

SCS ENGINEERS

March 23, 2017
Project No. 27214218.01

Mr. Bill Sadler, P.G.
ADEQ – Solid Waste Management Division
5301 Northshore Drive
North Little Rock, Arkansas 72118

Subject: **NABORS Landfill**

Fourth Quarter 2016 Groundwater Monitoring and Gas Monitoring Reports

Mr. Sadler,

In accordance with Contract Number 4600033394, SCS Engineers is submitting the Fourth Quarter Groundwater Monitoring Report (GWMR) and Fourth Quarter Gas Monitoring Report summarizing monitoring activities performed in December 2016 at the NABORS Landfill.

If you have questions or comments regarding these reports, please do not hesitate to contact us at (913) 681-0030.

Sincerely,



Dillon Baird, P.E.
Project Engineer
SCS ENGINEERS



Floyd Cotter, P.E.
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Enclosure: Fourth Quarter 2016 Groundwater Monitoring Report
Fourth Quarter 2016 Gas Monitoring Report
Fourth Quarter 2016 Sanitas Database Flat File

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FOURTH QUARTER 2016 NABORS LANDFILL GROUNDWATER MONITORING REPORT

Presented to:
Arkansas Department of Environmental Quality



5301 Northshore Drive
North Little Rock, AR 72118-5317
501-682-0744

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1 INTRODUCTION

This report summarizes the results of the Fourth Quarter 2016 Groundwater Assessment Monitoring event at the NABORS Landfill. Field work was conducted by personnel from SCS Engineers (SCS) on December 19-21, 2016. This report was prepared under the provisions of Contract No. 4600033394 between the Arkansas Department of Environmental Quality (ADEQ) and SCS.

The NABORS Landfill originally operated under Solid Waste Disposal Permit number 0249-S, as issued to RLH, Inc. (RLH) by the Arkansas Department of Environmental Quality (ADEQ) on June 14, 1988. The solid waste permit was transferred to NABORS on August 31, 2005. The NABORS Landfill is currently under Solid Waste Disposal Permit 0249-S1-R2 issued by the ADEQ on August 10, 2006. Although the permit is considered “open”, the landfill is not receiving waste. The ADEQ is currently managing the closure of the site. The analytical work for this sampling event was conducted by Environmental Science Corporation (ESC) of Nashville, Tennessee and groundwater sampling was conducted by SCS.

1.1 SITE DESCRIPTION

The Northwest Arkansas Regional Solid Waste Management District (District) owns both a Class 1 and Class 4 Landfill at the subject site. The NABORS Landfills (herein referred to as Landfill) are located on approximately 700 acres near Three Brothers (Baxter County), Arkansas. The permitted Class 1 area is located in a portion of the SW1/4 of SE1/4 of Section 26, Township 21 North, Range 14 West, and NW1/4 of NE1/4 of Section 35, Township 21 North, Range 14 West. A general geographic location map is included as **FIGURE 1** in **APPENDIX A**. All report Figures are provided in **APPENDIX A**.

1.2 SITE GROUNDWATER MONITORING SYSTEM

The Landfill groundwater monitoring system has evolved over time into a system of monitoring points including both monitoring wells and local springs. The current Assessment Monitoring Program was triggered by the statistically significant occurrence of certain parameters documented in the original Detection Monitoring System. In turn, the required contingencies for Nature and Extent characterization and other regulatory provisions were addressed through the development of the site.

More specifically, the Second Detection Monitoring System for the site that was intended to comply with the provisions of Reg.22.1202 through Reg.22.1204 was approved by ADEQ in 1998. Following the Second Half 2005 sampling event, the ADEQ was notified under the provisions of 22.1204(c) of a statistically significant increase for volatile organic compounds (VOC) at MW-1. These detections were verified during the Second Half 2006 sampling event and the facility began Assessment Monitoring at wells MW-1, MW-2, MW-3, MW-4, MW-5, MW-6, and MW-7 in June of 2006 as required by Regulation 22.1205. At that time these seven wells were the only permitted facility Detection Monitoring wells.

The Assessment Monitoring program was later expanded to include all the wells/springs listed below when the new permit was issued in August of 2006 (0249-S1-R2), and when the Nature and Extent Characterization was completed. Monitoring was conducted under this program through the Third Quarter 2012.

Assessment Monitoring continued on a quarterly basis as per 22.1205(d) based upon:

- The presence of VOCs at MW-1
- Detected concentrations of arsenic at various wells, some of which were above the Groundwater Protection Standard (GWPS)
- Vinyl chloride detections at CAO-1 which historically exceed the GWPS.

The current groundwater monitoring system for the NABORS Landfill consists of twenty-four (24) monitoring wells, thirteen (13) springs, and a Leachate sample for a total of thirty-eight (38) Assessment Monitoring points. These sampling points are listed below and are located on **FIGURE 2**.

NABORS GROUNDWATER ASSESSMENT MONITORING POINTS				
MW-1	NAB-1	MW-577	SP-4	NE-6
MW-2	NAB-2	MW-689D	SP-5	MW-1R
MW-3	NAB-3	MW-633D	SP-7	
MW-4	NAB-4	TSP-1	Spring A	
MW-5	NAB-7	TSP-2	Spring B	
MW-6	CAO-3	TSP-3	Leachate	
MW-7	NAB-8	TSP-4	NE-2	
CAO-1	MW-509D	Entrance Seep	NE-3	
CAO-2	Class I Draw	Class IV Draw	Spring near NE-3	
Note: NAB-1 is damaged at approximately 68 feet below top of casing and is no longer being sampled.				

2 GROUNDWATER SAMPLING

The Fourth Quarter 2016 Assessment Monitoring sampling event was conducted on December 19-21, 2016. A representative of SCS collected samples from twenty-three (23) monitoring wells (MW-1 through MW-7, MW-1R, MW-509D, MW-577, MW-633D, MW-689D, CAO-1, CAO-2, CAO-3, NAB-2, NAB-3, NAB-4, NAB-7, NAB-8, NE-2, NE-3 and NE-6) and five (5) springs (Spring A, Class I Draw Spring, Class IV Draw Spring, SP-7, and the Landfill Entrance Seep). All additional springs were dry, or had been covered by landfill construction and no longer exist. The current *Groundwater Sampling and Analysis Plan* dated December 2011 (ADEQ document #61474) was utilized for this sampling event. The procedures for obtaining groundwater samples, parameters analyzed, sample preservation and handling are discussed in the following sections.

2.1 WATER LEVEL DETERMINATION

Prior to evacuating each well for sampling, the depth to water was measured using an electronic water level probe. The measurements were taken to the nearest 0.01-foot from the top of the well casing and the information was used to calculate the volume of water in the well. Because non-dedicated equipment was used to obtain water levels, procedures were instituted to insure the samples were not contaminated. The electronic water level probe is constructed of inert materials and was de-contaminated with distilled water prior to use at each well.

2.2 WELL EVACUATION

The water in a well prior to sampling may not be representative of in-situ groundwater quality. Therefore, the groundwater technician used an electric submersible pump with dedicated sampling tubing to purge a minimum of three casing volumes at a rate that did not excessively agitate the recharge water. Since non-dedicated equipment was used to purge the wells, procedures were utilized to insure the samples were not contaminated. Clean, non-powdered, nitrile gloves were worn by the sampling personnel. Measures were taken to prevent surface soils from coming in contact with the purging equipment and lines, which could introduce contaminants to the well.

2.3 EQUIPMENT DECONTAMINATION PROCEDURES

All equipment that was used in the monitoring wells and had contact with the samples was thoroughly cleaned before use. These devices included a water level probe and a submersible pump. The water level probe was washed with potable water and phosphate-free laboratory detergent. Next, the probe was rinsed with potable water and finally, rinsed with distilled water. The water level probe was then placed in a plastic bag to reduce contact with air and transported into the field. After a water level was measured at each well, a paper towel was soaked with distilled water and as the probe was reeled up the tape and probe were wiped clean.

The submersible pump was initially flushed with potable water and phosphate-free detergent. Next, the pump was rinsed with potable water, and finally rinsed and flushed with distilled water in a portable decontamination tub prior to use in each well. The pump was transported in a clean, sealed tub to minimize contact with the air prior to use at each well.

2.4 SAMPLE EXTRACTION

The technique used to withdraw each groundwater sample from the wells was selected based on consideration of the parameters analyzed in the sample. To insure the groundwater sample is representative of the formation, it is important to minimize physically altering or chemically contaminating the sample during the withdrawal process. In order to minimize the possibility of sample contamination the groundwater technicians did the following:

- Made sure clean sampling equipment was not placed directly on the ground or other contaminated surfaces prior to insertion into the well.
- Gently lowered and retrieved sampling equipment in order to prevent undue disturbance of the water column. Monitoring wells were purged and samples were collected using a submersible pump. Wells that went dry during purging were allowed to recharge for approximately 24 hours and samples were collected using a disposable bailer.
- Transferred samples to the appropriate containers in a manner that minimized agitation and aeration.

Samples were collected and containerized in the order of volatilization sensitivity of the parameters. Spring samples are collected where able, by utilizing a grab sample method by holding the sample bottle within the spring water flow path. The list of parameters analyzed is presented in **TABLE 1**.

TABLE 1. ASSESSMENT MONITORING CONSTITUENTS (AMC)

<u>APPENDIX 1 VOLATILES</u>	<u>INDICATOR PARAMETERS</u>	<u>INORGANICS</u>
ACETONE	CHLORIDE	ANTIMONY
ACRYLONITRILE	pH	ARSENIC
BENZENE	SULFATE	BARIUM
BROMOCHLOROMETHANE	TDS	BERYLLIUM
BROMODICHLOROMETHANE	TOC	CADMIUM
CHROMIUM	SPECIFIC CONDUCTANCE	CHROMIUM
CARBON TETRACHLORIDE		COBALT
CARBON DISULFIDE		COPPER
CHLOROBENZENE		LEAD
CHLOROETHANE		NICKEL
CHLOROFORM		SELENIUM
DIBROMOCHLOROMETHANE		SILVER
1,2, DICHLOROBENZENE		THALLIUM
1,4, DICHLOROBENZENE		VANADIUM
TRANS- 1,4-DICHLORO-2-BUTENE		ZINC
1,1 DICHLOROETHANE		IRON
1,2 DICHLOROETHANE		MANGANESE
CIS-1,2,-DICHLOROETHYLENE		TIN
TRANS-1,2-DICHLOROETHYLENE		
1,2-DICHLOROPROPANE		
CIS-1,3-DICHLOROPROPENE		
TRANS-1,3-DICHLOROPROPENE		
ETHYLBENZENE		
2-HEXANONE		
METHYL BROMIDE		
METHYL CHLORIDE		
METHYLENE BROMIDE		
METHYLENE CHLORIDE		
METHYL ETHYL KETONE		
METHYL IODIDE		
4- METHYL-2-PENTANONE		
STYRENE		
1,1,1,2-TETRACHLOROETHANE		
1,1,2,2,-TETRACHLOROETHANE		
TETRACHLOROETHANE		
TOLUENE		
1,1,1-TRICHLOROETHANE		
1,1,2-TRICHLOROETHANE		
TRICHLOROETHYLENE		
TRICHLOROFLUOROMETHANE		
1,2,3-TRICHLOROPROPANE		
VINYL ACETATE		
VINYL CHLORIDE		
XYLENE		

The collection order for the common groundwater parameters was as follows:

- Volatile Organic Compounds (VOCs)
- Total Organic Carbon (TOC)
- Sulfate, Chloride, and Total Dissolved Solids (TDS)
- Total Metals

2.5 FIELD TESTING

Some of the parameters evaluated are physically or chemically unstable and were measured immediately after collection by the SCS representative using a flow cell. Examples of unstable elements or properties include pH and temperature. Although the turbidity and specific conductance (inverse of electrical resistance) of a substance are relatively stable, these parameters were also measured in the field. This information was recorded on *Groundwater Monitoring Sampling Records* presented in **APPENDIX B**. A summary of the field measurements for the Fourth Quarter 2016 Assessment Monitoring sampling event is presented in **TABLE 2**.

TABLE 2. FOURTH QUARTER 2016 FIELD MEASUREMENTS

Well #	Date	Time	TOC Elev. (fmsl)	GW Depth (ft.)	GW Elev. (fmsl)	pH (SU)	Temp. (°C)	Spec. Cond. (µS/cm)	Turbidity (NTU)
MW-1R	12/20/2016	1629	1067.57	69.77	997.80	6.14	16.8	1523	18.5
MW-1	12/20/2016	1558	1067.26	67.65	999.61	6.15	16.8	1618	35.7
MW-2	12/20/2016	1652	1001.21	35.00	966.21	6.60	16.5	622	2.22
MW-3	12/21/2016	0804	994.48	26.84	967.64	6.32	17.3	868	3.07
MW-4	12/21/2016	0847	1012.11	87.02	925.09	6.34	15.7	655	10.7
MW-5	12/21/2016	0911	1004.38	77.77	926.61	6.27	15.2	702	8.47
MW-6	12/21/2016	0946	1000.38	56.75	943.63	6.50	14.3	733	5.68
MW-7	12/20/2016	1438	999.66	8.64	991.02	6.25	15.4	578	8.40
CAO-1	12/21/2016	1022	1026.40	26.45	999.95	5.91	16.7	1466	5.65
CAO-2	12/21/2016	0748	998.80	28.23	970.57	6.35	16.5	489	12.7
CAO-3	12/21/2016	0720	984.20	10.62	973.58	6.60	15.6	469	4.13
NAB-2	12/20/2016	1253	993.98	79.26	914.72	6.24	16.0	744	19.8
NAB-3	12/20/2016	0819	921.49	25.18	896.31	7.75	15.3	721	13.5
NAB-4	12/20/2016	1042	1004.20	108.07	896.13	6.26	15.8	743	13.4
NAB-7	12/20/2016	1515	1012.36	22.51	989.85	6.30	16.0	636	2.71
*NAB-8	12/20/2016	0700	1039.21	78.54	960.67	4.00	5.2	624	17.8
MW-509D	12/20/2016	1415	1014.20	24.25	989.95	6.20	16.8	667	59.1
MW-577	12/20/2016	1210	982.60	42.25	940.35	6.28	16.1	674	4.79
MW-633D	12/20/2016	1130	1050.10	64.40	985.70	6.41	17.0	719	4.99
MW-689D	12/20/2016	0931	966.20	26.08	940.12	6.38	16.9	692	16.8
NE-2	12/19/2016	1150	976.98	53.10	923.88	8.00	13.5	2192	19.2
*NE-3	12/20/2016	0730	846.91	8.30	838.61	4.64	7.1	592	13.8
NE-6	12/21/2016	0820	901.42	9.35	892.07	6.32	15.5	623	3.36

*Note: NAB-8 and NE-3 went dry during purging (at approx. 3 and 4.5 gallons, respectively)

2.6 FIELD QA/QC PROCEDURES

For QA/QC purposes, a duplicate sample of MW-6 was collected and labeled Dupe. Procedures utilized for collecting the duplicate sample were identical to the sampling protocol detailed in Section 2.4 and collected at the same time as the MW-6 samples. The duplicate sample was collected to verify the consistency and precision of the sampling and testing procedures.

A field blank was also collected and labeled FB. The field blank consisted of distilled water poured into a sample container under field conditions and returned for laboratory analysis. The SCS field representative prepared the field blank for all the required monitoring parameters. The field blank was used to verify that the sample collection and handling process or ambient conditions, such as airborne materials or other factors unique to the sampling area did not affect the quality of the samples. A volatile organic analyte (VOA) trip blank was also included as part of the field QA/QC procedures. The trip blank was prepared in the laboratory utilizing de-ionized water, transported to the site, handled as a sample (yet never opened in the field), and returned to the laboratory for analysis. Trip blank results are used to verify that the sample containers were adequately prepared/handled in the laboratory, and that the groundwater samples were protected from contamination during transport.

An equipment blank, labeled EB, was prepared on site by pouring de-ionized water over the water level probe, gloves, and through a disposable bailer. Equipment blank results are used to verify that proper protocols for collection of samples and decontamination of equipment were followed.

2.7 HANDLING/TRANSPORT/CUSTODY

Samples were accompanied by a Chain-of-Custody record that includes the name of the facility, collector's signature, monitoring point identification number, date, time, type of sample, number of containers, and analyses required. Samples collected from the Landfill site were placed in sample containers provided by the Laboratory. Containers were certified clean by the supplier and transported with ice to preserve samples.

Attached to the sample container at the time of collection is the sample label. The following information is recorded on the sample label:

- Project or facility name
- Sample type
- Sample location number (well number)
- Preservation type
- Sampling date and time
- Sample collector's name or initials

Documentation for the sample collection process and other important information was recorded on the chain of custody. The standard format includes the date, time, type of sample, code for sample analysis, unique sample number, and sampling location. The entries were signed by the sample collector.

2.8 SAMPLE PRESERVATION

In accordance with the facility's *Sampling and Analysis Plan*, the samples were placed in an ice chest for preservation and cooled to approximately 4 degrees Celsius. Custody was retained by a SCS representative from the time of collection until shipment via Federal Express to Environmental Science Corp. (ESC) in Nashville, Tennessee. Laboratory analytical results and a copy of the ESC Chain-of-Custody form are included in **APPENDIX C**.

3 FOURTH QUARTER 2016 ASSESSMENT MONITORING EVENT

The sampling results summarized in this report are for the Fourth Quarter 2016 Assessment Monitoring Event. The results for this event, conducted on December 19-21, 2016 are provided in the following sections, tables, and appendices. In addition, all historical groundwater data was evaluated statistically to determine if significant differences exist between compliance and background concentrations at each monitoring point.

3.1 GROUNDWATER ELEVATION, FLOW DIRECTION & RATE

There are currently twenty-three monitoring wells located around the Landfill area. Water level elevations were measured for monitoring wells MW-1R, MW-1, MW-2, MW-3, MW-4, MW-5, MW-6, MW-7, CAO-1, CAO-2, CAO-3, NAB-2, NAB-3, NAB-4, NAB-7, NAB-8, NE-2, NE-3, NE-6, MW-509D, MW-577, MW-689 and MW-633D during the Fourth Quarter 2016 event. **TABLE 2** summarizes the results of the water level and field measurements for this event. The highest water level elevation during this event was measured in monitoring well CAO-1, located east of Area 1-2, and the lowest elevation occurred in monitoring well NE-3, located southeast of Area 1-3. A potentiometric surface map was constructed utilizing the water levels measured during the Fourth Quarter 2016 Assessment Monitoring Event and is presented as **FIGURE 2**.

As **FIGURE 2** indicates, groundwater within the uppermost aquifer was found to flow to the west/northwest in Area 1-2 and generally to the east-southeast in Area 1-3. Based on this flow pattern, monitoring wells MW-1, MW-1R, MW-7, and NAB-7 are upgradient wells, and wells MW-2, MW-3, MW-4, MW-5, MW-6, NAB-2, NAB-3, NAB-4, NAB-8, MW-509D, MW-633D, MW-577, MW-689, CAO-1, CAO-2, and CAO-3 monitor the groundwater downgradient of the landfill.

Based on the principles of Darcian flow, the average linear velocity (groundwater flow rate) during the Fourth Quarter 2016 Assessment Monitoring event was calculated utilizing the following equation:

$$V_x = (K \cdot i) / n_e$$

where,

V_x is the average linear velocity (length/time),
 K is the hydraulic conductivity (length/time),
 i is the hydraulic gradient (length/length),
and n_e is the effective porosity (decimal).

The hydraulic gradient in the Area 1-2 portion of the Landfill was calculated by comparing upgradient well, MW-1R, to the most directly downgradient well, MW-5. The change in head of 71.20 feet between the two wells over a distance of approximately 1,432 feet produces a hydraulic gradient of 0.05 (ft/ft).

The hydraulic gradient in the Area 1-3 portion of the Landfill was calculated by comparing upgradient well, MW-1R, to the most directly downgradient well, NAB-2. The change in head of 83.08 feet between the two wells over a distance of approximately 693 feet produces a hydraulic gradient of 0.12 (ft/ft).

Grubbs, Garner, & Hoskyn, Inc. reported an average hydraulic conductivity of 1.0×10^{-3} cm/sec in the site's *Hydrogeologic and Geotechnical Report* (1987). This hydraulic conductivity for the uppermost aquifer was used to aid in the flow rate calculations. SCS utilized an estimated porosity for this report of 10 percent for dolomite bedrock (Freeze and Cherry, 1979). An effective porosity was then determined by multiplying the porosity by 0.90 (90 percent). Effective porosity is always equal to or less than the porosity and utilizing 90 percent is a conservative approach since part of the total porosity is occupied by static fluid held to the mineral surface by surface tension. The effective porosity determined was nine percent.

Area 1-2:

$$V_x = [(1.0 \times 10^{-3} \text{ cm/sec})(0.05)] / (0.09) = 5.52 \times 10^{-4} \text{ cm/sec or } \mathbf{1.57 \text{ ft/day}}$$

Area 1-3:

$$V_x = [(1.0 \times 10^{-3} \text{ cm/sec})(0.120)] / (0.09) = 1.33 \times 10^{-3} \text{ cm/sec or } \mathbf{3.78 \text{ ft/day}}$$

3.2 STATISTICAL EVALUATION

The historical statistical database (provided on CD in **APPENDIX D**) was first reviewed for anomalies or outliers using the statistical program SANITAS™ for Groundwater. There were statistical outliers calculated for dissolved solids at MW-633D, manganese at NE-2, sulfate at NE-6, total organic carbon at NAB-3 and zinc at NE-6.

In addition to outlier analysis, parameter concentrations were plotted versus time for each of the parameters. These graphs are included in **APPENDIX E**. Graphs provide a summary of the historical data that are more easily visualized on graphs than tables. Another important application of these graphs is for detecting possible trends or drifts in the data from a given well. Furthermore, when visually comparing the plots of all the wells for a parameter, it is easy to identify the variability among the wells. This variability may be spatial or due to contamination from an off-site source.

An important consideration in any graphical presentation is whether the data is significantly influenced by seasonal changes. If this is the case, then the data should be adjusted for seasonal influences. In order to make such a determination, there should exist at least eight and preferably sixteen observations for each parameter. However, seasonal influences will likely be first suspected from visual observation of the data graphs discussed above. Based on the data generated thus far and as stated in previous reports, it is suspected that concentration levels are significantly influenced by the amount of precipitation and the timing of individual precipitation events in relation to sampling events.

The methods used to evaluate the groundwater data for statistically significant increases (SSIs) are based on statistical procedures outlined in the *Statistical Analysis of Ground-Water Monitoring Data at RCRA Facilities (Unified Guidance, March 2009)* and ASTM D6312-98 *Standard Guide for Developing Appropriate Statistical Approaches for Groundwater Detection Monitoring Programs*. The SANITAS™ for Groundwater program was utilized to statistically evaluate the data for the Fourth Quarter 2016 sampling event. A brief description of the procedures used in the statistical evaluation is provided on each statistical plot (See **APPENDIX E**).

3.2.1 Sen's Slope/Mann-Kendall

When used in conjunction with one another, the Mann-Kendall test for temporal trend and the Sen's slope estimate are two types of Evaluation Monitoring Statistics useful in determining the significance of an apparent trend and to estimate the magnitude of that trend. The Sen's Slope/Mann-Kendall was performed on all detected constituents from each well to determine whether a statistical trend is present in the data. The results of the Sen's Slope/Mann-Kendall plots associated with the Fourth Quarter 2016 sampling event are presented in **APPENDIX E**. A number of constituents presented a false trend due to a change in reporting limits. Only constituents with true statistical trends in detected concentrations are presented below:

Well	Significant Decreasing Trends	Significant Increasing Trends
CAO-1	manganese	arsenic
CAO-2	iron	chloride, manganese, total organic carbon
CAO-3	sulfate	
MW-1		arsenic, barium, chloride, iron, sulfate
MW-1R	manganese	cis-1,2-dichloroethene
MW-3		arsenic, barium, chloride, manganese, nickel
MW-4		chloride, zinc
MW-5	sulfate	chloride
MW-6		chloride
MW-7	chloride, sulfate	
MW-509D		sulfate
MW-577	barium, dissolved solids, sulfate	chloride
MW-633D	sulfate	1,1-dichloroethane, zinc
MW-689D	barium, iron	chloride
NAB-2		chloride, zinc
NAB-4		barium,
NAB-8	barium,	
NE-2	chloride, dissolved solids, sulfate, total organic carbon	
NE-6	zinc	

3.2.2 Results of Assessment Monitoring Statistical Analyses

Confidence intervals are the recommended statistical strategy for assessment monitoring. The Groundwater Protection Standards (GWPS) utilized in the statistical evaluation are included in **TABLE 3**.

