 21:27
7440-66-6	Zinc	<20.0	U	ug/L	1	05/05/2017 14:05
7440-66-6	Zinc, Dissolved	10.7	J	ug/L	1	05/03/2017 21:27

SAMPLE NO.

MW-3B

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Lab Sample ID: 7016438016 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7429-90-5	Aluminum	<200	U	ug/L	1	05/05/2017 14:10
7440-36-0	Antimony	<60.0	U	ug/L	1	05/05/2017 14:10
7440-38-2	Arsenic	<10.0	U	ug/L	1	05/05/2017 14:10
7440-39-3	Barium	34.7	J	ug/L	1	05/05/2017 14:10
7440-41-7	Beryllium	<5.0	U	ug/L	1	05/05/2017 14:10
7440-42-8	Boron	40.9	J	ug/L	1	05/05/2017 14:10
7440-43-9	Cadmium	0.29	J	ug/L	1	05/05/2017 14:10
7440-70-2	Calcium	12900		ug/L	1	05/05/2017 14:10
7440-47-3	Chromium	<10.0	U	ug/L	1	05/05/2017 14:10
7440-48-4	Cobalt	5.5	J	ug/L	1	05/05/2017 14:10
7440-50-8	Copper	<25.0	U	ug/L	1	05/05/2017 14:10
7439-89-6	Iron	12100		ug/L	1	05/05/2017 14:10
7439-92-1	Lead	<5.0	U	ug/L	1	05/05/2017 14:10
7439-95-4	Magnesium	4310		ug/L	1	05/05/2017 14:10
7439-96-5	Manganese	3790		ug/L	1	05/05/2017 14:10
7440-02-0	Nickel	3.1	J	ug/L	1	05/05/2017 14:10
7440-09-7	Potassium	4200	J	ug/L	1	05/05/2017 14:10
7782-49-2	Selenium	<10.0	U	ug/L	1	05/05/2017 14:10
7440-22-4	Silver	<10.0	U	ug/L	1	05/05/2017 14:10
7440-23-5	Sodium	16900		ug/L	1	05/05/2017 14:10
7440-28-0	Thallium	<10.0	U	ug/L	1	05/05/2017 14:10
7440-62-2	Vanadium	<50.0	U	ug/L	1	05/05/2017 14:10
7440-66-6	Zinc	2.3	J	ug/L	1	05/05/2017 14:10

SAMPLE NO.

MW-3C

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Lab Sample ID: 7016438017 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7429-90-5	Aluminum	<200	U	ug/L	1	05/05/2017 14:15
7440-36-0	Antimony	<60.0	U	ug/L	1	05/05/2017 14:15
7440-38-2	Arsenic	<10.0	U	ug/L	1	05/05/2017 14:15
7440-39-3	Barium	18.3	J	ug/L	1	05/05/2017 14:15
7440-41-7	Beryllium	<5.0	U	ug/L	1	05/05/2017 14:15
7440-42-8	Boron	5.5	J	ug/L	1	05/05/2017 14:15
7440-43-9	Cadmium	<2.5	U	ug/L	1	05/05/2017 14:15
7440-70-2	Calcium	8630		ug/L	1	05/05/2017 14:15
7440-47-3	Chromium	4.8	J	ug/L	1	05/05/2017 14:15
7440-48-4	Cobalt	<50.0	U	ug/L	1	05/05/2017 14:15
7440-50-8	Copper	<25.0	U	ug/L	1	05/05/2017 14:15
7439-89-6	Iron	38.5	J	ug/L	1	05/05/2017 14:15
7439-92-1	Lead	<5.0	U	ug/L	1	05/05/2017 14:15
7439-95-4	Magnesium	3740		ug/L	1	05/05/2017 14:15
7439-96-5	Manganese	3.9	J	ug/L	1	05/05/2017 14:15
7440-02-0	Nickel	6.8	J	ug/L	1	05/05/2017 14:15
7440-09-7	Potassium	874	J	ug/L	1	05/05/2017 14:15
7782-49-2	Selenium	<10.0	U	ug/L	1	05/05/2017 14:15
7440-22-4	Silver	<10.0	U	ug/L	1	05/05/2017 14:15
7440-23-5	Sodium	13900		ug/L	1	05/05/2017 14:15
7440-28-0	Thallium	<10.0	U	ug/L	1	05/05/2017 14:15
7440-62-2	Vanadium	<50.0	U	ug/L	1	05/05/2017 14:15
7440-66-6	Zinc	<20.0	U	ug/L	1	05/05/2017 14:15

SAMPLE NO.

MW-4A

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Lab Sample ID: 7016438018 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7429-90-5	Aluminum	242		ug/L	1	05/05/2017 14:51
7440-36-0	Antimony	<60.0	U	ug/L	1	05/05/2017 14:51
7440-38-2	Arsenic	<10.0	U	ug/L	1	05/05/2017 14:51
7440-39-3	Barium	128	J	ug/L	1	05/05/2017 14:51
7440-41-7	Beryllium	<5.0	U	ug/L	1	05/05/2017 14:51
7440-42-8	Boron	40.2	J	ug/L	1	05/05/2017 14:51
7440-43-9	Cadmium	0.36	J	ug/L	1	05/05/2017 14:51
7440-70-2	Calcium	10100		ug/L	1	05/05/2017 14:51
7440-47-3	Chromium	6.7	J	ug/L	1	05/05/2017 14:51
7440-48-4	Cobalt	<50.0	U	ug/L	1	05/05/2017 14:51
7440-50-8	Copper	<25.0	U	ug/L	1	05/05/2017 14:51
7439-89-6	Iron	129		ug/L	1	05/05/2017 14:51
7439-92-1	Lead	<5.0	U	ug/L	1	05/05/2017 14:51
7439-95-4	Magnesium	3600		ug/L	1	05/05/2017 14:51
7439-96-5	Manganese	128		ug/L	1	05/05/2017 14:51
7440-02-0	Nickel	4.0	J	ug/L	1	05/05/2017 14:51
7440-09-7	Potassium	3340	J	ug/L	1	05/05/2017 14:51
7782-49-2	Selenium	<10.0	U	ug/L	1	05/05/2017 14:51
7440-22-4	Silver	<10.0	U	ug/L	1	05/05/2017 14:51
7440-23-5	Sodium	31600		ug/L	1	05/05/2017 14:51
7440-28-0	Thallium	<10.0	U	ug/L	1	05/05/2017 14:51
7440-62-2	Vanadium	<50.0	U	ug/L	1	05/05/2017 14:51
7440-66-6	Zinc	5.2	J	ug/L	1	05/05/2017 14:51

SAMPLE NO.

MW-4B

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Lab Sample ID: 7016438019 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7429-90-5	Aluminum	<200	U	ug/L	1	05/05/2017 14:56
7440-36-0	Antimony	<60.0	U	ug/L	1	05/05/2017 14:56
7440-38-2	Arsenic	<10.0	U	ug/L	1	05/05/2017 14:56
7440-39-3	Barium	40.3	J	ug/L	1	05/05/2017 14:56
7440-41-7	Beryllium	<5.0	U	ug/L	1	05/05/2017 14:56
7440-42-8	Boron	58.2		ug/L	1	05/05/2017 14:56
7440-43-9	Cadmium	0.13	J	ug/L	1	05/05/2017 14:56
7440-70-2	Calcium	18700		ug/L	1	05/05/2017 14:56
7440-47-3	Chromium	<10.0	U	ug/L	1	05/05/2017 14:56
7440-48-4	Cobalt	2.4	J	ug/L	1	05/05/2017 14:56
7440-50-8	Copper	<25.0	U	ug/L	1	05/05/2017 14:56
7439-89-6	Iron	1280		ug/L	1	05/05/2017 14:56
7439-92-1	Lead	<5.0	U	ug/L	1	05/05/2017 14:56
7439-95-4	Magnesium	9470		ug/L	1	05/05/2017 14:56
7439-96-5	Manganese	343		ug/L	1	05/05/2017 14:56
7440-02-0	Nickel	4.1	J	ug/L	1	05/05/2017 14:56
7440-09-7	Potassium	2040	J	ug/L	1	05/05/2017 14:56
7782-49-2	Selenium	<10.0	U	ug/L	1	05/05/2017 14:56
7440-22-4	Silver	<10.0	U	ug/L	1	05/05/2017 14:56
7440-23-5	Sodium	18100		ug/L	1	05/05/2017 14:56
7440-28-0	Thallium	<10.0	U	ug/L	1	05/05/2017 14:56
7440-62-2	Vanadium	<50.0	U	ug/L	1	05/05/2017 14:56
7440-66-6	Zinc	<20.0	U	ug/L	1	05/05/2017 14:56

SAMPLE NO.

MW-4C

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Lab Sample ID: 7016438020 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7429-90-5	Aluminum	<200	U	ug/L	1	05/05/2017 15:01
7440-36-0	Antimony	<60.0	U	ug/L	1	05/05/2017 15:01
7440-38-2	Arsenic	<10.0	U	ug/L	1	05/05/2017 15:01
7440-39-3	Barium	53.2	J	ug/L	1	05/05/2017 15:01
7440-41-7	Beryllium	<5.0	U	ug/L	1	05/05/2017 15:01
7440-42-8	Boron	<50.0	U	ug/L	1	05/05/2017 15:01
7440-43-9	Cadmium	<2.5	U	ug/L	1	05/05/2017 15:01
7440-70-2	Calcium	28000		ug/L	1	05/05/2017 15:01
7440-47-3	Chromium	300		ug/L	1	05/05/2017 15:01
7440-48-4	Cobalt	12.2	J	ug/L	1	05/05/2017 15:01
7440-50-8	Copper	<25.0	U	ug/L	1	05/05/2017 15:01
7439-89-6	Iron	1500		ug/L	1	05/05/2017 15:01
7439-92-1	Lead	<5.0	U	ug/L	1	05/05/2017 15:01
7439-95-4	Magnesium	12500		ug/L	1	05/05/2017 15:01
7439-96-5	Manganese	78.9		ug/L	1	05/05/2017 15:01
7440-02-0	Nickel	426		ug/L	1	05/05/2017 15:01
7440-09-7	Potassium	1750	J	ug/L	1	05/05/2017 15:01
7782-49-2	Selenium	<10.0	U	ug/L	1	05/05/2017 15:01
7440-22-4	Silver	<10.0	U	ug/L	1	05/05/2017 15:01
7440-23-5	Sodium	39300		ug/L	1	05/05/2017 15:01
7440-28-0	Thallium	<10.0	U	ug/L	1	05/05/2017 15:01
7440-62-2	Vanadium	0.83	J	ug/L	1	05/05/2017 15:01
7440-66-6	Zinc	<20.0	U	ug/L	1	05/05/2017 15:01

FORM II INORGANIC-1

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Initial Calibration Verification Source: 11539

Continuing Calibration Verification Source: 16332

Concentration Units: ug/L Instrument ID: 70ICP1

	Initial Calibration Verification				Continuing Calibration Verification						
	05/03/2017 00:55				05/03/2017 01:26			05/03/2017 02:17			
Analyte	True	Found	%R	Control Limit	True	Found	%R	True	Found	%R	Control Limit
Aluminum	5000	4850	97.0	90-110	5000	4920	98.5	5000	4890	97.7	90-110
Antimony	500	474	94.8	90-110	750	716	95.5	750	714	95.2	90-110
Arsenic	500	480	95.9	90-110	500	472	94.4	500	469	93.7	90-110
Barium	500	493	98.7	90-110	500	492	98.4	500	492	98.4	90-110
Beryllium	50	48.6	97.2	90-110	50	48.6	97.2	50	48.6	97.2	90-110
Boron	5000	4830	96.6	90-110	2500	2410	96.3	2500	2390	95.7	90-110
Cadmium	50	48.8	97.7	90-110	50	48.4	96.9	50	48.5	97.0	90-110
Calcium	25000	24400	97.6	90-110	25000	24300	97.2	25000	24000	96.0	90-110
Chromium	500	493	98.6	90-110	250	245	98.0	250	245	98.0	90-110
Cobalt	500	488	97.5	90-110	500	488	97.7	500	487	97.3	90-110
Copper	500	483	96.6	90-110	250	248	99.1	250	249	99.6	90-110
Iron	5000	4890	97.8	90-110	2000	1970	98.4	2000	1910	95.3	90-110
Lead	500	488	97.6	90-110	500	483	96.6	500	481	96.2	90-110
Magnesium	25000	24300	97.3	90-110	25000	23700	94.9	25000	23200	92.9	90-110
Manganese	500	488	97.6	90-110	250	246	98.2	250	245	97.8	90-110
Nickel	500	489	97.7	90-110	250	243	97.1	250	242	96.6	90-110
Potassium	25000	24800	99.2	90-110	50000	47200	94.4	50000	46600	93.3	90-110
Selenium	500	477	95.3	90-110	750	718	95.8	750	710	94.6	90-110
Silver	50	50.4	100.8	90-110	250	243	97.2	250	241	96.4	90-110
Sodium	25000	25400	101.6	90-110	50000	51400	102.8	50000	50000	100.0	90-110
Thallium	500	492	98.4	90-110	750	739	98.5	750	736	98.1	90-110
Vanadium	500	482	96.3	90-110	500	485	97.0	500	481	96.2	90-110
Zinc	2500	2440	97.7	90-110	1000	968	96.8	1000	960	96.0	90-110

FORM II INORGANIC-1

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Initial Calibration Verification Source: 16618

Continuing Calibration Verification Source: 16621

Concentration Units: ug/L Instrument ID: 70ICP1

	Initial Calibration Verification				Continuing Calibration Verification						
	05/05/2017 13:03				05/05/2017 13:34			05/05/2017 14:36			
Analyte	True	Found	%R	Control Limit	True	Found	%R	True	Found	%R	Control Limit
Aluminum	5000	4850	97.0	90-110	5000	5070	101.5	5000	5100	102.1	90-110
Antimony	500	488	97.6	90-110	750	772	102.9	750	763	101.7	90-110
Arsenic	500	486	97.1	90-110	500	520	103.9	500	503	100.6	90-110
Barium	500	491	98.2	90-110	500	515	103.1	500	514	102.7	90-110
Beryllium	50	49.2	98.3	90-110	50	53.2	106.5	50	53.3	106.6	90-110
Boron	5000	4850	97.0	90-110	2500	2600	104.0	2500	2560	102.6	90-110
Cadmium	50	49.6	99.1	90-110	50	52.2	104.4	50	51.3	102.6	90-110
Calcium	25000	24900	99.7	90-110	25000	27000	108.0	25000	27000	108.0	90-110
Chromium	500	489	97.7	90-110	250	251	100.4	250	250	99.8	90-110
Cobalt	500	497	99.4	90-110	500	514	102.7	500	505	101.1	90-110
Copper	500	502	100.3	90-110	250	256	102.4	250	251	100.4	90-110
Iron	5000	4930	98.6	90-110	2000	2130	106.5	2000	2120	106.1	90-110
Lead	500	486	97.1	90-110	500	550	109.9	500	547	109.4	90-110
Magnesium	25000	25100	100.4	90-110	25000	26100	104.3	25000	26100	104.4	90-110
Manganese	500	492	98.4	90-110	250	268	107.3	250	267	106.7	90-110
Nickel	500	496	99.2	90-110	250	260	104.2	250	255	102.0	90-110
Potassium	25000	24300	97.4	90-110	50000	48200	96.5	50000	47000	94.0	90-110
Selenium	500	500	100.1	90-110	750	778	103.8	750	744	99.2	90-110
Silver	50	51.4	102.8	90-110	250	256	102.2	250	256	102.2	90-110
Sodium	25000	25300	101.1	90-110	50000	49700	99.3	50000	51700	103.4	90-110
Thallium	500	499	99.8	90-110	750	781	104.2	750	774	103.3	90-110
Vanadium	500	488	97.7	90-110	500	542	108.4	500	539	107.8	90-110
Zinc	2500	2430	97.2	90-110	1000	1070	106.7	1000	1060	106.5	90-110

FORM II INORGANIC-2

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Initial Calibration Verification Source:

Continuing Calibration Verification Source: 16621

Concentration Units: ug/L Instrument ID: 70ICP1

	Continuing Calibration Verification			
	05/05/2017 15:22			Control Limit
Analyte	True	Found	%R	
Aluminum	5000	5090	101.7	90-110
Antimony	750	744	99.2	90-110
Arsenic	500	501	100.2	90-110
Barium	500	504	100.7	90-110
Beryllium	50	51.6	103.3	90-110
Boron	2500	2500	100.2	90-110
Cadmium	50	50.9	101.8	90-110
Calcium	25000	26200	104.9	90-110
Chromium	250	249	99.6	90-110
Cobalt	500	508	101.7	90-110
Copper	250	259	103.5	90-110
Iron	2000	2000	100.2	90-110
Lead	500	508	101.7	90-110
Magnesium	25000	26400	105.6	90-110
Manganese	250	257	102.8	90-110
Nickel	250	254	101.8	90-110
Potassium	50000	46600	93.2	90-110
Selenium	750	728	97.1	90-110
Silver	250	249	99.7	90-110
Sodium	50000	50500	101.0	90-110
Thallium	750	770	102.7	90-110
Vanadium	500	511	102.3	90-110
Zinc	1000	1010	100.7	90-110

FORM II INORGANIC-1

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Initial Calibration Verification Source: 11539

Continuing Calibration Verification Source: 16332

Concentration Units: ug/L Instrument ID: 70ICP2

	Initial Calibration Verification				Continuing Calibration Verification						
	05/03/2017 13:22				05/03/2017 13:52			05/03/2017 14:51			
Analyte	True	Found	%R	Control Limit	True	Found	%R	True	Found	%R	Control Limit
Aluminum	5000	4840	96.8	90-110	5000	4830	96.6	5000	4840	96.7	90-110
Antimony	500	476	95.1	90-110	750	728	97.0	750	739	98.5	90-110
Arsenic	500	478	95.7	90-110	500	479	95.8	500	485	97.0	90-110
Barium	500	491	98.1	90-110	500	492	98.3	500	492	98.5	90-110
Beryllium	50	48.5	96.9	90-110	50	48.4	96.8	50	49.2	98.4	90-110
Boron	5000	4820	96.5	90-110	2500	2430	97.1	2500	2460	98.3	90-110
Cadmium	50	49.2	98.3	90-110	50	49.3	98.6	50	49.4	98.8	90-110
Calcium	25000	24400	97.7	90-110	25000	24400	97.6	25000	24500	98.2	90-110
Chromium	500	501	100.2	90-110	250	251	100.4	250	253	101.0	90-110
Cobalt	500	488	97.5	90-110	500	488	97.6	500	490	98.0	90-110
Copper	500	487	97.5	90-110	250	240	96.1	250	242	96.8	90-110
Iron	5000	4800	96.0	90-110	2000	1950	97.4	2000	1980	98.8	90-110
Lead	500	490	97.9	90-110	500	486	97.1	500	485	97.1	90-110
Magnesium	25000	24300	97.4	90-110	25000	24500	98.0	25000	25200	100.9	90-110
Manganese	500	486	97.1	90-110	250	235	94.1	250	239	95.5	90-110
Nickel	500	492	98.5	90-110	250	247	98.7	250	249	99.4	90-110
Potassium	25000	24400	97.5	90-110	50000	46400	92.8	50000	46500	93.0	90-110
Selenium	500	490	98.0	90-110	750	739	98.5	750	750	100.0	90-110
Silver	50	47.5	94.9	90-110	250	236	94.4	250	234	93.6	90-110
Sodium	25000	24300	97.0	90-110	50000	49500	99.1	50000	50100	100.2	90-110
Thallium	500	492	98.4	90-110	750	738	98.4	750	746	99.4	90-110
Vanadium	500	486	97.2	90-110	500	476	95.2	500	474	94.7	90-110
Zinc	2500	2440	97.6	90-110	1000	976	97.6	1000	984	98.4	90-110

FORM II INORGANIC-2

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Initial Calibration Verification Source:

Continuing Calibration Verification Source: 16332

Concentration Units: ug/L Instrument ID: 70ICP2

	Continuing Calibration Verification						
	05/03/2017 15:51			05/03/2017 16:46			Control Limit
Analyte	True	Found	%R	True	Found	%R	
Aluminum	5000	5020	100.3	5000	4950	99.1	90-110
Antimony	750	707	94.2	750	712	94.9	90-110
Arsenic	500	462	92.5	500	467	93.4	90-110
Barium	500	489	97.7	500	489	97.9	90-110
Beryllium	50	50.7	101.5	50	48.3	96.7	90-110
Boron	2500	2420	96.9	2500	2400	96.2	90-110
Cadmium	50	46.8	93.7	50	47.9	95.8	90-110
Calcium	25000	25000	99.8	25000	24200	96.8	90-110
Chromium	250	228	91.1	250	236	94.3	90-110
Cobalt	500	488	97.7	500	486	97.2	90-110
Copper	250	248	99.4	250	243	97.2	90-110
Iron	2000	2030	101.4	2000	1900	95.0	90-110
Lead	500	483	96.6	500	484	96.8	90-110
Magnesium	25000	26200	104.6	25000	24200	96.9	90-110
Manganese	250	246	98.5	250	239	95.7	90-110
Nickel	250	242	96.8	250	243	97.2	90-110
Potassium	50000	46800	93.6	50000	46300	92.6	90-110
Selenium	750	679	90.5	750	703	93.7	90-110
Silver	250	235	94.2	250	236	94.4	90-110
Sodium	50000	49200	98.4	50000	50300	100.7	90-110
Thallium	750	746	99.5	750	738	98.5	90-110
Vanadium	500	474	94.7	500	477	95.3	90-110
Zinc	1000	935	93.5	1000	949	94.9	90-110

FORM II INORGANIC-1

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Initial Calibration Verification Source: 11539

Continuing Calibration Verification Source: 16332

Concentration Units: ug/L Instrument ID: 70ICP2

	Initial Calibration Verification				Continuing Calibration Verification						
	05/03/2017 19:48				05/03/2017 20:17			05/03/2017 21:17			
Analyte	True	Found	%R	Control Limit	True	Found	%R	True	Found	%R	Control Limit
Aluminum	5000	4790	95.7	90-110	5000	4960	99.2	5000	4970	99.4	90-110
Antimony	500	475	95.0	90-110	750	736	98.1	750	719	95.9	90-110
Arsenic	500	477	95.4	90-110	500	482	96.5	500	479	95.8	90-110
Barium	500	486	97.2	90-110	500	490	98.0	500	494	98.8	90-110
Beryllium	50	48.0	96.0	90-110	50	48.2	96.4	50	50.3	100.6	90-110
Boron	5000	4780	95.6	90-110	2500	2420	97.0	2500	2450	98.1	90-110
Cadmium	50	47.7	95.4	90-110	50	48.3	96.6	50	49.1	98.3	90-110
Calcium	25000	24100	96.3	90-110	25000	24400	97.4	25000	25000	100.2	90-110
Chromium	500	505	101.0	90-110	250	253	101.2	250	237	94.7	90-110
Cobalt	500	483	96.6	90-110	500	488	97.6	500	493	98.5	90-110
Copper	500	484	96.8	90-110	250	247	98.6	250	246	98.4	90-110
Iron	5000	4940	98.7	90-110	2000	2040	102.2	2000	2010	100.6	90-110
Lead	500	476	95.3	90-110	500	478	95.7	500	496	99.2	90-110
Magnesium	25000	24000	96.1	90-110	25000	24600	98.2	25000	26000	104.0	90-110
Manganese	500	486	97.3	90-110	250	246	98.4	250	245	98.1	90-110
Nickel	500	488	97.6	90-110	250	247	98.8	250	246	98.5	90-110
Potassium	25000	25000	100.2	90-110	50000	48000	95.9	50000	46500	93.0	90-110
Selenium	500	496	99.3	90-110	750	755	100.6	750	706	94.1	90-110
Silver	50	47.6	95.1	90-110	250	245	97.8	250	237	95.0	90-110
Sodium	25000	24200	96.8	90-110	50000	49700	99.5	50000	49800	99.7	90-110
Thallium	500	486	97.2	90-110	750	741	98.7	750	751	100.2	90-110
Vanadium	500	488	97.6	90-110	500	495	99.0	500	473	94.7	90-110
Zinc	2500	2410	96.2	90-110	1000	970	97.0	1000	964	96.4	90-110

FORM II INORGANIC-2

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Initial Calibration Verification Source:

Continuing Calibration Verification Source: 16332

Concentration Units: ug/L Instrument ID: 70ICP2

	Continuing Calibration Verification			
	05/03/2017 22:16			Control Limit
Analyte	True	Found	%R	
Aluminum	5000	4810	96.2	90-110
Antimony	750	710	94.6	90-110
Arsenic	500	469	93.8	90-110
Barium	500	487	97.4	90-110
Beryllium	50	48.8	97.7	90-110
Boron	2500	2410	96.4	90-110
Cadmium	50	48.2	96.5	90-110
Calcium	25000	24400	97.4	90-110
Chromium	250	236	94.5	90-110
Cobalt	500	484	96.9	90-110
Copper	250	238	95.3	90-110
Iron	2000	1950	97.6	90-110
Lead	500	486	97.2	90-110
Magnesium	25000	25000	100.0	90-110
Manganese	250	237	94.8	90-110
Nickel	250	243	97.2	90-110
Potassium	50000	46400	92.8	90-110
Selenium	750	696	92.9	90-110
Silver	250	230	91.9	90-110
Sodium	50000	49300	98.6	90-110
Thallium	750	741	98.8	90-110
Vanadium	500	458	91.6	90-110
Zinc	1000	950	95.0	90-110

FORM II INORGANIC-1

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Initial Calibration Verification Source: 11539

Continuing Calibration Verification Source: 16332

Concentration Units: ug/L Instrument ID: 70ICP2

	Initial Calibration Verification				Continuing Calibration Verification						
	05/04/2017 11:09				05/04/2017 11:34			05/04/2017 15:30			
Analyte	True	Found	%R	Control Limit	True	Found	%R	True	Found	%R	Control Limit
Chromium	500	501	100.2	90-110	250	244	97.6	250	246	98.3	90-110
Iron	5000	5080	101.6	90-110	2000	2090	104.4	2000	2120	105.8	90-110
Manganese	500	489	97.8	90-110	250	249	99.6	250	254	101.4	90-110
Thallium	500	501	100.3	90-110	750	767	102.2	750	782	104.2	90-110

FORM II INORGANIC-2

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Initial Calibration Verification Source:

Continuing Calibration Verification Source: 16332

Concentration Units: ug/L Instrument ID: 70ICP2

	Continuing Calibration Verification						
	05/04/2017 16:31			05/04/2017 17:00			Control Limit
Analyte	True	Found	%R	True	Found	%R	
Chromium	250	265	106.1	250	254	101.7	90-110
Iron	2000	2100	104.8	2000	2060	102.8	90-110
Manganese	250	252	100.8	250	253	101.0	90-110
Thallium	750	781	104.1	750	777	103.6	90-110

FORM II INORGANIC-1

CRDL CHECK STANDARD

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

CRDL Check Standard Source: 8378 Analysis Date/Time: 05/03/2017 01:10

Concentration Units: ug/L

Analyte	CRDL Check Standard			
	True	Found	%R	Control Limit %R
Aluminum	200	192	96.0	70-130
Antimony	60	58.6	97.7	70-130
Arsenic	10.0	8.9	89.4	70-130
Barium	200	202	101.0	70-130
Beryllium	5.0	5.0	100.6	70-130
Boron	50	51.7	103.3	70-130
Cadmium	2.5	2.5	99.4	70-130
Calcium	200	190	94.9	70-130
Chromium	10.0	9.6	95.9	70-130
Cobalt	50	49.8	99.7	70-130
Copper	25	23.7	94.9	70-130
Iron	20	24.5	122.4	70-130
Lead	5.0	4.0	80.9	70-130
Magnesium	200	214	106.8	70-130
Manganese	10.0	10.2	102.1	70-130
Nickel	40	38.5	96.2	70-130
Potassium	5000	5270	105.4	70-130
Selenium	10.0	9.0	90.2	70-130
Silver	10.0	9.3	92.6	70-130
Sodium	5000	5730	114.5	70-130
Thallium	10.0	11.3	112.9	70-130
Vanadium	50	48.1	96.2	70-130
Zinc	20	19.6	98.2	70-130

FORM II INORGANIC-1

CRDL CHECK STANDARD

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

CRDL Check Standard Source: 16617 Analysis Date/Time: 05/05/2017 13:19

Concentration Units: ug/L

Analyte	CRDL Check Standard			
	True	Found	%R	Control Limit %R
Aluminum	200	199	99.6	70-130
Antimony	60	57.8	96.4	70-130
Arsenic	10.0	10.6	106.2	70-130
Barium	200	205	102.4	70-130
Beryllium	5.0	4.7	94.0	70-130
Boron	50	49.8	99.7	70-130
Cadmium	2.5	2.6	103.6	70-130
Calcium	200	166	82.8	70-130
Chromium	10.0	10.5	105.4	70-130
Cobalt	50	50.9	101.9	70-130
Copper	25	26.7	106.9	70-130
Iron	20	22.3	111.6	70-130
Lead	5.0	5.1	101.3	70-130
Magnesium	200	218	109.1	70-130
Manganese	10.0	10.5	105.1	70-130
Nickel	40	41.0	102.4	70-130
Potassium	5000	4620	92.4	70-130
Selenium	10.0	11.3	113.1	70-130
Silver	10.0	9.6	96.3	70-130
Sodium	5000	4730	94.6	70-130
Thallium	10.0	10.1	100.6	70-130
Vanadium	50	51.1	102.2	70-130
Zinc	20	18.5	92.4	70-130

FORM II INORGANIC-1

CRDL CHECK STANDARD

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

CRDL Check Standard Source: 8378 Analysis Date/Time: 05/03/2017 13:37

Concentration Units: ug/L

Analyte	CRDL Check Standard			
	True	Found	%R	Control Limit %R
Aluminum	200	190	94.8	70-130
Antimony	60	59.6	99.3	70-130
Arsenic	10.0	8.7	86.6	70-130
Barium	200	202	100.8	70-130
Beryllium	5.0	5.1	101.7	70-130
Boron	50	56.0	112.1	70-130
Cadmium	2.5	2.4	94.6	70-130
Calcium	200	212	105.8	70-130
Chromium	10.0	9.7	96.9	70-130
Cobalt	50	49.9	99.7	70-130
Copper	25	24.9	99.5	70-130
Iron	20	16.0	80.0	70-130
Lead	5.0	5.2	103.8	70-130
Magnesium	200	159	79.4	70-130
Manganese	10.0	9.8	98.4	70-130
Nickel	40	40.3	100.8	70-130
Potassium	5000	4890	97.8	70-130
Selenium	10.0	10.6	105.8	70-130
Silver	10.0	9.1	90.9	70-130
Sodium	5000	5060	101.3	70-130
Thallium	10.0	8.8	87.6	70-130
Vanadium	50	47.2	94.4	70-130
Zinc	20	17.6	88.0	70-130

FORM II INORGANIC-1

CRDL CHECK STANDARD

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

CRDL Check Standard Source: 8378 Analysis Date/Time: 05/03/2017 20:03

Concentration Units: ug/L

Analyte	CRDL Check Standard			
	True	Found	%R	Control Limit %R
Aluminum	200	189	94.6	70-130
Antimony	60	58.7	97.8	70-130
Arsenic	10.0	11.3	112.7	70-130
Barium	200	201	100.3	70-130
Beryllium	5.0	4.8	96.6	70-130
Boron	50	54.8	109.6	70-130
Cadmium	2.5	2.4	95.7	70-130
Calcium	200	209	104.4	70-130
Chromium	10.0	10.4	104.5	70-130
Cobalt	50	49.8	99.6	70-130
Copper	25	24.4	97.8	70-130
Iron	20	14.3	71.6	70-130
Lead	5.0	4.2	83.9	70-130
Magnesium	200	173	86.6	70-130
Manganese	10.0	9.9	99.4	70-130
Nickel	40	39.7	99.2	70-130
Potassium	5000	5170	103.4	70-130
Selenium	10.0	8.9	88.8	70-130
Silver	10.0	8.5	85.2	70-130
Sodium	5000	4980	99.6	70-130
Thallium	10.0	9.0	90.3	70-130
Vanadium	50	47.4	94.7	70-130
Zinc	20	18.3	91.6	70-130

FORM II INORGANIC-1

CRDL CHECK STANDARD

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

CRDL Check Standard Source: 8378 Analysis Date/Time: 05/04/2017 11:19

Concentration Units: ug/L

Analyte	CRDL Check Standard			
	True	Found	%R	Control Limit %R
Chromium	10.0	9.8	98.0	70-130
Iron	20	24.5	122.5	70-130
Manganese	10.0	10.3	103.4	70-130
Thallium	10.0	9.0	90.1	70-130

FORM III INORGANIC-1

BLANKS

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract : NORTH SEA LANDFILL

Method Blank Matrix: Water Instrument ID: 70ICP1

Method Blank Concentration Units: ug/L

Analyte	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Method Blank	
	05/03/2017 01:05	C	05/03/2017 01:31	C	05/03/2017 02:22	C		C	103461	C
Aluminum	10.8	U	12.4	J	10.8	U			<200	U
Antimony	3.9	U	3.9	U	3.9	U			<60.0	U
Arsenic	3.1	U	3.1	U	-3.3	J			<10.0	U
Barium	0.20	U	0.20	U	0.20	U			<200	U
Beryllium	0.30	U	0.30	U	0.30	U			<5.0	U
Boron	4.3	J	2.6	U	2.6	U			<50.0	U
Cadmium	0.20	U	0.20	U	0.20	U			<2.5	U
Calcium	17.0	U	27.9	J	17.0	U			<200	U
Chromium	0.80	U	0.80	U	0.80	U			<10.0	U
Cobalt	0.30	U	0.30	U	0.30	U			<50.0	U
Copper	0.70	U	0.70	U	0.70	U			<25.0	U
Iron	10.2	U	11.3	J	10.2	U			<100	U
Lead	2.1	U	2.1	U	2.1	U			<5.0	U
Magnesium	120	J	-66	J	35.0	U			<200	U
Manganese	1.1	U	1.1	U	1.5	J			0.94	J
Nickel	-1.0	J	0.40	U	-0.94	J			<40.0	U
Potassium	320	U	320	U	320	U			<5000	U
Selenium	4.8	U	4.8	U	4.8	U			<10.0	U
Silver	1.6	U	1.6	U	1.6	U			<10.0	U
Sodium	-3100	J	1280	J	762	U			1180	J
Thallium	2.2	U	2.2	U	2.2	U			<10.0	U
Vanadium	1.0	U	1.0	U	1.0	U			<50.0	U
Zinc	1.2	U	1.6	J	1.2	U			<20.0	U

FORM III INORGANIC-1

BLANKS

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract : NORTH SEA LANDFILL

Method Blank Matrix: Water Instrument ID: 70ICP1

Method Blank Concentration Units: ug/L

Analyte	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Method Blank	
	05/05/2017 13:13	C	05/05/2017 13:39	C	05/05/2017 14:41	C	05/05/2017 15:27	C	103951	C
Aluminum	10.8	U	10.8	U	10.8	U	10.8	U	19.1	J
Antimony	3.9	U	3.9	U	3.9	U	-4.4	J	<60.0	U
Arsenic	3.1	U	3.1	U	3.1	U	3.1	U	<10.0	U
Barium	-0.30	J	-0.32	J	-0.36	J	0.20	U	<200	U
Beryllium	0.30	U	0.30	U	0.31	J	0.30	U	<5.0	U
Boron	3.5	J	2.6	U	-5.1	J	-4.6	J	<50.0	U
Cadmium	0.20	U	0.20	U	0.20	U	0.20	U	<2.5	U
Calcium	-24	J	-37	J	17.0	U	-27	J	<200	U
Chromium	0.80	U	-0.90	J	0.80	U	0.94	J	<10.0	U
Cobalt	0.30	U	0.30	U	0.30	U	0.30	U	<50.0	U
Copper	1.1	J	0.70	U	0.70	U	1.1	J	<25.0	U
Iron	10.2	U	10.2	U	10.2	U	10.2	U	<100	U
Lead	2.1	U	2.1	U	2.1	U	2.1	U	<5.0	U
Magnesium	35.0	U	-37	J	35.0	U	-46	J	<200	U
Manganese	1.1	U	1.1	U	1.1	U	1.1	U	<10.0	U
Nickel	0.46	J	0.40	U	0.40	U	0.40	U	<40.0	U
Potassium	320	U	368	J	320	U	320	U	<5000	U
Selenium	4.8	U	4.8	U	4.8	U	4.8	U	<10.0	U
Silver	1.6	U	1.6	U	1.6	U	1.6	U	<10.0	U
Sodium	1180	J	1790	J	-1500	J	-1700	J	1190	J
Thallium	2.2	U	2.2	U	2.2	U	2.2	U	<10.0	U
Vanadium	1.0	U	1.0	U	1.0	U	1.0	U	<50.0	U
Zinc	1.2	U	1.2	U	-1.8	J	-1.5	J	<20.0	U

FORM III INORGANIC-1

BLANKS

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract : NORTH SEA LANDFILL

Method Blank Matrix: Water Instrument ID: 70ICP2

Method Blank Concentration Units: ug/L

Analyte	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Method Blank	
	05/03/2017 13:32	C	05/03/2017 13:56	C	05/03/2017 14:56	C	05/03/2017 15:56	C	103457	C
Aluminum	29.7	U	29.7	U	29.7	U	29.7	U	<200	U
Antimony	1.3	U	1.7	J	1.3	U	2.4	J	<60.0	U
Arsenic	2.0	U	2.0	U	-2.5	J	2.0	U	<10.0	U
Barium	0.24	J	0.16	J	0.10	U	0.19	J	<200	U
Beryllium	0.10	U	0.10	U	0.10	U	0.20	J	<5.0	U
Boron	8.4	J	5.5	J	5.5	J	3.6	U	4.0	J
Cadmium	0.20	U	0.20	U	0.20	U	0.20	U	<2.5	U
Calcium	20.7	J	30.6	J	20.4	J	14.1	U	<200	U
Chromium	1.3	U	1.3	U	1.3	U	1.3	U	<10.0	U
Cobalt	-0.26	J	0.20	U	0.20	U	0.20	U	<50.0	U
Copper	0.40	U	0.54	J	0.40	U	0.40	U	<25.0	U
Iron	2.7	U	-4.1	J	2.7	U	2.7	U	<100	U
Lead	1.3	J	1.2	U	-1.3	J	1.2	U	<5.0	U
Magnesium	18.4	U	44.7	J	-27	J	-31	J	<200	U
Manganese	0.10	U	0.10	U	0.10	U	0.13	J	1.3	J
Nickel	-0.43	J	0.30	U	0.30	U	0.30	U	<40.0	U
Potassium	122	U	122	U	204	J	122	U	<5000	U
Selenium	2.4	U	2.4	U	2.4	U	-2.9	J	<10.0	U
Silver	-1.5	J	-2.0	J	-1.0	J	0.80	U	<10.0	U
Sodium	70.8	U	70.8	U	70.8	U	70.8	U	<5000	U
Thallium	1.1	U	1.1	U	1.1	U	1.5	J	<10.0	U
Vanadium	-0.67	J	0.60	U	0.60	U	0.60	U	<50.0	U
Zinc	-1.8	J	-2.2	J	-1.9	J	-2.2	J	<20.0	U

FORM III INORGANIC-2

BLANKS

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract : NORTH SEA LANDFILL

Method Blank Matrix: Instrument ID: 70ICP2

Method Blank Concentration Units:

Analyte	Initial Calibration Blank		Continuing Calibration Blank (ug/L)					
		C	05/03/2017 16:51	C		C		C
Aluminum			29.7	U				
Antimony			1.3	U				
Arsenic			2.0	U				
Barium			0.10	U				
Beryllium			0.12	J				
Boron			3.6	U				
Cadmium			0.20	U				
Calcium			14.1	U				
Chromium			1.3	U				
Cobalt			0.20	U				
Copper			0.69	J				
Iron			-5.0	J				
Lead			1.2	U				
Magnesium			21.2	J				
Manganese			0.10	U				
Nickel			-0.34	J				
Potassium			122	U				
Selenium			2.4	U				
Silver			0.80	U				
Sodium			70.8	U				
Thallium			-1.6	J				
Vanadium			0.60	U				
Zinc			-2.8	J				

FORM III INORGANIC-1

BLANKS

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract : NORTH SEA LANDFILL

Method Blank Matrix: Water Instrument ID: 70ICP2

Method Blank Concentration Units: ug/L

Analyte	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Method Blank	
	05/03/2017 19:58	C	05/03/2017 20:22	C	05/03/2017 21:22	C	05/03/2017 22:21	C	104205	C
Aluminum	29.7	U	29.7	U	29.7	U	29.7	U	<200	U
Antimony	1.3	U	1.3	U	1.3	U	1.3	J	<60.0	U
Arsenic	2.0	U	2.7	J	3.0	J	2.0	U	<10.0	U
Barium	0.10	U	0.10	U	0.10	U	0.10	U	<200	U
Beryllium	-0.19	J	-0.15	J	0.10	U	-0.13	J	<5.0	U
Boron	8.6	J	6.4	J	5.8	J	5.5	J	5.0	J
Cadmium	0.20	U	0.20	U	0.20	U	0.20	U	<2.5	U
Calcium	14.1	U	14.1	U	14.1	U	14.1	U	<200	U
Chromium	1.3	U	1.3	U	1.3	U	1.3	U	<10.0	U
Cobalt	0.20	U	0.20	U	-0.25	J	0.20	U	<50.0	U
Copper	0.40	U	0.40	U	0.40	U	0.40	U	<25.0	U
Iron	-3.6	J	2.7	U	2.7	U	2.7	U	<100	U
Lead	1.2	U	1.2	U	1.2	U	1.2	U	<5.0	U
Magnesium	-68	J	18.4	U	-58	J	-23	J	<200	U
Manganese	0.10	U	0.10	U	0.10	U	-0.11	J	<10.0	U
Nickel	0.30	U	0.30	U	0.30	U	0.30	U	<40.0	U
Potassium	608	J	506	J	604	J	1050	J	<5000	U
Selenium	2.4	U	2.4	U	-2.7	J	2.4	U	<10.0	U
Silver	-1.1	J	0.80	U	0.80	U	0.80	U	<10.0	U
Sodium	70.8	U	70.8	U	70.8	U	70.8	U	<5000	U
Thallium	1.1	U	1.1	U	1.1	U	1.1	U	<10.0	U
Vanadium	0.60	U	0.60	U	0.60	U	0.60	U	<50.0	U
Zinc	-0.85	J	-1.1	J	-0.95	J	-1.2	J	<20.0	U

FORM III INORGANIC-1

BLANKS

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract : NORTH SEA LANDFILL

Method Blank Matrix: Instrument ID: 70ICP2

Method Blank Concentration Units:

Analyte	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)					
	05/04/2017 11:14	C	05/04/2017 11:39	C	05/04/2017 15:35	C	05/04/2017 16:36	C
Chromium	1.3	U	1.3	U	1.3	U	1.3	U
Iron	2.7	U	2.7	U	6.7	J	5.3	J
Manganese	0.10	U	0.10	U	0.10	U	0.10	U
Thallium	1.1	U	1.1	U	1.1	U	1.1	U

FORM III INORGANIC-2

BLANKS

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract : NORTH SEA LANDFILL

Method Blank Matrix: Instrument ID: 70ICP2

Method Blank Concentration Units:

Analyte	Initial Calibration Blank		Continuing Calibration Blank (ug/L)					
		C	05/04/2017 17:05	C		C		C
Chromium			1.3	U				
Iron			5.2	J				
Manganese			0.10	U				
Thallium			-1.8	J				

FORM IV INORGANIC-1
INTERFERENCE CHECK SAMPLE

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Instrument ID: 70ICP1 Solution A Run Date: 05/03/2017 01:15

ICS Source: 10978,11540 Solution AB Run Date: 05/03/2017 01:21

Concentration Units: ug/L

Analyte	True		Found				
	Sol. A	Sol. AB	Sol. A	%R	Sol. AB	%R	Limits
Aluminum	500000	500000	497800	99.6	499500	99.9	80-120
Antimony		1200	10.04		1162	96.8	80-120
Arsenic		200	16.65		208.9	104.5	80-120
Barium		1000	0.1632		965	96.5	80-120
Beryllium		1000	0.213		992.1	99.2	80-120
Boron			3.365		976.2		
Cadmium		2000	9.729		1851	92.6	80-120
Calcium	500000	500000	482400	96.5	482200	96.4	80-120
Chromium		1000	-81.45		865.1	86.5	80-120
Cobalt		1000	4.754		939.1	93.9	80-120
Copper		1000	2.747		947.4	94.7	80-120
Iron	200000	200000	186600	93.3	186200	93.1	80-120
Lead		100	-8.542		81.8	81.8	80-120
Magnesium	500000	500000	499400	99.9	497700	99.5	80-120
Manganese		1000	-1.649		954.7	95.5	80-120
Nickel		2000	-8.909		1844	92.2	80-120
Potassium			10140		11440		
Selenium		100	-9.811		86.1	86.1	80-120
Silver		400	-4.216		407.5	101.9	80-120
Sodium			-1929		-3129		
Thallium		200	1.843		182.8	91.4	80-120
Vanadium		1000	5.825		957.5	95.8	80-120
Zinc		2000	7.943		1927	96.4	80-120

FORM IV INORGANIC-1
INTERFERENCE CHECK SAMPLE

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Instrument ID: 70ICP1 Solution A Run Date: 05/05/2017 13:24

ICS Source: 16550,16551 Solution AB Run Date: 05/05/2017 13:29

Concentration Units: ug/L

Analyte	True		Found				
	Sol. A	Sol. AB	Sol. A	%R	Sol. AB	%R	Limits
Aluminum	500000	500000	505200	101	512000	102.4	80-120
Antimony		1200	7.804		1216	101.3	80-120
Arsenic		200	12.49		214.3	107.2	80-120
Barium		1000	-0.6092		991.4	99.1	80-120
Beryllium		1000	-0.2982		1034	103.4	80-120
Boron			-0.0095		1000		
Cadmium		2000	9.947		1930	96.5	80-120
Calcium	500000	500000	507100	101.4	511700	102.3	80-120
Chromium		1000	-128.4		833.5	83.4	80-120
Cobalt		1000	4.525		962.1	96.2	80-120
Copper		1000	6.447		970.2	97	80-120
Iron	200000	200000	193800	96.9	194100	97.1	80-120
Lead		100	-2.958		91.13	91.1	80-120
Magnesium	500000	500000	523200	104.6	526600	105.3	80-120
Manganese		1000	-0.7914		1012	101.2	80-120
Nickel		2000	-3.984		1905	95.3	80-120
Potassium			9845		11460		
Selenium		100	-13.82		88.99	89	80-120
Silver		400	23.11		466.9	116.7	80-120
Sodium			2505		2296		
Thallium		200	-0.9328		189	94.5	80-120
Vanadium		1000	6.905		1034	103.4	80-120
Zinc		2000	9.794		2057	102.9	80-120

FORM IV INORGANIC-2
INTERFERENCE CHECK SAMPLE

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Instrument ID: 70ICP1 Solution A Run Date: 05/05/2017 15:11

ICS Source: 16550,16551 Solution AB Run Date: 05/05/2017 15:17

Concentration Units: ug/L

Analyte	True		Found				
	Sol. A	Sol. AB	Sol. A	%R	Sol. AB	%R	Limits
Aluminum	500000	500000	498400	99.7	504200	100.8	80-120
Antimony		1200	5.086		1191	99.3	80-120
Arsenic		200	13.81		208.9	104.5	80-120
Barium		1000	-0.791		982.1	98.2	80-120
Beryllium		1000	0.1519		1019	101.9	80-120
Boron			-8.094		970.4		
Cadmium		2000	9.74		1890	94.5	80-120
Calcium	500000	500000	493300	98.7	497300	99.5	80-120
Chromium		1000	-133.3		831.3	83.1	80-120
Cobalt		1000	3.973		952.7	95.3	80-120
Copper		1000	5.354		962.7	96.3	80-120
Iron	200000	200000	191400	95.7	185400	92.7	80-120
Lead		100	-0.0776		91.67	91.7	80-120
Magnesium	500000	500000	520700	104.1	529200	105.8	80-120
Manganese		1000	-1.31		976.6	97.7	80-120
Nickel		2000	-4.448		1876	93.8	80-120
Potassium			9616		11000		
Selenium		100	-6.784		82.71	82.7	80-120
Silver		400	22.87		457	114.3	80-120
Sodium			4163		3383		
Thallium		200	0.5321		187	93.5	80-120
Vanadium		1000	6.635		985.9	98.6	80-120
Zinc		2000	8.552		1983	99.2	80-120

FORM IV INORGANIC-1
INTERFERENCE CHECK SAMPLE

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Instrument ID: 70ICP2 Solution A Run Date: 05/03/2017 13:42

ICS Source: 10978,11540 Solution AB Run Date: 05/03/2017 13:47

Concentration Units: ug/L

Analyte	True		Found				
	Sol. A	Sol. AB	Sol. A	%R	Sol. AB	%R	Limits
Aluminum	500000	500000	481400	96.3	478000	95.6	80-120
Antimony		1200	-8.266		1161	96.8	80-120
Arsenic		200	-16.01		172.6	86.3	80-120
Barium		1000	-7.748		957.3	95.7	80-120
Beryllium		1000	0.2197		953	95.3	80-120
Boron			0.9637		983.6		
Cadmium		2000	2.757		1877	93.9	80-120
Calcium	500000	500000	483300	96.7	480900	96.2	80-120
Chromium		1000	-8.488		969.5	97	80-120
Cobalt		1000	2.736		926.9	92.7	80-120
Copper		1000	42.88		970.2	97	80-120
Iron	200000	200000	194400	97.2	187700	93.9	80-120
Lead		100	-3.544		85.1	85.1	80-120
Magnesium	500000	500000	518000	103.6	499800	100	80-120
Manganese		1000	-8.311		945	94.5	80-120
Nickel		2000	4.943		1852	92.6	80-120
Potassium			109.6		101.3		
Selenium		100	10.28		111.7	111.7	80-120
Silver		400	-55.18		355.6	88.9	80-120
Sodium			56.93		-42.65		
Thallium		200	0.7861		162.2	81.1	80-120
Vanadium		1000	-4.085		937.8	93.8	80-120
Zinc		2000	13.52		1971	98.6	80-120

FORM IV INORGANIC-2
INTERFERENCE CHECK SAMPLE

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Instrument ID: 70ICP2 Solution A Run Date: 05/03/2017 16:36

ICS Source: 10978,11540 Solution AB Run Date: 05/03/2017 16:41

Concentration Units: ug/L

Analyte	True		Found				
	Sol. A	Sol. AB	Sol. A	%R	Sol. AB	%R	Limits
Aluminum	500000	500000	492000	98.4	492800	98.6	80-120
Antimony		1200	-5.363		1135	94.6	80-120
Arsenic		200	-13.79		176.3	88.2	80-120
Barium		1000	-4.739		966.9	96.7	80-120
Beryllium		1000	0.2576		981.6	98.2	80-120
Boron			-5.003		980.5		
Cadmium		2000	2.814		1823	91.2	80-120
Calcium	500000	500000	484000	96.8	484700	96.9	80-120
Chromium		1000	12.51		929	92.9	80-120
Cobalt		1000	2.707		932.8	93.3	80-120
Copper		1000	31.99		976.2	97.6	80-120
Iron	200000	200000	191300	95.7	190500	95.3	80-120
Lead		100	-3.6		86.17	86.2	80-120
Magnesium	500000	500000	513600	102.7	512100	102.4	80-120
Manganese		1000	-7.501		979	97.9	80-120
Nickel		2000	4.282		1837	91.9	80-120
Potassium			-100.9		-105.9		
Selenium		100	9.294		99.98	100	80-120
Silver		400	-53.29		361.7	90.4	80-120
Sodium			83.84		-75.73		
Thallium		200	-0.5808		175.5	87.8	80-120
Vanadium		1000	-4.401		937.7	93.8	80-120
Zinc		2000	13.35		1923	96.2	80-120

FORM IV INORGANIC-1
INTERFERENCE CHECK SAMPLE

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Instrument ID: 70ICP2 Solution A Run Date: 05/03/2017 20:07

ICS Source: 16550,16551 Solution AB Run Date: 05/03/2017 20:12

Concentration Units: ug/L

Analyte	True		Found				
	Sol. A	Sol. AB	Sol. A	%R	Sol. AB	%R	Limits
Aluminum	500000	500000	488700	97.7	488800	97.8	80-120
Antimony		1200	-8.422		1167	97.3	80-120
Arsenic		200	-13.82		180.1	90.1	80-120
Barium		1000	-6.202		954.5	95.5	80-120
Beryllium		1000	0.0734		944.8	94.5	80-120
Boron			1.201		959.2		
Cadmium		2000	-3.165		1820	91	80-120
Calcium	500000	500000	476000	95.2	471600	94.3	80-120
Chromium		1000	15.21		995.8	99.6	80-120
Cobalt		1000	2.944		925.4	92.5	80-120
Copper		1000	-94.21		855.1	85.5	80-120
Iron	200000	200000	197700	98.9	194800	97.4	80-120
Lead		100	-6.474		80.81	80.8	80-120
Magnesium	500000	500000	506600	101.3	490100	98	80-120
Manganese		1000	-6.372		963.9	96.4	80-120
Nickel		2000	4.094		1845	92.3	80-120
Potassium			598		468.5		
Selenium		100	-6.513		101	101	80-120
Silver		400	-43.65		382.2	95.6	80-120
Sodium			51.77		-45.27		
Thallium		200	0.2766		163	81.5	80-120
Vanadium		1000	-5.333		979.8	98	80-120
Zinc		2000	13.88		1952	97.6	80-120

FORM IV INORGANIC-2
INTERFERENCE CHECK SAMPLE

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Instrument ID: 70ICP2 Solution A Run Date: 05/03/2017 22:06

ICS Source: 16550,16551 Solution AB Run Date: 05/03/2017 22:11

Concentration Units: ug/L

Analyte	True		Found				
	Sol. A	Sol. AB	Sol. A	%R	Sol. AB	%R	Limits
Aluminum	500000	500000	478300	95.7	485400	97.1	80-120
Antimony		1200	-6.089		1140	95	80-120
Arsenic		200	-10.41		181.4	90.7	80-120
Barium		1000	-3.71		961.1	96.1	80-120
Beryllium		1000	0.0463		962.9	96.3	80-120
Boron			-1.65		960.2		
Cadmium		2000	-2.643		1833	91.7	80-120
Calcium	500000	500000	472900	94.6	475000	95	80-120
Chromium		1000	30.21		960.6	96.1	80-120
Cobalt		1000	2.598		925.3	92.5	80-120
Copper		1000	-93.24		838.7	83.9	80-120
Iron	200000	200000	190400	95.2	189600	94.8	80-120
Lead		100	-5.318		83.04	83	80-120
Magnesium	500000	500000	500200	100	501500	100.3	80-120
Manganese		1000	-5.797		949.6	95	80-120
Nickel		2000	3.81		1832	91.6	80-120
Potassium			1495		1239		
Selenium		100	-0.672		94.9	94.9	80-120
Silver		400	-40.01		363.2	90.8	80-120
Sodium			356.4		217.5		
Thallium		200	0.4837		174.9	87.5	80-120
Vanadium		1000	-4.703		916.7	91.7	80-120
Zinc		2000	14.35		1929	96.5	80-120

FORM IV INORGANIC-1
INTERFERENCE CHECK SAMPLE

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Instrument ID: 70ICP2 Solution A Run Date: 05/04/2017 11:24

ICS Source: 10978,11540 Solution AB Run Date: 05/04/2017 11:29

Concentration Units: ug/L

Analyte	True		Found				
	Sol. A	Sol. AB	Sol. A	%R	Sol. AB	%R	Limits
Aluminum	500000	500000	512400	102.5	501400	100.3	80-120
Antimony		1200	-7.966		1182	98.5	80-120
Arsenic		200	-9.604		186.9	93.5	80-120
Barium		1000	-1.008		1004	100.4	80-120
Beryllium		1000	0.2146		1033	103.3	80-120
Boron			3.096		1008		
Cadmium		2000	3.053		1893	94.7	80-120
Calcium	500000	500000	514100	102.8	506800	101.4	80-120
Chromium		1000	23.2		972.6	97.3	80-120
Cobalt		1000	2.518		967.6	96.8	80-120
Copper		1000	12.48		978.2	97.8	80-120
Iron	200000	200000	215100	107.6	207600	103.8	80-120
Lead		100	-12.41		80.54	80.5	80-120
Magnesium	500000	500000	506100	101.2	502200	100.4	80-120
Manganese		1000	-6.29		990.4	99	80-120
Nickel		2000	5.224		1909	95.5	80-120
Potassium			-60.54		-137.5		
Selenium		100	-11.89		94.93	94.9	80-120
Silver		400	2.508		418.5	104.6	80-120
Sodium			21.38		-74.82		
Thallium		200	3.128		181.7	90.9	80-120
Vanadium		1000	-4.008		951.4	95.1	80-120
Zinc		2000	15.31		2013	100.7	80-120

FORM IV INORGANIC-2
INTERFERENCE CHECK SAMPLE

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Instrument ID: 70ICP2 Solution A Run Date: 05/04/2017 16:50

ICS Source: 10978,11540 Solution AB Run Date: 05/04/2017 16:55

Concentration Units: ug/L

Analyte	True		Found				
	Sol. A	Sol. AB	Sol. A	%R	Sol. AB	%R	Limits
Aluminum	500000	500000	513900	102.8	514400	102.9	80-120
Antimony		1200	-10.08		1191	99.3	80-120
Arsenic		200	-12.28		186.6	93.3	80-120
Barium		1000	-2.738		1018	101.8	80-120
Beryllium		1000	0.1355		1024	102.4	80-120
Boron			-2.008		1009		
Cadmium		2000	3.344		1928	96.4	80-120
Calcium	500000	500000	514400	102.9	507700	101.5	80-120
Chromium		1000	32.73		997.8	99.8	80-120
Cobalt		1000	2.689		979.2	97.9	80-120
Copper		1000	19.52		1010	101	80-120
Iron	200000	200000	207600	103.8	203900	102	80-120
Lead		100	-12.14		80.46	80.5	80-120
Magnesium	500000	500000	509800	102	504600	100.9	80-120
Manganese		1000	-6.169		1017	101.7	80-120
Nickel		2000	4.807		1935	96.8	80-120
Potassium			-131.7		-245.8		
Selenium		100	-1.615		95.05	95.1	80-120
Silver		400	1.872		429.4	107.4	80-120
Sodium			-27.52		-131.6		
Thallium		200	0.5237		182.8	91.4	80-120
Vanadium		1000	-4.122		983.5	98.4	80-120
Zinc		2000	15.72		2031	101.6	80-120

SAMPLE NO.

103464MS

FORM V INORGANIC-1

MATRIX SPIKE SAMPLE RECOVERY

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Matrix: Water Basis: Wet Parent Sample ID: MW-11A

Percent Moisture:

Analyte	Units	Control Limit %R	Spiked Sample Result (SSR)	Sample Result (SR)	Spike Added (SA)	%R
Aluminum	ug/L	75-125	5840	1010	5000	97
Antimony	ug/L	75-125	743	<60.0	750	99
Arsenic	ug/L	75-125	588	75.9	500	102
Barium	ug/L	75-125	1600	1100	500	100
Beryllium	ug/L	75-125	52.6	<5.0	50.0	105
Boron	ug/L	75-125	2580	38.7J	2500	102
Cadmium	ug/L	75-125	78.8	27.8	50.0	102
Calcium	ug/L	75-125	82300	56600	25000	102
Chromium	ug/L	75-125	<10.0	41.8J	250	-17*
Cobalt	ug/L	75-125	547	18.3J	500	106
Copper	ug/L	75-125	343	70.7	250	109
Iron	ug/L	75-125	827000	775000	2000	2580*
Lead	ug/L	75-125	526	19.3	500	101
Magnesium	ug/L	75-125	36100	11200	25000	100
Manganese	ug/L	75-125	37700	35900	250	748*
Nickel	ug/L	75-125	249	<40.0	250	99
Potassium	ug/L	75-125	62300	14300	50000	96
Selenium	ug/L	75-125	776	8.5J	750	102
Silver	ug/L	75-125	388	<10.0	250	155*
Sodium	ug/L	75-125	70900	18700	50000	104
Thallium	ug/L	75-125	713	43.8J	750	89
Vanadium	ug/L	75-125	553	20.6J	500	107
Zinc	ug/L	75-125	1060	66.4	1000	99

* Spike Recovery outside QC Limits

SAMPLE NO.

103460MS

FORM V INORGANIC-1

MATRIX SPIKE SAMPLE RECOVERY

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Matrix: Water Basis: Wet Parent Sample ID: 7016368002

Percent Moisture:

Analyte	Units	Control Limit %R	Spiked Sample Result (SSR)	Sample Result (SR)	Spike Added (SA)	%R
Aluminum	ug/L	75-125	5170	<200	5000	103
Antimony	ug/L	75-125	795	<60.0	750	106
Arsenic	ug/L	75-125	521	<10.0	500	104
Barium	ug/L	75-125	590	<200	500	104
Beryllium	ug/L	75-125	51.9	<5.0	50.0	104
Boron	ug/L	75-125	2680	85.2	2500	104
Cadmium	ug/L	75-125	52.5	<2.5	50.0	105
Calcium	ug/L	75-125	86400	60800	25000	103
Chromium	ug/L	75-125	273	<10.0	250	109
Cobalt	ug/L	75-125	520	<50.0	500	104
Copper	ug/L	75-125	258	<25.0	250	102
Iron	ug/L	75-125	2050	<100	2000	102
Lead	ug/L	75-125	513	<5.0	500	102
Magnesium	ug/L	75-125	29600	3690	25000	104
Manganese	ug/L	75-125	251	<10.0	250	100
Nickel	ug/L	75-125	264	<40.0	250	106
Potassium	ug/L	75-125	66300	18400	50000	96
Selenium	ug/L	75-125	815	<10.0	750	109
Silver	ug/L	75-125	379	<10.0	250	152*
Sodium	ug/L	75-125	105000	49600	50000	110
Thallium	ug/L	75-125	783	<10.0	750	104
Vanadium	ug/L	75-125	509	<50.0	500	102
Zinc	ug/L	75-125	1060	<20.0	1000	105

* Spike Recovery outside QC Limits

SAMPLE NO.

104209MS

FORM V INORGANIC-1

MATRIX SPIKE SAMPLE RECOVERY

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Matrix: Water Basis: Wet Parent Sample ID: MW-11B

Percent Moisture:

Analyte	Units	Control Limit %R	Spiked Sample Result (SSR)	Sample Result (SR)	Spike Added (SA)	%R
Aluminum, Dissolved	ug/L	75-125	5730	<200	5000	115
Antimony, Dissolved	ug/L	75-125	808	<60.0	750	108
Arsenic, Dissolved	ug/L	75-125	532	<10.0	500	106
Barium, Dissolved	ug/L	75-125	552	7.8J	500	109
Beryllium, Dissolved	ug/L	75-125	60.3	<5.0	50.0	121
Boron, Dissolved	ug/L	75-125	2710	19.8J	2500	108
Cadmium, Dissolved	ug/L	75-125	54.1	0.081J	50.0	108
Calcium, Dissolved	ug/L	75-125	40100	10000	25000	120
Chromium, Dissolved	ug/L	75-125	289	<10.0	250	115
Cobalt, Dissolved	ug/L	75-125	544	<50.0	500	109
Copper, Dissolved	ug/L	75-125	275	4.0J	250	108
Iron, Dissolved	ug/L	75-125	2450	<100	2000	122
Lead, Dissolved	ug/L	75-125	546	<5.0	500	109
Magnesium, Dissolved	ug/L	75-125	33700	3420	25000	121
Manganese, Dissolved	ug/L	75-125	294	7.6J	250	115
Nickel, Dissolved	ug/L	75-125	274	1.9J	250	109
Potassium, Dissolved	ug/L	75-125	57000	1240J	50000	112
Selenium, Dissolved	ug/L	75-125	808	<10.0	750	108
Silver, Dissolved	ug/L	75-125	75.7	<10.0	250	30*
Sodium, Dissolved	ug/L	75-125	70600	7630	50000	126*
Thallium, Dissolved	ug/L	75-125	826	<10.0	750	110
Vanadium, Dissolved	ug/L	75-125	569	<50.0	500	114
Zinc, Dissolved	ug/L	75-125	1080	<20.0	1000	108

* Spike Recovery outside QC Limits

SAMPLE NO.

103954MS

FORM V INORGANIC-1

MATRIX SPIKE SAMPLE RECOVERY

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Matrix: Water Basis: Wet Parent Sample ID: MW-3C

Percent Moisture:

Analyte	Units	Control Limit %R	Spiked Sample Result (SSR)	Sample Result (SR)	Spike Added (SA)	%R
Aluminum	ug/L	75-125	5440	<200	5000	109
Antimony	ug/L	75-125	805	<60.0	750	107
Arsenic	ug/L	75-125	530	<10.0	500	106
Barium	ug/L	75-125	562	18.3J	500	109
Beryllium	ug/L	75-125	56.3	<5.0	50.0	113
Boron	ug/L	75-125	2700	5.5J	2500	108
Cadmium	ug/L	75-125	54.2	<2.5	50.0	108
Calcium	ug/L	75-125	36000	8630	25000	110
Chromium	ug/L	75-125	271	4.8J	250	107
Cobalt	ug/L	75-125	533	<50.0	500	107
Copper	ug/L	75-125	264	<25.0	250	105
Iron	ug/L	75-125	2300	38.5J	2000	113
Lead	ug/L	75-125	572	<5.0	500	114
Magnesium	ug/L	75-125	30400	3740	25000	107
Manganese	ug/L	75-125	282	3.9J	250	111
Nickel	ug/L	75-125	275	6.8J	250	107
Potassium	ug/L	75-125	48800	874J	50000	96
Selenium	ug/L	75-125	776	<10.0	750	103
Silver	ug/L	75-125	486	<10.0	250	194*
Sodium	ug/L	75-125	67800	13900	50000	108
Thallium	ug/L	75-125	813	<10.0	750	108
Vanadium	ug/L	75-125	563	<50.0	500	113
Zinc	ug/L	75-125	1120	<20.0	1000	112

* Spike Recovery outside QC Limits

SAMPLE NO.

103501PDS

FORM V INORGANIC-1

POST-DIGESTION SPIKE SAMPLE RECOVERY

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Matrix: Water Parent Sample ID: MW-11A

Analyte	Units	Control Limit %R	DF	Spiked Sample Result (SSR)	DF	Sample Result (SR)	Spike Added (SA)	%R
Aluminum	ug/L	85-115	1	5680	1	1010	5000	93.5
Antimony	ug/L	85-115	1	665	1	3.0U	750	88.7
Arsenic	ug/L	85-115	1	531	1	75.9	500	91.0
Barium	ug/L	85-115	1	1540	1	1100	500	88.8
Beryllium	ug/L	85-115	1	47.3	1	0.57U	50	94.7
Boron	ug/L	85-115	1	2390	1	38.7J	2500	93.9
Cadmium	ug/L	85-115	1	73.9	1	27.8	50	92.0
Calcium	ug/L	85-115	1	78100	1	56600	25000	85.8
Cobalt	ug/L	85-115	1	495	1	18.3J	500	95.3
Copper	ug/L	85-115	1	313	1	70.7	250	96.9
Lead	ug/L	85-115	1	479	1	19.3	500	91.9
Magnesium	ug/L	85-115	1	33000	1	11200	25000	87.4
Nickel	ug/L	85-115	1	224	1	0.88U	250	89.4
Potassium	ug/L	85-115	1	56700	1	14300	50000	84.8*
Selenium	ug/L	85-115	1	700	1	8.5J	750	92.2
Silver	ug/L	85-115	1	67.9	1	3.6U	250	27.2*
Sodium	ug/L	85-115	1	66300	1	18700	50000	95.3
Vanadium	ug/L	85-115	1	487	1	20.6J	500	93.3
Zinc	ug/L	85-115	1	987	1	66.4	1000	92.1

SAMPLE NO.

103497PDS

FORM V INORGANIC-1

POST-DIGESTION SPIKE SAMPLE RECOVERY

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Matrix: Water Parent Sample ID: 7016368002

Analyte	Units	Control Limit %R	DF	Spiked Sample Result (SSR)	DF	Sample Result (SR)	Spike Added (SA)	%R
Aluminum	ug/L	85-115	1	4150	1	13.4U	5000	83.0*
Antimony	ug/L	85-115	1	651	1	3.0U	750	86.8
Arsenic	ug/L	85-115	1	425	1	6.8U	500	84.9*
Barium	ug/L	85-115	1	493	1	69.0J	500	84.7*
Beryllium	ug/L	85-115	1	43.2	1	0.57U	50	86.5
Boron	ug/L	85-115	1	2240	1	85.2	2500	86.0
Cadmium	ug/L	85-115	1	42.9	1	0.063U	50	85.8
Calcium	ug/L	85-115	1	80000	1	60800	25000	76.9*
Chromium	ug/L	85-115	1	225	1	1.6U	250	90.1
Cobalt	ug/L	85-115	1	427	1	0.63U	500	85.3
Copper	ug/L	85-115	1	215	1	3.6J	250	84.5*
Iron	ug/L	85-115	1	1720	1	13.7J	2000	85.3
Lead	ug/L	85-115	1	420	1	1.3U	500	84.0*
Magnesium	ug/L	85-115	1	25500	1	3690	25000	87.4
Manganese	ug/L	85-115	1	208	1	0.65U	250	83.3*
Nickel	ug/L	85-115	1	216	1	0.88U	250	86.4
Potassium	ug/L	85-115	1	55800	1	18400	50000	74.9*
Selenium	ug/L	85-115	1	658	1	6.2U	750	87.7
Silver	ug/L	85-115	1	69.8	1	3.6U	250	27.9*
Sodium	ug/L	85-115	1	93000	1	49600	50000	87.0
Thallium	ug/L	85-115	1	641	1	3.6U	750	85.5
Vanadium	ug/L	85-115	1	414	1	0.80U	500	82.8*
Zinc	ug/L	85-115	1	863	1	1.2U	1000	86.3

SAMPLE NO.

104001PDS

FORM V INORGANIC-1

POST-DIGESTION SPIKE SAMPLE RECOVERY

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Matrix: Water Parent Sample ID: MW-3C

Analyte	Units	Control Limit %R	DF	Spiked Sample Result (SSR)	DF	Sample Result (SR)	Spike Added (SA)	%R
Aluminum	ug/L	85-115	1	5100	1	13.4U	5000	102.1
Antimony	ug/L	85-115	1	715	1	3.0U	750	95.3
Arsenic	ug/L	85-115	1	473	1	6.8U	500	94.6
Barium	ug/L	85-115	1	500	1	18.3J	500	96.4
Beryllium	ug/L	85-115	1	57.5	1	0.57U	50	115.1*
Boron	ug/L	85-115	1	2440	1	5.5J	2500	97.6
Cadmium	ug/L	85-115	1	48.1	1	0.063U	50	96.2
Calcium	ug/L	85-115	1	36900	1	8630	25000	113.1
Chromium	ug/L	85-115	1	262	1	4.8J	250	102.7
Cobalt	ug/L	85-115	1	470	1	0.63U	500	94.0
Copper	ug/L	85-115	1	234	1	2.5U	250	93.6
Iron	ug/L	85-115	1	2350	1	38.5J	2000	115.6*
Lead	ug/L	85-115	1	530	1	1.3U	500	106.1
Magnesium	ug/L	85-115	1	30600	1	3740	25000	107.6
Manganese	ug/L	85-115	1	282	1	3.9J	250	111.1
Nickel	ug/L	85-115	1	245	1	6.8J	250	95.4
Potassium	ug/L	85-115	1	47300	1	874J	50000	92.9
Selenium	ug/L	85-115	1	689	1	6.2U	750	91.9
Silver	ug/L	85-115	1	117	1	3.6U	250	46.6*
Sodium	ug/L	85-115	1	66800	1	13900	50000	105.7
Thallium	ug/L	85-115	1	727	1	3.6U	750	96.9
Vanadium	ug/L	85-115	1	562	1	0.80U	500	112.4
Zinc	ug/L	85-115	1	1020	1	1.2U	1000	101.9

SAMPLE NO.

103463DUP

FORM VI INORGANIC-1
DUPLICATES

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Matrix: Water Concentration Units: ug/L

Percent Moisture: Basis: Wet

Analyte	Control Limit	Sample	Duplicate	RPD
Aluminum	20	1010	88.8J	
Antimony	20	<60.0	<60.0	
Arsenic	20	75.9	77.0	1
Barium	20	1100	1090	1
Beryllium	20	<5.0	<5.0	
Boron	20	38.7J	37.3J	
Cadmium	20	27.8	27.6	1
Calcium	20	56600	56700	0
Chromium	20	41.8J	36.3J	
Cobalt	20	18.3J	17.9J	
Copper	20	70.7	60.8	15
Iron	20	775000	834000	7
Lead	20	19.3	17.2	12
Magnesium	20	11200	11200	0
Manganese	20	35900	38900	8
Nickel	20	<40.0	<40.0	
Potassium	20	14300	14100	1
Selenium	20	8.5J	<10.0	
Silver	20	<10.0	<10.0	
Sodium	20	18700	18400	2
Thallium	20	43.8J	36.4J	
Vanadium	20	20.6J	20.4J	
Zinc	20	66.4	48.3	32*

* RPD outside QC Limits

SAMPLE NO.

103459DUP

FORM VI INORGANIC-1
DUPLICATES

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Matrix: Water Concentration Units: ug/L

Percent Moisture: Basis: Wet

Analyte	Control Limit	Sample	Duplicate	RPD
Aluminum	20	<200	<200	
Antimony	20	<60.0	<60.0	
Arsenic	20	<10.0	<10.0	
Barium	20	<200	70.0J	
Beryllium	20	<5.0	<5.0	
Boron	20	85.2	85.8	1
Cadmium	20	<2.5	<2.5	
Calcium	20	60800	60800	0
Chromium	20	<10.0	<10.0	
Cobalt	20	<50.0	<50.0	
Copper	20	<25.0	3.5J	
Iron	20	<100	20.6J	
Lead	20	<5.0	<5.0	
Magnesium	20	3690	3650	1
Manganese	20	<10.0	<10.0	
Nickel	20	<40.0	<40.0	
Potassium	20	18400	18500	0
Selenium	20	<10.0	<10.0	
Silver	20	<10.0	<10.0	
Sodium	20	49600	50600	2
Thallium	20	<10.0	<10.0	
Vanadium	20	<50.0	<50.0	
Zinc	20	<20.0	<20.0	

SAMPLE NO.

104208DUP

FORM VI INORGANIC-1
DUPLICATES

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Matrix: Water Concentration Units: ug/L

Percent Moisture: Basis: Wet

Analyte	Control Limit	Sample	Duplicate	RPD
Aluminum, Dissolved	20	<200	<200	
Antimony, Dissolved	20	<60.0	<60.0	
Arsenic, Dissolved	20	<10.0	<10.0	
Barium, Dissolved	20	7.8J	7.7J	
Beryllium, Dissolved	20	<5.0	<5.0	
Boron, Dissolved	20	19.8J	16.6J	
Cadmium, Dissolved	20	0.081J	<2.5	
Calcium, Dissolved	20	10000	9920	1
Chromium, Dissolved	20	<10.0	<10.0	
Cobalt, Dissolved	20	<50.0	<50.0	
Copper, Dissolved	20	4.0J	3.3J	
Iron, Dissolved	20	<100	<100	
Lead, Dissolved	20	<5.0	<5.0	
Magnesium, Dissolved	20	3420	3360	2
Manganese, Dissolved	20	7.6J	7.6J	
Nickel, Dissolved	20	1.9J	2.6J	
Potassium, Dissolved	20	1240J	974J	
Selenium, Dissolved	20	<10.0	<10.0	
Silver, Dissolved	20	<10.0	<10.0	
Sodium, Dissolved	20	7630	7490	2
Thallium, Dissolved	20	<10.0	<10.0	
Vanadium, Dissolved	20	<50.0	<50.0	
Zinc, Dissolved	20	<20.0	<20.0	

SAMPLE NO.

103953DUP

FORM VI INORGANIC-1
DUPLICATES

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Matrix: Water Concentration Units: ug/L

Percent Moisture: Basis: Wet

Analyte	Control Limit	Sample	Duplicate	RPD
Aluminum	20	<200	31.3J	
Antimony	20	<60.0	<60.0	
Arsenic	20	<10.0	<10.0	
Barium	20	18.3J	18.2J	
Beryllium	20	<5.0	<5.0	
Boron	20	5.5J	4.6J	
Cadmium	20	<2.5	<2.5	
Calcium	20	8630	8390	3
Chromium	20	4.8J	5.7J	
Cobalt	20	<50.0	<50.0	
Copper	20	<25.0	<25.0	
Iron	20	38.5J	37.2J	
Lead	20	<5.0	<5.0	
Magnesium	20	3740	3680	2
Manganese	20	3.9J	4.2J	
Nickel	20	6.8J	7.1J	
Potassium	20	874J	1030J	
Selenium	20	<10.0	<10.0	
Silver	20	<10.0	<10.0	
Sodium	20	13900	7680	58*
Thallium	20	<10.0	<10.0	
Vanadium	20	<50.0	<50.0	
Zinc	20	<20.0	<20.0	

* RPD outside QC Limits

SAMPLE NO.

103462LCS

FORM VII INORGANIC-1
LABORATORY CONTROL SAMPLE

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Matrix: Water

Analyte	Units	True	Found	%R	Limits	
Aluminum	ug/L	5000	4940	99	80	120
Antimony	ug/L	750	736	98	80	120
Arsenic	ug/L	500	479	96	80	120
Barium	ug/L	500	501	100	80	120
Beryllium	ug/L	50.0	50.0	100	80	120
Boron	ug/L	2500	2440	98	80	120
Cadmium	ug/L	50.0	49.0	98	80	120
Calcium	ug/L	25000	24600	98	80	120
Chromium	ug/L	250	250	100	80	120
Cobalt	ug/L	500	499	100	80	120
Copper	ug/L	250	252	101	80	120
Iron	ug/L	2000	1990	99	80	120
Lead	ug/L	500	493	99	80	120
Magnesium	ug/L	25000	23800	95	80	120
Manganese	ug/L	250	249	100	80	120
Nickel	ug/L	250	247	99	80	120
Potassium	ug/L	50000	49300	99	80	120
Selenium	ug/L	750	722	96	80	120
Silver	ug/L	250	240	96	80	120
Sodium	ug/L	50000	55100	110	80	120
Thallium	ug/L	750	749	100	80	120
Vanadium	ug/L	500	487	97	80	120
Zinc	ug/L	1000	976	98	80	120

SAMPLE NO.

103458LCS

FORM VII INORGANIC-1
LABORATORY CONTROL SAMPLE

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Matrix: Water

Analyte	Units	True	Found	%R	Limits	
Aluminum	ug/L	5000	4660	93	80	120
Antimony	ug/L	750	724	96	80	120
Arsenic	ug/L	500	476	95	80	120
Barium	ug/L	500	480	96	80	120
Beryllium	ug/L	50.0	47.3	95	80	120
Boron	ug/L	2500	2380	95	80	120
Cadmium	ug/L	50.0	48.5	97	80	120
Calcium	ug/L	25000	23600	95	80	120
Chromium	ug/L	250	254	101	80	120
Cobalt	ug/L	500	478	96	80	120
Copper	ug/L	250	234	94	80	120
Iron	ug/L	2000	1840	92	80	120
Lead	ug/L	500	474	95	80	120
Magnesium	ug/L	25000	23800	95	80	120
Manganese	ug/L	250	230	92	80	120
Nickel	ug/L	250	243	97	80	120
Potassium	ug/L	50000	44900	90	80	120
Selenium	ug/L	750	732	98	80	120
Silver	ug/L	250	224	90	80	120
Sodium	ug/L	50000	48800	98	80	120
Thallium	ug/L	750	725	97	80	120
Vanadium	ug/L	500	466	93	80	120
Zinc	ug/L	1000	961	96	80	120

SAMPLE NO.

104206LCS

FORM VII INORGANIC-1
LABORATORY CONTROL SAMPLE

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Matrix: Water

Analyte	Units	True	Found	%R	Limits	
Aluminum, Dissolved	ug/L	5000	4890	98	80	120
Antimony, Dissolved	ug/L	750	725	97	80	120
Arsenic, Dissolved	ug/L	500	476	95	80	120
Barium, Dissolved	ug/L	500	489	98	80	120
Beryllium, Dissolved	ug/L	50.0	47.4	95	80	120
Boron, Dissolved	ug/L	2500	2400	96	80	120
Cadmium, Dissolved	ug/L	50.0	48.2	96	80	120
Calcium, Dissolved	ug/L	25000	24200	97	80	120
Chromium, Dissolved	ug/L	250	247	99	80	120
Cobalt, Dissolved	ug/L	500	486	97	80	120
Copper, Dissolved	ug/L	250	244	97	80	120
Iron, Dissolved	ug/L	2000	1940	97	80	120
Lead, Dissolved	ug/L	500	481	96	80	120
Magnesium, Dissolved	ug/L	25000	23800	95	80	120
Manganese, Dissolved	ug/L	250	241	96	80	120
Nickel, Dissolved	ug/L	250	245	98	80	120
Potassium, Dissolved	ug/L	50000	47700	95	80	120
Selenium, Dissolved	ug/L	750	737	98	80	120
Silver, Dissolved	ug/L	250	243	97	80	120
Sodium, Dissolved	ug/L	50000	49700	99	80	120
Thallium, Dissolved	ug/L	750	736	98	80	120
Vanadium, Dissolved	ug/L	500	491	98	80	120
Zinc, Dissolved	ug/L	1000	962	96	80	120

SAMPLE NO.

103952LCS

FORM VII INORGANIC-1
LABORATORY CONTROL SAMPLE

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Matrix: Water

Analyte	Units	True	Found	%R	Limits	
Aluminum	ug/L	5000	5160	103	80	120
Antimony	ug/L	750	782	104	80	120
Arsenic	ug/L	500	523	105	80	120
Barium	ug/L	500	522	104	80	120
Beryllium	ug/L	50.0	54.0	108	80	120
Boron	ug/L	2500	2640	105	80	120
Cadmium	ug/L	50.0	52.7	105	80	120
Calcium	ug/L	25000	27500	110	80	120
Chromium	ug/L	250	253	101	80	120
Cobalt	ug/L	500	516	103	80	120
Copper	ug/L	250	256	103	80	120
Iron	ug/L	2000	2170	108	80	120
Lead	ug/L	500	568	114	80	120
Magnesium	ug/L	25000	26200	105	80	120
Manganese	ug/L	250	278	111	80	120
Nickel	ug/L	250	262	105	80	120
Potassium	ug/L	50000	48100	96	80	120
Selenium	ug/L	750	777	104	80	120
Silver	ug/L	250	261	104	80	120
Sodium	ug/L	50000	50000	100	80	120
Thallium	ug/L	750	788	105	80	120
Vanadium	ug/L	500	560	112	80	120
Zinc	ug/L	1000	1100	110	80	120

SAMPLE NO.

103502SD

FORM VIII INORGANIC-1
SERIAL DILUTIONS

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Matrix: Water Parent Sample ID: MW-11A

Analyte	Units	Initial Sample Result	Serial Dilution Result	% Difference	Control Limit %D
Aluminum	ug/L	1010	1050	4.1	10
Antimony	ug/L	3.0U	15.2U		10
Arsenic	ug/L	75.9	77.2	1.7	10
Barium	ug/L	1100	1100	0.2	10
Beryllium	ug/L	0.57U	2.8U		10
Boron	ug/L	38.7J	50.4J	30.2*	10
Cadmium	ug/L	27.8	23.6	15.1*	10
Calcium	ug/L	56600	59400	4.8	10
Cobalt	ug/L	18.3J	18.8J	2.8	10
Copper	ug/L	70.7	64.6J	8.8	10
Lead	ug/L	19.3	12.3J	36.1*	10
Magnesium	ug/L	11200	11600	4.1	10
Nickel	ug/L	0.88U	4.4U		10
Potassium	ug/L	14300	13800J	3.4	10
Selenium	ug/L	8.5J	31.2U		10
Silver	ug/L	3.6U	17.8U		10
Sodium	ug/L	18700	19900J	6.7	10
Vanadium	ug/L	20.6J	25.5J	23.9*	10
Zinc	ug/L	66.4	65.4J	1.5	10

* Indicates that the % Difference exceeds the control limit.
No difference is calculated if either result is a non-detect.

06/08/2017 14:45

SAMPLE NO.

103498SD

FORM VIII INORGANIC-1
SERIAL DILUTIONS

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Matrix: Water Parent Sample ID: 7016368002

Analyte	Units	Initial Sample Result	Serial Dilution Result	% Difference	Control Limit %D
Aluminum	ug/L	13.4U	67.0U		10
Antimony	ug/L	3.0U	15.2U		10
Arsenic	ug/L	6.8U	33.8U		10
Barium	ug/L	69.0J	69.7J	1.0	10
Beryllium	ug/L	0.57U	2.8U		10
Boron	ug/L	85.2	98.2J	15.3*	10
Cadmium	ug/L	0.063U	0.32U		10
Calcium	ug/L	60800	61100	0.5	10
Chromium	ug/L	1.6U	7.8U		10
Cobalt	ug/L	0.63U	3.1U		10
Copper	ug/L	3.6J	12.4U		10
Iron	ug/L	13.7J	54.3U		10
Lead	ug/L	1.3U	6.4U		10
Magnesium	ug/L	3690	3900	5.7	10
Manganese	ug/L	0.65U	3.2U		10
Nickel	ug/L	0.88U	4.4U		10
Potassium	ug/L	18400	19300J	5.0	10
Selenium	ug/L	6.2U	31.2U		10
Silver	ug/L	3.6U	17.8U		10
Sodium	ug/L	49600	49900	0.7	10
Thallium	ug/L	3.6U	17.8U		10
Vanadium	ug/L	0.80U	4.0U		10
Zinc	ug/L	1.2U	5.9U		10

* Indicates that the % Difference exceeds the control limit.
No difference is calculated if either result is a non-detect.

SAMPLE NO.

104207SD

FORM VIII INORGANIC-1
SERIAL DILUTIONS

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Matrix: Water Parent Sample ID: MW-11B

Analyte	Units	Initial Sample Result	Serial Dilution Result	% Difference	Control Limit %D
Aluminum, Dissolved	ug/L	13.4U	67.0U		10
Antimony, Dissolved	ug/L	3.0U	15.2U		10
Arsenic, Dissolved	ug/L	6.8U	33.8U		10
Barium, Dissolved	ug/L	7.8J	7.0J	10.4*	10
Beryllium, Dissolved	ug/L	0.57U	2.8U		10
Boron, Dissolved	ug/L	19.8J	34.6J	74.7*	10
Cadmium, Dissolved	ug/L	0.081J	0.32U		10
Calcium, Dissolved	ug/L	10000	6140	38.9*	10
Chromium, Dissolved	ug/L	1.6U	7.8U		10
Cobalt, Dissolved	ug/L	0.63U	3.1U		10
Copper, Dissolved	ug/L	4.0J	12.4U		10
Iron, Dissolved	ug/L	10.9U	54.3U		10
Lead, Dissolved	ug/L	1.3U	6.4U		10
Magnesium, Dissolved	ug/L	3420	2180	36.3*	10
Manganese, Dissolved	ug/L	7.6J	5.0J	34.5*	10
Nickel, Dissolved	ug/L	1.9J	4.4U		10
Potassium, Dissolved	ug/L	1240J	4150U		10
Selenium, Dissolved	ug/L	6.2U	31.2U		10
Silver, Dissolved	ug/L	3.6U	17.8U		10
Sodium, Dissolved	ug/L	7630	4700J	38.4*	10
Thallium, Dissolved	ug/L	3.6U	17.8U		10
Vanadium, Dissolved	ug/L	0.80U	4.0U		10
Zinc, Dissolved	ug/L	1.2U	5.9U		10

* Indicates that the % Difference exceeds the control limit.
No difference is calculated if either result is a non-detect.

SAMPLE NO.

104002SD

FORM VIII INORGANIC-1
SERIAL DILUTIONS

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Matrix: Water Parent Sample ID: MW-3C

Analyte	Units	Initial Sample Result	Serial Dilution Result	% Difference	Control Limit %D
Aluminum	ug/L	13.4U	67.0U		10
Antimony	ug/L	3.0U	15.2U		10
Arsenic	ug/L	6.8U	33.8U		10
Barium	ug/L	18.3J	15.9J	12.7*	10
Beryllium	ug/L	0.57U	2.8U		10
Boron	ug/L	5.5J	17.2U		10
Cadmium	ug/L	0.063U	0.32U		10
Calcium	ug/L	8630	8560	0.9	10
Chromium	ug/L	4.8J	7.8U		10
Cobalt	ug/L	0.63U	3.1U		10
Copper	ug/L	2.5U	12.4U		10
Iron	ug/L	38.5J	54.3U		10
Lead	ug/L	1.3U	6.4U		10
Magnesium	ug/L	3740	3540	5.5	10
Manganese	ug/L	3.9J	3.5J	8.8	10
Nickel	ug/L	6.8J	6.4J	6.1	10
Potassium	ug/L	874J	4150U		10
Selenium	ug/L	6.2U	31.2U		10
Silver	ug/L	3.6U	17.8U		10
Sodium	ug/L	13900	373U		10
Thallium	ug/L	3.6U	17.8U		10
Vanadium	ug/L	0.80U	4.0U		10
Zinc	ug/L	1.2U	5.9U		10

* Indicates that the % Difference exceeds the control limit.
No difference is calculated if either result is a non-detect.

06/08/2017 14:04

FORM IX INORGANIC-1
INSTRUMENT DETECTION LIMITS

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Preparation Method: None Instrument ID: 70ICP1

Concentration Units: ug/L

Analyte	PQL	IDL	IDL Date
Aluminum	200	10.8	10/01/2016
Antimony	60.0	3.9	10/01/2016
Arsenic	10.0	3.1	10/01/2016
Barium	200	0.20	10/01/2016
Beryllium	5.0	0.30	10/01/2016
Boron	50.0	2.6	10/01/2016
Cadmium	2.5	0.20	10/01/2016
Calcium	200	17.0	10/01/2016
Chromium	10.0	0.80	10/01/2016
Cobalt	50.0	0.30	10/01/2016
Copper	25.0	0.70	10/01/2016
Iron	20.0	10.2	10/01/2016
Lead	5.0	2.1	10/01/2016
Magnesium	200	35.0	10/01/2016
Manganese	10.0	1.1	10/01/2016
Nickel	40.0	0.40	10/01/2016
Potassium	5000	320	10/01/2016
Selenium	10.0	4.8	10/01/2016
Silver	10.0	1.6	10/01/2016
Sodium	5000	762	10/01/2016
Thallium	10.0	2.2	10/01/2016
Vanadium	50.0	1.0	10/01/2016
Zinc	20.0	1.2	10/01/2016

FORM IX INORGANIC-2
METHOD DETECTION LIMITS

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Preparation Method: EPA 3005A Instrument ID: 70ICP1

Concentration Units: ug/L

Analyte	PQL	MDL	MDL Date
Aluminum	200	13.4	01/23/2017
Antimony	60.0	3.0	01/23/2017
Arsenic	10.0	6.8	01/23/2017
Barium	200	1.2	01/23/2017
Beryllium	5.0	0.57	01/23/2017
Boron	50.0	3.4	01/23/2017
Cadmium	2.5	0.063	01/23/2017
Calcium	200	39.4	01/23/2017
Chromium	10.0	1.6	01/23/2017
Cobalt	50.0	0.63	01/23/2017
Copper	25.0	2.5	01/23/2017
Iron	100	10.9	01/23/2017
Lead	5.0	1.3	01/23/2017
Magnesium	200	70.4	01/23/2017
Manganese	10.0	0.65	01/23/2017
Nickel	40.0	0.88	01/23/2017
Potassium	5000	830	01/23/2017
Selenium	10.0	6.2	01/23/2017
Silver	10.0	3.6	01/23/2017
Sodium	5000	74.6	01/23/2017
Thallium	10.0	3.6	01/23/2017
Vanadium	50.0	0.80	01/23/2017
Zinc	20.0	1.2	01/23/2017

FORM IX INORGANIC-1
INSTRUMENT DETECTION LIMITS

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Preparation Method: None Instrument ID: 70ICP2

Concentration Units: ug/L

Analyte	PQL	IDL	IDL Date
Aluminum	200	29.7	12/15/2016
Antimony	60.0	1.3	12/15/2016
Arsenic	10.0	2.0	12/15/2016
Barium	200	0.10	12/15/2016
Beryllium	5.0	0.10	12/15/2016
Boron	50.0	3.6	12/15/2016
Cadmium	2.5	0.20	12/15/2016
Calcium	200	14.1	12/15/2016
Chromium	10.0	1.3	12/15/2016
Cobalt	50.0	0.20	12/15/2016
Copper	25.0	0.40	12/15/2016
Iron	20.0	2.7	12/15/2016
Lead	5.0	1.2	12/15/2016
Magnesium	200	18.4	12/15/2016
Manganese	10.0	0.10	12/15/2016
Nickel	40.0	0.30	12/15/2016
Potassium	5000	122	12/15/2016
Selenium	10.0	2.4	12/15/2016
Silver	10.0	0.80	12/15/2016
Sodium	5000	70.8	12/15/2016
Thallium	10.0	1.1	12/15/2016
Vanadium	50.0	0.60	12/15/2016
Zinc	20.0	0.40	12/15/2016

FORM IX INORGANIC-2
METHOD DETECTION LIMITS

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Preparation Method: EPA 6010C Instrument ID: 70ICP2

Concentration Units: ug/L

Analyte	PQL	MDL	MDL Date
Aluminum	200	13.4	01/23/2017
Antimony	60.0	3.0	01/23/2017
Arsenic	10.0	6.8	01/23/2017
Barium	200	1.2	01/23/2017
Beryllium	5.0	0.57	01/23/2017
Boron	50.0	3.4	01/23/2017
Cadmium	2.5	0.063	01/23/2017
Calcium	200	39.4	01/23/2017
Chromium	10.0	1.6	01/23/2017
Cobalt	50.0	0.63	01/23/2017
Copper	25.0	2.5	01/23/2017
Iron	100	10.9	01/23/2017
Lead	5.0	1.3	01/23/2017
Magnesium	200	70.4	01/23/2017
Manganese	10.0	0.65	01/23/2017
Nickel	40.0	0.88	01/23/2017
Potassium	5000	830	01/23/2017
Selenium	10.0	6.2	01/23/2017
Silver	10.0	3.6	01/23/2017
Sodium	5000	74.6	01/23/2017
Thallium	10.0	3.6	01/23/2017
Vanadium	50.0	0.80	01/23/2017
Zinc	20.0	1.2	01/23/2017

FORM IX INORGANIC-3
METHOD DETECTION LIMITS

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Preparation Method: EPA 3005A Instrument ID: 70ICP2

Concentration Units: ug/L

Analyte	PQL	MDL	MDL Date
Aluminum	200	13.4	01/23/2017
Antimony	60.0	3.0	01/23/2017
Arsenic	10.0	6.8	01/23/2017
Barium	200	1.2	01/23/2017
Beryllium	5.0	0.57	01/23/2017
Boron	50.0	3.4	01/23/2017
Cadmium	2.5	0.063	01/23/2017
Calcium	200	39.4	01/23/2017
Chromium	10.0	1.6	01/23/2017
Cobalt	50.0	0.63	01/23/2017
Copper	25.0	2.5	01/23/2017
Iron	100	10.9	01/23/2017
Lead	5.0	1.3	01/23/2017
Magnesium	200	70.4	01/23/2017
Manganese	10.0	0.65	01/23/2017
Nickel	40.0	0.88	01/23/2017
Potassium	5000	830	01/23/2017
Selenium	10.0	6.2	01/23/2017
Silver	10.0	3.6	01/23/2017
Sodium	5000	74.6	01/23/2017
Thallium	10.0	3.6	01/23/2017
Vanadium	50.0	0.80	01/23/2017
Zinc	20.0	1.2	01/23/2017

Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
Ag 328.068 {103}	☒	3	Ni	0.000000	0.000000	No
			V	-0.002253	0.000000	No
			Al	-0.000000	0.000000	No
Al 308.215 {109}	☒	1	V	0.037601	0.000000	No
As 189.042 {478}	☒	3	Cr	-0.000132	0.000000	No
			Fe	-0.000089	0.000000	No
			Al	0.000006	0.000000	No
Au 267.595 {126}	☒	12	Fe	-0.000275	0.000000	No
			Na	-0.000070	0.000000	No
			Cr	-0.001333	0.000000	No
			Cu	-0.001489	0.000000	No
			Cd	-0.001708	0.000000	No
			Be	-0.001686	0.000000	No
			Ni	-0.001599	0.000000	No
			Zn	-0.003827	0.000000	No
			Mn	-0.003859	0.000000	No
			V	-0.000839	0.000000	No
			Al	-0.000088	0.000000	No
			Mg	-0.000055	0.000000	No
B 208.959 {461}	☒	2	Co	0.028090	0.000000	No
			V	0.002621	0.000000	No
Ba 233.527 {445}	☒	3	Co	0.025595	0.000000	No
			Fe	-0.000079	0.000000	No
			V	-0.000707	0.000000	No
Ba 455.403 { 74}	☒	None				
Ba 493.409 { 68}	☒	None				
Be 313.042 {108}	☒	12	V	0.000063	0.000000	No
			Fe	-0.000001	0.000000	No
			Na	-0.000000	0.000000	No
			Cr	-0.000004	0.000000	No
			Cu	-0.000002	0.000000	No
			Cd	-0.000002	0.000000	No
			Ni	0.000006	0.000000	No
			Zn	-0.000005	0.000000	No
			Mn	-0.000009	0.000000	No
			Al	-0.000000	0.000000	No
			Mg	-0.000000	0.000000	No
			Se	-0.000000	0.000000	No
Ca 315.887 {107}	☒	12	Fe	0.000088	0.000000	No
			Na	0.000027	0.000000	No
			Cr	-0.000871	0.000000	No
			Cu	0.000504	0.000000	No
			Cd	0.000609	0.000000	No
			Be	0.000266	0.000000	No
			Ni	0.000454	0.000000	No
			Zn	0.001626	0.000000	No
			Mn	0.001781	0.000000	No
			V	0.001066	0.000000	No
			Al	0.000054	0.000000	No
			Mg	0.000022	0.000000	No
Cd 226.502 {449}	☒	13	Fe	0.000074	0.000000	No
			V	0.000004	0.000000	No
			Co	-0.000375	0.000000	No
			Na	-0.000000	0.000000	No

Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
			Cr	-0.000024	0.000000	No
			Cu	-0.000003	0.000000	No
			Be	0.000020	0.000000	No
			Ni	-0.000005	0.000000	No
			Zn	0.000005	0.000000	No
			Mn	0.000007	0.000000	No
			Al	-0.000003	0.000000	No
			Mg	-0.000000	0.000000	No
			Se	0.000001	0.000000	No
Co 228.616 {447}	☒	8	Fe	0.000013	0.000000	No
			Na	-0.000001	0.000000	No
			Cr	-0.000104	0.000000	No
			Cd	-0.000006	0.000000	No
			Be	-0.000006	0.000000	No
			Ni	0.000104	0.000000	No
			Mn	-0.000012	0.000000	No
			Al	-0.000000	0.000000	No
Cr 283.563 {119}	☒	2	Fe	0.001111	0.000000	No
			Al	0.000002	0.000000	No
Cu 224.700 {450}	☒	1	Fe	0.000555	0.000000	No
Cu 324.754 {104}	☒	None				
Cu 327.396 {103}	☒	None				
Fe 259.940 {130}	☒	12	Na	0.000006	0.000000	No
			Cr	0.000572	0.000000	No
			Cu	0.000137	0.000000	No
			Cd	0.000197	0.000000	No
			Be	0.000114	0.000000	No
			Ni	0.000147	0.000000	No
			Zn	0.000326	0.000000	No
			Mn	0.000120	0.000000	No
			V	0.000338	0.000000	No
			Al	0.000007	0.000000	No
			Mg	0.000017	0.000000	No
			Se	-0.000061	0.000000	No
Fe 271.441 {124}	☒	None				
K 769.896 { 44}	☒	13	Al	0.000055	0.000000	No
			Co	0.042192	0.000000	No
			Cr	0.002242	0.000000	No
			Mn	-0.007070	0.000000	No
			V	-0.003441	0.000000	No
			Fe	0.000111	0.000000	No
			Na	0.000268	0.000000	No
			Cu	0.002418	0.000000	No
			Be	0.000788	0.000000	No
			Ni	0.000768	0.000000	No
			Zn	-0.003255	0.000000	No
			Mg	-0.000105	0.000000	No
			Se	-0.002660	0.000000	No
Mg 279.079 {121}	☒	10	Fe	-0.000982	0.000000	No
			Na	-0.000046	0.000000	No
			Cr	-0.000905	0.000000	No
			Cu	-0.001001	0.000000	No
			Cd	-0.000694	0.000000	No
			Be	-0.000833	0.000000	No

Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
			Ni	-0.000911	0.000000	No
			Mn	-0.002844	0.000000	No
			Al	-0.000057	0.000000	No
			Se	-0.000627	0.000000	No
Mn 257.610 {131}	☒	11	Mg	0.000035	0.000000	No
			Fe	-0.000005	0.000000	No
			Na	0.000000	0.000000	No
			Cr	-0.000032	0.000000	No
			Cu	-0.000001	0.000000	No
			Cd	-0.000002	0.000000	No
			Ni	0.000001	0.000000	No
			Zn	-0.000002	0.000000	No
			V	-0.000001	0.000000	No
			Al	-0.000001	0.000000	No
			Se	-0.000001	0.000000	No
Mo 202.030 {467}	☒	13	Fe	-0.000012	0.000000	No
			Na	-0.000000	0.000000	No
			Cr	0.000048	0.000000	No
			Cu	0.000003	0.000000	No
			Cd	-0.000004	0.000000	No
			Be	-0.000001	0.000000	No
			Ni	-0.000006	0.000000	No
			Zn	0.000004	0.000000	No
			Mn	-0.000051	0.000000	No
			V	0.000014	0.000000	No
			Al	-0.000003	0.000000	No
			Mg	-0.000001	0.000000	No
			Se	0.000004	0.000000	No
Na 330.237 {102}	☒	None				
Na 588.995 { 57}	☒	13	Co	0.053334	0.000000	No
			V	0.003967	0.000000	No
			Fe	0.000165	0.000000	No
			Cr	0.005793	0.000000	No
			Cu	0.002964	0.000000	No
			Cd	0.003506	0.000000	No
			Be	0.002993	0.000000	No
			Ni	0.002806	0.000000	No
			Zn	0.005441	0.000000	No
			Mn	0.005071	0.000000	No
			Al	0.000086	0.000000	No
			Mg	0.000124	0.000000	No
			Se	0.002013	0.000000	No
Ni 231.604 {445}	☒	12	Fe	-0.000045	0.000000	No
			Na	0.000002	0.000000	No
			Cr	0.000005	0.000000	No
			Cu	0.000012	0.000000	No
			Cd	0.000011	0.000000	No
			Be	-0.001965	0.000000	No
			Zn	0.000039	0.000000	No
			Mn	0.000052	0.000000	No
			V	-0.000002	0.000000	No
			Al	0.000004	0.000000	No
			Mg	0.000004	0.000000	No
			Se	0.000007	0.000000	No

Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
P 177.495 {490}	☒	2	Cu	-0.065358	0.000000	No
			Ni	0.001355	0.000000	No
Pb 220.353 {453}	☐	7	Fe	0.000032	0.000000	No
			Al	0.000216	0.000000	No
			Cu	0.001065	0.000000	No
			Co	-0.000693	0.000000	No
			Ni	0.000196	0.000000	No
			Mn	0.067257	0.000000	No
			V	0.000792	0.000000	No
Sb 206.833 {463}	☒	2	Cr	0.018033	0.000000	No
			Fe	0.000077	0.000000	No
Se 196.090 {472}	☒	5	Fe	-0.000009	0.000000	No
			Al	0.000006	0.000000	No
			Mn	0.000579	0.000000	No
			V	0.000017	0.000000	No
			Cr	-0.000011	0.000000	No
Si 288.158 {117}	☒	5	Co	0.007246	0.000000	No
			Cr	-0.008216	0.000000	No
			V	0.037740	0.000000	No
			Na	0.000031	0.000000	No
			Cd	-0.001153	0.000000	No
Sn 189.989 {477}	☒	13	Fe	-0.000006	0.000000	No
			Na	-0.000004	0.000000	No
			Cr	-0.000140	0.000000	No
			Cu	-0.000081	0.000000	No
			Cd	-0.000080	0.000000	No
			Be	-0.000075	0.000000	No
			Ni	-0.000079	0.000000	No
			Zn	-0.000220	0.000000	No
			Mn	-0.000226	0.000000	No
			V	-0.000084	0.000000	No
			Al	0.000030	0.000000	No
			Mg	-0.000003	0.000000	No
			Se	-0.000025	0.000000	No
Sr 421.552 { 80}2	☒	None				
Ti 334.941 {101}	☒	1	Mg	0.000026	0.000000	No
Tl 190.856 {477}	☒	5	Co	0.003212	0.000000	No
			V	0.002622	0.000000	No
			Fe	-0.000009	0.000000	No
			Al	-0.000002	0.000000	No
			Cr	0.000173	0.000000	No
V 292.402 {115}	☒	10	Fe	0.000036	0.000000	No
			Na	0.000001	0.000000	No
			Cr	-0.002051	0.000000	No
			Be	0.000007	0.000000	No
			Ni	0.000027	0.000000	No
			Zn	0.000033	0.000000	No
			Mn	0.000014	0.000000	No
			Al	0.000000	0.000000	No
			Mg	0.000001	0.000000	No
			Se	-0.000021	0.000000	No
Y 224.306 {450}*	☒	None				
Y 371.030 { 91}*	☒	None				
Y 371.030 { 91}2*	☒	None				

	Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
	Zn 213.856 {457}	☒	15	Fe	0.000096	0.000000	No
				Al	0.000004	0.000000	No
				Co	0.012231	0.000000	No
				Cu	0.001169	0.000000	No
				Cr	-0.000038	0.000000	No
				Ni	0.006309	0.000000	No
				V	-0.000051	0.000000	No
				Pb	0.000000	0.000000	No
				Ba	0.002078	0.000000	No
				Na	-0.000000	0.000000	No
				Cd	-0.000037	0.000000	No
				Be	-0.000038	0.000000	No
				Mn	-0.000050	0.000000	No
				Mg	-0.000000	0.000000	No
				Se	-0.000011	0.000000	No

Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
Ag 328.068 {103}	☒	4	Ni	0.000000	0.000000	No
			V	-0.004804	0.000000	No
			Al	0.000000	0.000000	No
			Fe	-0.000190	0.000000	No
Al 308.215 {109}	☒	1	V	0.098354	0.000000	No
As 189.042 {478}	☒	3	Cr	-0.000338	0.000000	No
			Fe	-0.000198	0.000000	No
			Al	-0.000014	0.000000	No
Au 267.595 {126}	☒	2	Mg	0.000759	0.000000	No
			V	0.000019	0.000000	No
B 208.959 {461}	☒	2	Co	0.028090	0.000000	No
			V	0.002337	0.000000	No
Ba 233.527 {445}	☒	2	Co	0.025595	0.000000	No
			V	-0.000891	0.000000	No
Ba 455.403 { 74}	☒	None				
Ba 493.409 { 68}	☒	None				
Be 313.042 {108}	☒	11	V	0.000730	0.000000	No
			Na	0.000000	0.000000	No
			Mg	0.000000	0.000000	No
			Al	0.000000	0.000000	No
			Cr	0.000000	0.000000	No
			Mn	0.000016	0.000000	No
			Fe	0.000000	0.000000	No
			Ni	0.000018	0.000000	No
			Cu	0.000001	0.000000	No
			Zn	0.000017	0.000000	No
			Cd	-0.000004	0.000000	No
Ca 315.887 {107}	☒	12	Be	-0.003010	0.000000	No
			Na	-0.000056	0.000000	No
			Mg	-0.000045	0.000000	No
			Al	-0.000020	0.000000	No
			V	-0.000339	0.000000	No
			Cr	-0.002145	0.000000	No
			Mn	-0.002153	0.000000	No
			Fe	-0.000150	0.000000	No
			Ni	-0.000892	0.000000	No
			Cu	-0.000815	0.000000	No
			Zn	-0.002665	0.000000	No
			Cd	-0.000782	0.000000	No
Cd 226.502 {449}	☒	12	Fe	0.000065	0.000000	No
			V	0.000010	0.000000	No
			Co	-0.000375	0.000000	No
			Be	0.000016	0.000000	No
			Na	0.000000	0.000000	No
			Mg	0.000000	0.000000	No
			Al	-0.000004	0.000000	No
			Cr	-0.000030	0.000000	No
			Mn	0.000019	0.000000	No
			Ni	-0.000006	0.000000	No
			Cu	-0.000006	0.000000	No
			Zn	0.000009	0.000000	No
Co 228.616 {447}	☒	12	Be	0.000004	0.000000	No
			Na	-0.000001	0.000000	No
			Mg	-0.000001	0.000000	No

Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
			Al	0.000000	0.000000	No
			V	0.000012	0.000000	No
			Cr	-0.000010	0.000000	No
			Mn	0.000009	0.000000	No
			Fe	0.000009	0.000000	No
			Ni	0.000088	0.000000	No
			Cu	0.000003	0.000000	No
			Zn	-0.000011	0.000000	No
			Cd	-0.000015	0.000000	No
Cr 283.563 {119}	☒	2	Fe	0.001225	0.000000	No
			Al	0.000002	0.000000	No
Cu 224.700 {450}	☒	None				
Cu 324.754 {104}	☒	None				
Cu 327.396 {103}	☒	None				
Fe 259.940 {130}	☒	13	Ca	0.000167	0.000000	No
			Co	0.002076	0.000000	No
			Be	-0.000113	0.000000	No
			Na	-0.000008	0.000000	No
			Mg	0.000007	0.000000	No
			Al	-0.000010	0.000000	No
			V	-0.000089	0.000000	No
			Cr	0.000313	0.000000	No
			Mn	-0.000551	0.000000	No
			Ni	-0.000271	0.000000	No
			Cu	-0.000006	0.000000	No
			Zn	-0.000715	0.000000	No
			Cd	-0.000172	0.000000	No
Fe 271.441 {124}	☒	None				
K 769.896 { 44}	☒	16	Al	-0.006837	0.000000	No
			Co	-0.078073	0.000000	No
			Cr	-0.113956	0.000000	No
			Mn	-0.127587	0.000000	No
			V	-0.101448	0.000000	No
			Ca	-0.007424	0.000000	No
			Fe	-0.009012	0.000000	No
			Mg	-0.007766	0.000000	No
			Ba	-0.161050	0.000000	No
			Cd	-0.127932	0.000000	No
			Cu	-0.131850	0.000000	No
			Ni	-0.116535	0.000000	No
			Pb	-0.268520	0.000000	No
			Zn	-0.130517	0.000000	No
			Be	-0.014758	0.000000	No
			Na	-0.000059	0.000000	No
Mg 279.079 {121}	☒	11	Be	-0.000886	0.000000	No
			Na	-0.000070	0.000000	No
			Al	-0.000074	0.000000	No
			V	-0.001030	0.000000	No
			Cr	-0.001341	0.000000	No
			Mn	-0.005157	0.000000	No
			Fe	-0.000523	0.000000	No
			Ni	-0.001667	0.000000	No
			Cu	-0.001095	0.000000	No
			Zn	-0.002828	0.000000	No

Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
			Cd	-0.001276	0.000000	No
Mn 257.610 {131}	☒	10	Mg	0.000020	0.000000	No
			Be	-0.000006	0.000000	No
			Na	0.000000	0.000000	No
			V	-0.000013	0.000000	No
			Cr	-0.000039	0.000000	No
			Fe	-0.000006	0.000000	No
			Ni	-0.000004	0.000000	No
			Cu	-0.000004	0.000000	No
			Zn	-0.000011	0.000000	No
			Cd	-0.000002	0.000000	No
Mo 202.030 {467}	☒	12	Be	0.000011	0.000000	No
			Na	0.000000	0.000000	No
			Mg	-0.000001	0.000000	No
			Al	-0.000005	0.000000	No
			V	0.000032	0.000000	No
			Cr	0.000044	0.000000	No
			Mn	-0.000108	0.000000	No
			Fe	-0.000011	0.000000	No
			Ni	0.000002	0.000000	No
			Cu	-0.000011	0.000000	No
			Zn	-0.000084	0.000000	No
			Cd	-0.000004	0.000000	No
Na 330.237 {102}	☒	11	Be	-0.016305	0.000000	No
			Mg	-0.003953	0.000000	No
			Al	-0.002699	0.000000	No
			V	-0.047668	0.000000	No
			Cr	-0.062292	0.000000	No
			Mn	-0.071226	0.000000	No
			Fe	-0.008158	0.000000	No
			Ni	-0.036196	0.000000	No
			Cu	0.017065	0.000000	No
			Zn	-0.499413	0.000000	No
			Cd	-0.028553	0.000000	No
Na 588.995 { 57}	☒	14	Co	0.003622	0.000000	No
			V	-0.076381	0.000000	No
			Al	-0.002212	0.000000	No
			Ca	-0.004239	0.000000	No
			Fe	-0.003907	0.000000	No
			Mg	-0.005335	0.000000	No
			Ba	-0.101164	0.000000	No
			Cd	-0.094447	0.000000	No
			Cr	-0.080948	0.000000	No
			Cu	-0.102405	0.000000	No
			Mn	-0.091095	0.000000	No
			Ni	-0.100071	0.000000	No
			Pb	-0.219265	0.000000	No
			Zn	-0.106898	0.000000	No
Ni 231.604 {445}	☒	11	Be	-0.001490	0.000000	No
			Na	-0.000001	0.000000	No
			Mg	0.000003	0.000000	No
			Al	0.000003	0.000000	No
			V	-0.000001	0.000000	No
			Cr	-0.000023	0.000000	No

Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
			Mn	0.000020	0.000000	No
			Fe	-0.000073	0.000000	No
			Cu	-0.000021	0.000000	No
			Zn	-0.000016	0.000000	No
			Cd	-0.000001	0.000000	No
P 177.495 {490}	☒	2	Cu	-0.012415	0.000000	No
			Ni	0.001143	0.000000	No
Pb 220.353 {453}	☐	7	Fe	0.013200	0.000000	No
			Al	-0.000022	0.000000	No
			Cu	-0.003728	0.000000	No
			Co	-0.000693	0.000000	No
			Ni	-0.059750	0.000000	No
			Mn	0.067257	0.000000	No
			V	0.000792	0.000000	No
Sb 206.833 {463}	☒	2	Cr	0.025609	0.000000	No
			Fe	0.000077	0.000000	No
Se 196.090 {472}	☒	5	Fe	-0.000009	0.000000	No
			Al	0.000018	0.000000	No
			Mn	0.000579	0.000000	No
			V	0.000017	0.000000	No
			Cr	-0.000034	0.000000	No
Si 288.158 {117}	☒	6	Co	0.011797	0.000000	No
			Cr	-0.012070	0.000000	No
			V	0.328992	0.000000	No
			Na	0.000039	0.000000	No
			Mg	0.000025	0.000000	No
			Al	0.000040	0.000000	No
Sn 189.989 {477}	☒	10	Be	-0.000014	0.000000	No
			Mg	-0.000002	0.000000	No
			Al	0.000031	0.000000	No
			V	0.000000	0.000000	No
			Cr	-0.000045	0.000000	No
			Mn	-0.000430	0.000000	No
			Fe	0.000001	0.000000	No
			Ni	-0.000011	0.000000	No
			Cu	-0.000006	0.000000	No
			Zn	-0.000051	0.000000	No
Sr 421.552 { 80}2	☒	None				
Ti 334.941 {101}	☒	None				
Tl 190.856 {477}	☒	5	Co	0.003212	0.000000	No
			V	0.001696	0.000000	No
			Fe	-0.000009	0.000000	No
			Al	-0.000002	0.000000	No
			Cr	0.000173	0.000000	No
V 292.402 {115}	☒	9	Be	-0.000003	0.000000	No
			Mg	-0.000001	0.000000	No
			Al	-0.000001	0.000000	No
			Cr	-0.002869	0.000000	No
			Mn	-0.000292	0.000000	No
			Fe	-0.000003	0.000000	No
			Cu	-0.000023	0.000000	No
			Zn	-0.000003	0.000000	No
			Cd	0.000003	0.000000	No
Y 224.306 {450}*	☒	None				

	Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
	Y 371.030 { 91}*	☒	None				
	Y 371.030 { 91}2*	☒	None				
	Zn 213.856 {457}	☒	14	Fe	0.000100	0.000000	No
				Al	0.000150	0.000000	No
				Co	0.012231	0.000000	No
				Cu	0.000559	0.000000	No
				Cr	0.000011	0.000000	No
				Ni	0.008325	0.000000	No
				V	-0.000021	0.000000	No
				Pb	0.000000	0.000000	No
				Ba	0.002078	0.000000	No
				Be	-0.000012	0.000000	No
				Na	0.000000	0.000000	No
				Mg	0.000001	0.000000	No
				Mn	0.000016	0.000000	No
				Cd	-0.000017	0.000000	No

FORM XI - INORGANIC-1
LINEAR DYNAMIC RANGES

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract : NORTH SEA LANDFILL

Instrument ID: 70ICP1 Effective Date:10/01/2016

Analyte	Concentration (ug/L)
Aluminum	500000
Antimony	10000
Arsenic	50000
Barium	50000
Beryllium	50000
Boron	20000
Cadmium	50000
Calcium	1000000
Chromium	50000
Cobalt	50000
Copper	50000
Iron	400000
Lead	50000
Magnesium	500000
Manganese	20000
Nickel	50000
Potassium	300000
Selenium	50000
Silver	5000
Sodium	1000000
Thallium	10000
Vanadium	50000
Zinc	20000

FORM XI - INORGANIC-1
LINEAR DYNAMIC RANGES

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract : NORTH SEA LANDFILL

Instrument ID: 70ICP2 Effective Date:10/01/2016

Analyte	Concentration (ug/L)
Aluminum	500000
Antimony	10000
Arsenic	50000
Barium	50000
Beryllium	50000
Boron	20000
Cadmium	50000
Calcium	1000000
Chromium	50000
Cobalt	50000
Copper	50000
Iron	400000
Lead	50000
Magnesium	500000
Manganese	20000
Nickel	50000
Potassium	300000
Selenium	50000
Silver	5000
Sodium	1000000
Thallium	10000
Vanadium	50000
Zinc	20000

FORM XII INORGANIC-1
PREPARATION LOG

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Preparation Method: EPA 3005A Batch: MPRP 2064

Lab Sample ID	Sample Name	Preparation Date	Initial Volume (mL)	Final Volume (mL)
103461	103461BLANK	04/25/2017	50	50
103462	103462LCS	04/25/2017	50	50
103463	103463DUP	04/25/2017	50	50
103464	103464MS	04/25/2017	50	50
7016438014	MW-11A	04/25/2017	50	50

FORM XII INORGANIC-1
PREPARATION LOG

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Preparation Method: EPA 3005A Batch: MPRP 2063

Lab Sample ID	Sample Name	Preparation Date	Initial Volume (mL)	Final Volume (mL)
103457	103457BLANK	04/25/2017	50	50
103458	103458LCS	04/25/2017	50	50
103459	103459DUP	04/25/2017	50	50
103460	103460MS	04/25/2017	50	50
7016438001	MW-1A	04/25/2017	50	50
7016438002	MW-1B	04/25/2017	50	50
7016438003	MW-1C	04/25/2017	50	50
7016438005	MW-11B	04/25/2017	50	50
7016438006	MW-12A	04/25/2017	50	50
7016438007	MW-12B	04/25/2017	50	50
7016438008	DUP001	04/25/2017	50	50
7016438009	FB	04/25/2017	50	50
7016438010	LEA-PRI	04/25/2017	50	50
7016438011	LEA-SEC	04/25/2017	50	50

FORM XII INORGANIC-1
PREPARATION LOG

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Preparation Method: EPA 6010C Batch: ICP 2617

Lab Sample ID	Sample Name	Preparation Date	Initial Volume (mL)	Final Volume (mL)
104205	104205BLANK	05/03/2017	10	10
104206	104206LCS	05/03/2017	10	10
104208	104208DUP	05/03/2017	10	10
104209	104209MS	05/03/2017	10	10
7016438005	MW-11B	05/03/2017	10	10
7016438006	MW-12A	05/03/2017	10	10
7016438014	MW-11A	05/03/2017	10	10
7016438015	MW-3A	05/03/2017	10	10

FORM XII INORGANIC-1
PREPARATION LOG

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Preparation Method: EPA 3005A Batch: MPRP 2076

Lab Sample ID	Sample Name	Preparation Date	Initial Volume (mL)	Final Volume (mL)
103951	103951BLANK	04/26/2017	50	50
103952	103952LCS	04/26/2017	50	50
103953	103953DUP	04/26/2017	50	50
103954	103954MS	04/26/2017	50	50
7016438015	MW-3A	04/26/2017	50	50
7016438016	MW-3B	04/26/2017	50	50
7016438017	MW-3C	04/26/2017	50	50
7016438018	MW-4A	04/26/2017	50	50
7016438019	MW-4B	04/26/2017	50	50
7016438020	MW-4C	04/26/2017	50	50

FORM XIII INORGANIC-1
ANALYSIS RUN LOG

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Instrument ID: 70ICP1 Analysis Method: EPA 6010C

Start Date: 05/03/2017 00:30 End Date: 05/03/2017 02:22

Sample Name	Lab Sample ID	D/F	Date	Time	Ag	Al	As	B	Ba	Be	Ca	Cd	Co	Cr	Cu	Fe	K	Mg	Mn	Na
8789163CAL0	8789163CAL0	1	05/03/2017	00:30	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
8789164CAL1	8789164CAL1	1	05/03/2017	00:35	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
8789165CAL2	8789165CAL2	1	05/03/2017	00:40	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
8789166CAL3	8789166CAL3	1	05/03/2017	00:45	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
8789167CAL4	8789167CAL4	1	05/03/2017	00:50	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
8789168ICV	8789168ICV	1	05/03/2017	00:55	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
8789170ICB	8789170ICB	1	05/03/2017	01:05	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
8789171CRDL	8789171CRDL	1	05/03/2017	01:10	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
8789172ICSA	8789172ICSA	1	05/03/2017	01:15	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
8789173ICSAB	8789173ICSAB	1	05/03/2017	01:21	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
8789174CCV	8789174CCV	1	05/03/2017	01:26	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
8789175CCB	8789175CCB	1	05/03/2017	01:31	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
103461BLANK	103461	1	05/03/2017	01:36	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
103462LCS	103462	1	05/03/2017	01:41	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
MW-11A	7016438014	1	05/03/2017	01:46	X	X	X	X	X	X	X	X	X		X		X	X		X
103463DUP	103463	1	05/03/2017	01:51	X	X	X	X	X	X	X	X	X		X		X	X		X
103464MS	103464	1	05/03/2017	01:56	X	X	X	X	X	X	X	X	X	X	X		X	X		X
103502SD	103502	5	05/03/2017	02:01	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
103501PDS	103501	1	05/03/2017	02:06	X	X	X	X	X	X	X	X	X		X		X	X		X
8789176CCV	8789176CCV	1	05/03/2017	02:17	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
8789177CCB	8789177CCB	1	05/03/2017	02:22	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

FORM XIII INORGANIC-1
ANALYSIS RUN LOG

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Instrument ID: 70ICP1 Analysis Method: EPA 6010C

Start Date: 05/03/2017 00:30 End Date: 05/03/2017 02:22

Sample Name	Lab Sample ID	D/F	Date	Time	Ni	Pb	Sb	Se	Tl	V	Zn
8789163CAL0	8789163CAL0	1	05/03/2017	00:30	X	X	X	X	X	X	X
8789164CAL1	8789164CAL1	1	05/03/2017	00:35	X	X	X	X	X	X	X
8789165CAL2	8789165CAL2	1	05/03/2017	00:40	X	X	X	X	X	X	X
8789166CAL3	8789166CAL3	1	05/03/2017	00:45	X	X	X	X	X	X	X
8789167CAL4	8789167CAL4	1	05/03/2017	00:50	X	X	X	X	X	X	X
8789168ICV	8789168ICV	1	05/03/2017	00:55	X	X	X	X	X	X	X
8789170ICB	8789170ICB	1	05/03/2017	01:05	X	X	X	X	X	X	X
8789171CRDL	8789171CRDL	1	05/03/2017	01:10	X	X	X	X	X	X	X
8789172ICSA	8789172ICSA	1	05/03/2017	01:15	X	X	X	X	X	X	X
8789173ICSAB	8789173ICSAB	1	05/03/2017	01:21	X	X	X	X	X	X	X
8789174CCV	8789174CCV	1	05/03/2017	01:26	X	X	X	X	X	X	X
8789175CCB	8789175CCB	1	05/03/2017	01:31	X	X	X	X	X	X	X
103461BLANK	103461	1	05/03/2017	01:36	X	X	X	X	X	X	X
103462LCS	103462	1	05/03/2017	01:41	X	X	X	X	X	X	X
MW-11A	7016438014	1	05/03/2017	01:46	X	X	X	X		X	X
103463DUP	103463	1	05/03/2017	01:51	X	X	X	X		X	X
103464MS	103464	1	05/03/2017	01:56	X	X	X	X	X	X	X
103502SD	103502	5	05/03/2017	02:01	X	X	X	X	X	X	X
103501PDS	103501	1	05/03/2017	02:06	X	X	X	X	X	X	X
8789176CCV	8789176CCV	1	05/03/2017	02:17	X	X	X	X	X	X	X
8789177CCB	8789177CCB	1	05/03/2017	02:22	X	X	X	X	X	X	X

FORM XIII INORGANIC-1
ANALYSIS RUN LOG

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Instrument ID: 70ICP1 Analysis Method: EPA 6010C

Start Date: 05/05/2017 12:38 End Date: 05/05/2017 15:27

Sample Name	Lab Sample ID	D/F	Date	Time	Ag	Al	As	B	Ba	Be	Ca	Cd	Co	Cr	Cu	Fe	K	Mg	Mn	Na
8798237CAL0	8798237CAL0	1	05/05/2017	12:38	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
8798238CAL1	8798238CAL1	1	05/05/2017	12:44	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
8798239CAL2	8798239CAL2	1	05/05/2017	12:49	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
8798240CAL3	8798240CAL3	1	05/05/2017	12:53	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
8798241CAL4	8798241CAL4	1	05/05/2017	12:58	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
8798242ICV	8798242ICV	1	05/05/2017	13:03	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
8798244ICB	8798244ICB	1	05/05/2017	13:13	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
8798245CRDL	8798245CRDL	1	05/05/2017	13:19	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
8798246ICSA	8798246ICSA	1	05/05/2017	13:24	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
8798247ICSAB	8798247ICSAB	1	05/05/2017	13:29	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
8798248CCV	8798248CCV	1	05/05/2017	13:34	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
8798249CCB	8798249CCB	1	05/05/2017	13:39	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
103951BLANK	103951	1	05/05/2017	13:44	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
103952LCS	103952	1	05/05/2017	13:50	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
MW-3A	7016438015	1	05/05/2017	14:05	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
MW-3B	7016438016	1	05/05/2017	14:10	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
MW-3C	7016438017	1	05/05/2017	14:15	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
104001PDS	104001	1	05/05/2017	14:20	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
104002SD	104002	5	05/05/2017	14:25	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
103953DUP	103953	1	05/05/2017	14:30	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
8798250CCV	8798250CCV	1	05/05/2017	14:36	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
8798251CCB	8798251CCB	1	05/05/2017	14:41	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
103954MS	103954	1	05/05/2017	14:46	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
MW-4A	7016438018	1	05/05/2017	14:51	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
MW-4B	7016438019	1	05/05/2017	14:56	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
MW-4C	7016438020	1	05/05/2017	15:01	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
8798254ICSA	8798254ICSA	1	05/05/2017	15:11	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
8798255ICSAB	8798255ICSAB	1	05/05/2017	15:17	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
8798256CCV	8798256CCV	1	05/05/2017	15:22	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
8798257CCB	8798257CCB	1	05/05/2017	15:27	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

FORM XIII INORGANIC-1
ANALYSIS RUN LOG

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Instrument ID: 70ICP1 Analysis Method: EPA 6010C

Start Date: 05/05/2017 12:38 End Date: 05/05/2017 15:27

Sample Name	Lab Sample ID	D/F	Date	Time	Ni	Pb	Sb	Se	Tl	V	Zn
8798237CAL0	8798237CAL0	1	05/05/2017	12:38	X	X	X	X	X	X	X
8798238CAL1	8798238CAL1	1	05/05/2017	12:44	X	X	X	X	X	X	X
8798239CAL2	8798239CAL2	1	05/05/2017	12:49	X	X	X	X	X	X	X
8798240CAL3	8798240CAL3	1	05/05/2017	12:53	X	X	X	X	X	X	X
8798241CAL4	8798241CAL4	1	05/05/2017	12:58	X	X	X	X	X	X	X
8798242ICV	8798242ICV	1	05/05/2017	13:03	X	X	X	X	X	X	X
8798244ICB	8798244ICB	1	05/05/2017	13:13	X	X	X	X	X	X	X
8798245CRDL	8798245CRDL	1	05/05/2017	13:19	X	X	X	X	X	X	X
8798246ICSA	8798246ICSA	1	05/05/2017	13:24	X	X	X	X	X	X	X
8798247ICSAB	8798247ICSAB	1	05/05/2017	13:29	X	X	X	X	X	X	X
8798248CCV	8798248CCV	1	05/05/2017	13:34	X	X	X	X	X	X	X
8798249CCB	8798249CCB	1	05/05/2017	13:39	X	X	X	X	X	X	X
103951BLANK	103951	1	05/05/2017	13:44	X	X	X	X	X	X	X
103952LCS	103952	1	05/05/2017	13:50	X	X	X	X	X	X	X
MW-3A	7016438015	1	05/05/2017	14:05	X	X	X	X	X	X	X
MW-3B	7016438016	1	05/05/2017	14:10	X	X	X	X	X	X	X
MW-3C	7016438017	1	05/05/2017	14:15	X	X	X	X	X	X	X
104001PDS	104001	1	05/05/2017	14:20	X	X	X	X	X	X	X
104002SD	104002	5	05/05/2017	14:25	X	X	X	X	X	X	X
103953DUP	103953	1	05/05/2017	14:30	X	X	X	X	X	X	X
8798250CCV	8798250CCV	1	05/05/2017	14:36	X	X	X	X	X	X	X
8798251CCB	8798251CCB	1	05/05/2017	14:41	X	X	X	X	X	X	X
103954MS	103954	1	05/05/2017	14:46	X	X	X	X	X	X	X
MW-4A	7016438018	1	05/05/2017	14:51	X	X	X	X	X	X	X
MW-4B	7016438019	1	05/05/2017	14:56	X	X	X	X	X	X	X
MW-4C	7016438020	1	05/05/2017	15:01	X	X	X	X	X	X	X
8798254ICSA	8798254ICSA	1	05/05/2017	15:11	X	X	X	X	X	X	X
8798255ICSAB	8798255ICSAB	1	05/05/2017	15:17	X	X	X	X	X	X	X
8798256CCV	8798256CCV	1	05/05/2017	15:22	X	X	X	X	X	X	X
8798257CCB	8798257CCB	1	05/05/2017	15:27	X	X	X	X	X	X	X

FORM XIII INORGANIC-1
ANALYSIS RUN LOG

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Instrument ID: 70ICP2 Analysis Method: EPA 6010C

Start Date: 05/03/2017 12:58 End Date: 05/03/2017 16:51

Sample Name	Lab Sample ID	D/F	Date	Time	Ag	Al	As	B	Ba	Be	Ca	Cd	Co	Cr	Cu	Fe	K	Mg	Mn	Na
8790013CAL0	8790013CAL0	1	05/03/2017	12:58	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
8790014CAL1	8790014CAL1	1	05/03/2017	13:03	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
8790015CAL2	8790015CAL2	1	05/03/2017	13:07	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
8790016CAL3	8790016CAL3	1	05/03/2017	13:12	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
8790017CAL4	8790017CAL4	1	05/03/2017	13:17	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
8790018ICV	8790018ICV	1	05/03/2017	13:22	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
8790020ICB	8790020ICB	1	05/03/2017	13:32	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
8790021CRDL	8790021CRDL	1	05/03/2017	13:37	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
8790022ICSA	8790022ICSA	1	05/03/2017	13:42	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
8790023ICSAB	8790023ICSAB	1	05/03/2017	13:47	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
8790024CCV	8790024CCV	1	05/03/2017	13:52	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
8790025CCB	8790025CCB	1	05/03/2017	13:56	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
103457BLANK	103457	1	05/03/2017	14:02	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
103458LCS	103458	1	05/03/2017	14:07	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
7016368002	7016368002	1	05/03/2017	14:26	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
103497PDS	103497	1	05/03/2017	14:31	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
103498SD	103498	5	05/03/2017	14:36	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
103459DUP	103459	1	05/03/2017	14:41	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
103460MS	103460	1	05/03/2017	14:46	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
8790026CCV	8790026CCV	1	05/03/2017	14:51	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
8790028CCB	8790028CCB	1	05/03/2017	14:56	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
MW-1A	7016438001	1	05/03/2017	15:31	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
MW-1B	7016438002	1	05/03/2017	15:36	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
MW-1C	7016438003	1	05/03/2017	15:41	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
MW-11B	7016438005	1	05/03/2017	15:46	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
8790051CCV	8790051CCV	1	05/03/2017	15:51	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
8790052CCB	8790052CCB	1	05/03/2017	15:56	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
MW-12A	7016438006	1	05/03/2017	16:01	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
MW-12B	7016438007	1	05/03/2017	16:06	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
DUP001	7016438008	1	05/03/2017	16:11	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
FB	7016438009	1	05/03/2017	16:16	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
LEA-PRI	7016438010	1	05/03/2017	16:21							X	X				X	X	X	X	X
LEA-SEC	7016438011	1	05/03/2017	16:26							X	X				X	X	X	X	X
8790055ICSA	8790055ICSA	1	05/03/2017	16:36	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
8790056ICSAB	8790056ICSAB	1	05/03/2017	16:41	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
8790057CCV	8790057CCV	1	05/03/2017	16:46	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
8790058CCB	8790058CCB	1	05/03/2017	16:51	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

FORM XIII INORGANIC-1
ANALYSIS RUN LOG

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Instrument ID: 70ICP2 Analysis Method: EPA 6010C

Start Date: 05/03/2017 12:58 End Date: 05/03/2017 16:51

Sample Name	Lab Sample ID	D/F	Date	Time	Ni	Pb	Sb	Se	Tl	V	Zn
8790013CAL0	8790013CAL0	1	05/03/2017	12:58	X	X	X	X	X	X	X
8790014CAL1	8790014CAL1	1	05/03/2017	13:03	X	X	X	X	X	X	X
8790015CAL2	8790015CAL2	1	05/03/2017	13:07	X	X	X	X	X	X	X
8790016CAL3	8790016CAL3	1	05/03/2017	13:12	X	X	X	X	X	X	X
8790017CAL4	8790017CAL4	1	05/03/2017	13:17	X	X	X	X	X	X	X
8790018ICV	8790018ICV	1	05/03/2017	13:22	X	X	X	X	X	X	X
8790020ICB	8790020ICB	1	05/03/2017	13:32	X	X	X	X	X	X	X
8790021CRDL	8790021CRDL	1	05/03/2017	13:37	X	X	X	X	X	X	X
8790022ICSA	8790022ICSA	1	05/03/2017	13:42	X	X	X	X	X	X	X
8790023ICSAB	8790023ICSAB	1	05/03/2017	13:47	X	X	X	X	X	X	X
8790024CCV	8790024CCV	1	05/03/2017	13:52	X	X	X	X	X	X	X
8790025CCB	8790025CCB	1	05/03/2017	13:56	X	X	X	X	X	X	X
103457BLANK	103457	1	05/03/2017	14:02	X	X	X	X	X	X	X
103458LCS	103458	1	05/03/2017	14:07	X	X	X	X	X	X	X
7016368002	7016368002	1	05/03/2017	14:26	X	X	X	X	X	X	X
103497PDS	103497	1	05/03/2017	14:31	X	X	X	X	X	X	X
103498SD	103498	5	05/03/2017	14:36	X	X	X	X	X	X	X
103459DUP	103459	1	05/03/2017	14:41	X	X	X	X	X	X	X
103460MS	103460	1	05/03/2017	14:46	X	X	X	X	X	X	X
8790026CCV	8790026CCV	1	05/03/2017	14:51	X	X	X	X	X	X	X
8790028CCB	8790028CCB	1	05/03/2017	14:56	X	X	X	X	X	X	X
MW-1A	7016438001	1	05/03/2017	15:31	X	X	X	X	X	X	X
MW-1B	7016438002	1	05/03/2017	15:36	X	X	X	X	X	X	X
MW-1C	7016438003	1	05/03/2017	15:41	X	X	X	X	X	X	X
MW-11B	7016438005	1	05/03/2017	15:46	X	X	X	X	X	X	X
8790051CCV	8790051CCV	1	05/03/2017	15:51	X	X	X	X	X	X	X
8790052CCB	8790052CCB	1	05/03/2017	15:56	X	X	X	X	X	X	X
MW-12A	7016438006	1	05/03/2017	16:01	X	X	X	X	X	X	X
MW-12B	7016438007	1	05/03/2017	16:06	X	X	X	X	X	X	X
DUP001	7016438008	1	05/03/2017	16:11	X	X	X	X	X	X	X
FB	7016438009	1	05/03/2017	16:16	X	X	X	X	X	X	X
LEA-PRI	7016438010	1	05/03/2017	16:21		X					
LEA-SEC	7016438011	1	05/03/2017	16:26		X					
8790055ICSA	8790055ICSA	1	05/03/2017	16:36	X	X	X	X	X	X	X
8790056ICSAB	8790056ICSAB	1	05/03/2017	16:41	X	X	X	X	X	X	X
8790057CCV	8790057CCV	1	05/03/2017	16:46	X	X	X	X	X	X	X
8790058CCB	8790058CCB	1	05/03/2017	16:51	X	X	X	X	X	X	X

FORM XIII INORGANIC-1
ANALYSIS RUN LOG

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Instrument ID: 70ICP2 Analysis Method: EPA 6010C

Start Date: 05/03/2017 19:23 End Date: 05/03/2017 22:21

Sample Name	Lab Sample ID	D/F	Date	Time	Ag	Al	As	B	Ba	Be	Ca	Cd	Co	Cr	Cu	Fe	K	Mg	Mn	Na
8791942CAL0	8791942CAL0	1	05/03/2017	19:23	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
8791943CAL1	8791943CAL1	1	05/03/2017	19:28	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
8791944CAL2	8791944CAL2	1	05/03/2017	19:33	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
8791945CAL3	8791945CAL3	1	05/03/2017	19:38	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
8791946CAL4	8791946CAL4	1	05/03/2017	19:43	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
8791950ICV	8791950ICV	1	05/03/2017	19:48	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
8791952ICB	8791952ICB	1	05/03/2017	19:58	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
8791953CRDL	8791953CRDL	1	05/03/2017	20:03	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
8791954ICSA	8791954ICSA	1	05/03/2017	20:07	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
8791955ICSAB	8791955ICSAB	1	05/03/2017	20:12	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
8791956CCV	8791956CCV	1	05/03/2017	20:17	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
8791957CCB	8791957CCB	1	05/03/2017	20:22	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
104205BLANK	104205	1	05/03/2017	20:27	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
104206LCS	104206	1	05/03/2017	20:37	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
MW-11B	7016438005	1	05/03/2017	20:47	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
104207SD	104207	5	05/03/2017	20:52	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
104208DUP	104208	1	05/03/2017	20:57	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
104209MS	104209	1	05/03/2017	21:02	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
MW-12A	7016438006	1	05/03/2017	21:07	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
MW-11A	7016438014	1	05/03/2017	21:12	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
8791959CCV	8791959CCV	1	05/03/2017	21:17	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
8791960CCB	8791960CCB	1	05/03/2017	21:22	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
MW-3A	7016438015	1	05/03/2017	21:27	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
8791963ICSA	8791963ICSA	1	05/03/2017	22:06	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
8791964ICSAB	8791964ICSAB	1	05/03/2017	22:11	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
8791965CCV	8791965CCV	1	05/03/2017	22:16	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
8791966CCB	8791966CCB	1	05/03/2017	22:21	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

FORM XIII INORGANIC-1
ANALYSIS RUN LOG

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Instrument ID: 70ICP2 Analysis Method: EPA 6010C

Start Date: 05/03/2017 19:23 End Date: 05/03/2017 22:21

Sample Name	Lab Sample ID	D/F	Date	Time	Ni	Pb	Sb	Se	Tl	V	Zn
8791942CAL0	8791942CAL0	1	05/03/2017	19:23	X	X	X	X	X	X	X
8791943CAL1	8791943CAL1	1	05/03/2017	19:28	X	X	X	X	X	X	X
8791944CAL2	8791944CAL2	1	05/03/2017	19:33	X	X	X	X	X	X	X
8791945CAL3	8791945CAL3	1	05/03/2017	19:38	X	X	X	X	X	X	X
8791946CAL4	8791946CAL4	1	05/03/2017	19:43	X	X	X	X	X	X	X
8791950ICV	8791950ICV	1	05/03/2017	19:48	X	X	X	X	X	X	X
8791952ICB	8791952ICB	1	05/03/2017	19:58	X	X	X	X	X	X	X
8791953CRDL	8791953CRDL	1	05/03/2017	20:03	X	X	X	X	X	X	X
8791954ICSA	8791954ICSA	1	05/03/2017	20:07	X	X	X	X	X	X	X
8791955ICSAB	8791955ICSAB	1	05/03/2017	20:12	X	X	X	X	X	X	X
8791956CCV	8791956CCV	1	05/03/2017	20:17	X	X	X	X	X	X	X
8791957CCB	8791957CCB	1	05/03/2017	20:22	X	X	X	X	X	X	X
104205BLANK	104205	1	05/03/2017	20:27	X	X	X	X	X	X	X
104206LCS	104206	1	05/03/2017	20:37	X	X	X	X	X	X	X
MW-11B	7016438005	1	05/03/2017	20:47	X	X	X	X	X	X	X
104207SD	104207	5	05/03/2017	20:52	X	X	X	X	X	X	X
104208DUP	104208	1	05/03/2017	20:57	X	X	X	X	X	X	X
104209MS	104209	1	05/03/2017	21:02	X	X	X	X	X	X	X
MW-12A	7016438006	1	05/03/2017	21:07	X	X	X	X	X	X	X
MW-11A	7016438014	1	05/03/2017	21:12	X	X	X	X	X	X	X
8791959CCV	8791959CCV	1	05/03/2017	21:17	X	X	X	X	X	X	X
8791960CCB	8791960CCB	1	05/03/2017	21:22	X	X	X	X	X	X	X
MW-3A	7016438015	1	05/03/2017	21:27	X	X	X	X	X	X	X
8791963ICSA	8791963ICSA	1	05/03/2017	22:06	X	X	X	X	X	X	X
8791964ICSAB	8791964ICSAB	1	05/03/2017	22:11	X	X	X	X	X	X	X
8791965CCV	8791965CCV	1	05/03/2017	22:16	X	X	X	X	X	X	X
8791966CCB	8791966CCB	1	05/03/2017	22:21	X	X	X	X	X	X	X

FORM XIII INORGANIC-1
ANALYSIS RUN LOG

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Instrument ID: 70ICP2 Analysis Method: EPA 6010C

Start Date: 05/04/2017 10:45 End Date: 05/04/2017 17:05

Sample Name	Lab Sample ID	D/F	Date	Time	Cr	Fe	Mn	Tl
8793867CAL0	8793867CAL0	1	05/04/2017	10:45	X	X	X	X
8793868CAL1	8793868CAL1	1	05/04/2017	10:50	X	X	X	X
8793869CAL2	8793869CAL2	1	05/04/2017	10:55	X	X	X	X
8793870CAL3	8793870CAL3	1	05/04/2017	11:00	X	X	X	X
8793871CAL4	8793871CAL4	1	05/04/2017	11:05	X	X	X	X
8793872ICV	8793872ICV	1	05/04/2017	11:09	X	X	X	X
8793873ICB	8793873ICB	1	05/04/2017	11:14	X	X	X	X
8793874CRDL	8793874CRDL	1	05/04/2017	11:19	X	X	X	X
8793875ICSA	8793875ICSA	1	05/04/2017	11:24	X	X	X	X
8793876ICSAB	8793876ICSAB	1	05/04/2017	11:29	X	X	X	X
8793877CCV	8793877CCV	1	05/04/2017	11:34	X	X	X	X
8793878CCB	8793878CCB	1	05/04/2017	11:39	X	X	X	X
8793885CCV	8793885CCV	1	05/04/2017	15:30	X	X	X	X
8793886CCB	8793886CCB	1	05/04/2017	15:35	X	X	X	X
MW-11A	7016438014	10	05/04/2017	16:21	X	X	X	X
103463DUP	103463	10	05/04/2017	16:26	X	X	X	X
8793887CCV	8793887CCV	1	05/04/2017	16:31	X	X	X	X
8793888CCB	8793888CCB	1	05/04/2017	16:36	X	X	X	X
103464MS	103464	10	05/04/2017	16:41		X	X	
8793890ICSA	8793890ICSA	1	05/04/2017	16:50	X	X	X	X
8793891ICSAB	8793891ICSAB	1	05/04/2017	16:55	X	X	X	X
8793892CCV	8793892CCV	1	05/04/2017	17:00	X	X	X	X
8793893CCB	8793893CCB	1	05/04/2017	17:05	X	X	X	X

Sample Name: CAL0 Acquired: 5/3/2017 0:30:29 Type: Cal
Method: New MethodDec2016(v335) Mode: IR Corr. Factor: 1.000000
User: andrew schmadtke Sample Type: Dilution Factor: :
Comment:

Elem	Ag	Al	As	Au	B	Ba	Be	Ca
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	-.0009	.0011	.0000	.0000	.0006	.0014	.0003	.0000
Stddev	.0000	.0001	.000	.0001	.0000	.0001	.0002	.000
%RSD	5.499	6.991	36.69	20010.	7.383	4.180	74.91	569.4
#1	-.0009	.0012	.0000	.0000	.0005	.0013	.0004	.0000
#2	-.0008	.0011	.0000	-.0001	.0006	.0014	.0000	.0001
#3	-.0009	.0011	.0000	.0000	.0006	.0014	.0004	-.0002

Elem	Cd	Co	Cr	Cu	Fe	K	Mg	Mn
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0000	-.0003	.0031	.0000	.0000	.0033	.0000	.0003
Stddev	.000	.0001	.0004	.000	.0001	.0001	.0000	.0001
%RSD	87.81	16.10	11.68	51.41	222.5	4.233	437.6	25.49
#1	.0000	-.0003	.0031	.0000	.0000	.0034	.0000	.0004
#2	-.0001	-.0004	.0027	.0000	.0000	.0032	.0001	.0002
#3	-.0001	-.0004	.0035	.0000	.0001	.0034	.0000	.0004

Elem	Mo	Na	Ni	P	Pb	Sb	Se	Si
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0001	.0001	-.0001	.0000	.0000	.0003	.0000	.0021
Stddev	.0000	.0001	.0000	.0000	.000	.0000	.0000	.0001
%RSD	27.88	199.1	41.90	22.96	266.4	12.49	413.7	2.940
#1	.0001	.0000	-.0001	.0000	.0000	.0004	.0000	.0022
#2	.0001	.0002	-.0001	.0000	-.0001	.0003	.0000	.0021
#3	.0001	.0000	.0000	.0000	.0000	.0003	.0000	.0022

Elem	Sn	Sr	Ti	Tl	V	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0001	.0065	.0002	.0000	.0000	12000.	91530.	13140.
Stddev	.0000	.0001	.0001	.000	.0000	38.	726.	143.
%RSD	40.68	1.153	46.59	47.08	123.2	.3196	.7931	1.090
#1	.0000	.0065	.0003	.0000	.0000	12030.	90800.	13020.
#2	.0001	.0065	.0001	.0000	.0000	12020.	92260.	13100.
#3	.0001	.0064	.0003	.0000	.0000	11950.	91540.	13290.

Sample Name: CAL0 Acquired: 5/3/2017 0:30:29 Type: Cal
Method: New MethodDec2016(v335) Mode: IR Corr. Factor: 1.000000
User: andrew schmadtke Sample Type: Dilution Factor: :
Comment:

Elem	Zn
Units	Cts/S
Avg	.0003
Stddev	.0000
%RSD	3.083
#1	.0003
#2	.0003
#3	.0003

Int. Std.	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S
Avg	11999.	91533.	13136.
Stddev	38.	726.	143.
%RSD	.31963	.79311	1.0896
#1	12025.	90804.	13015.
#2	12016.	92256.	13099.
#3	11955.	91540.	13294.

Sample Name: CAL1 Acquired: 5/3/2017 0:35:40 Type: Cal
Method: New MethodDec2016(v335) Mode: IR Corr. Factor: 1.000000
User: andrew schmadtke Sample Type: Dilution Factor: :
Comment:

Elem	Ag	Al	As	Au	B	Ba	Be	Ca
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0120	.0305	.0021	.0005	.0791	.1135	.0115	.0761
Stddev	.0001	.0002	.0000	.0001	.0001	.0006	.0002	.0002
%RSD	.4293	.7691	2.192	16.73	.1886	.5015	1.341	.2741
#1	.0121	.0306	.0021	.0006	.0792	.1141	.0113	.0758
#2	.0120	.0306	.0021	.0004	.0789	.1131	.0116	.0762
#3	.0120	.0302	.0020	.0006	.0791	.1133	.0114	.0761

Elem	Cd	Co	Cr	Cu	Fe	K	Mg	Mn
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0133	.0340	.1038	.0009	.0077	.0583	.0140	.0638
Stddev	.0001	.0001	.0006	.0000	.0001	.0014	.0002	.0005
%RSD	.6475	.3855	.5608	.8332	.9397	2.472	1.358	.8153
#1	.0133	.0342	.1042	.0009	.0076	.0586	.0139	.0639
#2	.0132	.0339	.1040	.0009	.0078	.0567	.0138	.0643
#3	.0133	.0340	.1031	.0009	.0076	.0595	.0142	.0633

Elem	Mo	Na	Ni	P	Pb	Sb	Se	Si
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0306	.0008	.0074	.0071	.0092	.0100	.0039	.0454
Stddev	.0001	.0000	.0001	.0000	.0000	.0001	.0000	.0004
%RSD	.3383	2.603	.9379	.4371	.1036	.5902	1.020	.8664
#1	.0307	.0007	.0075	.0071	.0092	.0100	.0039	.0457
#2	.0305	.0007	.0073	.0071	.0092	.0101	.0038	.0456
#3	.0306	.0008	.0074	.0071	.0092	.0100	.0039	.0450

Elem	Sn	Sr	Ti	Tl	V	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0255	.8062	.1037	.0071	.0177	12020.	90810.	13210.
Stddev	.0000	.0074	.0007	.0000	.0001	49.	443.	54.
%RSD	.1085	.9158	.7103	.4821	.8286	.4111	.4877	.4116
#1	.0256	.8119	.1042	.0071	.0177	11970.	90540.	13210.
#2	.0255	.8089	.1040	.0071	.0178	12060.	90570.	13150.
#3	.0255	.7979	.1028	.0070	.0175	12040.	91320.	13260.

Sample Name: CAL1 Acquired: 5/3/2017 0:35:40 Type: Cal
Method: New MethodDec2016(v335) Mode: IR Corr. Factor: 1.000000
User: andrew schmadtke Sample Type: Dilution Factor: :
Comment:

Elem	Zn
Units	Cts/S
Avg	.0594
Stddev	.0003
%RSD	.4552
#1	.0597
#2	.0592
#3	.0593

Int. Std.	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S
Avg	12022.	90810.	13209.
Stddev	49.	443.	54.
%RSD	.41109	.48770	.41159
#1	11967.	90540.	13212.
#2	12063.	90568.	13153.
#3	12036.	91321.	13261.

Sample Name: CAL2 Acquired: 5/3/2017 0:40:36 Type: Cal
Method: New MethodDec2016(v335) Mode: IR Corr. Factor: 1.000000
User: andrew schmadtke Sample Type: Dilution Factor: :
Comment:

Elem	Ag	Al	As	Au	B	Ba	Be	Ca
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0313	.0749	.0053	.0012	.1966	.2812	.0279	.1905
Stddev	.0004	.0007	.0000	.0001	.0005	.0002	.0002	.0009
%RSD	1.207	.9693	.8096	4.294	.2512	.0801	.7188	.4672
#1	.0309	.0744	.0054	.0012	.1961	.2814	.0281	.1904
#2	.0317	.0758	.0053	.0013	.1968	.2812	.0280	.1897
#3	.0312	.0746	.0053	.0012	.1970	.2809	.0277	.1915

Elem	Cd	Co	Cr	Cu	Fe	K	Mg	Mn
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0329	.0846	.2536	.0023	.0190	.1396	.0345	.1576
Stddev	.0002	.0001	.0013	.0000	.0002	.0003	.0000	.0018
%RSD	.5128	.1314	.5200	.7340	1.315	.1922	.1375	1.144
#1	.0327	.0848	.2521	.0023	.0191	.1393	.0345	.1559
#2	.0330	.0846	.2544	.0023	.0191	.1398	.0346	.1595
#3	.0330	.0845	.2543	.0023	.0187	.1396	.0345	.1575

Elem	Mo	Na	Ni	P	Pb	Sb	Se	Si
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0761	.0019	.0184	.0177	.0228	.0245	.0096	.1115
Stddev	.0001	.0001	.0001	.0001	.0001	.0000	.0001	.0014
%RSD	.1144	3.679	.2897	.3349	.4019	.0587	.8424	1.264
#1	.0761	.0018	.0183	.0178	.0229	.0245	.0095	.1100
#2	.0761	.0020	.0184	.0177	.0227	.0245	.0096	.1128
#3	.0760	.0019	.0184	.0177	.0229	.0245	.0097	.1116

Elem	Sn	Sr	Ti	Tl	V	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0633	2.007	.2563	.0174	.0440	12030.	90730.	13220.
Stddev	.0001	.028	.0027	.0001	.0004	14.	508.	71.
%RSD	.0866	1.401	1.039	.4042	.9012	.1139	.5601	.5391
#1	.0632	1.978	.2540	.0174	.0437	12030.	91220.	13140.
#2	.0633	2.035	.2592	.0173	.0444	12020.	90210.	13230.
#3	.0633	2.007	.2558	.0174	.0439	12050.	90750.	13280.

Sample Name: CAL2 Acquired: 5/3/2017 0:40:36 Type: Cal
Method: New MethodDec2016(v335) Mode: IR Corr. Factor: 1.000000
User: andrew schmadtke Sample Type: Dilution Factor: :
Comment:

Elem	Zn
Units	Cts/S
Avg	.1459
Stddev	.0001
%RSD	.0740
#1	.1459
#2	.1461
#3	.1458

Int. Std.	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S
Avg	12032.	90726.	13218.
Stddev	14.	508.	71.
%RSD	.11385	.56013	.53905
#1	12030.	91222.	13142.
#2	12020.	90207.	13230.
#3	12047.	90748.	13284.

Sample Name: CAL3 Acquired: 5/3/2017 0:45:28 Type: Cal
Method: New MethodDec2016(v335) Mode: IR Corr. Factor: 1.000000
User: andrew schmadtke Sample Type: Dilution Factor: :
Comment:

Elem	Ag	Al	As	Au	B	Ba	Be	Ca
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0633	.1486	.0107	.0025	.3892	.5553	.0553	.3807
Stddev	.0001	.0006	.0000	.0001	.0012	.0017	.0003	.0003
%RSD	.2079	.3776	.0994	2.803	.3118	.3121	.4865	.0865
#1	.0632	.1486	.0107	.0026	.3905	.5571	.0556	.3810
#2	.0635	.1492	.0107	.0026	.3889	.5553	.0554	.3804
#3	.0633	.1481	.0107	.0025	.3882	.5537	.0550	.3808

Elem	Cd	Co	Cr	Cu	Fe	K	Mg	Mn
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0651	.1680	.4969	.0046	.0371	.2786	.0691	.3120
Stddev	.0001	.0005	.0030	.0000	.0003	.0016	.0005	.0013
%RSD	.1093	.2869	.6056	.7034	.8310	.5748	.7923	.4018
#1	.0651	.1686	.4964	.0046	.0375	.2787	.0697	.3118
#2	.0652	.1677	.5001	.0046	.0369	.2802	.0687	.3134
#3	.0651	.1677	.4942	.0046	.0370	.2770	.0689	.3109

Elem	Mo	Na	Ni	P	Pb	Sb	Se	Si
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.1513	.0036	.0365	.0355	.0454	.0486	.0192	.2210
Stddev	.0003	.0002	.0001	.0001	.0002	.0001	.0001	.0011
%RSD	.2248	5.916	.1962	.4187	.4271	.2528	.4292	.4941
#1	.1517	.0034	.0366	.0357	.0456	.0487	.0193	.2204
#2	.1513	.0037	.0364	.0355	.0453	.0486	.0192	.2222
#3	.1510	.0038	.0364	.0354	.0452	.0484	.0191	.2203

Elem	Sn	Sr	Ti	Tl	V	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.1252	3.922	.5108	.0342	.0877	12070.	90580.	13300.
Stddev	.0005	.037	.0021	.0001	.0004	56.	273.	27.
%RSD	.3952	.9548	.4189	.3594	.4478	.4613	.3011	.2045
#1	.1256	3.882	.5110	.0344	.0877	12040.	90540.	13270.
#2	.1254	3.956	.5129	.0342	.0882	12030.	90320.	13320.
#3	.1246	3.928	.5086	.0341	.0874	12130.	90870.	13310.

Sample Name: CAL3 Acquired: 5/3/2017 0:45:28 Type: Cal
Method: New MethodDec2016(v335) Mode: IR Corr. Factor: 1.000000
User: andrew schmadtke Sample Type: Dilution Factor: :
Comment:

Elem	Zn
Units	Cts/S
Avg	.2861
Stddev	.0012
%RSD	.4223
#1	.2872
#2	.2863
#3	.2848

Int. Std.	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S
Avg	12068.	90578.	13297.
Stddev	56.	273.	27.
%RSD	.46129	.30111	.20454
#1	12040.	90544.	13266.
#2	12031.	90324.	13316.
#3	12132.	90866.	13309.

Sample Name: CAL4 Acquired: 5/3/2017 0:50:25 Type: Cal
Method: New MethodDec2016(v335) Mode: IR Corr. Factor: 1.000000
User: andrew schmadtke Sample Type: Dilution Factor: :
Comment:

Elem	Ag	Al	As	Au	B	Ba	Be	Ca
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.1273	.2936	.0211	.0051	.7672	1.102	.1078	.7400
Stddev	.0016	.0037	.0001	.0002	.0021	.003	.0002	.0059
%RSD	1.289	1.265	.4744	3.539	.2705	.2789	.2156	.7936
#1	.1285	.2969	.0213	.0049	.7671	1.101	.1081	.7448
#2	.1280	.2943	.0211	.0053	.7652	1.099	.1079	.7416
#3	.1255	.2895	.0211	.0051	.7694	1.105	.1076	.7335

Elem	Cd	Co	Cr	Cu	Fe	K	Mg	Mn
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.1274	.3283	.9873	.0090	.0731	.5566	.1348	.6136
Stddev	.0003	.0008	.0049	.0002	.0002	.0024	.0006	.0079
%RSD	.2429	.2416	.4993	1.826	.3382	.4229	.4700	1.284
#1	.1275	.3292	.9819	.0091	.0732	.5563	.1354	.6202
#2	.1270	.3279	.9883	.0090	.0732	.5592	.1348	.6157
#3	.1276	.3277	.9916	.0088	.0728	.5545	.1342	.6049

Elem	Mo	Na	Ni	P	Pb	Sb	Se	Si
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.2993	.0072	.0715	.0706	.0889	.0962	.0373	.4321
Stddev	.0011	.0001	.0002	.0003	.0003	.0002	.0002	.0051
%RSD	.3612	.7168	.2551	.3904	.3129	.2040	.4997	1.189
#1	.2992	.0072	.0716	.0707	.0891	.0963	.0374	.4364
#2	.2983	.0073	.0713	.0704	.0886	.0960	.0373	.4335
#3	.3004	.0073	.0716	.0709	.0889	.0964	.0371	.4264

Elem	Sn	Sr	Ti	Tl	V	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.2443	7.624	1.002	.0667	.1720	11640.	88130.	12990.
Stddev	.0006	.061	.013	.0001	.0023	73.	561.	41.
%RSD	.2460	.8024	1.326	.1167	1.359	.6292	.6370	.3171
#1	.2448	7.681	1.015	.0668	.1741	11710.	87650.	12970.
#2	.2437	7.631	1.004	.0666	.1725	11650.	87990.	13040.
#3	.2446	7.560	.9883	.0667	.1695	11560.	88740.	12970.

Sample Name: CAL4 Acquired: 5/3/2017 0:50:25 Type: Cal
Method: New MethodDec2016(v335) Mode: IR Corr. Factor: 1.000000
User: andrew schmadtke Sample Type: Dilution Factor: :
Comment:

Elem	Zn
Units	Cts/S
Avg	.5648
Stddev	.0030
%RSD	.5317
#1	.5640
#2	.5623
#3	.5681

Int. Std.	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S
Avg	11642.	88126.	12991.
Stddev	73.	561.	41.
%RSD	.62915	.63701	.31714
#1	11710.	87645.	12968.
#2	11652.	87989.	13038.
#3	11565.	88743.	12966.

Sample Name: ICV Acquired: 5/3/2017 0:55:20 Type: QC
Method: New MethodDec2016(v335) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Sample Type: ICV Dilution Factor: 1 :
Comment: 6010_W_PKG

Elem	Ag	Al	As	Au	B	Ba	Be	Ca
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**50.40**	**4850.**	**479.5**	**465.9**	**4832.**	**493.3**	**48.60**	**24400.**
Stddev	1.50	16.	.6	31.2	10.	1.3	.53	107.
%RSD	2.968	.3233	.1255	6.692	.2112	.2715	1.089	.4390
#1	49.31	4867.	478.9	493.3	4829.	493.4	48.39	24530.
#2	49.79	4838.	480.1	472.5	4824.	492.0	49.21	24330.
#3	52.11	4844.	479.6	432.0	4843.	494.6	48.22	24350.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Cd	Co	Cr	Cu	Fe	K	Mg	Mn
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**48.83**	**487.6**	**493.1**	**483.1**	**4891.**	**24790.**	**24330.**	**487.9**
Stddev	.25	.2	1.7	2.8	47.	168.	281.	1.3
%RSD	.5196	.0486	.3386	.5700	.9553	.6781	1.154	.2726
#1	48.90	487.9	493.0	484.2	4898.	24800.	24520.	489.4
#2	48.56	487.5	491.4	485.2	4934.	24960.	24470.	486.7
#3	49.05	487.5	494.8	480.0	4842.	24620.	24010.	487.7
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: ICV Acquired: 5/3/2017 0:55:20 Type: QC
Method: New MethodDec2016(v335) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Sample Type: ICV Dilution Factor: 1 :
Comment: 6010_W_PKG

Elem	Mo	Na	Ni	P	Pb	Sb	Se	Si
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**489.5**	**25390.**	**488.7**	F **446.0**	**487.8**	**473.8**	**476.7**	**4700.**
Stddev	1.1	5262.	1.6	2.7	1.4	2.1	3.4	7.
%RSD	.2152	20.72	.3325	.6076	.2849	.4342	.7032	.1444
#1	489.2	19320.	489.1	447.0	486.3	471.4	480.6	4707.
#2	488.6	28670.	486.9	442.9	487.9	474.6	474.9	4700.
#3	490.7	28190.	490.0	448.0	489.1	475.3	474.7	4693.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				550.0				
Low Limit				450.0				

Elem	Sn	Sr	Ti	Tl	V	Y	Y	Y
Units	ug/L	ug/L	ug/L	ug/L	ug/L	%	%	%
Avg	**2423.**	**504.7**	**482.5**	**491.9**	**481.5**	**98.96**	**98.80**	**14.06**
Stddev	4.	.4	1.6	.6	1.1	.51	.19	.07
%RSD	.1717	.0826	.3271	.1138	.2311	.5149	.1875	.5307
#1	2423.	504.3	484.2	491.5	482.8	99.40	98.96	14.10
#2	2419.	505.0	481.1	491.8	480.6	99.09	98.60	13.98
#3	2427.	504.9	482.2	492.6	481.2	98.40	98.84	14.11
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	None	None
High Limit								
Low Limit								

Sample Name: ICV Acquired: 5/3/2017 0:55:20 Type: QC
Method: New MethodDec2016(v335) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Sample Type: ICV Dilution Factor: 1 :
Comment: 6010_W_PKG

Elem	Zn
Units	ug/L
Avg	2442.
Stddev	10.
%RSD	.3953
#1	2436.
#2	2437.
#3	2453.
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S
Avg	11874.	90435.	12872.
Stddev	61.	170.	68.
%RSD	.51491	.18748	.53068
#1	11927.	90583.	12906.
#2	11889.	90250.	12793.
#3	11807.	90470.	12916.

Sample Name: ICB Acquired: 5/3/2017 1:05:23 Type: QC
Method: New MethodDec2016(v335) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Sample Type: ICB Dilution Factor: 1 :
Comment: 6010_W_PKG

Elem	Ag	Al	As	Au	B	Ba	Be	Ca	Cd
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	-.3023	-.5833	2.639	-11.56	4.298	.1369	.1214	3.525	-.0564
Stddev	1.129	2.028	2.267	24.07	.833	.1083	.2905	19.73	.0428
%RSD	373.6	347.7	85.91	208.2	19.39	79.12	239.3	559.9	75.93
#1	.7551	.5874	1.133	-15.51	5.168	.1339	-.0907	25.48	-.0672
#2	-.1701	.5881	5.247	-33.42	3.507	.2467	.0024	-2.155	-.0927
#3	-1.492	-2.925	1.538	14.24	4.219	.0301	.4525	-12.75	-.0092
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co	Cr	Cu	Fe	K	Mg	Mn	Mo	Na
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	-.0903	.0134	-.3387	3.265	-219.0	119.6	-.0930	.1601	-3074.
Stddev	.3472	.6458	.4471	5.263	183.1	16.1	.0552	.5273	5248.
%RSD	384.4	4836.	132.0	161.2	83.61	13.42	59.32	329.3	170.7
#1	-.1073	.6707	-.7331	-.4681	-49.43	114.6	-.1070	.5979	-1902.
#2	-.4287	-.0106	.1470	.9785	-413.1	137.6	-.0322	.3077	1489.
#3	.2650	-.6201	-.4299	9.285	-194.4	106.7	-.1399	-.4252	-8809.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: ICB Acquired: 5/3/2017 1:05:23 Type: QC
Method: New MethodDec2016(v335) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Sample Type: ICB Dilution Factor: 1 :
Comment: 6010_W_PKG

Elem	Ni	P	Pb	Sb	Se	Si	Sn	Sr	Ti
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**-1.019**	**1.727**	**.3969**	**-1.622**	**-.4360**	**-.1270**	**-1.066**	**.0302**	**.1850**
Stddev	.217	2.677	1.276	.954	1.943	3.023	.888	.0188	.1890
%RSD	21.33	155.0	321.4	58.81	445.7	2380.	83.29	62.26	102.1
#1	-.8230	-.9818	-.4090	-2.166	.0978	-3.549	-.1531	.0434	.0356
#2	-.9804	4.372	1.868	-.5206	1.184	.9840	-1.119	.0385	.1220
#3	-1.252	1.792	-.2679	-2.180	-2.590	2.184	-1.927	.0087	.3975
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Tl	V	Y	Y	Y	Zn
Units	ug/L	ug/L	%	%	%	ug/L
Avg	**1.609**	**-.1362**	**100.3**	**100.1**	**14.21**	**-.0625**
Stddev	1.423	.2747	.2	.6	.12	.1998
%RSD	88.45	201.6	.1986	.6240	.8354	319.6
#1	2.319	-.3028	100.4	99.88	14.13	-.0821
#2	-.0296	.1808	100.0	99.54	14.15	.1464
#3	2.537	-.2867	100.4	100.7	14.35	-.2517
Check ?	Chk Pass	Chk Pass	None	None	None	Chk Pass
High Limit						
Low Limit						

Sample Name: ICB Acquired: 5/3/2017 1:05:23 Type: QC
Method: New MethodDec2016(v335) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Sample Type: ICB Dilution Factor: 1 :
Comment: 6010_W_PKG

Int. Std.	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S
Avg	12030.	91583.	13006.
Stddev	24.	571.	109.
%RSD	.19860	.62399	.83545
#1	12043.	91420.	12932.
#2	12002.	91111.	12955.
#3	12045.	92218.	13131.

Sample Name: CRDL Acquired: 5/3/2017 1:10:37 Type: QC
Method: New MethodDec2016(v335) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Sample Type: LOQ Dilution Factor: 1 :
Comment: 6010_W_PKG

Elem	Ag	Al	As	Au	B	Ba	Be	Ca
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**9.257**	**192.0**	**8.935**	**219.3**	**51.67**	**202.0**	**5.032**	**189.8**
Stddev	.873	4.1	2.210	96.8	.37	.8	.303	21.3
%RSD	9.428	2.144	24.73	44.13	.7076	.3762	6.023	11.22
#1	9.363	196.8	6.409	122.1	52.01	202.9	5.037	166.0
#2	10.07	189.7	10.51	315.6	51.29	201.8	5.333	196.5
#3	8.336	189.5	9.886	220.2	51.72	201.4	4.727	207.0
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Cd	Co	Cr	Cu	Fe	K	Mg	Mn
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**2.486**	**49.85**	**9.588**	**23.72**	**24.48**	**5270.**	**213.7**	**10.21**
Stddev	.208	.25	.368	1.45	8.21	92.	82.9	.13
%RSD	8.383	.5082	3.834	6.120	33.55	1.753	38.80	1.278
#1	2.334	49.56	9.998	22.07	33.70	5226.	306.0	10.07
#2	2.400	50.03	9.289	24.78	17.95	5377.	145.6	10.32
#3	2.723	49.96	9.475	24.32	21.79	5209.	189.4	10.26
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: CRDL Acquired: 5/3/2017 1:10:37 Type: QC
Method: New MethodDec2016(v335) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Sample Type: LOQ Dilution Factor: 1 :
Comment: 6010_W_PKG

Elem	Mo	Na	Ni	P	Pb	Sb	Se	Si
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**20.08**	**5727.**	**38.50**	**42.47**	**4.045**	**58.60**	**9.017**	F **4.200**
Stddev	.41	2498.	1.55	.70	2.939	2.54	5.355	1.781
%RSD	2.061	43.62	4.016	1.643	72.66	4.337	59.39	42.42
#1	19.63	7628.	40.13	43.10	6.248	60.68	12.04	4.696
#2	20.45	6655.	37.05	41.72	5.181	55.77	2.834	2.223
#3	20.17	2897.	38.34	42.59	.7075	59.34	12.18	5.681
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit								26.00
Low Limit								14.00

Elem	Sn	Sr	Ti	Tl	V	Y	Y	Y
Units	ug/L	ug/L	ug/L	ug/L	ug/L	%	%	%
Avg	**51.99**	**49.75**	**48.95**	**11.29**	**48.08**	**101.0**	**100.2**	**14.39**
Stddev	1.41	.13	.10	1.54	.85	.4	.2	.04
%RSD	2.708	.2641	.2130	13.66	1.762	.4100	.1635	.3090
#1	52.62	49.81	48.95	11.76	47.68	100.5	100.0	14.34
#2	50.38	49.83	49.06	9.565	47.51	101.0	100.2	14.40
#3	52.98	49.60	48.85	12.54	49.06	101.4	100.3	14.43
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	None	None
High Limit								
Low Limit								

Sample Name: CRDL Acquired: 5/3/2017 1:10:37 Type: QC
Method: New MethodDec2016(v335) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Sample Type: LOQ Dilution Factor: 1 :
Comment: 6010_W_PKG

Elem	Zn
Units	ug/L
Avg	19.65
Stddev	.30
%RSD	1.538
#1	19.90
#2	19.75
#3	19.31
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S
Avg	12115.	91702.	13174.
Stddev	50.	150.	41.
%RSD	.40997	.16352	.30902
#1	12063.	91543.	13130.
#2	12120.	91723.	13180.
#3	12162.	91840.	13211.

Sample Name: ICSA Acquired: 5/3/2017 1:15:48 Type: QC
Method: New MethodDec2016(v335) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Sample Type: ICSA Dilution Factor: 1 :
Comment: 6010_W_PKG

Elem	Ag	Al	As	Au	B	Ba	Be
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**-4.216**	**497800.**	**16.65**	F **-357.3**	**3.365**	**.1632**	**.2130**
Stddev	1.075	1683.	.16	14.4	1.083	.0259	.3283
%RSD	25.50	.3380	.9319	4.042	32.18	15.89	154.1
#1	-4.547	497000.	16.48	-340.7	4.555	.1437	.4158
#2	-5.087	496700.	16.72	-364.8	3.100	.1533	.3890
#3	-3.014	499800.	16.77	-366.6	2.439	.1926	-.1657
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit				200.0			
Low Limit				-200.0			

Elem	Ca	Cd	Co	Cr	Cu	Fe	K
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**482400.**	F **9.729**	**4.754**	F **-81.45**	**2.747**	**186600.**	**10140.**
Stddev	774.	.205	.516	1.81	.834	422.	216.
%RSD	.1604	2.104	10.86	2.225	30.35	.2261	2.128
#1	482100.	9.657	4.394	-79.57	2.912	187100.	10210.
#2	481900.	9.960	4.522	-81.61	1.843	186500.	9905.
#3	483300.	9.570	5.346	-83.19	3.487	186300.	10320.
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Fail	Chk Pass	Chk Pass	None
High Limit		5.000		20.00			
Low Limit		-5.000		-20.00			

Sample Name: ICSA Acquired: 5/3/2017 1:15:48 Type: QC
Method: New MethodDec2016(v335) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Sample Type: ICSA Dilution Factor: 1 :
Comment: 6010_W_PKG

Elem	Mg	Mn	Mo	Na	Ni	P	Pb
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**499400.**	**-1.649**	**3.880**	**-1929.**	**-8.909**	**3.080**	**-8.542**
Stddev	1517.	.182	.611	5785.	.540	2.794	.392
%RSD	.3038	11.03	15.76	299.9	6.061	90.71	4.589
#1	497800.	-1.476	4.512	-1255.	-8.299	-.1333	-8.091
#2	499600.	-1.631	3.292	-8021.	-9.325	4.437	-8.732
#3	500800.	-1.839	3.835	3490.	-9.104	4.937	-8.803
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sb	Se	Si	Sn	Sr	Ti	Tl
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**10.04**	**-9.811**	**-9.759**	**-14.76**	**3.859**	**-1.494**	**1.843**
Stddev	.75	6.796	5.198	.26	.026	.140	2.385
%RSD	7.420	69.27	53.26	1.759	.6729	9.383	129.4
#1	10.42	-3.757	-15.74	-14.46	3.832	-1.450	4.566
#2	10.53	-17.16	-6.332	-14.88	3.864	-1.651	.1280
#3	9.186	-8.515	-7.205	-14.93	3.883	-1.382	.8337
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: ICSA Acquired: 5/3/2017 1:15:48 Type: QC
Method: New MethodDec2016(v335) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Sample Type: ICSA Dilution Factor: 1 :
Comment: 6010_W_PKG

Elem	V	Y	Y	Y	Zn
Units	ug/L	%	%	%	ug/L
Avg	5.825	95.20	94.34	14.07	7.943
Stddev	1.208	.52	.49	.03	.578
%RSD	20.74	.5511	.5162	.2407	7.275
#1	6.472	94.59	94.87	14.10	8.389
#2	4.432	95.49	94.23	14.07	8.150
#3	6.573	95.51	93.91	14.03	7.290
Check ?	Chk Pass	None	None	None	Chk Pass
High Limit					
Low Limit					

Int. Std.	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S
Avg	11422.	86349.	12876.
Stddev	63.	446.	31.
%RSD	.55114	.51616	.24068
#1	11350.	86837.	12907.
#2	11458.	86247.	12877.
#3	11460.	85963.	12845.

Sample Name: ICSAB Acquired: 5/3/2017 1:21:02 Type: QC
Method: New MethodDec2016(v335) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Sample Type: ICSAB Dilution Factor: 1 :
Comment: 6010_W_PKG

Elem	Ag	Al	As	Au	B	Ba	Be
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**407.5**	**499500.**	**208.9**	F **636.2**	**976.2**	**965.0**	**992.1**
Stddev	.8	5396.	3.9	85.3	2.8	4.2	5.1
%RSD	.2031	1.080	1.857	13.41	.2908	.4353	.5121
#1	406.6	505700.	207.6	733.4	979.3	969.0	997.9
#2	407.7	497100.	213.3	601.4	973.9	960.7	988.5
#3	408.2	495800.	205.9	573.8	975.3	965.3	989.9
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit				1200.			
Low Limit				800.0			

Elem	Ca	Cd	Co	Cr	Cu	Fe	K
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**482200.**	**1851.**	**939.1**	**865.1**	**947.4**	**186200.**	**11440.**
Stddev	1968.	8.	2.3	7.8	4.1	491.	106.
%RSD	.4082	.4055	.2411	.9028	.4309	.2638	.9238
#1	482800.	1859.	941.4	869.5	944.4	186800.	11340.
#2	483800.	1845.	939.1	856.1	952.1	185800.	11550.
#3	480000.	1847.	936.9	869.8	945.8	186100.	11430.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: ICSAB Acquired: 5/3/2017 1:21:02 Type: QC
Method: New MethodDec2016(v335) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Sample Type: ICSAB Dilution Factor: 1 :
Comment: 6010_W_PKG

Elem	Mg	Mn	Mo	Na	Ni	P	Pb
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**497700.**	**954.7**	**964.1**	**-3129.**	**1844.**	**426.1**	**81.80**
Stddev	4025.	3.5	3.7	4841.	7.	3.6	.43
%RSD	.8086	.3663	.3873	154.7	.3564	.8386	.5252
#1	500400.	953.5	968.4	-7915.	1852.	430.1	82.25
#2	499700.	951.9	962.0	-3236.	1839.	423.1	81.39
#3	493100.	958.6	961.9	1764.	1842.	425.2	81.76
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sb	Se	Si	Sn	Sr	Ti	Tl
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**1162.**	**86.10**	F **688.5**	**930.2**	**1020.**	**979.5**	**182.8**
Stddev	8.	5.90	7.1	6.4	6.	2.1	2.6
%RSD	.6479	6.850	1.030	.6832	.5993	.2131	1.398
#1	1171.	80.50	681.3	937.1	1027.	981.9	185.2
#2	1157.	85.56	688.6	924.6	1018.	978.7	183.2
#3	1159.	92.26	695.5	928.8	1015.	977.9	180.1
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			1200.				
Low Limit			800.0				

Sample Name: ICSAB Acquired: 5/3/2017 1:21:02 Type: QC
Method: New MethodDec2016(v335) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Sample Type: ICSAB Dilution Factor: 1 :
Comment: 6010_W_PKG

Elem	V	Y	Y	Y	Zn
Units	ug/L	%	%	%	ug/L
Avg	957.5	94.97	93.91	13.88	1927.
Stddev	.8	.34	.23	.06	12.
%RSD	.0824	.3563	.2502	.4037	.6045
#1	957.2	94.81	94.08	13.92	1939.
#2	956.9	95.36	94.01	13.90	1917.
#3	958.4	94.75	93.64	13.82	1924.
Check ?	Chk Pass	None	None	None	Chk Pass
High Limit					
Low Limit					

Int. Std.	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S
Avg	11396.	85960.	12705.
Stddev	41.	215.	51.
%RSD	.35632	.25019	.40375
#1	11375.	86117.	12742.
#2	11442.	86048.	12727.
#3	11369.	85715.	12647.

Sample Name: CCV Acquired: 5/3/2017 1:26:11 Type: QC
Method: New MethodDec2016(v335) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Sample Type: CCV Dilution Factor: 1 :
Comment: 6010_W_PKG

Elem	Ag	Al	As	Au	B	Ba	Be	Ca
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**243.1**	**4925.**	**472.2**	F **444.2**	**2408.**	**491.8**	**48.59**	**24300.**
Stddev	.8	12.	1.3	32.5	3.	.5	.26	70.
%RSD	.3488	.2406	.2764	7.314	.1136	.1117	.5422	.2874
#1	243.4	4918.	473.6	423.1	2409.	492.1	48.76	24370.
#2	242.2	4938.	471.1	427.9	2410.	492.2	48.29	24280.
#3	243.8	4918.	471.8	481.6	2405.	491.2	48.73	24240.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				550.0				
Low Limit				450.0				

Elem	Cd	Co	Cr	Cu	Fe	K	Mg	Mn
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**48.45**	**488.5**	**244.9**	**247.7**	**1969.**	**47180.**	**23730.**	**245.5**
Stddev	.29	1.4	2.2	.4	19.	206.	331.	1.2
%RSD	.6061	.2909	.9004	.1802	.9825	.4372	1.395	.5008
#1	48.77	489.1	246.8	248.1	1961.	47370.	23910.	245.7
#2	48.38	489.5	242.5	247.6	1956.	46960.	23930.	244.2
#3	48.19	486.8	245.5	247.3	1991.	47220.	23340.	246.7
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: CCV Acquired: 5/3/2017 1:26:11 Type: QC
Method: New MethodDec2016(v335) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Sample Type: CCV Dilution Factor: 1 :
Comment: 6010_W_PKG

Elem	Mo	Na	Ni	P	Pb	Sb	Se	Si
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**485.4**	**51390.**	**242.7**	**942.9**	**482.8**	**716.4**	**718.5**	**4737.**
Stddev	.6	7020.	.3	3.2	2.6	3.5	1.3	29.
%RSD	.1245	13.66	.1129	.3364	.5411	.4941	.1764	.6034
#1	484.8	52110.	242.9	946.5	485.6	714.2	718.9	4750.
#2	485.3	44040.	242.9	941.1	482.1	714.5	717.0	4705.
#3	486.0	58030.	242.4	941.0	480.5	720.5	719.4	4757.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Sn	Sr	Ti	Tl	V	Y	Y	Y
Units	ug/L	ug/L	ug/L	ug/L	ug/L	%	%	%
Avg	**2415.**	**509.2**	**483.8**	**738.7**	**485.0**	**98.98**	**97.66**	**13.90**
Stddev	3.	3.8	.7	3.1	2.8	.24	.24	.03
%RSD	.1266	.7482	.1493	.4195	.5825	.2386	.2472	.1883
#1	2417.	509.8	484.6	742.3	486.6	99.25	97.92	13.93
#2	2417.	505.2	483.2	737.3	481.8	98.81	97.62	13.89
#3	2412.	512.7	483.7	736.6	486.8	98.88	97.44	13.88
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	None	None
High Limit								
Low Limit								

Sample Name: CCV Acquired: 5/3/2017 1:26:11 Type: QC
Method: New MethodDec2016(v335) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Sample Type: CCV Dilution Factor: 1 :
Comment: 6010_W_PKG

Elem	Zn
Units	ug/L
Avg	967.5
Stddev	.7
%RSD	.0757
#1	967.8
#2	968.0
#3	966.7
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S
Avg	11876.	89392.	12719.
Stddev	28.	221.	24.
%RSD	.23858	.24721	.18826
#1	11908.	89627.	12746.
#2	11855.	89359.	12711.
#3	11864.	89189.	12701.

Sample Name: CCB Acquired: 5/3/2017 1:31:04 Type: QC
Method: New MethodDec2016(v335) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Sample Type: CCB Dilution Factor: 1 :
Comment: 6010_W_PKG

Elem	Ag	Al	As	Au	B	Ba	Be	Ca	Cd
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**-1.191**	**12.44**	**1.593**	**24.27**	**2.494**	**.1656**	**-.0582**	**27.89**	**.0799**
Stddev	.377	9.56	3.484	31.66	.299	.2377	.1130	30.53	.0815
%RSD	31.61	76.83	218.7	130.5	11.99	143.6	194.1	109.5	101.9
#1	-1.560	23.29	-.8557	-.6384	2.750	.3771	.0295	-3.611	.0436
#2	-1.207	8.785	.0533	13.55	2.567	.2113	-.1857	57.34	.0230
#3	-.8071	5.251	5.582	59.90	2.166	-.0917	-.0185	29.93	.1732
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co	Cr	Cu	Fe	K	Mg	Mn	Mo	Na
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**.2414**	**-.0966**	**-.3464**	**11.33**	**-127.9**	**-66.00**	**.5873**	**.7584**	**1275.**
Stddev	.1913	.1762	1.802	4.16	219.5	57.95	.0210	.4103	5126.
%RSD	79.23	182.4	520.1	36.73	171.6	87.81	3.581	54.10	402.1
#1	.4123	-.0956	-.0401	10.06	-269.7	-71.60	.6094	1.204	6892.
#2	.2770	-.2732	1.282	7.950	124.9	-121.0	.5850	.3955	-3151.
#3	.0348	.0791	-2.281	15.98	-238.9	-5.450	.5675	.6762	83.54
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: CCB Acquired: 5/3/2017 1:31:04 Type: QC
Method: New MethodDec2016(v335) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Sample Type: CCB Dilution Factor: 1 :
Comment: 6010_W_PKG

Elem	Ni	P	Pb	Sb	Se	Si	Sn	Sr	Ti
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**-.3786**	**.1480**	**-.0598**	**1.819**	**-2.112**	**-2.628**	**.8212**	**.0337**	**.0180**
Stddev	.5656	1.107	.9185	4.233	6.991	1.811	1.198	.0316	.1470
%RSD	149.4	748.3	1535.	232.7	331.0	68.92	145.9	93.65	814.7
#1	-.3044	-.0218	.7480	-2.968	.4916	-2.773	2.058	.0560	.0720
#2	-.9776	-.8648	.1315	3.355	3.204	-4.363	.7402	-.0024	.1304
#3	.1463	1.331	-1.059	5.068	-10.03	-.7489	-.3344	.0476	-.1483
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Tl	V	Y	Y	Y	Zn
Units	ug/L	ug/L	%	%	%	ug/L
Avg	**-.1011**	**-.4490**	**100.1**	**98.63**	**13.89**	**1.633**
Stddev	3.312	.5759	.7	.53	.06	.225
%RSD	3277.	128.3	.6914	.5409	.4055	13.80
#1	1.133	.1461	100.5	98.79	13.83	1.868
#2	-3.853	-1.004	100.5	99.06	13.91	1.612
#3	2.417	-.4893	99.27	98.03	13.94	1.419
Check ?	Chk Pass	Chk Pass	None	None	None	Chk Pass
High Limit						
Low Limit						

Sample Name: CCB Acquired: 5/3/2017 1:31:04 Type: QC
Method: New MethodDec2016(v335) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Sample Type: CCB Dilution Factor: 1 :
Comment: 6010_W_PKG

Int. Std.	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S
Avg	12007.	90275.	12717.
Stddev	83.	488.	52.
%RSD	.69137	.54094	.40551
#1	12054.	90425.	12660.
#2	12056.	90671.	12734.
#3	11911.	89729.	12759.

Sample Name: 103461_2600 Acquired: 5/3/2017 1:36:17 Type: Unk
Method: New MethodDec2016(v335) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Sample Type: MBLK Dilution Factor: 1 :
Comment: 6010_W_PKG

Elem	Ag	Al	As	Au	B	Ba	Be	Ca	Cd
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**-1.096**	**2.916**	**.2133**	**-11.49**	**1.300**	**-.1014**	**.0546**	**24.65**	**.0493**
Stddev	.970	3.713	2.806	22.22	.746	.1234	.2887	10.72	.1428
%RSD	88.51	127.3	1316.	193.4	57.36	121.8	529.0	43.50	289.5
#1	.0219	-.7004	-.1330	-7.546	1.174	.0334	-.2193	15.26	.1266
#2	-1.593	2.730	3.176	-35.41	.6255	-.1287	.3561	36.33	.1368
#3	-1.718	6.719	-2.403	8.494	2.101	-.2089	.0270	22.36	-.1154

Elem	Co	Cr	Cu	Fe	K	Mg	Mn	Mo	Na
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**.2412**	**.3159**	**-1.277**	**-.7092**	**793.0**	**35.93**	**.9391**	**.0217**	**1175.**
Stddev	.1175	.0950	.645	6.121	184.7	123.4	.0305	.4871	3244.
%RSD	48.71	30.06	50.55	863.1	23.29	343.6	3.248	2245.	276.0
#1	.2463	.4138	-1.341	3.665	998.3	-55.05	.9203	.1892	3343.
#2	.1213	.3097	-.6014	1.911	640.6	176.4	.9743	.4030	-2554.
#3	.3561	.2241	-1.887	-7.704	740.0	-13.61	.9226	-.5271	2737.

Elem	Ni	P	Pb	Sb	Se	Si	Sn	Sr	Ti
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**-.7647**	**1.210**	**.3225**	**.9831**	**-2.971**	**.7410**	**2.300**	**.0064**	**-.1074**
Stddev	.0722	.646	2.817	1.100	1.968	1.240	.566	.0355	.0363
%RSD	9.442	53.42	873.5	111.9	66.24	167.4	24.59	557.9	33.75
#1	-.8228	.4841	-2.758	1.079	-.9066	1.401	2.696	-.0277	-.1042
#2	-.6839	1.421	.9563	-.1622	-4.825	-.6899	1.652	.0036	-.0729
#3	-.7875	1.723	2.769	2.032	-3.181	1.512	2.551	.0432	-.1452

Elem	Tl	V	Y	Y	Y	Zn
Units	ug/L	ug/L	%	%	%	ug/L
Avg	**1.292**	**-.4330**	**99.13**	**98.19**	**13.89**	**.0845**
Stddev	.826	.3926	.13	.11	.01	.1679
%RSD	63.97	90.67	.1315	.1085	.1015	198.6
#1	1.453	-.3146	99.07	98.30	13.88	-.0346
#2	2.025	-.8712	99.28	98.17	13.89	.0117
#3	.3965	-.1132	99.05	98.09	13.90	.2765

Sample Name: 103461_2600 Acquired: 5/3/2017 1:36:17 Type: Unk
Method: New MethodDec2016(v335) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Sample Type: MBLK Dilution Factor: 1 :
Comment: 6010_W_PKG

Int. Std.	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S
Avg	11895.	89872.	12714.
Stddev	16.	97.	13.
%RSD	.13148	.10848	.10149
#1	11887.	89977.	12702.
#2	11913.	89854.	12713.
#3	11884.	89784.	12728.

Sample Name: 103462_2600 Acquired: 5/3/2017 1:41:30 Type: Unk
Method: New MethodDec2016(v335) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Sample Type: LCS Dilution Factor: 1 :
Comment: 6010_W_PKG

Elem	Ag	Al	As	Au	B	Ba	Be	Ca
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**239.7**	**4941.**	**479.1**	**489.1**	**2441.**	**501.1**	**49.96**	**24560.**
Stddev	.8	27.	2.1	27.7	5.	.4	.49	66.
%RSD	.3281	.5532	.4328	5.669	.1870	.0883	.9832	.2670
#1	238.9	4946.	479.4	493.3	2436.	501.1	50.49	24630.
#2	239.8	4912.	476.9	459.4	2441.	500.7	49.52	24490.
#3	240.5	4966.	481.0	514.4	2445.	501.6	49.87	24550.

Elem	Cd	Co	Cr	Cu	Fe	K	Mg	Mn
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**48.96**	**499.3**	**250.5**	**252.2**	**1987.**	**49290.**	**23840.**	**249.0**
Stddev	.28	.8	2.3	1.9	9.	124.	19.	.9
%RSD	.5734	.1649	.9126	.7499	.4604	.2515	.0795	.3587
#1	48.94	498.8	248.0	254.4	1997.	49170.	23860.	248.0
#2	48.69	498.9	251.3	250.9	1985.	49300.	23840.	249.1
#3	49.25	500.3	252.4	251.5	1979.	49410.	23820.	249.8

Elem	Mo	Na	Ni	P	Pb	Sb	Se	Si
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**497.4**	**55080.**	**246.9**	**947.1**	**493.0**	**736.2**	**721.9**	**4891.**
Stddev	1.0	2162.	.1	5.8	.9	2.3	3.0	27.
%RSD	.2057	3.926	.0547	.6152	.1824	.3085	.4217	.5432
#1	497.0	56710.	247.0	943.0	494.0	734.5	725.4	4868.
#2	496.6	55900.	246.8	944.5	492.9	735.2	720.5	4886.
#3	498.5	52630.	247.0	953.8	492.2	738.7	719.8	4920.

Elem	Sn	Sr	Ti	Tl	V	Y	Y	Y
Units	ug/L	ug/L	ug/L	ug/L	ug/L	%	%	%
Avg	**2446.**	**512.6**	**485.9**	**748.6**	**487.1**	**97.24**	**97.33**	**13.84**
Stddev	6.	3.4	1.9	2.2	2.1	.35	.37	.12
%RSD	.2395	.6720	.3916	.2926	.4235	.3550	.3839	.8765
#1	2442.	508.8	487.0	749.4	486.4	96.87	96.94	13.70
#2	2444.	513.7	483.7	746.1	485.5	97.29	97.36	13.90
#3	2453.	515.5	487.0	750.2	489.4	97.55	97.68	13.92

Sample Name: 103462_2600 Acquired: 5/3/2017 1:41:30 Type: Unk
Method: New MethodDec2016(v335) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Sample Type: LCS Dilution Factor: 1 :
Comment: 6010_W_PKG

Elem	Zn
Units	ug/L
Avg	975.8
Stddev	1.6
%RSD	.1651
#1	974.0
#2	976.3
#3	977.2

Int. Std.	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S
Avg	11667.	89085.	12667.
Stddev	41.	342.	111.
%RSD	.35503	.38389	.87647
#1	11623.	88730.	12539.
#2	11674.	89114.	12720.
#3	11705.	89412.	12741.

Sample Name: 7016438014_2600 Acquired: 5/3/2017 1:46:22 Type: Unk
Method: New MethodDec2016(v335) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Sample Type: SAMP Dilution Factor: 1 :
Comment: 6010_W_PKG

Elem	Ag	Al	As	Au	B	Ba
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**-8.910**	**1010.**	**75.88**	**-14.95**	**38.66**	**1099.**
Stddev	.632	9.	3.03	20.52	1.01	2.
%RSD	7.099	.8503	3.987	137.2	2.611	.1890
#1	-9.594	1003.	72.49	-35.53	39.74	1101.
#2	-8.792	1019.	78.29	-14.83	37.75	1097.
#3	-8.345	1008.	76.87	5.510	38.50	1099.

Elem	Be	Ca	Cd	Co	Cr	Cu
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**-.0414**	**56650.**	**27.84**	**18.31**	F **-269.5**	**70.74**
Stddev	.4381	52.	.28	.58	2.9	.75
%RSD	1058.	.0922	.9882	3.157	1.091	1.063
#1	.4284	56630.	28.14	18.89	-269.6	70.24
#2	-.4387	56710.	27.79	17.73	-272.4	70.37
#3	-.1139	56610.	27.59	18.30	-266.5	71.60

Elem	Fe	K	Mg	Mn	Mo	Na
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	F **611700.**	**14290.**	**11190.**	F **28010.**	**3.371**	**18660.**
Stddev	1546.	98.	85.	132.	.213	1673.
%RSD	.2528	.6848	.7582	.4721	6.311	8.966
#1	613100.	14180.	11180.	27860.	3.608	18450.
#2	610000.	14360.	11110.	28040.	3.196	17110.
#3	611900.	14330.	11280.	28120.	3.310	20440.

Elem	Ni	P	Pb	Sb	Se	Si
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**-12.95**	**7127.**	**19.29**	**-32.83**	**8.530**	F **32730.**
Stddev	.97	12.	.81	.86	2.464	54.
%RSD	7.482	.1667	4.202	2.606	28.88	.1643
#1	-14.03	7132.	19.50	-32.33	8.401	32710.
#2	-12.17	7113.	18.39	-33.82	6.133	32690.
#3	-12.64	7135.	19.97	-32.35	11.06	32790.

Sample Name: 7016438014_2600 Acquired: 5/3/2017 1:46:22 Type: Unk
Method: New MethodDec2016(v335) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Sample Type: SAMP Dilution Factor: 1 :
Comment: 6010_W_PKG

Elem	Sn	Sr	Ti	Tl	V	Y
Units	ug/L	ug/L	ug/L	ug/L	ug/L	%
Avg	**34.75**	**326.9**	**5.119**	F **-65.82**	**20.56**	**99.61**
Stddev	.46	1.2	.123	1.22	.13	.32
%RSD	1.314	.3580	2.409	1.850	.6142	.3242
#1	34.24	327.0	4.993	-64.71	20.53	99.25
#2	35.13	325.7	5.239	-67.12	20.70	99.70
#3	34.87	328.0	5.125	-65.61	20.46	99.88

Elem	Y	Y	Zn
Units	%	%	ug/L
Avg	**98.59**	**14.24**	**66.43**
Stddev	.03	.09	.15
%RSD	.0350	.6387	.2317
#1	98.59	14.18	66.39
#2	98.62	14.19	66.60
#3	98.55	14.35	66.30

Int. Std.	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S
Avg	**11952.**	**90241.**	**13035.**
Stddev	39.	32.	83.
%RSD	.32418	.03499	.63868
#1	11909.	90243.	12984.
#2	11963.	90272.	12990.
#3	11985.	90209.	13131.

Sample Name: 103463_2600 Acquired: 5/3/2017 1:51:26 Type: Unk
Method: New MethodDec2016(v335) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Sample Type: DUP Dilution Factor: 1 :
Comment: 6010_W_PKG

Elem	Ag	Al	As	Au	B	Ba
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**-8.668**	**88.78**	**77.01**	**-8.042**	**37.34**	**1092.**
Stddev	1.740	2.10	5.23	23.25	.42	4.
%RSD	20.08	2.369	6.793	289.1	1.124	.3244
#1	-7.104	90.23	80.34	-28.16	37.44	1093.
#2	-8.356	89.73	79.70	17.41	37.69	1095.
#3	-10.54	86.36	70.98	-13.37	36.87	1088.

Elem	Be	Ca	Cd	Co	Cr	Cu
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**-.0964**	**56720.**	**27.60**	**17.94**	F **-276.1**	**60.80**
Stddev	.4924	176.	.53	.71	8.3	.39
%RSD	510.7	.3109	1.914	3.946	3.000	.6430
#1	.4567	56920.	27.63	18.72	-281.8	61.16
#2	-.2588	56610.	28.12	17.35	-266.6	60.39
#3	-.4872	56620.	27.06	17.74	-279.8	60.84

Elem	Fe	K	Mg	Mn	Mo	Na
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	F **618000.**	**14130.**	**11180.**	F **27800.**	**3.250**	**18380.**
Stddev	2036.	119.	37.	56.	.391	2910.
%RSD	.3294	.8397	.3353	.1998	12.04	15.83
#1	620200.	14060.	11220.	27750.	3.225	15160.
#2	616200.	14270.	11150.	27860.	3.654	20820.
#3	617600.	14060.	11160.	27790.	2.872	19170.

Elem	Ni	P	Pb	Sb	Se	Si
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**-11.80**	**7263.**	**17.17**	**-31.49**	**-.1878**	F **32920.**
Stddev	.93	44.	2.38	2.43	2.517	230.
%RSD	7.859	.6095	13.88	7.727	1341.	.6972
#1	-12.24	7259.	19.37	-31.29	2.176	32660.
#2	-12.42	7309.	14.64	-34.01	.0943	33010.
#3	-10.73	7220.	17.49	-29.16	-2.834	33100.

Sample Name: 103463_2600 Acquired: 5/3/2017 1:51:26 Type: Unk
Method: New MethodDec2016(v335) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Sample Type: DUP Dilution Factor: 1 :
Comment: 6010_W_PKG

Elem	Sn	Sr	Ti	Tl	V	Y
Units	ug/L	ug/L	ug/L	ug/L	ug/L	%
Avg	**26.71**	**327.3**	**3.944**	F **-67.53**	**20.36**	**100.7**
Stddev	1.54	2.8	.223	2.50	.47	.5
%RSD	5.776	.8448	5.665	3.705	2.303	.4772
#1	25.02	324.1	3.808	-70.27	20.67	100.5
#2	27.06	329.4	3.823	-66.96	20.60	100.4
#3	28.05	328.2	4.202	-65.36	19.82	101.2

Elem	Y	Y	Zn
Units	%	%	ug/L
Avg	**98.90**	**14.21**	**48.26**
Stddev	.44	.04	1.09
%RSD	.4427	.2917	2.247
#1	99.41	14.16	47.89
#2	98.68	14.24	49.49
#3	98.63	14.22	47.41

Int. Std.	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S
Avg	**12082.**	**90530.**	**13003.**
Stddev	58.	401.	38.
%RSD	.47717	.44274	.29166
#1	12055.	90992.	12960.
#2	12043.	90323.	13030.
#3	12148.	90276.	13020.

Sample Name: 103464_2600 Acquired: 5/3/2017 1:56:31 Type: Unk
Method: New MethodDec2016(v335) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Sample Type: MS Dilution Factor: 1 :
Comment: 6010_W_PKG

Elem	Ag	Al	As	Au	B	Ba
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**387.9**	**5837.**	**588.0**	**490.4**	**2584.**	**1599.**
Stddev	2.8	42.	3.7	15.0	18.	14.
%RSD	.7329	.7192	.6308	3.055	.7062	.8595
#1	390.6	5871.	589.1	482.4	2601.	1611.
#2	388.2	5851.	591.0	507.7	2587.	1602.
#3	384.9	5790.	583.8	481.2	2565.	1584.

Elem	Be	Ca	Cd	Co	Cr	Cu
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**52.62**	**82260.**	**78.76**	**546.8**	F **-19.13**	**343.3**
Stddev	.60	414.	.83	3.7	7.41	3.3
%RSD	1.142	.5033	1.060	.6800	38.73	.9685
#1	52.42	82330.	79.61	549.8	-13.86	343.3
#2	53.29	82630.	78.73	548.1	-27.60	346.6
#3	52.14	81810.	77.94	542.7	-15.94	339.9

Elem	Fe	K	Mg	Mn	Mo	Na
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	F **615200.**	**62260.**	**36090.**	F **28100.**	**506.9**	**70860.**
Stddev	3215.	272.	525.	17.	4.8	1409.
%RSD	.5227	.4370	1.455	.0596	.9406	1.989
#1	617200.	62410.	36130.	28090.	511.3	70140.
#2	616900.	62430.	36590.	28100.	507.7	72480.
#3	611500.	61950.	35540.	28120.	501.8	69950.

Elem	Ni	P	Pb	Sb	Se	Si
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**248.6**	**8330.**	**525.7**	**743.4**	**775.7**	F **38320.**
Stddev	1.2	61.	4.3	3.7	8.2	186.
%RSD	.4746	.7360	.8235	.5003	1.062	.4865
#1	249.9	8383.	528.3	746.2	777.3	38480.
#2	248.3	8344.	528.1	744.8	783.0	38370.
#3	247.6	8263.	520.7	739.2	766.7	38120.

Sample Name: 103464_2600 Acquired: 5/3/2017 1:56:31 Type: Unk
Method: New MethodDec2016(v335) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Sample Type: MS Dilution Factor: 1 :
Comment: 6010_W_PKG

Elem	Sn	Sr	Ti	Tl	V	Y
Units	ug/L	ug/L	ug/L	ug/L	ug/L	%
Avg	2598.	857.8	528.8	713.1	553.2	100.6
Stddev	19.	8.8	3.9	9.8	2.9	.6
%RSD	.7232	1.026	.7314	1.371	.5167	.5622
#1	2614.	859.4	532.0	719.8	556.2	100.0
#2	2602.	865.7	529.8	717.7	552.8	100.5
#3	2577.	848.3	524.5	701.9	550.5	101.1

Elem	Y	Y	Zn
Units	%	%	ug/L
Avg	97.92	14.18	1061.
Stddev	.62	.08	11.
%RSD	.6306	.5908	1.001
#1	97.85	14.11	1071.
#2	97.34	14.15	1061.
#3	98.57	14.27	1050.

Int. Std.	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S
Avg	12066.	89627.	12979.
Stddev	68.	565.	77.
%RSD	.56224	.63058	.59079
#1	11999.	89563.	12919.
#2	12064.	89097.	12952.
#3	12135.	90222.	13065.

Sample Name: 103502_2600 X5 Acquired: 5/3/2017 2:01:36 Type: Unk
Method: New MethodDec2016(v335) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Sample Type: SD Dilution Factor: 5 :
Comment: 6010_W_PKG

Elem	Ag	Al	As	Au	B	Ba	Be
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**-3.347**	**210.2**	**15.44**	**-.7945**	**10.07**	**219.4**	**.0638**
Stddev	.804	19.3	1.52	19.81	1.09	9.2	.3778
%RSD	24.01	9.186	9.880	2494.	10.80	4.172	592.3
#1	-2.423	232.2	15.70	19.00	10.97	229.0	.4846
#2	-3.735	202.5	16.81	-.7496	10.38	218.3	-.0473
#3	-3.883	196.0	13.80	-20.63	8.861	210.8	-.2460

Elem	Ca	Cd	Co	Cr	Cu	Fe	K
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**11870.**	**4.729**	**3.763**	F **-61.39**	**12.91**	**130600.**	**2761.**
Stddev	646.	.063	.729	3.85	.49	6788.	341.
%RSD	5.443	1.327	19.37	6.269	3.759	5.197	12.34
#1	12580.	4.765	4.431	-64.90	12.67	138100.	3145.
#2	11730.	4.766	3.871	-62.00	12.60	129000.	2494.
#3	11310.	4.657	2.986	-57.27	13.47	124800.	2644.

Elem	Mg	Mn	Mo	Na	Ni	P	Pb
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**2330.**	**6146.**	**.4254**	**3983.**	**-4.769**	**1435.**	**2.466**
Stddev	117.	281.	.5069	2507.	.536	59.	1.810
%RSD	5.017	4.577	119.2	62.93	11.24	4.107	73.41
#1	2464.	6447.	.9993	1958.	-5.324	1496.	.5207
#2	2252.	6099.	.0387	6786.	-4.729	1431.	4.101
#3	2273.	5890.	.2383	3205.	-4.254	1378.	2.776

Elem	Sb	Se	Si	Sn	Sr	Ti	Tl
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**-5.899**	**2.367**	**6897.**	**5.553**	**66.08**	**1.175**	F **-11.97**
Stddev	1.188	3.621	326.	1.333	3.17	.067	3.05
%RSD	20.15	153.0	4.726	24.00	4.790	5.702	25.47
#1	-6.826	1.754	7245.	6.749	69.50	1.244	-15.30
#2	-6.312	-.9074	6847.	4.116	65.47	1.170	-9.321
#3	-4.559	6.256	6599.	5.794	63.26	1.110	-11.28

Sample Name: 103502_2600 X5 Acquired: 5/3/2017 2:01:36 Type: Unk
Method: New MethodDec2016(v335) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Sample Type: SD Dilution Factor: 5 :
Comment: 6010_W_PKG

Elem	V	Y	Y	Y	Zn
Units	ug/L	%	%	%	ug/L
Avg	5.094	104.4	100.2	14.18	13.09
Stddev	.356	.2	.1	.05	.38
%RSD	6.988	.2098	.0915	.3649	2.924
#1	5.130	104.2	100.3	14.23	13.43
#2	5.430	104.6	100.1	14.19	13.15
#3	4.721	104.4	100.2	14.12	12.68

Int. Std.	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S
Avg	12525.	91745.	12978.
Stddev	26.	84.	47.
%RSD	.20983	.09153	.36485
#1	12498.	91833.	13021.
#2	12550.	91665.	12985.
#3	12528.	91738.	12928.

Sample Name: 103501_2600 Acquired: 5/3/2017 2:06:51 Type: Unk
Method: New MethodDec2016(v335) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Sample Type: PDS Dilution Factor: 1 :
Comment: 6010_W_PKG

Elem	Ag	Al	As	Au	B	Ba
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**67.90**	**5683.**	**531.1**	**429.0**	**2386.**	**1543.**
Stddev	.85	59.	2.8	26.5	8.	5.
%RSD	1.258	1.036	.5295	6.169	.3267	.2957
#1	68.77	5729.	532.9	399.7	2377.	1538.
#2	67.06	5704.	527.9	436.1	2389.	1544.
#3	67.87	5617.	532.6	451.2	2392.	1547.

Elem	Be	Ca	Cd	Co	Cr	Cu
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**47.34**	**78100.**	**73.86**	**494.7**	F **-16.03**	**313.0**
Stddev	.43	423.	.64	.8	6.16	3.7
%RSD	.9179	.5413	.8716	.1671	38.43	1.190
#1	47.76	78470.	73.18	495.5	-23.03	317.2
#2	47.37	78190.	73.94	494.7	-11.45	311.6
#3	46.89	77640.	74.46	493.8	-13.60	310.1

Elem	Fe	K	Mg	Mn	Mo	Na
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	F **594900.**	**56680.**	**33030.**	F **27430.**	**469.9**	**66330.**
Stddev	3527.	301.	280.	42.	1.6	6237.
%RSD	.5928	.5304	.8474	.1535	.3336	9.403
#1	597800.	56610.	33150.	27390.	468.2	62820.
#2	596000.	57010.	32710.	27430.	470.4	73530.
#3	591000.	56430.	33230.	27470.	471.2	62630.

Elem	Ni	P	Pb	Sb	Se	Si
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**223.6**	**7872.**	**478.8**	**665.3**	**700.0**	F **37380.**
Stddev	1.0	31.	3.1	2.5	6.3	289.
%RSD	.4421	.3990	.6543	.3685	.8945	.7742
#1	224.6	7836.	475.2	662.9	705.8	37530.
#2	223.6	7893.	481.1	665.2	693.4	37570.
#3	222.6	7888.	479.9	667.8	700.9	37050.

Sample Name: 103501_2600 Acquired: 5/3/2017 2:06:51 Type: Unk
Method: New MethodDec2016(v335) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Sample Type: PDS Dilution Factor: 1 :
Comment: 6010_W_PKG

Elem	Sn	Sr	Ti	Tl	V	Y
Units	ug/L	ug/L	ug/L	ug/L	ug/L	%
Avg	**2357.**	**800.7**	**469.5**	**640.2**	**487.3**	**98.52**
Stddev	7.	9.4	3.9	1.8	5.6	.56
%RSD	.3006	1.175	.8271	.2866	1.155	.5650
#1	2350.	789.9	472.5	640.4	491.6	99.10
#2	2356.	804.9	470.9	638.3	489.4	98.49
#3	2364.	807.3	465.1	642.0	480.9	97.98

Elem	Y	Y	Zn
Units	%	%	ug/L
Avg	**97.47**	**13.77**	**987.4**
Stddev	.24	.07	5.8
%RSD	.2485	.5217	.5828
#1	97.74	13.79	980.9
#2	97.40	13.82	989.5
#3	97.28	13.69	991.8

Int. Std.	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S
Avg	**11822.**	**89220.**	**12602.**
Stddev	67.	222.	66.
%RSD	.56504	.24851	.52173
#1	11890.	89468.	12625.
#2	11817.	89152.	12654.
#3	11757.	89040.	12528.

Sample Name: CCV Acquired: 5/3/2017 2:17:08 Type: QC
Method: New MethodDec2016(v335) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Sample Type: CCV Dilution Factor: 1 :
Comment: 6010_W_PKG

Elem	Ag	Al	As	Au	B	Ba	Be	Ca
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**241.1**	**4887.**	**468.7**	F **374.7**	**2393.**	**492.0**	**48.61**	**24000.**
Stddev	1.1	39.	2.8	39.6	9.	2.0	.43	30.
%RSD	.4680	.8054	.5907	10.56	.3814	.4031	.8912	.1234
#1	240.2	4848.	471.8	330.2	2396.	493.0	49.11	23990.
#2	242.4	4885.	467.6	405.9	2400.	493.4	48.33	23980.
#3	240.7	4927.	466.6	388.1	2382.	489.8	48.38	24040.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				550.0				
Low Limit				450.0				

Elem	Cd	Co	Cr	Cu	Fe	K	Mg	Mn
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**48.48**	**486.7**	**244.9**	**249.0**	**1906.**	**46650.**	**23230.**	**244.6**
Stddev	.43	1.2	2.5	3.7	20.	475.	138.	1.8
%RSD	.8817	.2374	1.022	1.505	1.035	1.018	.5959	.7203
#1	48.85	487.4	245.9	247.1	1911.	46650.	23360.	243.3
#2	48.58	487.3	246.8	246.5	1885.	47130.	23090.	243.8
#3	48.02	485.3	242.1	253.3	1923.	46180.	23240.	246.6
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: CCV Acquired: 5/3/2017 2:17:08 Type: QC
Method: New MethodDec2016(v335) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Sample Type: CCV Dilution Factor: 1 :
Comment: 6010_W_PKG

Elem	Mo	Na	Ni	P	Pb	Sb	Se	Si
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**482.4**	**50000.**	**241.6**	**929.9**	**480.8**	**714.3**	**709.6**	**4732.**
Stddev	1.8	3025.	.7	3.6	4.9	5.0	2.3	16.
%RSD	.3653	6.050	.3091	.3891	1.012	.7007	.3217	.3320
#1	482.8	51940.	242.0	933.4	483.7	711.3	707.9	4716.
#2	483.9	51530.	242.1	930.3	483.5	720.1	712.2	4733.
#3	480.4	46510.	240.8	926.1	475.2	711.5	708.7	4747.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Sn	Sr	Ti	Tl	V	Y	Y	Y
Units	ug/L	ug/L	ug/L	ug/L	ug/L	%	%	%
Avg	**2399.**	**507.4**	**477.7**	**735.9**	**480.9**	**98.52**	**97.63**	**13.56**
Stddev	10.	2.5	2.5	3.5	.9	.71	.60	.02
%RSD	.4021	.4953	.5191	.4728	.1974	.7230	.6192	.1159
#1	2405.	504.5	475.3	737.7	480.4	98.24	98.25	13.56
#2	2405.	509.0	477.7	738.1	482.0	97.99	97.60	13.58
#3	2388.	508.7	480.3	731.9	480.2	99.33	97.04	13.54
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	None	None
High Limit								
Low Limit								

Sample Name: CCV Acquired: 5/3/2017 2:17:08 Type: QC
Method: New MethodDec2016(v335) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Sample Type: CCV Dilution Factor: 1 :
Comment: 6010_W_PKG

Elem	Zn
Units	ug/L
Avg	959.6
Stddev	6.8
%RSD	.7116
#1	965.1
#2	961.7
#3	952.0
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S
Avg	11821.	89361.	12412.
Stddev	85.	553.	14.
%RSD	.72300	.61920	.11587
#1	11787.	89928.	12410.
#2	11758.	89333.	12427.
#3	11918.	88822.	12398.

Sample Name: CCB Acquired: 5/3/2017 2:22:01 Type: QC
Method: New MethodDec2016(v335) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Sample Type: CCB Dilution Factor: 1 :
Comment: 6010_W_PKG

Elem	Ag	Al	As	Au	B	Ba	Be	Ca	Cd
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**-.3990**	**-3.192**	**-3.335**	**41.01**	**1.448**	**.0949**	**.2008**	**14.88**	**-.0653**
Stddev	1.357	3.298	3.159	26.80	.512	.1117	.1706	10.99	.1718
%RSD	340.1	103.3	94.71	65.36	35.34	117.6	84.92	73.89	263.0
#1	-1.384	-4.753	-6.974	10.06	1.810	.2239	.0072	2.345	.1141
#2	1.149	-5.420	-1.725	56.02	.8627	.0330	.3289	22.88	-.0818
#3	-.9624	.5961	-1.306	56.95	1.672	.0279	.2664	19.40	-.2282
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co	Cr	Cu	Fe	K	Mg	Mn	Mo	Na
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**.1460**	**-.1167**	**-.3567**	**-.4301**	**-25.09**	**-21.23**	**1.478**	**.5730**	**526.2**
Stddev	.0181	.3220	1.138	2.618	122.6	86.61	.066	.4565	3530.
%RSD	12.39	275.8	318.9	608.8	488.8	408.0	4.479	79.67	670.9
#1	.1660	-.2904	-.8871	1.468	-59.92	-115.9	1.407	1.079	4582.
#2	.1413	.2548	-1.132	-3.417	-126.6	-1.710	1.538	.4492	-1150.
#3	.1307	-.3146	.9493	.6589	111.2	53.96	1.488	.1911	-1853.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: CCB Acquired: 5/3/2017 2:22:01 Type: QC
Method: New MethodDec2016(v335) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Sample Type: CCB Dilution Factor: 1 :
Comment: 6010_W_PKG

Elem	Ni	P	Pb	Sb	Se	Si	Sn	Sr	Ti
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**-.9429**	**3.261**	**-.1352**	**1.794**	**-1.464**	**13.48**	**-.7588**	**.0917**	**.0519**
Stddev	.4710	.835	1.542	1.232	3.670	2.01	1.117	.0438	.1598
%RSD	49.96	25.61	1141.	68.68	250.7	14.92	147.2	47.80	307.9
#1	-.6528	3.576	1.436	2.670	1.637	15.80	-1.221	.1018	-.1171
#2	-.6894	2.314	-.1943	2.328	-.5118	12.46	-1.570	.1297	.0722
#3	-1.486	3.893	-1.647	.3851	-5.516	12.19	.5152	.0437	.2006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Tl	V	Y	Y	Y	Zn
Units	ug/L	ug/L	%	%	%	ug/L
Avg	**.8614**	**-.0411**	**101.1**	**99.97**	**13.82**	**.9402**
Stddev	1.069	.2712	.0	.51	.07	.1171
%RSD	124.1	660.5	.0314	.5138	.4810	12.45
#1	1.454	.2645	101.1	99.96	13.74	1.031
#2	-.3729	-.2532	101.1	100.5	13.85	.9811
#3	1.503	-.1345	101.0	99.46	13.87	.8081
Check ?	Chk Pass	Chk Pass	None	None	None	Chk Pass
High Limit						
Low Limit						

Sample Name: CCB Acquired: 5/3/2017 2:22:01 Type: QC
Method: New MethodDec2016(v335) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Sample Type: CCB Dilution Factor: 1 :
Comment: 6010_W_PKG

Int. Std.	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S
Avg	12128.	91506.	12650.
Stddev	4.	470.	61.
%RSD	.03141	.51383	.48103
#1	12132.	91497.	12580.
#2	12127.	91980.	12677.
#3	12124.	91040.	12692.

Sample Name: CAL0 Acquired: 5/5/2017 12:38:57 Type: Cal
Method: New MethodDec2016(v343) Mode: IR Corr. Factor: 1.000000
User: Charles Zervakos Sample Type: Dilution Factor: :
Comment:

Elem	Ag	Al	As	Au	B	Ba	Be	Ca
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0000	-.0001	.0000	.0002	.0015	.0015	.0006	.0000
Stddev	.0001	.0001	.000	.0000	.0001	.0001	.0000	.000
%RSD	896.1	81.48	113.1	23.19	5.137	4.575	2.158	467.7
#1	.0000	-.0001	.0000	.0003	.0015	.0015	.0006	.0000
#2	-.0001	.0000	.0000	.0002	.0015	.0014	.0006	-.0001
#3	.0001	-.0002	.0000	.0002	.0014	.0015	.0006	.0001

Elem	Cd	Co	Cr	Cu	Fe	K	Mg	Mn
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0000	-.0003	-.0201	-.0001	.0002	.0056	.0001	.0005
Stddev	.0001	.0000	.0001	.0000	.0001	.0006	.0002	.0000
%RSD	215.7	8.908	.2736	39.11	31.18	11.03	213.1	2.482
#1	.0000	-.0004	-.0201	-.0001	.0002	.0059	.0001	.0005
#2	.0000	-.0003	-.0201	-.0001	.0001	.0060	.0003	.0005
#3	.0001	-.0003	-.0200	.0000	.0001	.0049	-.0001	.0005

Elem	Mo	Na	Ni	P	Pb	Sb	Se	Si
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0000	.0000	-.0002	.0000	.0000	.0005	.0000	.0037
Stddev	.0001	.001	.0000	.0000	.000	.0000	.0001	.0000
%RSD	225.3	3425.	16.77	398.5	127.7	8.775	358.2	1.282
#1	.0001	.0002	-.0002	.0000	.0000	.0006	-.0001	.0037
#2	.0000	-.0005	-.0002	.0000	.0000	.0005	.0001	.0037
#3	.0000	.0003	-.0001	.0000	.0000	.0005	.0000	.0037

Elem	Sn	Sr	Ti	Tl	V	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0014	.0063	.0005	.0000	.0000	10460.	52490.	6592.
Stddev	.0001	.0002	.0001	.000	.0001	20.	491.	60.
%RSD	3.696	3.101	22.73	2890.	153.3	.1950	.9354	.9100
#1	.0015	.0065	.0004	.0000	.0000	10440.	52650.	6624.
#2	.0014	.0063	.0005	.0000	.0001	10460.	51940.	6630.
#3	.0014	.0061	.0006	.0000	.0000	10480.	52890.	6523.

Sample Name: CAL0 Acquired: 5/5/2017 12:38:57 Type: Cal
Method: New MethodDec2016(v343) Mode: IR Corr. Factor: 1.000000
User: Charles Zervakos Sample Type: Dilution Factor: :
Comment:

Elem	Zn
Units	Cts/S
Avg	.0008
Stddev	.0000
%RSD	4.692
#1	.0008
#2	.0007
#3	.0008

Int. Std.	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S
Avg	10461.	52492.	6592.3
Stddev	20.	491.	60.0
%RSD	.19504	.93540	.91002
#1	10442.	52649.	6623.6
#2	10457.	51942.	6630.2
#3	10483.	52886.	6523.1

Sample Name: CAL1 Acquired: 5/5/2017 12:44:07 Type: Cal
Method: New MethodDec2016(v343) Mode: IR Corr. Factor: 1.000000
User: Charles Zervakos Sample Type: Dilution Factor: :
Comment:

Elem	Ag	Al	As	Au	B	Ba	Be	Ca
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0269	.0469	.0028	.0006	.1068	.1572	.0244	.1375
Stddev	.0003	.0005	.0000	.0000	.0002	.0005	.0002	.0003
%RSD	1.171	1.001	1.211	4.342	.1872	.2999	1.015	.2400
#1	.0265	.0465	.0028	.0006	.1068	.1576	.0245	.1378
#2	.0271	.0468	.0028	.0005	.1067	.1567	.0246	.1375
#3	.0271	.0474	.0028	.0005	.1071	.1573	.0241	.1372

Elem	Cd	Co	Cr	Cu	Fe	K	Mg	Mn
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0181	.0484	.1207	.0022	.0168	.0705	.0337	.1326
Stddev	.0001	.0000	.0003	.0000	.0002	.0006	.0007	.0007
%RSD	.5735	.1028	.2381	.1227	.9719	.8230	2.128	.5505
#1	.0180	.0483	.1207	.0022	.0170	.0712	.0328	.1325
#2	.0182	.0484	.1204	.0022	.0166	.0703	.0340	.1319
#3	.0180	.0484	.1209	.0022	.0168	.0701	.0342	.1333

Elem	Mo	Na	Ni	P	Pb	Sb	Se	Si
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0397	.0020	.0103	.0080	.0109	.0133	.0053	.0895
Stddev	.0002	.0002	.0000	.0000	.0001	.0002	.0001	.0007
%RSD	.4838	10.10	.3872	.3002	.7402	1.178	1.631	.7829
#1	.0396	.0021	.0103	.0080	.0109	.0131	.0052	.0898
#2	.0395	.0022	.0103	.0080	.0108	.0133	.0053	.0887
#3	.0399	.0018	.0103	.0080	.0109	.0134	.0054	.0900

Elem	Sn	Sr	Ti	Tl	V	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0333	1.446	.1870	.0097	.0354	10570.	53220.	6666.
Stddev	.0001	.011	.0013	.0000	.0004	34.	346.	39.
%RSD	.2200	.7418	.6727	.4640	1.046	.3204	.6509	.5881
#1	.0333	1.438	.1863	.0097	.0353	10530.	53210.	6652.
#2	.0332	1.442	.1862	.0096	.0351	10600.	53580.	6710.
#3	.0333	1.458	.1885	.0097	.0358	10570.	52880.	6635.

Sample Name: CAL1 Acquired: 5/5/2017 12:44:07 Type: Cal
Method: New MethodDec2016(v343) Mode: IR Corr. Factor: 1.000000
User: Charles Zervakos Sample Type: Dilution Factor: :
Comment:

Elem	Zn
Units	Cts/S
Avg	.0732
Stddev	.0003
%RSD	.3656
#1	.0734
#2	.0729
#3	.0733

Int. Std.	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S
Avg	10565.	53222.	6665.8
Stddev	34.	346.	39.2
%RSD	.32036	.65088	.58810
#1	10531.	53206.	6651.9
#2	10598.	53576.	6710.0
#3	10567.	52884.	6635.4

Sample Name: CAL2 Acquired: 5/5/2017 12:49:02 Type: Cal
Method: New MethodDec2016(v343) Mode: IR Corr. Factor: 1.000000
User: Charles Zervakos Sample Type: Dilution Factor: :
Comment:

Elem	Ag	Al	As	Au	B	Ba	Be	Ca
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0676	.1199	.0070	.0014	.2655	.3888	.0608	.3448
Stddev	.0009	.0016	.0000	.0002	.0006	.0007	.0002	.0005
%RSD	1.318	1.313	.4204	11.39	.2204	.1691	.3596	.1527
#1	.0687	.1215	.0070	.0015	.2661	.3895	.0610	.3451
#2	.0672	.1196	.0070	.0014	.2649	.3886	.0607	.3451
#3	.0670	.1184	.0070	.0012	.2655	.3883	.0606	.3442

Elem	Cd	Co	Cr	Cu	Fe	K	Mg	Mn
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0445	.1208	.3293	.0056	.0416	.1708	.0840	.3313
Stddev	.0001	.0003	.0010	.0001	.0004	.0006	.0012	.0043
%RSD	.1967	.2096	.3023	1.694	1.053	.3525	1.439	1.295
#1	.0446	.1211	.3302	.0057	.0420	.1715	.0854	.3361
#2	.0445	.1206	.3282	.0056	.0412	.1704	.0832	.3296
#3	.0444	.1208	.3295	.0055	.0414	.1705	.0835	.3281

Elem	Mo	Na	Ni	P	Pb	Sb	Se	Si
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0994	.0038	.0256	.0203	.0268	.0327	.0134	.2259
Stddev	.0001	.0003	.0001	.0001	.0002	.0001	.0000	.0034
%RSD	.1209	8.628	.4918	.4603	.8757	.2980	.3440	1.486
#1	.0995	.0042	.0255	.0204	.0271	.0326	.0134	.2298
#2	.0993	.0039	.0257	.0203	.0267	.0328	.0133	.2242
#3	.0993	.0035	.0255	.0202	.0267	.0328	.0134	.2237

Elem	Sn	Sr	Ti	Tl	V	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0827	3.639	.4690	.0240	.0890	10470.	52370.	6656.
Stddev	.0001	.056	.0053	.0001	.0012	10.	574.	29.
%RSD	.1072	1.542	1.135	.4039	1.373	.0927	1.097	.4335
#1	.0828	3.700	.4748	.0241	.0904	10470.	51740.	6670.
#2	.0826	3.624	.4681	.0241	.0885	10480.	52520.	6675.
#3	.0827	3.591	.4642	.0239	.0882	10460.	52850.	6623.

Sample Name: CAL2 Acquired: 5/5/2017 12:49:02 Type: Cal
Method: New MethodDec2016(v343) Mode: IR Corr. Factor: 1.000000
User: Charles Zervakos Sample Type: Dilution Factor: :
Comment:

Elem	Zn
Units	Cts/S
Avg	.1799
Stddev	.0007
%RSD	.3912
#1	.1807
#2	.1796
#3	.1794

Int. Std.	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S
Avg	10469.	52370.	6656.1
Stddev	10.	574.	28.9
%RSD	.09270	1.0966	.43346
#1	10468.	51736.	6670.5
#2	10479.	52520.	6675.0
#3	10460.	52855.	6622.9

Sample Name: CAL3 Acquired: 5/5/2017 12:53:52 Type: Cal
Method: New MethodDec2016(v343) Mode: IR Corr. Factor: 1.000000
User: Charles Zervakos Sample Type: Dilution Factor: :
Comment:

Elem	Ag	Al	As	Au	B	Ba	Be	Ca
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.1367	.2399	.0143	.0032	.5314	.7779	.1198	.6875
Stddev	.0004	.0017	.0001	.0000	.0008	.0008	.0011	.0036
%RSD	.3141	.7274	.8215	1.222	.1565	.1092	.9275	.5200
#1	.1362	.2392	.0142	.0032	.5310	.7774	.1185	.6872
#2	.1370	.2419	.0142	.0032	.5324	.7788	.1203	.6840
#3	.1368	.2386	.0144	.0032	.5309	.7773	.1206	.6912

Elem	Cd	Co	Cr	Cu	Fe	K	Mg	Mn
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0891	.2413	.6850	.0111	.0833	.3473	.1676	.6567
Stddev	.0002	.0002	.0024	.0001	.0002	.0022	.0010	.0032
%RSD	.2566	.0724	.3549	.4681	.2460	.6322	.6075	.4894
#1	.0889	.2411	.6825	.0111	.0835	.3448	.1681	.6530
#2	.0894	.2414	.6873	.0112	.0832	.3481	.1664	.6586
#3	.0890	.2415	.6852	.0111	.0832	.3490	.1683	.6585

Elem	Mo	Na	Ni	P	Pb	Sb	Se	Si
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.2004	.0088	.0512	.0414	.0537	.0661	.0270	.4462
Stddev	.0007	.0001	.0000	.0001	.0004	.0002	.0001	.0033
%RSD	.3615	1.638	.0376	.2699	.7223	.3708	.2127	.7406
#1	.1996	.0087	.0512	.0413	.0537	.0658	.0270	.4426
#2	.2009	.0089	.0512	.0414	.0541	.0663	.0271	.4472
#3	.2007	.0087	.0512	.0415	.0533	.0661	.0270	.4489

Elem	Sn	Sr	Ti	Tl	V	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.1655	7.149	.9338	.0477	.1770	10380.	52420.	6704.
Stddev	.0003	.014	.0035	.0000	.0008	34.	222.	45.
%RSD	.2103	.1996	.3797	.0730	.4514	.3288	.4234	.6772
#1	.1655	7.158	.9303	.0477	.1762	10360.	52500.	6659.
#2	.1659	7.157	.9374	.0478	.1772	10360.	52170.	6749.
#3	.1652	7.133	.9335	.0477	.1777	10420.	52590.	6704.

Sample Name: CAL3 Acquired: 5/5/2017 12:53:52 Type: Cal
Method: New MethodDec2016(v343) Mode: IR Corr. Factor: 1.000000
User: Charles Zervakos Sample Type: Dilution Factor: :
Comment:

Elem	Zn
Units	Cts/S
Avg	.3587
Stddev	.0008
%RSD	.2213
#1	.3583
#2	.3597
#3	.3583

Int. Std.	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S
Avg	10383.	52417.	6704.0
Stddev	34.	222.	45.4
%RSD	.32876	.42336	.67722
#1	10363.	52497.	6658.6
#2	10363.	52166.	6749.4
#3	10422.	52588.	6704.0

Sample Name: CAL4 Acquired: 5/5/2017 12:58:49 Type: Cal
Method: New MethodDec2016(v343) Mode: IR Corr. Factor: 1.000000
User: Charles Zervakos Sample Type: Dilution Factor: :
Comment:

Elem	Ag	Al	As	Au	B	Ba	Be	Ca
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.2827	.4966	.0297	.0063	1.078	1.573	.2407	1.394
Stddev	.0006	.0015	.0001	.0001	.001	.004	.0008	.010
%RSD	.1980	.2952	.2457	1.032	.0432	.2403	.3478	.7027
#1	.2829	.4966	.0297	.0062	1.078	1.577	.2402	1.383
#2	.2831	.4980	.0297	.0063	1.078	1.574	.2403	1.402
#3	.2820	.4951	.0298	.0063	1.077	1.569	.2417	1.397

Elem	Cd	Co	Cr	Cu	Fe	K	Mg	Mn
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.1804	.4864	1.400	.0228	.1681	.7239	.3423	1.334
Stddev	.0003	.0002	.001	.0000	.0005	.0054	.0037	.001
%RSD	.1466	.0499	.0328	.2099	.2947	.7525	1.092	.1081
#1	.1802	.4861	1.400	.0228	.1676	.7253	.3380	1.335
#2	.1805	.4866	1.400	.0228	.1680	.7285	.3449	1.333
#3	.1807	.4863	1.400	.0227	.1686	.7179	.3440	1.334

Elem	Mo	Na	Ni	P	Pb	Sb	Se	Si
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.4073	.0170	.1031	.0862	.1084	.1367	.0562	.9073
Stddev	.0005	.0005	.0001	.0002	.0002	.0001	.0002	.0023
%RSD	.1211	3.087	.0807	.2565	.2001	.0630	.4226	.2546
#1	.4076	.0176	.1031	.0860	.1084	.1366	.0559	.9049
#2	.4075	.0166	.1030	.0861	.1087	.1367	.0563	.9075
#3	.4067	.0167	.1032	.0864	.1083	.1367	.0563	.9095

Elem	Sn	Sr	Ti	Tl	V	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.3335	14.24	1.910	.0952	.3605	10250.	51350.	6731.
Stddev	.0005	.06	.006	.0000	.0004	51.	304.	20.
%RSD	.1574	.3898	.3079	.0383	.1164	.4978	.5928	.2946
#1	.3332	14.26	1.914	.0952	.3609	10200.	51000.	6742.
#2	.3341	14.17	1.913	.0952	.3605	10260.	51470.	6743.
#3	.3331	14.27	1.903	.0951	.3601	10300.	51570.	6708.

Sample Name: CAL4 Acquired: 5/5/2017 12:58:49 Type: Cal
Method: New MethodDec2016(v343) Mode: IR Corr. Factor: 1.000000
User: Charles Zervakos Sample Type: Dilution Factor: :
Comment:

Elem	Zn
Units	Cts/S
Avg	.7324
Stddev	.0016
%RSD	.2128
#1	.7328
#2	.7337
#3	.7307

Int. Std.	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S
Avg	10253.	51347.	6731.0
Stddev	51.	304.	19.8
%RSD	.49782	.59283	.29463
#1	10197.	51001.	6741.7
#2	10264.	51469.	6743.2
#3	10297.	51572.	6708.1

Sample Name: ICV Acquired: 5/5/2017 13:03:43 Type: QC
Method: New MethodDec2016(v343) Mode: CONC Corr. Factor: 1.000000
User: Charles Zervakos Sample Type: ICV Dilution Factor: 1 : 11539
Comment: 6010 W 70ICP1

Elem	Ag	Al	As	Au	B	Ba	Be	Ca
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**51.42**	**4850.**	**485.5**	**458.2**	**4852.**	**491.1**	**49.15**	**24920.**
Stddev	.60	43.	1.5	25.0	9.	1.1	.27	114.
%RSD	1.174	.8862	.3141	5.453	.1890	.2279	.5412	.4588
#1	51.29	4801.	487.2	479.9	4860.	492.1	49.14	24930.
#2	50.89	4863.	484.5	463.9	4842.	489.9	49.42	24810.
#3	52.08	4884.	484.7	430.9	4855.	491.3	48.88	25030.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Cd	Co	Cr	Cu	Fe	K	Mg	Mn
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**49.56**	**496.8**	**488.6**	**501.6**	**4928.**	**24340.**	**25090.**	**491.9**
Stddev	.25	.8	1.1	4.0	29.	144.	339.	2.8
%RSD	.5056	.1600	.2152	.7993	.5830	.5896	1.351	.5730
#1	49.71	496.1	489.1	497.1	4939.	24500.	25100.	489.0
#2	49.27	496.6	487.4	503.2	4950.	24230.	24750.	492.0
#3	49.70	497.7	489.3	504.6	4895.	24290.	25420.	494.6
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: ICV Acquired: 5/5/2017 13:03:43 Type: QC
Method: New MethodDec2016(v343) Mode: CONC Corr. Factor: 1.000000
User: Charles Zervakos Sample Type: ICV Dilution Factor: 1 : 11539
Comment: 6010 W 70ICP1

Elem	Mo	Na	Ni	P	Pb	Sb	Se	Si
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**488.8**	**25280.**	**496.0**	**459.7**	**485.6**	**487.8**	**500.5**	**4736.**
Stddev	2.7	2986.	.9	2.6	1.7	5.0	4.8	29.
%RSD	.5534	11.81	.1741	.5579	.3476	1.031	.9507	.6069
#1	491.7	23290.	495.6	457.0	487.6	493.6	505.6	4709.
#2	486.4	28710.	495.4	460.0	484.8	485.4	499.5	4732.
#3	488.3	23830.	497.0	462.1	484.5	484.5	496.3	4766.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Sn	Sr	Ti	Tl	V	Y	Y	Y
Units	ug/L	ug/L	ug/L	ug/L	ug/L	%	%	%
Avg	**2437.**	**500.1**	**490.9**	**499.1**	**488.5**	**104.0**	**103.6**	**13.20**
Stddev	6.	2.0	3.9	1.2	4.4	.1	.7	.05
%RSD	.2395	.4089	.7940	.2346	.8997	.1164	.6456	.3748
#1	2442.	497.8	486.5	499.1	483.5	103.9	104.4	13.18
#2	2430.	501.0	492.4	498.0	490.1	104.1	103.4	13.16
#3	2438.	501.6	493.8	500.3	491.9	104.0	103.1	13.25
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	None	None
High Limit								
Low Limit								

Sample Name: ICV Acquired: 5/5/2017 13:03:43 Type: QC
Method: New MethodDec2016(v343) Mode: CONC Corr. Factor: 1.000000
User: Charles Zervakos Sample Type: ICV Dilution Factor: 1 : 11539
Comment: 6010 W 70ICP1

Elem	Zn
Units	ug/L
Avg	2430.
Stddev	4.
%RSD	.1807
#1	2433.
#2	2425.
#3	2431.
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S
Avg	10879.	54380.	6927.1
Stddev	13.	351.	26.0
%RSD	.11640	.64559	.37480
#1	10865.	54777.	6919.0
#2	10889.	54252.	6906.2
#3	10884.	54111.	6956.2

Sample Name: ICB Acquired: 5/5/2017 13:13:54 Type: QC
Method: New MethodDec2016(v343) Mode: CONC Corr. Factor: 1.000000
User: Charles Zervakos Sample Type: ICB Dilution Factor: 1 : 16619
Comment: 6010 W 70ICP1

Elem	Ag	Al	As	Au	B	Ba	Be	Ca	Cd
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**.0648**	**3.240**	**-.1996**	**-112.6**	**3.498**	**-.3025**	**-.1489**	**-24.08**	**-.0832**
Stddev	.0488	4.096	1.818	38.6	.941	.0406	.2123	9.67	.0483
%RSD	75.35	126.4	910.7	34.30	26.88	13.41	142.6	40.15	58.07
#1	.0121	7.364	-.3270	-119.7	4.534	-.2952	.0426	-20.05	-.1380
#2	.0736	-.8276	1.679	-70.90	3.265	-.2661	-.1120	-17.08	-.0464
#3	.1085	3.185	-1.950	-147.1	2.697	-.3462	-.3772	-35.11	-.0653
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co	Cr	Cu	Fe	K	Mg	Mn	Mo	Na
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**-.2274**	**.7898**	**1.101**	**-4.582**	**181.6**	**-13.61**	**-.0200**	**.1448**	**1185.**
Stddev	.2622	.2726	.572	2.786	92.7	78.46	.0487	.0550	3493.
%RSD	115.3	34.51	51.97	60.81	51.08	576.5	243.8	38.00	294.9
#1	-.1798	.9255	.4406	-1.749	184.6	-29.97	.0142	.1322	-2800.
#2	-.5101	.9678	1.449	-7.319	87.34	-82.61	-.0758	.2050	3722.
#3	.0077	.4760	1.413	-4.679	272.7	71.74	.0016	.0971	2632.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: ICB Acquired: 5/5/2017 13:13:54 Type: QC
Method: New MethodDec2016(v343) Mode: CONC Corr. Factor: 1.000000
User: Charles Zervakos Sample Type: ICB Dilution Factor: 1 : 16619
Comment: 6010 W 70ICP1

Elem	Ni	P	Pb	Sb	Se	Si	Sn	Sr	Ti
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	.4577	.1969	.0763	-.8101	-4.063	-1.868	-35.09	-.0481	-.1469
Stddev	.5189	2.657	1.678	2.138	.613	2.185	1.89	.0304	.1982
%RSD	113.4	1350.	2198.	264.0	15.08	117.0	5.374	63.17	134.9
#1	.5770	-.0494	-.2879	1.653	-3.362	.3771	-32.95	-.0818	-.2314
#2	-.1104	-2.328	1.907	-1.885	-4.328	-1.994	-35.80	-.0228	-.2889
#3	.9066	2.968	-1.390	-2.198	-4.499	-3.988	-36.52	-.0396	.0796
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Tl	V	Y	Y	Y	Zn
Units	ug/L	ug/L	%	%	%	ug/L
Avg	-1.242	-.4987	105.6	104.1	12.98	-1.085
Stddev	.445	.7347	.2	.4	.07	.057
%RSD	35.80	147.3	.2336	.3940	.5319	5.219
#1	-1.292	.3023	105.7	103.8	13.06	-1.051
#2	-1.660	-1.141	105.8	104.0	12.92	-1.151
#3	-.7747	-.6570	105.4	104.6	12.96	-1.055
Check ?	Chk Pass	Chk Pass	None	None	None	Chk Pass
High Limit						
Low Limit						

Sample Name: ICB Acquired: 5/5/2017 13:13:54 Type: QC
Method: New MethodDec2016(v343) Mode: CONC Corr. Factor: 1.000000
User: Charles Zervakos Sample Type: ICB Dilution Factor: 1 : 16619
Comment: 6010 W 70ICP1

Int. Std.	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S
Avg	11051.	54660.	6814.4
Stddev	26.	215.	36.2
%RSD	.23361	.39401	.53186
#1	11062.	54506.	6854.7
#2	11070.	54568.	6784.5
#3	11022.	54906.	6804.0

Sample Name: CRDL Acquired: 5/5/2017 13:19:07 Type: QC
Method: New MethodDec2016(v343) Mode: CONC Corr. Factor: 1.000000
User: Charles Zervakos Sample Type: LOQ Dilution Factor: 1 : 16617
Comment: 6010 W 70ICP1

Elem	Ag	Al	As	Au	B	Ba	Be	Ca
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**9.631**	**199.2**	**10.62**	F **131.7**	**49.83**	**204.8**	**4.699**	**165.5**
Stddev	.021	5.4	3.27	48.2	.86	1.1	.234	7.4
%RSD	.2225	2.697	30.79	36.58	1.727	.5557	4.985	4.451
#1	9.646	195.4	8.307	165.7	49.22	204.0	4.865	160.3
#2	9.616	203.0	12.93	97.59	50.44	205.6	4.534	170.7
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				260.0				
Low Limit				140.0				

Elem	Cd	Co	Cr	Cu	Fe	K	Mg	Mn
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**2.590**	**50.94**	**10.54**	**26.73**	**22.33**	**4619.**	**218.2**	**10.51**
Stddev	.117	.06	.40	.96	10.08	254.	30.0	.09
%RSD	4.534	.1259	3.822	3.582	45.14	5.495	13.73	.8944
#1	2.673	50.99	10.83	26.05	15.20	4799.	239.4	10.44
#2	2.507	50.90	10.26	27.41	29.46	4440.	197.0	10.58
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo	Na	Ni	P	Pb	Sb	Se	Si
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**18.90**	**4729.**	**40.98**	**47.31**	**5.067**	**57.84**	**11.31**	F **7.228**
Stddev	.29	3008.	.41	.24	1.059	4.95	1.51	2.530
%RSD	1.512	63.61	1.002	.5091	20.89	8.556	13.33	35.01
#1	18.70	6856.	40.69	47.14	4.319	54.34	10.25	5.439
#2	19.11	2602.	41.27	47.48	5.816	61.34	12.38	9.017
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit								26.00
Low Limit								14.00

Sample Name: CRDL Acquired: 5/5/2017 13:19:07 Type: QC
Method: New MethodDec2016(v343) Mode: CONC Corr. Factor: 1.000000
User: Charles Zervakos Sample Type: LOQ Dilution Factor: 1 : 16617
Comment: 6010 W 70ICP1

Elem	Sn	Sr	Ti	Tl	V	Y	Y	Y
Units	ug/L	ug/L	ug/L	ug/L	ug/L	%	%	%
Avg	F 11.69	51.08	51.14	10.06	51.10	105.8	102.4	12.84
Stddev	.95	.03	.11	.82	.57	.5	.8	.01
%RSD	8.157	.0544	.2112	8.106	1.122	.4751	.8021	.0847
#1	12.37	51.06	51.07	10.64	50.69	106.2	103.0	12.85
#2	11.02	51.10	51.22	9.483	51.50	105.4	101.9	12.83
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	None	None
High Limit	65.00							
Low Limit	35.00							

Elem	Zn
Units	ug/L
Avg	18.48
Stddev	.11
%RSD	.5797
#1	18.56
#2	18.41
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S
Avg	11067.	53774.	6739.4
Stddev	53.	431.	5.7
%RSD	.47511	.80209	.08467
#1	11104.	54079.	6743.4
#2	11030.	53469.	6735.4

Sample Name: ICSA Acquired: 5/5/2017 13:24:18 Type: QC
Method: New MethodDec2016(v343) Mode: CONC Corr. Factor: 1.000000
User: Charles Zervakos Sample Type: ICSA Dilution Factor: 1 : 16550
Comment: 6010 W 70ICP1

Elem	Ag	Al	As	Au	B	Ba	Be
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	F **23.11**	**505200.**	**12.49**	F **-447.0**	**-.0095**	**-.6092**	**-.2982**
Stddev	.86	1889.	.70	73.4	.1590	.1326	.1636
%RSD	3.724	.3739	5.629	16.42	1668.	21.77	54.86
#1	22.86	504500.	12.77	-398.7	.1136	-.7250	-.1146
#2	22.39	503700.	11.69	-410.9	.0469	-.6381	-.3517
#3	24.06	507300.	13.01	-531.4	-.1890	-.4645	-.4283
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit	20.00			200.0			
Low Limit	-20.00			-200.0			

Elem	Ca	Cd	Co	Cr	Cu	Fe	K
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**507100.**	F **9.947**	**4.525**	F **-128.4**	**6.447**	**193800.**	**9845.**
Stddev	2469.	.175	.592	.6	1.191	707.	112.
%RSD	.4868	1.764	13.09	.5026	18.47	.3651	1.140
#1	506600.	10.14	4.860	-127.7	5.443	193000.	9917.
#2	504900.	9.799	4.873	-128.9	6.135	193900.	9716.
#3	509800.	9.902	3.841	-128.6	7.762	194400.	9903.
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Fail	Chk Pass	Chk Pass	None
High Limit		5.000		20.00			
Low Limit		-5.000		-20.00			

Sample Name: ICSA Acquired: 5/5/2017 13:24:18 Type: QC
Method: New MethodDec2016(v343) Mode: CONC Corr. Factor: 1.000000
User: Charles Zervakos Sample Type: ICSA Dilution Factor: 1 : 16550
Comment: 6010 W 70ICP1

Elem	Mg	Mn	Mo	Na	Ni	P	Pb
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**523200.**	**-.7914**	**-.8321**	**2505.**	**-3.984**	**3.629**	**-2.958**
Stddev	3649.	.1830	.6759	3110.	.508	2.405	.556
%RSD	.6974	23.12	81.22	124.2	12.76	66.27	18.79
#1	526000.	-.9894	-1.370	-903.8	-4.392	2.537	-3.445
#2	519100.	-.7564	-.0736	5189.	-3.414	6.387	-2.352
#3	524600.	-.6285	-1.052	3229.	-4.145	1.964	-3.076
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sb	Se	Si	Sn	Sr	Ti	Tl
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**7.804**	**-13.82**	**-4.492**	**-55.68**	**3.863**	**2.391**	**-.9328**
Stddev	4.701	4.93	3.733	.41	.037	.171	2.681
%RSD	60.24	35.69	83.11	.7428	.9578	7.148	287.4
#1	3.842	-15.19	-.3490	-55.66	3.821	2.315	-1.193
#2	6.572	-8.349	-7.595	-56.11	3.889	2.587	-3.474
#3	13.00	-17.92	-5.531	-55.28	3.881	2.271	1.869
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: ICSA Acquired: 5/5/2017 13:24:18 Type: QC
Method: New MethodDec2016(v343) Mode: CONC Corr. Factor: 1.000000
User: Charles Zervakos Sample Type: ICSA Dilution Factor: 1 : 16550
Comment: 6010 W 70ICP1

Elem	V	Y	Y	Y	Zn
Units	ug/L	%	%	%	ug/L
Avg	6.905	97.54	94.05	12.32	9.794
Stddev	.636	.17	.79	.06	.045
%RSD	9.205	.1744	.8400	.4780	.4621
#1	7.195	97.54	94.85	12.37	9.827
#2	7.344	97.38	94.04	12.34	9.742
#3	6.176	97.72	93.27	12.26	9.812
Check ?	Chk Pass	None	None	None	Chk Pass
High Limit					
Low Limit					

Int. Std.	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S
Avg	10204.	49370.	6469.6
Stddev	18.	415.	30.9
%RSD	.17442	.83998	.47800
#1	10203.	49787.	6495.3
#2	10186.	49365.	6478.3
#3	10222.	48957.	6435.3

Sample Name: ICSAB Acquired: 5/5/2017 13:29:30 Type: QC
Method: New MethodDec2016(v343) Mode: CONC Corr. Factor: 1.000000
User: Charles Zervakos Sample Type: ICSAB Dilution Factor: 1 : 16551
Comment: 6010 W 70ICP1

Elem	Ag	Al	As	Au	B	Ba	Be
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**466.9**	**512000.**	**214.3**	F **571.3**	**1000.**	**991.4**	**1034.**
Stddev	1.1	2678.	1.8	43.5	5.	2.7	1.
%RSD	.2381	.5230	.8498	7.611	.4676	.2673	.0766
#1	466.8	515100.	213.9	604.9	998.6	990.0	1035.
#2	465.9	510600.	212.8	586.7	996.8	989.7	1034.
#3	468.1	510400.	216.3	522.2	1006.	994.4	1034.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit				1200.			
Low Limit				800.0			

Elem	Ca	Cd	Co	Cr	Cu	Fe	K
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**511700.**	**1930.**	**962.1**	**833.5**	**970.2**	**194100.**	**11460.**
Stddev	417.	4.	.2	5.2	5.4	298.	158.
%RSD	.0814	.1998	.0189	.6235	.5602	.1534	1.378
#1	511700.	1928.	962.0	832.7	972.0	194400.	11310.
#2	511300.	1927.	962.3	828.8	974.5	194000.	11450.
#3	512100.	1934.	962.1	839.1	964.1	193800.	11620.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: ICSAB Acquired: 5/5/2017 13:29:30 Type: QC
Method: New MethodDec2016(v343) Mode: CONC Corr. Factor: 1.000000
User: Charles Zervakos Sample Type: ICSAB Dilution Factor: 1 : 16551
Comment: 6010 W 70ICP1

Elem	Mg	Mn	Mo	Na	Ni	P	Pb
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**526600.**	**1012.**	**963.3**	**2296.**	**1905.**	**457.5**	**91.13**
Stddev	1669.	1.	6.3	3674.	1.	4.1	1.27
%RSD	.3169	.0792	.6510	160.0	.0293	.9044	1.391
#1	528500.	1012.	959.3	6533.	1906.	458.0	90.13
#2	526000.	1011.	960.0	373.7	1905.	461.3	92.56
#3	525300.	1012.	970.5	-17.62	1905.	453.1	90.71
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sb	Se	Si	Sn	Sr	Ti	Tl
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**1216.**	**88.99**	F **729.2**	**935.3**	**1018.**	**1012.**	**189.0**
Stddev	7.	2.34	2.9	4.2	3.	4.	1.9
%RSD	.5508	2.635	.3935	.4469	.3325	.3981	1.003
#1	1214.	91.48	732.5	931.3	1022.	1016.	187.6
#2	1210.	86.83	727.6	935.1	1016.	1014.	188.2
#3	1223.	88.65	727.5	939.6	1017.	1008.	191.1
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			1200.				
Low Limit			800.0				

Sample Name: ICSAB Acquired: 5/5/2017 13:29:30 Type: QC
Method: New MethodDec2016(v343) Mode: CONC Corr. Factor: 1.000000
User: Charles Zervakos Sample Type: ICSAB Dilution Factor: 1 : 16551
Comment: 6010 W 70ICP1

Elem	V	Y	Y	Y	Zn
Units	ug/L	%	%	%	ug/L
Avg	**1034.**	**97.35**	**93.22**	**12.20**	**2057.**
Stddev	1.	.21	.13	.04	11.
%RSD	.0822	.2120	.1374	.3680	.5444
#1	1034.	97.29	93.22	12.15	2051.
#2	1033.	97.57	93.09	12.22	2051.
#3	1034.	97.17	93.35	12.23	2070.
Check ?	Chk Pass	None	None	None	Chk Pass
High Limit					
Low Limit					

Int. Std.	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S
Avg	**10183.**	**48934.**	**6402.8**
Stddev	22.	67.	23.6
%RSD	.21203	.13740	.36804
#1	10177.	48932.	6375.8
#2	10207.	48867.	6413.0
#3	10165.	49002.	6419.5

Sample Name: CCV Acquired: 5/5/2017 13:34:38 Type: QC
Method: New MethodDec2016(v343) Mode: CONC Corr. Factor: 1.000000
User: Charles Zervakos Sample Type: CCV Dilution Factor: 1 : 16539
Comment: 6010 W 70ICP1

Elem	Ag	Al	As	Au	B	Ba	Be	Ca
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	255.6	5074.	519.6	F 411.6	2599.	515.4	53.23	27000.
Stddev	5.1	112.	.9	25.7	5.	1.3	.03	41.
%RSD	1.990	2.216	.1737	6.232	.2018	.2545	.0572	.1530
#1	259.2	5153.	518.9	429.7	2595.	514.5	53.21	27030.
#2	252.0	4994.	520.2	393.5	2602.	516.3	53.25	26970.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				550.0				
Low Limit				450.0				

Elem	Cd	Co	Cr	Cu	Fe	K	Mg	Mn
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	52.21	513.6	251.1	256.1	2130.	48230.	26080.	268.3
Stddev	.06	1.1	1.1	3.9	22.	285.	28.	4.6
%RSD	.1154	.2201	.4396	1.512	1.020	.5900	.1066	1.720
#1	52.16	514.4	251.8	258.8	2145.	48020.	26060.	271.6
#2	52.25	512.8	250.3	253.3	2114.	48430.	26100.	265.1
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo	Na	Ni	P	Pb	Sb	Se	Si
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	509.4	49660.	260.4	1009.	549.6	772.1	778.4	F 5653.
Stddev	1.8	1055.	.8	4.	1.8	.5	5.8	94.
%RSD	.3622	2.123	.2892	.4383	.3308	.0622	.7471	1.660
#1	508.1	48920.	259.8	1012.	548.4	772.4	782.5	5720.
#2	510.7	50410.	260.9	1005.	550.9	771.7	774.3	5587.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit								5500.
Low Limit								4500.

Sample Name: CCV Acquired: 5/5/2017 13:34:38 Type: QC
Method: New MethodDec2016(v343) Mode: CONC Corr. Factor: 1.000000
User: Charles Zervakos Sample Type: CCV Dilution Factor: 1 : 16539
Comment: 6010 W 70ICP1

Elem	Sn	Sr	Ti	Tl	V	Y	Y	Y
Units	ug/L	ug/L	ug/L	ug/L	ug/L	%	%	%
Avg	2627.	510.7	516.8	781.3	542.1	102.8	97.49	12.18
Stddev	2.	8.2	9.7	2.0	8.9	.4	1.21	.01
%RSD	.0710	1.603	1.880	.2606	1.649	.4059	1.245	.1187
#1	2626.	516.5	523.7	782.8	548.4	103.1	96.64	12.19
#2	2628.	504.9	510.0	779.9	535.8	102.5	98.35	12.17
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	None	None
High Limit								
Low Limit								

Elem	Zn
Units	ug/L
Avg	1067.
Stddev	5.
%RSD	.4394
#1	1063.
#2	1070.
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S
Avg	10752.	51177.	6392.7
Stddev	44.	637.	7.6
%RSD	.40593	1.2454	.11866
#1	10783.	50726.	6398.1
#2	10721.	51628.	6387.3

Sample Name: CCB Acquired: 5/5/2017 13:39:38 Type: QC
Method: New MethodDec2016(v343) Mode: CONC Corr. Factor: 1.000000
User: Charles Zervakos Sample Type: CCB Dilution Factor: 1 : 16619
Comment: 6010 W 70ICP1

Elem	Ag	Al	As	Au	B	Ba	Be	Ca	Cd
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	.1392	.9511	-1.268	-69.92	-.1389	-.3208	.0765	-36.53	-.0304
Stddev	.3624	1.799	.529	21.04	1.387	.0686	.3055	9.92	.0775
%RSD	260.4	189.2	41.73	30.10	998.7	21.39	399.3	27.16	255.2
#1	.4686	2.387	-1.759	-51.99	1.330	-.2523	-.1700	-43.77	-.1071
#2	-.2491	1.533	-.7076	-64.68	-.3187	-.3205	-.0188	-40.61	.0480
#3	.1981	-1.067	-1.338	-93.08	-1.428	-.3895	.4183	-25.22	-.0321
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co	Cr	Cu	Fe	K	Mg	Mn	Mo	Na
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	-.1787	-.8986	.1932	-2.019	368.4	-37.15	.0256	.7112	1793.
Stddev	.2528	.2795	1.205	5.298	164.4	81.33	.0231	.8939	4445.
%RSD	141.4	31.10	623.5	262.4	44.64	218.9	90.21	125.7	247.9
#1	-.4435	-1.185	1.233	-1.250	558.2	56.34	.0367	1.531	2141.
#2	-.1526	-.6268	.4740	2.853	271.4	-91.62	-.0009	.8444	-2816.
#3	.0600	-.8839	-1.127	-7.660	275.5	-76.15	.0412	-.2418	6054.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: CCB Acquired: 5/5/2017 13:39:38 Type: QC
Method: New MethodDec2016(v343) Mode: CONC Corr. Factor: 1.000000
User: Charles Zervakos Sample Type: CCB Dilution Factor: 1 : 16619
Comment: 6010 W 70ICP1

Elem	Ni	P	Pb	Sb	Se	Si	Sn	Sr	Ti
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	.3039	1.077	.1629	-3.191	-1.162	8.347	-37.73	-.0250	-.1214
Stddev	.6273	.765	1.234	2.700	3.458	2.706	.75	.0206	.0705
%RSD	206.4	71.04	757.2	84.62	297.5	32.41	1.984	82.50	58.13
#1	-.0608	1.955	1.562	-1.690	2.753	9.467	-37.43	-.0363	-.1013
#2	1.028	.5524	-.7702	-1.574	-3.798	5.262	-37.18	-.0012	-.0630
#3	-.0558	.7240	-.3028	-6.309	-2.442	10.31	-38.58	-.0374	-.1997
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Tl	V	Y	Y	Y	Zn
Units	ug/L	ug/L	%	%	%	ug/L
Avg	-.0326	-.8156	101.9	96.52	11.72	.0338
Stddev	.1822	.3984	.2	.84	.02	.0933
%RSD	559.4	48.85	.1881	.8713	.1711	276.0
#1	-.2353	-1.267	101.8	97.48	11.74	.0005
#2	.0202	-.6658	101.8	96.12	11.70	-.0383
#3	.1174	-.5138	102.2	95.95	11.71	.1392
Check ?	Chk Pass	Chk Pass	None	None	None	Chk Pass
High Limit						
Low Limit						

Sample Name: CCB Acquired: 5/5/2017 13:39:38 Type: QC
Method: New MethodDec2016(v343) Mode: CONC Corr. Factor: 1.000000
User: Charles Zervakos Sample Type: CCB Dilution Factor: 1 : 16619
Comment: 6010 W 70ICP1

Int. Std.	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S
Avg	10664.	50665.	6151.7
Stddev	20.	441.	10.5
%RSD	.18815	.87133	.17108
#1	10652.	51172.	6163.2
#2	10654.	50455.	6142.7
#3	10687.	50367.	6149.2

Sample Name: 103951_2613 Acquired: 5/5/2017 13:44:52 Type: Unk
Method: New MethodDec2016(v343) Mode: CONC Corr. Factor: 1.000000
User: Charles Zervakos Sample Type: SAMP Dilution Factor: 1 :
Comment: 6010 W 70ICP1

Elem	Ag	Al	As	Au	B	Ba	Be	Ca	Cd
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	.3033	19.13	-.5859	-44.18	-2.991	-.2679	-.0052	-26.91	.0092
Stddev	.6447	8.37	3.107	28.75	.295	.0606	.2274	21.75	.2183
%RSD	212.6	43.74	530.2	65.07	9.850	22.64	4395.	80.82	2381.
#1	.5954	10.56	-1.234	-19.55	-2.816	-.3133	.2574	-4.381	.2605
#2	.7502	19.55	2.793	-75.77	-2.825	-.1990	-.1427	-28.57	-.1335
#3	-.4357	27.27	-3.318	-37.22	-3.331	-.2913	-.1301	-47.79	-.0994

Elem	Co	Cr	Cu	Fe	K	Mg	Mn	Mo	Na
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	-.0453	-1.582	.7647	-3.850	143.2	-71.74	-.0568	-.5442	1188.
Stddev	.3044	.291	.5019	3.508	134.9	59.40	.0410	.1564	3074.
%RSD	672.2	18.39	65.64	91.10	94.25	82.80	72.19	28.73	258.6
#1	.2976	-1.349	.2149	-7.894	231.6	-113.8	-.0898	-.3827	-2230.
#2	-.2838	-1.908	.8808	-1.625	-12.15	-97.60	-.0698	-.5550	2070.
#3	-.1497	-1.488	1.198	-2.032	210.1	-3.794	-.0109	-.6949	3725.

Elem	Ni	P	Pb	Sb	Se	Si	Sn	Sr	Ti
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	-.0052	.6183	-1.177	-1.257	-.5154	7.055	-37.81	-.0615	-.0616
Stddev	.5232	1.352	1.154	.523	2.619	3.173	.44	.0280	.1490
%RSD	10040.	218.6	98.11	41.61	508.2	44.98	1.173	45.52	241.8
#1	-.4977	.6196	-.4199	-1.425	.7923	6.924	-37.89	-.0345	-.2330
#2	.5440	-.7340	-.6048	-1.675	-3.531	10.29	-37.34	-.0904	.0368
#3	-.0619	1.969	-2.506	-.6706	1.193	3.949	-38.22	-.0596	.0114

Elem	Tl	V	Y	Y	Y	Zn
Units	ug/L	ug/L	%	%	%	ug/L
Avg	-1.139	-.3035	101.8	95.70	11.71	-1.840
Stddev	.889	.3722	.2	.22	.05	.048
%RSD	78.03	122.6	.2343	.2325	.4036	2.589
#1	-.2314	-.5297	101.5	95.46	11.67	-1.883
#2	-2.008	.1260	101.9	95.90	11.71	-1.789
#3	-1.178	-.5069	102.0	95.75	11.76	-1.849

Sample Name: 103951_2613 Acquired: 5/5/2017 13:44:52 Type: Unk
Method: New MethodDec2016(v343) Mode: CONC Corr. Factor: 1.000000
User: Charles Zervakos Sample Type: SAMP Dilution Factor: 1 :
Comment: 6010 W 70ICP1

Int. Std.	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S
Avg	10649.	50237.	6147.5
Stddev	25.	117.	24.8
%RSD	.23431	.23252	.40362
#1	10621.	50111.	6123.4
#2	10655.	50341.	6146.3
#3	10670.	50261.	6173.0

Sample Name: 103952_2613 Acquired: 5/5/2017 13:50:06 Type: Unk
Method: New MethodDec2016(v343) Mode: CONC Corr. Factor: 1.000000
User: Charles Zervakos Sample Type: SAMP Dilution Factor: 1 :
Comment: 6010 W 70ICP1

Elem	Ag	Al	As	Au	B	Ba	Be	Ca
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**260.7**	**5161.**	**522.7**	**410.4**	**2636.**	**522.4**	**54.02**	**27470.**
Stddev	2.5	13.	4.4	39.4	2.	1.4	.29	174.
%RSD	.9494	.2585	.8453	9.604	.0835	.2664	.5332	.6318
#1	259.7	5146.	520.2	385.1	2637.	524.0	53.89	27380.
#2	263.5	5172.	520.2	390.2	2633.	521.6	53.82	27360.
#3	258.9	5165.	527.8	455.8	2636.	521.5	54.35	27670.

Elem	Cd	Co	Cr	Cu	Fe	K	Mg	Mn
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**52.73**	**515.8**	**252.6**	**256.4**	**2170.**	**48110.**	**26190.**	**278.4**
Stddev	.05	1.0	.3	3.0	39.	300.	329.	1.5
%RSD	.0863	.1848	.1135	1.157	1.789	.6243	1.257	.5264
#1	52.70	515.9	252.6	254.4	2193.	48370.	25930.	276.9
#2	52.70	514.8	252.9	259.8	2125.	47780.	26090.	279.9
#3	52.78	516.7	252.3	255.1	2190.	48170.	26560.	278.5

Elem	Mo	Na	Ni	P	Pb	Sb	Se	Si
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**514.8**	**50020.**	**262.0**	**1003.**	**568.1**	**781.9**	**776.7**	**5855.**
Stddev	.5	180.	.2	2.	4.0	1.5	5.9	30.
%RSD	.1010	.3603	.0867	.1534	.7128	.1928	.7596	.5203
#1	515.4	50160.	262.2	1002.	569.7	780.3	769.9	5835.
#2	514.4	50070.	262.0	1004.	563.5	782.3	779.9	5890.
#3	514.7	49810.	261.7	1002.	571.2	783.3	780.3	5840.

Elem	Sn	Sr	Ti	Tl	V	Y	Y	Y
Units	ug/L	ug/L	ug/L	ug/L	ug/L	%	%	%
Avg	**2671.**	**522.1**	**525.7**	**787.9**	**560.5**	**101.1**	**94.60**	**11.67**
Stddev	3.	6.6	1.4	.6	.8	.2	.58	.07
%RSD	.1300	1.257	.2640	.0820	.1398	.1912	.6100	.6158
#1	2674.	517.2	524.7	787.2	559.7	100.9	95.07	11.73
#2	2667.	529.5	527.3	788.5	561.3	101.3	93.95	11.69
#3	2672.	519.4	525.1	788.0	560.3	101.1	94.76	11.59

Sample Name: 103952_2613 Acquired: 5/5/2017 13:50:06 Type: Unk
Method: New MethodDec2016(v343) Mode: CONC Corr. Factor: 1.000000
User: Charles Zervakos Sample Type: SAMP Dilution Factor: 1 :
Comment: 6010 W 70ICP1

Elem	Zn
Units	ug/L
Avg	1097.
Stddev	3.
%RSD	.2408
#1	1100.
#2	1095.
#3	1097.

Int. Std.	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S
Avg	10575.	49656.	6125.8
Stddev	20.	303.	37.7
%RSD	.19123	.60996	.61584
#1	10552.	49905.	6156.0
#2	10591.	49318.	6137.8
#3	10580.	49743.	6083.5

Sample Name: 7016438015_2613 Acquired: 5/5/2017 14:05:21 Type: Unk
Method: New MethodDec2016(v343) Mode: CONC Corr. Factor: 1.000000
User: Charles Zervakos Sample Type: SAMP Dilution Factor: 1 :
Comment: 6010 W 70ICP1

Elem	Ag	Al	As	Au	B	Ba	Be	Ca
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	.8863	22.01	-1.667	-61.05	21.09	74.43	-.0872	20810.
Stddev	.3358	6.79	2.955	41.38	.47	.33	.2480	60.
%RSD	37.89	30.85	177.3	67.77	2.225	.4448	284.4	.2874
#1	1.246	27.09	.2814	-13.32	20.66	74.10	-.1988	20800.
#2	.5818	14.30	-5.067	-83.13	21.01	74.44	-.2598	20760.
#3	.8306	24.65	-.2156	-86.70	21.59	74.76	.1970	20880.

Elem	Cd	Co	Cr	Cu	Fe	K	Mg	Mn
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	.2725	4.897	1664.	24.01	6521.	5830.	5508.	358.6
Stddev	.1377	.177	16.	.52	17.	47.	103.	1.8
%RSD	50.54	3.610	.9482	2.156	.2650	.8064	1.871	.4883
#1	.1966	4.696	1647.	23.70	6502.	5784.	5623.	358.3
#2	.1894	4.969	1678.	23.73	6525.	5878.	5425.	360.5
#3	.4314	5.027	1666.	24.61	6536.	5828.	5475.	357.0

Elem	Mo	Na	Ni	P	Pb	Sb	Se	Si
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	8.944	82880.	132.1	20.48	-.8670	-26.38	-1.210	5221.
Stddev	.227	4045.	.3	.57	2.591	1.26	2.156	40.
%RSD	2.539	4.881	.2424	2.766	298.8	4.789	178.2	.7740
#1	8.689	87300.	131.8	20.82	1.917	-27.29	1.273	5188.
#2	9.127	79370.	132.4	19.83	-1.311	-26.91	-2.301	5266.
#3	9.014	81960.	132.0	20.80	-3.207	-24.94	-2.603	5208.

Elem	Sn	Sr	Ti	Tl	V	Y	Y	Y
Units	ug/L	ug/L	ug/L	ug/L	ug/L	%	%	%
Avg	-38.93	92.87	2.984	-.7994	2.346	99.46	93.21	11.32
Stddev	.28	.70	.076	2.270	.524	.54	.35	.04
%RSD	.7198	.7563	2.562	284.0	22.32	.5393	.3707	.3736
#1	-38.92	92.81	2.901	-1.181	2.780	99.95	93.00	11.33
#2	-38.66	93.60	3.000	1.638	2.494	99.55	93.61	11.36
#3	-39.22	92.20	3.051	-2.855	1.765	98.89	93.02	11.28

Sample Name: 7016438015_2613 Acquired: 5/5/2017 14:05:21 Type: Unk
Method: New MethodDec2016(v343) Mode: CONC Corr. Factor: 1.000000
User: Charles Zervakos Sample Type: SAMP Dilution Factor: 1 :
Comment: 6010 W 70ICP1

Elem	Zn
Units	ug/L
Avg	-.1288
Stddev	.4841
%RSD	375.8
#1	-.0273
#2	.2965
#3	-.6557

Int. Std.	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S
Avg	10404.	48930.	5943.8
Stddev	56.	181.	22.2
%RSD	.53930	.37066	.37355
#1	10455.	48820.	5948.5
#2	10413.	49139.	5963.2
#3	10344.	48830.	5919.6

Sample Name: 7016438016_2613 Acquired: 5/5/2017 14:10:28 Type: Unk
Method: New MethodDec2016(v343) Mode: CONC Corr. Factor: 1.000000
User: Charles Zervakos Sample Type: SAMP Dilution Factor: 1 :
Comment: 6010 W 70ICP1

Elem	Ag	Al	As	Au	B	Ba	Be	Ca
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**2.517**	**4.200**	**6.045**	**-48.24**	**40.87**	**34.67**	**-.0700**	**12860.**
Stddev	.535	3.530	1.787	41.25	.59	.23	.0560	52.
%RSD	21.24	84.06	29.57	85.52	1.443	.6652	79.98	.4077
#1	3.061	6.057	7.910	-92.36	40.69	34.42	-.0207	12900.
#2	1.992	.1286	5.878	-41.73	41.53	34.72	-.0583	12800.
#3	2.500	6.414	4.347	-10.63	40.40	34.88	-.1309	12880.

Elem	Cd	Co	Cr	Cu	Fe	K	Mg	Mn
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**.2862**	**5.524**	**-9.343**	**.6914**	**12140.**	**4197.**	**4313.**	**3794.**
Stddev	.1765	.290	.658	1.045	88.	165.	162.	24.
%RSD	61.66	5.254	7.043	151.1	.7218	3.935	3.753	.6332
#1	.4508	5.485	-9.064	1.245	12180.	4324.	4180.	3797.
#2	.0999	5.832	-8.871	-.5138	12040.	4010.	4265.	3769.
#3	.3080	5.255	-10.10	1.343	12210.	4255.	4493.	3817.

Elem	Mo	Na	Ni	P	Pb	Sb	Se	Si
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**-.6711**	**16910.**	**3.078**	**115.2**	**-.3203**	**-2.754**	**.2420**	**5995.**
Stddev	.4078	3066.	.503	.8	.6467	.879	1.341	56.
%RSD	60.77	18.14	16.33	.6566	201.9	31.93	554.0	.9292
#1	-1.008	20370.	2.956	114.3	-.8450	-3.319	-.8429	5994.
#2	-.7878	15810.	3.630	115.4	.4022	-1.741	-.1719	5940.
#3	-.2177	14540.	2.647	115.8	-.5181	-3.202	1.741	6051.

Elem	Sn	Sr	Ti	Tl	V	Y	Y	Y
Units	ug/L	ug/L	ug/L	ug/L	ug/L	%	%	%
Avg	**-36.91**	**71.19**	**1.581**	**-9.587**	**-.3880**	**99.00**	**93.30**	**11.16**
Stddev	.76	.30	.083	.934	.2629	.89	.55	.08
%RSD	2.061	.4257	5.242	9.744	67.76	.8953	.5937	.6863
#1	-36.44	71.44	1.628	-9.795	-.5531	99.66	93.12	11.20
#2	-37.79	70.85	1.630	-10.40	-.5261	99.35	93.92	11.20
#3	-36.50	71.27	1.485	-8.567	-.0848	97.99	92.86	11.07

Sample Name: 7016438016_2613 Acquired: 5/5/2017 14:10:28 Type: Unk
Method: New MethodDec2016(v343) Mode: CONC Corr. Factor: 1.000000
User: Charles Zervakos Sample Type: SAMP Dilution Factor: 1 :
Comment: 6010 W 70ICP1

Elem	Zn
Units	ug/L
Avg	2.284
Stddev	.191
%RSD	8.353
#1	2.127
#2	2.230
#3	2.497

Int. Std.	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S
Avg	10356.	48974.	5855.9
Stddev	93.	291.	40.2
%RSD	.89531	.59367	.68628
#1	10425.	48879.	5879.9
#2	10393.	49300.	5878.4
#3	10251.	48742.	5809.6

Sample Name: 7016438017_2613 Acquired: 5/5/2017 14:15:37 Type: Unk
Method: New MethodDec2016(v343) Mode: CONC Corr. Factor: 1.000000
User: Charles Zervakos Sample Type: SAMP Dilution Factor: 1 :
Comment: 6010 W 70ICP1

Elem	Ag	Al	As	Au	B	Ba	Be	Ca
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	.3040	4.281	-1.240	-61.69	5.485	18.26	-.1671	8630.
Stddev	.4619	7.391	1.453	61.27	.850	.10	.5448	17.
%RSD	152.0	172.6	117.2	99.32	15.49	.5739	326.1	.1955
#1	.3623	6.073	-1.544	-125.2	5.560	18.37	.4329	8642.
#2	-.1843	-3.841	.3416	-2.896	6.295	18.26	-.3033	8638.
#3	.7340	10.61	-2.517	-57.00	4.600	18.16	-.6308	8611.

Elem	Cd	Co	Cr	Cu	Fe	K	Mg	Mn
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	-.0209	-.1402	4.820	.2950	38.48	873.9	3745.	3.873
Stddev	.0568	.0782	.377	.1974	12.59	324.6	56.	.015
%RSD	272.0	55.77	7.811	66.93	32.72	37.15	1.488	.3886
#1	.0444	-.1258	5.242	.1757	52.48	1193.	3769.	3.879
#2	-.0589	-.2247	4.518	.5229	28.09	884.9	3786.	3.884
#3	-.0482	-.0703	4.699	.1864	34.87	544.0	3682.	3.855

Elem	Mo	Na	Ni	P	Pb	Sb	Se	Si
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	-.9198	13920.	6.824	10.71	-2.825	-1.062	-1.366	10350.
Stddev	.1824	2198.	.718	1.20	.296	1.065	.797	120.
%RSD	19.84	15.79	10.52	11.19	10.48	100.3	58.36	1.157
#1	-.7377	16300.	6.457	9.395	-2.792	-.5401	-.9914	10450.
#2	-.9191	13480.	6.364	11.01	-3.136	-2.287	-2.281	10380.
#3	-1.103	11970.	7.651	11.74	-2.547	-.3583	-.8249	10220.

Elem	Sn	Sr	Ti	Tl	V	Y	Y	Y
Units	ug/L	ug/L	ug/L	ug/L	ug/L	%	%	%
Avg	-40.32	40.65	1.111	-1.200	-.1912	98.76	92.28	10.92
Stddev	.70	.20	.172	.611	.0596	.41	.95	.05
%RSD	1.737	.4956	15.49	50.88	31.18	.4124	1.029	.4782
#1	-40.35	40.89	1.306	-1.192	-.1272	98.44	91.26	10.88
#2	-41.01	40.53	.9843	-1.815	-.2011	98.62	92.44	10.89
#3	-39.61	40.55	1.041	-.5934	-.2452	99.22	93.14	10.98

Sample Name: 7016438017_2613 Acquired: 5/5/2017 14:15:37 Type: Unk
Method: New MethodDec2016(v343) Mode: CONC Corr. Factor: 1.000000
User: Charles Zervakos Sample Type: SAMP Dilution Factor: 1 :
Comment: 6010 W 70ICP1

Elem	Zn
Units	ug/L
Avg	-1.031
Stddev	.203
%RSD	19.67
#1	-.8149
#2	-1.217
#3	-1.062

Int. Std.	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S
Avg	10331.	48441.	5730.3
Stddev	43.	499.	27.4
%RSD	.41244	1.0291	.47817
#1	10297.	47906.	5712.5
#2	10316.	48525.	5716.7
#3	10379.	48893.	5761.9

Sample Name: 104001_2613 Acquired: 5/5/2017 14:20:48 Type: Unk
Method: New MethodDec2016(v343) Mode: CONC Corr. Factor: 1.000000
User: Charles Zervakos Sample Type: SAMP Dilution Factor: 1 :
Comment: 6010 W 70ICP1

Elem	Ag	Al	As	Au	B	Ba	Be	Ca
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**116.6**	**5103.**	**472.8**	**423.8**	**2445.**	**500.5**	**57.54**	**36900.**
Stddev	21.9	922.	95.5	148.1	483.	95.2	9.70	5067.
%RSD	18.76	18.06	20.19	34.95	19.74	19.02	16.86	13.73
#1	138.0	6029.	568.8	555.9	2925.	595.1	67.36	42100.
#2	117.5	5093.	472.0	451.9	2450.	501.9	57.28	36640.
#3	94.30	4186.	377.8	263.7	1959.	404.7	47.97	31980.

Elem	Cd	Co	Cr	Cu	Fe	K	Mg	Mn
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**48.10**	**469.9**	**261.5**	**233.9**	**2350.**	**47330.**	**30640.**	**281.7**
Stddev	9.51	91.8	46.1	45.8	419.	8495.	4777.	49.2
%RSD	19.76	19.54	17.64	19.59	17.82	17.95	15.59	17.45
#1	57.60	561.5	307.5	279.4	2786.	55900.	35480.	331.7
#2	48.12	470.3	261.7	234.5	2313.	47190.	30530.	280.2
#3	38.59	377.8	215.2	187.8	1951.	38910.	25930.	233.4

Elem	Mo	Na	Ni	P	Pb	Sb	Se	Si
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**482.5**	**66780.**	**245.2**	**909.9**	**530.5**	**715.1**	**689.3**	**14770.**
Stddev	93.2	7157.	47.8	180.1	104.7	144.0	135.6	748.
%RSD	19.32	10.72	19.51	19.80	19.73	20.14	19.67	5.062
#1	575.4	74480.	292.8	1090.	634.1	858.8	822.4	15540.
#2	483.1	65540.	245.7	910.1	532.7	715.6	694.2	14750.
#3	389.0	60330.	197.2	729.7	424.8	570.8	551.4	14040.

Elem	Sn	Sr	Ti	Tl	V	Y	Y	Y
Units	ug/L	ug/L	ug/L	ug/L	ug/L	%	%	%
Avg	**2442.**	**571.3**	**523.2**	**726.8**	**562.1**	**97.48**	**90.85**	**11.01**
Stddev	490.	93.3	94.2	139.8	100.1	.30	.28	.03
%RSD	20.06	16.33	18.01	19.23	17.81	.3049	.3072	.2814
#1	2930.	665.9	618.9	865.6	663.9	97.24	90.56	10.98
#2	2447.	568.5	520.3	728.8	558.7	97.37	91.11	11.00
#3	1950.	479.4	430.5	586.1	463.8	97.81	90.89	11.04

Sample Name: 104001_2613 Acquired: 5/5/2017 14:20:48 Type: Unk
Method: New MethodDec2016(v343) Mode: CONC Corr. Factor: 1.000000
User: Charles Zervakos Sample Type: SAMP Dilution Factor: 1 :
Comment: 6010 W 70ICP1

Elem	Zn
Units	ug/L
Avg	1019.
Stddev	202.
%RSD	19.77
#1	1220.
#2	1021.
#3	817.0

Int. Std.	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S
Avg	10197.	47690.	5777.0
Stddev	31.	147.	16.3
%RSD	.30488	.30720	.28141
#1	10172.	47535.	5762.6
#2	10186.	47826.	5773.8
#3	10232.	47709.	5794.7

Sample Name: 104002_2613x5 Acquired: 5/5/2017 14:25:43 Type: Unk
Method: New MethodDec2016(v343) Mode: CONC Corr. Factor: 1.000000
User: Charles Zervakos Sample Type: SAMP Dilution Factor: 1 :
Comment: 6010 W 70ICP1

Elem	Ag	Al	As	Au	B	Ba	Be	Ca	Cd
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	.6276	1.973	.6770	-44.83	-3.562	3.189	-.2821	1711.	-.0802
Stddev	.0998	7.696	3.071	7.06	.316	.154	.2354	279.	.0213
%RSD	15.90	390.0	453.7	15.75	8.881	4.832	83.45	16.33	26.53
#1	.5708	3.115	.5227	-40.92	-3.298	3.366	-.0734	2032.	-.0855
#2	.5691	9.034	3.823	-52.98	-3.913	3.108	-.5373	1577.	-.0568
#3	.7428	-6.229	-2.314	-40.59	-3.476	3.092	-.2357	1523.	-.0984

Elem	Co	Cr	Cu	Fe	K	Mg	Mn	Mo	Na
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	-.0863	-.7677	.1529	10.50	387.9	708.0	.7065	-.3663	-1692.
Stddev	.1765	.6464	.3107	1.63	318.2	163.2	.1638	.4091	3011.
%RSD	204.4	84.20	203.3	15.53	82.01	23.05	23.19	111.7	177.9
#1	.0176	-.2792	.0659	9.137	625.2	858.3	.8955	-.0116	-1554.
#2	-.2901	-.5231	-.1051	10.05	26.42	534.4	.6048	-.2736	-4770.
#3	.0136	-1.501	.4978	12.30	512.2	731.3	.6193	-.8138	1248.

Elem	Ni	P	Pb	Sb	Se	Si	Sn	Sr	Ti
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	1.282	1.215	-2.028	-1.510	1.944	2084.	-38.74	8.227	.4581
Stddev	.305	.267	2.128	.448	3.977	327.	.90	1.336	.2794
%RSD	23.79	21.99	104.9	29.67	204.5	15.67	2.331	16.24	61.00
#1	.9299	.9066	.1929	-1.892	2.057	2462.	-37.71	9.769	.1465
#2	1.463	1.357	-4.049	-1.017	5.864	1901.	-39.41	7.481	.6865
#3	1.454	1.381	-2.227	-1.621	-2.087	1891.	-39.10	7.432	.5413

Elem	Tl	V	Y	Y	Y	Zn
Units	ug/L	ug/L	%	%	%	ug/L
Avg	.4118	-.8117	98.39	92.41	11.04	-1.735
Stddev	1.125	.2224	.48	.25	.13	.163
%RSD	273.3	27.40	.4895	.2742	1.188	9.400
#1	-.0639	-.5557	97.85	92.18	10.92	-1.765
#2	1.697	-.9567	98.52	92.68	11.04	-1.558
#3	-.3976	-.9227	98.79	92.35	11.18	-1.880

Sample Name: 104002_2613x5 Acquired: 5/5/2017 14:25:43 Type: Unk
Method: New MethodDec2016(v343) Mode: CONC Corr. Factor: 1.000000
User: Charles Zervakos Sample Type: SAMP Dilution Factor: 1 :
Comment: 6010 W 70ICP1

Int. Std.	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S
Avg	10292.	48507.	5796.7
Stddev	50.	133.	68.9
%RSD	.48951	.27425	1.1883
#1	10236.	48389.	5730.0
#2	10306.	48651.	5792.7
#3	10334.	48479.	5867.6

Sample Name: 103953_2613 Acquired: 5/5/2017 14:30:56 Type: Unk
Method: New MethodDec2016(v343) Mode: CONC Corr. Factor: 1.000000
User: Charles Zervakos Sample Type: SAMP Dilution Factor: 1 :
Comment: 6010 W 70ICP1

Elem	Ag	Al	As	Au	B	Ba	Be	Ca
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**-.0176**	**31.29**	**-2.987**	**-38.37**	**4.647**	**18.16**	**.1289**	**8392.**
Stddev	.0728	3.85	1.815	29.70	.045	.20	.5854	52.
%RSD	413.5	12.30	60.77	77.40	.9731	1.126	454.1	.6187
#1	-.0716	35.37	-.8946	-27.61	4.688	18.14	.4572	8412.
#2	-.0463	30.79	-4.137	-15.56	4.653	18.37	.4765	8431.
#3	.0651	27.72	-3.929	-71.96	4.599	17.96	-.5470	8333.

Elem	Cd	Co	Cr	Cu	Fe	K	Mg	Mn
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**.0561**	**.0025**	**5.749**	**.3779**	**37.19**	**1030.**	**3675.**	**4.218**
Stddev	.0747	.2563	.154	.4957	16.89	85.	44.	.074
%RSD	133.1	10250.	2.685	131.2	45.42	8.266	1.185	1.764
#1	.1047	-.1894	5.747	.8527	50.23	945.8	3666.	4.198
#2	.0936	-.0967	5.596	.4173	18.11	1027.	3637.	4.301
#3	-.0299	.2935	5.904	-.1363	43.24	1116.	3722.	4.156

Elem	Mo	Na	Ni	P	Pb	Sb	Se	Si
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**-.5686**	**7684.**	**7.096**	**13.50**	**-2.964**	**-4.371**	**2.176**	**10040.**
Stddev	.2251	633.	.501	2.14	1.095	2.210	1.246	64.
%RSD	39.58	8.236	7.060	15.88	36.95	50.56	57.29	.6389
#1	-.4367	7851.	7.635	13.42	-2.524	-6.784	1.000	10080.
#2	-.4406	8217.	7.007	11.40	-4.211	-2.445	2.044	10060.
#3	-.8285	6984.	6.645	15.68	-2.157	-3.884	3.483	9963.

Elem	Sn	Sr	Ti	Tl	V	Y	Y	Y
Units	ug/L	ug/L	ug/L	ug/L	ug/L	%	%	%
Avg	**-40.60**	**40.45**	**1.389**	**-2.619**	**-.0992**	**99.29**	**94.30**	**11.27**
Stddev	.36	.41	.053	1.513	.3376	.41	.29	.07
%RSD	.8929	1.015	3.810	57.75	340.5	.4089	.3031	.6487
#1	-40.20	40.81	1.377	-2.063	.2181	99.42	94.53	11.34
#2	-40.71	40.54	1.447	-1.464	-.4540	98.84	94.38	11.28
#3	-40.90	40.00	1.343	-4.332	-.0616	99.62	93.98	11.19

Sample Name: 103953_2613 Acquired: 5/5/2017 14:30:56 Type: Unk
Method: New MethodDec2016(v343) Mode: CONC Corr. Factor: 1.000000
User: Charles Zervakos Sample Type: SAMP Dilution Factor: 1 :
Comment: 6010 W 70ICP1

Elem	Zn
Units	ug/L
Avg	-1.169
Stddev	.132
%RSD	11.31
#1	-1.021
#2	-1.275
#3	-1.210

Int. Std.	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S
Avg	10387.	49499.	5915.3
Stddev	42.	150.	38.4
%RSD	.40888	.30306	.64874
#1	10400.	49623.	5950.3
#2	10339.	49541.	5921.2
#3	10421.	49332.	5874.3

Sample Name: CCV Acquired: 5/5/2017 14:36:07 Type: QC
Method: New MethodDec2016(v343) Mode: CONC Corr. Factor: 1.000000
User: Charles Zervakos Sample Type: CCV Dilution Factor: 1 : 16539
Comment: 6010 W 70ICP1

Elem	Ag	Al	As	Au	B	Ba	Be	Ca
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**255.5**	**5104.**	**502.9**	F **410.8**	**2564.**	**513.7**	**53.29**	**27000.**
Stddev	1.5	31.	.6	74.9	6.	1.4	.26	24.
%RSD	.5741	.6131	.1187	18.23	.2397	.2744	.4949	.0879
#1	255.7	5093.	502.4	383.0	2570.	515.3	53.57	26980.
#2	256.9	5139.	502.9	495.6	2558.	513.1	53.26	27030.
#3	254.0	5079.	503.6	353.8	2563.	512.7	53.04	26990.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				550.0				
Low Limit				450.0				

Elem	Cd	Co	Cr	Cu	Fe	K	Mg	Mn
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**51.31**	**505.4**	**249.5**	**251.0**	**2122.**	**46980.**	**26100.**	**266.7**
Stddev	.21	1.0	.7	3.4	10.	166.	71.	1.4
%RSD	.4098	.1974	.2962	1.346	.4776	.3535	.2736	.5393
#1	51.53	506.5	249.2	250.9	2120.	47160.	26180.	265.8
#2	51.11	505.2	249.0	254.4	2133.	46840.	26070.	268.4
#3	51.29	504.5	250.4	247.7	2113.	46930.	26040.	266.0
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: CCV Acquired: 5/5/2017 14:36:07 Type: QC
Method: New MethodDec2016(v343) Mode: CONC Corr. Factor: 1.000000
User: Charles Zervakos Sample Type: CCV Dilution Factor: 1 : 16539
Comment: 6010 W 70ICP1

Elem	Mo	Na	Ni	P	Pb	Sb	Se	Si
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**506.8**	**51710.**	**254.9**	**973.4**	**547.1**	**762.6**	**744.1**	F **5592.**
Stddev	1.7	5456.	.2	4.1	4.5	5.5	6.3	39.
%RSD	.3355	10.55	.0917	.4180	.8271	.7248	.8529	.6920
#1	505.6	46950.	254.9	972.6	552.3	769.0	738.2	5561.
#2	506.1	50510.	255.1	977.8	544.6	759.1	743.3	5635.
#3	508.8	57660.	254.6	969.7	544.3	759.7	750.8	5579.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit								5500.
Low Limit								4500.

Elem	Sn	Sr	Ti	Tl	V	Y	Y	Y
Units	ug/L	ug/L	ug/L	ug/L	ug/L	%	%	%
Avg	**2580.**	**517.5**	**515.1**	**774.4**	**538.8**	**98.48**	**94.29**	**11.24**
Stddev	7.	3.5	3.2	2.4	5.8	.20	.51	.03
%RSD	.2617	.6799	.6147	.3040	1.078	.2054	.5396	.2666
#1	2588.	513.8	513.8	777.1	534.4	98.26	94.31	11.26
#2	2575.	520.8	518.8	773.0	545.4	98.66	93.77	11.21
#3	2579.	517.8	512.9	773.1	536.7	98.54	94.79	11.26
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	None	None
High Limit								
Low Limit								

Sample Name: CCV Acquired: 5/5/2017 14:36:07 Type: QC
Method: New MethodDec2016(v343) Mode: CONC Corr. Factor: 1.000000
User: Charles Zervakos Sample Type: CCV Dilution Factor: 1 : 16539
Comment: 6010 W 70ICP1

Elem	Zn
Units	ug/L
Avg	1065.
Stddev	5.
%RSD	.4431
#1	1070.
#2	1061.
#3	1065.
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S
Avg	10302.	49495.	5900.9
Stddev	21.	267.	15.7
%RSD	.20543	.53963	.26664
#1	10279.	49507.	5910.9
#2	10320.	49222.	5882.8
#3	10307.	49756.	5909.0

Sample Name: CCB Acquired: 5/5/2017 14:41:00 Type: QC
Method: New MethodDec2016(v343) Mode: CONC Corr. Factor: 1.000000
User: Charles Zervakos Sample Type: CCB Dilution Factor: 1 : 16619
Comment: 6010 W 70ICP1

Elem	Ag	Al	As	Au	B	Ba	Be	Ca	Cd
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**.2539**	**-.8322**	**.4095**	**-77.38**	**-5.077**	**-.3552**	**.3126**	**-5.038**	**-.0678**
Stddev	.6547	2.085	2.097	21.95	.151	.0365	.0959	11.65	.0694
%RSD	257.9	250.5	512.0	28.36	2.972	10.28	30.67	231.3	102.4
#1	.7755	1.192	.6157	-54.67	-5.118	-.3813	.2090	2.484	-.0497
#2	-.4809	-.7152	2.395	-98.48	-4.910	-.3708	.3306	-18.46	-.1444
#3	.4670	-2.973	-1.783	-78.99	-5.203	-.3134	.3983	.8627	-.0091
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co	Cr	Cu	Fe	K	Mg	Mn	Mo	Na
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**.0579**	**-.6705**	**.6755**	**-4.168**	**115.2**	**21.65**	**-.0852**	**.1347**	**-1484.**
Stddev	.1275	.5772	.5129	13.74	212.7	86.58	.0303	.4868	3066.
%RSD	220.3	86.09	75.93	329.5	184.7	399.9	35.50	361.3	206.7
#1	.0511	-.8223	.1507	.2310	346.6	-28.99	-.1105	.6192	-1395.
#2	-.0661	-1.157	1.176	-19.56	-71.73	121.6	-.0935	.1393	1538.
#3	.1885	-.0325	.7002	6.829	70.63	-27.68	-.0517	-.3543	-4593.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: CCB Acquired: 5/5/2017 14:41:00 Type: QC
Method: New MethodDec2016(v343) Mode: CONC Corr. Factor: 1.000000
User: Charles Zervakos Sample Type: CCB Dilution Factor: 1 : 16619
Comment: 6010 W 70ICP1

Elem	Ni	P	Pb	Sb	Se	Si	Sn	Sr	Ti
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	.3456	.9279	-.8332	-3.112	1.024	6.482	-37.74	-.0567	.0306
Stddev	.1811	.7370	.3498	2.382	3.145	2.937	.78	.0101	.0960
%RSD	52.40	79.42	41.98	76.54	307.1	45.31	2.075	17.75	313.3
#1	.1609	1.330	-.9614	-1.495	1.280	8.022	-38.64	-.0513	.0599
#2	.5229	1.377	-1.101	-5.847	-2.241	8.330	-37.27	-.0684	-.0766
#3	.3530	.0774	-.4374	-1.994	4.033	3.095	-37.30	-.0505	.1087
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Tl	V	Y	Y	Y	Zn
Units	ug/L	ug/L	%	%	%	ug/L
Avg	-1.379	-.7484	100.1	96.12	11.30	-1.774
Stddev	1.800	.5865	.1	.21	.05	.544
%RSD	130.6	78.37	.0590	.2142	.4766	30.66
#1	-.9731	-.1712	100.1	95.91	11.24	-2.401
#2	-3.347	-1.344	100.1	96.11	11.35	-1.469
#3	.1841	-.7303	100.0	96.32	11.32	-1.450
Check ?	Chk Pass	Chk Pass	None	None	None	Chk Pass
High Limit						
Low Limit						

Sample Name: CCB Acquired: 5/5/2017 14:41:00 Type: QC
Method: New MethodDec2016(v343) Mode: CONC Corr. Factor: 1.000000
User: Charles Zervakos Sample Type: CCB Dilution Factor: 1 : 16619
Comment: 6010 W 70ICP1

Int. Std.	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S
Avg	10469.	50453.	5932.4
Stddev	6.	108.	28.3
%RSD	.05901	.21422	.47664
#1	10469.	50345.	5900.9
#2	10475.	50453.	5955.7
#3	10462.	50561.	5940.6

Sample Name: 103954_2613 Acquired: 5/5/2017 14:46:15 Type: Unk
Method: New MethodDec2016(v343) Mode: CONC Corr. Factor: 1.000000
User: Charles Zervakos Sample Type: SAMP Dilution Factor: 1 :
Comment: 6010 W 70ICP1

Elem	Ag	Al	As	Au	B	Ba	Be	Ca
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**485.6**	**5436.**	**529.8**	**404.7**	**2696.**	**561.5**	**56.32**	**36030.**
Stddev	3.9	31.	2.9	50.5	10.	2.5	.18	103.
%RSD	.8057	.5651	.5498	12.49	.3840	.4435	.3274	.2855
#1	486.4	5446.	527.5	376.3	2705.	563.7	56.52	36090.
#2	489.1	5460.	528.8	463.1	2698.	562.0	56.28	36090.
#3	481.4	5402.	533.1	374.8	2685.	558.8	56.16	35910.

Elem	Cd	Co	Cr	Cu	Fe	K	Mg	Mn
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**54.16**	**533.2**	**271.1**	**263.6**	**2297.**	**48760.**	**30450.**	**281.6**
Stddev	.19	1.4	1.0	1.3	28.	38.	106.	2.6
%RSD	.3495	.2639	.3687	.4780	1.217	.0787	.3475	.9257
#1	54.29	534.8	270.9	264.5	2308.	48800.	30410.	282.5
#2	54.24	532.5	272.2	264.2	2317.	48740.	30560.	283.6
#3	53.94	532.3	270.2	262.2	2265.	48730.	30360.	278.6

Elem	Mo	Na	Ni	P	Pb	Sb	Se	Si
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**539.0**	**67820.**	**274.8**	**1033.**	**572.2**	**805.2**	**775.7**	**14270.**
Stddev	2.3	4768.	.6	2.	5.4	2.8	5.1	160.
%RSD	.4206	7.030	.2364	.2213	.9394	.3486	.6531	1.118
#1	540.7	65690.	274.6	1035.	575.4	808.4	771.3	14300.
#2	539.9	73280.	275.6	1031.	575.2	803.1	781.3	14420.
#3	536.4	64490.	274.4	1034.	566.0	804.2	774.7	14100.

Elem	Sn	Sr	Ti	Tl	V	Y	Y	Y
Units	ug/L	ug/L	ug/L	ug/L	ug/L	%	%	%
Avg	**2723.**	**577.8**	**538.1**	**812.9**	**563.1**	**97.46**	**94.32**	**11.21**
Stddev	11.	4.9	2.2	.8	5.4	.39	.89	.05
%RSD	.4007	.8430	.4069	.0979	.9546	.4052	.9460	.4722
#1	2735.	574.2	539.7	813.5	565.9	97.02	94.02	11.17
#2	2720.	583.3	539.1	813.3	566.5	97.60	93.62	11.20
#3	2714.	575.8	535.6	812.0	556.9	97.77	95.33	11.27

Sample Name: 103954_2613 Acquired: 5/5/2017 14:46:15 Type: Unk
Method: New MethodDec2016(v343) Mode: CONC Corr. Factor: 1.000000
User: Charles Zervakos Sample Type: SAMP Dilution Factor: 1 :
Comment: 6010 W 70ICP1

Elem	Zn
Units	ug/L
Avg	1117.
Stddev	8.
%RSD	.7542
#1	1125.
#2	1119.
#3	1108.

Int. Std.	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S
Avg	10195.	49513.	5885.4
Stddev	41.	468.	27.8
%RSD	.40515	.94601	.47220
#1	10149.	49356.	5862.7
#2	10209.	49143.	5877.0
#3	10228.	50040.	5916.4

Sample Name: 7016438018_2613 Acquired: 5/5/2017 14:51:14 Type: Unk
Method: New MethodDec2016(v343) Mode: CONC Corr. Factor: 1.000000
User: Charles Zervakos Sample Type: SAMP Dilution Factor: 1 :
Comment: 6010 W 70ICP1

Elem	Ag	Al	As	Au	B	Ba	Be	Ca
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	.2052	241.7	-.6556	-77.00	40.18	128.4	.1350	10100.
Stddev	.5438	1.8	1.918	6.38	.86	.9	.2473	72.
%RSD	265.0	.7617	292.6	8.282	2.145	.6902	183.2	.7094
#1	-.3527	243.7	1.380	-69.68	41.06	129.2	.3830	10120.
#2	.7336	240.0	-.9168	-80.00	40.12	128.6	-.1117	10160.
#3	.2347	241.4	-2.430	-81.33	39.34	127.4	.1336	10020.

Elem	Cd	Co	Cr	Cu	Fe	K	Mg	Mn
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	.3562	.0377	6.665	1.524	129.1	3341.	3596.	128.4
Stddev	.1027	.2057	.177	.628	5.3	194.	141.	.9
%RSD	28.84	545.3	2.657	41.20	4.116	5.816	3.913	.7298
#1	.2585	.0024	6.463	.9813	133.8	3514.	3738.	128.9
#2	.4633	-.1480	6.740	2.211	130.1	3130.	3595.	127.3
#3	.3467	.2588	6.792	1.378	123.3	3378.	3456.	129.0

Elem	Mo	Na	Ni	P	Pb	Sb	Se	Si
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	.0062	31590.	3.986	9.424	-.3479	-2.078	-.2213	6191.
Stddev	.5051	4443.	.389	1.074	1.146	.913	4.155	50.
%RSD	8134.	14.06	9.753	11.39	329.3	43.93	1877.	.8140
#1	.4133	33570.	3.548	10.12	-.7598	-2.015	3.680	6227.
#2	.1644	26500.	4.292	8.188	-1.231	-1.198	.2467	6133.
#3	-.5591	34700.	4.117	9.968	.9469	-3.021	-4.591	6212.

Elem	Sn	Sr	Ti	Tl	V	Y	Y	Y
Units	ug/L	ug/L	ug/L	ug/L	ug/L	%	%	%
Avg	-37.61	60.22	2.472	-1.163	-.2846	100.1	97.33	11.56
Stddev	.42	.42	.137	1.292	.6053	.5	.62	.04
%RSD	1.122	.6939	5.528	111.2	212.7	.4625	.6324	.3454
#1	-37.12	60.21	2.452	-1.825	-.9795	99.69	97.15	11.58
#2	-37.87	59.80	2.617	-1.989	.1279	100.0	98.01	11.51
#3	-37.83	60.64	2.346	.3269	-.0020	100.6	96.82	11.58

Sample Name: 7016438018_2613 Acquired: 5/5/2017 14:51:14 Type: Unk
Method: New MethodDec2016(v343) Mode: CONC Corr. Factor: 1.000000
User: Charles Zervakos Sample Type: SAMP Dilution Factor: 1 :
Comment: 6010 W 70ICP1

Elem	Zn
Units	ug/L
Avg	5.212
Stddev	.121
%RSD	2.326
#1	5.275
#2	5.072
#3	5.288

Int. Std.	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S
Avg	10472.	51089.	6066.8
Stddev	48.	323.	21.0
%RSD	.46247	.63243	.34543
#1	10428.	50999.	6077.4
#2	10464.	51448.	6042.7
#3	10524.	50821.	6080.4

Sample Name: 7016438019_2613 Acquired: 5/5/2017 14:56:26 Type: Unk
Method: New MethodDec2016(v343) Mode: CONC Corr. Factor: 1.000000
User: Charles Zervakos Sample Type: SAMP Dilution Factor: 1 :
Comment: 6010 W 70ICP1

Elem	Ag	Al	As	Au	B	Ba	Be	Ca
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	.1940	8.070	-1.028	-56.77	58.18	40.28	-.2099	18670.
Stddev	.7307	2.340	.837	29.68	.24	.02	.1199	106.
%RSD	376.7	28.99	81.46	52.28	.4176	.0412	57.11	.5682
#1	.8216	10.08	-1.453	-84.46	58.44	40.30	-.3482	18750.
#2	-.6081	8.628	-.0633	-60.42	57.96	40.26	-.1454	18550.
#3	.3685	5.502	-1.567	-25.43	58.16	40.28	-.1361	18700.

Elem	Cd	Co	Cr	Cu	Fe	K	Mg	Mn
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	.1317	2.396	-.3961	1.987	1281.	2038.	9474.	343.0
Stddev	.0628	.030	.1898	.426	21.	102.	63.	.4
%RSD	47.64	1.236	47.91	21.43	1.652	5.006	.6617	.1187
#1	.2023	2.414	-.5532	2.478	1281.	1921.	9472.	342.5
#2	.1108	2.361	-.1853	1.727	1260.	2081.	9412.	343.3
#3	.0821	2.411	-.4499	1.755	1302.	2111.	9537.	343.2

Elem	Mo	Na	Ni	P	Pb	Sb	Se	Si
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	-1.044	18130.	4.101	9.425	-3.020	-2.651	-2.333	8644.
Stddev	.035	1606.	.870	.864	2.652	1.568	3.731	17.
%RSD	3.373	8.857	21.21	9.171	87.83	59.15	159.9	.2012
#1	-1.003	16550.	4.918	8.656	-.3789	-3.508	-4.478	8627.
#2	-1.062	19760.	4.200	9.258	-2.997	-3.605	-4.496	8643.
#3	-1.066	18080.	3.186	10.36	-5.683	-.8412	1.976	8662.

Elem	Sn	Sr	Ti	Tl	V	Y	Y	Y
Units	ug/L	ug/L	ug/L	ug/L	ug/L	%	%	%
Avg	-40.61	85.61	1.949	-.8063	.0282	100.3	97.94	11.60
Stddev	.22	.12	.121	1.723	.3177	.3	1.40	.01
%RSD	.5409	.1425	6.223	213.7	1128.	.3103	1.427	.1288
#1	-40.37	85.47	2.087	-.2248	.0014	100.5	98.92	11.62
#2	-40.80	85.68	1.860	.5508	-.2753	99.97	98.56	11.59
#3	-40.66	85.69	1.900	-2.745	.3584	100.5	96.34	11.60

Sample Name: 7016438019_2613 Acquired: 5/5/2017 14:56:26 Type: Unk
Method: New MethodDec2016(v343) Mode: CONC Corr. Factor: 1.000000
User: Charles Zervakos Sample Type: SAMP Dilution Factor: 1 :
Comment: 6010 W 70ICP1

Elem	Zn
Units	ug/L
Avg	-.8463
Stddev	.2274
%RSD	26.87
#1	-.9624
#2	-.9921
#3	-.5843

Int. Std.	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S
Avg	10495.	51412.	6090.2
Stddev	33.	734.	7.8
%RSD	.31030	1.4268	.12875
#1	10516.	51927.	6099.1
#2	10457.	51736.	6084.4
#3	10511.	50572.	6087.1

Sample Name: 7016438020_2613 Acquired: 5/5/2017 15:01:36 Type: Unk
Method: New MethodDec2016(v343) Mode: CONC Corr. Factor: 1.000000
User: Charles Zervakos Sample Type: SAMP Dilution Factor: 1 :
Comment: 6010 W 70ICP1

Elem	Ag	Al	As	Au	B	Ba	Be	Ca
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	.1251	9.511	-2.344	-57.45	2.638	53.25	.1098	27990.
Stddev	.2052	1.820	1.441	98.91	.494	.09	.3870	186.
%RSD	164.0	19.13	61.50	172.2	18.73	.1718	352.5	.6652
#1	.2647	11.58	-2.032	56.69	2.409	53.20	-.3370	28100.
#2	.2213	8.783	-1.084	-118.0	3.205	53.20	.3310	28100.
#3	-.1105	8.168	-3.915	-111.1	2.299	53.36	.3353	27780.

Elem	Cd	Co	Cr	Cu	Fe	K	Mg	Mn
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	.0602	12.23	300.0	.4442	1495.	1747.	12510.	78.92
Stddev	.0759	.35	.9	1.131	14.	127.	209.	.20
%RSD	126.1	2.887	.2923	254.7	.9523	7.275	1.674	.2554
#1	.1374	12.64	299.6	1.280	1481.	1853.	12740.	79.14
#2	-.0143	11.97	299.4	-.8431	1494.	1606.	12440.	78.74
#3	.0574	12.10	301.0	.8955	1510.	1783.	12340.	78.87

Elem	Mo	Na	Ni	P	Pb	Sb	Se	Si
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	2.028	39320.	425.5	22.85	-2.188	-7.310	-3.046	8927.
Stddev	.223	1387.	1.1	1.87	.666	2.062	3.780	44.
%RSD	10.98	3.528	.2629	8.188	30.43	28.20	124.1	.4954
#1	1.858	38040.	424.3	24.87	-2.612	-6.738	.8275	8965.
#2	1.947	40790.	426.5	22.52	-2.532	-5.594	-6.725	8878.
#3	2.280	39120.	425.7	21.17	-1.421	-9.597	-3.240	8938.

Elem	Sn	Sr	Ti	Tl	V	Y	Y	Y
Units	ug/L	ug/L	ug/L	ug/L	ug/L	%	%	%
Avg	-41.85	117.9	2.416	-.6478	.8254	99.69	98.59	11.63
Stddev	.98	.4	.158	1.100	.2641	.34	.25	.12
%RSD	2.331	.3420	6.535	169.8	31.99	.3376	.2488	1.018
#1	-42.36	118.4	2.428	-1.358	.5900	99.71	98.33	11.55
#2	-40.73	117.6	2.253	-1.205	.7752	100.0	98.82	11.57
#3	-42.47	117.8	2.568	.6193	1.111	99.34	98.62	11.76

Sample Name: 7016438020_2613 Acquired: 5/5/2017 15:01:36 Type: Unk
Method: New MethodDec2016(v343) Mode: CONC Corr. Factor: 1.000000
User: Charles Zervakos Sample Type: SAMP Dilution Factor: 1 :
Comment: 6010 W 70ICP1

Elem	Zn
Units	ug/L
Avg	-2.427
Stddev	.172
%RSD	7.109
#1	-2.406
#2	-2.609
#3	-2.265

Int. Std.	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S
Avg	10428.	51753.	6103.7
Stddev	35.	129.	62.1
%RSD	.33762	.24884	1.0180
#1	10431.	51618.	6063.1
#2	10462.	51875.	6072.6
#3	10392.	51767.	6175.2

Sample Name: ICSA Acquired: 5/5/2017 15:11:54 Type: QC
Method: New MethodDec2016(v343) Mode: CONC Corr. Factor: 1.000000
User: Charles Zervakos Sample Type: ICSA Dilution Factor: : 16550
Comment: 6010 W 70ICP1

Elem	Ag	Al	As	Au	B	Ba	Be
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	F **22.87**	**498400.**	**13.81**	F **-423.0**	**-8.094**	**-.7910**	**.1519**
Stddev	.24	1197.	6.26	49.5	.196	.0508	.3534
%RSD	1.068	.2402	45.36	11.71	2.426	6.423	232.6
#1	23.14	499300.	18.44	-463.9	-8.163	-.8492	-.2046
#2	22.82	498900.	6.682	-437.3	-7.872	-.7684	.1582
#3	22.66	497000.	16.31	-367.9	-8.246	-.7554	.5022
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit	20.00			200.0			
Low Limit	-20.00			-200.0			

Elem	Ca	Cd	Co	Cr	Cu	Fe	K
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**493300.**	F **9.740**	**3.973**	F **-133.3**	**5.354**	**191400.**	**9616.**
Stddev	3215.	.246	.113	.2	.759	654.	160.
%RSD	.6518	2.530	2.833	.1147	14.17	.3418	1.661
#1	496400.	9.801	3.912	-133.1	4.743	191800.	9462.
#2	493500.	9.468	4.103	-133.4	6.204	191800.	9781.
#3	490000.	9.949	3.903	-133.4	5.117	190700.	9606.
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Fail	Chk Pass	Chk Pass	None
High Limit		5.000		20.00			
Low Limit		-5.000		-20.00			

Sample Name: ICSA Acquired: 5/5/2017 15:11:54 Type: QC
Method: New MethodDec2016(v343) Mode: CONC Corr. Factor: 1.000000
User: Charles Zervakos Sample Type: ICSA Dilution Factor: : 16550
Comment: 6010 W 70ICP1

Elem	Mg	Mn	Mo	Na	Ni	P	Pb
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**520700.**	**-1.310**	**-1.491**	**4163.**	**-4.448**	**4.389**	**-.0776**
Stddev	3409.	.056	.244	4540.	.410	3.211	5.089
%RSD	.6547	4.264	16.39	109.0	9.224	73.15	6561.
#1	524400.	-1.247	-1.507	-403.3	-3.995	2.810	4.705
#2	520100.	-1.354	-1.726	4217.	-4.794	8.084	.4896
#3	517700.	-1.329	-1.239	8675.	-4.555	2.274	-5.427
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sb	Se	Si	Sn	Sr	Ti	Tl
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**5.086**	**-6.784**	**-13.88**	**-56.37**	**3.886**	**2.420**	**.5321**
Stddev	5.363	5.433	4.64	1.48	.005	.200	3.161
%RSD	105.4	80.07	33.43	2.620	.1411	8.266	594.0
#1	1.614	-8.150	-12.24	-54.71	3.882	2.342	-3.096
#2	11.26	-.7995	-10.29	-57.54	3.892	2.647	1.998
#3	2.381	-11.40	-19.12	-56.87	3.884	2.271	2.694
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: ICSA Acquired: 5/5/2017 15:11:54 Type: QC
Method: New MethodDec2016(v343) Mode: CONC Corr. Factor: 1.000000
User: Charles Zervakos Sample Type: ICSA Dilution Factor: : 16550
Comment: 6010 W 70ICP1

Elem	V	Y	Y	Y	Zn
Units	ug/L	%	%	%	ug/L
Avg	6.635	94.08	93.74	11.50	8.552
Stddev	.164	.15	.90	.09	.338
%RSD	2.476	.1642	.9653	.8204	3.950
#1	6.567	93.91	92.81	11.43	8.735
#2	6.516	94.21	93.80	11.46	8.162
#3	6.823	94.12	94.61	11.61	8.758
Check ?	Chk Pass	None	None	None	Chk Pass
High Limit					
Low Limit					

Int. Std.	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S
Avg	9841.0	49206.	6036.3
Stddev	16.2	475.	49.5
%RSD	.16416	.96534	.82044
#1	9823.1	48716.	5999.7
#2	9854.5	49240.	6016.6
#3	9845.3	49664.	6092.7

Sample Name: ICSAB Acquired: 5/5/2017 15:17:04 Type: QC
Method: New MethodDec2016(v343) Mode: CONC Corr. Factor: 1.000000
User: Charles Zervakos Sample Type: ICSAB Dilution Factor: : 16551
Comment: 6010 W 70ICP1

Elem	Ag	Al	As	Au	B	Ba	Be
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**457.0**	**504200.**	**208.9**	F **543.0**	**970.4**	**982.1**	**1019.**
Stddev	.7	2692.	2.9	11.1	3.5	1.5	1.
%RSD	.1623	.5339	1.402	2.043	.3588	.1497	.0942
#1	457.5	501700.	212.0	545.6	967.2	981.9	1018.
#2	456.1	504000.	208.5	552.5	970.0	983.7	1020.
#3	457.3	507000.	206.2	530.8	974.1	980.8	1018.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit				1200.			
Low Limit				800.0			

Elem	Ca	Cd	Co	Cr	Cu	Fe	K
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**497300.**	**1890.**	**952.7**	**831.3**	**962.7**	**185400.**	**11000.**
Stddev	2453.	4.	.8	3.6	3.6	229.	52.
%RSD	.4932	.2321	.0812	.4351	.3746	.1236	.4760
#1	498700.	1885.	952.2	827.2	960.4	185200.	11060.
#2	494500.	1892.	953.6	832.5	960.9	185600.	10980.
#3	498700.	1893.	952.3	834.1	966.9	185400.	10960.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: ICSAB Acquired: 5/5/2017 15:17:04 Type: QC
Method: New MethodDec2016(v343) Mode: CONC Corr. Factor: 1.000000
User: Charles Zervakos Sample Type: ICSAB Dilution Factor: : 16551
Comment: 6010 W 70ICP1

Elem	Mg	Mn	Mo	Na	Ni	P	Pb
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**529200.**	**976.6**	**956.2**	**3383.**	**1876.**	**453.2**	**91.67**
Stddev	4960.	4.2	2.8	6474.	1.	3.6	2.79
%RSD	.9373	.4332	.2972	191.4	.0615	.8007	3.042
#1	530700.	973.0	953.3	3959.	1874.	453.0	92.53
#2	523700.	975.7	958.9	9549.	1876.	449.6	93.94
#3	533200.	981.3	956.5	-3360.	1876.	456.9	88.56
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Sb	Se	Si	Sn	Sr	Ti	Tl
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**1191.**	**82.71**	F **692.6**	**903.4**	**1021.**	**992.3**	**187.0**
Stddev	3.	4.31	6.9	1.9	8.	1.5	1.9
%RSD	.2827	5.213	1.000	.2158	.8082	.1465	1.020
#1	1189.	80.02	689.0	901.9	1021.	991.1	186.2
#2	1189.	87.68	688.3	905.6	1030.	992.0	185.6
#3	1195.	80.42	700.6	902.6	1014.	993.9	189.1
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			1200.				
Low Limit			800.0				

Sample Name: ICSAB Acquired: 5/5/2017 15:17:04 Type: QC
Method: New MethodDec2016(v343) Mode: CONC Corr. Factor: 1.000000
User: Charles Zervakos Sample Type: ICSAB Dilution Factor: : 16551
Comment: 6010 W 70ICP1

Elem	V	Y	Y	Y	Zn
Units	ug/L	%	%	%	ug/L
Avg	985.9	95.05	94.10	11.67	1983.
Stddev	2.8	.28	.13	.11	7.
%RSD	.2822	.2993	.1340	.9239	.3410
#1	983.3	94.85	93.98	11.56	1975.
#2	985.6	94.93	94.09	11.78	1987.
#3	988.8	95.38	94.23	11.69	1987.
Check ?	Chk Pass	None	None	None	Chk Pass
High Limit					
Low Limit					

Int. Std.	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S
Avg	9943.1	49396.	6128.4
Stddev	29.8	66.	56.6
%RSD	.29930	.13398	.92388
#1	9921.9	49332.	6068.5
#2	9930.4	49392.	6181.0
#3	9977.1	49465.	6135.7

Sample Name: CCV Acquired: 5/5/2017 15:22:08 Type: QC
Method: New MethodDec2016(v343) Mode: CONC Corr. Factor: 1.000000
User: Charles Zervakos Sample Type: CCV Dilution Factor: 1 : 16539
Comment: 6010 W 70ICP1

Elem	Ag	Al	As	Au	B	Ba	Be	Ca
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**249.3**	**5087.**	**501.2**	F **430.0**	**2505.**	**503.5**	**51.64**	**26220.**
Stddev	2.1	12.	4.1	40.8	5.	1.9	.11	83.
%RSD	.8279	.2286	.8245	9.486	.2193	.3856	.2211	.3158
#1	249.8	5084.	499.9	468.0	2511.	505.8	51.51	26190.
#2	247.0	5077.	497.8	386.9	2500.	502.6	51.68	26310.
#3	251.0	5100.	505.8	434.9	2505.	502.3	51.72	26160.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				550.0				
Low Limit				450.0				

Elem	Cd	Co	Cr	Cu	Fe	K	Mg	Mn
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**50.91**	**508.3**	**249.1**	**258.7**	**2005.**	**46590.**	**26410.**	**257.0**
Stddev	.13	.7	1.9	2.0	25.	261.	276.	1.8
%RSD	.2534	.1475	.7691	.7802	1.254	.5595	1.045	.6901
#1	51.06	509.1	250.8	257.1	2016.	46860.	26570.	257.7
#2	50.86	508.1	247.0	258.1	2023.	46350.	26570.	255.0
#3	50.82	507.6	249.6	261.0	1976.	46560.	26090.	258.3
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: CCV Acquired: 5/5/2017 15:22:08 Type: QC
Method: New MethodDec2016(v343) Mode: CONC Corr. Factor: 1.000000
User: Charles Zervakos Sample Type: CCV Dilution Factor: 1 : 16539
Comment: 6010 W 70ICP1

Elem	Mo	Na	Ni	P	Pb	Sb	Se	Si
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**496.4**	**50520.**	**254.4**	**1004.**	**508.5**	**744.1**	**727.9**	**5323.**
Stddev	1.8	6965.	.7	2.	1.0	1.1	8.2	49.
%RSD	.3720	13.79	.2639	.1982	.1974	.1460	1.127	.9238
#1	498.5	54750.	254.3	1002.	509.2	744.9	723.4	5334.
#2	495.2	54340.	255.0	1005.	509.0	744.6	722.8	5269.
#3	495.5	42480.	253.7	1006.	507.4	742.9	737.3	5365.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Sn	Sr	Ti	Tl	V	Y	Y	Y
Units	ug/L	ug/L	ug/L	ug/L	ug/L	%	%	%
Avg	**2523.**	**514.0**	**510.7**	**770.2**	**511.3**	**103.1**	**100.5**	**12.08**
Stddev	7.	2.6	2.2	2.5	4.0	.5	.3	.07
%RSD	.2847	.5012	.4384	.3216	.7877	.5158	.2814	.5481
#1	2529.	511.1	510.5	773.0	512.7	102.6	100.6	12.09
#2	2515.	515.8	508.6	768.7	506.7	103.2	100.8	12.01
#3	2524.	515.2	513.1	768.8	514.4	103.7	100.2	12.14
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	None	None
High Limit								
Low Limit								

Sample Name: CCV Acquired: 5/5/2017 15:22:08 Type: QC
Method: New MethodDec2016(v343) Mode: CONC Corr. Factor: 1.000000
User: Charles Zervakos Sample Type: CCV Dilution Factor: 1 : 16539
Comment: 6010 W 70ICP1

Elem	Zn
Units	ug/L
Avg	1007.
Stddev	5.
%RSD	.4753
#1	1013.
#2	1004.
#3	1005.
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S
Avg	10789.	52772.	6340.4
Stddev	56.	149.	34.8
%RSD	.51585	.28144	.54813
#1	10732.	52808.	6343.8
#2	10793.	52900.	6304.0
#3	10843.	52609.	6373.3

Sample Name: CCB Acquired: 5/5/2017 15:27:04 Type: QC
Method: New MethodDec2016(v343) Mode: CONC Corr. Factor: 1.000000
User: Charles Zervakos Sample Type: CCB Dilution Factor: 1 : 16619
Comment: 6010 W 70ICP1

Elem	Ag	Al	As	Au	B	Ba	Be	Ca	Cd
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	.2268	1.176	2.886	-75.11	-4.618	-.1979	-.1420	-26.82	-.0995
Stddev	.7135	3.419	2.336	49.99	.223	.0543	.2310	22.13	.2073
%RSD	314.6	290.8	80.95	66.56	4.820	27.45	162.6	82.50	208.4
#1	.1345	1.331	.9663	-23.21	-4.363	-.2595	.1236	-15.01	-.1990
#2	.9820	4.514	2.205	-79.16	-4.720	-.1778	-.2959	-52.35	.1388
#3	-.4361	-2.318	5.488	-122.9	-4.772	-.1565	-.2538	-13.10	-.2382
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co	Cr	Cu	Fe	K	Mg	Mn	Mo	Na
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	-.0854	.9428	1.062	-1.472	42.12	-46.37	.0408	.5808	-1708.
Stddev	.3040	.0845	.328	1.719	157.1	37.70	.0295	.4978	2923.
%RSD	356.1	8.961	30.87	116.8	373.0	81.31	72.21	85.72	171.1
#1	-.4361	.8776	1.440	.4706	-67.52	-46.30	.0186	1.063	-3288.
#2	.1022	1.038	.8621	-2.090	-28.23	-8.703	.0297	.6106	1665.
#3	.0778	.9126	.8836	-2.798	222.1	-84.11	.0743	.0687	-3502.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: CCB Acquired: 5/5/2017 15:27:04 Type: QC
Method: New MethodDec2016(v343) Mode: CONC Corr. Factor: 1.000000
User: Charles Zervakos Sample Type: CCB Dilution Factor: 1 : 16619
Comment: 6010 W 70ICP1

Elem	Ni	P	Pb	Sb	Se	Si	Sn	Sr	Ti
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	.2397	.5964	-.0017	-4.390	1.544	.5367	-37.77	-.0225	-.1553
Stddev	.1963	.9024	2.239	1.370	.528	1.502	.84	.0195	.1186
%RSD	81.89	151.3	135500.	31.21	34.21	279.8	2.227	86.73	76.37
#1	.4645	1.528	.7769	-2.923	.9783	-1.120	-36.80	-.0238	-.0231
#2	.1025	-.2739	-2.526	-5.637	1.630	.9212	-38.20	-.0024	-.1902
#3	.1520	.5355	1.744	-4.610	2.024	1.809	-38.32	-.0414	-.2525
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Tl	V	Y	Y	Y	Zn
Units	ug/L	ug/L	%	%	%	ug/L
Avg	-1.054	-.2389	105.9	103.9	12.31	-1.472
Stddev	.232	.7310	.4	.6	.11	.276
%RSD	21.99	306.0	.3542	.5317	.9282	18.75
#1	-.8610	.0139	105.7	103.9	12.20	-1.162
#2	-1.311	.3322	105.8	103.4	12.43	-1.566
#3	-.9893	-1.063	106.4	104.5	12.29	-1.689
Check ?	Chk Pass	Chk Pass	None	None	None	Chk Pass
High Limit						
Low Limit						

Sample Name: CCB Acquired: 5/5/2017 15:27:04 Type: QC
Method: New MethodDec2016(v343) Mode: CONC Corr. Factor: 1.000000
User: Charles Zervakos Sample Type: CCB Dilution Factor: 1 : 16619
Comment: 6010 W 70ICP1

Int. Std.	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S
Avg	11083.	54549.	6461.4
Stddev	39.	290.	60.0
%RSD	.35424	.53172	.92820
#1	11053.	54542.	6405.6
#2	11068.	54262.	6524.9
#3	11127.	54842.	6453.7

Sample Name: CAL0 Acquired: 5/3/2017 12:58:05 Type: Cal
Method: USE(v270) Mode: IR Corr. Factor: 1.000000
User: andrew schmadtke Instrument ID: ICP 2 Dilution Factor: 1 Method:
Comment:

Elem	Ag	Al	As	Au	B	Ba	Be	Ca
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**-.0006**	**.0021**	**.0000**	**.0002**	**-.0001**	**.0009**	**-.0007**	**-.0006**
Stddev	.0001	.0001	.0000	.0001	.0000	.0000	.0001	.0001
%RSD	16.64	3.229	109.8	54.70	9.235	1.797	11.15	19.74
#1	-.0005	.0020	.0000	.0004	-.0001	.0009	-.0008	-.0005
#2	-.0007	.0021	.0000	.0001	-.0001	.0008	-.0006	-.0005
#3	-.0005	.0021	.0000	.0002	-.0001	.0009	-.0008	-.0007

Elem	Cd	Co	Cr	Cu	Fe	K	Mg	Mn
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.0000**	**.0001**	**.0008**	**-.0001**	**.0001**	**.0095**	**.0001**	**.0003**
Stddev	.000	.0001	.0003	.0000	.0001	.0005	.0000	.0000
%RSD	74.62	82.72	34.85	17.66	81.10	4.967	12.57	7.794
#1	.0000	.0000	.0005	-.0001	.0001	.0090	.0002	.0003
#2	.0000	.0002	.0010	-.0001	.0000	.0100	.0001	.0004
#3	.0000	.0001	.0008	-.0001	.0001	.0094	.0001	.0003

Elem	Mo	Na	Ni	P	Pb	Sb	Se	Si
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**-.0003**	**-.0631**	**.0000**	**.0000**	**.0000**	**.0001**	**.0000**	**.0019**
Stddev	.0000	.0014	.000	.0000	.0001	.0000	.0001	.0001
%RSD	11.98	2.201	970.9	113.2	195.8	21.71	198.3	3.857
#1	-.0003	-.0640	-.0001	.0000	.0000	.0001	.0001	.0020
#2	-.0003	-.0638	.0000	.0000	.0001	.0001	.0000	.0018
#3	-.0004	-.0615	.0000	.0000	.0000	.0001	.0000	.0019

Elem	Sn	Sr	Ti	Tl	V	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.0000**	**.0075**	**.0003**	**.0001**	**.0000**	**19530.**	**83610.**	**32950.**
Stddev	.0000	.0001	.0000	.0000	.0001	39.	287.	237.
%RSD	107.7	1.644	18.92	30.78	254.3	.2010	.3428	.7180
#1	.0000	.0074	.0002	.0001	.0001	19550.	83320.	33070.
#2	.0000	.0076	.0003	.0001	.0001	19480.	83610.	32670.
#3	.0000	.0073	.0002	.0001	-.0001	19550.	83900.	33100.

Sample Name: CAL0 Acquired: 5/3/2017 12:58:05 Type: Cal
Method: USE(v270) Mode: IR Corr. Factor: 1.000000
User: andrew schmadtke Instrument ID: ICP 2 Dilution Factor: 1 Method:
Comment:

Elem	Zn
Units	Cts/S
Avg	.0032
Stddev	.0008
%RSD	24.87
#1	.0040
#2	.0032
#3	.0024

Int. Std.	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S
Avg	19527.	83609.	32945.
Stddev	39.	287.	237.
%RSD	.20103	.34276	.71801
#1	19546.	83323.	33068.
#2	19482.	83610.	32672.
#3	19553.	83896.	33095.

Sample Name: CAL1 Acquired: 5/3/2017 13:03:04 Type: Cal
Method: USE(v270) Mode: IR Corr. Factor: 1.000000
User: andrew schmadtke Instrument ID: ICP 2 Dilution Factor: 1 Method:
Comment:

Elem	Ag	Al	As	Au	B	Ba	Be	Ca
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0130	.0415	.0026	.0016	.0618	.1276	.0203	.1254
Stddev	.0000	.0003	.0000	.0003	.0001	.0003	.0001	.0004
%RSD	.2349	.6780	1.919	15.64	.1590	.2133	.3310	.3051
#1	.0130	.0418	.0025	.0019	.0617	.1272	.0202	.1251
#2	.0130	.0412	.0026	.0015	.0619	.1278	.0204	.1258
#3	.0130	.0417	.0026	.0015	.0618	.1276	.0203	.1253

Elem	Cd	Co	Cr	Cu	Fe	K	Mg	Mn
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0135	.0531	.0928	.0029	.0136	.1268	.0167	.0820
Stddev	.0000	.0001	.0004	.0000	.0001	.0015	.0002	.0003
%RSD	.2595	.1940	.4637	.7872	.9159	1.197	1.227	.3126
#1	.0136	.0530	.0931	.0028	.0135	.1250	.0168	.0822
#2	.0136	.0531	.0930	.0029	.0136	.1275	.0169	.0817
#3	.0135	.0532	.0923	.0029	.0137	.1277	.0165	.0820

Elem	Mo	Na	Ni	P	Pb	Sb	Se	Si
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0290	.7135	.0115	.0070	.0112	.0094	.0046	.0587
Stddev	.0001	.0040	.0001	.0001	.0001	.0000	.0001	.0005
%RSD	.4811	.5595	.6037	1.091	.9419	.1572	1.242	.7918
#1	.0288	.7125	.0114	.0069	.0112	.0094	.0045	.0588
#2	.0291	.7102	.0115	.0071	.0111	.0094	.0046	.0582
#3	.0290	.7179	.0115	.0070	.0113	.0094	.0046	.0591

Elem	Sn	Sr	Ti	Tl	V	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0341	1.436	.1468	.0075	.0286	19100.	82680.	32650.
Stddev	.0001	.007	.0010	.0000	.0002	64.	468.	129.
%RSD	.2986	.5211	.6722	.3671	.6610	.3332	.5655	.3940
#1	.0340	1.442	.1475	.0075	.0286	19170.	82750.	32550.
#2	.0342	1.427	.1457	.0075	.0284	19090.	83110.	32800.
#3	.0342	1.437	.1471	.0074	.0288	19040.	82180.	32610.

Sample Name: CAL1 Acquired: 5/3/2017 13:03:04 Type: Cal
Method: USE(v270) Mode: IR Corr. Factor: 1.000000
User: andrew schmadtke Instrument ID: ICP 2 Dilution Factor: 1 Method:
Comment:

Elem	Zn
Units	Cts/S
Avg	.0926
Stddev	.0002
%RSD	.2094
#1	.0924
#2	.0927
#3	.0927

Int. Std.	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S
Avg	19100.	82683.	32654.
Stddev	64.	468.	129.
%RSD	.33325	.56548	.39398
#1	19169.	82755.	32551.
#2	19088.	83111.	32798.
#3	19043.	82184.	32612.

Sample Name: CAL2 Acquired: 5/3/2017 13:07:52 Type: Cal
Method: USE(v270) Mode: IR Corr. Factor: 1.000000
User: andrew schmadtke Instrument ID: ICP 2 Dilution Factor: 1 Method:
Comment:

Elem	Ag	Al	As	Au	B	Ba	Be	Ca
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0328	.0993	.0064	.0034	.1517	.3138	.0501	.3086
Stddev	.0002	.0002	.0000	.0001	.0002	.0004	.0003	.0009
%RSD	.4878	.2365	.3432	3.542	.1356	.1284	.6529	.2924
#1	.0329	.0996	.0065	.0035	.1519	.3142	.0504	.3094
#2	.0326	.0992	.0064	.0034	.1515	.3137	.0502	.3087
#3	.0329	.0992	.0064	.0032	.1517	.3135	.0498	.3077

Elem	Cd	Co	Cr	Cu	Fe	K	Mg	Mn
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0334	.1291	.2299	.0070	.0325	.2985	.0405	.1981
Stddev	.0000	.0002	.0006	.0000	.0003	.0015	.0003	.0001
%RSD	.0074	.1318	.2605	.1788	.8667	.4921	.8105	.0408
#1	.0334	.1291	.2293	.0070	.0328	.2986	.0408	.1981
#2	.0334	.1292	.2305	.0070	.0324	.2999	.0406	.1981
#3	.0334	.1289	.2299	.0070	.0323	.2970	.0402	.1980

Elem	Mo	Na	Ni	P	Pb	Sb	Se	Si
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0724	1.847	.0281	.0174	.0274	.0231	.0113	.1417
Stddev	.0001	.004	.0001	.0000	.0001	.0001	.0000	.0006
%RSD	.1963	.1883	.3838	.2847	.3115	.5890	.3201	.4426
#1	.0722	1.851	.0281	.0174	.0275	.0229	.0113	.1410
#2	.0725	1.846	.0281	.0174	.0274	.0231	.0113	.1422
#3	.0724	1.844	.0279	.0175	.0273	.0232	.0112	.1418

Elem	Sn	Sr	Ti	Tl	V	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0839	3.378	.3542	.0179	.0705	18740.	81770.	32550.
Stddev	.0001	.045	.0018	.0001	.0005	36.	351.	102.
%RSD	.0842	1.338	.5134	.5138	.7427	.1930	.4294	.3141
#1	.0839	3.396	.3523	.0180	.0710	18710.	81370.	32430.
#2	.0839	3.412	.3560	.0179	.0700	18740.	81920.	32610.
#3	.0840	3.327	.3543	.0179	.0706	18780.	82030.	32600.