TABLE 3. Groundwater Protection Standards (Regulation 22.1205 (h)(I))

Compound	MCL**	RBSL***	Compound	MCL**	RBSL***
Total Arsenic	0.01 mg/l		Chloroethane (Ethyl Chloride)	--	21,000 ug/l
Total Barium	2 mg/l		Vinyl Chloride	2 ug/l	
Total Cadmium	0.005 mg/l		1,1-Dichloroethane	--	2.7 ug/l
Total Cobalt	--	0.011 mg/l	cis-1,2-Dichloroethene (-ethylene)	70 ug/l	--
Total Chromium	0.1 mg/l	--	Tetrachloroethene (-ethylene)	5 ug/l	
Total Nickel	--	0.039 mg/l	1,4-dichlorobenzene	75 ug/l	
Total Zinc	--	6 mg/l	Methylene Chloride	5 ug/l	
Total Selenium	0.05 mg/l		Toluene	1,000 ug/l	
Tin	--	12mg/l	Trans 1,2-dichloroethylene	100 ug/l	
Silver	--	0.094 mg/l	Xylene (Total)	10,000 ug/l	
Thallium	0.002 mg/l		Ethyl Benzene	700 ug/l	
Vanadium	--	0.086 mg/l	Carbon Disulfide	--	810 ug/l
Antimony	0.006 mg/l		Chlorobenzene	100 ug/l	
Beryllium	0.004 mg/l		Cyanide	200 ug/l	
Copper	1.3 mg/l		Mercury	200 ug/l	
Lead	0.015 mg/l		Trichloroethene (-ethylene)	5 ug/l	
Benzene	5 ug/l				
Available MCL's will be used as the Groundwater Protection Standard **MCL = Maximum Contaminant Levels (current or proposed) ***RBSL = Risk-Based Screen Levels (EPA Region 6 Human Health Medium Specific Screening Level) Residential Water (Residential Scenario: Ingestion and Inhalation)					

Data evaluation consisted of the establishment of 95% Lower Confidence Limits (LCL), assuming that a minimum of four (4) background samples exist for each parameter and well detected during the Assessment Monitoring Program. If inadequate background data exists, sufficient background data will be collected to provide adequate sample size for statistical analysis. If the 95% LCL of one parameter exceeds action levels defined as Maximum Contaminant Levels (MCLs), if applicable, or a health-based alternate Groundwater Protection Standards (GWPS) as stipulated in Section 22.1205(d)(4), the site will conduct an Assessment of Corrective Measures in coordination with ADEQ.

Because the entire monitoring system is currently in the Assessment Monitoring Program, each detected volatile organic compound and metal parameter at each well was evaluated utilizing events from 2011 to present. This number of events was selected based on the interpretation that data population has been generally stable at each monitoring point over this time period. Data prior to these events varied substantially in some cases from the utilized data set. The statistical evaluation was conducted in

accordance with recommended procedures found in the Unified Guidance. Confidence Interval statistical analysis was not performed for indicator parameters.

The results of the assessment monitoring statistical evaluations indicated the concentrations of the following parameters at the following wells, statistically exceeded the established Groundwater Protection Standards.

FOURTH QUARTER 2016 GWPS EXCEEDANCES

MONITORING POINT	AMC
CAO-1	1,1-dichloroethane, arsenic, cobalt, vinyl chloride
MW-1	1,1-dichloroethane, cobalt, nickel
MW-1R	1,1-dichloroethane, arsenic, cobalt, nickel, vinyl chloride

The results of the Fourth Quarter 2016 Sampling Event indicate that AMC concentrations statistically exceed the GWPS at sample points CAO-1, MW-1, and MW-1R

The results of the confidence interval evaluation associated with the Fourth Quarter 2016 sampling event are presented in **APPENDIX E**. In accordance with Regulation 12.1205(d)(4), an *Assessment of Corrective Measures Report* (June 2015, Document 67822) was submitted to ADEQ for approval.

3.3 LABORATORY ANALYTICAL RESULTS

The analytical laboratory results for the Fourth Quarter 2016 Assessment Monitoring sampling event are summarized in **TABLE 4** and **TABLE 5**. The Tables present a comparison of parameter concentrations from the current sampling event to the applicable Primary Drinking Water Standards-Maximum Contaminant Levels (MCLs) and Secondary Drinking Water Standards (SDWS). The SDWS are set primarily for aesthetic reasons and are generally not considered health-based criteria. Constituents covered by the SDWS are those which may adversely affect the aesthetic qualities of drinking water such as taste, odor, color, and appearance and are not federally enforced.

Primary Drinking Water Standard MCL exceedances noted for well samples consisted of arsenic at MW-1, MW-1R, and CAO-1; cadmium at MW-509D; 1,1-dichloroethane at MW-1 and MW-1R; and vinyl chloride at MW-1R and CAO-1 (see **TABLE 4** and **TABLE 5**) during the Fourth Quarter 2016 Assessment Monitoring event.

As shown in **TABLE 5**, Appendix 1 volatile organic compound (VOC) detections in well samples above the PQL consisted of the following:

- **MW-1** – chlorobenzene, 1,1-dichloroethane, cis-1,2-dichloroethene, and vinyl chloride
- **MW-1R** – chlorobenzene, 1,4-dichlorobenzene, 1,1-dichloroethane, cis-1,2-dichloroethene, trichloroethene, and vinyl chloride
- **CAO-1** – benzene, 1,1-dichloroethane, and vinyl chloride
- **MW-633D** - 1,1-dichloroethane

Because VOCs are not naturally occurring, detected concentrations above the PQL are considered SSIs.

3.4 QUALITY ASSURANCE/QUALITY CONTROL RESULTS

A QA/QC comparison for the Fourth Quarter 2016 Assessment Monitoring event is presented in **TABLES 4** and **5**. The duplicate sample was consistent with the representative sample during this event. The field and equipment blank had detections of toluene, while the trip blank had no VOC detections, during the Fourth Quarter 2016 Assessment Monitoring event

TABLE 4. INORGANIC GROUNDWATER QUALITY RESULTS

WELL ID	pH (SU)	TDS (mg/L)	Sulfide (mg/L)	Cyanide (mg/L)	Cl (mg/L)	SO ₄ (mg/L)	TOC (mg/L)	Hg (mg/L)
MW-1	6.14	972	<0.05	<0.005	122	23.7	9.23	<0.0002
MW-1R	6.15	928	<0.05	<0.005	102	23.7	7.52	<0.0002
MW-2	6.60	381	<0.05	<0.005	3.61	14.7	0.519 J	<0.0002
MW-3	6.32	525	<0.05	<0.005	9.54	12.3	2.32	<0.0002
MW-4	6.34	376	<0.05	<0.005	7.31	14.9	1.09	<0.0002
MW-5	6.27	416	<0.05	<0.005	5.76	7.07	1.2	<0.0002
MW-6	6.50	432	<0.05	<0.005	21.0	7.76	1.75	<0.0002
Dupe (MW-6)	N/A	459	<0.05	<0.005	20.8	8.32	1.39	<0.0002
MW-7	6.25	338	<0.05	<0.005	1.50	6.39	1.07	<0.0002
CAO-1	5.91	794	<0.05	<0.005	95.9	0.104 J	10.6	<0.0002
CAO-2	6.35	433	<0.05	<0.005	66.2	0.261 J	5.77	<0.0002
CAO-3	6.60	305	<0.05	<0.005	17.9	6.01	1.65	<0.0002
NAB-2	6.24	443	<0.05	<0.005	10.4	13.5	1.39	<0.0002
NAB-3	7.75	425	<0.05	<0.005	9.17	8.97	94.7	0.000134 J
NAB-4	6.26	458	<0.05	<0.005	4.11	41.9	1.79	<0.0002
NAB-7	6.30	399	<0.05	<0.005	3.05	29.7	1.61	<0.0002
NAB-8	4.00	371	<0.05	<0.005	2.23	11.2	23.3	<0.0002
MW-509D	6.20	395	<0.05	<0.005	6.42	16.0	1.23	<0.0002
MW-577	6.28	398	<0.05	<0.005	2.48	20.2	1.14	<0.0002
MW-633D	6.41	366	<0.05	<0.005	15.4	10.6	1.53 B	<0.0002
MW-689D	6.38	408	<0.05	<0.005	2.49	14.2	0.579 J,B	<0.0002
NE-2	8.00	1660	<0.05	<0.005	24.9	737	12.4	<0.0002
NE-3	4.64	347	<0.05	<0.005	5.54	15.3	1.60	<0.0002
NE-6	6.32	398	<0.05	<0.005	2.31	22.4	0.663 J	<0.0002
Spring A	6.81	359	<0.05	<0.005	2.37	8.17	0.967 J	<0.0002
Class I Draw Sp	6.65	319	<0.05	<0.005	45	2.8 J	4.23	<0.0002
Landfill Ent Seep	6.95	335	<0.05	<0.005	12.7	4.41 J	2.38	<0.0002
SP-7	6.75	275	<0.05	<0.005	16.1	5.17	2.37	<0.0002
Field Blank	N/A	26	<0.05	<0.005	0.122 J	<5.0	0.397 J	<0.0002
LEACHATE	7.59	1830	<0.05	<0.005	659	11.2	60.0	<0.0002
EPA Standards	6.5-8.5**	500**	---	---	250**	250**	---	0.002*

*Primary Drinking Water Standard-Maximum Contaminant Level (MCL)

**Secondary Drinking Water Standard (SDWS)

"J" Value= estimated concentration above the MDL but below the PQL

Values in **bold** exceed applicable Primary Drinking Water EPA Standards.

Values with a "B" suffix denotes the same analyte is found in the associated blank.

TABLE 4 (CONT'D). INORGANIC GROUNDWATER QUALITY RESULTS

WELL ID	Sb (mg/L)	As (mg/L)	Ba (mg/L)	Be (mg/L)	Cd (mg/L)	Cr (mg/L)	Cu (mg/L)	Co (mg/L)
MW-1	0.00115 J	0.071	0.201	<0.002	0.000654 J	0.00588	0.0104 B	0.109
MW-1R	<0.002	0.0627	0.173	<0.002	0.000239 J	0.00168 J	0.00493 J,B	0.0692
MW-2	<0.002	0.00466	0.0315	<0.002	<0.001	<0.002	0.000563 J,B	0.000295 J
MW-3	<0.002	0.00231	0.0812	<0.002	0.00043 J	0.000594 J	0.00108 J,B	0.0041
MW-4	<0.002	0.000505 J	0.0358	<0.002	0.000883 J	0.000895 J	0.00122 J,B	<0.002
MW-5	<0.002	0.000536 J	0.0341	<0.002	<0.001	0.00328	0.00377 J,B	<0.002
MW-6	<0.002	0.000423 J	0.0465	<0.002	0.000439 J	0.000805 J	0.00121 J,B	<0.002
Dupe (MW-6)	<0.002	0.000422 J	0.0482	<0.002	0.00047 J	<0.002	0.0016 J,B	<0.002
MW-7	<0.002	0.000687 J	0.0463	<0.002	0.000307 J	<0.002	0.0017 J,B	0.0056
CAO-1	<0.002	0.123	0.25	<0.002	<0.001	0.00132 J	0.000868 J,B	0.0286
CAO-2	<0.002	0.00135 J	0.0997	<0.002	0.00148	0.000821 J	0.0015 J,B	0.0111
CAO-3	<0.002	<0.002	0.0412	<0.002	0.000765 J	<0.002	0.00105 J,B	<0.002
NAB-2	0.000806 J	0.00628	0.0394	<0.002	<0.001	0.00577	0.00185 J,B	<0.002
NAB-3	<0.002	0.000561 J	0.0502	<0.002	0.000995 J	0.00121 J	0.00263 J,B	0.00125 J
NAB-4	<0.002	0.00458	0.0419	<0.002	0.00128	0.00571	0.004 J,B	0.00106 J
NAB-7	<0.002	0.00574	0.023	<0.002	<0.001	0.00744	0.00529 B	0.000774 J
NAB-8	<0.002	0.00354	0.0319	<0.002	0.000291 J	<0.002	0.000959 J,B	<0.002
MW-509D	<0.002	0.00136 J	0.034	<0.002	0.00621	0.00233	0.00262 J,B	0.000342 J
MW-577	<0.002	0.00139 J	0.0233	<0.002	<0.001	<0.002	0.000986 J,B	<0.002
MW-633D	<0.002	0.000414 J	0.041	<0.002	0.00168	0.00174 J	0.00351 J,B	<0.002
MW-689D	<0.002	0.000733 J	0.0277	<0.002	<0.001	0.00118 J	0.00256 J,B	<0.002
NE-2	<0.002	0.00199 J	0.0185	<0.002	<0.001	<0.002	0.00146 J,B	0.000603 J
NE-3	<0.002	0.000766 J	0.128	<0.002	0.000181 J	<0.002	0.000727 J,B	0.000394
NE-6	<0.002	0.00157 J	0.0328	<0.002	<0.001	0.00312	0.00189 J,B	0.000682 J
Spring A	<0.002	0.000375 J	0.0418	<0.002	0.00161	<0.002	0.00119 J,B	0.00169 J
Class I Draw Sp	<0.002	0.000799 J	0.0661	<0.002	<0.001	<0.002	0.000709 J,B	0.00108 J
Landfill Ent Seep	<0.002	0.003	0.0798	<0.002	<0.001	<0.002	<0.005	0.00241
SP-7	<0.002	0.00473	0.0727	<0.002	<0.001	<0.002	0.000792 J,B	0.00271
Field Blank	<0.002	<0.002	<0.005	<0.002	<0.001	<0.002	0.00619 B	<0.002
LEACHATE	<0.002	0.00912	2.56	<0.002	<0.001	0.0307	0.0122 B	0.00624
EPA Standards	0.006*	0.01*	2*	0.004*	0.005*	0.1*	1.3*	---

*Primary Drinking Water Standard-Maximum Contaminant Level (MCL) / **Secondary Drinking Water Standard (SDWS)

"J" Value= estimated concentration above the MDL but below the PQL / Values in **bold** exceed applicable Primary Drinking Water EPA Standards.

Values with a "B" suffix denotes the same analyte is found in the associated blank.

TABLE 4 (CONT'D). INORGANIC GROUNDWATER QUALITY RESULTS

WELL ID	Fe (mg/L)	Pb (mg/L)	Mn (mg/L)	Ni (mg/L)	Se (mg/L)	Ag (mg/L)	Tl (mg/L)	Sn (mg/L)	V (mg/L)	Zn (mg/L)
MW-1	6.3	0.0029 B	0.78	0.158	<0.002	<0.002	0.000372 J	0.000693 J,B	0.00178 J	0.619
MW-1R	23.7	0.00241 B	0.346	0.0802	<0.002	<0.002	0.00164 J	0.00143 J,B	0.00045 J	1.6
MW-2	0.118	0.000636 J,B	0.0104	0.00979	<0.002	<0.002	<0.002	<0.002	0.000361 J	0.00366 J,B
MW-3	0.473	0.000937 J,B	2.23	0.0622	<0.002	<0.002	0.000661 J	<0.002	0.000426 J	0.146
MW-4	0.0411	0.000888 J,B	0.00209 J,B	0.114 J	<0.002	<0.002	<0.002	<0.002	0.0004 J	0.105
MW-5	0.0606 J	0.000765 J,B	0.00185 J,B	0.00281	<0.002	<0.002	<0.002	0.000313 J,B	0.000385 J	0.0368 B
MW-6	0.0334 J	0.000601 J,B	0.000867 J,B	0.000957 J	<0.002	<0.002	<0.002	0.000311 J,B	0.000427 J	0.0415 B
Dupe (MW-6)	0.0637 J,B	0.000635 J,B	0.00134 J,B	0.000804 J	<0.002	<0.002	<0.002	0.000326 J,B	0.000306 J	0.0416
MW-7	0.153	0.00153 J,B	0.363	0.0106	<0.002	<0.002	<0.002	0.000318 J,B	0.000497 J	0.0151 J,B
CAO-1	36.6	0.000886 J,B	1.2	0.0571	<0.002	<0.002	<0.002	0.000812 J,B	0.00115 J	0.0272 B
CAO-2	0.305	0.0013 J,B	4.35	0.0438	<0.002	<0.002	0.000612 J	0.000432 J,B	0.000711 J	0.0429 B
CAO-3	0.039 J	0.00106 J,B	0.0084	0.00196 J	<0.002	<0.002	<0.002	0.000506 J,B	0.000514 J	0.0213 J,B
NAB-2	0.536	0.00316 B	0.0175	0.00586	<0.002	<0.002	<0.002	0.000638 J,B	0.00128 J	0.0602
NAB-3	0.108	0.000842 J,B	0.0483	0.00268	<0.002	<0.002	<0.002	0.000407 J,B	0.000542 J	0.0823
NAB-4	0.247	0.00148 J,B	0.0166	0.0187	<0.002	<0.002	0.000547 J	0.000531 J,B	0.000569 J	0.656
NAB-7	0.4	0.00555 B	0.00701	0.0195	<0.002	<0.002	<0.002	<0.002	<0.000359 J	0.043 B
NAB-8	0.0378 J	0.000583 J,B	0.00405 J	<0.002	<0.002	<0.002	<0.002	<0.002	0.000351 J	0.00799 J,B
MW-509D	0.882	0.0029 B	0.0149	0.00283	<0.002	<0.002	<0.002	0.000307 J,B	0.00256 J	0.457
MW-577	0.189	0.000479 J,B	0.00484 J	0.0048	<0.002	<0.002	<0.002	<0.002	0.000297 J	<0.025
MW-633D	0.0548 J	0.000434 J,B	0.0035 J	0.00465	<0.002	<0.002	<0.002	0.000552 J,B	0.000561 J	0.283
MW-689D	0.143	0.00124 J,B	0.00803	0.00153 J	<0.002	<0.002	<0.002	0.000472 J,B	0.000508 J	0.00523 J,B
NE-2	0.6	0.00123 J,B	0.022	0.00719	0.000467 J	<0.002	<0.002	0.000305 J,B	0.000924 J	0.0797
NE-3	0.062 J,B	0.000515 J,B	0.0329	0.00364	<0.002	<0.002	<0.002	0.000479 J,B	0.00046 J	0.0411
NE-6	0.345	0.00102 J,B	0.0153	0.00782	<0.002	<0.002	<0.002	0.000323 J,B	0.000521 J	0.202
Spring A	0.118 B	0.000597 J,B	0.327	0.00446	<0.002	<0.002	<0.002	<0.002	0.000706 J	0.122
Class I Draw Sp	0.567	0.000762 J,B	0.464	0.00333	<0.002	<0.002	<0.002	0.000322 J,B	0.000474 J	0.00299 J,B
Landfill Ent Seep	2.01	0.000245 J,B	0.914	0.00236	<0.002	<0.002	<0.002	0.000379 J,B	0.000288 J	<0.025
SP-7	2.05	0.000428 J,B	1.14	0.00335	<0.002	<0.002	<0.002	<0.002	0.000281 J	0.00614 J,B
Field Blank	0.0466 J,B	0.000543 J,B	0.000294 J,B	<0.002	<0.002	<0.002	<0.002	0.000331 J,B	<0.005	<0.025
LEACHATE	49.4	0.00315 B	1.22	0.0499	0.000627 J	<0.002	<0.002	0.00632	0.00208 J	0.0666
EPA Standards	0.3**	0.015*	0.05**	---	0.05*	0.1**	0.002*	---	---	5**

*Primary Drinking Water Standard-Maximum Contaminant Level (MCL) / **Secondary Drinking Water Standard (SDWS)

"J" Value= estimated concentration above the MDL but below the PQL / Values in **bold** exceed applicable Primary Drinking Water EPA Standards.

Values with a "B" suffix denotes the same analyte is found in the associated blank.

TABLE 5. VOLATILE ORGANIC GROUNDWATER QUALITY RESULTS

WELL ID	Acetone (ug/L)	Benzene (ug/L)	ChlBenz (ug/L)	ClEthane (ug/L)	1,4-DCB (ug/L)	1,1-DCA (ug/L)	1,2-DCA (ug/L)	CisDCEE (ug/L)	TranDCEE (ug/L)	TCE (ug/L)	VC (ug/L)	Xylene (ug/L)	Toluene (ug/L)	(MIBK) (ug/L)
MW-1	<10	0.572 J	1.2	<5.0	<1.0	11.1	0.399 J	7.76	<1.0	0.607 J	1.37	<3.0	<1.0	<10.0
MW-1R	<10	0.857 J	1.46	2.07 J	2.63	16.2	0.369 J	10.2	0.405 J	1.11	3.69	<3.0	<1.0	<10.0
MW-2	<10	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0	<1.0	<10.0
MW-3	<10	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0	<1.0	<10.0
MW-4	<10	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0	<1.0	<10.0
MW-5	<10	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0	<1.0	<10.0
MW-6	<10	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0	<1.0	<10.0
Dupe (MW-6)	<10	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0	<1.0	<10.0
MW-7	<10	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0	<1.0	<10.0
CAO-1	<10	4.34	0.849 J	2.0 J	<1.0	5.43	<1.0	<1.0	<1.0	<1.0		<3.0	0.443 J	<10.0
CAO-2	<10	<1.0	<1.0	<5.0	<1.0	0.488 J	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0	<1.0	<10.0
CAO-3	<10	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0	<1.0	<10.0
NAB-2	<10	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0	<1.0	<10.0
NAB-3	<10	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0	<1.0	<10.0
NAB-4	<10	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0	<1.0	<10.0
NAB-7	<10	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0	<1.0	<10.0
NAB-8	<10	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0	<1.0	<10.0
MW-509D	<10	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0	<1.0	<10.0
MW-577	<10	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0	<1.0	<10.0
MW-633D	<10	<1.0	<1.0	<5.0	<1.0	1.97	<1.0	0.607 J	<1.0	<1.0	<1.0	<3.0	<1.0	<10.0
MW-689D	<10	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0	<1.0	<10.0
NE-2	<10	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0	<1.0	<10.0
NE-3	<10	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0	<1.0
NE-6	<10	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0	<1.0
Spring A	<10	<1.0	<1.0	<5.0	<1.0	2.92	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0	<1.0
Class I Draw Sp	<10	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0	<1.0
Landfill Ent Seep	<10	<1.0	<1.0	2.81 J	<1.0	0.862 J	<1.0	0.477 J	<1.0	<1.0	<1.0	<1.0	<3.0	<1.0
SP-7	<10	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0	<1.0
Field Blank	<10	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0	0.865 J
LEACHATE	23.6	<1.0	<1.0	0.565 J	1.4	0.565 J	<1.0	<1.0	<1.0	<1.0	<1.0	0.463 J	2.04 J	<1.0
Trip Blank	<10	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0	<1.0
Equipment Blank	<10	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0	0.82 J
EPA Standards	---	5	75	---	75	7	5	70	100	5	2	10,000	1,000	---

EPA standards depicted above are Primary Drinking Water Standard MCLs / "J" Value= estimated concentration above the MDL but below the PQL

Values in **bold** exceed applicable Primary Drinking Water EPA Standards / Values with a "B" suffix denotes the same analyte is found in the associated blank.

4 CONCLUSION

Based on the results of the Fourth Quarter 2016 Assessment Monitoring and analytical testing, SCS reached the following conclusions:

Groundwater Flow:

- **FIGURE 2** represents a potentiometric surface map constructed from water levels measured during the Fourth Quarter 2016 Assessment Monitoring event. As indicated, groundwater within the uppermost aquifer was found to flow in a west-northwesterly direction in the Area 1-2 portion of the site. This flow relationship is consistent with the flow direction indicated by historical water level measurements. The groundwater flow direction in the Area 1-3 portion of the site is to the east-southeast. The average linear velocity in Area 1-2 is estimated at 5.52×10^{-4} cm/sec or **1.57 ft/day**. The average linear velocity in Area 1-3 is estimated at 1.33×10^{-3} cm/sec or **3.78 ft/day**.