Sample Name: CAL2 Acquired: 5/3/2017 13:07:52 Type: Cal
Method: USE(v270) Mode: IR Corr. Factor: 1.000000
User: andrew schmadtke Instrument ID: ICP 2 Dilution Factor: 1 Method:
Comment:

Elem	Zn
Units	Cts/S
Avg	.2264
Stddev	.0002
%RSD	.0889
#1	.2266
#2	.2264
#3	.2262

Int. Std.	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S
Avg	18744.	81772.	32548.
Stddev	36.	351.	102.
%RSD	.19300	.42942	.31410
#1	18712.	81372.	32430.
#2	18739.	81917.	32613.
#3	18783.	82028.	32600.

Sample Name: CAL3 Acquired: 5/3/2017 13:12:42 Type: Cal
Method: USE(v270) Mode: IR Corr. Factor: 1.000000
User: andrew schmadtke Instrument ID: ICP 2 Dilution Factor: 1 Method:
Comment:

Elem	Ag	Al	As	Au	B	Ba	Be	Ca
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0660	.1933	.0130	.0070	.3039	.6262	.0997	.6126
Stddev	.0004	.0015	.0000	.0000	.0001	.0002	.0004	.0017
%RSD	.5855	.7563	.3041	.0533	.0292	.0351	.3949	.2787
#1	.0664	.1942	.0130	.0070	.3040	.6263	.0998	.6138
#2	.0659	.1942	.0130	.0070	.3038	.6264	.0993	.6107
#3	.0656	.1917	.0130	.0070	.3040	.6260	.1001	.6135

Elem	Cd	Co	Cr	Cu	Fe	K	Mg	Mn
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0669	.2561	.4653	.0138	.0643	.5960	.0806	.3887
Stddev	.0002	.0003	.0012	.0001	.0005	.0033	.0005	.0037
%RSD	.3060	.1220	.2674	.6972	.7720	.5462	.5779	.9474
#1	.0671	.2564	.4652	.0139	.0641	.5995	.0807	.3914
#2	.0667	.2560	.4641	.0139	.0639	.5930	.0801	.3903
#3	.0670	.2558	.4666	.0137	.0648	.5956	.0810	.3845

Elem	Mo	Na	Ni	P	Pb	Sb	Se	Si
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.1459	3.709	.0558	.0353	.0542	.0465	.0229	.2801
Stddev	.0001	.020	.0001	.0001	.0001	.0000	.0001	.0020
%RSD	.0947	.5402	.1195	.3485	.1297	.0791	.3666	.7134
#1	.1459	3.728	.0557	.0353	.0542	.0465	.0228	.2811
#2	.1457	3.688	.0558	.0352	.0543	.0465	.0229	.2814
#3	.1460	3.709	.0559	.0355	.0541	.0465	.0229	.2778

Elem	Sn	Sr	Ti	Tl	V	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.1673	6.625	.6973	.0352	.1403	18340.	81570.	32520.
Stddev	.0003	.118	.0073	.0001	.0013	12.	665.	113.
%RSD	.1784	1.776	1.050	.1799	.9574	.0634	.8151	.3474
#1	.1675	6.654	.7017	.0352	.1417	18340.	81110.	32440.
#2	.1670	6.727	.7014	.0352	.1404	18350.	81270.	32650.
#3	.1674	6.496	.6889	.0353	.1390	18330.	82330.	32460.

Sample Name: CAL3 Acquired: 5/3/2017 13:12:42 Type: Cal
Method: USE(v270) Mode: IR Corr. Factor: 1.000000
User: andrew schmadtke Instrument ID: ICP 2 Dilution Factor: 1 Method:
Comment:

Elem	Zn
Units	Cts/S
Avg	.4547
Stddev	.0005
%RSD	.1021
#1	.4546
#2	.4542
#3	.4552

Int. Std.	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S
Avg	18338.	81571.	32516.
Stddev	12.	665.	113.
%RSD	.06338	.81511	.34744
#1	18338.	81114.	32443.
#2	18349.	81266.	32646.
#3	18326.	82334.	32459.

Sample Name: CAL4 Acquired: 5/3/2017 13:17:31 Type: Cal
Method: USE(v270) Mode: IR Corr. Factor: 1.000000
User: andrew schmadtke Instrument ID: ICP 2 Dilution Factor: 1 Method:
Comment:

Elem	Ag	Al	As	Au	B	Ba	Be	Ca
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.1346	.3827	.0263	.0138	.6017	1.237	.1945	1.199
Stddev	.0012	.0034	.0001	.0002	.0016	.003	.0015	.004
%RSD	.8582	.8963	.2227	1.420	.2633	.2318	.7786	.3779
#1	.1346	.3830	.0263	.0140	.6035	1.240	.1960	1.204
#2	.1335	.3791	.0263	.0136	.6010	1.235	.1930	1.196
#3	.1358	.3860	.0262	.0137	.6006	1.235	.1945	1.197

Elem	Cd	Co	Cr	Cu	Fe	K	Mg	Mn
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.1326	.5046	.9235	.0276	.1249	1.200	.1570	.7726
Stddev	.0004	.0014	.0012	.0002	.0008	.004	.0023	.0070
%RSD	.3083	.2802	.1258	.8203	.6557	.3478	1.437	.9062
#1	.1331	.5061	.9248	.0276	.1256	1.204	.1586	.7732
#2	.1323	.5034	.9228	.0273	.1240	1.195	.1544	.7653
#3	.1325	.5042	.9228	.0278	.1250	1.200	.1580	.7792

Elem	Mo	Na	Ni	P	Pb	Sb	Se	Si
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.2907	7.101	.1099	.0713	.1064	.0935	.0462	.5587
Stddev	.0007	.037	.0003	.0003	.0003	.0001	.0002	.0056
%RSD	.2381	.5173	.2588	.3601	.3231	.1129	.3509	.9941
#1	.2915	7.131	.1102	.0716	.1068	.0936	.0464	.5578
#2	.2902	7.112	.1097	.0711	.1063	.0934	.0461	.5537
#3	.2905	7.060	.1099	.0712	.1061	.0934	.0463	.5647

Elem	Sn	Sr	Ti	Tl	V	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.3308	12.72	1.386	.0683	.2814	17720.	78450.	32390.
Stddev	.0013	.31	.012	.0002	.0017	42.	772.	88.
%RSD	.3987	2.473	.8865	.3181	.6087	.2396	.9844	.2709
#1	.3323	12.82	1.385	.0686	.2820	17680.	78400.	32300.
#2	.3301	12.36	1.374	.0681	.2795	17760.	79240.	32410.
#3	.3299	12.97	1.398	.0682	.2828	17720.	77700.	32480.

Sample Name: CAL4 Acquired: 5/3/2017 13:17:31 Type: Cal
Method: USE(v270) Mode: IR Corr. Factor: 1.000000
User: andrew schmadtke Instrument ID: ICP 2 Dilution Factor: 1 Method:
Comment:

Elem	Zn
Units	Cts/S
Avg	.9122
Stddev	.0025
%RSD	.2775
#1	.9151
#2	.9111
#3	.9103

Int. Std.	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S
Avg	17720.	78447.	32394.
Stddev	42.	772.	88.
%RSD	.23960	.98437	.27086
#1	17677.	78400.	32301.
#2	17762.	79242.	32406.
#3	17721.	77700.	32476.

Sample Name: ICV Acquired: 5/3/2017 13:22:27 Type: QC
Method: USE(v270) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Instrument ID: Dilution Factor: 1 Method:
Comment:

Elem	Ag	Al	As	Au	B	Ba	Be	Ca
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**47.47**	**4841.**	**478.4**	**474.2**	**4824.**	**490.6**	**48.47**	**24420.**
Stddev	.99	103.	4.6	4.0	29.	3.1	.40	103.
%RSD	2.093	2.123	.9657	.8393	.6031	.6376	.8194	.4235
#1	47.60	4768.	473.9	471.4	4791.	487.0	48.93	24530.
#2	48.39	4796.	483.1	478.7	4835.	492.3	48.30	24340.
#3	46.41	4958.	478.1	472.4	4846.	492.5	48.20	24370.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Cd	Co	Cr	Cu	Fe	K	Mg	Mn
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**49.17**	**487.6**	**500.8**	**487.3**	**4801.**	**24380.**	**24340.**	**485.6**
Stddev	.41	3.0	7.5	9.5	77.	439.	418.	10.4
%RSD	.8280	.6059	1.492	1.952	1.602	1.800	1.717	2.132
#1	48.76	484.4	492.4	478.8	4889.	24860.	24810.	477.9
#2	49.58	488.2	503.2	485.6	4768.	24290.	24000.	481.7
#3	49.17	490.2	506.8	497.6	4747.	24000.	24200.	497.4
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo	Na	Ni	P	Pb	Sb	Se	Si
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**489.8**	**24260.**	**492.5**	**478.5**	**489.7**	**475.6**	**490.2**	**4692.**
Stddev	3.1	68.	2.8	3.5	4.3	2.9	5.1	94.
%RSD	.6394	.2793	.5643	.7362	.8779	.6118	1.045	1.998
#1	486.1	24260.	489.3	474.7	484.9	473.0	487.8	4634.
#2	491.6	24190.	493.9	479.4	493.2	478.8	496.1	4643.
#3	491.5	24320.	494.2	481.5	490.9	475.0	486.8	4800.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: ICV Acquired: 5/3/2017 13:22:27 Type: QC
Method: USE(v270) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Instrument ID: Dilution Factor: 1 Method:
Comment:

Elem	Sn	Sr	Ti	Tl	V	Y	Y	Y
Units	ug/L	ug/L	ug/L	ug/L	ug/L	%	%	%
Avg	**2448.**	**496.0**	**480.7**	**492.0**	**485.9**	**94.06**	**97.56**	**39.15**
Stddev	19.	9.6	9.6	5.1	10.5	.69	2.04	.08
%RSD	.7826	1.927	1.998	1.039	2.165	.7331	2.092	.1923
#1	2426.	496.5	474.8	486.2	476.6	94.81	99.14	39.22
#2	2459.	486.2	475.5	495.5	483.8	93.89	98.29	39.16
#3	2459.	505.3	491.8	494.5	497.3	93.47	95.25	39.07
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	None	None
High Limit								
Low Limit								

Elem	Zn
Units	ug/L
Avg	**2439.**
Stddev	19.
%RSD	.7638
#1	2418.
#2	2449.
#3	2450.
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S
Avg	**18367.**	**81569.**	**32734.**
Stddev	135.	1706.	63.
%RSD	.73314	2.0918	.19232
#1	18515.	82887.	32794.
#2	18334.	82177.	32739.
#3	18251.	79642.	32669.

Sample Name: ICB Acquired: 5/3/2017 13:32:14 Type: QC
Method: USE(v270) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Instrument ID: Dilution Factor: 1 Method:
Comment:

Elem	Ag	Al	As	Au	B	Ba	Be	Ca	Cd
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**-1.528**	**-.5310**	**-1.080**	**10.27**	**8.412**	**.2367**	**-.0177**	**20.72**	**-.0590**
Stddev	.765	4.788	2.488	15.82	.848	.0967	.2012	.91	.0743
%RSD	50.08	901.8	230.4	154.0	10.08	40.86	1139.	4.410	125.8
#1	-1.032	-2.861	-1.556	14.25	9.046	.2111	.0957	20.61	.0038
#2	-1.144	-3.709	-3.295	23.73	8.741	.1554	.1013	21.68	-.0399
#3	-2.410	4.976	1.612	-7.156	7.449	.3437	-.2500	19.87	-.1410
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co	Cr	Cu	Fe	K	Mg	Mn	Mo	Na
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**-.2573**	**.4768**	**.3806**	**-2.600**	**52.59**	**16.18**	**.0900**	**-.0002**	**29.15**
Stddev	.2426	.2712	.2267	4.608	85.73	69.33	.0281	.1186	37.07
%RSD	94.29	56.87	59.57	177.2	163.0	428.6	31.18	48470.	127.2
#1	-.1105	.7763	.6292	-7.911	97.09	27.40	.1068	-.0351	57.22
#2	-.5373	.2479	.3275	-.2313	-46.25	-58.08	.0576	.1318	-12.87
#3	-.1241	.4063	.1851	.3424	106.9	79.21	.1057	-.0975	43.09
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Ni	P	Pb	Sb	Se	Si	Sn	Sr	Ti
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**-.4346**	**-.6683**	**1.271**	**.3083**	**-.0722**	**-3.915**	**-.1188**	**-.0786**	**.0049**
Stddev	.5131	.8155	1.047	2.185	1.829	.410	.4046	.0239	.2164
%RSD	118.1	122.0	82.35	708.5	2534.	10.48	340.5	30.40	4393.
#1	-.4774	-1.430	1.420	-.7726	1.962	-4.292	-.1306	-.0967	.1946
#2	.0985	-.7664	.1580	2.823	-.5974	-3.478	.2916	-.0876	-.2308
#3	-.9250	.1917	2.236	-1.125	-1.581	-3.976	-.5175	-.0515	.0510
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: ICB Acquired: 5/3/2017 13:32:14 Type: QC
Method: USE(v270) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Instrument ID: Dilution Factor: 1 Method:
Comment:

Elem	Tl	V	Y	Y	Y	Zn
Units	ug/L	ug/L	%	%	%	ug/L
Avg	1.059	-.6741	97.99	102.5	40.14	-1.800
Stddev	.724	.3806	.24	1.1	.13	.142
%RSD	68.41	56.45	.2485	1.091	.3252	7.907
#1	.5909	-.6609	97.71	103.6	40.28	-1.912
#2	.6920	-1.061	98.11	102.6	40.09	-1.640
#3	1.893	-.3004	98.14	101.4	40.04	-1.847
Check ?	Chk Pass	Chk Pass	None	None	None	Chk Pass
High Limit						
Low Limit						

Int. Std.	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S
Avg	19134.	85726.	33559.
Stddev	48.	935.	109.
%RSD	.24846	1.0912	.32518
#1	19079.	86610.	33682.
#2	19159.	85822.	33521.
#3	19164.	84746.	33474.

Sample Name: CRDL Acquired: 5/3/2017 13:37:14 Type: QC
Method: USE(v270) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Instrument ID: Dilution Factor: 1 Method:
Comment:

Elem	Ag	Al	As	Au	B	Ba	Be	Ca	Cd	Co
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**9.088**	**189.6**	**8.662**	**181.5**	**56.05**	**201.6**	**5.087**	**211.7**	**2.366**	**49.86**
Stddev	1.010	8.6	1.612	28.7	.50	1.1	.089	9.0	.097	.32
%RSD	11.11	4.541	18.61	15.79	.8981	.5365	1.745	4.270	4.084	.6389
#1	8.049	181.3	9.319	157.9	56.17	202.7	4.984	201.2	2.403	50.13
#2	10.07	198.5	6.825	173.2	56.49	201.4	5.137	216.8	2.256	49.93
#3	9.148	188.9	9.841	213.4	55.50	200.6	5.139	216.9	2.438	49.51
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Cr	Cu	Fe	K	Mg	Mn	Mo	Na	Ni	P
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**9.687**	**24.87**	**16.00**	**4888.**	**158.8**	**9.836**	**19.36**	**5063.**	**40.33**	**46.03**
Stddev	.559	.65	2.26	98.	46.3	.039	.17	43.	.39	.51
%RSD	5.769	2.622	14.11	2.011	29.18	.4001	.8755	.8429	.9778	1.099
#1	9.152	25.46	18.48	4981.	201.4	9.793	19.49	5056.	40.51	45.48
#2	10.27	24.17	15.47	4900.	109.5	9.871	19.17	5024.	40.60	46.48
#3	9.643	24.98	14.05	4785.	165.4	9.843	19.43	5109.	39.88	46.14
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Pb	Sb	Se	Si	Sn	Sr	Ti	Tl	V	Y
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	%
Avg	**5.191**	**59.59**	**10.58**	**18.57**	**49.73**	**52.61**	**49.06**	**8.755**	**47.19**	**98.25**
Stddev	1.226	1.73	2.59	2.96	.34	.32	.33	.814	1.18	.37
%RSD	23.62	2.905	24.49	15.93	.6874	.6141	.6630	9.299	2.507	.3746
#1	4.228	59.39	13.56	15.34	49.36	52.28	48.77	8.358	45.87	97.98
#2	6.571	57.96	8.821	21.15	49.79	52.62	49.41	8.216	48.15	98.10
#3	4.774	61.41	9.368	19.23	50.04	52.92	48.98	9.692	47.55	98.67
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
High Limit										
Low Limit										

Sample Name: CRDL Acquired: 5/3/2017 13:37:14 Type: QC
Method: USE(v270) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Instrument ID: Dilution Factor: 1 Method:
Comment:

Elem	Y	Y	Zn
Units	%	%	ug/L
Avg	**101.4**	**39.93**	**17.59**
Stddev	.4	.13	.22
%RSD	.4103	.3150	1.253
#1	101.8	40.05	17.83
#2	101.4	39.92	17.53
#3	100.9	39.80	17.40
Check ?	None	None	Chk Pass
High Limit			
Low Limit			

Int. Std.	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S
Avg	**19185.**	**84748.**	**33382.**
Stddev	72.	348.	105.
%RSD	.37462	.41030	.31504
#1	19132.	85084.	33490.
#2	19156.	84771.	33377.
#3	19267.	84389.	33280.

Sample Name: ICSA Acquired: 5/3/2017 13:42:10 Type: QC
Method: USE(v270) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Instrument ID: Dilution Factor: 1 Method:
Comment:

Elem	Ag	Al	As	Au	B	Ba	Be
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	F -55.18	481400.	-16.01	122.0	.9637	-7.748	.2197
Stddev	1.37	3442.	3.96	12.4	.1973	.729	.1708
%RSD	2.486	.7150	24.73	10.14	20.47	9.413	77.71
#1	-53.87	484700.	-12.96	134.1	.9502	-6.908	.0227
#2	-55.05	477900.	-14.57	109.4	.7734	-8.128	.3129
#3	-56.60	481600.	-20.48	122.6	1.167	-8.210	.3236
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	20.00						
Low Limit	-20.00						

Elem	Ca	Cd	Co	Cr	Cu	Fe	K
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	483300.	2.757	2.736	-8.488	42.88	194400.	109.6
Stddev	1675.	.084	.390	1.017	1.91	2837.	48.2
%RSD	.3465	3.049	14.26	11.98	4.458	1.459	44.00
#1	485100.	2.691	2.496	-9.660	40.67	197700.	134.6
#2	483000.	2.852	3.186	-7.844	44.01	193100.	140.1
#3	481800.	2.729	2.526	-7.960	43.95	192500.	53.99
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg	Mn	Mo	Na	Ni	P	Pb
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	518000.	-8.311	-.9880	56.93	4.943	19.71	-3.544
Stddev	7286.	.182	.4241	23.45	.237	1.59	2.024
%RSD	1.406	2.192	42.92	41.18	4.790	8.042	57.11
#1	526400.	-8.518	-1.147	60.82	4.673	21.52	-3.250
#2	514300.	-8.178	-.5075	78.20	5.047	19.03	-5.699
#3	513400.	-8.236	-1.310	31.79	5.111	18.57	-1.683
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: ICSA Acquired: 5/3/2017 13:42:10 Type: QC
Method: USE(v270) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Instrument ID: Dilution Factor: 1 Method:
Comment:

Elem	Sb	Se	Si	Sn	Sr	Ti	Tl
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**-8.266**	**10.28**	**-4.613**	**-11.20**	**3.755**	**-9.562**	**.7861**
Stddev	2.133	4.43	3.263	.98	.053	.285	1.763
%RSD	25.81	43.07	70.74	8.731	1.412	2.986	224.3
#1	-10.66	13.23	-4.917	-12.30	3.816	-9.891	-.7768
#2	-6.575	12.41	-1.209	-10.43	3.725	-9.389	.4379
#3	-7.560	5.187	-7.714	-10.87	3.725	-9.405	2.697
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	V	Y	Y	Y	Zn
Units	ug/L	%	%	%	ug/L
Avg	**-4.085**	**89.73**	**93.40**	**38.46**	**13.52**
Stddev	.741	.30	.51	.11	.35
%RSD	18.14	.3298	.5456	.2736	2.567
#1	-4.903	90.05	93.09	38.58	13.18
#2	-3.890	89.66	93.99	38.38	13.87
#3	-3.460	89.47	93.13	38.43	13.50
Check ?	Chk Pass	None	None	None	Chk Pass
High Limit					
Low Limit					

Int. Std.	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S
Avg	**17521.**	**78095.**	**32158.**
Stddev	58.	426.	88.
%RSD	.32985	.54558	.27364
#1	17584.	77831.	32256.
#2	17507.	78587.	32088.
#3	17471.	77867.	32129.

Sample Name: ICSAB Acquired: 5/3/2017 13:47:06 Type: QC
Method: USE(v270) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Instrument ID: Dilution Factor: 1 Method:
Comment:

Elem	Ag	Al	As	Au	B	Ba	Be
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**355.6**	**478000.**	**172.6**	**1067.**	**983.6**	**957.3**	**953.0**
Stddev	3.7	4307.	3.8	11.	2.2	1.8	7.7
%RSD	1.028	.9010	2.218	1.030	.2284	.1923	.8076
#1	352.9	474700.	173.5	1080.	986.1	959.1	960.7
#2	354.0	476300.	168.4	1062.	981.8	957.6	952.9
#3	359.7	482800.	175.8	1060.	982.9	955.4	945.3
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Ca	Cd	Co	Cr	Cu	Fe	K
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**480900.**	**1877.**	**926.9**	**969.5**	**970.2**	**187700.**	**101.3**
Stddev	1107.	3.	1.4	3.4	9.7	2700.	64.0
%RSD	.2301	.1724	.1554	.3496	.9966	1.438	63.23
#1	481900.	1875.	928.3	971.0	963.2	190600.	153.6
#2	481100.	1881.	926.8	971.9	966.3	187400.	120.4
#3	479700.	1877.	925.5	965.6	981.3	185200.	29.85
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg	Mn	Mo	Na	Ni	P	Pb
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**499800.**	**945.0**	**961.9**	**-42.65**	**1852.**	**489.7**	**85.10**
Stddev	5450.	4.0	1.0	27.90	4.	2.2	1.40
%RSD	1.090	.4208	.1051	65.42	.2125	.4517	1.639
#1	505700.	943.1	962.0	-17.88	1855.	488.1	84.28
#2	498900.	942.4	962.9	-72.88	1854.	492.2	84.30
#3	494900.	949.6	960.9	-37.19	1848.	488.9	86.71
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: ICSAB Acquired: 5/3/2017 13:47:06 Type: QC
Method: USE(v270) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Instrument ID: Dilution Factor: 1 Method:
Comment:

Elem	Sb	Se	Si	Sn	Sr	Ti	Tl
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	1161.	111.7	938.5	931.1	1013.	952.2	162.2
Stddev	1.	1.5	5.2	1.9	6.	4.1	2.3
%RSD	.0605	1.323	.5568	.2093	.5527	.4297	1.417
#1	1162.	110.0	934.9	928.9	1018.	951.6	160.6
#2	1162.	112.6	936.1	932.5	1007.	948.5	161.2
#3	1160.	112.5	944.4	931.9	1014.	956.6	164.8
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	V	Y	Y	Y	Zn
Units	ug/L	%	%	%	ug/L
Avg	937.8	89.03	93.58	38.70	1971.
Stddev	8.9	.07	.77	.13	2.
%RSD	.9511	.0791	.8225	.3473	.0781
#1	934.4	88.98	93.97	38.82	1971.
#2	931.1	88.99	94.08	38.56	1972.
#3	947.9	89.11	92.70	38.72	1969.
Check ?	Chk Pass	None	None	None	Chk Pass
High Limit					
Low Limit					

Int. Std.	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S
Avg	17384.	78244.	32356.
Stddev	14.	644.	112.
%RSD	.07913	.82246	.34730
#1	17376.	78567.	32459.
#2	17377.	78663.	32236.
#3	17400.	77503.	32373.

Sample Name: CCV Acquired: 5/3/2017 13:52:06 Type: QC
Method: USE(v270) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Instrument ID: Dilution Factor: 1 Method:
Comment:

Elem	Ag	Al	As	Au	B	Ba	Be	Ca
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**235.9**	**4830.**	**479.0**	**469.6**	**2428.**	**491.7**	**48.41**	**24400.**
Stddev	.9	24.	1.4	9.9	4.	1.5	.29	22.
%RSD	.4022	.5016	.2898	2.099	.1831	.3111	.5954	.0891
#1	236.9	4857.	480.5	478.2	2427.	491.2	48.38	24400.
#2	235.1	4817.	478.9	471.6	2433.	493.4	48.14	24370.
#3	235.6	4814.	477.7	458.8	2425.	490.4	48.71	24420.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Cd	Co	Cr	Cu	Fe	K	Mg	Mn
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**49.32**	**488.0**	**251.1**	**240.2**	**1947.**	**46420.**	**24510.**	**235.2**
Stddev	.28	1.3	3.3	1.8	7.	167.	51.	1.4
%RSD	.5635	.2613	1.299	.7700	.3658	.3604	.2072	.5916
#1	49.46	488.4	253.2	242.1	1956.	46530.	24490.	236.6
#2	49.50	489.0	252.6	238.4	1942.	46510.	24480.	235.4
#3	49.00	486.5	247.3	240.1	1944.	46230.	24570.	233.8
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo	Na	Ni	P	Pb	Sb	Se	Si
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**489.9**	**49530.**	**246.8**	**955.9**	**485.6**	**727.8**	**739.0**	**4663.**
Stddev	1.6	156.	.8	5.3	1.8	1.7	5.4	10.
%RSD	.3208	.3147	.3385	.5548	.3721	.2343	.7313	.2096
#1	490.0	49620.	246.9	959.0	487.1	727.1	742.5	4670.
#2	491.4	49620.	247.6	959.0	485.9	729.8	741.8	4652.
#3	488.3	49350.	245.9	949.8	483.6	726.6	732.8	4667.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: CCV Acquired: 5/3/2017 13:52:06 Type: QC
Method: USE(v270) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Instrument ID: Dilution Factor: 1 Method:
Comment:

Elem	Sn	Sr	Ti	Tl	V	Y	Y	Y
Units	ug/L	ug/L	ug/L	ug/L	ug/L	%	%	%
Avg	**2460.**	**497.3**	**469.9**	**738.0**	**476.2**	**94.81**	**99.98**	**39.61**
Stddev	12.	3.9	1.0	1.8	5.1	.50	.51	.11
%RSD	.4693	.7879	.2102	.2431	1.081	.5301	.5074	.2861
#1	2465.	493.0	471.0	736.1	480.6	94.68	99.43	39.57
#2	2468.	500.5	469.7	739.7	477.4	94.39	100.4	39.52
#3	2447.	498.5	469.0	738.3	470.5	95.37	100.1	39.74
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	None	None
High Limit								
Low Limit								

Elem	Zn
Units	ug/L
Avg	**975.8**
Stddev	4.4
%RSD	.4509
#1	977.3
#2	979.3
#3	970.9
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S
Avg	**18514.**	**83593.**	**33117.**
Stddev	98.	424.	95.
%RSD	.53014	.50743	.28615
#1	18487.	83134.	33087.
#2	18432.	83971.	33042.
#3	18623.	83674.	33224.

Sample Name: CCB Acquired: 5/3/2017 13:56:57 Type: QC
Method: USE(v270) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Instrument ID: Dilution Factor: 1 Method:
Comment:

Elem	Ag	Al	As	Au	B	Ba	Be	Ca	Cd
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**-2.016**	**-4.140**	**.5948**	**-16.34**	**5.484**	**.1582**	**.0811**	**30.60**	**-.0279**
Stddev	.629	2.952	.5757	16.82	.878	.0975	.0561	2.70	.0660
%RSD	31.19	71.31	96.79	103.0	16.01	61.63	69.13	8.827	236.3
#1	-2.190	-7.520	.1426	-18.87	6.382	.2033	.0711	28.12	-.0092
#2	-1.318	-2.830	1.243	1.611	5.445	.0463	.1415	33.48	-.1013
#3	-2.539	-2.069	.3989	-31.75	4.626	.2249	.0307	30.20	.0267
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co	Cr	Cu	Fe	K	Mg	Mn	Mo	Na
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**-.1391**	**.4534**	**.5362**	**-4.128**	**108.4**	**44.73**	**.0159**	**.4989**	**16.06**
Stddev	.2966	.6253	.2637	4.110	99.3	53.60	.0384	.5342	29.86
%RSD	213.3	137.9	49.18	99.55	91.63	119.8	241.3	107.1	185.9
#1	-.4813	.0578	.7991	.0091	200.8	-16.42	-.0263	.9977	29.62
#2	.0215	.1281	.5378	-8.210	121.1	66.97	.0487	.5637	-18.17
#3	.0426	1.174	.2717	-4.184	3.332	83.62	.0253	-.0648	36.73
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Ni	P	Pb	Sb	Se	Si	Sn	Sr	Ti
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**-.0934**	**-.0812**	**.6416**	**1.663**	**.8505**	**-7.602**	**-.4140**	**-.0859**	**-.0791**
Stddev	.1393	2.178	.9051	1.416	1.282	3.060	1.035	.0171	.1169
%RSD	149.2	2683.	141.1	85.19	150.7	40.25	250.0	19.89	147.8
#1	.0091	1.771	1.497	2.108	.0451	-7.843	.6605	-.1032	.0495
#2	-.0373	-2.480	-.3058	2.803	.1782	-4.429	-1.404	-.0856	-.1788
#3	-.2521	.4660	.7331	.0773	2.328	-10.53	-.4984	-.0690	-.1081
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: CCB Acquired: 5/3/2017 13:56:57 Type: QC
Method: USE(v270) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Instrument ID: Dilution Factor: 1 Method:
Comment:

Elem	Tl	V	Y	Y	Y	Zn
Units	ug/L	ug/L	%	%	%	ug/L
Avg	.7474	-.0211	97.56	104.6	40.28	-2.158
Stddev	.6290	.4308	.10	.3	.28	.223
%RSD	84.15	2046.	.1056	.2469	.7025	10.32
#1	1.098	.2807	97.52	104.7	40.58	-2.010
#2	.0213	-.5144	97.68	104.3	40.02	-2.051
#3	1.123	.1705	97.48	104.8	40.23	-2.415
Check ?	Chk Pass	Chk Pass	None	None	None	Chk Pass
High Limit						
Low Limit						

Int. Std.	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S
Avg	19051.	87461.	33677.
Stddev	20.	216.	237.
%RSD	.10563	.24688	.70254
#1	19043.	87548.	33932.
#2	19074.	87216.	33465.
#3	19036.	87621.	33634.

Sample Name: 103457_2599 Acquired: 5/3/2017 14:02:00 Type: Unk
Method: USE(v270) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Instrument ID: Dilution Factor: 1 Method:
Comment:

Elem	Ag	Al	As	Au	B	Ba	Be	Ca	Cd
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**-.9381**	**-7.755**	**-1.093**	**-13.92**	**4.019**	**.1118**	**.0206**	**17.00**	**-.1522**
Stddev	.5272	3.041	2.179	11.86	.378	.0275	.0584	10.32	.0890
%RSD	56.20	39.21	199.3	85.17	9.412	24.59	283.2	60.73	58.44
#1	-1.544	-4.933	1.382	-5.137	4.420	.1400	.0641	27.21	-.1880
#2	-.5863	-7.357	-1.942	-9.223	3.966	.1104	-.0458	6.572	-.2178
#3	-.6837	-10.98	-2.719	-27.41	3.669	.0850	.0436	17.21	-.0510

Elem	Co	Cr	Cu	Fe	K	Mg	Mn	Mo	Na
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**-.0802**	**.3599**	**.8879**	**6.641**	**202.3**	**-47.01**	**1.259**	**.2358**	**50.96**
Stddev	.1897	.5864	.0862	2.646	93.2	15.23	.086	.1509	9.82
%RSD	236.6	162.9	9.711	39.85	46.09	32.39	6.807	63.99	19.28
#1	-.0328	1.029	.8417	6.330	282.7	-40.59	1.333	.4079	51.09
#2	.0813	-.0640	.9874	9.429	224.0	-36.05	1.165	.1267	60.72
#3	-.2891	.1146	.8347	4.164	100.1	-64.40	1.278	.1727	41.08

Elem	Ni	P	Pb	Sb	Se	Si	Sn	Sr	Ti
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**-.3786**	**1.082**	**-.0113**	**1.135**	**1.265**	**-4.921**	**.6431**	**-.0932**	**-.1739**
Stddev	.1706	2.430	.6818	.401	1.064	.717	.0552	.0588	.1660
%RSD	45.05	224.6	6032.	35.38	84.14	14.57	8.587	63.07	95.47
#1	-.5321	-1.427	.4447	1.489	.0484	-4.918	.7044	-.0389	-.1166
#2	-.4088	3.425	.3165	.6987	1.722	-4.206	.5971	-.1556	-.0442
#3	-.1950	1.249	-.7951	1.216	2.024	-5.640	.6278	-.0850	-.3610

Elem	Tl	V	Y	Y	Y	Zn
Units	ug/L	ug/L	%	%	%	ug/L
Avg	**1.180**	**-.0029**	**96.06**	**102.5**	**40.08**	**-1.623**
Stddev	.504	.4859	.32	.3	.16	.060
%RSD	42.72	16640.	.3370	.2652	.3921	3.704
#1	.7493	.1131	95.69	102.2	40.13	-1.685
#2	1.734	.4145	96.22	102.4	39.91	-1.617
#3	1.056	-.5364	96.28	102.8	40.21	-1.566

Sample Name: 103457_2599 Acquired: 5/3/2017 14:02:00 Type: Unk
Method: USE(v270) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Instrument ID: Dilution Factor: 1 Method:
Comment:

Int. Std.	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S
Avg	18758.	85661.	33512.
Stddev	63.	227.	131.
%RSD	.33697	.26515	.39208
#1	18686.	85471.	33549.
#2	18789.	85600.	33366.
#3	18801.	85913.	33621.

Sample Name: 103458_2599 Acquired: 5/3/2017 14:07:02 Type: Unk
Method: USE(v270) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Instrument ID: Dilution Factor: 1 Method:
Comment:

Elem	Ag	Al	As	Au	B	Ba	Be	Ca
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**223.9**	**4662.**	**475.6**	**460.4**	**2381.**	**480.5**	**47.29**	**23650.**
Stddev	.9	29.	.6	29.9	5.	1.3	.18	139.
%RSD	.4016	.6151	.1215	6.488	.2167	.2670	.3793	.5867
#1	224.9	4694.	475.9	466.6	2376.	479.9	47.35	23740.
#2	223.4	4653.	476.0	427.9	2386.	481.9	47.08	23490.
#3	223.3	4639.	474.9	486.6	2382.	479.6	47.42	23720.

Elem	Cd	Co	Cr	Cu	Fe	K	Mg	Mn
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**48.47**	**477.9**	**253.6**	**234.4**	**1844.**	**44910.**	**23850.**	**230.2**
Stddev	.06	.5	.8	.9	28.	236.	264.	1.1
%RSD	.1229	.1106	.3302	.3754	1.537	.5243	1.109	.4796
#1	48.42	477.5	254.1	234.9	1873.	45140.	24070.	231.5
#2	48.53	478.5	253.9	233.4	1817.	44940.	23560.	229.5
#3	48.46	477.8	252.6	235.0	1843.	44670.	23930.	229.7

Elem	Mo	Na	Ni	P	Pb	Sb	Se	Si
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**486.5**	**48820.**	**243.4**	**940.2**	**473.8**	**723.6**	**731.9**	**4685.**
Stddev	1.3	70.	1.0	2.5	1.2	1.1	1.5	17.
%RSD	.2640	.1427	.4056	.2691	.2533	.1528	.2108	.3542
#1	485.2	48900.	242.7	942.6	473.1	722.6	731.0	4703.
#2	487.8	48790.	244.5	940.5	475.1	724.8	733.6	4672.
#3	486.5	48770.	243.0	937.6	473.0	723.4	730.9	4679.

Elem	Sn	Sr	Ti	Tl	V	Y	Y	Y
Units	ug/L	ug/L	ug/L	ug/L	ug/L	%	%	%
Avg	**2406.**	**491.0**	**458.4**	**724.7**	**466.2**	**93.51**	**100.2**	**39.89**
Stddev	5.	3.5	2.2	2.8	2.4	.24	.7	.16
%RSD	.1974	.7109	.4882	.3876	.5127	.2543	.6581	.4119
#1	2403.	495.0	460.9	722.9	468.7	93.34	99.53	40.08
#2	2412.	489.3	457.6	727.9	464.0	93.40	100.8	39.83
#3	2404.	488.7	456.7	723.2	465.8	93.78	100.3	39.76

Sample Name: 103458_2599 Acquired: 5/3/2017 14:07:02 Type: Unk
Method: USE(v270) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Instrument ID: Dilution Factor: 1 Method:
Comment:

Elem	Zn
Units	ug/L
Avg	961.2
Stddev	2.0
%RSD	.2033
#1	960.6
#2	963.4
#3	959.6

Int. Std.	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S
Avg	18259.	83797.	33353.
Stddev	46.	552.	137.
%RSD	.25427	.65813	.41186
#1	18227.	83213.	33508.
#2	18239.	84309.	33304.
#3	18313.	83871.	33247.

Sample Name: 103497_2599 Acquired: 5/3/2017 14:31:55 Type: Unk
Method: USE(v270) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Instrument ID: Dilution Factor: 1 Method:
Comment:

Elem	Ag	Al	As	Au	B	Ba	Be	Ca
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**69.77**	**4150.**	**424.6**	**414.8**	**2236.**	**492.6**	**43.23**	**80020.**
Stddev	.22	33.	4.0	20.4	8.	1.3	.02	81.
%RSD	.3136	.7834	.9307	4.918	.3416	.2659	.0436	.1011
#1	69.67	4115.	421.8	393.1	2242.	493.4	43.25	80100.
#2	70.02	4180.	429.1	417.9	2238.	493.4	43.21	79940.
#3	69.62	4155.	422.8	433.5	2227.	491.1	43.24	80020.

Elem	Cd	Co	Cr	Cu	Fe	K	Mg	Mn
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**42.92**	**426.6**	**225.2**	**214.8**	**1720.**	**55840.**	**25540.**	**208.3**
Stddev	.04	1.1	1.0	.5	17.	410.	138.	1.6
%RSD	.0961	.2512	.4223	.2417	.9599	.7338	.5394	.7724
#1	42.91	427.0	224.4	214.2	1739.	55430.	25440.	206.8
#2	42.96	427.5	224.9	215.2	1708.	56250.	25700.	210.0
#3	42.88	425.4	226.3	215.0	1713.	55830.	25490.	208.3

Elem	Mo	Na	Ni	P	Pb	Sb	Se	Si
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**437.3**	**93050.**	**215.9**	**855.6**	**420.0**	**651.0**	**657.7**	**6473.**
Stddev	.3	134.	.2	2.0	.6	2.4	2.9	28.
%RSD	.0776	.1439	.0938	.2365	.1379	.3671	.4471	.4397
#1	437.2	93210.	216.1	854.8	419.3	651.4	654.6	6445.
#2	437.7	92970.	216.0	857.9	420.2	653.2	660.4	6502.
#3	437.0	92980.	215.7	854.1	420.5	648.4	658.1	6472.

Elem	Sn	Sr	Ti	Tl	V	Y	Y	Y
Units	ug/L	ug/L	ug/L	ug/L	ug/L	%	%	%
Avg	**2138.**	**692.7**	**421.1**	**641.1**	**414.2**	**94.21**	**99.50**	**39.64**
Stddev	4.	1.9	3.1	2.8	3.8	.32	.65	.11
%RSD	.1989	.2729	.7264	.4413	.9094	.3409	.6499	.2674
#1	2137.	693.5	418.2	643.4	409.8	94.57	100.2	39.63
#2	2143.	690.5	424.3	641.9	416.3	93.94	98.90	39.76
#3	2135.	694.0	421.0	637.9	416.4	94.13	99.41	39.55

Sample Name: 103497_2599 Acquired: 5/3/2017 14:31:55 Type: Unk
Method: USE(v270) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Instrument ID: Dilution Factor: 1 Method:
Comment:

Elem	Zn
Units	ug/L
Avg	863.0
Stddev	1.1
%RSD	.1272
#1	862.4
#2	864.3
#3	862.4

Int. Std.	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S
Avg	18397.	83192.	33147.
Stddev	63.	541.	89.
%RSD	.34086	.64990	.26736
#1	18466.	83766.	33136.
#2	18343.	82692.	33240.
#3	18382.	83117.	33064.

Sample Name: 103498_2599 Acquired: 5/3/2017 14:36:44 Type: Unk
Method: USE(v270) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Instrument ID: Dilution Factor: 1 Method:
Comment:

Elem	Ag	Al	As	Au	B	Ba	Be	Ca
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**-1.846**	**-11.03**	**-1.749**	**-30.60**	**19.64**	**13.94**	**.0030**	**12220.**
Stddev	.527	1.88	3.081	5.41	.79	.03	.1371	195.
%RSD	28.53	17.05	176.2	17.69	4.044	.2078	4637.	1.597
#1	-1.662	-12.37	1.387	-35.53	20.29	13.91	-.1044	12420.
#2	-2.440	-11.84	-4.773	-31.47	19.87	13.93	.1574	12220.
#3	-1.436	-8.882	-1.859	-24.81	18.75	13.97	-.0441	12030.

Elem	Cd	Co	Cr	Cu	Fe	K	Mg	Mn
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**-.1516**	**-.1310**	**1.403**	**.5677**	**2.995**	**3864.**	**779.2**	**.1081**
Stddev	.1090	.0784	.705	.2287	5.790	148.	24.7	.0277
%RSD	71.91	59.88	50.27	40.29	193.3	3.834	3.174	25.65
#1	-.0614	-.2133	.6113	.7919	-1.293	3982.	764.5	.1381
#2	-.1206	-.1226	1.633	.3348	9.582	3698.	807.7	.1027
#3	-.2727	-.0571	1.964	.5763	.6970	3914.	765.2	.0834

Elem	Mo	Na	Ni	P	Pb	Sb	Se	Si
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**.7971**	**9981.**	**.1244**	**.8908**	**.0864**	**.0644**	**1.956**	**579.3**
Stddev	.2487	123.	.5088	1.455	1.714	.6717	2.656	11.3
%RSD	31.20	1.230	408.8	163.3	1983.	1043.	135.8	1.956
#1	1.082	10100.	-.4478	-.5331	-1.341	.1570	-.7530	589.3
#2	.6234	9991.	.5257	2.375	-.3864	.6850	2.066	581.8
#3	.6859	9853.	.2954	.8305	1.987	-.6488	4.555	567.0

Elem	Sn	Sr	Ti	Tl	V	Y	Y	Y
Units	ug/L	ug/L	ug/L	ug/L	ug/L	%	%	%
Avg	**-.3303**	**48.42**	**.4413**	**-.2418**	**-.1582**	**96.04**	**103.1**	**39.71**
Stddev	.2000	.95	.1131	.8586	.4371	.58	.5	.06
%RSD	60.55	1.957	25.62	355.1	276.2	.6007	.4466	.1512
#1	-.1007	49.40	.5546	-1.021	-.6588	96.71	103.6	39.73
#2	-.4236	48.36	.4407	.6787	.1477	95.67	103.0	39.76
#3	-.4665	47.51	.3285	-.3831	.0365	95.75	102.7	39.64

Sample Name: 103498_2599 Acquired: 5/3/2017 14:36:44 Type: Unk
Method: USE(v270) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Instrument ID: Dilution Factor: 1 Method:
Comment:

Elem	Zn
Units	ug/L
Avg	-2.227
Stddev	.156
%RSD	7.018
#1	-2.101
#2	-2.180
#3	-2.402

Int. Std.	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S
Avg	18755.	86171.	33201.
Stddev	113.	385.	50.
%RSD	.60067	.44664	.15115
#1	18885.	86588.	33216.
#2	18682.	86093.	33242.
#3	18698.	85831.	33145.

Sample Name: 103459_2599 Acquired: 5/3/2017 14:41:43 Type: Unk
Method: USE(v270) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Instrument ID: Dilution Factor: 1 Method:
Comment:

Elem	Ag	Al	As	Au	B	Ba	Be	Ca
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**-1.428**	**.2279**	**.5746**	**-14.13**	**85.82**	**70.01**	**.0672**	**60790.**
Stddev	.784	1.540	2.232	19.51	.47	.14	.0840	148.
%RSD	54.90	675.6	388.5	138.1	.5432	.2021	124.9	.2433
#1	-1.883	-1.361	-1.356	-25.53	86.33	69.93	.0576	60760.
#2	-1.877	.3326	.0606	8.401	85.74	69.93	-.0115	60660.
#3	-.5227	1.713	3.019	-25.27	85.41	70.18	.1556	60950.

Elem	Cd	Co	Cr	Cu	Fe	K	Mg	Mn
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**-.1351**	**.2304**	**.8882**	**3.486**	**20.62**	**18470.**	**3649.**	**.2978**
Stddev	.0439	.0736	.1148	.262	4.74	16.	36.	.0422
%RSD	32.53	31.94	12.92	7.513	23.00	.0850	.9870	14.18
#1	-.0986	.3002	.9514	3.371	24.49	18470.	3671.	.2941
#2	-.1228	.2374	.9575	3.786	15.33	18490.	3607.	.3418
#3	-.1839	.1536	.7557	3.302	22.04	18460.	3668.	.2575

Elem	Mo	Na	Ni	P	Pb	Sb	Se	Si
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**4.202**	**50570.**	**-.3521**	**8.489**	**.4841**	**-.7266**	**1.887**	**2909.**
Stddev	.188	78.	.3723	.640	1.011	.5412	.549	16.
%RSD	4.469	.1537	105.7	7.536	208.9	74.48	29.08	.5407
#1	4.418	50500.	-.2677	8.799	.2932	-.6760	1.627	2925.
#2	4.103	50650.	-.0293	7.753	-.4182	-.2125	2.517	2909.
#3	4.084	50560.	-.7594	8.915	1.577	-1.291	1.516	2894.

Elem	Sn	Sr	Ti	Tl	V	Y	Y	Y
Units	ug/L	ug/L	ug/L	ug/L	ug/L	%	%	%
Avg	**.0530**	**246.0**	**1.959**	**.2879**	**-.2251**	**94.19**	**101.8**	**39.28**
Stddev	.7452	2.2	.033	.6173	.1055	.18	.7	.09
%RSD	1407.	.9035	1.660	214.4	46.88	.1915	.6981	.2221
#1	-.8066	248.1	1.996	.6744	-.1419	94.16	101.6	39.32
#2	.4499	246.3	1.937	.6131	-.3438	94.03	101.3	39.18
#3	.5156	243.7	1.943	-.4240	-.1895	94.39	102.6	39.33

Sample Name: 103459_2599 Acquired: 5/3/2017 14:41:43 Type: Unk
Method: USE(v270) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Instrument ID: Dilution Factor: 1 Method:
Comment:

Elem	Zn
Units	ug/L
Avg	-.1964
Stddev	.0633
%RSD	32.24
#1	-.2125
#2	-.1265
#3	-.2500

Int. Std.	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S
Avg	18393.	85140.	32839.
Stddev	35.	594.	73.
%RSD	.19150	.69810	.22214
#1	18387.	84951.	32879.
#2	18361.	84663.	32755.
#3	18431.	85806.	32883.

Sample Name: 103460_2599 Acquired: 5/3/2017 14:46:43 Type: Unk
Method: USE(v270) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Instrument ID: Dilution Factor: 1 Method:
Comment:

Elem	Ag	Al	As	Au	B	Ba	Be
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**379.4**	**5167.**	**520.9**	**471.5**	**2675.**	**590.3**	**51.92**
Stddev	1.9	10.	1.2	24.1	5.	2.3	.24
%RSD	.4903	.1865	.2218	5.104	.1842	.3954	.4563
#1	380.0	5171.	519.7	478.7	2681.	592.9	51.96
#2	380.8	5156.	521.1	491.2	2673.	589.7	52.14
#3	377.3	5174.	522.0	444.7	2672.	588.4	51.67

Elem	Ca	Cd	Co	Cr	Cu	Fe	K
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**86440.**	**52.54**	**520.0**	**272.6**	**257.8**	**2052.**	**66340.**
Stddev	84.	.09	1.0	1.8	2.8	14.	178.
%RSD	.0967	.1775	.1931	.6457	1.071	.6944	.2683
#1	86540.	52.63	521.1	274.1	260.6	2067.	66140.
#2	86410.	52.44	519.5	272.9	257.8	2039.	66410.
#3	86380.	52.55	519.3	270.7	255.1	2050.	66470.

Elem	Mg	Mn	Mo	Na	Ni	P	Pb
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**29600.**	**251.0**	**531.1**	**104800.**	**264.3**	**1052.**	**512.8**
Stddev	195.	.8	2.4	518.	.5	3.	2.5
%RSD	.6581	.3355	.4447	.4939	.2051	.3084	.4825
#1	29710.	252.0	533.4	105300.	264.9	1055.	511.4
#2	29700.	250.4	531.3	104800.	263.8	1051.	515.7
#3	29370.	250.6	528.7	104200.	264.1	1049.	511.3

Elem	Sb	Se	Si	Sn	Sr	Ti	Tl
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**794.6**	**815.1**	**7247.**	**2620.**	**777.3**	**501.6**	**783.3**
Stddev	1.7	6.9	33.	9.	14.4	3.0	2.8
%RSD	.2115	.8471	.4606	.3347	1.855	.6017	.3614
#1	796.4	813.5	7284.	2624.	793.8	504.6	785.4
#2	794.3	822.7	7219.	2625.	767.1	498.6	784.3
#3	793.1	809.1	7239.	2609.	771.0	501.7	780.1

Sample Name: 103460_2599 Acquired: 5/3/2017 14:46:43 Type: Unk
Method: USE(v270) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Instrument ID: Dilution Factor: 1 Method:
Comment:

Elem	V	Y	Y	Y	Zn
Units	ug/L	%	%	%	ug/L
Avg	508.6	94.20	100.4	39.77	1055.
Stddev	.6	.33	.8	.23	5.
%RSD	.1160	.3546	.8003	.5827	.4444
#1	508.7	93.86	99.56	39.60	1060.
#2	509.2	94.21	100.6	39.67	1055.
#3	508.0	94.53	101.1	40.03	1051.

Int. Std.	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S
Avg	18395.	83982.	33249.
Stddev	65.	672.	194.
%RSD	.35455	.80034	.58267
#1	18329.	83243.	33111.
#2	18396.	84148.	33166.
#3	18459.	84556.	33471.

Sample Name: CCV Acquired: 5/3/2017 14:51:32 Type: QC
Method: USE(v270) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Instrument ID: Dilution Factor: 1 Method:
Comment:

Elem	Ag	Al	As	Au	B	Ba	Be	Ca
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**233.9**	**4836.**	**485.0**	**474.7**	**2457.**	**492.5**	**49.20**	**24540.**
Stddev	2.9	36.	2.9	11.8	4.	1.9	.05	31.
%RSD	1.223	.7507	.5964	2.491	.1610	.3861	.0995	.1267
#1	236.4	4871.	485.4	471.3	2459.	494.1	49.25	24500.
#2	230.7	4838.	487.7	464.9	2459.	493.0	49.20	24560.
#3	234.5	4798.	481.9	487.8	2452.	490.4	49.15	24560.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Cd	Co	Cr	Cu	Fe	K	Mg	Mn
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**49.39**	**490.1**	**252.6**	**242.0**	**1976.**	**46510.**	**25220.**	**238.7**
Stddev	.20	.8	1.2	2.1	21.	308.	206.	1.9
%RSD	.4011	.1603	.4838	.8511	1.040	.6617	.8173	.8015
#1	49.57	490.5	253.7	244.0	1965.	46170.	25090.	240.7
#2	49.43	490.6	252.9	242.2	1962.	46580.	25460.	238.7
#3	49.18	489.2	251.3	239.9	1999.	46770.	25120.	236.8
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo	Na	Ni	P	Pb	Sb	Se	Si
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**492.0**	**50120.**	**248.6**	**964.7**	**485.4**	**738.8**	**749.9**	**4848.**
Stddev	.9	204.	1.0	4.8	1.2	3.7	1.4	42.
%RSD	.1833	.4074	.3985	.4997	.2570	.4999	.1820	.8576
#1	492.9	50220.	249.1	964.6	486.4	737.9	748.7	4883.
#2	492.0	50250.	249.3	969.5	485.7	742.9	751.4	4859.
#3	491.1	49880.	247.5	959.9	484.0	735.7	749.7	4802.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: CCV Acquired: 5/3/2017 14:51:32 Type: QC
Method: USE(v270) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Instrument ID: Dilution Factor: 1 Method:
Comment:

Elem	Sn	Sr	Ti	Tl	V	Y	Y	Y
Units	ug/L	ug/L	ug/L	ug/L	ug/L	%	%	%
Avg	2462.	520.8	480.5	745.6	473.5	96.72	101.3	39.61
Stddev	7.	2.6	3.6	3.0	4.0	.15	.7	.20
%RSD	.3018	.4900	.7476	.3989	.8366	.1546	.6647	.5007
#1	2466.	523.6	483.7	749.0	477.9	96.59	100.6	39.52
#2	2467.	518.8	481.2	743.7	470.3	96.68	101.4	39.47
#3	2454.	519.9	476.6	744.0	472.2	96.88	101.9	39.84
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	None	None
High Limit								
Low Limit								

Elem	Zn
Units	ug/L
Avg	983.6
Stddev	2.4
%RSD	.2413
#1	985.3
#2	984.6
#3	980.9
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S
Avg	18886.	84687.	33117.
Stddev	29.	563.	166.
%RSD	.15464	.66471	.50074
#1	18861.	84080.	33044.
#2	18879.	84789.	33000.
#3	18918.	85191.	33306.

Sample Name: CCB Acquired: 5/3/2017 14:56:23 Type: QC
Method: USE(v270) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Instrument ID: Dilution Factor: 1 Method:
Comment:

Elem	Ag	Al	As	Au	B	Ba	Be	Ca	Cd
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**-1.035**	**20.74**	**-2.495**	**-1.031**	**5.483**	**.0741**	**.0916**	**20.45**	**-.0119**
Stddev	1.174	4.57	1.841	20.58	1.478	.0945	.1271	8.75	.0819
%RSD	113.5	22.05	73.77	1995.	26.96	127.5	138.8	42.79	688.5
#1	-1.958	18.27	-.4856	19.22	7.187	.0050	.1030	10.64	-.0865
#2	-1.434	17.93	-4.100	-21.92	4.551	.0355	-.0409	23.25	-.0248
#3	.2868	26.02	-2.900	-.3983	4.711	.1817	.2126	27.45	.0757
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co	Cr	Cu	Fe	K	Mg	Mn	Mo	Na
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**-.0316**	**.0143**	**.3035**	**1.578**	**204.1**	**-27.34**	**.0499**	**.4982**	**41.05**
Stddev	.1419	.1699	.1769	3.884	129.3	70.69	.0628	.3290	38.40
%RSD	449.2	1185.	58.30	246.1	63.34	258.6	125.9	66.03	93.53
#1	-.1849	-.0614	.3513	2.578	337.8	-105.0	.1214	.8352	55.13
#2	.0951	-.1046	.4516	-2.708	194.9	-10.15	.0250	.4814	70.42
#3	-.0049	.2090	.1076	4.865	79.69	33.17	.0034	.1779	-2.398
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Ni	P	Pb	Sb	Se	Si	Sn	Sr	Ti
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**.1732**	**-1.033**	**-1.317**	**-.1519**	**-.0698**	**-.9493**	**2.528**	**.0031**	**-.1320**
Stddev	.2628	1.489	.289	.9911	2.240	.7167	.364	.0258	.2167
%RSD	151.7	144.3	21.91	652.4	3211.	75.50	14.40	823.5	164.3
#1	.1288	.3908	-1.012	.9594	-2.655	-.1505	2.926	.0117	-.1403
#2	.4555	-.9082	-1.355	-.9440	1.292	-1.536	2.448	.0235	.0888
#3	-.0645	-2.580	-1.585	-.4712	1.154	-1.161	2.211	-.0258	-.3444
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: CCB Acquired: 5/3/2017 14:56:23 Type: QC
Method: USE(v270) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Instrument ID: Dilution Factor: 1 Method:
Comment:

Elem	Tl	V	Y	Y	Y	Zn
Units	ug/L	ug/L	%	%	%	ug/L
Avg	.1361	.1644	99.28	103.1	39.24	-1.928
Stddev	.6246	.4311	.26	.1	.39	.074
%RSD	459.0	262.3	.2658	.1392	.9954	3.844
#1	-.4923	.5538	99.58	103.1	39.60	-2.013
#2	.1438	-.2988	99.12	103.2	39.29	-1.884
#3	.7568	.2382	99.14	102.9	38.83	-1.886
Check ?	Chk Pass	Chk Pass	None	None	None	Chk Pass
High Limit						
Low Limit						

Int. Std.	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S
Avg	19387.	86170.	32809.
Stddev	52.	120.	327.
%RSD	.26584	.13919	.99541
#1	19446.	86171.	33112.
#2	19354.	86289.	32852.
#3	19359.	86050.	32463.

Sample Name: 7016438001_2599 Acquired: 5/3/2017 15:31:53 Type: Unk
Method: USE(v270) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Instrument ID: Dilution Factor: Method:
Comment:

Elem	Ag	Al	As	Au	B	Ba	Be	Ca	Cd
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**-.4916**	**57.64**	**-.3515**	**-4.059**	**17.82**	**23.86**	**.2000**	**8435.**	**.0216**
Stddev	.2850	7.34	.9100	14.85	.31	.05	.1858	40.	.1000
%RSD	57.97	12.73	258.9	365.8	1.761	.1950	92.93	.4741	462.4
#1	-.2483	50.07	-.0313	12.61	18.19	23.85	.0189	8476.	.0348
#2	-.8051	64.72	-1.378	-15.87	17.62	23.82	.1907	8396.	-.0843
#3	-.4213	58.14	.3551	-8.920	17.66	23.91	.3902	8431.	.1144

Elem	Co	Cr	Cu	Fe	K	Mg	Mn	Mo	Na
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**2.089**	**8.218**	**4.755**	**527.4**	**2929.**	**3277.**	**289.9**	**.1884**	**8473.**
Stddev	.307	.131	.236	4.8	97.	54.	2.2	.0367	36.
%RSD	14.71	1.592	4.964	.9168	3.328	1.652	.7707	19.46	.4212
#1	2.249	8.369	4.976	521.9	3035.	3338.	287.9	.1610	8493.
#2	1.735	8.143	4.782	529.5	2907.	3236.	289.6	.2300	8432.
#3	2.284	8.141	4.507	530.9	2844.	3256.	292.3	.1740	8495.

Elem	Ni	P	Pb	Sb	Se	Si	Sn	Sr	Ti
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**4.174**	**21.13**	**1.461**	**.2812**	**-1.429**	**4665.**	**.2698**	**32.30**	**2.348**
Stddev	.228	.87	.647	1.214	2.601	43.	.4920	.25	.183
%RSD	5.469	4.098	44.31	431.5	181.9	.9198	182.3	.7743	7.784
#1	3.932	21.16	.7633	-.7500	-1.781	4615.	-.2772	32.02	2.555
#2	4.206	20.24	2.042	1.618	1.329	4688.	.4107	32.39	2.210
#3	4.385	21.97	1.577	-.0247	-3.837	4691.	.6760	32.50	2.278

Elem	Tl	V	Y	Y	Y	Zn
Units	ug/L	ug/L	%	%	%	ug/L
Avg	**-.6319**	**.4948**	**99.79**	**103.3**	**39.06**	**.5980**
Stddev	1.470	.2366	.27	.6	.29	.1327
%RSD	232.6	47.82	.2731	.5918	.7452	22.19
#1	-2.148	.6781	99.50	104.0	38.80	.4477
#2	.7870	.2277	99.86	103.2	39.00	.6989
#3	-.5344	.5787	100.0	102.7	39.37	.6475

Sample Name: 7016438001_2599 Acquired: 5/3/2017 15:31:53 Type: Unk
Method: USE(v270) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Instrument ID: Dilution Factor: Method:
Comment:

Int. Std.	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S
Avg	19487.	86379.	32656.
Stddev	53.	511.	243.
%RSD	.27315	.59177	.74516
#1	19429.	86918.	32441.
#2	19499.	86316.	32605.
#3	19533.	85902.	32920.

Sample Name: 7016438002_2599 Acquired: 5/3/2017 15:36:51 Type: Unk
Method: USE(v270) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Instrument ID: Dilution Factor: Method:
Comment:

Elem	Ag	Al	As	Au	B	Ba	Be	Ca	Cd
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**-.4866**	**6.216**	**-2.368**	**-15.94**	**9.977**	**9.670**	**.1125**	**3968.**	**-.0989**
Stddev	1.271	2.726	1.850	14.25	.366	.086	.0994	15.	.0810
%RSD	261.2	43.86	78.15	89.40	3.672	.8933	88.36	.3867	81.97
#1	-1.255	4.383	-.3589	-14.82	10.38	9.653	.1381	3964.	-.0953
#2	-1.185	4.915	-4.002	-2.287	9.671	9.763	.1966	3984.	-.1817
#3	.9806	9.349	-2.742	-30.73	9.877	9.593	.0028	3954.	-.0197

Elem	Co	Cr	Cu	Fe	K	Mg	Mn	Mo	Na
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**-.0192**	**2.910**	**2.554**	**7.406**	**554.7**	**1829.**	**1.299**	**-.1342**	**7855.**
Stddev	.4547	.010	.433	2.654	154.6	36.	.024	.4080	50.
%RSD	2363.	.3297	16.96	35.83	27.87	1.950	1.818	304.0	.6381
#1	-.1610	2.905	2.054	8.497	675.9	1836.	1.291	-.2249	7880.
#2	.4895	2.904	2.783	9.340	607.4	1790.	1.280	.3115	7797.
#3	-.3862	2.921	2.824	4.381	380.6	1861.	1.326	-.4892	7887.

Elem	Ni	P	Pb	Sb	Se	Si	Sn	Sr	Ti
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**9.983**	**4.993**	**1.188**	**-.0557**	**-.1453**	**5938.**	**.8046**	**39.61**	**.3395**
Stddev	.682	2.468	.443	.3910	1.766	48.	1.428	.25	.1998
%RSD	6.836	49.43	37.29	701.4	1216.	.8048	177.4	.6327	58.86
#1	9.195	2.691	1.595	.3947	-2.185	5992.	2.275	39.87	.4634
#2	10.39	4.688	1.253	-.3076	.8686	5917.	-.5756	39.37	.1090
#3	10.37	7.599	.7162	-.2542	.8805	5903.	.7143	39.60	.4461

Elem	Tl	V	Y	Y	Y	Zn
Units	ug/L	ug/L	%	%	%	ug/L
Avg	**-.9612**	**-.3166**	**101.2**	**102.9**	**38.81**	**-1.636**
Stddev	.8345	.6460	.6	.8	.05	.065
%RSD	86.81	204.0	.5539	.8220	.1285	3.989
#1	-1.141	.0409	100.8	102.1	38.76	-1.671
#2	-1.691	.0716	100.9	102.7	38.82	-1.677
#3	-.0514	-1.062	101.8	103.8	38.85	-1.561

Sample Name: 7016438002_2599 Acquired: 5/3/2017 15:36:51 Type: Unk
Method: USE(v270) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Instrument ID: Dilution Factor: Method:
Comment:

Int. Std.	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S
Avg	19754.	86022.	32448.
Stddev	109.	707.	42.
%RSD	.55386	.82200	.12848
#1	19676.	85386.	32403.
#2	19706.	85897.	32456.
#3	19879.	86783.	32485.

Sample Name: 7016438003_2599 Acquired: 5/3/2017 15:41:49 Type: Unk
Method: USE(v270) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Instrument ID: Dilution Factor: Method:
Comment:

Elem	Ag	Al	As	Au	B	Ba	Be	Ca	Cd
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**-.8111**	**3.074**	**-2.016**	**-.6063**	**11.49**	**9.209**	**.0438**	**4443.**	**-.1524**
Stddev	.4992	7.035	2.355	24.83	.39	.082	.0702	20.	.0335
%RSD	61.55	228.8	116.8	4095.	3.406	.8930	160.3	.4468	22.00
#1	-.6447	-3.908	.7014	25.24	11.88	9.181	-.0307	4457.	-.1664
#2	-.4162	2.970	-3.278	-24.27	11.50	9.301	.0535	4421.	-.1141
#3	-1.372	10.16	-3.471	-2.794	11.10	9.143	.1086	4453.	-.1766

Elem	Co	Cr	Cu	Fe	K	Mg	Mn	Mo	Na
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**.1745**	**4.146**	**.2162**	**8.712**	**679.7**	**2385.**	**.7925**	**.0405**	**7770.**
Stddev	.1609	.500	.4624	2.627	190.4	62.	.0335	.1284	36.
%RSD	92.20	12.07	213.9	30.15	28.01	2.603	4.228	316.6	.4677
#1	.1931	4.723	.3365	11.14	479.6	2456.	.7548	-.1072	7738.
#2	.0052	3.888	.6066	9.072	701.0	2362.	.8039	.1249	7763.
#3	.3254	3.828	-.2944	5.923	858.5	2338.	.8189	.1039	7810.

Elem	Ni	P	Pb	Sb	Se	Si	Sn	Sr	Ti
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**24.75**	**5.196**	**.6996**	**-.1662**	**-1.180**	**6657.**	**-.2189**	**28.20**	**.2430**
Stddev	.28	.563	1.787	1.239	1.413	110.	.1199	.61	.0410
%RSD	1.145	10.83	255.4	745.7	119.8	1.651	54.76	2.165	16.90
#1	24.69	5.661	1.017	1.035	.4300	6702.	-.3559	28.37	.2811
#2	25.05	4.571	2.306	-1.441	-1.755	6531.	-.1676	27.52	.2482
#3	24.49	5.357	-1.225	-.0928	-2.214	6737.	-.1332	28.71	.1995

Elem	Tl	V	Y	Y	Y	Zn
Units	ug/L	ug/L	%	%	%	ug/L
Avg	**.9544**	**-.3486**	**102.5**	**102.9**	**39.02**	**-1.948**
Stddev	1.096	.2242	.4	1.2	.38	.186
%RSD	114.8	64.32	.4274	1.156	.9798	9.524
#1	2.062	-.5972	102.4	101.9	39.46	-2.089
#2	.9315	-.2868	102.1	104.2	38.75	-2.017
#3	-.1299	-.1618	103.0	102.5	38.86	-1.738

Sample Name: 7016438003_2599 Acquired: 5/3/2017 15:41:49 Type: Unk
Method: USE(v270) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Instrument ID: Dilution Factor: Method:
Comment:

Int. Std.	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S
Avg	20018.	86004.	32628.
Stddev	86.	994.	320.
%RSD	.42745	1.1558	.97980
#1	19996.	85226.	32993.
#2	19946.	87124.	32399.
#3	20112.	85661.	32492.

Sample Name: 7016438005_2599 Acquired: 5/3/2017 15:46:46 Type: Unk
Method: USE(v270) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Instrument ID: Dilution Factor: Method:
Comment:

Elem	Ag	Al	As	Au	B	Ba	Be	Ca
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**-3.182**	**901.8**	**1.209**	**-20.36**	**18.56**	**26.03**	**.2506**	**13620.**
Stddev	.211	5.9	.989	32.54	.71	.17	.0649	61.
%RSD	6.645	.6587	81.78	159.8	3.850	.6488	25.91	.4446
#1	-2.940	908.5	1.062	6.978	18.61	26.10	.2752	13690.
#2	-3.333	897.3	2.264	-56.35	19.25	26.14	.1769	13590.
#3	-3.273	899.6	.3024	-11.72	17.83	25.83	.2996	13580.

Elem	Cd	Co	Cr	Cu	Fe	K	Mg	Mn
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**.0993**	**.8774**	**17.03**	**7.310**	**9951.**	**1653.**	**4640.**	**345.2**
Stddev	.0972	.0269	.37	.599	117.	83.	45.	3.8
%RSD	97.93	3.071	2.200	8.191	1.176	4.992	.9599	1.098
#1	-.0092	.8583	17.12	6.643	10080.	1586.	4686.	349.5
#2	.1285	.8656	17.36	7.800	9852.	1629.	4637.	342.2
#3	.1786	.9082	16.62	7.488	9920.	1745.	4597.	344.0

Elem	Mo	Na	Ni	P	Pb	Sb	Se	Si
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**.6906**	**8303.**	**9.852**	**190.6**	**6.328**	**.7250**	**-.0162**	**7186.**
Stddev	.1987	23.	.095	2.3	1.258	1.351	.4635	101.
%RSD	28.78	.2823	.9639	1.208	19.89	186.4	2857.	1.401
#1	.8519	8330.	9.856	191.2	4.878	1.101	.5100	7302.
#2	.4686	8294.	9.754	188.1	7.130	1.848	-.3639	7133.
#3	.7512	8286.	9.944	192.6	6.976	-.7745	-.1947	7122.

Elem	Sn	Sr	Ti	Tl	V	Y	Y	Y
Units	ug/L	ug/L	ug/L	ug/L	ug/L	%	%	%
Avg	**.9543**	**56.53**	**42.42**	**-.6634**	**2.291**	**102.8**	**102.0**	**38.39**
Stddev	.4640	.99	.55	.3421	.474	.1	.6	.11
%RSD	48.62	1.757	1.294	51.57	20.71	.0956	.5955	.2856
#1	.4383	57.62	43.06	-.3591	2.582	102.7	101.3	38.29
#2	1.087	56.31	42.06	-1.034	1.743	102.9	102.5	38.51
#3	1.337	55.67	42.16	-.5975	2.547	102.9	102.3	38.38

Sample Name: 7016438005_2599 Acquired: 5/3/2017 15:46:46 Type: Unk
Method: USE(v270) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Instrument ID: Dilution Factor: Method:
Comment:

Elem	Zn
Units	ug/L
Avg	8.936
Stddev	.032
%RSD	.3608
#1	8.900
#2	8.963
#3	8.945

Int. Std.	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S
Avg	20076.	85314.	32101.
Stddev	19.	508.	92.
%RSD	.09561	.59546	.28564
#1	20054.	84736.	32013.
#2	20086.	85690.	32196.
#3	20089.	85515.	32093.

Sample Name: CCV Acquired: 5/3/2017 15:51:42 Type: QC
Method: USE(v270) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Instrument ID: Dilution Factor: Method:
Comment:

Elem	Ag	Al	As	Au	B	Ba	Be	Ca
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**235.4**	**5017.**	**462.4**	**451.2**	**2423.**	**488.7**	**50.73**	**24950.**
Stddev	2.6	59.	2.5	4.8	1.	1.2	.29	77.
%RSD	1.124	1.170	.5405	1.070	.0617	.2411	.5653	.3099
#1	235.0	5007.	465.2	454.1	2425.	490.0	50.98	25010.
#2	233.0	4964.	461.2	445.6	2423.	488.3	50.42	24980.
#3	238.3	5080.	460.7	453.8	2422.	487.7	50.79	24860.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Cd	Co	Cr	Cu	Fe	K	Mg	Mn
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**46.84**	**488.3**	**227.8**	**248.4**	**2027.**	**46790.**	**26160.**	**246.2**
Stddev	.10	1.4	3.1	3.3	29.	202.	220.	2.8
%RSD	.2089	.2822	1.354	1.321	1.444	.4322	.8392	1.118
#1	46.94	489.3	231.2	245.7	2048.	46680.	26390.	246.8
#2	46.75	488.8	225.3	247.5	1994.	47020.	25950.	243.2
#3	46.83	486.7	226.8	252.1	2040.	46670.	26140.	248.6
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo	Na	Ni	P	Pb	Sb	Se	Si
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**472.8**	**49190.**	**241.9**	**918.5**	**483.2**	**706.6**	**678.8**	**4977.**
Stddev	1.4	182.	.6	3.2	1.3	5.0	3.5	59.
%RSD	.2865	.3689	.2403	.3493	.2697	.7031	.5087	1.192
#1	472.7	49390.	242.4	922.0	484.5	712.3	676.1	4969.
#2	471.5	49150.	242.1	917.6	483.2	703.5	677.5	4922.
#3	474.2	49030.	241.3	915.8	481.9	704.0	682.7	5040.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: CCV Acquired: 5/3/2017 15:51:42 Type: QC
Method: USE(v270) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Instrument ID: Dilution Factor: Method:
Comment:

Elem	Sn	Sr	Ti	Tl	V	Y	Y	Y
Units	ug/L	ug/L	ug/L	ug/L	ug/L	%	%	%
Avg	2372.	547.5	509.5	745.9	473.7	101.1	99.39	37.69
Stddev	3.	1.2	6.2	3.1	6.3	.1	1.30	.17
%RSD	.1237	.2178	1.214	.4204	1.331	.1348	1.312	.4520
#1	2376.	548.6	510.0	746.0	473.4	101.1	100.4	37.69
#2	2371.	546.2	503.0	749.0	467.5	101.2	99.85	37.86
#3	2371.	547.7	515.4	742.7	480.1	100.9	97.92	37.52
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	None	None
High Limit								
Low Limit								

Elem	Zn
Units	ug/L
Avg	934.9
Stddev	1.7
%RSD	.1818
#1	936.8
#2	933.9
#3	933.9
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S
Avg	19737.	83102.	31510.
Stddev	27.	1090.	142.
%RSD	.13481	1.3120	.45204
#1	19752.	83951.	31513.
#2	19754.	83482.	31651.
#3	19707.	81872.	31366.

Sample Name: CCB Acquired: 5/3/2017 15:56:33 Type: QC
Method: USE(v270) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Instrument ID: Dilution Factor: Method:
Comment:

Elem	Ag	Al	As	Au	B	Ba	Be	Ca	Cd
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	.0351	1.289	-.9219	-20.02	3.590	.1906	.1979	6.704	-.0751
Stddev	.2117	2.970	1.419	17.30	1.095	.0735	.1538	15.12	.0201
%RSD	603.2	230.4	153.9	86.37	30.49	38.57	77.74	225.5	26.69
#1	.2449	-2.128	-1.887	-2.025	4.802	.2526	.0274	-5.828	-.0645
#2	-.1784	3.251	-1.586	-36.52	3.296	.1094	.2401	23.49	-.0983
#3	.0388	2.744	.7071	-21.53	2.673	.2099	.3262	2.448	-.0627
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co	Cr	Cu	Fe	K	Mg	Mn	Mo	Na
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	-.0538	-.0194	-.2912	-2.159	76.71	-30.91	.1291	.2457	-14.08
Stddev	.1125	.1385	.4567	4.808	47.09	64.78	.1020	.4580	40.20
%RSD	209.2	712.6	156.8	222.7	61.38	209.6	79.00	186.4	285.4
#1	-.0532	-.1667	-.5256	2.814	121.4	-90.28	.2395	.6462	-60.20
#2	-.1665	.0002	-.5830	-2.508	81.17	38.18	.0384	.3445	4.418
#3	.0584	.1082	.2351	-6.783	27.56	-40.64	.1094	-.2537	13.53
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Ni	P	Pb	Sb	Se	Si	Sn	Sr	Ti
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	-.2851	.5409	-.3768	2.419	-2.882	5.041	-.4951	.0230	-.2373
Stddev	.1523	.4914	1.310	1.975	1.843	3.952	.5645	.0096	.0675
%RSD	53.41	90.84	347.8	81.66	63.95	78.40	114.0	41.72	28.45
#1	-.1861	1.095	-1.886	3.060	-3.075	.6213	-1.144	.0122	-.2626
#2	-.4605	.1581	.4681	3.994	-4.622	8.236	-.1162	.0307	-.1608
#3	-.2088	.3696	.2880	.2026	-.9505	6.266	-.2251	.0260	-.2886
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: CCB Acquired: 5/3/2017 15:56:33 Type: QC
Method: USE(v270) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Instrument ID: Dilution Factor: Method:
Comment:

Elem	Tl	V	Y	Y	Y	Zn
Units	ug/L	ug/L	%	%	%	ug/L
Avg	**1.511**	**-.1507**	**102.8**	**101.9**	**37.79**	**-2.250**
Stddev	1.071	.1450	.1	.7	.24	.152
%RSD	70.88	96.22	.1133	.6696	.6431	6.757
#1	2.092	-.2831	102.7	101.1	37.63	-2.213
#2	2.167	.0043	102.9	102.4	37.67	-2.121
#3	.2752	-.1733	102.9	102.2	38.07	-2.418
Check ?	Chk Pass	Chk Pass	None	None	None	Chk Pass
High Limit						
Low Limit						

Int. Std.	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S
Avg	**20080.**	**85203.**	**31594.**
Stddev	23.	571.	203.
%RSD	.11330	.66963	.64310
#1	20055.	84547.	31460.
#2	20100.	85575.	31493.
#3	20086.	85489.	31827.

Sample Name: 7016438006_2599 Acquired: 5/3/2017 16:01:34 Type: Unk
Method: USE(v270) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Instrument ID: Dilution Factor: Method:
Comment:

Elem	Ag	Al	As	Au	B	Ba	Be	Ca
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**.4048**	**44.87**	**-1.076**	**-18.92**	**40.70**	**28.96**	**.1896**	**15060.**
Stddev	.1091	9.43	.922	28.69	.54	.04	.1736	38.
%RSD	26.96	21.01	85.67	151.6	1.322	.1251	91.58	.2532
#1	.4718	53.00	-1.982	14.21	40.32	28.97	.1312	15070.
#2	.2788	34.54	-.1383	-35.82	41.32	28.99	.0527	15020.
#3	.4636	47.08	-1.109	-35.15	40.48	28.92	.3849	15090.

Elem	Cd	Co	Cr	Cu	Fe	K	Mg	Mn
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**.0609**	**4.642**	**2.126**	**2.688**	**1560.**	**3979.**	**4235.**	**2688.**
Stddev	.0976	.212	.268	.507	16.	55.	36.	9.
%RSD	160.4	4.568	12.59	18.86	1.011	1.380	.8535	.3205
#1	.1304	4.556	1.817	3.271	1564.	3923.	4226.	2691.
#2	-.0508	4.884	2.273	2.439	1573.	4032.	4276.	2678.
#3	.1030	4.487	2.289	2.354	1543.	3981.	4205.	2694.

Elem	Mo	Na	Ni	P	Pb	Sb	Se	Si
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**.6986**	**8653.**	**5.475**	**54.50**	**.2501**	**.3303**	**-4.578**	**6584.**
Stddev	.0526	1.	.254	.43	2.108	.8147	2.117	10.
%RSD	7.536	.0083	4.647	.7917	843.0	246.7	46.25	.1586
#1	.7523	8652.	5.189	54.96	2.412	1.209	-2.446	6583.
#2	.6964	8652.	5.676	54.10	-1.800	-.3995	-6.680	6574.
#3	.6471	8653.	5.559	54.44	.1378	.1812	-4.609	6594.

Elem	Sn	Sr	Ti	Tl	V	Y	Y	Y
Units	ug/L	ug/L	ug/L	ug/L	ug/L	%	%	%
Avg	**.9196**	**55.18**	**1.807**	**4.109**	**1.308**	**102.4**	**101.7**	**38.14**
Stddev	.3230	.05	.116	1.824	.518	.3	.5	.07
%RSD	35.13	.0966	6.441	44.40	39.58	.2579	.4956	.1872
#1	.5582	55.23	1.762	5.763	1.141	102.1	101.5	38.07
#2	1.180	55.17	1.719	2.152	.8945	102.4	102.3	38.13
#3	1.021	55.13	1.939	4.411	1.889	102.6	101.3	38.21

Sample Name: 7016438006_2599 Acquired: 5/3/2017 16:01:34 Type: Unk
Method: USE(v270) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Instrument ID: Dilution Factor: Method:
Comment:

Elem	Zn
Units	ug/L
Avg	1.202
Stddev	.134
%RSD	11.17
#1	1.223
#2	1.325
#3	1.058

Int. Std.	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S
Avg	19993.	85027.	31887.
Stddev	52.	421.	60.
%RSD	.25787	.49564	.18719
#1	19936.	84854.	31832.
#2	20004.	85507.	31878.
#3	20038.	84720.	31950.

Sample Name: 7016438007_2599 Acquired: 5/3/2017 16:06:32 Type: Unk
Method: USE(v270) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Instrument ID: Dilution Factor: Method:
Comment:

Elem	Ag	Al	As	Au	B	Ba	Be	Ca
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**.5571**	**13.64**	**-.4820**	**8.257**	**32.75**	**17.04**	**.2423**	**11290.**
Stddev	.6338	4.74	1.463	21.75	.15	.09	.0816	51.
%RSD	113.8	34.73	303.5	263.4	.4587	.5153	33.67	.4553
#1	1.176	17.37	1.115	32.07	32.64	16.95	.3155	11320.
#2	.5854	8.309	-1.759	3.246	32.69	17.12	.2572	11320.
#3	-.0903	15.25	-.8019	-10.55	32.92	17.06	.1543	11230.

Elem	Cd	Co	Cr	Cu	Fe	K	Mg	Mn
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**.0079**	**.4404**	**1.173**	**1.254**	**39.31**	**2624.**	**3916.**	**93.67**
Stddev	.0757	.2596	.584	.443	6.86	58.	61.	.49
%RSD	957.5	58.94	49.76	35.28	17.45	2.228	1.557	.5275
#1	-.0626	.7340	.5202	1.702	37.56	2630.	3882.	94.18
#2	.0880	.3462	1.645	1.244	46.87	2678.	3986.	93.64
#3	-.0017	.2411	1.353	.8174	33.49	2562.	3879.	93.19

Elem	Mo	Na	Ni	P	Pb	Sb	Se	Si
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**-.0341**	**8934.**	**2.558**	**15.15**	**.7624**	**-.6084**	**-1.181**	**6498.**
Stddev	.3323	21.	.141	.53	.9566	1.474	3.499	29.
%RSD	974.4	.2319	5.513	3.508	125.5	242.3	296.3	.4416
#1	-.0680	8944.	2.606	15.75	.6396	.7540	2.761	6530.
#2	-.3481	8910.	2.669	14.93	1.774	-.4060	-3.919	6485.
#3	.3138	8948.	2.399	14.76	-.1269	-2.173	-2.385	6477.

Elem	Sn	Sr	Ti	Tl	V	Y	Y	Y
Units	ug/L	ug/L	ug/L	ug/L	ug/L	%	%	%
Avg	**-.6109**	**35.13**	**.7340**	**.9148**	**.2889**	**102.4**	**101.7**	**37.77**
Stddev	.0659	.17	.1215	1.284	.1619	.4	.1	.13
%RSD	10.79	.4780	16.55	140.3	56.05	.3535	.1118	.3375
#1	-.5480	35.25	.8671	-.1335	.4144	102.9	101.5	37.84
#2	-.6052	35.21	.7056	2.347	.1061	102.3	101.7	37.85
#3	-.6795	34.94	.6292	.5314	.3461	102.2	101.7	37.62

Sample Name: 7016438007_2599 Acquired: 5/3/2017 16:06:32 Type: Unk
Method: USE(v270) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Instrument ID: Dilution Factor: Method:
Comment:

Elem	Zn
Units	ug/L
Avg	-1.123
Stddev	.205
%RSD	18.29
#1	-.9582
#2	-1.353
#3	-1.057

Int. Std.	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S
Avg	20004.	85001.	31577.
Stddev	71.	95.	107.
%RSD	.35347	.11183	.33747
#1	20086.	84892.	31634.
#2	19968.	85044.	31644.
#3	19959.	85066.	31454.

Sample Name: 7016438008_2599 Acquired: 5/3/2017 16:11:31 Type: Unk
Method: USE(v270) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Instrument ID: Dilution Factor: Method:
Comment:

Elem	Ag	Al	As	Au	B	Ba	Be	Ca	Cd
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**-.4587**	**6.418**	**-.9996**	**-23.70**	**10.98**	**8.945**	**.1366**	**4315.**	**-.0053**
Stddev	.7976	5.305	.9353	17.45	.39	.081	.0895	20.	.0682
%RSD	173.9	82.66	93.57	73.60	3.575	.9077	65.52	.4687	1278.
#1	.4542	6.405	-.8546	-3.694	11.16	9.009	.0792	4330.	.0060
#2	-1.021	11.73	-.1452	-35.72	11.25	8.854	.2398	4323.	.0564
#3	-.8096	1.119	-1.999	-31.70	10.53	8.973	.0909	4292.	-.0785

Elem	Co	Cr	Cu	Fe	K	Mg	Mn	Mo	Na
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**-.0016**	**6.300**	**2.236**	**14.18**	**560.3**	**2242.**	**1.441**	**.0557**	**7507.**
Stddev	.1498	.416	.603	4.70	156.9	44.	.049	.2865	3.
%RSD	9141.	6.609	26.98	33.11	28.00	1.962	3.388	514.3	.0339
#1	-.0944	6.432	2.365	19.36	522.4	2289.	1.467	-.0331	7505.
#2	.1712	5.834	1.578	10.19	425.9	2202.	1.472	.3760	7510.
#3	-.0817	6.634	2.763	13.00	732.7	2236.	1.385	-.1759	7506.

Elem	Ni	P	Pb	Sb	Se	Si	Sn	Sr	Ti
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**22.91**	**6.182**	**1.518**	**.8745**	**.0180**	**6237.**	**-.0073**	**26.49**	**.1944**
Stddev	.29	.573	.977	2.484	1.690	62.	.8427	.38	.0250
%RSD	1.279	9.275	64.33	284.1	9370.	.9962	11490.	1.422	12.84
#1	23.08	6.111	2.116	-1.979	-.5208	6267.	.7384	26.72	.2002
#2	22.57	5.647	.3910	2.559	1.911	6279.	.1611	26.70	.1671
#3	23.08	6.787	2.047	2.044	-1.336	6166.	-.9215	26.06	.2160

Elem	Tl	V	Y	Y	Y	Zn
Units	ug/L	ug/L	%	%	%	ug/L
Avg	**.3290**	**-.0536**	**101.1**	**100.8**	**37.55**	**-2.243**
Stddev	.3854	.7914	.2	.4	.14	.078
%RSD	117.2	1477.	.2442	.3965	.3648	3.469
#1	.1828	.6932	101.4	101.1	37.67	-2.199
#2	.0381	-.8830	101.1	100.4	37.40	-2.198
#3	.7662	.0291	100.9	101.0	37.58	-2.333

Sample Name: 7016438008_2599 Acquired: 5/3/2017 16:11:31 Type: Unk
Method: USE(v270) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Instrument ID: Dilution Factor: Method:
Comment:

Int. Std.	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S
Avg	19744.	84318.	31394.
Stddev	48.	334.	115.
%RSD	.24420	.39649	.36481
#1	19794.	84562.	31493.
#2	19741.	83937.	31269.
#3	19698.	84454.	31420.

Sample Name: 7016438009_2599 Acquired: 5/3/2017 16:16:31 Type: Unk
Method: USE(v270) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Instrument ID: Dilution Factor: Method:
Comment:

Elem	Ag	Al	As	Au	B	Ba	Be	Ca	Cd
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**.1826**	**11.17**	**-2.029**	**-16.74**	**1.577**	**.1379**	**.2259**	**15.13**	**.0211**
Stddev	.8293	1.84	3.019	13.33	.261	.0491	.0205	21.64	.1087
%RSD	454.2	16.49	148.8	79.63	16.52	35.63	9.076	143.0	514.7
#1	-.7626	9.380	-.9987	-13.60	1.662	.1571	.2176	-3.838	.0920
#2	.5223	11.08	-5.428	-5.259	1.785	.0821	.2492	38.70	.0754
#3	.7880	13.06	.3400	-31.36	1.285	.1745	.2108	10.54	-.1041

Elem	Co	Cr	Cu	Fe	K	Mg	Mn	Mo	Na
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**-.2147**	**.6443**	**.6999**	**3.710**	**-5.773**	**-58.29**	**3.961**	**-.0667**	**60.07**
Stddev	.1580	.1601	.3605	3.189	60.99	4.22	.090	.1916	29.70
%RSD	73.60	24.85	51.50	85.95	1056.	7.239	2.263	287.1	49.44
#1	-.0855	.6176	.8359	4.316	-76.04	-60.69	4.032	-.1716	26.03
#2	-.1677	.4993	.2912	.2617	25.32	-60.76	3.991	-.1830	73.50
#3	-.3908	.8162	.9725	6.553	33.40	-53.42	3.860	.1544	80.69

Elem	Ni	P	Pb	Sb	Se	Si	Sn	Sr	Ti
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**-.3162**	**1.346**	**.0644**	**.5794**	**-.3295**	**7.167**	**.7879**	**.0212**	**.5848**
Stddev	.1955	.906	1.404	1.339	2.280	1.744	.4042	.0306	.1051
%RSD	61.83	67.32	2181.	231.2	691.8	24.34	51.30	144.5	17.97
#1	-.4954	2.289	-1.471	-.8549	-1.550	5.164	.9557	-.0140	.6848
#2	-.1077	.4818	1.282	1.797	2.301	7.981	.3268	.0415	.5943
#3	-.3456	1.268	.3819	.7958	-1.739	8.355	1.081	.0360	.4753

Elem	Tl	V	Y	Y	Y	Zn
Units	ug/L	ug/L	%	%	%	ug/L
Avg	**-.4094**	**.2859**	**101.0**	**101.1**	**37.78**	**-1.774**
Stddev	1.230	.1426	.2	.3	.28	.136
%RSD	300.4	49.88	.1726	.2911	.7492	7.680
#1	-1.663	.4484	100.9	100.9	37.47	-1.624
#2	-.3613	.1813	100.9	100.9	37.85	-1.890
#3	.7957	.2282	101.2	101.4	38.02	-1.806

Sample Name: 7016438009_2599 Acquired: 5/3/2017 16:16:31 Type: Unk
Method: USE(v270) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Instrument ID: Dilution Factor: Method:
Comment:

Int. Std.	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S
Avg	19720.	84522.	31590.
Stddev	34.	246.	237.
%RSD	.17256	.29112	.74920
#1	19697.	84362.	31329.
#2	19704.	84399.	31649.
#3	19759.	84805.	31791.

Sample Name: 7016438010_2599 Acquired: 5/3/2017 16:21:31 Type: Unk
Method: USE(v270) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Instrument ID: Dilution Factor: Method:
Comment:

Elem	Ag	Al	As	Au	B	Ba	Be	Ca
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**-8.392**	**57.06**	**.4181**	**5.485**	**182.1**	**65.43**	**.1597**	**60190.**
Stddev	.512	.98	1.320	10.24	.5	.02	.0260	137.
%RSD	6.103	1.714	315.8	186.7	.2677	.0318	16.26	.2274
#1	-7.868	56.27	.6470	-3.126	182.1	65.44	.1861	60310.
#2	-8.891	56.75	1.609	2.769	181.6	65.43	.1588	60210.
#3	-8.417	58.15	-1.002	16.81	182.6	65.40	.1342	60040.

Elem	Cd	Co	Cr	Cu	Fe	K	Mg	Mn
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**.2141**	**1.641**	**3.811**	**9.007**	**29900.**	**17980.**	**8929.**	**2202.**
Stddev	.0914	.329	.240	.579	260.	200.	38.	22.
%RSD	42.68	20.03	6.292	6.424	.8679	1.110	.4217	.9778
#1	.1095	1.678	3.806	8.408	30190.	18020.	8964.	2222.
#2	.2786	1.295	4.053	9.052	29760.	17770.	8889.	2204.
#3	.2540	1.950	3.573	9.563	29730.	18160.	8935.	2179.

Elem	Mo	Na	Ni	P	Pb	Sb	Se	Si
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**-.2331**	**37910.**	**3.235**	**172.9**	**1.436**	**-.2770**	**.2911**	**5136.**
Stddev	.1573	59.	.277	1.7	.696	.5750	3.120	60.
%RSD	67.46	.1553	8.569	1.008	48.42	207.6	1072.	1.163
#1	-.4143	37940.	3.537	171.8	.6446	-.3407	-1.002	5198.
#2	-.1312	37950.	3.174	174.9	1.949	-.8175	3.850	5131.
#3	-.1539	37840.	2.993	172.1	1.716	.3273	-1.975	5079.

Elem	Sn	Sr	Ti	Tl	V	Y	Y	Y
Units	ug/L	ug/L	ug/L	ug/L	ug/L	%	%	%
Avg	**1.840**	**242.1**	**4.062**	**3.656**	**1.427**	**99.75**	**100.8**	**37.65**
Stddev	.816	2.6	.023	1.698	.977	.07	.8	.26
%RSD	44.37	1.088	.5567	46.44	68.49	.0690	.8056	.6900
#1	2.268	245.1	4.065	4.116	.3398	99.78	100.0	37.63
#2	2.353	241.3	4.038	5.076	2.233	99.67	100.7	37.40
#3	.8985	240.0	4.083	1.775	1.708	99.79	101.6	37.92

Sample Name: 7016438010_2599 Acquired: 5/3/2017 16:21:31 Type: Unk
Method: USE(v270) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Instrument ID: Dilution Factor: Method:
Comment:

Elem	Zn
Units	ug/L
Avg	2.926
Stddev	.138
%RSD	4.703
#1	2.875
#2	2.820
#3	3.081

Int. Std.	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S
Avg	19477.	84262.	31482.
Stddev	13.	679.	217.
%RSD	.06905	.80561	.69003
#1	19483.	83644.	31464.
#2	19462.	84153.	31274.
#3	19487.	84988.	31707.

Sample Name: 7016438011_2599 Acquired: 5/3/2017 16:26:24 Type: Unk
Method: USE(v270) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Instrument ID: Dilution Factor: Method:
Comment:

Elem	Ag	Al	As	Au	B	Ba	Be	Ca
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**-7.333**	**183.3**	**5.505**	**36.46**	**213.9**	**123.0**	**.3431**	**73010.**
Stddev	.696	1.0	2.730	23.44	.2	.2	.0626	382.
%RSD	9.489	.5382	49.59	64.30	.0761	.1398	18.25	.5234
#1	-7.408	182.2	6.459	63.52	213.8	122.8	.2745	73440.
#2	-6.602	184.0	7.629	22.84	213.8	123.2	.3972	72900.
#3	-7.988	183.8	2.426	23.01	214.1	122.9	.3575	72700.

Elem	Cd	Co	Cr	Cu	Fe	K	Mg	Mn
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**.2188**	**11.00**	**6.130**	**13.40**	**32450.**	**31910.**	**12580.**	**8164.**
Stddev	.0246	.08	.695	.20	17.	147.	115.	136.
%RSD	11.24	.6913	11.34	1.463	.0521	.4610	.9151	1.665
#1	.2358	10.98	6.733	13.62	32430.	32050.	12650.	8122.
#2	.2301	10.94	6.289	13.26	32460.	31930.	12640.	8317.
#3	.1906	11.08	5.370	13.31	32450.	31750.	12450.	8055.

Elem	Mo	Na	Ni	P	Pb	Sb	Se	Si
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**.6994**	**62240.**	**16.03**	**964.5**	**1.534**	**-.8017**	**-1.540**	**6824.**
Stddev	.2109	443.	.66	4.7	.497	.6671	1.686	117.
%RSD	30.16	.7112	4.135	.4833	32.36	83.21	109.5	1.715
#1	.5712	62710.	16.40	965.5	1.515	-.2324	-3.372	6732.
#2	.9428	62180.	16.42	968.5	1.048	-1.536	-.0543	6956.
#3	.5842	61840.	15.26	959.4	2.040	-.6370	-1.194	6786.

Elem	Sn	Sr	Ti	Tl	V	Y	Y	Y
Units	ug/L	ug/L	ug/L	ug/L	ug/L	%	%	%
Avg	**3.928**	**329.4**	**15.01**	**9.712**	**3.980**	**99.36**	**99.96**	**37.79**
Stddev	.531	5.6	.36	1.009	.896	.10	.83	.04
%RSD	13.51	1.709	2.387	10.39	22.51	.0976	.8259	.1097
#1	3.369	324.8	14.91	10.06	4.208	99.25	100.4	37.78
#2	3.990	335.6	15.40	10.50	4.741	99.43	99.01	37.76
#3	4.425	327.6	14.71	8.575	2.993	99.40	100.5	37.84

Sample Name: 7016438011_2599 Acquired: 5/3/2017 16:26:24 Type: Unk
Method: USE(v270) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Instrument ID: Dilution Factor: Method:
Comment:

Elem	Zn
Units	ug/L
Avg	4.834
Stddev	.113
%RSD	2.335
#1	4.863
#2	4.930
#3	4.709

Int. Std.	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S
Avg	19403.	83575.	31595.
Stddev	19.	690.	35.
%RSD	.09757	.82591	.10967
#1	19381.	83936.	31585.
#2	19416.	82779.	31567.
#3	19411.	84010.	31634.

Sample Name: ICSA Acquired: 5/3/2017 16:36:18 Type: QC
Method: USE(v270) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Instrument ID: Dilution Factor: Method:
Comment:

Elem	Ag	Al	As	Au	B	Ba	Be
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	F -53.29	492000.	-13.79	116.9	-5.003	-4.739	.2576
Stddev	.72	4151.	3.60	7.1	1.357	.163	.0581
%RSD	1.358	.8436	26.10	6.071	27.13	3.440	22.53
#1	-53.25	488200.	-9.799	108.8	-5.409	-4.556	.1906
#2	-52.59	491300.	-16.78	120.5	-3.489	-4.790	.2900
#3	-54.03	496500.	-14.80	121.6	-6.111	-4.870	.2922
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	20.00						
Low Limit	-20.00						

Elem	Ca	Cd	Co	Cr	Cu	Fe	K
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	484000.	2.814	2.707	12.51	31.99	191300.	-100.9
Stddev	681.	.062	.328	.36	.88	1534.	39.2
%RSD	.1408	2.218	12.11	2.847	2.763	.8016	38.82
#1	484200.	2.885	2.331	12.84	31.23	193100.	-108.9
#2	484600.	2.789	2.856	12.13	31.77	190700.	-135.4
#3	483200.	2.768	2.934	12.57	32.96	190200.	-58.35
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg	Mn	Mo	Na	Ni	P	Pb
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	513600.	-7.501	-1.506	83.84	4.282	18.97	-3.600
Stddev	5424.	.136	.379	6.06	.474	1.84	.513
%RSD	1.056	1.816	25.19	7.227	11.07	9.691	14.25
#1	519800.	-7.654	-1.349	78.07	4.821	16.90	-3.382
#2	511400.	-7.392	-1.230	83.31	3.928	19.57	-4.186
#3	509600.	-7.458	-1.938	90.15	4.098	20.43	-3.232
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: ICSA Acquired: 5/3/2017 16:36:18 Type: QC
Method: USE(v270) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Instrument ID: Dilution Factor: Method:
Comment:

Elem	Sb	Se	Si	Sn	Sr	Ti	Tl
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**-5.363**	**9.294**	**13.81**	**-12.84**	**3.942**	**-9.166**	**-.5808**
Stddev	1.629	4.264	19.51	.16	.030	.494	1.543
%RSD	30.37	45.87	141.3	1.222	.7669	5.391	265.7
#1	-5.165	4.429	-1.556	-12.67	3.975	-9.684	-1.580
#2	-3.843	11.07	35.76	-12.86	3.916	-9.114	1.197
#3	-7.082	12.38	7.224	-12.98	3.933	-8.700	-1.359
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	V	Y	Y	Y	Zn
Units	ug/L	%	%	%	ug/L
Avg	**-4.401**	**93.13**	**94.04**	**37.02**	**13.35**
Stddev	.851	.12	.88	.09	.31
%RSD	19.34	.1289	.9386	.2475	2.313
#1	-5.098	93.22	94.58	37.08	13.26
#2	-3.453	93.18	94.52	36.92	13.70
#3	-4.652	93.00	93.02	37.07	13.10
Check ?	Chk Pass	None	None	None	Chk Pass
High Limit					
Low Limit					

Int. Std.	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S
Avg	**18187.**	**78626.**	**30956.**
Stddev	23.	738.	77.
%RSD	.12894	.93864	.24752
#1	18204.	79076.	31004.
#2	18195.	79027.	30867.
#3	18160.	77774.	30995.

Sample Name: ICSAB Acquired: 5/3/2017 16:41:14 Type: QC
Method: USE(v270) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Instrument ID: Dilution Factor: Method:
Comment:

Elem	Ag	Al	As	Au	B	Ba	Be
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**361.7**	**492800.**	**176.3**	**1025.**	**980.5**	**966.9**	**981.6**
Stddev	.4	1918.	2.0	10.	2.2	1.6	7.9
%RSD	.1228	.3891	1.148	.9788	.2268	.1622	.8082
#1	361.3	490600.	178.0	1035.	982.8	968.6	985.7
#2	362.1	493900.	176.9	1024.	980.5	965.6	986.6
#3	361.5	493900.	174.1	1015.	978.3	966.3	972.4
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Ca	Cd	Co	Cr	Cu	Fe	K
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**484700.**	**1823.**	**932.8**	**929.0**	**976.2**	**190500.**	**-105.9**
Stddev	3009.	7.	2.5	7.6	1.3	1331.	88.2
%RSD	.6207	.4050	.2631	.8144	.1331	.6987	83.30
#1	486800.	1828.	935.6	932.3	975.5	190800.	-56.40
#2	486000.	1815.	931.8	920.3	975.4	191600.	-53.51
#3	481200.	1827.	931.1	934.3	977.7	189000.	-207.7
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg	Mn	Mo	Na	Ni	P	Pb
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**512100.**	**979.0**	**948.4**	**-75.73**	**1837.**	**482.4**	**86.17**
Stddev	5360.	1.2	2.0	9.02	6.	1.6	.99
%RSD	1.047	.1186	.2072	11.91	.3063	.3345	1.145
#1	511600.	980.0	949.9	-84.26	1843.	483.5	85.05
#2	517700.	979.3	946.2	-66.28	1831.	480.6	86.57
#3	507000.	977.7	949.1	-76.63	1836.	483.2	86.90
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: ICSAB Acquired: 5/3/2017 16:41:14 Type: QC
Method: USE(v270) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Instrument ID: Dilution Factor: Method:
Comment:

Elem	Sb	Se	Si	Sn	Sr	Ti	Tl
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	1135.	99.98	986.2	914.5	1093.	1009.	175.5
Stddev	1.	4.38	2.5	3.6	2.	3.	1.0
%RSD	.0673	4.377	.2564	.3925	.2041	.3336	.5795
#1	1136.	98.21	988.1	917.0	1094.	1012.	176.2
#2	1134.	96.77	987.1	910.4	1095.	1010.	175.8
#3	1135.	105.0	983.3	916.1	1091.	1005.	174.3
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	V	Y	Y	Y	Zn
Units	ug/L	%	%	%	ug/L
Avg	937.7	91.85	92.18	36.03	1923.
Stddev	3.9	.27	.30	.28	6.
%RSD	.4151	.2893	.3281	.7643	.3116
#1	934.8	92.03	92.51	36.21	1927.
#2	936.3	91.97	91.92	35.71	1916.
#3	942.1	91.55	92.10	36.16	1926.
Check ?	Chk Pass	None	None	None	Chk Pass
High Limit					
Low Limit					

Int. Std.	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S
Avg	17936.	77071.	30124.
Stddev	52.	253.	230.
%RSD	.28931	.32815	.76430
#1	17972.	77350.	30279.
#2	17959.	76856.	29859.
#3	17876.	77006.	30234.

Sample Name: CCV Acquired: 5/3/2017 16:46:13 Type: QC
Method: USE(v270) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Instrument ID: Dilution Factor: Method:
Comment:

Elem	Ag	Al	As	Au	B	Ba	Be	Ca
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**236.0**	**4953.**	**467.2**	F **436.4**	**2405.**	**489.3**	**48.33**	**24210.**
Stddev	1.4	30.	1.2	18.6	9.	1.6	.15	101.
%RSD	.5813	.5970	.2558	4.272	.3680	.3294	.3131	.4187
#1	236.1	4949.	468.3	456.9	2411.	491.0	48.19	24140.
#2	237.3	4984.	465.9	420.6	2409.	489.1	48.49	24330.
#3	234.6	4926.	467.4	431.6	2395.	487.8	48.30	24170.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				550.0				
Low Limit				450.0				

Elem	Cd	Co	Cr	Cu	Fe	K	Mg	Mn
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**47.89**	**486.1**	**235.8**	**243.1**	**1901.**	**46290.**	**24230.**	**239.3**
Stddev	.14	1.6	.7	2.4	20.	253.	79.	2.1
%RSD	.2890	.3224	.2832	.9926	1.046	.5460	.3243	.8725
#1	47.99	487.2	235.7	244.1	1878.	46340.	24140.	240.3
#2	47.74	486.9	235.1	244.8	1916.	46510.	24250.	240.8
#3	47.96	484.3	236.5	240.3	1907.	46020.	24300.	237.0
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo	Na	Ni	P	Pb	Sb	Se	Si
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**478.8**	**50330.**	**242.9**	**934.6**	**484.1**	**711.6**	**702.9**	**4756.**
Stddev	1.6	106.	.4	1.3	2.9	2.7	5.5	36.
%RSD	.3322	.2101	.1462	.1362	.5977	.3786	.7839	.7647
#1	480.6	50410.	242.7	935.8	487.4	714.3	709.1	4788.
#2	478.5	50210.	243.2	934.9	483.1	711.5	698.7	4764.
#3	477.4	50360.	242.6	933.2	481.9	708.9	700.7	4717.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: CCV Acquired: 5/3/2017 16:46:13 Type: QC
Method: USE(v270) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Instrument ID: Dilution Factor: Method:
Comment:

Elem	Sn	Sr	Ti	Tl	V	Y	Y	Y
Units	ug/L	ug/L	ug/L	ug/L	ug/L	%	%	%
Avg	2411.	518.6	488.5	738.5	476.6	97.38	99.13	36.90
Stddev	4.	4.9	3.8	2.6	2.6	.12	.70	.27
%RSD	.1658	.9490	.7769	.3555	.5364	.1278	.7031	.7345
#1	2415.	517.7	489.8	741.5	477.1	97.30	98.73	37.14
#2	2411.	523.9	491.5	737.3	478.9	97.52	98.74	36.95
#3	2407.	514.2	484.3	736.7	473.9	97.31	99.94	36.61
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	None	None
High Limit								
Low Limit								

Elem	Zn
Units	ug/L
Avg	948.7
Stddev	1.1
%RSD	.1118
#1	949.9
#2	948.3
#3	947.9
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S
Avg	19015.	82886.	30852.
Stddev	24.	583.	227.
%RSD	.12776	.70305	.73449
#1	19000.	82546.	31053.
#2	19044.	82553.	30897.
#3	19003.	83559.	30606.

Sample Name: CCB Acquired: 5/3/2017 16:51:03 Type: QC
Method: USE(v270) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Instrument ID: Dilution Factor: Method:
Comment:

Elem	Ag	Al	As	Au	B	Ba	Be	Ca	Cd
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**-.3969**	**.1107**	**-1.221**	**-18.62**	**2.807**	**.0941**	**.1151**	**11.76**	**.0022**
Stddev	.8620	4.558	2.053	21.11	.756	.0536	.1952	14.61	.0525
%RSD	217.2	4118.	168.2	113.4	26.93	56.93	169.7	124.3	2418.
#1	-.5967	4.460	.6536	-38.02	3.671	.1186	.2159	5.447	.0615
#2	.5474	.5022	-.9007	3.863	2.489	.1310	-.1100	1.364	-.0383
#3	-1.141	-4.630	-3.416	-21.70	2.263	.0327	.2392	28.46	-.0167
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co	Cr	Cu	Fe	K	Mg	Mn	Mo	Na
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**.1352**	**-.1050**	**.6928**	**-5.004**	**-47.28**	**21.24**	**-.0457**	**.6493**	**-25.96**
Stddev	.0705	.1621	.9024	8.439	74.74	21.74	.0647	.2206	16.70
%RSD	52.14	154.4	130.2	168.6	158.1	102.4	141.4	33.97	64.32
#1	.1531	-.1932	.1547	-8.426	-47.16	30.41	-.0175	.9000	-39.35
#2	.0574	-.2039	1.735	-11.20	27.40	-3.588	.0000	.5631	-7.253
#3	.1949	.0821	.1893	4.608	-122.1	36.89	-.1197	.4849	-31.27
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Ni	P	Pb	Sb	Se	Si	Sn	Sr	Ti
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**-.3446**	**-.4398**	**1.013**	**.2433**	**-.1837**	**-2.025**	**-.7984**	**-.0667**	**-.0583**
Stddev	.2348	.3869	.706	.9367	.9987	1.524	.8780	.0279	.0584
%RSD	68.13	87.97	69.64	385.0	543.8	75.26	110.0	41.78	100.3
#1	-.1163	-.0584	.3518	1.222	-.1217	-.6291	-1.235	-.0386	-.1249
#2	-.3322	-.8320	1.756	.1523	-1.212	-3.651	.2123	-.0944	-.0340
#3	-.5854	-.4290	.9315	-.6446	.7826	-1.795	-1.373	-.0671	-.0159
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: CCB Acquired: 5/3/2017 16:51:03 Type: QC
Method: USE(v270) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Instrument ID: Dilution Factor: Method:
Comment:

Elem	Tl	V	Y	Y	Y	Zn
Units	ug/L	ug/L	%	%	%	ug/L
Avg	**-1.610**	**-.3812**	**100.4**	**104.5**	**37.75**	**-2.772**
Stddev	1.118	.1858	.4	1.0	.22	.175
%RSD	69.43	48.73	.3629	.9439	.5920	6.310
#1	-2.831	-.3378	100.0	103.5	37.57	-2.636
#2	-.6362	-.5848	100.5	104.6	37.69	-2.710
#3	-1.363	-.2210	100.7	105.5	38.00	-2.970
Check ?	Chk Pass	Chk Pass	None	None	None	Chk Pass
High Limit						
Low Limit						

Int. Std.	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S
Avg	**19614.**	**87392.**	**31566.**
Stddev	71.	825.	187.
%RSD	.36293	.94392	.59196
#1	19535.	86541.	31411.
#2	19632.	87448.	31514.
#3	19673.	88188.	31774.

Sample Name: CAL0 Acquired: 5/4/2017 10:45:32 Type: Cal
Method: USE(v274) Mode: IR Corr. Factor: 1.000000
User: andrew schmadtke Instrument ID: ICP 2 Dilution Factor: 1 Method:
Comment:

Elem	Ag	Al	As	Au	B	Ba	Be	Ca
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**-.0004**	**.0021**	**.0000**	**.0001**	**.0000**	**.0009**	**-.0005**	**-.0004**
Stddev	.0001	.0000	.0000	.0001	.0000	.0000	.0001	.0002
%RSD	22.98	1.898	144.2	143.0	751.3	2.726	19.59	47.20
#1	-.0004	.0021	.0000	.0002	.0000	.0009	-.0006	-.0006
#2	-.0005	.0021	.0000	.0001	.0001	.0009	-.0004	-.0005
#3	-.0003	.0022	.0000	.0000	.0000	.0009	-.0005	-.0002

Elem	Cd	Co	Cr	Cu	Fe	K	Mg	Mn
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**-.0001**	**.0001**	**.0009**	**-.0001**	**.0001**	**.0121**	**.0001**	**.0003**
Stddev	.0000	.0001	.0004	.0000	.0001	.0009	.0001	.0000
%RSD	40.27	39.61	48.88	29.28	144.2	7.393	113.2	7.770
#1	-.0001	.0001	.0011	-.0001	.0000	.0132	.0000	.0003
#2	.0000	.0002	.0004	-.0001	.0002	.0114	.0002	.0003
#3	-.0001	.0001	.0012	-.0001	.0001	.0119	.0001	.0003

Elem	Mo	Na	Ni	P	Pb	Sb	Se	Si
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**-.0003**	**-.0568**	**-.0001**	**.0000**	**.0001**	**.0001**	**-.0001**	**.0016**
Stddev	.0000	.0012	.0000	.0000	.0000	.0001	.0000	.0001
%RSD	10.33	2.125	67.56	113.6	72.73	41.04	44.06	4.722
#1	-.0003	-.0581	.0000	.0000	.0001	.0001	-.0001	.0017
#2	-.0004	-.0557	.0000	.0000	.0000	.0001	-.0001	.0016
#3	-.0003	-.0567	-.0001	.0000	.0001	.0002	-.0001	.0016

Elem	Sn	Sr	Ti	Tl	V	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.0001**	**.0107**	**.0001**	**.0001**	**-.0001**	**19390.**	**84930.**	**32840.**
Stddev	.0000	.0002	.0000	.0000	.0001	80.	248.	255.
%RSD	9.944	2.054	29.89	31.65	91.87	.4114	.2924	.7773
#1	.0001	.0104	.0001	.0001	.0000	19390.	85190.	32610.
#2	.0001	.0108	.0001	.0001	.0000	19460.	84690.	33120.
#3	.0001	.0108	.0001	.0001	-.0002	19300.	84910.	32810.

Sample Name: CAL0 Acquired: 5/4/2017 10:45:32 Type: Cal
Method: USE(v274) Mode: IR Corr. Factor: 1.000000
User: andrew schmadtke Instrument ID: ICP 2 Dilution Factor: 1 Method:
Comment:

Elem	Zn
Units	Cts/S
Avg	.0003
Stddev	.0000
%RSD	5.363
#1	.0003
#2	.0003
#3	.0003

Int. Std.	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S
Avg	19387.	84928.	32845.
Stddev	80.	248.	255.
%RSD	.41142	.29244	.77734
#1	19393.	85185.	32612.
#2	19464.	84690.	33118.
#3	19305.	84908.	32805.

Sample Name: CAL1 Acquired: 5/4/2017 10:50:32 Type: Cal
Method: USE(v274) Mode: IR Corr. Factor: 1.000000
User: andrew schmadtke Instrument ID: ICP 2 Dilution Factor: 1 Method:
Comment:

Elem	Ag	Al	As	Au	B	Ba	Be	Ca
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0127	.0396	.0024	.0022	.0585	.1211	.0192	.1201
Stddev	.0002	.0004	.0000	.0001	.0000	.0002	.0002	.0006
%RSD	1.615	.9823	.5174	2.754	.0822	.1261	1.030	.4852
#1	.0128	.0400	.0025	.0022	.0585	.1212	.0193	.1207
#2	.0125	.0393	.0024	.0021	.0585	.1212	.0193	.1202
#3	.0128	.0397	.0024	.0021	.0586	.1209	.0190	.1195

Elem	Cd	Co	Cr	Cu	Fe	K	Mg	Mn
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0127	.0502	.0871	.0027	.0195	.1141	.0247	.0769
Stddev	.0001	.0001	.0008	.0000	.0002	.0005	.0001	.0009
%RSD	.5121	.2596	.9067	1.002	.9446	.4712	.4234	1.131
#1	.0127	.0502	.0880	.0027	.0194	.1142	.0248	.0779
#2	.0128	.0502	.0865	.0027	.0193	.1135	.0246	.0763
#3	.0127	.0500	.0867	.0027	.0197	.1146	.0247	.0766

Elem	Mo	Na	Ni	P	Pb	Sb	Se	Si
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0273	.6806	.0108	.0066	.0125	.0088	.0040	.0540
Stddev	.0001	.0019	.0000	.0000	.0000	.0001	.0000	.0007
%RSD	.3124	.2763	.2216	.2569	.1498	1.096	.2812	1.234
#1	.0272	.6820	.0108	.0066	.0125	.0087	.0040	.0547
#2	.0273	.6784	.0107	.0066	.0125	.0088	.0040	.0535
#3	.0273	.6813	.0108	.0066	.0125	.0089	.0040	.0537

Elem	Sn	Sr	Ti	Tl	V	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0321	1.926	.1372	.0070	.0275	19130.	83300.	32600.
Stddev	.0000	.017	.0016	.0001	.0002	12.	375.	164.
%RSD	.1134	.8960	1.143	1.068	.7703	.0632	.4500	.5019
#1	.0321	1.944	.1389	.0070	.0277	19140.	82890.	32750.
#2	.0321	1.910	.1357	.0071	.0273	19130.	83620.	32420.
#3	.0320	1.925	.1370	.0070	.0274	19110.	83400.	32630.

Sample Name: CAL1 Acquired: 5/4/2017 10:50:32 Type: Cal
Method: USE(v274) Mode: IR Corr. Factor: 1.000000
User: andrew schmadtke Instrument ID: ICP 2 Dilution Factor: 1 Method:
Comment:

Elem	Zn
Units	Cts/S
Avg	.0687
Stddev	.0001
%RSD	.1346
#1	.0686
#2	.0688
#3	.0687

Int. Std.	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S
Avg	19125.	83304.	32599.
Stddev	12.	375.	164.
%RSD	.06322	.45000	.50186
#1	19136.	82891.	32749.
#2	19127.	83622.	32424.
#3	19112.	83399.	32625.

Sample Name: CAL2 Acquired: 5/4/2017 10:55:20 Type: Cal
Method: USE(v274) Mode: IR Corr. Factor: 1.000000
User: andrew schmadtke Instrument ID: ICP 2 Dilution Factor: 1 Method:
Comment:

Elem	Ag	Al	As	Au	B	Ba	Be	Ca
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0319	.0952	.0061	.0051	.1453	.3000	.0487	.3007
Stddev	.0003	.0006	.0000	.0001	.0002	.0003	.0001	.0007
%RSD	.9695	.5910	.6349	1.989	.1431	.1077	.1672	.2211
#1	.0321	.0948	.0061	.0052	.1451	.2997	.0486	.3001
#2	.0315	.0950	.0060	.0050	.1454	.2998	.0487	.3014
#3	.0320	.0958	.0061	.0051	.1455	.3003	.0488	.3007

Elem	Cd	Co	Cr	Cu	Fe	K	Mg	Mn
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0315	.1233	.2136	.0067	.0494	.2666	.0612	.1879
Stddev	.0001	.0002	.0007	.0000	.0001	.0015	.0002	.0009
%RSD	.1978	.1666	.3458	.6568	.2610	.5622	.3022	.4726
#1	.0316	.1233	.2145	.0066	.0494	.2654	.0611	.1870
#2	.0315	.1235	.2131	.0067	.0495	.2661	.0614	.1879
#3	.0314	.1231	.2133	.0067	.0493	.2683	.0611	.1888

Elem	Mo	Na	Ni	P	Pb	Sb	Se	Si
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0685	1.778	.0266	.0163	.0306	.0218	.0100	.1332
Stddev	.0002	.008	.0001	.0001	.0000	.0000	.0000	.0009
%RSD	.2377	.4342	.2144	.4149	.1439	.1408	.4581	.6997
#1	.0684	1.780	.0266	.0163	.0306	.0219	.0101	.1321
#2	.0684	1.785	.0265	.0162	.0306	.0218	.0100	.1335
#3	.0687	1.770	.0266	.0163	.0306	.0218	.0101	.1338

Elem	Sn	Sr	Ti	Tl	V	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0790	4.671	.3381	.0171	.0675	18920.	82790.	32010.
Stddev	.0002	.031	.0021	.0001	.0003	43.	460.	146.
%RSD	.2335	.6679	.6329	.3460	.4984	.2265	.5557	.4551
#1	.0791	4.655	.3356	.0171	.0674	18870.	83190.	31920.
#2	.0788	4.650	.3390	.0172	.0673	18960.	82880.	31940.
#3	.0791	4.706	.3396	.0172	.0679	18920.	82290.	32180.

Sample Name: CAL2 Acquired: 5/4/2017 10:55:20 Type: Cal
Method: USE(v274) Mode: IR Corr. Factor: 1.000000
User: andrew schmadtke Instrument ID: ICP 2 Dilution Factor: 1 Method:
Comment:

Elem	Zn
Units	Cts/S
Avg	.1684
Stddev	.0002
%RSD	.1315
#1	.1683
#2	.1682
#3	.1686

Int. Std.	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S
Avg	18917.	82786.	32012.
Stddev	43.	460.	146.
%RSD	.22646	.55567	.45506
#1	18872.	83192.	31915.
#2	18958.	82881.	31942.
#3	18921.	82286.	32180.

Sample Name: CAL3 Acquired: 5/4/2017 11:00:10 Type: Cal
Method: USE(v274) Mode: IR Corr. Factor: 1.000000
User: andrew schmadtke Instrument ID: ICP 2 Dilution Factor: 1 Method:
Comment:

Elem	Ag	Al	As	Au	B	Ba	Be	Ca
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0643	.1872	.0122	.0104	.2899	.5983	.0961	.5935
Stddev	.0001	.0002	.0000	.0002	.0005	.0009	.0005	.0013
%RSD	.2174	.1326	.3776	1.500	.1615	.1559	.5225	.2269
#1	.0642	.1870	.0122	.0103	.2904	.5994	.0959	.5934
#2	.0645	.1875	.0121	.0106	.2894	.5981	.0966	.5949
#3	.0643	.1873	.0122	.0104	.2898	.5976	.0957	.5922

Elem	Cd	Co	Cr	Cu	Fe	K	Mg	Mn
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0627	.2440	.4289	.0133	.0963	.5366	.1217	.3729
Stddev	.0001	.0005	.0010	.0000	.0003	.0006	.0002	.0005
%RSD	.1324	.2237	.2343	.2601	.3284	.1140	.1902	.1284
#1	.0627	.2446	.4277	.0133	.0964	.5360	.1215	.3729
#2	.0628	.2437	.4296	.0132	.0965	.5366	.1219	.3724
#3	.0626	.2437	.4293	.0133	.0959	.5372	.1218	.3733

Elem	Mo	Na	Ni	P	Pb	Sb	Se	Si
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.1375	3.555	.0527	.0331	.0607	.0437	.0206	.2672
Stddev	.0001	.013	.0001	.0000	.0001	.0001	.0000	.0011
%RSD	.0582	.3578	.1420	.1459	.1117	.2957	.1664	.4141
#1	.1374	3.555	.0528	.0331	.0607	.0438	.0205	.2670
#2	.1375	3.568	.0527	.0331	.0607	.0438	.0206	.2662
#3	.1374	3.542	.0527	.0330	.0606	.0436	.0206	.2684

Elem	Sn	Sr	Ti	Tl	V	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.1573	9.305	.6721	.0335	.1346	18550.	81780.	32050.
Stddev	.0002	.024	.0007	.0001	.0001	46.	24.	177.
%RSD	.1495	.2533	.1082	.1922	.0964	.2459	.0292	.5525
#1	.1576	9.328	.6725	.0335	.1346	18540.	81790.	32120.
#2	.1573	9.281	.6712	.0335	.1347	18510.	81790.	31850.
#3	.1571	9.306	.6725	.0336	.1344	18600.	81750.	32190.

Sample Name: CAL3 Acquired: 5/4/2017 11:00:10 Type: Cal
Method: USE(v274) Mode: IR Corr. Factor: 1.000000
User: andrew schmadtke Instrument ID: ICP 2 Dilution Factor: 1 Method:
Comment:

Elem	Zn
Units	Cts/S
Avg	.3364
Stddev	.0004
%RSD	.1124
#1	.3368
#2	.3361
#3	.3362

Int. Std.	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S
Avg	18552.	81776.	32054.
Stddev	46.	24.	177.
%RSD	.24594	.02919	.55246
#1	18544.	81791.	32123.
#2	18510.	81789.	31853.
#3	18601.	81749.	32187.

Sample Name: CAL4 Acquired: 5/4/2017 11:05:00 Type: Cal
Method: USE(v274) Mode: IR Corr. Factor: 1.000000
User: andrew schmadtke Instrument ID: ICP 2 Dilution Factor: 1 Method:
Comment:

Elem	Ag	Al	As	Au	B	Ba	Be	Ca
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.1308	.3716	.0246	.0209	.5756	1.180	.1917	1.174
Stddev	.0004	.0017	.0001	.0003	.0005	.001	.0016	.004
%RSD	.3032	.4594	.3081	1.316	.0912	.0741	.8332	.3283
#1	.1312	.3735	.0245	.0208	.5757	1.180	.1899	1.171
#2	.1308	.3710	.0246	.0207	.5761	1.181	.1927	1.179
#3	.1304	.3702	.0245	.0212	.5751	1.179	.1927	1.172

Elem	Cd	Co	Cr	Cu	Fe	K	Mg	Mn
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.1229	.4804	.8476	.0262	.1933	1.080	.2401	.7432
Stddev	.0004	.0005	.0053	.0001	.0024	.009	.0005	.0030
%RSD	.3235	.0970	.6231	.3636	1.224	.8255	.2039	.4081
#1	.1225	.4803	.8416	.0264	.1907	1.072	.2406	.7460
#2	.1233	.4810	.8514	.0262	.1954	1.078	.2400	.7436
#3	.1230	.4800	.8498	.0262	.1938	1.090	.2397	.7400

Elem	Mo	Na	Ni	P	Pb	Sb	Se	Si
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.2733	6.809	.1035	.0661	.1184	.0876	.0408	.5400
Stddev	.0005	.024	.0001	.0002	.0003	.0001	.0002	.0014
%RSD	.1805	.3466	.0817	.2773	.2784	.1696	.3922	.2505
#1	.2727	6.817	.1034	.0659	.1181	.0875	.0407	.5395
#2	.2735	6.783	.1035	.0662	.1187	.0878	.0410	.5415
#3	.2736	6.828	.1036	.0661	.1185	.0876	.0408	.5390

Elem	Sn	Sr	Ti	Tl	V	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.3076	18.07	1.354	.0652	.2689	18240.	79650.	31940.
Stddev	.0007	.20	.006	.0001	.0011	53.	279.	165.
%RSD	.2399	1.092	.4218	.1123	.4122	.2891	.3506	.5164
#1	.3068	18.30	1.358	.0653	.2702	18300.	79340.	31900.
#2	.3083	17.95	1.356	.0653	.2681	18220.	79870.	31800.
#3	.3076	17.97	1.347	.0652	.2685	18210.	79740.	32130.

Sample Name: CAL4 Acquired: 5/4/2017 11:05:00 Type: Cal
Method: USE(v274) Mode: IR Corr. Factor: 1.000000
User: andrew schmadtke Instrument ID: ICP 2 Dilution Factor: 1 Method:
Comment:

Elem	Zn
Units	Cts/S
Avg	.6697
Stddev	.0009
%RSD	.1385
#1	.6687
#2	.6706
#3	.6699

Int. Std.	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S
Avg	18244.	79649.	31945.
Stddev	53.	279.	165.
%RSD	.28906	.35065	.51644
#1	18304.	79336.	31903.
#2	18220.	79873.	31805.
#3	18207.	79738.	32126.

Sample Name: ICV Acquired: 5/4/2017 11:09:57 Type: QC
Method: USE(v274) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Instrument ID: Dilution Factor: 1 Method:
Comment:

Elem	Ag	Al	As	Au	B	Ba	Be	Ca
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**49.20**	**4853.**	**484.8**	F **474.1**	**4913.**	**499.6**	**50.44**	**25100.**
Stddev	1.51	35.	3.4	18.6	12.	1.2	.17	40.
%RSD	3.075	.7253	.6923	3.928	.2454	.2437	.3414	.1594
#1	50.28	4834.	481.5	460.8	4900.	498.2	50.27	25120.
#2	47.47	4832.	484.7	466.1	4924.	500.1	50.45	25050.
#3	49.85	4894.	488.2	495.4	4916.	500.4	50.61	25120.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				525.0				
Low Limit				475.0				

Elem	Cd	Co	Cr	Cu	Fe	K	Mg	Mn
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**49.65**	**496.1**	**500.8**	**487.7**	**5079.**	**24670.**	**24930.**	**488.9**
Stddev	.13	1.6	1.7	3.4	16.	175.	100.	2.1
%RSD	.2597	.3178	.3372	.6984	.3137	.7080	.3997	.4264
#1	49.56	494.3	501.1	485.2	5067.	24860.	24910.	488.2
#2	49.80	497.3	502.3	486.3	5097.	24610.	24840.	487.3
#3	49.60	496.7	499.0	491.6	5073.	24530.	25040.	491.3
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo	Na	Ni	P	Pb	Sb	Se	Si
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**496.0**	**24620.**	**499.1**	**483.8**	**499.0**	**482.6**	**489.7**	F **4749.**
Stddev	1.1	99.	.8	3.0	2.2	1.5	2.2	13.
%RSD	.2207	.4019	.1636	.6287	.4491	.3009	.4463	.2837
#1	494.8	24510.	498.2	480.5	497.2	482.5	488.9	4756.
#2	497.0	24630.	499.8	484.5	498.4	484.1	488.1	4733.
#3	496.3	24710.	499.2	486.5	501.5	481.2	492.2	4757.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit								5250.
Low Limit								4750.

Sample Name: ICV Acquired: 5/4/2017 11:09:57 Type: QC
Method: USE(v274) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Instrument ID: Dilution Factor: 1 Method:
Comment:

Elem	Sn	Sr	Ti	Tl	V	Y	Y	Y
Units	ug/L	ug/L	ug/L	ug/L	ug/L	%	%	%
Avg	**2474.**	**500.0**	**486.2**	**501.3**	**483.2**	**98.07**	**99.44**	**37.77**
Stddev	8.	7.4	1.3	2.6	4.9	.21	.74	.07
%RSD	.3323	1.481	.2764	.5103	1.007	.2176	.7461	.1768
#1	2466.	495.1	485.9	498.5	481.2	98.21	99.73	37.78
#2	2474.	496.3	485.0	502.0	479.6	98.19	99.98	37.83
#3	2483.	508.5	487.6	503.5	488.7	97.83	98.59	37.70
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	None	None
High Limit								
Low Limit								

Elem	Zn
Units	ug/L
Avg	**2458.**
Stddev	7.
%RSD	.2772
#1	2450.
#2	2461.
#3	2462.
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S
Avg	**19014.**	**84449.**	**32076.**
Stddev	41.	630.	57.
%RSD	.21761	.74614	.17681
#1	19040.	84702.	32086.
#2	19036.	84914.	32126.
#3	18966.	83732.	32014.

Sample Name: ICB Acquired: 5/4/2017 11:14:49 Type: QC
Method: USE(v274) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Instrument ID: Dilution Factor: 1 Method:
Comment:

Elem	Ag	Al	As	Au	B	Ba	Be	Ca	Cd
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**-.3260**	**2.582**	**.0771**	**15.69**	**13.55**	**.1635**	**-.1047**	**3.646**	**.0071**
Stddev	.5844	2.790	2.282	10.84	1.72	.1682	.1458	8.144	.0375
%RSD	179.3	108.0	2961.	69.08	12.73	102.9	139.3	223.4	527.7
#1	.2612	5.479	-1.702	20.52	15.50	.2584	.0535	9.730	-.0124
#2	-.9077	-.0865	-.7169	23.29	12.90	.2627	-.1336	-5.605	-.0166
#3	-.3315	2.354	2.650	3.278	12.24	-.0307	-.2338	6.813	.0504
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co	Cr	Cu	Fe	K	Mg	Mn	Mo	Na
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**-.1595**	**.5175**	**.0247**	**1.212**	**259.9**	**13.80**	**.0504**	**1.412**	**-68.19**
Stddev	.1867	.3060	.8387	.813	231.4	23.29	.0493	.332	36.53
%RSD	117.1	59.12	3393.	67.05	89.06	168.8	97.75	23.49	53.56
#1	.0422	.1710	-.7202	2.038	379.6	-12.89	.0745	1.701	-79.81
#2	-.1944	.7505	.9331	.4128	407.0	30.04	.0830	1.484	-97.50
#3	-.3262	.6310	-.1387	1.186	-6.912	24.24	-.0063	1.050	-27.27
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Ni	P	Pb	Sb	Se	Si	Sn	Sr	Ti
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**.3405**	**1.139**	**.2240**	**-.9780**	**5.051**	**5.082**	**-.5629**	**.0010**	**.0417**
Stddev	.1801	3.399	.6758	2.132	2.342	3.051	.5835	.0046	.2136
%RSD	52.89	298.5	301.7	218.0	46.37	60.05	103.7	477.5	512.4
#1	.1635	.6391	-.4786	1.483	3.233	8.375	-.0193	-.0043	.1437
#2	.5236	4.760	.8693	-2.148	7.694	4.520	-1.179	.0028	-.2038
#3	.3345	-1.983	.2813	-2.269	4.226	2.350	-.4899	.0043	.1852
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: ICB Acquired: 5/4/2017 11:14:49 Type: QC
Method: USE(v274) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Instrument ID: Dilution Factor: 1 Method:
Comment:

Elem	Tl	V	Y	Y	Y	Zn
Units	ug/L	ug/L	%	%	%	ug/L
Avg	-.7910	.6938	98.77	99.77	37.78	.9004
Stddev	.9030	.4202	.34	.08	.31	.1570
%RSD	114.2	60.56	.3408	.0827	.8295	17.43
#1	-1.636	.5907	98.42	99.68	37.86	.8331
#2	-.8977	.3348	98.81	99.84	37.44	.7883
#3	.1607	1.156	99.09	99.80	38.05	1.080
Check ?	Chk Pass	Chk Pass	None	None	None	Chk Pass
High Limit						
Low Limit						

Int. Std.	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S
Avg	19150.	84736.	32089.
Stddev	65.	70.	266.
%RSD	.34081	.08266	.82946
#1	19081.	84659.	32154.
#2	19157.	84795.	31796.
#3	19211.	84754.	32316.

Sample Name: CRDL Acquired: 5/4/2017 11:19:49 Type: QC
Method: USE(v274) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Instrument ID: Dilution Factor: 1 Method:
Comment:

Elem	Ag	Al	As	Au	B	Ba	Be	Ca	Cd	Co
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**10.47**	**198.4**	**10.79**	**192.5**	**58.79**	**208.6**	**5.159**	**211.3**	**2.495**	**51.82**
Stddev	.23	2.6	2.23	16.4	.43	.6	.180	11.5	.047	.40
%RSD	2.188	1.296	20.66	8.515	.7334	.3000	3.484	5.456	1.895	.7653
#1	10.57	198.5	11.55	203.8	59.11	209.2	5.252	221.8	2.547	52.18
#2	10.21	195.9	12.54	200.1	58.95	208.7	5.274	213.2	2.481	51.87
#3	10.64	201.0	8.280	173.7	58.30	208.0	4.952	199.0	2.456	51.39

Check ? Chk PassChk PassChk PassChk PassChk PassChk PassChk PassChk PassChk PassChk Pass
High Limit
Low Limit

Elem	Cr	Cu	Fe	K	Mg	Mn	Mo	Na	Ni	P
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**9.802**	**25.57**	**24.50**	**4676.**	**217.6**	**10.34**	**20.27**	**5100.**	**41.31**	**48.18**
Stddev	.119	.09	3.64	76.	21.5	.05	.19	29.	.59	1.20
%RSD	1.215	.3606	14.85	1.619	9.879	.4770	.9384	.5672	1.432	2.487
#1	9.919	25.48	28.62	4665.	211.4	10.28	20.31	5132.	40.93	49.31
#2	9.807	25.66	21.73	4757.	199.9	10.37	20.06	5094.	41.00	46.92
#3	9.681	25.57	23.15	4606.	241.5	10.36	20.44	5075.	41.99	48.31

Check ? Chk PassChk PassChk PassChk PassChk PassChk PassChk PassChk PassChk PassChk Pass
High Limit
Low Limit

Elem	Pb	Sb	Se	Si	Sn	Sr	Ti	Tl	V	Y
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	%
Avg	**5.631**	**59.01**	**11.23**	**23.44**	**50.17**	**51.13**	**50.88**	**9.011**	**48.90**	**101.6**
Stddev	.656	.51	2.29	3.03	.35	.23	.47	.749	1.04	.7
%RSD	11.65	.8569	20.41	12.94	.6964	.4485	.9311	8.309	2.129	.7337
#1	5.920	58.87	11.27	20.17	50.03	51.08	50.63	8.356	47.82	101.2
#2	4.880	58.58	13.50	23.98	49.90	50.94	50.59	9.827	49.00	101.1
#3	6.091	59.57	8.919	26.16	50.56	51.39	51.43	8.851	49.89	102.4

Check ? Chk PassChk PassChk PassChk PassChk PassChk PassChk PassChk PassChk Pass None
High Limit
Low Limit

Sample Name: CRDL Acquired: 5/4/2017 11:19:49 Type: QC
Method: USE(v274) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Instrument ID: Dilution Factor: 1 Method:
Comment:

Elem	Y	Y	Zn
Units	%	%	ug/L
Avg	100.9	38.14	20.61
Stddev	.6	.17	.16
%RSD	.6293	.4566	.7987
#1	101.3	37.97	20.62
#2	101.3	38.32	20.77
#3	100.2	38.14	20.44
Check ?	None	None	Chk Pass
High Limit			
Low Limit			

Int. Std.	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S
Avg	19691.	85714.	32396.
Stddev	144.	539.	148.
%RSD	.73369	.62927	.45656
#1	19617.	86050.	32249.
#2	19598.	86000.	32544.
#3	19857.	85091.	32394.

Sample Name: ICSA Acquired: 5/4/2017 11:24:45 Type: QC
Method: USE(v274) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Instrument ID: Dilution Factor: 1 Method:
Comment:

Elem	Ag	Al	As	Au	B	Ba	Be
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**2.508**	**512400.**	**-9.604**	**136.3**	**3.096**	**-1.008**	**.2146**
Stddev	1.481	2977.	2.694	24.6	.863	.197	.1015
%RSD	59.06	.5810	28.05	18.04	27.87	19.51	47.28
#1	3.962	513200.	-12.51	126.6	3.468	-1.030	.3316
#2	2.562	514800.	-7.190	118.1	3.711	-.8017	.1622
#3	1.001	509100.	-9.112	164.3	2.110	-1.193	.1502
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Ca	Cd	Co	Cr	Cu	Fe	K
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**514100.**	**3.053**	**2.518**	F **23.20**	**12.48**	**215100.**	**-60.54**
Stddev	1283.	.245	.105	1.13	.71	877.	147.6
%RSD	.2495	8.036	4.168	4.882	5.655	.4079	243.8
#1	514000.	3.206	2.409	22.00	13.24	215500.	-163.7
#2	515500.	3.183	2.619	24.24	11.84	215700.	-126.4
#3	512900.	2.770	2.526	23.37	12.36	214100.	108.5
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit				20.00			
Low Limit				-20.00			

Elem	Mg	Mn	Mo	Na	Ni	P	Pb
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**506100.**	**-6.290**	**-.9795**	**21.38**	**5.224**	**19.76**	F **-12.41**
Stddev	869.	.150	.4441	23.26	.534	2.78	.56
%RSD	.1718	2.378	45.35	108.8	10.23	14.07	4.506
#1	505600.	-6.138	-1.197	48.10	4.860	18.92	-11.84
#2	507100.	-6.437	-.4685	10.35	4.974	17.50	-12.42
#3	505500.	-6.296	-1.273	5.677	5.837	22.87	-12.96
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit							10.00
Low Limit							-10.00

Sample Name: ICSA Acquired: 5/4/2017 11:24:45 Type: QC
Method: USE(v274) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Instrument ID: Dilution Factor: 1 Method:
Comment:

Elem	Sb	Se	Si	Sn	Sr	Ti	Tl
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**-7.966**	**-11.89**	**6.547**	**-14.02**	**3.757**	**-8.477**	**3.128**
Stddev	3.347	3.25	4.800	.62	.043	.154	1.419
%RSD	42.01	27.31	73.32	4.418	1.156	1.815	45.38
#1	-10.12	-13.83	9.717	-14.21	3.788	-8.349	2.413
#2	-9.666	-13.69	8.899	-14.52	3.708	-8.436	4.763
#3	-4.111	-8.139	1.024	-13.32	3.776	-8.648	2.208
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	V	Y	Y	Y	Zn
Units	ug/L	%	%	%	ug/L
Avg	**-4.008**	**93.34**	**91.02**	**36.41**	**15.31**
Stddev	.687	.10	.32	.35	.12
%RSD	17.15	.1093	.3533	.9485	.8140
#1	-4.481	93.44	90.73	36.81	15.21
#2	-3.219	93.35	90.95	36.21	15.27
#3	-4.323	93.23	91.36	36.21	15.45
Check ?	Chk Pass	None	None	None	Chk Pass
High Limit					
Low Limit					

Int. Std.	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S
Avg	**18096.**	**77298.**	**30920.**
Stddev	20.	273.	293.
%RSD	.10933	.35330	.94849
#1	18115.	77055.	31259.
#2	18097.	77245.	30749.
#3	18075.	77593.	30752.

Sample Name: ICSAB Acquired: 5/4/2017 11:29:42 Type: QC
Method: USE(v274) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Instrument ID: Dilution Factor: 1 Method:
Comment:

Elem	Ag	Al	As	Au	B	Ba	Be
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**418.5**	**501400.**	**186.9**	**1071.**	**1008.**	**1004.**	**1033.**
Stddev	5.0	4713.	3.2	15.	1.	.	9.
%RSD	1.192	.9400	1.730	1.361	.1243	.0492	.9058
#1	419.9	504800.	189.3	1057.	1008.	1004.	1044.
#2	413.0	496000.	188.1	1086.	1009.	1005.	1026.
#3	422.7	503500.	183.2	1071.	1006.	1004.	1030.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Ca	Cd	Co	Cr	Cu	Fe	K
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**506800.**	**1893.**	**967.6**	**972.6**	**978.2**	**207600.**	**-137.5**
Stddev	821.	4.	1.5	2.9	11.3	2543.	141.5
%RSD	.1621	.1913	.1546	.3032	1.154	1.225	102.9
#1	507600.	1889.	966.9	969.2	985.6	210600.	13.16
#2	506000.	1896.	969.3	974.8	965.2	206000.	-267.7
#3	506800.	1894.	966.6	973.8	983.9	206400.	-158.0
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg	Mn	Mo	Na	Ni	P	Pb
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**502200.**	**990.4**	**969.2**	**-74.82**	**1909.**	**505.1**	**80.54**
Stddev	2096.	11.1	.3	6.81	2.	.5	.92
%RSD	.4173	1.124	.0297	9.100	.0898	.1060	1.139
#1	499800.	999.5	968.9	-69.05	1910.	505.6	81.59
#2	503300.	978.0	969.5	-82.33	1910.	505.3	80.11
#3	503600.	993.7	969.2	-73.08	1907.	504.5	79.91
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: ICSAB Acquired: 5/4/2017 11:29:42 Type: QC
Method: USE(v274) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Instrument ID: Dilution Factor: 1 Method:
Comment:

Elem	Sb	Se	Si	Sn	Sr	Ti	Tl
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	1182.	94.93	981.7	935.9	1018.	1006.	181.7
Stddev	3.	4.82	14.7	.9	5.	13.	.5
%RSD	.2249	5.082	1.496	.0954	.4932	1.275	.2690
#1	1181.	89.94	996.6	935.4	1017.	1019.	182.2
#2	1180.	99.57	967.2	936.9	1013.	993.1	181.3
#3	1185.	95.29	981.4	935.3	1023.	1006.	181.5
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	V	Y	Y	Y	Zn
Units	ug/L	%	%	%	ug/L
Avg	951.4	92.87	91.91	36.44	2013.
Stddev	11.6	.23	.85	.15	1.
%RSD	1.222	.2499	.9227	.4191	.0716
#1	949.8	93.04	91.25	36.58	2011.
#2	940.7	92.60	92.87	36.28	2014.
#3	963.8	92.96	91.62	36.45	2012.
Check ?	Chk Pass	None	None	None	Chk Pass
High Limit					
Low Limit					

Int. Std.	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S
Avg	18004.	78061.	30946.
Stddev	45.	720.	130.
%RSD	.24986	.92271	.41906
#1	18037.	77498.	31068.
#2	17953.	78872.	30810.
#3	18023.	77811.	30960.

Sample Name: CCV Acquired: 5/4/2017 11:34:41 Type: QC
Method: USE(v274) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Instrument ID: Dilution Factor: 1 Method:
Comment:

Elem	Ag	Al	As	Au	B	Ba	Be	Ca
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**245.1**	**5098.**	**487.9**	**476.5**	**2500.**	**506.6**	**51.37**	**25690.**
Stddev	2.1	31.	5.9	20.8	2.	.4	.29	97.
%RSD	.8392	.6150	1.200	4.360	.0907	.0843	.5743	.3770
#1	246.6	5128.	493.1	500.4	2499.	507.0	51.47	25810.
#2	245.8	5101.	481.5	463.5	2503.	506.2	51.04	25630.
#3	242.7	5066.	489.1	465.5	2498.	506.6	51.60	25650.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Cd	Co	Cr	Cu	Fe	K	Mg	Mn
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**49.64**	**503.4**	**244.1**	**250.5**	**2087.**	**48110.**	**25180.**	**249.0**
Stddev	.16	.7	3.7	1.6	8.	186.	104.	1.8
%RSD	.3233	.1435	1.505	.6194	.4008	.3859	.4122	.7200
#1	49.82	504.2	248.3	252.0	2077.	48290.	25280.	251.1
#2	49.55	503.2	241.6	250.7	2092.	47920.	25190.	248.0
#3	49.55	502.9	242.4	248.9	2092.	48130.	25070.	248.0
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo	Na	Ni	P	Pb	Sb	Se	Si
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**497.1**	**50500.**	**252.3**	**976.4**	**502.4**	**733.5**	**727.1**	**4889.**
Stddev	.2	221.	.5	2.3	1.0	.7	5.4	26.
%RSD	.0398	.4369	.2171	.2320	.2068	.0943	.7432	.5381
#1	497.2	50750.	252.5	979.0	503.5	732.9	733.1	4918.
#2	497.3	50330.	252.7	975.4	502.5	733.4	722.6	4868.
#3	496.9	50430.	251.7	974.7	501.4	734.3	725.7	4879.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: CCV Acquired: 5/4/2017 11:34:41 Type: QC
Method: USE(v274) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Instrument ID: Dilution Factor: 1 Method:
Comment:

Elem	Sn	Sr	Ti	Tl	V	Y	Y	Y
Units	ug/L	ug/L	ug/L	ug/L	ug/L	%	%	%
Avg	2503.	514.6	502.0	766.8	493.4	98.94	98.11	37.19
Stddev	11.	7.6	3.2	3.2	4.9	.20	.24	.11
%RSD	.4509	1.473	.6290	.4236	.9896	.1994	.2469	.2938
#1	2516.	523.4	505.5	770.4	498.7	98.71	97.96	37.09
#2	2498.	510.6	499.4	764.2	492.4	99.07	97.99	37.17
#3	2496.	509.9	501.1	765.8	489.0	99.03	98.39	37.31
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	None	None
High Limit								
Low Limit								

Elem	Zn
Units	ug/L
Avg	990.5
Stddev	2.9
%RSD	.2978
#1	993.7
#2	989.7
#3	988.0
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S
Avg	19181.	83326.	31584.
Stddev	38.	206.	93.
%RSD	.19945	.24686	.29383
#1	19137.	83191.	31499.
#2	19208.	83225.	31570.
#3	19199.	83563.	31683.

Sample Name: CCB Acquired: 5/4/2017 11:39:31 Type: QC
Method: USE(v274) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Instrument ID: Dilution Factor: 1 Method:
Comment:

Elem	Ag	Al	As	Au	B	Ba	Be	Ca	Cd
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	.5153	3.201	-.5319	8.056	6.074	.0349	-.0284	.3447	-.0295
Stddev	1.745	6.550	1.646	8.033	.469	.1155	.1429	9.263	.1164
%RSD	338.6	204.7	309.5	99.72	7.722	330.9	503.1	2687.	395.0
#1	2.260	-3.595	-2.363	4.363	6.531	-.0840	.0116	-3.471	-.1039
#2	-1.230	3.724	.8265	2.533	6.098	.1467	-.1870	10.91	.1047
#3	.5154	9.474	-.0598	17.27	5.594	.0420	.0902	-6.401	-.0892
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co	Cr	Cu	Fe	K	Mg	Mn	Mo	Na
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	-.0824	.2305	.0009	-.0850	-65.10	7.358	.0711	.9889	-59.09
Stddev	.2975	.2697	.1122	5.418	87.09	33.86	.1237	.4530	42.15
%RSD	360.8	117.0	13090.	6376.	133.8	460.2	174.0	45.81	71.33
#1	-.3989	.2893	.1304	4.417	-103.9	3.482	.1059	1.503	-17.45
#2	-.0399	.4659	-.0667	1.426	34.65	42.99	-.0663	.6479	-58.10
#3	.1915	-.0638	-.0612	-6.098	-126.0	-24.40	.1736	.8159	-101.7
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Ni	P	Pb	Sb	Se	Si	Sn	Sr	Ti
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	.0689	.1726	-.2734	1.131	.6253	5.681	.3130	-.0435	.1975
Stddev	.0855	1.140	1.057	.512	4.576	6.864	.4764	.0173	.2262
%RSD	124.2	660.4	386.6	45.26	731.9	120.8	152.2	39.73	114.5
#1	.1510	1.459	-.9194	1.714	4.160	6.670	.1979	-.0536	.2833
#2	-.0197	-.2301	-.8473	.7594	2.260	12.00	.8364	-.0235	-.0590
#3	.0752	-.7112	.9464	.9182	-4.544	-1.623	-.0954	-.0533	.3682
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: CCB Acquired: 5/4/2017 11:39:31 Type: QC
Method: USE(v274) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Instrument ID: Dilution Factor: 1 Method:
Comment:

Elem	Tl	V	Y	Y	Y	Zn
Units	ug/L	ug/L	%	%	%	ug/L
Avg	-.2923	.2612	100.0	99.65	37.54	.3186
Stddev	.9551	.3168	.3	.18	.18	.1741
%RSD	326.8	121.3	.3495	.1791	.4887	54.66
#1	.7632	.4514	99.71	99.46	37.57	.1659
#2	-1.097	.4368	99.93	99.68	37.71	.5082
#3	-.5429	-.1046	100.4	99.81	37.35	.2816
Check ?	Chk Pass	Chk Pass	None	None	None	Chk Pass
High Limit						
Low Limit						

Int. Std.	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S
Avg	19389.	84631.	31886.
Stddev	68.	152.	156.
%RSD	.34951	.17905	.48874
#1	19330.	84468.	31911.
#2	19375.	84657.	32027.
#3	19463.	84768.	31719.

Sample Name: CCV Acquired: 5/4/2017 15:30:49 Type: QC
Method: USE(v274) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Instrument ID: Dilution Factor: 1 Method:
Comment:

Elem	Ag	Al	As	Au	B	Ba	Be	Ca
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**245.3**	**5131.**	**494.6**	F **422.5**	**2534.**	**516.5**	**51.93**	**25980.**
Stddev	2.2	38.	3.6	14.5	4.	.8	.35	79.
%RSD	.8799	.7491	.7272	3.439	.1500	.1579	.6801	.3045
#1	243.5	5094.	497.5	405.7	2535.	517.4	52.31	26050.
#2	247.7	5170.	495.8	430.3	2537.	516.4	51.88	25990.
#3	244.8	5129.	490.6	431.4	2529.	515.8	51.61	25890.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				550.0				
Low Limit				450.0				

Elem	Cd	Co	Cr	Cu	Fe	K	Mg	Mn
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**50.41**	**513.1**	**245.7**	**255.5**	**2116.**	**46730.**	**25240.**	**253.5**
Stddev	.10	.4	1.5	1.1	25.	106.	63.	2.0
%RSD	.2006	.0740	.6082	.4356	1.176	.2259	.2507	.7837
#1	50.41	513.3	244.6	254.7	2142.	46620.	25270.	251.6
#2	50.31	513.2	245.1	256.8	2092.	46830.	25270.	255.5
#3	50.51	512.6	247.4	255.1	2115.	46730.	25160.	253.4
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo	Na	Ni	P	Pb	Sb	Se	Si
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**503.3**	**52250.**	**256.2**	**994.4**	**511.9**	**744.5**	**742.8**	**4977.**
Stddev	1.3	110.	.5	1.1	1.3	.6	4.5	27.
%RSD	.2518	.2104	.2123	.1065	.2597	.0860	.6032	.5409
#1	501.9	52320.	256.7	993.5	512.1	743.8	739.9	4968.
#2	504.4	52310.	255.6	995.6	513.2	745.0	740.5	5008.
#3	503.6	52130.	256.4	994.1	510.5	744.6	747.9	4956.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: CCV Acquired: 5/4/2017 15:30:49 Type: QC
Method: USE(v274) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Instrument ID: Dilution Factor: 1 Method:
Comment:

Elem	Sn	Sr	Ti	Tl	V	Y	Y	Y
Units	ug/L	ug/L	ug/L	ug/L	ug/L	%	%	%
Avg	2551.	514.8	512.1	781.5	496.3	98.82	97.61	34.21
Stddev	2.	4.6	4.0	3.0	5.9	.11	.78	.05
%RSD	.0769	.8901	.7725	.3887	1.195	.1154	.8016	.1473
#1	2550.	511.1	509.3	783.9	489.6	98.93	98.43	34.18
#2	2554.	519.9	516.6	782.5	498.8	98.84	96.87	34.17
#3	2550.	513.4	510.3	778.1	500.6	98.70	97.52	34.26
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	None	None
High Limit								
Low Limit								

Elem	Zn
Units	ug/L
Avg	1003.
Stddev	1.
%RSD	.0932
#1	1004.
#2	1004.
#3	1002.
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S
Avg	19159.	82896.	29050.
Stddev	22.	665.	43.
%RSD	.11543	.80164	.14733
#1	19179.	83595.	29027.
#2	19163.	82272.	29023.
#3	19135.	82820.	29099.

Sample Name: CCB Acquired: 5/4/2017 15:35:39 Type: QC
Method: USE(v274) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Instrument ID: Dilution Factor: 1 Method:
Comment:

Elem	Ag	Al	As	Au	B	Ba	Be	Ca	Cd
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**-.2373**	**2.033**	**1.422**	**-.6352**	**3.186**	**.0886**	**.0159**	**4.873**	**.0080**
Stddev	.5668	6.488	2.310	21.36	.481	.0471	.0774	3.993	.0253
%RSD	238.9	319.1	162.4	3362.	15.10	53.17	487.1	81.94	317.7
#1	-.5870	9.295	-1.122	5.001	3.673	.0774	-.0726	8.944	.0169
#2	-.5415	-.0031	2.003	-24.24	3.174	.0481	.0708	.9630	-.0206
#3	.4167	-3.193	3.386	17.34	2.711	.1404	.0494	4.711	.0276
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co	Cr	Cu	Fe	K	Mg	Mn	Mo	Na
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**-.2310**	**.0136**	**.3264**	**6.688**	**-169.2**	**20.29**	**.0428**	**.7079**	**-170.2**
Stddev	.1755	.5441	.3742	2.010	159.0	15.84	.0242	.2260	18.9
%RSD	75.97	3994.	114.6	30.06	93.95	78.03	56.46	31.92	11.12
#1	-.0330	.4729	.0114	5.288	14.32	36.55	.0169	.9541	-163.3
#2	-.2925	.1553	.7400	5.785	-264.0	4.919	.0468	.5100	-155.7
#3	-.3675	-.5873	.2277	8.991	-257.9	19.41	.0647	.6596	-191.6
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Ni	P	Pb	Sb	Se	Si	Sn	Sr	Ti
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**.7666**	**1.275**	**.7328**	**1.150**	**.7451**	**8.269**	**-1.937**	**-.0390**	**.1689**
Stddev	.2166	.998	2.084	2.111	4.513	2.114	.442	.0279	.1271
%RSD	28.25	78.30	284.4	183.6	605.7	25.57	22.84	71.68	75.21
#1	.5181	.8798	.7450	1.506	5.603	10.63	-1.428	-.0423	.2909
#2	.9151	.5344	2.811	3.060	-.0497	6.539	-2.231	-.0651	.0373
#3	.8666	2.410	-1.358	-1.117	-3.318	7.642	-2.151	-.0095	.1786
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: CCB Acquired: 5/4/2017 15:35:39 Type: QC
Method: USE(v274) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Instrument ID: Dilution Factor: 1 Method:
Comment:

Elem	Tl	V	Y	Y	Y	Zn
Units	ug/L	ug/L	%	%	%	ug/L
Avg	**-.9043**	**.7051**	**100.2**	**100.2**	**34.37**	**.8676**
Stddev	2.391	.4435	.5	.8	.18	.2691
%RSD	264.4	62.90	.4668	.8241	.5126	31.02
#1	-.0375	1.162	100.3	99.55	34.18	.8588
#2	.9325	.2769	100.5	101.1	34.53	.6031
#3	-3.608	.6759	99.63	99.98	34.39	1.141
Check ?	Chk Pass	Chk Pass	None	None	None	Chk Pass
High Limit						
Low Limit						

Int. Std.	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S
Avg	**19418.**	**85117.**	**29186.**
Stddev	91.	701.	150.
%RSD	.46676	.82410	.51257
#1	19449.	84543.	29026.
#2	19489.	85899.	29323.
#3	19316.	84908.	29209.

Sample Name: 7016438014_2600x10 Acquired: 5/4/2017 16:21:09 Type: Unk
Method: USE(v274) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Instrument ID: ICP 2 Dilution Factor: 1 Method:
Comment:

Elem	Ag	Al	As	Au	B	Ba	Be	Ca
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**-.0435**	**8.478**	**-2.261**	**30.46**	**9.699**	**120.3**	**-.0866**	**6814.**
Stddev	1.432	6.987	1.972	16.10	1.003	11.9	.0633	856.
%RSD	3290.	82.40	87.20	52.85	10.34	9.882	73.09	12.55
#1	-.3153	13.83	-3.611	48.53	10.84	132.8	-.1386	7733.
#2	-1.321	11.03	.0017	25.21	8.968	119.1	-.1049	6670.
#3	1.505	.5756	-3.174	17.65	9.289	109.1	-.0162	6040.

Elem	Cd	Co	Cr	Cu	Fe	K	Mg	Mn
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**.7728**	**1.517**	**4.182**	**20.53**	**77510.**	**183.3**	**1415.**	**3587.**
Stddev	.1027	.364	.813	.72	9493.	75.2	166.	446.
%RSD	13.29	23.97	19.44	3.532	12.25	41.02	11.74	12.44
#1	.6601	1.864	3.474	19.71	87630.	258.6	1574.	4073.
#2	.7974	1.549	5.070	21.09	76090.	183.0	1429.	3489.
#3	.8610	1.139	4.001	20.78	68800.	108.3	1243.	3198.

Elem	Mo	Na	Ni	P	Pb	Sb	Se	Si
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**.5597**	**1152.**	**2.868**	**830.1**	**2.271**	**-5.335**	**-2.712**	**3672.**
Stddev	.2200	138.	.365	76.7	1.035	.488	4.407	417.
%RSD	39.31	11.99	12.74	9.237	45.55	9.139	162.5	11.35
#1	.4970	1300.	3.229	910.6	2.947	-4.894	-7.605	4121.
#2	.3778	1129.	2.499	822.0	1.080	-5.253	.9453	3597.
#3	.8043	1026.	2.877	757.8	2.787	-5.858	-1.477	3297.

Elem	Sn	Sr	Ti	Tl	V	Y	Y	Y
Units	ug/L	ug/L	ug/L	ug/L	ug/L	%	%	%
Avg	**.7149**	**37.46**	**1.014**	**4.380**	**.0555**	**99.10**	**101.5**	**35.14**
Stddev	.9509	4.37	.086	1.653	.4309	.28	.8	.13
%RSD	133.0	11.66	8.435	37.74	776.5	.2821	.7496	.3699
#1	1.439	42.22	.9164	5.376	-.0642	99.16	100.7	35.08
#2	1.068	36.52	1.047	2.472	-.3029	99.34	102.0	35.05
#3	-.3621	33.64	1.077	5.292	.5336	98.79	102.0	35.29

Sample Name: 7016438014_2600x10 Acquired: 5/4/2017 16:21:09 Type: Unk
Method: USE(v274) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Instrument ID: ICP 2 Dilution Factor: 1 Method:
Comment:

Elem	Zn
Units	ug/L
Avg	6.210
Stddev	.287
%RSD	4.619
#1	6.466
#2	6.263
#3	5.900

Int. Std.	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S
Avg	19213.	86242.	29842.
Stddev	54.	647.	110.
%RSD	.28206	.74964	.36990
#1	19225.	85496.	29791.
#2	19260.	86624.	29766.
#3	19153.	86607.	29968.

Sample Name: 103463_2600x10 Acquired: 5/4/2017 16:26:09 Type: Unk
Method: USE(v274) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Instrument ID: ICP 2 Dilution Factor: 1 Method:
Comment:

Elem	Ag	Al	As	Au	B	Ba	Be	Ca
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**-.4349**	**3.822**	**-2.621**	**45.84**	**8.814**	**128.1**	**-.0389**	**7332.**
Stddev	.5312	2.453	2.844	8.34	1.520	17.0	.0320	1074.
%RSD	122.1	64.18	108.5	18.19	17.25	13.24	82.22	14.65
#1	-.3864	6.056	-.7908	47.80	10.57	145.6	-.0752	8456.
#2	.0703	4.212	-5.897	36.69	8.025	126.7	-.0146	7224.
#3	-.9886	1.197	-1.175	53.02	7.850	111.8	-.0270	6316.

Elem	Cd	Co	Cr	Cu	Fe	K	Mg	Mn
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**.7703**	**1.514**	**3.626**	**20.79**	**83450.**	**446.1**	**1489.**	**3890.**
Stddev	.0768	.520	.324	1.85	12100.	119.3	261.	590.
%RSD	9.966	34.33	8.937	8.884	14.50	26.75	17.52	15.18
#1	.8025	1.757	3.323	22.64	96120.	540.9	1773.	4511.
#2	.8257	1.867	3.585	20.78	82240.	485.2	1436.	3824.
#3	.6827	.9168	3.968	18.94	72010.	312.1	1259.	3335.

Elem	Mo	Na	Ni	P	Pb	Sb	Se	Si
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**.5331**	**1246.**	**3.076**	**880.6**	**3.500**	**-3.005**	**1.233**	**3965.**
Stddev	.1977	194.	.590	117.5	1.254	1.405	3.620	529.
%RSD	37.09	15.58	19.17	13.35	35.82	46.75	293.6	13.33
#1	.6828	1458.	3.371	1004.	4.937	-4.615	-2.935	4506.
#2	.6075	1202.	3.459	869.0	2.624	-2.373	3.036	3938.
#3	.3089	1077.	2.397	769.4	2.940	-2.027	3.598	3450.

Elem	Sn	Sr	Ti	Tl	V	Y	Y	Y
Units	ug/L	ug/L	ug/L	ug/L	ug/L	%	%	%
Avg	**.4847**	**40.15**	**.9981**	**3.635**	**-.4331**	**98.90**	**101.3**	**35.23**
Stddev	.6101	5.45	.2408	1.328	.7103	.31	.2	.24
%RSD	125.9	13.58	24.13	36.52	164.0	.3088	.1486	.6687
#1	.6413	45.90	1.272	5.134	-.6562	98.60	101.4	35.12
#2	-.1884	39.49	.9022	2.607	-1.005	98.90	101.5	35.06
#3	1.001	35.05	.8200	3.165	.3619	99.21	101.2	35.50

Sample Name: 103463_2600x10 Acquired: 5/4/2017 16:26:09 Type: Unk
Method: USE(v274) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Instrument ID: ICP 2 Dilution Factor: 1 Method:
Comment:

Elem	Zn
Units	ug/L
Avg	6.362
Stddev	.710
%RSD	11.17
#1	7.089
#2	6.328
#3	5.669

Int. Std.	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S
Avg	19174.	86073.	29918.
Stddev	59.	128.	200.
%RSD	.30879	.14864	.66875
#1	19115.	86107.	29829.
#2	19173.	86181.	29777.
#3	19234.	85932.	30147.

Sample Name: CCV Acquired: 5/4/2017 16:31:11 Type: QC
Method: USE(v274) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Instrument ID: Dilution Factor: 1 Method:
Comment:

Elem	Ag	Al	As	Au	B	Ba	Be	Ca
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**241.2**	**5039.**	**508.0**	F **421.6**	**2544.**	**513.0**	**51.09**	**25450.**
Stddev	.5	33.	2.2	10.6	.	.7	.24	75.
%RSD	.2132	.6539	.4289	2.506	.0145	.1390	.4609	.2953
#1	241.5	5022.	508.1	433.2	2544.	513.7	51.16	25480.
#2	241.6	5077.	510.2	412.7	2544.	512.8	50.83	25370.
#3	240.6	5018.	505.9	418.8	2544.	512.3	51.28	25510.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				550.0				
Low Limit				450.0				

Elem	Cd	Co	Cr	Cu	Fe	K	Mg	Mn
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**52.00**	**514.1**	**265.2**	**252.6**	**2097.**	**47240.**	**25060.**	**252.0**
Stddev	.15	.5	1.0	1.5	12.	296.	60.	2.1
%RSD	.2826	.0933	.3779	.6025	.5895	.6261	.2400	.8278
#1	52.16	514.6	265.5	251.0	2087.	47260.	25120.	251.0
#2	51.96	514.2	266.0	254.0	2093.	46930.	25000.	254.4
#3	51.87	513.6	264.1	252.9	2110.	47520.	25050.	250.6
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo	Na	Ni	P	Pb	Sb	Se	Si
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**510.1**	**52760.**	**260.2**	**1018.**	**516.4**	**770.5**	**802.9**	**5352.**
Stddev	.8	234.	.8	5.	.6	3.1	3.5	66.
%RSD	.1548	.4432	.2927	.5228	.1161	.4064	.4300	1.239
#1	510.0	53030.	260.6	1017.	516.9	773.6	806.9	5316.
#2	510.9	52600.	260.6	1023.	515.8	770.7	801.6	5428.
#3	509.3	52650.	259.3	1013.	516.6	767.3	800.4	5311.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: CCV Acquired: 5/4/2017 16:31:11 Type: QC
Method: USE(v274) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Instrument ID: Dilution Factor: 1 Method:
Comment:

Elem	Sn	Sr	Ti	Tl	V	Y	Y	Y
Units	ug/L	ug/L	ug/L	ug/L	ug/L	%	%	%
Avg	2591.	511.7	500.1	781.1	497.1	99.38	100.5	35.24
Stddev	7.	3.5	4.4	.3	1.0	.52	.5	.11
%RSD	.2522	.6855	.8834	.0365	.2036	.5218	.5304	.3095
#1	2591.	507.7	497.4	781.4	496.7	98.81	100.5	35.19
#2	2597.	514.4	505.2	780.9	498.2	99.48	100.00	35.17
#3	2584.	513.0	497.6	781.1	496.3	99.83	101.1	35.37
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	None	None
High Limit								
Low Limit								

Elem	Zn
Units	ug/L
Avg	1018.
Stddev	3.
%RSD	.2903
#1	1020.
#2	1019.
#3	1015.
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S
Avg	19266.	85380.	29931.
Stddev	101.	453.	93.
%RSD	.52179	.53040	.30954
#1	19157.	85381.	29888.
#2	19288.	84926.	29869.
#3	19355.	85832.	30038.