Analytical Results:

- A QA/QC comparison for the Fourth Quarter 2016 Assessment Monitoring event is presented in **TABLES 4** and **5**. The duplicate sample was consistent with the representative sample during this event. The field and equipment blank had detections of toluene, while the trip blank had no VOC detections, during the Fourth Quarter 2016 Assessment Monitoring event
- Primary Drinking Water Standard MCL exceedances noted for well samples consisted of arsenic at MW-1, MW-1R, and CAO-1; cadmium at MW-509D; 1,1-dichloroethane at MW-1 and MW-1R; and vinyl chloride at MW-1R and CAO-1 (see **TABLE 4** and **TABLE 5**) during the Fourth Quarter 2016 Assessment Monitoring event.
- As shown in **TABLE 5**, Appendix 1 volatile organic compound (VOC) detections in well samples above the PQL consisted of the following:
 - **MW-1** – chlorobenzene, 1,1-dichloroethane, cis-1,2-dichloroethene, and vinyl chloride
 - **MW-1R** – chlorobenzene, 1,4-dichlorobenzene, 1,1-dichloroethane, cis-1,2-dichloroethene, trichloroethene, and vinyl chloride
 - **CAO-1** – benzene, 1,1-dichloroethane, and vinyl chloride
 - **MW-633D** - 1,1-dichloroethane

Statistical Evaluation:

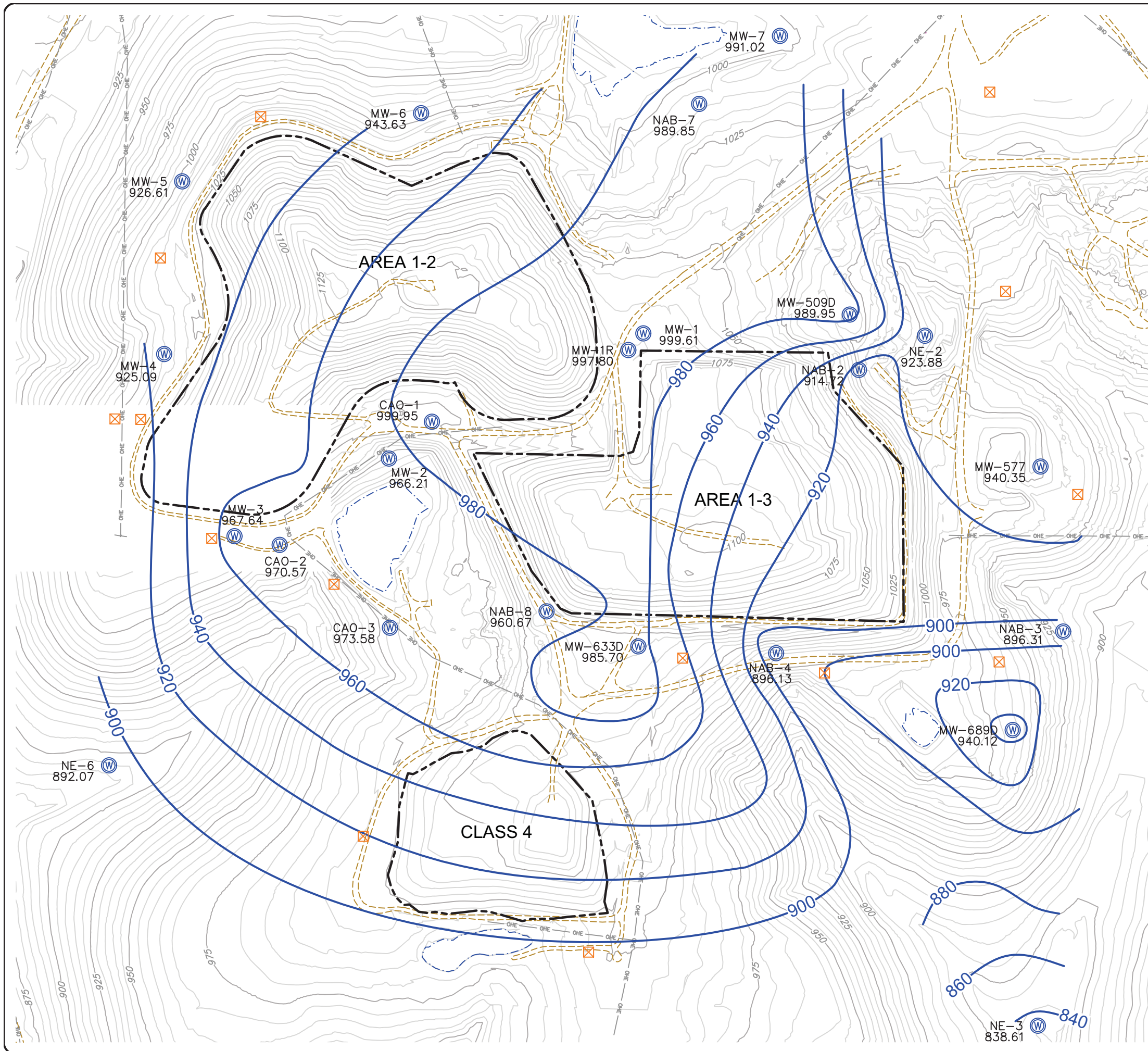
- The results of the assessment monitoring statistical evaluations indicated the concentrations of the following parameters at the following wells, statistically exceeded the established groundwater protection standards (**TABLE 3**).

MONITORING POINT	AMC
CAO-1	1,1-dichloroethane, arsenic, cobalt, vinyl chloride
MW-1	1,1-dichloroethane, cobalt, nickel
MW-1R	1,1-dichloroethane, arsenic, cobalt, nickel, vinyl chloride

- *The results of the Fourth Quarter 2016 Sampling Event indicate that AMC concentrations statistically exceed the GWPS at sample points CAO-1, MW-1, and MW-1R*
- *In accordance with Regulation 12.1205(d)(4), an Assessment of Corrective Measures Report (June 2015, Document 67822) was submitted to ADEQ for approval.*
- *The next quarterly sampling event is scheduled for March 2017.*

APPENDIX A

FIGURES



LEGEND:

- EXISTING 5' MINOR CONTOUR
- EXISTING 25' MAJOR CONTOUR
- GROUNDWATER CONTOUR
- EXISTING ROAD
- EXISTING OVERHEAD ELECTRIC
- DISPOSAL BOUNDARY (APPROXIMATE)
- EXISTING BODY OF WATER
- EXISTING GROUNDWATER WELL
- EXISTING GAS PROBE

NOTES:

- EXISTING TOPOGRAPHY BASED ON AERIAL SURVEY PERFORMED BY M.J. HARDEN ASSOCIATES, INC ON AUGUST 17, 2010. UPDATES TO THE TOPOGRAPHY AND SITE FEATURES FOR AREA 1-2, AREA 1-3, AND CLASS 4 DISPOSAL UNITS SURVEYED BY CONSOLIDATED LAND SERVICES, INC BETWEEN DECEMBER 2014 AND JANUARY 2015.
- GROUNDWATER ELEVATIONS TAKEN ON DECEMBER 19-21, 2016.

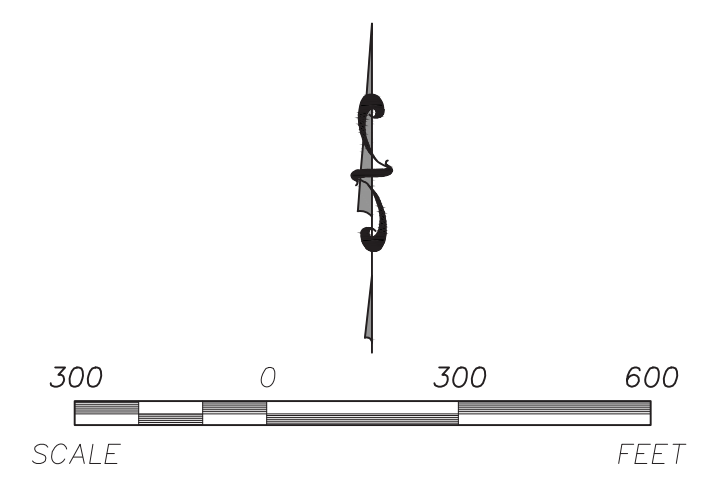


FIGURE 2 - POTENTIOMETRIC MAP
4th QUARTER 2016 GROUNDWATER MONITORING
NABORS LANDFILL
BAXTER COUNTY, ARKANSAS

SCS ENGINEERS
11219 Richards Drive
North Little Rock, Arkansas 72113
PH. (501) 812-4551

CHK. BY: KAV	DWN. BY: DMB	DSN. BY: DMB	PROJ. NO. 27214218.01
PROJ. MGR: DM	DATE: 3/17/17	CADD FILE: POTENTIOMETRIC MAP.DWG	

APPENDIX B

GROUNDWATER SAMPLING RECORDS

Field Groundwater Sampling Record

Facility NABORS Date 12/20/2016 Well No. MW-1R
 Sampling Personnel Darren Motley
 Casing Diameter 2.0" Condition of well ok Locked? yes
 Well Depth 78.55 DTW (from TOC) 69.77 Volume H₂O in well 1.4
 Other Information
 Sunny, 45
 5 mph wind
 sub-pump
 started purge @ 1612

Date	Time	Volume (gallons)	pH (SU)	Temp (°C)	D.O. (mg/L)	ORP (mV)	S.C (µSm)	Turbidity (NTU)
12/20/2016	1614	1.5	6.18	15.8	2.57	28.4	1516	320
	1620	3.0	6.17	16.5	2.02	17.9	1517	30.4
	1626	4.5	6.15	16.7	1.34	9.9	1522	56.5
	1629	6.0	6.14	16.8	1.01	8.7	1523	28.5

Sampling Date & Time 12/20/2016 @ 1629

Notes

Field Groundwater Sampling Record

Facility NABORS Date 12/20/2016 Well No. MW-1
 Sampling Personnel Darren Motley
 Casing Diameter 2.0" Condition of well ok Locked? no
 Well Depth 77.20 DTW (from TOC) 67.65 Volume H2O in well 1.5
 Other Information
 Sunny, 45
 5 mph wind
 sub-pump
 started purge @ 1523

Date	Time	Volume (gallons)	pH (SU)	Temp (°C)	D.O. (mg/L)	ORP (mV)	S.C (µSm)	Turbidity (NTU)
12/20/2016	1528	1.5	6.42	16.3	1.51	73.7	1656	18.6
	1532	3.0	6.24	16.5	0.74	66.7	1652	16.1
	1536	4.5	6.22	16.4	0.99	60.1	1648	17.7
	1542	6.0	5.84	16.6	0.99	52.9	1654	773
	1558	12.0	6.15	16.8	1.39	43.6	1618	35.7

Sampling Date & Time 12/20/2016 @ 1558

Notes

Field Groundwater Sampling Record

Facility	NABORS	Date	12/20/2016	Well No.	MW-2
Sampling Personnel	Darren Motley				
Casing Diameter	2.0"	Condition of well	ok	Locked?	yes
Well Depth	49.10"	DTW (from TOC)	35.00	Volume H2O in well	2.2
Other Information					
Sunny, 40°					
5 mph wind					
sub-pump					
started purge @ 1647					

Date	Time	Volume (gallons)	pH (SU)	Temp (°C)	D.O. (mg/L)	ORP (mV)	S.C (µSm)	Turbidity (NTU)
12/20/2016	1648	2.5	6.59	16.5	1.30	-22.2	603	7.85
	1650	5.0	6.62	16.5	0.72	-35.1	612	4.45
	1652	7.5	6.60	16.5	0.51	-40.9	622	2.22

Sampling Date & Time 12/20/2016 @ 1652

Notes

Field Groundwater Sampling Record

Facility NABORS Date 12/21/2016 Well No. MW-3
 Sampling Personnel Darren Motley
 Casing Diameter 2.0" Condition of well ok Locked? yes
 Well Depth 39.60" DTW (from TOC) 26.84 Volume H2O in well 1.2
 Other Information
 Sunny, 30°
 5 mph wind
 sub pump
 start purging @ 0759

Date	Time	Volume (gallons)	pH (SU)	Temp (°C)	D.O. (mg/L)	ORP (mV)	S.C (µSm)	Turbidity (NTU)
12/21/2016	0800	1.5	6.49	17.3	2.03	-7.4	841	14.7
	0802	3.0	6.50	17.3	1.23	-5.2	864	3.24
	0804	4.5	6.32	17.3	1.17	-4.9	868	3.07

Sampling Date & Time 12/21/2016 @ 0804

Notes

Field Groundwater Sampling Record

Facility NABORS Date 12/21/2016 Well No. MW-4
 Sampling Personnel Darren Motley
 Casing Diameter 2.0" Condition of well ok Locked? yes
 Well Depth 100.60 DTW (from TOC) 87.02 Volume H2O in well 2.2
 Other Information
 Sunny 30°
 5 mph wind
 sub-pump
 start purging @ 0826

Date	Time	Volume (gallons)	pH (SU)	Temp (°C)	D.O. (mg/L)	ORP (mV)	S.C (µSm)	Turbidity (NTU)
12/21/2016	0834	2.5	6.46	15.5	5.79	1.3	658	152
	0837	5.0	6.35	15.8	5.69	-1.5	655	66.6
	0842	7.5	6.32	15.7	5.77	-3.2	650	37.8
	0847	10.0	6.34	15.7	5.59	-2.5	655	10.7

Sampling Date & Time 12/21/2016 @ 0847

Notes

Field Groundwater Sampling Record

Facility NABORS Date 12/21/2016 Well No. MW-5
 Sampling Personnel Darren Motley
 Casing Diameter 2.0" Condition of well ok Locked? yes
 Well Depth 89.75" DTW (from TOC) 77.77 Volume H2O in well 1.9
 Other Information
 Sunny 30°
 5 mph wind
 sub-pump
 start purging @ 0911

Date	Time	Volume (gallons)	pH (SU)	Temp (°C)	D.O. (mg/L)	ORP (mV)	S.C (µSm)	Turbidity (NTU)
12/21/2016	0902	2.0	6.44	14.8	6.11	6.8	692	43.9
	0907	4.0	6.36	15.2	5.28	1.7	702	21.1
	0911	6.0	6.27	15.2	4.98	-1.3	702	8.47

Sampling Date & Time 12/21/2016 @ 0911

Notes

Field Groundwater Sampling Record

Facility NABORS Date 12/21/2016 Well No. MW-6
 Sampling Personnel Darren Motley
 Casing Diameter 2.0" Condition of well ok Locked? yes
 Well Depth 68.90 DTW (from TOC) 56.75 Volume H2O in well 1.9
 Other Information
 Sunny, 35°
 5 mph wind
 sub-pump
 start purging @ 0935

Date	Time	Volume (gallons)	pH (SU)	Temp (°C)	D.O. (mg/L)	ORP (mV)	S.C (µSm)	Turbidity (NTU)
12/21/2016	0942	2.0	6.68	14.2	6.30	18.1	725	12.1
	0944	4.0	6.55	14.3	4.95	16.0	731	8.69
	0946	6.0	6.50	14.3	4.15	12.5	733	5.68

Sampling Date & Time 12/21/2016 @ 0946

Notes

Dup @ 0950

F.B @ 0955

E.B @ 0957

T.B @ 1000

Field Groundwater Sampling Record

Facility NABORS Date 12/20/2016 Well No. MW-7
 Sampling Personnel Darren Motley
 Casing Diameter 2.0" Condition of well ok Locked? yes
 Well Depth 23.0 DTW (from TOC) 8.69 Volume H2O in well 2.3
 Other Information
 Sunny, 42°
 5 mph wind
 sub-pump
 start purging @ 1426

Date	Time	Volume (gallons)	pH (SU)	Temp (°C)	D.O. (mg/L)	ORP (mV)	S.C (µSm)	Turbidity (NTU)
12/20/2016	1431	2.5	6.25	15.1	6.33	29.8	575	18.8
	1432	5.0	6.33	15.2	5.39	29.3	576	44.9
	1435	7.5	6.29	15.3	5.86	28.0	577	15.3
	1438	10.0	6.25	15.4	5.86	28.1	578	8.4

Sampling Date & Time 12/20/2016 @ 1438

Notes

Field Groundwater Sampling Record

Facility NABORS Date 12/21/2016 Well No. CAO-1
 Sampling Personnel Darren Motley
 Casing Diameter 2.0" Condition of well ok Locked? yes
 Well Depth 37.0 DTW (from TOC) 26.45 Volume H2O in well 1.7
 Other Information
 Sunny, 40°
 5 mph wind
 sub-pump
 start purging @ 1006

Date	Time	Volume (gallons)	pH (SU)	Temp (°C)	D.O. (mg/L)	ORP (mV)	S.C (µSm)	Turbidity (NTU)
12/21/2016	1011	2.0	6.32	16.6	1.92	45.8	1413	110
	1016	4.0	6.22	16.7	1.64	21.3	1455	15.4
	1022	6.0	5.91	16.7	1.46	8.4	1466	5.65

Sampling Date & Time 12/21/2016 @ 1022

Notes

Field Groundwater Sampling Record

Facility NABORS Date 12/21/2016 Well No. CAO-2
 Sampling Personnel Darren Motley
 Casing Diameter 2.0" Condition of well ok Locked? yes
 Well Depth 39.65 DTW (from TOC) 28.23 Volume H2O in well 1.8
 Other Information
 Sunny 30°
 5 mph wind
 sub-pump
 start purging @ 0730

Date	Time	Volume (gallons)	pH (SU)	Temp (°C)	D.O. (mg/L)	ORP (mV)	S.C (µSm)	Turbidity (NTU)
12/21/2016	0736	2.0	6.52	17.2	2.27	45.3	713	35.0
	0739	4.0	6.48	17.1	2.87	40.3	710	40.7
	0744	6.0	6.39	17.0	1.99	38.2	456	20.5
	0748	8.0	6.35	16.5	1.16	36.4	489	12.7

Sampling Date & Time 12/21/2016 @ 0748

Notes

Field Groundwater Sampling Record

Facility NABORS Date 12/21/2016 Well No. CAO-3
 Sampling Personnel Darren Motley
 Casing Diameter 2.0" Condition of well ok Locked? yes
 Well Depth 23.0 DTW (from TOC) 10.62 Volume H2O in well 2.0
 Other Information
 Sunny 30°
 5 mph wind
 sub-pump
 start purging @ 0650

Date	Time	Volume (gallons)	pH (SU)	Temp (°C)	D.O. (mg/L)	ORP (mV)	S.C (µSm)	Turbidity (NTU)
12/21/2016	0700	2.0	6.95	15.5	2.13	32.7	476	34.3
	0715	4.0	6.89	15.5	1.07	27.7	469	6.85
	0720	6.0	6.60	15.6	0.77	25.9	469	4.13

Sampling Date & Time 12/21/2016 @ 0720

Notes

Field Groundwater Sampling Record

Facility NABORS Date 12/20/2016 Well No. NAB-2
 Sampling Personnel Darren Motley
 Casing Diameter 2.0" Condition of well ok Locked? no
 Well Depth 93.0 DTW (from TOC) 79.26 Volume H2O in well 2.2
 Other Information
 Cloudy 40°
 5 mph wind
 sub-pump
 start purging @ 1221

Date	Time	Volume (gallons)	pH (SU)	Temp (°C)	D.O. (mg/L)	ORP (mV)	S.C (µSm)	Turbidity (NTU)
12/20/2016	1226	2.5	6.40	15.5	1.60	55.0	683	82.6
	1229	5.0	6.36	15.7	1.06	52.4	714	56.1
	1233	7.5	6.31	15.8	0.60	39.8	718	45.3
	1237	10.0	6.39	15.8	0.52	38.2	722	37.9
	1240	12.5	6.30	15.8	0.46	35.5	730	28.0
	1242	15.0	6.28	15.8	0.41	33.3	737	33.5
	1247	17.5	6.26	16.0	0.43	32.6	749	25.9
	1253	20.0	6.24	16.0	0.44	34.1	744	19.8

Sampling Date & Time 12/20/2016 @ 1253

Notes

Field Groundwater Sampling Record

Facility NABORS Date 12/20/2016 Well No. NAB-3
 Sampling Personnel Darren Motley
 Casing Diameter 2.0" Condition of well ok Locked? yes
 Well Depth 47.0 DTW (from TOC) 25.18 Volume H2O in well 3.5
 Other Information
 Sunny 12°
 5 mph wind
 sub-pump
 start purging @ 0800

Date	Time	Volume (gallons)	pH (SU)	Temp (°C)	D.O. (mg/L)	ORP (mV)	S.C (µSm)	Turbidity (NTU)
12/20/2016	0805	3.5	7.43	15.3	2.09	39.3	746	98.1
	0809	7.0	7.27	15.4	2.10	41.3	731	59.4
	0813	10.5	7.52	15.3	3.48	42.7	727	42.7
	0819	14.0	7.75	15.3	6.36	43.5	721	13.5

Sampling Date & Time 12/20/2016 @ 0819

Notes

Field Groundwater Sampling Record

Facility NABORS Date 9/20/2016 Well No. NAB-4
 Sampling Personnel Darren Motley
 Casing Diameter 2.0" Condition of well ok Locked? yes
 Well Depth 132.0 DTW (from TOC) 108.07 Volume H2O in well 3.9
 Other Information
 Sunny 23°
 5 mph wind
 sub-pump
 start purging @ 0946

Date	Time	Volume (gallons)	pH (SU)	Temp (°C)	D.O. (mg/L)	ORP (mV)	S.C (µSm)	Turbidity (NTU)
12/20/2016	1009	4.0	6.40	16.1	1.49	44.9	741	233
	1021	8.0	6.33	16.0	2.02	35.0	744	83.5
	1034	12.0	6.28	16.3	0.86	39.0	738	40.2
	1042	16.0	6.26	15.8	0.78	38.2	743	13.4

Sampling Date & Time 12/20/2016 @ 1042

Notes

pad is lifted off of ground

Field Groundwater Sampling Record

Facility NABORS Date 12/20/2016 Well No. NAB-7
 Sampling Personnel Darren Motley
 Casing Diameter 2.0" Condition of well _____ Locked? _____
 Well Depth 44.0 DTW (from TOC) 22.51 Volume H2O in well 3.5
 Other Information _____
 Sunny 95°
 5 mph wind
 sub-pump
 start purging @ 1447

Date	Time	Volume (gallons)	pH (SU)	Temp (°C)	D.O. (mg/L)	ORP (mV)	S.C (µSm)	Turbidity (NTU)
12/20/2016	1455	3.5	6.46	16.0	1.01	18.8	626	27.2
	1505	7.0	6.25	16.0	0.77	18.9	632	3.23
	1515	10.5	6.30	16.0	0.90	19.2	636	2.71

Sampling Date & Time 12/20/2016 @ 1515

Notes _____

Field Groundwater Sampling Record

Facility NABORS Date 12/19/2016 Well No. NAB-8
 Sampling Personnel Darren Motley
 Casing Diameter 2.0" Condition of well ok Locked? yes
 Well Depth 95.0 DTW (from TOC) 78.54 Volume H2O in well 2.6
 Other Information
 Sunny 20°
 5 mph wind
 Bailer
 start purging @ 1230

Date	Time	Volume (gallons)	pH (SU)	Temp (°C)	D.O. (mg/L)	ORP (mV)	S.C (µSm)	Turbidity (NTU)
12/19/2016	1240	3.0	8.61	11.9	3.90	72.8	605	21.3
Dry @ 3 gallons								
12/20/2016	0700		4.00	5.2	4.36	93.6	624	17.8

Sampling Date & Time 12/20/2016 @ 0700

Notes

Field Groundwater Sampling Record

Facility NABORS Date 12/20/2016 Well No. MW-509D
 Sampling Personnel Darren Motley
 Casing Diameter 2.0" Condition of well _____ Locked? _____
 Well Depth 39.65 DTW (from TOC) 24.25 Volume H2O in well 2.5
 Other Information _____
 Sunny, 42°
 5 mph wind
 sub-pump
 start purging @ 1300

Date	Time	Volume (gallons)	pH (SU)	Temp (°C)	D.O. (mg/L)	ORP (mV)	S.C (µSm)	Turbidity (NTU)
12/20/2016	1310	2.5	6.33	17.2	5.35	28.1	656	326
	1316	5.0	6.36	17.3	5.18	28.8	653	115
	1324	7.5	6.31	17.2	5.27	30.7	653	83.5
	1330	10.0	6.28	17.2	5.24	30.4	655	106
	1345	12.5	6.28	17.1	4.99	31.7	660	109
	1353	15.0	6.26	17.0	4.54	31.8	662	103
	1358	17.5	6.23	17.0	4.51	32.0	664	153
	1415	24.5	6.20	16.8	3.60	32.1	667	59.1