Sample Name: CCB Acquired: 5/4/2017 16:36:01 Type: QC
Method: USE(v274) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Instrument ID: Dilution Factor: 1 Method:
Comment:

Elem	Ag	Al	As	Au	B	Ba	Be	Ca	Cd
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**-.8825**	**-5.285**	**-2.266**	**8.522**	**6.599**	**.0845**	**-.0812**	**-8.449**	**-.0298**
Stddev	.5164	4.247	1.167	16.55	.665	.0582	.2123	5.256	.0697
%RSD	58.52	80.37	51.49	194.2	10.08	68.89	261.4	62.21	234.3
#1	-1.467	-9.714	-2.441	-9.639	7.178	.1088	-.3263	-10.48	.0187
#2	-.6908	-1.247	-3.336	12.45	5.872	.0181	.0430	-2.480	.0017
#3	-.4893	-4.893	-1.022	22.75	6.747	.1266	.0397	-12.39	-.1097
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co	Cr	Cu	Fe	K	Mg	Mn	Mo	Na
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**-.2832**	**.1541**	**-.1251**	**5.286**	**18.41**	**36.28**	**.0304**	**.4687**	**-72.10**
Stddev	.2536	.5259	1.011	.246	102.3	60.96	.0735	.1846	18.54
%RSD	89.54	341.3	808.1	4.644	555.6	168.0	241.5	39.38	25.71
#1	-.2785	.2916	.5664	5.092	92.28	7.138	-.0169	.6783	-85.49
#2	-.5391	-.4269	-1.285	5.562	61.28	-4.643	-.0069	.3306	-79.86
#3	-.0320	.5975	.3435	5.205	-98.34	106.3	.1150	.3971	-50.94
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Ni	P	Pb	Sb	Se	Si	Sn	Sr	Ti
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**.5341**	**.2752**	**.2266**	**-1.308**	**2.173**	**15.36**	**-1.351**	**-.0639**	**.2827**
Stddev	.6623	.4969	.7889	.562	2.425	3.38	.171	.0189	.1337
%RSD	124.0	180.5	348.2	42.95	111.6	22.02	12.69	29.53	47.28
#1	.5402	-.1461	1.135	-.6594	.6283	15.48	-1.539	-.0782	.1915
#2	-.1312	.1486	-.1686	-1.648	4.968	18.67	-1.308	-.0425	.2205
#3	1.193	.8232	-.2867	-1.616	.9221	11.92	-1.204	-.0709	.4361
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: CCB Acquired: 5/4/2017 16:36:01 Type: QC
Method: USE(v274) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Instrument ID: Dilution Factor: 1 Method:
Comment:

Elem	Tl	V	Y	Y	Y	Zn
Units	ug/L	ug/L	%	%	%	ug/L
Avg	-.5623	.7463	102.0	102.0	35.23	-.0924
Stddev	1.116	.4711	.1	.5	.11	.1632
%RSD	198.6	63.13	.0630	.4691	.3181	176.7
#1	-1.763	.3837	102.0	102.5	35.36	-.0633
#2	-.3684	1.279	101.9	102.1	35.18	.0543
#3	.4445	.5764	101.9	101.5	35.16	-.2682
Check ?	Chk Pass	Chk Pass	None	None	None	Chk Pass
High Limit						
Low Limit						

Int. Std.	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S
Avg	19770.	86632.	29921.
Stddev	12.	406.	95.
%RSD	.06302	.46910	.31807
#1	19785.	87013.	30030.
#2	19762.	86678.	29875.
#3	19765.	86204.	29857.

Sample Name: 103464_2600x10 Acquired: 5/4/2017 16:41:02 Type: Unk
Method: USE(v274) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Instrument ID: ICP 2 Dilution Factor: 1 Method:
Comment:

Elem	Ag	Al	As	Au	B	Ba	Be
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	F 45.30	F 683.9	F 56.05	F 83.43	F 303.0	182.7	F 6.624
Stddev	5.12	75.1	7.21	25.48	33.8	20.8	1.153
%RSD	11.30	10.99	12.86	30.54	11.16	11.41	17.40
#1	49.43	763.6	63.66	88.26	339.2	205.1	7.890
#2	46.91	673.6	55.16	106.1	297.4	179.1	6.349
#3	39.57	614.4	49.32	55.88	272.3	163.9	5.634

Elem	Ca	Cd	Co	Cr	Cu	Fe	K
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	F 10180.	F 6.348	62.48	F 37.80	F 41.33	F 82680.	5705.
Stddev	1467.	.497	7.08	2.71	2.89	11950.	837.
%RSD	14.41	7.826	11.33	7.181	7.002	14.46	14.67
#1	11740.	6.914	70.22	40.93	44.15	95110.	6613.
#2	9974.	6.145	60.88	36.06	41.47	81640.	5536.
#3	8833.	5.984	56.33	36.41	38.37	71280.	4965.

Elem	Mg	Mn	Mo	Na	Ni	P	Pb
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	F 4510.	F 3774.	F 57.88	F 7694.	32.74	F 942.4	F 62.71
Stddev	681.	492.	6.62	1061.	4.00	105.0	6.65
%RSD	15.10	13.04	11.44	13.80	12.21	11.15	10.60
#1	5235.	4287.	64.96	8833.	36.98	1055.	69.59
#2	4411.	3728.	56.87	7518.	32.20	924.7	62.23
#3	3884.	3306.	51.83	6732.	29.04	847.4	56.32

Elem	Sb	Se	Si	Sn	Sr	Ti	Tl
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	F 83.47	F 83.38	F 4328.	F 296.2	F 99.58	63.64	F 96.18
Stddev	9.73	11.44	495.	33.8	11.57	7.31	10.52
%RSD	11.66	13.72	11.43	11.39	11.61	11.49	10.94
#1	93.96	95.75	4834.	332.7	111.8	71.17	107.2
#2	81.72	81.21	4304.	289.8	98.07	63.17	95.02
#3	74.74	73.19	3845.	266.2	88.84	56.57	86.29

Sample Name: 103464_2600x10 Acquired: 5/4/2017 16:41:02 Type: Unk
Method: USE(v274) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Instrument ID: ICP 2 Dilution Factor: 1 Method:
Comment:

Elem	V	Y	Y	Y	Zn
Units	ug/L	%	%	%	ug/L
Avg	**60.03**	**101.6**	**101.0**	**34.75**	F **122.3**
Stddev	6.62	.1	.9	.01	14.1
%RSD	11.03	.1306	.8680	.0240	11.48
#1	67.37	101.7	102.0	34.76	137.4
#2	58.23	101.6	100.4	34.75	120.0
#3	54.50	101.4	100.7	34.74	109.6

Int. Std.	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S
Avg	**19693.**	**85809.**	**29512.**
Stddev	26.	745.	7.
%RSD	.13060	.86804	.02398
#1	19715.	86649.	29518.
#2	19700.	85228.	29512.
#3	19664.	85551.	29504.

Sample Name: ICSA Acquired: 5/4/2017 16:50:52 Type: QC
Method: USE(v274) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Instrument ID: Dilution Factor: 1 Method:
Comment:

Elem	Ag	Al	As	Au	B	Ba	Be
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	1.872	513900.	-12.28	122.4	-2.008	-2.738	.1355
Stddev	1.031	3034.	4.21	11.8	.863	.469	.0745
%RSD	55.04	.5905	34.23	9.679	42.97	17.14	55.02
#1	2.775	517300.	-16.42	130.2	-2.280	-3.137	.0747
#2	2.092	512700.	-12.41	108.7	-1.042	-2.855	.1131
#3	.7497	511600.	-8.018	128.2	-2.702	-2.221	.2187
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Ca	Cd	Co	Cr	Cu	Fe	K
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	514400.	3.344	2.689	F 32.73	19.52	207600.	-131.7
Stddev	1943.	.135	.280	1.94	1.72	2227.	120.8
%RSD	.3777	4.029	10.41	5.929	8.801	1.073	91.79
#1	515300.	3.347	3.011	31.32	21.42	208700.	-136.0
#2	515600.	3.207	2.555	31.92	19.06	209000.	-8.712
#3	512100.	3.477	2.501	34.94	18.07	205000.	-250.3
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit				20.00			
Low Limit				-20.00			

Elem	Mg	Mn	Mo	Na	Ni	P	Pb
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	509800.	-6.169	-1.307	-27.52	4.807	19.34	F -12.14
Stddev	1127.	.043	.509	39.98	.528	2.14	.55
%RSD	.2210	.6954	38.93	145.3	10.99	11.07	4.543
#1	511100.	-6.190	-1.816	-4.411	5.367	21.31	-12.50
#2	509000.	-6.198	-1.304	-4.468	4.736	17.06	-11.50
#3	509400.	-6.120	-.7991	-73.69	4.318	19.65	-12.41
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit							10.00
Low Limit							-10.00

Sample Name: ICSA Acquired: 5/4/2017 16:50:52 Type: QC
Method: USE(v274) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Instrument ID: Dilution Factor: 1 Method:
Comment:

Elem	Sb	Se	Si	Sn	Sr	Ti	Tl
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**-10.08**	**-1.615**	**6.794**	**-14.36**	**3.805**	**-8.443**	**.5237**
Stddev	3.25	2.957	2.869	.50	.037	.373	2.553
%RSD	32.28	183.1	42.22	3.504	.9854	4.414	487.4
#1	-6.992	1.797	4.345	-14.94	3.843	-8.729	2.110
#2	-9.764	-3.426	9.950	-14.03	3.768	-8.022	-2.421
#3	-13.47	-3.217	6.087	-14.12	3.803	-8.579	1.882
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	V	Y	Y	Y	Zn
Units	ug/L	%	%	%	ug/L
Avg	**-4.122**	**94.03**	**92.04**	**33.07**	**15.72**
Stddev	.443	.13	.17	.15	.04
%RSD	10.75	.1384	.1836	.4650	.2589
#1	-3.642	94.18	92.00	33.20	15.73
#2	-4.208	93.95	91.89	32.90	15.68
#3	-4.515	93.97	92.22	33.11	15.76
Check ?	Chk Pass	None	None	None	Chk Pass
High Limit					
Low Limit					

Int. Std.	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S
Avg	**18230.**	**78164.**	**28086.**
Stddev	25.	144.	131.
%RSD	.13844	.18362	.46500
#1	18260.	78133.	28198.
#2	18214.	78038.	27943.
#3	18217.	78320.	28116.

Sample Name: ICSAB Acquired: 5/4/2017 16:55:51 Type: QC
Method: USE(v274) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Instrument ID: Dilution Factor: 1 Method:
Comment:

Elem	Ag	Al	As	Au	B	Ba	Be
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**429.4**	**514400.**	**186.6**	**988.3**	**1009.**	**1018.**	**1024.**
Stddev	.5	4250.	3.9	10.5	4.	2.	3.
%RSD	.1209	.8263	2.084	1.067	.4393	.1916	.3286
#1	429.2	519300.	187.5	999.3	1013.	1020.	1028.
#2	429.9	512300.	190.0	987.2	1011.	1018.	1023.
#3	428.9	511600.	182.4	978.3	1004.	1016.	1022.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Ca	Cd	Co	Cr	Cu	Fe	K
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**507700.**	**1928.**	**979.2**	**997.8**	**1010.**	**203900.**	**-245.8**
Stddev	1598.	3.	2.3	2.2	2.	909.	55.4
%RSD	.3147	.1349	.2304	.2221	.2013	.4457	22.55
#1	509300.	1931.	980.8	998.0	1012.	204800.	-218.0
#2	507600.	1927.	980.1	999.9	1011.	203800.	-209.7
#3	506100.	1926.	976.6	995.5	1008.	203000.	-309.6
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mg	Mn	Mo	Na	Ni	P	Pb
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**504600.**	**1017.**	**981.2**	**-131.6**	**1935.**	**512.0**	**80.46**
Stddev	693.	5.	.2	22.8	3.	.8	.42
%RSD	.1373	.4895	.0248	17.34	.1557	.1568	.5227
#1	505200.	1020.	981.2	-127.3	1936.	511.6	80.38
#2	504800.	1020.	980.9	-156.3	1938.	511.5	80.09
#3	503800.	1011.	981.4	-111.2	1932.	512.9	80.92
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: ICSAB Acquired: 5/4/2017 16:55:51 Type: QC
Method: USE(v274) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Instrument ID: Dilution Factor: 1 Method:
Comment:

Elem	Sb	Se	Si	Sn	Sr	Ti	Tl
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	1191.	95.05	1001.	954.3	1043.	1026.	182.8
Stddev	4.	7.45	10.	5.5	1.	7.	2.8
%RSD	.3161	7.840	1.013	.5713	.1227	.6515	1.558
#1	1191.	93.92	1010.	960.5	1044.	1030.	186.0
#2	1195.	88.23	1004.	952.3	1042.	1029.	180.7
#3	1187.	103.0	990.0	950.1	1044.	1018.	181.6
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	V	Y	Y	Y	Zn
Units	ug/L	%	%	%	ug/L
Avg	983.5	93.28	91.29	33.04	2031.
Stddev	1.7	.24	.10	.06	3.
%RSD	.1714	.2574	.1116	.1885	.1477
#1	983.1	93.50	91.38	33.03	2034.
#2	982.1	93.30	91.18	32.98	2032.
#3	985.4	93.03	91.31	33.11	2028.
Check ?	Chk Pass	None	None	None	Chk Pass
High Limit					
Low Limit					

Int. Std.	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S
Avg	18084.	77528.	28061.
Stddev	47.	87.	53.
%RSD	.25737	.11158	.18855
#1	18128.	77605.	28055.
#2	18089.	77434.	28012.
#3	18035.	77544.	28117.

Sample Name: CCV Acquired: 5/4/2017 17:00:53 Type: QC
Method: USE(v274) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Instrument ID: Dilution Factor: 1 Method:
Comment:

Elem	Ag	Al	As	Au	B	Ba	Be	Ca
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**246.6**	**5131.**	**496.1**	F **449.2**	**2514.**	**514.7**	**50.89**	**25680.**
Stddev	2.4	70.	3.9	22.2	.	.7	.21	106.
%RSD	.9598	1.354	.7959	4.949	.0154	.1284	.4197	.4144
#1	246.2	5153.	493.5	447.9	2514.	515.4	51.12	25750.
#2	249.1	5187.	494.2	427.6	2514.	514.4	50.85	25730.
#3	244.4	5053.	500.6	472.0	2513.	514.1	50.70	25560.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				550.0				
Low Limit				450.0				

Elem	Cd	Co	Cr	Cu	Fe	K	Mg	Mn
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**50.98**	**512.3**	**254.2**	**254.1**	**2057.**	**46500.**	**25240.**	**252.6**
Stddev	.17	.9	1.2	3.7	9.	49.	55.	2.7
%RSD	.3244	.1853	.4600	1.460	.4434	.1063	.2174	1.054
#1	51.14	513.3	253.8	255.5	2068.	46500.	25300.	252.8
#2	50.99	512.2	253.3	256.8	2051.	46550.	25200.	255.2
#3	50.81	511.5	255.5	249.8	2053.	46450.	25210.	249.8
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo	Na	Ni	P	Pb	Sb	Se	Si
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**505.2**	**52920.**	**257.2**	**1000.**	**513.0**	**747.3**	**763.1**	**4919.**
Stddev	.9	115.	.4	5.	1.1	1.0	3.6	69.
%RSD	.1771	.2164	.1695	.5182	.2150	.1322	.4769	1.406
#1	504.8	53040.	257.4	1006.	514.1	746.6	765.1	4939.
#2	506.2	52810.	257.6	997.6	511.9	748.5	765.4	4976.
#3	504.6	52920.	256.7	996.9	513.0	746.9	758.9	4842.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: CCV Acquired: 5/4/2017 17:00:53 Type: QC
Method: USE(v274) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Instrument ID: Dilution Factor: 1 Method:
Comment:

Elem	Sn	Sr	Ti	Tl	V	Y	Y	Y
Units	ug/L	ug/L	ug/L	ug/L	ug/L	%	%	%
Avg	2566.	517.9	505.3	776.7	501.0	98.79	98.56	34.05
Stddev	5.	4.2	7.6	4.7	7.1	.15	1.17	.06
%RSD	.1987	.8066	1.511	.6096	1.425	.1507	1.185	.1805
#1	2568.	514.6	506.3	780.8	498.8	98.86	98.51	34.12
#2	2569.	522.6	512.3	771.5	509.0	98.88	97.42	34.01
#3	2560.	516.6	497.2	777.8	495.2	98.62	99.76	34.02
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	None	None
High Limit								
Low Limit								

Elem	Zn
Units	ug/L
Avg	1003.
Stddev	2.
%RSD	.2005
#1	1006.
#2	1003.
#3	1002.
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S
Avg	19152.	83706.	28915.
Stddev	29.	992.	52.
%RSD	.15070	1.1848	.18047
#1	19167.	83659.	28975.
#2	19171.	82739.	28880.
#3	19119.	84721.	28889.

Sample Name: CCB Acquired: 5/4/2017 17:05:44 Type: QC
Method: USE(v274) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Instrument ID: Dilution Factor: 1 Method:
Comment:

Elem	Ag	Al	As	Au	B	Ba	Be	Ca	Cd
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**-.0148**	**1.714**	**-.6404**	**6.965**	**4.154**	**.0663**	**-.0540**	**1.256**	**.0193**
Stddev	1.834	4.225	4.306	17.05	.729	.0257	.2179	4.377	.0200
%RSD	12390.	246.5	672.5	244.8	17.55	38.70	403.2	348.5	103.6
#1	-1.627	4.837	-4.179	-9.500	4.695	.0946	.1880	4.097	.0114
#2	-.3974	3.399	-1.896	5.844	4.441	.0596	-.1157	-3.785	.0045
#3	1.980	-3.094	4.154	24.55	3.325	.0446	-.2345	3.455	.0420
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co	Cr	Cu	Fe	K	Mg	Mn	Mo	Na
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**-.0356**	**-.2466**	**.0879**	**5.239**	**-5.767**	**29.86**	**.0967**	**.8064**	**-179.1**
Stddev	.1185	.0892	.2476	2.994	132.9	29.77	.0122	.4479	15.5
%RSD	332.7	36.16	281.5	57.15	2305.	99.69	12.58	55.55	8.655
#1	-.1725	-.2311	-.1975	1.980	-120.2	61.24	.1106	1.276	-196.3
#2	.0313	-.3425	.2446	7.869	-37.22	2.013	.0880	.7584	-174.7
#3	.0343	-.1662	.2167	5.869	140.1	26.33	.0916	.3843	-166.2
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Ni	P	Pb	Sb	Se	Si	Sn	Sr	Ti
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**.2515**	**.2618**	**-.3002**	**.7121**	**-1.963**	**7.031**	**-.8895**	**-.0450**	**.2675**
Stddev	.2658	.2160	1.111	.9109	2.859	1.728	.0657	.0066	.1199
%RSD	105.7	82.51	370.2	127.9	145.6	24.58	7.385	14.66	44.82
#1	.1613	.0275	.9336	1.735	.6503	8.963	-.9634	-.0438	.1307
#2	.5507	.4530	-.6113	.4136	-5.016	5.631	-.8677	-.0522	.3178
#3	.0426	.3048	-1.223	-.0121	-1.523	6.499	-.8375	-.0392	.3541
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: CCB Acquired: 5/4/2017 17:05:44 Type: QC
Method: USE(v274) Mode: CONC Corr. Factor: 1.000000
User: andrew schmadtke Instrument ID: Dilution Factor: 1 Method:
Comment:

Elem	Tl	V	Y	Y	Y	Zn
Units	ug/L	ug/L	%	%	%	ug/L
Avg	**-1.818**	**.7811**	**99.59**	**100.8**	**33.90**	**.6092**
Stddev	1.376	.3116	.22	.5	.61	.1708
%RSD	75.68	39.89	.2164	.5206	1.797	28.03
#1	-1.659	.7815	99.77	100.2	33.20	.7416
#2	-.5286	.4693	99.35	101.1	34.23	.4165
#3	-3.267	1.093	99.66	101.1	34.28	.6697
Check ?	Chk Pass	Chk Pass	None	None	None	Chk Pass
High Limit						
Low Limit						

Int. Std.	Y	Y	Y
Units	Cts/S	Cts/S	Cts/S
Avg	**19309.**	**85618.**	**28794.**
Stddev	42.	446.	517.
%RSD	.21641	.52060	1.7970
#1	19343.	85103.	28197.
#2	19262.	85864.	29067.
#3	19322.	85886.	29117.

Prep Log Report

Batch Information: MPRP-2063

Template Version: F-LI-I-016-Rev.00 (01Oct2016)

Prep Method	EPA 3005A	Analysis Method	EPA 6010C	Extracted By	JLN	Extracted Date/Time	04/25/2017 10:52:23:562
Block ID	HB002	Thermometer ID	TH016	Block Temp (C)	98.00	Correction Factor (C)	1
Corrected Temp. (C)	99.00	Digestion Start Time	04/25/2017 11:52:28:386	Digestion End Time	04/25/2017 15:52:32:762	Block End Temp (C)	98
Corrected End Temp. (C)	99.00	Digestion Vessel	3215	Metals Pipette 1	MEP011	Metals Pipette 2	
Metals Pipette 3		Metals Pipette 4		Bottle Disp. 1	MED001	Bottle Disp. 2	MED005
Reviewed By		Reviewed By Date		Batch Notes			

Sample Information:

QC Rule	Sample Type	Lab Sample ID	Matrix	pH < 2	Initial Volume (mL)	Conc. HNO3 (mL)	Conc. HCL (mL)	Final Volume (mL)	Container ID	Sample Notes	ICP-SPK (mL)
6010 W_P	BLANK	**103457**	Water	Yes	50	9418 (1)	9416 (2.5)	50			
6010 W_P	LCS	**103458**	Water	Yes	50	9418 (1)	9416 (2.5)	50			11533 (1)
6010 W_P	PS	**7016360001**	Water	Yes	50	9418 (1)	9416 (2.5)	50			
6010 W_P	PS	**7016360002**	Water	Yes	50	9418 (1)	9416 (2.5)	50			
6010 W_P	PS	**7016368001**	Water	Yes	50	9418 (1)	9416 (2.5)	50			
6010 W_P	RQS	**7016368002**	Water	Yes	50	9418 (1)	9416 (2.5)	50			
6010 W_P	DUP	**103459**	Water	Yes	50	9418 (1)	9416 (2.5)	50			
6010 W_P	MS	**103460**	Water	Yes	50	9418 (1)	9416 (2.5)	50			11533 (1)
6010 W_P	PS	**7016368003**	Water	Yes	50	9418 (1)	9416 (2.5)	50			
6010 W_P	PS	**7016368004**	Water	Yes	50	9418 (1)	9416 (2.5)	50			
6010 W_P	PS	**7016368005**	Water	Yes	50	9418 (1)	9416 (2.5)	50			
6010 W_P	PS	**7016368006**	Water	Yes	50	9418 (1)	9416 (2.5)	50			
6010 W_P	PS	**7016368007**	Water	Yes	50	9418 (1)	9416 (2.5)	50			
6010 W_P	PS	**7016368008**	Water	Yes	50	9418 (1)	9416 (2.5)	50			
6010 W_P	PS	**7016438001**	Water	Yes	50	9418 (1)	9416 (2.5)	50			
6010 W_P	PS	**7016438002**	Water	Yes	50	9418 (1)	9416 (2.5)	50			
6010 W_P	PS	**7016438003**	Water	Yes	50	9418 (1)	9416 (2.5)	50			
6010 W_P	PS	**7016438005**	Water	Yes	50	9418 (1)	9416 (2.5)	50			
6010 W_P	PS	**7016438006**	Water	Yes	50	9418 (1)	9416 (2.5)	50			
6010 W_P	PS	**7016438007**	Water	Yes	50	9418 (1)	9416 (2.5)	50			

Prep Log Report

QC Rule	Sample Type	Lab Sample ID	Matrix	pH < 2	Initial Volume (mL)	Conc. HNO3 (mL)	Conc. HCL (mL)	Final Volume (mL)	Container ID	Sample Notes	ICP-SPK (mL)
6010 W_P	PS	**7016438008**	Water	Yes	50	9418 (1)	9416 (2.5)	50			
6010 W_P	PS	**7016438009**	Water	Yes	50	9418 (1)	9416 (2.5)	50			
6010 W_P	PS	**7016438010**	Water	Yes	50	9418 (1)	9416 (2.5)	50			
6010 W_P	PS	**7016438011**	Water	Yes	50	9418 (1)	9416 (2.5)	50			

Standard Notes:

11533: ICP-SPK

Prep Log Report

Batch Information: MPRP-2064

Template Version: F-LI-I-016-Rev.00 (01Oct2016)

Prep Method	EPA 3005A	Analysis Method	EPA 6010C	Extracted By	JLN	Extracted Date/Time	04/25/2017 10:53:19:592
Block ID	HB002	Thermometer ID	TH016	Block Temp (C)	98.00	Correction Factor (C)	1
Corrected Temp. (C)	99.00	Digestion Start Time	04/25/2017 11:53:25:448	Digestion End Time	04/25/2017 15:53:27:390	Block End Temp (C)	98
Corrected End Temp. (C)	99.00	Digestion Vessel	3215	Metals Pipette 1	MEP011	Metals Pipette 2	
Metals Pipette 3		Metals Pipette 4		Bottle Disp. 1	MED001	Bottle Disp. 2	MED005
Reviewed By		Reviewed By Date		Batch Notes			

Sample Information:

QC Rule	Sample Type	Lab Sample ID	Matrix	pH < 2	Initial Volume (mL)	Conc. HNO3 (mL)	Conc. HCL (mL)	Final Volume (mL)	Container ID	Sample Notes	ICP-SPK (mL)
6010 W_P	BLANK	**103461**	Water	Yes	50	9418 (1)	9416 (2.5)	50			
6010 W_P	LCS	**103462**	Water	Yes	50	9418 (1)	9416 (2.5)	50			11533 (1)
6010 W_P	PS	**7016438014**	Water	Yes	50	9418 (1)	9416 (2.5)	50			
6010 W_P	DUP	**103463**	Water	Yes	50	9418 (1)	9416 (2.5)	50			
6010 W_P	MS	**103464**	Water	Yes	50	9418 (1)	9416 (2.5)	50			11533 (1)

Standard Notes:

11533: ICP-SPK

Prep Log Report

Batch Information: MPRP-2076

Template Version: F-LI-I-016-Rev.00 (01Oct2016)

Prep Method	EPA 3005A	Analysis Method	EPA 6010C	Extracted By	JLN	Extracted Date/Time	04/26/2017 10:18:41:273
Block ID	HB002	Thermometer ID	TH016	Block Temp (C)	98.00	Correction Factor (C)	1
Corrected Temp. (C)	99.00	Digestion Start Time	04/26/2017 11:18:48:185	Digestion End Time	04/26/2017 15:18:51:736	Block End Temp (C)	98
Corrected End Temp. (C)	99.00	Digestion Vessel	3215	Metals Pipette 1	MEP011	Metals Pipette 2	
Metals Pipette 3		Metals Pipette 4		Bottle Disp. 1	MED001	Bottle Disp. 2	MED005
Reviewed By		Reviewed By Date		Batch Notes			

Sample Information:

QC Rule	Sample Type	Lab Sample ID	Matrix	pH < 2	Initial Volume (mL)	Conc. HNO3 (mL)	Conc. HCL (mL)	Final Volume (mL)	Container ID	Sample Notes	ICP-SPK (mL)
6010 W_P	BLANK	**103951**	Water	Yes	50	9418 (1)	9416 (2.5)	50			
6010 W_P	LCS	**103952**	Water	Yes	50	9418 (1)	9416 (2.5)	50			11533 (1)
6010 W_P	PS	**7016541001**	Water	Yes	50	9418 (1)	9416 (2.5)	50			
6010 W_P	PS	**7016541002**	Water	Yes	50	9418 (1)	9416 (2.5)	50			
6010 W_P	PS	**7016438015**	Water	Yes	50	9418 (1)	9416 (2.5)	50			
6010 W_P	PS	**7016438016**	Water	Yes	50	9418 (1)	9416 (2.5)	50			
6010 W_P	RQS	**7016438017**	Water	Yes	50	9418 (1)	9416 (2.5)	50			
6010 W_P	DUP	**103953**	Water	Yes	50	9418 (1)	9416 (2.5)	50			
6010 W_P	MS	**103954**	Water	Yes	50	9418 (1)	9416 (2.5)	50			11533 (1)
6010 W_P	PS	**7016438018**	Water	Yes	50	9418 (1)	9416 (2.5)	50			
6010 W_P	PS	**7016438019**	Water	Yes	50	9418 (1)	9416 (2.5)	50			
6010 W_P	PS	**7016438020**	Water	Yes	50	9418 (1)	9416 (2.5)	50			

Standard Notes:

11533: ICP-SPK

SAMPLE NO.

MW-1A

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Lab Sample ID: 7016438001 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7439-97-6	Mercury	<0.20	U	ug/L	1	05/02/2017 14:44

SAMPLE NO.

MW-1B

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Lab Sample ID: 7016438002 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7439-97-6	Mercury	<0.20	U	ug/L	1	05/02/2017 14:46

SAMPLE NO.

MW-1C

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Lab Sample ID: 7016438003 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7439-97-6	Mercury	<0.20	U	ug/L	1	05/02/2017 14:47

SAMPLE NO.

MW-11B

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Lab Sample ID: 7016438005 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7439-97-6	Mercury	<0.20	U	ug/L	1	05/02/2017 14:49
7439-97-6	Mercury, Dissolved	<0.20	U	ug/L	1	05/02/2017 15:45

SAMPLE NO.

MW-12A

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Lab Sample ID: 7016438006 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7439-97-6	Mercury	<0.20	U	ug/L	1	05/02/2017 14:55
7439-97-6	Mercury, Dissolved	<0.20	U	ug/L	1	05/02/2017 15:48

SAMPLE NO.

MW-12B

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Lab Sample ID: 7016438007 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7439-97-6	Mercury	<0.20	U	ug/L	1	05/02/2017 14:56

SAMPLE NO.

DUP001

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Lab Sample ID: 7016438008 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7439-97-6	Mercury	<0.20	U	ug/L	1	05/02/2017 14:58

SAMPLE NO.

FB

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Lab Sample ID: 7016438009 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7439-97-6	Mercury	<0.20	U	ug/L	1	05/02/2017 15:00

SAMPLE NO.

MW-11A

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Lab Sample ID: 7016438014 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7439-97-6	Mercury	<4.0	U	ug/L	1	05/02/2017 15:01
7439-97-6	Mercury, Dissolved	<0.20	U	ug/L	1	05/02/2017 15:49

SAMPLE NO.

MW-3A

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Lab Sample ID: 7016438015 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7439-97-6	Mercury	<0.20	U	ug/L	1	05/02/2017 15:06
7439-97-6	Mercury, Dissolved	<0.20	U	ug/L	1	05/02/2017 15:51

SAMPLE NO.

MW-3B

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Lab Sample ID: 7016438016 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7439-97-6	Mercury	<0.20	U	ug/L	1	05/02/2017 15:08

SAMPLE NO.

MW-3C

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Lab Sample ID: 7016438017 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7439-97-6	Mercury	<0.20	U	ug/L	1	05/02/2017 15:10

SAMPLE NO.

MW-4A

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Lab Sample ID: 7016438018 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7439-97-6	Mercury	<0.20	U	ug/L	1	05/02/2017 15:19

SAMPLE NO.

MW-4B

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Lab Sample ID: 7016438019 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7439-97-6	Mercury	<0.20	U	ug/L	1	05/02/2017 15:21

SAMPLE NO.

MW-4C

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Lab Sample ID: 7016438020 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7439-97-6	Mercury	<0.20	U	ug/L	1	05/02/2017 15:22

FORM II INORGANIC-1

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Initial Calibration Verification Source: 16352

Continuing Calibration Verification Source: 16350

Concentration Units: ug/L Instrument ID: 70HG1

	Initial Calibration Verification				Continuing Calibration Verification						
	05/02/2017 14:03				05/02/2017 14:08			05/02/2017 14:30			Control Limit
Analyte	True	Found	%R	Control Limit	True	Found	%R	True	Found	%R	
Mercury	1.0	0.98	98.3	90-110	5.0	4.9	98.1	5.0	4.5	90.9	90-110

FORM II INORGANIC-2

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Initial Calibration Verification Source:

Continuing Calibration Verification Source: 16350

Concentration Units: ug/L Instrument ID: 70HG1

	Continuing Calibration Verification									
	05/02/2017 14:51			05/02/2017 15:11			05/02/2017 15:33			Control Limit
Analyte	True	Found	%R	True	Found	%R	True	Found	%R	
Mercury	5.0	5.0	100.6	5.0	5.1	101.1	5.0	4.8	96.9	90-110

FORM II INORGANIC-3

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Initial Calibration Verification Source:

Continuing Calibration Verification Source: 16350

Concentration Units: ug/L Instrument ID: 70HG1

	Continuing Calibration Verification									
	05/02/2017 15:54			05/02/2017 16:18			05/02/2017 16:29			Control Limit
Analyte	True	Found	%R	True	Found	%R	True	Found	%R	
Mercury	5.0	4.7	93.1	5.0	5.4	108.3	5.0	4.9	97.4	90-110

FORM II INORGANIC-1

CRDL CHECK STANDARD

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

CRDL Check Standard Source: 16347 Analysis Date/Time: 05/02/2017 14:07

Concentration Units: ug/L

Analyte	CRDL Check Standard			
	True	Found	%R	Control Limit %R
Mercury	0.2	0.19	94.2	70-130

FORM II INORGANIC-1

CRDL CHECK STANDARD

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

CRDL Check Standard Source: 16347 Analysis Date/Time: 05/02/2017 16:27

Concentration Units: ug/L

Analyte	CRDL Check Standard			
	True	Found	%R	Control Limit %R
Mercury	0.2	0.14	71.6	70-130

FORM III INORGANIC-1

BLANKS

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract : NORTH SEA LANDFILL

Method Blank Matrix: Water Instrument ID: 70HG1

Method Blank Concentration Units: ug/L

Analyte	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Method Blank	
	05/02/2017 14:05	C	05/02/2017 14:10	C	05/02/2017 14:31	C	05/02/2017 14:52	C	103470	C
Mercury	-0.032	J	-0.028	J	0.023	U	0.023	U	<0.20	U

FORM III INORGANIC-2

BLANKS

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract : NORTH SEA LANDFILL

Method Blank Matrix: Water Instrument ID: 70HG1

Method Blank Concentration Units: ug/L

Analyte	Initial Calibration Blank		Continuing Calibration Blank (ug/L)						Method Blank	
		C	05/02/2017 15:13	C	05/02/2017 15:35	C	05/02/2017 15:56	C	105222	C
Mercury			0.023	U	0.023	U	-0.047	J	<0.20	U

FORM III INORGANIC-3

BLANKS

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract : NORTH SEA LANDFILL

Method Blank Matrix: Instrument ID: 70HG1

Method Blank Concentration Units:

Analyte	Initial Calibration Blank		Continuing Calibration Blank (ug/L)					
		C	05/02/2017 16:20	C	05/02/2017 16:31	C		C
Mercury			-0.077	J	-0.041	J		

SAMPLE NO.

103472MS

FORM V INORGANIC-1

MATRIX SPIKE SAMPLE RECOVERY

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Matrix: Water Basis: Wet Parent Sample ID: MW-3C

Percent Moisture:

Analyte	Units	Control Limit %R	Spiked Sample Result (SSR)	Sample Result (SR)	Spike Added (SA)	%R
Mercury	ug/L	75-125	0.86	<0.20	1.0	86

SAMPLE NO.

105224MS

FORM V INORGANIC-1

MATRIX SPIKE SAMPLE RECOVERY

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Matrix: Water Basis: Wet Parent Sample ID: MW-3A

Percent Moisture:

Analyte	Units	Control Limit %R	Spiked Sample Result (SSR)	Sample Result (SR)	Spike Added (SA)	%R
Mercury, Dissolved	ug/L	75-125	0.94	<0.20	1.0	94

SAMPLE NO.

103473DUP

FORM VI INORGANIC-1
DUPLICATES

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Matrix: Water Concentration Units: ug/L

Percent Moisture: Basis: Wet

Analyte	Control Limit	Sample	Duplicate	RPD
Mercury	20	<0.20	<0.20	

SAMPLE NO.

105225DUP

FORM VI INORGANIC-1
DUPLICATES

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Matrix: Water Concentration Units: ug/L

Percent Moisture: Basis: Wet

Analyte	Control Limit	Sample	Duplicate	RPD
Mercury, Dissolved	20	<0.20	<0.20	

SAMPLE NO.

103471LCS

FORM VII INORGANIC-1
LABORATORY CONTROL SAMPLE

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Matrix: Water

Analyte	Units	True	Found	%R	Limits	
Mercury	ug/L	1.0	0.96	96	80	120

SAMPLE NO.

105223LCS

FORM VII INORGANIC-1
LABORATORY CONTROL SAMPLE

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Matrix: Water

Analyte	Units	True	Found	%R	Limits	
Mercury, Dissolved	ug/L	1.0	0.94	94	80	120

FORM IX INORGANIC-1
INSTRUMENT DETECTION LIMITS

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Preparation Method: None Instrument ID: 70HG1

Concentration Units: ug/L

Analyte	PQL	IDL	IDL Date
Mercury	0.20	0.023	10/01/2016

FORM IX INORGANIC-2
METHOD DETECTION LIMITS

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Preparation Method: EPA 7470A Instrument ID: 70HG1

Concentration Units: ug/L

Analyte	PQL	MDL	MDL Date
Mercury	0.20	0.023	10/01/2016

FORM XII INORGANIC-1
PREPARATION LOG

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Preparation Method: EPA 7470A Batch: MERP 1303

Lab Sample ID	Sample Name	Preparation Date	Initial Volume (mL)	Final Volume (mL)
103470	103470BLANK	04/25/2017	20	20
103471	103471LCS	04/25/2017	20	20
103472	103472MS	04/25/2017	20	20
103473	103473DUP	04/25/2017	20	20
7016438001	MW-1A	04/25/2017	20	20
7016438002	MW-1B	04/25/2017	20	20
7016438003	MW-1C	04/25/2017	20	20
7016438005	MW-11B	04/25/2017	20	20
7016438006	MW-12A	04/25/2017	20	20
7016438007	MW-12B	04/25/2017	20	20
7016438008	DUP001	04/25/2017	20	20
7016438009	FB	04/25/2017	20	20
7016438014	MW-11A	04/25/2017	1	20
7016438015	MW-3A	04/25/2017	20	20
7016438016	MW-3B	04/25/2017	20	20
7016438017	MW-3C	04/25/2017	20	20
7016438018	MW-4A	04/25/2017	20	20
7016438019	MW-4B	04/25/2017	20	20
7016438020	MW-4C	04/25/2017	20	20

FORM XII INORGANIC-1
PREPARATION LOG

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Preparation Method: EPA 7470A Batch: MERP 1310

Lab Sample ID	Sample Name	Preparation Date	Initial Volume (mL)	Final Volume (mL)
105222	105222BLANK	04/28/2017	20	20
105223	105223LCS	04/28/2017	20	20
105224	105224MS	04/28/2017	20	20
105225	105225DUP	04/28/2017	20	20
7016438005	MW-11B	04/28/2017	20	20
7016438006	MW-12A	04/28/2017	20	20
7016438014	MW-11A	04/28/2017	20	20
7016438015	MW-3A	04/28/2017	20	20

FORM XIII INORGANIC-1
ANALYSIS RUN LOG

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Instrument ID: 70HG1 Analysis Method: EPA 7470A

Start Date: 05/02/2017 13:42 End Date: 05/02/2017 16:31

Sample Name	Lab Sample ID	D/F	Date	Time	Hg
8784013CAL0	8784013CAL0	1	05/02/2017	13:42	X
8784014CAL1	8784014CAL1	1	05/02/2017	13:43	X
8784015CAL2	8784015CAL2	1	05/02/2017	13:45	X
8784016CAL3	8784016CAL3	1	05/02/2017	13:47	X
8784017CAL4	8784017CAL4	1	05/02/2017	13:49	X
8784018CAL5	8784018CAL5	1	05/02/2017	13:51	X
8784019ICV	8784019ICV	1	05/02/2017	14:03	X
8784020ICB	8784020ICB	1	05/02/2017	14:05	X
8784021CRDL	8784021CRDL	1	05/02/2017	14:07	X
8784022CCV	8784022CCV	1	05/02/2017	14:08	X
8784023CCB	8784023CCB	1	05/02/2017	14:10	X
8784024CCV	8784024CCV	1	05/02/2017	14:30	X
8784025CCB	8784025CCB	1	05/02/2017	14:31	X
103470BLANK	103470	1	05/02/2017	14:40	X
103471LCS	103471	1	05/02/2017	14:42	X
MW-1A	7016438001	1	05/02/2017	14:44	X
MW-1B	7016438002	1	05/02/2017	14:46	X
MW-1C	7016438003	1	05/02/2017	14:47	X
MW-11B	7016438005	1	05/02/2017	14:49	X
8784026CCV	8784026CCV	1	05/02/2017	14:51	X
8784027CCB	8784027CCB	1	05/02/2017	14:52	X
MW-12A	7016438006	1	05/02/2017	14:55	X
MW-12B	7016438007	1	05/02/2017	14:56	X
DUP001	7016438008	1	05/02/2017	14:58	X
FB	7016438009	1	05/02/2017	15:00	X
MW-11A	7016438014	1	05/02/2017	15:01	X
MW-3A	7016438015	1	05/02/2017	15:06	X
MW-3B	7016438016	1	05/02/2017	15:08	X
MW-3C	7016438017	1	05/02/2017	15:10	X
8784028CCV	8784028CCV	1	05/02/2017	15:11	X
8784029CCB	8784029CCB	1	05/02/2017	15:13	X
103472MS	103472	1	05/02/2017	15:15	X
103473DUP	103473	1	05/02/2017	15:17	X
MW-4A	7016438018	1	05/02/2017	15:19	X
MW-4B	7016438019	1	05/02/2017	15:21	X
MW-4C	7016438020	1	05/02/2017	15:22	X
8784030CCV	8784030CCV	1	05/02/2017	15:33	X
8784031CCB	8784031CCB	1	05/02/2017	15:35	X
105222BLANK	105222	1	05/02/2017	15:42	X
105223LCS	105223	1	05/02/2017	15:44	X
MW-11B	7016438005	1	05/02/2017	15:45	X
MW-12A	7016438006	1	05/02/2017	15:48	X
MW-11A	7016438014	1	05/02/2017	15:49	X
MW-3A	7016438015	1	05/02/2017	15:51	X
105224MS	105224	1	05/02/2017	15:53	X

FORM XIII INORGANIC-2
ANALYSIS RUN LOG

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Instrument ID: 70HG1 Analysis Method: EPA 7470A

Start Date: 05/02/2017 13:42 End Date: 05/02/2017 16:31

Sample Name	Lab Sample ID	D/F	Date	Time	Hg
8784032CCV	8784032CCV	1	05/02/2017	15:54	X
8784033CCB	8784033CCB	1	05/02/2017	15:56	X
105225DUP	105225	1	05/02/2017	15:58	X
8784034CCV	8784034CCV	1	05/02/2017	16:18	X
8784035CCB	8784035CCB	1	05/02/2017	16:20	X
8784036CRDL	8784036CRDL	1	05/02/2017	16:27	X
8784037CCV	8784037CCV	1	05/02/2017	16:29	X
8784038CCB	8784038CCB	1	05/02/2017	16:31	X

HG050217W

Method: HG245.1 Operator: Admin Date of Analysis: 02 May 2017 13:13:28

Sample ID	Type	Date	Element	Units	Extended ID	Stats Data
CAL0	S	02 May 2017 13:42:06	Hg	ug/L		-167,
CAL1	S	02 May 2017 13:43:47	Hg	ug/L		1108,
CAL2	S	02 May 2017 13:45:28	Hg	ug/L		5849,
CAL3	S	02 May 2017 13:47:12	Hg	ug/L		11218,
CAL4	S	02 May 2017 13:49:13	Hg	ug/L		26820,
CAL5	S	02 May 2017 13:51:18	Hg	ug/L		54666,
IPC	C	02 May 2017 14:01:33	Hg	ug/L		0.9964,
ICV	C	02 May 2017 14:03:16	Hg	ug/L		0.9832,
ICB	C	02 May 2017 14:05:16	Hg	ug/L		-0.0318,
CRDL	C	02 May 2017 14:07:17	Hg	ug/L		0.1884,
CCV	C	02 May 2017 14:08:58	Hg	ug/L		4.9054,
CCB	C	02 May 2017 14:10:41	Hg	ug/L		-0.0276,
106071_1433	U	02 May 2017 14:12:52	Hg	ug/L	BLANK	-0.0630,
106072_1433	U	02 May 2017 14:14:34	Hg	ug/L	LCS	1.0550,
7016860001_1433	U	02 May 2017 14:16:14	Hg	ug/L	PS	0.0514,
7016865005_1433	U	02 May 2017 14:18:14	Hg	ug/L	PS	-0.0566,
106073_1433	U	02 May 2017 14:19:56	Hg	ug/L	MS	1.0062,
106074_1433	U	02 May 2017 14:21:36	Hg	ug/L	DUP	-0.0340,
7017117001_1433	U	02 May 2017 14:23:35	Hg	ug/L	PS	-0.0318,
7017117002_1433	U	02 May 2017 14:25:16	Hg	ug/L	PS	-0.0076,
7017117003_1433	U	02 May 2017 14:26:57	Hg	ug/L	PS	-0.0021,
7017117004_1433	U	02 May 2017 14:28:38	Hg	ug/L	PS	-0.0195,
CCV	C	02 May 2017 14:30:19	Hg	ug/L		4.5470,
CCB	C	02 May 2017 14:31:59	Hg	ug/L		-0.0021,
7017255008_1433	U	02 May 2017 14:34:11	Hg	ug/L	PS	-0.0256,
7017255009_1433	U	02 May 2017 14:35:55	Hg	ug/L	PS	-0.0298,
7017255010_1433	U	02 May 2017 14:37:36	Hg	ug/L	PS	-0.0103,
7017255011_1433	U	02 May 2017 14:39:16	Hg	ug/L	PS	-0.0111,
103470_1422	U	02 May 2017 14:40:56	Hg	ug/L	BLANK	-0.0006,
103471_1422	U	02 May 2017 14:42:36	Hg	ug/L	LCS	0.9616,
7016438001_1422	U	02 May 2017 14:44:16	Hg	ug/L	PS	-0.0239,
7016438002_1422	U	02 May 2017 14:46:14	Hg	ug/L	PS	-0.0279,
7016438003_1422	U	02 May 2017 14:47:55	Hg	ug/L	PS	-0.0101,
7016438005_1422	U	02 May 2017 14:49:35	Hg	ug/L	PS	0.0101,
CCV	C	02 May 2017 14:51:16	Hg	ug/L		5.0325,
CCB	C	02 May 2017 14:52:56	Hg	ug/L		0.0047,
7016438006_1422	U	02 May 2017 14:55:08	Hg	ug/L	PS	-0.0557,
7016438007_1422	U	02 May 2017 14:56:51	Hg	ug/L	PS	-0.0032,
7016438008_1422	U	02 May 2017 14:58:33	Hg	ug/L	PS	0.0005,
7016438009_1422	U	02 May 2017 15:00:14	Hg	ug/L	PS	0.0042,
7016438014_1422	U	02 May 2017 15:01:55	Hg	ug/L	PS	-0.0061,
7016541001_1422	U	02 May 2017 15:03:35	Hg	ug/L	PS	0.0093,
7016541002_1422	U	02 May 2017 15:05:16	Hg	ug/L	PS	-0.0100,
7016438015_1422	U	02 May 2017 15:06:56	Hg	ug/L	PS	-0.0114,
7016438016_1422	U	02 May 2017 15:08:36	Hg	ug/L	PS	-0.0081,
7016438017_1422	U	02 May 2017 15:10:16	Hg	ug/L	RQS	-0.0083,
CCV	C	02 May 2017 15:11:56	Hg	ug/L		5.0565,
CCB	C	02 May 2017 15:13:36	Hg	ug/L		-0.0024,
103472_1422	U	02 May 2017 15:15:49	Hg	ug/L	MS	0.8554,
103473_1422	U	02 May 2017 15:17:31	Hg	ug/L	DUP	-0.0248,
7016438018_1422	U	02 May 2017 15:19:32	Hg	ug/L	PS	-0.0256,
7016438019_1422	U	02 May 2017 15:21:13	Hg	ug/L	PS	-0.0076,
7016438020_1422	U	02 May 2017 15:22:54	Hg	ug/L	PS	-0.0059,
105039_1430	U	02 May 2017 15:24:35	Hg	ug/L	BLANK	-0.0109,
105040_1430	U	02 May 2017 15:26:17	Hg	ug/L	LCS	0.9737,
103671_1430	U	02 May 2017 15:27:57	Hg	ug/L	LB	-0.0201,
7016947001_1430	U	02 May 2017 15:29:59	Hg	ug/L	PS	-0.0338,
105041_1430	U	02 May 2017 15:31:39	Hg	ug/L	MS	0.9423,
CCV	C	02 May 2017 15:33:20	Hg	ug/L		4.8439,
CCB	C	02 May 2017 15:35:20	Hg	ug/L		0.0005,
105042_1430	U	02 May 2017 15:37:34	Hg	ug/L	DUP	-0.0638,
7016770001_1430	U	02 May 2017 15:39:16	Hg	ug/L	PS	-0.0151,
7016822001_1430	U	02 May 2017 15:40:56	Hg	ug/L	PS	-0.0142,
105222_1431	U	02 May 2017 15:42:37	Hg	ug/L	BLANK	-0.0103,
105223_1431	U	02 May 2017 15:44:18	Hg	ug/L	LCS	0.9364,
7016438005_1431	U	02 May 2017 15:45:58	Hg	ug/L	PS	-0.0256,

HG050217W

Method: HG245.1 Operator: Admin Date of Analysis: 02 May 2017 13:13:28

Sample ID	Type	Date	Element	Units	Extended ID	Stats Data
7016438006_1431	U	02 May 2017 15:48:01	Hg	ug/L	PS	-0.0270,
7016438014_1431	U	02 May 2017 15:49:42	Hg	ug/L	PS	-0.0083,
7016438015_1431	U	02 May 2017 15:51:24	Hg	ug/L	PS	-0.0123,
105224_1431	U	02 May 2017 15:53:04	Hg	ug/L	MS	0.9426,
CCV	C	02 May 2017 15:54:44	Hg	ug/L		4.6535,
CCB	C	02 May 2017 15:56:45	Hg	ug/L		-0.0472,
105225_1431	U	02 May 2017 15:58:58	Hg	ug/L	DUP	-0.0660,
106321_1435	U	02 May 2017 16:00:40	Hg	ug/L	BLANK	-0.0202,
106322_1435	U	02 May 2017 16:02:21	Hg	ug/L	LCS	0.8736,
7016700002_1435	U	02 May 2017 16:04:02	Hg	ug/L	PS	-0.0235,
106323_1435	U	02 May 2017 16:06:04	Hg	ug/L	MS	0.8338,
106324_1435	U	02 May 2017 16:07:45	Hg	ug/L	DUP	-0.0243,
7016700003_1435	U	02 May 2017 16:09:50	Hg	ug/L	PS	-0.0320,
7016708002_1435	U	02 May 2017 16:11:30	Hg	ug/L	PS	-0.0039,
7016708003_1435	U	02 May 2017 16:13:11	Hg	ug/L	PS	-0.0114,
7016712002_1435	U	02 May 2017 16:14:53	Hg	ug/L	PS	-0.0094,
CCV	C	02 May 2017 16:18:14	Hg	ug/L		5.4164,
CCB	C	02 May 2017 16:20:30	Hg	ug/L		-0.0772,
7016712003_1435	U	02 May 2017 16:22:46	Hg	ug/L	PS	-0.0680,
7016714002_1435	U	02 May 2017 16:24:29	Hg	ug/L	PS	-0.0156,
7016714003_1435	U	02 May 2017 16:26:10	Hg	ug/L	PS	-0.0123,
CRDL	C	02 May 2017 16:27:50	Hg	ug/L		0.1432,
CCV	C	02 May 2017 16:29:32	Hg	ug/L		4.8702,
CCB	C	02 May 2017 16:31:14	Hg	ug/L		-0.0406,

Prep Log Report

Batch Information: MERP-1303

Template Version: F-LI-I-038-Rev.00 (01Oct2016)

Prep Method	EPA 7470A	Analysis Method	EPA 7470A	Extracted By	JLN	Extracted Date/Time	04/25/2017 12:55:04:036
Block ID	HB002	Thermometer ID	TH016	Block Temp (C)	98.00	Correction Factor (C)	1.0
Corrected Temp. (C)	99.00	Digestion Start Time	04/25/2017 13:55:11:188	Digestion End Time	04/25/2017 15:55:16:374	Block End Temp (C)	98
Corrected End Temp. (C)	99.00	Digestion Vessel	3215	Metals Pipette 1	MEP003	Metals Pipette 2	MEP006
Metals Pipette 3	MEP007	Bottle Disp. 1	MED001	Bottle Disp. 2	MED004	Bottle Disp. 3	MED005
Bottle Disp. 4		Reviewed By		Reviewed By Date		Batch Notes	

Sample Information:

QC Rule	Sample Type	Lab Sample ID	Select	Matrix	pH < 2	Initial Volume (mL)	Conc. HNO3 (mL)	H2SO4 - Conc. (L)	5% KMnO4 (mL)	5% K2S2O8 (mL)	Hg Hydrox Soln (mL)	Final Volume (mL)	Sample Notes	HG-SPK (mL)
7470 W_P	BLANK	**103470**	Y	Water	Yes	20	9418 (0.5)	15706 (1)	15739 (3)	15472 (1.6)	15754 (1.2)	20		
7470 W_P	LCS	**103471**	Y	Water	Yes	20	9418 (0.5)	15706 (1)	15739 (3)	15472 (1.6)	15754 (1.2)	20		15816 (.1)
7470 W_P	PS	**7016438001**	Y	Water	Yes	20	9418 (0.5)	15706 (1)	15739 (3)	15472 (1.6)	15754 (1.2)	20		
7470 W_P	PS	**7016438002**	Y	Water	Yes	20	9418 (0.5)	15706 (1)	15739 (3)	15472 (1.6)	15754 (1.2)	20		
7470 W_P	PS	**7016438003**	Y	Water	Yes	20	9418 (0.5)	15706 (1)	15739 (3)	15472 (1.6)	15754 (1.2)	20		
7470 W_P	PS	**7016438005**	Y	Water	Yes	20	9418 (0.5)	15706 (1)	15739 (3)	15472 (1.6)	15754 (1.2)	20		
7470 W_P	PS	**7016438006**	Y	Water	Yes	20	9418 (0.5)	15706 (1)	15739 (3)	15472 (1.6)	15754 (1.2)	20		
7470 W_P	PS	**7016438007**	Y	Water	Yes	20	9418 (0.5)	15706 (1)	15739 (3)	15472 (1.6)	15754 (1.2)	20		
7470 W_P	PS	**7016438008**	Y	Water	Yes	20	9418 (0.5)	15706 (1)	15739 (3)	15472 (1.6)	15754 (1.2)	20		
7470 W_P	PS	**7016438009**	Y	Water	Yes	20	9418 (0.5)	15706 (1)	15739 (3)	15472 (1.6)	15754 (1.2)	20		
7470 W_P	PS	**7016438014**	Y	Water	Yes	1	9418 (0.5)	15706 (1)	15739 (3)	15472 (1.6)	15754 (1.2)	20		
7470 W_P	PS	**7016541001**	Y	Water	Yes	20	9418 (0.5)	15706 (1)	15739 (3)	15472 (1.6)	15754 (1.2)	20		
7470 W_P	PS	**7016541002**	Y	Water	Yes	20	9418 (0.5)	15706 (1)	15739 (3)	15472 (1.6)	15754 (1.2)	20		
7470 W_P	PS	**7016438015**	Y	Water	Yes	20	9418 (0.5)	15706 (1)	15739 (3)	15472 (1.6)	15754 (1.2)	20		
7470 W_P	PS	**7016438016**	Y	Water	Yes	20	9418 (0.5)	15706 (1)	15739 (3)	15472 (1.6)	15754 (1.2)	20		
7470 W_P	RQS	**7016438017**	Y	Water	Yes	20	9418 (0.5)	15706 (1)	15739 (3)	15472 (1.6)	15754 (1.2)	20		
7470 W_P	MS	**103472**	Y	Water	Yes	20	9418 (0.5)	15706 (1)	15739 (3)	15472 (1.6)	15754 (1.2)	20		15816 (.1)
7470 W_P	DUP	**103473**	Y	Water	Yes	20	9418 (0.5)	15706 (1)	15739 (3)	15472 (1.6)	15754 (1.2)	20		
7470 W_P	PS	**7016438018**	Y	Water	Yes	20	9418 (0.5)	15706 (1)	15739 (3)	15472 (1.6)	15754 (1.2)	20		
7470 W_P	PS	**7016438019**	Y	Water	Yes	20	9418 (0.5)	15706 (1)	15739 (3)	15472 (1.6)	15754 (1.2)	20		

Prep Log Report

QC Rule	Sample Type	Lab Sample ID	Select	Matrix	pH < 2	Initial Volume (mL)	Conc. HNO3 (mL)	H2SO4 - Conc. (L)	5% KMnO4 (mL)	5% K2S2O8 (mL)	Hg Hydrox Soln (mL)	Final Volume (mL)	Sample Notes	HG-SPK (mL)
7470 W_P	PS	**7016438020**	Y	Water	Yes	20	9418 (0.5)	15706 (1)	15739 (3)	15472 (1.6)	15754 (1.2)	20		

Standard Notes:

15816: MERC QC SPK INT 200 ug/L

Prep Log Report

Batch Information: MERP-1310

Template Version: F-LI-I-016-Rev.00 (01Oct2016)

Prep Method	EPA 7470A	Analysis Method	EPA 7470A	Extracted By	JLN	Extracted Date/Time	04/28/2017 10:41:57:045
Block ID	HB002	Thermometer ID	TH016	Block Temp (C)	98.00	Correction Factor (C)	1
Corrected Temp. (C)	99.00	Digestion Start Time	04/28/2017 11:42:16:741	Digestion End Time	04/28/2017 13:42:29:796	Block End Temp (C)	98
Corrected End Temp. (C)	99.00	Digestion Vessel	3215	Metals Pipette 1	MEP011	Metals Pipette 2	
Metals Pipette 3		Metals Pipette 4		Bottle Disp. 1	MED001	Bottle Disp. 2	MED005
Reviewed By		Reviewed By Date		Batch Notes			

Sample Information:

QC Rule	Sample Type	Lab Sample ID	Matrix	pH < 2	Initial Volume (mL)	Conc. HNO3 (mL)	Conc. HCL (mL)	Final Volume (mL)	Container ID	Sample Notes	HG-SPK (mL)
7470 WD_P	BLANK	**105222**	Water	Yes	20	9418 (1)	9416 (2.5)	20			
7470 WD_P	LCS	**105223**	Water	Yes	20	9418 (1)	9416 (2.5)	20			16118 (.1)
7470 WD_P	PS	**7016438005**	Water	Yes	20	9418 (1)	9416 (2.5)	20			
7470 WD_P	PS	**7016438006**	Water	Yes	20	9418 (1)	9416 (2.5)	20			
7470 WD_P	PS	**7016438014**	Water	Yes	20	9418 (1)	9416 (2.5)	20			
7470 WD_P	PS	**7016438015**	Water	Yes	20	9418 (1)	9416 (2.5)	20			
7470 WD_P	MS	**105224**	Water	Yes	20	9418 (1)	9416 (2.5)	20			16118 (.1)
7470 WD_P	DUP	**105225**	Water	Yes	20	9418 (1)	9416 (2.5)	20			

Standard Notes:

16118: MERC QC SPK INT 200 ug/L

Prep Log Report

Batch Information: HGW-Q-1436

Template Version: F-LI-I-038-Rev.00 (01Oct2016)

Prep Method		Analysis Method		Extracted By	JLN	Extracted Date/Time	05/02/2017 12:04:05:634
Block ID	HB002	Thermometer ID	TH016	Block Temp (C)	98.00	Correction Factor (C)	1.0
Corrected Temp. (C)	99.00	Digestion Start Time	05/02/2017 12:20:17:504	Digestion End Time	05/02/2017 12:35:24:402	Block End Temp (C)	98
Corrected End Temp. (C)	99.00	Digestion Vessel	3215	Metals Pipette 1	MEP003	Metals Pipette 2	MEP006
Metals Pipette 3	MEP007	Bottle Disp. 1	MED001	Bottle Disp. 2	MED004	Bottle Disp. 3	MED005
Bottle Disp. 4		Reviewed By		Reviewed By Date		Batch Notes	

Sample Information:

QC Rule	Sample Type	Lab Sample ID	Select	Matrix	pH < 2	Initial Volume (mL)	Conc. HNO3 (mL)	H2SO4 - Conc. (L)	5% KMnO4 (mL)	5% K2S2O8 (mL)	Hg Hydrox Soln (mL)	Final Volume (mL)	Sample Notes	CAL-STD
HG WATER_Q	CAL0	**CAL0**	Y	Water	Yes	1	9418 (0.5)	15706 (1)	15739 (3)	15472 (1.6)	15754 (1.2)	1		16346 (1)
HG WATER_Q	CAL1	**CAL1**	Y	Water	Yes	1	9418 (0.5)	15706 (1)	15739 (3)	15472 (1.6)	15754 (1.2)	1		16347 (1)
HG WATER_Q	CAL2	**CAL2**	Y	Water	Yes	1	9418 (0.5)	15706 (1)	15739 (3)	15472 (1.6)	15754 (1.2)	1		16348 (1)
HG WATER_Q	CAL3	**CAL3**	Y	Water	Yes	1	9418 (0.5)	15706 (1)	15739 (3)	15472 (1.6)	15754 (1.2)	1		16349 (1)
HG WATER_Q	CAL4	**CAL4**	Y	Water	Yes	1	9418 (0.5)	15706 (1)	15739 (3)	15472 (1.6)	15754 (1.2)	1		16350 (1)
HG WATER_Q	CAL5	**CAL5**	Y	Water	Yes	1	9418 (0.5)	15706 (1)	15739 (3)	15472 (1.6)	15754 (1.2)	1		16351 (1)
HG WATER_Q	ICV	**ICV**	Y	Water	Yes	1	9418 (0.5)	15706 (1)	15739 (3)	15472 (1.6)	15754 (1.2)	1		16352 (1)
HG WATER_Q	ICB	**ICB**	Y	Water	Yes	1	9418 (0.5)	15706 (1)	15739 (3)	15472 (1.6)	15754 (1.2)	1		16346 (1)
HG WATER_Q	CCV	**CCV**	Y	Water	Yes	1	9418 (0.5)	15706 (1)	15739 (3)	15472 (1.6)	15754 (1.2)	1		16350 (1)
HG WATER_Q	CCB	**CCB**	Y	Water	Yes	1	9418 (0.5)	15706 (1)	15739 (3)	15472 (1.6)	15754 (1.2)	1		16346 (1)
HG WATER_Q	CRDL	**CRDL**	Y	Water	Yes	1	9418 (0.5)	15706 (1)	15739 (3)	15472 (1.6)	15754 (1.2)	1		16347 (1)
HG WATER_Q	IPC	**IPC**	Y	Water	Yes	1	9418 (0.5)	15706 (1)	15739 (3)	15472 (1.6)	15754 (1.2)	1		16348 (1)

Standard Notes:

16346: MERC WATER CCB
16347: MERC WATER 0.2 ug/L
16348: MERC WATER 1.0 ug/L
16349: MERC WATER 2.0 ug/L
16350: MERC WATER 5.0 ug/L
16351: MERC WATER 10 ug/L
16352: MERC WATER ICV 1.0 ug/L

SAMPLE NO.

MW-1A

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Lab Sample ID: 7016438001 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
24959-67-9	Bromide	<0.50	U	mg/L	1	05/08/2017 18:51
16887-00-6	Chloride	14.0		mg/L	1	05/08/2017 18:51
14808-79-8	Sulfate	8.9		mg/L	1	05/08/2017 18:51

SAMPLE NO.

MW-1B

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Lab Sample ID: 7016438002 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
24959-67-9	Bromide	<0.50	U	mg/L	1	05/08/2017 19:18
16887-00-6	Chloride	8.8		mg/L	1	05/08/2017 19:18
14808-79-8	Sulfate	7.5		mg/L	1	05/08/2017 19:18

SAMPLE NO.

MW-1C

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Lab Sample ID: 7016438003 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
24959-67-9	Bromide	<0.50	U	mg/L	1	05/08/2017 19:31
16887-00-6	Chloride	9.0		mg/L	1	05/08/2017 19:31
14808-79-8	Sulfate	8.2		mg/L	1	05/08/2017 19:31

SAMPLE NO.

MW-11B

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Lab Sample ID: 7016438005 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
24959-67-9	Bromide	0.029	J	mg/L	1	05/08/2017 19:45
16887-00-6	Chloride	9.3		mg/L	1	05/08/2017 19:45
14808-79-8	Sulfate	7.1		mg/L	1	05/08/2017 19:45

SAMPLE NO.

MW-12A

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Lab Sample ID: 7016438006 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
24959-67-9	Bromide	0.057	J	mg/L	1	05/08/2017 19:58
16887-00-6	Chloride	11.0		mg/L	1	05/08/2017 19:58
14808-79-8	Sulfate	14.5		mg/L	1	05/08/2017 19:58

SAMPLE NO.

MW-12B

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Lab Sample ID: 7016438007 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
24959-67-9	Bromide	0.050	J	mg/L	1	05/08/2017 20:12
16887-00-6	Chloride	11.3		mg/L	1	05/08/2017 20:12
14808-79-8	Sulfate	14.0		mg/L	1	05/08/2017 20:12

SAMPLE NO.

DUP001

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Lab Sample ID: 7016438008 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
24959-67-9	Bromide	0.030	J	mg/L	1	05/08/2017 20:52
16887-00-6	Chloride	9.1		mg/L	1	05/08/2017 20:52
14808-79-8	Sulfate	8.3		mg/L	1	05/08/2017 20:52

SAMPLE NO.

FB

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Lab Sample ID: 7016438009 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
24959-67-9	Bromide	<0.50	U	mg/L	1	05/08/2017 21:06
16887-00-6	Chloride	0.35	J	mg/L	1	05/08/2017 21:06
14808-79-8	Sulfate	<5.0	U	mg/L	1	05/08/2017 21:06

SAMPLE NO.

LEA-PRI

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Lab Sample ID: 7016438010 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
24959-67-9	Bromide	0.18	J	mg/L	1	05/08/2017 21:19
16887-00-6	Chloride	42.5		mg/L	1	05/08/2017 21:19
14808-79-8	Sulfate	52.2		mg/L	5	05/09/2017 10:50

SAMPLE NO.

LEA-SEC

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Lab Sample ID: 7016438011 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
24959-67-9	Bromide	0.32	J	mg/L	1	05/08/2017 21:33
16887-00-6	Chloride	71.7		mg/L	5	05/09/2017 11:03
14808-79-8	Sulfate	6.4		mg/L	1	05/08/2017 21:33

SAMPLE NO.

MW-11A

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Lab Sample ID: 7016438014 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
24959-67-9	Bromide	0.037	J	mg/L	1	05/08/2017 21:46
16887-00-6	Chloride	14.2		mg/L	1	05/08/2017 21:46
14808-79-8	Sulfate	12.2		mg/L	1	05/08/2017 21:46

SAMPLE NO.

MW-3A

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Lab Sample ID: 7016438015 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
24959-67-9	Bromide	<0.50	U	mg/L	1	05/08/2017 22:00
16887-00-6	Chloride	154		mg/L	5	05/09/2017 11:17
14808-79-8	Sulfate	8.7		mg/L	1	05/08/2017 22:00

SAMPLE NO.

MW-3B

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Lab Sample ID: 7016438016 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
24959-67-9	Bromide	0.067	J	mg/L	1	05/08/2017 22:13
16887-00-6	Chloride	14.7		mg/L	1	05/08/2017 22:13
14808-79-8	Sulfate	13.8		mg/L	1	05/08/2017 22:13

SAMPLE NO.

MW-3C

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Lab Sample ID: 7016438017 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
24959-67-9	Bromide	0.062	J	mg/L	1	05/08/2017 22:27
16887-00-6	Chloride	10.6		mg/L	1	05/08/2017 22:27
14808-79-8	Sulfate	3.0	J	mg/L	1	05/08/2017 22:27

SAMPLE NO.

MW-4A

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Lab Sample ID: 7016438018 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
24959-67-9	Bromide	0.030	J	mg/L	1	05/08/2017 23:34
16887-00-6	Chloride	47.0		mg/L	1	05/08/2017 23:34
14808-79-8	Sulfate	16.6		mg/L	1	05/08/2017 23:34

SAMPLE NO.

MW-4B

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Lab Sample ID: 7016438019 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
24959-67-9	Bromide	0.077	J	mg/L	1	05/08/2017 23:48
16887-00-6	Chloride	15.2		mg/L	1	05/08/2017 23:48
14808-79-8	Sulfate	9.9		mg/L	1	05/08/2017 23:48

SAMPLE NO.

MW-4C

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Lab Sample ID: 7016438020 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
24959-67-9	Bromide	0.075	J	mg/L	1	05/09/2017 00:01
16887-00-6	Chloride	106		mg/L	5	05/09/2017 11:30
14808-79-8	Sulfate	4.2	J	mg/L	1	05/09/2017 00:01

FORM II INORGANIC-1

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Initial Calibration Verification Source:

Continuing Calibration Verification Source: 15528

Concentration Units: mg/L Instrument ID: 70WTA2

	Initial Calibration Verification				Continuing Calibration Verification						
					05/08/2017 17:43			05/08/2017 20:25			Control Limit
Analyte	True	Found	%R	Control Limit	True	Found	%R	True	Found	%R	
Bromide					1.0	0.96	96.1	1.0	0.99	98.5	90-110
Chloride					10.0	9.4	93.8	10.0	9.4	94.2	90-110
Sulfate					10.0	9.9	98.7	10.0	9.7	97.0	90-110

FORM II INORGANIC-2

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Initial Calibration Verification Source:

Continuing Calibration Verification Source: 15528

Concentration Units: mg/L Instrument ID: 70WTA2

	Continuing Calibration Verification									
	05/08/2017 23:07			05/09/2017 01:49			05/09/2017 09:56			Control Limit
Analyte	True	Found	%R	True	Found	%R	True	Found	%R	
Bromide	1.0	0.99	98.8	1.0	0.99	99.2	1.0	0.99	98.7	90-110
Chloride	10.0	9.4	94.2	10.0	9.4	94.4	10.0	9.7	96.9	90-110
Sulfate	10.0	9.7	97.2	10.0	9.8	97.6	10.0	10.1	100.9	90-110

FORM II INORGANIC-3

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Initial Calibration Verification Source:

Continuing Calibration Verification Source: 15528

Concentration Units: mg/L Instrument ID: 70WTA2

	Continuing Calibration Verification			
	05/09/2017 12:38			Control Limit
Analyte	True	Found	%R	
Bromide	1.0	1.0	100.5	90-110
Chloride	10.0	9.6	96.3	90-110
Sulfate	10.0	10.0	100.1	90-110

FORM III INORGANIC-1

BLANKS

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract : NORTH SEA LANDFILL

Method Blank Matrix: Water Instrument ID: 70WTA2

Method Blank Concentration Units: mg/L

Analyte	Initial Calibration Blank		Continuing Calibration Blank (mg/L)						Method Blank	
		C	05/08/2017 17:56	C	05/08/2017 20:39	C	05/08/2017 23:21	C	109785	C
Bromide			0.028	U	0.028	U	0.028	U	<0.50	U
Chloride			0.19	U	0.19	U	0.19	U	<2.0	U
Sulfate			0.21	U	0.21	U	0.21	U	<5.0	U

FORM III INORGANIC-2

BLANKS

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract : NORTH SEA LANDFILL

Method Blank Matrix: Instrument ID: 70WTA2

Method Blank Concentration Units:

Analyte	Initial Calibration Blank		Continuing Calibration Blank (mg/L)					
		C	05/09/2017 02:03	C	05/09/2017 10:09	C	05/09/2017 12:51	C
Bromide			0.028	U	0.028	U	0.028	U
Chloride			0.19	U	0.19	U	0.19	U
Sulfate			0.21	U	0.21	U	0.21	U

SAMPLE NO.

109787MS

FORM V INORGANIC-1

MATRIX SPIKE SAMPLE RECOVERY

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Matrix: Water Basis: Wet Parent Sample ID: MW-3C

Percent Moisture:

Analyte	Units	Control Limit %R	Spiked Sample Result (SSR)	Sample Result (SR)	Spike Added (SA)	%R
Bromide	mg/L	80-120	1.0	0.062J	1.0	94
Chloride	mg/L	80-120	21.2	10.6	10.0	106
Sulfate	mg/L	80-120	12.7	3.0J	10.0	97

SAMPLE NO.

109789MS

FORM V INORGANIC-2

MATRIX SPIKE SAMPLE RECOVERY

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Matrix: Water Basis: Wet Parent Sample ID: 7017537001

Percent Moisture:

Analyte	Units	Control Limit %R	Spiked Sample Result (SSR)	Sample Result (SR)	Spike Added (SA)	%R
Bromide	mg/L	80-120	1.7	0.78	1.0	95
Chloride	mg/L	80-120	624	354	250	108
Sulfate	mg/L	80-120	687	414	250	109

SAMPLE NO.

109788DUP

FORM VI INORGANIC-1
DUPLICATES

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Matrix: Water Concentration Units: mg/L

Percent Moisture: _____ Basis: Wet

Analyte	Control Limit	Sample	Duplicate	RPD
Bromide	20	0.062J	0.060J	
Chloride	20	10.6	10.5	2
Sulfate	20	3.0J	3.0J	

SAMPLE NO.

109790DUP

FORM VI INORGANIC-2
DUPLICATES

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Matrix: Water Concentration Units: mg/L

Percent Moisture: Basis: Wet

Analyte	Control Limit	Sample	Duplicate	RPD
Bromide	20	0.78	0.77	1
Chloride	20	354	354	0
Sulfate	20	414	<5.0	

SAMPLE NO.

109786LCS

FORM VII INORGANIC-1
LABORATORY CONTROL SAMPLE

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Matrix: Water

Analyte	Units	True	Found	%R	Limits	
Bromide	mg/L	1.0	0.99	99	90	110
Chloride	mg/L	10.0	9.4	94	90	110
Sulfate	mg/L	10.0	9.7	97	90	110

FORM XII INORGANIC-1
PREPARATION LOG

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Preparation Method: EPA 300.0 Batch: WETA 4376

Lab Sample ID	Sample Name	Preparation Date	Initial Volume (mL)	Final Volume (mL)
109785	109785BLANK	05/08/2017	10	10
109786	109786LCS	05/08/2017	10	10
109787	109787MS	05/08/2017	10	10
109788	109788DUP	05/08/2017	10	10
109789	109789MS	05/09/2017	10	10
109789	109789MS	05/09/2017	10	10
109790	109790DUP	05/09/2017	10	10
109790	109790DUP	05/09/2017	10	10
7016438001	MW-1A	05/08/2017	10	10
7016438002	MW-1B	05/08/2017	10	10
7016438003	MW-1C	05/08/2017	10	10
7016438005	MW-11B	05/08/2017	10	10
7016438006	MW-12A	05/08/2017	10	10
7016438007	MW-12B	05/08/2017	10	10
7016438008	DUP001	05/08/2017	10	10
7016438009	FB	05/08/2017	10	10
7016438010	LEA-PRI	05/08/2017	10	10
7016438010	LEA-PRI	05/09/2017	10	10
7016438011	LEA-SEC	05/08/2017	10	10
7016438011	LEA-SEC	05/09/2017	10	10
7016438014	MW-11A	05/08/2017	10	10
7016438015	MW-3A	05/08/2017	10	10
7016438015	MW-3A	05/09/2017	10	10
7016438016	MW-3B	05/08/2017	10	10
7016438017	MW-3C	05/08/2017	10	10
7016438018	MW-4A	05/08/2017	10	10
7016438019	MW-4B	05/08/2017	10	10
7016438020	MW-4C	05/09/2017	10	10
7016438020	MW-4C	05/09/2017	10	10

FORM XIII INORGANIC-1
ANALYSIS RUN LOG

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Instrument ID: 70WTA2 Analysis Method: EPA 300.0

Start Date: 05/08/2017 17:43 End Date: 05/09/2017 12:51

Sample Name	Lab Sample ID	D/F	Date	Time	Cl	SO4	brom
8809054CCV	8809054CCV	1	05/08/2017	17:43	X	X	X
8809055CCB	8809055CCB	1	05/08/2017	17:56	X	X	X
109786LCS	109786	1	05/08/2017	18:24	X	X	X
109785BLANK	109785	1	05/08/2017	18:37	X	X	X
MW-1A	7016438001	1	05/08/2017	18:51	X	X	X
MW-1B	7016438002	1	05/08/2017	19:18	X	X	X
MW-1C	7016438003	1	05/08/2017	19:31	X	X	X
MW-11B	7016438005	1	05/08/2017	19:45	X	X	X
MW-12A	7016438006	1	05/08/2017	19:58	X	X	X
MW-12B	7016438007	1	05/08/2017	20:12	X	X	X
8809057CCV	8809057CCV	1	05/08/2017	20:25	X	X	X
8809058CCB	8809058CCB	1	05/08/2017	20:39	X	X	X
DUP001	7016438008	1	05/08/2017	20:52	X	X	X
FB	7016438009	1	05/08/2017	21:06	X	X	X
LEA-PRI	7016438010	1	05/08/2017	21:19	X		X
LEA-SEC	7016438011	1	05/08/2017	21:33		X	X
MW-11A	7016438014	1	05/08/2017	21:46	X	X	X
MW-3A	7016438015	1	05/08/2017	22:00		X	X
MW-3B	7016438016	1	05/08/2017	22:13	X	X	X
MW-3C	7016438017	1	05/08/2017	22:27	X	X	X
109787MS	109787	1	05/08/2017	22:40	X	X	X
109788DUP	109788	1	05/08/2017	22:54	X	X	X
8809059CCV	8809059CCV	1	05/08/2017	23:07	X	X	X
8809060CCB	8809060CCB	1	05/08/2017	23:21	X	X	X
MW-4A	7016438018	1	05/08/2017	23:34	X	X	X
MW-4B	7016438019	1	05/08/2017	23:48	X	X	X
MW-4C	7016438020	1	05/09/2017	00:01		X	X
7017537001	7017537001	1	05/09/2017	00:15			
109789MS	109789	1	05/09/2017	00:28			X
109790DUP	109790	1	05/09/2017	00:42		X	X
8809061CCV	8809061CCV	1	05/09/2017	01:49	X	X	X
8809062CCB	8809062CCB	1	05/09/2017	02:03	X	X	X
8809067CCV	8809067CCV	1	05/09/2017	09:56	X	X	X
8809068CCB	8809068CCB	1	05/09/2017	10:09	X	X	X
LEA-PRI	7016438010	5	05/09/2017	10:50		X	
LEA-SEC	7016438011	5	05/09/2017	11:03	X		
MW-3A	7016438015	5	05/09/2017	11:17	X		
MW-4C	7016438020	5	05/09/2017	11:30	X		
7017537001	7017537001	25	05/09/2017	11:44		X	
109789MS	109789	25	05/09/2017	11:57	X	X	
109790DUP	109790	25	05/09/2017	12:11	X		
8809069CCV	8809069CCV	1	05/09/2017	12:38	X	X	X
8809070CCB	8809070CCB	1	05/09/2017	12:51	X	X	X

ANALYST: BNK 5/17/17

Date : 5/17/2017

Original Run Filename: OM_5-8-2017_05-41-52PM.OMN Created: 5/8/2017 5:41:52 PM
Original Run Author's Signature: [wetchem]
Current Run Filename: ANIONS-050817.omn Last Modified: 5/9/2017 6:18:25 PM
Current Run Author's Signature: [wetchem]
Description: EPA 300.0 / 9056
ALL SAMPLES WERE FILTERED
Filter lot #:160305264

Sample	Rep.	Cup No.	Channel 1								Detection Time
			Bromide		Chloride		Fluoride		Sulfate		
			Conc. (mg/L)	Area (V.min)	Conc. (mg/L)	Area (V.min)	Conc. (mg/L)	Area (V.min)	Conc. (mg/L)	Area (V.min)	
"CCV:CCV:Anion300_WW"	1	S4	0.96082	0.0016548	9.3752	0.053608	1.0193	0.0068056	9.8708	0.035029	5/8/2017@5:43:27 PM
	Known Conc:		1.0000		10.000		1.0000		10.000		
"CCB:CCB:Anion300_WW"	1	S8	0.012812	0.0000	-0.0014551	0.0000	0.016676	1.7859e-5	-0.025654	8.3612e-5	5/8/2017@5:56:59 PM
	Known Conc:		0.0000		0.0000		0.0000		0.0000		
CRDL	1	1	0.47612	0.00080874	1.7936	0.010263	0.11562	0.00068773	4.4800	0.015993	5/8/2017@6:10:30 PM
	Known Conc:		0.50000		0.0000		0.10000		0.0000		
109785_4376	1	S4	0.99142	0.0017082	9.3841	0.053659	1.0303	0.0068799	9.7291	0.034528	5/8/2017@6:24:01 PM
	Known Conc:		100.00		100.00		100.00		100.00		
109786_4376	1	S8	0.021784	1.5661e-5	0.15172	0.00087573	0.016265	1.5076e-5	-0.024441	8.7895e-5	5/8/2017@6:37:33 PM
	Known Conc:		100.00		100.00		100.00		100.00		
7016438001_4376	1	2	0.027752	2.6079e-5	14.023	0.080179	0.011549	-1.6851e-5	8.9445	0.031758	5/8/2017@6:51:04 PM
7016438001_4376x10	1	3	0.016284	6.0604e-6	1.4089	0.0080632	0.014038	0.0000	0.92097	0.0034262	5/8/2017@7:04:35 PM
7016438002_4376	1	4	0.027236	2.5178e-5	8.7544	0.050059	0.10601	0.00062261	7.5425	0.026807	5/8/2017@7:18:06 PM
	Calibration:		Table/Fig. : 2		Table/Fig. : 1				Table/Fig. : 3		
7016438003_4376	1	5	0.026842	2.4491e-5	9.0075	0.051506	0.095211	0.00054953	8.2138	0.029178	5/8/2017@7:31:36 PM
	Calibration:						Table/Fig. : 4				
7016438005_4376	1	6	0.029046	2.8336e-5	9.2902	0.053122	0.099482	0.00057845	7.0734	0.025151	5/8/2017@7:45:07 PM
7016438006_4376	1	7	0.057288	7.7635e-5	11.046	0.063158	0.10124	0.00059034	14.484	0.051317	5/8/2017@7:58:37 PM
7016438007_4376	1	8	0.049553	6.4135e-5	11.348	0.064884	0.11804	0.00070410	14.031	0.049718	5/8/2017@8:12:08 PM
"CCV:CCV:Anion300_WW"	1	S4	0.98544	0.0016978	9.4174	0.053849	1.0460	0.0069860	9.7000	0.034426	5/8/2017@8:25:38 PM
	Known Conc:		1.0000		10.000		1.0000		10.000		
"CCB:CCB:Anion300_WW"	1	S8	0.017392	7.9950e-6	0.14604	0.00084324	0.016156	1.4339e-5	-0.038427	3.8510e-5	5/8/2017@8:39:10 PM
	Known Conc:		0.0000		0.0000		0.0000		0.0000		
7016438008_4376	1	9	0.030128	3.0225e-5	9.0724	0.051876	0.090725	0.00051916	8.3373	0.029614	5/8/2017@8:52:41 PM
7016438009_4376	1	10	0.012812	0.0000	0.34744	0.0019947	0.018542	3.0490e-5	0.14197	0.00067550	5/8/2017@9:06:10 PM
7016438010_4376	1	11	0.17598	0.00028482	42.527	0.24314	0.099702	0.00057994	61.551	0.21752	5/8/2017@9:19:40 PM
7016438011_4376	1	13	0.31791	0.00053258	77.545	0.44334	0.10535	0.00061817	6.3678	0.022659	5/8/2017@9:33:11 PM
7016438014_4376	1	15	0.037372	4.2871e-5	14.153	0.080926	0.067849	0.00036429	12.176	0.043170	5/8/2017@9:46:42 PM
7016438015_4376	1	16	0.023120	1.7994e-5	165.79	0.94783	0.014038	0.0000	8.6765	0.030812	5/8/2017@10:00:13 PM
7016438016_4376	1	18	0.067290	9.5095e-5	14.674	0.083903	0.014038	0.0000	13.774	0.048811	5/8/2017@10:13:43 PM
7016438017_4376	1	19	0.061733	8.5395e-5	10.648	0.060886	0.10362	0.00060646	3.0013	0.010772	5/8/2017@10:27:14 PM
109787_4376	1	20	1.0029	0.0017283	21.226	0.12136	1.0755	0.0071858	12.714	0.045067	5/8/2017@10:40:44 PM
109788_4376	1	21	0.060149	8.2631e-5	10.459	0.059804	0.10316	0.00060333	2.9675	0.010653	5/8/2017@10:54:14 PM
"CCV:CCV:Anion300_WW"	1	S4	0.98843	0.0017030	9.4172	0.053848	1.0490	0.0070066	9.7175	0.034487	5/8/2017@11:07:45 PM
	Known Conc:		1.0000		10.000		1.0000		10.000		
"CCB:CCB:Anion300_WW"	1	S8	0.015187	4.1459e-6	-0.0014551	0.0000	0.016122	1.4106e-5	-0.034000	5.4143e-5	5/8/2017@11:21:17 PM

ANALYST: BNK

Date : 5/17/2017

	Known Conc:		0.0000		0.0000		0.0000		0.0000		
7016438018_4376	1	22	0.030402	3.0704e-5	46.999	0.26871	0.22314	0.0014156	16.629	0.058893	5/8/2017@11:34:47 PM
7016438019_4376	1	23	0.077373	0.00011270	15.242	0.087147	0.067027	0.00035873	9.8589	0.034986	5/8/2017@11:48:17 PM
7016438020_4376	1	24	0.074831	0.00010826	122.20	0.69867	0.014038	0.0000	4.1531	0.014839	5/9/2017@12:01:46 AM
7017537001_4376	1	26	0.78232	0.0013432	417.31	2.3859	0.68028	0.0045104	542.46	1.9156	5/9/2017@12:15:17 AM
109789_4376	1	27	1.7329	0.0030025	420.93	2.4066	1.6404	0.011011	540.19	1.9076	5/9/2017@12:28:48 AM
109790_4376	1	28	0.77396	0.0013286	51.165	0.29253	0.66495	0.0044066	-0.049333	0.0000	5/9/2017@12:42:19 AM
7017537002_4376	1	29	0.54670	0.00093195	162.48	0.92895	0.72688	0.0048259	399.71	1.4116	5/9/2017@12:55:50 AM
7016893001_4376	1	30	0.048511	6.2315e-5	101.27	0.57900	0.059124	0.00030523	77.728	0.27464	5/9/2017@1:09:20 AM
109791_4377	1	S4	1.0087	0.0017385	9.4570	0.054075	1.0524	0.0070299	9.7414	0.034572	5/9/2017@1:22:51 AM
	Known Conc:		100.00		100.00		100.00		100.00		
109792_4377	1	S15	1.0633	0.0018336	10.422	0.059592	0.97381	0.0064975	10.702	0.037963	5/9/2017@1:36:23 AM
	Known Conc:		100.00		100.00		100.00		100.00		
"CCV:CCV:Anion300_WW"	1	S4	0.99163	0.0017086	9.4363	0.053957	1.0520	0.0070270	9.7554	0.034621	5/9/2017@1:49:54 AM
	Known Conc:		1.0000		10.000		1.0000		10.000		
"CCB:CCB:Anion300_WW"	1	S8	0.012812	0.0000	-0.0014551	0.0000	0.015760	1.1653e-5	-0.035303	4.9541e-5	5/9/2017@2:03:26 AM
	Known Conc:		0.0000		0.0000		0.0000		0.0000		
7016931001_4377	1	31	0.032668	3.4660e-5	49.425	0.28258	1.7863	0.011998	15.023	0.053220	5/9/2017@2:16:56 AM
7016995001_4377	1	32	0.038856	4.5462e-5	13.038	0.074549	0.096892	0.00056091	130.64	0.46149	5/9/2017@2:30:26 AM
109793_4377	1	33	0.99226	0.0017097	23.806	0.13611	1.0594	0.0070769	142.21	0.50231	5/9/2017@2:43:57 AM
109794_4377	1	34	0.040586	4.8481e-5	13.450	0.076903	0.042678	0.00019389	131.23	0.46357	5/9/2017@2:57:26 AM
7016997001_4377	1	35	0.027781	2.6130e-5	140.87	0.80541	0.030252	0.00010977	6.6360	0.023606	5/9/2017@3:10:56 AM
7016997002_4377	1	36	0.10162	0.00015503	499.35	2.8549	0.085947	0.00048681	10.994	0.038996	5/9/2017@3:24:26 AM
7017184001_4377	1	37	0.023300	1.8307e-5	8.2232	0.047022	0.012067	-1.3348e-5	1.2857	0.0047142	5/9/2017@3:37:57 AM
7017184002_4377	1	38	0.012812	0.0000	0.23580	0.0013564	0.014038	0.0000	-0.032394	5.9813e-5	5/9/2017@3:51:28 AM
7016373005_4327X5	1	54	839.33	1.4651	-0.0014551	0.0000	0.014038	0.0000	1.5864	0.0057760	5/9/2017@4:04:59 AM
7016373005_4327X1000	1	55	0.30790	0.00051510	20.145	0.11518	0.014038	0.0000	0.0034122	0.00018625	5/9/2017@4:18:29 AM
"CCV:CCV:Anion300_WW"	1	S4	0.99581	0.0017159	9.4729	0.054166	1.0555	0.0070503	9.8114	0.034819	5/9/2017@4:32:00 AM
	Known Conc:		1.0000		10.000		1.0000		10.000		
"CCB:CCB:Anion300_WW"	1	S8	0.012812	0.0000	0.15222	0.00087860	0.024637	7.1753e-5	-0.031926	6.1466e-5	5/9/2017@4:45:32 AM
	Known Conc:		0.0000		0.0000		0.0000		0.0000		
7016373006_4327X5	1	56	501.16	0.87480	-0.0014551	0.0000	243.30	1.6470	19.401	0.068679	5/9/2017@4:59:02 AM
7016373006_4327X1000	1	57	0.33851	0.00056853	34.156	0.19528	0.014038	0.0000	0.36200	0.0014525	5/9/2017@5:12:32 AM
7016373007_4327X5	1	58	0.012812	0.0000	-0.0014551	0.0000	571.42	3.8684	2.1160	0.0076460	5/9/2017@5:26:02 AM
7016373007_4327X1000	1	59	0.62852	0.0010748	49.043	0.28039	0.014038	0.0000	-0.026997	0.00026953	5/9/2017@5:39:32 AM
7016373008_4327X5	1	60	0.012812	0.0000	0.053766	0.00031571	495.02	3.3512	1.2783	0.0046881	5/9/2017@5:53:02 AM
7016373008_4327X1000	1	61	0.53099	0.00090453	47.883	0.27376	0.014038	0.0000	0.11456	0.00057872	5/9/2017@6:06:33 AM
7016373009_4327X5	1	62	0.012812	0.0000	-0.0014551	0.0000	0.24209	0.0015439	0.044686	0.00033199	5/9/2017@6:20:04 AM
7016373009_4327X1000	1	63	0.34008	0.00057127	26.791	0.15318	0.014038	0.0000	3.4387	0.012316	5/9/2017@6:33:35 AM
7016373010_4327X5	1	64	999.96	1.7455	-0.0014551	0.0000	0.014038	0.0000	43.164	0.15259	5/9/2017@6:47:06 AM
7016373010_4327X1000	1	65	0.28357	0.00047263	20.120	0.11504	0.078930	0.00043931	9.9025	0.035141	5/9/2017@7:00:37 AM
"CCV:CCV:Anion300_WW"	1	S4	1.0029	0.0017283	9.5710	0.054727	1.0613	0.0070896	9.9662	0.035366	5/9/2017@7:14:07 AM
	Known Conc:		1.0000		10.000		1.0000		10.000		
"CCB:CCB:Anion300_WW"	1	S8	0.014721	3.3319e-6	-0.0014551	0.0000	0.024972	7.4022e-5	-0.023556	9.1022e-5	5/9/2017@7:27:40 AM
	Known Conc:		0.0000		0.0000		0.0000		0.0000		
7016373011_4327X5	1	66	0.012812	0.0000	-0.0014551	0.0000	0.014038	0.0000	0.20895	0.00091203	5/9/2017@7:41:10 AM
7016373011_4327X1000	1	67	0.43532	0.00073753	36.027	0.20598	0.014038	0.0000	3.4657	0.012412	5/9/2017@7:54:40 AM
7016373012_4327X5	1	68	485.66	0.84774	-0.0014551	0.0000	0.014038	0.0000	-0.041011	2.9388e-5	5/9/2017@8:08:11 AM
7016373012_4327X1000	1	69	0.39034	0.00065901	32.948	0.18838	0.014038	0.0000	7.7896	0.027680	5/9/2017@8:21:41 AM

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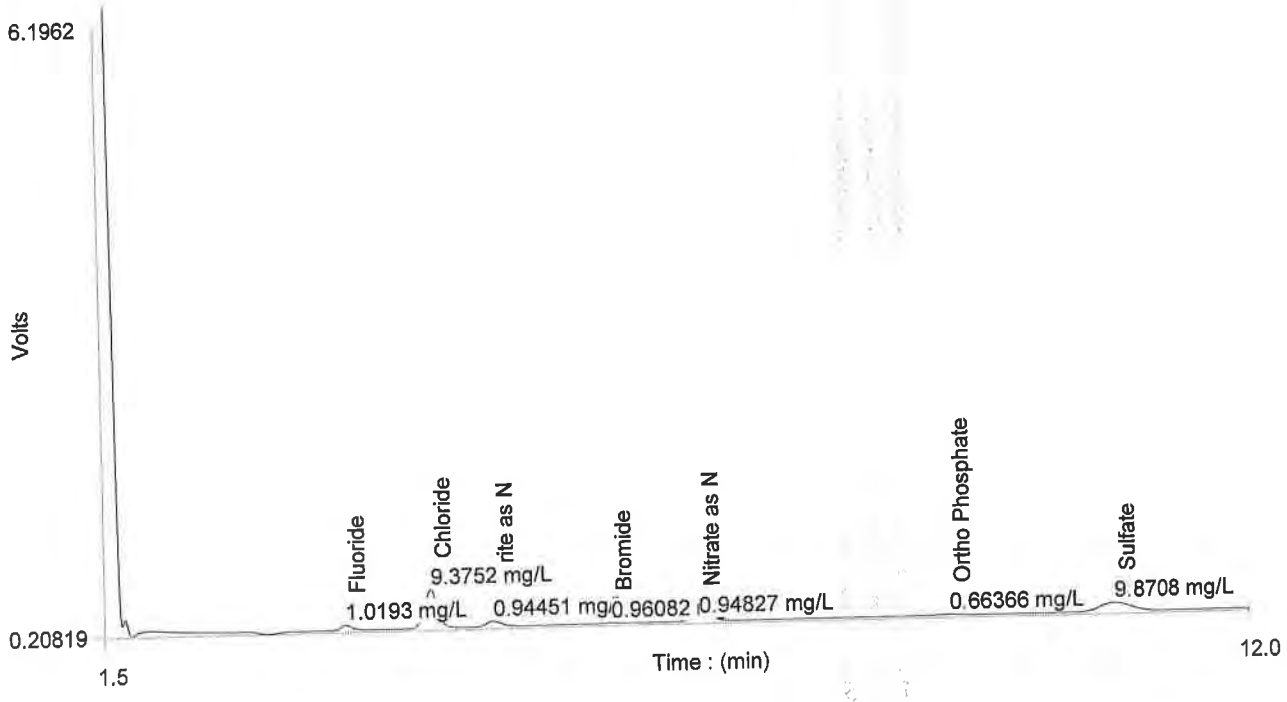
ANALYST: BNK

7016373013_4327X5	1	70	979.67	1.7101	0.016852	0.00010467	654.18	4.4287	-1.4312	-0.0048795	5/9/2017@8:35:11 AM
7016373013_4327X1000	1	71	0.56602	0.00096566	49.519	0.28312	0.010441	-2.4354e-5	2.4546	0.0088416	5/9/2017@8:48:41 AM
7016373014_4327X5	1	72	1160.9	2.0264	-0.0014551	0.0000	484.83	3.2822	-0.79755	-0.0026420	5/9/2017@9:02:12 AM
7016373014_4327X1000	1	73	0.012812	0.0000	39.034	0.22317	0.014038	0.0000	-0.049333	0.0000	5/9/2017@9:15:43 AM
7016373015_4327X5	1	74	630.77	1.1010	-0.0014551	0.0000	0.014038	0.0000	-0.049333	0.0000	5/9/2017@9:29:14 AM
7016373015_4327X1000	1	75	0.012812	0.0000	22.792	0.13032	0.014038	0.0000	3.8404	0.013735	5/9/2017@9:42:45 AM
"CCV:CCV:Anion300_WW"	1	S4	0.98694	0.0017004	9.6890	0.055402	1.0665	0.0071253	10.092	0.035811	5/9/2017@9:56:16 AM
	Known Conc:		1.0000		10.000		1.0000		10.000		
"CCB:CCB:Anion300_WW"	1	S8	0.012812	0.0000	0.16268	0.00093837	0.014378	2.2966e-6	-0.031920	6.1488e-5	5/9/2017@10:09:48 AM
	Known Conc:		0.0000		0.0000		0.0000		0.0000		
7016373016_4327X5	1	76	39.601	0.069104	688.87	3.9384	0.014038	0.0000	5.4924	0.019568	5/9/2017@10:23:18 AM
7016373016_4327X1000	1	77	0.18015	0.00029210	11.255	0.064358	0.014038	0.0000	0.0083881	0.00020382	5/9/2017@10:36:49 AM
7016438010_4376x5	1	12	0.041107	4.9390e-5	7.7451	0.044288	0.025864	8.0061e-5	10.430	0.037002	5/9/2017@10:50:19 AM
7016438011_4376x5	1	14	0.072070	0.00010344	14.335	0.081965	0.066000	0.00035177	1.2385	0.0045473	5/9/2017@11:03:50 AM
7016438015_4376x5	1	17	0.016593	6.5994e-6	30.759	0.17586	0.014038	0.0000	1.6534	0.0060124	5/9/2017@11:17:20 AM
7016438020_4376x5	1	25	0.026803	2.4422e-5	21.188	0.12114	0.014038	0.0000	0.78050	0.0029302	5/9/2017@11:30:52 AM
7017537001_4376X25	1	78	0.038445	4.4744e-5	14.142	0.080859	0.045993	0.00021633	16.554	0.058626	5/9/2017@11:44:22 AM
109789_4376X25	1	79	0.98853	0.0017032	24.947	0.14264	1.0728	0.0071678	27.497	0.097269	5/9/2017@11:57:52 AM
109790_4376X25	1	80	0.037950	4.3880e-5	14.173	0.081037	0.036830	0.00015430	16.753	0.059329	5/9/2017@12:11:23 PM
7017537002_4376X25	1	81	0.030913	3.1595e-5	5.1909	0.029686	0.069392	0.00037474	11.818	0.041904	5/9/2017@12:24:53 PM
"CCV:CCV:Anion300_WW"	1	S4	1.0052	0.0017322	9.6311	0.055071	1.0723	0.0071646	10.013	0.035531	5/9/2017@12:38:24 PM
	Known Conc:		1.0000		10.000		1.0000		10.000		
"CCB:CCB:Anion300_WW"	1	S8	0.016115	5.7653e-6	-0.0014551	0.0000	0.017626	2.4285e-5	-0.028898	7.2159e-5	5/9/2017@12:51:56 PM
	Known Conc:		0.0000		0.0000		0.0000		0.0000		
7016893001_4376X5	1	82	0.020677	1.3728e-5	15.778	0.090212	0.023188	6.1941e-5	12.611	0.044703	5/9/2017@1:05:27 PM
7016997001_4377X5	1	83	0.015937	5.4538e-6	25.718	0.14704	0.011444	-1.7563e-5	1.5019	0.0054774	5/9/2017@1:18:57 PM
7016997002_4377X100	1	84	0.012812	0.0000	9.1426	0.052278	0.014038	0.0000	0.044079	0.00032984	5/9/2017@1:32:27 PM
7016995001_4377X5	1	32	0.041920	5.0810e-5	13.470	0.077017	0.041847	0.00018826	130.35	0.46046	5/9/2017@1:45:58 PM
"CCV:CCV:Anion300_WW"	1	S4	1.0136	0.0017469	9.6676	0.055279	1.0755	0.0071860	10.132	0.035952	5/9/2017@1:59:30 PM
	Known Conc:		1.0000		10.000		1.0000		10.000		
"CCB:CCB:Anion300_WW"	1	S8	0.012812	0.0000	-0.0014551	0.0000	-0.0087641	-0.00015437	-0.036861	4.4042e-5	5/9/2017@2:13:03 PM
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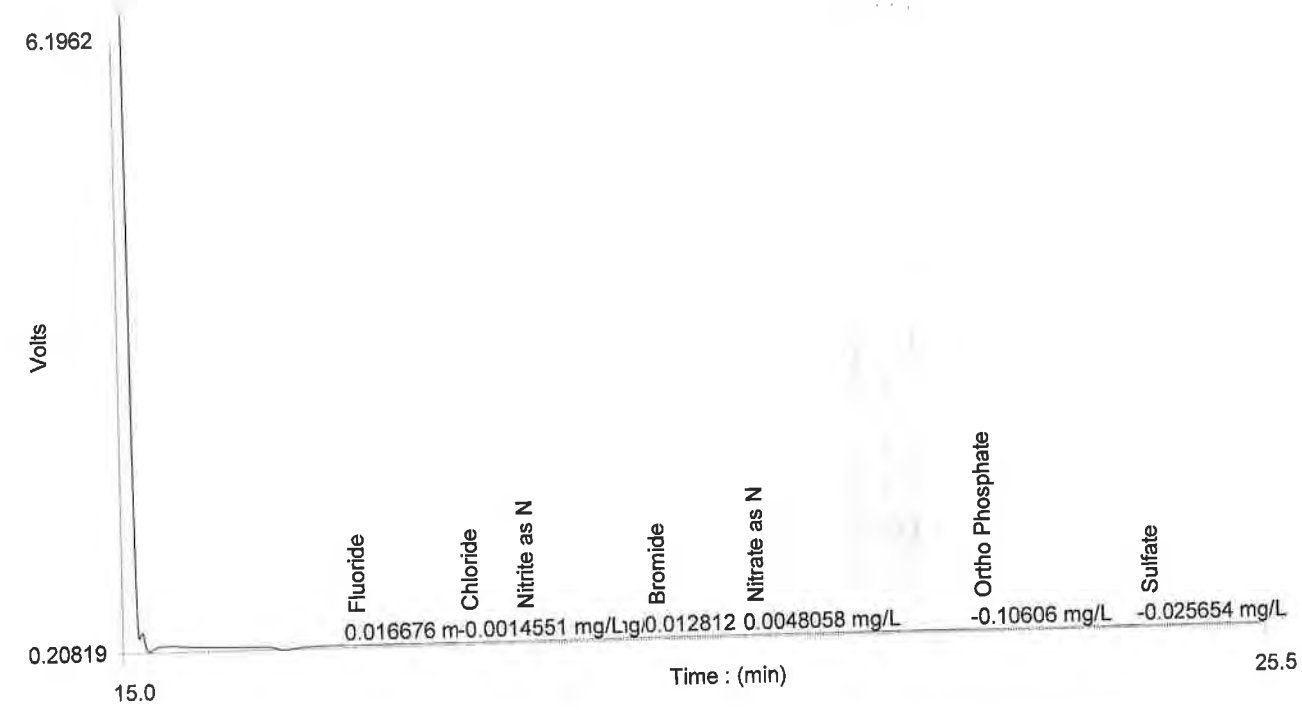
Date : 5/17/2017

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Channel 1 (Anions) - "CCV:CCV:Anion300_WW" [Row: 1]



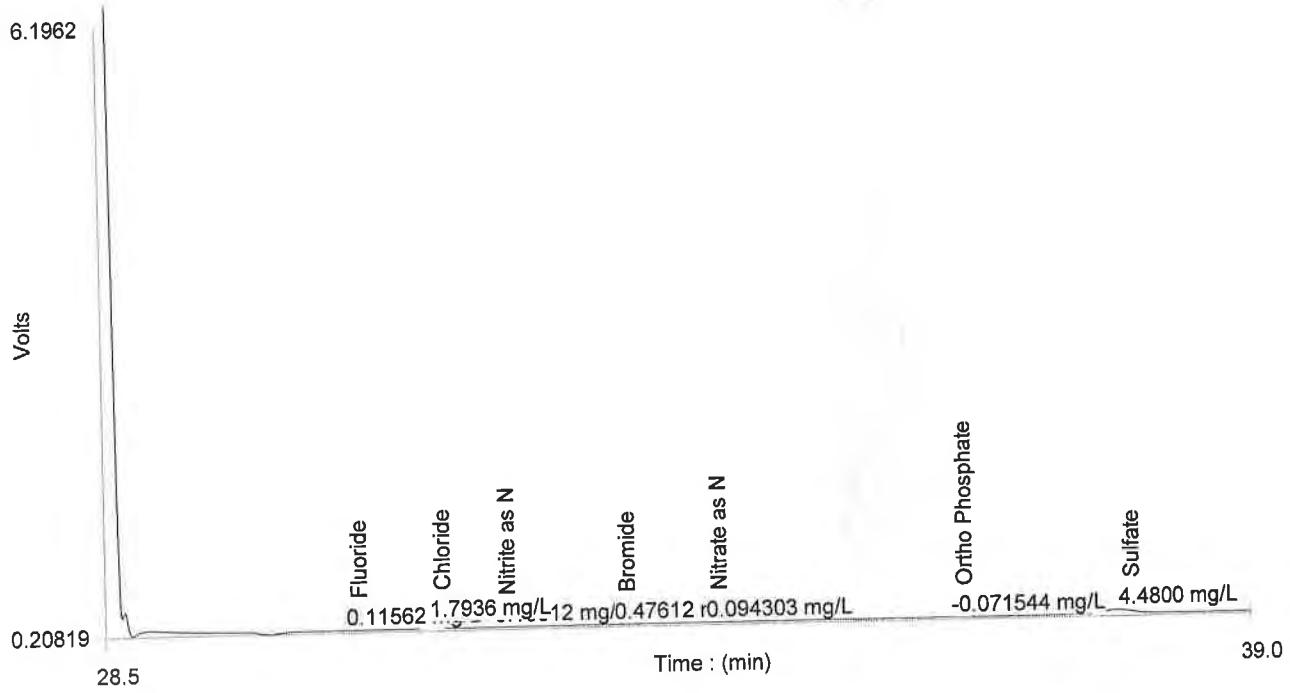
Channel 1 (Anions) - "CCB:CCB:Anion300_WW" [Row: 2]



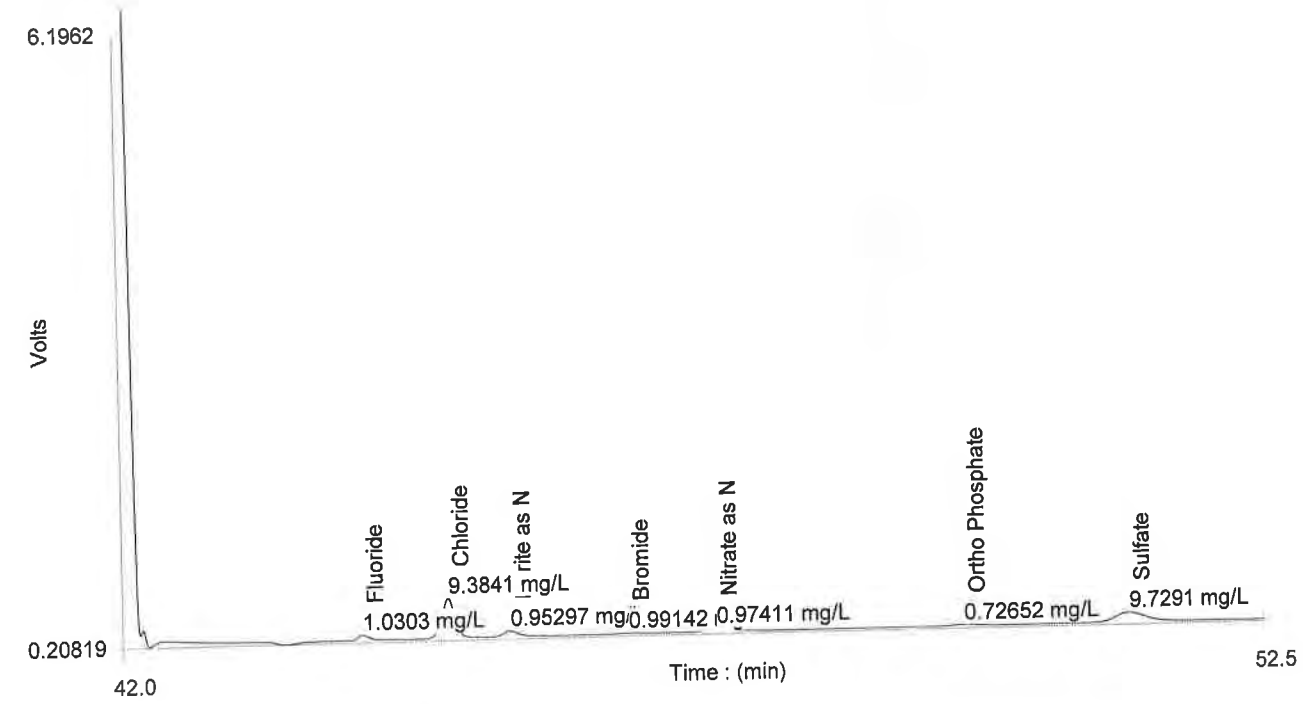
Date : 5/17/2017

ANALYST: BNK

Channel 1 (Anions) - CRDL [Row: 3]



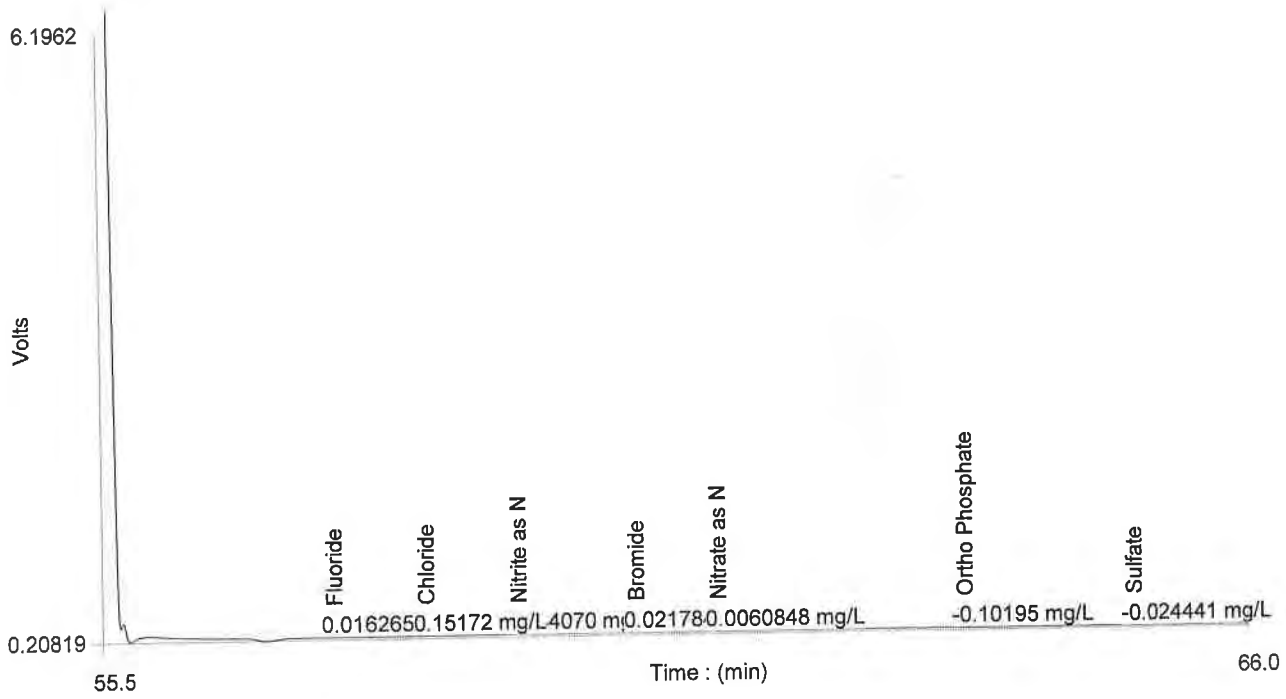
Channel 1 (Anions) - 109785_4376 [Row: 4]



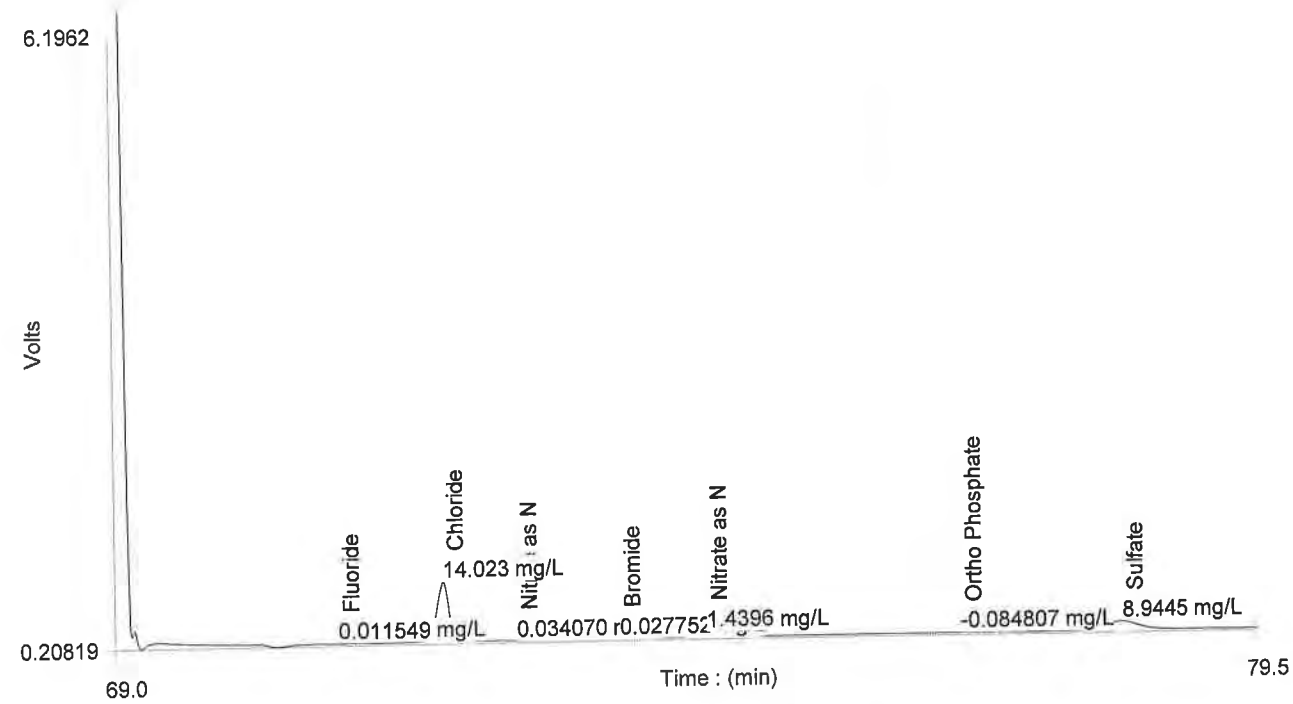
ANALYST: BNK

Date : 5/17/2017

Channel 1 (Anions) - 109786_4376 [Row: 5]



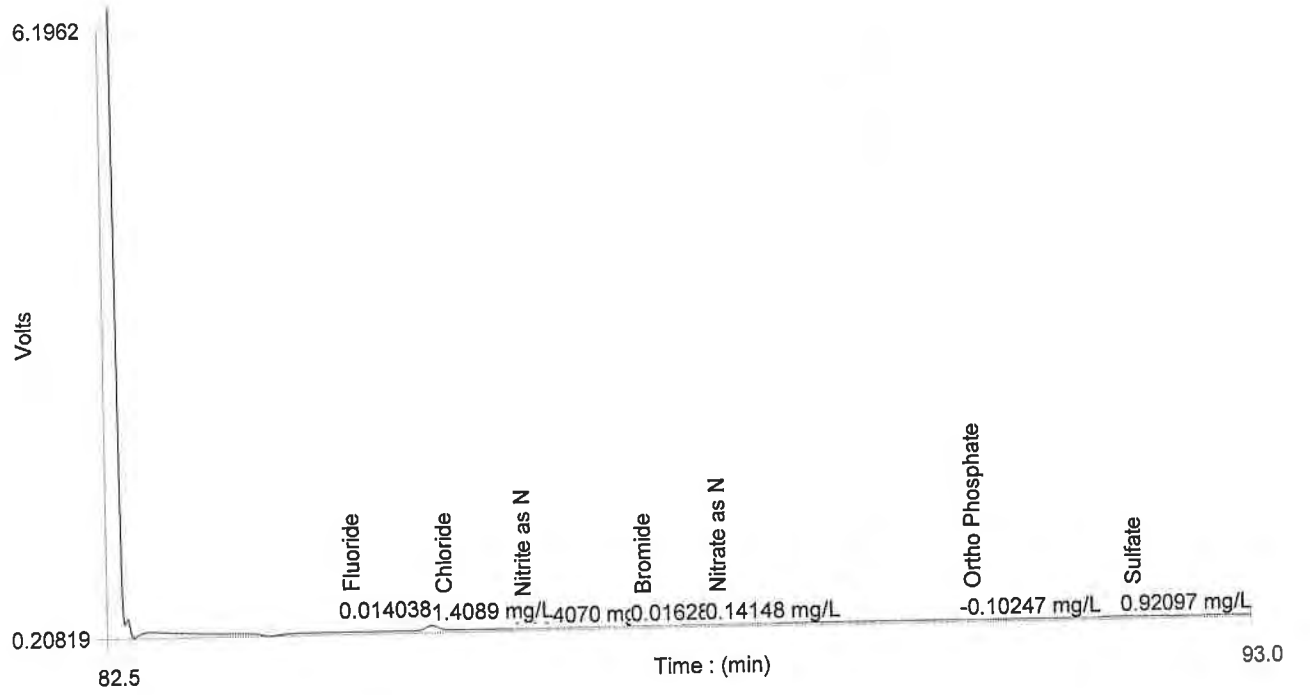
Channel 1 (Anions) - 7016438001_4376 [Row: 6]



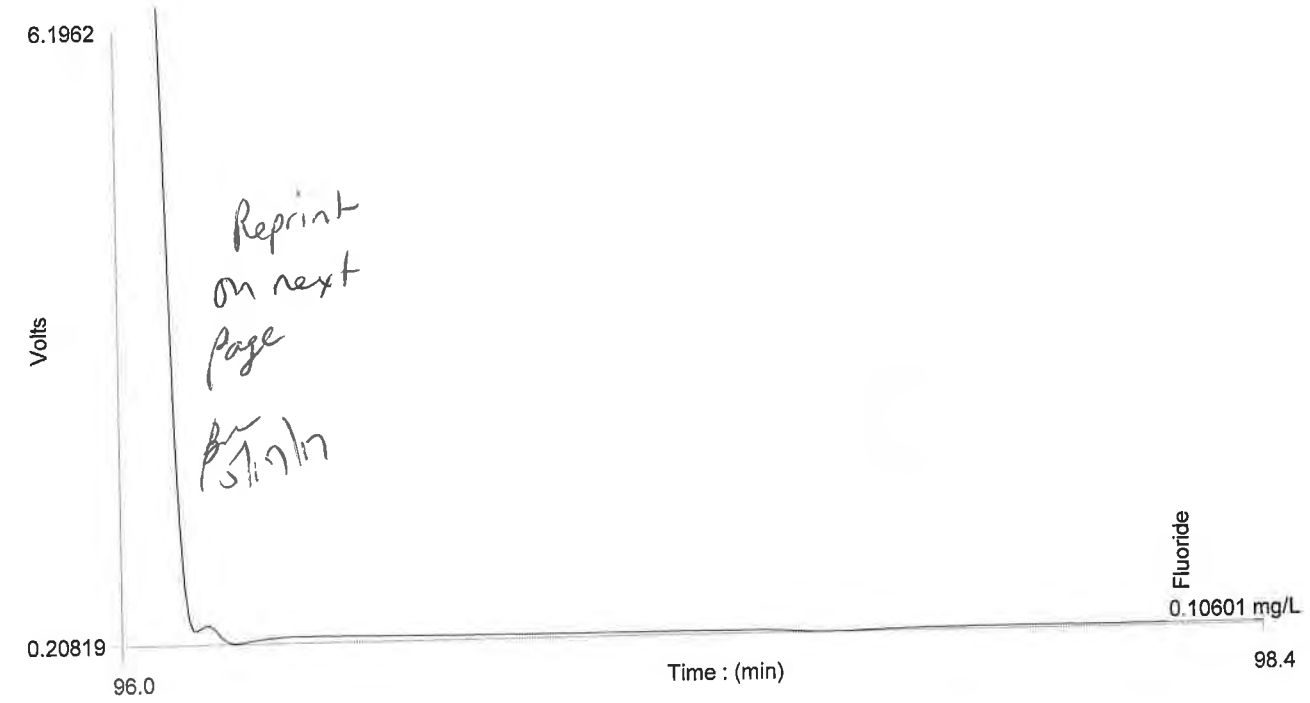
Date : 5/17/2017

ANALYST: BNK

Channel 1 (Anions) - 7016438001_4376x10 [Row: 7]



Channel 1 (Anions) - 7016438002_4376 [Row: 8]



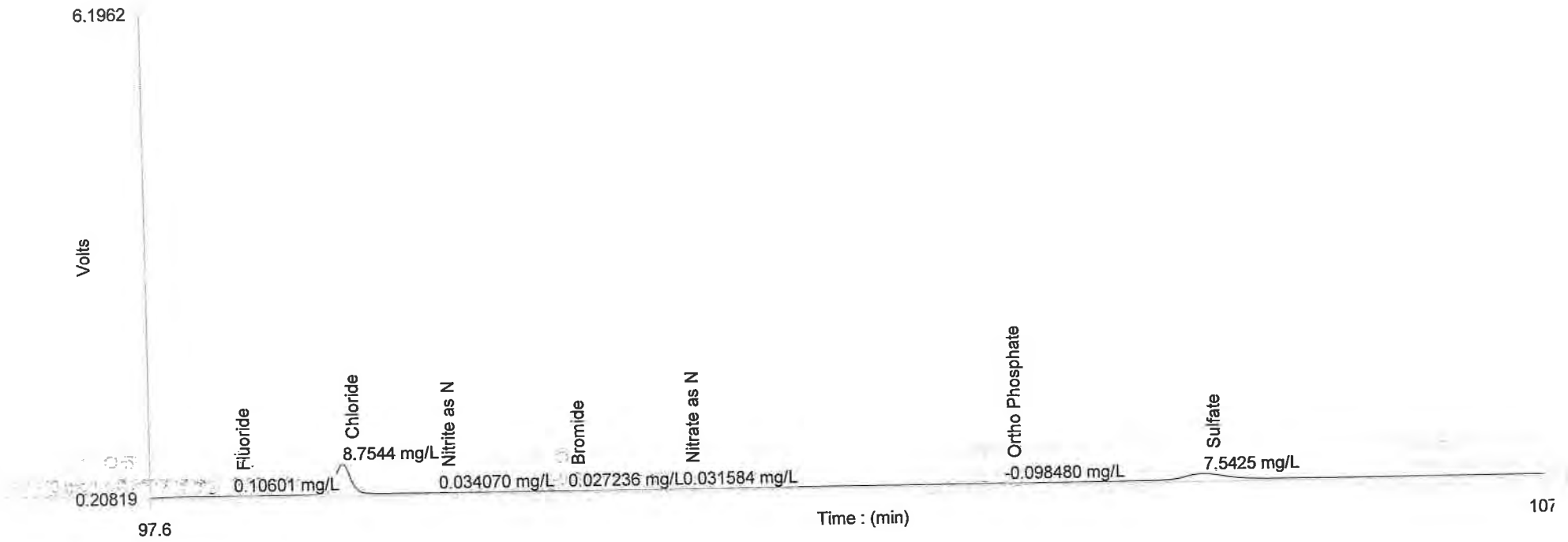
Date : 5/17/2017

ANALYST: BNK

Original Run Filename: Created: 5/8/2017 5:41:52 PM
Original Run Author's Signature: []
Current Run Filename: Last Modified: 5/9/2017 6:18:25 PM
Current Run Author's Signature: [wetchem]

5/17/17 7016438002

Channel 1 (Anions) - ~~Current View~~

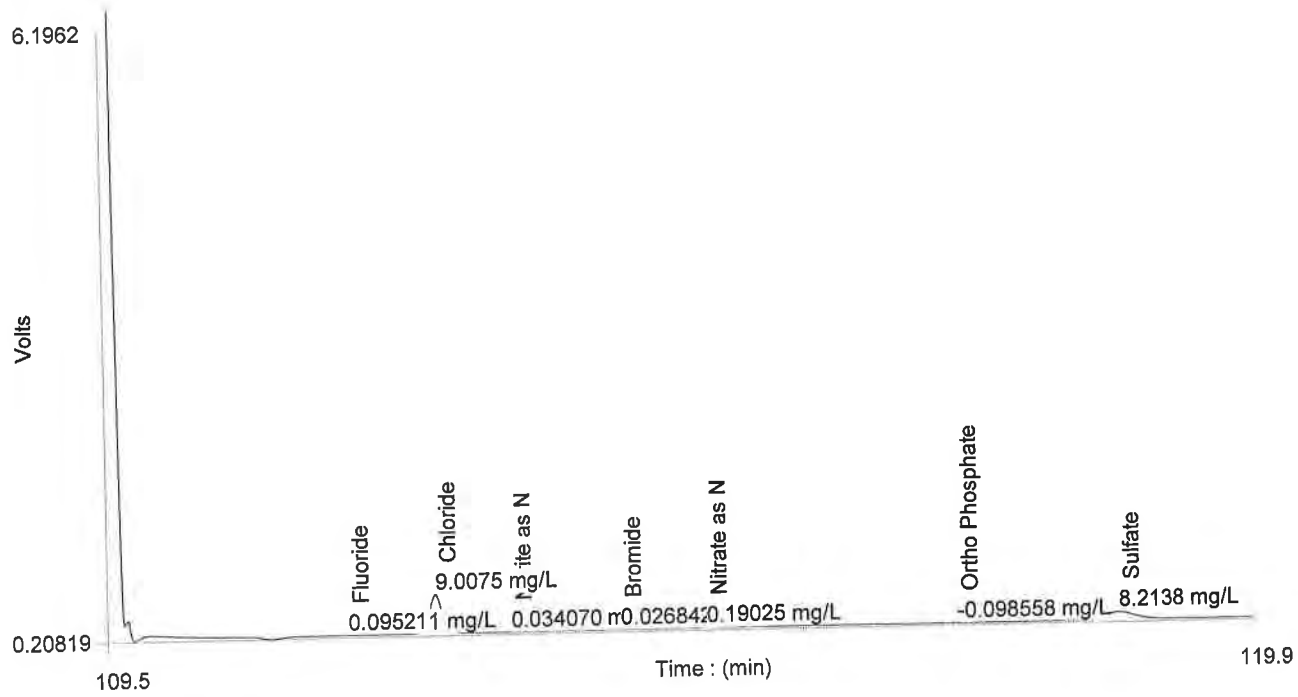


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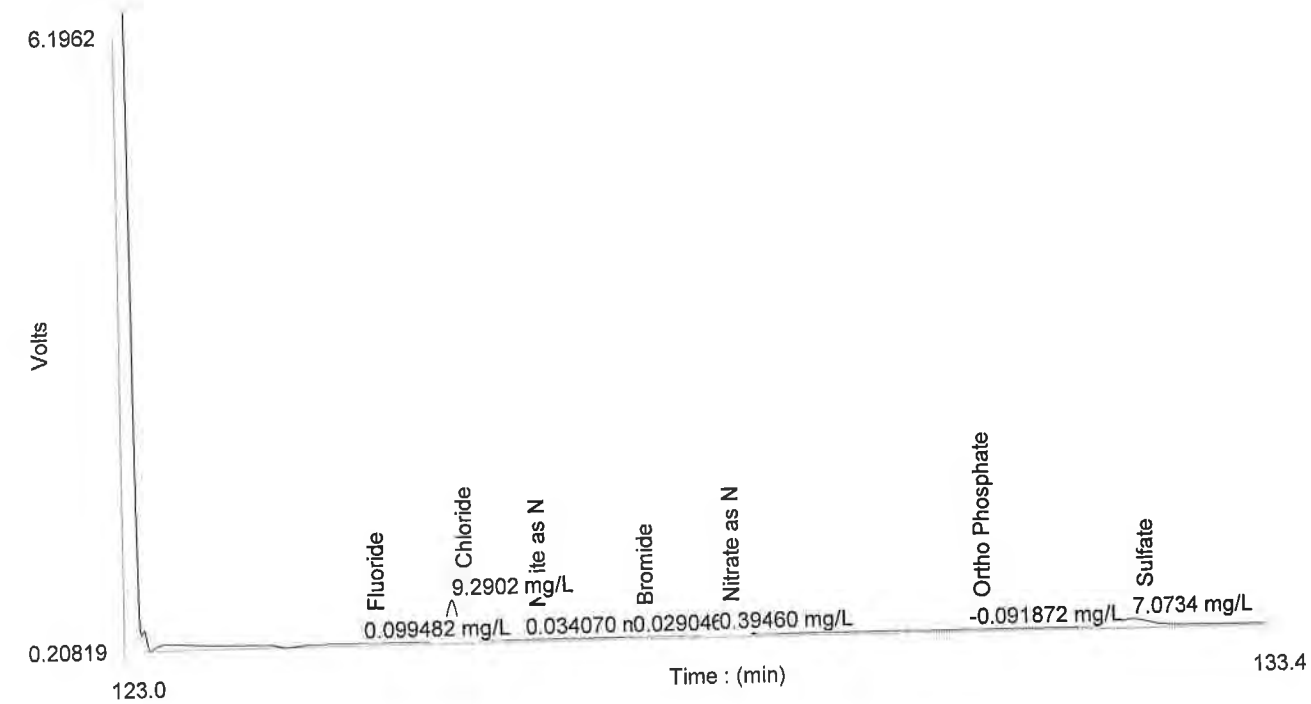
Date : 5/17/2017

ANALYST: BNK

Channel 1 (Anions) - 7016438003_4376 [Row: 9]



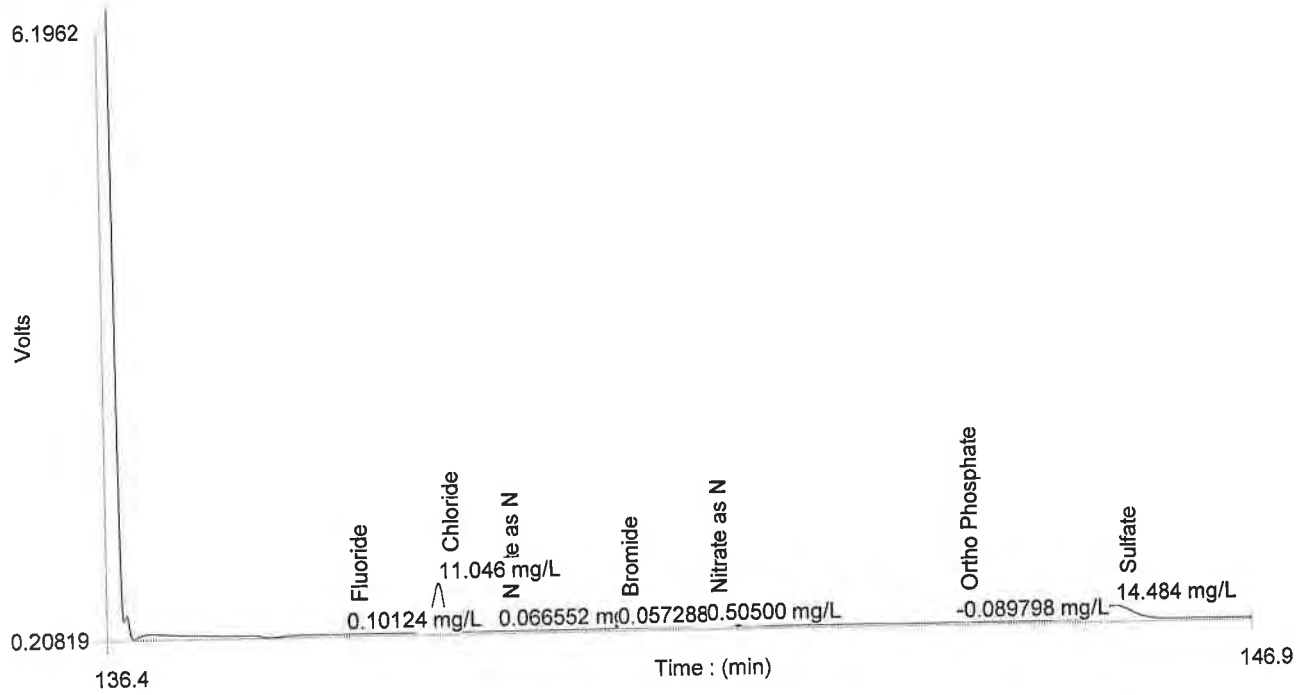
Channel 1 (Anions) - 7016438005_4376 [Row: 10]



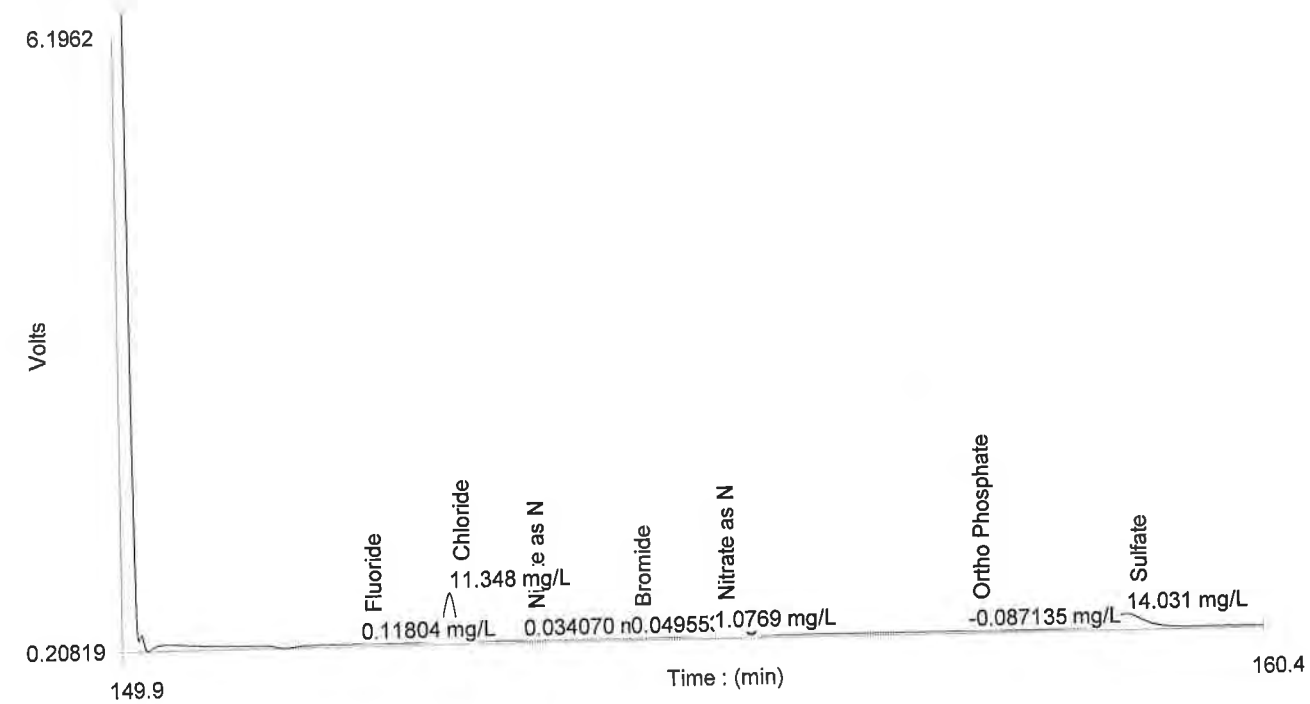
Date : 5/17/2017

ANALYST: BNK

Channel 1 (Anions) - 7016438006_4376 [Row: 11]



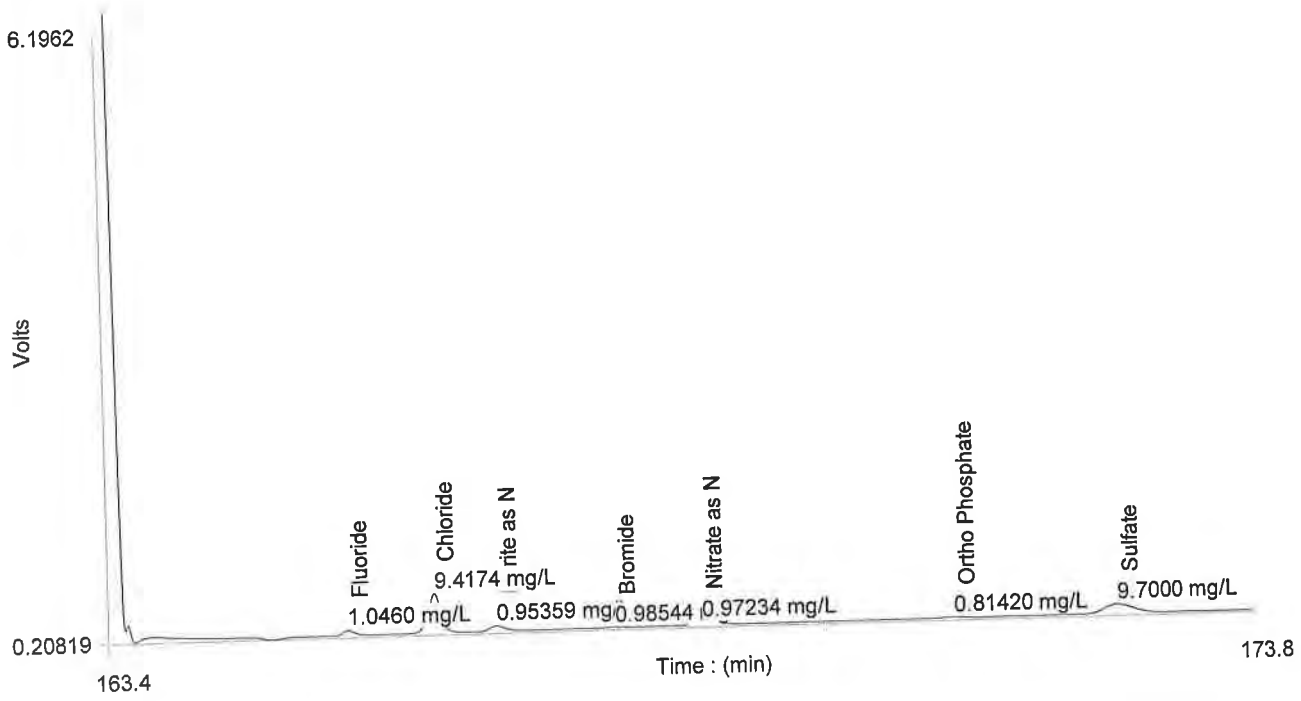
Channel 1 (Anions) - 7016438007_4376 [Row: 12]



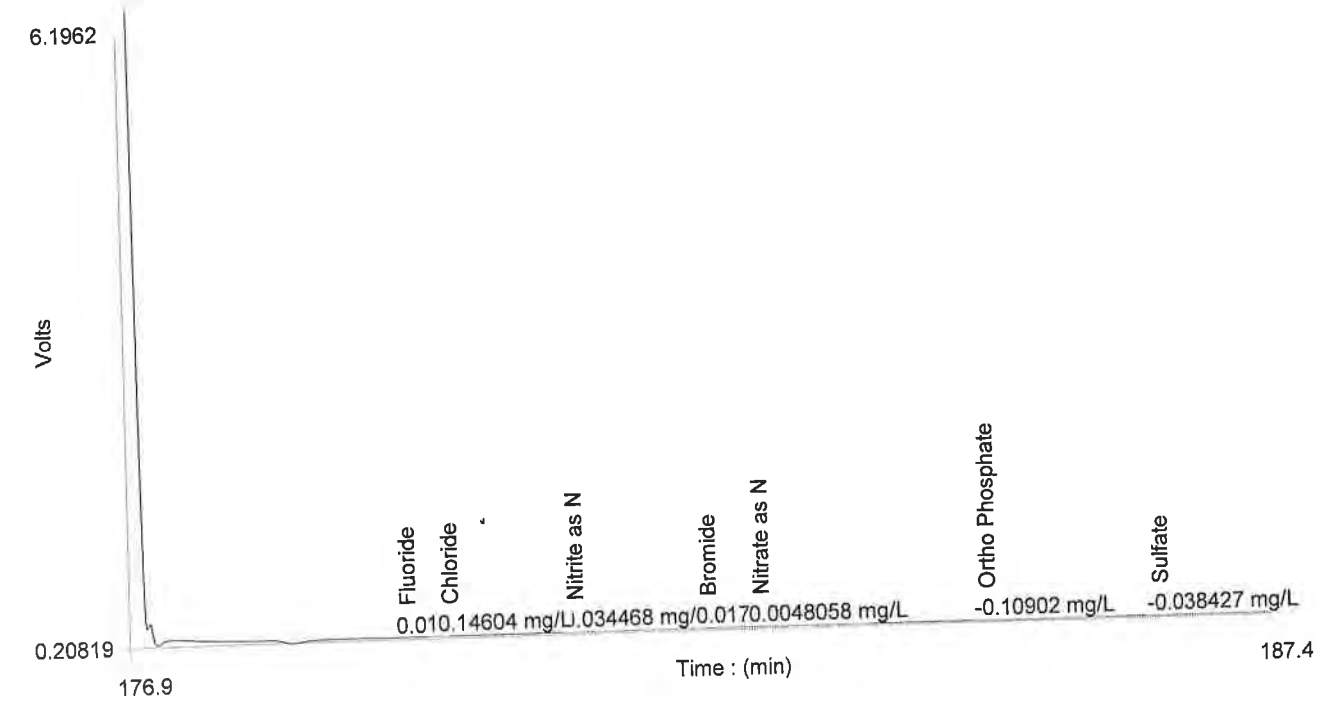
Date : 5/17/2017

ANALYST: BNK

Channel 1 (Anions) - "CCV:CCV:Anion300_WW" [Row: 13]



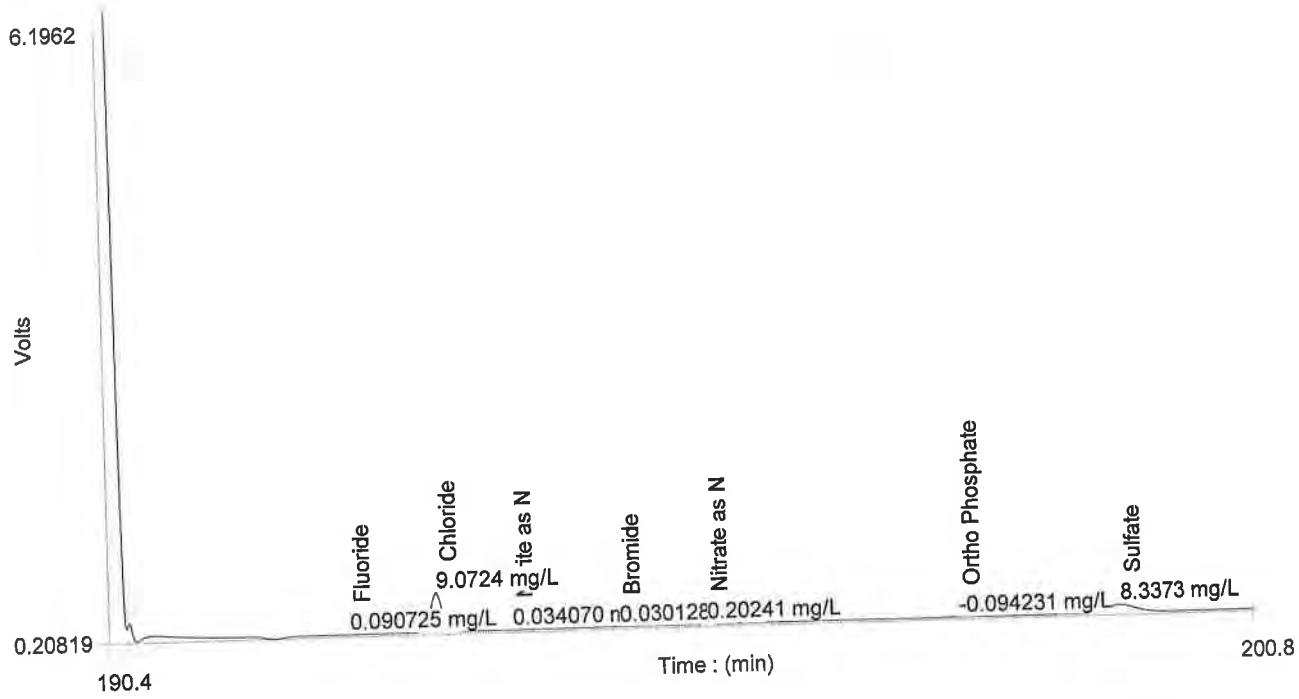
Channel 1 (Anions) - "CCB:CCB:Anion300_WW" [Row: 14]



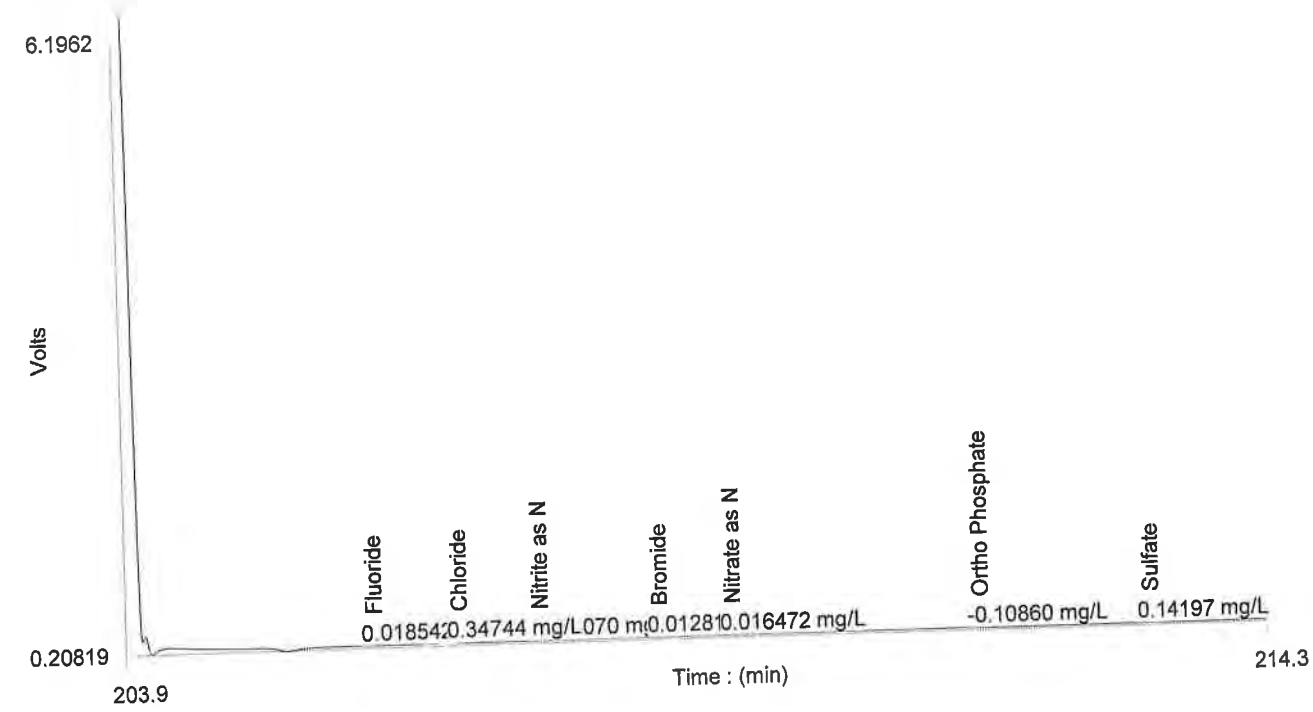
Date : 5/17/2017

ANALYST: BNK

Channel 1 (Anions) - 7016438008_4376 [Row: 15]



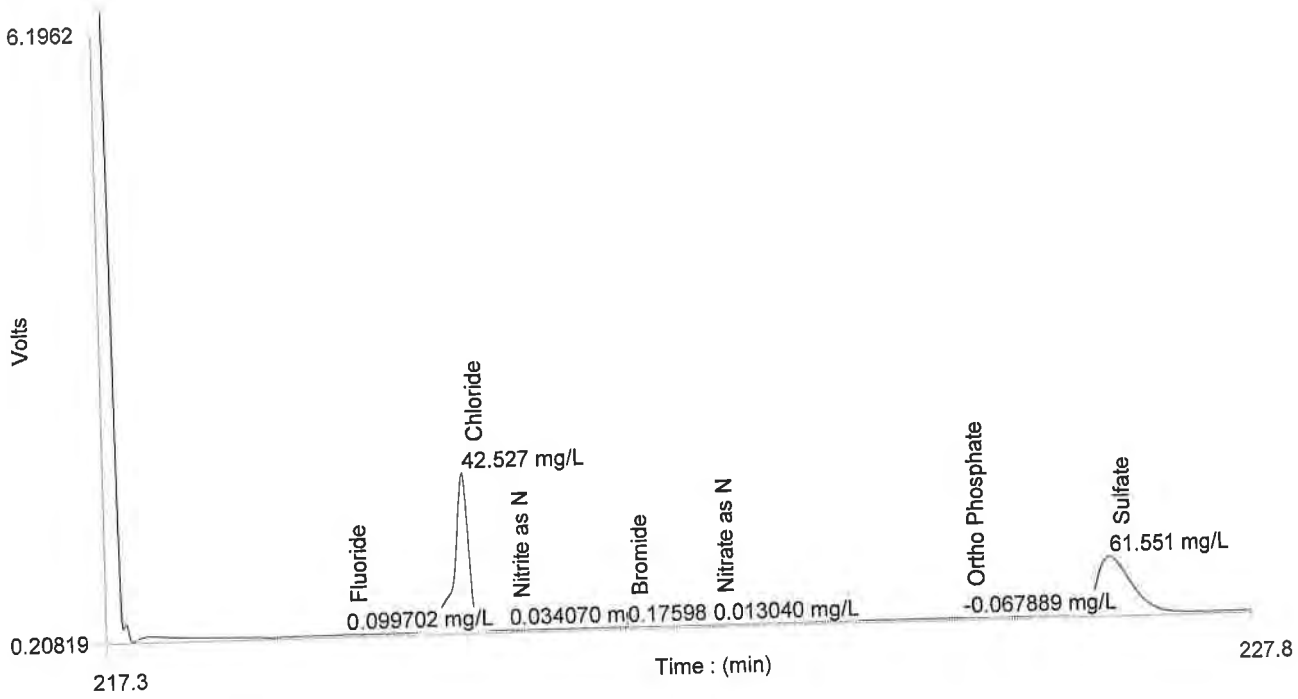
Channel 1 (Anions) - 7016438009_4376 [Row: 16]



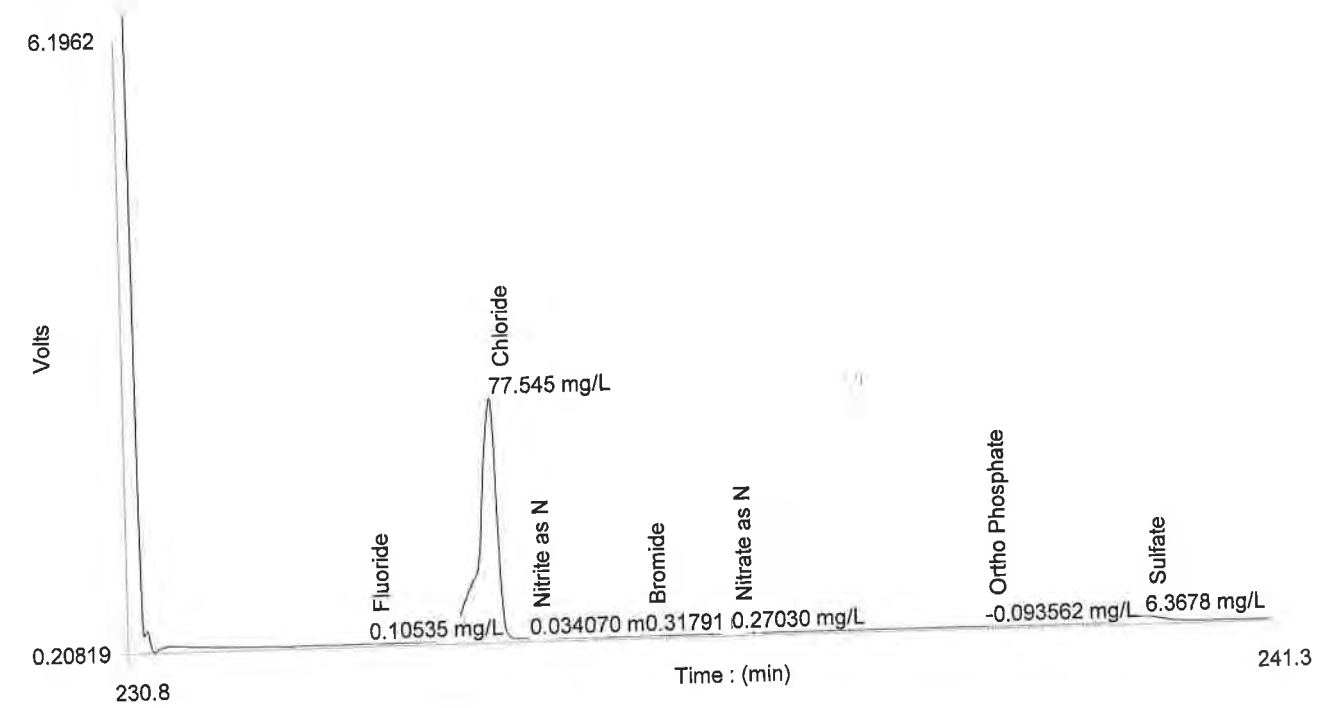
Date : 5/17/2017

ANALYST: BNK

Channel 1 (Anions) - 7016438010_4376 [Row: 17]



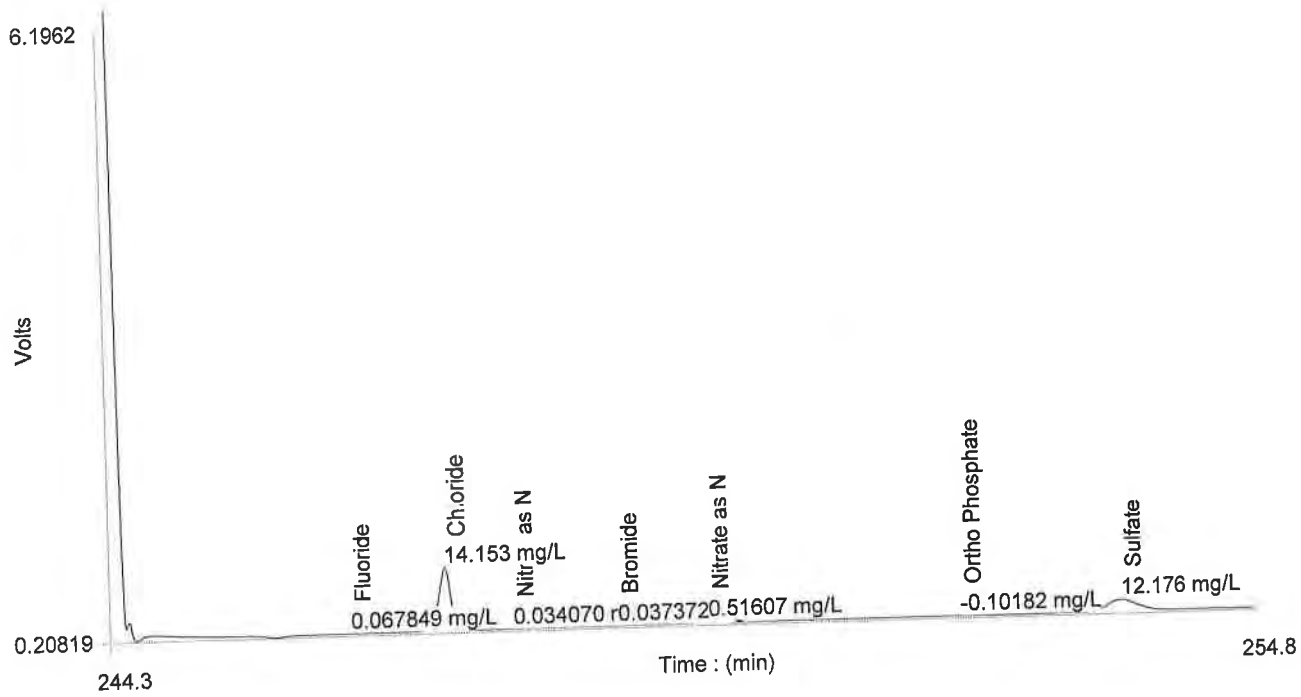
Channel 1 (Anions) - 7016438011_4376 [Row: 18]



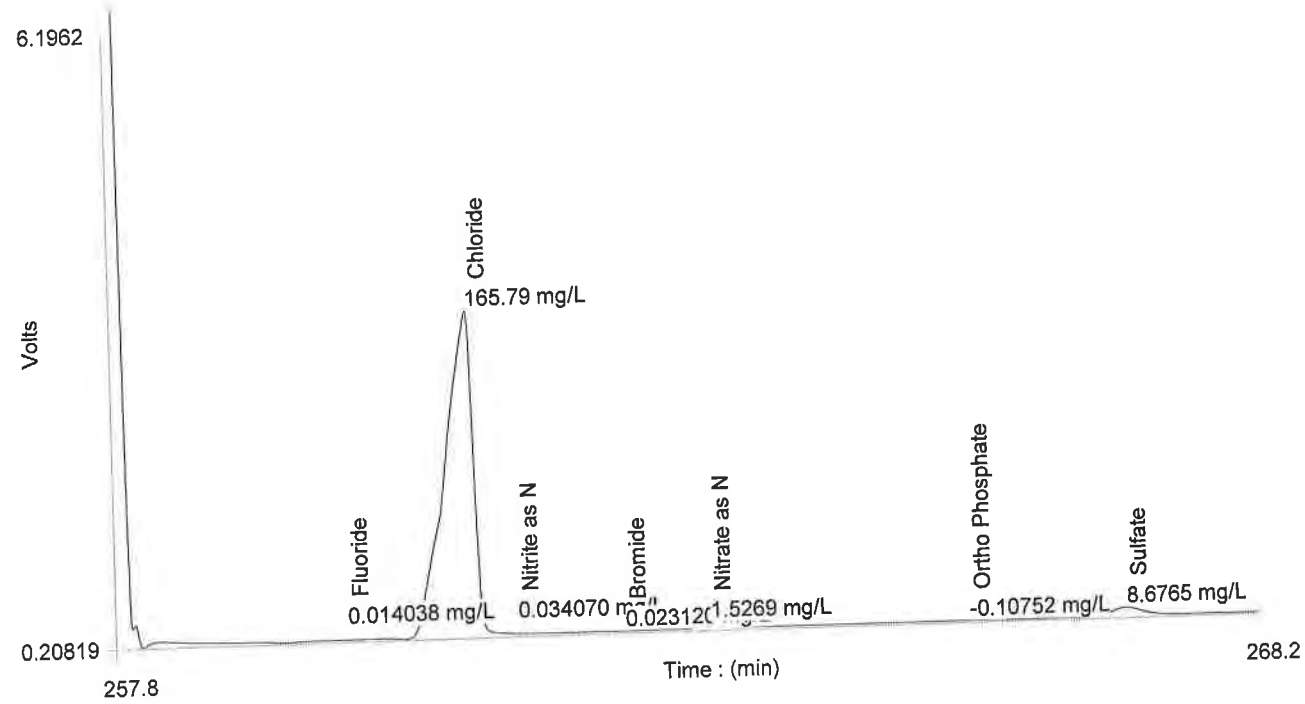
Date : 5/17/2017

ANALYST: BNK

Channel 1 (Anions) - 7016438014_4376 [Row: 19]



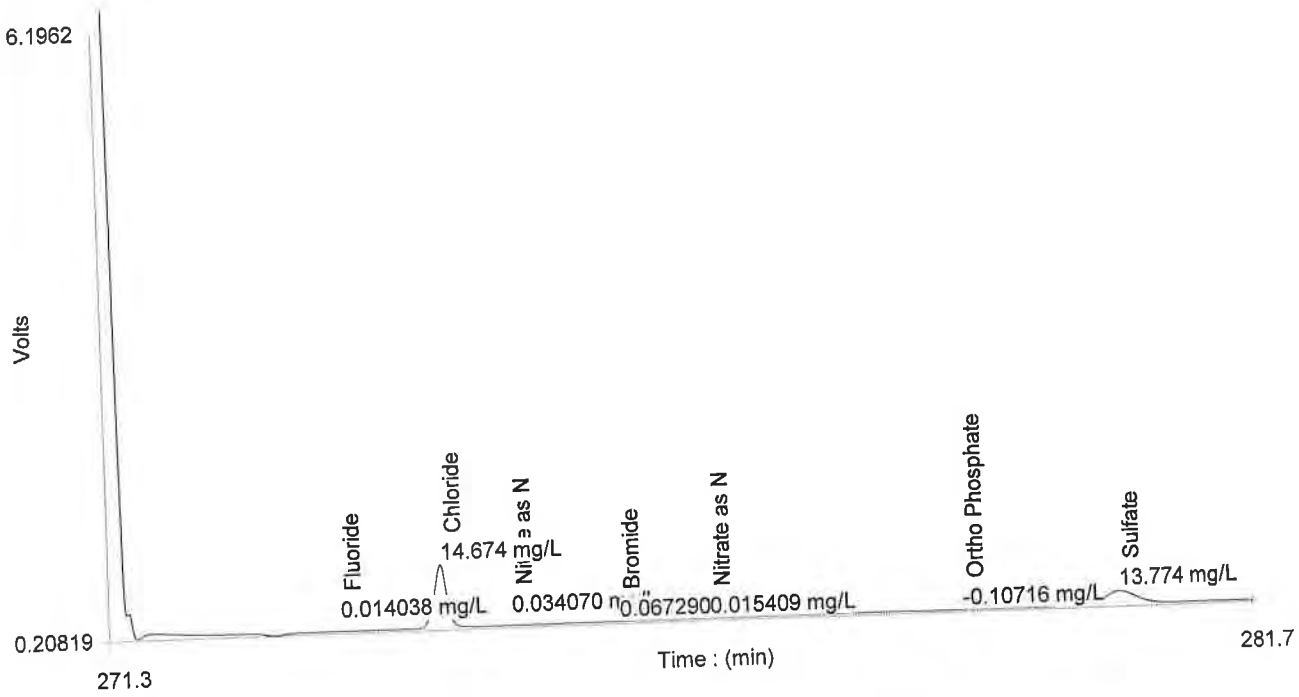
Channel 1 (Anions) - 7016438015_4376 [Row: 20]



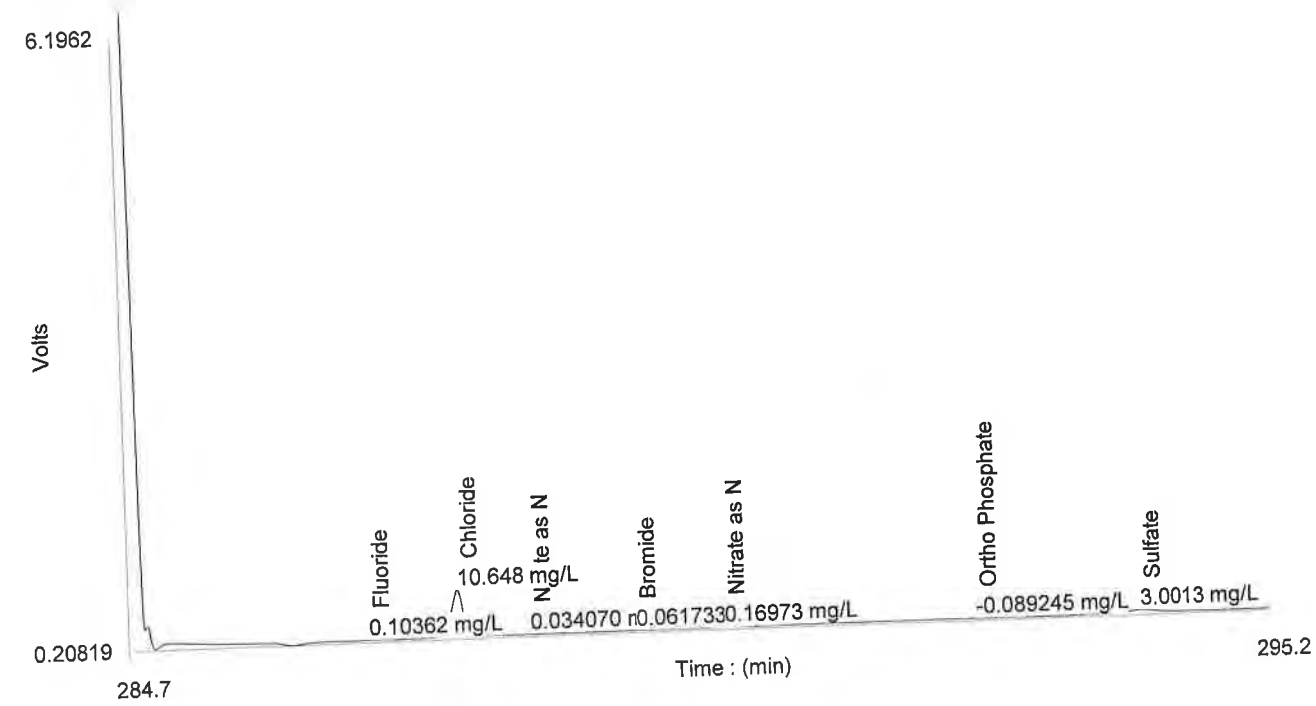
Date : 5/17/2017

ANALYST: BNK

Channel 1 (Anions) - 7016438016_4376 [Row: 21]