Sampling Date & Time 12/20/2016 @ 1415

Notes _____

Field Groundwater Sampling Record

Facility NABORS Date 12/20/2016 Well No. MW-577
 Sampling Personnel Darren Motley
 Casing Diameter 2.0" Condition of well ok Locked? yes
 Well Depth 55.6 DTW (from TOC) 42.25 Volume H₂O in well 2.1
 Other Information
 Sunny, 32°
 5 mph wind
 sub-pump
 start purging @ 1149

Date	Time	Volume (gallons)	pH (SU)	Temp (°C)	D.O. (mg/L)	ORP (mV)	S.C (µSm)	Turbidity (NTU)
12/20/2016	1156	2.0	6.44	16.0	2.20	36.9	693	25.5
	1204	4.0	6.47	16.1	1.48	27.8	676	5.72
	1210	6.0	6.28	16.1	1.40	27.7	674	4.79

Sampling Date & Time 12/20/2016 @ 1210

Notes

Field Groundwater Sampling Record

Facility NABORS Date 12/20/2016 Well No. MW-633D
 Sampling Personnel Darren Motley
 Casing Diameter 2.0" Condition of well OK Locked? YES
 Well Depth 87.92 DTW (from TOC) 64.40 Volume H2O in well 3.8
 Other Information
 Sunny 30°
 5 mph wind
 sub-pump
 start purging @ 1102

Date	Time	Volume (gallons)	pH (SU)	Temp (°C)	D.O. (mg/L)	ORP (mV)	S.C (µSm)	Turbidity (NTU)
12/20/2016	1112	4.0	6.60	16.5	1.49	42.8	719	64.2
	1221	8.0	6.54	16.8	1.22	39.6	718	6.54
	1130	12.0	6.41	17.0	1.13	38.4	719	4.99

Sampling Date & Time 12/20/2016 @ 1130

Notes

Field Groundwater Sampling Record

Facility NABORS Date 12/20/2016 Well No. MW-689D
 Sampling Personnel Darren Motley
 Casing Diameter 2.0" Condition of well ok Locked? yes
 Well Depth 44.45 DTW (from TOC) 26.08 Volume H₂O in well 2.9
 Other Information
 Sunny 18°
 5 mph wind
 sub-pump
 start purging @ 0836

Date	Time	Volume (gallons)	pH (SU)	Temp (°C)	D.O. (mg/L)	ORP (mV)	S.C (µSm)	Turbidity (NTU)
12/20/2016	0845	3.0	10.81	16.8	2.24	38.0	663	551
	0851	6.0	6.43	16.8	1.33	34.6	669	141
	0859	9.0	6.24	16.9	0.92	34.1	669	69.3
	0906	12.0	6.30	16.8	2.36	32.3	668	43.4
	0913	15.0	6.35	16.9	0.62	32.0	669	31.0
	0920	18.0	6.30	16.9	0.52	32.2	671	25.4
	0925	21.0	6.33	16.9	0.448	32.7	672	20.1
	0931	24.0	6.38	16.9	0.42	32.1	672	16.8

Sampling Date & Time 12/20/2016 @ 0931

Notes

Field Groundwater Sampling Record

Facility NABORS Date 12/19/2016 Well No. NE-2
Sampling Personnel Darren Motley
Casing Diameter 2.0" Condition of well ok Locked? yes
Well Depth 64.0 DTW (from TOC) 53.10 Volume H2O in well 1.5
Other Information
Sunny, 18°
5 mph wind
bailer
start purging @ 1150

Date	Time	Volume (gallons)	pH (SU)	Temp (°C)	D.O. (mg/L)	ORP (mV)	S.C (µSm)	Turbidity (NTU)
12/19/2016	1150	1.0	8.0	13.5	2.50	141.5	2192	19.2

Sampling Date & Time 12/19/2016 @ 1150

Notes

Field Groundwater Sampling Record

Facility NABORS Date 12/19/2016 Well No. NE-3
 Sampling Personnel Darren Motley
 Casing Diameter 2.0" Condition of well ok Locked? yes
 Well Depth 27.7 DTW (from TOC) 8.30 Volume H₂O in well 3.1
 Other Information _____
 Sunny 20°
 5 mph wind
 Sub-pump
 started purging @ 1210

Date	Time	Volume (gallons)	pH (SU)	Temp (°C)	D.O. (mg/L)	ORP (mV)	S.C (µSm)	Turbidity (NTU)
12/19/2016	1215	3.0	9.55	11.1	4.94	81.1	668	237
Dry @ 4.5 gallons								
12/20/2016	0730		4.64	7.1	5.36	88.2	592	13.8

Sampling Date & Time 12/20/2016 @ 0730

Notes _____

Field Groundwater Sampling Record

Facility NABORS Date 12/21/2016 Well No. NE-6
 Sampling Personnel Darren Motley
 Casing Diameter 2.0" Condition of well ok Locked? yes
 Well Depth 18.15 DTW (from TOC) 9.35 Volume H2O in well 1.4
 Other Information
 Sunny 30°
 5 mph wind
 sub-pump
 start purging @ 0812

Date	Time	Volume (gallons)	pH (SU)	Temp (°C)	D.O. (mg/L)	ORP (mV)	S.C (µSm)	Turbidity (NTU)
12/21/2016	0814	1.5	6.43	14.9	7.29	-0.1	606	11.8
	0817	3.0	6.35	15.5	2.53	-6.6	635	5.17
	0820	4.5	6.32	15.5	2.36	-6.9	623	3.36

Sampling Date & Time 12/21/2016 @ 0820

Notes

Field Groundwater Sampling Record

Facility NABORS Date 12/20/2016 Sample. LeachateSampling Personnel Darren Motley

Other Information

Sunny 40°5 mph wind

Date	Time	Volume (gallons)	pH (SU)	Temp (°C)	D.O. (mg/L)	ORP (mV)	S.C (µSm)	Turbidity (NTU)
12/20/2016	1705		7.59	3.1	8.73	90.8	3605	156

Sampling Date & Time 1705

Notes

Field Spring Sampling Record

Facility NABORS Date 12/21/2016Sampling Personnel Darren Motley

Other Information _____

Sunny 45

5 mph wind

Sample ID	Sample Date	Time	pH (SU)	Temp (°C)	D.O. (mg/L)	ORP (mV)	S.C (µSm)	Turbidity (NTU)
SP-NE-3	1055	Dry						
TSP-3	1050	Dry						
TSP-4	1045	Dry						
Spring-A	1140		6.81	14.0	5.47	-25.6	573	6.28
Class I Draw	1105		6.65	7.1	5.67	-8.4	557	8.83
Class IV Draw	1110	Dry						
SP-7	1130		6.75	11.7	6.02	-16.9	472	23.4
Spring B	1100	Dry						
Entrance Sweep	1120		6.95	8.1	5.55	-14.2	576	10.8

Notes _____

APPENDIX C

LABORATORY ANALYTICAL RESULTS

SCS Engineers - Little Rock, AR

Sample Delivery Group: L880396

Samples Received: 12/22/2016

Project Number:

Description: Nabors Landfill

Report To:

Stacie Whitmer

11219 Richardson Drive

North Little Rock, AR 72113

Entire Report Reviewed By:



Mark W. Beasley

Technical Service Representative

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.



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¹Cp²Tc³Ss⁴Cn⁵Sr⁶Gl⁷Al⁸Sc



⁸Sc: Chain of Custody

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¹ Cp
² Tc
³ Ss
⁴ Cn
⁵ Sr
⁶ Gl
⁷ Al
⁸ Sc

SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



MW-1 L880396-01 GW

Collected by
Darren Motley

Collected date/time
12/20/16 15:58

Received date/time
12/22/16 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG938474	1	12/27/16 13:24	12/27/16 15:37	JER
Mercury by Method 7470A	WG938137	1	12/23/16 09:21	12/23/16 14:50	TRB
Metals (ICPMS) by Method 6020	WG938047	1	12/27/16 11:18	12/29/16 23:04	VSS
Volatile Organic Compounds (GC/MS) by Method 8260B	WG938408	1	12/26/16 04:17	12/26/16 04:17	ACG
Wet Chemistry by Method 4500S2 D-2011	WG938032	1	12/22/16 22:24	12/22/16 22:24	MZ
Wet Chemistry by Method 9012B	WG938805	1	12/28/16 09:52	12/29/16 09:29	DR
Wet Chemistry by Method 9056A	WG938352	1	12/24/16 16:17	12/24/16 16:17	NJM
Wet Chemistry by Method 9056A	WG938352	5	12/24/16 20:16	12/24/16 20:16	NJM
Wet Chemistry by Method 9060A	WG938825	1	12/29/16 12:12	12/29/16 12:12	SJM

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Gl

⁷ Al

⁸ Sc

MW-2 L880396-02 GW

Collected by
Darren Motley

Collected date/time
12/20/16 16:52

Received date/time
12/22/16 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG938474	1	12/27/16 13:24	12/27/16 15:37	JER
Mercury by Method 7470A	WG938137	1	12/23/16 09:21	12/23/16 14:57	TRB
Metals (ICPMS) by Method 6020	WG938047	1	12/27/16 11:18	12/29/16 23:07	VSS
Volatile Organic Compounds (GC/MS) by Method 8260B	WG938408	1	12/26/16 04:41	12/26/16 04:41	ACG
Wet Chemistry by Method 4500S2 D-2011	WG938032	1	12/22/16 22:24	12/22/16 22:24	MZ
Wet Chemistry by Method 9012B	WG938805	1	12/28/16 09:52	12/29/16 09:30	DR
Wet Chemistry by Method 9056A	WG938352	1	12/24/16 16:32	12/24/16 16:32	NJM
Wet Chemistry by Method 9060A	WG938824	1	12/28/16 13:39	12/28/16 13:39	SJM

MW-3 L880396-03 GW

Collected by
Darren Motley

Collected date/time
12/21/16 08:04

Received date/time
12/22/16 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG938476	1	12/27/16 13:32	12/27/16 14:20	JER
Mercury by Method 7470A	WG938137	1	12/23/16 09:21	12/23/16 14:59	TRB
Metals (ICPMS) by Method 6020	WG938047	1	12/27/16 11:18	12/29/16 23:11	VSS
Volatile Organic Compounds (GC/MS) by Method 8260B	WG938408	1	12/26/16 05:04	12/26/16 05:04	ACG
Wet Chemistry by Method 4500S2 D-2011	WG938032	1	12/22/16 22:24	12/22/16 22:24	MZ
Wet Chemistry by Method 9012B	WG938805	1	12/28/16 09:52	12/29/16 09:31	DR
Wet Chemistry by Method 9056A	WG938352	1	12/24/16 15:47	12/24/16 15:47	NJM
Wet Chemistry by Method 9060A	WG938824	1	12/28/16 13:50	12/28/16 13:50	SJM

MW-4 L880396-04 GW

Collected by
Darren Motley

Collected date/time
12/21/16 08:47

Received date/time
12/22/16 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG938476	1	12/27/16 13:32	12/27/16 14:20	JER
Mercury by Method 7470A	WG938137	1	12/23/16 09:21	12/23/16 15:02	TRB
Metals (ICPMS) by Method 6020	WG938047	1	12/27/16 11:18	12/29/16 23:14	VSS
Volatile Organic Compounds (GC/MS) by Method 8260B	WG938408	1	12/26/16 05:27	12/26/16 05:27	ACG
Wet Chemistry by Method 4500S2 D-2011	WG938032	1	12/22/16 22:24	12/22/16 22:24	MZ
Wet Chemistry by Method 9012B	WG938805	1	12/28/16 09:52	12/29/16 09:32	DR
Wet Chemistry by Method 9056A	WG938352	1	12/24/16 17:32	12/24/16 17:32	NJM
Wet Chemistry by Method 9060A	WG938824	1	12/28/16 14:02	12/28/16 14:02	SJM

ACCOUNT:

SCS Engineers - Little Rock, AR

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01/03/17 09:02

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SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



MW-5 L880396-05 GW

Collected by
Darren Motley

Collected date/time
12/21/16 09:11

Received date/time
12/22/16 09:30

¹Cp

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG938476	1	12/27/16 13:32	12/27/16 14:20	JER
Mercury by Method 7470A	WG938137	1	12/23/16 09:21	12/23/16 15:04	TRB
Metals (ICPMS) by Method 6020	WG938047	1	12/27/16 11:18	12/29/16 23:18	VSS
Volatile Organic Compounds (GC/MS) by Method 8260B	WG938408	1	12/26/16 05:51	12/26/16 05:51	ACG
Wet Chemistry by Method 4500S2 D-2011	WG938032	1	12/22/16 22:24	12/22/16 22:24	MZ
Wet Chemistry by Method 9012B	WG938805	1	12/28/16 09:52	12/29/16 09:33	DR
Wet Chemistry by Method 9056A	WG938352	1	12/24/16 17:47	12/24/16 17:47	NJM
Wet Chemistry by Method 9060A	WG938824	1	12/28/16 14:13	12/28/16 14:13	SJM

²Tc

³Ss

⁴Cn

⁵Sr

MW-6 L880396-06 GW

Collected by
Darren Motley

Collected date/time
12/21/16 09:46

Received date/time
12/22/16 09:30

⁶Gl

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG938476	1	12/27/16 13:32	12/27/16 14:20	JER
Mercury by Method 7470A	WG938137	1	12/23/16 09:21	12/23/16 15:06	TRB
Metals (ICPMS) by Method 6020	WG938047	1	12/27/16 11:18	12/29/16 23:22	VSS
Volatile Organic Compounds (GC/MS) by Method 8260B	WG938408	1	12/26/16 06:14	12/26/16 06:14	ACG
Wet Chemistry by Method 4500S2 D-2011	WG938032	1	12/22/16 22:25	12/22/16 22:25	MZ
Wet Chemistry by Method 9012B	WG938805	1	12/28/16 09:52	12/29/16 09:36	DR
Wet Chemistry by Method 9056A	WG938352	1	12/24/16 18:31	12/24/16 18:31	NJM
Wet Chemistry by Method 9060A	WG938824	1	12/28/16 14:24	12/28/16 14:24	SJM

⁷Al

⁸Sc

MW-7 L880396-07 GW

Collected by
Darren Motley

Collected date/time
12/20/16 14:38

Received date/time
12/22/16 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG938474	1	12/27/16 13:24	12/27/16 15:37	JER
Mercury by Method 7470A	WG938137	1	12/23/16 09:21	12/23/16 15:15	TRB
Metals (ICPMS) by Method 6020	WG938047	1	12/27/16 11:18	12/29/16 23:25	VSS
Volatile Organic Compounds (GC/MS) by Method 8260B	WG938408	1	12/26/16 06:37	12/26/16 06:37	ACG
Wet Chemistry by Method 4500S2 D-2011	WG938032	1	12/22/16 22:26	12/22/16 22:26	MZ
Wet Chemistry by Method 9012B	WG938805	1	12/28/16 09:52	12/29/16 09:37	DR
Wet Chemistry by Method 9056A	WG938352	1	12/24/16 18:46	12/24/16 18:46	NJM
Wet Chemistry by Method 9060A	WG938824	1	12/28/16 14:35	12/28/16 14:35	SJM

CAO-1 L880396-08 GW

Collected by
Darren Motley

Collected date/time
12/21/16 10:22

Received date/time
12/22/16 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG938476	1	12/27/16 13:32	12/27/16 14:20	JER
Mercury by Method 7470A	WG938137	1	12/23/16 09:21	12/23/16 15:18	TRB
Metals (ICPMS) by Method 6020	WG938047	1	12/27/16 11:18	12/29/16 23:29	VSS
Volatile Organic Compounds (GC/MS) by Method 8260B	WG938408	1	12/26/16 07:00	12/26/16 07:00	ACG
Wet Chemistry by Method 4500S2 D-2011	WG938032	1	12/22/16 22:26	12/22/16 22:26	MZ
Wet Chemistry by Method 9012B	WG938805	1	12/28/16 09:52	12/29/16 09:38	DR
Wet Chemistry by Method 9056A	WG938352	1	12/24/16 19:01	12/24/16 19:01	NJM
Wet Chemistry by Method 9060A	WG938825	2	12/29/16 12:37	12/29/16 12:37	SJM

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SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



CAO-2 L880396-09 GW

Collected by
Darren Motley

Collected date/time
12/21/16 07:48

Received date/time
12/22/16 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG938690	1	12/28/16 13:53	12/28/16 14:22	JER
Mercury by Method 7470A	WG938137	1	12/23/16 09:21	12/23/16 15:20	TRB
Metals (ICPMS) by Method 6020	WG938047	1	12/27/16 11:18	12/29/16 23:32	VSS
Volatile Organic Compounds (GC/MS) by Method 8260B	WG938408	1	12/26/16 07:24	12/26/16 07:24	ACG
Wet Chemistry by Method 4500S2 D-2011	WG938032	1	12/22/16 22:26	12/22/16 22:26	MZ
Wet Chemistry by Method 9012B	WG938805	1	12/28/16 09:52	12/29/16 09:39	DR
Wet Chemistry by Method 9056A	WG938352	1	12/24/16 19:16	12/24/16 19:16	NJM
Wet Chemistry by Method 9060A	WG938824	1	12/28/16 14:58	12/28/16 14:58	SJM

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Gl

⁷ Al

⁸ Sc

CAO-3 L880396-10 GW

Collected by
Darren Motley

Collected date/time
12/21/16 07:20

Received date/time
12/22/16 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG938690	1	12/28/16 13:53	12/28/16 14:22	JER
Mercury by Method 7470A	WG938137	1	12/23/16 09:21	12/23/16 15:22	TRB
Metals (ICPMS) by Method 6020	WG938047	1	12/27/16 11:18	12/29/16 23:36	VSS
Volatile Organic Compounds (GC/MS) by Method 8260B	WG938408	1	12/26/16 07:47	12/26/16 07:47	ACG
Wet Chemistry by Method 4500S2 D-2011	WG938032	1	12/22/16 22:26	12/22/16 22:26	MZ
Wet Chemistry by Method 9012B	WG938805	1	12/28/16 09:52	12/29/16 09:41	DR
Wet Chemistry by Method 9056A	WG938354	1	12/27/16 16:01	12/27/16 16:01	KCF
Wet Chemistry by Method 9060A	WG938824	1	12/28/16 15:10	12/28/16 15:10	SJM

NAB-2 L880396-11 GW

Collected by
Darren Motley

Collected date/time
12/20/16 12:53

Received date/time
12/22/16 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG938474	1	12/27/16 13:24	12/27/16 15:37	JER
Mercury by Method 7470A	WG938137	1	12/23/16 09:21	12/23/16 15:24	TRB
Metals (ICPMS) by Method 6020	WG938047	1	12/27/16 11:18	12/29/16 23:50	VSS
Volatile Organic Compounds (GC/MS) by Method 8260B	WG938408	1	12/26/16 08:10	12/26/16 08:10	ACG
Wet Chemistry by Method 4500S2 D-2011	WG938032	1	12/22/16 22:26	12/22/16 22:26	MZ
Wet Chemistry by Method 9012B	WG938805	1	12/28/16 09:52	12/29/16 09:42	DR
Wet Chemistry by Method 9056A	WG938354	1	12/27/16 16:21	12/27/16 16:21	KCF
Wet Chemistry by Method 9060A	WG938824	1	12/28/16 16:16	12/28/16 16:16	SJM

NAB-3 L880396-12 GW

Collected by
Darren Motley

Collected date/time
12/20/16 08:19

Received date/time
12/22/16 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG938474	1	12/27/16 13:24	12/27/16 15:37	JER
Mercury by Method 7470A	WG938411	1	12/24/16 05:59	12/27/16 14:46	NJB
Metals (ICPMS) by Method 6020	WG938047	1	12/27/16 11:18	12/29/16 23:54	VSS
Volatile Organic Compounds (GC/MS) by Method 8260B	WG938408	1	12/26/16 08:33	12/26/16 08:33	ACG
Wet Chemistry by Method 4500S2 D-2011	WG938032	1	12/22/16 22:26	12/22/16 22:26	MZ
Wet Chemistry by Method 9012B	WG938805	1	12/28/16 09:52	12/29/16 09:43	DR
Wet Chemistry by Method 9056A	WG938354	1	12/27/16 16:31	12/27/16 16:31	KCF
Wet Chemistry by Method 9060A	WG938824	1	12/28/16 16:41	12/28/16 16:41	SJM

ACCOUNT:

SCS Engineers - Little Rock, AR

PROJECT:

SDG:

L880396

DATE/TIME:

01/03/17 09:02

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SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



NAB-4 L880396-13 GW

			Collected by Darren Motley	Collected date/time 12/20/16 10:42	Received date/time 12/22/16 09:30
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG938474	1	12/27/16 13:24	12/27/16 15:37	JER
Mercury by Method 7470A	WG938137	1	12/23/16 09:21	12/23/16 15:27	TRB
Metals (ICPMS) by Method 6020	WG938047	1	12/27/16 11:18	12/29/16 23:57	VSS
Volatile Organic Compounds (GC/MS) by Method 8260B	WG938408	1	12/26/16 08:57	12/26/16 08:57	ACG
Wet Chemistry by Method 4500S2 D-2011	WG938032	1	12/22/16 22:27	12/22/16 22:27	MZ
Wet Chemistry by Method 9012B	WG938805	1	12/28/16 09:52	12/29/16 09:44	DR
Wet Chemistry by Method 9056A	WG938354	1	12/27/16 16:41	12/27/16 16:41	KCF
Wet Chemistry by Method 9060A	WG938824	1	12/28/16 16:55	12/28/16 16:55	SJM

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

NAB-7 L880396-14 GW

			Collected by Darren Motley	Collected date/time 12/20/16 15:15	Received date/time 12/22/16 09:30
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG938474	1	12/27/16 13:24	12/27/16 15:37	JER
Mercury by Method 7470A	WG938137	1	12/23/16 09:21	12/23/16 15:29	TRB
Metals (ICPMS) by Method 6020	WG938047	1	12/27/16 11:18	12/30/16 00:01	VSS
Volatile Organic Compounds (GC/MS) by Method 8260B	WG938408	1	12/26/16 09:20	12/26/16 09:20	ACG
Wet Chemistry by Method 4500S2 D-2011	WG938032	1	12/22/16 22:27	12/22/16 22:27	MZ
Wet Chemistry by Method 9012B	WG938805	1	12/28/16 09:52	12/29/16 09:47	DR
Wet Chemistry by Method 9056A	WG938354	1	12/27/16 16:52	12/27/16 16:52	KCF
Wet Chemistry by Method 9060A	WG938824	1	12/28/16 17:06	12/28/16 17:06	SJM

⁶ Gl

⁷ Al

⁸ Sc

NAB-8 L880396-15 GW

			Collected by Darren Motley	Collected date/time 12/20/16 07:00	Received date/time 12/22/16 09:30
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG938474	1	12/27/16 13:24	12/27/16 15:37	JER
Mercury by Method 7470A	WG938137	1	12/23/16 09:21	12/23/16 15:31	TRB
Metals (ICPMS) by Method 6020	WG938047	1	12/27/16 11:18	12/30/16 00:04	VSS
Volatile Organic Compounds (GC/MS) by Method 8260B	WG938408	1	12/26/16 09:43	12/26/16 09:43	ACG
Wet Chemistry by Method 4500S2 D-2011	WG938033	1	12/22/16 22:09	12/22/16 22:09	MZ
Wet Chemistry by Method 9012B	WG938805	1	12/28/16 09:52	12/29/16 09:48	DR
Wet Chemistry by Method 9056A	WG938354	1	12/27/16 17:02	12/27/16 17:02	KCF
Wet Chemistry by Method 9060A	WG938824	1	12/28/16 17:32	12/28/16 17:32	SJM

MW-509D L880396-16 GW

			Collected by Darren Motley	Collected date/time 12/20/16 14:15	Received date/time 12/22/16 09:30
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG938474	1	12/27/16 13:24	12/27/16 15:37	JER
Mercury by Method 7470A	WG938137	1	12/23/16 09:21	12/23/16 15:33	TRB
Metals (ICPMS) by Method 6020	WG938047	1	12/27/16 11:18	12/30/16 00:08	VSS
Volatile Organic Compounds (GC/MS) by Method 8260B	WG938408	1	12/26/16 10:07	12/26/16 10:07	ACG
Wet Chemistry by Method 4500S2 D-2011	WG938033	1	12/22/16 22:10	12/22/16 22:10	MZ
Wet Chemistry by Method 9012B	WG938805	1	12/28/16 09:52	12/29/16 09:51	DR
Wet Chemistry by Method 9056A	WG938354	1	12/27/16 17:42	12/27/16 17:42	KCF
Wet Chemistry by Method 9060A	WG938824	1	12/28/16 17:43	12/28/16 17:43	SJM

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SCS Engineers - Little Rock, AR

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SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



MW-577 L880396-17 GW

Collected by
Darren Motley

Collected date/time
12/20/16 12:10

Received date/time
12/22/16 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG938474	1	12/27/16 13:24	12/27/16 15:37	JER
Mercury by Method 7470A	WG938137	1	12/23/16 09:21	12/23/16 15:36	TRB
Metals (ICPMS) by Method 6020	WG938047	1	12/27/16 11:18	12/30/16 00:12	VSS
Volatile Organic Compounds (GC/MS) by Method 8260B	WG938408	1	12/26/16 10:30	12/26/16 10:30	ACG
Wet Chemistry by Method 4500S2 D-2011	WG938033	1	12/22/16 22:10	12/22/16 22:10	MZ
Wet Chemistry by Method 9012B	WG938805	1	12/28/16 09:52	12/29/16 09:52	DR
Wet Chemistry by Method 9056A	WG938354	1	12/27/16 17:53	12/27/16 17:53	KCF
Wet Chemistry by Method 9060A	WG938824	1	12/28/16 17:55	12/28/16 17:55	SJM

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Gl

⁷ Al

⁸ Sc

MW-689D L880396-18 GW

Collected by
Darren Motley

Collected date/time
12/20/16 09:31

Received date/time
12/22/16 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG938475	1	12/27/16 13:28	12/27/16 14:58	JER
Mercury by Method 7470A	WG938137	1	12/23/16 09:21	12/23/16 15:42	TRB
Metals (ICPMS) by Method 6020	WG938047	1	12/27/16 11:18	12/30/16 00:15	VSS
Volatile Organic Compounds (GC/MS) by Method 8260B	WG938408	1	12/26/16 10:53	12/26/16 10:53	ACG
Wet Chemistry by Method 4500S2 D-2011	WG938033	1	12/22/16 22:10	12/22/16 22:10	MZ
Wet Chemistry by Method 9012B	WG938805	1	12/28/16 09:52	12/29/16 09:53	DR
Wet Chemistry by Method 9056A	WG938354	1	12/27/16 18:03	12/27/16 18:03	KCF
Wet Chemistry by Method 9060A	WG938825	1	12/29/16 12:57	12/29/16 12:57	SJM

MW-633D L880396-19 GW

Collected by
Darren Motley

Collected date/time
12/20/16 11:30

Received date/time
12/22/16 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG938475	1	12/27/16 13:28	12/27/16 14:58	JER
Mercury by Method 7470A	WG938137	1	12/23/16 09:21	12/23/16 15:45	TRB
Metals (ICPMS) by Method 6020	WG938047	1	12/27/16 11:18	12/30/16 00:19	VSS
Volatile Organic Compounds (GC/MS) by Method 8260B	WG938408	1	12/26/16 11:17	12/26/16 11:17	ACG
Wet Chemistry by Method 4500S2 D-2011	WG938033	1	12/22/16 22:11	12/22/16 22:11	MZ
Wet Chemistry by Method 9012B	WG938805	1	12/28/16 09:52	12/29/16 09:54	DR
Wet Chemistry by Method 9056A	WG938354	1	12/27/16 18:13	12/27/16 18:13	KCF
Wet Chemistry by Method 9060A	WG938825	1	12/29/16 13:46	12/29/16 13:46	SJM

NE-2 L880396-20 GW

Collected by
Darren Motley

Collected date/time
12/19/16 11:50

Received date/time
12/22/16 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG938167	1	12/24/16 05:22	12/25/16 00:15	JM
Mercury by Method 7470A	WG938137	1	12/23/16 09:21	12/23/16 15:47	TRB
Metals (ICPMS) by Method 6020	WG938047	1	12/27/16 11:18	12/29/16 22:24	VSS
Volatile Organic Compounds (GC/MS) by Method 8260B	WG938408	1	12/26/16 11:40	12/26/16 11:40	ACG
Wet Chemistry by Method 4500S2 D-2011	WG938033	1	12/22/16 22:11	12/22/16 22:11	MZ
Wet Chemistry by Method 9012B	WG938805	1	12/28/16 09:52	12/29/16 09:58	DR
Wet Chemistry by Method 9056A	WG938354	1	12/27/16 18:23	12/27/16 18:23	KCF
Wet Chemistry by Method 9056A	WG939061	20	12/28/16 12:47	12/28/16 12:47	KCF
Wet Chemistry by Method 9060A	WG938825	1	12/29/16 14:15	12/29/16 14:15	SJM

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SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



NE-3 L880396-21 GW

Collected by
Darren Motley

Collected date/time
12/20/16 07:30

Received date/time
12/22/16 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG938475	1	12/27/16 13:28	12/27/16 14:58	JER
Mercury by Method 7470A	WG938138	1	12/23/16 09:22	12/23/16 17:37	TRB
Metals (ICPMS) by Method 6020	WG938049	1	12/27/16 13:37	12/30/16 01:36	VSS
Metals (ICPMS) by Method 6020	WG939602	1	12/30/16 07:06	12/30/16 10:18	JPD
Volatile Organic Compounds (GC/MS) by Method 8260B	WG938588	1	12/26/16 00:57	12/26/16 00:57	JHH
Wet Chemistry by Method 4500S2 D-2011	WG938033	1	12/22/16 22:11	12/22/16 22:11	MZ
Wet Chemistry by Method 9012B	WG939301	1	12/29/16 14:18	12/29/16 17:43	ASK
Wet Chemistry by Method 9056A	WG938354	1	12/27/16 18:33	12/27/16 18:33	KCF
Wet Chemistry by Method 9060A	WG939610	1	12/31/16 11:59	12/31/16 11:59	SJM

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Gl

⁷ Al

⁸ Sc

NE-6 L880396-22 GW

Collected by
Darren Motley

Collected date/time
12/21/16 08:20

Received date/time
12/22/16 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG938690	1	12/28/16 13:53	12/28/16 14:22	JER
Mercury by Method 7470A	WG938138	1	12/23/16 09:22	12/23/16 17:39	TRB
Metals (ICPMS) by Method 6020	WG938049	1	12/27/16 13:37	12/30/16 01:40	VSS
Metals (ICPMS) by Method 6020	WG939602	1	12/30/16 07:06	12/30/16 10:22	JPD
Volatile Organic Compounds (GC/MS) by Method 8260B	WG938588	1	12/26/16 01:21	12/26/16 01:21	JHH
Wet Chemistry by Method 4500S2 D-2011	WG938033	1	12/22/16 22:12	12/22/16 22:12	MZ
Wet Chemistry by Method 9012B	WG939301	1	12/29/16 14:18	12/29/16 17:44	ASK
Wet Chemistry by Method 9056A	WG939061	1	12/28/16 12:57	12/28/16 12:57	KCF
Wet Chemistry by Method 9060A	WG939610	1	12/31/16 12:34	12/31/16 12:34	SJM

MW-1R L880396-23 GW

Collected by
Darren Motley

Collected date/time
12/20/16 16:29

Received date/time
12/22/16 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG938475	1	12/27/16 13:28	12/27/16 14:58	JER
Mercury by Method 7470A	WG938138	1	12/23/16 09:22	12/23/16 17:41	TRB
Metals (ICPMS) by Method 6020	WG938049	1	12/27/16 13:37	12/30/16 01:43	VSS
Metals (ICPMS) by Method 6020	WG939602	2	12/30/16 07:06	12/30/16 11:12	JPD
Volatile Organic Compounds (GC/MS) by Method 8260B	WG938588	1	12/26/16 01:45	12/26/16 01:45	JHH
Wet Chemistry by Method 4500S2 D-2011	WG938033	1	12/22/16 22:12	12/22/16 22:12	MZ
Wet Chemistry by Method 9012B	WG939301	1	12/29/16 14:18	12/29/16 17:47	ASK
Wet Chemistry by Method 9056A	WG938354	2	12/27/16 19:34	12/27/16 19:34	KCF
Wet Chemistry by Method 9060A	WG939610	1	12/31/16 12:52	12/31/16 12:52	SJM

SP-7 L880396-24 GW

Collected by
Darren Motley

Collected date/time
12/21/16 11:30

Received date/time
12/22/16 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG938690	1	12/28/16 13:53	12/28/16 14:22	JER
Mercury by Method 7470A	WG938138	1	12/23/16 09:22	12/23/16 17:43	TRB
Metals (ICPMS) by Method 6020	WG938049	1	12/27/16 13:37	12/30/16 01:47	VSS
Volatile Organic Compounds (GC/MS) by Method 8260B	WG938588	1	12/26/16 02:09	12/26/16 02:09	JHH
Wet Chemistry by Method 4500S2 D-2011	WG938033	1	12/22/16 22:12	12/22/16 22:12	MZ
Wet Chemistry by Method 9012B	WG939301	1	12/29/16 14:18	12/29/16 17:48	ASK
Wet Chemistry by Method 9056A	WG938354	1	12/27/16 19:44	12/27/16 19:44	KCF
Wet Chemistry by Method 9060A	WG939610	1	12/31/16 13:10	12/31/16 13:10	SJM

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SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



SPRING-A L880396-25 GW

			Collected by Darren Motley	Collected date/time 12/21/16 11:40	Received date/time 12/22/16 09:30
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG938690	1	12/28/16 13:53	12/28/16 14:22	JER
Mercury by Method 7470A	WG938138	1	12/23/16 09:22	12/23/16 17:46	TRB
Metals (ICPMS) by Method 6020	WG938049	1	12/27/16 13:37	12/30/16 01:50	VSS
Metals (ICPMS) by Method 6020	WG939602	1	12/30/16 07:06	12/30/16 10:36	JPD
Volatile Organic Compounds (GC/MS) by Method 8260B	WG938676	1	12/26/16 15:30	12/26/16 15:30	BMB
Wet Chemistry by Method 4500S2 D-2011	WG938033	1	12/22/16 22:12	12/22/16 22:12	MZ
Wet Chemistry by Method 9012B	WG939301	1	12/29/16 14:18	12/29/16 17:49	ASK
Wet Chemistry by Method 9056A	WG938354	1	12/27/16 19:54	12/27/16 19:54	KCF
Wet Chemistry by Method 9060A	WG939610	1	12/31/16 13:29	12/31/16 13:29	SJM



LANDFILL ENTRANCE SEEP L880396-26 GW

			Collected by Darren Motley	Collected date/time 12/21/16 11:20	Received date/time 12/22/16 09:30
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG938690	1	12/28/16 13:53	12/28/16 14:22	JER
Mercury by Method 7470A	WG938138	1	12/23/16 09:22	12/23/16 17:48	TRB
Metals (ICPMS) by Method 6020	WG938049	1	12/27/16 13:37	12/30/16 01:54	VSS
Volatile Organic Compounds (GC/MS) by Method 8260B	WG938676	1	12/26/16 15:43	12/26/16 15:43	BMB
Wet Chemistry by Method 4500S2 D-2011	WG938033	1	12/22/16 22:13	12/22/16 22:13	MZ
Wet Chemistry by Method 9012B	WG939301	1	12/29/16 14:18	12/29/16 17:52	ASK
Wet Chemistry by Method 9056A	WG938354	1	12/27/16 20:05	12/27/16 20:05	KCF
Wet Chemistry by Method 9060A	WG939610	1	12/31/16 13:50	12/31/16 13:50	SJM

CLASS I DRAW L880396-27 GW

			Collected by Darren Motley	Collected date/time 12/21/16 11:05	Received date/time 12/22/16 09:30
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG938690	1	12/28/16 13:53	12/28/16 14:22	JER
Mercury by Method 7470A	WG938138	1	12/23/16 09:22	12/23/16 17:50	TRB
Metals (ICPMS) by Method 6020	WG938049	1	12/27/16 13:37	12/30/16 01:57	VSS
Volatile Organic Compounds (GC/MS) by Method 8260B	WG938676	1	12/26/16 15:57	12/26/16 15:57	BMB
Wet Chemistry by Method 4500S2 D-2011	WG938033	1	12/22/16 22:14	12/22/16 22:14	MZ
Wet Chemistry by Method 9012B	WG939301	1	12/29/16 14:18	12/29/16 17:54	ASK
Wet Chemistry by Method 9056A	WG938354	1	12/27/16 20:15	12/27/16 20:15	KCF
Wet Chemistry by Method 9060A	WG939610	1	12/31/16 15:26	12/31/16 15:26	SJM

LEACHATE L880396-28 GW

			Collected by Darren Motley	Collected date/time 12/20/16 17:05	Received date/time 12/22/16 09:30
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG938475	1	12/27/16 13:28	12/27/16 14:58	JER
Mercury by Method 7470A	WG938138	1	12/23/16 09:22	12/23/16 17:52	TRB
Metals (ICPMS) by Method 6020	WG938049	1	12/27/16 13:37	12/30/16 02:01	VSS
Metals (ICPMS) by Method 6020	WG938049	5	12/27/16 13:37	12/30/16 02:24	VSS
Metals (ICPMS) by Method 6020	WG939602	1	12/30/16 07:06	12/30/16 10:39	JPD
Volatile Organic Compounds (GC/MS) by Method 8260B	WG938676	1	12/26/16 16:10	12/26/16 16:10	BMB
Wet Chemistry by Method 4500S2 D-2011	WG938033	1	12/22/16 22:14	12/22/16 22:14	MZ
Wet Chemistry by Method 9012B	WG939301	1	12/29/16 14:18	12/29/16 17:55	ASK
Wet Chemistry by Method 9056A	WG938354	1	12/27/16 20:25	12/27/16 20:25	KCF
Wet Chemistry by Method 9056A	WG938354	10	12/27/16 20:35	12/27/16 20:35	KCF
Wet Chemistry by Method 9060A	WG939610	1	12/31/16 15:46	12/31/16 15:46	SJM

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DUPLICATE L880396-29 GW

Collected by
Darren MotleyCollected date/time
12/21/16 09:50Received date/time
12/22/16 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG938690	1	12/28/16 13:53	12/28/16 14:22	JER
Mercury by Method 7470A	WG938138	1	12/23/16 09:22	12/23/16 17:55	TRB
Metals (ICPMS) by Method 6020	WG938049	1	12/27/16 13:37	12/30/16 02:05	VSS
Metals (ICPMS) by Method 6020	WG939602	1	12/30/16 07:06	12/30/16 10:43	JPD
Volatile Organic Compounds (GC/MS) by Method 8260B	WG938676	1	12/26/16 16:24	12/26/16 16:24	BMB
Wet Chemistry by Method 4500S2 D-2011	WG938033	1	12/22/16 22:14	12/22/16 22:14	MZ
Wet Chemistry by Method 9012B	WG939301	1	12/29/16 14:18	12/29/16 17:56	ASK
Wet Chemistry by Method 9056A	WG938354	1	12/27/16 20:45	12/27/16 20:45	KCF
Wet Chemistry by Method 9060A	WG939610	1	12/31/16 16:01	12/31/16 16:01	SJM

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Gl⁷ Al⁸ Sc

FIELD BLANK L880396-30 GW

Collected by
Darren MotleyCollected date/time
12/21/16 09:55Received date/time
12/22/16 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG938690	1	12/28/16 13:53	12/28/16 14:22	JER
Mercury by Method 7470A	WG938138	1	12/23/16 09:22	12/23/16 18:04	TRB
Metals (ICPMS) by Method 6020	WG938049	1	12/27/16 13:37	12/30/16 01:00	VSS
Metals (ICPMS) by Method 6020	WG939602	1	12/30/16 07:06	12/30/16 10:46	JPD
Volatile Organic Compounds (GC/MS) by Method 8260B	WG938676	1	12/26/16 16:37	12/26/16 16:37	BMB
Wet Chemistry by Method 4500S2 D-2011	WG938033	1	12/22/16 22:15	12/22/16 22:15	MZ
Wet Chemistry by Method 9012B	WG939301	1	12/29/16 14:18	12/29/16 17:58	ASK
Wet Chemistry by Method 9056A	WG938517	1	12/27/16 18:29	12/27/16 18:29	KCF
Wet Chemistry by Method 9060A	WG939610	1	12/31/16 16:20	12/31/16 16:20	SJM

EQUIPMENT BLANK L880396-31 GW

Collected by
Darren MotleyCollected date/time
12/21/16 09:57Received date/time
12/22/16 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG938676	1	12/26/16 16:50	12/26/16 16:50	BMB

TRIP BLANK L880396-32 GW

Collected by
Darren MotleyCollected date/time
12/21/16 10:00Received date/time
12/22/16 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG938588	1	12/25/16 19:07	12/25/16 19:07	JHH



All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times. All MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Mark W. Beasley
Technical Service Representative





Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Dissolved Solids	972000		2820	10000	1	12/27/2016 15:37	WG938474

1 Cp

2 Tc

Wet Chemistry by Method 4500S2 D-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Sulfide	U		6.50	50.0	1	12/22/2016 22:24	WG938032

3 Ss

4 Cn

Wet Chemistry by Method 9012B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Cyanide	U		1.80	5.00	1	12/29/2016 09:29	WG938805

5 Sr

6 Gl

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	122000		260	5000	5	12/24/2016 20:16	WG938352
Sulfate	23700		77.4	5000	1	12/24/2016 16:17	WG938352

7 Al

8 Sc

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	9230		102	1000	1	12/29/2016 12:12	WG938825

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Mercury	U		0.0490	0.200	1	12/23/2016 14:50	WG938137

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Antimony	1.15	J	0.754	2.00	1	12/29/2016 23:04	WG938047
Arsenic	71.0		0.250	2.00	1	12/29/2016 23:04	WG938047
Barium	201		0.360	5.00	1	12/29/2016 23:04	WG938047
Beryllium	U		0.120	2.00	1	12/29/2016 23:04	WG938047
Cadmium	0.654	J	0.160	1.00	1	12/29/2016 23:04	WG938047
Chromium	5.88		0.540	2.00	1	12/29/2016 23:04	WG938047
Copper	10.4	B	0.520	5.00	1	12/29/2016 23:04	WG938047
Cobalt	109		0.260	2.00	1	12/29/2016 23:04	WG938047
Iron	6300		15.0	100	1	12/29/2016 23:04	WG938047
Lead	2.90	B	0.240	2.00	1	12/29/2016 23:04	WG938047
Manganese	780		0.250	5.00	1	12/29/2016 23:04	WG938047
Nickel	158		0.350	2.00	1	12/29/2016 23:04	WG938047
Selenium	U		0.380	2.00	1	12/29/2016 23:04	WG938047
Silver	U		0.310	2.00	1	12/29/2016 23:04	WG938047
Thallium	0.372	J	0.190	2.00	1	12/29/2016 23:04	WG938047
Tin	0.693	B J	0.300	2.00	1	12/29/2016 23:04	WG938047
Vanadium	1.78	J	0.180	5.00	1	12/29/2016 23:04	WG938047
Zinc	619		2.56	25.0	1	12/29/2016 23:04	WG938047



Collected date/time: 12/20/16 15:58

L880396

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		10.0	50.0	1	12/26/2016 04:17	WG938408
Acrylonitrile	U		1.87	10.0	1	12/26/2016 04:17	WG938408
Benzene	0.572	J	0.331	1.00	1	12/26/2016 04:17	WG938408
Bromochloromethane	U	J4	0.520	1.00	1	12/26/2016 04:17	WG938408
Bromodichloromethane	U		0.380	1.00	1	12/26/2016 04:17	WG938408
Bromoform	U		0.469	1.00	1	12/26/2016 04:17	WG938408
Bromomethane	U		0.866	5.00	1	12/26/2016 04:17	WG938408
Carbon disulfide	U		0.275	1.00	1	12/26/2016 04:17	WG938408
Carbon tetrachloride	U		0.379	1.00	1	12/26/2016 04:17	WG938408
Chlorobenzene	1.20		0.348	1.00	1	12/26/2016 04:17	WG938408
Chlorodibromomethane	U		0.327	1.00	1	12/26/2016 04:17	WG938408
Chloroethane	U	J4	0.453	5.00	1	12/26/2016 04:17	WG938408
Chloroform	U		0.324	5.00	1	12/26/2016 04:17	WG938408
Chloromethane	U		0.276	2.50	1	12/26/2016 04:17	WG938408
Dibromomethane	U		0.346	1.00	1	12/26/2016 04:17	WG938408
1,2-Dibromoethane	U		0.381	1.00	1	12/26/2016 04:17	WG938408
1,2-Dibromo-3-Chloropropane	U		1.33	5.00	1	12/26/2016 04:17	WG938408
1,2-Dichlorobenzene	U		0.349	1.00	1	12/26/2016 04:17	WG938408
1,4-Dichlorobenzene	U		0.274	1.00	1	12/26/2016 04:17	WG938408
trans-1,4-Dichloro-2-butene	U		0.866	2.50	1	12/26/2016 04:17	WG938408
1,1-Dichloroethane	11.1		0.259	1.00	1	12/26/2016 04:17	WG938408
1,2-Dichloroethane	0.399	J	0.361	1.00	1	12/26/2016 04:17	WG938408
1,1-Dichloroethene	U		0.398	1.00	1	12/26/2016 04:17	WG938408
cis-1,2-Dichloroethene	7.76		0.260	1.00	1	12/26/2016 04:17	WG938408
trans-1,2-Dichloroethene	U		0.396	1.00	1	12/26/2016 04:17	WG938408
1,2-Dichloropropane	U		0.306	1.00	1	12/26/2016 04:17	WG938408
cis-1,3-Dichloropropene	U		0.418	1.00	1	12/26/2016 04:17	WG938408
trans-1,3-Dichloropropene	U		0.419	1.00	1	12/26/2016 04:17	WG938408
Ethylbenzene	U		0.384	1.00	1	12/26/2016 04:17	WG938408
2-Hexanone	U		3.82	10.0	1	12/26/2016 04:17	WG938408
Iodomethane	U		1.71	10.0	1	12/26/2016 04:17	WG938408
2-Butanone (MEK)	U		3.93	15.0	1	12/26/2016 04:17	WG938408
Methylene Chloride	U		1.00	5.00	1	12/26/2016 04:17	WG938408
4-Methyl-2-pentanone (MIBK)	U		2.14	10.0	1	12/26/2016 04:17	WG938408
Styrene	U		0.307	1.00	1	12/26/2016 04:17	WG938408
1,1,1,2-Tetrachloroethane	U		0.385	1.00	1	12/26/2016 04:17	WG938408
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	12/26/2016 04:17	WG938408
Tetrachloroethene	U		0.372	1.00	1	12/26/2016 04:17	WG938408
Toluene	U		0.412	1.00	1	12/26/2016 04:17	WG938408
1,1,1-Trichloroethane	U		0.319	1.00	1	12/26/2016 04:17	WG938408
1,1,2-Trichloroethane	U		0.383	1.00	1	12/26/2016 04:17	WG938408
Trichloroethene	0.607	J	0.398	1.00	1	12/26/2016 04:17	WG938408
Trichlorofluoromethane	U		1.20	5.00	1	12/26/2016 04:17	WG938408
1,2,3-Trichloropropane	U		0.807	2.50	1	12/26/2016 04:17	WG938408
Vinyl acetate	U		1.63	10.0	1	12/26/2016 04:17	WG938408
Vinyl chloride	1.37		0.259	1.00	1	12/26/2016 04:17	WG938408
Xylenes, Total	U		1.06	3.00	1	12/26/2016 04:17	WG938408
(S) Toluene-d8	100			90.0-115		12/26/2016 04:17	WG938408
(S) Dibromofluoromethane	102			79.0-121		12/26/2016 04:17	WG938408
(S) 4-Bromofluorobenzene	94.4			80.1-120		12/26/2016 04:17	WG938408

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Gl

7 Al

8 Sc



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Dissolved Solids	381000		2820	10000	1	12/27/2016 15:37	WG938474

1 Cp

2 Tc

Wet Chemistry by Method 4500S2 D-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Sulfide	U		6.50	50.0	1	12/22/2016 22:24	WG938032

3 Ss

4 Cn

Wet Chemistry by Method 9012B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Cyanide	U		1.80	5.00	1	12/29/2016 09:30	WG938805

5 Sr

6 Gl

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	3610		51.9	1000	1	12/24/2016 16:32	WG938352
Sulfate	14700		77.4	5000	1	12/24/2016 16:32	WG938352