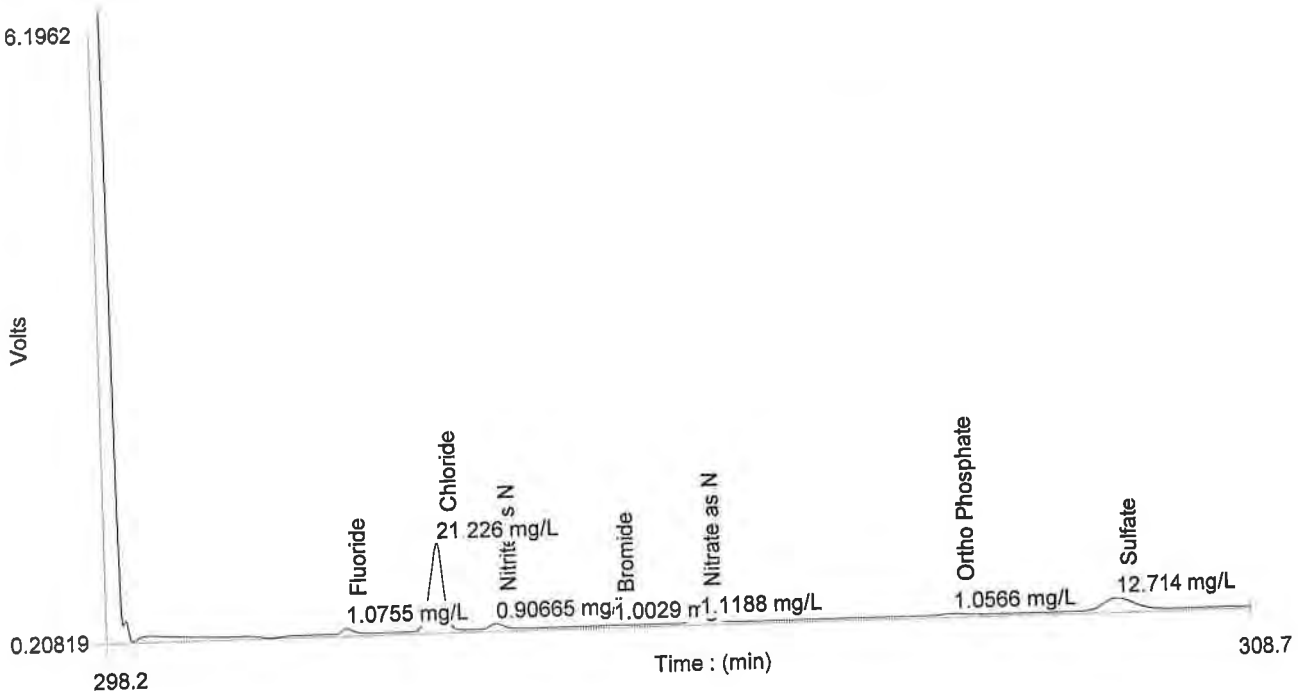
Channel 1 (Anions) - 7016438017_4376 [Row: 22]



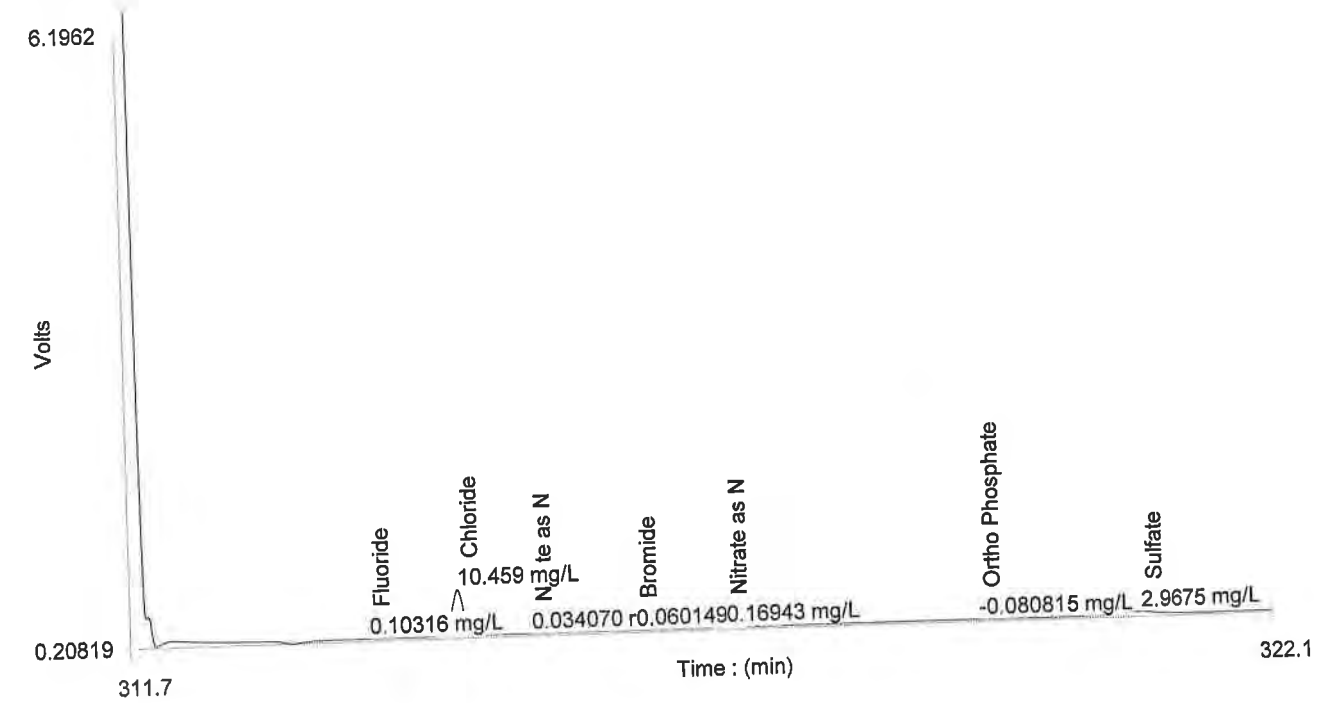
Date : 5/17/2017

ANALYST: BNK

Channel 1 (Anions) - 109787_4376 [Row: 23]



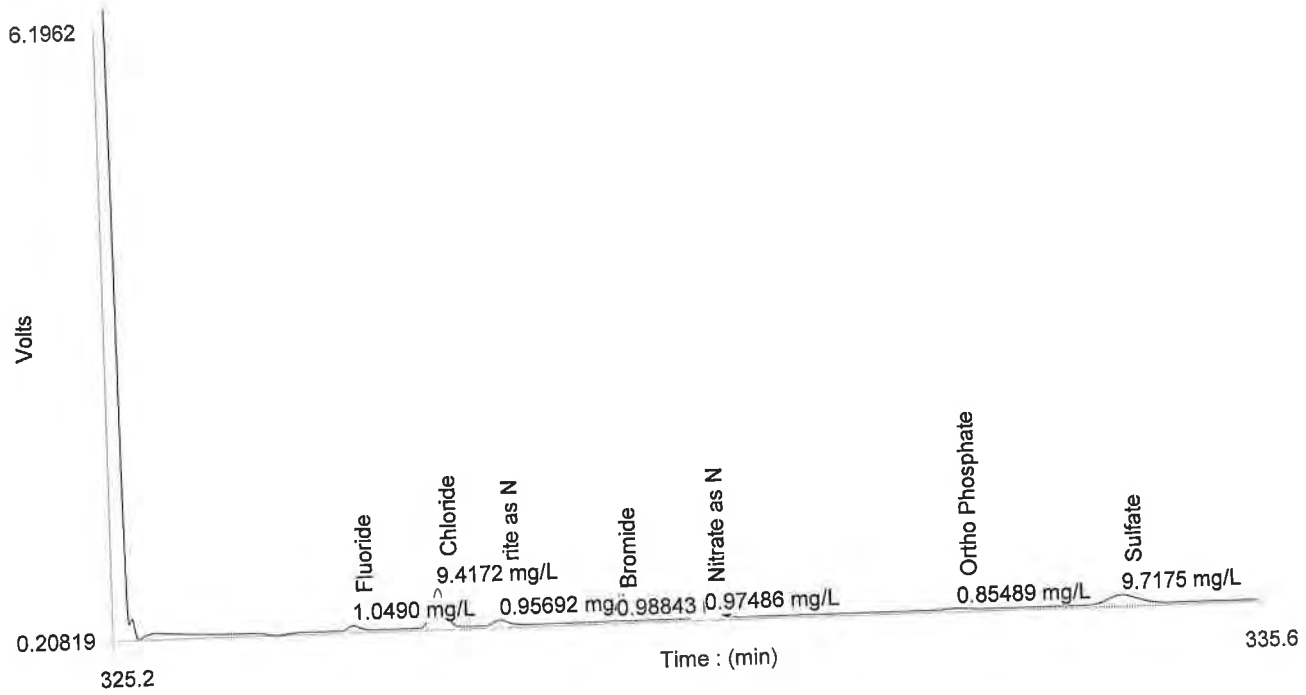
Channel 1 (Anions) - 109788_4376 [Row: 24]



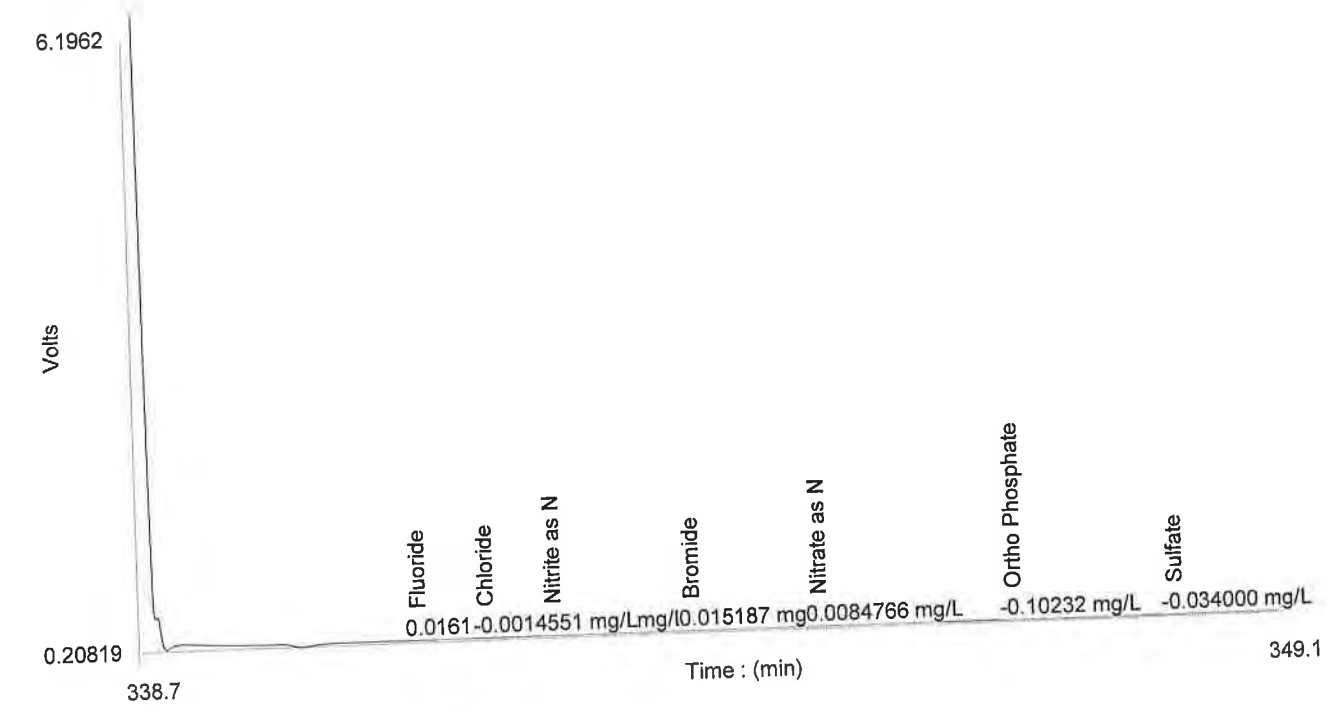
Date : 5/17/2017

ANALYST: BNK

Channel 1 (Anions) - "CCV:CCV:Anion300_WW" [Row: 25]



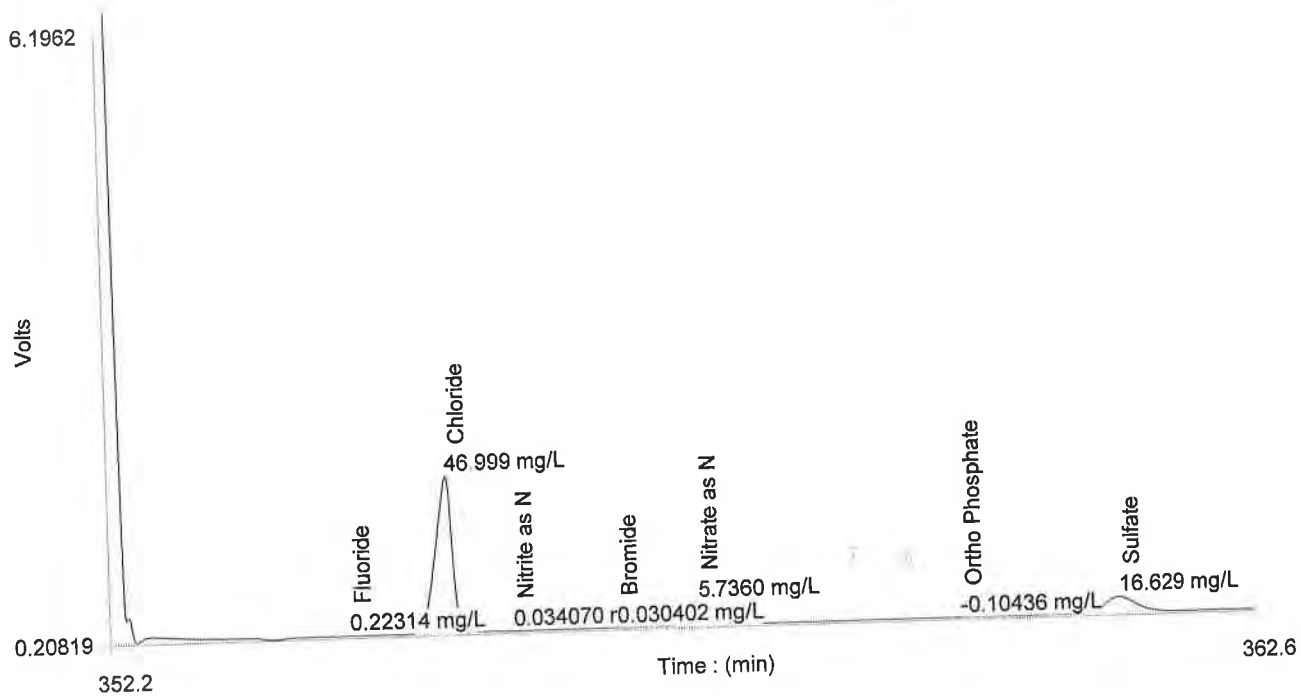
Channel 1 (Anions) - "CCB:CCB:Anion300_WW" [Row: 26]



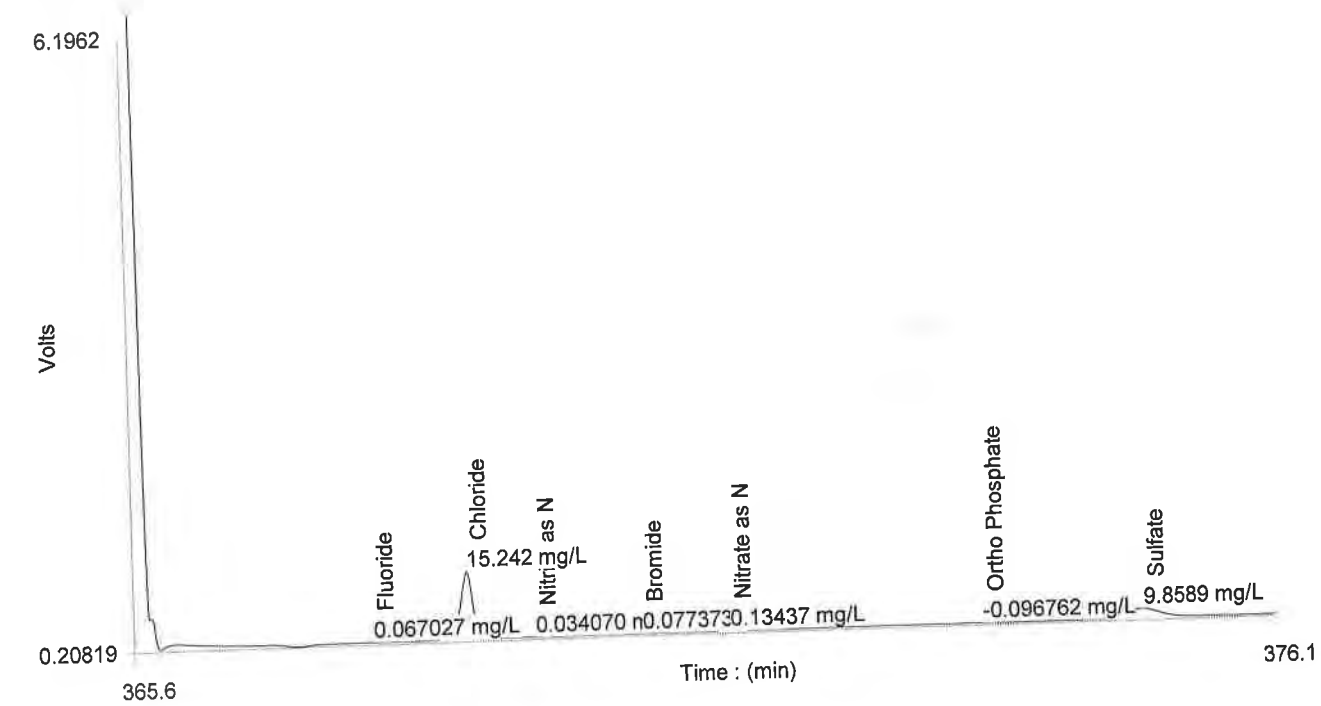
Date : 5/17/2017

ANALYST: BNK

Channel 1 (Anions) - 7016438018_4376 [Row: 27]



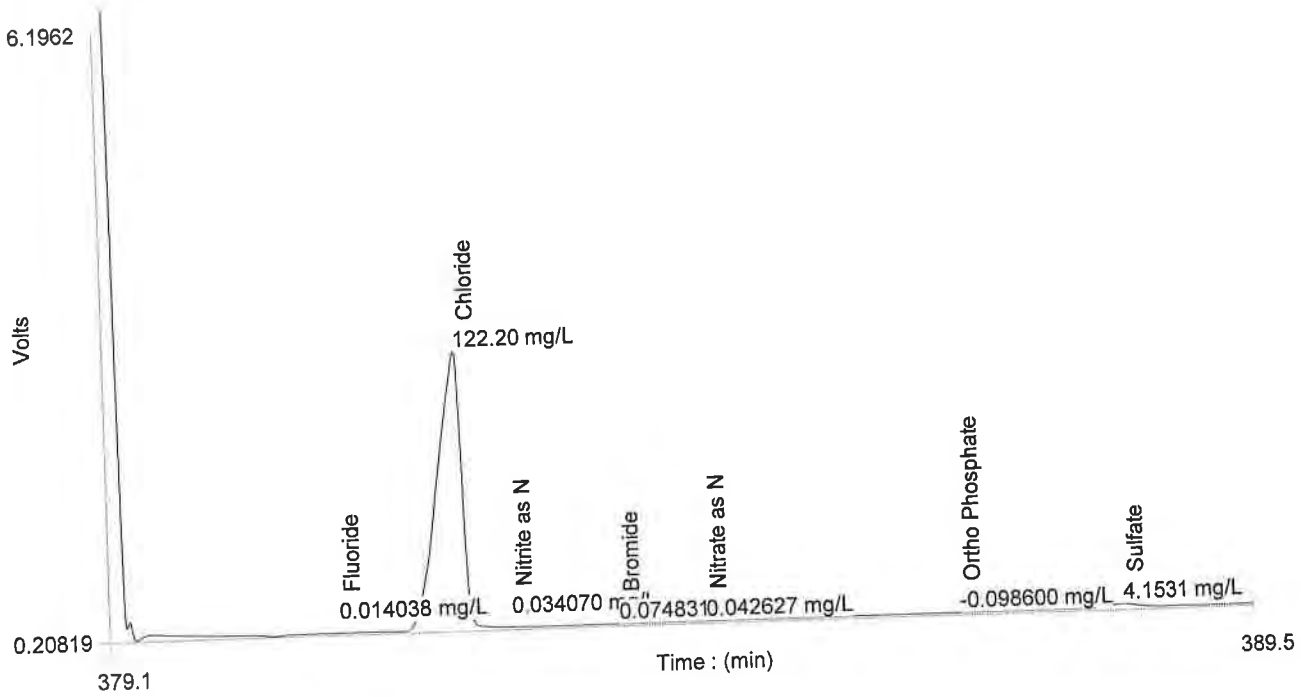
Channel 1 (Anions) - 7016438019_4376 [Row: 28]



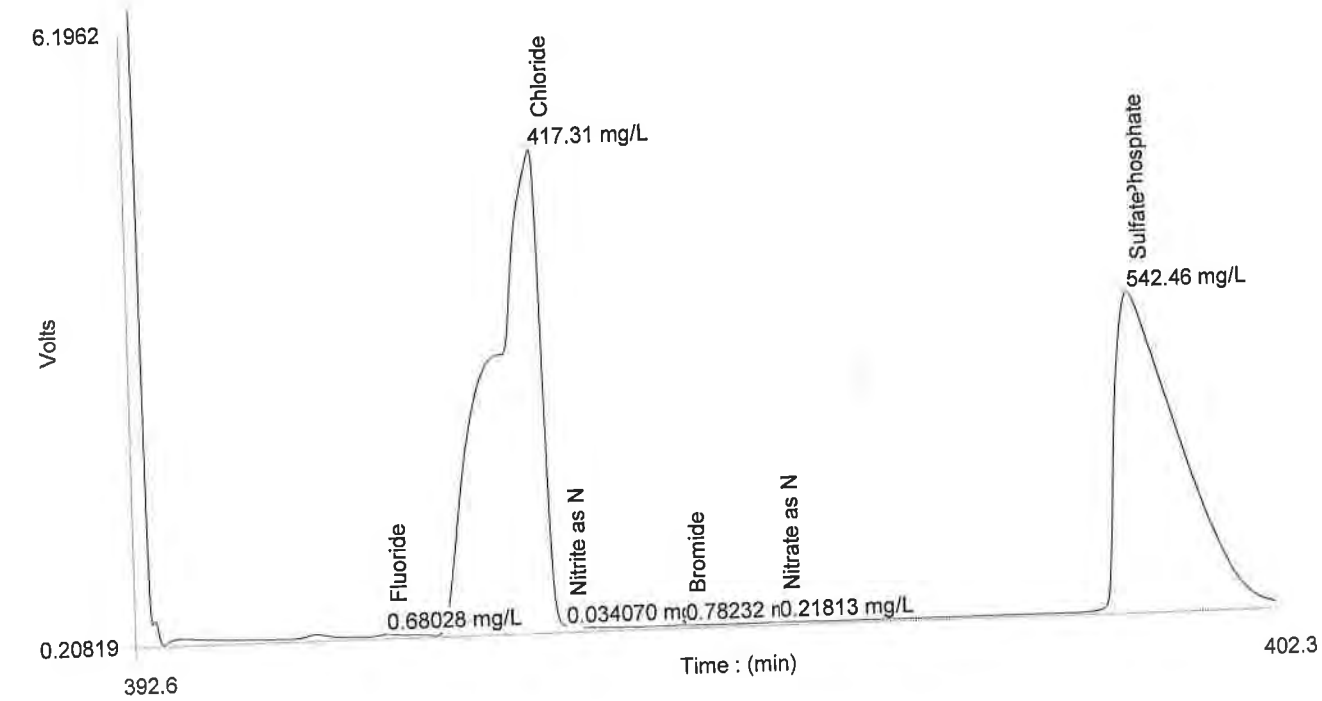
Date : 5/17/2017

ANALYST: BNK

Channel 1 (Anions) - 7016438020_4376 [Row: 29]



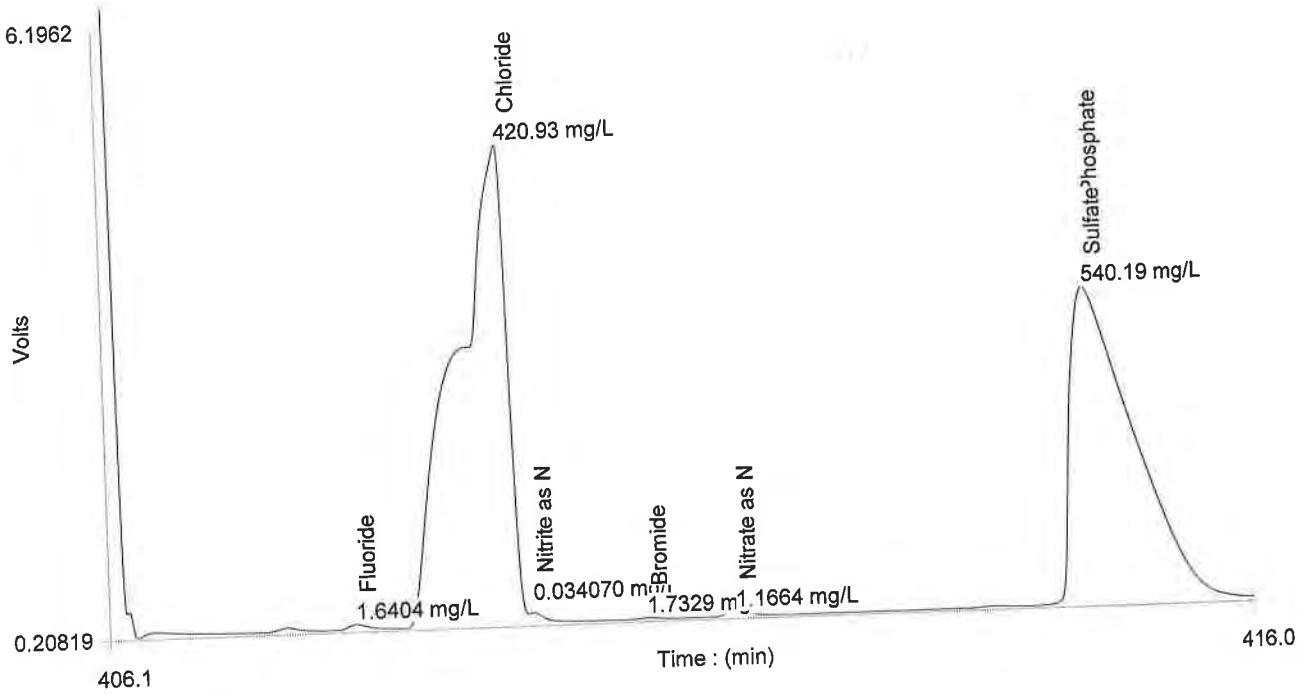
Channel 1 (Anions) - 7017537001_4376 [Row: 30]



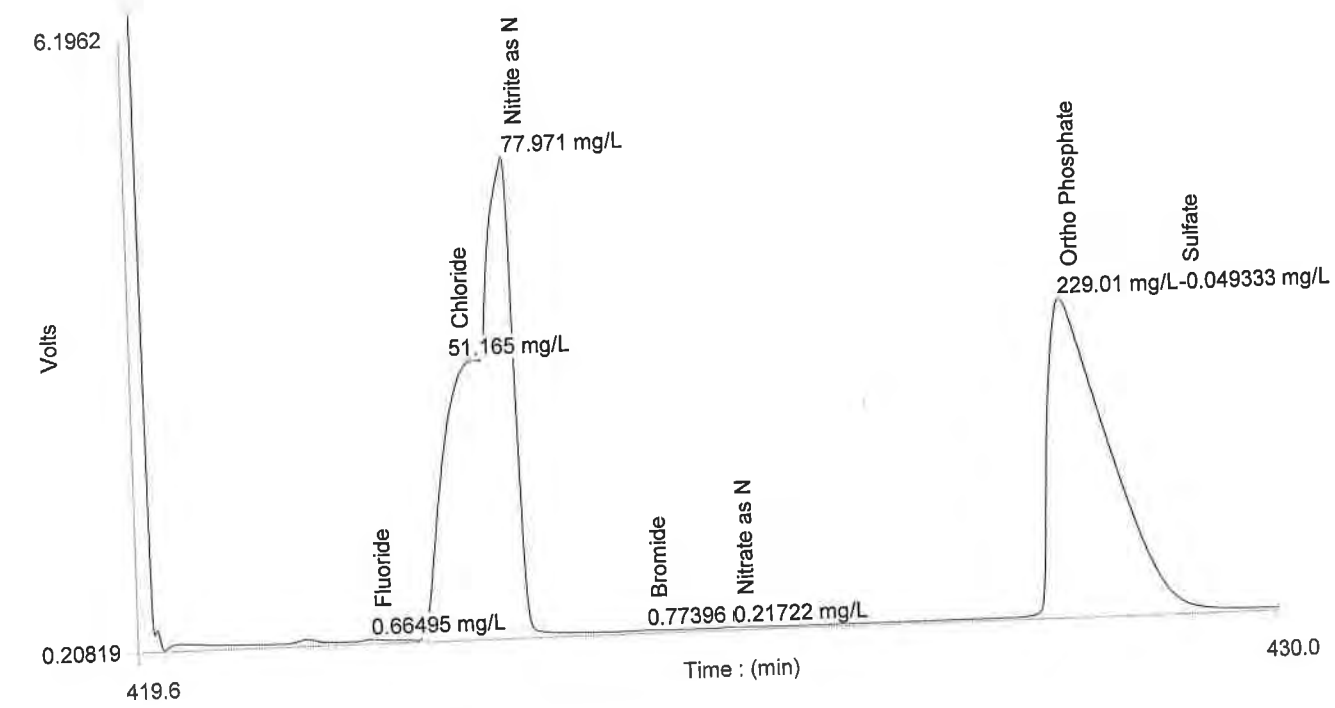
Date : 5/17/2017

ANALYST: BNK

Channel 1 (Anions) - 109789_4376 [Row: 31]



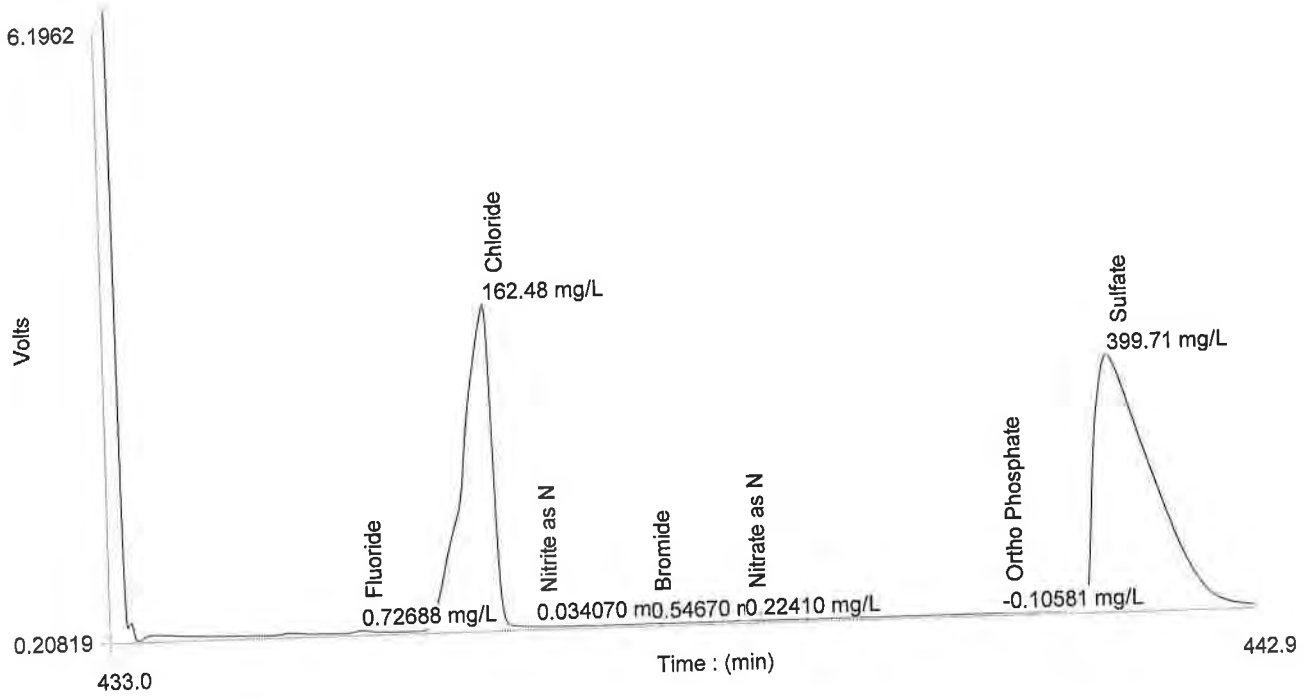
Channel 1 (Anions) - 109790_4376 [Row: 32]



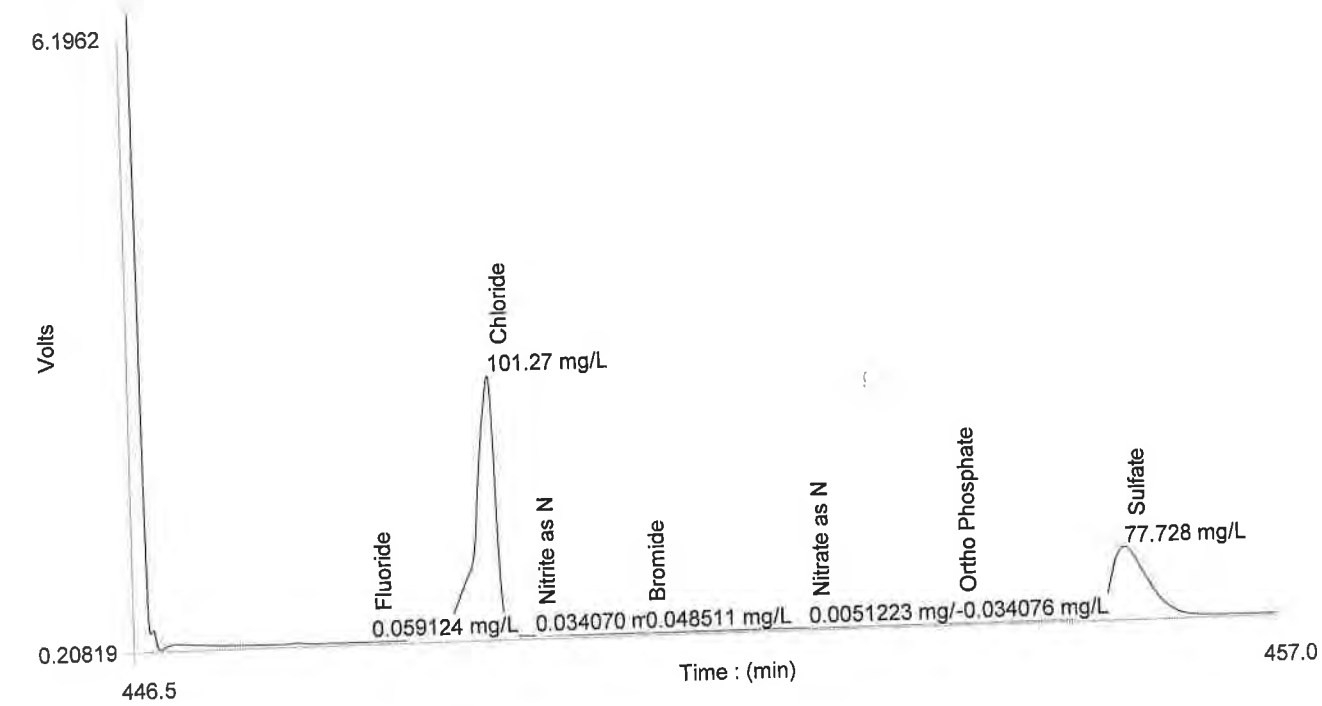
Date : 5/17/2017

ANALYST: BNK

Channel 1 (Anions) - 7017537002_4376 [Row: 33]



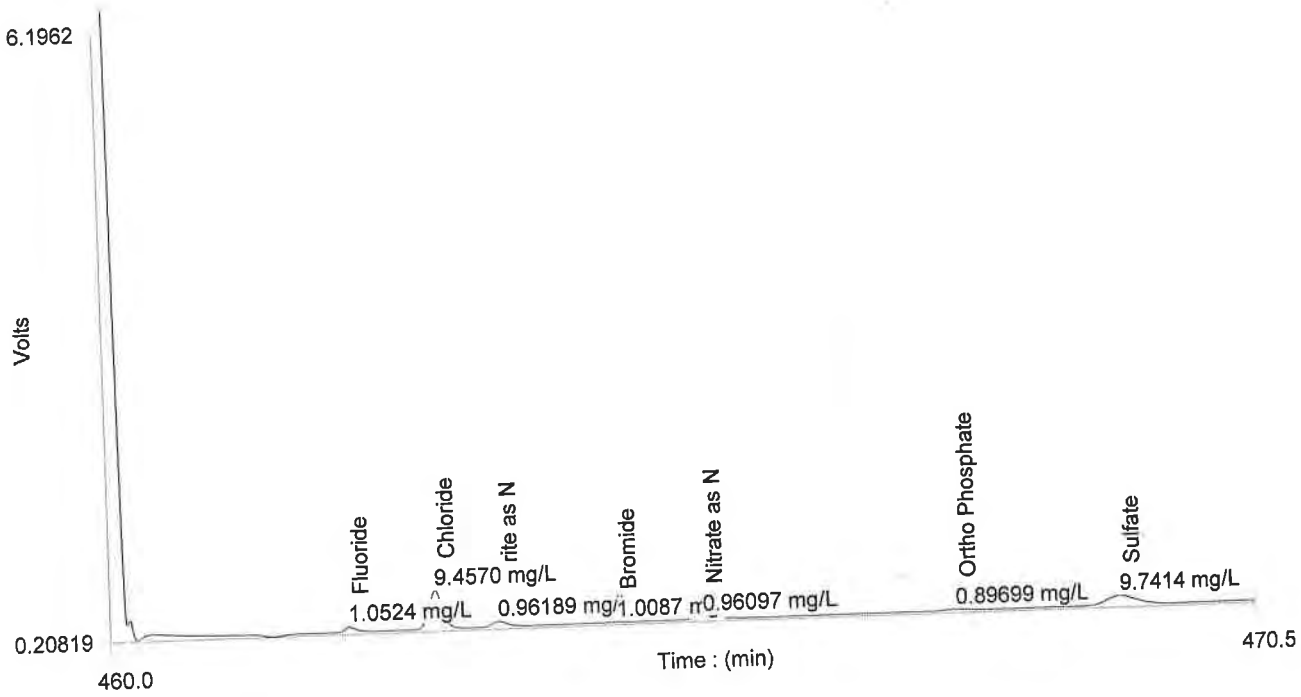
Channel 1 (Anions) - 7016893001_4376 [Row: 34]



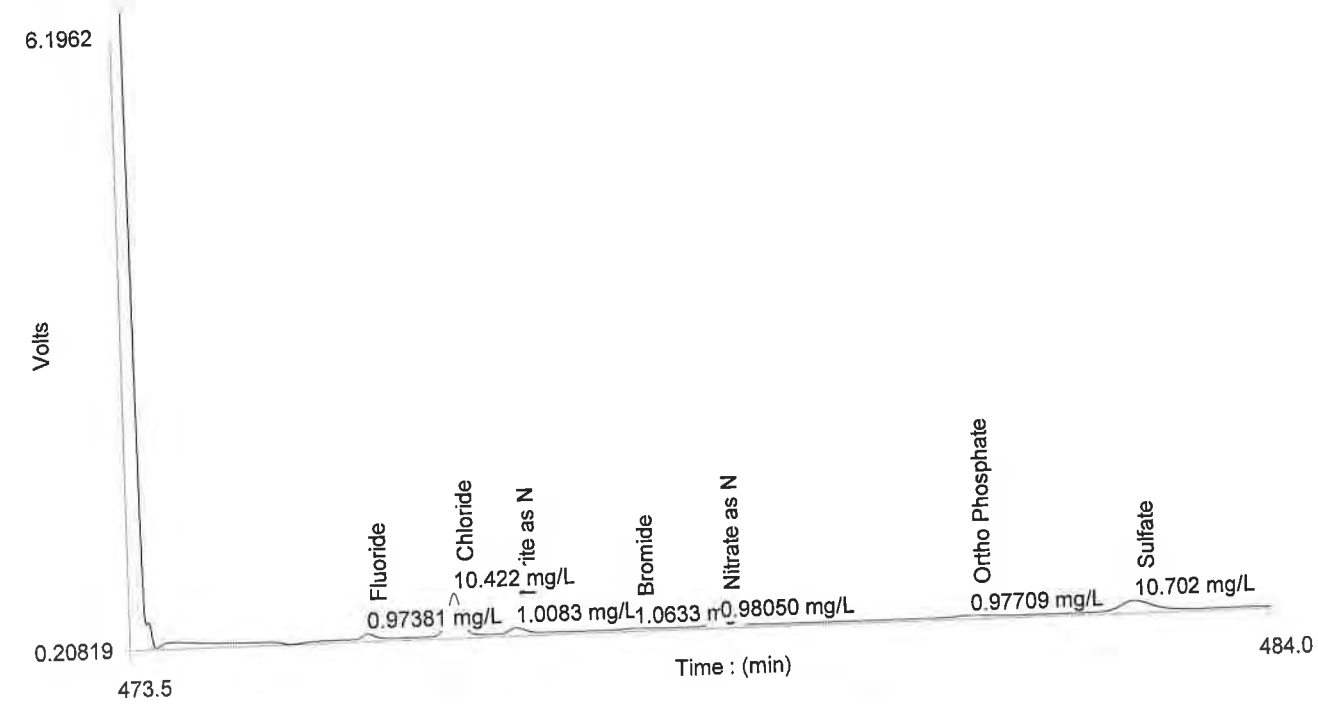
Date : 5/17/2017

ANALYST: BNK

Channel 1 (Anions) - 109791_4377 [Row: 35]



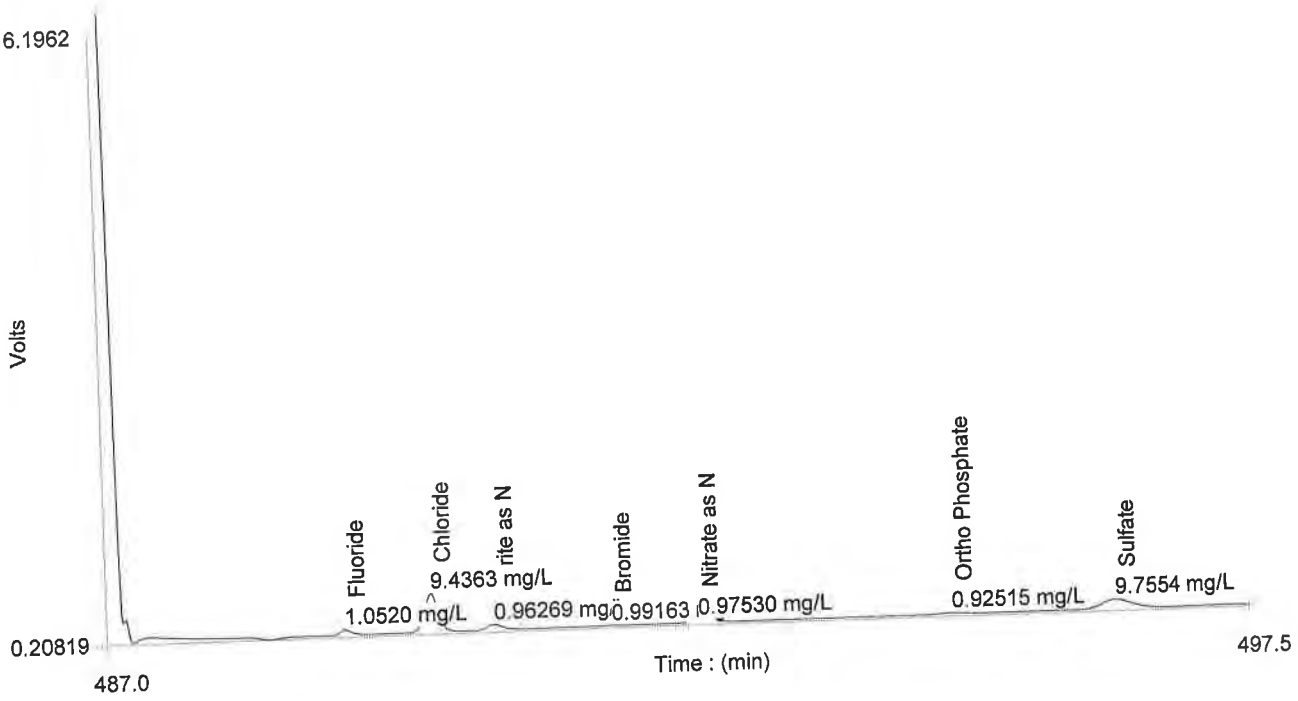
Channel 1 (Anions) - 109792_4377 [Row: 36]



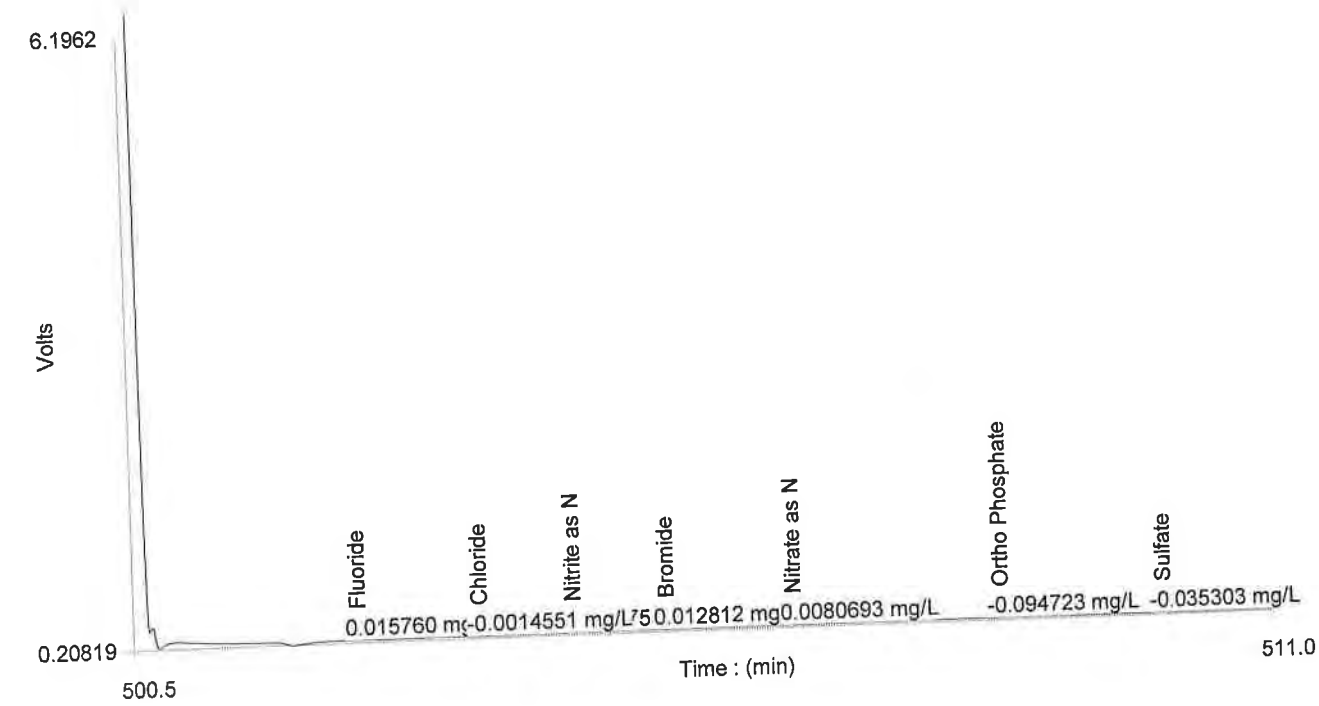
Date : 5/17/2017

ANALYST: BNK

Channel 1 (Anions) - "CCV:CCV:Anion300_WW" [Row: 37]



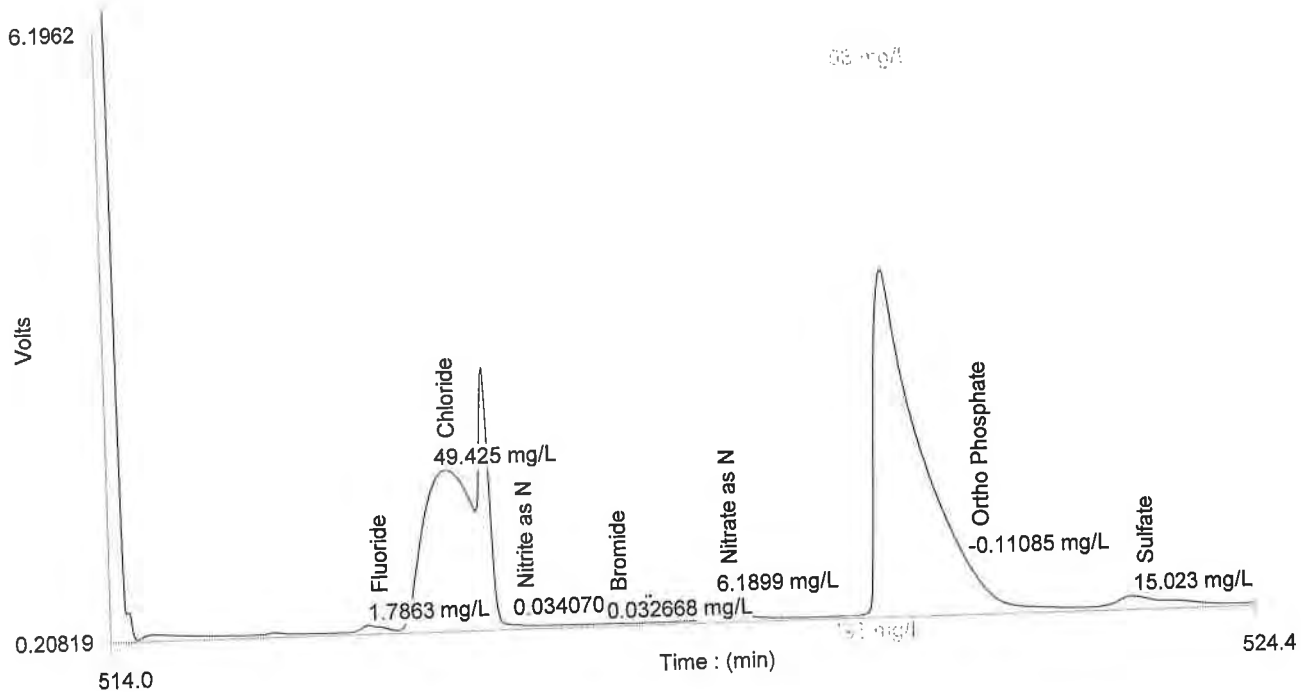
Channel 1 (Anions) - "CCB:CCB:Anion300_WW" [Row: 38]



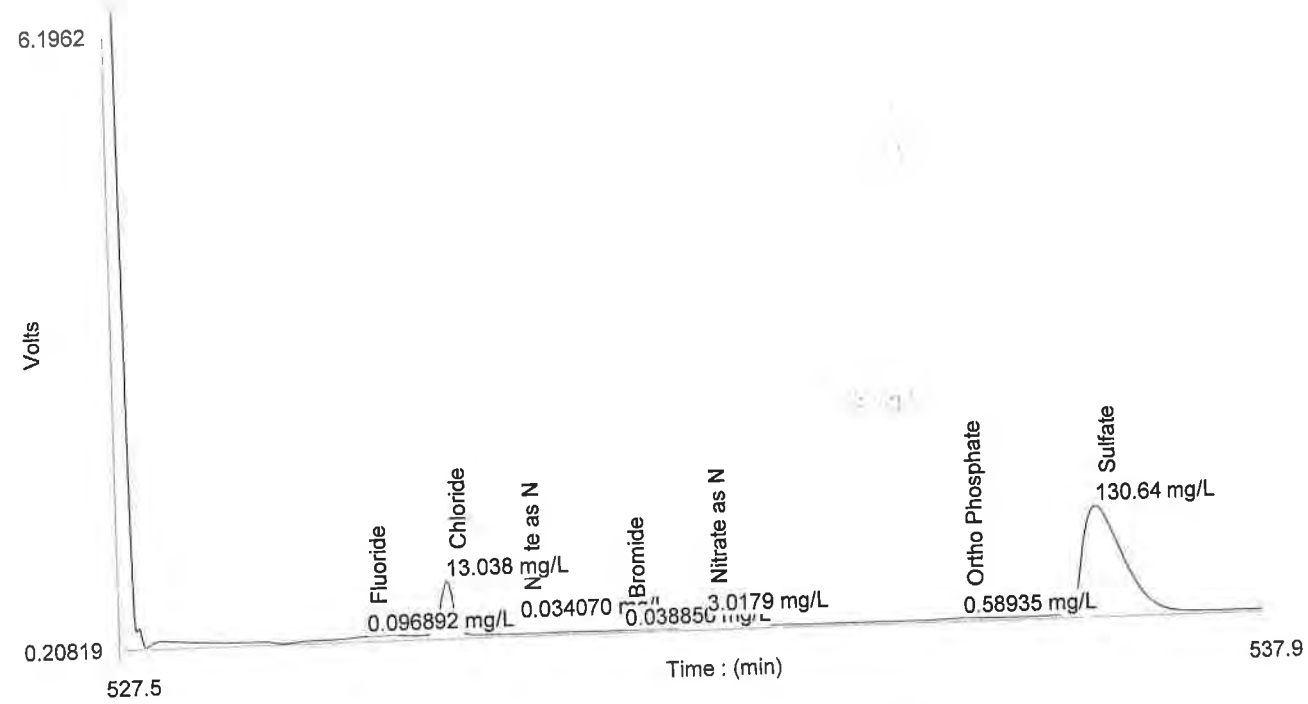
Date : 5/17/2017

ANALYST: BNK

Channel 1 (Anions) - 7016931001_4377 [Row: 39]



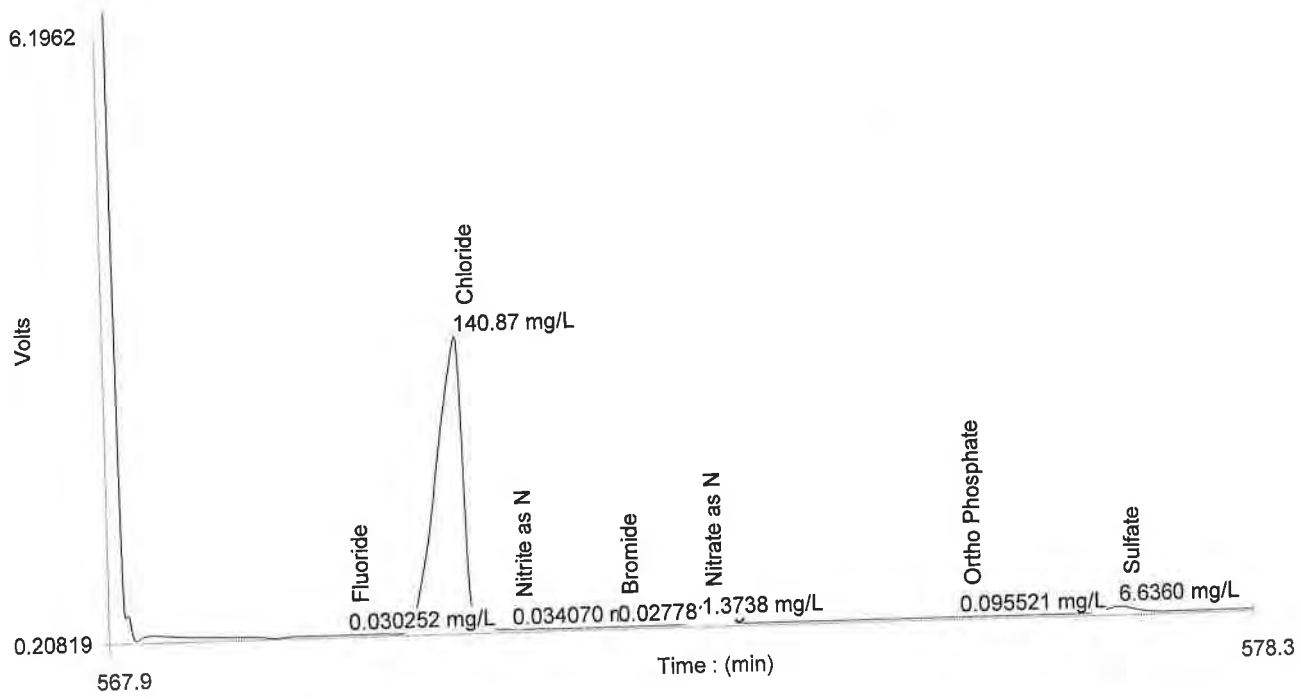
Channel 1 (Anions) - 7016995001_4377 [Row: 40]



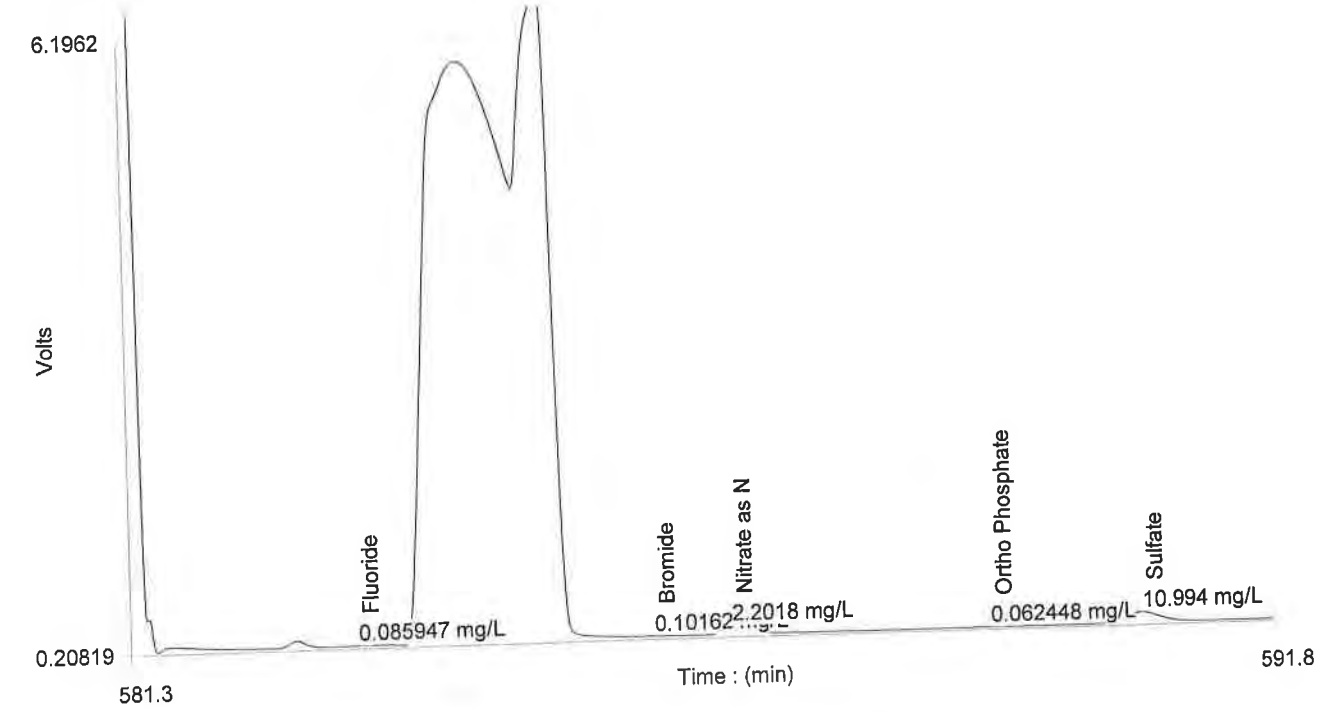
Date : 5/17/2017

ANALYST: BNK

Channel 1 (Anions) - 7016997001_4377 [Row: 43]



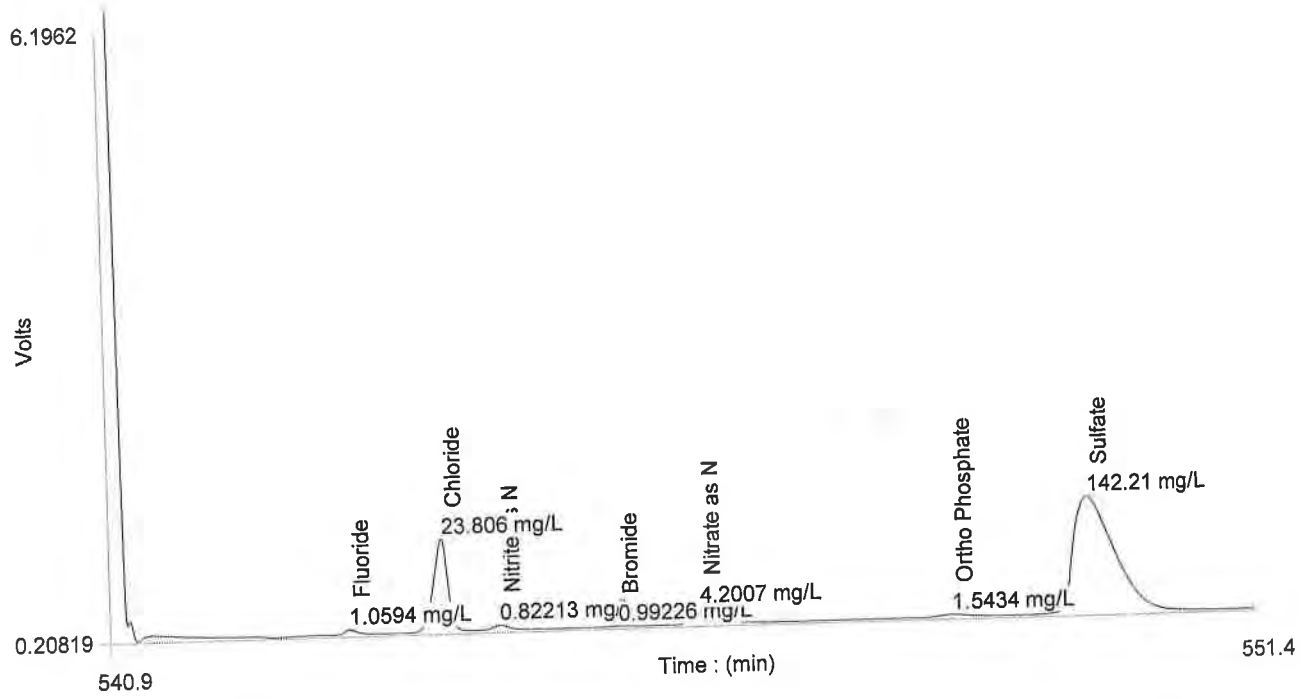
Channel 1 (Anions) - 7016997002_4377 [Row: 44]



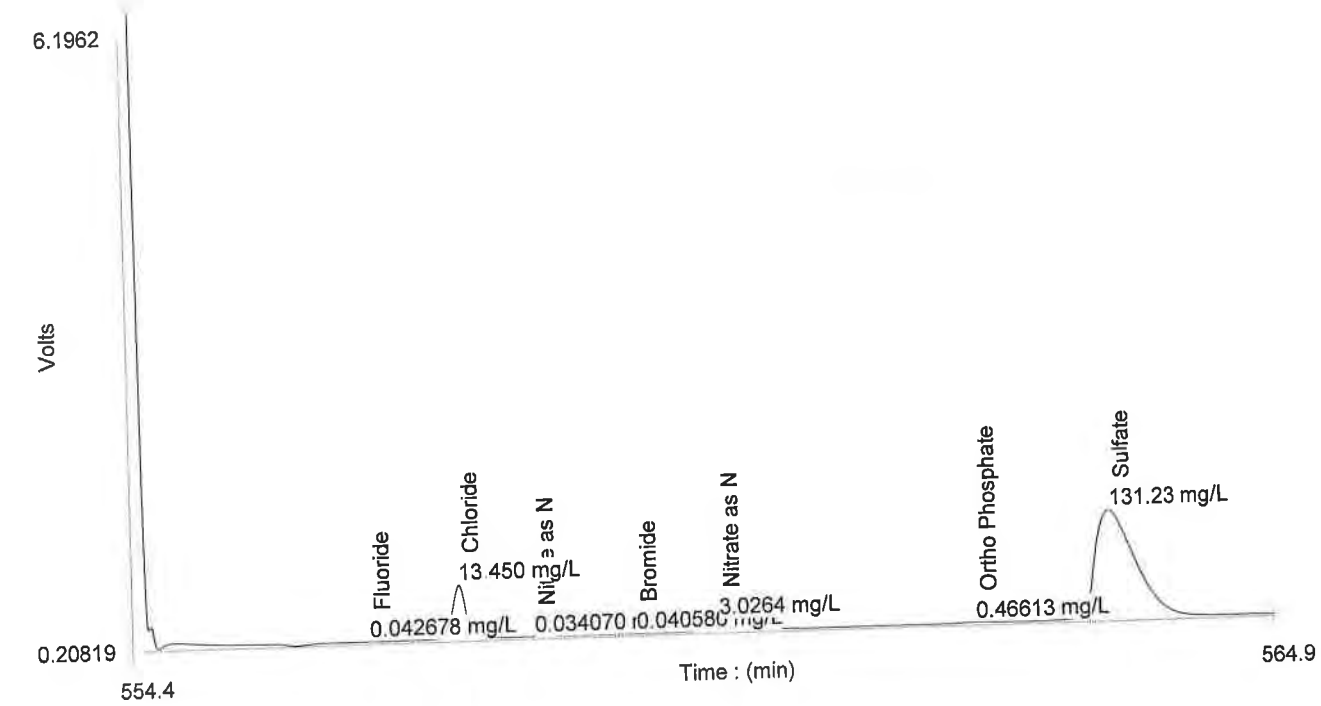
Date : 5/17/2017

ANALYST: BNK

Channel 1 (Anions) - 109793_4377 [Row: 41]



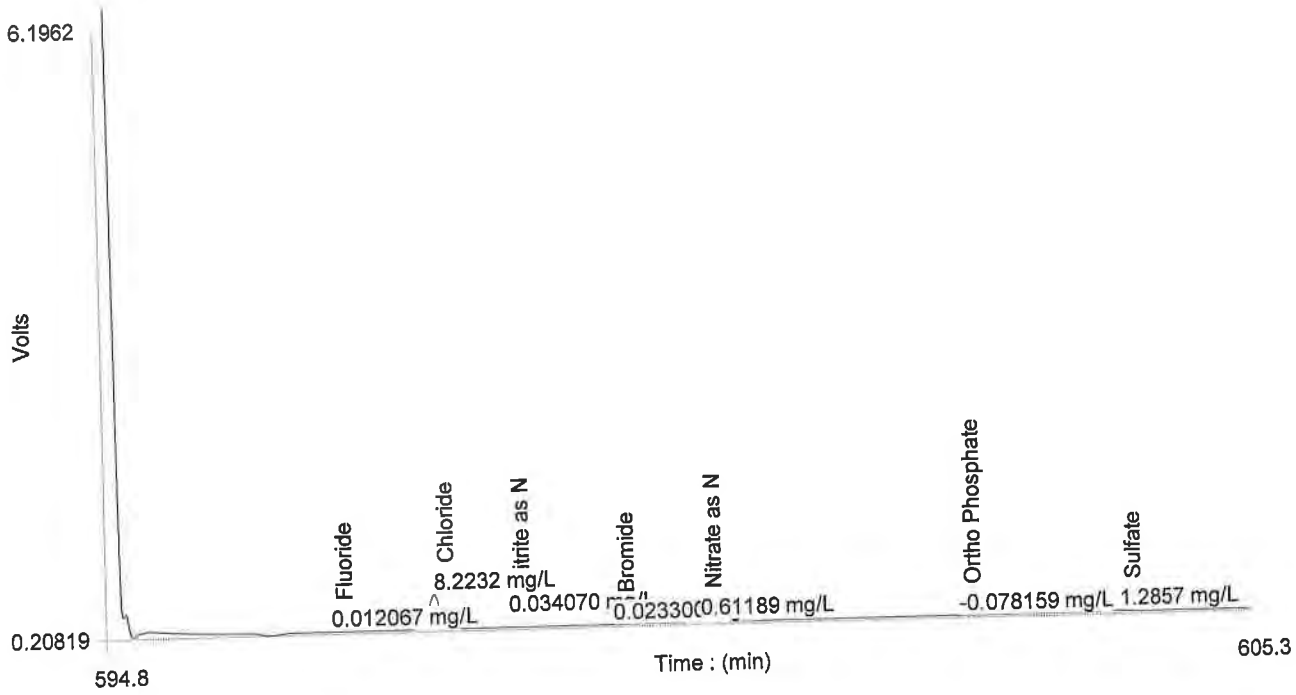
Channel 1 (Anions) - 109794_4377 [Row: 42]



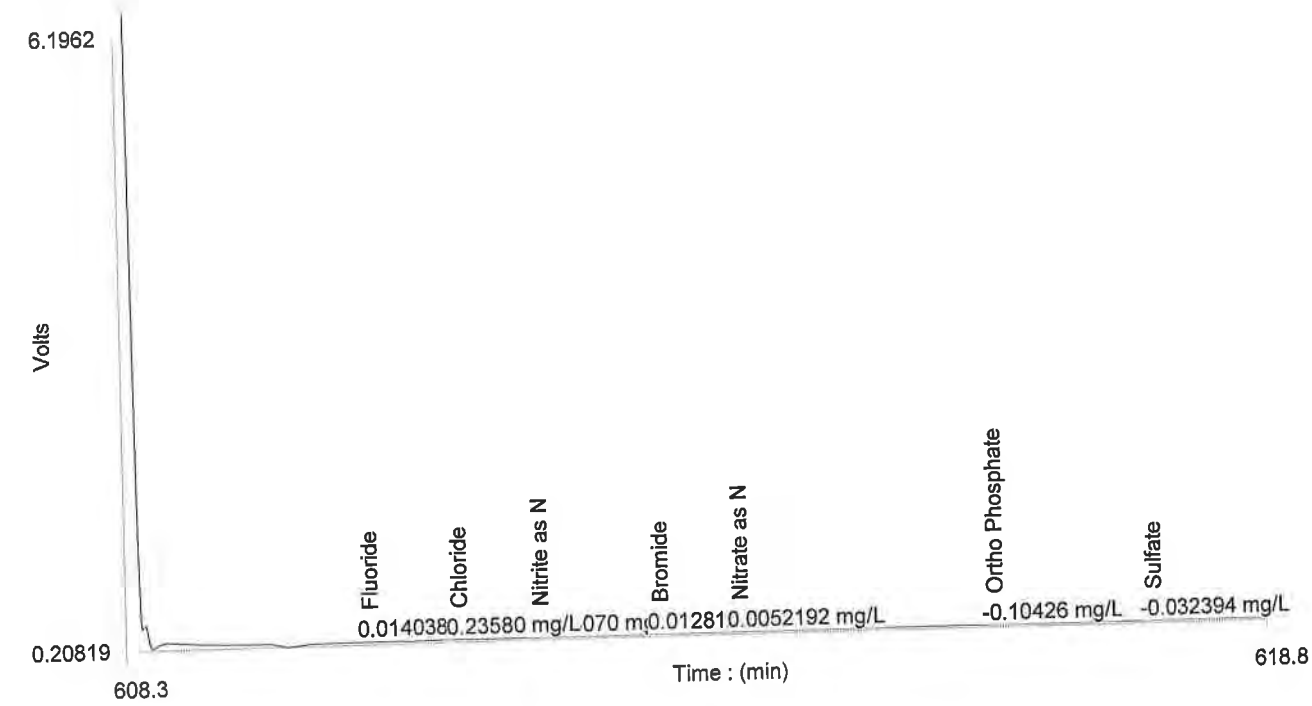
Date : 5/17/2017

ANALYST: BNK

Channel 1 (Anions) - 7017184001_4377 [Row: 45]



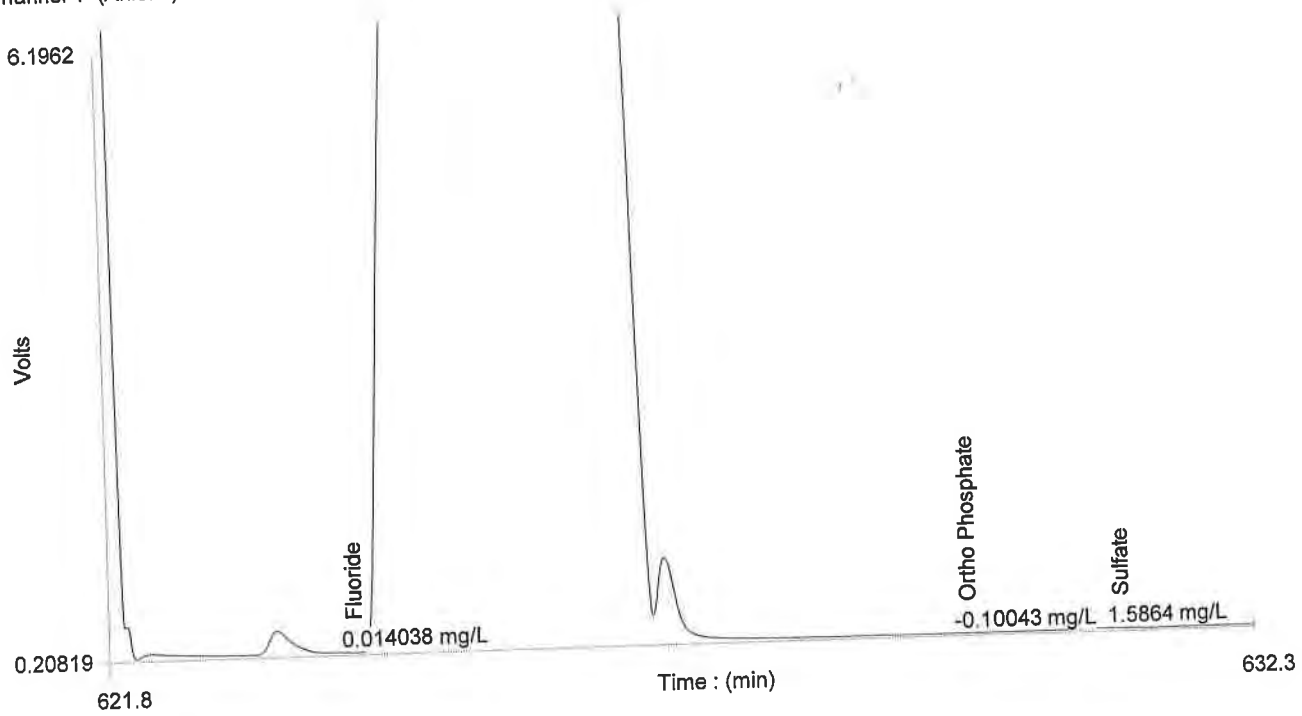
Channel 1 (Anions) - 7017184002_4377 [Row: 46]



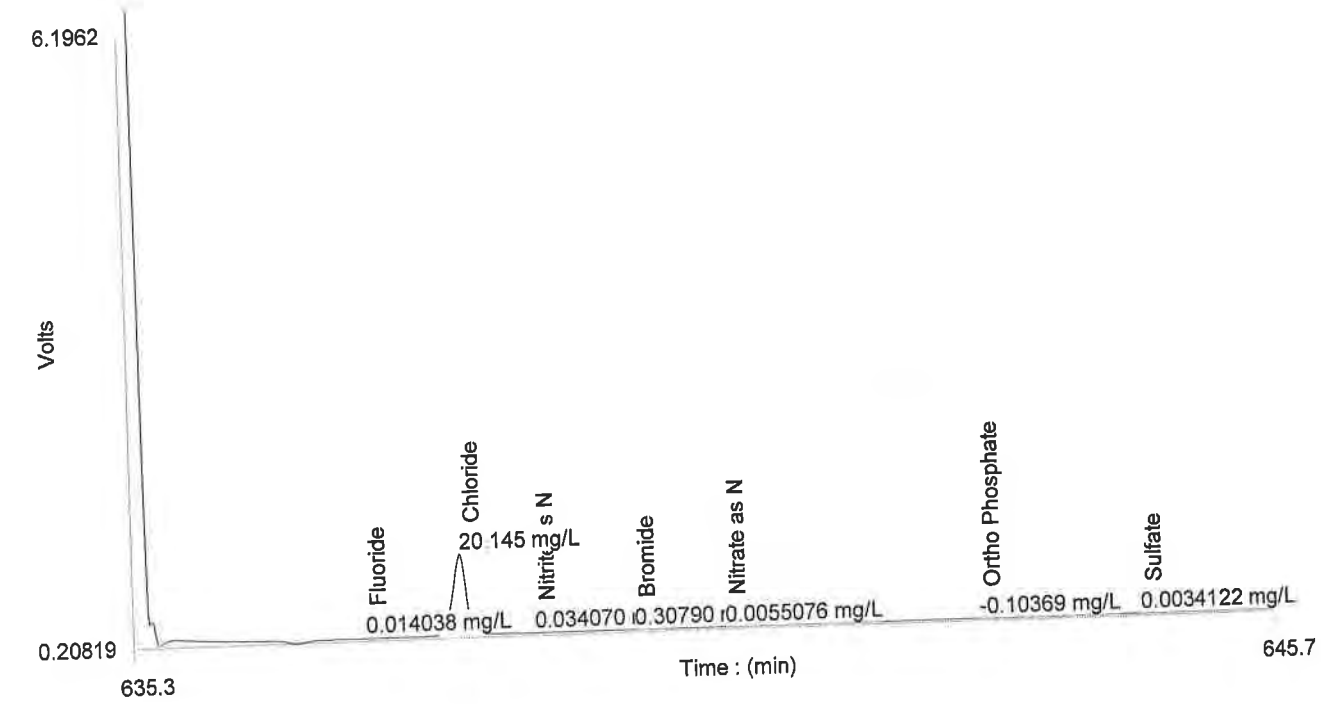
Date : 5/17/2017

ANALYST: BNK

Channel 1 (Anions) - 7016373005_4327X5 [Row: 47]



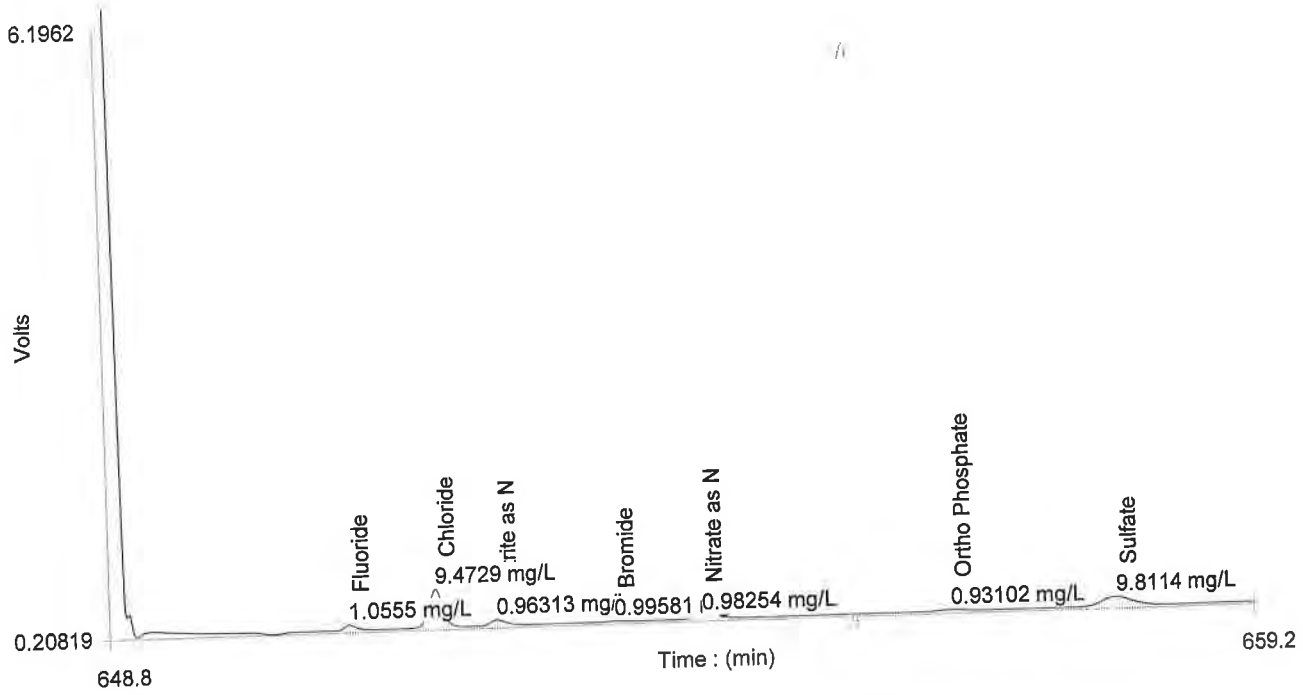
Channel 1 (Anions) - 7016373005_4327X1000 [Row: 48]



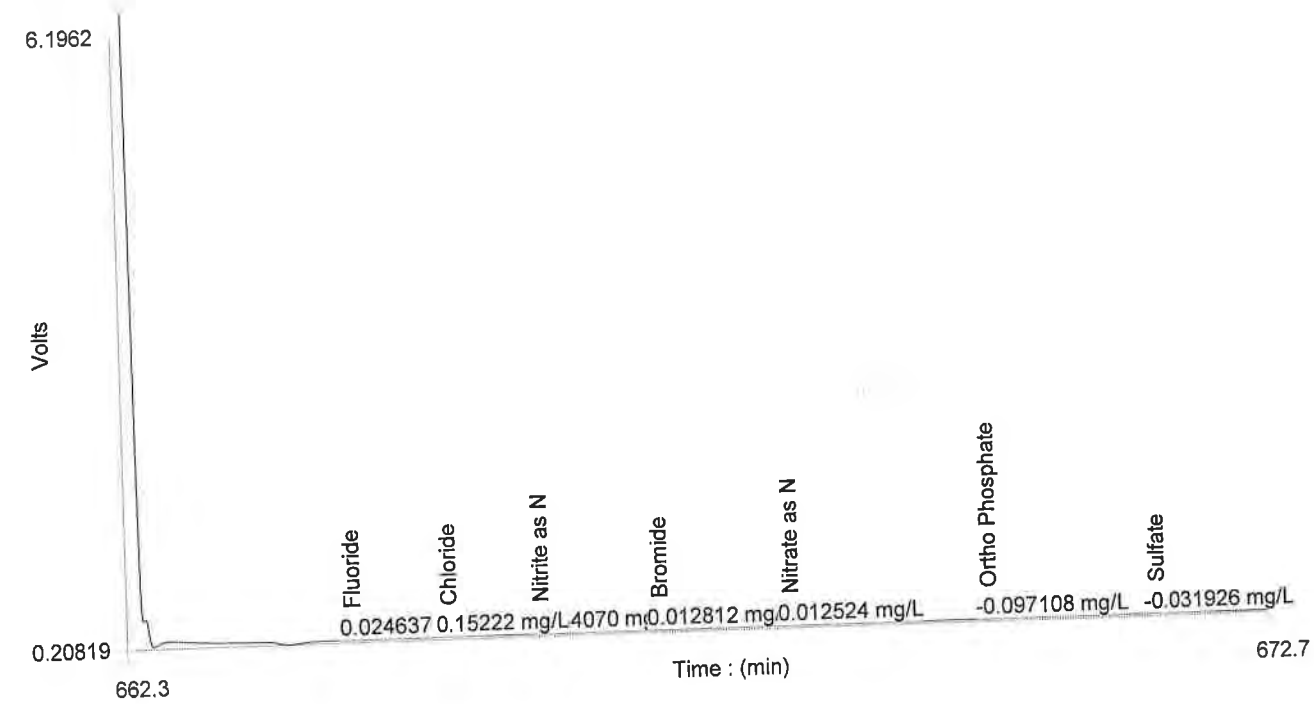
Date : 5/17/2017

ANALYST: BNK

Channel 1 (Anions) - "CCV:CCV:Anion300_WW" [Row: 49]



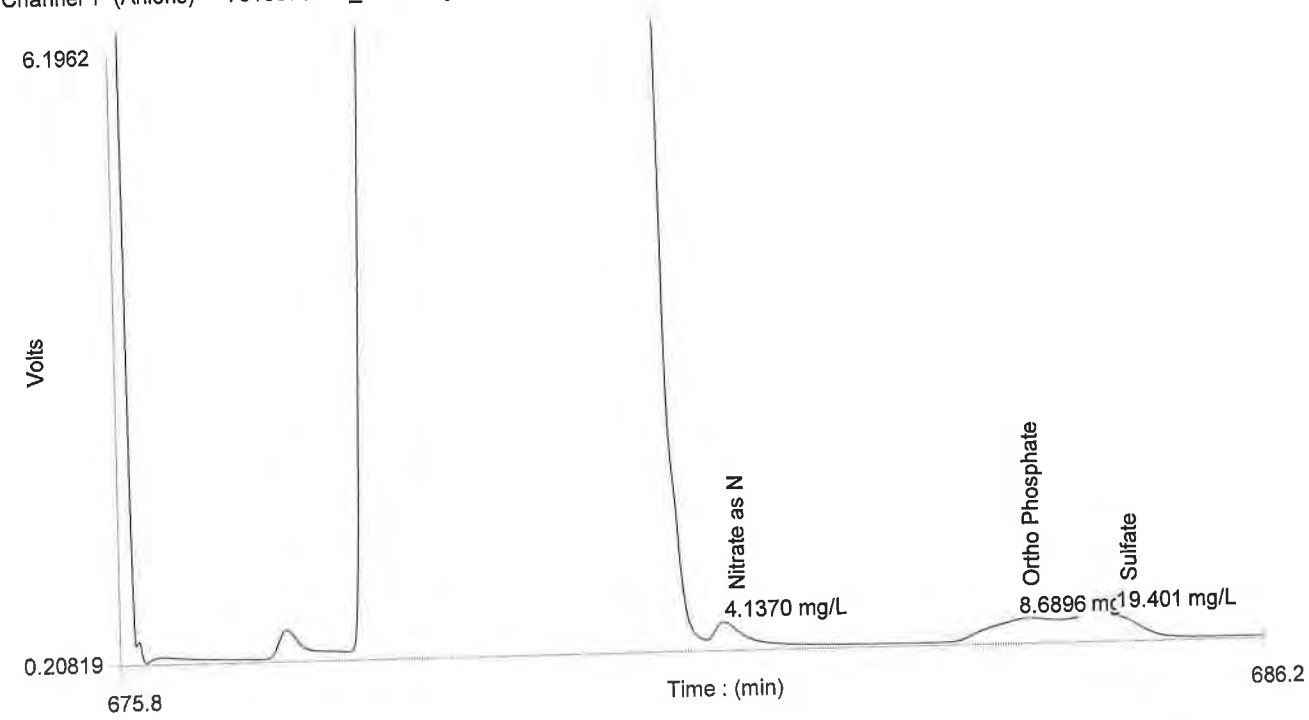
Channel 1 (Anions) - "CCB:CCB:Anion300_WW" [Row: 50]



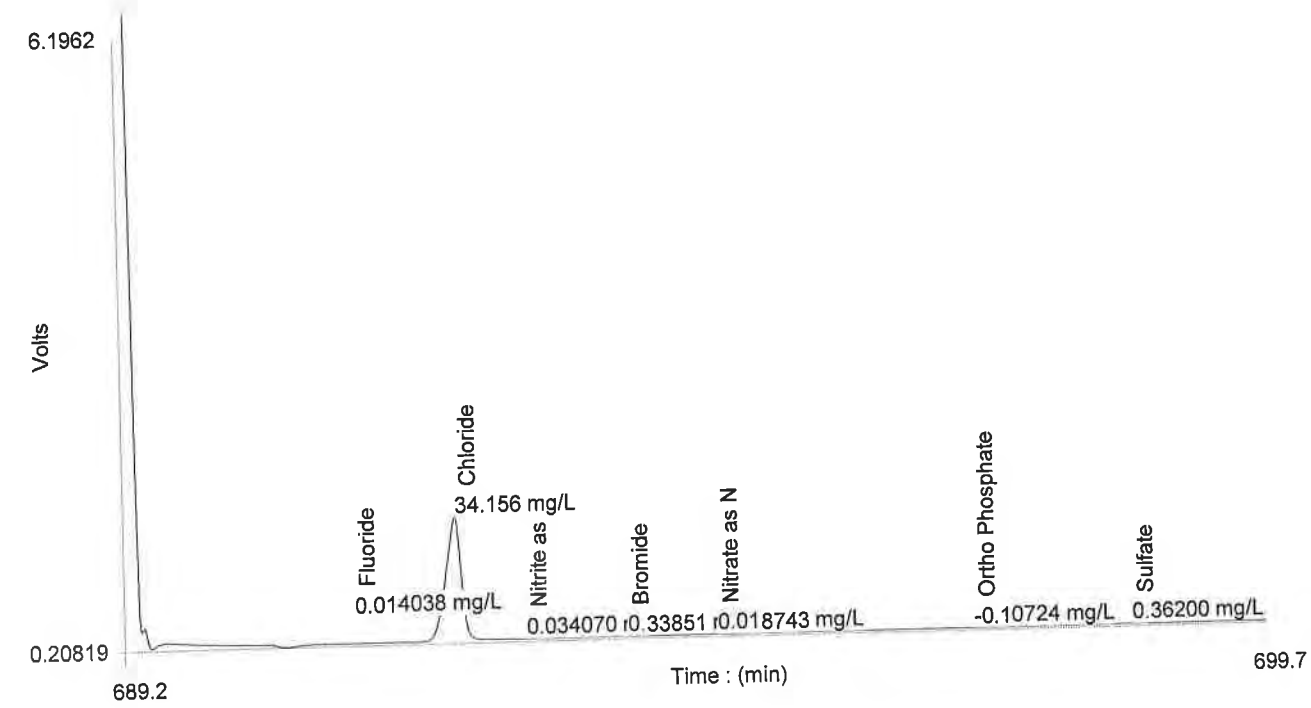
Date : 5/17/2017

ANALYST: BNK

Channel 1 (Anions) - 7016373006_4327X5 [Row: 51]



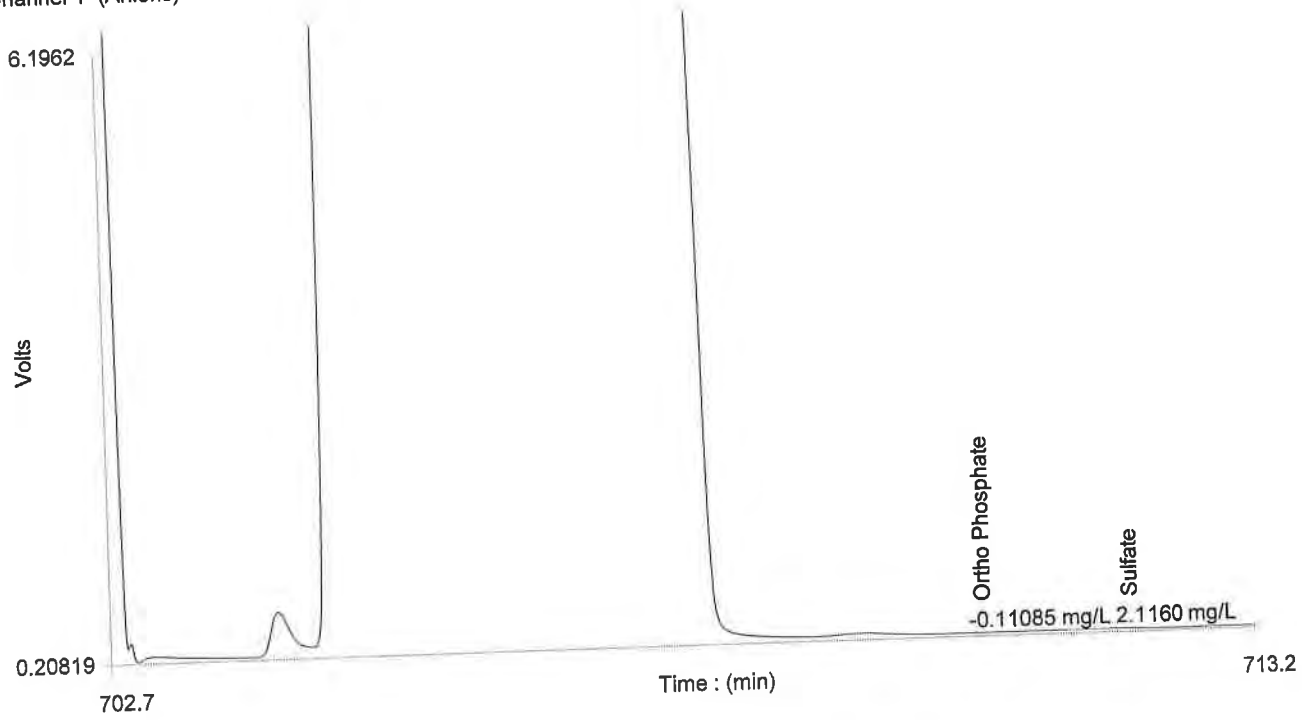
Channel 1 (Anions) - 7016373006_4327X1000 [Row: 52]



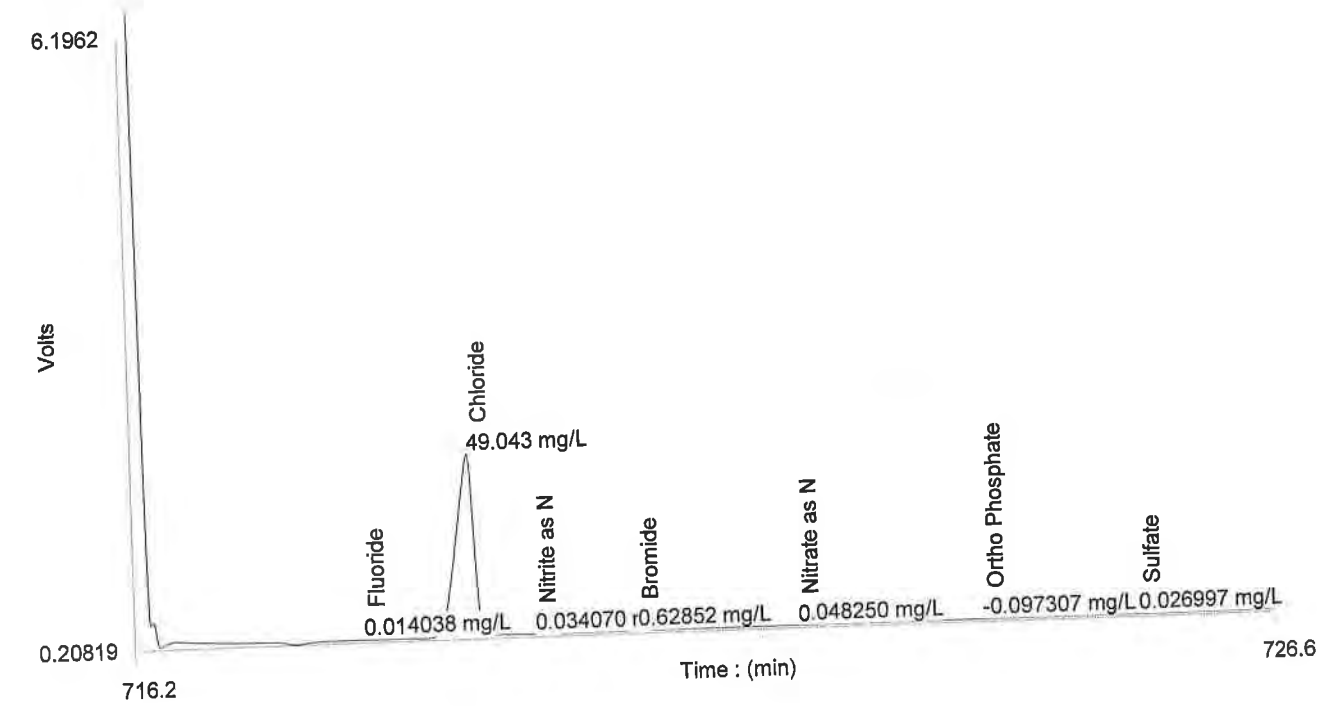
Date : 5/17/2017

ANALYST: BNK

Channel 1 (Anions) - 7016373007_4327X5 [Row: 53]



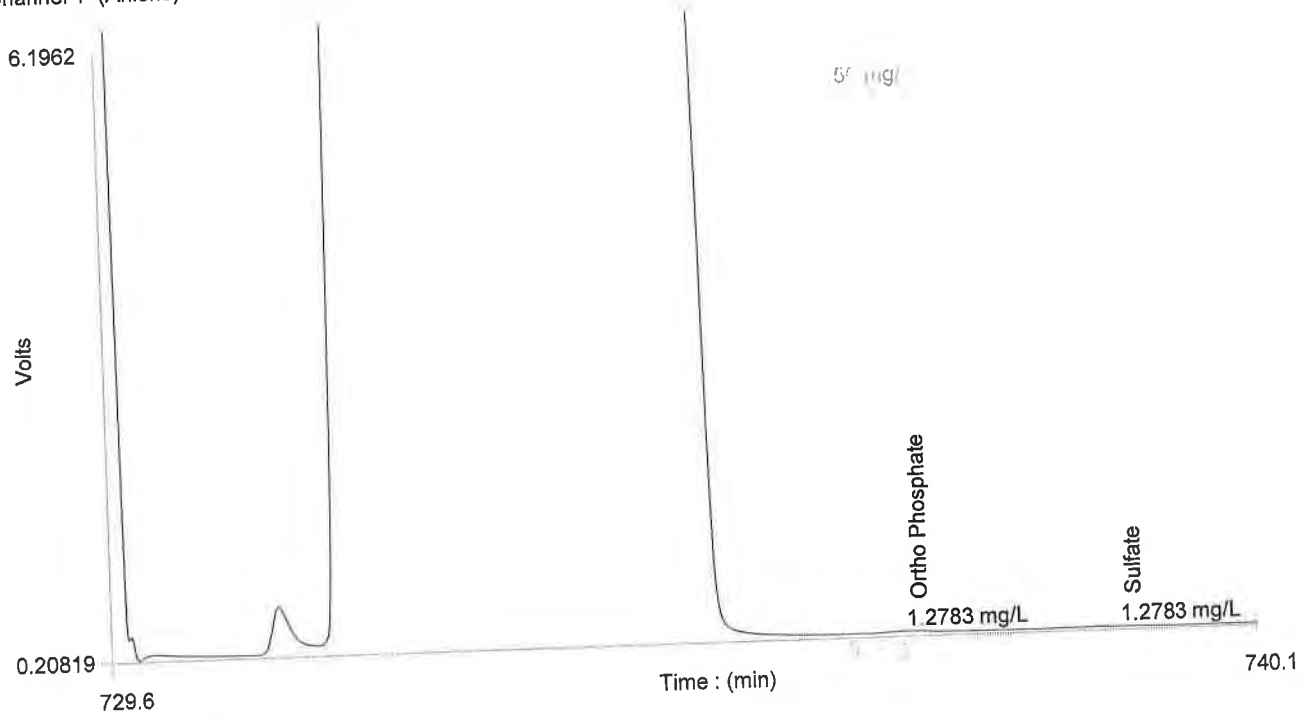
Channel 1 (Anions) - 7016373007_4327X1000 [Row: 54]



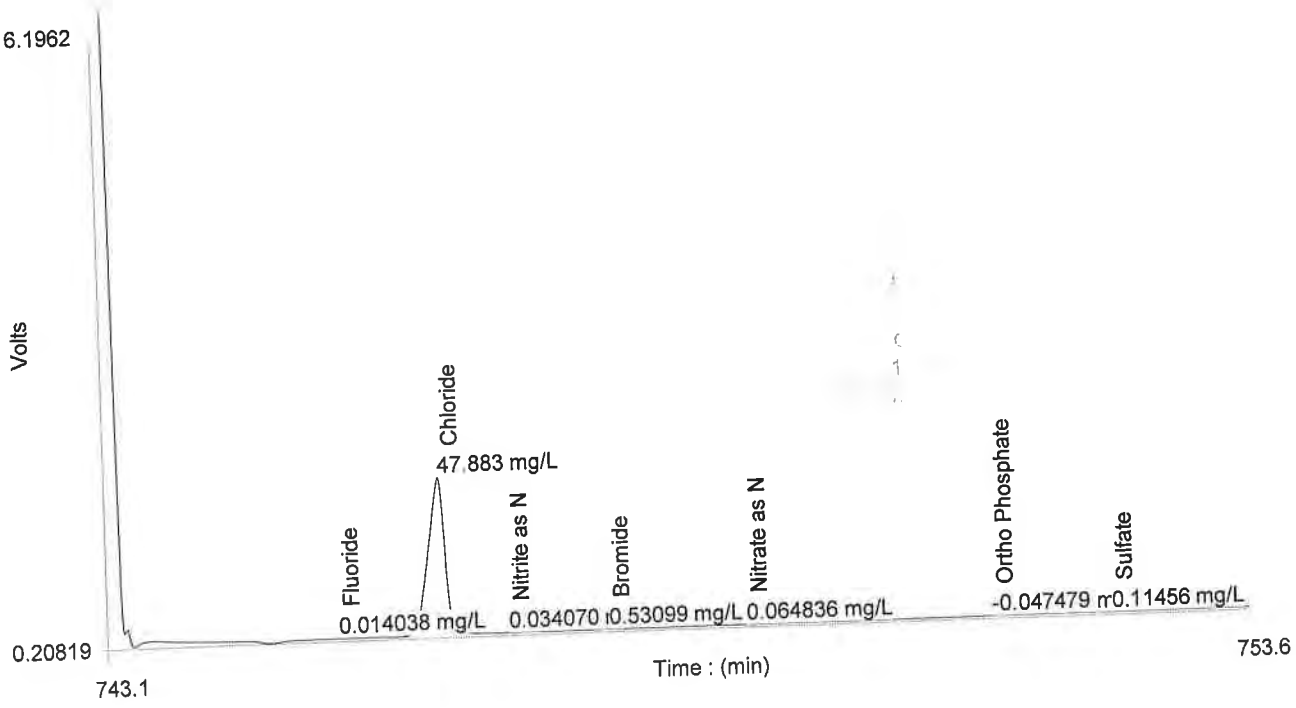
Date : 5/17/2017

ANALYST: BNK

Channel 1 (Anions) - 7016373008_4327X5 [Row: 55]



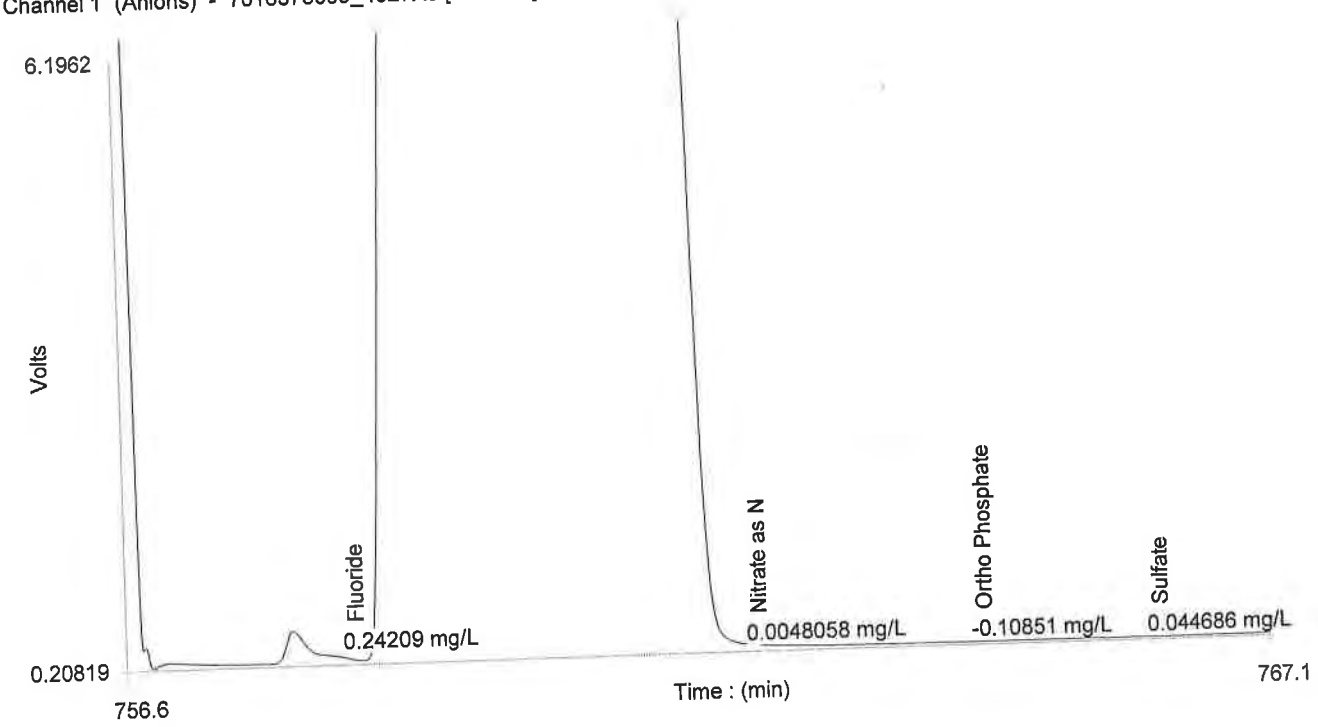
Channel 1 (Anions) - 7016373008_4327X1000 [Row: 56]



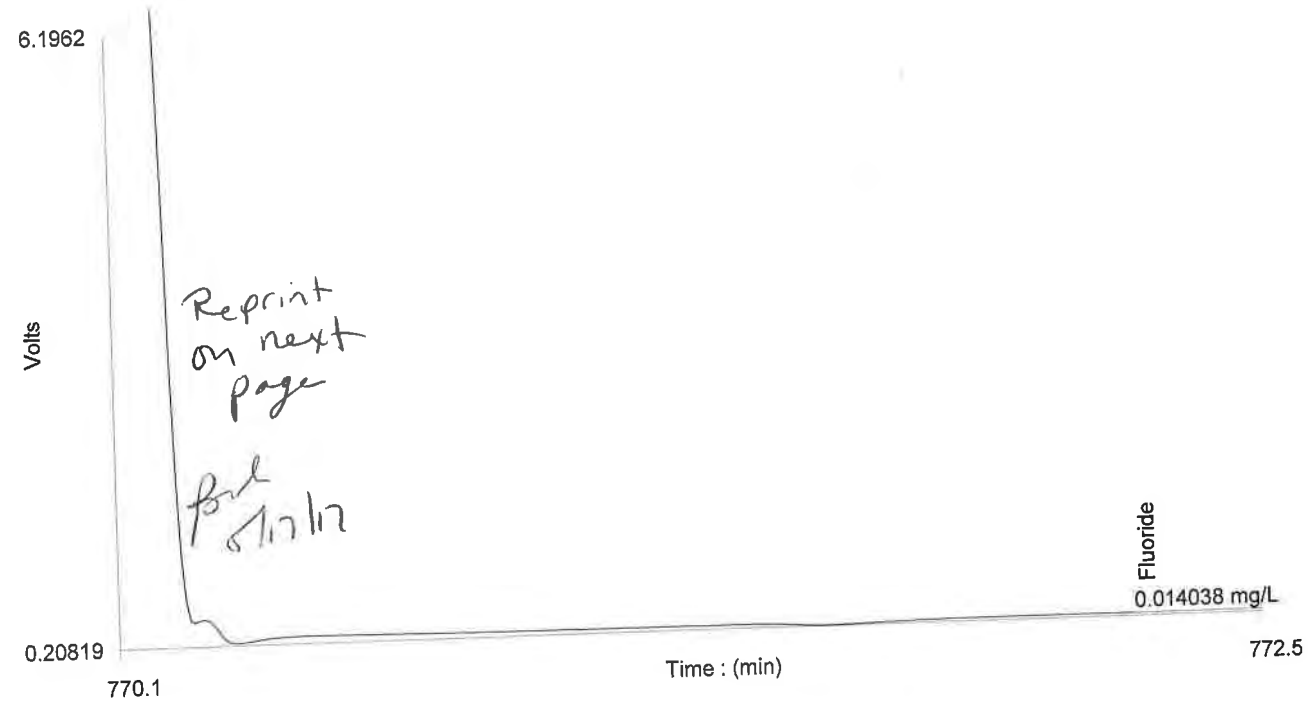
Date : 5/17/2017

ANALYST: BNK

Channel 1 (Anions) - 7016373009_4327X5 [Row: 57]



Channel 1 (Anions) - 7016373009_4327X1000 [Row: 58]



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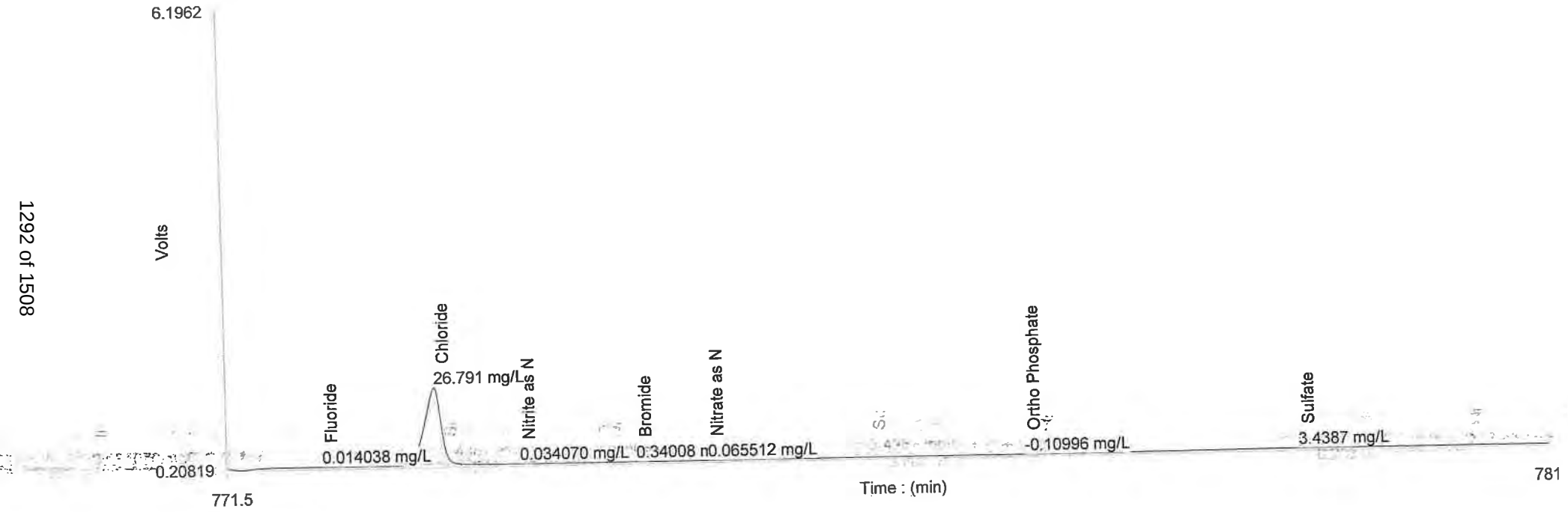
Date : 5/17/2017

ANALYST: BNK

Original Run Filename: Created: 5/8/2017 5:41:52 PM
Original Run Author's Signature: []
Current Run Filename: Last Modified: 5/9/2017 6:18:25 PM
Current Run Author's Signature: [wetchem]

5/17/17 7016373009

Channel 1 (Anions) ~~Current View~~

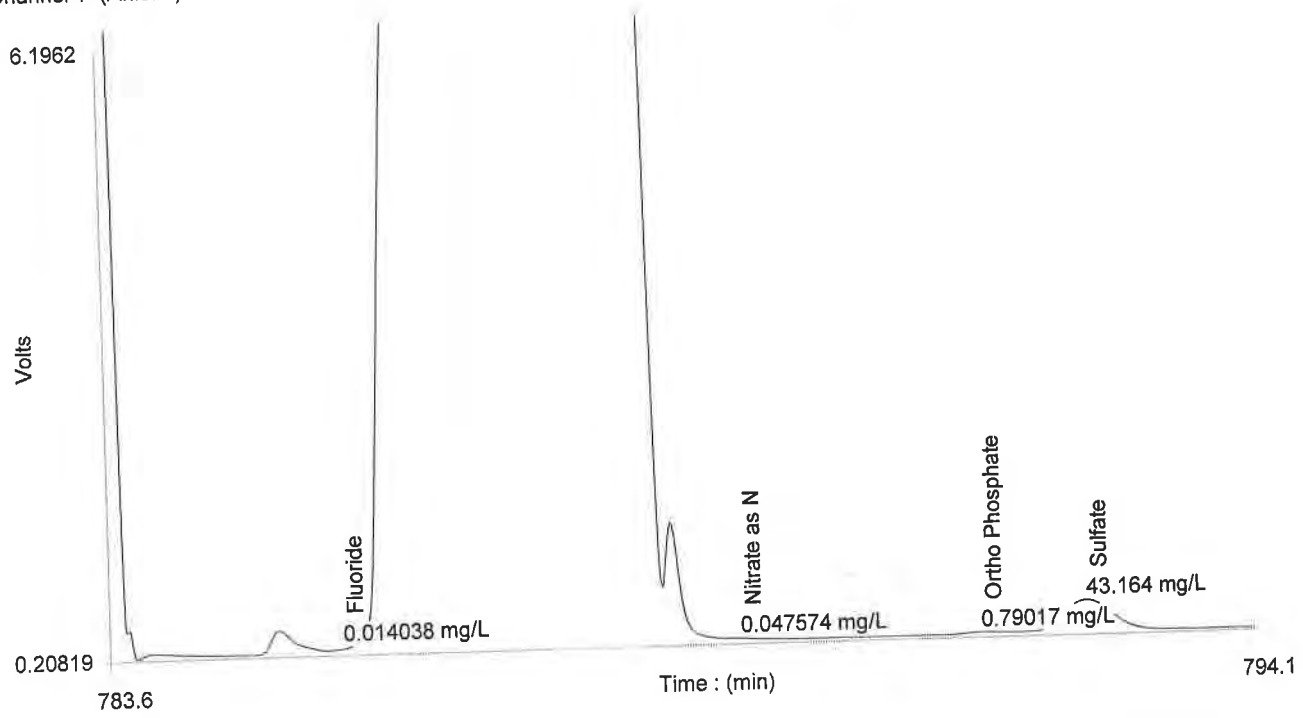


1292 of 1508

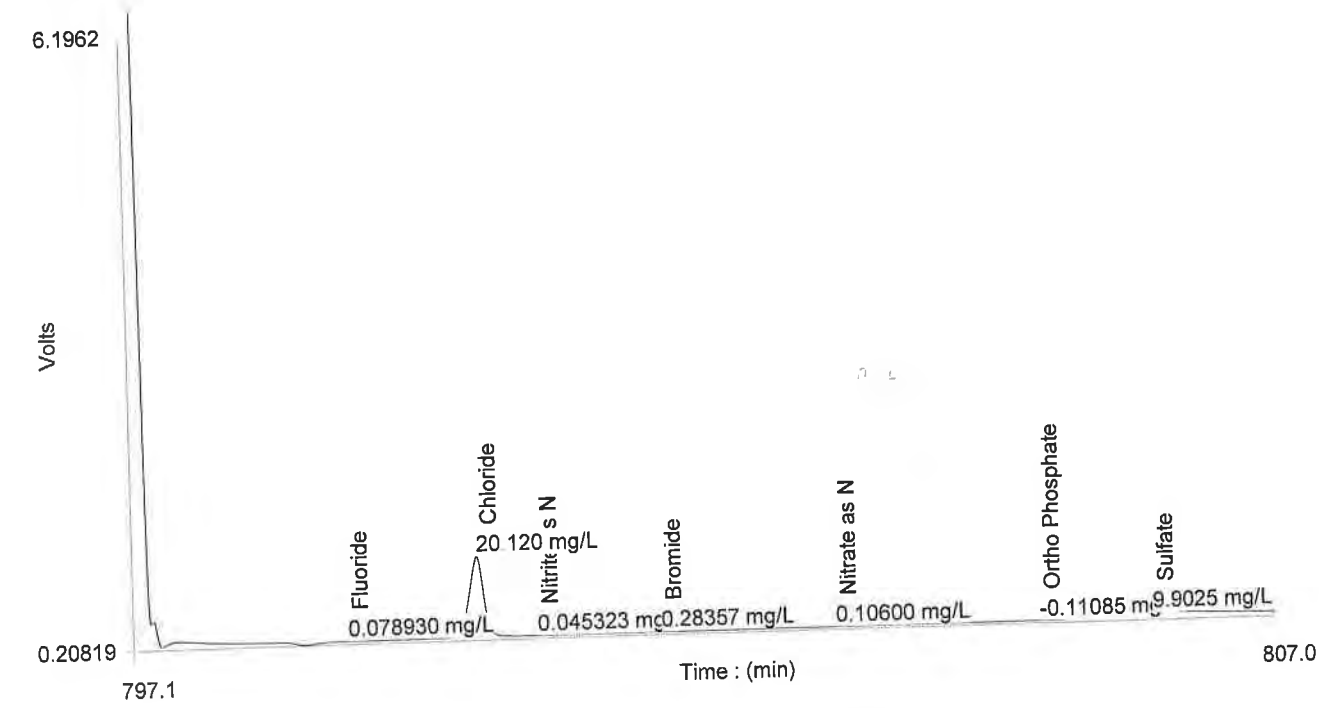
Date : 5/17/2017

ANALYST: BNK

Channel 1 (Anions) - 7016373010_4327X5 [Row: 59]



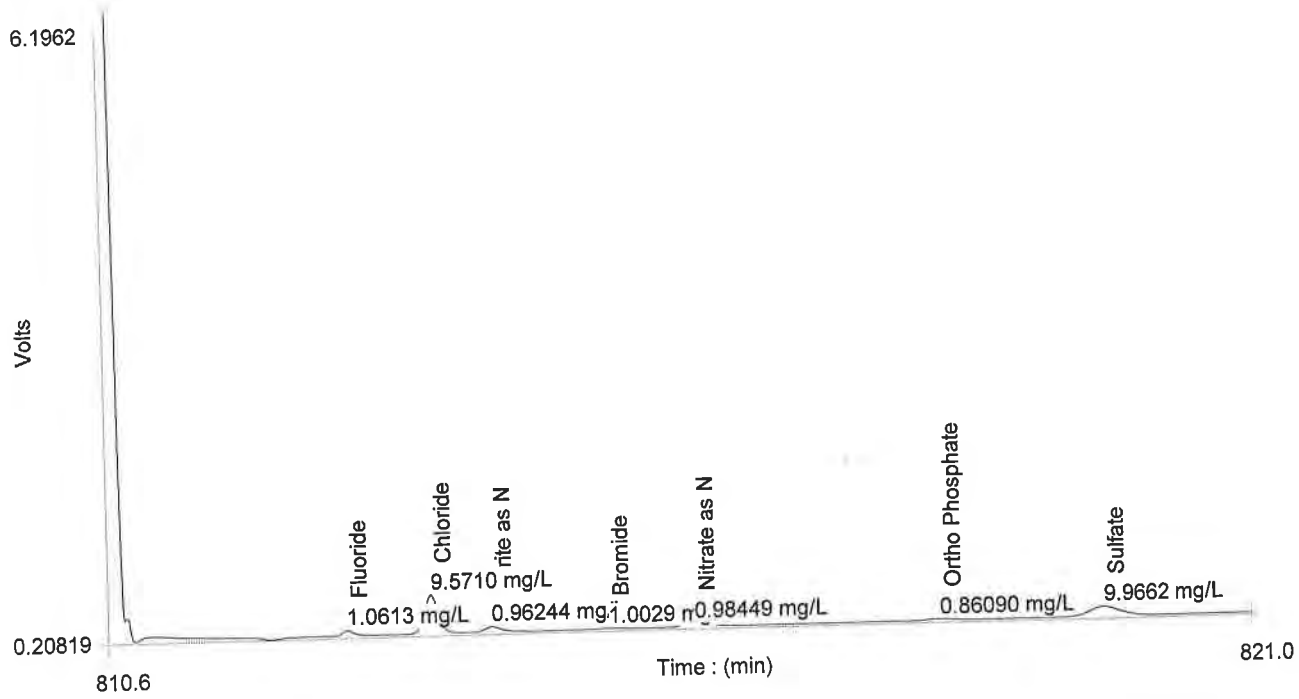
Channel 1 (Anions) - 7016373010_4327X1000 [Row: 60]



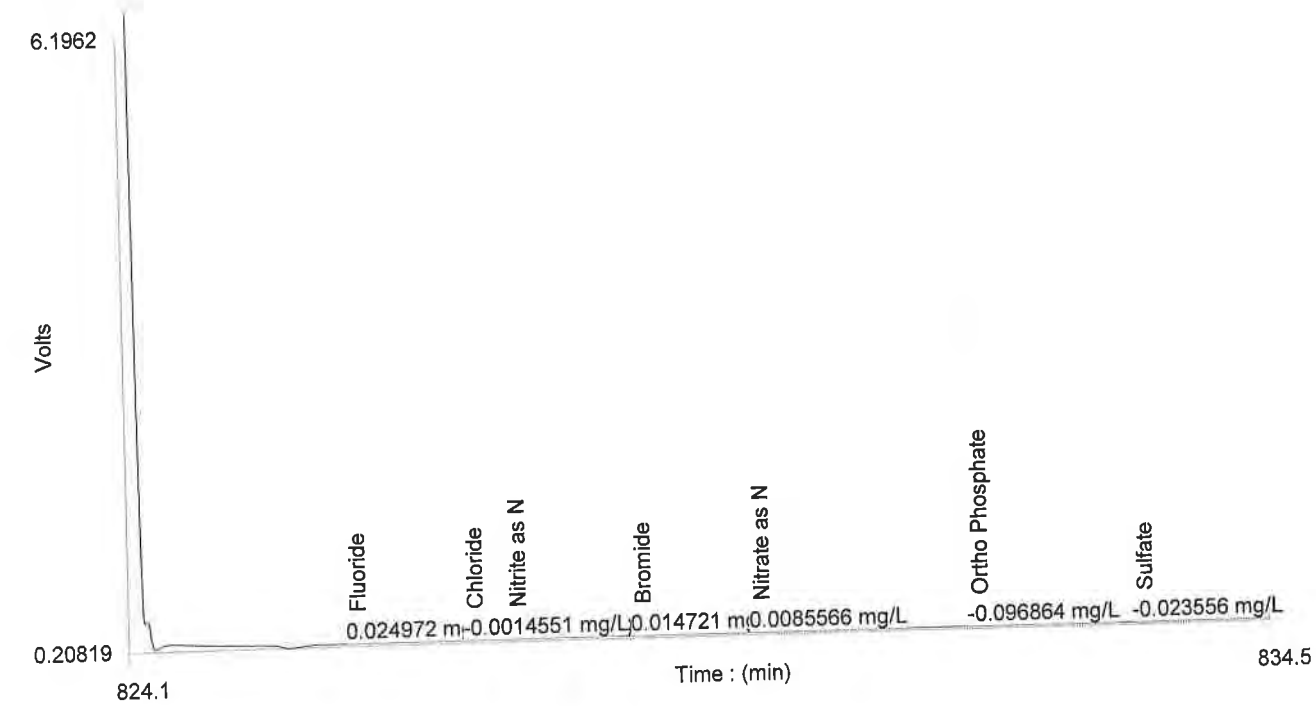
Date : 5/17/2017

ANALYST: BNK

Channel 1 (Anions) - "CCV:CCV:Anion300_WW" [Row: 61]



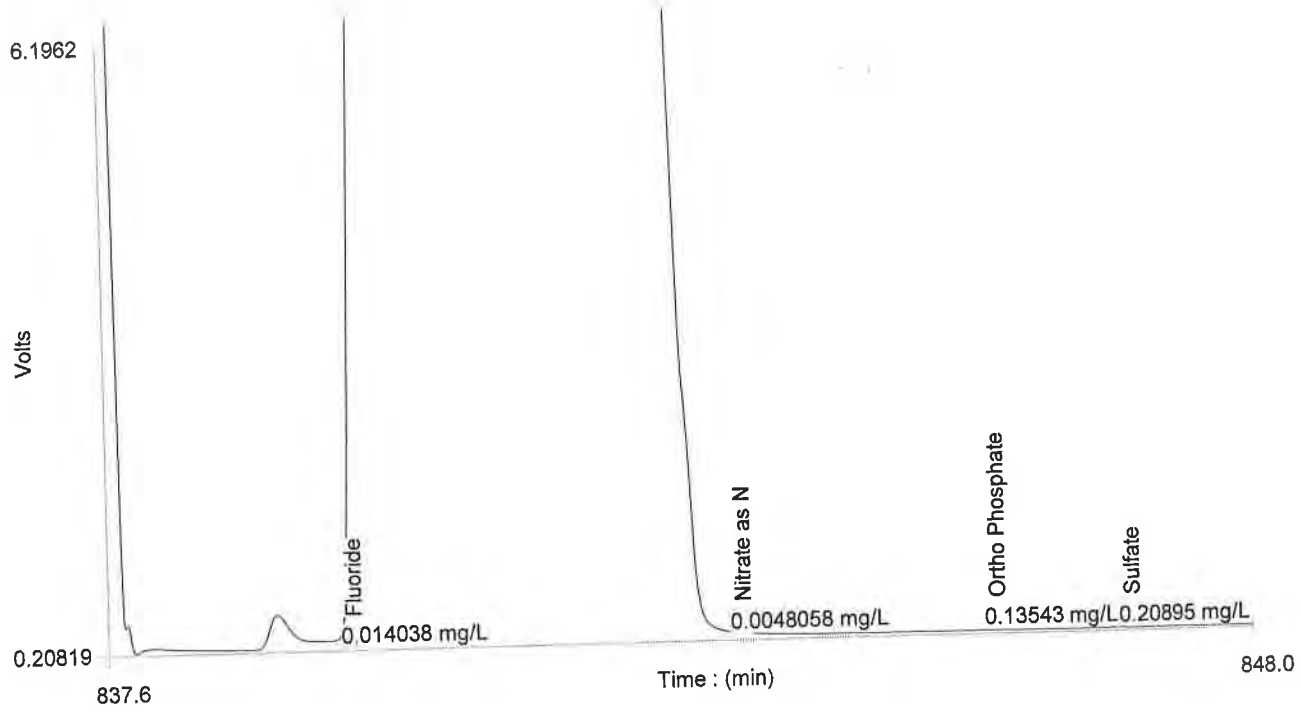
Channel 1 (Anions) - "CCB:CCB:Anion300_WW" [Row: 62]



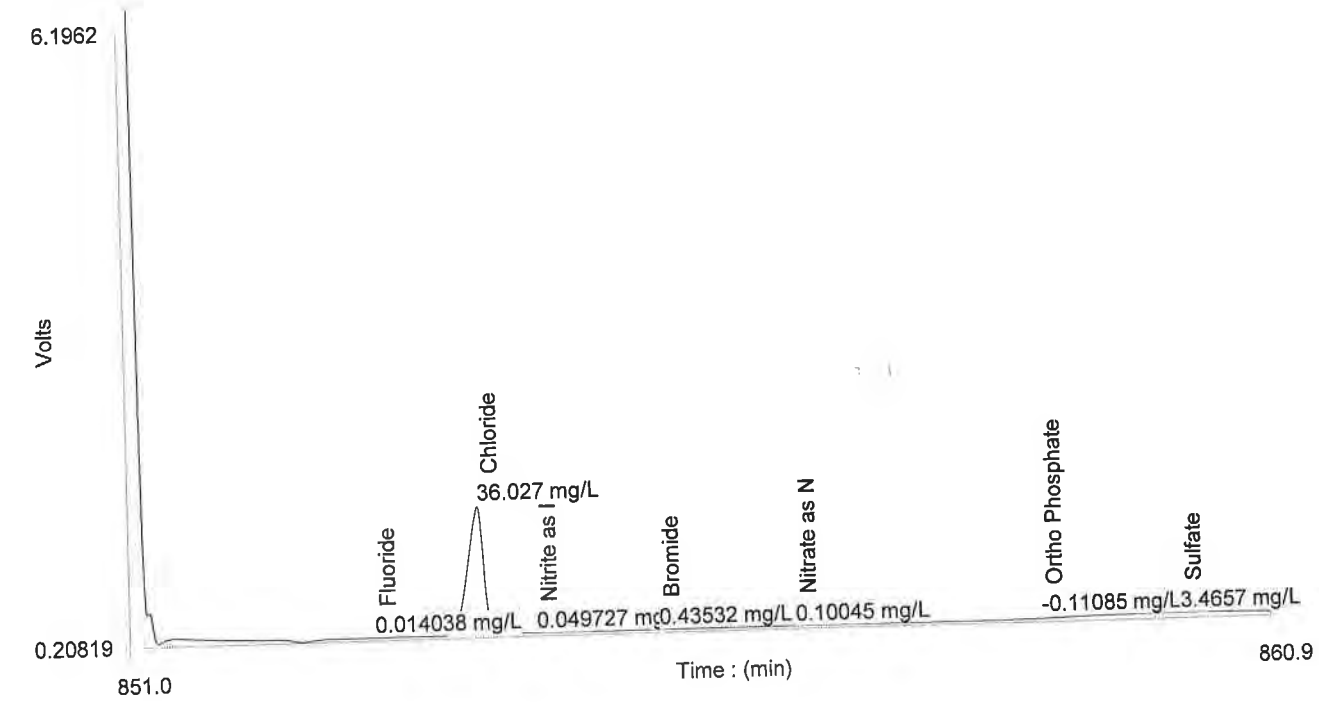
Date : 5/17/2017

ANALYST: BNK

Channel 1 (Anions) - 7016373011_4327X5 [Row: 63]



Channel 1 (Anions) - 7016373011_4327X1000 [Row: 64]



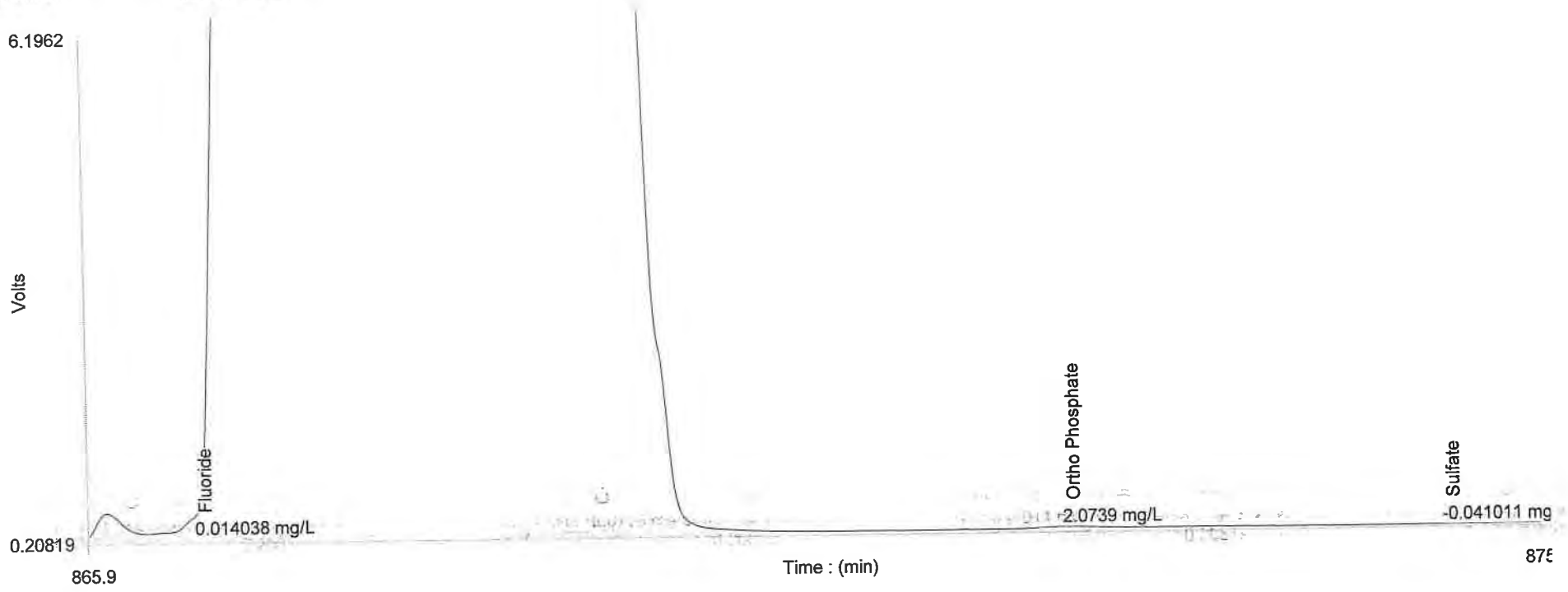
Date : 5/17/2017

ANALYST: BNK

Original Run Filename: Created: 5/8/2017 5:41:52 PM
Original Run Author's Signature: []
Current Run Filename: Last Modified: 5/9/2017 6:18:25 PM
Current Run Author's Signature: [wetchem]

5/17/17 7016373012 -4327X5

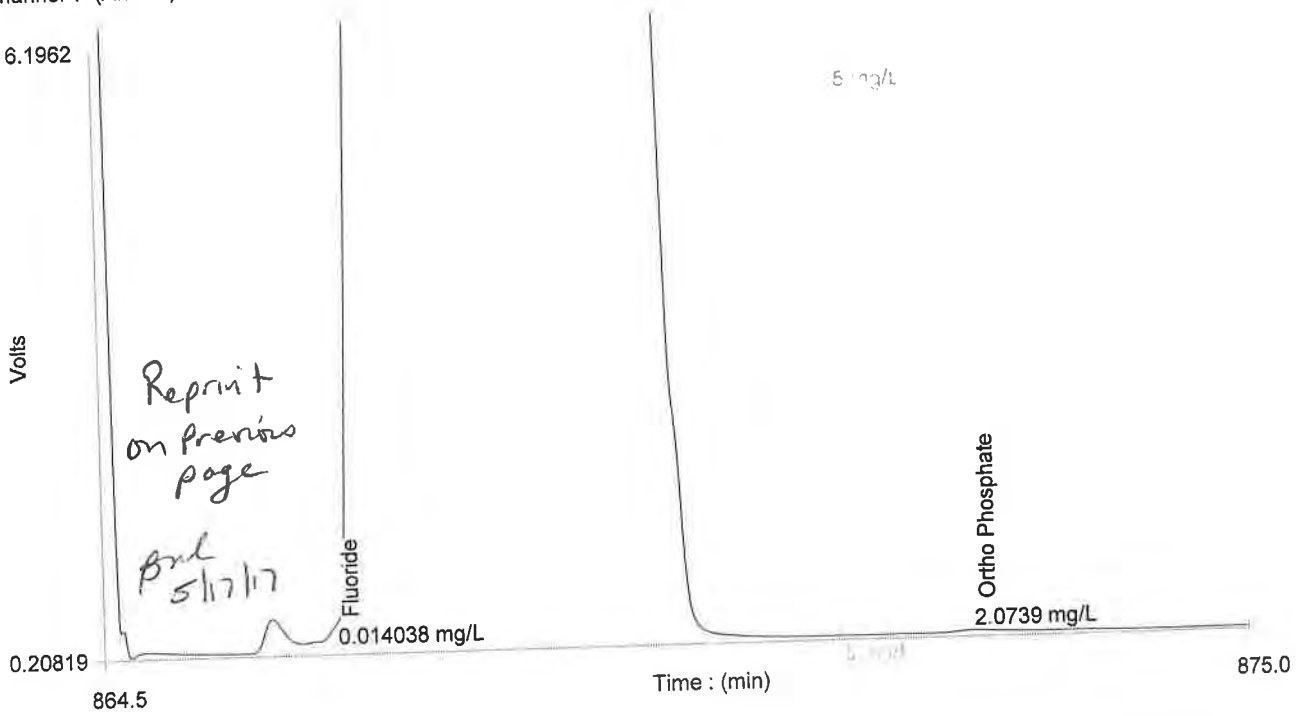
Channel 1 (Anions) - ~~Current View~~



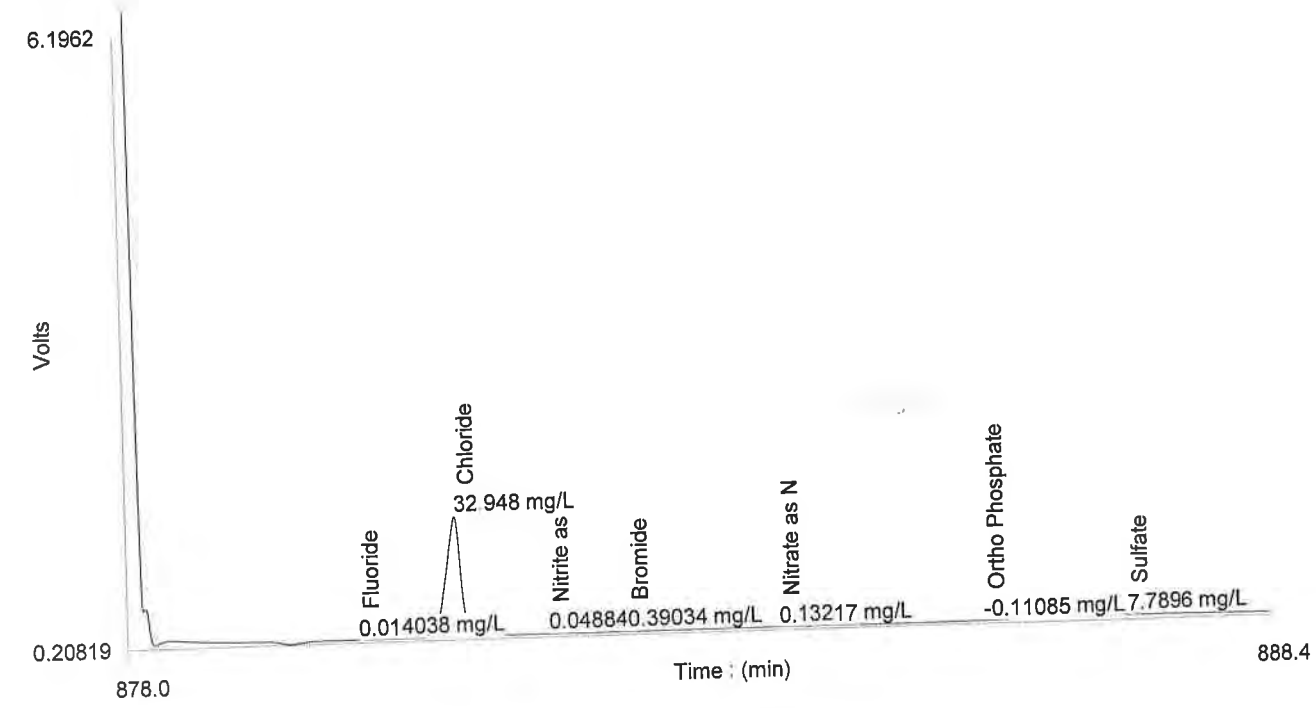
Date : 5/17/2017

ANALYST: BNK

Channel 1 (Anions) - 7016373012_4327X5 [Row: 65]



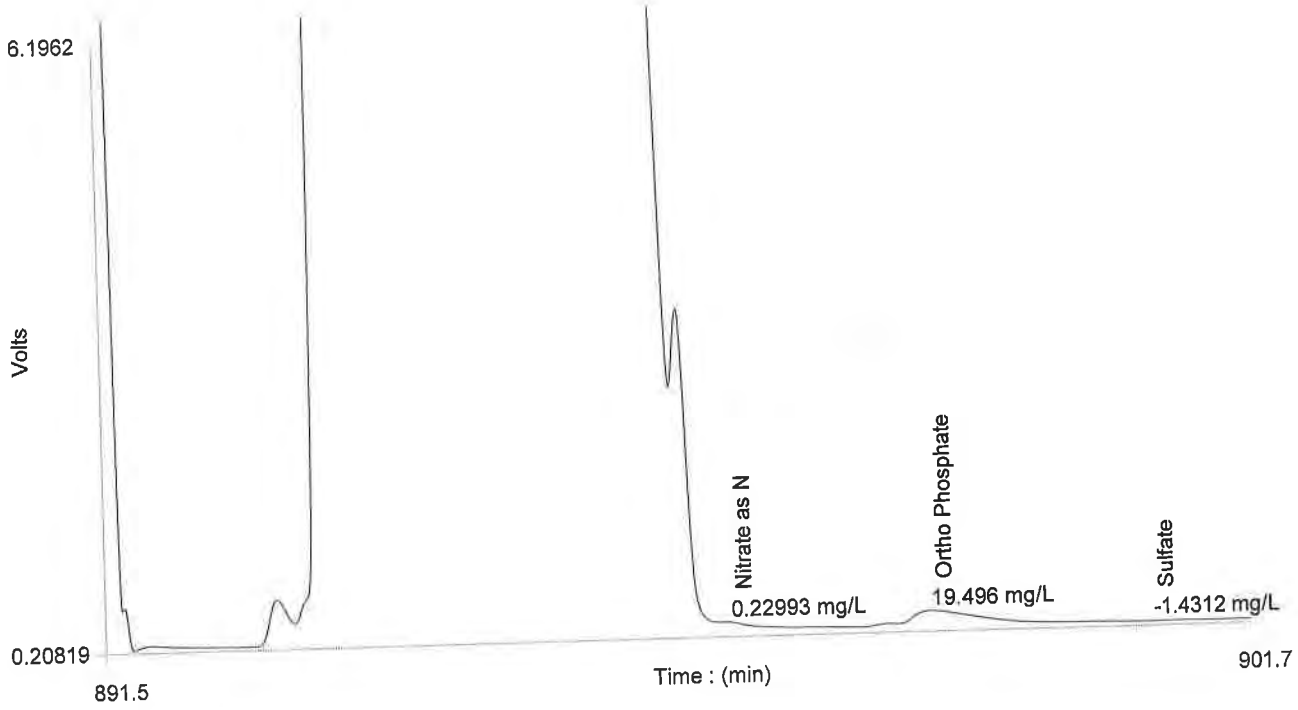
Channel 1 (Anions) - 7016373012_4327X1000 [Row: 66]



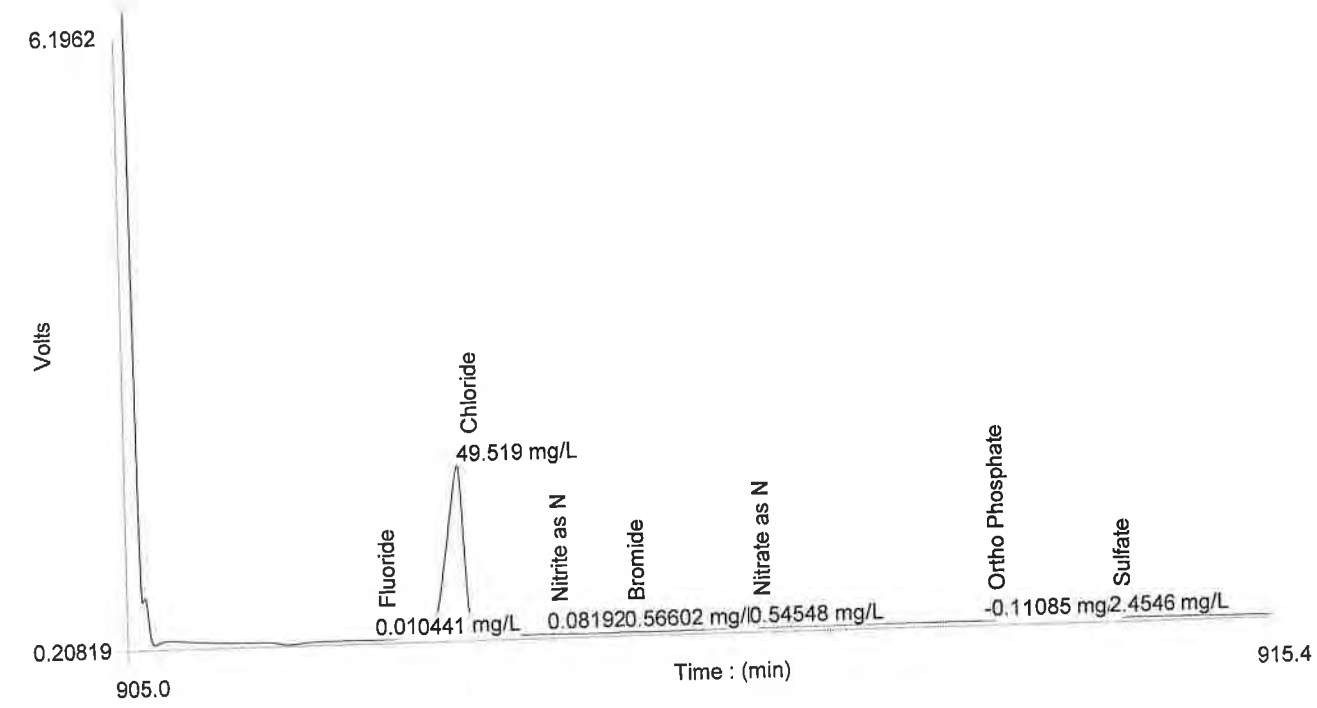
Date : 5/17/2017

ANALYST: BNK

Channel 1 (Anions) - 7016373013_4327X5 [Row: 67]



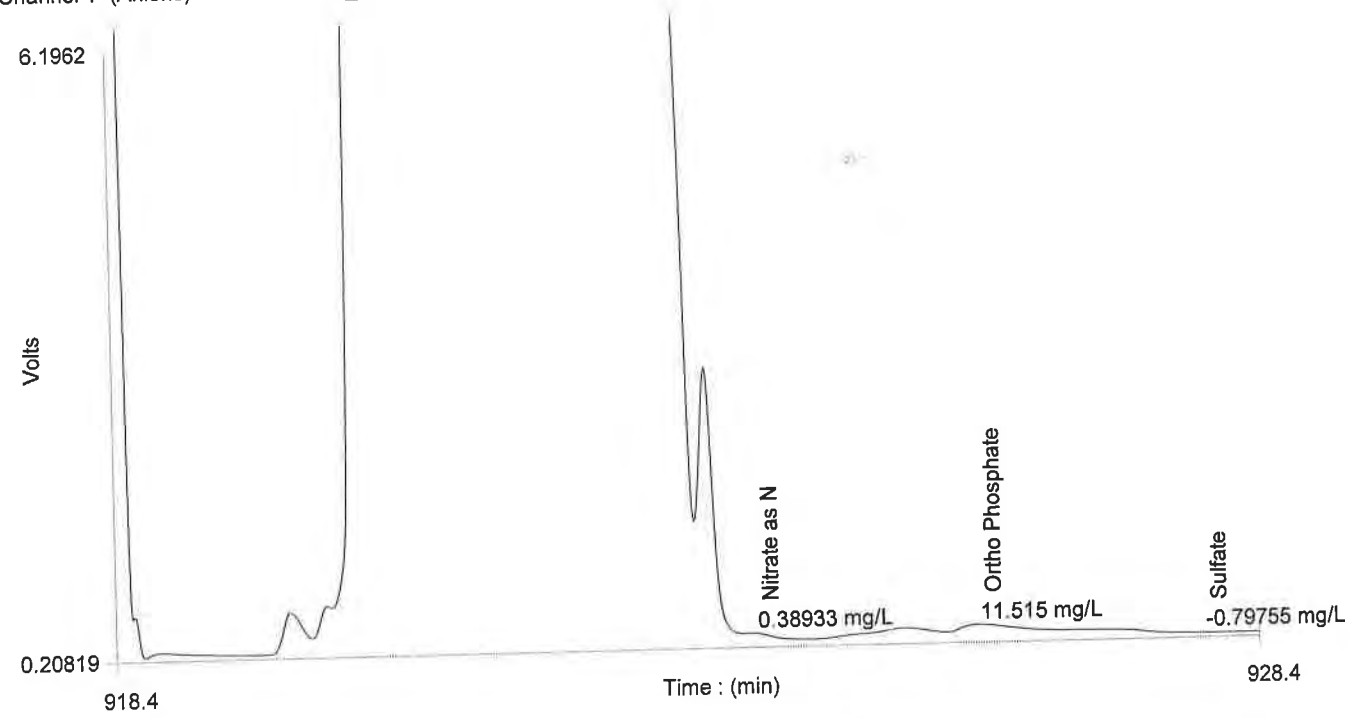
Channel 1 (Anions) - 7016373013_4327X1000 [Row: 68]



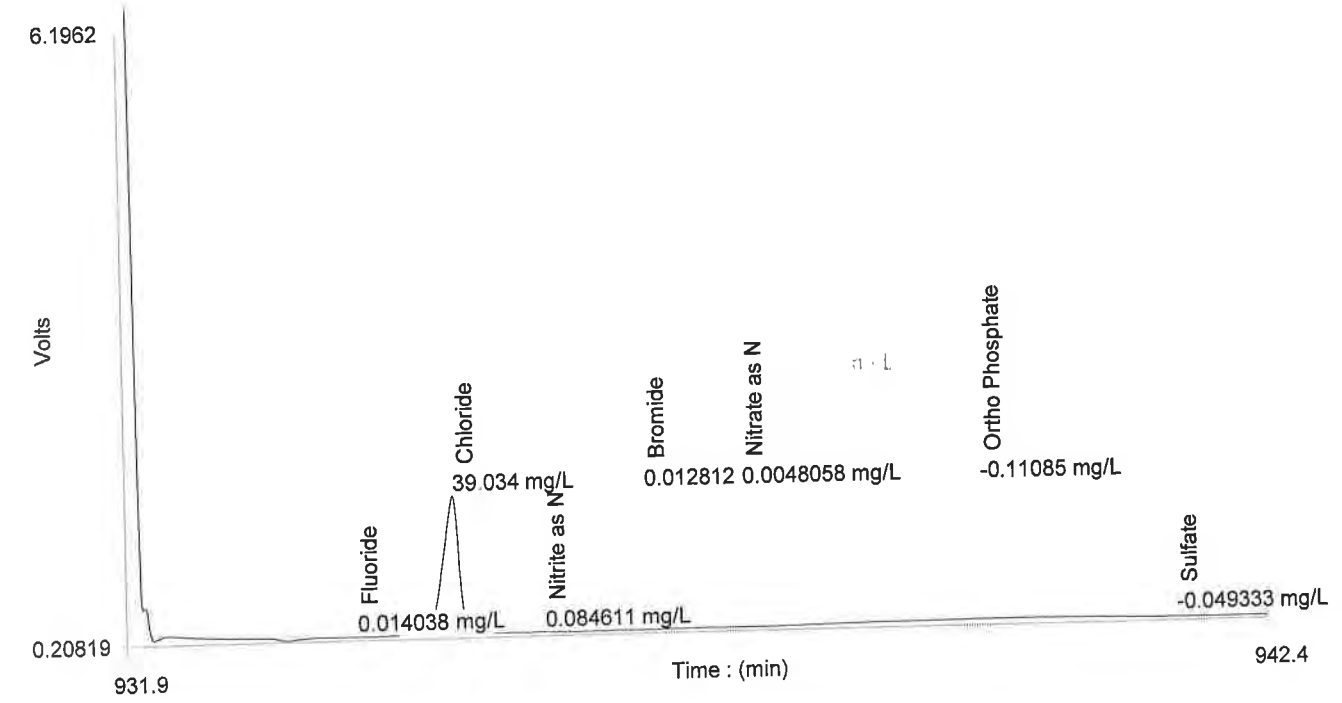
Date : 5/17/2017

ANALYST: BNK

Channel 1 (Anions) - 7016373014_4327X5 [Row: 69]



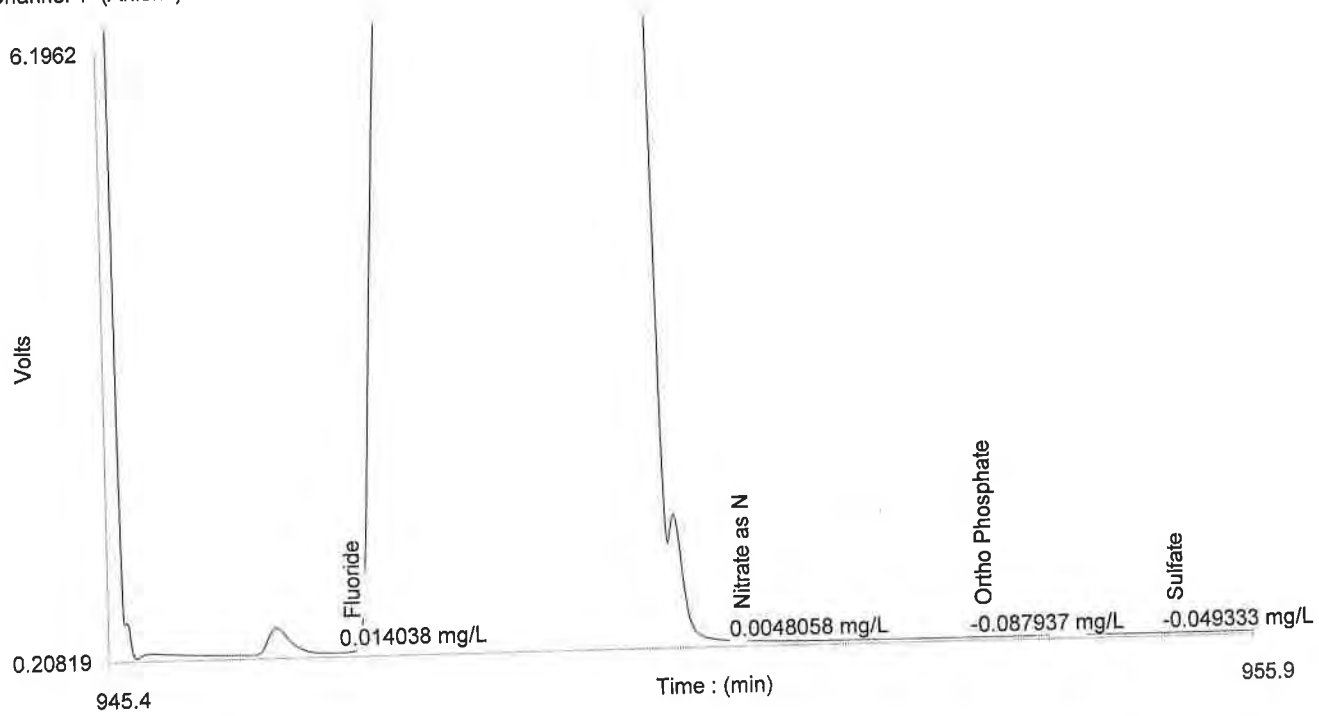
Channel 1 (Anions) - 7016373014_4327X1000 [Row: 70]



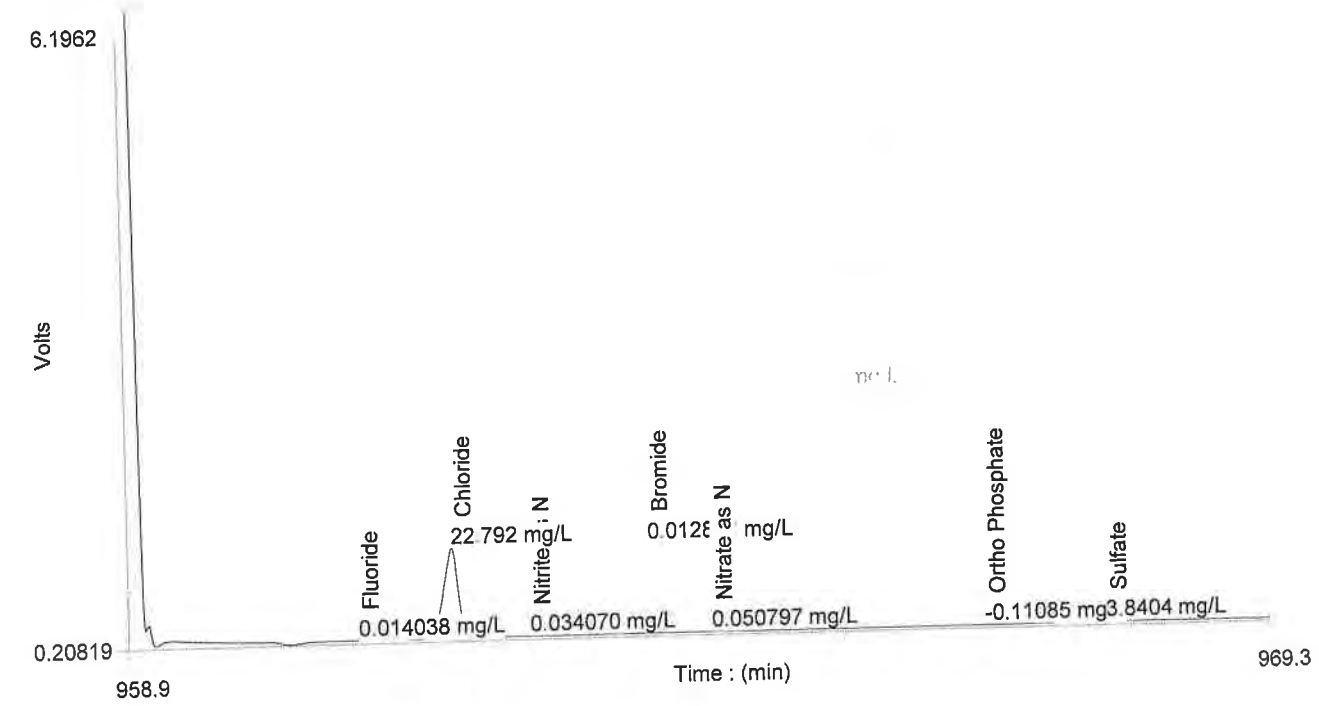
Date : 5/17/2017

ANALYST: BNK

Channel 1 (Anions) - 7016373015_4327X5 [Row: 71]



Channel 1 (Anions) - 7016373015_4327X1000 [Row: 72]



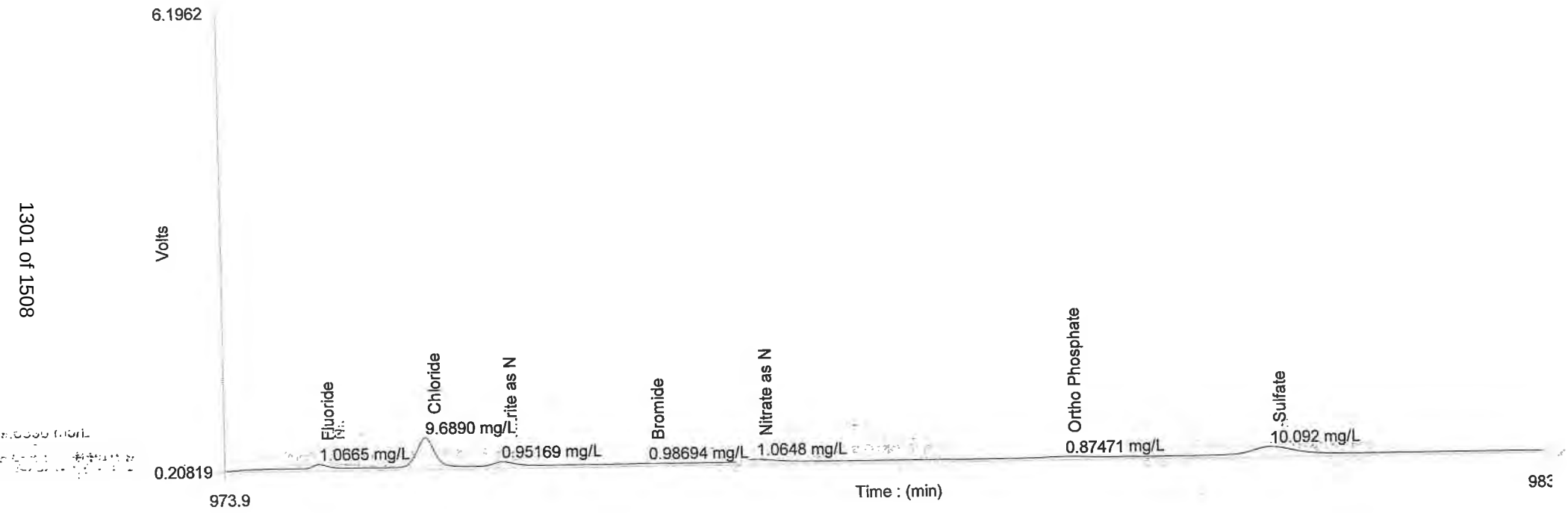
Date : 5/17/2017

ANALYST: BNK

Original Run Filename: Created: 5/8/2017 5:41:52 PM
Original Run Author's Signature: []
Current Run Filename: Last Modified: 5/9/2017 6:18:25 PM
Current Run Author's Signature: [wetchem]

5/11/17 CCV

Channel 1 (Anions) - ~~Current View~~

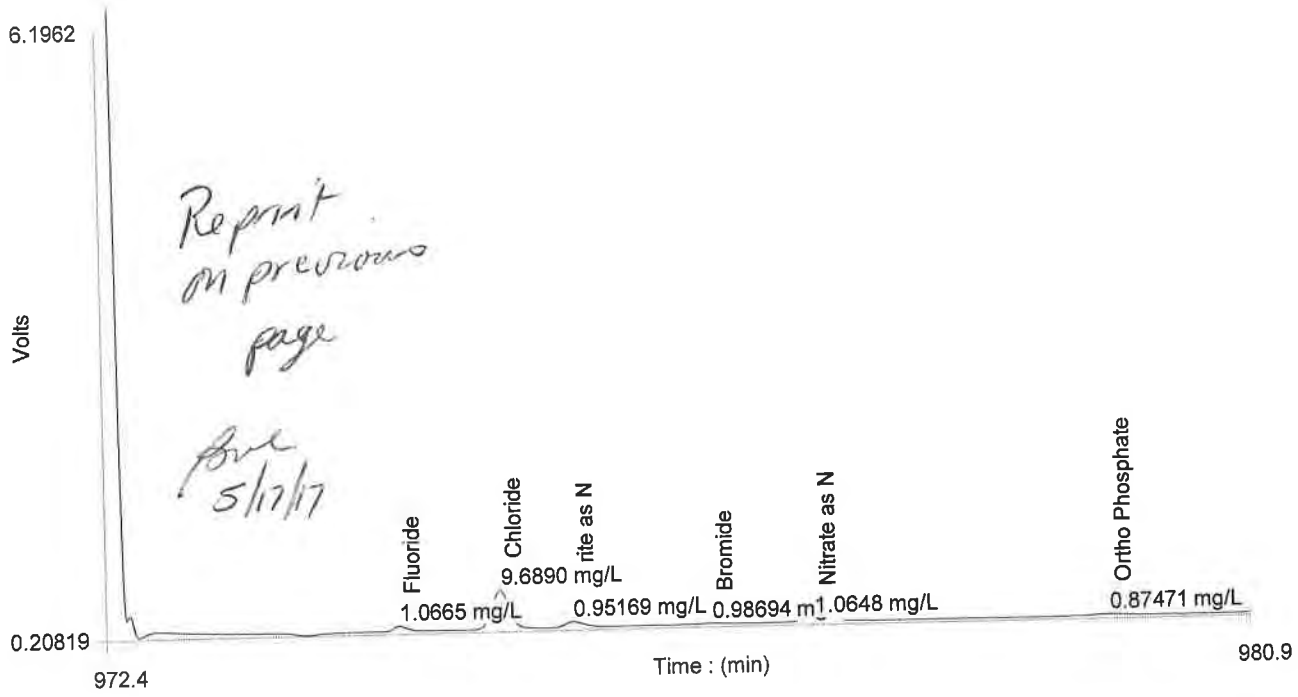


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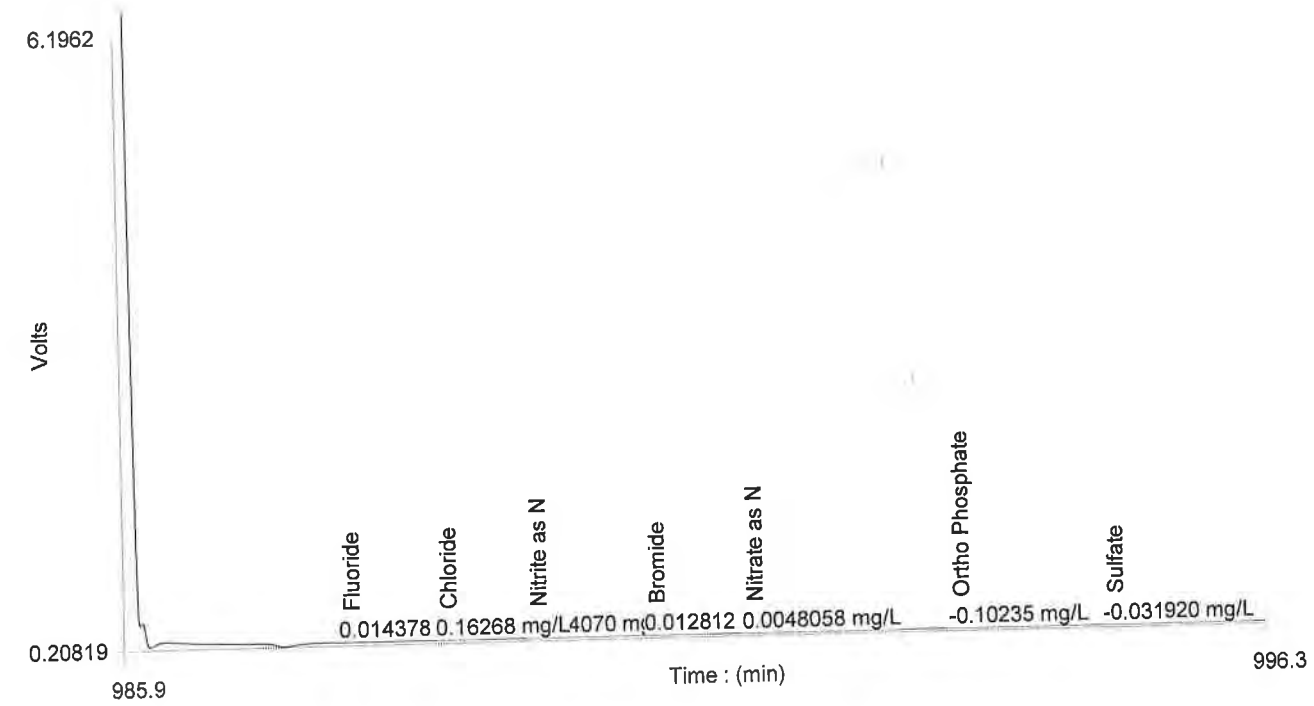
Date : 5/17/2017

ANALYST: BNK

Channel 1 (Anions) - "CCV:CCV:Anion300_WW" [Row: 73]



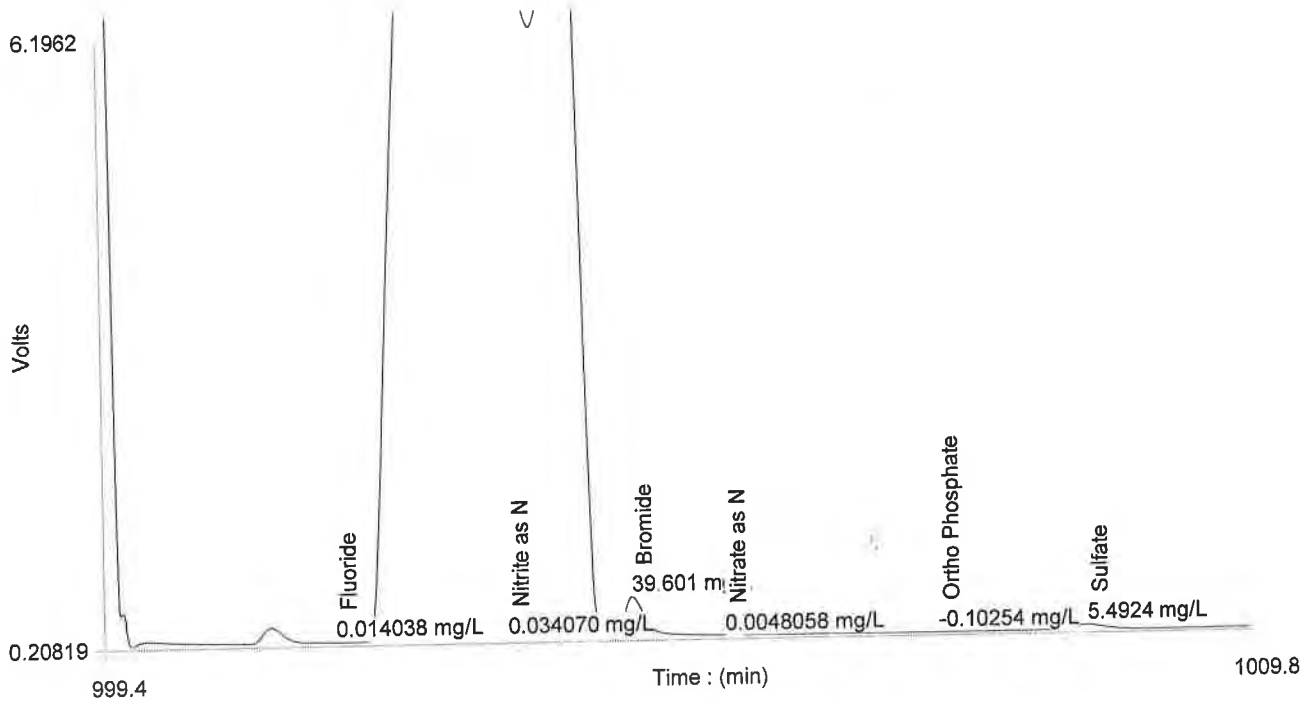
Channel 1 (Anions) - "CCB:CCB:Anion300_WW" [Row: 74]



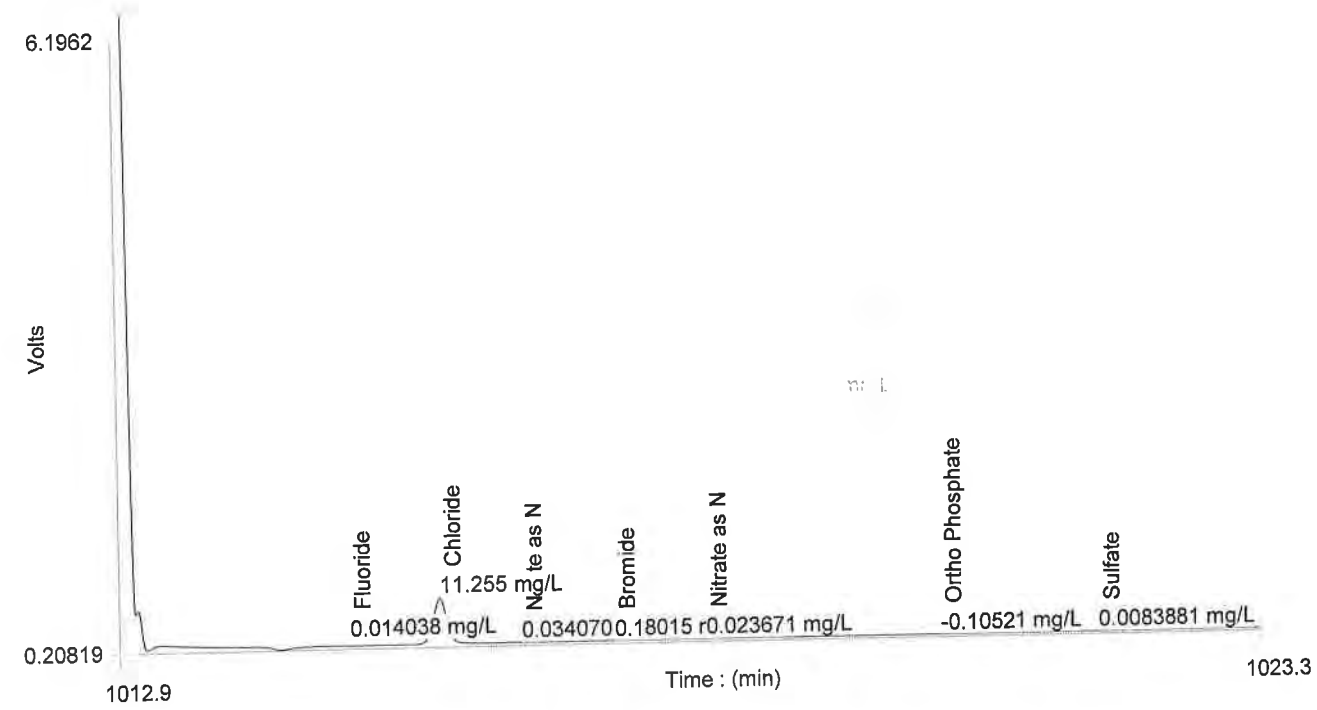
Date : 5/17/2017

ANALYST: BNK

Channel 1 (Anions) - 7016373016_4327X5 [Row: 75]



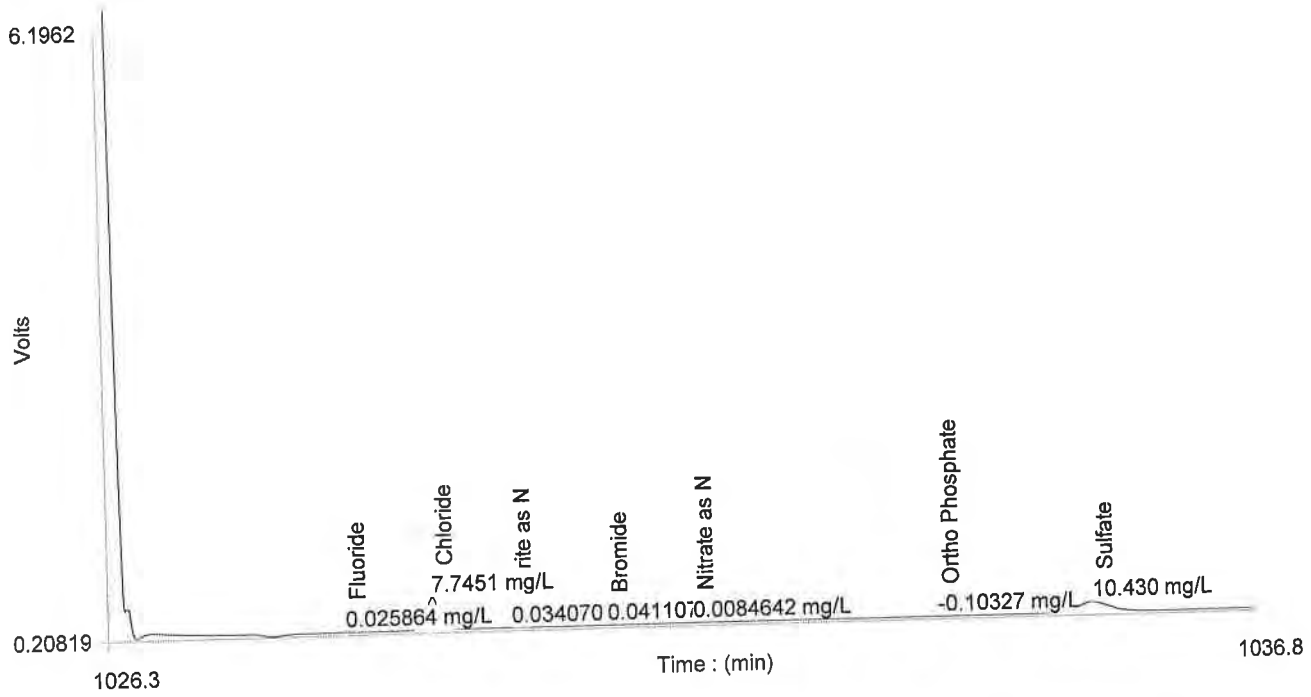
Channel 1 (Anions) - 7016373016_4327X1000 [Row: 76]



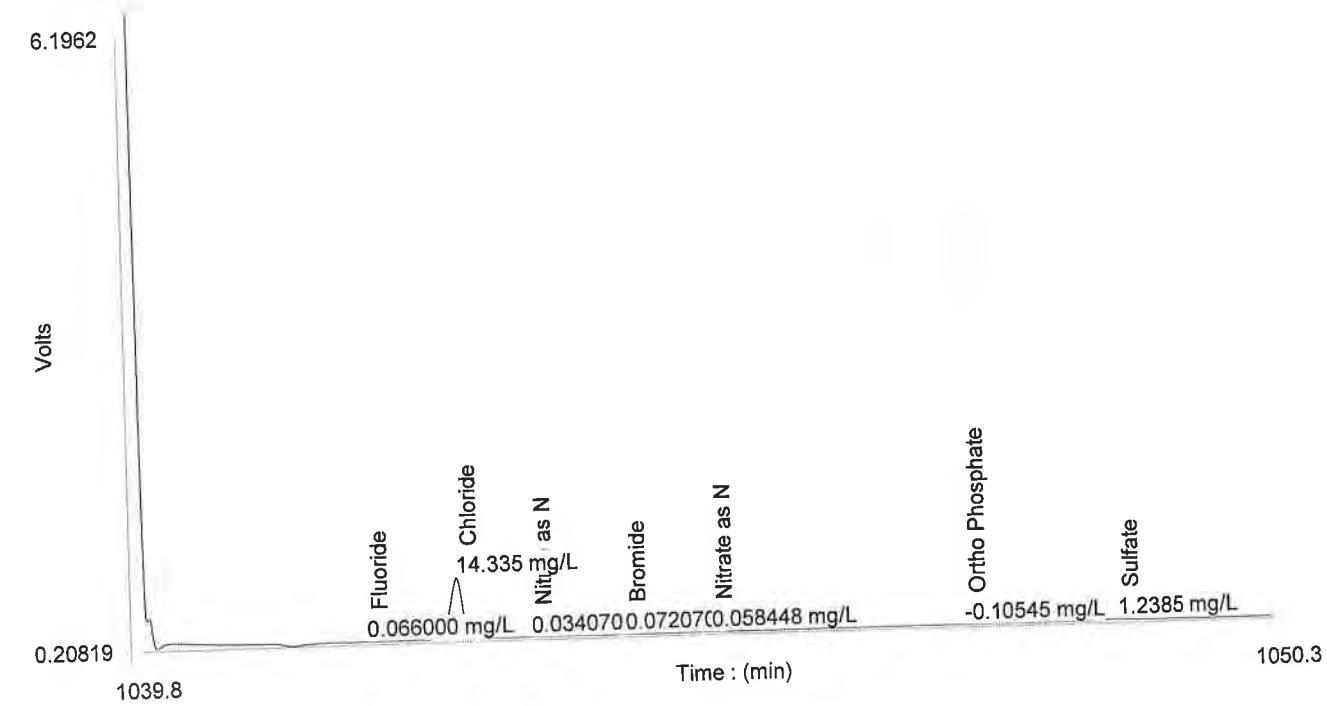
Date : 5/17/2017

ANALYST: BNK

Channel 1 (Anions) - 7016438010_4376x5 [Row: 77]



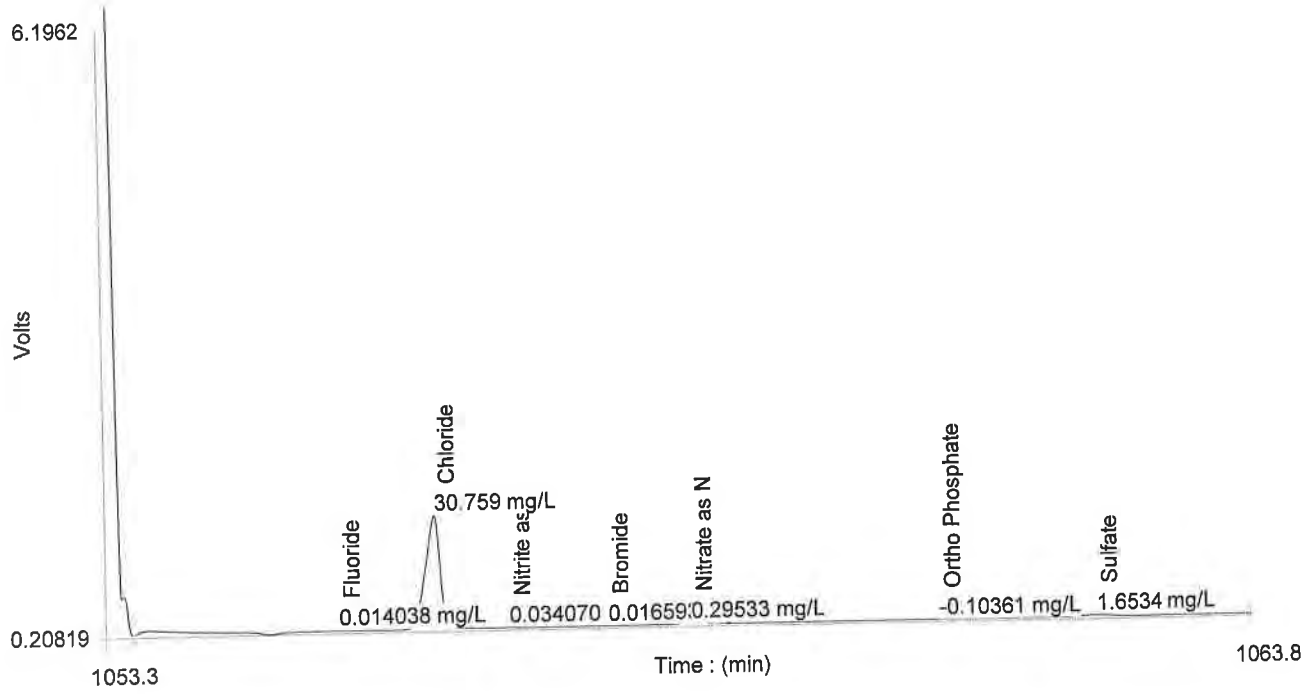
Channel 1 (Anions) - 7016438011_4376x5 [Row: 78]



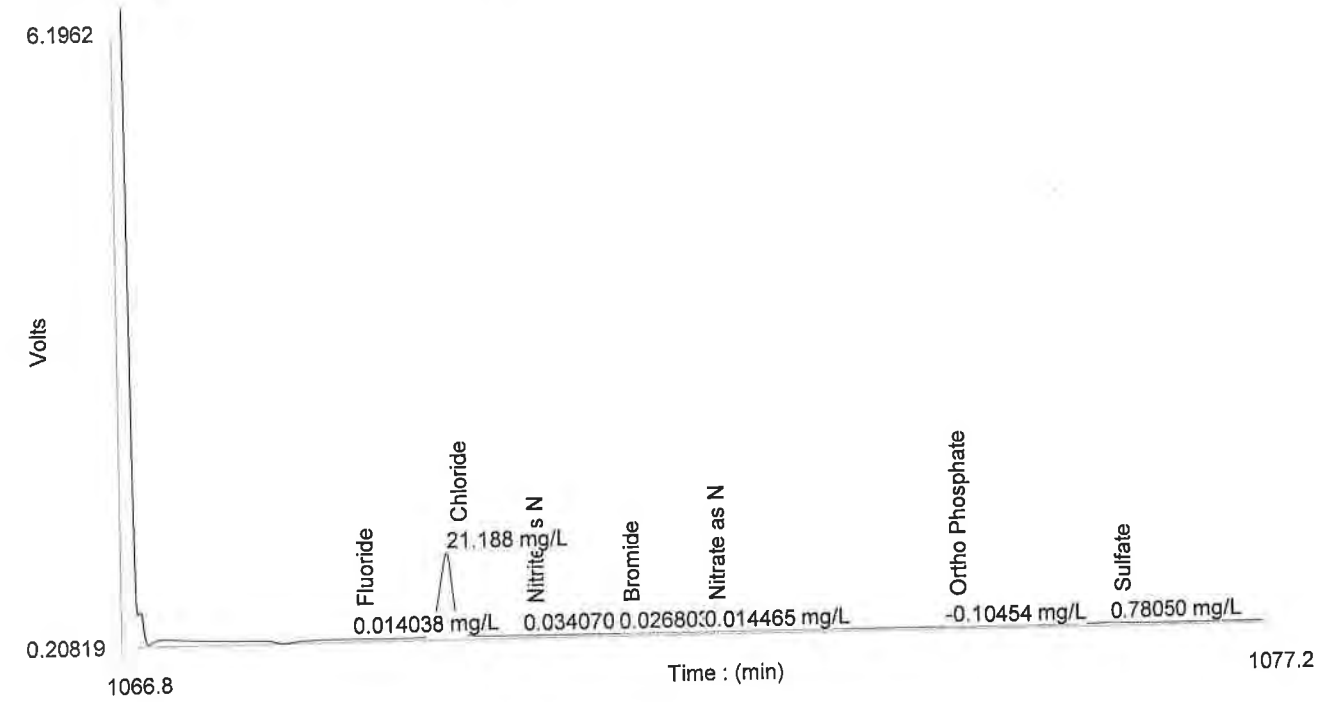
Date : 5/17/2017

ANALYST: BNK

Channel 1 (Anions) - 7016438015_4376x5 [Row: 79]



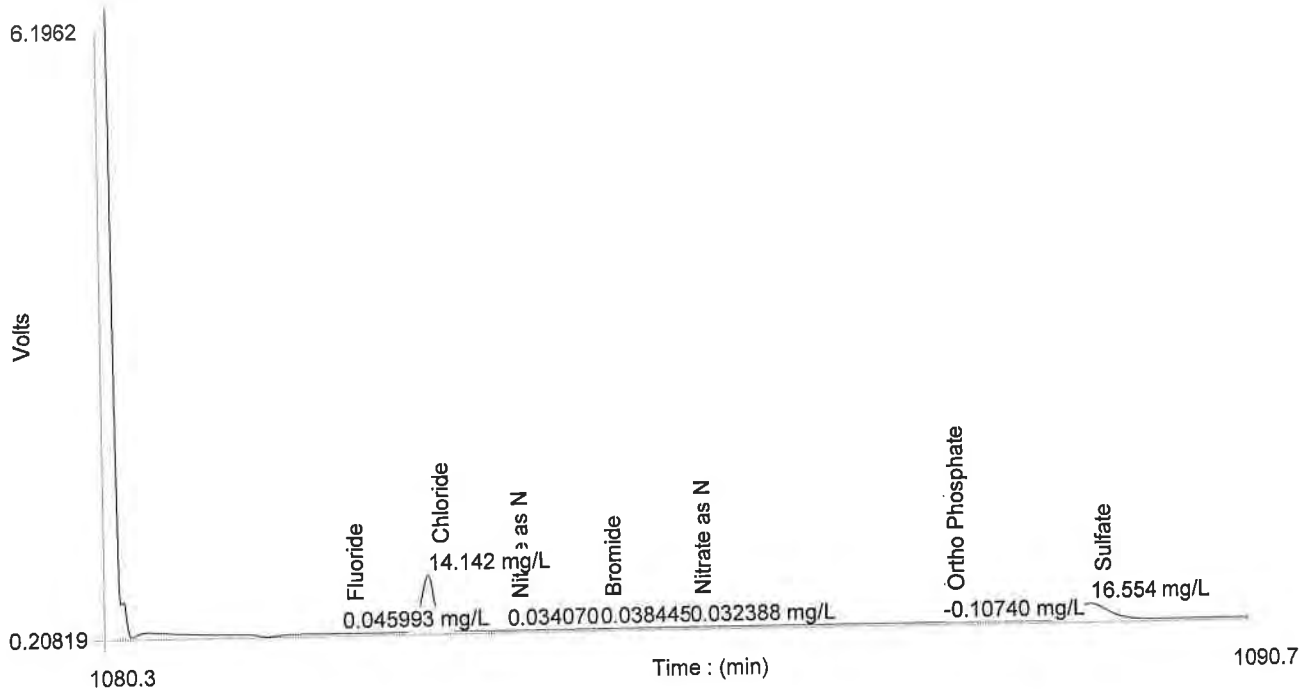
Channel 1 (Anions) - 7016438020_4376x5 [Row: 80]



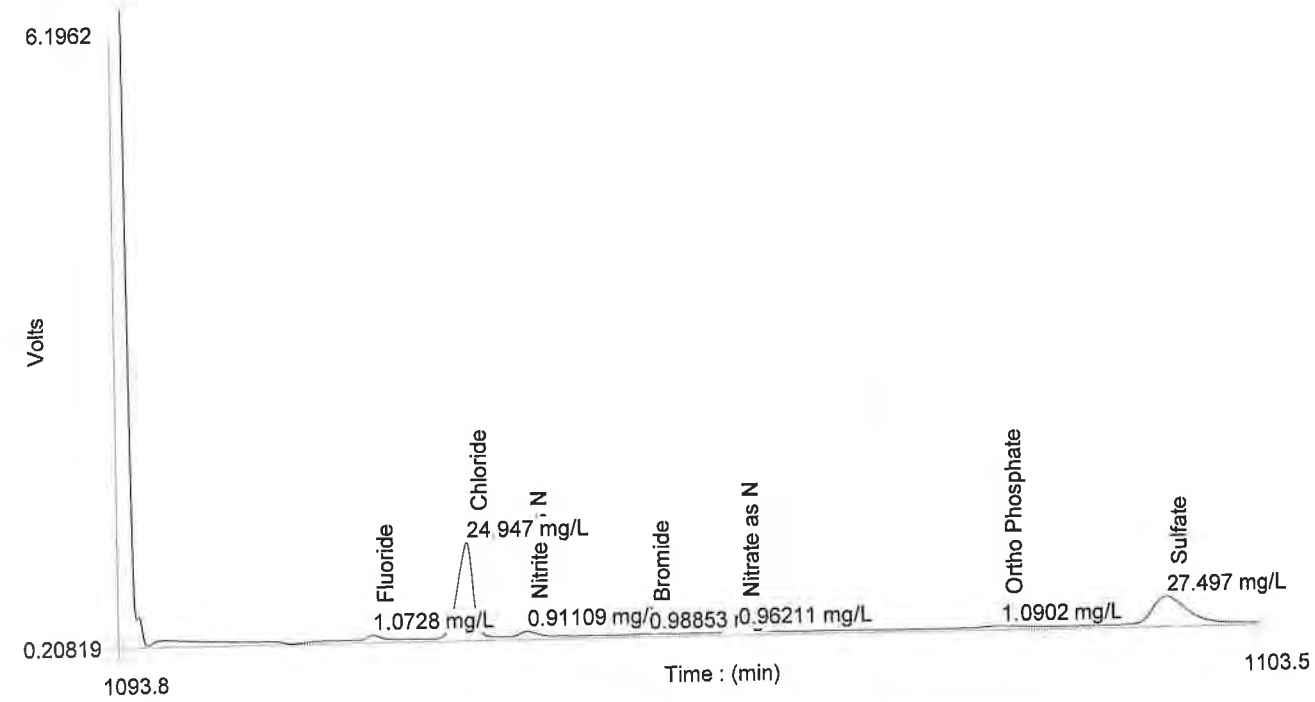
ANALYST: BNK

Date : 5/17/2017

Channel 1 (Anions) - 7017537001_4376X25 [Row: 81]



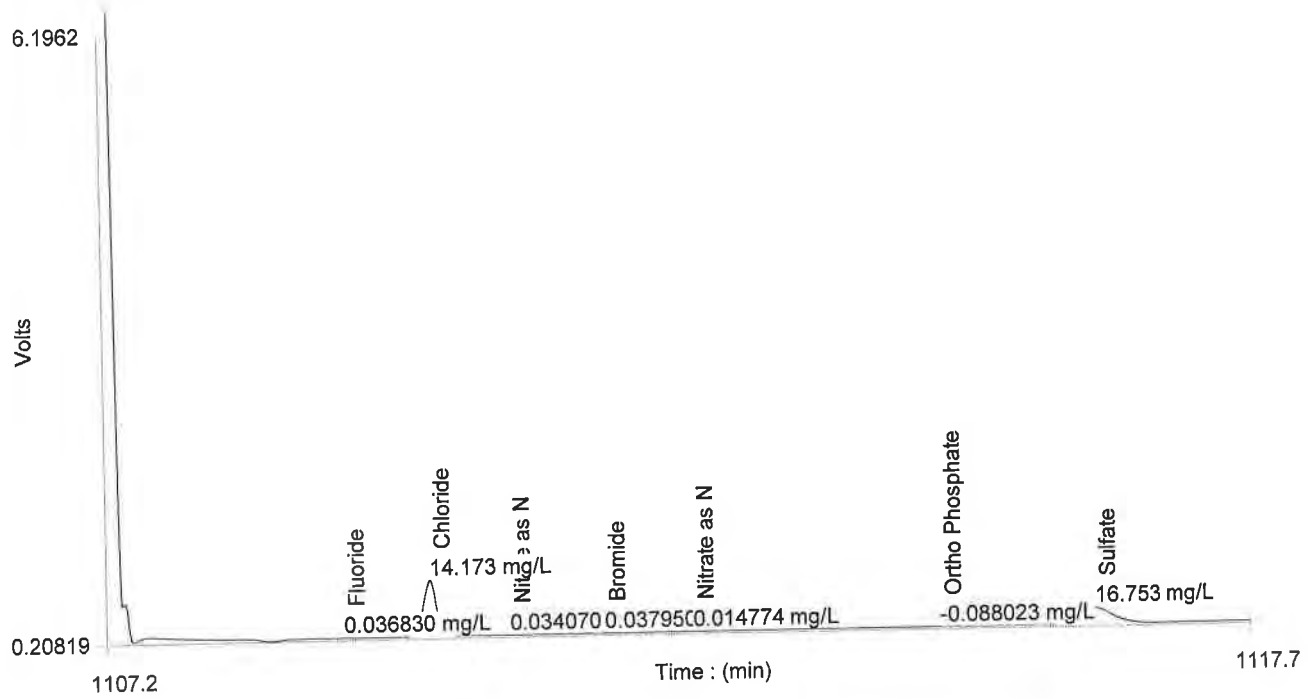
Channel 1 (Anions) - 109789_4376X25 [Row: 82]



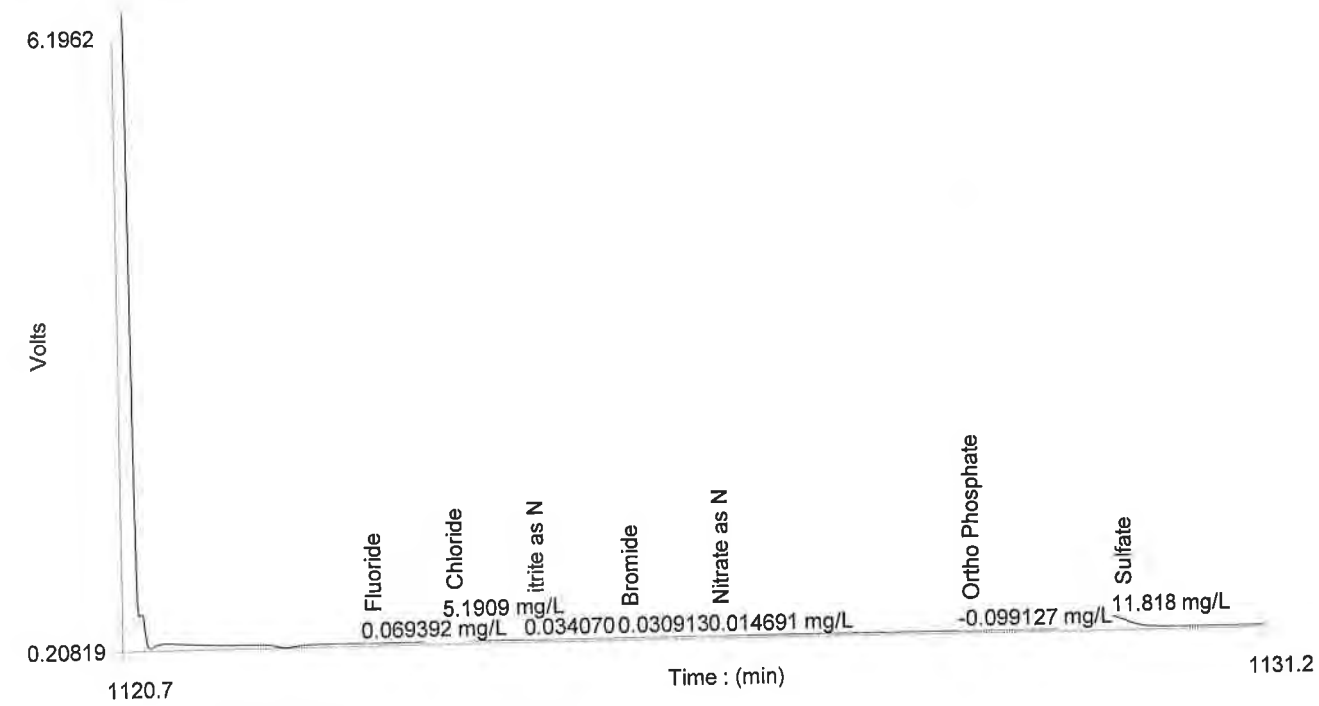
Date : 5/17/2017

ANALYST: BNK

Channel 1 (Anions) - 109790_4376X25 [Row: 83]



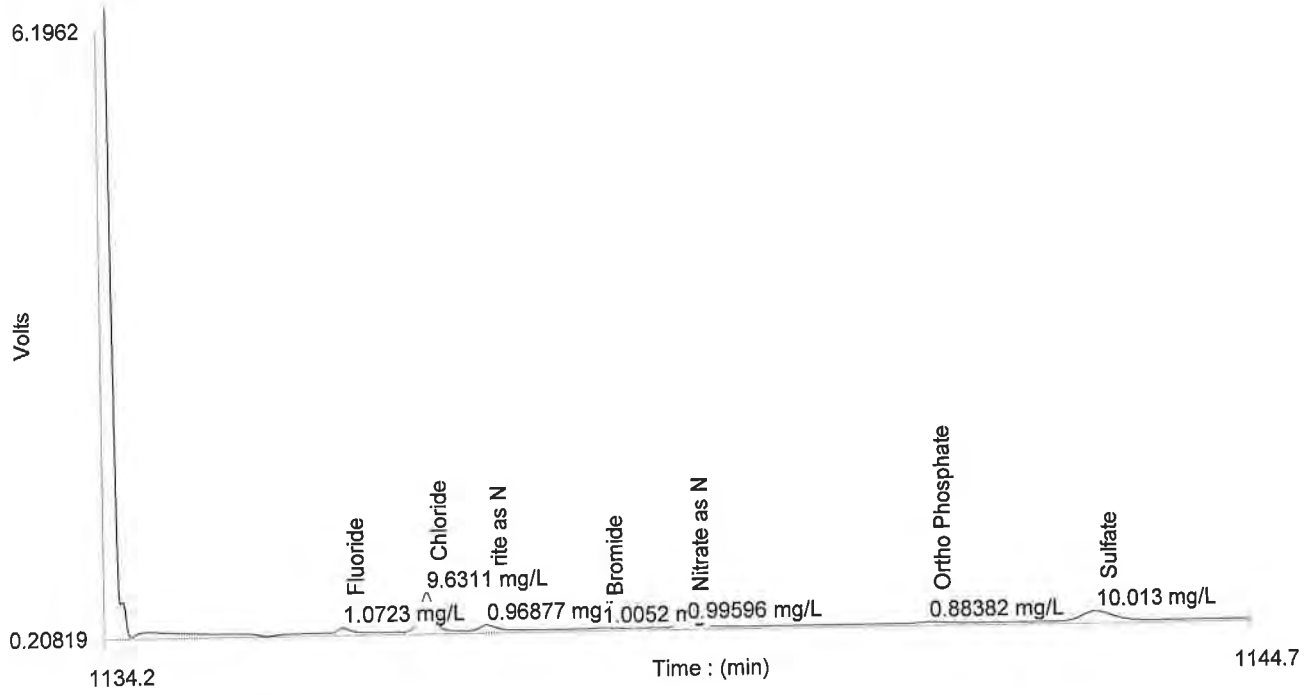
Channel 1 (Anions) - 7017537002_4376X25 [Row: 84]



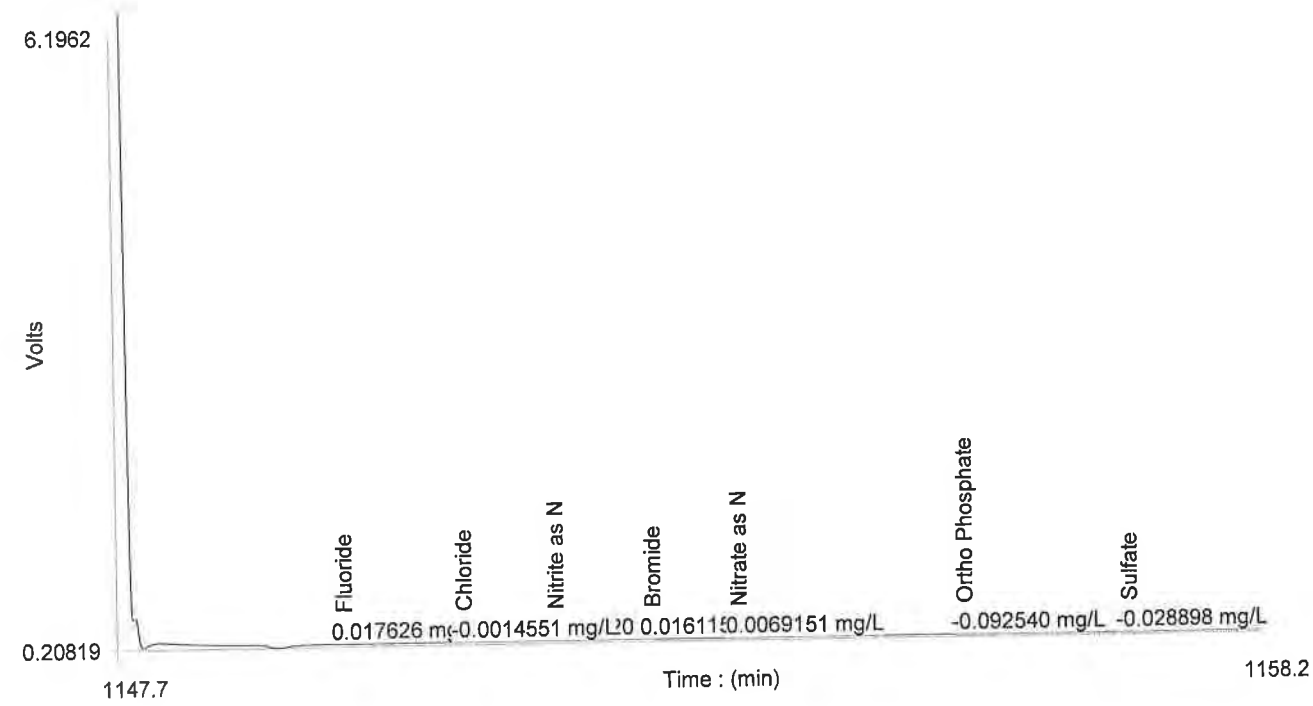
ANALYST: BNK

Date : 5/17/2017

Channel 1 (Anions) - "CCV:CCV:Anion300_WW" [Row: 85]



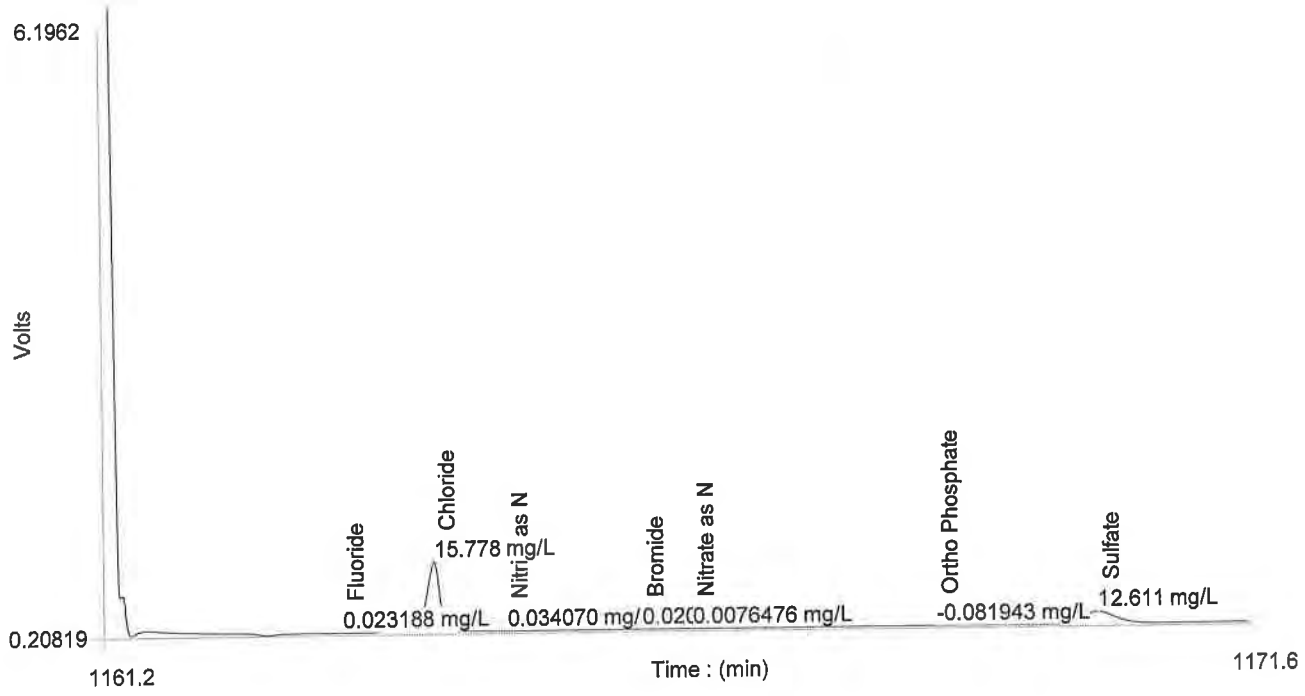
Channel 1 (Anions) - "CCB:CCB:Anion300_WW" [Row: 86]



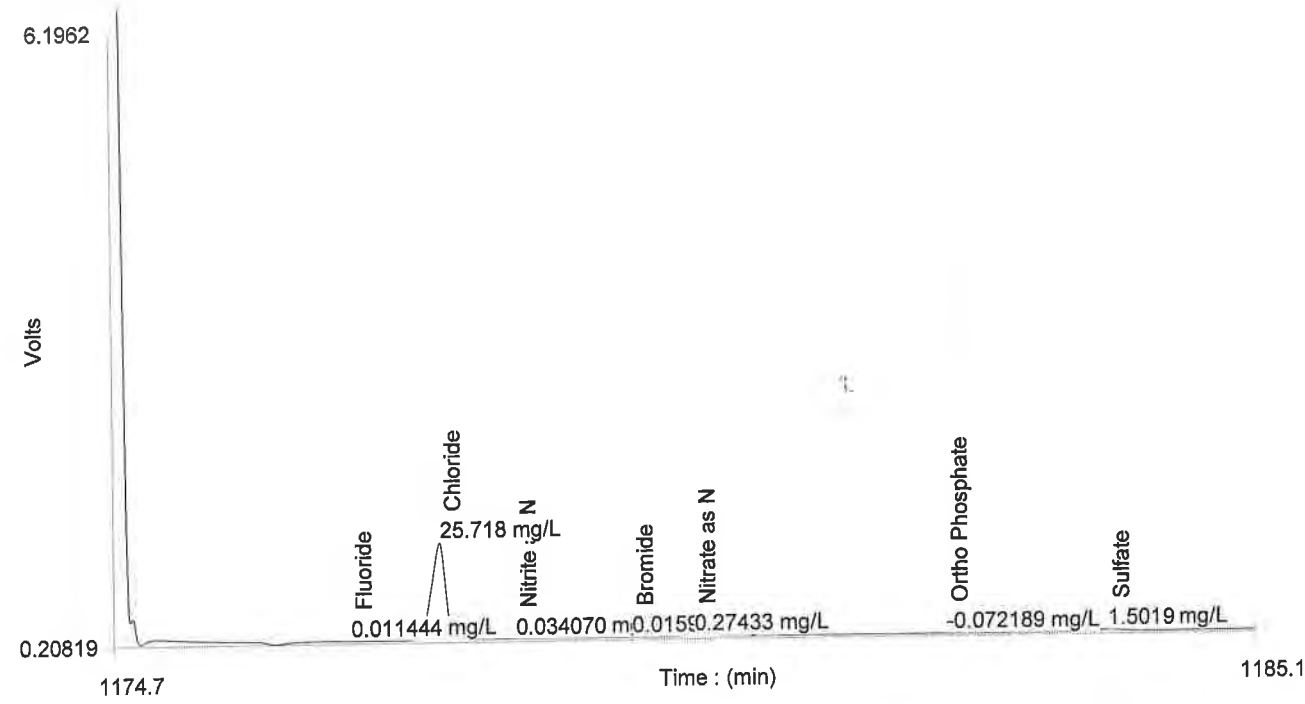
ANALYST: BNK

Date : 5/17/2017

Channel 1 (Anions) - 7016893001_4376X5 [Row: 87]



Channel 1 (Anions) - 7016997001_4377X5 [Row: 88]



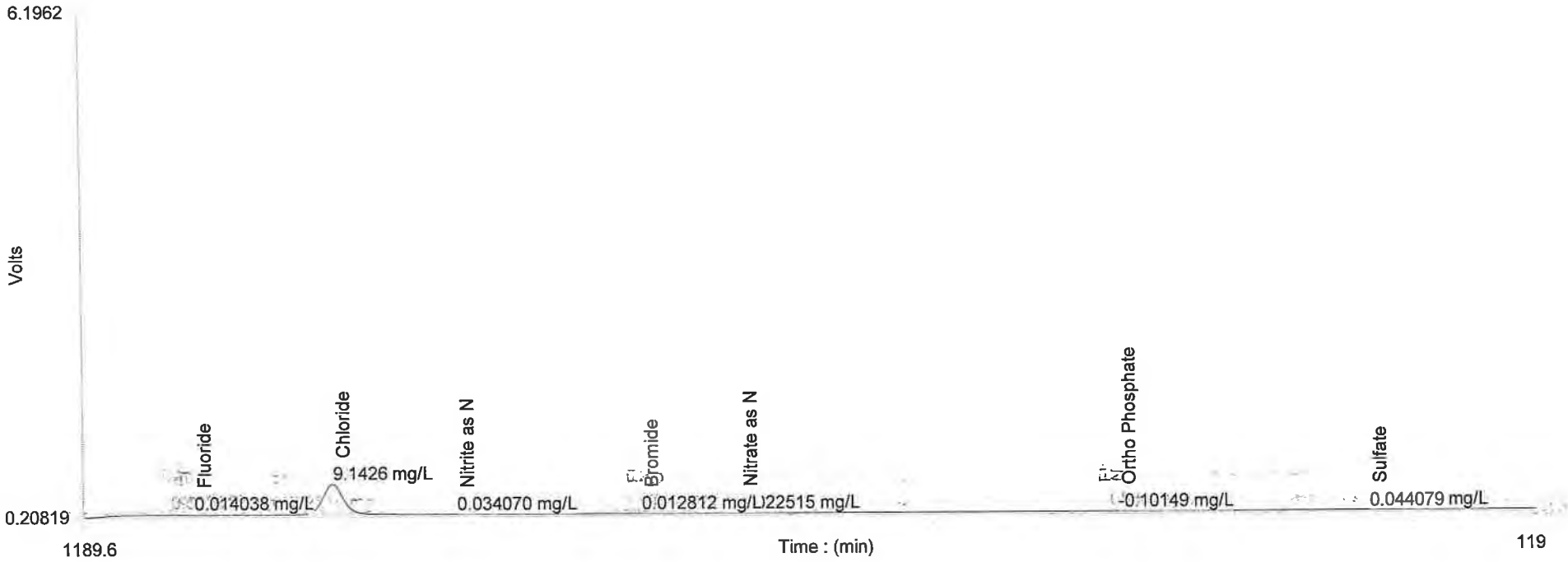
ANALYST: BNK

Date : 5/17/2017

Original Run Filename: Created: 5/8/2017 5:41:52 PM
Original Run Author's Signature: []
Current Run Filename: Last Modified: 5/9/2017 6:18:25 PM
Current Run Author's Signature: [wetchem]

5/10/17 7016997.002

Channel 1 (Anions) - ~~Current View~~

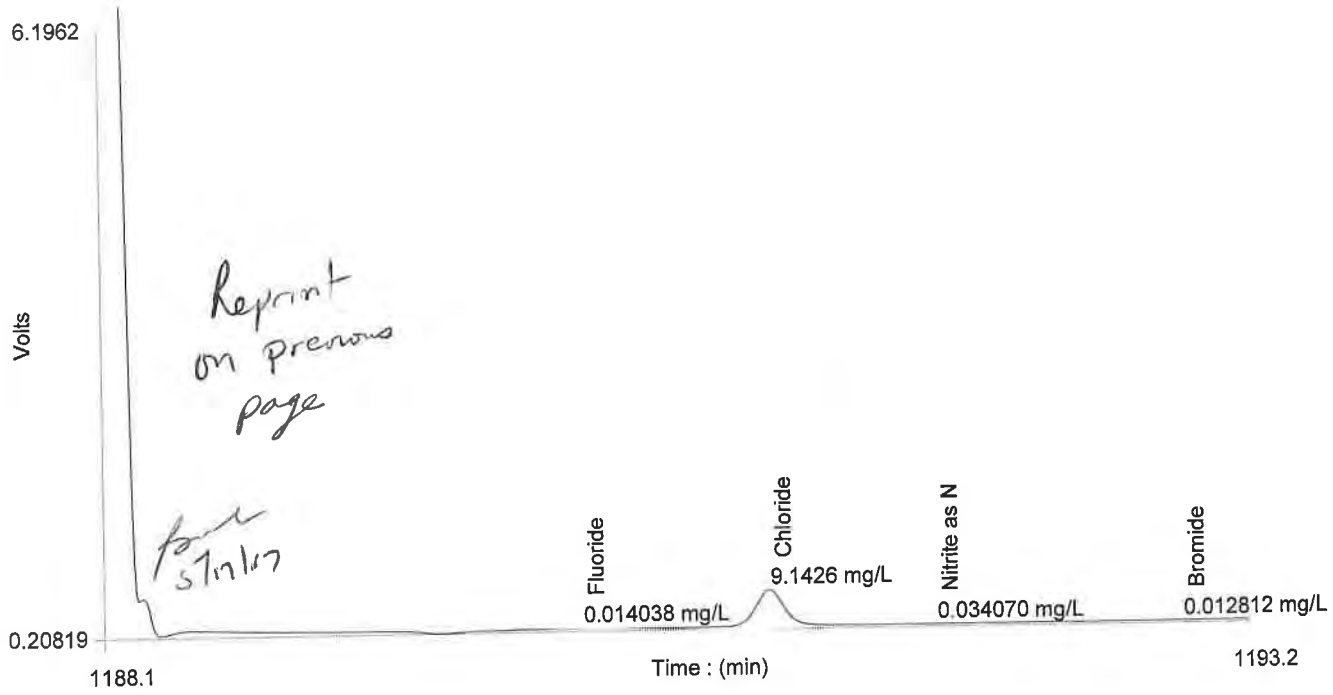


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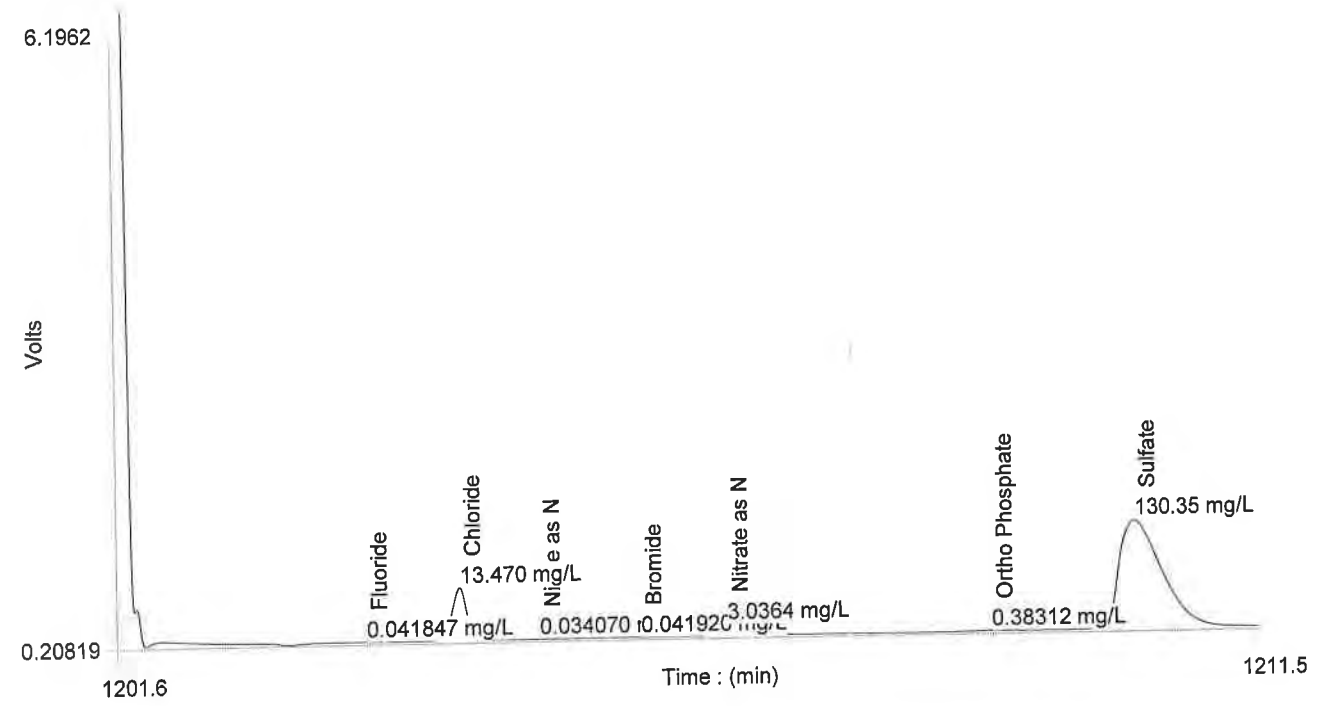
ANALYST: BNK

Date : 5/17/2017

Channel 1 (Anions) - 7016997002_4377X100 [Row: 89]



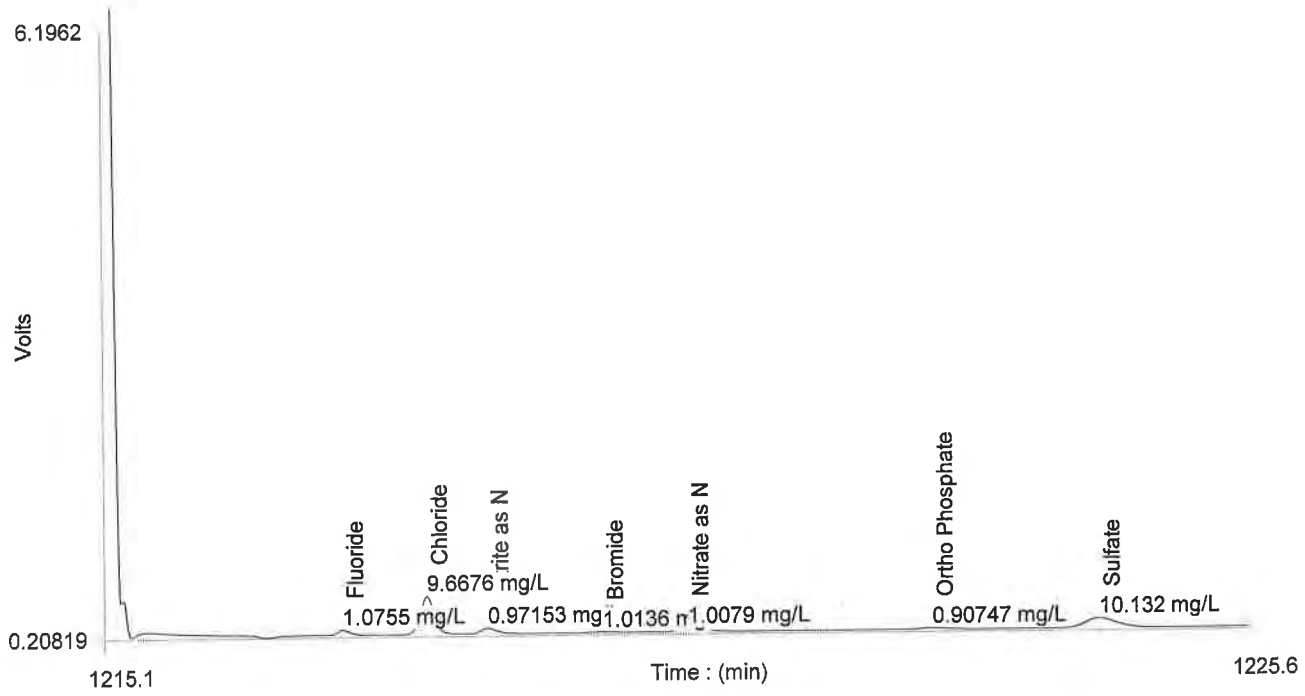
Channel 1 (Anions) - 7016995001_4377X5 [Row: 90]



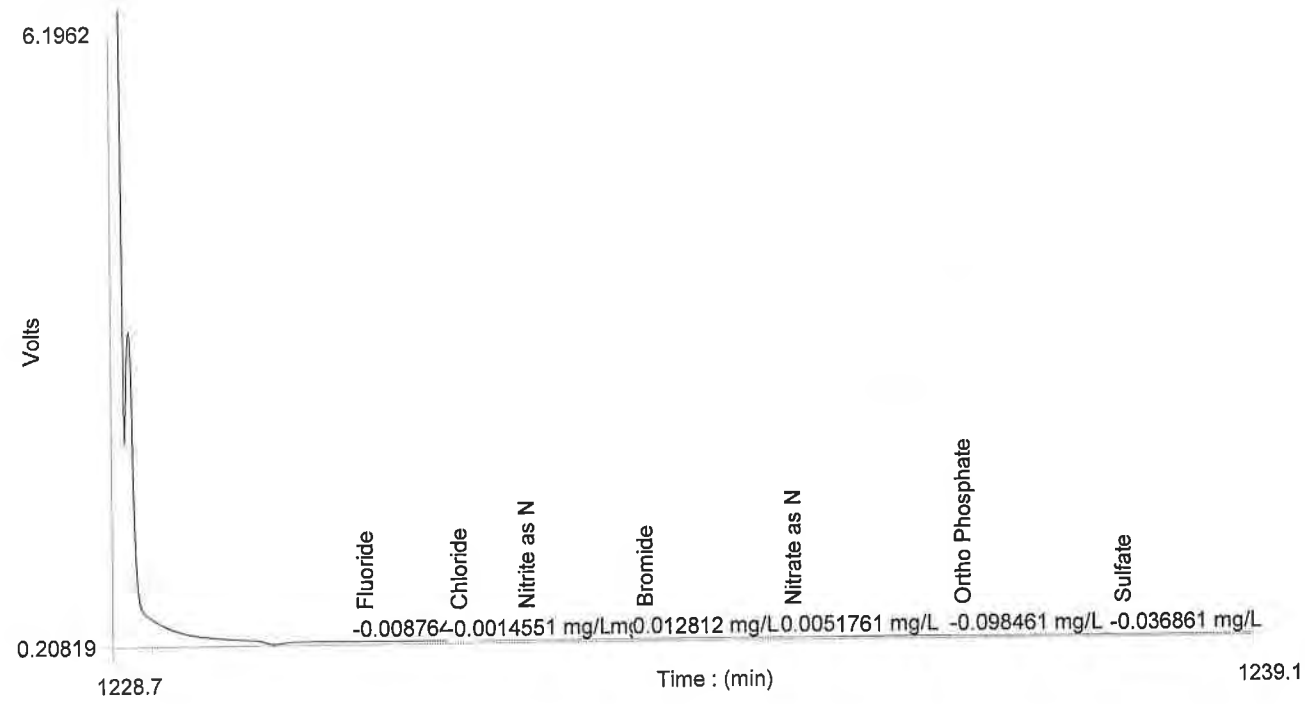
ANALYST: BNK

Date : 5/17/2017

Channel 1 (Anions) - "CCV:CCV:Anion300_WW" [Row: 91]



Channel 1 (Anions) - "CCB:CCB:Anion300_WW" [Row: 92]



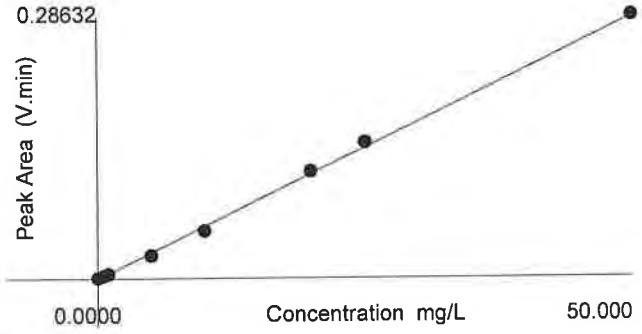
ANALYST: BNK

Date : 5/17/2017

Table : 1 (Chloride)

	Known Conc. (mg/L)	Rep.	Peak Area (V.min)	Peak Height (V)	% RSD	% Residual	Det. Conc (mg/L)	Detection Date	Detection Time
1	50.000	1	0.28632	1.7904	0.0	-0.4	50.080	4/19/2017	7:40:40 PM
2	25.000	1	0.14814	1.1135	0.0	-3.9	25.910	4/19/2017	7:27:08 PM
3	20.000	1	0.11674	0.92958	0.0	-2.3	20.418	4/19/2017	7:13:37 PM
4	10.000	1	0.051968	0.45997	0.0	8.9	9.0884	4/19/2017	7:00:05 PM
5	5.0000	1	0.025049	0.22670	0.0	12.2	4.3799	4/19/2017	6:46:35 PM
6	1.0000	1	0.0049226	0.039981	0.0	14.1	0.85956	4/19/2017	6:33:04 PM
7	0.50000	1	0.0028585	0.021516	0.0	0.7	0.49853	4/19/2017	6:19:34 PM
8	0.0000	1	0.00086504	0.0043970			0.14985	4/19/2017	6:06:04 PM

Figure : 1 (Chloride)



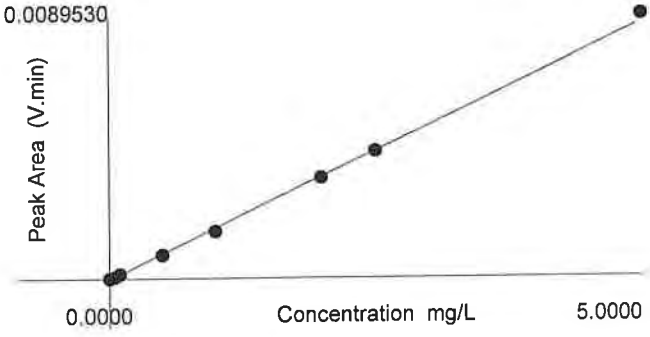
Area = 0.0057023 * Conc + 2.7571e-5
Conc = 174.91 * Area - 0.0014551
Correlation Coefficient (r) = 0.99986

Weighting : 1/x

Table : 2 (Bromide)

	Known Conc. (mg/L)	Rep.	Peak Area (V.min)	Peak Height (V)	% RSD	% Residual	Det. Conc (mg/L)	Detection Date	Detection Time
1	5.0000	1	0.0089530	0.046220	0.0	-3.0	5.1418	4/19/2017	7:40:40 PM
2	2.5000	1	0.0043166	0.021477	0.0	0.4	2.4857	4/19/2017	7:27:08 PM
3	2.0000	1	0.0034154	0.016900	0.0	1.4	1.9694	4/19/2017	7:13:37 PM
4	1.0000	1	0.0015898	0.0076668	0.0	7.6	0.92355	4/19/2017	7:00:05 PM
5	0.50000	1	0.00079984	0.0038007	0.0	5.8	0.47102	4/19/2017	6:46:35 PM
6	0.10000	1	0.00014878	0.00068705	0.0	2.3	0.098047	4/19/2017	6:33:04 PM
7	0.050000	1	5.5347e-5	0.00030203	0.0	15.0	0.044519	4/19/2017	6:19:34 PM
8	0.0000	1	0.0000	0.0000			0.012812	4/19/2017	6:06:04 PM

Figure : 2 (Bromide)



Area = 0.0017429 * Conc - 2.2012e-5
Conc = 572.88 * Area + 0.012812
Correlation Coefficient (r) = 0.99992

Weighting : 1/x

ANALYST: BNK

Date : 5/17/2017

Table : 3 (Sulfate)

	Known Conc. (mg/L)	Rep.	Peak Area (V.min)	Peak Height (V)	% RSD	% Residual	Det. Conc (mg/L)	Detection Date	Detection Time
1	50.000	1	0.17158	0.57608	0.0	2.6	48.542	4/19/2017	7:40:40 PM
2	25.000	1	0.093314	0.28958	0.0	-5.8	26.377	4/19/2017	7:27:08 PM
3	20.000	1	0.074344	0.22918	0.0	-5.3	21.005	4/19/2017	7:13:37 PM
4	10.000	1	0.033122	0.10172	0.0	6.4	9.3307	4/19/2017	7:00:05 PM
5	5.0000	1	0.016507	0.050263	0.0	7.2	4.6254	4/19/2017	6:46:35 PM
6	1.0000	1	0.0031715	0.0095926	0.0	14.5	0.84883	4/19/2017	6:33:04 PM
7	0.50000	1	0.0017744	0.0052516	0.0	8.9	0.45319	4/19/2017	6:19:34 PM
8	0.0000	1	0.00072230	0.0026441			0.15522	4/19/2017	6:06:04 PM

Figure : 3 (Sulfate)

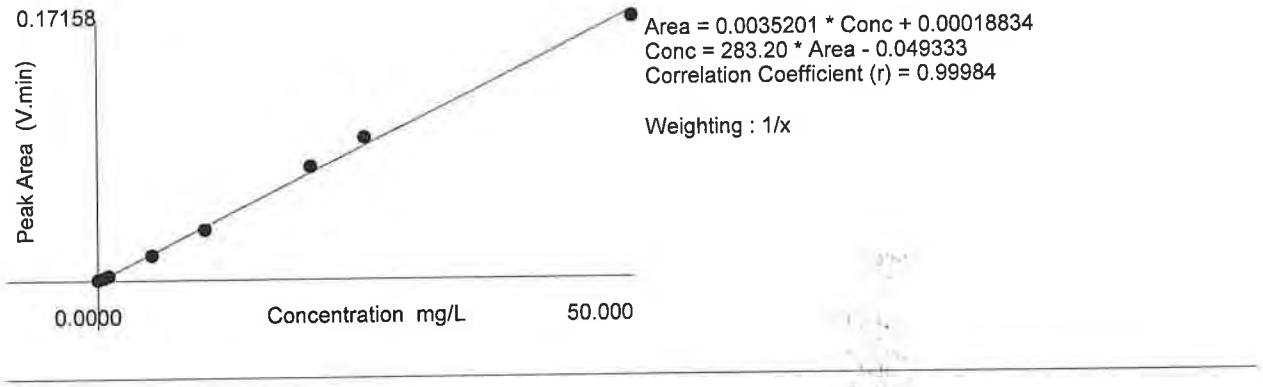
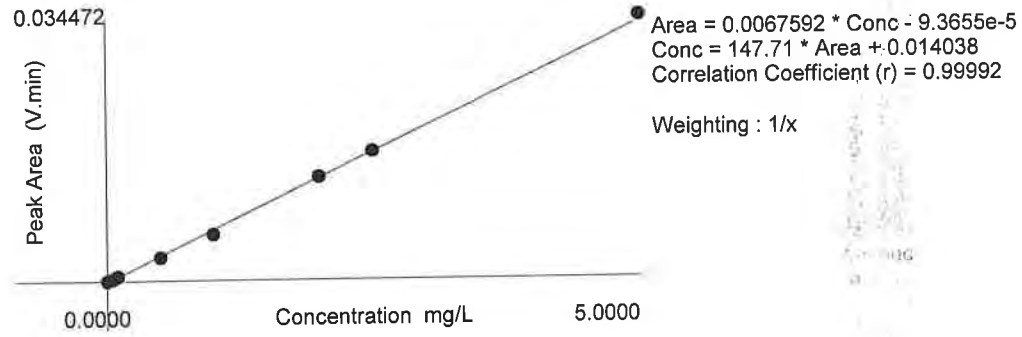


Table : 4 (Fluoride)

	Known Conc. (mg/L)	Rep.	Peak Area (V.min)	Peak Height (V)	% RSD	% Residual	Det. Conc (mg/L)	Detection Date	Detection Time
1	5.0000	1	0.034472	0.38025	0.0	-2.3	5.1059	4/19/2017	7:40:40 PM
2	2.5000	1	0.016864	0.18780	0.0	-0.4	2.5051	4/19/2017	7:27:08 PM
3	2.0000	1	0.013504	0.14802	0.0	-0.6	2.0088	4/19/2017	7:13:37 PM
4	1.0000	1	0.0060126	0.065760	0.0	9.8	0.90218	4/19/2017	7:00:05 PM
5	0.50000	1	0.0030319	0.032189	0.0	7.7	0.46189	4/19/2017	6:46:35 PM
6	0.10000	1	0.00059238	0.0056437	0.0	-1.7	0.10154	4/19/2017	6:33:04 PM
7	0.050000	1	0.00023257	0.0027407	0.0	4.8	0.048391	4/19/2017	6:19:34 PM
8	0.0000	1	-3.9797e-5	-0.00012146			0.0081598	4/19/2017	6:06:04 PM

Figure : 4 (Fluoride)



SAMPLE NO.

MW-1A

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Lab Sample ID: 7016438001 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Total Dissolved Solids	73.0		mg/L	1	04/27/2017 14:06

SAMPLE NO.

MW-1B

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Lab Sample ID: 7016438002 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Total Dissolved Solids	42.0		mg/L	1	04/27/2017 14:07

SAMPLE NO.

MW-1C

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Lab Sample ID: 7016438003 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Total Dissolved Solids	50.0		mg/L	1	04/27/2017 14:08

SAMPLE NO.

MW-11B

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Lab Sample ID: 7016438005 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Total Dissolved Solids	75.0		mg/L	1	04/27/2017 14:08

SAMPLE NO.

MW-12A

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Lab Sample ID: 7016438006 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Total Dissolved Solids	93.0		mg/L	1	04/27/2017 14:08

SAMPLE NO.

MW-12B

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Lab Sample ID: 7016438007 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Total Dissolved Solids	86.0		mg/L	1	04/27/2017 14:09

SAMPLE NO.

DUP001

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Lab Sample ID: 7016438008 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Total Dissolved Solids	48.0		mg/L	1	04/27/2017 14:09

SAMPLE NO.

FB

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Lab Sample ID: 7016438009 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Total Dissolved Solids	<10.0	U	mg/L	1	04/27/2017 14:09

SAMPLE NO.

LEA-PRI

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Lab Sample ID: 7016438010 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Total Dissolved Solids	363		mg/L	1	04/27/2017 14:10

SAMPLE NO.

LEA-SEC

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Lab Sample ID: 7016438011 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Total Dissolved Solids	472		mg/L	1	04/27/2017 14:10

SAMPLE NO.

MW-11A

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Lab Sample ID: 7016438014 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Total Dissolved Solids	186		mg/L	1	04/27/2017 14:11

SAMPLE NO.

MW-3A

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Lab Sample ID: 7016438015 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Total Dissolved Solids	317		mg/L	1	04/27/2017 14:15

SAMPLE NO.

MW-3B

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Lab Sample ID: 7016438016 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Total Dissolved Solids	102		mg/L	1	04/27/2017 14:15

SAMPLE NO.

MW-3C

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Lab Sample ID: 7016438017 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Total Dissolved Solids	63.0		mg/L	1	04/27/2017 14:16

SAMPLE NO.

MW-4A

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Lab Sample ID: 7016438018 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Total Dissolved Solids	137		mg/L	1	04/27/2017 14:18

SAMPLE NO.

MW-4B

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Lab Sample ID: 7016438019 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Total Dissolved Solids	133		mg/L	1	04/27/2017 14:19

SAMPLE NO.

MW-4C

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Lab Sample ID: 7016438020 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Total Dissolved Solids	309		mg/L	1	04/27/2017 14:19

FORM III INORGANIC-1

BLANKS

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract : NORTH SEA LANDFILL

Method Blank Matrix: Water Instrument ID: 70BAL1

Method Blank Concentration Units: mg/L

Analyte	Initial Calibration Blank		Continuing Calibration Blank						Method Blank	
		C		C		C		C	104616	C
Total Dissolved Solids									<10.0	U

FORM III INORGANIC-1

BLANKS

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract : NORTH SEA LANDFILL

Method Blank Matrix: Water Instrument ID: 70BAL1

Method Blank Concentration Units: mg/L

Analyte	Initial Calibration Blank		Continuing Calibration Blank						Method Blank	
		C		C		C		C	104623	C
Total Dissolved Solids									<10.0	U

SAMPLE NO.

104619MS

FORM V INORGANIC-1

MATRIX SPIKE SAMPLE RECOVERY

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Matrix: Water Basis: Wet Parent Sample ID: MW-1A

Percent Moisture:

Analyte	Units	Control Limit %R	Spiked Sample Result (SSR)	Sample Result (SR)	Spike Added (SA)	%R
Total Dissolved Solids	mg/L	75-125	379	73.0	300	102

SAMPLE NO.

104621MS

FORM V INORGANIC-2

MATRIX SPIKE SAMPLE RECOVERY

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Matrix: Water Basis: Wet Parent Sample ID: MW-3C

Percent Moisture:

Analyte	Units	Control Limit %R	Spiked Sample Result (SSR)	Sample Result (SR)	Spike Added (SA)	%R
Total Dissolved Solids	mg/L	75-125	387	63.0	300	108

SAMPLE NO.

104626MS

FORM V INORGANIC-1

MATRIX SPIKE SAMPLE RECOVERY

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Matrix: Water Basis: Wet Parent Sample ID: MW-4A

Percent Moisture:

Analyte	Units	Control Limit %R	Spiked Sample Result (SSR)	Sample Result (SR)	Spike Added (SA)	%R
Total Dissolved Solids	mg/L	75-125	442	137	300	102

SAMPLE NO.

104618DUP

FORM VI INORGANIC-1
DUPLICATES

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Matrix: Water Concentration Units: mg/L

Percent Moisture: Basis: Wet

Analyte	Control Limit	Sample	Duplicate	RPD
Total Dissolved Solids	20	73.0	70.0	4

SAMPLE NO.

104620DUP

FORM VI INORGANIC-2
DUPLICATES

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Matrix: Water Concentration Units: mg/L

Percent Moisture: Basis: Wet

Analyte	Control Limit	Sample	Duplicate	RPD
Total Dissolved Solids	20	63.0	74.0	16

SAMPLE NO.

104625DUP

FORM VI INORGANIC-1
DUPLICATES

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Matrix: Water Concentration Units: mg/L

Percent Moisture: Basis: Wet

Analyte	Control Limit	Sample	Duplicate	RPD
Total Dissolved Solids	20	137	144	5

SAMPLE NO.

104617LCS

FORM VII INORGANIC-1
LABORATORY CONTROL SAMPLE

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Matrix: Water

Analyte	Units	True	Found	%R	Limits	
Total Dissolved Solids	mg/L	500	480	96	85	115

SAMPLE NO.

104624LCS

FORM VII INORGANIC-1
LABORATORY CONTROL SAMPLE

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Matrix: Water

Analyte	Units	True	Found	%R	Limits	
Total Dissolved Solids	mg/L	500	502	100	85	115

FORM XII INORGANIC-1
PREPARATION LOG

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Preparation Method: SM22 2540C Batch: WET 5542

Lab Sample ID	Sample Name	Preparation Date	Initial Volume (mL)	Final Volume (mL)
104616	104616BLANK	04/27/2017	100	100
104617	104617LCS	04/27/2017	50	100
104618	104618DUP	04/27/2017	100	100
104619	104619MS	04/27/2017	100	100
104620	104620DUP	04/27/2017	100	100
104621	104621MS	04/27/2017	100	100
7016438001	MW-1A	04/27/2017	100	100
7016438002	MW-1B	04/27/2017	100	100
7016438003	MW-1C	04/27/2017	100	100
7016438005	MW-11B	04/27/2017	100	100
7016438006	MW-12A	04/27/2017	100	100
7016438007	MW-12B	04/27/2017	100	100
7016438008	DUP001	04/27/2017	100	100
7016438009	FB	04/27/2017	100	100
7016438010	LEA-PRI	04/27/2017	100	100
7016438011	LEA-SEC	04/27/2017	100	100
7016438014	MW-11A	04/27/2017	100	100
7016438015	MW-3A	04/27/2017	100	100
7016438016	MW-3B	04/27/2017	100	100
7016438017	MW-3C	04/27/2017	100	100

FORM XII INORGANIC-1
PREPARATION LOG

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Preparation Method: SM22 2540C Batch: WET 5543

Lab Sample ID	Sample Name	Preparation Date	Initial Volume (mL)	Final Volume (mL)
104623	104623BLANK	04/27/2017	100	100
104624	104624LCS	04/27/2017	50	100
104625	104625DUP	04/27/2017	100	100
104626	104626MS	04/27/2017	100	100
7016438018	MW-4A	04/27/2017	100	100
7016438019	MW-4B	04/27/2017	100	100
7016438020	MW-4C	04/27/2017	100	100

FORM XIII INORGANIC-1

ANALYSIS RUN LOG

Lab Name: Pace Analytical - New York SDG No. : 7016438 Contract: NORTH SEA LANDFILL

Instrument ID: 70BAL1 Analysis Method: SM22 2540C

Start Date: 04/27/2017 14:05 End Date: 04/27/2017 14:19

Sample Name	Lab Sample ID	D/F	Date	Time	tds w
104616BLANK	104616	1	04/27/2017	14:05	X
104617LCS	104617	1	04/27/2017	14:06	X
MW-1A	7016438001	1	04/27/2017	14:06	X
104618DUP	104618	1	04/27/2017	14:06	X
104619MS	104619	1	04/27/2017	14:07	X
MW-1B	7016438002	1	04/27/2017	14:07	X
MW-1C	7016438003	1	04/27/2017	14:08	X
MW-11B	7016438005	1	04/27/2017	14:08	X
MW-12A	7016438006	1	04/27/2017	14:08	X
MW-12B	7016438007	1	04/27/2017	14:09	X
DUP001	7016438008	1	04/27/2017	14:09	X
FB	7016438009	1	04/27/2017	14:09	X
LEA-PRI	7016438010	1	04/27/2017	14:10	X
LEA-SEC	7016438011	1	04/27/2017	14:10	X
MW-11A	7016438014	1	04/27/2017	14:11	X
MW-3A	7016438015	1	04/27/2017	14:15	X
MW-3B	7016438016	1	04/27/2017	14:15	X
MW-3C	7016438017	1	04/27/2017	14:16	X
104620DUP	104620	1	04/27/2017	14:16	X
104621MS	104621	1	04/27/2017	14:16	X
104623BLANK	104623	1	04/27/2017	14:17	X
104624LCS	104624	1	04/27/2017	14:17	X
MW-4A	7016438018	1	04/27/2017	14:18	X
104625DUP	104625	1	04/27/2017	14:18	X
104626MS	104626	1	04/27/2017	14:18	X
MW-4B	7016438019	1	04/27/2017	14:19	X
MW-4C	7016438020	1	04/27/2017	14:19	X

Prep Log Report

Batch Information: WET TDS 5542/3 4/27/17

Template Version: F-LI-I-012-Rev.00 (14Nov2016)

Analysis Method	SM22 2540C	Analyzed By	STH	Instrument	70BAL1	Oven ID	OVEN001
Thermometer ID	TH054	Oven Temp Correction Factor	0.3	Oven Temp In1 | Corr | Date/Time | Init	180.0 | 180.3 | 04/27/2017 15:46 | STH	Oven Temp Out1 | Corr | Date/Time | Init	180.0 | 180.3 | 04/28/2017 10:00 | STH
Desic. In 1 ID | Date/Time | Init	des01 | 04/28/2017 10:00 | STH	Desic. Out 1 Date/Time | Init	04/28/2017 11:18 | STH	Batch Notes		Reviewed By	
Reviewed By Date							

Sample Information:

QC Rule	Sample Type	Lab Sample ID	Select	TDS Filters ()	Run Date/Time	Initial Volume (mL)	ID	TDS Posted	TDS Final (mg/L)	Beaker Wt 1	Beaker Use 1	Oven Wt 1	Oven Use 1	Sample Notes
2540C W	BLANK	**104616**	Y	421 ()	04/27/2017 14:05:38	100	01	-5.0000	-5.0000	105.7664	M	105.7659	M	
2540C W	LCS	**104617**	Y	421 ()	04/27/2017 14:06:02	50	RX	240.00	480.00	110.2563	M	110.2803	M	
2540C W	PS	**7016438001**	Y	421 ()	04/27/2017 14:06:21	100	VO	73.000	73.000	116.2899	M	116.2972	M	
2540C W	DUP	**104618**	Y	421 ()	04/27/2017 14:06:47	100	31	70.000	70.000	105.5243	M	105.5313	M	
2540C W	MS	**104619**	Y	421 ()	04/27/2017 14:07:22	100	LL	379.00	379.00	115.6964	M	115.7343	M	
2540C W	PS	**7016438002**	Y	421 ()	04/27/2017 14:07:45	100	16	42.000	42.000	105.9506	M	105.9548	M	
2540C W	PS	**7016438003**	Y	421 ()	04/27/2017 14:08:05	100	DI	50.000	50.000	114.9042	M	114.9092	M	
2540C W	PS	**7016438005**	Y	421 ()	04/27/2017 14:08:30	100	003	75.000	75.000	103.0160	M	103.0235	M	
2540C W	PS	**7016438006**	Y	421 ()	04/27/2017 14:08:47	100	007	93.000	93.000	108.7060	M	108.7153	M	
2540C W	PS	**7016438007**	Y	421 ()	04/27/2017 14:09:12	100	05	86.000	86.000	113.0753	M	113.0839	M	
2540C W	PS	**7016438008**	Y	421 ()	04/27/2017 14:09:28	100	TIX	48.000	48.000	113.6279	M	113.6327	M	
2540C W	PS	**7016438009**	Y	421 ()	04/27/2017 14:09:51	100	18	0.0000	0.0000	109.8997	M	109.8997	M	
2540C W	PS	**7016438010**	Y	421 ()	04/27/2017 14:10:13	100	04	363.00	363.00	97.7921	M	97.8284	M	
2540C W	PS	**7016438011**	Y	421 ()	04/27/2017 14:10:30	100	15	472.00	472.00	104.2070	M	104.2542	M	
2540C W	PS	**7016438014**	Y	421 ()	04/27/2017 14:11:00	100	85	186.00	186.00	111.2418	M	111.2604	M	
2540C W	PS	**7016460001**	Y	421 ()	04/27/2017 14:11:23	100	10	22.000	22.000	113.0661	M	113.0683	M	
2540C W	PS	**7016460002**	Y	421 ()	04/27/2017 14:11:46	100	864	22.000	22.000	104.8208	M	104.8230	M	

Prep Log Report

QC Rule	Sample Type	Lab Sample ID	Select	TDS Filters ()	Run Date/Time	Initial Volume (mL)	ID	TDS Posted	TDS Final (mg/L)	Beaker Wt 1	Beaker Use 1	Oven Wt 1	Oven Use 1	Sample Notes
2540C W	PS	**7016460003**	Y	421 ()	04/27/2017 14:12:18	100	21	25.000	25.000	110.8173	M	110.8198	M	
2540C W	PS	**7016487001**	Y	421 ()	04/27/2017 14:14:27	100	17	53.000	53.000	114.4169	M	114.4222	M	
2540C W	PS	**7016487002**	Y	421 ()	04/27/2017 14:14:49	100	24	59.000	59.000	113.6415	M	113.6474	M	
2540C W	PS	**7016438015**	Y	421 ()	04/27/2017 14:15:17	100	36	317.00	317.00	115.1283	M	115.1600	M	
2540C W	PS	**7016438016**	Y	421 ()	04/27/2017 14:15:42	100	907	102.00	102.00	105.8342	M	105.8444	M	
2540C W	RQS	**7016438017**	Y	421 ()	04/27/2017 14:16:07	100	O	63.000	63.000	102.0718	M	102.0781	M	
2540C W	DUP	**104620**	Y	421 ()	04/27/2017 14:16:30	100	H2O	74.000	74.000	115.4592	M	115.4666	M	
2540C W	MS	**104621**	Y	421 ()	04/27/2017 14:16:46	100	CAT	387.00	387.00	111.7104	M	111.7491	M	
2540C W	BLANK	**104623**	Y	421 ()	04/27/2017 14:17:17	100	888	-3.0000	-3.0000	110.6229	M	110.6226	M	
2540C W	LCS	**104624**	Y	421 ()	04/27/2017 14:17:43	50	08	251.00	502.00	112.4932	M	112.5183	M	
2540C W	PS	**7016438018**	Y	421 ()	04/27/2017 14:18:09	100	27	137.00	137.00	108.3283	M	108.3420	M	
2540C W	DUP	**104625**	Y	421 ()	04/27/2017 14:18:36	100	CO2	144.00	144.00	110.4619	M	110.4763	M	
2540C W	MS	**104626**	Y	421 ()	04/27/2017 14:18:58	100	D	442.00	442.00	110.2461	M	110.2903	M	
2540C W	PS	**7016438019**	Y	421 ()	04/27/2017 14:19:22	100	805	133.00	133.00	109.7823	M	109.7956	M	
2540C W	PS	**7016438020**	Y	421 ()	04/27/2017 14:19:49	100	889	309.00	309.00	111.8738	M	111.9047	M	
2540C W	PS	**7016731001**	Y	421 ()	04/27/2017 14:20:50	50	07	113.00	226.00	105.9093	M	105.9206	M	
2540C W	PS	**7016761001**	Y	421 ()	04/27/2017 14:21:21	100	802	96.000	96.000	101.9709	M	101.9805	M	
2540C W	PS	**7016748001**	Y	421 ()	04/27/2017 14:21:57	100	1220	23.000	23.000	108.7971	M	108.7994	M	

Prep Log Report

QC Rule	Sample Type	Lab Sample ID	TS/TDS-SPK (mL)	TS/TDSMS-SPK (mL)
2540C W	BLANK	**104616**		
2540C W	LCS	**104617**	5216 (50)	
2540C W	PS	**7016438001**		
2540C W	DUP	**104618**		
2540C W	MS	**104619**		3453 (3)
2540C W	PS	**7016438002**		
2540C W	PS	**7016438003**		
2540C W	PS	**7016438005**		
2540C W	PS	**7016438006**		
2540C W	PS	**7016438007**		
2540C W	PS	**7016438008**		
2540C W	PS	**7016438009**		
2540C W	PS	**7016438010**		
2540C W	PS	**7016438011**		
2540C W	PS	**7016438014**		
2540C W	PS	**7016460001**		
2540C W	PS	**7016460002**		
2540C W	PS	**7016460003**		
2540C W	PS	**7016487001**		
2540C W	PS	**7016487002**		
2540C W	PS	**7016438015**		
2540C W	PS	**7016438016**		
2540C W	RQS	**7016438017**		
2540C W	DUP	**104620**		
2540C W	MS	**104621**		3453 (3)
2540C W	BLANK	**104623**		
2540C W	LCS	**104624**	5216 (50)	

Prep Log Report

QC Rule	Sample Type	Lab Sample ID	TS/TDS-SPK (mL)	TS/TDSMS-SPK (mL)
2540C W	PS	**7016438018**		
2540C W	DUP	**104625**		
2540C W	MS	**104626**		3453 (3)
2540C W	PS	**7016438019**		
2540C W	PS	**7016438020**		
2540C W	PS	**7016731001**		
2540C W	PS	**7016761001**		
2540C W	PS	**7016748001**		

Standard Notes:

3453: WET TS/TDS MS Spike

5216: WET TS/TSS/TDS

Analytical Data Package

Prepared by:

Pace Analytical Services

Pace Project No.: 30216882

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Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

May 04, 2017

Ms. Jennifer Aracri
Pace Analytical Melville
575 Broad Hollow Road
Melville, NY 11747

RE: Project: 7016438
Pace Project No.: 30216882

Dear Ms. Aracri:
Enclosed are the analytical results for sample(s) received by the laboratory on April 22, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Samantha Bayura

Samantha Bayura
samantha.bayura@pacelabs.com
(724)850-5622
Project Manager

Enclosures

cc: Ms. Jennifer Aracri, Pace Analytical Melville

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: 7016438
Pace Project No.: 30216882

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
L-A-B DOD-ELAP Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification
Connecticut Certification #: PH-0694
Delaware Certification
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: 90133
Louisiana DHH/TNI Certification #: LA140008
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: PA00091
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification
Missouri Certification #: 235
Montana Certification #: Cert 0082
Nebraska Certification #: NE-05-29-14
Nevada Certification #: PA014572015-1
New Hampshire/TNI Certification #: 2976
New Jersey/TNI Certification #: PA 051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Oregon/TNI Certification #: PA200002
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: TN2867
Texas/TNI Certification #: T104704188-14-8
Utah/TNI Certification #: PA014572015-5
USDA Soil Permit #: P330-14-00213
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Certification
Wyoming Certification #: 8TMS-L

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PROJECT NARRATIVE

Project: 7016438
Pace Project No.: 30216882

Method: **SM5310C-00**
Description: 5310C TOC
Client: Pace Analytical Services, Inc. - Melville
Date: May 04, 2017

General Information:
2 samples were analyzed for SM5310C-00. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: 7016438
Pace Project No.: 30216882

Method: **EPA 9060A**
Description: 9060A Total Organic Carbon
Client: Pace Analytical Services, Inc. - Melville
Date: May 04, 2017

General Information:
15 samples were analyzed for EPA 9060A. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

QC Batch: 257289

B: Analyte was detected in the associated method blank.

- BLANK for HBN 257289 [WETA/280 (Lab ID: 1267273)
  - Total Organic Carbon

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: 7016438
Pace Project No.: 30216882

Sample: MW-1A **Lab ID: 7016438001** Collected: 04/19/17 10:30 Received: 04/22/17 11:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
9060A Total Organic Carbon	Analytical Method: EPA 9060A							
Total Organic Carbon	**0.94J**	mg/L	1.0	1		05/03/17 22:07	7440-44-0	
Total Organic Carbon	**0.81J**	mg/L	1.0	1		05/03/17 22:07	7440-44-0	
Total Organic Carbon	**0.75J**	mg/L	1.0	1		05/03/17 22:07	7440-44-0	
Total Organic Carbon	**0.76J**	mg/L	1.0	1		05/03/17 22:07	7440-44-0	
Mean Total Organic Carbon	**0.82J**	mg/L	1.0	1		05/03/17 22:07	7440-44-0	

Sample: MW-1B **Lab ID: 7016438002** Collected: 04/19/17 10:05 Received: 04/22/17 11:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
9060A Total Organic Carbon	Analytical Method: EPA 9060A							
Total Organic Carbon	**0.22J**	mg/L	1.0	1		05/03/17 23:14	7440-44-0	
Total Organic Carbon	**0.17J**	mg/L	1.0	1		05/03/17 23:14	7440-44-0	
Total Organic Carbon	**0.15J**	mg/L	1.0	1		05/03/17 23:14	7440-44-0	
Total Organic Carbon	**0.16J**	mg/L	1.0	1		05/03/17 23:14	7440-44-0	
Mean Total Organic Carbon	**0.18J**	mg/L	1.0	1		05/03/17 23:14	7440-44-0	

Sample: MW-1C **Lab ID: 7016438003** Collected: 04/19/17 09:20 Received: 04/22/17 11:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
9060A Total Organic Carbon	Analytical Method: EPA 9060A							
Total Organic Carbon	**0.19J**	mg/L	1.0	1		05/03/17 23:49	7440-44-0	
Total Organic Carbon	**0.16J**	mg/L	1.0	1		05/03/17 23:49	7440-44-0	
Total Organic Carbon	**0.13J**	mg/L	1.0	1		05/03/17 23:49	7440-44-0	
Total Organic Carbon	**0.14J**	mg/L	1.0	1		05/03/17 23:49	7440-44-0	
Mean Total Organic Carbon	**0.16J**	mg/L	1.0	1		05/03/17 23:49	7440-44-0	

Sample: MW-11B **Lab ID: 7016438005** Collected: 04/19/17 12:00 Received: 04/22/17 11:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
9060A Total Organic Carbon	Analytical Method: EPA 9060A							
Total Organic Carbon	**2.0J**	mg/L	5.0	5		05/04/17 00:24	7440-44-0	
Total Organic Carbon	**1.6J**	mg/L	5.0	5		05/04/17 00:24	7440-44-0	
Total Organic Carbon	**1.6J**	mg/L	5.0	5		05/04/17 00:24	7440-44-0	
Total Organic Carbon	**1.6J**	mg/L	5.0	5		05/04/17 00:24	7440-44-0	
Mean Total Organic Carbon	**1.7J**	mg/L	5.0	5		05/04/17 00:24	7440-44-0	

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ANALYTICAL RESULTS

Project: 7016438
Pace Project No.: 30216882

Sample: MW-12A **Lab ID: 7016438006** Collected: 04/19/17 07:30 Received: 04/22/17 11:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
9060A Total Organic Carbon	Analytical Method: EPA 9060A							
Total Organic Carbon	**1.3J**	mg/L	5.0	5		05/04/17 00:59	7440-44-0	
Total Organic Carbon	**1.2J**	mg/L	5.0	5		05/04/17 00:59	7440-44-0	
Total Organic Carbon	**1.1J**	mg/L	5.0	5		05/04/17 00:59	7440-44-0	
Total Organic Carbon	**1.2J**	mg/L	5.0	5		05/04/17 00:59	7440-44-0	
Mean Total Organic Carbon	**1.2J**	mg/L	5.0	5		05/04/17 00:59	7440-44-0	

Sample: MW-12B **Lab ID: 7016438007** Collected: 04/19/17 08:00 Received: 04/22/17 11:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
9060A Total Organic Carbon	Analytical Method: EPA 9060A							
Total Organic Carbon	**0.60J**	mg/L	1.0	1		05/04/17 01:33	7440-44-0	
Total Organic Carbon	**0.54J**	mg/L	1.0	1		05/04/17 01:33	7440-44-0	
Total Organic Carbon	**0.53J**	mg/L	1.0	1		05/04/17 01:33	7440-44-0	
Total Organic Carbon	**0.49J**	mg/L	1.0	1		05/04/17 01:33	7440-44-0	
Mean Total Organic Carbon	**0.54J**	mg/L	1.0	1		05/04/17 01:33	7440-44-0	

Sample: DUP001 **Lab ID: 7016438008** Collected: 04/19/17 00:00 Received: 04/22/17 11:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
9060A Total Organic Carbon	Analytical Method: EPA 9060A							
Total Organic Carbon	**0.28J**	mg/L	1.0	1		05/04/17 02:07	7440-44-0	
Total Organic Carbon	**0.25J**	mg/L	1.0	1		05/04/17 02:07	7440-44-0	
Total Organic Carbon	**0.24J**	mg/L	1.0	1		05/04/17 02:07	7440-44-0	
Total Organic Carbon	**0.25J**	mg/L	1.0	1		05/04/17 02:07	7440-44-0	
Mean Total Organic Carbon	**0.25J**	mg/L	1.0	1		05/04/17 02:07	7440-44-0	

Sample: FB **Lab ID: 7016438009** Collected: 04/19/17 09:00 Received: 04/22/17 11:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
9060A Total Organic Carbon	Analytical Method: EPA 9060A							
Total Organic Carbon	**0.36J**	mg/L	5.0	5		05/04/17 02:43	7440-44-0	
Total Organic Carbon	**<5.0**	mg/L	5.0	5		05/04/17 02:43	7440-44-0	
Total Organic Carbon	**<5.0**	mg/L	5.0	5		05/04/17 02:43	7440-44-0	
Total Organic Carbon	**<5.0**	mg/L	5.0	5		05/04/17 02:43	7440-44-0	
Mean Total Organic Carbon	**<5.0**	mg/L	5.0	5		05/04/17 02:43	7440-44-0	

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ANALYTICAL RESULTS

Project: 7016438
Pace Project No.: 30216882

Sample: LEA-PRI **Lab ID: 7016438010** Collected: 04/19/17 13:00 Received: 04/22/17 11:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
5310C TOC	Analytical Method: SM5310C-00							
Total Organic Carbon	**12.2**	mg/L	2.0	2		05/03/17 14:25	7440-44-0	

Sample: LEA-SEC **Lab ID: 7016438011** Collected: 04/19/17 13:15 Received: 04/22/17 11:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
5310C TOC	Analytical Method: SM5310C-00							
Total Organic Carbon	**30.0**	mg/L	2.0	2		05/03/17 14:46	7440-44-0	

Sample: MW-11A **Lab ID: 7016438014** Collected: 04/19/17 12:15 Received: 04/22/17 11:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
9060A Total Organic Carbon	Analytical Method: EPA 9060A							
Total Organic Carbon	**13.9**	mg/L	10.0	10		05/04/17 03:20	7440-44-0	
Total Organic Carbon	**13.4**	mg/L	10.0	10		05/04/17 03:20	7440-44-0	
Total Organic Carbon	**13.9**	mg/L	10.0	10		05/04/17 03:20	7440-44-0	
Total Organic Carbon	**14.0**	mg/L	10.0	10		05/04/17 03:20	7440-44-0	
Mean Total Organic Carbon	**13.8**	mg/L	10.0	10		05/04/17 03:20	7440-44-0	

Sample: MW-3A **Lab ID: 7016438015** Collected: 04/20/17 09:55 Received: 04/22/17 11:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
9060A Total Organic Carbon	Analytical Method: EPA 9060A							
Total Organic Carbon	**2.8J**	mg/L	10.0	10		05/04/17 08:02	7440-44-0	B
Total Organic Carbon	**2.5J**	mg/L	10.0	10		05/04/17 08:02	7440-44-0	
Total Organic Carbon	**2.6J**	mg/L	10.0	10		05/04/17 08:02	7440-44-0	
Total Organic Carbon	**2.6J**	mg/L	10.0	10		05/04/17 08:02	7440-44-0	
Mean Total Organic Carbon	**2.6J**	mg/L	10.0	10		05/04/17 08:02	7440-44-0	

Sample: MW-3B **Lab ID: 7016438016** Collected: 04/20/17 09:40 Received: 04/22/17 11:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
9060A Total Organic Carbon	Analytical Method: EPA 9060A							
Total Organic Carbon	**2.0J**	mg/L	10.0	10		05/04/17 08:38	7440-44-0	B
Total Organic Carbon	**1.6J**	mg/L	10.0	10		05/04/17 08:38	7440-44-0	
Total Organic Carbon	**1.6J**	mg/L	10.0	10		05/04/17 08:38	7440-44-0	
Total Organic Carbon	**1.8J**	mg/L	10.0	10		05/04/17 08:38	7440-44-0	
Mean Total Organic Carbon	**1.8J**	mg/L	10.0	10		05/04/17 08:38	7440-44-0	

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ANALYTICAL RESULTS

Project: 7016438
Pace Project No.: 30216882

Sample: MW-3C **Lab ID: 7016438017** Collected: 04/20/17 08:50 Received: 04/22/17 11:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
9060A Total Organic Carbon	Analytical Method: EPA 9060A							
Total Organic Carbon	**0.36J**	mg/L	1.0	1		05/04/17 06:18	7440-44-0	B
Total Organic Carbon	**0.36J**	mg/L	1.0	1		05/04/17 06:18	7440-44-0	
Total Organic Carbon	**0.37J**	mg/L	1.0	1		05/04/17 06:18	7440-44-0	
Total Organic Carbon	**0.36J**	mg/L	1.0	1		05/04/17 06:18	7440-44-0	
Mean Total Organic Carbon	**0.36J**	mg/L	1.0	1		05/04/17 06:18	7440-44-0	

Sample: MW-4A **Lab ID: 7016438018** Collected: 04/20/17 12:30 Received: 04/22/17 11:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
9060A Total Organic Carbon	Analytical Method: EPA 9060A							
Total Organic Carbon	**0.87J**	mg/L	1.0	1		05/04/17 09:13	7440-44-0	
Total Organic Carbon	**0.82J**	mg/L	1.0	1		05/04/17 09:13	7440-44-0	
Total Organic Carbon	**0.82J**	mg/L	1.0	1		05/04/17 09:13	7440-44-0	
Total Organic Carbon	**0.83J**	mg/L	1.0	1		05/04/17 09:13	7440-44-0	
Mean Total Organic Carbon	**0.84J**	mg/L	1.0	1		05/04/17 09:13	7440-44-0	

Sample: MW-4B **Lab ID: 7016438019** Collected: 04/20/17 12:05 Received: 04/22/17 11:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
9060A Total Organic Carbon	Analytical Method: EPA 9060A							
Total Organic Carbon	**1.3**	mg/L	1.0	1		05/04/17 09:47	7440-44-0	
Total Organic Carbon	**1.3**	mg/L	1.0	1		05/04/17 09:47	7440-44-0	
Total Organic Carbon	**1.3**	mg/L	1.0	1		05/04/17 09:47	7440-44-0	
Total Organic Carbon	**1.3**	mg/L	1.0	1		05/04/17 09:47	7440-44-0	
Mean Total Organic Carbon	**1.3**	mg/L	1.0	1		05/04/17 09:47	7440-44-0	

Sample: MW-4C **Lab ID: 7016438020** Collected: 04/20/17 11:15 Received: 04/22/17 11:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
9060A Total Organic Carbon	Analytical Method: EPA 9060A							
Total Organic Carbon	**0.27J**	mg/L	1.0	1		05/04/17 10:21	7440-44-0	B
Total Organic Carbon	**0.25J**	mg/L	1.0	1		05/04/17 10:21	7440-44-0	
Total Organic Carbon	**0.25J**	mg/L	1.0	1		05/04/17 10:21	7440-44-0	
Total Organic Carbon	**0.24J**	mg/L	1.0	1		05/04/17 10:21	7440-44-0	
Mean Total Organic Carbon	**0.25J**	mg/L	1.0	1		05/04/17 10:21	7440-44-0	

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QUALITY CONTROL DATA

Project: 7016438
Pace Project No.: 30216882

QC Batch: 257000 Analysis Method: SM5310C-00
QC Batch Method: SM5310C-00 Analysis Description: 5310C Total Organic Carbon
Associated Lab Samples: 7016438010, 7016438011

METHOD BLANK: 1266155 Matrix: Water
Associated Lab Samples: 7016438010, 7016438011

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Organic Carbon	mg/L	<1.0	1.0	05/01/17 21:06	

LABORATORY CONTROL SAMPLE: 1266156

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Organic Carbon	mg/L	10	10.1	101	85-115	

MATRIX SPIKE SAMPLE: 1266157

Parameter	Units	30216137001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Total Organic Carbon	mg/L	146	10	151	52	85-115	ML

SAMPLE DUPLICATE: 1266158

Parameter	Units	30216391001 Result	Dup Result	RPD	Qualifiers
Total Organic Carbon	mg/L	3.1	2.6	20	

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QUALITY CONTROL DATA

Project: 7016438
Pace Project No.: 30216882

QC Batch: 257288 Analysis Method: EPA 9060A
QC Batch Method: EPA 9060A Analysis Description: 9060A TOC
Associated Lab Samples: 7016438001, 7016438002, 7016438003, 7016438005, 7016438006, 7016438007, 7016438008, 7016438009, 7016438014

METHOD BLANK: 1267269 Matrix: Water
Associated Lab Samples: 7016438001, 7016438002, 7016438003, 7016438005, 7016438006, 7016438007, 7016438008, 7016438009, 7016438014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mean Total Organic Carbon	mg/L	<1.0	1.0	05/03/17 19:47	
Total Organic Carbon	mg/L	<1.0	1.0	05/03/17 19:47	
Total Organic Carbon	mg/L	<1.0	1.0	05/03/17 19:47	
Total Organic Carbon	mg/L	<1.0	1.0	05/03/17 19:47	
Total Organic Carbon	mg/L	<1.0	1.0	05/03/17 19:47	

LABORATORY CONTROL SAMPLE: 1267270

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mean Total Organic Carbon	mg/L	10	9.7	97	85-115	
Total Organic Carbon	mg/L	10	9.6	96	85-115	
Total Organic Carbon	mg/L	10	9.7	97	85-115	
Total Organic Carbon	mg/L	10	9.7	97	85-115	
Total Organic Carbon	mg/L	10	9.8	98	85-115	

MATRIX SPIKE SAMPLE: 1267271

Parameter	Units	7016360002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mean Total Organic Carbon	mg/L	7.0	10	15.2	82	85-115	ML
Total Organic Carbon	mg/L	7.0	10	14.9	79	85-115	ML
Total Organic Carbon	mg/L	6.9	10	14.9	81	85-115	ML
Total Organic Carbon	mg/L	7.0	10	15.5	85	85-115	
Total Organic Carbon	mg/L	6.9	10	15.4	84	85-115	ML

SAMPLE DUPLICATE: 1267277

Parameter	Units	7016438001 Result	Dup Result	RPD	Qualifiers
Mean Total Organic Carbon	mg/L	0.82J	0.77J		
Total Organic Carbon	mg/L	0.94J	0.83J		
Total Organic Carbon	mg/L	0.81J	0.74J		
Total Organic Carbon	mg/L	0.75J	0.78J		
Total Organic Carbon	mg/L	0.76J	0.74J		

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QUALITY CONTROL DATA

Project: 7016438
Pace Project No.: 30216882

QC Batch: 257289 Analysis Method: EPA 9060A
QC Batch Method: EPA 9060A Analysis Description: 9060A TOC
Associated Lab Samples: 7016438015, 7016438016, 7016438017, 7016438018, 7016438019, 7016438020

METHOD BLANK: 1267273 Matrix: Water
Associated Lab Samples: 7016438015, 7016438016, 7016438017, 7016438018, 7016438019, 7016438020

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mean Total Organic Carbon	mg/L	<1.0	1.0	05/04/17 05:08	
Total Organic Carbon	mg/L	<1.0	1.0	05/04/17 05:08	
Total Organic Carbon	mg/L	<1.0	1.0	05/04/17 05:08	
Total Organic Carbon	mg/L	0.066J	1.0	05/04/17 05:08	
Total Organic Carbon	mg/L	<1.0	1.0	05/04/17 05:08	

LABORATORY CONTROL SAMPLE: 1267274

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mean Total Organic Carbon	mg/L	10	9.9	99	85-115	
Total Organic Carbon	mg/L	10	9.9	99	85-115	
Total Organic Carbon	mg/L	10	9.8	98	85-115	
Total Organic Carbon	mg/L	10	9.9	99	85-115	
Total Organic Carbon	mg/L	10	9.9	99	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1267275 1267276

Parameter	Units	7016438017 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Mean Total Organic Carbon	mg/L	0.36J	10	10	9.3	9.2	90	88	85-115	1	
Total Organic Carbon	mg/L	0.36J	10	10	9.4	9.3	91	90	85-115	1	
Total Organic Carbon	mg/L	0.36J	10	10	9.2	9.1	89	87	85-115	2	
Total Organic Carbon	mg/L	0.36J	10	10	9.4	9.3	90	89	85-115	1	
Total Organic Carbon	mg/L	0.37J	10	10	9.3	9.1	89	88	85-115	1	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALIFIERS

Project: 7016438
Pace Project No.: 30216882

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

B	Analyte was detected in the associated method blank.
ML	Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

REPORT OF LABORATORY ANALYSIS

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Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 7016438
Pace Project No.: 30216882

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
7016438010	**LEA-PRI**	SM5310C-00	257000		
7016438011	**LEA-SEC**	SM5310C-00	257000		
7016438001	**MW-1A**	EPA 9060A	257288		
7016438002	**MW-1B**	EPA 9060A	257288		
7016438003	**MW-1C**	EPA 9060A	257288		
7016438005	**MW-11B**	EPA 9060A	257288		
7016438006	**MW-12A**	EPA 9060A	257288		
7016438007	**MW-12B**	EPA 9060A	257288		
7016438008	**DUP001**	EPA 9060A	257288		
7016438009	**FB**	EPA 9060A	257288		
7016438014	**MW-11A**	EPA 9060A	257288		
7016438015	**MW-3A**	EPA 9060A	257289		
7016438016	**MW-3B**	EPA 9060A	257289		
7016438017	**MW-3C**	EPA 9060A	257289		
7016438018	**MW-4A**	EPA 9060A	257289		
7016438019	**MW-4B**	EPA 9060A	257289		
7016438020	**MW-4C**	EPA 9060A	257289		

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Chain of Custody

WO#: 30216882

Pace Analytical®
www.pacelabs.com

Workorder: 7016438 **Workorder Name:** NORTH SEA LANDFILL NSH1701 **Owner Received Date:** 4/20/2017 **Results Requested By:** 5/4/2017

Report To	Subcontract To
Jennifer Aracri Pace Analytical Melville 575 Broad Hollow Road Melville, NY 11747 Phone (631)694-3040	Pace Analytical Pittsburgh 1638 Roseytown Road Suites 2,3, & 4 Greensburg, PA 15601 Phone (724)850-5600

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers: H2SO4	TOC	Requested Analysis	LAB USE ONLY
1	MW-1A	PS	4/19/2017 10:30	7016438001	Water	1	X	9060	001
2	MW-1B	PS	4/19/2017 10:05	7016438002	Water	1	X		002
3	MW-1C	PS	4/19/2017 09:20	7016438003	Water	1	X		003
4	MW-11B	PS	4/19/2017 12:00	7016438005	Water	1	X		004
5	MW-12A	PS	4/19/2017 07:30	7016438006	Water	1	X		005
6	MW-12B	PS	4/19/2017 08:00	7016438007	Water	1	X		006
7	DUP001	PS	4/19/2017 00:00	7016438008	Water	1	X		007
8	FB	PS	4/19/2017 09:00	7016438009	Water	1	X		008
9	LEA-PRI	PS	4/19/2017 13:00	7016438010	Water	1	X	SM 5310B	009
10	LEA-SEC	PS	4/19/2017 13:15	7016438011	Water	1	X		010
11	MW-11A	PS	4/19/2017 12:15	7016438014	Water	1	X	9060	011
12	MW-3A	PS	4/20/2017 09:55	7016438015	Water	1	X		012
13	MW-3B	PS	4/20/2017 09:40	7016438016	Water	1	X		013
14	MW-3C	RQS	4/20/2017 08:50	7016438017	Water	1	X		014
15	MW-4A	PS	4/20/2017 12:30	7016438018	Water	1	X		015
16	MW-4B	PS	4/20/2017 12:05	7016438019	Water	1	X		016
17	MW-4C	PS	4/20/2017 11:15	7016438020	Water	1	X		017

Transfers	Released By	Date/Time	Received By	Date/Time	Comments
1		4/21/17 18:00	Kwun Shu	4/22/17 1120	
2					
3					

Cooler Temperature on Receipt 5.6°C	Custody Seal Y or (N)	Received on Ice (Y) or N	Samples Intact (Y) or N

***In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document. This chain of custody is considered complete as is since this information is available in the owner laboratory.

30216882

KEH

Sample Condition Upon Receipt Pittsburgh

Pace Analytical

Client Name: Pace LI Project # 30216882

Courier: ☒ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other _____

Tracking #: 7325 2574 9057

Custody Seal on Cooler/Box Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ no

Thermometer Used 7 Type of Ice: (Wet) Blue None

Cooler Temperature Observed Temp 1.9, 3.8 °C Correction Factor: 0.0 °C Final Temp: 1.9, 3.8 °C

Temp should be above freezing to 6°C

Date and Initials of person examining contents: KH 4/22/17

Comments:	Yes	No	N/A	
Chain of Custody Present:	✓			1.
Chain of Custody Filled Out:	✓			2.
Chain of Custody Relinquished:	✓			3.
Sampler Name & Signature on COC:		✓		4.
Sample Labels match COC: -includes date/time/ID Matrix: WT	✓			5.
Samples Arrived within Hold Time:	✓			6.
Short Hold Time Analysis (<72hr remaining):		✓		7.
Rush Turn Around Time Requested:		✓		8.
Sufficient Volume:	✓			9.
Correct Containers Used: -Pace Containers Used:	✓ ✓			10.
Containers Intact:	✓			11.
Orthophosphate field filtered				12.
Organic Samples checked for dechlorination:			✓	13.
Filtered volume received for Dissolved tests			✓	14.
All containers have been checked for preservation. All containers needing preservation are found to be in compliance with EPA recommendation.			✓	15.
exceptions: VOA, coliform, (TOC) O&G, Phenolics				Initial when completed: KH Date/time of preservation; Lot # of added preservative
Headspace in VOA Vials (>6mm):		✓		16.
Trip Blank Present:		✓		17.
Trip Blank Custody Seals Present			✓	
Rad Aqueous Samples Screened > 0.5 mrem/hr			✓	Initial when completed: Date:

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

☐ **A check in this box indicates that additional information has been stored in ereports.**

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

Manual Integration Letter Code System

NI: indicates that the peak was not integrated at all by the computer software.

LT: indicates that the peak in question was inappropriately integrated to an area less than what it should be (i.e. Peak area was cut)

GT: indicates that the peak in question was inappropriately integrated to an area greater than it should be (i.e. Peak tailing)

BA: indicates that the baseline had to be adjusted correctly by the analyst.

WP: indicates that the wrong peak was chosen (i.e. The surrogate peak was misidentified by the computer system.).

CO: indicates that the analyst had to split two co-eluting peaks apart that were not (or could not be) separated by the computer system.

RT: indicates that the retention time for the peak in question has shifted from the expected retention time.

INT: indicates that there was electronic interference (i.e. Noise).

Letter Codes from Manual Integration SOP S-ALL-Q-016-3

Data Qualifier Flags

Organic Data Flags

A: Target compound was detected but, the quantitated amount exceeded the maximum amount of the calibration range.

a. Target compound was detected but, the amount quantitated was below the limit of quantitation.

B: This flag is used when the analyte is found in the associated method blank as well as in the sample.

DF: This indicates the amount of the diluted analyte.

J: This flag designates a result that is between the method detection limit (MDL) and the reporting limit (RL). The reported number should be considered an estimated value.

M: Compound response was manually integrated.

N: This flag indicates presumptive evidence of a compound for a tentatively identified compound.

ND: This flag indicates the compound was analyzed for but not detected.

Q: One or more quality control criteria failed (e.g., LCS recovery, surrogate spike recovery or CCV)

R: Spike/Surrogate failed the recovery limits

U: This flag indicates the compound was analyzed for but not detected.

Data Qualifier Flags

Inorganic Data Flags

B: This flag is used when the analyte is found in the associated method blank as well as in the sample.

D: This flag represents a sample analyte that was reanalyzed at a dilution. For example, when the concentration of an analyte exceeds the upper calibration range, the more diluted concentrations are reported and with the letter D flag.

DF: This indicates that the analyte was diluted and the amount of the dilution.

N: This flag indicates presumptive evidence of a compound for a tentatively identified compound.

NC: This flag denotes that the percent recovery was not calculated because the sample concentration was greater than four times spike concentration.

ND: This flag indicates the compound was analyzed for but not detected.

Q: One or more quality control criteria failed (e.g., LCS recovery, surrogate spike recovery or CCV)

R: This represents a compound for the duplicate analysis that was not within the specified acceptable limits.

U: This flag indicates the compound was analyzed for but not detected.

SAMPLE NO.

MW-1A

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Pittsburgh SDG No. : 30216882 Contract: 7016438

Lab Sample ID: 7016438001 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-44-0	Mean Total Organic Carbon	0.82	J	mg/L	1	05/03/2017 22:07
7440-44-0	Total Organic Carbon	0.75	J	mg/L	1	05/03/2017 22:07
7440-44-0	Total Organic Carbon	0.76	J	mg/L	1	05/03/2017 22:07
7440-44-0	Total Organic Carbon	0.81	J	mg/L	1	05/03/2017 22:07
7440-44-0	Total Organic Carbon	0.94	J	mg/L	1	05/03/2017 22:07

SAMPLE NO.

MW-1B

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Pittsburgh SDG No. : 30216882 Contract: 7016438

Lab Sample ID: 7016438002 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-44-0	Mean Total Organic Carbon	0.18	J	mg/L	1	05/03/2017 23:14
7440-44-0	Total Organic Carbon	0.15	J	mg/L	1	05/03/2017 23:14
7440-44-0	Total Organic Carbon	0.16	J	mg/L	1	05/03/2017 23:14
7440-44-0	Total Organic Carbon	0.17	J	mg/L	1	05/03/2017 23:14
7440-44-0	Total Organic Carbon	0.22	J	mg/L	1	05/03/2017 23:14

SAMPLE NO.

MW-1C

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Pittsburgh SDG No. : 30216882 Contract: 7016438

Lab Sample ID: 7016438003 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-44-0	Mean Total Organic Carbon	0.16	J	mg/L	1	05/03/2017 23:49
7440-44-0	Total Organic Carbon	0.13	J	mg/L	1	05/03/2017 23:49
7440-44-0	Total Organic Carbon	0.14	J	mg/L	1	05/03/2017 23:49
7440-44-0	Total Organic Carbon	0.16	J	mg/L	1	05/03/2017 23:49
7440-44-0	Total Organic Carbon	0.19	J	mg/L	1	05/03/2017 23:49

SAMPLE NO.

MW-11B

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Pittsburgh SDG No. : 30216882 Contract: 7016438

Lab Sample ID: 7016438005 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-44-0	Mean Total Organic Carbon	1.7	J	mg/L	5	05/04/2017 00:24
7440-44-0	Total Organic Carbon	1.6	J	mg/L	5	05/04/2017 00:24
7440-44-0	Total Organic Carbon	1.6	J	mg/L	5	05/04/2017 00:24
7440-44-0	Total Organic Carbon	1.6	J	mg/L	5	05/04/2017 00:24
7440-44-0	Total Organic Carbon	2.0	J	mg/L	5	05/04/2017 00:24

SAMPLE NO.

MW-12A

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Pittsburgh SDG No. : 30216882 Contract: 7016438

Lab Sample ID: 7016438006 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-44-0	Mean Total Organic Carbon	1.2	J	mg/L	5	05/04/2017 00:59
7440-44-0	Total Organic Carbon	1.1	J	mg/L	5	05/04/2017 00:59
7440-44-0	Total Organic Carbon	1.2	J	mg/L	5	05/04/2017 00:59
7440-44-0	Total Organic Carbon	1.2	J	mg/L	5	05/04/2017 00:59
7440-44-0	Total Organic Carbon	1.3	J	mg/L	5	05/04/2017 00:59

SAMPLE NO.

MW-12B

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Pittsburgh SDG No. : 30216882 Contract: 7016438

Lab Sample ID: 7016438007 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-44-0	Mean Total Organic Carbon	0.54	J	mg/L	1	05/04/2017 01:33
7440-44-0	Total Organic Carbon	0.49	J	mg/L	1	05/04/2017 01:33
7440-44-0	Total Organic Carbon	0.53	J	mg/L	1	05/04/2017 01:33
7440-44-0	Total Organic Carbon	0.54	J	mg/L	1	05/04/2017 01:33
7440-44-0	Total Organic Carbon	0.60	J	mg/L	1	05/04/2017 01:33

SAMPLE NO.

DUP001

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Pittsburgh SDG No. : 30216882 Contract: 7016438

Lab Sample ID: 7016438008 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-44-0	Mean Total Organic Carbon	0.25	J	mg/L	1	05/04/2017 02:07
7440-44-0	Total Organic Carbon	0.24	J	mg/L	1	05/04/2017 02:07
7440-44-0	Total Organic Carbon	0.25	J	mg/L	1	05/04/2017 02:07
7440-44-0	Total Organic Carbon	0.25	J	mg/L	1	05/04/2017 02:07
7440-44-0	Total Organic Carbon	0.28	J	mg/L	1	05/04/2017 02:07

SAMPLE NO.

FB

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Pittsburgh SDG No. : 30216882 Contract: 7016438

Lab Sample ID: 7016438009 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-44-0	Mean Total Organic Carbon	<5.0	U	mg/L	5	05/04/2017 02:43
7440-44-0	Total Organic Carbon	0.36	J	mg/L	5	05/04/2017 02:43
7440-44-0	Total Organic Carbon	<5.0	U	mg/L	5	05/04/2017 02:43
7440-44-0	Total Organic Carbon	<5.0	U	mg/L	5	05/04/2017 02:43
7440-44-0	Total Organic Carbon	<5.0	U	mg/L	5	05/04/2017 02:43

SAMPLE NO.

LEA-PRI

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Pittsburgh SDG No. : 30216882 Contract: 7016438

Lab Sample ID: 7016438010 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-44-0	Total Organic Carbon	12.2		mg/L	2	05/03/2017 14:25

SAMPLE NO.

LEA-SEC

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Pittsburgh SDG No. : 30216882 Contract: 7016438

Lab Sample ID: 7016438011 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-44-0	Total Organic Carbon	30.0		mg/L	2	05/03/2017 14:46

SAMPLE NO.

MW-11A

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Pittsburgh SDG No. : 30216882 Contract: 7016438

Lab Sample ID: 7016438014 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-44-0	Mean Total Organic Carbon	13.8		mg/L	10	05/04/2017 03:20
7440-44-0	Total Organic Carbon	13.4		mg/L	10	05/04/2017 03:20
7440-44-0	Total Organic Carbon	13.9		mg/L	10	05/04/2017 03:20
7440-44-0	Total Organic Carbon	13.9		mg/L	10	05/04/2017 03:20
7440-44-0	Total Organic Carbon	14.0		mg/L	10	05/04/2017 03:20

SAMPLE NO.

MW-3A

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Pittsburgh SDG No. : 30216882 Contract: 7016438

Lab Sample ID: 7016438015 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-44-0	Mean Total Organic Carbon	2.6	J	mg/L	10	05/04/2017 08:02
7440-44-0	Total Organic Carbon	2.5	J	mg/L	10	05/04/2017 08:02
7440-44-0	Total Organic Carbon	2.6	J	mg/L	10	05/04/2017 08:02
7440-44-0	Total Organic Carbon	2.6	J	mg/L	10	05/04/2017 08:02
7440-44-0	Total Organic Carbon	2.8	J	mg/L	10	05/04/2017 08:02

SAMPLE NO.

MW-3B

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Pittsburgh SDG No. : 30216882 Contract: 7016438

Lab Sample ID: 7016438016 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-44-0	Mean Total Organic Carbon	1.8	J	mg/L	10	05/04/2017 08:38
7440-44-0	Total Organic Carbon	1.6	J	mg/L	10	05/04/2017 08:38
7440-44-0	Total Organic Carbon	1.6	J	mg/L	10	05/04/2017 08:38
7440-44-0	Total Organic Carbon	1.8	J	mg/L	10	05/04/2017 08:38
7440-44-0	Total Organic Carbon	2.0	J	mg/L	10	05/04/2017 08:38

SAMPLE NO.

MW-3C

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Pittsburgh SDG No. : 30216882 Contract: 7016438

Lab Sample ID: 7016438017 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-44-0	Mean Total Organic Carbon	0.36	J	mg/L	1	05/04/2017 06:18
7440-44-0	Total Organic Carbon	0.36	J	mg/L	1	05/04/2017 06:18
7440-44-0	Total Organic Carbon	0.36	J	mg/L	1	05/04/2017 06:18
7440-44-0	Total Organic Carbon	0.36	J	mg/L	1	05/04/2017 06:18
7440-44-0	Total Organic Carbon	0.37	J	mg/L	1	05/04/2017 06:18

SAMPLE NO.

MW-4A

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Pittsburgh SDG No. : 30216882 Contract: 7016438

Lab Sample ID: 7016438018 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-44-0	Mean Total Organic Carbon	0.84	J	mg/L	1	05/04/2017 09:13
7440-44-0	Total Organic Carbon	0.82	J	mg/L	1	05/04/2017 09:13
7440-44-0	Total Organic Carbon	0.82	J	mg/L	1	05/04/2017 09:13
7440-44-0	Total Organic Carbon	0.83	J	mg/L	1	05/04/2017 09:13
7440-44-0	Total Organic Carbon	0.87	J	mg/L	1	05/04/2017 09:13

SAMPLE NO.

MW-4B

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Pittsburgh SDG No. : 30216882 Contract: 7016438

Lab Sample ID: 7016438019 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-44-0	Mean Total Organic Carbon	1.3		mg/L	1	05/04/2017 09:47
7440-44-0	Total Organic Carbon	1.3		mg/L	1	05/04/2017 09:47
7440-44-0	Total Organic Carbon	1.3		mg/L	1	05/04/2017 09:47
7440-44-0	Total Organic Carbon	1.3		mg/L	1	05/04/2017 09:47
7440-44-0	Total Organic Carbon	1.3		mg/L	1	05/04/2017 09:47

SAMPLE NO.

MW-4C

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Pittsburgh SDG No. : 30216882 Contract: 7016438

Lab Sample ID: 7016438020 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-44-0	Mean Total Organic Carbon	0.25	J	mg/L	1	05/04/2017 10:21
7440-44-0	Total Organic Carbon	0.24	J	mg/L	1	05/04/2017 10:21
7440-44-0	Total Organic Carbon	0.25	J	mg/L	1	05/04/2017 10:21
7440-44-0	Total Organic Carbon	0.25	J	mg/L	1	05/04/2017 10:21
7440-44-0	Total Organic Carbon	0.27	J	mg/L	1	05/04/2017 10:21

FORM II INORGANIC-1

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Pace Analytical - Pittsburgh SDG No. : 30216882 Contract: 7016438

Initial Calibration Verification Source: 22151

Continuing Calibration Verification Source: 22150

Concentration Units: mg/L Instrument ID: 30WTA2

	Initial Calibration Verification				Continuing Calibration Verification						
	05/01/2017 20:21				05/02/2017 02:36			05/03/2017 12:41			Control Limit
Analyte	True	Found	%R	Control Limit	True	Found	%R	True	Found	%R	
Total Organic Carbon	10.0	10.3	103.2	90-110	25	26.3	105.1	25	25.4	101.6	90-110

FORM II INORGANIC-2

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Pace Analytical - Pittsburgh SDG No. : 30216882 Contract: 7016438

Initial Calibration Verification Source:

Continuing Calibration Verification Source: 22150

Concentration Units: mg/L Instrument ID: 30WTA2

	Continuing Calibration Verification			
	05/03/2017 15:36			Control Limit
Analyte	True	Found	%R	
Total Organic Carbon	25	25.5	102.1	90-110

FORM II INORGANIC-1

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Pace Analytical - Pittsburgh SDG No. : 30216882 Contract: 7016438

Initial Calibration Verification Source: 22151

Continuing Calibration Verification Source: 22150

Concentration Units: mg/L Instrument ID: 30WTA2

	Initial Calibration Verification				Continuing Calibration Verification						
	04/28/2017 21:25				05/03/2017 18:33			05/04/2017 03:55			Control Limit
Analyte	True	Found	%R	Control Limit	True	Found	%R	True	Found	%R	
Mean Total Organic Carbon	10.0	10.1	101.0	90-110	25	23.3	93.2	25	23.8	95.2	90-110
Total Organic Carbon	10.0	10.1	101.0	90-110	25	23.6	94.4	25	23.6	94.6	90-110
Total Organic Carbon	10.0	10.1	101.3	90-110	25	23.1	92.6	25	24.2	96.7	90-110
Total Organic Carbon	10.0	10.1	101.0	90-110	25	23.3	93.1	25	24.1	96.5	90-110
Total Organic Carbon	10.0	10.1	100.6	90-110	25	23.2	92.9	25	23.3	93.1	90-110

FORM II INORGANIC-2

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Pace Analytical - Pittsburgh SDG No. : 30216882 Contract: 7016438

Initial Calibration Verification Source:

Continuing Calibration Verification Source: 22150

Concentration Units: mg/L Instrument ID: 30WTA2

	Continuing Calibration Verification			
	05/04/2017 13:28			Control Limit
Analyte	True	Found	%R	
Mean Total Organic Carbon	25	23.8	95.2	90-110
Total Organic Carbon	25	23.8	95.3	90-110
Total Organic Carbon	25	23.9	95.5	90-110
Total Organic Carbon	25	23.9	95.6	90-110
Total Organic Carbon	25	23.6	94.6	90-110

FORM III INORGANIC-1

BLANKS

Lab Name: Pace Analytical - Pittsburgh SDG No. : 30216882 Contract : 7016438

Method Blank Matrix: Water Instrument ID: 30WTA2

Method Blank Concentration Units: mg/L

Analyte	Initial Calibration Blank (mg/L)		Continuing Calibration Blank (mg/L)						Method Blank	
	05/01/2017 20:41	C	05/02/2017 02:57	C	05/03/2017 13:03	C	05/03/2017 15:57	C	1266155	C
Total Organic Carbon	0.88	U	0.88	U	0.88	U	0.88	U	<1.0	U

FORM III INORGANIC-1

BLANKS

Lab Name: Pace Analytical - Pittsburgh SDG No. : 30216882 Contract : 7016438

Method Blank Matrix: Water Instrument ID: 30WTA2

Method Blank Concentration Units: mg/L

Analyte	Initial Calibration Blank (mg/L)		Continuing Calibration Blank (mg/L)						Method Blank	
	04/28/2017 22:02	C	05/03/2017 19:09	C	05/04/2017 04:31	C	05/04/2017 14:04	C	1267269	C
Mean Total Organic Carbon	0.88	U	0.88	U	0.88	U	0.88	U	<1.0	U
Total Organic Carbon	0.88	U	0.88	U	0.88	U	0.88	U	<1.0	U
Total Organic Carbon	0.88	U	0.88	U	0.88	U	0.88	U	<1.0	U
Total Organic Carbon	0.88	U	0.88	U	0.88	U	0.88	U	<1.0	U
Total Organic Carbon	0.88	U	0.88	U	0.88	U	0.88	U	<1.0	U

FORM III INORGANIC-2

BLANKS

Lab Name: Pace Analytical - Pittsburgh SDG No. : 30216882 Contract : 7016438

Method Blank Matrix: Water Instrument ID: 30WTA2

Method Blank Concentration Units: mg/L

Analyte	Initial Calibration Blank		Continuing Calibration Blank						Method Blank	
		C		C		C		C	1267273	C
Mean Total Organic Carbon									<1.0	U
Total Organic Carbon									0.066	J
Total Organic Carbon									<1.0	U
Total Organic Carbon									<1.0	U
Total Organic Carbon									<1.0	U

SAMPLE NO.

1266157MS

FORM V INORGANIC-1

MATRIX SPIKE SAMPLE RECOVERY

Lab Name: Pace Analytical - Pittsburgh SDG No. : 30216882 Contract: 7016438

Matrix: Water Basis: Wet Parent Sample ID: 30216137001

Percent Moisture:

Analyte	Units	Control Limit %R	Spiked Sample Result (SSR)	Sample Result (SR)	Spike Added (SA)	%R
Total Organic Carbon	mg/L	85-115	151	146	10.0	52*

* Spike Recovery outside QC Limits

SAMPLE NO.

1267271MS

FORM V INORGANIC-1

MATRIX SPIKE SAMPLE RECOVERY

Lab Name: Pace Analytical - Pittsburgh SDG No. : 30216882 Contract: 7016438

Matrix: Water Basis: Wet Parent Sample ID: 7016360002

Percent Moisture:

Analyte	Units	Control Limit %R	Spiked Sample Result (SSR)	Sample Result (SR)	Spike Added (SA)	%R
Total Organic Carbon	mg/L	85-115	14.9	6.9	10.0	81*
Total Organic Carbon	mg/L	85-115	15.4	6.9	10.0	84*
Total Organic Carbon	mg/L	85-115	14.9	7.0	10.0	79*
Mean Total Organic Carbon	mg/L	85-115	15.2	7.0	10.0	82*
Total Organic Carbon	mg/L	85-115	15.5	7.0	10.0	85

* Spike Recovery outside QC Limits

SAMPLE NO.

1267275MS

FORM V INORGANIC-1

MATRIX SPIKE SAMPLE RECOVERY

Lab Name: Pace Analytical - Pittsburgh SDG No. : 30216882 Contract: 7016438

Matrix: Water Basis: Wet Parent Sample ID: MW-3C

Percent Moisture:

Analyte	Units	Control Limit %R	Spiked Sample Result (SSR)	Sample Result (SR)	Spike Added (SA)	%R
Total Organic Carbon	mg/L	85-115	9.2	0.36J	10.0	89
Mean Total Organic Carbon	mg/L	85-115	9.3	0.36J	10.0	90
Total Organic Carbon	mg/L	85-115	9.4	0.36J	10.0	90
Total Organic Carbon	mg/L	85-115	9.4	0.36J	10.0	91
Total Organic Carbon	mg/L	85-115	9.3	0.37J	10.0	89

SAMPLE NO.

1267276MSD

FORM V INORGANIC-2

MATRIX SPIKE SAMPLE RECOVERY

Lab Name: Pace Analytical - Pittsburgh SDG No. : 30216882 Contract: 7016438

Matrix: Water Basis: Wet Parent Sample ID: MW-3C

Percent Moisture:

Analyte	Units	Control Limit %R	Spiked Sample Result (SSR)	Sample Result (SR)	Spike Added (SA)	%R
Total Organic Carbon	mg/L	85-115	9.1	0.36J	10.0	87
Mean Total Organic Carbon	mg/L	85-115	9.2	0.36J	10.0	88
Total Organic Carbon	mg/L	85-115	9.3	0.36J	10.0	89
Total Organic Carbon	mg/L	85-115	9.3	0.36J	10.0	90
Total Organic Carbon	mg/L	85-115	9.1	0.37J	10.0	88

SAMPLE NO.

1266158DUP

FORM VI INORGANIC-1
DUPLICATES

Lab Name: Pace Analytical - Pittsburgh SDG No. : 30216882 Contract: 7016438

Matrix: Water Concentration Units: mg/L

Percent Moisture: Basis: Wet

Analyte	Control Limit	Sample	Duplicate	RPD
Total Organic Carbon	20	3.1	2.6	20

SAMPLE NO.

1267277DUP

FORM VI INORGANIC-1
DUPLICATES

Lab Name: Pace Analytical - Pittsburgh SDG No. : 30216882 Contract: 7016438

Matrix: Water Concentration Units: mg/L

Percent Moisture: Basis: Wet

Analyte	Control Limit	Sample	Duplicate	RPD
Total Organic Carbon	20	0.75J	0.78J	
Total Organic Carbon	20	0.76J	0.74J	
Total Organic Carbon	20	0.81J	0.74J	
Mean Total Organic Carbon	20	0.82J	0.77J	
Total Organic Carbon	20	0.94J	0.83J	

SAMPLE NO.

1267276MSD

FORM VI INORGANIC-1
DUPLICATES

Lab Name: Pace Analytical - Pittsburgh SDG No. : 30216882 Contract: 7016438

Matrix: Water Concentration Units: mg/L

Percent Moisture: Basis: Wet

Analyte	Control Limit	Sample	Duplicate	RPD
Total Organic Carbon	20	9.2	9.1	2
Mean Total Organic Carbon	20	9.3	9.2	1
Total Organic Carbon	20	9.3	9.1	1
Total Organic Carbon	20	9.4	9.3	1
Total Organic Carbon	20	9.4	9.3	1

SAMPLE NO.

1266156LCS

FORM VII INORGANIC-1
LABORATORY CONTROL SAMPLE

Lab Name: Pace Analytical - Pittsburgh SDG No. : 30216882 Contract: 7016438

Matrix: Water

Analyte	Units	True	Found	%R	Limits	
Total Organic Carbon	mg/L	10.0	10.1	101	85	115

SAMPLE NO.

1267270LCS

FORM VII INORGANIC-1
LABORATORY CONTROL SAMPLE

Lab Name: Pace Analytical - Pittsburgh SDG No. : 30216882 Contract: 7016438

Matrix: Water

Analyte	Units	True	Found	%R	Limits	
Total Organic Carbon	mg/L	10.0	9.6	96	85	115
Mean Total Organic Carbon	mg/L	10.0	9.7	97	85	115
Total Organic Carbon	mg/L	10.0	9.7	97	85	115
Total Organic Carbon	mg/L	10.0	9.7	97	85	115
Total Organic Carbon	mg/L	10.0	9.8	98	85	115

SAMPLE NO.

1267274LCS

FORM VII INORGANIC-1
LABORATORY CONTROL SAMPLE

Lab Name: Pace Analytical - Pittsburgh SDG No. : 30216882 Contract: 7016438

Matrix: Water

Analyte	Units	True	Found	%R	Limits	
Total Organic Carbon	mg/L	10.0	9.8	98	85	115
Mean Total Organic Carbon	mg/L	10.0	9.9	99	85	115
Total Organic Carbon	mg/L	10.0	9.9	99	85	115
Total Organic Carbon	mg/L	10.0	9.9	99	85	115
Total Organic Carbon	mg/L	10.0	9.9	99	85	115

FORM IX INORGANIC-1

INSTRUMENT DETECTION LIMITS

Lab Name: Pace Analytical - Pittsburgh SDG No. : 30216882 Contract: 7016438

Preparation Method: None Instrument ID: 30WTA2

Concentration Units: mg/L

Analyte	PQL	IDL	IDL Date
Total Organic Carbon	1.0	0.88	01/01/2007

FORM IX INORGANIC-2
METHOD DETECTION LIMITS

Lab Name: Pace Analytical - Pittsburgh SDG No. : 30216882 Contract: 7016438

Preparation Method: SM5310C-00 Instrument ID: 30WTA2

Concentration Units: mg/L

Analyte	PQL	MDL	MDL Date
Total Organic Carbon	1.0	0.11	09/07/2016

FORM IX INORGANIC-1

INSTRUMENT DETECTION LIMITS

Lab Name: Pace Analytical - Pittsburgh SDG No. : 30216882 Contract: 7016438

Preparation Method: None Instrument ID: 30WTA2

Concentration Units: mg/L

Analyte	PQL	IDL	IDL Date
Mean Total Organic Carbon	1.0	0.88	01/01/2007
Total Organic Carbon	1.0	0.88	01/01/2007

FORM IX INORGANIC-2
METHOD DETECTION LIMITS

Lab Name: Pace Analytical - Pittsburgh SDG No. : 30216882 Contract: 7016438

Preparation Method: EPA 9060A Instrument ID: 30WTA2

Concentration Units: mg/L

Analyte	PQL	MDL	MDL Date
Mean Total Organic Carbon	1.0	0.063	09/12/2016
Total Organic Carbon	1.0	0.063	09/12/2016

FORM XII INORGANIC-1
PREPARATION LOG

Lab Name: Pace Analytical - Pittsburgh SDG No. : 30216882 Contract: 7016438

Preparation Method: SM5310C-00 Batch: WETA 27988

Lab Sample ID	Sample Name	Preparation Date	Initial Volume (mL)	Final Volume (mL)
1266155	1266155BLANK	05/01/2017	40	40
1266156	1266156LCS	05/01/2017	40	40
1266157	1266157MS	05/03/2017	40	40
1266158	1266158DUP	05/01/2017	40	40
7016438010	LEA-PRI	05/03/2017	40	40
7016438011	LEA-SEC	05/03/2017	40	40

FORM XII INORGANIC-1
PREPARATION LOG

Lab Name: Pace Analytical - Pittsburgh SDG No. : 30216882 Contract: 7016438

Preparation Method: EPA 9060A Batch: WETA 28026

Lab Sample ID	Sample Name	Preparation Date	Initial Volume (mL)	Final Volume (mL)
1267269	1267269BLANK	05/03/2017	40	40
1267270	1267270LCS	05/03/2017	40	40
1267271	1267271MS	05/03/2017	40	40
1267277	1267277DUP	05/03/2017	40	40
7016438001	MW-1A	05/03/2017	40	40
7016438002	MW-1B	05/03/2017	40	40
7016438003	MW-1C	05/03/2017	40	40
7016438005	MW-11B	05/04/2017	40	40
7016438006	MW-12A	05/04/2017	40	40
7016438007	MW-12B	05/04/2017	40	40
7016438008	DUP001	05/04/2017	40	40
7016438009	FB	05/04/2017	40	40
7016438014	MW-11A	05/04/2017	40	40

FORM XII INORGANIC-1
PREPARATION LOG

Lab Name: Pace Analytical - Pittsburgh SDG No. : 30216882 Contract: 7016438

Preparation Method: EPA 9060A Batch: WETA 28027

Lab Sample ID	Sample Name	Preparation Date	Initial Volume (mL)	Final Volume (mL)
1267273	1267273BLANK	05/04/2017	40	40
1267274	1267274LCS	05/04/2017	40	40
1267275	1267275MS	05/04/2017	40	40
1267276	1267276MSD	05/04/2017	40	40
7016438015	MW-3A	05/04/2017	40	40
7016438016	MW-3B	05/04/2017	40	40
7016438017	MW-3C	05/04/2017	40	40
7016438018	MW-4A	05/04/2017	40	40
7016438019	MW-4B	05/04/2017	40	40
7016438020	MW-4C	05/04/2017	40	40

FORM XIII INORGANIC-1

ANALYSIS RUN LOG

Lab Name: Pace Analytical - Pittsburgh SDG No. : 30216882 Contract: 7016438

Instrument ID: 30WTA2 Analysis Method: SM5310C-00

Start Date: 05/01/2017 18:18 End Date: 05/03/2017 15:57

Sample Name	Lab Sample ID	D/F	Date	Time	toc
8117103CAL1	8117103CAL1	1	05/01/2017	18:18	X
8117104CAL2	8117104CAL2	1	05/01/2017	18:30	X
8117107CAL3	8117107CAL3	1	05/01/2017	18:41	X
8117110CAL4	8117110CAL4	1	05/01/2017	18:53	X
8117114CAL5	8117114CAL5	1	05/01/2017	19:06	X
8117117CAL6	8117117CAL6	1	05/01/2017	19:18	X
8119236ICV	8119236ICV	1	05/01/2017	20:21	X
8119237ICB	8119237ICB	1	05/01/2017	20:41	X
1266155BLANK	1266155	1	05/01/2017	21:06	X
1266156LCS	1266156	1	05/01/2017	21:26	X
30216391001	30216391001	1	05/01/2017	22:42	X
1266158DUP	1266158	1	05/01/2017	23:03	X
8119238CCV	8119238CCV	1	05/02/2017	02:36	X
8119239CCB	8119239CCB	1	05/02/2017	02:57	X
8122003CCV	8122003CCV	1	05/03/2017	12:41	X
8122004CCB	8122004CCB	1	05/03/2017	13:03	X
30216137001	30216137001	10	05/03/2017	13:30	X
1266157MS	1266157	10	05/03/2017	13:58	X
LEA-PRI	7016438010	2	05/03/2017	14:25	X
LEA-SEC	7016438011	2	05/03/2017	14:46	X
8122006CCV	8122006CCV	1	05/03/2017	15:36	X
8122007CCB	8122007CCB	1	05/03/2017	15:57	X

FORM XIII INORGANIC-1
ANALYSIS RUN LOG

Lab Name: Pace Analytical - Pittsburgh SDG No. : 30216882 Contract: 7016438

Instrument ID: 30WTA2 Analysis Method: EPA 9060A

Start Date: 04/26/2017 12:47 End Date: 05/04/2017 14:04

Sample Name	Lab Sample ID	D/F	Date	Time	toc	toc 2	toc 3	toc 4	toc m
8094710CAL1	8094710CAL1	1	04/26/2017	12:47	X				X
8094711CAL2	8094711CAL2	1	04/26/2017	13:01	X				X
8094712CAL3	8094712CAL3	1	04/26/2017	13:14	X				X
8094713CAL4	8094713CAL4	1	04/26/2017	13:28	X				X
8094714CAL5	8094714CAL5	1	04/26/2017	13:42	X				X
8094715CAL6	8094715CAL6	1	04/26/2017	13:55	X				X
8114533ICV	8114533ICV	1	04/28/2017	21:25	X	X	X	X	X
8114534ICB	8114534ICB	1	04/28/2017	22:02	X	X	X	X	X
8126032CCV	8126032CCV	1	05/03/2017	18:33	X	X	X	X	X
8126033CCB	8126033CCB	1	05/03/2017	19:09	X	X	X	X	X
1267269BLANK	1267269	1	05/03/2017	19:47	X	X	X	X	X
1267270LCS	1267270	1	05/03/2017	20:24	X	X	X	X	X
7016360002	7016360002	1	05/03/2017	20:59	X	X	X	X	X
1267271MS	1267271	1	05/03/2017	21:33	X	X	X	X	X
MW-1A	7016438001	1	05/03/2017	22:07	X	X	X	X	X
1267277DUP	1267277	1	05/03/2017	22:40	X	X	X	X	X
MW-1B	7016438002	1	05/03/2017	23:14	X	X	X	X	X
MW-1C	7016438003	1	05/03/2017	23:49	X	X	X	X	X
MW-11B	7016438005	5	05/04/2017	00:24	X	X	X	X	X
MW-12A	7016438006	5	05/04/2017	00:59	X	X	X	X	X
MW-12B	7016438007	1	05/04/2017	01:33	X	X	X	X	X
DUP001	7016438008	1	05/04/2017	02:07	X	X	X	X	X
FB	7016438009	5	05/04/2017	02:43	X	X	X	X	X
MW-11A	7016438014	10	05/04/2017	03:20	X	X	X	X	X
8126034CCV	8126034CCV	1	05/04/2017	03:55	X	X	X	X	X
8126035CCB	8126035CCB	1	05/04/2017	04:31	X	X	X	X	X
1267273BLANK	1267273	1	05/04/2017	05:08	X	X	X	X	X
1267274LCS	1267274	1	05/04/2017	05:43	X	X	X	X	X
MW-3C	7016438017	1	05/04/2017	06:18	X	X	X	X	X
1267275MS	1267275	1	05/04/2017	06:52	X	X	X	X	X
1267276MSD	1267276	1	05/04/2017	07:27	X	X	X	X	X
MW-3A	7016438015	10	05/04/2017	08:02	X	X	X	X	X
MW-3B	7016438016	10	05/04/2017	08:38	X	X	X	X	X
MW-4A	7016438018	1	05/04/2017	09:13	X	X	X	X	X
MW-4B	7016438019	1	05/04/2017	09:47	X	X	X	X	X
MW-4C	7016438020	1	05/04/2017	10:21	X	X	X	X	X
8126036CCV	8126036CCV	1	05/04/2017	13:28	X	X	X	X	X
8126037CCB	8126037CCB	1	05/04/2017	14:04	X	X	X	X	X

Pace Analytical
1638 Roseytown Road
Greensburg, PA
15601
USA

Date Prepared: 05/02/2017 **By:** TOC

Date Approved: **By:**

Sample Results Summary

Spl #	Vial #	Sample ID	Num Rep	Act Rep	Method	Type	Dil	Cust ID	Mode	Avg. Area (cts)	Avg. Mass (ug)	Avg. Conc (PPM)	Std. Dev	% RSD	Notes
1	-	Clean Up	4	4	DefaultCleanUpMethod	Clean Up	1 : 1	00000000	TC	5,984	0.000	0.000	254	4.25	
3	1	TOC-RW	1	1	5310C Curve 05012017 - May 01, 2017; 02-39-49 PM	Std	1 : 1	00000000	TOC	4,630	0.000	0.000	0	0.00	
4	2	TOC-Std#1-1.000 PPM	1	1	5310C Curve 05012017 - May 01, 2017; 02-39-49 PM	Std	1 : 1	00000000	TOC	15,613	3.000	1.000	0	0.00	
5	3	TOC-Std#2-10.000 PPM	1	1	5310C Curve 05012017 - May 01, 2017; 02-39-49 PM	Std	1 : 1	00000000	TOC	97,939	30.000	10.000	0	0.00	
6	4	TOC-Std#3-25.000 PPM	1	1	5310C Curve 05012017 - May 01, 2017; 02-39-49 PM	Std	1 : 1	00000000	TOC	230,416	75.000	25.000	0	0.00	
7	5	TOC-Std#4-50.000 PPM	1	1	5310C Curve 05012017 - May 01, 2017; 02-39-49 PM	Std	1 : 1	00000000	TOC	457,738	150.000	50.000	0	0.00	
8	6	TOC-Std#5-75.000 PPM	1	1	5310C Curve 05012017 - May 01, 2017; 02-39-49 PM	Std	1 : 1	00000000	TOC	660,152	225.000	75.000	0	0.00	
9	7	TOC-Std#6-100.000 PPM	1	1	5310C Curve 05012017 - May 01, 2017; 02-39-49 PM	Std	1 : 1	00000000	TOC	899,495	300.000	100.000	0	0.00	

1633 of 1680

Pace Analytical
1638 Roseytown Road
Greensburg, PA
15601
USA

Date Prepared: 05/02/2017 **By:** TOC

Date Approved: **By:**

Sample Results

Spl #: 1 **Sample ID :** Clean Up **Type :** Clean Up **Date:** 05/01/2017 **Status:**
Vial #: - **Method :** DefaultCleanUpMethod **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TC Area (cts)	TC Mass (ugC)	TC Conc (PPM)
1	5:24 pm	-	-	-	6,362	0.000	0.000
2	5:31 pm	-	-	-	5,893	0.000	0.000
3	5:37 pm	-	-	-	5,808	0.000	0.000
4	5:43 pm	-	-	-	5,874	0.000	0.000
	Avg.	-	-	-	5,984	0.000	0.000
	Std.Dev.						
	% RSD.				4.25		

Spl #: 3 **Sample ID :** TOC-RW **Type :** Std **Date:** 05/01/2017 **Status:**
Vial #: 1 **Method :** 5310C Curve 05012017 - May **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	6:06 pm	-	-	-	4,630	0.000	0.000
	Avg.	-	-	-	4,630	0.000	0.000
	Std.Dev.						
	% RSD.				0.00		

Spl #: 4 **Sample ID :** TOC-Std#1-1.000 PPM **Type :** Std **Date:** 05/01/2017 **Status:**
Vial #: 2 **Method :** 5310C Curve 05012017 - May **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	6:18 pm	-	-	-	15,613	3.000	1.000
	Avg.	-	-	-	15,613	3.000	1.000
	Std.Dev.						
	% RSD.				0.00		

Denotes Excluded Replicates
Denotes First Failed Samples

Pace Analytical
1638 Roseytown Road
Greensburg, PA
15601
USA

Date Prepared: 05/02/2017 **By:** TOC

Date Approved: **By:**

Spl #: 5 **Sample ID :** TOC-Std#2-10.000 PPM **Type :** Std **Date:** 05/01/2017 **Status:**
Vial #: 3 **Method :** 5310C Curve 05012017 - May **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	6:30 pm	-	-	-	97,939	30.000	10.000
	Avg.	-	-	-	97,939	30.000	10.000
	Std.Dev.						
	% RSD.				0.00		

Spl #: 6 **Sample ID :** TOC-Std#3-25.000 PPM **Type :** Std **Date:** 05/01/2017 **Status:**
Vial #: 4 **Method :** 5310C Curve 05012017 - May **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	6:41 pm	-	-	-	230,416	75.000	25.000
	Avg.	-	-	-	230,416	75.000	25.000
	Std.Dev.						
	% RSD.				0.00		

Spl #: 7 **Sample ID :** TOC-Std#4-50.000 PPM **Type :** Std **Date:** 05/01/2017 **Status:**
Vial #: 5 **Method :** 5310C Curve 05012017 - May **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	6:53 pm	-	-	-	457,738	150.000	50.000
	Avg.	-	-	-	457,738	150.000	50.000
	Std.Dev.						
	% RSD.				0.00		

Pace Analytical
1638 Roseytown Road
Greensburg, PA
15601
USA

Date Prepared: 05/02/2017 **By:** TOC

Date Approved: **By:**

Spl #: 8 **Sample ID :** TOC-Std#5-75.000 PPM **Type :** Std **Date:** 05/01/2017 **Status:**
Vial #: 6 **Method :** 5310C Curve 05012017 - May **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	7:06 pm	-	-	-	660,152	225.000	75.000
	Avg.	-	-	-	660,152	225.000	75.000
	Std.Dev.						
	% RSD.				0.00		

Spl #: 9 **Sample ID :** TOC-Std#6-100.000 PPM **Type :** Std **Date:** 05/01/2017 **Status:**
Vial #: 7 **Method :** 5310C Curve 05012017 - May **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	7:18 pm	-	-	-	899,495	300.000	100.000
	Avg.	-	-	-	899,495	300.000	100.000
	Std.Dev.						
	% RSD.				0.00		

Pace Analytical
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15601
USA

Date Prepared: 05/02/2017 **By:** TOC

Date Approved: **By:**

Method Summary

Method Details

Method Name:	5310C Curve 05012017 - May 01, 2017; 02-39-49 PM
Date Created:	05/01/2017
Time Created:	14:45
Created By:	toc
Analysis Mode:	NPOC Only
Sparging Mode:	Internal
Pre-Acid Volume (mL):	1.000
Sparge Time (mm:ss):	02:00

Volumes

Sample Volume (mL):	3.000
Acid Volume (mL):	1.000
Persulfate Volume(mL):	2.000

Other

SysPressure:	20.00

Pre-Processing

Sample Dilution:	Enabled
Dilution Mode:	Manual
Dilution Factor:	1 : 1

Times

	React	Detect
TIC	01:30	03:00
TOC	02:00	03:00

Temp

	React	Detect
TIC	70	70
TOC	98	98

Outlier Removal Criteria

Enabled:	Yes
Additional Replicates:	1
Max. % RSD.	10.00

Rinses

Rinse Volume (mL):	9.000
Rinses Per Sample:	0
Rinses Per Replicate:	0

Max. Std. Dev. 100 Use Modified Oxidant: No

Calibration Summary

Calibration Generation

Generation Mode:	Manual
# of Stds:	5
Dilution Factor:	10 : 1
Dilution Volume (mL):	1.000
Add Zero as Std #1:	No

Calibration Mode

Primary Mode:	TOC
User for ALL Modes:	Enabled

Calibration Pass/Fail Criteria

Parameter	Enabled	Low	High	Failure
R² (ugC/K-cts)	Yes	0.1000	0.3000	Continue
	Yes	0.950	1.000	Continue
Offset (area) (cts)	No	-	-	-
Offset (mass) (ugC)	No	-	-	-
QC Blank(cts)	No	-	-	-

Checks, QC's and Actions

Type	Target (PPM)	Tolerance (+/- %)	1st Failure	2nd Failure
CK Std	n/a	10.00	Re-run	Continue
QC #1	0.000	10.00	Re-run	Continue
QC #2	0.000	10.00	Re-run	Continue
QC #3	0.000	10.00	Re-run	Continue
QC #4	0.000	10.00	Re-run	Continue
SST	0.000	15.00	Abort	Abort

Denotes Excluded Replicates

Denotes First Failed Samples

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Pace Analytical
1638 Roseytown Road
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15601
USA

Date Prepared: 05/02/2017 **By:** TOC

Date Approved: **By:**

Calibration Details

Calibration Mode:	TOC
Date Calibrated:	05/01/2017
Time Calibrated:	7:18 pm
Calibrated By:	toc
RF (ugC/k-cts):	0.3382
R2:	0.9997
R:	0.9998
QC Blank(cts):	0
Offset (cts):	7287
Offset (ugC):	-2.465
Reagent Blank (cts):	3,341
Units of Measure:	PPM->mg/L C

Calibration Settings

Stock Conc. For Dilutions: (PPM)	1,000.000
# of Reagent Blanks:	1
EFC Enabled:	No
Total Flowrate w/EFC:	50 ml/min
Check Standards:	Subtract Offset
Samples:	Substract Offset
Regression type:	Unweighted Linear

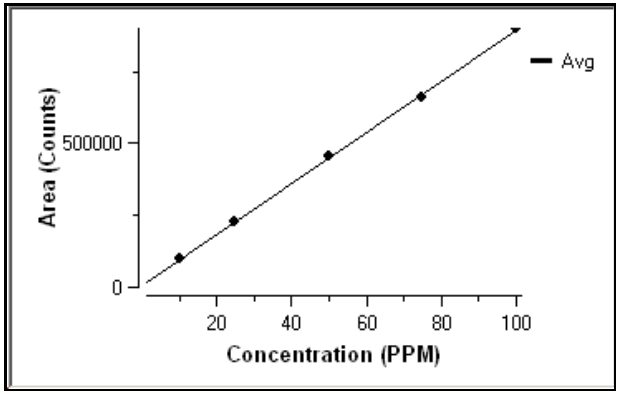
Calculations:

$$Concentration = \frac{\frac{RF}{1000} \times Area}{volume}$$

Samples: $Area = Area_{Peak} - Area_{Offset}$ *or* $Area = Area_{Peak} - Area_{RB}$

CHK Stds: $Area = Area_{Peak} - Area_{Offset}$ *or* $Area = Area_{Peak} - Area_{RW}$

QC Samples: $Area = Area_{Peak} - Area_{QCBlank}$



$$y = m \times x + b$$

$y \Rightarrow Area$ $\quad m \Rightarrow \frac{1000}{RF \times volume}$ $\quad b \Rightarrow 0$

Denotes Excluded Replicates

Denotes First Failed Samples

Pace Analytical
1638 Roseytown Road
Greensburg, PA
15601
USA

Date Prepared: 04/26/2017 **By:** TOC

Date Approved: **By:**

Sample Results Summary

Spl #	Vial #	Sample ID	Num Rep	Act Rep	Method	Type	Dil	Cust ID	Mode	Avg. Area (cts)	Avg. Mass (ug)	Avg. Conc (PPM)	Std. Dev	% RSD	Notes
1	-	Clean Up	8	8	DefaultCleanUpMethod	Clean Up	1 : 1	00000000	TC	7,932	0.000	0.000	496	6.25	
3	1	TOC-RW	1	1	9060 Curve 04262017 - Apr 26, 2017; 11-07-15 AM	Std	1 : 1	00000000	TOC	4,414	0.000	0.000	0	0.00	
4	2	TOC-Std#1-1.000 PPM	1	1	9060 Curve 04262017 - Apr 26, 2017; 11-07-15 AM	Std	1 : 1	00000000	TOC	14,826	3.000	1.000	0	0.00	
5	3	TOC-Std#2-10.000 PPM	1	1	9060 Curve 04262017 - Apr 26, 2017; 11-07-15 AM	Std	1 : 1	00000000	TOC	100,511	30.000	10.000	0	0.00	
6	4	TOC-Std#3-25.000 PPM	1	1	9060 Curve 04262017 - Apr 26, 2017; 11-07-15 AM	Std	1 : 1	00000000	TOC	238,411	75.000	25.000	0	0.00	
7	5	TOC-Std#4-50.000 PPM	1	1	9060 Curve 04262017 - Apr 26, 2017; 11-07-15 AM	Std	1 : 1	00000000	TOC	465,337	150.000	50.000	0	0.00	
8	6	TOC-Std#5-75.000 PPM	1	1	9060 Curve 04262017 - Apr 26, 2017; 11-07-15 AM	Std	1 : 1	00000000	TOC	703,928	225.000	75.000	0	0.00	
9	7	TOC-Std#6-100.000 PPM	1	1	9060 Curve 04262017 - Apr 26, 2017; 11-07-15 AM	Std	1 : 1	00000000	TOC	950,196	300.000	100.000	0	0.00	

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Denotes Excluded Replicates

Denotes First Failed Samples

Pace Analytical
1638 Roseytown Road
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USA

Date Prepared: 04/26/2017 **By:** TOC

Date Approved: **By:**

Sample Results

Spl #: 1 **Sample ID :** Clean Up **Type :** Clean Up **Date:** 04/26/2017 **Status:**
Vial #: - **Method :** DefaultCleanUpMethod **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TC Area (cts)	TC Mass (ugC)	TC Conc (PPM)
1	11:25 am	-	-	-	8,998	0.000	0.000
2	11:31 am	-	-	-	8,354	0.000	0.000
3	11:37 am	-	-	-	7,827	0.000	0.000
4	11:43 am	-	-	-	7,590	0.000	0.000
5	11:49 am	-	-	-	7,671	0.000	0.000
6	11:56 am	-	-	-	7,657	0.000	0.000
7	12:02 pm	-	-	-	7,722	0.000	0.000
8	12:08 pm	-	-	-	7,633	0.000	0.000
	Avg.	-	-	-	7,932	0.000	0.000
	Std.Dev.						
	% RSD.				6.25		

Spl #: 3 **Sample ID :** TOC-RW **Type :** Std **Date:** 04/26/2017 **Status:**
Vial #: 1 **Method :** 9060 Curve 04262017 - Apr 26 **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	12:34 pm	-	-	-	4,414	0.000	0.000
	Avg.	-	-	-	4,414	0.000	0.000
	Std.Dev.						
	% RSD.				0.00		

Denotes Excluded Replicates
Denotes First Failed Samples

Pace Analytical
1638 Roseytown Road
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USA

Date Prepared: 04/26/2017 **By:** TOC

Date Approved: **By:**

Spl #: 4 **Sample ID :** TOC-Std#1-1.000 PPM **Type :** Std **Date:** 04/26/2017 **Status:**
Vial #: 2 **Method :** 9060 Curve 04262017 - Apr 26 **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	12:47 pm	-	-	-	14,826	3.000	1.000
	Avg.	-	-	-	14,826	3.000	1.000
	Std.Dev.						
	% RSD.				0.00		

Spl #: 5 **Sample ID :** TOC-Std#2-10.000 PPM **Type :** Std **Date:** 04/26/2017 **Status:**
Vial #: 3 **Method :** 9060 Curve 04262017 - Apr 26 **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	1:01 pm	-	-	-	100,511	30.000	10.000
	Avg.	-	-	-	100,511	30.000	10.000
	Std.Dev.						
	% RSD.				0.00		

Spl #: 6 **Sample ID :** TOC-Std#3-25.000 PPM **Type :** Std **Date:** 04/26/2017 **Status:**
Vial #: 4 **Method :** 9060 Curve 04262017 - Apr 26 **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	1:14 pm	-	-	-	238,411	75.000	25.000
	Avg.	-	-	-	238,411	75.000	25.000
	Std.Dev.						
	% RSD.				0.00		

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15601
USA

Date Prepared: 04/26/2017 **By:** TOC

Date Approved: **By:**

Spl #: 7 **Sample ID :** TOC-Std#4-50.000 PPM **Type :** Std **Date:** 04/26/2017 **Status:**
Vial #: 5 **Method :** 9060 Curve 04262017 - Apr 26 **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	1:28 pm	-	-	-	465,337	150.000	50.000
	Avg.	-	-	-	465,337	150.000	50.000
	Std.Dev.						
	% RSD.				0.00		

Spl #: 8 **Sample ID :** TOC-Std#5-75.000 PPM **Type :** Std **Date:** 04/26/2017 **Status:**
Vial #: 6 **Method :** 9060 Curve 04262017 - Apr 26 **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	1:42 pm	-	-	-	703,928	225.000	75.000
	Avg.	-	-	-	703,928	225.000	75.000
	Std.Dev.						
	% RSD.				0.00		

Spl #: 9 **Sample ID :** TOC-Std#6-100.000 PPM **Type :** Std **Date:** 04/26/2017 **Status:**
Vial #: 7 **Method :** 9060 Curve 04262017 - Apr 26 **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	1:55 pm	-	-	-	950,196	300.000	100.000
	Avg.	-	-	-	950,196	300.000	100.000
	Std.Dev.						
	% RSD.				0.00		

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1638 Roseytown Road
Greensburg, PA
15601
USA

Date Prepared: 04/26/2017 **By:** TOC

Date Approved: **By:**

Method Summary

Method Details

Method Name:	9060 Curve 04262017 - Apr 26, 2017; 11-07-15 AM
Date Created:	04/26/2017
Time Created:	11:08
Created By:	toc
Analysis Mode:	NPOC Only
Sparging Mode:	External
Pre-Acid Volume (mL):	1.000
Sparge Time (mm:ss):	02:00

Volumes

Sample Volume (mL):	3.000
Acid Volume (mL):	1.000
Persulfate Volume(mL):	2.000

Other

SysPressure:	20.00

Pre-Processing

Sample Dilution:	Enabled
Dilution Mode:	Manual
Dilution Factor:	1 : 1

Times

	React	Detect
TIC	01:30	03:00
TOC	02:00	03:00

Temp

	React	Detect
TIC	70	70
TOC	98	98

Outlier Removal Criteria

Enabled:	Yes
Additional Replicates:	1
Max. % RSD.	10.00

Rinses

Rinse Volume (mL):	9.000
Rinses Per Sample:	0
Rinses Per Replicate:	1

Max. Std. Dev. 100 Use Modified Oxidant: No

Calibration Summary

Calibration Generation

Generation Mode:	Manual
# of Stds:	5
Dilution Factor:	10 : 1
Dilution Volume (mL):	1.000
Add Zero as Std #1:	No

Calibration Mode

Primary Mode:	TOC
User for ALL Modes:	Enabled

Calibration Pass/Fail Criteria

Parameter	Enabled	Low	High	Failure
R² (ugC/K-cts)	Yes	0.1000	0.3000	Continue
	Yes	0.995	1.000	Continue
Offset (area) (cts)	No	-	-	-
Offset (mass) (ugC)	No	-	-	-
QC Blank(cts)	No	-	-	-

Checks, QC's and Actions

Type	Target (PPM)	Tolerance (+/- %)	1st Failure	2nd Failure
CK Std	n/a	10.00	Re-run	Continue
QC #1	10.000	15.00	Re-run	Continue
QC #2	25.000	10.00	Re-run	Continue
QC #3	0.000	10.00	Re-run	Continue
QC #4	0.000	10.00	Re-run	Continue
SST	0.000	15.00	Abort	Abort

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1638 Roseytown Road
Greensburg, PA
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USA

Date Prepared: 04/26/2017 **By:** TOC

Date Approved: **By:**

Calibration Details

Calibration Mode:	TOC
Date Calibrated:	04/26/2017
Time Calibrated:	1:56 pm
Calibrated By:	toc
RF (ugC/k-cts):	0.3193
R2:	0.9998
R:	0.9999
QC Blank(cts):	0
Offset (cts):	3630
Offset (ugC):	-1.159
Reagent Blank (cts):	3,635
Units of Measure:	PPM->mg/L C

Calibration Settings

Stock Conc. For Dilutions: (PPM)	1,000.000
# of Reagent Blanks:	1
EFC Enabled:	No
Total Flowrate w/EFC:	50 ml/min
Check Standards:	Subtract Offset
Samples:	Substract Offset
Regression type:	Unweighted Linear

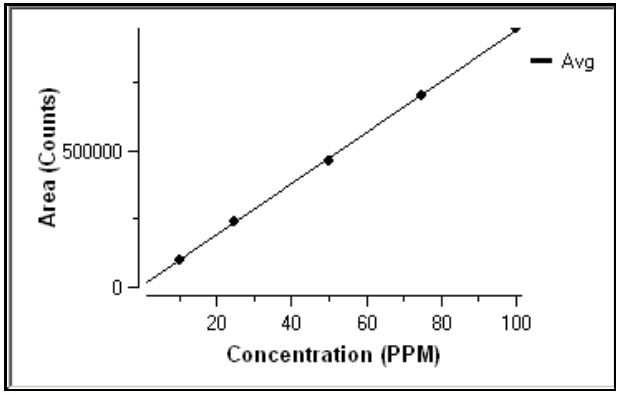
Calculations:

$$Concentration = \frac{\frac{RF}{1000} \times Area}{volume}$$

Samples: $Area = Area_{Peak} - Area_{Offset}$ *or* $Area = Area_{Peak} - Area_{RB}$

CHK Stds: $Area = Area_{Peak} - Area_{Offset}$ *or* $Area = Area_{Peak} - Area_{RW}$

QC Samples: $Area = Area_{Peak} - Area_{QCBlank}$



$$y = m \times x + b$$

$y \Rightarrow Area$ $\quad m \Rightarrow \frac{1000}{RF \times volume}$ $\quad b \Rightarrow 0$

Denotes Excluded Replicates

Denotes First Failed Samples

Pace Analytical
1638 Roseytown Road
Greensburg, PA
15601
USA

Date Prepared: 04/29/2017 **By:** TOC

Date Approved: **By:**

Sample Results Summary

Spl #	Vial #	Sample ID	Num Rep	Act Rep	Method	Type	Dil	Cust ID	Mode	Avg. Area (cts)	Avg. Mass (ug)	Avg. Conc (PPM)	Std. Dev	% RSD	Notes
1	-	Clean Up	6	6	DefaultCleanUpMethod	Clean Up	1 : 1	00000000	TC	7,124	0.000	0.000	292	4.10	
2	1	icv	4	4	9060 Curve 04262017 - Apr 26, 2017; 11-07-15 AM	Sample	1 : 1	00000000	TOC	98,514	30.297	10.099	261	0.27	Pass
3	2	icb	4	4	9060 Curve 04262017 - Apr 26, 2017; 11-07-15 AM	Sample	1 : 1	00000000	TOC	9,836	1.982	0.660	167	1.70	Pass
4	3	1265488_27967	4	4	9060 Curve 04262017 - Apr 26, 2017; 11-07-15 AM	Sample	1 : 1	00000000	TOC	6,532	0.927	0.309	70	1.07	Pass
5	4	1265489_27967	4	4	9060 Curve 04262017 - Apr 26, 2017; 11-07-15 AM	Sample	1 : 1	00000000	TOC	99,449	30.595	10.199	160	0.16	Pass
6	5	7015557002_27967x50	4	4	9060 Curve 04262017 - Apr 26, 2017; 11-07-15 AM	Sample	1 : 1	00000000	TOC	13,279	3.081	1.027	110	0.83	Pass
7	6	1265490_27967x50	4	4	9060 Curve 04262017 - Apr 26, 2017; 11-07-15 AM	Sample	1 : 1	00000000	TOC	31,224	8.811	2.937	186	0.60	Pass
8	7	1265491_27967x50	4	4	9060 Curve 04262017 - Apr 26, 2017; 11-07-15 AM	Sample	1 : 1	00000000	TOC	31,027	8.748	2.916	65	0.21	Pass
9	8	7015425025_27967x40	4	4	9060 Curve 04262017 - Apr 26, 2017; 11-07-15 AM	Sample	1 : 1	00000000	TOC	9,561	1.894	0.631	68	0.71	Pass
10	9	7015425027_27967x40	4	4	9060 Curve 04262017 - Apr 26, 2017; 11-07-15 AM	Sample	1 : 1	00000000	TOC	10,832	2.300	0.767	80	0.74	Pass
11	10	7015557001_27967x10	4	4	9060 Curve 04262017 - Apr 26, 2017; 11-07-15 AM	Sample	1 : 1	00000000	TOC	14,272	3.398	1.133	67	0.47	Pass
12	11	7015557003_27967x10	4	4	9060 Curve 04262017 - Apr 26, 2017; 11-07-15 AM	Sample	1 : 1	00000000	TOC	16,681	4.167	1.389	272	1.63	Pass
13	12	7015557004_27967x10	4	4	9060 Curve 04262017 - Apr 26, 2017; 11-07-15 AM	Sample	1 : 1	00000000	TOC	15,533	3.801	1.267	74	0.47	Pass
14	13	7015557005_27967x10	4	4	9060 Curve 04262017 - Apr 26, 2017; 11-07-15 AM	Sample	1 : 1	00000000	TOC	18,359	4.703	1.568	87	0.48	Pass
15	14	7015557006_27967x10	4	4	9060 Curve 04262017 - Apr 26, 2017; 11-07-15 AM	Sample	1 : 1	00000000	TOC	16,440	4.090	1.363	137	0.84	Pass
16	15	7015557007_27967x1	4	4	9060 Curve 04262017 - Apr 26, 2017; 11-07-15 AM	Sample	1 : 1	00000000	TOC	8,921	1.689	0.563	23	0.26	Pass
17	16	7015557010_27967x10	4	4	9060 Curve 04262017 - Apr 26, 2017; 11-07-15 AM	Sample	1 : 1	00000000	TOC	9,601	1.906	0.636	50	0.52	Pass
18	17	ccv	4	4	9060 Curve 04262017 - Apr 26, 2017; 11-07-15 AM	Sample	1 : 1	00000000	TOC	243,385	76.554	25.518	1,222	0.50	Pass
19	18	ccb	4	4	9060 Curve 04262017 - Apr 26, 2017; 11-07-15 AM	Sample	1 : 1	00000000	TOC	3,884	0.081	0.027	182	4.68	Pass