7 Al

8 Sc

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	519	J	102	1000	1	12/28/2016 13:39	WG938824

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Mercury	U		0.0490	0.200	1	12/23/2016 14:57	WG938137

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Antimony	U		0.754	2.00	1	12/29/2016 23:07	WG938047
Arsenic	4.66		0.250	2.00	1	12/29/2016 23:07	WG938047
Barium	31.5		0.360	5.00	1	12/29/2016 23:07	WG938047
Beryllium	U		0.120	2.00	1	12/29/2016 23:07	WG938047
Cadmium	U		0.160	1.00	1	12/29/2016 23:07	WG938047
Chromium	U		0.540	2.00	1	12/29/2016 23:07	WG938047
Copper	0.563	B J	0.520	5.00	1	12/29/2016 23:07	WG938047
Cobalt	0.295	J	0.260	2.00	1	12/29/2016 23:07	WG938047
Iron	118		15.0	100	1	12/29/2016 23:07	WG938047
Lead	0.636	B J	0.240	2.00	1	12/29/2016 23:07	WG938047
Manganese	10.4		0.250	5.00	1	12/29/2016 23:07	WG938047
Nickel	9.79		0.350	2.00	1	12/29/2016 23:07	WG938047
Selenium	U		0.380	2.00	1	12/29/2016 23:07	WG938047
Silver	U		0.310	2.00	1	12/29/2016 23:07	WG938047
Thallium	U		0.190	2.00	1	12/29/2016 23:07	WG938047
Tin	U		0.300	2.00	1	12/29/2016 23:07	WG938047
Vanadium	0.361	J	0.180	5.00	1	12/29/2016 23:07	WG938047
Zinc	3.66	B J	2.56	25.0	1	12/29/2016 23:07	WG938047



Collected date/time: 12/20/16 16:52

L880396

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		10.0	50.0	1	12/26/2016 04:41	WG938408
Acrylonitrile	U		1.87	10.0	1	12/26/2016 04:41	WG938408
Benzene	U		0.331	1.00	1	12/26/2016 04:41	WG938408
Bromochloromethane	U	J4	0.520	1.00	1	12/26/2016 04:41	WG938408
Bromodichloromethane	U		0.380	1.00	1	12/26/2016 04:41	WG938408
Bromoform	U		0.469	1.00	1	12/26/2016 04:41	WG938408
Bromomethane	U		0.866	5.00	1	12/26/2016 04:41	WG938408
Carbon disulfide	U		0.275	1.00	1	12/26/2016 04:41	WG938408
Carbon tetrachloride	U		0.379	1.00	1	12/26/2016 04:41	WG938408
Chlorobenzene	U		0.348	1.00	1	12/26/2016 04:41	WG938408
Chlorodibromomethane	U		0.327	1.00	1	12/26/2016 04:41	WG938408
Chloroethane	U	J4	0.453	5.00	1	12/26/2016 04:41	WG938408
Chloroform	U		0.324	5.00	1	12/26/2016 04:41	WG938408
Chloromethane	U		0.276	2.50	1	12/26/2016 04:41	WG938408
Dibromomethane	U		0.346	1.00	1	12/26/2016 04:41	WG938408
1,2-Dibromoethane	U		0.381	1.00	1	12/26/2016 04:41	WG938408
1,2-Dibromo-3-Chloropropane	U		1.33	5.00	1	12/26/2016 04:41	WG938408
1,2-Dichlorobenzene	U		0.349	1.00	1	12/26/2016 04:41	WG938408
1,4-Dichlorobenzene	U		0.274	1.00	1	12/26/2016 04:41	WG938408
trans-1,4-Dichloro-2-butene	U		0.866	2.50	1	12/26/2016 04:41	WG938408
1,1-Dichloroethane	U		0.259	1.00	1	12/26/2016 04:41	WG938408
1,2-Dichloroethane	U		0.361	1.00	1	12/26/2016 04:41	WG938408
1,1-Dichloroethene	U		0.398	1.00	1	12/26/2016 04:41	WG938408
cis-1,2-Dichloroethene	U		0.260	1.00	1	12/26/2016 04:41	WG938408
trans-1,2-Dichloroethene	U		0.396	1.00	1	12/26/2016 04:41	WG938408
1,2-Dichloropropane	U		0.306	1.00	1	12/26/2016 04:41	WG938408
cis-1,3-Dichloropropene	U		0.418	1.00	1	12/26/2016 04:41	WG938408
trans-1,3-Dichloropropene	U		0.419	1.00	1	12/26/2016 04:41	WG938408
Ethylbenzene	U		0.384	1.00	1	12/26/2016 04:41	WG938408
2-Hexanone	U		3.82	10.0	1	12/26/2016 04:41	WG938408
Iodomethane	U		1.71	10.0	1	12/26/2016 04:41	WG938408
2-Butanone (MEK)	U		3.93	15.0	1	12/26/2016 04:41	WG938408
Methylene Chloride	U		1.00	5.00	1	12/26/2016 04:41	WG938408
4-Methyl-2-pentanone (MIBK)	U		2.14	10.0	1	12/26/2016 04:41	WG938408
Styrene	U		0.307	1.00	1	12/26/2016 04:41	WG938408
1,1,1,2-Tetrachloroethane	U		0.385	1.00	1	12/26/2016 04:41	WG938408
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	12/26/2016 04:41	WG938408
Tetrachloroethene	U		0.372	1.00	1	12/26/2016 04:41	WG938408
Toluene	U		0.412	1.00	1	12/26/2016 04:41	WG938408
1,1,1-Trichloroethane	U		0.319	1.00	1	12/26/2016 04:41	WG938408
1,1,2-Trichloroethane	U		0.383	1.00	1	12/26/2016 04:41	WG938408
Trichloroethene	U		0.398	1.00	1	12/26/2016 04:41	WG938408
Trichlorofluoromethane	U		1.20	5.00	1	12/26/2016 04:41	WG938408
1,2,3-Trichloropropane	U		0.807	2.50	1	12/26/2016 04:41	WG938408
Vinyl acetate	U		1.63	10.0	1	12/26/2016 04:41	WG938408
Vinyl chloride	U		0.259	1.00	1	12/26/2016 04:41	WG938408
Xylenes, Total	U		1.06	3.00	1	12/26/2016 04:41	WG938408
(S) Toluene-d8	101			90.0-115		12/26/2016 04:41	WG938408
(S) Dibromofluoromethane	103			79.0-121		12/26/2016 04:41	WG938408
(S) 4-Bromofluorobenzene	94.5			80.1-120		12/26/2016 04:41	WG938408

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Gl

7 Al

8 Sc



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Dissolved Solids	525000		2820	10000	1	12/27/2016 14:20	WG938476

1 Cp

2 Tc

Wet Chemistry by Method 4500S2 D-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Sulfide	U		6.50	50.0	1	12/22/2016 22:24	WG938032

3 Ss

4 Cn

Wet Chemistry by Method 9012B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Cyanide	U		1.80	5.00	1	12/29/2016 09:31	WG938805

5 Sr

6 Gl

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	9540		51.9	1000	1	12/24/2016 15:47	WG938352
Sulfate	12300		77.4	5000	1	12/24/2016 15:47	WG938352

7 Al

8 Sc

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	2320		102	1000	1	12/28/2016 13:50	WG938824

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Mercury	U		0.0490	0.200	1	12/23/2016 14:59	WG938137

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Antimony	U		0.754	2.00	1	12/29/2016 23:11	WG938047
Arsenic	2.31		0.250	2.00	1	12/29/2016 23:11	WG938047
Barium	81.2		0.360	5.00	1	12/29/2016 23:11	WG938047
Beryllium	U		0.120	2.00	1	12/29/2016 23:11	WG938047
Cadmium	0.430	J	0.160	1.00	1	12/29/2016 23:11	WG938047
Chromium	0.594	J	0.540	2.00	1	12/29/2016 23:11	WG938047
Copper	1.08	B J	0.520	5.00	1	12/29/2016 23:11	WG938047
Cobalt	4.10		0.260	2.00	1	12/29/2016 23:11	WG938047
Iron	473		15.0	100	1	12/29/2016 23:11	WG938047
Lead	0.937	B J	0.240	2.00	1	12/29/2016 23:11	WG938047
Manganese	2230		0.250	5.00	1	12/29/2016 23:11	WG938047
Nickel	62.2		0.350	2.00	1	12/29/2016 23:11	WG938047
Selenium	U		0.380	2.00	1	12/29/2016 23:11	WG938047
Silver	U		0.310	2.00	1	12/29/2016 23:11	WG938047
Thallium	0.661	J	0.190	2.00	1	12/29/2016 23:11	WG938047
Tin	U		0.300	2.00	1	12/29/2016 23:11	WG938047
Vanadium	0.426	J	0.180	5.00	1	12/29/2016 23:11	WG938047
Zinc	146		2.56	25.0	1	12/29/2016 23:11	WG938047



Collected date/time: 12/21/16 08:04

L880396

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		10.0	50.0	1	12/26/2016 05:04	WG938408
Acrylonitrile	U		1.87	10.0	1	12/26/2016 05:04	WG938408
Benzene	U		0.331	1.00	1	12/26/2016 05:04	WG938408
Bromochloromethane	U	J4	0.520	1.00	1	12/26/2016 05:04	WG938408
Bromodichloromethane	U		0.380	1.00	1	12/26/2016 05:04	WG938408
Bromoform	U		0.469	1.00	1	12/26/2016 05:04	WG938408
Bromomethane	U		0.866	5.00	1	12/26/2016 05:04	WG938408
Carbon disulfide	U		0.275	1.00	1	12/26/2016 05:04	WG938408
Carbon tetrachloride	U		0.379	1.00	1	12/26/2016 05:04	WG938408
Chlorobenzene	U		0.348	1.00	1	12/26/2016 05:04	WG938408
Chlorodibromomethane	U		0.327	1.00	1	12/26/2016 05:04	WG938408
Chloroethane	U	J4	0.453	5.00	1	12/26/2016 05:04	WG938408
Chloroform	U		0.324	5.00	1	12/26/2016 05:04	WG938408
Chloromethane	U		0.276	2.50	1	12/26/2016 05:04	WG938408
Dibromomethane	U		0.346	1.00	1	12/26/2016 05:04	WG938408
1,2-Dibromoethane	U		0.381	1.00	1	12/26/2016 05:04	WG938408
1,2-Dibromo-3-Chloropropane	U		1.33	5.00	1	12/26/2016 05:04	WG938408
1,2-Dichlorobenzene	U		0.349	1.00	1	12/26/2016 05:04	WG938408
1,4-Dichlorobenzene	U		0.274	1.00	1	12/26/2016 05:04	WG938408
trans-1,4-Dichloro-2-butene	U		0.866	2.50	1	12/26/2016 05:04	WG938408
1,1-Dichloroethane	U		0.259	1.00	1	12/26/2016 05:04	WG938408
1,2-Dichloroethane	U		0.361	1.00	1	12/26/2016 05:04	WG938408
1,1-Dichloroethene	U		0.398	1.00	1	12/26/2016 05:04	WG938408
cis-1,2-Dichloroethene	U		0.260	1.00	1	12/26/2016 05:04	WG938408
trans-1,2-Dichloroethene	U		0.396	1.00	1	12/26/2016 05:04	WG938408
1,2-Dichloropropane	U		0.306	1.00	1	12/26/2016 05:04	WG938408
cis-1,3-Dichloropropene	U		0.418	1.00	1	12/26/2016 05:04	WG938408
trans-1,3-Dichloropropene	U		0.419	1.00	1	12/26/2016 05:04	WG938408
Ethylbenzene	U		0.384	1.00	1	12/26/2016 05:04	WG938408
2-Hexanone	U		3.82	10.0	1	12/26/2016 05:04	WG938408
Iodomethane	U		1.71	10.0	1	12/26/2016 05:04	WG938408
2-Butanone (MEK)	U		3.93	15.0	1	12/26/2016 05:04	WG938408
Methylene Chloride	U		1.00	5.00	1	12/26/2016 05:04	WG938408
4-Methyl-2-pentanone (MIBK)	U		2.14	10.0	1	12/26/2016 05:04	WG938408
Styrene	U		0.307	1.00	1	12/26/2016 05:04	WG938408
1,1,1,2-Tetrachloroethane	U		0.385	1.00	1	12/26/2016 05:04	WG938408
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	12/26/2016 05:04	WG938408
Tetrachloroethene	U		0.372	1.00	1	12/26/2016 05:04	WG938408
Toluene	U		0.412	1.00	1	12/26/2016 05:04	WG938408
1,1,1-Trichloroethane	U		0.319	1.00	1	12/26/2016 05:04	WG938408
1,1,2-Trichloroethane	U		0.383	1.00	1	12/26/2016 05:04	WG938408
Trichloroethene	U		0.398	1.00	1	12/26/2016 05:04	WG938408
Trichlorofluoromethane	U		1.20	5.00	1	12/26/2016 05:04	WG938408
1,2,3-Trichloropropane	U		0.807	2.50	1	12/26/2016 05:04	WG938408
Vinyl acetate	U		1.63	10.0	1	12/26/2016 05:04	WG938408
Vinyl chloride	U		0.259	1.00	1	12/26/2016 05:04	WG938408
Xylenes, Total	U		1.06	3.00	1	12/26/2016 05:04	WG938408
(S) Toluene-d8	101			90.0-115		12/26/2016 05:04	WG938408
(S) Dibromofluoromethane	101			79.0-121		12/26/2016 05:04	WG938408
(S) 4-Bromofluorobenzene	93.1			80.1-120		12/26/2016 05:04	WG938408

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Gl

7 Al

8 Sc



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Dissolved Solids	376000		2820	10000	1	12/27/2016 14:20	WG938476

1 Cp

2 Tc

Wet Chemistry by Method 4500S2 D-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Sulfide	U		6.50	50.0	1	12/22/2016 22:24	WG938032

3 Ss

4 Cn

Wet Chemistry by Method 9012B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Cyanide	U		1.80	5.00	1	12/29/2016 09:32	WG938805

5 Sr

6 Gl

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	7310		51.9	1000	1	12/24/2016 17:32	WG938352
Sulfate	14900		77.4	5000	1	12/24/2016 17:32	WG938352

7 Al

8 Sc

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	1090		102	1000	1	12/28/2016 14:02	WG938824

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Mercury	U		0.0490	0.200	1	12/23/2016 15:02	WG938137

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Antimony	U		0.754	2.00	1	12/29/2016 23:14	WG938047
Arsenic	0.505	J	0.250	2.00	1	12/29/2016 23:14	WG938047
Barium	35.8		0.360	5.00	1	12/29/2016 23:14	WG938047
Beryllium	U		0.120	2.00	1	12/29/2016 23:14	WG938047
Cadmium	0.883	J	0.160	1.00	1	12/29/2016 23:14	WG938047
Chromium	0.895	J	0.540	2.00	1	12/29/2016 23:14	WG938047
Copper	1.22	B J	0.520	5.00	1	12/29/2016 23:14	WG938047
Cobalt	U		0.260	2.00	1	12/29/2016 23:14	WG938047
Iron	41.1	J	15.0	100	1	12/29/2016 23:14	WG938047
Lead	0.888	B J	0.240	2.00	1	12/29/2016 23:14	WG938047
Manganese	2.09	B J	0.250	5.00	1	12/29/2016 23:14	WG938047
Nickel	1.14	J	0.350	2.00	1	12/29/2016 23:14	WG938047
Selenium	U		0.380	2.00	1	12/29/2016 23:14	WG938047
Silver	U		0.310	2.00	1	12/29/2016 23:14	WG938047
Thallium	U		0.190	2.00	1	12/29/2016 23:14	WG938047
Tin	U		0.300	2.00	1	12/29/2016 23:14	WG938047
Vanadium	0.400	J	0.180	5.00	1	12/29/2016 23:14	WG938047
Zinc	105		2.56	25.0	1	12/29/2016 23:14	WG938047



Collected date/time: 12/21/16 08:47

L880396

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		10.0	50.0	1	12/26/2016 05:27	WG938408
Acrylonitrile	U		1.87	10.0	1	12/26/2016 05:27	WG938408
Benzene	U		0.331	1.00	1	12/26/2016 05:27	WG938408
Bromochloromethane	U	J4	0.520	1.00	1	12/26/2016 05:27	WG938408
Bromodichloromethane	U		0.380	1.00	1	12/26/2016 05:27	WG938408
Bromoform	U		0.469	1.00	1	12/26/2016 05:27	WG938408
Bromomethane	U		0.866	5.00	1	12/26/2016 05:27	WG938408
Carbon disulfide	U		0.275	1.00	1	12/26/2016 05:27	WG938408
Carbon tetrachloride	U		0.379	1.00	1	12/26/2016 05:27	WG938408
Chlorobenzene	U		0.348	1.00	1	12/26/2016 05:27	WG938408
Chlorodibromomethane	U		0.327	1.00	1	12/26/2016 05:27	WG938408
Chloroethane	U	J4	0.453	5.00	1	12/26/2016 05:27	WG938408
Chloroform	U		0.324	5.00	1	12/26/2016 05:27	WG938408
Chloromethane	U		0.276	2.50	1	12/26/2016 05:27	WG938408
Dibromomethane	U		0.346	1.00	1	12/26/2016 05:27	WG938408
1,2-Dibromoethane	U		0.381	1.00	1	12/26/2016 05:27	WG938408
1,2-Dibromo-3-Chloropropane	U		1.33	5.00	1	12/26/2016 05:27	WG938408
1,2-Dichlorobenzene	U		0.349	1.00	1	12/26/2016 05:27	WG938408
1,4-Dichlorobenzene	U		0.274	1.00	1	12/26/2016 05:27	WG938408
trans-1,4-Dichloro-2-butene	U		0.866	2.50	1	12/26/2016 05:27	WG938408
1,1-Dichloroethane	U		0.259	1.00	1	12/26/2016 05:27	WG938408
1,2-Dichloroethane	U		0.361	1.00	1	12/26/2016 05:27	WG938408
1,1-Dichloroethene	U		0.398	1.00	1	12/26/2016 05:27	WG938408
cis-1,2-Dichloroethene	U		0.260	1.00	1	12/26/2016 05:27	WG938408
trans-1,2-Dichloroethene	U		0.396	1.00	1	12/26/2016 05:27	WG938408
1,2-Dichloropropane	U		0.306	1.00	1	12/26/2016 05:27	WG938408
cis-1,3-Dichloropropene	U		0.418	1.00	1	12/26/2016 05:27	WG938408
trans-1,3-Dichloropropene	U		0.419	1.00	1	12/26/2016 05:27	WG938408
Ethylbenzene	U		0.384	1.00	1	12/26/2016 05:27	WG938408
2-Hexanone	U		3.82	10.0	1	12/26/2016 05:27	WG938408
Iodomethane	U		1.71	10.0	1	12/26/2016 05:27	WG938408
2-Butanone (MEK)	U		3.93	15.0	1	12/26/2016 05:27	WG938408
Methylene Chloride	U		1.00	5.00	1	12/26/2016 05:27	WG938408
4-Methyl-2-pentanone (MIBK)	U		2.14	10.0	1	12/26/2016 05:27	WG938408
Styrene	U		0.307	1.00	1	12/26/2016 05:27	WG938408
1,1,1,2-Tetrachloroethane	U		0.385	1.00	1	12/26/2016 05:27	WG938408
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	12/26/2016 05:27	WG938408
Tetrachloroethene	U		0.372	1.00	1	12/26/2016 05:27	WG938408
Toluene	U		0.412	1.00	1	12/26/2016 05:27	WG938408
1,1,1-Trichloroethane	U		0.319	1.00	1	12/26/2016 05:27	WG938408
1,1,2-Trichloroethane	U		0.383	1.00	1	12/26/2016 05:27	WG938408
Trichloroethene	U		0.398	1.00	1	12/26/2016 05:27	WG938408
Trichlorofluoromethane	U		1.20	5.00	1	12/26/2016 05:27	WG938408
1,2,3-Trichloropropane	U		0.807	2.50	1	12/26/2016 05:27	WG938408
Vinyl acetate	U		1.63	10.0	1	12/26/2016 05:27	WG938408
Vinyl chloride	U		0.259	1.00	1	12/26/2016 05:27	WG938408
Xylenes, Total	U		1.06	3.00	1	12/26/2016 05:27	WG938408
(S) Toluene-d8	101			90.0-115		12/26/2016 05:27	WG938408
(S) Dibromofluoromethane	104			79.0-121		12/26/2016 05:27	WG938408
(S) 4-Bromofluorobenzene	95.3			80.1-120		12/26/2016 05:27	WG938408





Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Dissolved Solids	416000		2820	10000	1	12/27/2016 14:20	WG938476

1 Cp

2 Tc

Wet Chemistry by Method 4500S2 D-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Sulfide	U	J5	6.50	50.0	1	12/22/2016 22:24	WG938032

3 Ss

4 Cn

Wet Chemistry by Method 9012B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Cyanide	U		1.80	5.00	1	12/29/2016 09:33	WG938805

5 Sr

6 Gl

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	5760		51.9	1000	1	12/24/2016 17:47	WG938352
Sulfate	7070		77.4	5000	1	12/24/2016 17:47	WG938352

7 Al

8 Sc

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	1200		102	1000	1	12/28/2016 14:13	WG938824

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Mercury	U		0.0490	0.200	1	12/23/2016 15:04	WG938137

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Antimony	U		0.754	2.00	1	12/29/2016 23:18	WG938047
Arsenic	0.536	J	0.250	2.00	1	12/29/2016 23:18	WG938047
Barium	34.1		0.360	5.00	1	12/29/2016 23:18	WG938047
Beryllium	U		0.120	2.00	1	12/29/2016 23:18	WG938047
Cadmium	U		0.160	1.00	1	12/29/2016 23:18	WG938047
Chromium	3.28		0.540	2.00	1	12/29/2016 23:18	WG938047
Copper	3.77	B J	0.520	5.00	1	12/29/2016 23:18	WG938047
Cobalt	U		0.260	2.00	1	12/29/2016 23:18	WG938047
Iron	60.6	J	15.0	100	1	12/29/2016 23:18	WG938047
Lead	0.765	B J	0.240	2.00	1	12/29/2016 23:18	WG938047
Manganese	1.85	B J	0.250	5.00	1	12/29/2016 23:18	WG938047
Nickel	2.81		0.350	2.00	1	12/29/2016 23:18	WG938047
Selenium	U		0.380	2.00	1	12/29/2016 23:18	WG938047
Silver	U		0.310	2.00	1	12/29/2016 23:18	WG938047
Thallium	U		0.190	2.00	1	12/29/2016 23:18	WG938047
Tin	0.313	B J	0.300	2.00	1	12/29/2016 23:18	WG938047
Vanadium	0.385	J	0.180	5.00	1	12/29/2016 23:18	WG938047
Zinc	26.8	B	2.56	25.0	1	12/29/2016 23:18	WG938047



Collected date/time: 12/21/16 09:11

L880396

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		10.0	50.0	1	12/26/2016 05:51	WG938408
Acrylonitrile	U		1.87	10.0	1	12/26/2016 05:51	WG938408
Benzene	U		0.331	1.00	1	12/26/2016 05:51	WG938408
Bromochloromethane	U	J4	0.520	1.00	1	12/26/2016 05:51	WG938408
Bromodichloromethane	U		0.380	1.00	1	12/26/2016 05:51	WG938408
Bromoform	U		0.469	1.00	1	12/26/2016 05:51	WG938408
Bromomethane	U		0.866	5.00	1	12/26/2016 05:51	WG938408
Carbon disulfide	U		0.275	1.00	1	12/26/2016 05:51	WG938408
Carbon tetrachloride	U		0.379	1.00	1	12/26/2016 05:51	WG938408
Chlorobenzene	U		0.348	1.00	1	12/26/2016 05:51	WG938408
Chlorodibromomethane	U		0.327	1.00	1	12/26/2016 05:51	WG938408
Chloroethane	U	J4	0.453	5.00	1	12/26/2016 05:51	WG938408
Chloroform	U		0.324	5.00	1	12/26/2016 05:51	WG938408
Chloromethane	U		0.276	2.50	1	12/26/2016 05:51	WG938408
Dibromomethane	U		0.346	1.00	1	12/26/2016 05:51	WG938408
1,2-Dibromoethane	U		0.381	1.00	1	12/26/2016 05:51	WG938408
1,2-Dibromo-3-Chloropropane	U		1.33	5.00	1	12/26/2016 05:51	WG938408
1,2-Dichlorobenzene	U		0.349	1.00	1	12/26/2016 05:51	WG938408
1,4-Dichlorobenzene	U		0.274	1.00	1	12/26/2016 05:51	WG938408
trans-1,4-Dichloro-2-butene	U		0.866	2.50	1	12/26/2016 05:51	WG938408
1,1-Dichloroethane	U		0.259	1.00	1	12/26/2016 05:51	WG938408
1,2-Dichloroethane	U		0.361	1.00	1	12/26/2016 05:51	WG938408
1,1-Dichloroethene	U		0.398	1.00	1	12/26/2016 05:51	WG938408
cis-1,2-Dichloroethene	U		0.260	1.00	1	12/26/2016 05:51	WG938408
trans-1,2-Dichloroethene	U		0.396	1.00	1	12/26/2016 05:51	WG938408
1,2-Dichloropropane	U		0.306	1.00	1	12/26/2016 05:51	WG938408
cis-1,3-Dichloropropene	U		0.418	1.00	1	12/26/2016 05:51	WG938408
trans-1,3-Dichloropropene	U		0.419	1.00	1	12/26/2016 05:51	WG938408
Ethylbenzene	U		0.384	1.00	1	12/26/2016 05:51	WG938408
2-Hexanone	U		3.82	10.0	1	12/26/2016 05:51	WG938408
Iodomethane	U		1.71	10.0	1	12/26/2016 05:51	WG938408
2-Butanone (MEK)	U		3.93	15.0	1	12/26/2016 05:51	WG938408
Methylene Chloride	U		1.00	5.00	1	12/26/2016 05:51	WG938408
4-Methyl-2-pentanone (MIBK)	U		2.14	10.0	1	12/26/2016 05:51	WG938408
Styrene	U		0.307	1.00	1	12/26/2016 05:51	WG938408
1,1,1,2-Tetrachloroethane	U		0.385	1.00	1	12/26/2016 05:51	WG938408
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	12/26/2016 05:51	WG938408
Tetrachloroethene	U		0.372	1.00	1	12/26/2016 05:51	WG938408
Toluene	U		0.412	1.00	1	12/26/2016 05:51	WG938408
1,1,1-Trichloroethane	U		0.319	1.00	1	12/26/2016 05:51	WG938408
1,1,2-Trichloroethane	U		0.383	1.00	1	12/26/2016 05:51	WG938408
Trichloroethene	U		0.398	1.00	1	12/26/2016 05:51	WG938408
Trichlorofluoromethane	U		1.20	5.00	1	12/26/2016 05:51	WG938408
1,2,3-Trichloropropane	U		0.807	2.50	1	12/26/2016 05:51	WG938408
Vinyl acetate	U		1.63	10.0	1	12/26/2016 05:51	WG938408
Vinyl chloride	U		0.259	1.00	1	12/26/2016 05:51	WG938408
Xylenes, Total	U		1.06	3.00	1	12/26/2016 05:51	WG938408
(S) Toluene-d8	101			90.0-115		12/26/2016 05:51	WG938408
(S) Dibromofluoromethane	104			79.0-121		12/26/2016 05:51	WG938408
(S) 4-Bromofluorobenzene	93.8			80.1-120		12/26/2016 05:51	WG938408

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Gl

7 Al

8 Sc



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Dissolved Solids	432000		2820	10000	1	12/27/2016 14:20	WG938476

1 Cp

2 Tc

Wet Chemistry by Method 4500S2 D-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Sulfide	U		6.50	50.0	1	12/22/2016 22:25	WG938032

3 Ss

4 Cn

Wet Chemistry by Method 9012B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Cyanide	U		1.80	5.00	1	12/29/2016 09:36	WG938805

5 Sr

6 Gl

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	21000		51.9	1000	1	12/24/2016 18:31	WG938352
Sulfate	7760		77.4	5000	1	12/24/2016 18:31	WG938352

7 Al

8 Sc

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	1750		102	1000	1	12/28/2016 14:24	WG938824

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Mercury	U		0.0490	0.200	1	12/23/2016 15:06	WG938137

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Antimony	U		0.754	2.00	1	12/29/2016 23:22	WG938047
Arsenic	0.423	J	0.250	2.00	1	12/29/2016 23:22	WG938047
Barium	46.5		0.360	5.00	1	12/29/2016 23:22	WG938047
Beryllium	U		0.120	2.00	1	12/29/2016 23:22	WG938047
Cadmium	0.439	J	0.160	1.00	1	12/29/2016 23:22	WG938047
Chromium	0.805	J	0.540	2.00	1	12/29/2016 23:22	WG938047
Copper	1.21	B J	0.520	5.00	1	12/29/2016 23:22	WG938047
Cobalt	U		0.260	2.00	1	12/29/2016 23:22	WG938047
Iron	33.4	J	15.0	100	1	12/29/2016 23:22	WG938047
Lead	0.601	B J	0.240	2.00	1	12/29/2016 23:22	WG938047
Manganese	0.867	B J	0.250	5.00	1	12/29/2016 23:22	WG938047
Nickel	0.957	J	0.350	2.00	1	12/29/2016 23:22	WG938047
Selenium	U		0.380	2.00	1	12/29/2016 23:22	WG938047
Silver	U		0.310	2.00	1	12/29/2016 23:22	WG938047
Thallium	U		0.190	2.00	1	12/29/2016 23:22	WG938047
Tin	0.311	B J	0.300	2.00	1	12/29/2016 23:22	WG938047
Vanadium	0.427	J	0.180	5.00	1	12/29/2016 23:22	WG938047
Zinc	41.5	B	2.56	25.0	1	12/29/2016 23:22	WG938047



Collected date/time: 12/21/16 09:46

L880396

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		10.0	50.0	1	12/26/2016 06:14	WG938408
Acrylonitrile	U		1.87	10.0	1	12/26/2016 06:14	WG938408
Benzene	U		0.331	1.00	1	12/26/2016 06:14	WG938408
Bromochloromethane	U	J4	0.520	1.00	1	12/26/2016 06:14	WG938408
Bromodichloromethane	U		0.380	1.00	1	12/26/2016 06:14	WG938408
Bromoform	U		0.469	1.00	1	12/26/2016 06:14	WG938408
Bromomethane	U		0.866	5.00	1	12/26/2016 06:14	WG938408
Carbon disulfide	U		0.275	1.00	1	12/26/2016 06:14	WG938408
Carbon tetrachloride	U		0.379	1.00	1	12/26/2016 06:14	WG938408
Chlorobenzene	U		0.348	1.00	1	12/26/2016 06:14	WG938408
Chlorodibromomethane	U		0.327	1.00	1	12/26/2016 06:14	WG938408
Chloroethane	U	J4	0.453	5.00	1	12/26/2016 06:14	WG938408
Chloroform	U		0.324	5.00	1	12/26/2016 06:14	WG938408
Chloromethane	U		0.276	2.50	1	12/26/2016 06:14	WG938408
Dibromomethane	U		0.346	1.00	1	12/26/2016 06:14	WG938408
1,2-Dibromoethane	U		0.381	1.00	1	12/26/2016 06:14	WG938408
1,2-Dibromo-3-Chloropropane	U		1.33	5.00	1	12/26/2016 06:14	WG938408
1,2-Dichlorobenzene	U		0.349	1.00	1	12/26/2016 06:14	WG938408
1,4-Dichlorobenzene	U		0.274	1.00	1	12/26/2016 06:14	WG938408
trans-1,4-Dichloro-2-butene	U		0.866	2.50	1	12/26/2016 06:14	WG938408
1,1-Dichloroethane	U		0.259	1.00	1	12/26/2016 06:14	WG938408
1,2-Dichloroethane	U		0.361	1.00	1	12/26/2016 06:14	WG938408
1,1-Dichloroethene	U		0.398	1.00	1	12/26/2016 06:14	WG938408
cis-1,2-Dichloroethene	U		0.260	1.00	1	12/26/2016 06:14	WG938408
trans-1,2-Dichloroethene	U		0.396	1.00	1	12/26/2016 06:14	WG938408
1,2-Dichloropropane	U		0.306	1.00	1	12/26/2016 06:14	WG938408
cis-1,3-Dichloropropene	U		0.418	1.00	1	12/26/2016 06:14	WG938408
trans-1,3-Dichloropropene	U		0.419	1.00	1	12/26/2016 06:14	WG938408
Ethylbenzene	U		0.384	1.00	1	12/26/2016 06:14	WG938408
2-Hexanone	U		3.82	10.0	1	12/26/2016 06:14	WG938408
Iodomethane	U		1.71	10.0	1	12/26/2016 06:14	WG938408
2-Butanone (MEK)	U		3.93	15.0	1	12/26/2016 06:14	WG938408
Methylene Chloride	U		1.00	5.00	1	12/26/2016 06:14	WG938408
4-Methyl-2-pentanone (MIBK)	U		2.14	10.0	1	12/26/2016 06:14	WG938408
Styrene	U		0.307	1.00	1	12/26/2016 06:14	WG938408
1,1,1,2-Tetrachloroethane	U		0.385	1.00	1	12/26/2016 06:14	WG938408
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	12/26/2016 06:14	WG938408
Tetrachloroethene	U		0.372	1.00	1	12/26/2016 06:14	WG938408
Toluene	U		0.412	1.00	1	12/26/2016 06:14	WG938408
1,1,1-Trichloroethane	U		0.319	1.00	1	12/26/2016 06:14	WG938408
1,1,2-Trichloroethane	U		0.383	1.00	1	12/26/2016 06:14	WG938408
Trichloroethene	U		0.398	1.00	1	12/26/2016 06:14	WG938408
Trichlorofluoromethane	U		1.20	5.00	1	12/26/2016 06:14	WG938408
1,2,3-Trichloropropane	U		0.807	2.50	1	12/26/2016 06:14	WG938408
Vinyl acetate	U		1.63	10.0	1	12/26/2016 06:14	WG938408
Vinyl chloride	U		0.259	1.00	1	12/26/2016 06:14	WG938408
Xylenes, Total	U		1.06	3.00	1	12/26/2016 06:14	WG938408
(S) Toluene-d8	100			90.0-115		12/26/2016 06:14	WG938408
(S) Dibromofluoromethane	103			79.0-121		12/26/2016 06:14	WG938408
(S) 4-Bromofluorobenzene	93.6			80.1-120		12/26/2016 06:14	WG938408

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Gl

7 Al

8 Sc



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Dissolved Solids	338000		2820	10000	1	12/27/2016 15:37	WG938474

1 Cp

2 Tc

Wet Chemistry by Method 4500S2 D-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Sulfide	U		6.50	50.0	1	12/22/2016 22:26	WG938032

3 Ss

4 Cn

Wet Chemistry by Method 9012B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Cyanide	U		1.80	5.00	1	12/29/2016 09:37	WG938805

5 Sr

6 Gl

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	1500		51.9	1000	1	12/24/2016 18:46	WG938352
Sulfate	6390		77.4	5000	1	12/24/2016 18:46	WG938352

7 Al

8 Sc

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	1070		102	1000	1	12/28/2016 14:35	WG938824

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Mercury	U		0.0490	0.200	1	12/23/2016 15:15	WG938137

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Antimony	U		0.754	2.00	1	12/29/2016 23:25	WG938047
Arsenic	0.687	J	0.250	2.00	1	12/29/2016 23:25	WG938047
Barium	46.3		0.360	5.00	1	12/29/2016 23:25	WG938047
Beryllium	U		0.120	2.00	1	12/29/2016 23:25	WG938047
Cadmium	0.307	J	0.160	1.00	1	12/29/2016 23:25	WG938047
Chromium	U		0.540	2.00	1	12/29/2016 23:25	WG938047
Copper	1.70	B J	0.520	5.00	1	12/29/2016 23:25	WG938047
Cobalt	3.56		0.260	2.00	1	12/29/2016 23:25	WG938047
Iron	153		15.0	100	1	12/29/2016 23:25	WG938047
Lead	1.53	B J	0.240	2.00	1	12/29/2016 23:25	WG938047
Manganese	363		0.250	5.00	1	12/29/2016 23:25	WG938047
Nickel	10.6		0.350	2.00	1	12/29/2016 23:25	WG938047
Selenium	U		0.380	2.00	1	12/29/2016 23:25	WG938047
Silver	U		0.310	2.00	1	12/29/2016 23:25	WG938047
Thallium	U		0.190	2.00	1	12/29/2016 23:25	WG938047
Tin	0.318	B J	0.300	2.00	1	12/29/2016 23:25	WG938047
Vanadium	0.497	J	0.180	5.00	1	12/29/2016 23:25	WG938047
Zinc	15.1	B J	2.56	25.0	1	12/29/2016 23:25	WG938047



Collected date/time: 12/20/16 14:38

L880396

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		10.0	50.0	1	12/26/2016 06:37	WG938408
Acrylonitrile	U		1.87	10.0	1	12/26/2016 06:37	WG938408
Benzene	U		0.331	1.00	1	12/26/2016 06:37	WG938408
Bromochloromethane	U	J4	0.520	1.00	1	12/26/2016 06:37	WG938408
Bromodichloromethane	U		0.380	1.00	1	12/26/2016 06:37	WG938408
Bromoform	U		0.469	1.00	1	12/26/2016 06:37	WG938408
Bromomethane	U		0.866	5.00	1	12/26/2016 06:37	WG938408
Carbon disulfide	U		0.275	1.00	1	12/26/2016 06:37	WG938408
Carbon tetrachloride	U		0.379	1.00	1	12/26/2016 06:37	WG938408
Chlorobenzene	U		0.348	1.00	1	12/26/2016 06:37	WG938408
Chlorodibromomethane	U		0.327	1.00	1	12/26/2016 06:37	WG938408
Chloroethane	U	J4	0.453	5.00	1	12/26/2016 06:37	WG938408
Chloroform	U		0.324	5.00	1	12/26/2016 06:37	WG938408
Chloromethane	U		0.276	2.50	1	12/26/2016 06:37	WG938408
Dibromomethane	U		0.346	1.00	1	12/26/2016 06:37	WG938408
1,2-Dibromoethane	U		0.381	1.00	1	12/26/2016 06:37	WG938408
1,2-Dibromo-3-Chloropropane	U		1.33	5.00	1	12/26/2016 06:37	WG938408
1,2-Dichlorobenzene	U		0.349	1.00	1	12/26/2016 06:37	WG938408
1,4-Dichlorobenzene	U		0.274	1.00	1	12/26/2016 06:37	WG938408
trans-1,4-Dichloro-2-butene	U		0.866	2.50	1	12/26/2016 06:37	WG938408
1,1-Dichloroethane	U		0.259	1.00	1	12/26/2016 06:37	WG938408
1,2-Dichloroethane	U		0.361	1.00	1	12/26/2016 06:37	WG938408
1,1-Dichloroethene	U		0.398	1.00	1	12/26/2016 06:37	WG938408
cis-1,2-Dichloroethene	U		0.260	1.00	1	12/26/2016 06:37	WG938408
trans-1,2-Dichloroethene	U		0.396	1.00	1	12/26/2016 06:37	WG938408
1,2-Dichloropropane	U		0.306	1.00	1	12/26/2016 06:37	WG938408
cis-1,3-Dichloropropene	U		0.418	1.00	1	12/26/2016 06:37	WG938408
trans-1,3-Dichloropropene	U		0.419	1.00	1	12/26/2016 06:37	WG938408
Ethylbenzene	U		0.384	1.00	1	12/26/2016 06:37	WG938408
2-Hexanone	U		3.82	10.0	1	12/26/2016 06:37	WG938408
Iodomethane	U		1.71	10.0	1	12/26/2016 06:37	WG938408
2-Butanone (MEK)	U		3.93	15.0	1	12/26/2016 06:37	WG938408
Methylene Chloride	U		1.00	5.00	1	12/26/2016 06:37	WG938408
4-Methyl-2-pentanone (MIBK)	U		2.14	10.0	1	12/26/2016 06:37	WG938408
Styrene	U		0.307	1.00	1	12/26/2016 06:37	WG938408
1,1,1,2-Tetrachloroethane	U		0.385	1.00	1	12/26/2016 06:37	WG938408
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	12/26/2016 06:37	WG938408
Tetrachloroethene	U		0.372	1.00	1	12/26/2016 06:37	WG938408
Toluene	U		0.412	1.00	1	12/26/2016 06:37	WG938408
1,1,1-Trichloroethane	U		0.319	1.00	1	12/26/2016 06:37	WG938408
1,1,2-Trichloroethane	U		0.383	1.00	1	12/26/2016 06:37	WG938408
Trichloroethene	U		0.398	1.00	1	12/26/2016 06:37	WG938408
Trichlorofluoromethane	U		1.20	5.00	1	12/26/2016 06:37	WG938408
1,2,3-Trichloropropane	U		0.807	2.50	1	12/26/2016 06:37	WG938408
Vinyl acetate	U		1.63	10.0	1	12/26/2016 06:37	WG938408
Vinyl chloride	U		0.259	1.00	1	12/26/2016 06:37	WG938408
Xylenes, Total	U		1.06	3.00	1	12/26/2016 06:37	WG938408
(S) Toluene-d8	101			90.0-115		12/26/2016 06:37	WG938408
(S) Dibromofluoromethane	102			79.0-121		12/26/2016 06:37	WG938408
(S) 4-Bromofluorobenzene	92.2			80.1-120		12/26/2016 06:37	WG938408

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Gl

7 Al

8 Sc



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Dissolved Solids	794000		2820	10000	1	12/27/2016 14:20	WG938476

1 Cp

2 Tc

Wet Chemistry by Method 4500S2 D-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Sulfide	U		6.50	50.0	1	12/22/2016 22:26	WG938032

3 Ss

4 Cn

Wet Chemistry by Method 9012B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Cyanide	U		1.80	5.00	1	12/29/2016 09:38	WG938805

5 Sr

6 Gl

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	95900		51.9	1000	1	12/24/2016 19:01	WG938352
Sulfate	104	J	77.4	5000	1	12/24/2016 19:01	WG938352

7 Al

8 Sc

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	10600		204	2000	2	12/29/2016 12:37	WG938825

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Mercury	U		0.0490	0.200	1	12/23/2016 15:18	WG938137

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Antimony	U		0.754	2.00	1	12/29/2016 23:29	WG938047
Arsenic	123		0.250	2.00	1	12/29/2016 23:29	WG938047
Barium	250		0.360	5.00	1	12/29/2016 23:29	WG938047
Beryllium	U		0.120	2.00	1	12/29/2016 23:29	WG938047
Cadmium	U		0.160	1.00	1	12/29/2016 23:29	WG938047
Chromium	1.32	J	0.540	2.00	1	12/29/2016 23:29	WG938047
Copper	0.868	B J	0.520	5.00	1	12/29/2016 23:29	WG938047
Cobalt	28.6		0.260	2.00	1	12/29/2016 23:29	WG938047
Iron	36300		15.0	100	1	12/29/2016 23:29	WG938047
Lead	0.886	B J	0.240	2.00	1	12/29/2016 23:29	WG938047
Manganese	1200		0.250	5.00	1	12/29/2016 23:29	WG938047
Nickel	57.1		0.350	2.00	1	12/29/2016 23:29	WG938047
Selenium	U		0.380	2.00	1	12/29/2016 23:29	WG938047
Silver	U		0.310	2.00	1	12/29/2016 23:29	WG938047
Thallium	U		0.190	2.00	1	12/29/2016 23:29	WG938047
Tin	0.812	B J	0.300	2.00	1	12/29/2016 23:29	WG938047
Vanadium	1.15	J	0.180	5.00	1	12/29/2016 23:29	WG938047
Zinc	27.2	B	2.56	25.0	1	12/29/2016 23:29	WG938047



Collected date/time: 12/21/16 10:22

L880396

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		10.0	50.0	1	12/26/2016 07:00	WG938408
Acrylonitrile	U		1.87	10.0	1	12/26/2016 07:00	WG938408
Benzene	4.34		0.331	1.00	1	12/26/2016 07:00	WG938408
Bromochloromethane	U	J4	0.520	1.00	1	12/26/2016 07:00	WG938408
Bromodichloromethane	U		0.380	1.00	1	12/26/2016 07:00	WG938408
Bromoform	U		0.469	1.00	1	12/26/2016 07:00	WG938408
Bromomethane	U		0.866	5.00	1	12/26/2016 07:00	WG938408
Carbon disulfide	U		0.275	1.00	1	12/26/2016 07:00	WG938408
Carbon tetrachloride	U		0.379	1.00	1	12/26/2016 07:00	WG938408
Chlorobenzene	0.849	J	0.348	1.00	1	12/26/2016 07:00	WG938408
Chlorodibromomethane	U		0.327	1.00	1	12/26/2016 07:00	WG938408
Chloroethane	2.00	J J4	0.453	5.00	1	12/26/2016 07:00	WG938408
Chloroform	U		0.324	5.00	1	12/26/2016 07:00	WG938408
Chloromethane	U		0.276	2.50	1	12/26/2016 07:00	WG938408
Dibromomethane	U		0.346	1.00	1	12/26/2016 07:00	WG938408
1,2-Dibromoethane	U		0.381	1.00	1	12/26/2016 07:00	WG938408
1,2-Dibromo-3-Chloropropane	U		1.33	5.00	1	12/26/2016 07:00	WG938408
1,2-Dichlorobenzene	U		0.349	1.00	1	12/26/2016 07:00	WG938408
1,4-Dichlorobenzene	U		0.274	1.00	1	12/26/2016 07:00	WG938408
trans-1,4-Dichloro-2-butene	U		0.866	2.50	1	12/26/2016 07:00	WG938408
1,1-Dichloroethane	5.43		0.259	1.00	1	12/26/2016 07:00	WG938408
1,2-Dichloroethane	U		0.361	1.00	1	12/26/2016 07:00	WG938408
1,1-Dichloroethene	U		0.398	1.00	1	12/26/2016 07:00	WG938408
cis-1,2-Dichloroethene	U		0.260	1.00	1	12/26/2016 07:00	WG938408
trans-1,2-Dichloroethene	U		0.396	1.00	1	12/26/2016 07:00	WG938408
1,2-Dichloropropane	U		0.306	1.00	1	12/26/2016 07:00	WG938408
cis-1,3-Dichloropropene	U		0.418	1.00	1	12/26/2016 07:00	WG938408
trans-1,3-Dichloropropene	U		0.419	1.00	1	12/26/2016 07:00	WG938408
Ethylbenzene	U		0.384	1.00	1	12/26/2016 07:00	WG938408
2-Hexanone	U		3.82	10.0	1	12/26/2016 07:00	WG938408
Iodomethane	U		1.71	10.0	1	12/26/2016 07:00	WG938408
2-Butanone (MEK)	U		3.93	15.0	1	12/26/2016 07:00	WG938408
Methylene Chloride	U		1.00	5.00	1	12/26/2016 07:00	WG938408
4-Methyl-2-pentanone (MIBK)	U		2.14	10.0	1	12/26/2016 07:00	WG938408
Styrene	U		0.307	1.00	1	12/26/2016 07:00	WG938408
1,1,1,2-Tetrachloroethane	U		0.385	1.00	1	12/26/2016 07:00	WG938408
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	12/26/2016 07:00	WG938408
Tetrachloroethene	U		0.372	1.00	1	12/26/2016 07:00	WG938408
Toluene	0.443	J	0.412	1.00	1	12/26/2016 07:00	WG938408
1,1,1-Trichloroethane	U		0.319	1.00	1	12/26/2016 07:00	WG938408
1,1,2-Trichloroethane	U		0.383	1.00	1	12/26/2016 07:00	WG938408
Trichloroethene	U		0.398	1.00	1	12/26/2016 07:00	WG938408
Trichlorofluoromethane	U		1.20	5.00	1	12/26/2016 07:00	WG938408
1,2,3-Trichloropropane	U		0.807	2.50	1	12/26/2016 07:00	WG938408
Vinyl acetate	U		1.63	10.0	1	12/26/2016 07:00	WG938408
Vinyl chloride	2.60		0.259	1.00	1	12/26/2016 07:00	WG938408
Xylenes, Total	U		1.06	3.00	1	12/26/2016 07:00	WG938408
(S) Toluene-d8	101			90.0-115		12/26/2016 07:00	WG938408
(S) Dibromofluoromethane	103			79.0-121		12/26/2016 07:00	WG938408
(S) 4-Bromofluorobenzene	93.6			80.1-120		12/26/2016 07:00	WG938408