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Greensburg, PA
15601
USA

Date Prepared: 04/29/2017 **By:** TOC

Date Approved: **By:**

Sample Results

Spl #: 1 **Sample ID :** Clean Up **Type :** Clean Up **Date:** 04/28/2017 **Status:**
Vial #: - **Method :** DefaultCleanUpMethod **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TC Area (cts)	TC Mass (ugC)	TC Conc (PPM)
1	8:47 pm	-	-	-	7,489	0.000	0.000
2	8:53 pm	-	-	-	7,341	0.000	0.000
3	8:59 pm	-	-	-	7,177	0.000	0.000
4	9:05 pm	-	-	-	7,001	0.000	0.000
5	9:11 pm	-	-	-	7,092	0.000	0.000
6	9:17 pm	-	-	-	6,647	0.000	0.000
	Avg.	-	-	-	7,124	0.000	0.000
	Std.Dev.						
	% RSD.				4.10		

Spl #: 2 **Sample ID :** icv **Type :** Sample **Date:** 04/28/2017 **Status:** Pass
Vial #: 1 **Method :** 9060 Curve 04262017 - Apr 26 **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	9:25 pm	-	-	-	98,515	30.297	10.099
2	9:34 pm	-	-	-	98,817	30.393	10.131
3	9:41 pm	-	-	-	98,544	30.306	10.102
4	9:49 pm	-	-	-	98,179	30.190	10.063
	Avg.	-	-	-	98,514	30.297	10.099
	Std.Dev.						
	% RSD.				0.27		

Instrument ID: F750730374 (Wet Chemical)
Report_ID: TOC1030-R01522 (Report generated by OI Analytical's TOC Reporter V1.4.2)

Date Printed: 4/29/2017 **By Sample Report**

Denotes Excluded Replicates
Denotes First Failed Samples

Pace Analytical
1638 Roseytown Road
Greensburg, PA
15601
USA

Date Prepared: 04/29/2017 **By:** TOC

Date Approved: **By:**

Spl #: 3 **Sample ID :** icb **Type :** Sample **Date:** 04/28/2017 **Status:** Pass
Vial #: 2 **Method :** 9060 Curve 04262017 - Apr 26 **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	10:02 pm	-	-	-	9,777	1.963	0.654
2	10:10 pm	-	-	-	10,085	2.061	0.687
3	10:17 pm	-	-	-	9,740	1.951	0.650
4	10:24 pm	-	-	-	9,743	1.952	0.651
	Avg.	-	-	-	9,836	1.982	0.660
	Std.Dev.						
	% RSD.				1.70		

Spl #: 4 **Sample ID :** 1265488_27967 **Type :** Sample **Date:** 04/28/2017 **Status:** Pass
Vial #: 3 **Method :** 9060 Curve 04262017 - Apr 26 **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	10:38 pm	-	-	-	6,515	0.921	0.307
2	10:45 pm	-	-	-	6,475	0.908	0.303
3	10:53 pm	-	-	-	6,505	0.918	0.305
4	11:00 pm	-	-	-	6,633	0.959	0.320
	Avg.	-	-	-	6,532	0.927	0.309
	Std.Dev.						
	% RSD.				1.07		

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USA

Date Prepared: 04/29/2017 **By:** TOC

Date Approved: **By:**

Spl #: 5 **Sample ID :** 1265489_27967 **Type :** Sample **Date:** 04/28/2017 **Status:** Pass
Vial #: 4 **Method :** 9060 Curve 04262017 - Apr 26 **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	11:14 pm	-	-	-	99,291	30.545	10.182
2	11:21 pm	-	-	-	99,439	30.592	10.197
3	11:29 pm	-	-	-	99,670	30.666	10.222
4	11:37 pm	-	-	-	99,395	30.578	10.193
	Avg.	-	-	-	99,449	30.595	10.199
	Std.Dev.						
	% RSD.				0.16		

Spl #: 6 **Sample ID :** 7015557002_27967x50 **Type :** Sample **Date:** 04/29/2017 **Status:** Pass
Vial #: 5 **Method :** 9060 Curve 04262017 - Apr 26 **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	11:50 pm	-	-	-	13,283	3.082	1.027
2	11:58 pm	-	-	-	13,136	3.035	1.012
3	12:06 am	-	-	-	13,295	3.086	1.029
4	12:13 am	-	-	-	13,403	3.121	1.040
	Avg.	-	-	-	13,279	3.081	1.027
	Std.Dev.						
	% RSD.				0.83		

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Date Prepared: 04/29/2017 **By:** TOC

Date Approved: **By:**

Spl #: 7 **Sample ID :** 1265490_27967x50 **Type :** Sample **Date:** 04/29/2017 **Status:** Pass
Vial #: 6 **Method :** 9060 Curve 04262017 - Apr 26 **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	12:26 am	-	-	-	31,402	8.868	2.956
2	12:33 am	-	-	-	31,130	8.781	2.927
3	12:41 am	-	-	-	31,355	8.853	2.951
4	12:49 am	-	-	-	31,008	8.742	2.914
	Avg.	-	-	-	31,224	8.811	2.937
	Std.Dev.						
	% RSD.				0.60		

Spl #: 8 **Sample ID :** 1265491_27967x50 **Type :** Sample **Date:** 04/29/2017 **Status:** Pass
Vial #: 7 **Method :** 9060 Curve 04262017 - Apr 26 **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	1:02 am	-	-	-	30,975	8.731	2.911
2	1:09 am	-	-	-	31,074	8.763	2.921
3	1:17 am	-	-	-	31,090	8.768	2.923
4	1:24 am	-	-	-	30,967	8.729	2.910
	Avg.	-	-	-	31,027	8.748	2.916
	Std.Dev.						
	% RSD.				0.21		

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Date Prepared: 04/29/2017 **By:** TOC

Date Approved: **By:**

Spl #: 9 **Sample ID :** 7015425025_27967x40 **Type :** Sample **Date:** 04/29/2017 **Status:** Pass
Vial #: 8 **Method :** 9060 Curve 04262017 - Apr 26 **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	1:37 am	-	-	-	9,562	1.894	0.631
2	1:45 am	-	-	-	9,590	1.903	0.634
3	1:52 am	-	-	-	9,466	1.863	0.621
4	1:59 am	-	-	-	9,624	1.914	0.637
	Avg.	-	-	-	9,561	1.894	0.631
	Std.Dev.						
	% RSD.				0.71		

Spl #: 10 **Sample ID :** 7015425027_27967x40 **Type :** Sample **Date:** 04/29/2017 **Status:** Pass
Vial #: 9 **Method :** 9060 Curve 04262017 - Apr 26 **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	2:13 am	-	-	-	10,796	2.288	0.763
2	2:20 am	-	-	-	10,900	2.321	0.774
3	2:27 am	-	-	-	10,736	2.269	0.756
4	2:35 am	-	-	-	10,897	2.320	0.773
	Avg.	-	-	-	10,832	2.300	0.767
	Std.Dev.						
	% RSD.				0.74		

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USA

Date Prepared: 04/29/2017 **By:** TOC

Date Approved: **By:**

Spl #: 11 **Sample ID :** 7015557001_27967x10 **Type :** Sample **Date:** 04/29/2017 **Status:** Pass
Vial #: 10 **Method :** 9060 Curve 04262017 - Apr 26 **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	2:48 am	-	-	-	14,265	3.396	1.132
2	2:55 am	-	-	-	14,327	3.416	1.139
3	3:03 am	-	-	-	14,315	3.412	1.137
4	3:10 am	-	-	-	14,179	3.368	1.123
	Avg.	-	-	-	14,272	3.398	1.133
	Std.Dev.						
	% RSD.				0.47		

Spl #: 12 **Sample ID :** 7015557003_27967x10 **Type :** Sample **Date:** 04/29/2017 **Status:** Pass
Vial #: 11 **Method :** 9060 Curve 04262017 - Apr 26 **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	3:24 am	-	-	-	17,083	4.296	1.432
2	3:31 am	-	-	-	16,607	4.144	1.381
3	3:38 am	-	-	-	16,496	4.108	1.369
4	3:46 am	-	-	-	16,537	4.121	1.374
	Avg.	-	-	-	16,681	4.167	1.389
	Std.Dev.						
	% RSD.				1.63		

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USA

Date Prepared: 04/29/2017 **By:** TOC

Date Approved: **By:**

Spl #: 13 **Sample ID :** 7015557004_27967x10 **Type :** Sample **Date:** 04/29/2017 **Status:** Pass
Vial #: 12 **Method :** 9060 Curve 04262017 - Apr 26 **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	3:59 am	-	-	-	15,540	3.803	1.268
2	4:07 am	-	-	-	15,444	3.772	1.257
3	4:14 am	-	-	-	15,624	3.830	1.277
4	4:22 am	-	-	-	15,526	3.799	1.266
	Avg.	-	-	-	15,533	3.801	1.267
	Std.Dev.						
	% RSD.				0.47		

Spl #: 14 **Sample ID :** 7015557005_27967x10 **Type :** Sample **Date:** 04/29/2017 **Status:** Pass
Vial #: 13 **Method :** 9060 Curve 04262017 - Apr 26 **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	4:35 am	-	-	-	18,339	4.697	1.566
2	4:42 am	-	-	-	18,478	4.741	1.580
3	4:49 am	-	-	-	18,352	4.701	1.566
4	4:57 am	-	-	-	18,267	4.674	1.558
	Avg.	-	-	-	18,359	4.703	1.568
	Std.Dev.						
	% RSD.				0.48		

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USA

Date Prepared: 04/29/2017 **By:** TOC

Date Approved: **By:**

Spl #: 15 **Sample ID :** 7015557006_27967x10 **Type :** Sample **Date:** 04/29/2017 **Status:** Pass
Vial #: 14 **Method :** 9060 Curve 04262017 - Apr 26 **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	5:10 am	-	-	-	16,530	4.119	1.373
2	5:17 am	-	-	-	16,235	4.025	1.342
3	5:25 am	-	-	-	16,509	4.112	1.371
4	5:32 am	-	-	-	16,484	4.104	1.368
	Avg.	-	-	-	16,440	4.090	1.363
	Std.Dev.						
	% RSD.				0.84		

Spl #: 16 **Sample ID :** 7015557007_27967x1 **Type :** Sample **Date:** 04/29/2017 **Status:** Pass
Vial #: 15 **Method :** 9060 Curve 04262017 - Apr 26 **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	5:45 am	-	-	-	8,900	1.683	0.561
2	5:53 am	-	-	-	8,904	1.684	0.561
3	6:00 am	-	-	-	8,949	1.698	0.566
4	6:08 am	-	-	-	8,930	1.692	0.564
	Avg.	-	-	-	8,921	1.689	0.563
	Std.Dev.						
	% RSD.				0.26		

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Date Prepared: 04/29/2017 **By:** TOC

Date Approved: **By:**

Spl #: 17 **Sample ID :** 7015557010_27967x10 **Type :** Sample **Date:** 04/29/2017 **Status:** Pass
Vial #: 16 **Method :** 9060 Curve 04262017 - Apr 26 **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	6:21 am	-	-	-	9,564	1.895	0.632
2	6:28 am	-	-	-	9,639	1.919	0.640
3	6:36 am	-	-	-	9,648	1.922	0.641
4	6:43 am	-	-	-	9,552	1.891	0.630
	Avg.	-	-	-	9,601	1.906	0.636
	Std.Dev.						
	% RSD.				0.52		

Spl #: 18 **Sample ID :** ccv **Type :** Sample **Date:** 04/29/2017 **Status:** Pass
Vial #: 17 **Method :** 9060 Curve 04262017 - Apr 26 **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	6:57 am	-	-	-	243,288	76.523	25.508
2	7:05 am	-	-	-	242,236	76.188	25.396
3	7:13 am	-	-	-	242,918	76.405	25.469
4	7:21 am	-	-	-	245,098	77.101	25.701
	Avg.	-	-	-	243,385	76.554	25.518
	Std.Dev.						
	% RSD.				0.50		

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Date Prepared: 04/29/2017 **By:** TOC

Date Approved: **By:**

Spl #: 19 **Sample ID :** ccb **Type :** Sample **Date:** 04/29/2017 **Status:** Pass
Vial #: 18 **Method :** 9060 Curve 04262017 - Apr 26 **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	7:34 am	-	-	-	4,132	0.160	0.053
2	7:42 am	-	-	-	3,906	0.088	0.029
3	7:49 am	-	-	-	3,766	0.043	0.015
4	7:56 am	-	-	-	3,731	0.032	0.011
	Avg.	-	-	-	3,884	0.081	0.027
	Std.Dev.						
	% RSD.				4.68		

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1638 Roseytown Road
Greensburg, PA
15601
USA

Date Prepared: 04/29/2017 **By:** TOC

Date Approved: **By:**

Method Summary

Method Details

Method Name:	9060 Curve 04262017 - Apr 26, 2017; 11-07-15 AM
Date Created:	04/26/2017
Time Created:	11:08
Created By:	toc
Analysis Mode:	NPOC Only
Sparging Mode:	External
Pre-Acid Volume (mL):	1.000
Sparge Time (mm:ss):	02:00

Volumes

Sample Volume (mL):	3.000
Acid Volume (mL):	1.000
Persulfate Volume(mL):	2.000

Other

SysPressure:	20.00

Pre-Processing

Sample Dilution:	Enabled
Dilution Mode:	Manual
Dilution Factor:	1 : 1

Times

	React	Detect
TIC	01:30	03:00
TOC	02:00	03:00

Temp

	React	Detect
TIC	70	70
TOC	98	98

Outlier Removal Criteria

Enabled:	Yes
Additional Replicates:	1
Max. % RSD.	10.00

Rinses

Rinse Volume (mL):	9.000
Rinses Per Sample:	0
Rinses Per Replicate:	1

Max. Std. Dev. 100 Use Modified Oxidant: No

Calibration Summary

Calibration Generation

Generation Mode:	Manual
# of Stds:	5
Dilution Factor:	10 : 1
Dilution Volume (mL):	1.000
Add Zero as Std #1:	No

Calibration Mode

Primary Mode:	TOC
User for ALL Modes:	Enabled

Calibration Pass/Fail Criteria

Parameter	Enabled	Low	High	Failure
R² (ugC/K-cts)	Yes	0.1000	0.3000	Continue
	Yes	0.995	1.000	Continue
Offset (area) (cts)	No	-	-	-
Offset (mass) (ugC)	No	-	-	-
QC Blank(cts)	No	-	-	-

Checks, QC's and Actions

Type	Target (PPM)	Tolerance (+/- %)	1st Failure	2nd Failure
CK Std	n/a	10.00	Re-run	Continue
QC #1	10.000	15.00	Re-run	Continue
QC #2	25.000	10.00	Re-run	Continue
QC #3	0.000	10.00	Re-run	Continue
QC #4	0.000	10.00	Re-run	Continue
SST	0.000	15.00	Abort	Abort

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Pace Analytical
1638 Roseytown Road
Greensburg, PA
15601
USA

Date Prepared: 04/29/2017 **By:** TOC

Date Approved: **By:**

Calibration Details

Calibration Mode:	TOC
Date Calibrated:	04/26/2017
Time Calibrated:	1:56 pm
Calibrated By:	toc
RF (ugC/k-cts):	0.3193
R2:	0.9998
R:	0.9999
QC Blank(cts):	0
Offset (cts):	3630
Offset (ugC):	-1.159
Reagent Blank (cts):	3,635
Units of Measure:	PPM->mg/L C

Calibration Settings

Stock Conc. For Dilutions: (PPM)	1,000.000
# of Reagent Blanks:	1
EFC Enabled:	No
Total Flowrate w/EFC:	50 ml/min
Check Standards:	Subtract Offset
Samples:	Substract Offset
Regression type:	Unweighted Linear

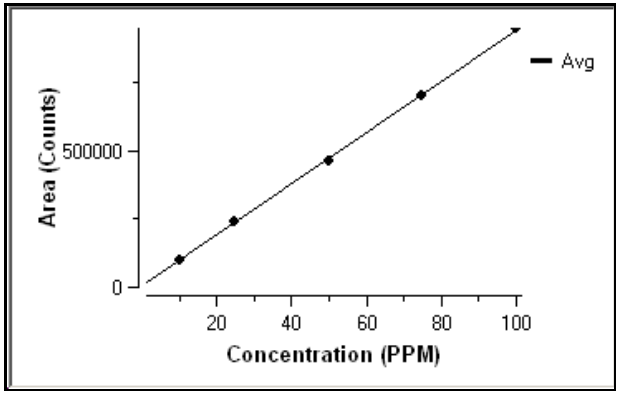
Calculations:

$$Concentration = \frac{\frac{RF}{1000} \times Area}{volume}$$

Samples: $Area = Area_{Peak} - Area_{Offset}$ *or* $Area = Area_{Peak} - Area_{RB}$

CHK Stds: $Area = Area_{Peak} - Area_{Offset}$ *or* $Area = Area_{Peak} - Area_{RW}$

QC Samples: $Area = Area_{Peak} - Area_{QCBlank}$



$$y = m \times x + b$$

$y \Rightarrow Area$ $\quad m \Rightarrow \frac{1000}{RF \times volume}$ $\quad b \Rightarrow 0$

Denotes Excluded Replicates

Denotes First Failed Samples

Pace Analytical
1638 Roseytown Road
Greensburg, PA
15601
USA

Date Prepared: 05/03/2017 **By:** TOC

Date Approved: **By:**

Sample Results Summary

Spl #	Vial #	Sample ID	Num Rep	Act Rep	Method	Type	Dil	Cust ID	Mode	Avg. Area (cts)	Avg. Mass (ug)	Avg. Conc (PPM)	Std. Dev	% RSD	Notes
1	-	Clean Up	4	4	DefaultCleanUpMethod	Clean Up	1 : 1	00000000	TC	9,311	0.000	0.000	763	8.20	
2	1	icv	2	2	5310C Curve 05012017 - May 01, 2017; 02-39-49 PM	Sample	1 : 1	00000000	TOC	98,205	30.752	10.250	892	0.91	Pass
3	2	icb	2	3	5310C Curve 05012017 - May 01, 2017; 02-39-49 PM	Sample	1 : 1	00000000	TOC	4,816	0.000	0.000	386	8.01	Pass
4	3	1266155_27988	2	2	5310C Curve 05012017 - May 01, 2017; 02-39-49 PM	Sample	1 : 1	00000000	TOC	5,523	0.000	0.000	98	1.78	Pass
5	4	1266156_27988	2	2	5310C Curve 05012017 - May 01, 2017; 02-39-49 PM	Sample	1 : 1	00000000	TOC	96,954	30.328	10.109	1,072	1.11	Pass
8	7	30216391001_27988	2	2	5310C Curve 05012017 - May 01, 2017; 02-39-49 PM	Sample	1 : 1	00000000	TOC	34,932	9.350	3.117	2,447	7.01	Pass
9	8	1266158_27988	2	2	5310C Curve 05012017 - May 01, 2017; 02-39-49 PM	Sample	1 : 1	00000000	TOC	29,969	7.672	2.558	55	0.18	Pass
12	11	30216630001_27988	2	2	5310C Curve 05012017 - May 01, 2017; 02-39-49 PM	Sample	1 : 1	00000000	TOC	32,424	8.502	2.834	44	0.13	Pass
13	12	30216630002_27988	2	2	5310C Curve 05012017 - May 01, 2017; 02-39-49 PM	Sample	1 : 1	00000000	TOC	30,375	7.809	2.603	982	3.23	Pass
14	13	30216630003_27988	2	2	5310C Curve 05012017 - May 01, 2017; 02-39-49 PM	Sample	1 : 1	00000000	TOC	28,148	7.056	2.352	624	2.22	Pass
15	14	30216630004_27988	2	2	5310C Curve 05012017 - May 01, 2017; 02-39-49 PM	Sample	1 : 1	00000000	TOC	30,715	7.924	2.641	430	1.40	Pass
16	15	30216630005_27988	2	3	5310C Curve 05012017 - May 01, 2017; 02-39-49 PM	Sample	1 : 1	00000000	TOC	4,526	0.000	0.000	290	6.40	Pass
18	17	ccv	2	2	5310C Curve 05012017 - May 01, 2017; 02-39-49 PM	Sample	1 : 1	00000000	TOC	241,374	79.176	26.392	1,413	0.59	Pass
19	18	ccb	2	3	5310C Curve 05012017 - May 01, 2017; 02-39-49 PM	Sample	1 : 1	00000000	TOC	4,719	0.000	0.000	19	0.40	Pass
20	19	7016409004_27988	2	3	5310C Curve 05012017 - May 01, 2017; 02-39-49 PM	Sample	1 : 1	00000000	TOC	16,794	3.216	1.072	3,352	19.96	Pass
21	20	7016409006_27988	2	2	5310C Curve 05012017 - May 01, 2017; 02-39-49 PM	Sample	1 : 1	00000000	TOC	7,231	0.034	0.011	362	5.00	Pass
22	21	30217063001_27988	2	2	5310C Curve 05012017 - May 01, 2017; 02-39-49 PM	Sample	1 : 1	00000000	TOC	14,613	2.478	0.826	438	2.99	Pass
23	22	30217064001_27988	2	2	5310C Curve 05012017 - May 01, 2017; 02-39-49 PM	Sample	1 : 1	00000000	TOC	11,314	1.362	0.454	205	1.81	Pass
24	23	30217064002_27988	2	2	5310C Curve 05012017 - May 01, 2017; 02-39-49 PM	Sample	1 : 1	00000000	TOC	14,298	2.371	0.790	35	0.25	Pass
25	24	30217065001_27988	2	2	5310C Curve 05012017 - May 01, 2017; 02-39-49 PM	Sample	1 : 1	00000000	TOC	21,466	4.796	1.598	285	1.33	Pass
26	25	30217065002_27988	2	2	5310C Curve 05012017 - May 01, 2017; 02-39-49 PM	Sample	1 : 1	00000000	TOC	33,379	8.825	2.941	172	0.51	Pass
27	26	30217065003_27988x5	2	2	5310C Curve 05012017 - May 01, 2017; 02-39-49 PM	Sample	1 : 1	00000000	TOC	160,901	51.958	17.320	13,465	8.37	Pass
28	27	30217065004_27988	2	2	5310C Curve 05012017 - May 01, 2017; 02-39-49 PM	Sample	1 : 1	00000000	TOC	9,504	0.750	0.249	891	9.38	Pass

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29	28	30217292001_27988x5	2	2	5310C Curve 05012017 - May 01, 2017; 02-39-49 PM	Sample	1 : 1	00000000	TOC	10,208	0.988	0.330	197	1.93	Pass
30	29	30217292001_ice	2	2	5310C Curve 05012017 - May 01, 2017; 02-39-49 PM	Sample	1 : 1	00000000	TOC	10,371	1.043	0.348	176	1.69	Pass
31	30	ccv	2	2	5310C Curve 05012017 - May 01, 2017; 02-39-49 PM	Sample	1 : 1	00000000	TOC	239,253	78.459	26.153	2,657	1.11	Pass
32	31	ccb	2	2	5310C Curve 05012017 - May 01, 2017; 02-39-49 PM	Sample	1 : 1	00000000	TOC	4,817	0.000	0.000	435	9.02	Pass
33	32	ccv	4	4	9060 Curve 04262017 - Apr 26, 2017; 11-07-15 AM	Sample	1 : 1	00000000	TOC	235,504	74.038	24.679	1,081	0.46	Pass
34	33	ccb	4	4	9060 Curve 04262017 - Apr 26, 2017; 11-07-15 AM	Sample	1 : 1	00000000	TOC	4,119	0.156	0.052	233	5.65	Pass
35	34	1265697_27971	4	4	9060 Curve 04262017 - Apr 26, 2017; 11-07-15 AM	Sample	1 : 1	00000000	TOC	8,003	1.396	0.465	126	1.57	Pass
36	35	1265698_27971	4	4	9060 Curve 04262017 - Apr 26, 2017; 11-07-15 AM	Sample	1 : 1	00000000	TOC	103,074	31.753	10.584	277	0.27	Pass
37	36	7016230017_27971x40	4	4	9060 Curve 04262017 - Apr 26, 2017; 11-07-15 AM	Sample	1 : 1	00000000	TOC	154,811	48.272	16.091	1,043	0.67	Pass
38	37	1265699_27971x40	4	4	9060 Curve 04262017 - Apr 26, 2017; 11-07-15 AM	Sample	1 : 1	00000000	TOC	174,749	54.639	18.213	1,489	0.85	Pass
39	38	1265700_27971x40	4	4	9060 Curve 04262017 - Apr 26, 2017; 11-07-15 AM	Sample	1 : 1	00000000	TOC	162,578	50.753	16.918	972	0.60	Pass
42	41	7016230013_27971x40	4	4	9060 Curve 04262017 - Apr 26, 2017; 11-07-15 AM	Sample	1 : 1	00000000	TOC	257,732	81.136	27.045	1,039	0.40	Pass
45	44	7016230016_27971x10	4	4	9060 Curve 04262017 - Apr 26, 2017; 11-07-15 AM	Sample	1 : 1	00000000	TOC	350,014	110.601	36.867	5,882	1.68	Pass
46	45	7016230018_27971x10	4	4	9060 Curve 04262017 - Apr 26, 2017; 11-07-15 AM	Sample	1 : 1	00000000	TOC	540,389	171.389	57.129	3,237	0.60	Pass
47	46	7016230019_27971x1	4	4	9060 Curve 04262017 - Apr 26, 2017; 11-07-15 AM	Sample	1 : 1	00000000	TOC	589,909	187.201	62.400	3,001	0.51	Pass
48	47	7016230020_27971x20	4	4	9060 Curve 04262017 - Apr 26, 2017; 11-07-15 AM	Sample	1 : 1	00000000	TOC	645,928	205.088	68.363	1,502	0.23	Pass
49	48	ccv	4	4	9060 Curve 04262017 - Apr 26, 2017; 11-07-15 AM	Sample	1 : 1	00000000	TOC	247,281	77.798	25.933	2,123	0.86	Pass
50	49	ccb	4	4	9060 Curve 04262017 - Apr 26, 2017; 11-07-15 AM	Sample	1 : 1	00000000	TOC	10,748	2.273	0.757	578	5.37	Pass
51	50	1265702_27972	4	4	9060 Curve 04262017 - Apr 26, 2017; 11-07-15 AM	Sample	1 : 1	00000000	TOC	10,033	2.044	0.682	121	1.21	Pass
52	51	1265703_27972	4	4	9060 Curve 04262017 - Apr 26, 2017; 11-07-15 AM	Sample	1 : 1	00000000	TOC	109,592	33.834	11.278	233	0.21	Pass
53	52	7016368002_27972	4	4	9060 Curve 04262017 - Apr 26, 2017; 11-07-15 AM	Sample	1 : 1	00000000	TOC	24,994	6.821	2.274	225	0.90	Pass
54	53	1265704_27972	4	4	9060 Curve 04262017 - Apr 26, 2017; 11-07-15 AM	Sample	1 : 1	00000000	TOC	120,137	37.201	12.400	611	0.51	Pass
55	54	1265705_27972	4	4	9060 Curve 04262017 - Apr 26, 2017; 11-07-15 AM	Sample	1 : 1	00000000	TOC	117,930	36.496	12.165	406	0.34	Pass
56	55	7016230021_27972x10	4	4	9060 Curve 04262017 - Apr 26, 2017; 11-07-15 AM	Sample	1 : 1	00000000	TOC	475,568	150.691	50.231	8,887	1.87	Pass
57	56	7016368001_27972	4	4	9060 Curve 04262017 - Apr 26, 2017; 11-07-15 AM	Sample	1 : 1	00000000	TOC	28,107	7.816	2.605	1,449	5.15	Pass

58	57	7016368003_27972x10	4	4	9060 Curve 04262017 - Apr 26, 2017; 11-07-15 AM	Sample	1 : 1	00000000	TOC	39,032	11.304	3.768	282	0.72	Pass
59	58	7016368004_27972	4	4	9060 Curve 04262017 - Apr 26, 2017; 11-07-15 AM	Sample	1 : 1	00000000	TOC	201,808	63.279	21.093	2,041	1.01	Pass
60	59	7016368005_27972	4	4	9060 Curve 04262017 - Apr 26, 2017; 11-07-15 AM	Sample	1 : 1	00000000	TOC	77,115	23.464	7.821	496	0.64	Pass
61	60	7016368006_27972	4	4	9060 Curve 04262017 - Apr 26, 2017; 11-07-15 AM	Sample	1 : 1	00000000	TOC	408,832	129.382	43.127	2,430	0.59	Pass
62	61	7016368007_27972	4	4	9060 Curve 04262017 - Apr 26, 2017; 11-07-15 AM	Sample	1 : 1	00000000	TOC	29,923	8.395	2.799	1,878	6.28	Pass
63	62	7016368008_27972	4	4	9060 Curve 04262017 - Apr 26, 2017; 11-07-15 AM	Sample	1 : 1	00000000	TOC	10,917	2.327	0.775	277	2.54	Pass
64	63	7016360001_27972x10	4	4	9060 Curve 04262017 - Apr 26, 2017; 11-07-15 AM	Sample	1 : 1	00000000	TOC	40,110	11.648	3.883	358	0.89	Pass
65	64	ccv	4	4	9060 Curve 04262017 - Apr 26, 2017; 11-07-15 AM	Sample	1 : 1	00000000	TOC	249,406	78.477	26.159	1,494	0.60	Pass
66	65	ccb	4	4	9060 Curve 04262017 - Apr 26, 2017; 11-07-15 AM	Sample	1 : 1	00000000	TOC	10,705	2.259	0.753	281	2.62	Pass
67	69	7016230011_27971x400 #1	4	4	9060 Curve 04262017 - Apr 26, 2017; 11-07-15 AM	Sample	1 : 1	00000000	TOC	262,917	82.791	27.597	2,714	1.03	Pass
68	70	7016230012_27971x400 #1	4	4	9060 Curve 04262017 - Apr 26, 2017; 11-07-15 AM	Sample	1 : 1	00000000	TOC	113,914	35.214	11.738	1,081	0.95	Pass
69	71	7016230014_27971x40# 1	4	4	9060 Curve 04262017 - Apr 26, 2017; 11-07-15 AM	Sample	1 : 1	00000000	TOC	312,922	98.758	32.919	2,287	0.73	Pass
70	72	7016230015_27971x40# 1	4	4	9060 Curve 04262017 - Apr 26, 2017; 11-07-15 AM	Sample	1 : 1	00000000	TOC	338,059	106.784	35.595	1,056	0.31	Pass
71	73	ccv#1	4	4	9060 Curve 04262017 - Apr 26, 2017; 11-07-15 AM	Sample	1 : 1	00000000	TOC	236,409	74.327	24.776	2,116	0.89	Pass
72	74	ccb#1	4	5	9060 Curve 04262017 - Apr 26, 2017; 11-07-15 AM	Sample	1 : 1	00000000	TOC	3,770	0.045	0.015	161	4.27	Pass

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Date Prepared: 05/03/2017 **By:** TOC

Date Approved: **By:**

Sample Results

Spl #: 1 **Sample ID :** Clean Up **Type :** Clean Up **Date:** 05/01/2017 **Status:**
Vial #: - **Method :** DefaultCleanUpMethod **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TC Area (cts)	TC Mass (ugC)	TC Conc (PPM)
1	7:55 pm	-	-	-	10,131	0.000	0.000
2	8:01 pm	-	-	-	9,769	0.000	0.000
3	8:07 pm	-	-	-	8,822	0.000	0.000
4	8:13 pm	-	-	-	8,520	0.000	0.000
	Avg.	-	-	-	9,311	0.000	0.000
	Std.Dev.						
	% RSD.				8.20		

Spl #: 2 **Sample ID :** icv **Type :** Sample **Date:** 05/01/2017 **Status:** Pass
Vial #: 1 **Method :** 5310C Curve 05012017 - May **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	8:21 pm	-	-	-	97,574	30.538	10.179
2	8:30 pm	-	-	-	98,836	30.965	10.322
	Avg.	-	-	-	98,205	30.752	10.250
	Std.Dev.						
	% RSD.				0.91		

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Spl #: 3 **Sample ID :** icb **Type :** Sample **Date:** 05/01/2017 **Status:** Pass
Vial #: 2 **Method :** 5310C Curve 05012017 - May **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	8:41 pm	-	-	-	6,191	0.000	0.000
2	8:49 pm	-	-	-	5,089	0.000	0.000
3	8:57 pm	-	-	-	4,543	0.000	0.000
	Avg.	-	-	-	4,816	0.000	0.000
	Std.Dev.						
	% RSD.				8.01		

Spl #: 4 **Sample ID :** 1266155_27988 **Type :** Sample **Date:** 05/01/2017 **Status:** Pass
Vial #: 3 **Method :** 5310C Curve 05012017 - May **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	9:06 pm	-	-	-	5,592	0.000	0.000
2	9:15 pm	-	-	-	5,453	0.000	0.000
	Avg.	-	-	-	5,523	0.000	0.000
	Std.Dev.						
	% RSD.				1.78		

Spl #: 5 **Sample ID :** 1266156_27988 **Type :** Sample **Date:** 05/01/2017 **Status:** Pass
Vial #: 4 **Method :** 5310C Curve 05012017 - May **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	9:26 pm	-	-	-	97,712	30.585	10.195
2	9:35 pm	-	-	-	96,196	30.072	10.023
	Avg.	-	-	-	96,954	30.328	10.109
	Std.Dev.						
	% RSD.				1.11		

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Date Prepared: 05/03/2017 **By:** TOC

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Spl #: 8 **Sample ID :** 30216391001_27988 **Type :** Sample **Date:** 05/01/2017 **Status:** Pass
Vial #: 7 **Method :** 5310C Curve 05012017 - May **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	10:42 pm	-	-	-	36,663	9.936	3.312
2	10:51 pm	-	-	-	33,202	8.765	2.922
	Avg.	-	-	-	34,932	9.350	3.117
	Std.Dev.						
	% RSD.				7.01		

Spl #: 9 **Sample ID :** 1266158_27988 **Type :** Sample **Date:** 05/01/2017 **Status:** Pass
Vial #: 8 **Method :** 5310C Curve 05012017 - May **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	11:03 pm	-	-	-	29,930	7.659	2.553
2	11:11 pm	-	-	-	30,008	7.685	2.562
	Avg.	-	-	-	29,969	7.672	2.558
	Std.Dev.						
	% RSD.				0.18		

Spl #: 12 **Sample ID :** 30216630001_27988 **Type :** Sample **Date:** 05/02/2017 **Status:** Pass
Vial #: 11 **Method :** 5310C Curve 05012017 - May **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	12:16 am	-	-	-	32,393	8.492	2.831
2	12:24 am	-	-	-	32,455	8.513	2.838
	Avg.	-	-	-	32,424	8.502	2.834
	Std.Dev.						
	% RSD.				0.13		

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Date Prepared: 05/03/2017 **By:** TOC

Date Approved: **By:**

Spl #: 13 **Sample ID :** 30216630002_27988 **Type :** Sample **Date:** 05/02/2017 **Status:** Pass
Vial #: 12 **Method :** 5310C Curve 05012017 - May **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	12:36 am	-	-	-	29,681	7.574	2.525
2	12:44 am	-	-	-	31,069	8.044	2.681
	Avg.	-	-	-	30,375	7.809	2.603
	Std.Dev.						
	% RSD.				3.23		

Spl #: 14 **Sample ID :** 30216630003_27988 **Type :** Sample **Date:** 05/02/2017 **Status:** Pass
Vial #: 13 **Method :** 5310C Curve 05012017 - May **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	12:57 am	-	-	-	27,707	6.907	2.302
2	1:06 am	-	-	-	28,590	7.205	2.402
	Avg.	-	-	-	28,148	7.056	2.352
	Std.Dev.						
	% RSD.				2.22		

Spl #: 15 **Sample ID :** 30216630004_27988 **Type :** Sample **Date:** 05/02/2017 **Status:** Pass
Vial #: 14 **Method :** 5310C Curve 05012017 - May **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	1:19 am	-	-	-	30,411	7.821	2.607
2	1:28 am	-	-	-	31,020	8.027	2.676
	Avg.	-	-	-	30,715	7.924	2.641
	Std.Dev.						
	% RSD.				1.40		

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Spl #: 16 **Sample ID :** 30216630005_27988 **Type :** Sample **Date:** 05/02/2017 **Status:** Pass
Vial #: 15 **Method :** 5310C Curve 05012017 - May **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	1:40 am	-	-	-	6,213	0.000	0.000
2	1:49 am	-	-	-	4,731	0.000	0.000
3	1:58 am	-	-	-	4,321	0.000	0.000
	Avg.	-	-	-	4,526	0.000	0.000
	Std.Dev.						
	% RSD.				6.40		

Spl #: 18 **Sample ID :** ccv **Type :** Sample **Date:** 05/02/2017 **Status:** Pass
Vial #: 17 **Method :** 5310C Curve 05012017 - May **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	2:36 am	-	-	-	242,373	79.514	26.505
2	2:44 am	-	-	-	240,375	78.838	26.279
	Avg.	-	-	-	241,374	79.176	26.392
	Std.Dev.						
	% RSD.				0.59		

Spl #: 19 **Sample ID :** ccb **Type :** Sample **Date:** 05/02/2017 **Status:** Pass
Vial #: 18 **Method :** 5310C Curve 05012017 - May **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	2:57 am	-	-	-	5,609	0.000	0.000
2	3:06 am	-	-	-	4,733	0.000	0.000
3	3:15 am	-	-	-	4,706	0.000	0.000
	Avg.	-	-	-	4,719	0.000	0.000
	Std.Dev.						
	% RSD.				0.40		

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Date Prepared: 05/03/2017 **By:** TOC

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Spl #: 20 **Sample ID :** 7016409004_27988 **Type :** Sample **Date:** 05/02/2017 **Status:** Pass
Vial #: 19 **Method :** 5310C Curve 05012017 - May **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	3:24 am	-	-	-	9,933	0.895	0.298
2	3:32 am	-	-	-	14,424	2.414	0.805
3	3:41 am	-	-	-	19,165	4.018	1.339
	Avg.	-	-	-	16,794	3.216	1.072
	Std.Dev.						
	% RSD.				19.96		

Spl #: 21 **Sample ID :** 7016409006_27988 **Type :** Sample **Date:** 05/02/2017 **Status:** Pass
Vial #: 20 **Method :** 5310C Curve 05012017 - May **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	3:50 am	-	-	-	6,975	0.000	0.000
2	3:59 am	-	-	-	7,487	0.067	0.023
	Avg.	-	-	-	7,231	0.034	0.011
	Std.Dev.						
	% RSD.				5.00		

Spl #: 22 **Sample ID :** 30217063001_27988 **Type :** Sample **Date:** 05/02/2017 **Status:** Pass
Vial #: 21 **Method :** 5310C Curve 05012017 - May **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	4:11 am	-	-	-	14,922	2.582	0.861
2	4:19 am	-	-	-	14,303	2.373	0.791
	Avg.	-	-	-	14,613	2.478	0.826
	Std.Dev.						
	% RSD.				2.99		

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Date Prepared: 05/03/2017 **By:** TOC

Date Approved: **By:**

Spl #: 23 **Sample ID :** 30217064001_27988 **Type :** Sample **Date:** 05/02/2017 **Status:** Pass
Vial #: 22 **Method :** 5310C Curve 05012017 - May **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	4:30 am	-	-	-	11,459	1.411	0.470
2	4:39 am	-	-	-	11,169	1.313	0.438
	Avg.	-	-	-	11,314	1.362	0.454
	Std.Dev.						
	% RSD.				1.81		

Spl #: 24 **Sample ID :** 30217064002_27988 **Type :** Sample **Date:** 05/02/2017 **Status:** Pass
Vial #: 23 **Method :** 5310C Curve 05012017 - May **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	4:50 am	-	-	-	14,323	2.380	0.793
2	4:58 am	-	-	-	14,273	2.363	0.788
	Avg.	-	-	-	14,298	2.371	0.790
	Std.Dev.						
	% RSD.				0.25		

Spl #: 25 **Sample ID :** 30217065001_27988 **Type :** Sample **Date:** 05/02/2017 **Status:** Pass
Vial #: 24 **Method :** 5310C Curve 05012017 - May **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	5:09 am	-	-	-	21,265	4.728	1.576
2	5:18 am	-	-	-	21,668	4.864	1.621
	Avg.	-	-	-	21,466	4.796	1.598
	Std.Dev.						
	% RSD.				1.33		

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Date Prepared: 05/03/2017 **By:** TOC

Date Approved: **By:**

Spl #: 26 **Sample ID :** 30217065002_27988 **Type :** Sample **Date:** 05/02/2017 **Status:** Pass
Vial #: 25 **Method :** 5310C Curve 05012017 - May **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	5:29 am	-	-	-	33,500	8.866	2.955
2	5:37 am	-	-	-	33,257	8.784	2.927
	Avg.	-	-	-	33,379	8.825	2.941
	Std.Dev.						
	% RSD.				0.51		

Spl #: 27 **Sample ID :** 30217065003_27988x5 **Type :** Sample **Date:** 05/02/2017 **Status:** Pass
Vial #: 26 **Method :** 5310C Curve 05012017 - May **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	5:49 am	-	-	-	151,380	48.737	16.246
2	5:58 am	-	-	-	170,423	55.178	18.393
	Avg.	-	-	-	160,901	51.958	17.320
	Std.Dev.						
	% RSD.				8.37		

Spl #: 28 **Sample ID :** 30217065004_27988 **Type :** Sample **Date:** 05/02/2017 **Status:** Pass
Vial #: 27 **Method :** 5310C Curve 05012017 - May **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	6:10 am	-	-	-	10,134	0.963	0.320
2	6:19 am	-	-	-	8,873	0.537	0.179
	Avg.	-	-	-	9,504	0.750	0.249
	Std.Dev.						
	% RSD.				9.38		

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Spl #: 29 **Sample ID :** 30217292001_27988x5 **Type :** Sample **Date:** 05/02/2017 **Status:** Pass
Vial #: 28 **Method :** 5310C Curve 05012017 - May **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	6:31 am	-	-	-	10,069	0.941	0.314
2	6:40 am	-	-	-	10,347	1.035	0.345
	Avg.	-	-	-	10,208	0.988	0.330
	Std.Dev.						
	% RSD.				1.93		

Spl #: 30 **Sample ID :** 30217292001_ice **Type :** Sample **Date:** 05/02/2017 **Status:** Pass
Vial #: 29 **Method :** 5310C Curve 05012017 - May **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	6:52 am	-	-	-	10,495	1.085	0.362
2	7:00 am	-	-	-	10,247	1.001	0.334
	Avg.	-	-	-	10,371	1.043	0.348
	Std.Dev.						
	% RSD.				1.69		

Spl #: 31 **Sample ID :** ccv **Type :** Sample **Date:** 05/02/2017 **Status:** Pass
Vial #: 30 **Method :** 5310C Curve 05012017 - May **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	7:12 am	-	-	-	241,131	79.094	26.365
2	7:22 am	-	-	-	237,374	77.823	25.941
	Avg.	-	-	-	239,253	78.459	26.153
	Std.Dev.						
	% RSD.				1.11		

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Spl #: 32 **Sample ID :** ccb **Type :** Sample **Date:** 05/02/2017 **Status:** Pass
Vial #: 31 **Method :** 5310C Curve 05012017 - May **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	7:33 am	-	-	-	5,124	0.000	0.000
2	7:42 am	-	-	-	4,510	0.000	0.000
	Avg.	-	-	-	4,817	0.000	0.000
	Std.Dev.						
	% RSD.				9.02		

Spl #: 33 **Sample ID :** ccv **Type :** Sample **Date:** 05/02/2017 **Status:** Pass
Vial #: 32 **Method :** 9060 Curve 04262017 - Apr 26 **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	7:55 am	-	-	-	236,653	74.405	24.802
2	8:03 am	-	-	-	236,133	74.239	24.746
3	8:11 am	-	-	-	234,942	73.858	24.620
4	8:19 am	-	-	-	234,289	73.650	24.550
	Avg.	-	-	-	235,504	74.038	24.679
	Std.Dev.						
	% RSD.				0.46		

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Spl #: 34 **Sample ID :** ccb **Type :** Sample **Date:** 05/02/2017 **Status:** Pass
Vial #: 33 **Method :** 9060 Curve 04262017 - Apr 26 **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	8:32 am	-	-	-	4,414	0.250	0.083
2	8:40 am	-	-	-	4,160	0.169	0.056
3	8:47 am	-	-	-	3,857	0.073	0.024
4	8:54 am	-	-	-	4,045	0.132	0.044
	Avg.	-	-	-	4,119	0.156	0.052
	Std.Dev.						
	% RSD.				5.65		

Spl #: 35 **Sample ID :** 1265697_27971 **Type :** Sample **Date:** 05/02/2017 **Status:** Pass
Vial #: 34 **Method :** 9060 Curve 04262017 - Apr 26 **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	9:08 am	-	-	-	8,075	1.419	0.473
2	9:15 am	-	-	-	7,818	1.337	0.446
3	9:22 am	-	-	-	8,089	1.424	0.475
4	9:30 am	-	-	-	8,029	1.405	0.468
	Avg.	-	-	-	8,003	1.396	0.465
	Std.Dev.						
	% RSD.				1.57		

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Date Prepared: 05/03/2017 **By:** TOC

Date Approved: **By:**

Spl #: 36 **Sample ID :** 1265698_27971 **Type :** Sample **Date:** 05/02/2017 **Status:** Pass
Vial #: 35 **Method :** 9060 Curve 04262017 - Apr 26 **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	9:44 am	-	-	-	103,079	31.754	10.585
2	9:52 am	-	-	-	102,686	31.629	10.542
3	10:00 am	-	-	-	103,205	31.795	10.598
4	10:08 am	-	-	-	103,324	31.833	10.611
	Avg.	-	-	-	103,074	31.753	10.584
	Std.Dev.						
	% RSD.				0.27		

Spl #: 37 **Sample ID :** 7016230017_27971x40 **Type :** Sample **Date:** 05/02/2017 **Status:** Pass
Vial #: 36 **Method :** 9060 Curve 04262017 - Apr 26 **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	10:21 am	-	-	-	153,550	47.870	15.957
2	10:29 am	-	-	-	154,546	48.188	16.063
3	10:36 am	-	-	-	155,101	48.365	16.122
4	10:44 am	-	-	-	156,045	48.666	16.222
	Avg.	-	-	-	154,811	48.272	16.091
	Std.Dev.						
	% RSD.				0.67		

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Date Prepared: 05/03/2017 **By:** TOC

Date Approved: **By:**

Spl #: 38 **Sample ID :** 1265699_27971x40 **Type :** Sample **Date:** 05/02/2017 **Status:** Pass
Vial #: 37 **Method :** 9060 Curve 04262017 - Apr 26 **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	10:57 am	-	-	-	173,707	54.306	18.102
2	11:05 am	-	-	-	173,384	54.203	18.068
3	11:13 am	-	-	-	176,585	55.225	18.408
4	11:21 am	-	-	-	175,322	54.822	18.273
	Avg.	-	-	-	174,749	54.639	18.213
	Std.Dev.						
	% RSD.				0.85		

Spl #: 39 **Sample ID :** 1265700_27971x40 **Type :** Sample **Date:** 05/02/2017 **Status:** Pass
Vial #: 38 **Method :** 9060 Curve 04262017 - Apr 26 **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	11:35 am	-	-	-	163,872	51.166	17.055
2	11:43 am	-	-	-	161,612	50.444	16.815
3	11:52 am	-	-	-	162,122	50.607	16.869
4	12:00 pm	-	-	-	162,707	50.794	16.931
	Avg.	-	-	-	162,578	50.753	16.918
	Std.Dev.						
	% RSD.				0.60		

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Date Prepared: 05/03/2017 **By:** TOC

Date Approved: **By:**

Spl #: 42 **Sample ID :** 7016230013_27971x40 **Type :** Sample **Date:** 05/02/2017 **Status:** Pass
Vial #: 41 **Method :** 9060 Curve 04262017 - Apr 26 **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	1:30 pm	-	-	-	257,454	81.047	27.016
2	1:38 pm	-	-	-	258,495	81.379	27.126
3	1:47 pm	-	-	-	258,599	81.412	27.137
4	1:55 pm	-	-	-	256,380	80.704	26.901
	Avg.	-	-	-	257,732	81.136	27.045
	Std.Dev.						
	% RSD.				0.40		

Spl #: 45 **Sample ID :** 7016230016_27971x10 **Type :** Sample **Date:** 05/02/2017 **Status:** Pass
Vial #: 44 **Method :** 9060 Curve 04262017 - Apr 26 **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	3:25 pm	-	-	-	358,571	113.334	37.778
2	3:33 pm	-	-	-	349,173	110.333	36.778
3	3:42 pm	-	-	-	346,386	109.443	36.481
4	3:50 pm	-	-	-	345,926	109.296	36.432
	Avg.	-	-	-	350,014	110.601	36.867
	Std.Dev.						
	% RSD.				1.68		

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Date Prepared: 05/03/2017 **By:** TOC

Date Approved: **By:**

Spl #: 46 **Sample ID :** 7016230018_27971x10 **Type :** Sample **Date:** 05/02/2017 **Status:** Pass
Vial #: 45 **Method :** 9060 Curve 04262017 - Apr 26 **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	4:04 pm	-	-	-	542,970	172.213	57.404
2	4:12 pm	-	-	-	538,411	170.757	56.919
3	4:20 pm	-	-	-	543,303	172.319	57.440
4	4:28 pm	-	-	-	536,871	170.266	56.755
	Avg.	-	-	-	540,389	171.389	57.129
	Std.Dev.						
	% RSD.				0.60		

Spl #: 47 **Sample ID :** 7016230019_27971x1 **Type :** Sample **Date:** 05/02/2017 **Status:** Pass
Vial #: 46 **Method :** 9060 Curve 04262017 - Apr 26 **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	4:42 pm	-	-	-	593,385	188.311	62.770
2	4:50 pm	-	-	-	587,052	186.288	62.096
3	4:58 pm	-	-	-	591,414	187.681	62.560
4	5:06 pm	-	-	-	587,785	186.522	62.174
	Avg.	-	-	-	589,909	187.201	62.400
	Std.Dev.						
	% RSD.				0.51		

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Date Prepared: 05/03/2017 **By:** TOC

Date Approved: **By:**

Spl #: 48 **Sample ID :** 7016230020_27971x20 **Type :** Sample **Date:** 05/02/2017 **Status:** Pass
Vial #: 47 **Method :** 9060 Curve 04262017 - Apr 26 **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	5:20 pm	-	-	-	644,264	204.556	68.186
2	5:28 pm	-	-	-	645,052	204.808	68.269
3	5:36 pm	-	-	-	647,147	205.477	68.492
4	5:44 pm	-	-	-	647,248	205.509	68.503
	Avg.	-	-	-	645,928	205.088	68.363
	Std.Dev.						
	% RSD.				0.23		

Spl #: 49 **Sample ID :** ccv **Type :** Sample **Date:** 05/02/2017 **Status:** Pass
Vial #: 48 **Method :** 9060 Curve 04262017 - Apr 26 **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	5:58 pm	-	-	-	250,189	78.727	26.242
2	6:07 pm	-	-	-	246,858	77.663	25.888
3	6:15 pm	-	-	-	246,984	77.704	25.901
4	6:23 pm	-	-	-	245,092	77.099	25.700
	Avg.	-	-	-	247,281	77.798	25.933
	Std.Dev.						
	% RSD.				0.86		

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Date Prepared: 05/03/2017 **By:** TOC

Date Approved: **By:**

Spl #: 50 **Sample ID :** ccb **Type :** Sample **Date:** 05/02/2017 **Status:** Pass
Vial #: 49 **Method :** 9060 Curve 04262017 - Apr 26 **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	6:36 pm	-	-	-	11,597	2.544	0.847
2	6:44 pm	-	-	-	10,568	2.215	0.739
3	6:52 pm	-	-	-	10,517	2.199	0.732
4	6:59 pm	-	-	-	10,308	2.132	0.711
	Avg.	-	-	-	10,748	2.273	0.757
	Std.Dev.						
	% RSD.				5.37		

Spl #: 51 **Sample ID :** 1265702_27972 **Type :** Sample **Date:** 05/02/2017 **Status:** Pass
Vial #: 50 **Method :** 9060 Curve 04262017 - Apr 26 **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	7:12 pm	-	-	-	10,202	2.099	0.700
2	7:20 pm	-	-	-	9,971	2.025	0.675
3	7:28 pm	-	-	-	10,032	2.044	0.681
4	7:35 pm	-	-	-	9,925	2.010	0.670
	Avg.	-	-	-	10,033	2.044	0.682
	Std.Dev.						
	% RSD.				1.21		

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Date Prepared: 05/03/2017 **By:** TOC

Date Approved: **By:**

Spl #: 52 **Sample ID :** 1265703_27972 **Type :** Sample **Date:** 05/02/2017 **Status:** Pass
Vial #: 51 **Method :** 9060 Curve 04262017 - Apr 26 **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	7:49 pm	-	-	-	109,752	33.885	11.295
2	7:57 pm	-	-	-	109,746	33.883	11.294
3	8:05 pm	-	-	-	109,256	33.727	11.242
4	8:13 pm	-	-	-	109,616	33.842	11.281
	Avg.	-	-	-	109,592	33.834	11.278
	Std.Dev.						
	% RSD.				0.21		

Spl #: 53 **Sample ID :** 7016368002_27972 **Type :** Sample **Date:** 05/02/2017 **Status:** Pass
Vial #: 52 **Method :** 9060 Curve 04262017 - Apr 26 **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	8:27 pm	-	-	-	25,045	6.838	2.279
2	8:35 pm	-	-	-	25,163	6.876	2.292
3	8:43 pm	-	-	-	25,102	6.856	2.285
4	8:50 pm	-	-	-	24,664	6.716	2.239
	Avg.	-	-	-	24,994	6.821	2.274
	Std.Dev.						
	% RSD.				0.90		

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Date Prepared: 05/03/2017 **By:** TOC

Date Approved: **By:**

Spl #: 54 **Sample ID :** 1265704_27972 **Type :** Sample **Date:** 05/02/2017 **Status:** Pass
Vial #: 53 **Method :** 9060 Curve 04262017 - Apr 26 **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	9:04 pm	-	-	-	121,015	37.482	12.494
2	9:12 pm	-	-	-	120,074	37.181	12.394
3	9:20 pm	-	-	-	119,648	37.045	12.348
4	9:28 pm	-	-	-	119,811	37.097	12.366
	Avg.	-	-	-	120,137	37.201	12.400
	Std.Dev.						
	% RSD.				0.51		

Spl #: 55 **Sample ID :** 1265705_27972 **Type :** Sample **Date:** 05/02/2017 **Status:** Pass
Vial #: 54 **Method :** 9060 Curve 04262017 - Apr 26 **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	9:42 pm	-	-	-	118,486	36.674	12.225
2	9:50 pm	-	-	-	117,554	36.376	12.125
3	9:58 pm	-	-	-	117,722	36.430	12.143
4	10:06 pm	-	-	-	117,959	36.505	12.169
	Avg.	-	-	-	117,930	36.496	12.165
	Std.Dev.						
	% RSD.				0.34		

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Date Prepared: 05/03/2017 **By:** TOC

Date Approved: **By:**

Spl #: 56 **Sample ID :** 7016230021_27972x10 **Type :** Sample **Date:** 05/02/2017 **Status:** Pass
Vial #: 55 **Method :** 9060 Curve 04262017 - Apr 26 **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	10:20 pm	-	-	-	464,412	147.129	49.043
2	10:28 pm	-	-	-	472,417	149.685	49.895
3	10:36 pm	-	-	-	482,371	152.864	50.955
4	10:45 pm	-	-	-	483,070	153.087	51.029
	Avg.	-	-	-	475,568	150.691	50.231
	Std.Dev.						
	% RSD.				1.87		

Spl #: 57 **Sample ID :** 7016368001_27972 **Type :** Sample **Date:** 05/02/2017 **Status:** Pass
Vial #: 56 **Method :** 9060 Curve 04262017 - Apr 26 **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	10:58 pm	-	-	-	30,180	8.478	2.826
2	11:06 pm	-	-	-	28,021	7.788	2.595
3	11:14 pm	-	-	-	27,209	7.529	2.510
4	11:22 pm	-	-	-	27,019	7.468	2.489
	Avg.	-	-	-	28,107	7.816	2.605
	Std.Dev.						
	% RSD.				5.15		

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Date Prepared: 05/03/2017 **By:** TOC

Date Approved: **By:**

Spl #: 58 **Sample ID :** 7016368003_27972x10 **Type :** Sample **Date:** 05/03/2017 **Status:** Pass
Vial #: 57 **Method :** 9060 Curve 04262017 - Apr 26 **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	11:36 pm	-	-	-	39,012	11.298	3.766
2	11:44 pm	-	-	-	39,397	11.420	3.807
3	11:52 pm	-	-	-	38,708	11.201	3.734
4	12:00 am	-	-	-	39,010	11.297	3.766
	Avg.	-	-	-	39,032	11.304	3.768
	Std.Dev.						
	% RSD.				0.72		

Spl #: 59 **Sample ID :** 7016368004_27972 **Type :** Sample **Date:** 05/03/2017 **Status:** Pass
Vial #: 58 **Method :** 9060 Curve 04262017 - Apr 26 **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	12:14 am	-	-	-	200,097	62.733	20.911
2	12:22 am	-	-	-	199,986	62.697	20.899
3	12:30 am	-	-	-	203,536	63.831	21.277
4	12:39 am	-	-	-	203,613	63.855	21.285
	Avg.	-	-	-	201,808	63.279	21.093
	Std.Dev.						
	% RSD.				1.01		

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Date Prepared: 05/03/2017 **By:** TOC

Date Approved: **By:**

Spl #: 60 **Sample ID :** 7016368005_27972 **Type :** Sample **Date:** 05/03/2017 **Status:** Pass
Vial #: 59 **Method :** 9060 Curve 04262017 - Apr 26 **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	12:53 am	-	-	-	77,124	23.467	7.822
2	1:01 am	-	-	-	76,421	23.243	7.748
3	1:09 am	-	-	-	77,563	23.607	7.869
4	1:17 am	-	-	-	77,349	23.539	7.846
	Avg.	-	-	-	77,115	23.464	7.821
	Std.Dev.						
	% RSD.				0.64		

Spl #: 61 **Sample ID :** 7016368006_27972 **Type :** Sample **Date:** 05/03/2017 **Status:** Pass
Vial #: 60 **Method :** 9060 Curve 04262017 - Apr 26 **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	1:31 am	-	-	-	410,995	130.073	43.358
2	1:39 am	-	-	-	410,344	129.865	43.288
3	1:47 am	-	-	-	408,409	129.247	43.082
4	1:56 am	-	-	-	405,582	128.344	42.781
	Avg.	-	-	-	408,832	129.382	43.127
	Std.Dev.						
	% RSD.				0.59		

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Date Prepared: 05/03/2017 **By:** TOC

Date Approved: **By:**

Spl #: 62 **Sample ID :** 7016368007_27972 **Type :** Sample **Date:** 05/03/2017 **Status:** Pass
Vial #: 61 **Method :** 9060 Curve 04262017 - Apr 26 **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	2:10 am	-	-	-	32,712	9.286	3.095
2	2:18 am	-	-	-	29,364	8.217	2.739
3	2:26 am	-	-	-	28,826	8.045	2.682
4	2:34 am	-	-	-	28,788	8.033	2.678
	Avg.	-	-	-	29,923	8.395	2.799
	Std.Dev.						
	% RSD.				6.28		

Spl #: 63 **Sample ID :** 7016368008_27972 **Type :** Sample **Date:** 05/03/2017 **Status:** Pass
Vial #: 62 **Method :** 9060 Curve 04262017 - Apr 26 **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	2:47 am	-	-	-	11,283	2.443	0.815
2	2:55 am	-	-	-	10,975	2.345	0.782
3	3:03 am	-	-	-	10,752	2.274	0.757
4	3:11 am	-	-	-	10,659	2.245	0.748
	Avg.	-	-	-	10,917	2.327	0.775
	Std.Dev.						
	% RSD.				2.54		

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Date Prepared: 05/03/2017 **By:** TOC

Date Approved: **By:**

Spl #: 64 **Sample ID :** 7016360001_27972x10 **Type :** Sample **Date:** 05/03/2017 **Status:** Pass
Vial #: 63 **Method :** 9060 Curve 04262017 - Apr 26 **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	3:24 am	-	-	-	40,005	11.615	3.872
2	3:32 am	-	-	-	40,348	11.724	3.908
3	3:40 am	-	-	-	40,435	11.752	3.917
4	3:48 am	-	-	-	39,651	11.502	3.834
	Avg.	-	-	-	40,110	11.648	3.883
	Std.Dev.						
	% RSD.				0.89		

Spl #: 65 **Sample ID :** ccv **Type :** Sample **Date:** 05/03/2017 **Status:** Pass
Vial #: 64 **Method :** 9060 Curve 04262017 - Apr 26 **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	4:02 am	-	-	-	251,337	79.094	26.365
2	4:10 am	-	-	-	249,374	78.467	26.156
3	4:18 am	-	-	-	249,217	78.417	26.139
4	4:27 am	-	-	-	247,695	77.931	25.977
	Avg.	-	-	-	249,406	78.477	26.159
	Std.Dev.						
	% RSD.				0.60		

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Date Prepared: 05/03/2017 **By:** TOC

Date Approved: **By:**

Spl #: 66 **Sample ID :** ccb **Type :** Sample **Date:** 05/03/2017 **Status:** Pass
Vial #: 65 **Method :** 9060 Curve 04262017 - Apr 26 **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	4:40 am	-	-	-	11,112	2.389	0.796
2	4:48 am	-	-	-	10,668	2.247	0.749
3	4:55 am	-	-	-	10,554	2.211	0.736
4	5:03 am	-	-	-	10,488	2.190	0.730
	Avg.	-	-	-	10,705	2.259	0.753
	Std.Dev.						
	% RSD.				2.62		

Spl #: 67 **Sample ID :** 7016230011_27971x400#1 **Type :** Sample **Date:** 05/03/2017 **Status:** Pass
Vial #: 69 **Method :** 9060 Curve 04262017 - Apr 26 **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	5:17 am	-	-	-	259,419	81.674	27.225
2	5:25 am	-	-	-	262,518	82.664	27.555
3	5:33 am	-	-	-	263,841	83.086	27.695
4	5:41 am	-	-	-	265,891	83.741	27.914
	Avg.	-	-	-	262,917	82.791	27.597
	Std.Dev.						
	% RSD.				1.03		

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Date Prepared: 05/03/2017 **By:** TOC

Date Approved: **By:**

Spl #: 68 **Sample ID :** 7016230012_27971x400#1 **Type :** Sample **Date:** 05/03/2017 **Status:** Pass
Vial #: 70 **Method :** 9060 Curve 04262017 - Apr 26 **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	5:55 am	-	-	-	115,353	35.673	11.891
2	6:02 am	-	-	-	113,944	35.224	11.741
3	6:11 am	-	-	-	113,604	35.115	11.704
4	6:19 am	-	-	-	112,757	34.844	11.615
	Avg.	-	-	-	113,914	35.214	11.738
	Std.Dev.						
	% RSD.				0.95		

Spl #: 69 **Sample ID :** 7016230014_27971x40#1 **Type :** Sample **Date:** 05/03/2017 **Status:** Pass
Vial #: 71 **Method :** 9060 Curve 04262017 - Apr 26 **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	6:33 am	-	-	-	315,141	99.466	33.156
2	6:41 am	-	-	-	314,075	99.126	33.041
3	6:49 am	-	-	-	312,608	98.658	32.886
4	6:57 am	-	-	-	309,866	97.782	32.594
	Avg.	-	-	-	312,922	98.758	32.919
	Std.Dev.						
	% RSD.				0.73		

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Date Prepared: 05/03/2017 **By:** TOC

Date Approved: **By:**

Spl #: 70 **Sample ID :** 7016230015_27971x40#1 **Type :** Sample **Date:** 05/03/2017 **Status:** Pass
Vial #: 72 **Method :** 9060 Curve 04262017 - Apr 26 **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	7:11 am	-	-	-	339,500	107.244	35.748
2	7:19 am	-	-	-	336,960	106.433	35.478
3	7:28 am	-	-	-	337,925	106.741	35.580
4	7:36 am	-	-	-	337,853	106.718	35.573
	Avg.	-	-	-	338,059	106.784	35.595
	Std.Dev.						
	% RSD.				0.31		

Spl #: 71 **Sample ID :** ccv#1 **Type :** Sample **Date:** 05/03/2017 **Status:** Pass
Vial #: 73 **Method :** 9060 Curve 04262017 - Apr 26 **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	7:50 am	-	-	-	235,488	74.033	24.678
2	7:58 am	-	-	-	234,684	73.776	24.592
3	8:06 am	-	-	-	235,986	74.192	24.731
4	8:14 am	-	-	-	239,479	75.307	25.102
	Avg.	-	-	-	236,409	74.327	24.776
	Std.Dev.						
	% RSD.				0.89		

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Date Prepared: 05/03/2017 **By:** TOC

Date Approved: **By:**

Spl #: 72 **Sample ID :** ccb#1 **Type :** Sample **Date:** 05/03/2017 **Status:** Pass
Vial #: 74 **Method :** 9060 Curve 04262017 - Apr 26 **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	8:28 am	-	-	-	4,664	0.330	0.110
2	8:35 am	-	-	-	4,003	0.119	0.040
3	8:43 am	-	-	-	3,632	0.001	0.000
4	8:50 am	-	-	-	3,736	0.034	0.011
5	8:57 am	-	-	-	3,711	0.026	0.009
	Avg.	-	-	-	3,770	0.045	0.015
	Std.Dev.						
	% RSD.				4.27		

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Date Prepared: 05/03/2017 **By:** TOC

Date Approved: **By:**

Method Summary

Method Details

Method Name:	5310C Curve 05012017 - May 01, 2017; 02-39-49 PM
Date Created:	05/01/2017
Time Created:	14:45
Created By:	toc
Analysis Mode:	NPOC Only
Sparging Mode:	Internal
Pre-Acid Volume (mL):	1.000
Sparge Time (mm:ss):	02:00

Volumes

Sample Volume (mL):	3.000
Acid Volume (mL):	1.000
Persulfate Volume(mL):	2.000

Other

SysPressure:	20.00

Pre-Processing

Sample Dilution:	Enabled
Dilution Mode:	Manual
Dilution Factor:	1 : 1

Times

	React	Detect
TIC	01:30	03:00
TOC	02:00	03:00

Temp

	React	Detect
TIC	70	70
TOC	98	98

Outlier Removal Criteria

Enabled:	Yes
Additional Replicates:	1
Max. % RSD.	10.00

Rinses

Rinse Volume (mL):	9.000
Rinses Per Sample:	0
Rinses Per Replicate:	0

Max. Std. Dev. 100 Use Modified Oxidant: No

Calibration Summary

Calibration Generation

Generation Mode:	Manual
# of Stds:	5
Dilution Factor:	10 : 1
Dilution Volume (mL):	1.000
Add Zero as Std #1:	No

Calibration Pass/Fail Criteria

Parameter	Enabled	Low	High	Failure
R² (ugC/K-cts)	Yes	0.1000	0.3000	Continue
	Yes	0.950	1.000	Continue
Offset (area) (cts)	No	-	-	-
Offset (mass) (ugC)	No	-	-	-
QC Blank(cts)	No	-	-	-

Calibration Mode

Primary Mode:	TOC
User for ALL Modes:	Enabled

Checks, QC's and Actions

Type	Target (PPM)	Tolerance (+/- %)	1st Failure	2nd Failure
CK Std	n/a	10.00	Re-run	Continue
QC #1	0.000	10.00	Re-run	Continue
QC #2	0.000	10.00	Re-run	Continue
QC #3	0.000	10.00	Re-run	Continue
QC #4	0.000	10.00	Re-run	Continue
SST	0.000	15.00	Abort	Abort

Denotes Excluded Replicates

Denotes First Failed Samples

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Date Prepared: 05/03/2017 **By:** TOC

Date Approved: **By:**

Calibration Details

Calibration Mode:	TOC
Date Calibrated:	05/01/2017
Time Calibrated:	7:18 pm
Calibrated By:	toc
RF (ugC/k-cts):	0.3382
R2:	0.9997
R:	0.9998
QC Blank(cts):	0
Offset (cts):	7287
Offset (ugC):	-2.465
Reagent Blank (cts):	3,341
Units of Measure:	PPM->mg/L C

Calibration Settings

Stock Conc. For Dilutions: (PPM)	1,000.000
# of Reagent Blanks:	1
EFC Enabled:	No
Total Flowrate w/EFC:	50 ml/min
Check Standards:	Subtract Offset
Samples:	Substract Offset
Regression type:	Unweighted Linear

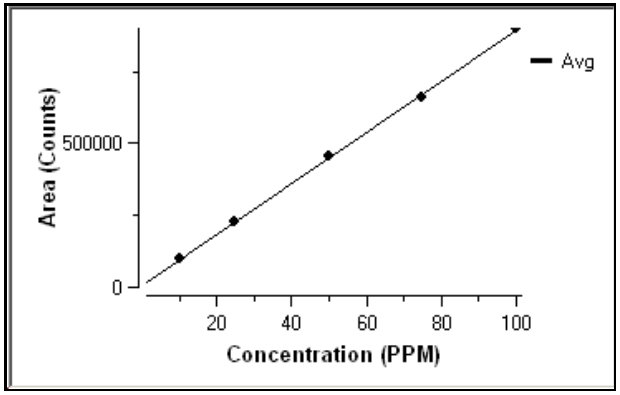
Calculations:

$$Concentration = \frac{\frac{RF}{1000} \times Area}{volume}$$

Samples: $Area = Area_{Peak} - Area_{Offset}$ *or* $Area = Area_{Peak} - Area_{RB}$

CHK Stds: $Area = Area_{Peak} - Area_{Offset}$ *or* $Area = Area_{Peak} - Area_{RW}$

QC Samples: $Area = Area_{Peak} - Area_{QCBlank}$



$$y = m \times x + b$$

$y \Rightarrow Area$ $\quad m \Rightarrow \frac{1000}{RF \times volume}$ $\quad b \Rightarrow 0$

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Date Prepared: 05/03/2017 **By:** TOC

Date Approved: **By:**

Method Summary

Method Details

Method Name:	9060 Curve 04262017 - Apr 26, 2017; 11-07-15 AM
Date Created:	04/26/2017
Time Created:	11:08
Created By:	toc
Analysis Mode:	NPOC Only
Sparging Mode:	External
Pre-Acid Volume (mL):	1.000
Sparge Time (mm:ss):	02:00

Volumes

Sample Volume (mL):	3.000
Acid Volume (mL):	1.000
Persulfate Volume(mL):	2.000

Other

SysPressure:	20.00

Pre-Processing

Sample Dilution:	Enabled
Dilution Mode:	Manual
Dilution Factor:	1 : 1

Times

	React	Detect
TIC	01:30	03:00
TOC	02:00	03:00

Temp

	React	Detect
TIC	70	70
TOC	98	98

Outlier Removal Criteria

Enabled:	Yes
Additional Replicates:	1
Max. % RSD.	10.00

Rinses

Rinse Volume (mL):	9.000
Rinses Per Sample:	0
Rinses Per Replicate:	1

Max. Std. Dev. 100 Use Modified Oxidant: No

Calibration Summary

Calibration Generation

Generation Mode:	Manual
# of Stds:	5
Dilution Factor:	10 : 1
Dilution Volume (mL):	1.000
Add Zero as Std #1:	No

Calibration Mode

Primary Mode:	TOC
User for ALL Modes:	Enabled

Calibration Pass/Fail Criteria

Parameter	Enabled	Low	High	Failure
R² (ugC/K-cts)	Yes	0.1000	0.3000	Continue
	Yes	0.995	1.000	Continue
Offset (area) (cts)	No	-	-	-
Offset (mass) (ugC)	No	-	-	-
QC Blank(cts)	No	-	-	-

Checks, QC's and Actions

Type	Target (PPM)	Tolerance (+/- %)	1st Failure	2nd Failure
CK Std	n/a	10.00	Re-run	Continue
QC #1	10.000	15.00	Re-run	Continue
QC #2	25.000	10.00	Re-run	Continue
QC #3	0.000	10.00	Re-run	Continue
QC #4	0.000	10.00	Re-run	Continue
SST	0.000	15.00	Abort	Abort

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USA

Date Prepared: 05/03/2017 **By:** TOC

Date Approved: **By:**

Calibration Details

Calibration Mode:	TOC
Date Calibrated:	04/26/2017
Time Calibrated:	1:56 pm
Calibrated By:	toc
RF (ugC/k-cts):	0.3193
R2:	0.9998
R:	0.9999
QC Blank(cts):	0
Offset (cts):	3630
Offset (ugC):	-1.159
Reagent Blank (cts):	3,635
Units of Measure:	PPM->mg/L C

Calibration Settings

Stock Conc. For Dilutions: (PPM)	1,000.000
# of Reagent Blanks:	1
EFC Enabled:	No
Total Flowrate w/EFC:	50 ml/min
Check Standards:	Subtract Offset
Samples:	Substract Offset
Regression type:	Unweighted Linear

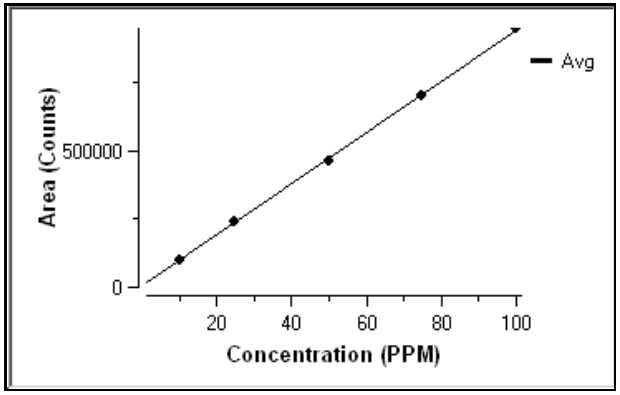
Calculations:

$$Concentration = \frac{\frac{RF}{1000} \times Area}{volume}$$

Samples: $Area = Area_{Peak} - Area_{Offset}$ *or* $Area = Area_{Peak} - Area_{RB}$

CHK Stds: $Area = Area_{Peak} - Area_{Offset}$ *or* $Area = Area_{Peak} - Area_{RW}$

QC Samples: $Area = Area_{Peak} - Area_{QCBlank}$



$$y = m \times x + b$$

$y \Rightarrow Area$ $\quad m \Rightarrow \frac{1000}{RF \times volume}$ $\quad b \Rightarrow 0$

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Denotes Excluded Replicates

Denotes First Failed Samples

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Greensburg, PA
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USA

Date Prepared: 05/04/2017 **By:** TOC

Date Approved: **By:**

Sample Results Summary

Spl #	Vial #	Sample ID	Num Rep	Act Rep	Method	Type	Dil	Cust ID	Mode	Avg. Area (cts)	Avg. Mass (ug)	Avg. Conc (PPM)	Std. Dev	% RSD	Notes
1	-	Clean Up	4	4	DefaultCleanUpMethod	Clean Up	1 : 1	00000000	TC	7,260	0.000	0.000	672	9.26	
2	1	ccv	4	4	9060 Curve 04262017 - Apr 26, 2017; 11-07-15 AM	Sample	1 : 1	00000000	TOC	222,644	69.932	23.311	1,904	0.86	Pass
3	2	ccb	4	4	9060 Curve 04262017 - Apr 26, 2017; 11-07-15 AM	Sample	1 : 1	00000000	TOC	3,473	0.016	0.006	256	7.36	Pass
4	3	1267269_28026	4	4	9060 Curve 04262017 - Apr 26, 2017; 11-07-15 AM	Sample	1 : 1	00000000	TOC	3,392	0.010	0.004	277	8.17	Pass
5	4	1267270_28026	4	4	9060 Curve 04262017 - Apr 26, 2017; 11-07-15 AM	Sample	1 : 1	00000000	TOC	94,846	29.126	9.709	800	0.84	Pass
6	5	7016360002_28026	4	4	9060 Curve 04262017 - Apr 26, 2017; 11-07-15 AM	Sample	1 : 1	00000000	TOC	68,940	20.854	6.951	685	0.99	Pass
7	6	1267271_28026	4	4	9060 Curve 04262017 - Apr 26, 2017; 11-07-15 AM	Sample	1 : 1	00000000	TOC	146,093	45.489	15.163	2,758	1.89	Pass
8	7	7016438001_28026	4	4	9060 Curve 04262017 - Apr 26, 2017; 11-07-15 AM	Sample	1 : 1	00000000	TOC	11,283	2.444	0.815	800	7.09	Pass
9	8	1267277_28026	4	4	9060 Curve 04262017 - Apr 26, 2017; 11-07-15 AM	Sample	1 : 1	00000000	TOC	10,897	2.320	0.773	386	3.54	Pass
10	9	7016438002_28026	4	4	9060 Curve 04262017 - Apr 26, 2017; 11-07-15 AM	Sample	1 : 1	00000000	TOC	5,285	0.528	0.176	276	5.22	Pass
11	10	7016438003_28026	4	4	9060 Curve 04262017 - Apr 26, 2017; 11-07-15 AM	Sample	1 : 1	00000000	TOC	5,083	0.464	0.155	240	4.71	Pass
12	11	7016438005_28026x5	4	4	9060 Curve 04262017 - Apr 26, 2017; 11-07-15 AM	Sample	1 : 1	00000000	TOC	6,810	1.016	0.339	328	4.82	Pass
13	12	7016438006_28026x5	4	4	9060 Curve 04262017 - Apr 26, 2017; 11-07-15 AM	Sample	1 : 1	00000000	TOC	5,869	0.715	0.239	114	1.94	Pass
14	13	7016438007_28026	4	4	9060 Curve 04262017 - Apr 26, 2017; 11-07-15 AM	Sample	1 : 1	00000000	TOC	8,693	1.617	0.539	426	4.90	Pass
15	14	7016438008_28026	4	4	9060 Curve 04262017 - Apr 26, 2017; 11-07-15 AM	Sample	1 : 1	00000000	TOC	6,011	0.760	0.254	164	2.73	Pass
16	15	7016438009_28026x5	4	4	9060 Curve 04262017 - Apr 26, 2017; 11-07-15 AM	Sample	1 : 1	00000000	TOC	3,928	0.095	0.032	254	6.46	Pass
17	16	7016438014_28026x10	4	4	9060 Curve 04262017 - Apr 26, 2017; 11-07-15 AM	Sample	1 : 1	00000000	TOC	16,597	4.140	1.380	237	1.43	Pass
18	17	ccv	4	4	9060 Curve 04262017 - Apr 26, 2017; 11-07-15 AM	Sample	1 : 1	00000000	TOC	227,319	71.425	23.808	4,048	1.78	Pass
19	18	ccb	4	4	9060 Curve 04262017 - Apr 26, 2017; 11-07-15 AM	Sample	1 : 1	00000000	TOC	3,701	0.042	0.014	259	7.01	Pass
20	19	1267273_28027	4	4	9060 Curve 04262017 - Apr 26, 2017; 11-07-15 AM	Sample	1 : 1	00000000	TOC	3,801	0.056	0.019	299	7.87	Pass
21	20	1267274_28027	4	4	9060 Curve 04262017 - Apr 26, 2017; 11-07-15 AM	Sample	1 : 1	00000000	TOC	96,467	29.643	9.881	479	0.50	Pass
22	21	7016438017_28027	4	4	9060 Curve 04262017 - Apr 26, 2017; 11-07-15 AM	Sample	1 : 1	00000000	TOC	7,047	1.091	0.364	40	0.57	Pass
23	22	1267275_28027	4	4	9060 Curve 04262017 - Apr 26, 2017; 11-07-15 AM	Sample	1 : 1	00000000	TOC	91,155	27.947	9.315	884	0.97	Pass

Instrument ID: F750730374 (Wet Chemical)
Report_ID: TOC1030-R01529 (Report generated by OI Analytical's TOC Reporter V1.4.2)

Date Printed: 5/4/2017

By Sample Report

Denotes Excluded Replicates

Denotes First Failed Samples

24	23	1267276_28027	4	4	9060 Curve 04262017 - Apr 26, 2017; 11-07-15 AM	Sample	1 : 1	00000000	TOC	90,008	27.581	9.194	1,162	1.29	Pass
25	24	7016438015_28027x10	4	4	9060 Curve 04262017 - Apr 26, 2017; 11-07-15 AM	Sample	1 : 1	00000000	TOC	6,083	0.783	0.261	93	1.52	Pass
26	25	7016438016_28027x10	4	4	9060 Curve 04262017 - Apr 26, 2017; 11-07-15 AM	Sample	1 : 1	00000000	TOC	5,270	0.524	0.174	195	3.71	Pass
27	26	7016438018_28027	4	4	9060 Curve 04262017 - Apr 26, 2017; 11-07-15 AM	Sample	1 : 1	00000000	TOC	11,479	2.506	0.835	213	1.85	Pass
28	27	7016438019_28027	4	4	9060 Curve 04262017 - Apr 26, 2017; 11-07-15 AM	Sample	1 : 1	00000000	TOC	16,019	3.956	1.319	274	1.71	Pass
29	28	7016438020_28027	4	4	9060 Curve 04262017 - Apr 26, 2017; 11-07-15 AM	Sample	1 : 1	00000000	TOC	6,017	0.762	0.254	91	1.51	Pass
30	29	7016373001_28027x20	4	4	9060 Curve 04262017 - Apr 26, 2017; 11-07-15 AM	Sample	1 : 1	00000000	TOC	306,606	96.741	32.247	1,293	0.42	Pass
31	30	7016373002_28027x40	4	4	9060 Curve 04262017 - Apr 26, 2017; 11-07-15 AM	Sample	1 : 1	00000000	TOC	249,445	78.489	26.163	2,453	0.98	Pass
32	31	7016373003_28027x40	4	4	9060 Curve 04262017 - Apr 26, 2017; 11-07-15 AM	Sample	1 : 1	00000000	TOC	195,437	61.245	20.415	557	0.28	Pass
33	32	7016373004_28027x20	4	4	9060 Curve 04262017 - Apr 26, 2017; 11-07-15 AM	Sample	1 : 1	00000000	TOC	141,733	44.097	14.699	494	0.35	Pass
34	33	ccv	4	4	9060 Curve 04262017 - Apr 26, 2017; 11-07-15 AM	Sample	1 : 1	00000000	TOC	227,316	71.424	23.808	1,033	0.45	Pass
35	34	ccb	4	4	9060 Curve 04262017 - Apr 26, 2017; 11-07-15 AM	Sample	1 : 1	00000000	TOC	5,909	0.728	0.243	255	4.32	Pass

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Sample Results

Spl #: 1 **Sample ID :** Clean Up **Type :** Clean Up **Date:** 05/03/2017 **Status:**
Vial #: - **Method :** DefaultCleanUpMethod **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TC Area (cts)	TC Mass (ugC)	TC Conc (PPM)
1	6:05 pm	-	-	-	8,217	0.000	0.000
2	6:12 pm	-	-	-	7,192	0.000	0.000
3	6:19 pm	-	-	-	6,956	0.000	0.000
4	6:25 pm	-	-	-	6,674	0.000	0.000
	Avg.	-	-	-	7,260	0.000	0.000
	Std.Dev.						
	% RSD.				9.26		

Spl #: 2 **Sample ID :** ccv **Type :** Sample **Date:** 05/03/2017 **Status:** Pass
Vial #: 1 **Method :** 9060 Curve 04262017 - Apr 26 **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	6:33 pm	-	-	-	225,414	70.816	23.605
2	6:40 pm	-	-	-	221,092	69.436	23.146
3	6:48 pm	-	-	-	222,199	69.790	23.263
4	6:55 pm	-	-	-	221,871	69.685	23.228
	Avg.	-	-	-	222,644	69.932	23.311
	Std.Dev.						
	% RSD.				0.86		

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Spl #: 3 **Sample ID :** ccb **Type :** Sample **Date:** 05/03/2017 **Status:** Pass
Vial #: 2 **Method :** 9060 Curve 04262017 - Apr 26 **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	7:09 pm	-	-	-	3,835	0.065	0.022
2	7:17 pm	-	-	-	3,469	0.000	0.000
3	7:25 pm	-	-	-	3,307	0.000	0.000
4	7:33 pm	-	-	-	3,280	0.000	0.000
	Avg.	-	-	-	3,473	0.016	0.006
	Std.Dev.						
	% RSD.				7.36		

Spl #: 4 **Sample ID :** 1267269_28026 **Type :** Sample **Date:** 05/03/2017 **Status:** Pass
Vial #: 3 **Method :** 9060 Curve 04262017 - Apr 26 **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	7:47 pm	-	-	-	3,761	0.042	0.014
2	7:55 pm	-	-	-	3,421	0.000	0.000
3	8:03 pm	-	-	-	3,107	0.000	0.000
4	8:11 pm	-	-	-	3,281	0.000	0.000
	Avg.	-	-	-	3,392	0.010	0.004
	Std.Dev.						
	% RSD.				8.17		

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Date Prepared: 05/04/2017 **By:** TOC

Date Approved: **By:**

Spl #: 5 **Sample ID :** 1267270_28026 **Type :** Sample **Date:** 05/03/2017 **Status:** Pass
Vial #: 4 **Method :** 9060 Curve 04262017 - Apr 26 **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	8:24 pm	-	-	-	94,659	29.066	9.689
2	8:31 pm	-	-	-	93,864	28.812	9.604
3	8:39 pm	-	-	-	95,774	29.422	9.807
4	8:46 pm	-	-	-	95,088	29.203	9.734
	Avg.	-	-	-	94,846	29.126	9.709
	Std.Dev.						
	% RSD.				0.84		

Spl #: 6 **Sample ID :** 7016360002_28026 **Type :** Sample **Date:** 05/03/2017 **Status:** Pass
Vial #: 5 **Method :** 9060 Curve 04262017 - Apr 26 **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	8:59 pm	-	-	-	68,663	20.765	6.922
2	9:06 pm	-	-	-	69,564	21.053	7.018
3	9:13 pm	-	-	-	68,104	20.587	6.862
4	9:20 pm	-	-	-	69,431	21.010	7.004
	Avg.	-	-	-	68,940	20.854	6.951
	Std.Dev.						
	% RSD.				0.99		

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Spl #: 7 **Sample ID :** 1267271_28026 **Type :** Sample **Date:** 05/03/2017 **Status:** Pass
Vial #: 6 **Method :** 9060 Curve 04262017 - Apr 26 **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	9:33 pm	-	-	-	147,980	46.091	15.364
2	9:40 pm	-	-	-	143,576	44.685	14.895
3	9:47 pm	-	-	-	143,885	44.784	14.927
4	9:54 pm	-	-	-	148,929	46.394	15.465
	Avg.	-	-	-	146,093	45.489	15.163
	Std.Dev.						
	% RSD.				1.89		

Spl #: 8 **Sample ID :** 7016438001_28026 **Type :** Sample **Date:** 05/03/2017 **Status:** Pass
Vial #: 7 **Method :** 9060 Curve 04262017 - Apr 26 **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	10:07 pm	-	-	-	12,422	2.807	0.936
2	10:14 pm	-	-	-	11,258	2.436	0.812
3	10:21 pm	-	-	-	10,681	2.251	0.750
4	10:28 pm	-	-	-	10,771	2.280	0.760
	Avg.	-	-	-	11,283	2.444	0.815
	Std.Dev.						
	% RSD.				7.09		

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Spl #: 9 **Sample ID :** 1267277_28026 **Type :** Sample **Date:** 05/03/2017 **Status:** Pass
Vial #: 8 **Method :** 9060 Curve 04262017 - Apr 26 **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	10:40 pm	-	-	-	11,399	2.481	0.827
2	10:47 pm	-	-	-	10,601	2.226	0.741
3	10:54 pm	-	-	-	10,999	2.353	0.784
4	11:01 pm	-	-	-	10,587	2.221	0.741
	Avg.	-	-	-	10,897	2.320	0.773
	Std.Dev.						
	% RSD.				3.54		

Spl #: 10 **Sample ID :** 7016438002_28026 **Type :** Sample **Date:** 05/03/2017 **Status:** Pass
Vial #: 9 **Method :** 9060 Curve 04262017 - Apr 26 **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	11:14 pm	-	-	-	5,693	0.659	0.220
2	11:21 pm	-	-	-	5,192	0.499	0.166
3	11:29 pm	-	-	-	5,081	0.463	0.154
4	11:36 pm	-	-	-	5,175	0.493	0.164
	Avg.	-	-	-	5,285	0.528	0.176
	Std.Dev.						
	% RSD.				5.22		

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Date Prepared: 05/04/2017 **By:** TOC

Date Approved: **By:**

Spl #: 11 **Sample ID :** 7016438003_28026 **Type :** Sample **Date:** 05/04/2017 **Status:** Pass
Vial #: 10 **Method :** 9060 Curve 04262017 - Apr 26 **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	11:49 pm	-	-	-	5,412	0.569	0.190
2	11:56 pm	-	-	-	5,101	0.470	0.157
3	12:03 am	-	-	-	4,871	0.396	0.132
4	12:10 am	-	-	-	4,946	0.420	0.140
	Avg.	-	-	-	5,083	0.464	0.155
	Std.Dev.						
	% RSD.				4.71		

Spl #: 12 **Sample ID :** 7016438005_28026x5 **Type :** Sample **Date:** 05/04/2017 **Status:** Pass
Vial #: 11 **Method :** 9060 Curve 04262017 - Apr 26 **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	12:24 am	-	-	-	7,299	1.172	0.391
2	12:31 am	-	-	-	6,707	0.982	0.328
3	12:39 am	-	-	-	6,616	0.954	0.318
4	12:46 am	-	-	-	6,619	0.954	0.318
	Avg.	-	-	-	6,810	1.016	0.339
	Std.Dev.						
	% RSD.				4.82		

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Spl #: 13 **Sample ID :** 7016438006_28026x5 **Type :** Sample **Date:** 05/04/2017 **Status:** Pass
Vial #: 12 **Method :** 9060 Curve 04262017 - Apr 26 **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	12:59 am	-	-	-	6,025	0.765	0.255
2	1:06 am	-	-	-	5,804	0.694	0.231
3	1:13 am	-	-	-	5,768	0.683	0.228
4	1:21 am	-	-	-	5,881	0.719	0.240
	Avg.	-	-	-	5,869	0.715	0.239
	Std.Dev.						
	% RSD.				1.94		

Spl #: 14 **Sample ID :** 7016438007_28026 **Type :** Sample **Date:** 05/04/2017 **Status:** Pass
Vial #: 13 **Method :** 9060 Curve 04262017 - Apr 26 **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	1:33 am	-	-	-	9,227	1.787	0.596
2	1:40 am	-	-	-	8,745	1.633	0.544
3	1:47 am	-	-	-	8,607	1.589	0.530
4	1:54 am	-	-	-	8,193	1.457	0.486
	Avg.	-	-	-	8,693	1.617	0.539
	Std.Dev.						
	% RSD.				4.90		

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Date Approved: **By:**

Spl #: 15 **Sample ID :** 7016438008_28026 **Type :** Sample **Date:** 05/04/2017 **Status:** Pass
Vial #: 14 **Method :** 9060 Curve 04262017 - Apr 26 **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	2:07 am	-	-	-	6,236	0.832	0.277
2	2:14 am	-	-	-	6,015	0.762	0.254
3	2:22 am	-	-	-	5,852	0.709	0.237
4	2:29 am	-	-	-	5,940	0.738	0.246
	Avg.	-	-	-	6,011	0.760	0.254
	Std.Dev.						
	% RSD.				2.73		

Spl #: 16 **Sample ID :** 7016438009_28026x5 **Type :** Sample **Date:** 05/04/2017 **Status:** Pass
Vial #: 15 **Method :** 9060 Curve 04262017 - Apr 26 **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	2:43 am	-	-	-	4,308	0.216	0.072
2	2:51 am	-	-	-	3,793	0.052	0.017
3	2:59 am	-	-	-	3,824	0.062	0.021
4	3:06 am	-	-	-	3,787	0.050	0.017
	Avg.	-	-	-	3,928	0.095	0.032
	Std.Dev.						
	% RSD.				6.46		

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Date Prepared: 05/04/2017 **By:** TOC

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Spl #: 17 **Sample ID :** 7016438014_28026x10 **Type :** Sample **Date:** 05/04/2017 **Status:** Pass
Vial #: 16 **Method :** 9060 Curve 04262017 - Apr 26 **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	3:20 am	-	-	-	16,656	4.159	1.387
2	3:27 am	-	-	-	16,255	4.031	1.344
3	3:35 am	-	-	-	16,668	4.163	1.388
4	3:42 am	-	-	-	16,806	4.207	1.402
	Avg.	-	-	-	16,597	4.140	1.380
	Std.Dev.						
	% RSD.				1.43		

Spl #: 18 **Sample ID :** ccv **Type :** Sample **Date:** 05/04/2017 **Status:** Pass
Vial #: 17 **Method :** 9060 Curve 04262017 - Apr 26 **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	3:55 am	-	-	-	225,830	70.949	23.650
2	4:03 am	-	-	-	230,839	72.549	24.183
3	4:10 am	-	-	-	230,334	72.387	24.129
4	4:17 am	-	-	-	222,273	69.813	23.271
	Avg.	-	-	-	227,319	71.425	23.808
	Std.Dev.						
	% RSD.				1.78		

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Date Prepared: 05/04/2017 **By:** TOC

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Spl #: 19 **Sample ID :** ccb **Type :** Sample **Date:** 05/04/2017 **Status:** Pass
Vial #: 18 **Method :** 9060 Curve 04262017 - Apr 26 **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	4:31 am	-	-	-	4,001	0.118	0.039
2	4:38 am	-	-	-	3,387	0.000	0.000
3	4:46 am	-	-	-	3,626	0.000	0.000
4	4:54 am	-	-	-	3,789	0.051	0.017
	Avg.	-	-	-	3,701	0.042	0.014
	Std.Dev.						
	% RSD.				7.01		

Spl #: 20 **Sample ID :** 1267273_28027 **Type :** Sample **Date:** 05/04/2017 **Status:** Pass
Vial #: 19 **Method :** 9060 Curve 04262017 - Apr 26 **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	5:08 am	-	-	-	4,248	0.197	0.066
2	5:16 am	-	-	-	3,618	0.000	0.000
3	5:23 am	-	-	-	3,652	0.007	0.002
4	5:31 am	-	-	-	3,687	0.018	0.006
	Avg.	-	-	-	3,801	0.056	0.019
	Std.Dev.						
	% RSD.				7.87		

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Date Prepared: 05/04/2017 **By:** TOC

Date Approved: **By:**

Spl #: 21 **Sample ID :** 1267274_28027 **Type :** Sample **Date:** 05/04/2017 **Status:** Pass
Vial #: 20 **Method :** 9060 Curve 04262017 - Apr 26 **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	5:43 am	-	-	-	96,771	29.740	9.913
2	5:51 am	-	-	-	96,701	29.718	9.906
3	5:58 am	-	-	-	96,644	29.700	9.900
4	6:06 am	-	-	-	95,754	29.415	9.805
	Avg.	-	-	-	96,467	29.643	9.881
	Std.Dev.						
	% RSD.				0.50		

Spl #: 22 **Sample ID :** 7016438017_28027 **Type :** Sample **Date:** 05/04/2017 **Status:** Pass
Vial #: 21 **Method :** 9060 Curve 04262017 - Apr 26 **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	6:18 am	-	-	-	7,022	1.083	0.361
2	6:25 am	-	-	-	7,009	1.079	0.360
3	6:33 am	-	-	-	7,098	1.107	0.369
4	6:40 am	-	-	-	7,058	1.095	0.365
	Avg.	-	-	-	7,047	1.091	0.364
	Std.Dev.						
	% RSD.				0.57		

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Date Prepared: 05/04/2017 **By:** TOC

Date Approved: **By:**

Spl #: 23 **Sample ID :** 1267275_28027 **Type :** Sample **Date:** 05/04/2017 **Status:** Pass
Vial #: 22 **Method :** 9060 Curve 04262017 - Apr 26 **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	6:52 am	-	-	-	91,525	28.065	9.354
2	7:00 am	-	-	-	92,217	28.286	9.429
3	7:07 am	-	-	-	90,609	27.773	9.258
4	7:14 am	-	-	-	90,269	27.664	9.221
	Avg.	-	-	-	91,155	27.947	9.315
	Std.Dev.						
	% RSD.				0.97		

Spl #: 24 **Sample ID :** 1267276_28027 **Type :** Sample **Date:** 05/04/2017 **Status:** Pass
Vial #: 23 **Method :** 9060 Curve 04262017 - Apr 26 **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	7:27 am	-	-	-	90,547	27.753	9.251
2	7:34 am	-	-	-	91,322	28.000	9.333
3	7:41 am	-	-	-	89,480	27.412	9.137
4	7:49 am	-	-	-	88,683	27.158	9.053
	Avg.	-	-	-	90,008	27.581	9.194
	Std.Dev.						
	% RSD.				1.29		

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Denotes First Failed Samples

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Date Prepared: 05/04/2017 **By:** TOC

Date Approved: **By:**

Spl #: 25 **Sample ID :** 7016438015_28027x10 **Type :** Sample **Date:** 05/04/2017 **Status:** Pass
Vial #: 24 **Method :** 9060 Curve 04262017 - Apr 26 **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	8:02 am	-	-	-	6,212	0.824	0.275
2	8:09 am	-	-	-	5,991	0.754	0.251
3	8:17 am	-	-	-	6,062	0.777	0.259
4	8:24 am	-	-	-	6,067	0.778	0.259
	Avg.	-	-	-	6,083	0.783	0.261
	Std.Dev.						
	% RSD.				1.52		

Spl #: 26 **Sample ID :** 7016438016_28027x10 **Type :** Sample **Date:** 05/04/2017 **Status:** Pass
Vial #: 25 **Method :** 9060 Curve 04262017 - Apr 26 **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	8:38 am	-	-	-	5,531	0.607	0.202
2	8:45 am	-	-	-	5,093	0.467	0.156
3	8:53 am	-	-	-	5,151	0.486	0.162
4	9:01 am	-	-	-	5,305	0.535	0.178
	Avg.	-	-	-	5,270	0.524	0.174
	Std.Dev.						
	% RSD.				3.71		

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Date Prepared: 05/04/2017 **By:** TOC

Date Approved: **By:**

Spl #: 27 **Sample ID :** 7016438018_28027 **Type :** Sample **Date:** 05/04/2017 **Status:** Pass
Vial #: 26 **Method :** 9060 Curve 04262017 - Apr 26 **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	9:13 am	-	-	-	11,789	2.605	0.868
2	9:20 am	-	-	-	11,324	2.457	0.819
3	9:27 am	-	-	-	11,358	2.468	0.823
4	9:34 am	-	-	-	11,446	2.496	0.832
	Avg.	-	-	-	11,479	2.506	0.835
	Std.Dev.						
	% RSD.				1.85		

Spl #: 28 **Sample ID :** 7016438019_28027 **Type :** Sample **Date:** 05/04/2017 **Status:** Pass
Vial #: 27 **Method :** 9060 Curve 04262017 - Apr 26 **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	9:47 am	-	-	-	16,291	4.043	1.348
2	9:54 am	-	-	-	16,190	4.011	1.337
3	10:01 am	-	-	-	15,688	3.850	1.283
4	10:08 am	-	-	-	15,908	3.920	1.307
	Avg.	-	-	-	16,019	3.956	1.319
	Std.Dev.						
	% RSD.				1.71		

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Date Prepared: 05/04/2017 **By:** TOC

Date Approved: **By:**

Spl #: 29 **Sample ID :** 7016438020_28027 **Type :** Sample **Date:** 05/04/2017 **Status:** Pass
Vial #: 28 **Method :** 9060 Curve 04262017 - Apr 26 **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	10:21 am	-	-	-	6,138	0.801	0.267
2	10:28 am	-	-	-	6,006	0.759	0.253
3	10:35 am	-	-	-	6,006	0.759	0.253
4	10:43 am	-	-	-	5,917	0.730	0.243
	Avg.	-	-	-	6,017	0.762	0.254
	Std.Dev.						
	% RSD.				1.51		

Spl #: 30 **Sample ID :** 7016373001_28027x20 **Type :** Sample **Date:** 05/04/2017 **Status:** Pass
Vial #: 29 **Method :** 9060 Curve 04262017 - Apr 26 **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	10:56 am	-	-	-	304,707	96.135	32.045
2	11:04 am	-	-	-	307,199	96.931	32.310
3	11:13 am	-	-	-	307,580	97.052	32.351
4	11:21 am	-	-	-	306,936	96.847	32.282
	Avg.	-	-	-	306,606	96.741	32.247
	Std.Dev.						
	% RSD.				0.42		

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Date Prepared: 05/04/2017 **By:** TOC

Date Approved: **By:**

Spl #: 31 **Sample ID :** 7016373002_28027x40 **Type :** Sample **Date:** 05/04/2017 **Status:** Pass
Vial #: 30 **Method :** 9060 Curve 04262017 - Apr 26 **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	11:34 am	-	-	-	250,142	78.712	26.237
2	11:42 am	-	-	-	250,317	78.768	26.255
3	11:50 am	-	-	-	245,870	77.348	25.783
4	11:58 am	-	-	-	251,450	79.130	26.377
	Avg.	-	-	-	249,445	78.489	26.163
	Std.Dev.						
	% RSD.				0.98		

Spl #: 32 **Sample ID :** 7016373003_28027x40 **Type :** Sample **Date:** 05/04/2017 **Status:** Pass
Vial #: 31 **Method :** 9060 Curve 04262017 - Apr 26 **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	12:12 pm	-	-	-	195,573	61.288	20.429
2	12:20 pm	-	-	-	194,893	61.071	20.357
3	12:28 pm	-	-	-	195,125	61.145	20.382
4	12:36 pm	-	-	-	196,157	61.474	20.492
	Avg.	-	-	-	195,437	61.245	20.415
	Std.Dev.						
	% RSD.				0.28		

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Date Prepared: 05/04/2017 **By:** TOC

Date Approved: **By:**

Spl #: 33 **Sample ID :** 7016373004_28027x20 **Type :** Sample **Date:** 05/04/2017 **Status:** Pass
Vial #: 32 **Method :** 9060 Curve 04262017 - Apr 26 **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	12:50 pm	-	-	-	141,546	44.037	14.679
2	12:58 pm	-	-	-	141,741	44.099	14.700
3	1:06 pm	-	-	-	141,239	43.939	14.646
4	1:14 pm	-	-	-	142,407	44.312	14.771
	Avg.	-	-	-	141,733	44.097	14.699
	Std.Dev.						
	% RSD.				0.35		

Spl #: 34 **Sample ID :** ccv **Type :** Sample **Date:** 05/04/2017 **Status:** Pass
Vial #: 33 **Method :** 9060 Curve 04262017 - Apr 26 **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	1:28 pm	-	-	-	227,515	71.487	23.829
2	1:36 pm	-	-	-	227,878	71.603	23.868
3	1:43 pm	-	-	-	228,066	71.663	23.888
4	1:51 pm	-	-	-	225,806	70.941	23.647
	Avg.	-	-	-	227,316	71.424	23.808
	Std.Dev.						
	% RSD.				0.45		

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Date Prepared: 05/04/2017 **By:** TOC

Date Approved: **By:**

Spl #: 35 **Sample ID :** ccb **Type :** Sample **Date:** 05/04/2017 **Status:** Pass
Vial #: 34 **Method :** 9060 Curve 04262017 - Apr 26 **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	2:04 pm	-	-	-	6,277	0.845	0.282
2	2:13 pm	-	-	-	5,691	0.658	0.219
3	2:21 pm	-	-	-	5,855	0.710	0.237
4	2:29 pm	-	-	-	5,812	0.697	0.232
	Avg.	-	-	-	5,909	0.728	0.243
	Std.Dev.						
	% RSD.				4.32		

Denotes Excluded Replicates
Denotes First Failed Samples

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Date Prepared: 05/04/2017 **By:** TOC

Date Approved: **By:**

Method Summary

Method Details

Method Name:	9060 Curve 04262017 - Apr 26, 2017; 11-07-15 AM
Date Created:	04/26/2017
Time Created:	11:08
Created By:	toc
Analysis Mode:	NPOC Only
Sparging Mode:	External
Pre-Acid Volume (mL):	1.000
Sparge Time (mm:ss):	02:00

Volumes

Sample Volume (mL):	3.000
Acid Volume (mL):	1.000
Persulfate Volume(mL):	2.000

Other

SysPressure:	20.00

Pre-Processing

Sample Dilution:	Enabled
Dilution Mode:	Manual
Dilution Factor:	1 : 1

Times

	React	Detect
TIC	01:30	03:00
TOC	02:00	03:00

Temp

	React	Detect
TIC	70	70
TOC	98	98

Outlier Removal Criteria

Enabled:	Yes
Additional Replicates:	1
Max. % RSD.	10.00

Rinses

Rinse Volume (mL):	9.000
Rinses Per Sample:	0
Rinses Per Replicate:	1

Max. Std. Dev. 100 Use Modified Oxidant: No

Calibration Summary

Calibration Generation

Generation Mode:	Manual
# of Stds:	5
Dilution Factor:	10 : 1
Dilution Volume (mL):	1.000
Add Zero as Std #1:	No

Calibration Mode

Primary Mode:	TOC
User for ALL Modes:	Enabled

Calibration Pass/Fail Criteria

Parameter	Enabled	Low	High	Failure
R² (ugC/K-cts)	Yes	0.1000	0.3000	Continue
	Yes	0.995	1.000	Continue
Offset (area) (cts)	No	-	-	-
Offset (mass) (ugC)	No	-	-	-
QC Blank(cts)	No	-	-	-

Checks, QC's and Actions

Type	Target (PPM)	Tolerance (+/- %)	1st Failure	2nd Failure
CK Std	n/a	10.00	Re-run	Continue
QC #1	10.000	15.00	Re-run	Continue
QC #2	25.000	10.00	Re-run	Continue
QC #3	0.000	10.00	Re-run	Continue
QC #4	0.000	10.00	Re-run	Continue
SST	0.000	15.00	Abort	Abort

Denotes Excluded Replicates

Denotes First Failed Samples

Pace Analytical
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Date Prepared: 05/04/2017 **By:** TOC

Date Approved: **By:**

Calibration Details

Calibration Mode:	TOC
Date Calibrated:	04/26/2017
Time Calibrated:	1:56 pm
Calibrated By:	toc
RF (ugC/k-cts):	0.3193
R2:	0.9998
R:	0.9999
QC Blank(cts):	0
Offset (cts):	3630
Offset (ugC):	-1.159
Reagent Blank (cts):	3,635
Units of Measure:	PPM->mg/L C

Calibration Settings

Stock Conc. For Dilutions: (PPM)	1,000.000
# of Reagent Blanks:	1
EFC Enabled:	No
Total Flowrate w/EFC:	50 ml/min
Check Standards:	Subtract Offset
Samples:	Substract Offset
Regression type:	Unweighted Linear

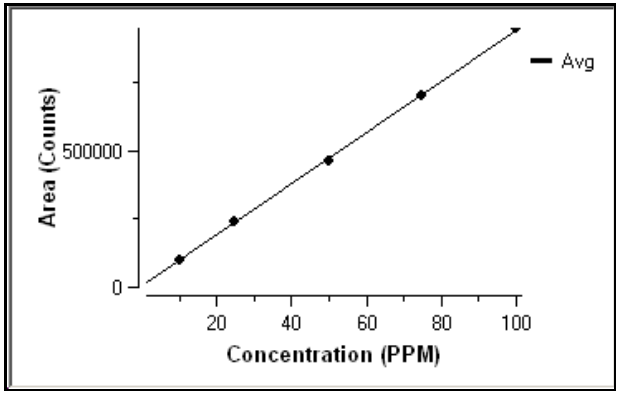
Calculations:

$$Concentration = \frac{\frac{RF}{1000} \times Area}{volume}$$

Samples: $Area = Area_{Peak} - Area_{Offset}$ *or* $Area = Area_{Peak} - Area_{RB}$

CHK Stds: $Area = Area_{Peak} - Area_{Offset}$ *or* $Area = Area_{Peak} - Area_{RW}$

QC Samples: $Area = Area_{Peak} - Area_{QCBlank}$



$$y = m \times x + b$$

$y \Rightarrow Area$ $\quad m \Rightarrow \frac{1000}{RF \times volume}$ $\quad b \Rightarrow 0$

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USA

Date Prepared: 05/03/2017 **By:** TOC

Date Approved: **By:**

Sample Results Summary

Spl #	Vial #	Sample ID	Num Rep	Act Rep	Method	Type	Dil	Cust ID	Mode	Avg. Area (cts)	Avg. Mass (ug)	Avg. Conc (PPM)	Std. Dev	% RSD	Notes
1	-	Clean Up	6	6	DefaultCleanUpMethod	Clean Up	1 : 1	00000000	TC	7,814	0.000	0.000	746	9.55	
2	1	ccv	2	2	5310C Curve 05012017 - May 01, 2017; 02-39-49 PM	Sample	1 : 1	00000000	TOC	230,707	75.568	25.189	2,692	1.17	Pass
3	2	ccb	2	3	5310C Curve 05012017 - May 01, 2017; 02-39-49 PM	Sample	1 : 1	00000000	TOC	3,882	0.000	0.000	45	1.16	Pass
4	3	30216137001_27988x10	2	3	5310C Curve 05012017 - May 01, 2017; 02-39-49 PM	Sample	1 : 1	00000000	TOC	136,958	43.859	14.619	7,166	5.23	Pass
5	4	1266157_27988x10	2	3	5310C Curve 05012017 - May 01, 2017; 02-39-49 PM	Sample	1 : 1	00000000	TOC	141,542	45.409	15.137	6,513	4.60	Pass
6	5	7016438010_27988x2	2	2	5310C Curve 05012017 - May 01, 2017; 02-39-49 PM	Sample	1 : 1	00000000	TOC	61,207	18.238	6.079	4,550	7.43	Pass
7	6	7016438011_27988x2	2	3	5310C Curve 05012017 - May 01, 2017; 02-39-49 PM	Sample	1 : 1	00000000	TOC	140,185	44.951	14.983	6,506	4.64	Pass
8	7	30216808003_27988x2	2	2	5310C Curve 05012017 - May 01, 2017; 02-39-49 PM	Sample	1 : 1	00000000	TOC	33,099	8.730	2.909	2,172	6.56	Pass
9	8	ccv	2	2	5310C Curve 05012017 - May 01, 2017; 02-39-49 PM	Sample	1 : 1	00000000	TOC	233,033	76.355	25.452	995	0.43	Pass
10	9	ccb	2	3	5310C Curve 05012017 - May 01, 2017; 02-39-49 PM	Sample	1 : 1	00000000	TOC	4,497	0.000	0.000	322	7.17	Pass

Instrument ID: F750730374 (Wet Chemical)
Report_ID: TOC1030-R01528 (Report generated by OI Analytical's TOC Reporter V1.4.2)

Date Printed: 5/3/2017

By Sample Report

Denotes Excluded Replicates

Denotes First Failed Samples

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USA

Date Prepared: 05/03/2017 **By:** TOC

Date Approved: **By:**

Sample Results

Spl #: 1 **Sample ID :** Clean Up **Type :** Clean Up **Date:** 05/03/2017 **Status:**
Vial #: - **Method :** DefaultCleanUpMethod **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TC Area (cts)	TC Mass (ugC)	TC Conc (PPM)
1	12:00 pm	-	-	-	9,159	0.000	0.000
2	12:07 pm	-	-	-	8,069	0.000	0.000
3	12:13 pm	-	-	-	7,823	0.000	0.000
4	12:19 pm	-	-	-	7,390	0.000	0.000
5	12:26 pm	-	-	-	7,331	0.000	0.000
6	12:32 pm	-	-	-	7,108	0.000	0.000
	Avg.	-	-	-	7,814	0.000	0.000
	Std.Dev.						
	% RSD.				9.55		

Spl #: 2 **Sample ID :** ccv **Type :** Sample **Date:** 05/03/2017 **Status:** Pass
Vial #: 1 **Method :** 5310C Curve 05012017 - May **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	12:41 pm	-	-	-	228,804	74.924	24.975
2	12:50 pm	-	-	-	232,611	76.212	25.404
	Avg.	-	-	-	230,707	75.568	25.189
	Std.Dev.						
	% RSD.				1.17		

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Date Prepared: 05/03/2017 **By:** TOC

Date Approved: **By:**

Spl #: 3 **Sample ID :** ccb **Type :** Sample **Date:** 05/03/2017 **Status:** Pass
Vial #: 2 **Method :** 5310C Curve 05012017 - May **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	1:03 pm	-	-	-	5,197	0.000	0.000
2	1:11 pm	-	-	-	3,850	0.000	0.000
3	1:20 pm	-	-	-	3,914	0.000	0.000
	Avg.	-	-	-	3,882	0.000	0.000
	Std.Dev.						
	% RSD.				1.16		

Spl #: 4 **Sample ID :** 30216137001_27988x10 **Type :** Sample **Date:** 05/03/2017 **Status:** Pass
Vial #: 3 **Method :** 5310C Curve 05012017 - May **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	1:30 pm	-	-	-	112,813	35.693	11.898
2	1:39 pm	-	-	-	131,891	42.145	14.048
3	1:48 pm	-	-	-	142,025	45.573	15.190
	Avg.	-	-	-	136,958	43.859	14.619
	Std.Dev.						
	% RSD.				5.23		

Spl #: 5 **Sample ID :** 1266157_27988x10 **Type :** Sample **Date:** 05/03/2017 **Status:** Pass
Vial #: 4 **Method :** 5310C Curve 05012017 - May **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	1:58 pm	-	-	-	118,745	37.699	12.566
2	2:07 pm	-	-	-	136,937	43.852	14.617
3	2:16 pm	-	-	-	146,147	46.967	15.656
	Avg.	-	-	-	141,542	45.409	15.137
	Std.Dev.						
	% RSD.				4.60		

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Date Prepared: 05/03/2017 **By:** TOC

Date Approved: **By:**

Spl #: 6 **Sample ID :** 7016438010_27988x2 **Type :** Sample **Date:** 05/03/2017 **Status:** Pass
Vial #: 5 **Method :** 5310C Curve 05012017 - May **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	2:25 pm	-	-	-	57,989	17.149	5.716
2	2:34 pm	-	-	-	64,425	19.326	6.442
	Avg.	-	-	-	61,207	18.238	6.079
	Std.Dev.						
	% RSD.				7.43		

Spl #: 7 **Sample ID :** 7016438011_27988x2 **Type :** Sample **Date:** 05/03/2017 **Status:** Pass
Vial #: 6 **Method :** 5310C Curve 05012017 - May **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	2:46 pm	-	-	-	114,085	36.123	12.041
2	2:55 pm	-	-	-	135,584	43.394	14.465
3	3:05 pm	-	-	-	144,786	46.507	15.502
	Avg.	-	-	-	140,185	44.951	14.983
	Std.Dev.						
	% RSD.				4.64		

Spl #: 8 **Sample ID :** 30216808003_27988x2 **Type :** Sample **Date:** 05/03/2017 **Status:** Pass
Vial #: 7 **Method :** 5310C Curve 05012017 - May **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	3:14 pm	-	-	-	31,563	8.211	2.736
2	3:23 pm	-	-	-	34,635	9.250	3.083
	Avg.	-	-	-	33,099	8.730	2.909
	Std.Dev.						
	% RSD.				6.56		

Pace Analytical
1638 Roseytown Road
Greensburg, PA
15601
USA

Date Prepared: 05/03/2017 **By:** TOC

Date Approved: **By:**

Spl #: 9 **Sample ID :** ccv **Type :** Sample **Date:** 05/03/2017 **Status:** Pass
Vial #: 8 **Method :** 5310C Curve 05012017 - May **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	3:36 pm	-	-	-	232,330	76.117	25.372
2	3:45 pm	-	-	-	233,737	76.593	25.531
	Avg.	-	-	-	233,033	76.355	25.452
	Std.Dev.						
	% RSD.				0.43		

Spl #: 10 **Sample ID :** ccb **Type :** Sample **Date:** 05/03/2017 **Status:** Pass
Vial #: 9 **Method :** 5310C Curve 05012017 - May **Dilution** 1 : 1 **Customer ID:** 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	3:57 pm	-	-	-	5,762	0.000	0.000
2	4:06 pm	-	-	-	4,725	0.000	0.000
3	4:15 pm	-	-	-	4,269	0.000	0.000
	Avg.	-	-	-	4,497	0.000	0.000
	Std.Dev.						
	% RSD.				7.17		

Pace Analytical
1638 Roseytown Road
Greensburg, PA
15601
USA

Date Prepared: 05/03/2017 **By:** TOC

Date Approved: **By:**

Method Summary

Method Details

Method Name:	5310C Curve 05012017 - May 01, 2017; 02-39-49 PM
Date Created:	05/01/2017
Time Created:	14:45
Created By:	toc
Analysis Mode:	NPOC Only
Sparging Mode:	Internal
Pre-Acid Volume (mL):	1.000
Sparge Time (mm:ss):	02:00

Volumes

Sample Volume (mL):	3.000
Acid Volume (mL):	1.000
Persulfate Volume(mL):	2.000

Other

SysPressure:	20.00

Pre-Processing

Sample Dilution:	Enabled
Dilution Mode:	Manual
Dilution Factor:	1 : 1

Times

	React	Detect
TIC	01:30	03:00
TOC	02:00	03:00

Temp

	React	Detect
TIC	70	70
TOC	98	98

Outlier Removal Criteria

Enabled:	Yes
Additional Replicates:	1
Max. % RSD.	10.00

Rinses

Rinse Volume (mL):	9.000
Rinses Per Sample:	0
Rinses Per Replicate:	0

Max. Std. Dev. 100 Use Modified Oxidant: No

Calibration Summary

Calibration Generation

Generation Mode:	Manual
# of Stds:	5
Dilution Factor:	10 : 1
Dilution Volume (mL):	1.000
Add Zero as Std #1:	No

Calibration Mode

Primary Mode:	TOC
User for ALL Modes:	Enabled

Calibration Pass/Fail Criteria

Parameter	Enabled	Low	High	Failure
R² (ugC/K-cts)	Yes	0.1000	0.3000	Continue
	Yes	0.950	1.000	Continue
Offset (area) (cts)	No	-	-	-
Offset (mass) (ugC)	No	-	-	-
QC Blank(cts)	No	-	-	-

Checks, QC's and Actions

Type	Target (PPM)	Tolerance (+/- %)	1st Failure	2nd Failure
CK Std	n/a	10.00	Re-run	Continue
QC #1	0.000	10.00	Re-run	Continue
QC #2	0.000	10.00	Re-run	Continue
QC #3	0.000	10.00	Re-run	Continue
QC #4	0.000	10.00	Re-run	Continue
SST	0.000	15.00	Abort	Abort

Denotes Excluded Replicates

Denotes First Failed Samples

Pace Analytical
1638 Roseytown Road
Greensburg, PA
15601
USA

Date Prepared: 05/03/2017 **By:** TOC

Date Approved: **By:**

Calibration Details

Calibration Mode:	TOC
Date Calibrated:	05/01/2017
Time Calibrated:	7:18 pm
Calibrated By:	toc
RF (ugC/k-cts):	0.3382
R2:	0.9997
R:	0.9998
QC Blank(cts):	0
Offset (cts):	7287
Offset (ugC):	-2.465
Reagent Blank (cts):	3,341
Units of Measure:	PPM->mg/L C

Calibration Settings

Stock Conc. For Dilutions: (PPM)	1,000.000
# of Reagent Blanks:	1
EFC Enabled:	No
Total Flowrate w/EFC:	50 ml/min
Check Standards:	Subtract Offset
Samples:	Substract Offset
Regression type:	Unweighted Linear

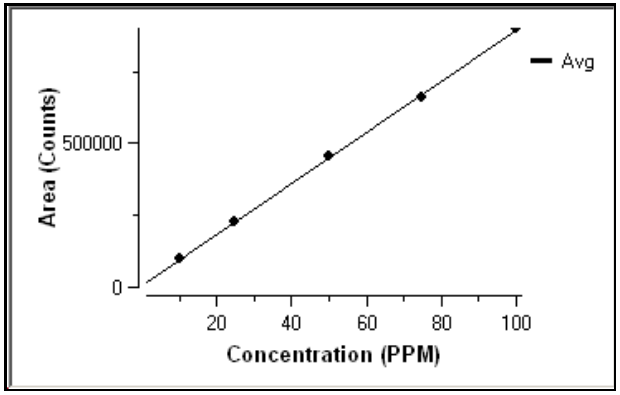
Calculations:

$$Concentration = \frac{\frac{RF}{1000} \times Area}{volume}$$

Samples: $Area = Area_{Peak} - Area_{Offset}$ *or* $Area = Area_{Peak} - Area_{RB}$

CHK Stds: $Area = Area_{Peak} - Area_{Offset}$ *or* $Area = Area_{Peak} - Area_{RW}$

QC Samples: $Area = Area_{Peak} - Area_{QCBlank}$



$$y = m \times x + b$$

$y \Rightarrow Area$ $\quad m \Rightarrow \frac{1000}{RF \times volume}$ $\quad b \Rightarrow 0$

1561 of 1588

Prep Log Report

Batch Information: WETA 256488 TOC 5310 CURVE TRACE **Template Version: F-PA-I-040-Rev.02 (12Dec2016)**

Prep Method		Analysis Method	5310	Prepared By	LEP	Prep Date Date/Time	05/01/2017 17:40:06:422
Phosphoric Acid Solution	21392	Sodium Persulfate Soln.	21393	Reviewed By		Reviewed By Date	
Batch Notes	Instrument Traceability						

Sample Information:

QC Rule	Sample Type	Lab Sample ID	Initial Amount (g or mL)	Final Volume (mL)	Final pH	Matrix	Sample Notes	CAL-STD
WETA TOC_Q	CCV	**CCV**	1	1	<2	Water		22150 (1)
WETA TOC_Q	CCB	**CCB**	1	1	<2	Water		22163 (1)
WETA TOC_Q	CAL0	**CAL0**	1	1	<2	Water		
WETA TOC_Q	CAL1	**CAL1**	1	1	<2	Water		22164 (1)
WETA TOC_Q	CAL2	**CAL2**	1	1	<2	Water		22165 (1)
WETA TOC_Q	CAL3	**CAL3**	1	1	<2	Water		22166 (1)
WETA TOC_Q	CAL4	**CAL4**	1	1	<2	Water		22167 (1)
WETA TOC_Q	CAL5	**CAL5**	1	1	<2	Water		22168 (1)
WETA TOC_Q	CAL6	**CAL6**	1	1	<2	Water		22169 (1)
WETA TOC_Q	ICB	**ICB**	1	1	<2	Water		22163 (1)
WETA TOC_Q	ICV	**ICV**	1	1	<2	Water		22151 (1)

Standard Notes:

22150: WET TOC CCV (25 ppm)
22151: WET TOC ICV/LCS (10 ppm) WC31-39-18
22163: WET TOC CCB/ICB
22164: WET TOC Curve Point 1 (1 ppm)
22165: WET TOC Curve Point 2 (10 ppm)
22166: WET TOC Curve Point 3 (25 ppm)
22167: WET TOC Curve Point 4 (50 ppm)
22168: WET TOC Curve Point 5 (75 ppm)
22169: WET TOC Curve Point 6 (100 ppm)

Prep Log Report

Batch Information: weta 257000/256897/256898 toc trace

Template Version: F-PA-I-040-Rev.02 (12Dec2016)

Prep Method	SM5310C-00	Analysis Method	SM5310C-00	Prepared By	LEP	Prep Date Date/Time	05/03/2017 20:17:27:389
Phosphoric Acid Solution	22567	Sodium Persulfate Soln.	22568	Reviewed By	BKH	Reviewed By Date	05/30/2017 11:39
Batch Notes	Instrument Traceability						

Sample Information:

QC Rule	Sample Type	Lab Sample ID	Initial Amount (g	mL)	Final Volume (mL)	Final pH	Matrix	Sample Notes	TOC-SPK (mL)
5310 WTOC	BLANK	**1266155**	40		40	<2	Water		
5310 WTOC	DUP	**1266158**	40		40	<2	Water		
5310 WTOC	LCS	**1266156**	40		40	<2	Water		22149 (.4)
5310 WTOC	MS	**1266157**	40		40	<2	Water		22149 (.4)
5310 WTOC	PS	**30216137001**	40		40	<2	Water		
5310 WTOC	PS	**30216391001**	40		40	<2	Water		
5310 WTOC	PS	**30216630001**	40		40	<2	Water		
5310 WTOC	PS	**30216630002**	40		40	<2	Water		
5310 WTOC	PS	**30216630003**	40		40	<2	Water		
5310 WTOC	PS	**30216630004**	40		40	<2	Water		
5310 WTOC	PS	**30216630005**	40		40	<2	Water		
5310 WTOC	PS	**30216808003**	40		40	<2	Water		
5310 WTOC	PS	**7016409004**	40		40	<2	Water		
5310 WTOC	PS	**7016409006**	40		40	<2	Water		
5310 WTOC	PS	**7016438010**	40		40	<2	Water		
5310 WTOC	PS	**7016438011**	40		40	<2	Water		
5310 WTOC	PS	**30217063001**	40		40	<2	Water		
5310 WTOC	PS	**30217064001**	40		40	<2	Water		
5310 WTOC	PS	**30217064002**	40		40	<2	Water		
5310 WTOC	PS	**30217065001**	40		40	<2	Water		
5310 WTOC	PS	**30217065002**	40		40	<2	Water		
5310 WTOC	PS	**30217065003**	40		40	<2	Water		

Prep Log Report

QC Rule	Sample Type	Lab Sample ID	Initial Amount (g | mL)	Final Volume (mL)	Final pH	Matrix	Sample Notes	TOC-SPK (mL)
5310 WTOC	PS	**30217065004**	40	40	<2	Water		
5310 WTOC	PS	**30217292001**	40	40	<2	Water		
9060A W	BLANK	**1265697**	40	40	<2	Water		
9060A W	LCS	**1265698**	40	40	<2	Water		22149 (.4)
9060A W	MS	**1265699**	40	40	<2	Water		22149 (.4)
9060A W	MSD	**1265700**	40	40	<2	Water		22149 (.4)
9060A W	PS	**7016230011**	40	40	<2	Water		
9060A W	PS	**7016230012**	40	40	<2	Water		
9060A W	PS	**7016230013**	40	40	<2	Water		
9060A W	PS	**7016230014**	40	40	<2	Water		
9060A W	PS	**7016230015**	40	40	<2	Water		
9060A W	PS	**7016230016**	40	40	<2	Water		
9060A W	PS	**7016230018**	40	40	<2	Water		
9060A W	PS	**7016230019**	40	40	<2	Water		
9060A W	PS	**7016230020**	40	40	<2	Water		
9060A W	RQS	**7016230017**	40	40	<2	Water		
9060A W	BLANK	**1265702**	40	40	<2	Water		
9060A W	LCS	**1265703**	40	40	<2	Water		22149 (.4)
9060A W	MS	**1265704**	40	40	<2	Water		22149 (.4)
9060A W	MSD	**1265705**	40	40	<2	Water		22149 (.4)
9060A W	PS	**7016360001**	40	40	<2	Water		
9060A W	PS	**7016368001**	40	40	<2	Water		
9060A W	PS	**7016368003**	40	40	<2	Water		
9060A W	PS	**7016368004**	40	40	<2	Water		
9060A W	PS	**7016368005**	40	40	<2	Water		
9060A W	PS	**7016368006**	40	40	<2	Water		
9060A W	PS	**7016368007**	40	40	<2	Water		

Prep Log Report

QC Rule	Sample Type	Lab Sample ID	Initial Amount (g | mL)	Final Volume (mL)	Final pH	Matrix	Sample Notes	TOC-SPK (mL)
9060A W	PS	**7016368008**	40	40	<2	Water		
9060A W	PS	**7016230021**	40	40	<2	Water		
9060A W	RQS	**7016368002**	40	40	<2	Water		

Standard Notes:

22149: WET TOC-STK2/SPK

Prep Log Report

Batch Information: WETA 256487 9060 CURVE

Template Version: F-PA-I-040-Rev.02 (12Dec2016)

Prep Method	TOC	Analysis Method	9060	Prepared By	LEP	Prep Date Date/Time	04/26/2017 12:15:49:951
Phosphoric Acid Solution	21392	Sodium Persulfate Soln.	21393	Reviewed By		Reviewed By Date	
Batch Notes	Instrument Traceability						

Sample Information:

QC Rule	Sample Type	Lab Sample ID	Initial Amount (g | mL)	Final Volume (mL)	Final pH	Matrix	Sample Notes	CAL-STD
WETA9060_Q	CCV	**CCV**	1	1	<2	Water		22150 (1)
WETA9060_Q	CCB	**CCB**	1	1	<2	Water		22163 (1)
WETA9060_Q	CAL0	**CAL0**	1	1	<2	Water		
WETA9060_Q	CAL1	**CAL1**	1	1	<2	Water		22164 (1)
WETA9060_Q	CAL2	**CAL2**	1	1	<2	Water		22165 (1)
WETA9060_Q	CAL3	**CAL3**	1	1	<2	Water		22166 (1)
WETA9060_Q	CAL4	**CAL4**	1	1	<2	Water		22167 (1)
WETA9060_Q	CAL5	**CAL5**	1	1	<2	Water		22168 (1)
WETA9060_Q	CAL6	**CAL6**	1	1	<2	Water		22169 (1)
WETA9060_Q	ICB	**ICB**	1	1	<2	Water		22163 (1)
WETA9060_Q	ICV	**ICV**	1	1	<2	Water		22151 (1)

Standard Notes:

22150: WET TOC CCV (25 ppm)
22151: WET TOC ICV/LCS (10 ppm) WC31-39-18
22163: WET TOC CCB/ICB
22164: WET TOC Curve Point 1 (1 ppm)
22165: WET TOC Curve Point 2 (10 ppm)
22166: WET TOC Curve Point 3 (25 ppm)
22167: WET TOC Curve Point 4 (50 ppm)
22168: WET TOC Curve Point 5 (75 ppm)
22169: WET TOC Curve Point 6 (100 ppm)

Prep Log Report

Batch Information: WETA 257288/257289 TOC TRACE

Template Version: F-PA-I-040-Rev.02 (12Dec2016)

Prep Method	EPA 9060A	Analysis Method	EPA 9060A	Prepared By	LEP	Prep Date Date/Time	05/04/2017 16:53:42:701
Phosphoric Acid Solution	22567	Sodium Persulfate Soln.	22568	Reviewed By	BKH	Reviewed By Date	05/30/2017 11:39
Batch Notes	Instrument Traceability						

Sample Information:

QC Rule	Sample Type	Lab Sample ID	Initial Amount (g	mL)	Final Volume (mL)	Final pH	Matrix	Sample Notes	TOC-SPK (mL)
9060A W	BLANK	**1267269**	40		40	<2	Water		
9060A W	DUP	**1267277**	40		40	<2	Water		
9060A W	LCS	**1267270**	40		40	<2	Water		22149 (.4)
9060A W	MS	**1267271**	40		40	<2	Water		22149 (.4)
9060A W	PS	**7016360002**	40		40	<2	Water		
9060A W	PS	**7016438001**	40		40	<2	Water		
9060A W	PS	**7016438002**	40		40	<2	Water		
9060A W	PS	**7016438003**	40		40	<2	Water		
9060A W	PS	**7016438005**	40		40	<2	Water		
9060A W	PS	**7016438006**	40		40	<2	Water		
9060A W	PS	**7016438007**	40		40	<2	Water		
9060A W	PS	**7016438008**	40		40	<2	Water		
9060A W	PS	**7016438009**	40		40	<2	Water		
9060A W	PS	**7016438014**	40		40	<2	Water		
9060A W	BLANK	**1267273**	40		40	<2	Water		
9060A W	LCS	**1267274**	40		40	<2	Water		22149 (.4)
9060A W	MS	**1267275**	40		40	<2	Water		22149 (.4)
9060A W	MSD	**1267276**	40		40	<2	Water		22149 (.4)
9060A W	PS	**7016373001**	40		40	<2	Water		
9060A W	PS	**7016373002**	40		40	<2	Water		
9060A W	PS	**7016373003**	40		40	<2	Water		
9060A W	PS	**7016373004**	40		40	<2	Water		

Prep Log Report

QC Rule	Sample Type	Lab Sample ID	Initial Amount (g | mL)	Final Volume (mL)	Final pH	Matrix	Sample Notes	TOC-SPK (mL)
9060A W	PS	**7016438015**	40	40	<2	Water		
9060A W	PS	**7016438016**	40	40	<2	Water		
9060A W	PS	**7016438018**	40	40	<2	Water		
9060A W	PS	**7016438019**	40	40	<2	Water		
9060A W	PS	**7016438020**	40	40	<2	Water		
9060A W	RQS	**7016438017**	40	40	<2	Water		

Standard Notes:

22149: WET TOC-STK2/SPK

PREMIER ENVIRONMENTAL SERVICES, INC.

DATA VALIDATION REPORT
OF THE
TOWN OF SOUTHAMPTON
NORTH SEA LANDFILL

ORGANIC AND INORGANIC ANALYSES
OF AQUEOUS SAMPLES

PACE ANALYTICAL SERVICES, INC.
MELVILLE, NEW YORK

LABORATORY REPORT NUMBER: 7016438

September, 2017

Prepared for
P.W. Grosser Consulting
Bohemia, New York

Prepared by
Premier Environmental Services
2815 Covered Bridge Road
Merrick, New York 11566
(516)223-9761

NYS DEC Data Usability Summary Report

DATA VALIDATION FOR:	Volatile Organic Analyses
SITE:	North Sea Landfill
CONTRACT LAB:	Pace Analytical Services, Inc. Melville, New York
REPORT NO.:	7016438
REVIEWER:	Renee Cohen
DATE REVIEW COMPLETED:	September, 2017
MATRIX:	Aqueous

The data validation was performed according to the guidelines in the described in the New York State Department of Environmental Conservation, Division of Environmental Remediation, Guidance for the Development of Data Usability Summary Reports (DUSR). In addition, the data has been reviewed using the protocol specified in the NYS Analytical Services Protocol ('05).

All data are considered valid and acceptable except those analytes which have been rejected "R" (unusable). Due to various QC problems, some analytes may have been qualified with a "J" (estimated), "N" (presumptive evidence for the presence of the material, "U" (non-detect), or "JN" (presumptive evidence for the presence of the material at an estimated value) flag. All actions are detailed on the attached sheets.

Several factors should be noted for all persons using this data. Persons using this data should be aware that no result is guaranteed to be accurate even if it has passed all QC tests. The main purpose of this review is to appropriately qualify outliers and to determine whether the results presented meet the specific site/project criteria for data quality and data use.

This data reports includes seventeen (17) aqueous samples, one (1) Field Blank and two (2) Trip Blank samples. The samples associated with this data set were collected April 19, 2017 and April 20, 2017. The samples were received at Pace Analytical Services, Inc. located in Melville, New York on April 20, 2017 and April 21, 2017. The cooler temperatures were within QC limits upon receipt. The samples were analyzed for Volatile Organic Analytes (EPA Method 8260C), Total and Dissolved Metals and Miscellaneous Wet Chemistry analytes as specified on the Chain of Custody (COC) documentation that accompanied the samples to the laboratory.

A cross-reference between Field Sample ID and Laboratory Sample ID is located in Table 1 of this report. Copies of the definitions that may be used to qualify data results are located in Appendix A of this report. Copies of qualified data result pages are located in Appendix B of this report and a copy of Chain of Custody (COC) documentation associated with sampling event is located in Appendix C.

This review is for the subset of samples that were marked on the Chain of Custody for Volatile Organic Analytes. A sub set of these samples was also analyzed for Total and Dissolved Metals and miscellaneous wet chemistry analytes. The review of these inorganic analytes is located in stand-alone data review reports within this validation report.

ORGANIC DATA ASSESSMENT

1. OVERVIEW:

The client requested that five (5) percent (%) of the samples in this data set be reviewed. One (1) discreet sample point was chosen for Volatile Organic Data review. A full review of the holding times and instrument calibration was performed on this data set.

The samples were analyzed using EPA Test Methods for the Evaluation of Solid Waste (SW 846), Method 8260C. The Volatile Organic analytes were reported by the laboratory. Proper custody transfer of the samples was documented in the laboratory reports. Cooler temperatures were within QC limits. Sample preservation was checked prior to analysis. The samples in this data set were properly preserved.

The following aqueous sample was chosen for review in the VOA fraction: MW-1A.

2. HOLDING TIME:

The amount of an analyte in a sample can change with time due to chemical instability, degradation, volatilization, etc. If the specified holding time is exceeded, the data may not be valid. Preserved volatile organic analyses are required to be analyzed within 10 days of validated time of sample receipt (VTSR) in accordance with the NYSDEC ASP, Rev '95. The technical holding time for properly preserved aqueous samples is 14 days from collection.

Sample 1A was collected on April 19, 2017 and received at the laboratory on April 20, 2017. The sample analysis was completed on April 25, 2017. The sample chosen for review and the associated QC samples were prepared and analyzed within ten (10) days of VTSR.

3. SURROGATES:

Each of the samples is spiked with surrogate compounds prior to sample preparation to evaluate the overall laboratory performance and the efficiency of the analytical technique. If the measured surrogate concentrations are outside the QC limits, qualifiers were applied to the effected samples.

Each of the samples in this data set was spiked with the three (3) surrogate compounds 1, 2-Dichloroethane-d4, Toluene-d8 and 4-Bromofluorobenzene. In house-surrogate recovery limits were utilized by the laboratory. The percent recovery of each surrogate compound met QC criteria in the sample chosen for review.

4. MATRIX SPIKE/SPIKE DUPLICATE, MS/MSD:

The MS/MSD data are generated to determine the long-term precision and accuracy of the analytical method in various matrices. The MS/MSD may be used in conjunction with other QC criteria for additional qualification of data.

Site specific MS/MSD was performed on sample MW-3C. In house recovery limits were reported for each target compound reported in this data set. RPD criteria 0-20 was reported for each target analyte. % Recovery and RPD (%) met QC criteria in the site-specific MS/MSD associated with this data set.

ORGANIC DATA ASSESSMENT

5. BLANK SPIKE ANALYSIS:

The NY ASP protocol requires that a blank spike analysis be performed with each sample batch. The blank spike analysis is used to ensure that the analytical system is in control. The laboratory applied in-house recovery limits for each analyte.

The laboratory performed one (1) laboratory control sample (LCS)/laboratory control sample duplicate (LCSD) analysis with the sample chosen for review. The LCS was fortified with the complete list of target analytes. In-house spike recovery limits were reported for each of target analyte Percent recovery met QC limits with the exception of the following: 1,1-DCA, 1,2-DCA, 1,2-Dibromoethane (EDB), 2-Butanone, 2-Hexanone, 4-Methyl-2-pentanone, Acetone, Acrylonitrile, Carbon Tetrachloride, DBCM, Tetrachloroethene. These target analytes have been estimated "J"/"UJ" in the sample chosen for review (MW-1A).

6. BLANK CONTAMINATION:

Quality assurance (QA) blanks, such as the method, trip, field, or rinse blanks are prepared to identify any contamination that may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Trip blanks measure cross-contamination of samples during shipment. Field blanks measure cross-contamination of samples during field operations. Samples are then qualified based on blank contamination when detected.

A) Method Blank contamination

One (1) aqueous method blank sample is associated with these sample analyses. This method blank sample was free from contamination of target and non-target (TIC) analytes.

B) Field Blank contamination

The Field Blank sample reported Acetone (5.3 ug/l B) and Methylene Chloride (3.3 ug/l). Acetone and/or Methylene Chloride when detected in associated samples have been negated "U" qualified due to the field blank sample.

Qualified data result pages are located in Appendix B of this report.

C) Trip Blank contamination

Two (2) Trip Blank samples are associated with this data set. Each of the Trip Blank samples is free from contamination of target analytes with the exception of the following: Trip Blank 4/19/17-Acetone (3.6 J ug/l) and Methylene Chloride (1.8 J ug/l) and Trip Blank 4/20/17-Acetone (6.5 ug/l) and Methylene Chloride (2.1 ug/l). Methylene Chloride was detected in sample MW-1A (2.1 J ug/L). Methylene Chloride has been negated "U" qualified in sample MW-1A.

Qualified data result pages are located in Appendix B of this report.

D) Storage Blank contamination

The Storage Blank sample associated with this data is free from contamination of target analytes with the exception Acetone and Methylene Chloride. Acetone was previously qualified due to Trip Blank contamination; therefore no further action was taken.

ORGANIC DATA ASSESSMENT

7. GC/MS CALIBRATION:

Satisfactory instrument calibration is established to ensure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of giving acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument is giving satisfactory daily performance.

A) RESPONSE FACTOR

The response factor measures the instrument's response to specific chemical compounds. Region II data review requires that the response factor of all analytes be greater than or equal to 0.05 in both initial and continuing calibration analyses. A value less than 0.05 indicates a serious detection and quantitation problem (poor sensitivity). Region II data validation criteria states that if the minimum RRF criteria are not met in an initial calibration the positive results are qualified "J". Non-detect results in the initial calibration with a RRF <0.05 are qualified "R", unusable. If RRF criteria is not met in the continuing calibration curve analysis, affected positive analytes will be qualified "J" estimated. Those analytes not detected are not qualified. The SW-846 Methods cite specific analytes known as System Performance Check Compounds (SPCC). Minimum response criteria are set for these analytes. If the minimum criteria are not met, analyses must stop and the source of problems must be found and corrected. Data associated with this set has been reviewed for the criteria in the cited in the EPA Method and the Region II criteria.

One (1) initial calibration curve analysis is associated with the aqueous samples in this data set. The laboratory performed one aqueous initial multilevel calibration on March 27, 2017 (Inst 70MSV6). The RRF of target compounds met QC criteria in this initial calibration curve analysis. One (1) ICV standard was analyzed. RRF of target analytes met QC criteria in the ICV standard analysis.

One (1) continuing calibration standards are associated with the sample chosen for review in this data set. The CCV standard was analyzed April 25, 2017. The RRF of target compounds met QC criteria in this continuing calibration standard analysis.

B) PERCENT RELATIVE STANDARD DEVIATION (RSD) AND PERCENT DIFFERENCE (%D):

Percent RSD is calculated from the initial calibration and is used to indicate the stability of the specific compound response factor over increasing concentration. Percent D compares the response factor of the compounds in the continuing calibration standard to the mean response factor (RRF) from the initial calibration. Percent D is a measure of the instrument's daily performance. Region II data validation criteria states that the percent RSD of the initial calibration curve must be less than or equal to 20% (30% CCC compounds). The %D must be <20% in the continuing calibration standard. These criteria have been applied to all target analytes. A value outside of these limits indicates potential detection and quantitation errors. For these reasons, all positive results are flagged as estimated, "J" and non-detects may be flagged "UJ", based on professional judgment. If %RSD and %D grossly exceed QC criteria (>90%), non-detects data may be qualified "R", unusable. Data associated with this set has been reviewed for the criteria in the cited in the USEPA Data Validation Guidelines and the USEPA Region II criteria.

One (1) aqueous initial calibration standard analysis is associated with this data set. The laboratory analyzed an aqueous initial calibration curve on March 27, 2017 (Inst 70MSV6). The laboratory reported the Relative Standard Deviation (%RSD) of each target compound on a summary form that was included in the report. Target analyte %RSD criteria were met in the initial calibration curve analysis. An initial calibration verification standard was analyzed. Target analytes with the exception of: 2-Butanone (24.1%), Tetrachloroethene (20.87%) and Vinyl Acetate (24.46%). These target analytes have been estimated "J"/" UJ" qualified.

Qualified data result pages are located in Appendix B of this report.

ORGANIC DATA ASSESSMENT

7. GC/MS CALIBRATION:

B) PERCENT RELATIVE STANDARD DEVIATION (RSD) AND PERCENT DIFFERENCE (%D) (cont'd):

One (1) continuing calibration standard analysis is associated with the aqueous sample chosen for data review. This CCV standard was analyzed April 25, 2017 (File ID: 8774811). The % Difference of reported target compounds met QC criteria in the continuing calibration standard, with the exception of the following reported compounds:

Date	Analyte	%Difference
4/25/17	Acetone	27.76
	Acrylonitrile	22.28
	2-Butanone	23.27
	Carbon Tetrachloride	27.11
	Dibromochloromethane	38.65
	1,2-Dibromoethane (EDB)	27.27
	2-Hexanone	24.27
	4-methyl-2-pentanone	22.54
	Tetrachloroethane	21.07

These target analytes have been estimated "J"/"UJ" qualified in sample MW-1A.

Qualified data result pages are located in Appendix B of this report.

8. GC/MS INTERNAL STANDARDS PERFORMANCE:

Internal standard (IS) performance criteria ensure that the GC/MS sensitivity and response are stable during every run. The method recommends that the internal standard area count must not vary by more than a factor of 2 (-50%to +100%) from the associated continuing calibration standard. The method recommends that the retention time of the internal standard must not vary more than ±30 seconds from the associated continuing calibration standard. The EPA CLP validation guidelines state that if the area count is outside the (-50% to +100%) range of the associated standard, all of the positive results for compounds quantitated using that IS are qualified estimated, "J", and all non-detects below 50% are qualified "UJ", non-detects above 100% should not be qualified or "R" if there is a severe loss of sensitivity. The internal standard area count evaluation criteria are applied to all field and QC samples.

The samples in this data set were spiked with the internal standards Pentafluorobenzene, 1, 4-Difluorobenzene, Chlorobenzene-d5 and 1, 4-Dichlorobenzene-d4 prior to analysis. The area counts and retention time of each internal standard met QC criteria in the field samples and QC samples associated with this data set.

9. GC/MS MASS SPECTROMETER TUNING:

Tuning and performance criteria are established to ensure adequate mass resolution, proper identification of compounds, and to some degree, sufficient instrument sensitivity. These criteria are not sample specific. Instrument performance is determined using standard materials. Therefore, these criteria should be met in all circumstances. The tuning standard for volatile organics is Bromofluorobenzene (BFB). If the mass calibration is in error, or missing, all associated data will be classified as unusable, "R".

The tune criteria listed in the data report met or exceeded that required by the method. Tuning criteria associated with these sample analyses were met.

ORGANIC DATA ASSESSMENT

10. FIELD DUPLICATE ANALYSIS:

Field duplicate samples are taken and analyzed as an indication of overall precision. These measure both field and lab precision, therefore, the results may have more variability than lab duplicate samples. Soil samples are also expected to have a greater variance due to the difficulties associated with collecting exact duplicate soil samples. Data was not qualified based on the results of the field duplicate sample data.

Field duplicate sample analysis is not associated with the sample chosen for review.

11. COMPOUND IDENTIFICATION:

Target compounds are identified on the GC/MS by using the analyte's relative retention time (RRT) and by comparison to the ion spectra obtained from known standards. For the results to be a positive hit, the sample peak must be within $\pm$ 0.06 RRT units of the standard compound, and have an ion spectrum which has a ratio of the primary and secondary ion intensities with 20% of that in the standard compound.

Fourteen (14) field samples, one (1) Field Blank sample and two (2) Trip Blank sample were marked on the COC for volatile organic analyses. One (1) aqueous sample was chosen for data review and DUSR preparation. Sample MW-1A was analyzed for Volatile Organic analytes by EPA Method 8260C. Tentatively Identified Compounds (TIC's) were analyzed, none were reported in this sample. The samples were analyzed in accordance with the cited method. Results reported between the method detection limit and the reporting limit are "J" qualified by the laboratory.

Sample MW-1A was analyzed without dilution. The laboratory provided the quantitation report, chromatogram and analyte spectra in the New York Sate DEC ASP Category B deliverable that was reported for this data set.

12. OVERALL ASSESSMENT:

The aqueous samples associated with this data set were collected April 19, 2017 and April 20, 2017. The COC documents that accompanied the samples to the laboratory and indicated which samples were to be analyzed Volatile Organic compounds. The data reported agrees with the raw data provided in the final report. The laboratory provided a complete ASP Category B data package and reported all data using acceptable protocols and laboratory qualifiers as defined in the report package.

One (1) sample was reviewed to meet the Quality Assurance Plan requirements. The Volatile Organic analytes/sample results associated with sample MW-1A are reported to the laboratory reporting limit or Practical Quantitation Limit (PQL). These Volatile Organic data results are acceptable for use with the noted data qualifiers. Data qualification is described in the above report.

Qualified data result pages are located in Appendix B of this report.

NYS DEC Data Usability Summary Report

DATA VALIDATION FOR:	**Target Analyte List of Metals (TAL)**
SITE:	**North Sea Landfill**
CONTRACT LAB:	**Pace Analytical Services, Inc. Melville, New York**
PROJECT NO.:	**7016438**
REVIEWER:	**Renee Cohen**
DATE REVIEW COMPLETED:	**September 2017**
MATRIX:	**Aqueous**

The Chain of Custody (COC) documentation associated with this data set listed sixteen (16) aqueous samples and one (1) field blank sample. Samples in this data set were analyzed for the Total TAL metals (inc. Boron), Filtered TAL metals (inc. Boron) or a subset of metals in accordance with the COC documents that accompanied the samples to the laboratory.

The samples in this data set were collected April 19, 2017 and April 20, 2017 and received at Pace Analytical Services, Inc. located in Melville, New York on April 20, 2017 and April 21, 2017.

The data evaluation was performed according to the guidelines noted in the "National Functional Guidelines for Inorganic Data Review", January, 2010 and the NYSDEC ASP. A Data Usability Summary Report (DUSR) has been prepared in accordance with the guidelines of the Division of Environmental Remediation.

Several factors should be noted for all persons using this data. Persons using this data should be aware that no result is guaranteed to be accurate even if it has passed all QC tests. The main purpose of this review is to appropriately qualify outliers and to determine whether the results presented meet the specific site/project criteria for data quality and data use.

Table 1 of this report contains a cross reference between the Field Sample ID's and the Laboratory Sample ID's. Appendix A of this Data Usability Summary Report (DUSR) contains a summary of the data qualifiers that may be used in the report. Appendix B contains the qualified data result pages. Appendix C contains the Chain of Custody (COC) documents associated with this data set.

The samples in this data set were also analyzed for Volatile Organic Analytes and Miscellaneous Wet Chemistry analytes. The data review associated with these analyses are located in stand-alone Data Usability Reports (DUSR). This data review is associated with these Metals Analyses.

DATA USABILITY SUMMARY REPORT (DUSR)
Inorganic Data Assessment

1. OVERVIEW

This data report includes the analysis of 5% of the aqueous samples that were collected April 19, 2017 and April 20, 2017. The samples were received at the laboratory on April 20, 2017 and April 21, 2017 and analyzed for the parameters indicated on the COC documents that accompanied the samples to the laboratory. Table 1 of this report is a cross reference between the Field Sample ID and Laboratory Sample ID.

Sample MW-1A (7016438001) was reviewed for Total ICP Metals (Inc. Hg). The sample chosen for data review was not prepared and/or analyzed for Dissolved/Filtered Metals.

2. HOLDING TIME

The amount of an analyte in a sample can change with time due to chemical instability, degradation, volatilization, etc. If the specified holding time is exceeded, the data may not be valid. Metals with the exception of Mercury, is required to be digested and analyzed within 180 days of Verified Time of Sample Receipt (VTSR). Mercury samples are to be digested and analyzed within 26 days of VTSR.

The total metal aqueous sample chosen for review was prepared for ICP metals in one (1) batch on April 25, 2017. The sample digestate and associated QC samples were analyzed in one (1) analytical sequence on May 3, 2017. The sample chosen for review was digested for Mercury on April 25, 2017. The Mercury sample digestate was analyzed on May 2, 2017. Total ICP and Mercury of the sample chosen for review was digested and analyzed within the method holding time.

Filtered Metal Analyses – The sample chosen for data review was not prepared and/or analyzed for filtered/dissolved metal analyses.

3. CALIBRATION ANALYSIS

Inductively Coupled Plasma (ICP) was utilized for these analyses. The ICP was calibrated using the calibration standards required by the manufacturer. An initial calibration verification (ICV) standard is then analyzed to verify instrument calibration. One (1) continuing calibration standard was analyzed after each ten (10) field samples.

Total Metal Analyses –One (1) ICP analytical sequence is associated with the samples in this data set. The sample chosen for review was analyzed May 3, 2017. One (1) Hg analytical sequence is associated with this data set. The sample digestates were analyzed on May 2, 2107. The ICV and CCV standards associated with the analytical sequence met QC criteria.

Filtered Metal Analyses – The sample chosen for data review was not prepared and/or analyzed for filtered/dissolved metal analyses.

4. ICP CRDL STANDARD

The CRDL standard is used for the verification of instrument linearity near the CRDL. The CRDL standard control limits are 70%-130% recovery. If the CRDL standard falls outside of the control limits, associated data less than or equal to the 10X the CRDL are qualified estimated (J or UJ) or rejected (R) depending on the recovery of the CRDL standard and the concentration of the analyte in the sample. When the CRDL standard exceeds the control limit, indicating a high bias samples are qualified estimated (J or UJ).

The laboratory analyzed one (1) CRDL standard with each of the Total and Filtered ICP analytical sequences associated with this data set. This validator applied limits of 70-130% to review each target analyte.

Total Metal Analyses –The CRDL recovery of the target analytes met QC criteria in the opening and closing CRDL standard.

Filtered Metal Analyses - The sample chosen for data review was not prepared and/or analyzed for filtered/dissolved metal analyses.

5. ICP INTERFERENCE CHECK STANDARD

The Interference Check Standard (ICS) is used to verify the laboratory interelement and background correction factors of the ICP. Two solutions comprise the ICS A and ICS AB. Solution A consists of the interferent metals while solution AB is the group of target analytes and the interferent metals. An ICS analysis consists of analyzing both solutions consecutively for all wavelengths used for each analyte reported by ICP. The ICP ICS standards are to be analyzed at the beginning and end of each analytical run. The results are to fall within control limits of +/-20% of the true value.

Total Metal Analyses - The laboratory analyzed one (1) ICSA and one (1) ICSAB standard at the beginning and end of the ICP analytical sequence reported with this data set. These QC samples are used to verify the laboratories interelement and background correction factors of the ICP. The recovery of the ICSA/AB standards met QC criteria in the analytical sequence associated with this data sets on May 3, 2017 and May 5, 2017.

Filtered Metal Analyses - The sample chosen for data review was not prepared and/or analyzed for filtered/dissolved metal analyses.

DATA USABILITY SUMMARY REPORT (DUSR)
Inorganic Data Assessment

6. MATRIX SPIKE (MS) ANALYSIS

The spike sample analysis provides information about the effect of the sample matrix upon the digestion and measurement methodology. The spike control limits are 75%-125% when the sample concentration is less than four (4) times the spike added. If the matrix spike recoveries fall in the range of 30%-74%, the sample results are may be biased low and are qualified as estimated (J or UJ). If the matrix spike recoveries fall in the range of 126%-200%, sample results may be biased high. Positive results are qualified estimated (J). If the spike recovery is greater than 125% and the reported sample result is less than the IDL the data point is acceptable for use. If the matrix spike recovery is greater than 200%, the associated sample data are unusable and are rejected (R). If matrix spike results are less than 30%, the associated non-detect results are qualified unusable and rejected (R), and the results reported above the IDL are qualified estimated (J).

Total Metal Analyses - Batch QC matrix spike (MS) analysis was reported with the sample chosen for review in this data set. In addition, matrix spike analysis was performed on sample MW-11A, MW-11B, MW-3C. These samples were not associated with the preparation batch associated with sample MW-1A, therefore no action was taken.

Filtered Metal Analyses - The sample chosen for data review was not prepared and/or analyzed for filtered/dissolved metal analyses.

7. POST DIGESTION SPIKE ANALYSIS

The post digestion spike sample analysis provides additional information about the effect of the sample matrix upon the digestion and measurement methodology. The post digestion spike is performed for each analyte that the pre-digestion spike recovery falls outside the 75-125% control limit.

Total Metal Analyses - Post digestion spike analysis was performed on the Batch QC sample in the preparation batch associated with sample MW-1A. Sample data has not been qualified based on the results of Batch QC analyses.

Filtered Metal Analyses - The sample chosen for data review was not prepared and/or analyzed for filtered/dissolved metal analyses

8. DUPLICATE SAMPLE ANALYSIS

The laboratory duplicate sample analysis is used to evaluate the laboratory precision of the method for each analyte. If the duplicate sample analysis results for a particular analyte fall outside the control windows of 20% RPD or +/- CRDL, whichever is appropriate depending upon the concentration of the sample, the associated sample results are qualified "J" estimated.

Total Metals Analyses – Batch QC duplicate analysis is reported with this data set. Batch QC duplicate analysis associated with the sample chosen for review (MW-1A). Sample data has not been qualified based on Batch QC duplicate analyses.

Filtered Metal Analyses - The sample chosen for data review was not prepared and/or analyzed for filtered/dissolved metal analyses.

9. ICP SERIAL DILUTION

The serial dilution analysis indicates whether significant physical or chemical interference's exist due to the sample matrix. If the concentration of any analyte in the original sample is greater than 50 times the instrument detection limit (IDL), an analysis of a 5-fold dilution samples must yield results which have a percent difference (%D) of less than or equal to 10 with the original sample results. If the %D of the serial dilution exceeds the 10% (and is not greater than 100%) for a particular analyte, all the associated sample results are qualified estimated (J).

Total Metal Analysis – Batch QC serial dilution analysis is associated with the sample chosen for review in the data set. Sample data has not been qualified based on the results of Batch QC analyses.

Filtered Metal Analyses - The sample chosen for data review was not prepared and/or analyzed for filtered/dissolved metal analyses

10. BLANKS

Blank analyses are assessed to determine the existence and magnitude of contamination problems. The criteria for the evaluation of blanks applies to all blanks, including but not limited to reagent blanks, method blanks and field blanks. The responsibility for action in the case of an unsuitable blank result depends upon the circumstances and the origin of the blank itself. If the problem with any blank exists, then all associated data must be carefully evaluated to determine whether there is inherent variability in the data for that case, or the problem is an isolated occurrence not affecting other data.

The laboratory provided a summary report form for the method blank associated with each of the preparation batches. Each of the ICP preparation blanks (Total and Filtered) was free from contamination of all target analytes above the reporting limit.

The preparation blank associated with both the Total and Filtered Mercury sample analyses was free from contamination above the laboratory reporting limit.

The preparation blank associated with both the Total Cyanide sample analyses was free from contamination above the laboratory reporting limit.

Field Blank (7016438009) was free from contamination of the select list of metals that were analyzed except for Manganese (4.0 J ug/l). The concentration of Manganese detected in the sample chosen for review was higher than that which can be attributed to the Field Blank sample. Sample data has not been qualified based on the results of the Field blank sample.

The laboratory provided summary forms to report the ICB and CCB analyses for all the ICP and Mercury analytical sequences reported in this data set. All QC criteria were met in each of the ICB/CCB analyses reported in this data set.

DATA USABILITY SUMMARY REPORT (DUSR)
Inorganic Data Assessment

11. LABORATORY CONTROL SAMPLE ANALYSIS (LCS)

The laboratory control sample (LCS) analysis provides information about the efficiency of the laboratory digestion procedure. If the recovery of any analyte is outside the established control limits, then laboratory performance and method accuracy are in question. Professional judgment is used to determine of data should be qualified or rejected.

One (1) Laboratory Control Sample (LCS) was prepared and analyzed with each preparation batch. Each of the LCS samples was fortified with the associated target analytes. A recovery limit of 80%-120% was applied to each target analyte. The recovery of target analytes met QC criteria in each of the ICP LCS samples associated with this data set.

12. INSTRUMENT QC DATA

The laboratory provided the required annual and semiannual ICP and Mercury Instrument QC summary report forms in this data report. All annual and semiannual QC studies were performed by the laboratory within the proper time frame.

13. COMPOUND IDENTIFICATION

The samples in this data set were reported as Total Metals and Filtered/Dissolved Metals. Samples were filtered upon receipt at the laboratory as per the documentation that accompanied the samples to the laboratory. Samples in this data set were analyzed for ICP metals and mercury as specified by the COC documents that accompanied the samples to the laboratory.

Five (5) percent (%) of these samples were chosen for data review. Sample MW-1A (7016438001) was chosen for the review of Total Metals. Sample MW-1A was not analyzed for dissolved metals.

The samples in this data set were analyzed in accordance with the required methods as specified by the COC documents that accompanied the samples to the laboratory. All sample data was reported in ug/l.

14. FIELD DUPLICATE SAMPLE ANALYSIS

Field duplicate samples are collected and analyzed as an indication of overall precision. These results are expected to have more variability than laboratory duplicate samples. Soil samples have more variability than aqueous samples due to the non-homogeneity of the soil. The total metal sample chosen for data review (MW-1A) is not the field duplicate sample that was included in this data set. Sample MW-1C was collected in duplicate. Duplicate analysis was performed on sample MW-1C. The RPD (%) of these field duplicate sample results met QC criteria. Sample MW-1C and DUP-001 were not analyzed for dissolved metals.

15. SYSTEM PERFORMANCE AND OVERALL ASSESSMENT

This data set included the reporting of Total and Filtered Metals as required by the Chain of Custody Documentation that accompanied the samples to the laboratory. The samples were analyzed for the Total/Filtered TAL Metals and Boron or a subset of metals designated by the associated COC documents. The Chain of Custody documents noted what samples were analyzed for specified analytes. A copy of the Chain of Custody is located in Appendix C of this report. The sample results are reported in accordance with the cited methods.

The sample chosen for Total Metals data review in this data set is acceptable for use without data qualifiers.

NYS DEC Data Usability Summary Report

DATA VALIDATION FOR:	**Miscellaneous Wet Chemistry**
SITE:	**North Sea Landfill**
CONTRACT LAB:	**Pace Analytical Services, Inc. Melville, NY**
REPORT NO.:	**7016438**
REVIEWER:	**Renee Cohen**
DATE REVIEW COMPLETED:	**September 2017**
MATRIX:	**Aqueous**

The Chain of Custody (COC) documentation associated with this data set listed seventeen (17) samples (inc. 1 field duplicate sample, one (1) Field Blank and two (2) Trip Blank sample. The samples in this data set were collected April 19, 2017 and April 20, 2017 and received at Pace Analytical Services, Inc. located in Melville, New York on April 20, 2017 and April 21, 2017.

The data evaluation was performed according to the guidelines and QC criteria cited in the miscellaneous wet chemistry methods that were used for this data set. A Data Usability Summary Report (DUSR) has been prepared in accordance with the guidelines of the Division of Environmental Remediation.

Several factors should be noted for all persons using this data. Persons using this data should be aware that no result is guaranteed to be accurate even if it has passed all QC tests. The main purpose of this review is to appropriately qualify outliers and to determine whether the results presented meet the specific site/project criteria for data quality and data use.

Table I of this report contains a cross reference between the Field Sample ID's and the Laboratory Sample ID's. Appendix A of this Data Usability Summary Report (DUSR) contains a summary of the data qualifiers that may be used in the report. Appendix B contains the qualified data result pages. Appendix C contains the Chain of Custody (COC) documents associated with this data set.

The laboratory performed these wet chemistry analyses based on the COC documentation that accompanied the samples to the laboratory. In addition, these samples were analyzed for Volatile Organic Analytes and Metals (Total and Filtered). The review of these various analyses is reported in stand-alone DUSR reports. This data review is associated with the Miscellaneous Wet Chemistry Analyses.

DATA USABILITY SUMMARY REPORT (DUSR)
NORTH SEA LANDFILL

1. OVERVIEW

This data report includes the review of 5% of the aqueous samples that were collected and received at the laboratory on April 19,2017 and April 20, 2017. Table 1 of this report is a cross reference between the field sample ID and laboratory sample ID. Sixteen (16) samples, two (2) Field Blank samples and one (1) Trip Blank sample were submitted to the laboratory for the analyses listed on the COC documents.

One (1) of the samples in this data set was chosen for review. The sample chosen for review was sample MW-1A (7016438001).

The samples in this data set were analyzed for the parameters listed on the COC documents. A full data deliverable was generated to report these sample results. The aqueous samples in this data set were analyzed for the Wet Chemistry analytes. The samples in this data set were subcontracted Pace Analytical Pittsburgh located in Greensburg, PA for TOC analysis.

2. HOLDING TIME

The amount of an analyte in a sample can change with time due to chemical instability, degradation, volatilization, etc. If the specified holding time is exceeded, the data may not be valid.

The laboratory chronicles list the date of analysis for each of the Miscellaneous Wet Chemistry analyses. Sample MW-1A was chosen for data review. The holding time for each of the reported analyses with the analysis Total Dissolved Solids (TDS) met QC criteria. TDS was performed outside the seven-day holding time. TDS in the sample chosen for review has been estimated "J" qualified.

Qualified data result pages are located in Appendix B of this report.

3. CALIBRATION ANALYSIS

The laboratory summarized the initial and continuing calibration data associated with each of the wet chemistry analytes where applicable. All initial and continuing calibration standard analyses associated with this data set met QC criteria for each of the analytes reported in this data set.

4. MATRIX SPIKE (MS) ANALYSIS

The spike sample analysis provides information about the effect of the sample matrix upon the digestion and measurement methodology. The spike control limits are designated by Pace Analytical Laboratories. The in-house recovery limits are cited on the QC summary report pages for each analyte where applicable.

Sample MW-3C was utilized as the matrix spike sample for the Ion Chromatography analyses (Bromide, Chloride, Sulfate). Percent recovery met QC criteria in the site-specific MS analysis.

Sample MW-1B was utilized as the matrix spike sample for these Total Organic Carbon (TOC) sample batch analyzed 5/3/17. Percent recovery in the MS was below QC criteria. Sample MW-1B was not the sample chosen for review, therefore no action was taken.

Sample MW-1A was utilized as the matrix spike sample for the Total Dissolved Solids (TDS) sample batch analyzed 4/27/17. Percent recovery met QC criteria in the in the-site specific MS analysis.

5. DUPLICATE SAMPLE ANALYSIS

The laboratory duplicate sample analysis is used to evaluate the laboratory precision of the method for each analyte. If the duplicate sample analysis results for a particular analyte fall outside the control windows of 20% RPD depending upon the concentration of the sample, the associated sample results are qualified "J" estimated.

Site specific sample MW-3C was utilized as the laboratory duplicate sample for Bromide, Chloride, Sulfate. Sample MW-1A was prepared and analyzed as the laboratory duplicate analysis for TDS. Laboratory duplicate RPD met QC criteria in these laboratory duplicate analyses.

6. BLANKS

Blank analyses are assessed to determine the existence and magnitude of contamination problems. The criteria for the evaluation of blanks applies to all blanks, including but not limited to reagent blanks, method blanks and field blanks. The responsibility for action in the case of an unsuitable blank result depends upon the circumstances and the origin of the blank itself. If the problem with any blank exists, then all associated data must be carefully evaluated to determine whether there is inherent variability in the data for that case, or the problem is an isolated occurrence not affecting other data.

The laboratory provided Method Blank data results for each of the Wet Chemistry analytes. The method blank and/or preparation blank associated with these miscellaneous Wet Chemistry methods were free from contamination of the target analyte above the reporting limit.

The Field Blank (FB) sample was free from contamination of the target analytes reported in this data set with the exception of Alkalinity (0.60 J mg/l), Biological Oxygen Demand (BOD) (1.0 J mg/l), Chloride (0.35 J mg/l), Phenol (25.0 mg/l), Ammonia (0.2 mg/L) and TOC (0.36 J mg/L). When detected in the sample chosen for review and the concentration can be attributed to the Field Blank, the analyte has been negated "U" qualified.

Qualified data result pages are located in Appendix B of this report.

7. LABORATORY CONTROL SAMPLE ANALYSIS (LCS)

The laboratory control sample (LCS) analysis provides information about the efficiency of the laboratory digestion procedure. If the recovery of any analyte is outside the established control limits, then laboratory performance and method accuracy are in question. Professional judgment is used to determine of data should be qualified or rejected.

The laboratory reported LCS recoveries for each of the wet chemistry analyses. The recovery of each of the LCS samples met QC criteria.

8. COMPOUND IDENTIFICATION

Sample results are reported in accordance with the cited methods. A review of the raw data was performed for these wet chemistry analyses. Sample MW-1A (7016438001) was the sample chosen for complete review. Sample results were reported in accordance with the method. Sample results are reported to the base reporting limit for the reported target analytes.

8. COMPOUND IDENTIFICATION

Sample results are reported in accordance with the cited methods. A review of the raw data was performed for these wet chemistry analyses. Sample MW-1A (7016438001) was the sample chosen for complete review. Sample results were reported in accordance with the method. Sample results are reported to the base reporting limit for the reported target analytes.

9. FIELD DUPLICATE DATA RESULTS:

Field duplicate samples are taken and analyzed as an indication of overall precision. The field duplicate sample analyses measure both field and laboratory precision; therefore, the results may have more variability than lab duplicate samples.

The duplicate sample (MW-1C) in this data set was not chosen within the 5% sample review. The RPD of the field duplicate sample (MW-1C/DUP-001) met QC criteria for the reported target analytes.

10. SYSTEM PERFORMANCE AND OVERALL ASSESSMENT

The inorganic analyses associated with this data set included the reporting of sixteen (16) aqueous samples (inc. 1 field duplicate sample) and one (1) Field Blank sample per the COC documents that accompanied the samples to the laboratory. The samples were analyzed for miscellaneous Wet Chemistry analytes as noted on the COC documents that accompanied the data set. Five percent (5%) of the sample set was to be reviewed. The sample chosen for review was sample MW-1A (7016438001). Sample MW-1A was subcontracted to Pace Analytical Pittsburgh located in Greensburg, PA for TOC analysis. A copy of the associated Chain of Custody documents is located in Appendix C of this report. The sample results are reported in accordance with the cited methods.

The miscellaneous wet chemistry analyte results in sample MW-1A are acceptable for use with noted data qualifiers. Data qualifiers are described in this report. Qualified data result pages are located in Appendix B of this report.

TABLE 1

CLIENT SAMPLE ID	LABORATORYSAMPLE ID
MW-1A	7016438001

APPENDIX A

DATA QUALIFIER DEFINITIONS

U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

J - The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

N - The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification."

NJ - The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.

UJ - The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

R - The sample results are unreliable/unusable. The presence or absence of the analyte cannot be verified.

K – The analyte is present. The reported value may be biased high. The actual value is expected to be lower than reported.

L - The analyte is present. The reported value may be biased low. The actual value is expected to be higher than reported.

UL – The analyte was not detected, and the reported quantitation limit is probably higher than reported.

APPENDIX B

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

Sample: MW-1A **Lab ID: 7016438001** Collected: 04/19/17 10:30 Received: 04/20/17 12:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C							
1,2-Dichlorobenzene	**<5.0**	ug/L	5.0	1		04/25/17 15:15	95-50-1	
1,4-Dichlorobenzene	**<5.0**	ug/L	5.0	1		04/25/17 15:15	106-46-7	
trans-1,4-Dichloro-2-butene	**<5.0**	ug/L	5.0	1		04/25/17 15:15	110-57-6	
1,1-Dichloroethane	**<5.0** UJ	ug/L	5.0	1		04/25/17 15:15	75-34-3	L2
1,2-Dichloroethane	**<5.0** UJ	ug/L	5.0	1		04/25/17 15:15	107-06-2	L2
1,1-Dichloroethene	**<5.0**	ug/L	5.0	1		04/25/17 15:15	75-35-4	
cis-1,2-Dichloroethene	**<5.0**	ug/L	5.0	1		04/25/17 15:15	156-59-2	
trans-1,2-Dichloroethene	**<5.0**	ug/L	5.0	1		04/25/17 15:15	156-60-5	
1,2-Dichloropropane	**<5.0**	ug/L	5.0	1		04/25/17 15:15	78-87-5	
cis-1,3-Dichloropropene	**<5.0**	ug/L	5.0	1		04/25/17 15:15	10061-01-5	
trans-1,3-Dichloropropene	**<5.0**	ug/L	5.0	1		04/25/17 15:15	10061-02-6	
Ethylbenzene	**<5.0**	ug/L	5.0	1		04/25/17 15:15	100-41-4	
2-Hexanone	**<5.0** UJ	ug/L	5.0	1		04/25/17 15:15	591-78-6	CC
Iodomethane	**<5.0**	ug/L	5.0	1		04/25/17 15:15	74-88-4	
Methylene Chloride	**<5.0**	ug/L	5.0	1		04/25/17 15:15	75-09-2	
4-Methyl-2-pentanone (MIBK)	**<5.0** UJ	ug/L	5.0	1		04/25/17 15:15	108-10-1	CC,L2
Styrene	**<5.0**	ug/L	5.0	1		04/25/17 15:15	100-42-5	
1,1,1,2-Tetrachloroethane	**<5.0**	ug/L	5.0	1		04/25/17 15:15	630-20-6	
1,1,2,2-Tetrachloroethane	**<5.0**	ug/L	5.0	1		04/25/17 15:15	79-34-5	
Tetrachloroethene	**<5.0** UJ	ug/L	5.0	1		04/25/17 15:15	127-18-4	
Toluene	**<5.0**	ug/L	5.0	1		04/25/17 15:15	108-88-3	
1,1,1-Trichloroethane	**<5.0**	ug/L	5.0	1		04/25/17 15:15	71-55-6	
1,1,2-Trichloroethane	**<5.0**	ug/L	5.0	1		04/25/17 15:15	79-00-5	
Trichloroethene	**<5.0**	ug/L	5.0	1		04/25/17 15:15	79-01-6	
Trichlorofluoromethane	**<5.0**	ug/L	5.0	1		04/25/17 15:15	75-69-4	
1,2,3-Trichloropropane	**<5.0**	ug/L	5.0	1		04/25/17 15:15	96-18-4	
Vinyl acetate	**<5.0** UJ	ug/L	5.0	1		04/25/17 15:15	108-05-4	
Vinyl chloride	**<5.0**	ug/L	5.0	1		04/25/17 15:15	75-01-4	
Xylene (Total)	**<5.0**	ug/L	5.0	1		04/25/17 15:15	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	90	%.	68-153	1		04/25/17 15:15	17060-07-0	
4-Bromofluorobenzene (S)	119	%.	79-124	1		04/25/17 15:15	460-00-4	
Toluene-d8 (S)	117	%.	69-124	1		04/25/17 15:15	2037-26-5	
2120B W Apparent Color	Analytical Method: SM22 2120B							
Apparent Color	**20.0**	units	5.0	1		04/20/17 14:51		
pH	**6.0**	Std. Units	0.10	1		04/20/17 14:51		
2320B Alkalinity	Analytical Method: SM22 2320B							
Alkalinity, Total as CaCO3	**23.2**	mg/L	1.0	1		04/27/17 13:09		
2340C Hardness, Total	Analytical Method: SM22 2340C							
Total Hardness	**40.0**	mg/L	5.0	1		05/03/17 14:08		
2540C Total Dissolved Solids	Analytical Method: SM22 2540C							
Total Dissolved Solids	**73.0** J	mg/L	10.0	1		04/27/17 14:06		H1

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

Sample: MW-1A **Lab ID: 7016438001** Collected: 04/19/17 10:30 Received: 04/20/17 12:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Chromium, Hexavalent	Analytical Method: SM22 3500-Cr B							
Chromium, Hexavalent	**<0.020**	mg/L	0.020	1		04/21/17 01:10	18540-29-9	H3
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4							
Chemical Oxygen Demand	**<10.0**	mg/L	10.0	1	04/28/17 11:33	04/28/17 14:24		
5210B BOD, 5 day	Analytical Method: SM22 5210B Preparation Method: SM22 5210B							
BOD, 5 day	**1.0J** U	mg/L	2.0	1	04/20/17 18:41	04/25/17 13:19		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0							
Bromide	**<0.50**	mg/L	0.50	1		05/08/17 18:51	24959-67-9	
Chloride	**14.0**	mg/L	2.0	1		05/08/17 18:51	16887-00-6	
Sulfate	**8.9**	mg/L	5.0	1		05/08/17 18:51	14808-79-8	
351.2 Total Kjeldahl Nitrogen	Analytical Method: EPA 351.2 Preparation Method: EPA 351.2							
Nitrogen, Kjeldahl, Total	**0.16**	mg/L	0.10	1	05/02/17 06:55	05/02/17 13:15	7727-37-9	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2							
Nitrate as N	**1.3**	mg/L	0.050	1		04/21/17 08:06	14797-55-8	
Nitrate-Nitrite (as N)	**1.3**	mg/L	0.050	1		04/21/17 08:06	7727-37-9	
353.2 Nitrogen, NO2	Analytical Method: EPA 353.2							
Nitrite as N	**<0.050**	mg/L	0.050	1		04/21/17 04:08	14797-65-0	
Phenolics, Total Recoverable	Analytical Method: EPA 420.1 Preparation Method: EPA 420.1							
Phenolics, Total Recoverable	**56.4**	ug/L	10.0	2	05/02/17 12:00	05/02/17 18:06		M1
4500 Ammonia Water	Analytical Method: SM22 4500 NH3 H							
Nitrogen, Ammonia	**0.040J** U	mg/L	0.10	1		05/08/17 13:08	7664-41-7	
9014 Cyanide, Total	Analytical Method: EPA 9014 Total Cyanide Preparation Method: EPA 9010C							
Cyanide	**<10.0**	ug/L	10.0	1	05/02/17 09:52	05/02/17 17:26	57-12-5	
9060A Total Organic Carbon	Analytical Method: EPA 9060A							
Total Organic Carbon	**0.94J**	mg/L	1.0	1		05/03/17 22:07	7440-44-0	
Total Organic Carbon	**0.81J**	mg/L	1.0	1		05/03/17 22:07	7440-44-0	
Total Organic Carbon	**0.75J**	mg/L	1.0	1		05/03/17 22:07	7440-44-0	
Total Organic Carbon	**0.76J**	mg/L	1.0	1		05/03/17 22:07	7440-44-0	
Mean Total Organic Carbon	**0.82J** U	mg/L	1.0	1		05/03/17 22:07	7440-44-0	

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575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: NORTH SEA LANDFILL
Pace Project No.: 7016438

Sample: MW-1A **Lab ID: 7016438001** Collected: 04/19/17 10:30 Received: 04/20/17 12:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010C Preparation Method: EPA 3005A							
Aluminum	**57.6J**	ug/L	200	1	04/25/17 10:52	05/03/17 15:31	7429-90-5	
Antimony	**<60.0**	ug/L	60.0	1	04/25/17 10:52	05/03/17 15:31	7440-36-0	
Arsenic	**<10.0**	ug/L	10.0	1	04/25/17 10:52	05/03/17 15:31	7440-38-2	
Barium	**23.9J**	ug/L	200	1	04/25/17 10:52	05/03/17 15:31	7440-39-3	
Beryllium	**<5.0**	ug/L	5.0	1	04/25/17 10:52	05/03/17 15:31	7440-41-7	
Boron	**17.8J**	ug/L	50.0	1	04/25/17 10:52	05/03/17 15:31	7440-42-8	B
Cadmium	**<2.5**	ug/L	2.5	1	04/25/17 10:52	05/03/17 15:31	7440-43-9	
Calcium	**8440**	ug/L	200	1	04/25/17 10:52	05/03/17 15:31	7440-70-2	
Chromium	**8.2J**	ug/L	10.0	1	04/25/17 10:52	05/03/17 15:31	7440-47-3	
Cobalt	**2.1J**	ug/L	50.0	1	04/25/17 10:52	05/03/17 15:31	7440-48-4	
Copper	**4.8J**	ug/L	25.0	1	04/25/17 10:52	05/03/17 15:31	7440-50-8	
Iron	**527**	ug/L	100	1	04/25/17 10:52	05/03/17 15:31	7439-89-6	
Lead	**1.5J**	ug/L	5.0	1	04/25/17 10:52	05/03/17 15:31	7439-92-1	
Magnesium	**3280**	ug/L	200	1	04/25/17 10:52	05/03/17 15:31	7439-95-4	
Manganese	**290**	ug/L	10.0	1	04/25/17 10:52	05/03/17 15:31	7439-96-5	
Nickel	**4.2J**	ug/L	40.0	1	04/25/17 10:52	05/03/17 15:31	7440-02-0	
Potassium	**2930J**	ug/L	5000	1	04/25/17 10:52	05/03/17 15:31	7440-09-7	
Selenium	**<10.0**	ug/L	10.0	1	04/25/17 10:52	05/03/17 15:31	7782-49-2	
Silver	**<10.0**	ug/L	10.0	1	04/25/17 10:52	05/03/17 15:31	7440-22-4	
Sodium	**8470**	ug/L	5000	1	04/25/17 10:52	05/03/17 15:31	7440-23-5	
Thallium	**<10.0**	ug/L	10.0	1	04/25/17 10:52	05/03/17 15:31	7440-28-0	
Vanadium	**<50.0**	ug/L	50.0	1	04/25/17 10:52	05/03/17 15:31	7440-62-2	
Zinc	**<20.0**	ug/L	20.0	1	04/25/17 10:52	05/03/17 15:31	7440-66-6	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A							
Mercury	**<0.20**	ug/L	0.20	1	04/25/17 12:55	05/02/17 14:44	7439-97-6	
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C							
Acetone	**2.1J** UJ	ug/L	5.0	1		04/25/17 15:15	67-64-1	CC
Acrylonitrile	**<5.0** UJ	ug/L	5.0	1		04/25/17 15:15	107-13-1	CC
Benzene	**<5.0**	ug/L	5.0	1		04/25/17 15:15	71-43-2	
Bromochloromethane	**<5.0**	ug/L	5.0	1		04/25/17 15:15	74-97-5	
Bromodichloromethane	**<5.0**	ug/L	5.0	1		04/25/17 15:15	75-27-4	
Bromoform	**<5.0**	ug/L	5.0	1		04/25/17 15:15	75-25-2	
Bromomethane	**<5.0**	ug/L	5.0	1		04/25/17 15:15	74-83-9	
2-Butanone (MEK)	**<5.0** UJ	ug/L	5.0	1		04/25/17 15:15	78-93-3	CC
Carbon disulfide	**<5.0**	ug/L	5.0	1		04/25/17 15:15	75-15-0	
Carbon tetrachloride	**<5.0** UJ	ug/L	5.0	1		04/25/17 15:15	56-23-5	
Chlorobenzene	**<5.0**	ug/L	5.0	1		04/25/17 15:15	108-90-7	
Chloroethane	**<5.0**	ug/L	5.0	1		04/25/17 15:15	75-00-3	
Chloroform	**<5.0**	ug/L	5.0	1		04/25/17 15:15	67-66-3	
Chloromethane	**<5.0**	ug/L	5.0	1		04/25/17 15:15	74-87-3	
1,2-Dibromo-3-chloropropane	**<5.0**	ug/L	5.0	1		04/25/17 15:15	96-12-8	
Dibromochloromethane	**<5.0** UJ	ug/L	5.0	1		04/25/17 15:15	124-48-1	L1
1,2-Dibromoethane (EDB)	**<5.0** UJ	ug/L	5.0	1		04/25/17 15:15	106-93-4	
Dibromomethane	**<5.0**	ug/L	5.0	1		04/25/17 15:15	74-95-3	

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APPENDIX C

Pace Analytical
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CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed ac

WO#: 7016438

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:
Company: PW Grosser Consulting	Report To: Derek Ersbak	Attention: Same as Client
Address: 630 Johnson Ave Bohemia, NY 11716	Copy To:	Company Name:
Email To: dereke@pwgrosser.com	Purchase Order No.:	Address:
Phone: 631-589-6353 Fax:	Project Name: North Sea Landfill	Pace Quote Reference:
Requested Due Date/TAT:	Project Number: NSH1701	Pace Project Manager:
		Pace Profile #:

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER

☐ UST ☐ RCRA ☐ OTHER _____

Site Location STATE: _____

Section D Required Client Information

Matrix Codes — MATRIX / CODE: Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Tissue TS; Other DT

ITEM #	SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	Baseline Parameters	Filtered Metals	Routine Parameters	Arsenic	Baseline VOC	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	MW-1A	WT	G			4-19-17	1030		9	X	X	X	X	X					X						-001
2	MW-1B						1005		9	X	X	X	X	X					X						-002
3	MW-1C						0920		9	X	X	X	X	X					X						-003
4	MW-11A						1215		10	X	X	X	X	X					X	X					~~-004~~ -014
5	MW-11B						1200		9	X	X	X	X	X					X						-005
6	MW-12A						0730		10	X	X	X	X	X					X	X					-006
7	MW-12B						0800		9	X	X	X	X	X					X						-007
8	LEA-PRI						1300		7	X	X	X		X							X	X			-008
9	LEA-SEC						1315		7	X	X	X		X							X	X			-011
10	DUP001						XX		9	X	X	X	X	X					X						-008
11	(VC) ~~Field Blank~~ FB					↓	0900		9	X	X	X	X	X					X					(VC)	-009
12	TRIP BLANK	↓	↓			~~↓~~	XX		2				X						X						-012

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
ASP B Category B Deliverables		4/20/17	1140		4-20-17	1140				
	Chey D'Amore	4-20-17	1220		4/20/17	1220	6.0	Y	Y	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Kaitlyn Crosby

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 04/19/17

Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

ORIGINAL

Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for invoices not paid within 30 days.

F-ALL-Q-020rev.07, 15 [illegible]007

Page 157 of 160

157 of 1508

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CHAIN-OF-CUSTOD

The Chain-of-Custody is a LEGAL D

WO#: 7016438

PM: JSA Due Date: 05/04/17

CLIENT: TOS

Page: | of |

2137886

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Info.
Company: PWGC	Report To: Derek Ersbak	Attention: Same as Client
Address: 630 Johnson Ave Bohemia, NY 11716	Copy To:	Company Name:
Email To: dereke@pwgmosser.com	Purchase Order No.:	Address:
Phone: 631-589-6353 Fax:	Project Name: North Sea Landfill	Pace Quote Reference:
Requested Due Date/TAT: Standard	Project Number: SHP 1701	Pace Project Manager:
		Pace Profile #:

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER

☐ UST ☐ RCRA ☐ OTHER _____

Site Location STATE: _____

Requested Analysis Filtered (Y/N)

ITEM #	Section D Required Client Information — SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED: COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Y/N	Analysis Test ↓: Baseline Parameters	Filtered Metals	Baseline VOCs	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	MW-3A	WT	G			4-20-17	0955		10	X	X	X	X	X					X	X			015
2	MW-3B						0940		9														016
3	MW-3C						0850		9														017
4	MW-3C/MS						0850		9														↓
5	MW-3C/MSD						0850		9														018
6	MW-4A						1230		9														019
7	MW-4B						1205		9														020
8	MW-4C					↓	1115		9	↓	↓	↓	↓	↓	↓				↓				021
9	TRIP BLANK	↓	↓			XX	XX		2				X								X		
10																							
11																							
12																							

Matrix Codes — MATRIX / CODE: Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Tissue TS; Other OT

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Kaitlyn Crosby	4-21-17	10:23		4-21-17	10:23	
		4-21-17	11:00		4/21/17	1100	10 Y Y Y

ORIGINAL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Kaitlyn Crosby

SIGNATURE of SAMPLER: _____ DATE Signed (MM/DD/YY): 04/20/17

Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

F-ALL-Q-020rev.07, 15-May-2007

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Pace Analytical

Sample Condition Upon Rece

WO#: 7016438

PM: JSA Due Date: 05/04/17
CLIENT: TOS

Client Name: PW Grosser

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☑ Pace ☐ Other _____

Optional
Proj. Due Date:
Proj. Name:

Tracking #: _____

Custody Seal on Cooler/Box Present: ☑ yes ☐ no Seals intact: ☑ yes ☐ no

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☑ None ☐ Other _____

Thermometer Used: ~~TH077~~ ~~TH078~~ Type of Ice: ☑ Wet ☐ Blue ☐ None ☐ Samples on ice, cooling process has begun

Cooler Temperature: 6-0 TH092

Date and Initials of person examining contents: CD

Temp should be above freezing to 6°C

Comments:

Chain of Custody Present:	☑Yes	☐No	☐N/A
Chain of Custody Filled Out:	☑Yes	☐No	☐N/A
Chain of Custody Relinquished:	☑Yes	☐No	☐N/A
Sampler Name & Signature on COC:	☑Yes	☐No	☐N/A
Samples Arrived within Hold Time:	☑Yes	☐No	☐N/A
Short Hold Time Analysis (<72hr):	☐Yes	☑No	☐N/A
Rush Turn Around Time Requested:	☐Yes	☑No	☐N/A
Sufficient Volume:	☑Yes	☐No	☐N/A
Correct Containers Used:	☑Yes	☐No	☐N/A
-Pace Containers Used:	☑Yes	☐No	☐N/A
Containers Intact:	☑Yes	☐No	☐N/A
Filtered volume received for Dissolved tests	☐Yes	☐No	☑N/A
Sample Labels match COC:	☐Yes	☐No	☐N/A
-Includes date/time/ID/Analysis Matrix SL WT OIL			
All containers needing preservation have been checked.	☑Yes	☐No	☐N/A
All containers needing preservation are found to be in compliance with EPA recommendation.	☑Yes	☐No	☐N/A
Exceptions: VOA, micro, TOC, O&G			
Samples checked for dechlorination:	☐Yes	☐No	☑N/A
Headspace in VOA Vials (>6mm):	☐Yes	☑No	☐N/A
Trip Blank Present:	☑Yes	☐No	☐N/A
Trip Blank Custody Seals Present	☐Yes	☐No	☑N/A
Pace Trip Blank Lot # (if purchased): _____			

1. 1250 unpreserved
2.
3.
4.
5.
6.
7.
8.
9. Client provided one extra bottle for sample "MW-11B", this sample was logged for diss. metals out of this container although this analysis is not requested on the COC.
10.
11. This analysis is not requested on the COC.
12. Client also provided a 1L bottle for samples LEA-PRI + LEA-SEC. Samples not logged
13. pH on cap but the NAOH bottle was added to the SM 4500

Initial when completed:	Lot # of added preservative:
	Date and Time preservative added:

14.
15.
16.

Client Notification/ Resolution: Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

* PM (Project Manager) review is documented electronically in LIMS.

F-LI-C-002-rev.00

Pace Analytical

Sample Condition Upon Receipt

WO#: 7016438

PM: JSA Due Date: 05/04/17
CLIENT: TOS

Client Name: PW Grosser

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☑ Pace ☐ Other _____

Optional
Proj. Due Date:
Proj. Name:

Tracking #: _____

Custody Seal on Cooler/Box Present: ☑ yes ☐ no Seals intact: ☑ yes ☐ no

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☑ None ☐ Other _____

Thermometer Used: ~~TH077~~ ~~TH078~~ Type of Ice: ☑ Wet ☐ Blue ☐ None ☐ Samples on ice, cooling process has begun

Cooler Temperature: 1.0 TH092

Date and Initials of person examining contents: CD 4/21/17

Temp should be above freezing to 6°C

		Comments:
Chain of Custody Present:	☑Yes ☐No ☐N/A	1.
Chain of Custody Filled Out:	☑Yes ☐No ☐N/A	2.
Chain of Custody Relinquished:	☑Yes ☐No ☐N/A	3.
Sampler Name & Signature on COC:	☑Yes ☐No ☐N/A	4.
Samples Arrived within Hold Time:	☑Yes ☐No ☐N/A	5.
Short Hold Time Analysis (<72hr):	☑Yes ☐No ☐N/A	6.
Rush Turn Around Time Requested:	☐Yes ☑No ☐N/A	7.
Sufficient Volume:	☑Yes ☐No ☐N/A	8.
Correct Containers Used:	☑Yes ☐No ☐N/A	9.
-Pace Containers Used:	☑Yes ☐No ☐N/A	
Containers Intact:	☑Yes ☐No ☐N/A	10.
Filtered volume received for Dissolved tests	☑Yes ☐No ☐N/A	11.
Sample Labels match COC:	☑Yes ☐No ☐N/A	12.
-Includes date/time/ID/Analysis Matrix SL WT OIL		
All containers needing preservation have been checked.	☑Yes ☐No ☐N/A	13. Sample MW-4C, bottle AG3S
All containers needing preservation are found to be in compliance with EPA recommendation.	☐Yes ☑No ☐N/A	Initial when completed: NL; Lot # of added preservative: 52267 1mL H_2SO_4
Exceptions: VOA, micro, TOC, O&G		Date and Time preservative added: 4/21/17 12:47
Samples checked for dechlorination:	☐Yes ☐No ☑N/A	14.
Headspace in VOA Vials (>6mm):	☐Yes ☑No ☐N/A	15.
Trip Blank Present:	☑Yes ☐No ☐N/A	16.
Trip Blank Custody Seals Present	☑Yes ☐No ☐N/A	
Pace Trip Blank Lot # (if purchased): _____		

Client Notification/ Resolution: Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

* PM (Project Manager) review is documented electronically in LIMS.

F-LI-C-002-rev.00

WO#:3016882

Chain of Custody

Pace Analytical
www.pacelabs.com

Workorder: 7016438 **Workorder Name:** NORTH SEA LANDFILL NSH1701 **Owner Received Date:** 4/20/2017 **Results Requested By:** 5/4/2017

Report To	Subcontract To
Jennifer Aracri Pace Analytical Melville 575 Broad Hollow Road Melville, NY 11747 Phone (631)694-3040	Pace Analytical Pittsburgh 1638 Roseytown Road Suites 2,3, & 4 Greensburg, PA 15601 Phone (724)850-5600

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers: H2SO4	TOC	Requested Analysis	LAB USE ONLY
1	MW-1A	PS	4/19/2017 10:30	7016438001	Water	1	X	9060	001
2	MW-1B	PS	4/19/2017 10:05	7016438002	Water	1	X		002
3	MW-1C	PS	4/19/2017 09:20	7016438003	Water	1	X		003
4	MW-11B	PS	4/19/2017 12:00	7016438005	Water	1	X		004
5	MW-12A	PS	4/19/2017 07:30	7016438006	Water	1	X		005
6	MW-12B	PS	4/19/2017 08:00	7016438007	Water	1	X		006
7	DUP001	PS	4/19/2017 00:00	7016438008	Water	1	X		007
8	FB	PS	4/19/2017 09:00	7016438009	Water	1	X		008
9	LEA-PRI	PS	4/19/2017 13:00	7016438010	Water	1	X	SM 5310B	009
10	LEA-SEC	PS	4/19/2017 13:15	7016438011	Water	1	X		010
11	MW-11A	PS	4/19/2017 12:15	7016438014	Water	1	X	9060	011
12	MW-3A	PS	4/20/2017 09:55	7016438015	Water	1	X		012
13	MW-3B	PS	4/20/2017 09:40	7016438016	Water	1	X		013
14	MW-3C	RQS	4/20/2017 08:50	7016438017	Water	1	X		014
15	MW-4A	PS	4/20/2017 12:30	7016438018	Water	1	X		015
16	MW-4B	PS	4/20/2017 12:05	7016438019	Water	1	X		016
17	MW-4C	PS	4/20/2017 11:15	7016438020	Water	1	X		017

Transfers	Released By	Date/Time	Received By	Date/Time	Comments
1		4/21/17 18:00		4/22/17 1120	
2					
3					

Cooler Temperature on Receipt	Custody Seal Y or (N)	Received on Ice (Y) or N	Samples Intact (Y) or N
5.1°C			

***In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document. This chain of custody is considered complete as is since this information is available in the owner laboratory.

30216882

KEH

Sample Condition Upon Receipt Pittsburgh

Pace Analytical

Client Name: Pace LI Project # 30216882

Courier: ☒ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other _____

Tracking #: 7325 2574 9057

Custody Seal on Cooler/Box Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ no

Thermometer Used 7 Type of Ice: (Wet) Blue None

Cooler Temperature Observed Temp 1.9, 3.8 °C Correction Factor: 0.0 °C Final Temp: 1.9, 3.8 °C

Temp should be above freezing to 6°C

Date and Initials of person examining contents: KH 4/22/17

Comments:	Yes	No	N/A	
Chain of Custody Present:	✓			1.
Chain of Custody Filled Out:	✓			2.
Chain of Custody Relinquished:	✓			3.
Sampler Name & Signature on COC:		✓		4.
Sample Labels match COC: -Includes date/time/ID Matrix: WT	✓			5.
Samples Arrived within Hold Time:	✓			6.
Short Hold Time Analysis (<72hr remaining):		✓		7.
Rush Turn Around Time Requested:		✓		8.
Sufficient Volume:	✓			9.
Correct Containers Used: -Pace Containers Used:	✓ ✓			10.
Containers Intact:	✓			11.
Orthophosphate field filtered			✓	12.
Organic Samples checked for dechlorination:			✓	13.
Filtered volume received for Dissolved tests			✓	14.
All containers have been checked for preservation. All containers needing preservation are found to be in compliance with EPA recommendation.			✓	15.
exceptions: VOA, coliform, (TOC) O&G, Phenolics				Initial when completed: KH Date/time of preservation:
				Lot # of added preservative:
Headspace in VOA Vials (>6mm):		✓		16.
Trip Blank Present:		✓		17.
Trip Blank Custody Seals Present			✓	
Rad Aqueous Samples Screened > 0.5 mrem/hr			✓	Initial when completed: Date:

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

☐ A check in this box indicates that additional information has been stored in ereports.

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

APPENDIX B

WELL INSPECTION CHECKLISTS

P.W. GROSSER CONSULTING, INC.

WELL INSPECTION CHECKLIST

Well No.	1A	Date	4/19/2017
Inspected By	KC	Weather Conditions	50F, Cloudy

WELL EXTERIOR CONDITIONS

CONCRETE PAD	Yes	No	Remarks
Intact:		X	Erosion on side of hill
Cracked:		X	
Missing:		X	
PONDING OF WATER AROUND WELL		X	
PROTECTIVE CASING/MANHOLE/LOCK	X		
Casing/Manhole - Intact:	X		
Lock - Intact:	X		
WELL CASING (STICKUP) STRAIGHT	X		
DESIGNATED MEASURING POINT	X		
WELL IS PROTECTED	X		
WELL IS CLEARLY MARKED	X		

INTERIOR WELL CONDITIONS

DEPTH TO WATER (FEET)	105.42
DEPTH TO BOTTOM (FEET)	110.00
PID (ppm)	0.0

P.W. GROSSER CONSULTING, INC.

WELL INSPECTION CHECKLIST

Well No.	1B	Date	4/19/2017
Inspected By	KC	Weather Conditions	50F, Cloudy

WELL EXTERIOR CONDITIONS

	Yes	No	Remarks
CONCRETE PAD			
Intact:	X		
Cracked:		X	
Missing:		X	
PONDING OF WATER AROUND WELL		X	
PROTECTIVE CASING/MANHOLE/LOCK	X		
Casing/Manhole - Intact:	X		
Lock - Intact:	X		
WELL CASING (STICKUP) STRAIGHT	X		
DESIGNATED MEASURING POINT	X		
WELL IS PROTECTED	X		
WELL IS CLEARLY MARKED	X		

INTERIOR WELL CONDITIONS

DEPTH TO WATER (FEET)	106.60
DEPTH TO BOTTOM (FEET)	162.08
PID (ppm)	0.0

P.W. GROSSER CONSULTING, INC.

WELL INSPECTION CHECKLIST

Well No.	1C	Date	4/19/2017
Inspected By	KC	Weather Conditions	50F, Cloudy

WELL EXTERIOR CONDITIONS

CONCRETE PAD	Yes	No	Remarks
Intact:		X	Erosion on side of hill
Cracked:		X	
Missing:		X	
PONDING OF WATER AROUND WELL		X	
PROTECTIVE CASING/MANHOLE/LOCK	X		
Casing/Manhole - Intact:	X		
Lock - Intact:	X		
WELL CASING (STICKUP) STRAIGHT	X		
DESIGNATED MEASURING POINT	X		
WELL IS PROTECTED	X		
WELL IS CLEARLY MARKED	X		

INTERIOR WELL CONDITIONS

DEPTH TO WATER (FEET)	106.95
DEPTH TO BOTTOM (FEET)	200.60
PID (ppm)	0.0

P.W. GROSSER CONSULTING, INC.

WELL INSPECTION CHECKLIST

Well No.	3A	Date	4/20/2017
Inspected By	KC	Weather Conditions	502F, Rain

WELL EXTERIOR CONDITIONS

	Yes	No	Remarks
CONCRETE PAD			
Intact:	X		
Cracked:		X	
Missing:		X	
PONDING OF WATER AROUND WELL		X	
PROTECTIVE CASING/MANHOLE/LOCK	X		
Casing/Manhole - Intact:	X		
Lock - Intact:	X		
WELL CASING (STICKUP) STRAIGHT	X		
DESIGNATED MEASURING POINT	X		
WELL IS PROTECTED	X		
WELL IS CLEARLY MARKED	X		

INTERIOR WELL CONDITIONS

DEPTH TO WATER (FEET)	47.99
DEPTH TO BOTTOM (FEET)	60.25
PID (ppm)	0.0

P.W. GROSSER CONSULTING, INC.

WELL INSPECTION CHECKLIST

Well No.	3B	Date	4/20/2017
Inspected By	KC	Weather Conditions	50F, Rain

WELL EXTERIOR CONDITIONS

	Yes	No	Remarks
CONCRETE PAD			
Intact:	X		
Cracked:		X	
Missing:		X	
PONDING OF WATER AROUND WELL		X	
PROTECTIVE CASING/MANHOLE/LOCK	X		
Casing/Manhole - Intact:	X		
Lock - Intact:	X		
WELL CASING (STICKUP) STRAIGHT	X		
DESIGNATED MEASURING POINT	X		
WELL IS PROTECTED	X		
WELL IS CLEARLY MARKED	X		

INTERIOR WELL CONDITIONS

DEPTH TO WATER (FEET)	45.03
DEPTH TO BOTTOM (FEET)	113.00
PID (ppm)	0.0

P.W. GROSSER CONSULTING, INC.

WELL INSPECTION CHECKLIST

Well No.	3C	Date	4/20/2017
Inspected By	KC	Weather Conditions	50F, Rain

WELL EXTERIOR CONDITIONS

	Yes	No	Remarks
CONCRETE PAD			
Intact:	X		
Cracked:		X	
Missing:		X	
PONDING OF WATER AROUND WELL		X	
PROTECTIVE CASING/MANHOLE/LOCK	X		
Casing/Manhole - Intact:	X		
Lock - Intact:	X		
WELL CASING (STICKUP) STRAIGHT	X		
DESIGNATED MEASURING POINT	X		
WELL IS PROTECTED	X		
WELL IS CLEARLY MARKED	X		

INTERIOR WELL CONDITIONS

DEPTH TO WATER (FEET)	44.46
DEPTH TO BOTTOM (FEET)	180.00
PID (ppm)	0.0

P.W. GROSSER CONSULTING, INC.

WELL INSPECTION CHECKLIST

Well No.	4A	Date	4/20/2017
Inspected By	KC	Weather Conditions	50F, Rain

WELL EXTERIOR CONDITIONS

	Yes	No	Remarks
CONCRETE PAD			
Intact:	X		
Cracked:		X	
Missing:		X	
PONDING OF WATER AROUND WELL		X	
PROTECTIVE CASING/MANHOLE/LOCK	X		
Casing/Manhole - Intact:	X		
Lock - Intact:	X		
WELL CASING (STICKUP) STRAIGHT	X		
DESIGNATED MEASURING POINT	X		
WELL IS PROTECTED	X		
WELL IS CLEARLY MARKED	X		

INTERIOR WELL CONDITIONS

DEPTH TO WATER (FEET)	13.04
DEPTH TO BOTTOM (FEET)	30.83
PID (ppm)	0.0

P.W. GROSSER CONSULTING, INC.

WELL INSPECTION CHECKLIST

Well No.	4B	Date	4/20/2017
Inspected By	KC	Weather Conditions	50F, Rain

WELL EXTERIOR CONDITIONS

	Yes	No	Remarks
CONCRETE PAD			
Intact:	X		
Cracked:		X	
Missing:		X	
PONDING OF WATER AROUND WELL		X	
PROTECTIVE CASING/MANHOLE/LOCK	X		
Casing/Manhole - Intact:	X		
Lock - Intact:	X		
WELL CASING (STICKUP) STRAIGHT	X		
DESIGNATED MEASURING POINT	X		
WELL IS PROTECTED	X		
WELL IS CLEARLY MARKED	X		

INTERIOR WELL CONDITIONS

DEPTH TO WATER (FEET)	13.40
DEPTH TO BOTTOM (FEET)	80.50
PID (ppm)	0.0

P.W. GROSSER CONSULTING, INC.

WELL INSPECTION CHECKLIST

Well No.	4C	Date	4/20/2017
Inspected By	KC	Weather Conditions	50F, Rain

WELL EXTERIOR CONDITIONS

	Yes	No	Remarks
CONCRETE PAD			
Intact:	X		
Cracked:		X	
Missing:		X	
PONDING OF WATER AROUND WELL		X	
PROTECTIVE CASING/MANHOLE/LOCK	X		
Casing/Manhole - Intact:	X		
Lock - Intact:	X		
WELL CASING (STICKUP) STRAIGHT	X		
DESIGNATED MEASURING POINT	X		
WELL IS PROTECTED	X		
WELL IS CLEARLY MARKED	X		

INTERIOR WELL CONDITIONS

DEPTH TO WATER (FEET)	9.68
DEPTH TO BOTTOM (FEET)	151.50
PID (ppm)	0.0

P.W. GROSSER CONSULTING, INC.

WELL INSPECTION CHECKLIST

Well No.	6AR	Date	4/20/2017
Inspected By	KC	Weather Conditions	50F, Rain

WELL EXTERIOR CONDITIONS

	Yes	No	Remarks
CONCRETE PAD			
Intact:	X		
Cracked:		X	
Missing:		X	
PONDING OF WATER AROUND WELL		X	
PROTECTIVE CASING/MANHOLE/LOCK	X		
Casing/Manhole - Intact:	X		
Lock - Intact:	X		
WELL CASING (STICKUP) STRAIGHT	X		
DESIGNATED MEASURING POINT	X		
WELL IS PROTECTED	X		
WELL IS CLEARLY MARKED	X		

INTERIOR WELL CONDITIONS

DEPTH TO WATER (FEET)	92.61
DEPTH TO BOTTOM (FEET)	111.45
PID (ppm)	0.0

P.W. GROSSER CONSULTING, INC.

WELL INSPECTION CHECKLIST

Well No.	6B	Date	4/20/2017
Inspected By	KC	Weather Conditions	50F, Rain

WELL EXTERIOR CONDITIONS

	Yes	No	Remarks
CONCRETE PAD			
Intact:	X		
Cracked:		X	
Missing:		X	
PONDING OF WATER AROUND WELL		X	
PROTECTIVE CASING/MANHOLE/LOCK	X		
Casing/Manhole - Intact:	X		
Lock - Intact:	X		
WELL CASING (STICKUP) STRAIGHT	X		
DESIGNATED MEASURING POINT	X		
WELL IS PROTECTED	X		
WELL IS CLEARLY MARKED	X		

INTERIOR WELL CONDITIONS

DEPTH TO WATER (FEET)	94.99
DEPTH TO BOTTOM (FEET)	145.00
PID (ppm)	0.0

P.W. GROSSER CONSULTING, INC.

WELL INSPECTION CHECKLIST

Well No.	7A	Date	4/19/2017
Inspected By	KC	Weather Conditions	50F, Cloudy

WELL EXTERIOR CONDITIONS

	Yes	No	Remarks
CONCRETE PAD			
Intact:	X		
Cracked:		X	
Missing:		X	
PONDING OF WATER AROUND WELL		X	
PROTECTIVE CASING/MANHOLE/LOCK	X		
Casing/Manhole - Intact:	X		
Lock - Intact:		X	Missing
WELL CASING (STICKUP) STRAIGHT	X		
DESIGNATED MEASURING POINT	X		
WELL IS PROTECTED	X		
WELL IS CLEARLY MARKED	X		

INTERIOR WELL CONDITIONS

DEPTH TO WATER (FEET)	84.88
DEPTH TO BOTTOM (FEET)	96.30
PID (ppm)	0.0

P.W. GROSSER CONSULTING, INC.

WELL INSPECTION CHECKLIST

Well No.	7B	Date	4/19/2017
Inspected By	KC	Weather Conditions	50F, Cloudy

WELL EXTERIOR CONDITIONS

	Yes	No	Remarks
CONCRETE PAD			
Intact:	X		
Cracked:		X	
Missing:		X	
PONDING OF WATER AROUND WELL		X	
PROTECTIVE CASING/MANHOLE/LOCK	X		
Casing/Manhole - Intact:	X		
Lock - Intact:	X		
WELL CASING (STICKUP) STRAIGHT	X		
DESIGNATED MEASURING POINT	X		
WELL IS PROTECTED	X		
WELL IS CLEARLY MARKED	X		

INTERIOR WELL CONDITIONS

DEPTH TO WATER (FEET)	84.45
DEPTH TO BOTTOM (FEET)	140.7
PID (ppm)	0.0

P.W. GROSSER CONSULTING, INC.

WELL INSPECTION CHECKLIST

Well No.	7C	Date	4/19/2017
Inspected By	KC	Weather Conditions	50F, Cloudy

WELL EXTERIOR CONDITIONS

	Yes	No	Remarks
CONCRETE PAD			
Intact:	X		
Cracked:		X	
Missing:		X	
PONDING OF WATER AROUND WELL		X	
PROTECTIVE CASING/MANHOLE/LOCK	X		
Casing/Manhole - Intact:	X		
Lock - Intact:	X		
WELL CASING (STICKUP) STRAIGHT	X		
DESIGNATED MEASURING POINT	X		
WELL IS PROTECTED	X		
WELL IS CLEARLY MARKED	X		

INTERIOR WELL CONDITIONS

DEPTH TO WATER (FEET)	85.64
DEPTH TO BOTTOM (FEET)	180.10
PID (ppm)	0.0

P.W. GROSSER CONSULTING, INC.

WELL INSPECTION CHECKLIST

Well No.	8	Date	4/19/2017
Inspected By	KC	Weather Conditions	50F, Cloudy

WELL EXTERIOR CONDITIONS

	Yes	No	Remarks
CONCRETE PAD			
Intact:	X		
Cracked:		X	
Missing:		X	
PONDING OF WATER AROUND WELL		X	
PROTECTIVE CASING/MANHOLE/LOCK	X		
Casing/Manhole - Intact:	X		
Lock - Intact:	X		
WELL CASING (STICKUP) STRAIGHT	X		
DESIGNATED MEASURING POINT	X		
WELL IS PROTECTED	X		
WELL IS CLEARLY MARKED	X		

INTERIOR WELL CONDITIONS

DEPTH TO WATER (FEET)	77.71
DEPTH TO BOTTOM (FEET)	83.91
PID (ppm)	0.0

P.W. GROSSER CONSULTING, INC.

WELL INSPECTION CHECKLIST

Well No.	9	Date	4/19/2017
Inspected By	KC	Weather Conditions	50F, Cloudy

WELL EXTERIOR CONDITIONS

	Yes	No	Remarks
CONCRETE PAD			
Intact:	X		
Cracked:		X	
Missing:		X	
PONDING OF WATER AROUND WELL		X	
PROTECTIVE CASING/MANHOLE/LOCK	X		
Casing/Manhole - Intact:	X		
Lock - Intact:	X		
WELL CASING (STICKUP) STRAIGHT	X		
DESIGNATED MEASURING POINT	X		
WELL IS PROTECTED	X		
WELL IS CLEARLY MARKED	X		

INTERIOR WELL CONDITIONS

DEPTH TO WATER (FEET)	74.58
DEPTH TO BOTTOM (FEET)	85.71
PID (ppm)	0.0

P.W. GROSSER CONSULTING, INC.

WELL INSPECTION CHECKLIST

Well No.	11A	Date	4/19/2017
Inspected By	KC	Weather Conditions	50F, Cloudy

WELL EXTERIOR CONDITIONS

	Yes	No	Remarks
CONCRETE PAD			
Intact:	X		
Cracked:		X	
Missing:		X	
PONDING OF WATER AROUND WELL		X	
PROTECTIVE CASING/MANHOLE/LOCK	X		
Casing/Manhole - Intact:	X		
Lock - Intact:	X		
WELL CASING (STICKUP) STRAIGHT	X		
DESIGNATED MEASURING POINT	X		
WELL IS PROTECTED	X		
WELL IS CLEARLY MARKED	X		

INTERIOR WELL CONDITIONS

DEPTH TO WATER (FEET)	73.68
DEPTH TO BOTTOM (FEET)	77.16
PID (ppm)	0.0

P.W. GROSSER CONSULTING, INC.

WELL INSPECTION CHECKLIST

Well No.	11B	Date	4/19/2017
Inspected By	KC	Weather Conditions	50F, Cloudy

WELL EXTERIOR CONDITIONS

CONCRETE PAD	Yes	No	Remarks
Intact:	X		
Cracked:		X	
Missing:		X	
PONDING OF WATER AROUND WELL		X	
PROTECTIVE CASING/MANHOLE/LOCK	X		
Casing/Manhole - Intact:	X		
Lock - Intact:	X		
WELL CASING (STICKUP) STRAIGHT	X		
DESIGNATED MEASURING POINT	X		
WELL IS PROTECTED	X		
WELL IS CLEARLY MARKED	X		

INTERIOR WELL CONDITIONS

DEPTH TO WATER (FEET)	74.35
DEPTH TO BOTTOM (FEET)	122.00
PID (ppm)	0.0

P.W. GROSSER CONSULTING, INC.

WELL INSPECTION CHECKLIST

Well No.	12A	Date	4/19/2017
Inspected By	KC	Weather Conditions	50F, Cloudy

WELL EXTERIOR CONDITIONS

	Yes	No	Remarks
CONCRETE PAD			
Intact:	X		
Cracked:		X	
Missing:		X	
PONDING OF WATER AROUND WELL		X	
PROTECTIVE CASING/MANHOLE/LOCK	X		
Casing/Manhole - Intact:	X		
Lock - Intact:	X		
WELL CASING (STICKUP) STRAIGHT	X		
DESIGNATED MEASURING POINT	X		
WELL IS PROTECTED	X		
WELL IS CLEARLY MARKED	X		

INTERIOR WELL CONDITIONS

DEPTH TO WATER (FEET)	80.60
DEPTH TO BOTTOM (FEET)	91.10
PID (ppm)	0.0

P.W. GROSSER CONSULTING, INC.

WELL INSPECTION CHECKLIST

Well No.	12B	Date	4/19/2017
Inspected By	KC	Weather Conditions	50F, Cloudy

WELL EXTERIOR CONDITIONS

	Yes	No	Remarks
CONCRETE PAD			
Intact:	X		
Cracked:		X	
Missing:		X	
PONDING OF WATER AROUND WELL		X	
PROTECTIVE CASING/MANHOLE/LOCK	X		
Casing/Manhole - Intact:	X		
Lock - Intact:	X		
WELL CASING (STICKUP) STRAIGHT	X		
DESIGNATED MEASURING POINT	X		
WELL IS PROTECTED	X		
WELL IS CLEARLY MARKED	X		

INTERIOR WELL CONDITIONS

DEPTH TO WATER (FEET)	81.21
DEPTH TO BOTTOM (FEET)	108.80
PID (ppm)	0.0

APPENDIX C

MONITORING WELL SAMPLING LOGS

P.W. GROSSER CONSULTING, INC.

WELL SAMPLING LOG

CLIENT/PROJECT No.	Town of Southhampton / SHP1701		
WELL No./OWNER	1A / Town of Southhampton		
SAMPLE I.D.	MW-1A		
SAMPLING POINT	TOC	SAMPLED BY	KC
DATE SAMPLED	4/19/2017	TIME SAMPLED	10:30
WELL USE	Monitoring		
STATIC WATER ELEVATION	105.42	FT. BELOW MEASURING POINT	TOC
WELL DIAMETER	4 Inches		
TOTAL WELL DEPTH	110.00	FT. BELOW MEASURING POINT	TOC

SAMPLING INFORMATION

PURGE METHOD	Submersible Pump	SAMPLE METHOD	Submersible Pump
PURGE RATE	5 GPM	PURGE TIME	1
CASING VOLUMES REMOVED	3	GALLONS	5
SAMPLE APPEARANCE	Clear	ODORS OBSERVED	None
PID (ppm)	0.0		
ANALYSIS	Baseline	DATE SHIPPED	4/20/2017

SAMPLING PARAMETERS

	Initial	1 Vol	2 Vol	3 Vol	Pre-sampling
pH	6.51	5.68	5.77	5.94	5.90
COND	0.101	0.146	0.141	0.139	0.138
T	13.2	12.4	12.2	12.1	12.0
ORP	222	262	249	240	242
TURB	39.3	0.5	0	0	0
D.O.	9.42	8.61	7.71	7.22	6.93

P.W. GROSSER CONSULTING, INC.

WELL SAMPLING LOG

CLIENT/PROJECT No.	Town of Southhampton / SHP1701		
WELL No./OWNER	1B / Town of Southhampton		
SAMPLE I.D.	MW-1B		
SAMPLING POINT	TOC	SAMPLED BY	KC
DATE SAMPLED	4/19/2017	TIME SAMPLED	10:05
WELL USE	Monitoring		
STATIC WATER ELEVATION	160.60	FT. BELOW MEASURING POINT	TOC
WELL DIAMETER	4 Inches		
TOTAL WELL DEPTH	162.08	FT. BELOW MEASURING POINT	TOC

SAMPLING INFORMATION

PURGE METHOD	Submersible Pump	SAMPLE METHOD	Submersible Pump
PURGE RATE	5 GPM	PURGE TIME	22
CASING VOLUMES REMOVED	3	GALLONS	110
SAMPLE APPEARANCE	Clear	ODORS OBSERVED	None
PID (ppm)	0.0		
ANALYSIS	Baseline	DATE SHIPPED	4/20/2017

SAMPLING PARAMETERS

	Initial	1 Vol	2 Vol	3 Vol	Pre-sampling
pH	6.66	6.11	6.16	6.18	6.18
COND	0.087	0.08	0.08	0.08	0.08
T	12.05	12.6	12.54	12.51	12.5
ORP	176	251	245	239	237
TURB	0	0	0	0	0
D.O.	8.74	8.91	8.93	8.88	8.85

P.W. GROSSER CONSULTING, INC.

WELL SAMPLING LOG

CLIENT/PROJECT No.	Town of Southhampton / SHP1701		
WELL No./OWNER	1C / Town of Southhampton		
SAMPLE I.D.	MW-1C / DUP001		
SAMPLING POINT	TOC	SAMPLED BY	KC
DATE SAMPLED	4/19/2017	TIME SAMPLED	9:20
WELL USE	Monitoring		
STATIC WATER ELEVATION	106.95	FT. BELOW MEASURING POINT	TOC
WELL DIAMETER	4 Inches		
TOTAL WELL DEPTH	200.6	FT. BELOW MEASURING POINT	TOC

SAMPLING INFORMATION

PURGE METHOD	Submersible Pump	SAMPLE METHOD	Submersible Pump
PURGE RATE	5 GPM	PURGE TIME	38
CASING VOLUMES REMOVED	3	GALLONS	190
SAMPLE APPEARANCE	Clear	ODORS OBSERVED	None
PID (ppm)	0.0		
ANALYSIS	Baseline	DATE SHIPPED	4/20/2017

SAMPLING PARAMETERS

	Initial	1 Vol	2 Vol	3 Vol	Pre-sampling
pH	6.52	6.09	6.13	6.07	6.07
COND	0.089	0.088	0.087	0.086	0.086
T	11.11	12.2	12.27	12.23	12.24
ORP	227	248	247	250	250
TURB	0	0	0	0	0
D.O.	7.89	7.58	7.84	8.26	8.24

P.W. GROSSER CONSULTING, INC.

WELL SAMPLING LOG

CLIENT/PROJECT No.	Town of Southhampton / SHP1701		
WELL No./OWNER	3A / Town of Southhampton		
SAMPLE I.D.	MW-3A		
SAMPLING POINT	TOC	SAMPLED BY	KC
DATE SAMPLED	4/20/2017	TIME SAMPLED	9:55
WELL USE	Monitoring		
STATIC WATER ELEVATION	47.99	FT. BELOW MEASURING POINT	TOC
WELL DIAMETER	4 Inches		
TOTAL WELL DEPTH	60.52	FT. BELOW MEASURING POINT	TOC

SAMPLING INFORMATION

PURGE METHOD	Submersible Pump	SAMPLE METHOD	Submersible Pump
PURGE RATE	5 GPM	PURGE TIME	5
CASING VOLUMES REMOVED	3	GALLONS	25
SAMPLE APPEARANCE	Slightly Turbid	ODORS OBSERVED	None
PID (ppm)	0.0		
ANALYSIS	Baseline & Filtered Metals	DATE SHIPPED	4/21/2017

SAMPLING PARAMETERS

	Initial	1 Vol	2 Vol	3 Vol	Pre-sampling
pH	6.51	6.45	6.29	6.10	6.09
COND	0.595	0.918	0.833	0.716	0.700
T	12.06	12.37	12.52	12.56	12.57
ORP	-18	-4	12	35	37
TURB	303	301	235	114	105
D.O.	8.98	5.9	4.95	3.96	3.85

P.W. GROSSER CONSULTING, INC.

WELL SAMPLING LOG

CLIENT/PROJECT No.	Town of Southhampton / SHP1701		
WELL No./OWNER	3B / Town of Southhampton		
SAMPLE I.D.	MW-3B		
SAMPLING POINT	TOC	SAMPLED BY	KC
DATE SAMPLED	4/20/2017	TIME SAMPLED	9:40
WELL USE	Monitoring		
STATIC WATER ELEVATION	45.03	FT. BELOW MEASURING POINT	TOC
WELL DIAMETER	4 Inches		
TOTAL WELL DEPTH	113.00	FT. BELOW MEASURING POINT	TOC

SAMPLING INFORMATION

PURGE METHOD	Submersible Pump	SAMPLE METHOD	Submersible Pump
PURGE RATE	5 GPM	PURGE TIME	27
CASING VOLUMES REMOVED	3	GALLONS	135
SAMPLE APPEARANCE	Clear	ODORS OBSERVED	None
PID (ppm)	0.0		
ANALYSIS	Baseline	DATE SHIPPED	4/21/2017

SAMPLING PARAMETERS

	Initial	1 Vol	2 Vol	3 Vol	Pre-sampling
pH	6.50	5.99	5.93	5.96	5.96
COND	0.178	0.207	0.209	0.220	0.220
T	11.34	12.65	12.78	12.85	12.85
ORP	136	-2	-15	-34	-34
TURB	81.3	0.0	0.0	0.0	0.0
D.O.	4.25	0.00	0.00	0.00	0.00

P.W. GROSSER CONSULTING, INC.

WELL SAMPLING LOG

CLIENT/PROJECT No.	Town of Southhampton / SHP1701		
WELL No./OWNER	3C / Town of Southhampton		
SAMPLE I.D.	MW-3C/MS/MSD		
SAMPLING POINT	TOC	SAMPLED BY	KC
DATE SAMPLED	4/20/2017	TIME SAMPLED	8:50
WELL USE	Monitoring		
STATIC WATER ELEVATION	44.46	FT. BELOW MEASURING POINT	TOC
WELL DIAMETER	4 Inches		
TOTAL WELL DEPTH	180	FT. BELOW MEASURING POINT	TOC

SAMPLING INFORMATION

PURGE METHOD	Submersible Pump	SAMPLE METHOD	Submersible Pump
PURGE RATE	5 GPM	PURGE TIME	54
CASING VOLUMES REMOVED	3	GALLONS	272
SAMPLE APPEARANCE	Clear	ODORS OBSERVED	None
PID (ppm)	0.0		
ANALYSIS	Baseline	DATE SHIPPED	4/21/2017

SAMPLING PARAMETERS

	Initial	1 Vol	2 Vol	3 Vol	Pre-sampling
pH	4.96	6.83	6.79	6.74	6.75
COND	0.190	0.130	0.130	0.130	0.130
T	10.90	12.65	12.73	12.76	12.75
ORP	260	190	185	180	180
TURB	0.0	0.0	0.0	0.0	0.0
D.O.	25.07	1.96	1.92	1.92	1.92

P.W. GROSSER CONSULTING, INC.

WELL SAMPLING LOG

CLIENT/PROJECT No.	Town of Southhampton / SHP1701		
WELL No./OWNER	4A / Town of Southhampton		
SAMPLE I.D.	MW-4A		
SAMPLING POINT	TOC	SAMPLED BY	KC
DATE SAMPLED	4/20/2017	TIME SAMPLED	12:30
WELL USE	Monitoring		
STATIC WATER ELEVATION	13.04	FT. BELOW MEASURING POINT	TOC
WELL DIAMETER	4 Inches		
TOTAL WELL DEPTH	30.83	FT. BELOW MEASURING POINT	TOC

SAMPLING INFORMATION

PURGE METHOD	Submersible Pump	SAMPLE METHOD	Submersible Pump
PURGE RATE	5 GPM	PURGE TIME	7
CASING VOLUMES REMOVED	3	GALLONS	35
SAMPLE APPEARANCE	Clear	ODORS OBSERVED	None
PID (ppm)	0.0		
ANALYSIS	Baseline	DATE SHIPPED	4/21/2017

SAMPLING PARAMETERS

	Initial	1 Vol	2 Vol	3 Vol	Pre-sampling
pH	6.82	5.22	4.98	4.94	4.93
COND	0.200	0.270	0.270	0.270	0.270
T	12.16	11.57	11.66	11.65	11.63
ORP	25	128	159	163	165
TURB	20.2	0.0	0.00	0.00	0.00
D.O.	7.57	3.93	3.82	3.89	3.85

P.W. GROSSER CONSULTING, INC.

WELL SAMPLING LOG

CLIENT/PROJECT No.	Town of Southhampton / SHP1701		
WELL No./OWNER	4B / Town of Southhampton		
SAMPLE I.D.	MW-4B		
SAMPLING POINT	TOC	SAMPLED BY	KC
DATE SAMPLED	4/20/2017	TIME SAMPLED	12:05
WELL USE	Monitoring		
STATIC WATER ELEVATION	13.4	FT. BELOW MEASURING POINT	TOC
WELL DIAMETER	4 Inches		
TOTAL WELL DEPTH	80.50	FT. BELOW MEASURING POINT	TOC

SAMPLING INFORMATION

PURGE METHOD	Submersible Pump	SAMPLE METHOD	Submersible Pump
PURGE RATE	5 GPM	PURGE TIME	26
CASING VOLUMES REMOVED	3	GALLONS	130
SAMPLE APPEARANCE	Clear	ODORS OBSERVED	None
PID (ppm)	0.0		
ANALYSIS	Baseline	DATE SHIPPED	4/21/2017

SAMPLING PARAMETERS

	Initial	1 Vol	2 Vol	3 Vol	Pre-sampling
pH	6.93	6.57	6.53	6.51	6.51
COND	0.47	0.26	0.25	0.25	0.25
T	12.48	12.43	12.7	12.74	12.75
ORP	39	68	77	56	55
TURB	6.7	0	0	0	0
D.O.	2.34	0.95	0.45	0.13	0.13

P.W. GROSSER CONSULTING, INC.

WELL SAMPLING LOG

CLIENT/PROJECT No.	Town of Southhampton / SHP1701		
WELL No./OWNER	4C / Town of Southhampton		
SAMPLE I.D.	MW-4C		
SAMPLING POINT	TOC	SAMPLED BY	KC
DATE SAMPLED	4/20/2017	TIME SAMPLED	11:15
WELL USE	Monitoring		
STATIC WATER ELEVATION	9.68	FT. BELOW MEASURING POINT	TOC
WELL DIAMETER	4 Inches		
TOTAL WELL DEPTH	151.50	FT. BELOW MEASURING POINT	TOC

SAMPLING INFORMATION

PURGE METHOD	Submersible Pump	SAMPLE METHOD	Submersible Pump
PURGE RATE	5 GPM	PURGE TIME	56
CASING VOLUMES REMOVED	3	GALLONS	282
SAMPLE APPEARANCE	Clear	ODORS OBSERVED	None
PID (ppm)	0.0		
ANALYSIS	Baseline	DATE SHIPPED	4/21/2017

SAMPLING PARAMETERS

	Initial	1 Vol	2 Vol	3 Vol	Pre-sampling
pH	6.58	6.62	6.84	6.84	6.84
COND	0.491	0.492	0.560	0.479	0.479
T	11.95	13.70	13.63	13.61	13.61
ORP	83	96	32	9	9
TURB	0.0	0.0	1.0	0.0	0.0
D.O.	3.71	0.63	1.03	1.79	1.81

P.W. GROSSER CONSULTING, INC.

WELL SAMPLING LOG

CLIENT/PROJECT No.	Town of Southhampton / SHP1701		
WELL No./OWNER	11A / Town of Southhampton		
SAMPLE I.D.	MW-11A		
SAMPLING POINT	TOC	SAMPLED BY	KC
DATE SAMPLED	4/19/2017	TIME SAMPLED	12:15
WELL USE	Monitoring		
STATIC WATER ELEVATION	73.68	FT. BELOW MEASURING POINT	TOC
WELL DIAMETER	4 Inches		
TOTAL WELL DEPTH	77.16	FT. BELOW MEASURING POINT	TOC

SAMPLING INFORMATION

PURGE METHOD	Submersible Pump	SAMPLE METHOD	Submersible Pump
PURGE RATE	5 GPM	PURGE TIME	9
CASING VOLUMES REMOVED	3	GALLONS	45
SAMPLE APPEARANCE	Turbid	ODORS OBSERVED	None
PID (ppm)	0.0		
ANALYSIS	Baseline & Filtered Metals	DATE SHIPPED	4/20/2017

SAMPLING PARAMETERS

	Initial	1 Vol	2 Vol	3 Vol	Pre-sampling
pH	6.56	6.34	6.49	6.51	6.47
COND	0.252	0.370	0.355	0.334	0.325
T	14.00	13.62	13.63	13.71	13.76
ORP	196	207	197	193	192
TURB	443	>1000	>1000	>1000	>1000
D.O.	8.98	7.49	5.93	4.69	3.34

P.W. GROSSER CONSULTING, INC.

WELL SAMPLING LOG

CLIENT/PROJECT No.	Town of Southhampton / SHP1701		
WELL No./OWNER	11B / Town of Southhampton		
SAMPLE I.D.	MW-11B		
SAMPLING POINT	TOC	SAMPLED BY	KC
DATE SAMPLED	4/19/2017	TIME SAMPLED	12:00
WELL USE	Monitoring		
STATIC WATER ELEVATION	74.35	FT. BELOW MEASURING POINT	TOC
WELL DIAMETER	4 Inches		
TOTAL WELL DEPTH	122.00	FT. BELOW MEASURING POINT	TOC

SAMPLING INFORMATION

PURGE METHOD	Submersible Pump	SAMPLE METHOD	Submersible Pump
PURGE RATE	5 GPM	PURGE TIME	19
CASING VOLUMES REMOVED	3	GALLONS	95
SAMPLE APPEARANCE	Slightly Turbid	ODORS OBSERVED	None
PID (ppm)	0.0		
ANALYSIS	Baseline & Filtered Metals	DATE SHIPPED	4/20/2017

SAMPLING PARAMETERS

	Initial	1 Vol	2 Vol	3 Vol	Pre-sampling
pH	6.31	6.26	6.16	6.20	6.20
COND	0.250	0.360	0.320	0.160	0.160
T	13.32	13.86	13.49	13.43	13.42
ORP	207	225	219	210	210
TURB	46.8	>1000	51.2	138.0	136.0
D.O.	8.85	6.72	4.22	6.46	6.54

P.W. GROSSER CONSULTING, INC.

WELL SAMPLING LOG

CLIENT/PROJECT No.	Town of Southhampton / SHP1701		
WELL No./OWNER	12A / Town of Southhampton		
SAMPLE I.D.	MW-12A		
SAMPLING POINT	TOC	SAMPLED BY	KC
DATE SAMPLED	4/19/2017	TIME SAMPLED	7:30
WELL USE	Monitoring		
STATIC WATER ELEVATION	80.6	FT. BELOW MEASURING POINT	TOC
WELL DIAMETER	4 Inches		
TOTAL WELL DEPTH	91.10	FT. BELOW MEASURING POINT	TOC

SAMPLING INFORMATION

PURGE METHOD	Submersible Pump	SAMPLE METHOD	Submersible Pump
PURGE RATE	5 GPM	PURGE TIME	4
CASING VOLUMES REMOVED	3	GALLONS	20
SAMPLE APPEARANCE	Slightly Turbid	ODORS OBSERVED	None
PID (ppm)	0.0		
ANALYSIS	Baseline	DATE SHIPPED	4/20/2017

SAMPLING PARAMETERS

	Initial	1 Vol	2 Vol	3 Vol	Pre-sampling
pH	5.29	5.42	5.47	5.54	5.55
COND	0.25	0.23	0.22	0.21	0.20
T	8.93	9.18	9.32	9.47	9.48
ORP	136	147	148	149	149
TURB	0	910	798	588	571
D.O.	4.26	9.35	9.69	5.89	6.25

P.W. GROSSER CONSULTING, INC.

WELL SAMPLING LOG

CLIENT/PROJECT No.	Town of Southhampton / SHP1701		
WELL No./OWNER	12B / Town of Southhampton		
SAMPLE I.D.	MW-12B		
SAMPLING POINT	TOC	SAMPLED BY	KC
DATE SAMPLED		TIME SAMPLED	8:50
WELL USE	Monitoring		
STATIC WATER ELEVATION		FT. BELOW MEASURING POINT	TOC
WELL DIAMETER	4 Inches		
TOTAL WELL DEPTH	108.80	FT. BELOW MEASURING POINT	TOC

SAMPLING INFORMATION

PURGE METHOD	Submersible Pump	SAMPLE METHOD	Submersible Pump
PURGE RATE	5 GPM	PURGE TIME	11
CASING VOLUMES REMOVED	3	GALLONS	55
SAMPLE APPEARANCE	Clear	ODORS OBSERVED	None
PID (ppm)	0.0		
ANALYSIS	Baseline	DATE SHIPPED	4/20/2017

SAMPLING PARAMETERS

	Initial	1 Vol	2 Vol	3 Vol	Pre-sampling
pH	6.4	5.75	5.73	5.75	5.76
COND	0.155	0.122	0.118	0.128	0.129
T	10.20	12.76	12.85	12.86	12.87
ORP	198	242	254	260	260
TURB	125	0	0	0	0
D.O.	9.55	5.04	5.72	5.32	5.30

P.W. GROSSER CONSULTING, INC.

WELL SAMPLING LOG

CLIENT/PROJECT No.	Town of Southhampton / SHP1701		
WELL No./OWNER	LEA-PRI / Town of Southhampton		
SAMPLE I.D.	LEA-PRI		
SAMPLING POINT	TOC	SAMPLED BY	KC
DATE SAMPLED	4/19/2017	TIME SAMPLED	13:00
WELL USE	NA		
STATIC WATER ELEVATION	NA	FT. BELOW MEASURING POINT	TOC
WELL DIAMETER	NA Inches		
TOTAL WELL DEPTH	NA	FT. BELOW MEASURING POINT	TOC

SAMPLING INFORMATION

PURGE METHOD	NA	SAMPLE METHOD	Bailer
PURGE RATE	-	PURGE TIME	-
CASING VOLUMES REMOVED	-	GALLONS	-
SAMPLE APPEARANCE	Turbid	ODORS OBSERVED	Leachate
PID (ppm)	NA		
ANALYSIS	Routine Parameters + Arsenic	DATE SHIPPED	4/20/2017

SAMPLING PARAMETERS

	Initial	1 Vol	2 Vol	3 Vol	Pre-sampling
pH	-	-	-	-	6.75
COND	-	-	-	-	0.78
T	-	-	-	-	11.4
ORP	-	-	-	-	-76
TURB	-	-	-	-	88.5
D.O.	-	-	-	-	8.56

P.W. GROSSER CONSULTING, INC.

WELL SAMPLING LOG

CLIENT/PROJECT No.	Town of Southhampton / SHP1701		
WELL No./OWNER	LEA-SEC / Town of Southhampton		
SAMPLE I.D.	LEA-SEC		
SAMPLING POINT	TOC	SAMPLED BY	KC
DATE SAMPLED	4/19/2017	TIME SAMPLED	13:15
WELL USE	NA		
STATIC WATER ELEVATION	NA	FT. BELOW MEASURING POINT	TOC
WELL DIAMETER	NA Inches		
TOTAL WELL DEPTH	NA	FT. BELOW MEASURING POINT	TOC

SAMPLING INFORMATION

PURGE METHOD	NA	SAMPLE METHOD	Bailer
PURGE RATE	-	PURGE TIME	-
CASING VOLUMES REMOVED	-	GALLONS	-
SAMPLE APPEARANCE	Turbid	ODORS OBSERVED	Leachate
PID (ppm)	NA		
ANALYSIS	Routine Parameters + Arsenic	DATE SHIPPED	4/20/2017

SAMPLING PARAMETERS

	Initial	1 Vol	2 Vol	3 Vol	Pre-sampling
pH	-	-	-	-	6.59
COND	-	-	-	-	1.06
T	-	-	-	-	10.5
ORP	-	-	-	-	-51
TURB	-	-	-	-	28.6
D.O.	-	-	-	-	6.7

APPENDIX D

6 NYCRR Part 360-2: LANDFILLS

Outdoor Activities
Animals, Plants, Aquatic Life
Chemical and Pollution Control
Energy and Climate
Lands and Waters
Education
Permits and Licenses
Public Involvement and News
Regulations and Enforcement
Regulations
Chapter IV- Quality Services
Subpart 360-2: Landfills - Page 2
Publications, Forms, Maps
About DEC

Subpart 360-2: Landfills - Page 2

(Statutory authority: Environmental Conservation Law, Sections 1-0101, 3-0301, 8-0113,19-0301, 19-0306, 23-2305, 23-2307, 27-0101, 27-0106, 27-0107, 27-0109, 27-0305, 27-0703, 27-0704, 27-0705, 27-0911, 27-1317, 27-1515, 52-0107, 52-0505, and 70-0107)

[Effective Date December 31, 1988]

[Amendment Dates:
Revised Effective March 27, 1990; with promulgation of new Subpart 15: Grants for Comprehensive Solid Waste Management Planning.
Revised Effective May 28, 1991; With repeal of existing Subpart 9 and promulgation of new Subpart 9: State Assistance for Municipal Landfill Closure Projects
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§360-2.11 Hydrogeologic report.

The hydrogeologic report must define the landfill site geology and hydrology and relate these factors to regional and local hydrogeologic patterns; define the critical stratigraphic section for the site; provide an understanding of groundwater and surface water flow at the site sufficient to determine the suitability of the site for a landfill; establish an environmental monitoring system capable of readily detecting a contaminant release from the facility and determining whether the site is contaminating surface or subsurface waters; and form the basis for design of the facility and contingency plans relating to ground or surface water contamination or gas migration as required in section 360-2.10 of this Subpart. The scope and extent of investigations necessary in the hydrogeologic report will vary based upon the hydrogeologic complexity of the site and the ability of the site to restrict contaminant migration. Additionally, the hydrogeologic report must define the engineering properties of the site as necessary for

proper design and construction of any facilities proposed to be built at the site.

(a) Requirements of the site investigation plan. The site investigation plan must clearly define all methods used in investigating the hydrogeologic conditions of the site, the scope of the intended investigation, and any specific hydrogeologic questions to be addressed. The applicant is strongly encouraged to develop a draft version of the plan for review by the department before starting the hydrogeologic investigation that begins to define the critical stratigraphic section, and to keep the department informed of the findings and subsequent investigative proposals as the study proceeds. The final version of the plan, included in the hydrogeologic report section of the permit application, must fully describe all methods of investigation used. Unless otherwise approved by the department, the plan must comply with the following:

(1) General requirements for all methods used. In obtaining the required hydrogeologic information, the applicant must employ current, standard, and generally accepted procedures. All work must be done in accordance with applicable American Society for Testing Materials standards or current and appropriate U.S. Environmental Protection Agency and department guidance documents. Alternative or innovative methodologies may be approved by the department; however, the department may initially require redundant technologies to prove the reliability of a new methodology. All procedures must be conducted under the supervision of a qualified groundwater scientist having experience in similar hydrogeologic investigations, in a manner that ensures accuracy of the data and precludes environmental degradation. The location of all installations, geophysical and geochemical surveys, and seismic lines for the proposed investigation must be shown on a map with the same scale and coordinate grid system used on the engineering plans (see section 360-1.9[e] of this Part).

(2) Literature search. A comprehensive search must be made for pertinent and reliable information concerning regional and site specific hydrogeologic conditions. The literature search must include, as available, records and reports of the New York State Department of Health, the New York State Department of Transportation, the U.S. Soil Conservation Service, and the New York State Geological Survey; basin planning reports, groundwater bulletins, water supply papers, professional papers and other open file reports of the U.S. Geological Survey; bulletins, circulars, map and chart series, memoirs and other publications of the New York State Geologic Survey; publications and bulletins of the Geological Society of America and other professional organizations; and publications of the U.S. Environmental Protection Agency and the department, college and university reports; and aerial photography or remotely sensed imagery.

(3) Surficial geologic mapping. The site must be mapped to determine the distribution of surficial deposits on and surrounding the site based upon information from the hydrogeologic investigation, field evaluations, and field confirmation of all interpretations made on the site itself.

(4) Test pits. Test pits may be used to determine shallow stratigraphy. The test pits must not create a health or safety hazard and must be logged by a geologist or geotechnical engineer with experience in similar hydrogeologic investigations. Logs must include: elevations; surface features before excavation; depth of the test pit and of all relevant horizons or features; moisture content of units; standard soil classifications (including the Unified Soil Classification System), stratigraphy, soil structure, bedrock lithology, brittle, or

secondary structures in soil and bedrock; and a sketch showing these features for each test pit constructed. Test pits must be promptly backfilled and compacted with excavated materials. The department may require that, if a test pit is dug, undisturbed soil samples be taken and tested in accordance with subparagraph (9)(ii) of this subdivision.

(5) Water well surveys. A survey of public and private water wells within one mile downgradient and one-quarter mile upgradient of the proposed site must be conducted. Surveys must obtain, where available, the location of wells, which must be shown on a map with their approximate elevation and depth, name of owner, age and usage of the well; stratigraphic unit screened; well construction; static water levels; well yield; perceived water quality; and any other relevant data which can be obtained.

(6) Geophysical and geochemical surveys. The department may require the use of geophysical and geochemical methods, such as electromagnetic, resistivity, seismic surveys, remote sensing surveys, downhole geophysics, isotope geochemistry, and soil gas analysis, where necessary to justify the interpretations and conclusions of the site investigation report and to provide information between boreholes, and aid in the siting of wells.

(7) Tracer studies. The department may require the use of tracer studies to aid in understanding groundwater flow or to otherwise assist in devising an effective environmental monitoring plan.

(i) Where sites overlie weathered limestone or dolostone bedrock or where karst environments cannot be avoided, the department may require tracer studies before finalizing the bedrock monitoring plan. Tracer studies must identify, in specific detail, areas of groundwater flow from the facility attributed to secondary permeability, recharge and discharge areas on and surrounding the site, storage of groundwater, and variations of water quality seasonally and during high and low flow periods.

(ii) Where a site is otherwise unmonitorable because of existing contamination, the department may allow the use of tracers to aid in monitoring.

(8) Monitoring wells and piezometers.

(i) Construction in general.

(a) Monitoring wells and piezometers must define the three-dimensional flow system within the critical stratigraphic section to justify the interpretations and conclusions of the hydrogeologic report.

(b) Construction techniques must be appropriate to ensure that groundwater samples and head level measurements characterize discrete stratigraphic intervals; and to prevent leakage of groundwater or contaminants along the well annulus. If leakage is detected, it must be corrected or the well abandoned.

(c) Monitoring wells and piezometers may be placed individually or as well clusters. Well clusters consist of individual wells at varying depths in close proximity, each installed in its own boring. Multiple wells placed into one large borehole are prohibited unless prior department approval in writing is obtained.

(d) Soil borings, soil samples, and rock cores must characterize each stratigraphic unit within the critical stratigraphic section to justify the interpretations and conclusions

of the hydrogeologic report.

(e) Every precaution must be taken during drilling and construction of monitoring wells to avoid introducing contaminants into a borehole. Only potable water of known chemistry may be used in drilling monitoring wells or piezometers unless otherwise approved by the department.

(f) All equipment placed into the boring must be properly decontaminated before use at the site and between boreholes. The initial cleaning at the site must ensure that no contaminants from the last site drilled will be introduced into the borings. All equipment must be steam cleaned between holes. Where possible, upgradient wells should be drilled first.

(g) Use of drilling muds is to be avoided unless prior department approval in writing is granted. If drilling muds are used, the material used must avoid the introduction of stray contaminants. Drilling muds must not be used within 10 feet of the screened interval.

(h) Air systems and drilling lubricants must not introduce contaminants into the borehole.

(i) Well borings must have an inside diameter at least two inches larger than the outside diameter of the casing and screen to ensure that a tremie may be properly used.

(j) Wells and borings must not be placed through or into waste unless prior department approval has been granted and sufficient safety precautions are employed. If waste is encountered unexpectedly during drilling, drilling of that boring must cease, the hole properly abandoned with cuttings properly disposed of and the department notified.

(ii) Construction of monitoring wells and piezometers.

(a) Well screens and risers must be constructed of materials selected to last for the required monitoring period of the facility without contributing contaminants to, or removing contaminants from, the groundwater. All materials used are subject to department approval. Joints, caps, and end plugs are to be secured by welds, threads with teflon tape, or force fittings. Solvents and glues or other adhesives are prohibited. Caps must be vented to allow for proper pressure equalization. The inside diameter of each well screen or riser pipe must be nominally two inches in diameter and must allow for proper development, survey and sampling equipment to be used within the screen and casing. A permanent mark should be made at the top of the riser pipe to provide a datum for subsequent water level measurements.

(b) Unless otherwise approved by the department, well screens are required for all wells and piezometers. All screens used must be factory constructed non-solvent welded/bonded continuous slot wire wrap screens of a material appropriate for long-term monitoring without contributing contaminants to or removing contaminants from the groundwater. The slot size of the screen must be compatible with the sand pack. Water table variations, site stratigraphy, expected contaminant behavior, and groundwater flow must be considered in determining the screen length, materials, and position. Where existing contamination is suspected or known, down hole geophysical

techniques may be required by the department to aid in selecting well screen elevations.

(c) The sand pack surrounding the well screen must consist of clean,inert, siliceous material. Grain size must be based upon a representative sieve analysis of the zone to be screened. The sand pack must minimize the amount of fine materials entering the well and must not inhibit water inflow to the well. The sand pack must be placed in the annular space around the well screen and extend two feet or 20 percent of the screen length (whichever is greater) above the top, and six inches below the bottom, of the screen. The sand pack material must be placed using the tremie method or another method approved by the department and must avoid bridging. The sand pack must be checked for proper placement. A finer grained sand pack material (100 percent passing the No. 30 sieve and less than two percent passing the No. 200 sieve) six inches thick must be placed at the top of the sand pack between the sand and the bentonite seal.

(d) Bentonite must be placed above the sand pack using the tremie or other approved method to form a seal at least three feet thick. A 6 to 12 inch fine grained sand pack must be placed above the bentonite seal to minimize grout infiltration. If pellets or chips are used, sufficient time should be allotted to allow for full hydration of the bentonite prior to emplacement of overlying materials.

(e) Grout of cement/bentonite, bentonite alone, or other suitable, low permeability material, if approved by the department, must completely fill the remaining annular space to the surface seal. The grout mixture must set up without being diluted by formation water, and must displace water in the annular space to ensure a continuous seal. The grout mixture must be placed under pressure using a tremie or other method approved by the department. Auger flights or casing must be left in the hole before grouting to prevent caving. The cement used must be appropriate for the groundwater chemistry of the site.

(f) A protective steel casing, at least two inches larger in diameter than the well casing, must be placed over the well casing or riser pipe and secured in a surface well seal to adequately protect the well casing. A distinctive, readily visible marker must be permanently affixed to the protective casing or near the well to identify the well number and ensure visibility even in periods of high snow cover. A drain hole must be drilled at the base of the protective casing. A vent hole must be located near the top of the protective casing to prevent explosive gas build up and to allow water levels to respond naturally to barometric pressure changes. The annulus of the protective casing should be filled with gravel. A locking cap must be installed with one to two inches clearance between the top of the well cap and the bottom of the locking cap when in the locked position and a weather resistant padlock must be placed on the protective casing and duplicate keys provided to the department.

(g) A concrete surface seal designed to last throughout the planned life of the monitoring well must be constructed. The surface seal must extend below the frost depth to prevent potential well damage. The top of the seal must be constructed by pouring the concrete into a pre-built form with a minimum of three foot long sides. The seal must be designed to prevent surface runoff from ponding and entering the well casing. In areas where traffic may cause damage to the well, bumperguards or other

suitable protection for the well is required. Any damaged or deteriorated surface seals must be reported to the department and repaired or replaced in an appropriate manner. The department may allow alternate designs when documentation is presented which demonstrates the intent of the regulations.

(h) Where under the circumstances of a particular situation the department believes that the methods identified in this section are inadequate, it may require that additional measures be taken to prevent migration of contaminants along the annulus of the well or to protect the well.

(i) Alternative construction methods for piezometers and wells which are not to be part of the environmental monitoring plan may be approved by the department if those methods meet the requirements set forth in clause (i)(b) of this paragraph.

(iii) Well and piezometer development. All wells and piezometers must be developed as soon as possible after installation, but not before the well seal and grout have set. Water must not be introduced into the well for development, except with approval of the department. Any contaminated water withdrawn during development must be properly managed. Development must not disturb the strata above the water-bearing zone or damage the well. The entire saturated screened interval must be developed. The department may require multiple attempts at well development to increase the likelihood that sediment free water can be obtained. Development methods should be appropriate for conditions/stratigraphy encountered. Placement of screens in a fine grained strata may require gentle development techniques to avoid pulling sediment into the well. The selected method must minimize to the greatest extent possible the amount of turbidity in the well.

(iv) Survey. The locations and elevations of all existing and abandoned test pits, soil borings, monitoring wells, and piezometers must be surveyed to obtain their precise location and plotted on a map in the hydrogeologic report. The vertical location of the ground surface and the mark made on the top of the monitoring well and piezometer risers must be accurately measured to the nearest 100th foot.

(v) Replacement of wells. All wells must be properly protected to ensure their integrity throughout the active and post-closure period of the facility. If, in the opinion of the department, water quality or other data show that the integrity of a well is lost, the well must be replaced and sampled within a time period acceptable to the department (but not to exceed 120 days) after written notification by the department. The initial sample for the replacement well must be analyzed for baseline parameters in the Water Quality Analysis Tables in this section.

(vi) Abandonment of wells. All soil borings or rock cores which are not completed as monitoring wells or piezometers and other abandoned wells must be fully sealed in a manner appropriate for the geologic conditions to prevent contaminant migration through the borehole. Generally, such sealing must include:

(a) Overboring or removal of the casing to the greatest extent possible, followed by perforation of any casing left in place. All casing and well installations in the upper five feet of the boring, or within five feet of the proposed level of excavation, must be removed.

(b) Sealing by pressure injection with cement bentonite grout, using a tremie pipe or

other method acceptable to the department, must extend the entire length of the boring to five feet below the ground surface or the proposed excavation level. The screened interval of the borehole must be sealed separately and tested to ensure its adequacy before sealing the remainder of the borehole. Where the surrounding geologic deposits are highly permeable, alternate methods of sealing may be required to prevent the migration of the grout into the surrounding geologic formation. The upper five feet must be backfilled with appropriate native materials compacted to avoid settlement.

(c) The sealed site must be restored to a safe condition. The site must be inspected periodically after sealing for settlement or other conditions which require remediation.

(9) Geologic sampling.

(i) All borings and rock cores must be sampled continuously to the base of the critical stratigraphic section. For well clusters, continuous samples must be collected from the surface to the base of the deepest well. Other wells in the cluster must be sampled at all stratigraphic changes, and at the screened interval. At sites where the geology is not of a complex nature the department may allow a reduction in the number of wells requiring continuous sampling. Soil borings must be sampled using the split spoon method and bedrock or boulders must be sampled by coring with standard size NX or larger diameter core bits. Samples must be retained in labeled glass jars or wooden core boxes. All samples must be securely stored and accessible throughout the life of the facility. The location of the storage area must be designated in the operation and maintenance plan for the facility.

(ii) A representative number of undisturbed samples must be collected from test pits and soil borings using appropriate methods to identify the soil characteristics of all cohesive soil units. Such samples must be analyzed in the laboratory for: Atterberg limits; gradation curves by sieve or hydrometer analysis or both, as appropriate; undisturbed permeabilities; and visual descriptions of undisturbed soil structures and lithologies.

(10) Logs.

(i) Complete and accurate drilling logs must be provided to the department for all soil borings. These logs must provide detailed soil classification according to the Unified Soil Classification System (USCS). The USCS visual method must be used on all samples supplemented by the USCS laboratory tests on a representative number of samples from each stratigraphic unit and each screened interval. Logs also must contain a description of matrix and clasts, mineralogy, roundness, color, appearance, odor, and behavior of materials using an appropriate descriptive system. A clear description of the system used must be included with the logs. When undisturbed samples have been taken, the interval tested and the test results must be clearly shown on the logs. All well logs must contain drilling information as observed in the field including: moisture content, location of the water table during drilling, water loss during drilling; depth to significant changes in material and rock; sample recovery measured in tenths of a foot; hammer blow counts, and other pertinent comments; the method of drilling, anomalous features such as gas in the well, and the use and description of drilling fluids or additives, including the source, and calculated and actual amounts of materials used.

(ii) Rock core logs must describe the lithology, mineralogy, degree of cementation, color, grain size, and any other physical characteristics of the rock; percent recovery and the

rock quality designation (RQD); other primary and secondary features, and contain all drilling observations and appropriate details required for soil boring logs. A clear photograph of all labeled cores must also be taken and submitted with the logs.

(iii) Well completion logs must contain a diagram of the completed well, all pertinent details on well construction, a description of the materials used, and elevations of all well features.

(iv) Copies of original field logs must be submitted to the department upon request.

(11) In situ hydraulic conductivity testing.In situ hydraulic conductivity testing must be done in all monitoring wells and piezometers, unless other methods that are approved by the department, are used. The testing method used must not introduce contaminants into the well. If contamination is known or suspected to exist, all water removed must be properly managed. Hydraulic conductivities may be determined using pump tests, slug tests, packer tests, tracer studies, isotopic geochemistry, thermal detection, or other suitable methods.

(b) Site investigation report. The site investigation report must include a final version of the site investigation plan, raw field data, analytical calculations, maps, flow nets, cross-sections, interpretations (and alternative interpretations where applicable), and conclusions. All maps, drawings and diagrams must have a minimum scale of 1:24,000, unless otherwise acceptable to the department. Such report must comprehensively describe:

(1) Regional geology. The discussion of regional geology must demonstrate how the regional geology relates to the formation of on-site geologic materials, the potential for and effects of off-site contaminant migration, and the location of nearby sensitive environments. This discussion must include available and appropriate information to describe:

(i) bedrock stratigraphy and structural features (represented on maps and columnar diagrams) constructed from field exposures and the geologic literature, describing formation and member names, geologic ages, rock types, thicknesses, the units' mineralogic and geochemical compositions and variabilities, rock fabrics, porosities and bulk permeabilities, including karst development, structural geology, including orientation and density or spacing of folds, faults, joints, and other features;

(ii) glacial geology, including a discussion of the formation, timing, stages, and distribution of glacial deposits, advances and retreats, hydrologic characteristics of the surficial deposits, such as kames, eskers, outwash moraines, etc.;

(iii) major topographic features, their origin and influence upon drainage basin characteristics; and

(iv) surface water and groundwater hydrologic features, including surface drainage patterns, recharge and discharge areas, wetlands and other sensitive environments, inferred regional groundwater flow directions, aquifers, aquitards and aquicludes, known primary water supply and principal aquifers, public water supply wells, and private water supply wells identified in the water supply well survey; any known peculiarities in surface water and groundwater geochemistry, and any other relevant features.

(2) Site-specific geology. The site investigation report must define site hydrogeologic conditions in three dimensions and their relationship to the proposed landfill. The report must define site geology, surface water and groundwater flow, and must relate site-specific conditions to the regional geology. The report must describe the potential impact the landfill

may have on surface and groundwater resources and other receptors, including future hydrogeologic conditions, which may occur with site development, and it must describe the hydrogeologic conditions in sufficient detail to construct a comprehensive understanding of groundwater flow, which can be quantified and verified through hydrologic, geochemical, and geophysical measurements. The report must provide sufficient data to specify the location and sampling frequency for environmental monitoring points; form the basis for contingency plans regarding groundwater and surface water contamination and explosive gas migration; and support the engineering design of the landfill. The site- specific hydrogeologic evaluation must specifically discuss all units in the critical stratigraphic section. Such evaluation must include maps, cross- sections, other graphical representations, and a detailed written analysis of the following:

(i) all hydrogeologic units such as aquifers, aquitards and aquicludes, and how they relate to surface water and groundwater flow. This must include all hydrogeologic data collected during the site investigation and explain and evaluate the hydrologic and engineering properties of the site and each specific unit; and

(ii) local groundwater recharge and discharge areas, high and low groundwater tables and potentiometric surfaces for each hydrologic unit, vertical and horizontal hydraulic gradients, groundwater flow directions and velocities, groundwater boundary conditions, surface water and groundwater interactions, and an evaluation of existing water quality.

(c) Environmental monitoring plan. The environmental monitoring plan must describe all proposed on-site and off-site monitoring, including the location of all environmental, facility, and other monitoring points, sampling schedule, analyses to be performed, statistical methods, and reporting requirements. The plan must also include a schedule for construction of the groundwater monitoring wells based on site-specific hydrogeology and the sequencing of construction of landfill cells; a schedule for initiation of the existing water quality and operational water quality monitoring programs and a contingency water quality monitoring plan which specifies trigger mechanisms for its initiation. Unless otherwise approved by the department, the plan must comply with the following:

(1) Groundwater sampling. Groundwater monitoring wells must be capable of detecting landfill-derived groundwater contamination within the critical stratigraphic section.

(i) Horizontal well spacing.

(a) Horizontal spacing of wells must be based upon site-specific conditions including groundwater flow rates, estimated longitudinal and transverse dispersivity rates, proximity to or presence of sensitive environments and groundwater users, the nature of contaminants disposed of at the site, and the proposed design and size of the landfill.

(b) In the first water-bearing unit of the critical stratigraphic section, monitoring well spacing must not exceed 500 feet along the downgradient perimeter of the facility. In sensitive environments or geologically complex environments, closer well spacing may be required. Upgradient or crossgradient well spacing must not exceed 1,500 feet and may be less in sensitive environments, or where up-gradient sources of contamination are known to exist. Subsequent water-bearing units must be monitored, as required by the department, based upon the potential for contaminant migration to that unit. Well spacing must provide at least one upgradient and three downgradient

monitoring wells or well clusters for each water- bearing unit of the critical stratigraphic section.

(c) Sensitive environments or areas where public health concerns exist may be subject to more intensive groundwater monitoring requirements. In addition, the department may require the applicant to develop acceptable computer models of contaminant plume behavior from hypothetical leaks in the liner system, if necessary to determine optimum monitoring well spacing.

(d) In areas where waterflow is irregular and unpredictable and where otherwise determined to be appropriate, the applicant may be required to conduct spring, sinkhole, or other sampling to enhance the monitoring.

(e) All downgradient monitoring wells must be located as close as practical to but not more than 50 feet from the waste boundary, unless otherwise approved by the department due to site specific conditions, to ensure early detection of any contaminant plume.

(f) All upgradient and crossgradient monitoring wells must be placed far enough from the waste boundary to avoid any facility derived impacts.

(ii) Well screen placement.

(a) Well screens must be located to readily detect groundwater contamination within the saturated thickness of the first water-bearing unit, and must be installed at a representative number of points at each subsequent permeable unit throughout the critical stratigraphic section. Well screens must not act as conduits through impermeable layers. Wells monitoring the water table should be screened to ensure that the water table can be sampled at all times.

(b) Upgradient and crossgradient wells must monitor the same hydrologic units whenever possible within the critical stratigraphic section as the downgradient monitoring wells.

(iii) Screen length. Well screens must not exceed 20 feet in length, unless otherwise approved by the department. The applicant must provide technical justification for the actual screen length chosen.

(iv) Geophysical and geochemical techniques. Where existing contamination is suspected, the department may require the use of geophysical and geochemical techniques to locate contaminated zones before selecting well locations and screen depths for environmental monitoring points.

(v) If a groundwater suppression system exists at a facility, the department may require representative sampling points to be designated as environmental monitoring points. Existing water quality monitoring at these points may not be required.

(2) Surface water and sediment sampling. The environmental monitoring plan must designate monitoring points, for use in operational or contingency monitoring or both of the facility pursuant to subparagraphs (5)(ii) and (iii) of this subdivision, for all surface water bodies that may be significantly impacted by a contaminant release from the facility. Sampling activities at these monitoring points shall be for surface water and sediment. The department may require the sampling and analysis of surface water and sediment

sampling points during a site investigation to understand site hydrogeology or existing patterns of contamination. In bodies of standing water, these points must be located at the closest point to the facility and must be included in existing water quality monitoring. In flowing water bodies, these points must include sufficient upgradient and downgradient locations to allow the facility's impact to be measured. These points, however, do not require existing water quality analysis. The detailed analysis requirements of these points must be specified in the contingency monitoring plan and the detailed sampling requirements must be specified in the site analytical plan.

(3) Leachate sampling. The environmental monitoring plan must specify the location of facility leachate sampling points and parameters to be analyzed so as to obtain a representative characterization of the leachate composition in the primary leachate collection and removal system and to determine the nature of liquids detected in the secondary leachate collection and removal system. The following must be included:

(i) Sampling points. All sampling points should be located to minimize pumping of leachate before sampling. Sampling points in the secondary leachate collection system should be adequate to sample liquids beneath each discrete leachate collection area or landfill cell.

(ii) Analysis required. Except as allowed by the department when a specific waste stream and its leachate are already well defined, analysis of the leachate in the primary and secondary leachate collection and removal systems must be performed semi-annually for expanded parameters. The department may require the use of specific analytical methods in these analyses when minimum detection levels are determined inadequate to fully characterize leachate.

(4) Water supply well sampling. If sampling and analysis of water supply wells is to be performed, the analytical requirements must be in accordance with those specified in the site analytical plan. Sampling frequency and analysis shall be at least quarterly for baseline parameters. Sampling methods must be consistently applied each time a well is sampled and before sampling any residential well, the New York State Department of Health and/or local health department must be notified.

(5) Water quality monitoring program. A water quality monitoring program must be implemented for all environmental monitoring points specified in the environmental monitoring plan. This program must be tailored to the site to establish existing water quality for the site prior to landfilling, operational water quality during operation of the site and the post-closure period, and contingency water quality, if contamination is detected at the site. These programs must meet the following minimum requirements:

(i) Existing water quality. The applicant must establish an existing water quality database to characterize the site geochemistry.

(a) The permit application must contain a preliminary evaluation of water quality, consisting of the first two rounds of sampling and analyses for a representative number of monitoring points at both upgradient and downgradient locations, in each water bearing hydrogeologic unit within the critical stratigraphic section, with a minimum of two samples taken from each well during the first round of sampling, unless otherwise approved by the department. The first round of these samples must be analyzed for the expanded parameters. The second round must be analyzed for the

baseline parameters, except as specified in clause (d) of this subparagraph. These samples should be taken in early spring and late summer, or equivalent, to approximate periods of high and low groundwater flow. The department may require sampling and analysis of additional monitoring points as necessary to define site hydrogeology and geochemistry in support of the interpretations and conclusions of the site investigation report.

(b) Before deposition of waste in the facility, all environmental monitoring points not previously sampled must be sampled and analyzed for four rounds of quarterly sampling. The first of these sampling rounds must be analyzed for expanded parameters and the other three rounds must be analyzed for baseline parameters. Those environmental monitoring points which were sampled in accordance with clause (a) of this subparagraph must be sampled and analyzed for baseline parameters for two rounds of samples. The samples shall be obtained at different times of the year than when the sampling required by clause (a) of this subparagraph was performed. If elevated contaminant levels were detected during the preliminary evaluation of water quality, then the sampling required in this clause shall be as specified in clause (d) of this subparagraph. The department may approve phased sampling, where hydrogeologic conditions warrant, as landfill cells are constructed. The sampling of these phased monitoring points shall commence at least one year prior to solid waste deposition and shall be in conformance with the requirements of clause (b) of this subparagraph or as approved by the department. As these phased monitoring points are added to the monitoring program, the procedures contained in clause (c) of this subparagraph shall be followed to reestablish existing water quality at the facility and recompute the standard deviation.

(c) Prior to facility operation, existing water quality must be established for each hydrogeologic flow regime being monitored at the site. Existing water quality for each hydrogeologic flow regime shall be the arithmetic mean, per parameter, of the analytical results of the samples obtained from those environmental monitoring points within that flow regime prior to deposition of solid waste; provided there is no reason to believe that the distribution of the analytical results was non-uniform. The standard deviation of the analytical results for each parameter within each flow regime shall also be established at that time. Should the department determine that the sampling results are non-representative of existing water quality or do not constitute a normal, uniform distribution, then the department shall specify such additional sampling and analyses as it deems necessary to confidently establish existing water quality at the site. For those facilities where solid waste has been placed previously in other than a contiguous landfill cell, the existing water quality may be based on only some of the environmental monitoring points, subject to the approval of the department.

(d) If elevated contaminant levels are detected and additional detailed information is needed to establish a complete existing water quality database, the department may require one or more rounds of baseline or expanded parameter sampling and analysis in any sampling point, using the procedure specified for contingency monitoring required in subparagraph (iii) of this paragraph when contamination is detected.

(e) Additional sampling and analysis beyond the site boundaries may be required to determine the nature and extent of contamination and the source, if possible. This evaluation may include construction, sampling, and analysis of any additional

monitoring wells, and surface water sampling points required by the department. Based upon the results of this additional data, the department may require analysis for any and all expanded parameters, to be included in quarterly or annual operational water quality sampling.

(ii) Operational water quality. The environmental monitoring plan must include a plan for operational water quality monitoring to be conducted during the operation, closure, and post-closure periods of the facility. The operational water quality monitoring plan must be able to distinguish landfill-derived contamination from the existing water quality at the site. The plan must also describe trigger mechanisms for initiating contingency water quality monitoring. The department may require modification of this plan as additional sampling data becomes available during the life of the facility. The minimum requirements for operational water quality monitoring are:

(a) Except as provided below, in each calendar year sampling and analysis must be performed at least quarterly, once for baseline parameters and three times for routine parameters. The baseline sampling event must be rotated quarterly; one round of baseline parameters to be analyzed in each calendar year will be sufficient unless a pattern of contamination exists which may require the department to change the sampling frequency. For double lined landfills, the department may allow omission of the winter sampling once a complete understanding of water chemistry has been obtained, provided that a demonstration of acceptable liner performance is made to the department. The department will require sampling and analysis on a quarterly basis, alternately analyzing for routine and baseline parameters, at all landfills which do not have a liner system constructed in accordance with section 360-2.13(f) of this Subpart.

(b) The department may approve phased sampling, where hydrogeologic conditions warrant, as landfill cells are constructed or as post-closure monitoring is completed as specified in section 360-2.15(i) of this Subpart. With department approval, sampling of specific environmental monitoring points which are not potentially impacted by the portions of the landfill already constructed, may be deferred, provided that scheduled sampling commences at least one year before landfill construction in the vicinity. The department may withdraw this approval at any time, based upon a change in facility design, operation, or performance.

(c) Operational water quality analysis must include at least those parameters specified in the Water Quality Analysis Tables for routine and baseline parameters. The department may modify these tables before granting a permit for the facility, or during the duration of the permit, if leachate composition so warrants. If subsequent leachate compositions vary or if the waste disposed of at the facility changes, the department may adjust analytical requirements accordingly.

(d) Within 90 days of completing the quarterly field sampling activities, the facility owner/operator must determine whether or not there is a significant increase from existing water quality levels established for each parameter pursuant to clause (c)(5)(i)(c) of this section.

(1) In determining whether a significant increase has occurred, the facility owner/operator must compare the groundwater quality of each parameter at each monitoring well to the existing water quality value of that parameter.

(2) A significant increase has occurred if:

(i) the groundwater quality for any parameter at any monitoring well exceeds the existing water quality value for that parameter, as established pursuant to clause (c)(5)(i)(c) of this section, by three standard deviations; or

(ii) the groundwater quality for any parameter at any monitoring well exceeds the existing water quality value for that parameter, as established pursuant to clause (c)(5)(i)(c) of this section and exceeds the water quality standards for that parameter as specified in Part 701, 702, or 703 of this Title. (e) If the owner/operator determines, pursuant to clause (d) of this subparagraph, that there is a significant increase from existing water quality levels for one or more of the parameters during field sampling for the routine parameters, excluding the field parameters, at any monitoring well, the facility owner/operator:

(1) must, within 14 days of this finding, notify the department indicating which parameters have shown significant increases from existing water quality levels; and

(2) must sample and analyze all monitoring points for the baseline parameters during the next quarterly sampling event. Subsequent sampling and analysis for baseline parameters must be conducted at least semiannually until the significant increase is determined not to be landfill-derived or the department determines such monitoring is not needed to protect public health or the environment.

(f) If the owner/operator determines, pursuant to clause (d) of this subparagraph, that there is a significant increase from existing water quality levels for one or more of the parameters during field sampling for the baseline parameters, excluding the field parameters, at any monitoring well, the facility owner/operator:

(1) must, within 14 days of this finding, notify the department indicating which parameters have shown significant increases from existing water quality levels; and

(2) must establish a contingency monitoring program meeting the requirements of subparagraph (iii) of this paragraph within 90 days except as provided for in subclause (3) of this clause.

(3) The facility owner/operator may attempt to demonstrate to the department that a source other than the facility caused the contamination or that the significant increase resulted from error in sampling, analysis, or natural variation in groundwater quality. A report documenting this demonstration must be submitted to the department for approval. If a successful demonstration is made, documented and approved by the department, the facility owner/operator may continue operational water quality monitoring as specified in this subparagraph. If, after 90 days, a successful demonstration is not made, the owner/operator must initiate a contingency monitoring program as required in subparagraph (iii) of this paragraph.

(iii) Contingency water quality. The environmental monitoring plan must include a plan for contingency water quality monitoring, as described in this subparagraph, which must be conducted when a significant increase over existing water quality has been detected pursuant to clause (c)(5)(ii)(d) of this section for one or more of the baseline parameters listed in the Water Quality Analysis Tables. All contingency water quality monitoring plans are subject to department approval, may be modified at any time by the department

when necessary to protect public health and the environment, and must include the following:

(a) Within 90 days of triggering a contingency water quality monitoring program, the facility owner/operator must sample and analyze the groundwater for the expanded parameters listed in the Water Quality Analysis Tables. A minimum of one sample from each monitoring well (upgradient and downgradient) must be collected and analyzed during this sampling. If any constituents are detected in the downgradient wells as a result of the expanded parameter analysis, a minimum of two independent samples from each well (upgradient and downgradient) must be collected within 30 days of obtaining the results of the expanded parameter analysis and analyzed for the detected constituents. These samples must be collected within two weeks of each other and then compared to the existing groundwater quality values established pursuant to subparagraph (c)(5)(i) of this section. If an increase in the existing water quality values in the upgradient wells is indicated by this comparison, the existing water quality values for these parameters shall be revised to be the arithmetic mean of the results of each parameter for which analyses were performed in the upgradient wells within each hydrogeologic flow regime. The department may delete any of the expanded parameters if it can be shown that the removed parameters are not reasonably expected to be in, or derived from, the waste contained in the landfill based on the leachate sampling being performed pursuant to paragraph (c)(3) of this section.

(b) After obtaining the results from the initial or subsequent sampling required in clause (a) of this subparagraph, the facility owner/operator must:

(1) within 14 days, notify the department to identify the expanded parameters that have been detected;

(2) within 90 days, and on a quarterly basis thereafter, resample all wells, conduct analyses for all baseline parameters, and for those expanded parameters that are detected in response to clause (a) of this subparagraph. In addition, the facility owner/operator shall sample and conduct analyses annually on all wells for the expanded parameters. At least one sample from each upgradient and downgradient well must be collected and analyzed during these sampling events. The department may reduce the requirements of this subclause based on site specific conditions; and

(3) establish groundwater protection standards for all parameters detected pursuant to clause (a) of this subparagraph. The groundwater protection standards must be established in accordance with clause (f) of this subparagraph.

(c) If the concentrations of any of the expanded parameters are shown to be at or below existing water quality values for two consecutive sampling events, the owner/operator must notify the department of this finding and, if approved by the department, may remove that parameter from the contingency water quality monitoring program. If the concentrations of all the expanded parameters are shown to be at or below existing water quality values for two consecutive sampling events, the owner/operator must notify the department and, if approved by the department, may return to operational water quality monitoring.

(d) If the concentrations of any expanded parameters are above existing water quality values, but all concentrations are below the groundwater protection standard

established under clause (f) of this subparagraph, the owner/operator must continue contingency monitoring in accordance with this subparagraph.

(e) If one or more expanded parameters are detected at significant levels above the groundwater protection standard established under clause (f) of this subparagraph in any sampling event, the facility owner/operator must, within 14 days of this finding, notify the department to identify the expanded parameters that have exceeded the groundwater protection standard, and notify all appropriate local government officials identified in the Contingency Plan, required pursuant to section 360-2.10 of this Subpart, that the notice has been sent to the department. The owner/operator must also:

(1) characterize the nature and extent of the release by installing additional monitoring wells as necessary;

(2) install at least one additional monitoring well at the facility boundary in the direction of contaminant migration, and sample this well in accordance with subparagraph (c)(5)(i) of this section;

(3) notify all persons who own the land or reside on the land that is directly over any part of the plume of contamination if contaminants have migrated off-site as indicated by sampling of wells in accordance with subclause (1) of this clause; and

(4) initiate an assessment of corrective measures as required by section 360-2.20 of this Subpart within 90 days; or

(5) demonstrate that a source other than the landfill caused the contamination, or that the significant increase resulted from error in sampling, analysis, or natural variation in groundwater quality. This report must be submitted for approval by the department. If a successful demonstration is made, the facility owner/operator must continue monitoring in accordance with the contingency water quality monitoring program pursuant to subparagraph (c)(3)(iii) of this section, and may return to operational monitoring if the expanded parameters are at or below existing water quality as specified in subparagraph (c)(5)(i) of this section. Unless and until a successful demonstration is made, the owner/operator must comply with this clause, including initiating an assessment of corrective measures.

(f) The owner/operator must establish a groundwater protection standard for each expanded parameter detected in the groundwater. The groundwater protection standard shall be:

(1) for parameters for which a maximum contaminant level (MCL) has been established in section 1412 of the Safe Drinking Water Act under 40 CFR part 141 (see section 360-1.3 of this Part) or for which standard has been established pursuant to Part 701, 702, or 703 of this Title, whichever is more stringent when the parameters are the same, the MCL or standard for that constituent;

(2) for parameters for which MCLs or standards have not been established, the existing water quality concentration for the parameter established from wells in accordance with subparagraph (c)(5)(i) of this section; or

(3) for parameters for which the existing water quality level is higher than the MCL or standard identified under subclause (1) of this clause, the existing water quality

concentration.

(iv) Reporting of data. Unless more rapid reporting is required to address an imminent environmental or public health concern, the owner or operator of the facility must report all water quality monitoring results to the department within 90 days of the conclusion of the sample collection. The report must include:

(a) A table showing the sample collection date, the analytical results (including all peaks even if below method detection limits [MDL]), designation of upgradient wells andlocation number for each environmental monitoring point sampled, applicable water quality standards, and groundwater protection standards if established, MDL's, and Chemical Abstracts Service (CAS) numbers on all parameters.

(b) In addition, tables or graphical representations comparing current water quality with existing water quality and with upgradient water quality must be presented. These comparisons may include Piper diagrams, Stiff diagrams, tables, or other analyses.

(c) A summary of the contraventions of State water quality standards, significant increases in concentrations above existing water quality, any exceedances of groundwater protection standards, and discussion of results, and any proposed modifications to the sampling and analysis schedule necessary to meet the requirements of subparagraphs (i) through (iii) of this paragraph.

(d) All AQA/AQC documentation must be submitted to the department in a form acceptable to the department.

(e) The annual report must contain a summary of the water quality information presented in clauses (b) and (c) of this subparagraph with special note of any changes in water quality which have occurred throughout the year.

(f) The data quality assessment report required pursuant to paragraph (d)(5) of this section.

(d) Site analytical plan. The site analytical plan must describe the method of sample collection and preservation, chain of custody documentation, analyses to be performed, analytical methods, data quality objectives, procedures for corrective actions, and procedures for data reduction, validation and reporting. The site analytical plan will pertain to existing water quality monitoring programs, operational water quality monitoring programs, and a contingency water quality monitoring program which specifies trigger mechanisms for its initiation. Unless otherwise approved by the department, the site analytical plan must comply with the following:

(1) Data quality objectives.

(i) The data quality objectives for the data generation activity must be established prior to the initiation of any sampling.

(ii) The data quality objectives shall define the goals of each phase of the water quality monitoring program, including, but not limited to, the following:

(a) reasons for the analytical program;

(b) identification of any regulatory programs and standards applicable to the analytical program; and

(c) minimum detection limits for each of the parameters listed in the Water Quality Analysis Tables.

(iii) The data quality objectives shall be the basis for the development of all other portions of the site analytical plan.

(2) Analytic quality assurance (AQA)/analytic quality control (AQC).

(i) The site analytical plan must include a discussion of the AQA/AQC for the sampling program associated with the facility and shall be sufficient to ensure that the data generated by the sampling and analysis activities are of a quality commensurate with their intended use and the requirements of the department. The discussion shall detail the AQA/AQC goals and protocols for each type of environmental monitoring to be performed at the facility. Elements must include a discussion of the quality objectives of the project, identification of the qualifications of those persons who will be performing the work and their responsibilities and authorities, enumeration of AQC procedures to be followed, and reference to the specific standard operating procedures that will be followed for all aspects of the environmental monitoring program.

(3) Field sampling procedures.

(i) All field sampling procedures shall be described in detail in the site analytical plan. All field quality control procedures shall be described including types and frequency of field quality control samples to be collected such as field blanks, trip blanks, field duplicates, reference materials and material blanks.

(ii) All samples must be collected and stored in the order of the parameter's volatilization sensitivity using methods, consistently applied, which ensure sample integrity.

(iii) All sampling equipment must be constructed of inert materials designed to obtain samples with minimal agitation and contact with the atmosphere; be cleaned and protected during transport to avoid contamination; and checked before use. Dedicated equipment must be constructed of appropriate inert materials and must be appropriate for the types of sampling to be performed.

(iv) Samples must be properly preserved and delivered to the laboratory with proper chain of custody within all appropriate holding times for the parameters to be analyzed.

(v) The sampling procedures and frequencies must be protective of human health and the environment.

(vi) Monitoring well sampling techniques. Monitoring well sampling techniques must be consistently performed each time a well is sampled, and must comply with the following:

(a) In areas where the presence of explosive or organic vapors is suspected, ambient air in the well must be checked for their presence before the well is evacuated.

(b) For wells with documented contamination, where contamination by non- aqueous phase liquids may be present, standing water in the well must be checked for immiscible layers or other contaminants that are lighter or heavier than water (floaters or sinkers). If present, floaters or sinkers must be sampled and analyzed separately by

a method described in the site analytical plan.

(c) Evacuation of the well must replace stagnant water in the well and the sand pack with fresh water representative of the formation. Evacuation methods, including pumping rate, depth of pump intake, and method of determining sufficiency of evacuation must be consistently applied each time the well is sampled. Evacuation methods must create the least possible turbidity in the well and must not lower the water in the well below the top of the sand pack whenever feasible. Evacuated water must be properly managed.

(d) After evacuation of the well, volatile organic samples must be collected.

(e) analysis must be performed after volatile organic samples have been collected, either within the borehole using a probe or from the next sample collected. All field test equipment must be calibrated at the beginning of each sampling day and checked and recalibrated according to the manufacturer's specifications. Calibration data must be reported with the analytical results.

(f) Groundwater samples shall not be filtered, unless otherwise approved by the department. If, due to site-specific conditions, sample turbidity cannot be reduced to 50 nephelometric turbidity units (NTUs) or less by good sampling technique or well redevelopment, the department may approve collection of both filtered and unfiltered samples for analyses of the inorganic parameters. All other analyses required will be on the unfiltered samples.

(vii) Surface water and sediment sampling techniques. Surface water and sediment sampling methods must be consistently applied to all samples, and must comply with the following:

(a) Surface water samples collected from shallow water should not include bottom sediment. In shallow moving water, downstream samples must be collected first to avoid disturbances from the bottom sediments.

(b) Each water body over three feet deep that is sampled must be checked for stratification, and each stratum must be checked for contamination using field parameters. Each stratum showing evidence of contamination must be separately analyzed. If no stratum shows such evidence, a composite sample having equal parts of water from each stratum must be analyzed.

(c) Sediment samples must be taken at each location from which surface water samples are taken, and should consist of the upper five centimeters of sediment.

(viii) Water supply well sampling techniques. Sampling methods must be consistently applied each time a well is sampled and must comply with the following:

(a) Samples should be collected directly from the well so as to yield water representative of the formations supplying the well. If this is not possible, samples must be collected as near to the well as possible and before the water is softened, filtered, or heated.

(b) If possible, samples must be collected before the water enters the pressure tank, otherwise the water must run long enough to flush water stored in the tank and pipes.

(c) Before sampling, water must be evacuated from the well to ensure a fresh sample

of aquifer water.

(d) If samples are collected from a tap, aerators, filters, or other devices must be removed before sampling.

(ix) Corrective action. Standard operating procedures must be established which describe the procedures used to identify and correct deficiencies in the sample collection process. The standard operating procedure shall specify that each corrective action must be documented in the sampling report submitted to the department, with a description of the deficiency, the corrective action taken, and the persons responsible for implementing the corrective action. Any alterations to the field sampling procedures shall be included as an amendment to the site analytical plan.

(4) Laboratory procedures.

(i) Laboratory analyses must be performed by a laboratory currently certified under the appropriate approval categories by the New York State Department of Health's Environmental Laboratory Approval Program (ELAP).

(ii) The site analytical plan should contain the standard operating procedures of all laboratory activities related to the environmental monitoring plan. Any revisions to these standard operating procedures must be documented. Standard operating procedures should be available for the following, at a minimum:

(a) receipt, storage and handling of samples;

(b) sample scheduling to ensure that holding time requirements are met;

(c) reagent/standard preparation;

(d) general laboratory techniques such as glassware cleaning procedures, operation of analytical balances, pipetting techniques and use of volumetric glassware;

(e) description of how analytical methods are actually to be performed including precise reference to the analytical method used; and not a simple reference to standard methods; and

(f) standard operating procedures for equipment calibration and maintenance to ensure that laboratory equipment and instrumentation are in working order, including, but not limited to procedures and schedules for calibration and maintenance in accordance with manufacturers' specifications; and

(g) for a corrective action, standard operating procedures must be established for identifying and correcting deficiencies in the laboratory procedures. The standard operating procedure shall specify that each corrective action must be documented in the sampling event report submitted to the department with a description of the deficiency, the corrective action taken, and the person responsible for implementing the corrective action. Any alterations to the laboratory procedures shall be included as an amendment to the site analytical plan.

(5) Data quality assessment. At the conclusion of each sampling event and analysis of the samples collected, data quality assessment shall occur. A data quality assessment report must be submitted with the results from each sampling event. Data quality assessment shall occur in two phases.

(i) Data validation.

(a) For those sampling events for which only routine parameters are analyzed, the data validation shall be performed by the laboratory that performed the sample analyses.

(b) For those sampling events for which baseline or expanded parameters are analyzed, the data validation shall be performed by a person other than the laboratory that performed the analyses and that is acceptable to the department.

(c) The data validation shall be performed on all analytical data for the facility at a rate acceptable to the department, but not less than five percent of the data generated, and shall consist, at a minimum, of the following:

(1) field records and analytical data are reviewed to determine whether the data are accurate and defensible. All AQA/AQC information shall be reviewed along with any corrective actions taken during that sampling event; and

(2) all data summaries shall be clearly marked to identify any data that are not representative of environmental conditions at the site, or that were not generated in accordance with the site analytical plan.

(ii) Data usability analysis.

(a) The data usability analysis shall be performed on all analytical data for the facility and shall consist of the following:

(1) an assessment to determine if the data quality objectives were met;

(2) for consistency, comparison of the analytical data with the results from previous sampling events;

(3) evaluation of field duplicate results to indicate the samples are representative;

(4) comparison of the results of all field blanks, trip blanks, equipment rinsate blanks, and method blanks with full data sets to provide information concerning contaminants that may have been introduced during sampling, shipping, or analyzing;

(5) evaluation of matrix effects to assess the performance of the analytical method with respect to the sample matrix, and determine whether the data have been biased high or low due to matrix effects;

(6) integration of the field and laboratory data with geological, hydrogeological, and meteorological data to provide information about the extent of contamination, if it occurs; and

(7) comparison of precision, accuracy, representativeness, comparability, completeness, and defensibility of the data generated with that required to meet the data quality objectives established in the site analytical plan.

(6) The following Water Quality Analysis Tables in this section list the routine, baseline, and expanded parameters for analysis of all monitoring samples.

WATER QUALITY ANALYSIS TABLES

ROUTINE PARAMETERS[1]

Common Name[2]	CAS RN[3]	Suggested Methods	PQL[4] (µg/l)
Field Parameters:			
Static water level(in wells and sumps)			
Specific Conductance		9050	
Temperature			
Floaters or Sinkers[5]			
Temperature			
pH		9040	
Eh		9041	
Dissolved Oxygen[6]			
Field Observations[7]			
Turbidity		180.1	
Leachate Indicators:			
Total Kjeldahl Nitrogen		351.1 351.2 351.3	60
Ammonia.....	7664-41-7	351.4 350.1 350.2	200 60
Nitrate.....		350.3	100
Chemical Oxygen Demand.....		9200 410.1 410.2 410.3 410.4	50000 50000 5000 80000
Biochemical Oxygen Demand (BOD_5).....		405.1	2000
Total Organic Carbon.....			
Total Dissolved Solids		9060	
Sulfate.....		160.1 9035	40000
Alkalinity.....		9036 9038	
Phenols.....		310.1	20000
Chloride.....	108-95-2	310.2 8040 9250	6000
Bromide.....		9251	
Total hardness as $CaCO_3$		9252 320.1 130.1 130.2	2000 20000 30000
Inorganic Parameters:			
Cadmium.....	(Total)	3010 7130	40 50
Calcium.....		7131	1
Iron.....	(Total) (Total)	7140 7380	40 100
Lead.....	(Total)	7381 6010	4 400

		7420	1000
Magnesium.....		7421	10
Manganese.....	(Total) (Total)	7450 7460	4 40
Potassium.....		7461	0.8
Sodium.....	(Total) (Total)	7610 7770	40 8

The department may modify this list as necessary.

Notes

[1]This list contains parameters for which possible analytical procedures are provided in EPA Report SW-846 *Test Methods for Evaluating Solid Waste*, third edition, November 1986, as revised December 1987, and *Methods for Chemical Analysis of Water and Wastes*, USEPA-600/4-79-020, March, 1979. The regulatory requirements pertain only to the list of parameters; the right hand columns (Methods and PQL) are given for informational purposes only. See also footnote 4.

[2]Common names are those widely used in government regulations, scientific publications, and commerce; synonyms exist for many chemicals.

[3]Chemical Abstracts Service Registry Number. Where "Total" is entered, all species in the groundwater that contain this element are included.

[4]Practical Quantitation Limits (PQLs) are the lowest concentrations of analytes in groundwaters that can be reliably determined within specified limits of precision and accuracy by the indicated methods under routine laboratory operating conditions. The PQLs listed are generally stated to one significant figure. PQLs are based on 5 ml samples for volatile organics and 1 L samples for semivolatile organics. CAUTION: The PQL values in many cases are based only on a general estimate for the method and not on a determination for individual compounds; PQLs are not a part of the regulation.

[5]Any floaters or sinkers found must be analyzed separately for baseline parameters.

[6]Surface water only.

[7]Any unusual conditions (colors, odors, surface sheens, etc.) noticed during well development, purging, or sampling must be reported.

BASELINE PARAMETERS[1]

Common Name[2]	CAS RN[3]	Suggested Methods	PQL[4] (µg/l)
Field Parameters:			
Static water level..... (in wells and sumps)			
Specific Conductance.....		9050	
Temperature.....			
Floaters or Sinkers[5].....			
pH.....		9040 9041	

Eh.....			
Dissolved Oxygen6.....			
Field Observations7.....		180.1	
Turbidity.....			
Leachate Indicators:			
Total Kjeldahl Nitrogen...		351.1 351.2 351.3	60
Ammonia.....	7664-41-7	351.4 350.1 350.2	200 30
Nitrate.....		350.3	100
Chemical Oxygen Demand....		9200 410.1 410.2 410.3	50000 50000 50000
Biochemical Oxygen Demand (BOD_5).....		410.4 405.1	80000 2000
Total Organic Carbon.....			
Total Dissolved Solids....		9060	
Sulfate.....		160.1 9035	40000
Alkalinity.....		9036 9038	
Phenols.....		310.1	20000
Chloride.....		310.2 9250	6000
Bromide.....		9251	
Total hardness as $CaCO_3$ ...		9252	
Color.....		320.1 130.1 130.2 110.1 110.2 110.3	2000 20000 30000 80
Boron.....	7440-42-8		
Inorganic Parameters:			
Aluminum.....			
Antimony.....	(total) (total)	7020 6010 7040	10 300 2000
Arsenic.....	(total)	7041 6010 7060	30 500 10
Barium.....	(total)	7061 6010	20 20
Beryllium.....	(total)	7080 6010 7090	1000 3 50
Cadmium.....	(total)	7091 6010 7130	2 40 50

Calcium.....		7131	1
Chromium.....	(total) (total)	7140 6010 7190	40 70 500
Chromium(Hexavalent)*....	18540-29-9	7191 7195 7196	10 600
Cobalt.....	(total)	7197 7198 6010	30 70
Copper.....	(total)	7200 7201 6010	500 10 60
Cyanide.....		7210	200
Iron.....	(total)	7211 9010	10 200
Lead.....	(total) (total)	7380 7381 6010	100 4 400
Magnesium.....		7420	1000
Manganese.....	(total)	7421 7450	10 4
Mercury.....	(total)	7460	40
Nickel.....	(total)	7461 7470	0.8 2
Potassium.....	(total) (total)	6010 7520 7610	150 400 40
Selenium.....	(total)	6010 7740	750 20
Silver.....	(total)	7741 6010	20 70
Sodium.....		7760	100
Thallium.....	(total) (total)	7761 7770 6010	10 8 400
Vanadium.....	(total)	7840 7841 6010	1000 10 80
Zinc.....	(total)	7910 7911 6010 7950 7951	2000 40 20 50 0.5
Organic Parameters:			
Acetone.....	67-64-1	8260	100
Acrylonitrile.....	107-13-1	8030 8260	5 200
Benzene.....	71-43-2	8020 8021 8260	2 0.1 5
Bromochloromethane.....	74-97-5	8021 8260	0.1 5
Bromodichloromethane.....	75-27-4	8010 8021	1 0.2

		8260	5
Bromoform; Tribromomethane	75-25-2	8010 8021 8260	2 15 5
Carbon disulfide.....	75-15-0	8260	100
Carbon tetrachloride.....	56-23-5	8010 8021 8260	1 0.1 10
Chlorobenzene.....	108-90-7	8010 8020 8021 8260	2 2 0.1 5
Chloroethane; Ethyl chloride.....	75-00-3	8010 8021	5 1
Chloroform; Trichloromethane.....	67-66-3	8010 8021	0.5 0.2
Dibromochloromethane; Chlorodibromomethane....	124-48-1	8260 8010 8021	5 1 0.3
1,2-Dibromo-3-chloropro-pane; DBCP.....	96-12-8	8260 8011 8021	5 0.1 30
1,2-Dibromoethane; Ethyl-ene dibromide; EDB.....	106-96-4	8260 8011 8021	25 0.1 10
o-Dichlorobenzene; 1,2-Dichlorobenzene.....	95-50-1	8026 8010 8020 8021 8120 8260	5 2 5 0.5 10 5
p-Dichlorobenzene; 1,4-Dichlorobenzene.....	106-46-	8270 8010 8020 8021 8120 8260	10 2 5 0.1 15 5
trans-1,4-Dichloro-2-bu- tene.....		8270	10
1,1-Dichloroethane; Ethylidene chloride.....	110-57-6 75-34-3	8260 8010 8021	100 1 0.5
1,2-Dichloroethane; Ethylene dichloride.....	107-06-2	8260 8010 8021	8 0.5 0.3
1,1-Dichloroethylene;		8260	5
1,1-Dichloroethene;		8010	1
Vinylidene chloride.....	75-35-4	8021	0.5
cis-1,2-Dichloroethylene;		8260	5
cis-1,2-Dichloroethene..		8021	0.2
trans-1,2-Dichloroethyl-ene;	156-59-2	8260	5
trans-1,2-Dichloro- ethene.....	156-60-5	8010 8021	1 0.5
1,2-Dichloropropane;		8260	5
Pro-pylene dichloride.....	78-87-5	8010 8021	0.5 0.05
cis-1,3-Dichloropropene...		8260	5

		8010	20
trans-1,3-Dichloropropene.	10061-01-5 10061-02-6	8260 8010 8260	10 5 10
Ethylbenzene.....	100-41-4	8020 8221 8260	2 0.05 5
2-Hexanone; Methyl butyl ketone.....	591-78-6	8260	50
Methyl bromide; Bromo- methane.....	74-83-9	8010 8021	20 10
Methyl chloride; Chloro- methane.....	74-87-3	8010 8021	1 0.3
Methylene bromide; Dibro- momethane.....	74-95-3	8010 8021	15 20
Methylene chloride; Dichloromethane....	75-09-02	8260 8010 8021	5 0.2 10
Methyl ethyl ketone; MEK; 2-Butanone....	78-93-3	8260 8010	100 40
4-Methyl-2-pentanone; Methyl isobutyl ketone..	108-10-1	8260 8015	10 5
Styrene.....	100-42-5	8260 8020 8021	100 1 0.1
1,1,1,2-Tetrachloroethane.	630-20-6	8260 8010 8021	10 5 5
1,1,2,2-Tetrachloroethane....	79-34-5	8260 8010 8021	0.5 0.1 0.05
Tetrachloroethylene; Tet- rachloroethene; Per-chloroethylene.....	127-18-4	8260 8010 8021	5 0.5 0.5
Toluene.....	108-88-3	8260 8020 8021	5 2 0.1
1,1,1-Trichloroethane; Methylchloroform.....	71-55-6	8260 8010 8021	5 0.3 0.3
1,1,2-Trichloroethane.....	79-00-5	8260 8010	5 0.2
Trichloroethylene; Tri- chloroethene.....	79-01-6	8260 8010 8021	5 1 0.2
Trichlorofluoromethane; CFC-11.....	75-69-4	8260 8010 8021 8260	5 10 0.3 5
1,2,3-Trichloropropane....	96-18-4	8010 8021 8260	10 5 15
Vinyl acetate.....	108-05-4	8260	50
Vinyl chloride; Chloro- ethene.....	75-01-4	810 8021 8260	2 0.4 10
Xylenes.....	1330-20-7	8020 8021	5 0.2

		8260	5

The department may modify this list as necessary.

Notes

[1]This list contains 47 volatile organics for which possible analytical procedures provided in EPA Report SW-846 *Test Methods for Evaluating Solid Waste*, third edition, November 1986, as revised December 1987, includes Method 8260; 25 metals for which SW-846 provides either Method 6010 or a method from the 7000 series of methods; and additional parameters for which possible procedures are provided in *Methods for Chemical Analysis of Water and Wastes*, USEPA-600/4-79-020, March, 1979. The regulatory requirements pertain only to the list of parameters; the right hand columns (Methods and PQL) are given for informational purposes only. See also footnote 4.

[2]Common names are those widely used in government regulations, scientific publications, and commerce; synonyms exist for many chemicals.

[3]Chemical Abstracts Service Registry Number. Where "Total" is entered, all species in the groundwater that contain this element are included.

[4]Practical Quantitation Limits (PQLs) are the lowest concentrations of analytes in groundwaters that can be reliably determined within specified limits of precision and accuracy by the indicated methods under routine laboratory operating conditions. The PQLs listed are generally stated to one significant figure. PQLs are based on 5 ml samples for volatile organics and 1 L samples for semivolatile organics. CAUTION: The PQL values in many cases are based only on a general estimate for the method and not on a determination for individual compounds; PQLs are not a part of the regulation.

[5]Any floaters or sinkers found must be analyzed separately for baseline parameters.

[6]Surface water only.

[7]Any unusual conditions (colors, odors, surface sheens, etc.) noticed during well development, purging, or sampling must be reported.

*The department may waive the requirement to analyze Hexavalent Chromium provided that Total and Hexavalent and Trivalent Chromium values do not exceed 0 .05 mg/l.

EXPANDED PARAMETERS[1]

Common Name[2]	CAS RN[3]	Suggested Methods	PQL[4] (µg/l)
Field Parameters:			
Static water level..... (in wells and sumps)			
Specific Conductance.....		9050	
Temperature.....			
Floaters or Sinkers[5].....			
pH.....		9040 9041	

Eh.....			
Dissolved Oxygen[6].....			
Field Observations[7].....		180.1	
Turbidity.....			
Leachate Indicators:			
Total Kjeldahl Nitrogen...		351.1 351.2 351.3	60
Ammonia.....	7664-41-7	351.4 350.1 350.2	200 30
Nitrate.....		350.3	100
Chemical Oxygen Demand....		9200 410.1 410.2 410.3 410.4	50000 50000 50000 80000
Biochemical Oxygen Demand (BOD_5).....		405.1	2000
Total Organic Carbon.....			
Total Dissolved Solids....		9060	
Sulfate.....		160.1 9035	40000
Alkalinity.....		9036 9038	
Phenols.....		310.1	20000
Chloride.....	108-95-2	310.2 8040 9250	6000
Bromide.....		9251	
Total hardness as $CaCO_3$ ...	24959-67-9	9252 320.1 130.1 130.2	2000 20000 30000
Color.....		110.1 110.2 110.3	80
Boron.....	7440-42-8		
Inorganic Parameters:			
Aluminum.....	(total)	7020	10
Antimony.....	(total)	6010 7040 7041	300 2000 30
Arsenic.....	(total)	6010 7060 7061	500 10 20
Barium.....	(total)	6010	20
Beryllium.....	(total)	7080 6010 7090	1000 3 50
Cadmium.....	(total)	7091 6010 7130	2 40 50

Calcium.....		7131	1
Chromium.....	(total) (total)	7140 6010 7190	40 70 500
Chromium(Hexavalent)*....	18540-29-9	7191 7195 7196 7197	10 600 30
Cobalt.....	(total)	7198 6010 7200	70 500
Copper.....	(total)	7201 6010	10 60
Cyanide.....		7211	10
Iron.....	(total) (total)	9010 7380	200 100
Lead.....	(total)	7381 6010 7420	4 400 1000
Magnesium.....		7421	10
Manganese.....	(total) (total)	7450 7460	4 40
Mercury.....	(total)	7461 7470	0.8 2
Nickel.....	(total)	6010 7520	150 400
Potassium.....	(total)	7610	40
Selenium.....	(total)	6010 7740 7741	750 20 20
Silver.....	(total)	6010 7760 7761	70 100 10
Sodium.....	(total)	7770	8
Thallium.....	(total)	6010 7840 7841	400 1000 10
Tin.....	(total)	6010	40
Vanadium.....	(total)	6010 7910 7911	80 2000 40
Zinc.....	(total)	6010 7950 7951	20 50 0.5
Organic Parameters:			
Acenaphthene....	83-32-9	8100 8270	200 10
Acemaphthylene	208-96-8	8100 8270	200 10
Acetone.....	67-64-1	8260	100
Acetonitrile; Methyl cyanide.....	75-05-8	8015	100
Acetophenone.....	98-86-2	8270	10
2-Acetylaminofluorene; 2-AAF.....	53-96-3	8270	20

Acrolein.....	107-02-8	8030 8260	5 100
Acrylonitrile.....	107-13-1	8030 8260	5 200
Aldrin.....	309-00-2	8080 8270	10 5
Ally chloride.....	107-05-1	8010 8260	5 10
4- aminobiphenyl...	92-67-1	8270	20
Anthracene.....	120-12-7	8100 8270	200 10
Benzene.....	71-43-2	8020 8021 8260	2 0.1 5
Benzo[a]anthracene; Benzanthracene.....	56-55-3	8100 8270	200 10
Benzo[b]fluoranthene..	205-99-2	8100 8270	200 10
Benzo[k]fluoranthene..	207-08-9	8100 8270	200 10
Benzo[ghi]perylene..	191-24-2	8100 8270	200 10
Benzo[a]pyrene...	50-32-8	8100 8270	200 10
Benzyl alcohol..	100-51-6	8270	20
alpha-BHC.....	319-84-6	8080 8270	0.05 10
beta-BHC....	319-85-7	8080 8270	0.05 10
delta-BHC.....	319--86-8	8080 8270	0.1 20
gamma-BHC; Lindane...	58-89-9	8080 8270	0.05 20
Bis(2-chloroethoxy)methane	111-91-1	8110 8270	5 10
Bis(2-chloroethyl) ether; Dichloroethyl ether...	111-44-4	8110 8270	3 10
Bis-(2-chloro-1-methyl-ethyl) ether; 2,21-Di- chlorodiisopropyl ether	108-60-1	8110 8270	10 10
DCIP, See note 9.....			
Bis(2-ethylhexyl)phthalate Bromochloromethane; Chlorobromomethane....	117-81-7 74-97-5	8060 8021 8260	20 0.1 5
Bromodichloromethane; Dibromochloromethane...	75-27-4	8010 8021	1 0.2
Bromoform; Tribromomethane	75-25-2	8260 8010 8021	5 2 15
4-Bromophenyl phenyl ether	101-55-3	8260 8110	5 25
Butyl benzyl phthalate; Benzyl butyl phthalate..	85-68-7	8270 8060	10 5
Carbon disulfide.....		8270	10

Carbon tetrachloride.....	75-15-0 56-23-5	8260 8010 8021 8260	100 1 0.1 10
Chlordane.....	See Note 10	8080 8270	0.1 50
p-Chloroaniline.....	106-47-8	8270	20
Chlorobenzene.....	108-90-7	8010 8020 8021 8260	2 2 0.1 5
Chlorobenzilate.....	510-15-6	8270	10
p-Chloro-m-cresol; 4-Chloro-3-methylphenol...	59-50-7	8040 8270	5 20
Chloroethane; Ethyl chloride.....	75-00-3	8010 8021 8260	5 1 10
Chloroform; Trichloromethane.....	67-66-3	8010 8021 8260	0.5 0.2 5
2-Chloronaphthalene...	91-58-7	8120 8270	10 10
2-Chlorophenol.....	95-57-8	8040 8270	5 10
4-Chlorophenyl phenyl ether.....	7005-72-3	8110 8270	40 10
Chloroprene.....	126-99-8	8010 8260	50 20
Chrysene.....	218-01-9	8100 8270	200 10
m-Cresol; 3-methylphenol..	108-39-4	8270	10
o-Cresol; 2-methylphenol..	95-48-7	8270	10
p-Cresol; 4-methylphenol..	106-44-5	8270	10
2,4-D; 2,4-Dichlorophen- oxyacetic acid.....	94-75-7	8150	10
4,41-DDD.....	72-54-8	8080	0.1
4,41-DDE.....		8270	10
4,41-DDT.....	72-55-9	8080	0.05
Diallate.....		8270	10
Dibenz[a,h]anthracene.....	50-29-3	8080 8270	0.1 10
Dibenzofuran.....	2303-16-4	8270	10
Dibromochloromethane; Chlorodibromomethane....	53-70-3 132-64-9 124-48-1	8100 8270 8270 8010 8021 8260	200 10 10 1 0.3 5
1,2-Dibromo-3-chloro- propane; DBCP.....	96-12-8	8011 8021 8260	0.1 30 25
1,2-Dibromoethane; Ethylene dibromide; EDB....	106-93-4	8011 8021 8260	0.1 10 5

Di-n-butyl phthalate.....	84-74-2	8060	5
o-Dichlorobenzene; 1,2-Dichlorobenzene.....	95-50-1	8270 8010 8020 8021 8120 8260	10 2 5 0.5 10 5
m-Dichlorobenzene; 1,3-Dichlorobenzene.....	541-73-1	8270 8010 8020 8021 8120 8260	10 5 5 0.2 10 5
p-Dichlorobenzene; 1,4-dichlorobenzene....	106-46-7	8270 8010 8020 8021 8120 8260	10 2 5 0.1 15 5
3,31-Dichlorobenzidine....		8270	10
trans-1,4-Dichloro- 2-butene.....	91-94-1	8270	10
Dichlorodifluoromethane; CFC 12.....	110-57-6 75-71-8	8260 8021	100 0.5
1,1-Dichloroethane; Ethyldidene chloride....	75-34-3	8260 8010	5 1
1,2-Dichloroethane; Ethylene dichloride....	107-06	8021 8260 8010	0.5 5 .05
1,1-Dichloroethylene; 1,1-Dichloroethene; Vinylidene chloride.....	75-35-4	8021 8260 8010	0.3 5 1
cis-1,2-Dichloroethylene; cis-1,2-Dichloroethene..		8021 8260	0.5 5
trans-1,2-Dichloroethylene	156-59-2	8021 8260	0.2 5
trans-1,2-Dichloroethene	156-60-5	8260 8010	5 1
2,4-Dichlorophenol.....	120-83-2	8021 8260 8040 8270	0.5 5 5 10
2,6-Dichlorophenol.....	87-65-0	8270	10
1,2-Dichloropropane; Propylene dichloride....	78-87-5	8010 8021 8260	0.5 0.05 5
1,3-Dichloropropane; Trimethylene dichloride.	142-28-9	8021 8260	0.3 5
2,2-Dichloropropane; Isopropylidene chloride.	594-20-7	8021 8260	0.5 15
1,1-Dichloropropene...	563-58-6	8021	0.2
cis-1,3-Dichloropropene..	10061- 01-5	8260 8010	5 20
trans-1,3-Dichloropropene	10061- 02-6	8260 8010	10 5
Dieldrin.....	60-57-1	8260 8080	10 0.05
Diethyl phthalate....	84-66-2	8270	10

		8060	5
0,0-Diethyl 0-2-pyrazinyl phosphorothioate; Thionazin.....	297-97-2	8270 8141 8270	10 5 20
Dimethoate.....	60-51-5	8141	3
p-(Dimethylamino)azo- benzene.....		8270	20
7,12-Dimethylbenz[a]- anthracene.....	60-11-7	8270	10
3,31-Dimethylbenzidine....	57-97-6	8270	10
2,4-Dimethylphenol; m-Xylenol.....	199-93-7 105-67-9	8270 8040	10 5
Dimethyl phthalate...		8270	10
m-Dinitrobenzene...	131-11-3	8060	5
4,6-Dinitro-o-cresol 4,6- Dinitro-2-methylphenol..	99-65-0	8270 8270	10 20
2,4-Dinitrophenol....	534-52-1	8040 8270	150 50
2,4-Dinitrotoluene.....	51-28-5	8040 8270	150 50
2,6-Dinitrotoluene....	121-14-2	8090 8270	0.2 10
Dinoseb; DNBP; 2-sec- Butyl-4,6-dinitrophenol.	606-20-2	8090 8270	0.1 10
Di-n-octyl phthalate...	88-85-7 117-84-0	8150 8270 8060 8270	1 20 30 10
11 Diphenylamine.....	122-39-4	8270	10
Disulfoton.....	298-04-4	8140 8141	2 0.5
Endosulfan I.....	959-98-8	8270 8080	10 0.1
Endosulfan II.....	33213-65-9	8270 8080	20 005
Endosulfan sulfate.....		8270	20
Endrin.....	1031-07-8	8080 8270	0.5 10
Endrin aldehyde.....	72-20-8	8080	0.1
Ethylbenzene.....	7421-93-4	8270 8080 8270	20 0.2 10
Ethyl methacrylate.....	100-41-4	8020 8021	2 0.05
Ethyl methanesulfonate....		8260	5
Famphur.....	97-63-2	8015	5
Fluoranthene.....		8260 8270	10 10
Fluorene.....	62-50-0 52-85-7	8270 8270	20 20
Heptachlor.....	206-44-0	8100 8270	200 10
Heptachlor epoxide.....	86-73-7	8100	200

		8270	10
Hexachlorobenzene.....	76-44-8	8080 8270	0.05 10
Hexachlorobutadiene.....	1024-57-3 118-74-1	8080 8270 8120	1 10 0.5
Hexachlorocyclopentadiene	87-68-3	8270 8021 8120	10 0.5 5
Hexachloroethane.....	77-47-7	8260 8270 8120	10 10 5
Hexachloropropene.....		8270	10
2-Hexanone; Methyl butyl ketone.....	67-72-1	8120 8260	0.5 10
Indeno(1,2,3-cd)pyrene...	1888-71-7 591-78-6 193-39-5	8270 8270 8260 8100 8270	10 10 50 200 10
Isobutyl alcohol.....	78-83-1	8015 8240	50 100
Isodrin.....	465-73-6	8270 8260	20 10
Isophorone.....	78-59-1	8090 8270	60 10
Isosafrole.....	120-58-1	8270	10
Kepone.....	143-50-0	8270	20
Methacrylonitrile.....	126-98-7	8015 8260	5 100
Methapyrilene.....	91-80-5	8270	100
Methoxychlor....	72-43-5	8080 8270	2 10
Methyl bromide; Bromomethane...	74-83-9	8010 8021	20 10
Methyl chloride; Chloromethane...	74-87-3	8010 8021	1 0.3
3-Methylcholanthrene....	56-49-5	8270	10
Methyl ethyl ketone; MEK; 2-Butanone.....	78-93-3	8015 8260	10 100
Methyl iodide;Iodomethane	74-88-4	8010 8260	40 10
Methyl methacrylate..	80-62-6	8015 8260	2 30
Methyl methanesulfonate..	66-27-3	8270	10
2-Methylnaphthalene....	91-57-6	8270	10
Methyl parathion; Parathion methyl....	298-00-0	8140 8141 8270	0.5 1 10
4-Methyl-2-pentanone; Methyl isobutyl ketone..	108-10-1	8015 8260	5 100
Methylene bromide; Dibromomethane...	74-95-3	8010 8021 8260	15 20 10

Methylene chloride; Dichloromethane....	75-09-2	8010 8021 8260	5 0.2 10
Naphthalene.....	91-20-3	8021 8100 8260 8270	0.5 200 5 10
1,4-Naphthoquinone.....	130-15-4	8270	10
1-Naphthylamine.....	134-32-7	8270	10
2-Naphthylamine.....	91-59-8	8270	10
o-Nitroaniline; 2-Nitroaniline.....	88-74-4	8270	50
m-Nitroaniline;			
3-Nitroaniline....	99-09-2	8270	50
p-Nitroaniline; 4-Nitroaniline.....	100-01-6	8270	20
Nitrobenzene...	98-95-3	8090 8270	40 10
o-Nitrophenol; 2-Nitrophenol...	88-75-5	8040 8270	5 10
p-Nitrophenol; 4-Nitrophenol....	100-02-7	8040 8270	10 50
N-Nitrosodi-n-butylamine.	924-16-3	8270	10
N-Nitrosodiethylamine....	55-18-5	8270	20
N-Nitrosodimethylamine...	62-75-9	8070	2
N-Nitrosodiphenylamine...	86-30-6	8070	5
N-Nitrosodipropylamine; N-Nitroso-N-dipropyl- amine; Di-n-propylni- trosamine.....	621-64-7	8070	10
N-Nitrosomethylethalamine	10595-95-6	8270	10
N-Nitrosopiperidine..	100-75-4	8270	20
N-Nitrosopyrrolidine..	930-55-2	8270	40
5-Nitro-o-toluidine.....	99-55-8	8270	10
Parathion.....	56-38-2	8141 8270	0.5 10
Pentachlorobenzene.....	608-93-5	8270	10
Pentachloronitrobenzene..	82-68-8	8270	20
Pentachlorophenol.....	87-86-5	8040 8270	5 50
Phenacetin.....	62-44-2	8270	20
Phenanthrene.....	85-01-8	8100 8270	200 10
Phenol.....	108-95-2	8040	1
p-Phenylenediamine...	106-50-3	8270	10
Phorate.....	298-02-2	8140 8141 8270	2 0.5 10
Polychlorinated biphenyls; PCB's; Aroclors...	See Note 11	8080 8270	50 200
Polychlorinated dibenzo-p-dioxins; PCDD's.....	See Note 12	8280	0.01

Polychlorinated dibenzo-furans; PCDF's.....	See Note 13	8280	0.01
Pronamide.....	23950-58-8	8270	10
Propionitrile; Ethyl cyanide.....	107-12-0	8015 8260	60 150
Pyrene.....	129-00-0	8100 8270	200 10
Safrole.....	94-59-7	8270	10
Silvex; 2,4,5-TP.....	93-72-1	8150	2
Styrene.....	100-42-5	8020 8021 8260	1 0.1 10
2,4,5-T; 2,4,5-trichloro- phenoxyacetic acid.....	93-76-5	8150	2
1,2,4,5-Tetrachlorobenzene 2,3,7,8-Tetrachlorodi-benzo-p-dioxin; 2,3,7,8-TCDD.....	95-94-3 1746-01-6 630-20-6	8270 8280	10 0.005
1,1,1,2-Tetrachloroethane.	79-34-5	8010 8021 8260	5 0.05 5
1,1,2,2-Tetrachloroethane.	127-18-4	8010 8021 8260	0.5 0.1 5
Tetrachloroethylene; Tetrachloroethene; Perchloroethylene.....	58-90-2	8010 8021 8260	0.5 0.5 5
2,3,4,6-Tetrachlorophenol.	108-88-3	8270	10
Toluene.....	95-53-4	8020 8021 8260	2 01 5
o-Toluidine.....	See Note 14	8270	10
Toxaphene.....	120-82-1	8080	2
1,2,4-Trichlorobenzene....	71-55-6	8021 8120 8260 8270	0.3 0.5 10 10
1,1,1-Trichloroethane; Methylchloroform.....	79-00-5	8010 8021 8260	0.3 0.3 5
1,1,2-Trichloroethane.....	79-01-6	8010 8260	0.2 5
Trichloroethylene; Trichloroethene.....	75-69-4	8010 8021 8260	1 0.2 5
Trichlorofluoromethane; CFC-11.....	95-95-4 88-06-2	8010 8021 8260	10 0.3 5
2,4,5-Trichlorophenol...		8270	10
2,4,6-Trichlorophenol.....	96-18-4	8040 8270	5 10
1,2,3-Trichloropropane...		8010 8021 8260	10 5 15
0,0,0-Triethyl phosphoro-	126-68-1	8270	10

thioate.....			
sym-Trinitrobenzene.....	99-35-4	8270	10
Vinyl acetate.....	108-05-4	8260	50
Vinyl chloride; Chloroethene....	75-01-4	8010 8021 8260	2 0.4 10
Xylene (total).....	See Note 15	8020 8021 8260	5 0.2 5

The department may modify this list as necessary. EXPANDED PARAMETERS[1]

Notes

[1]The regulatory requirements pertain only to the list of substances; the right hand columns (Methods and PQL) are given for informational purposes only. See also footnotes 4 and 5.

[2]Common names are those widely used in government regulations, scientific publications, and commerce; synonyms exist for many chemicals.

[3]Chemical Abstracts Service registry number. Where "Total" is entered, all species in the groundwater that contain this element are included.

[4]Suggested Methods refer to analytical procedure numbers used in EPA Report SW-846 *Test Methods for Evaluating Solid Waste*, third edition, November 1986, as revised, December 1987 and *Methods for Chemical Analysis of Water and Wastes*, USEPA-600-4/79-020, March, 1979. CAUTION: The methods listed are representative procedures and may not always be the most suitable method(s) for monitoring an analyte under the regulations.

[5]Practical Quantitation Limits (PQLs) are the lowest concentrations of analytes in groundwaters that can be reliably determined within specified limits of precision and accuracy by the indicated methods under routine laboratory operating conditions. The PQLs listed are generally stated to one significant figure. PQLs are based on 5 ml samples for volatile organics and 1 L samples for semivolatile organics. CAUTION: The PQL values in many cases are based only on a general estimate for the method and not on a determination for individual compounds; PQLs are not a part of the regulation. [6]Any floaters or sinkers found must be analyzed separately for baseline parameters.

[7]Surface water only.

[8]Any unusual conditions (colors, odors, surface sheens, etc.) noticed during well development, purging, or sampling must be reported.

[9]This substance is often called Bis(2-chloroisopropyl) ether, the name Chemical Abstracts Service applies to its noncommercial isomer, Propane, 2,2"-oxybis[2]-chloro- (CAS RN 39638-32-9).

[10]Chlordane: This entry includes alpha-chlordane (CAS RN 5103-71-9), beta-chlordane (CAS RN 5103-74-2), gamma-chlordane (CAS RN 5566-34-7), and constituents of chlordane (CAS RN 57-74-9 and CAS RN 12789-03-6). PQL shown is for technical chlordane. PQLs of specific isomers are about 20 µg/l by method 8270.

[11]Polychlorinated biphenyls (CAS RN 1336-36-3): This category contains congener chemicals, including constituents of Aroclor 1016 (CAS RN 12674-11-2), Aroclor 1221 (CAS RN 11104-28-2), Aroclor 1232 (CAS RN 11141-16-5), Aroclor 1242 (CAS RN 53469-21-9), Aroclor 1248 (CAS RN 12672-29-6), Aroclor 1254 (CAS RN 11097-69-1), and Aroclor 1260 (CAS RN 11096-82-5). The PQL shown is an average value for PCB congeners.

[12]Polychlorinated dibenzo-p-dioxins: This category contains congener chemicals, including tetrachlorodibenzo-p-dioxins (see also 2,3,7,8-TCDD), pentachlorodibenzo-p-dioxins, and hexachlorodibenzo-p-dioxins. The PQL shown is an average value for PCDD congeners. Upon request of the applicant, the department may waive the requirement to analyze for dioxins, where appropriate.

[13]Polychlorinated dibenzofurans: This category contains congener chemicals, including tetrachlrodibenzofurans, pentachlorodibenzofurans, and hexachlorodibenzofurans. The PQL shown is an average value for PCDF congeners. Upon request of the applicant, the department may waive the requirement to analyze for furans, where appropriate.

[14]Toxaphene: This entry includes congener chemicals contained in technical toxaphene (CAS RN 8001-35-2), i.e., chlorinated camphene.

[15]Xylene (total): This entry includes o-xylene (CAS RN 96-47-6), m-xylene (CAS RN 108-38-3), p-xylene (CAS RN 106-42-3), and unspecified xylenes (dimethylbenzenes) (CAS RN 1330-20-7). PQLs for method 8021 are 0.2 for o-xylene and 0.1 for m- or p-xylene. The PQL for m-xylene is 2.0 µg/L by method 8020 or 8260.

*The department may waive the requirement to analyze Hexavalent Chromium provided that Total and Hexavalent and Trivalent Chromium values do not exceed 0.05 mg/l.

§360-2.12 Landfill siting.

(a) Applicability. New landfills and lateral or vertical expansions of existing active landfills must be located on a site that exhibits the following characteristics unless the requirements of subdivision (b) of this section are met. A site selection study will be required only if the applicant proposes a site that does not exhibit all of the characteristics identified in either paragraph (1) or (2) of this subdivision.

(1) In the case of new landfills and lateral or vertical expansions of existing landfills:

(i) the site is not located in an area identified in section 360-1.7(a)(2) of this Part;

(ii) the site complies with the siting restrictions identified in subdivision (c) of this section;

(iii) bedrock subject to rapid or unpredictable groundwater flow must be avoided, unless it can be demonstrated that a containment failure of the facility would not result in contamination entering the bedrock system;

(iv) the site must not be in proximity of any mines, caves or other anomalous features that may alter groundwater flow;

(v) unconsolidated deposits underlying the proposed landfill must either exist or be constructed to be 20 feet or greater in thickness as measured from the base of the constructed liner system; and

(vi) the upper 20 feet of the unconsolidated deposits on the site must consist

predominantly (greater than 50 percent) of soils throughout the vertical section, with a maximum in situ coefficient of permeability of 5 x 10-6 centimeters per second, with no appreciable continuous deposits having a maximum coefficient of permeability of 5 x 10-4 centimeters per second.

(2) In the case of an existing landfill active on or after November 4, 1992 operating under and in compliance with a current Part 360 permit or order on consent, the department may allow lateral or vertical expansions if the site has less than 20 feet of unconsolidated deposits provided that:

(i) the proposed landfill expansion is identified in the local solid waste management plan approved by the department under Subpart 360-15 of this Part as a component of the integrated solid waste management system for the planning unit in which the facility is located and the proposed landfill expansion must be consistent with the goals and objectives of such plan;

(ii) the unconsolidated deposits underlying the proposed landfill exist or are constructed to be 10 feet or greater in thickness as measured from the base of the constructed liner system;

(iii) the applicant demonstrates that the expansion site will have no significant adverse impact on human health, safety, or welfare, the environment, or natural resources; and

(iv) the site complies with subparagraphs (1)(i)-(iv) of this subdivision.

(3) Except in Nassau and Suffolk Counties, in the case of ash monofills for the disposal offly ash treated in a manner consistent with section 360- 3.6(g)(3) of this Part, combined ash, or bottom ash, the department may allow ash monofill development at sites that have less than 20 feet of unconsolidated deposits provided that:

(i) the proposed monofill must be identified in the local solid waste management plan approved by the department under Subpart 360-15 of this Part as a component of the integrated solid waste management system for the planning unit in which the facility is located and the proposed monofill must be consistent with the goals and objectives of such plan;

(ii) the unconsolidated deposits underlying the proposed landfill on the site exist or are constructed to be 10 feet or greater in thickness as measured from the base of the constructed liner system;

(iii) the applicant demonstrates that the monofill site will have no significant adverse impact on the public health, safety or welfare, the environment or natural resources; and

(iv) the site complies with subparagraphs (1)(i)-(iv) of this subdivision.

(b) Exceptions. New landfills and lateral or vertical expansions of existing landfills may be located on sites that do not exhibit the characteristics identified in subdivision (a) of this section provided that the requirements of paragraphs (1) and (2) of this subdivision are met. The department may impose additional requirements to assure that the permitted activity will have no significant adverse impact on the public health, safety or welfare, the environment or natural resources for any site selected pursuant to this subdivision.

(1) The proposed landfill must be identified in the local solid waste management plan approved by the department under Subpart 360-15 of this Part as a component of the

integrated solid waste management system for the planning unit in which the facility is located, and the proposed landfill must be consistent with the goals and objectives of such plan.

(2) The applicant must perform a site selection study and submit a site selection report as part of a complete application. This report must describe the factors that prevent the applicant from using a site exhibiting the characteristics identified in subdivision (a) of this section. Such factors may include, but are not limited to, the proximity to receiving waters or proximity to sewer lines or POTWs to ensure proper management of leachate during the operational and post-closure period of the landfill. The site selection report must also demonstrate that the chosen site will have no significant adverse impact on public health, safety, or welfare, the environment or natural resources, and will be consistent with the provisions of the ECL.

(i) The site selection process must be comprehensive and must identify and evaluate a reasonable range of alternative sites which are feasible considering the capabilities and objectives of the applicant. All of the criteria used to eliminate and evaluate the suitability of the potential sites must be clearly defined and consistently applied. A phased approach must be used, in which a more detailed evaluation of sites occurs as the number of potential sites is reduced.

(a) The applicant must exclude inappropriate siting areas by avoiding the prohibited siting areas identified in section 360-1.7(a)(2) of this Part and applying the landfill siting restrictions identified in subdivision (c) of this section.

(b) The applicant must evaluate potential siting areas to identify alternative sites that are suitable for landfill development. When applying the siting criteria, the evaluation must include the use of the type of data listed in section 360-2.11(a)(2) of this Subpart. Field reconnaissance to confirm the published information and a morphologic evaluation of landforms must be performed to identify the areas which are likely to have thick low permeable soils available within the study area. The applicant must use the following criteria in the landfill site selection study:

(1) Unconsolidated deposits on the site must be those most likely to minimize the migration of contaminants from the landfill. In evaluating the sites, preferred sites should have the greatest possible thickness of these materials to provide a barrier to contaminant migration into bedrock;

(2) bedrock subject to rapid or unpredictable groundwater flow must be avoided unless it can be demonstrated that a containment failure of the facility would not result in contamination entering the bedrock system resulting in a contravention of groundwater standards;

(3) probable groundwater flow patterns and water quality must be considered in finding areas where containment failure would do the least environmental damage and would be easiest to correct;

(4) proximity and hydrogeologic relationship to water supply sources;

(5) natural topography and its impacts upon the proposed facility; and

(6) relationship to mines, caves, or other anomalous hydrogeologic features that might alter groundwater flow.

(c) Preliminary field investigations must be conducted at the highest ranking available site or sites, to identify any major obstacles to site development, and to provide sufficient data to differentiate among the preferred sites and support a siting decision.

(ii) The report must describe the process used to select the proposed site, including evaluation criteria, deferral (elimination) criteria, assumptions, data sources, decisionmaking means (such as numerical ranking systems) and other factors used to make the siting decisions. The report must demonstrate that, considering the capabilities and objectives of the applicant, a reasonable range of alternative sites available throughout the planning unit in which the project is proposed were evaluated and that the selected site is the most appropriate alternative. The decisionmaking process must be described to provide a clear understanding of how and why the siting decisions were made, and at a level of detail sufficient to provide for a comparative assessment of the alternatives discussed. The report must also include maps of sites and describe the results of the field investigations, the comparative advantages and disadvantages of the highest ranked sites, and the basis for selecting the proposed sites.

(c) Landfill siting restrictions. In addition to the provisions of section 360-1.7(a)(2) of this Part, the following landfill siting restrictions apply.

(1) Primary water supply, and principal aquifers:

(i) Except in Nassau and Suffolk Counties, and except as provided in subparagraph (ii) of this paragraph, no new landfill and no lateral or vertical expansion of an existing landfill may be constructed over primary water supply aquifers, principal aquifers, within a public water supply stabilized cone of depression area, or within a minimum distance of 100 feet to surface waters that are actively used as sources of municipal supply. Greater separation distances may be required in accordance with subparagraph (iii) of this paragraph.

(ii) The commissioner may allow lateral or vertical expansions of landfills, in operation pursuant to a valid Part 360 permit to operate or Order on Consent as of December 31, 1988, that are on principal aquifers, if there is a demonstrated public need for the capacity provided by the expansion that cannot be reasonably provided elsewhere, and that outweighs the potential risk of contamination to the aquifer. Additionally, the landfill expansion must promote the implementation of the State's solid waste management policy set forth in ECL 27-0106 and must be an integral part of any local solid waste management plan that may be in effect for the planning unit (as defined in ECL 27-0107) within which the facility is located; and the expansion must comply with all other requirements of this Part. However, the maximum time period allocated by the commissioner for any such expansion must not allow operation beyond December 31, 1995. In granting any expansion pursuant to this subparagraph, the department must impose specific conditions that are reasonably necessary to assure that the expansion will, to the extent practicable, have no significant adverse impact on public health or safety, welfare, the environment ornatural resources, and such approval contributes to the proper management of solid waste at the earliest possible time.

(iii) The required horizontal separation between deposited solid waste, and primary water supply aquifers, principal aquifers, public water supply stabilized cone of depression areas, or surface waters that are actively used as sources of municipal supply must be sufficient (based on the rate and direction of groundwater and surface water flow, landfill

design and requirements for corrective action in the event of failure of the landfill's containment system) to preclude contravention of groundwater standards in the aquifer and surface water standards in waters that are currently used as a source of municipal drinking water supply.

(2) Floodplains. Owners or operators of new landfill units, existing landfill units, and lateral expansions located in 100-year floodplains must demonstrate that the unit will not restrict the flow of the 100-year flood, reduce the temporary water storage capacity of the floodplain, or result in washout of solid waste so as to pose a hazard to human health and the environment.

(3) Aircraft safety.

(i) A landfill or landfill subcell into which putrescible solid waste is to be disposed must be located no closer than 5,000 feet from any airport runway end used by piston-powered fixed-wing aircraft and no closer than 10,000 feet from any airport runway end used by turbine-powered fixed-wing aircraft.

(ii) A landfill or landfill subcell into which putrescible solid waste is to be disposed, which is located within five miles of any airport runway end, must not, in the opinion of the Federal Aviation Administration, pose a potential bird or obstruction hazard to aircraft.

(iii) The permittee of an existing landfill or landfill subcell that is authorized to dispose of putrescible solid waste and that is located less than 10,000 feet from any airport runway end used by turbine-powered fixed- wing aircraft or less than 5,000 feet from any airport runway end used only by piston-powered fixed-wing aircraft must provide in its permit renewal application documentation that the Federal Aviation Administration believes the landfill or landfill subcell does not pose a bird hazard to aircraft.

(iv) Landfills containing only nonputrescible solid waste may be located less than 10,000 feet from any airport runway end used by turbine-powered fixed-wing aircraft or less than 5,000 feet from any airport runway end used only by piston-powered fixed-wing aircraft, if in the opinion of the Federal Aviation Administration they will not present a safety hazard to air traffic.

(v) The final elevation of a new landfill or expansion of an existing landfill must not extend more than 200 feet above the highest elevation of the land surface that existed prior to landfill development, unless the Federal Aviation Administration believes that the proposed fill height in excess of 200 feet will not present a safety hazard to air traffic.

(4) Unstable areas. A landfill must not be located in unstable areas where inadequate support for the structural components of the landfill exists or where changes in the substrate below or adjacent to the landfill are capable of impairing the integrity of some or all of the landfill structural components responsible for preventing releases from a landfill. An application for expansion of an existing landfill must demonstrate that adequate support for the structural components of the landfill exists or can be engineered to support any additional loads that may be generated by continued operation of the facility. For purposes of this paragraph:

(i) Unstable area means a location that is susceptible to natural or human- induced events or forces capable of impairing the integrity of some or all of the landfill structural components responsible for preventing releases from a landfill. Unstable areas can

include poor foundation conditions, areas susceptible to mass movements, and karst terrains.

(ii) Structural components means liners, leachate collection systems, final covers, run-on/run-off systems, and any other component used in the construction and operation of the landfill that is necessary for protection of human health and the environment.

(iii) Poor foundation conditions means those areas where features exist which indicate that a natural or human-induced event may result in inadequate foundation support for the structural components of a landfill.

(iv) Areas susceptible to mass movement means those areas of influence (i.e., areas characterized as having an active or substantial possibility of mass movement) where the movement of earth material at, beneath, or adjacent to the landfill because of natural or human-induced events, results in the downslope transport of soil and rock material by means of gravitational influence. Areas of mass movement include, but are not limited to, landslides, avalanches, debris slides and flows, soil fluctuation, block sliding and rock fall.

(v) Karst terrains means areas where karst topography, with its characteristic surface and subterranean features, is developed as the result of dissolution of limestone, dolomite, or other soluble rock. Characteristic physiographic features present in karst terrains include, but are not limited to sinkholes, sinking streams, caves, large springs and blind valleys.

(5) Unmonitorable or unremediable areas. New landfills must not be located in areas where environmental monitoring and site remediation cannot be conducted. Identification of these areas must be based upon ability to sufficiently characterize groundwater and surface water flow to locate upgradient and downgradient directions; ability to place environmental monitoring points which will detect releases from the landfill; ability to characterize and define a release from the landfill and determine what corrective actions may be necessary; and the ability to carry out those corrective actions. Lateral expansions adjacent to existing landfills which are already contaminating groundwater may be allowed by the department if the proposed expansion area can be constructed in a way that demonstrates compliance with the regulations. This may be demonstrated using remedial actions at the existing site resulting in a demonstrated improvement in groundwater quality; and any additional monitoring requirements that the department needs to ensure the integrity of the expansion area, such as leakage detection lysimeters installed beneath the new liner, statistical triggers of groundwater monitoring, tracers, additional monitoring wells surrounding the entire site, and any other monitoring methods required by the department.

(6) Fault areas. New landfills and lateral expansions shall not be located within 200 feet of a fault that has had displacement in Holocene time unless the owner or operator demonstrates to the department that an alternative setback distance of less than 200 feet will not result in damage to the structural integrity of the landfill unit and will be protective of human health and the environment.

(7) Seismic impact zones. New landfills and lateral expansions shall not be located in seismic impact zones, unless the owner or operator demonstrates to the department that all permanent containment structures, including liners, leachate collection systems, and surface water control systems, are designed to resist the maximum horizontal acceleration

in lithified earth material for the site pursuant to the provisions of section 360-2.7(b)(7) of this Subpart.

(8) Federally regulated wetlands. For the purpose of this Subpart, federally regulated wetlands means those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marsh, bogs and similar areas. New landfills and lateral expansions shall not be located in federally regulated wetlands, unless the appropriate permits are obtained from the U.S. Army Corps of Engineers, and unless the owner or operator can make the following demonstrations to the department, to the extent required under federal or State law.

(i) The presumption that a practicable alternative to the proposed landfill is available, which does not involve federally regulated wetlands, is clearly rebutted.

(ii) The construction and operation of the landfill will not:

(a) cause or contribute to violations of any applicable water quality standard;

(b) violate any applicable toxic effluent standard or prohibition;

(c) jeopardize the continued existence of endangered or threatened species or result in the destruction or adverse modification of a critical habitat; and

(d) violate any requirement for the protection of a marine sanctuary.

(iii) The landfill will not cause or contribute to significant degradation of federally regulated wetlands. The owner or operator must demonstrate the integrity of the landfill and its ability to protect ecological resources by addressing the following factors:

(a) erosion, stability and migration potential of native wetland soils, muds, and deposits used to support the landfill;

(b) erosion, stability and migration potential of dredged and fill materials used to support the landfill;

(c) the volume and chemical nature of the waste managed in the landfill;

(d) impacts from release of the solid waste on fish, wildlife, and other aquatic resources and their habitat;

(e) the potential effects on catastrophic release of waste to the federally regulated wetland and the resulting impacts on the environment; and

(f) any additional factors, as necessary, to demonstrate that ecological resources in the federally regulated wetland are sufficiently protected.

(iv) Steps have been taken to attempt to achieve no net loss of federally regulated wetlands to the extent required under federal or State law (as defined by acreage and function) by first avoiding impacts to federally regulated wetlands to the maximum extent practicable, then minimizing unavoidable impacts to the maximum extent practicable, and finally by offsetting remaining unavoidable wetland impacts through all appropriate and practicable compensatory mitigation actions (e.g. restoration of existing degraded wetlands or creation of new wetlands).

(v) Sufficient information is available to make a reasonable determination with respect to these demonstrations.

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