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Gl
7 Al
8 Sc



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Dissolved Solids	433000		2820	10000	1	12/28/2016 14:22	WG938690

1 Cp

2 Tc

Wet Chemistry by Method 4500S2 D-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Sulfide	U		6.50	50.0	1	12/22/2016 22:26	WG938032

3 Ss

4 Cn

Wet Chemistry by Method 9012B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Cyanide	U		1.80	5.00	1	12/29/2016 09:39	WG938805

5 Sr

6 Gl

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	66200		51.9	1000	1	12/24/2016 19:16	WG938352
Sulfate	261	J	77.4	5000	1	12/24/2016 19:16	WG938352

7 Al

8 Sc

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	5770		102	1000	1	12/28/2016 14:58	WG938824

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Mercury	U		0.0490	0.200	1	12/23/2016 15:20	WG938137

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Antimony	U		0.754	2.00	1	12/29/2016 23:32	WG938047
Arsenic	1.35	J	0.250	2.00	1	12/29/2016 23:32	WG938047
Barium	99.7		0.360	5.00	1	12/29/2016 23:32	WG938047
Beryllium	U		0.120	2.00	1	12/29/2016 23:32	WG938047
Cadmium	1.48		0.160	1.00	1	12/29/2016 23:32	WG938047
Chromium	0.821	J	0.540	2.00	1	12/29/2016 23:32	WG938047
Copper	1.50	B J	0.520	5.00	1	12/29/2016 23:32	WG938047
Cobalt	11.1		0.260	2.00	1	12/29/2016 23:32	WG938047
Iron	305		15.0	100	1	12/29/2016 23:32	WG938047
Lead	1.30	B J	0.240	2.00	1	12/29/2016 23:32	WG938047
Manganese	4350		0.250	5.00	1	12/29/2016 23:32	WG938047
Nickel	43.8		0.350	2.00	1	12/29/2016 23:32	WG938047
Selenium	U		0.380	2.00	1	12/29/2016 23:32	WG938047
Silver	U		0.310	2.00	1	12/29/2016 23:32	WG938047
Thallium	0.612	J	0.190	2.00	1	12/29/2016 23:32	WG938047
Tin	0.432	B J	0.300	2.00	1	12/29/2016 23:32	WG938047
Vanadium	0.711	J	0.180	5.00	1	12/29/2016 23:32	WG938047
Zinc	42.9	B	2.56	25.0	1	12/29/2016 23:32	WG938047



Collected date/time: 12/21/16 07:48

L880396

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		10.0	50.0	1	12/26/2016 07:24	WG938408
Acrylonitrile	U		1.87	10.0	1	12/26/2016 07:24	WG938408
Benzene	U		0.331	1.00	1	12/26/2016 07:24	WG938408
Bromochloromethane	U	J4	0.520	1.00	1	12/26/2016 07:24	WG938408
Bromodichloromethane	U		0.380	1.00	1	12/26/2016 07:24	WG938408
Bromoform	U		0.469	1.00	1	12/26/2016 07:24	WG938408
Bromomethane	U		0.866	5.00	1	12/26/2016 07:24	WG938408
Carbon disulfide	U		0.275	1.00	1	12/26/2016 07:24	WG938408
Carbon tetrachloride	U		0.379	1.00	1	12/26/2016 07:24	WG938408
Chlorobenzene	U		0.348	1.00	1	12/26/2016 07:24	WG938408
Chlorodibromomethane	U		0.327	1.00	1	12/26/2016 07:24	WG938408
Chloroethane	U	J4	0.453	5.00	1	12/26/2016 07:24	WG938408
Chloroform	U		0.324	5.00	1	12/26/2016 07:24	WG938408
Chloromethane	U		0.276	2.50	1	12/26/2016 07:24	WG938408
Dibromomethane	U		0.346	1.00	1	12/26/2016 07:24	WG938408
1,2-Dibromoethane	U		0.381	1.00	1	12/26/2016 07:24	WG938408
1,2-Dibromo-3-Chloropropane	U		1.33	5.00	1	12/26/2016 07:24	WG938408
1,2-Dichlorobenzene	U		0.349	1.00	1	12/26/2016 07:24	WG938408
1,4-Dichlorobenzene	U		0.274	1.00	1	12/26/2016 07:24	WG938408
trans-1,4-Dichloro-2-butene	U		0.866	2.50	1	12/26/2016 07:24	WG938408
1,1-Dichloroethane	0.488	J	0.259	1.00	1	12/26/2016 07:24	WG938408
1,2-Dichloroethane	U		0.361	1.00	1	12/26/2016 07:24	WG938408
1,1-Dichloroethene	U		0.398	1.00	1	12/26/2016 07:24	WG938408
cis-1,2-Dichloroethene	U		0.260	1.00	1	12/26/2016 07:24	WG938408
trans-1,2-Dichloroethene	U		0.396	1.00	1	12/26/2016 07:24	WG938408
1,2-Dichloropropane	U		0.306	1.00	1	12/26/2016 07:24	WG938408
cis-1,3-Dichloropropene	U		0.418	1.00	1	12/26/2016 07:24	WG938408
trans-1,3-Dichloropropene	U		0.419	1.00	1	12/26/2016 07:24	WG938408
Ethylbenzene	U		0.384	1.00	1	12/26/2016 07:24	WG938408
2-Hexanone	U		3.82	10.0	1	12/26/2016 07:24	WG938408
Iodomethane	U		1.71	10.0	1	12/26/2016 07:24	WG938408
2-Butanone (MEK)	U		3.93	15.0	1	12/26/2016 07:24	WG938408
Methylene Chloride	U		1.00	5.00	1	12/26/2016 07:24	WG938408
4-Methyl-2-pentanone (MIBK)	U		2.14	10.0	1	12/26/2016 07:24	WG938408
Styrene	U		0.307	1.00	1	12/26/2016 07:24	WG938408
1,1,1,2-Tetrachloroethane	U		0.385	1.00	1	12/26/2016 07:24	WG938408
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	12/26/2016 07:24	WG938408
Tetrachloroethene	U		0.372	1.00	1	12/26/2016 07:24	WG938408
Toluene	U		0.412	1.00	1	12/26/2016 07:24	WG938408
1,1,1-Trichloroethane	U		0.319	1.00	1	12/26/2016 07:24	WG938408
1,1,2-Trichloroethane	U		0.383	1.00	1	12/26/2016 07:24	WG938408
Trichloroethene	U		0.398	1.00	1	12/26/2016 07:24	WG938408
Trichlorofluoromethane	U		1.20	5.00	1	12/26/2016 07:24	WG938408
1,2,3-Trichloropropane	U		0.807	2.50	1	12/26/2016 07:24	WG938408
Vinyl acetate	U		1.63	10.0	1	12/26/2016 07:24	WG938408
Vinyl chloride	U		0.259	1.00	1	12/26/2016 07:24	WG938408
Xylenes, Total	U		1.06	3.00	1	12/26/2016 07:24	WG938408
(S) Toluene-d8	99.7			90.0-115		12/26/2016 07:24	WG938408
(S) Dibromofluoromethane	102			79.0-121		12/26/2016 07:24	WG938408
(S) 4-Bromofluorobenzene	94.0			80.1-120		12/26/2016 07:24	WG938408

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Gl

7 Al

8 Sc



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Dissolved Solids	305000		2820	10000	1	12/28/2016 14:22	WG938690

1 Cp

2 Tc

Wet Chemistry by Method 4500S2 D-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Sulfide	U		6.50	50.0	1	12/22/2016 22:26	WG938032

3 Ss

4 Cn

Wet Chemistry by Method 9012B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Cyanide	U		1.80	5.00	1	12/29/2016 09:41	WG938805

5 Sr

6 Gl

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	17900		51.9	1000	1	12/27/2016 16:01	WG938354
Sulfate	6010		77.4	5000	1	12/27/2016 16:01	WG938354

7 Al

8 Sc

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	1640		102	1000	1	12/28/2016 15:10	WG938824

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Mercury	U		0.0490	0.200	1	12/23/2016 15:22	WG938137

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Antimony	U		0.754	2.00	1	12/29/2016 23:36	WG938047
Arsenic	U		0.250	2.00	1	12/29/2016 23:36	WG938047
Barium	41.2		0.360	5.00	1	12/29/2016 23:36	WG938047
Beryllium	U		0.120	2.00	1	12/29/2016 23:36	WG938047
Cadmium	0.765	J	0.160	1.00	1	12/29/2016 23:36	WG938047
Chromium	U		0.540	2.00	1	12/29/2016 23:36	WG938047
Copper	1.05	B J	0.520	5.00	1	12/29/2016 23:36	WG938047
Cobalt	U		0.260	2.00	1	12/29/2016 23:36	WG938047
Iron	39.0	J	15.0	100	1	12/29/2016 23:36	WG938047
Lead	1.06	B J	0.240	2.00	1	12/29/2016 23:36	WG938047
Manganese	8.40		0.250	5.00	1	12/29/2016 23:36	WG938047
Nickel	1.96	J	0.350	2.00	1	12/29/2016 23:36	WG938047
Selenium	U		0.380	2.00	1	12/29/2016 23:36	WG938047
Silver	U		0.310	2.00	1	12/29/2016 23:36	WG938047
Thallium	U		0.190	2.00	1	12/29/2016 23:36	WG938047
Tin	0.506	B J	0.300	2.00	1	12/29/2016 23:36	WG938047
Vanadium	0.514	J	0.180	5.00	1	12/29/2016 23:36	WG938047
Zinc	21.3	B J	2.56	25.0	1	12/29/2016 23:36	WG938047



Collected date/time: 12/21/16 07:20

L880396

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		10.0	50.0	1	12/26/2016 07:47	WG938408
Acrylonitrile	U		1.87	10.0	1	12/26/2016 07:47	WG938408
Benzene	U		0.331	1.00	1	12/26/2016 07:47	WG938408
Bromochloromethane	U	J4	0.520	1.00	1	12/26/2016 07:47	WG938408
Bromodichloromethane	U		0.380	1.00	1	12/26/2016 07:47	WG938408
Bromoform	U		0.469	1.00	1	12/26/2016 07:47	WG938408
Bromomethane	U		0.866	5.00	1	12/26/2016 07:47	WG938408
Carbon disulfide	U		0.275	1.00	1	12/26/2016 07:47	WG938408
Carbon tetrachloride	U		0.379	1.00	1	12/26/2016 07:47	WG938408
Chlorobenzene	U		0.348	1.00	1	12/26/2016 07:47	WG938408
Chlorodibromomethane	U		0.327	1.00	1	12/26/2016 07:47	WG938408
Chloroethane	U	J4	0.453	5.00	1	12/26/2016 07:47	WG938408
Chloroform	U		0.324	5.00	1	12/26/2016 07:47	WG938408
Chloromethane	U		0.276	2.50	1	12/26/2016 07:47	WG938408
Dibromomethane	U		0.346	1.00	1	12/26/2016 07:47	WG938408
1,2-Dibromoethane	U		0.381	1.00	1	12/26/2016 07:47	WG938408
1,2-Dibromo-3-Chloropropane	U		1.33	5.00	1	12/26/2016 07:47	WG938408
1,2-Dichlorobenzene	U		0.349	1.00	1	12/26/2016 07:47	WG938408
1,4-Dichlorobenzene	U		0.274	1.00	1	12/26/2016 07:47	WG938408
trans-1,4-Dichloro-2-butene	U		0.866	2.50	1	12/26/2016 07:47	WG938408
1,1-Dichloroethane	U		0.259	1.00	1	12/26/2016 07:47	WG938408
1,2-Dichloroethane	U		0.361	1.00	1	12/26/2016 07:47	WG938408
1,1-Dichloroethene	U		0.398	1.00	1	12/26/2016 07:47	WG938408
cis-1,2-Dichloroethene	U		0.260	1.00	1	12/26/2016 07:47	WG938408
trans-1,2-Dichloroethene	U		0.396	1.00	1	12/26/2016 07:47	WG938408
1,2-Dichloropropane	U		0.306	1.00	1	12/26/2016 07:47	WG938408
cis-1,3-Dichloropropene	U		0.418	1.00	1	12/26/2016 07:47	WG938408
trans-1,3-Dichloropropene	U		0.419	1.00	1	12/26/2016 07:47	WG938408
Ethylbenzene	U		0.384	1.00	1	12/26/2016 07:47	WG938408
2-Hexanone	U		3.82	10.0	1	12/26/2016 07:47	WG938408
Iodomethane	U		1.71	10.0	1	12/26/2016 07:47	WG938408
2-Butanone (MEK)	U		3.93	15.0	1	12/26/2016 07:47	WG938408
Methylene Chloride	U		1.00	5.00	1	12/26/2016 07:47	WG938408
4-Methyl-2-pentanone (MIBK)	U		2.14	10.0	1	12/26/2016 07:47	WG938408
Styrene	U		0.307	1.00	1	12/26/2016 07:47	WG938408
1,1,1,2-Tetrachloroethane	U		0.385	1.00	1	12/26/2016 07:47	WG938408
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	12/26/2016 07:47	WG938408
Tetrachloroethene	U		0.372	1.00	1	12/26/2016 07:47	WG938408
Toluene	U		0.412	1.00	1	12/26/2016 07:47	WG938408
1,1,1-Trichloroethane	U		0.319	1.00	1	12/26/2016 07:47	WG938408
1,1,2-Trichloroethane	U		0.383	1.00	1	12/26/2016 07:47	WG938408
Trichloroethene	U		0.398	1.00	1	12/26/2016 07:47	WG938408
Trichlorofluoromethane	U		1.20	5.00	1	12/26/2016 07:47	WG938408
1,2,3-Trichloropropane	U		0.807	2.50	1	12/26/2016 07:47	WG938408
Vinyl acetate	U		1.63	10.0	1	12/26/2016 07:47	WG938408
Vinyl chloride	U		0.259	1.00	1	12/26/2016 07:47	WG938408
Xylenes, Total	U		1.06	3.00	1	12/26/2016 07:47	WG938408
(S) Toluene-d8	100			90.0-115		12/26/2016 07:47	WG938408
(S) Dibromofluoromethane	104			79.0-121		12/26/2016 07:47	WG938408
(S) 4-Bromofluorobenzene	92.7			80.1-120		12/26/2016 07:47	WG938408





Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Dissolved Solids	443000		2820	10000	1	12/27/2016 15:37	WG938474

1 Cp

2 Tc

Wet Chemistry by Method 4500S2 D-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Sulfide	U		6.50	50.0	1	12/22/2016 22:26	WG938032

3 Ss

4 Cn

Wet Chemistry by Method 9012B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Cyanide	U		1.80	5.00	1	12/29/2016 09:42	WG938805

5 Sr

6 Gl

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	10400		51.9	1000	1	12/27/2016 16:21	WG938354
Sulfate	13500		77.4	5000	1	12/27/2016 16:21	WG938354

7 Al

8 Sc

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	1390		102	1000	1	12/28/2016 16:16	WG938824

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Mercury	U		0.0490	0.200	1	12/23/2016 15:24	WG938137

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Antimony	0.806	J	0.754	2.00	1	12/29/2016 23:50	WG938047
Arsenic	6.28		0.250	2.00	1	12/29/2016 23:50	WG938047
Barium	39.4		0.360	5.00	1	12/29/2016 23:50	WG938047
Beryllium	U		0.120	2.00	1	12/29/2016 23:50	WG938047
Cadmium	U		0.160	1.00	1	12/29/2016 23:50	WG938047
Chromium	5.77		0.540	2.00	1	12/29/2016 23:50	WG938047
Copper	1.85	B J	0.520	5.00	1	12/29/2016 23:50	WG938047
Cobalt	U		0.260	2.00	1	12/29/2016 23:50	WG938047
Iron	536		15.0	100	1	12/29/2016 23:50	WG938047
Lead	3.16	B	0.240	2.00	1	12/29/2016 23:50	WG938047
Manganese	17.5		0.250	5.00	1	12/29/2016 23:50	WG938047
Nickel	5.86		0.350	2.00	1	12/29/2016 23:50	WG938047
Selenium	U		0.380	2.00	1	12/29/2016 23:50	WG938047
Silver	U		0.310	2.00	1	12/29/2016 23:50	WG938047
Thallium	U		0.190	2.00	1	12/29/2016 23:50	WG938047
Tin	0.638	B J	0.300	2.00	1	12/29/2016 23:50	WG938047
Vanadium	1.28	J	0.180	5.00	1	12/29/2016 23:50	WG938047
Zinc	60.2		2.56	25.0	1	12/29/2016 23:50	WG938047



Collected date/time: 12/20/16 12:53

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Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		10.0	50.0	1	12/26/2016 08:10	WG938408
Acrylonitrile	U		1.87	10.0	1	12/26/2016 08:10	WG938408
Benzene	U		0.331	1.00	1	12/26/2016 08:10	WG938408
Bromochloromethane	U	J4	0.520	1.00	1	12/26/2016 08:10	WG938408
Bromodichloromethane	U		0.380	1.00	1	12/26/2016 08:10	WG938408
Bromoform	U		0.469	1.00	1	12/26/2016 08:10	WG938408
Bromomethane	U		0.866	5.00	1	12/26/2016 08:10	WG938408
Carbon disulfide	U		0.275	1.00	1	12/26/2016 08:10	WG938408
Carbon tetrachloride	U		0.379	1.00	1	12/26/2016 08:10	WG938408
Chlorobenzene	U		0.348	1.00	1	12/26/2016 08:10	WG938408
Chlorodibromomethane	U		0.327	1.00	1	12/26/2016 08:10	WG938408
Chloroethane	U	J4	0.453	5.00	1	12/26/2016 08:10	WG938408
Chloroform	U		0.324	5.00	1	12/26/2016 08:10	WG938408
Chloromethane	U		0.276	2.50	1	12/26/2016 08:10	WG938408
Dibromomethane	U		0.346	1.00	1	12/26/2016 08:10	WG938408
1,2-Dibromoethane	U		0.381	1.00	1	12/26/2016 08:10	WG938408
1,2-Dibromo-3-Chloropropane	U		1.33	5.00	1	12/26/2016 08:10	WG938408
1,2-Dichlorobenzene	U		0.349	1.00	1	12/26/2016 08:10	WG938408
1,4-Dichlorobenzene	U		0.274	1.00	1	12/26/2016 08:10	WG938408
trans-1,4-Dichloro-2-butene	U		0.866	2.50	1	12/26/2016 08:10	WG938408
1,1-Dichloroethane	U		0.259	1.00	1	12/26/2016 08:10	WG938408
1,2-Dichloroethane	U		0.361	1.00	1	12/26/2016 08:10	WG938408
1,1-Dichloroethene	U		0.398	1.00	1	12/26/2016 08:10	WG938408
cis-1,2-Dichloroethene	U		0.260	1.00	1	12/26/2016 08:10	WG938408
trans-1,2-Dichloroethene	U		0.396	1.00	1	12/26/2016 08:10	WG938408
1,2-Dichloropropane	U		0.306	1.00	1	12/26/2016 08:10	WG938408
cis-1,3-Dichloropropene	U		0.418	1.00	1	12/26/2016 08:10	WG938408
trans-1,3-Dichloropropene	U		0.419	1.00	1	12/26/2016 08:10	WG938408
Ethylbenzene	U		0.384	1.00	1	12/26/2016 08:10	WG938408
2-Hexanone	U		3.82	10.0	1	12/26/2016 08:10	WG938408
Iodomethane	U		1.71	10.0	1	12/26/2016 08:10	WG938408
2-Butanone (MEK)	U		3.93	15.0	1	12/26/2016 08:10	WG938408
Methylene Chloride	U		1.00	5.00	1	12/26/2016 08:10	WG938408
4-Methyl-2-pentanone (MIBK)	U		2.14	10.0	1	12/26/2016 08:10	WG938408
Styrene	U		0.307	1.00	1	12/26/2016 08:10	WG938408
1,1,1,2-Tetrachloroethane	U		0.385	1.00	1	12/26/2016 08:10	WG938408
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	12/26/2016 08:10	WG938408
Tetrachloroethene	U		0.372	1.00	1	12/26/2016 08:10	WG938408
Toluene	U		0.412	1.00	1	12/26/2016 08:10	WG938408
1,1,1-Trichloroethane	U		0.319	1.00	1	12/26/2016 08:10	WG938408
1,1,2-Trichloroethane	U		0.383	1.00	1	12/26/2016 08:10	WG938408
Trichloroethene	U		0.398	1.00	1	12/26/2016 08:10	WG938408
Trichlorofluoromethane	U		1.20	5.00	1	12/26/2016 08:10	WG938408
1,2,3-Trichloropropane	U		0.807	2.50	1	12/26/2016 08:10	WG938408
Vinyl acetate	U		1.63	10.0	1	12/26/2016 08:10	WG938408
Vinyl chloride	U		0.259	1.00	1	12/26/2016 08:10	WG938408
Xylenes, Total	U		1.06	3.00	1	12/26/2016 08:10	WG938408
(S) Toluene-d8	101			90.0-115		12/26/2016 08:10	WG938408
(S) Dibromofluoromethane	102			79.0-121		12/26/2016 08:10	WG938408
(S) 4-Bromofluorobenzene	92.3			80.1-120		12/26/2016 08:10	WG938408

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Gl

7 Al

8 Sc



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Dissolved Solids	425000		2820	10000	1	12/27/2016 15:37	WG938474

1 Cp

2 Tc

Wet Chemistry by Method 4500S2 D-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Sulfide	U		6.50	50.0	1	12/22/2016 22:26	WG938032

3 Ss

4 Cn

Wet Chemistry by Method 9012B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Cyanide	U		1.80	5.00	1	12/29/2016 09:43	WG938805

5 Sr

6 Gl

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	9170		51.9	1000	1	12/27/2016 16:31	WG938354
Sulfate	8970		77.4	5000	1	12/27/2016 16:31	WG938354

7 Al

8 Sc

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	94700		102	1000	1	12/28/2016 16:41	WG938824

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Mercury	0.134	J	0.0490	0.200	1	12/27/2016 14:46	WG938411

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Antimony	U		0.754	2.00	1	12/29/2016 23:54	WG938047
Arsenic	0.561	J	0.250	2.00	1	12/29/2016 23:54	WG938047
Barium	50.2		0.360	5.00	1	12/29/2016 23:54	WG938047
Beryllium	U		0.120	2.00	1	12/29/2016 23:54	WG938047
Cadmium	0.995	J	0.160	1.00	1	12/29/2016 23:54	WG938047
Chromium	1.21	J	0.540	2.00	1	12/29/2016 23:54	WG938047
Copper	2.63	B J	0.520	5.00	1	12/29/2016 23:54	WG938047
Cobalt	1.25	J	0.260	2.00	1	12/29/2016 23:54	WG938047
Iron	108		15.0	100	1	12/29/2016 23:54	WG938047
Lead	0.842	B J	0.240	2.00	1	12/29/2016 23:54	WG938047
Manganese	48.3		0.250	5.00	1	12/29/2016 23:54	WG938047
Nickel	2.68		0.350	2.00	1	12/29/2016 23:54	WG938047
Selenium	U		0.380	2.00	1	12/29/2016 23:54	WG938047
Silver	U		0.310	2.00	1	12/29/2016 23:54	WG938047
Thallium	U		0.190	2.00	1	12/29/2016 23:54	WG938047
Tin	0.407	B J	0.300	2.00	1	12/29/2016 23:54	WG938047
Vanadium	0.542	J	0.180	5.00	1	12/29/2016 23:54	WG938047
Zinc	82.3		2.56	25.0	1	12/29/2016 23:54	WG938047



Collected date/time: 12/20/16 08:19

L880396

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		10.0	50.0	1	12/26/2016 08:33	WG938408
Acrylonitrile	U		1.87	10.0	1	12/26/2016 08:33	WG938408
Benzene	U		0.331	1.00	1	12/26/2016 08:33	WG938408
Bromochloromethane	U	J4	0.520	1.00	1	12/26/2016 08:33	WG938408
Bromodichloromethane	U		0.380	1.00	1	12/26/2016 08:33	WG938408
Bromoform	U		0.469	1.00	1	12/26/2016 08:33	WG938408
Bromomethane	U		0.866	5.00	1	12/26/2016 08:33	WG938408
Carbon disulfide	U		0.275	1.00	1	12/26/2016 08:33	WG938408
Carbon tetrachloride	U		0.379	1.00	1	12/26/2016 08:33	WG938408
Chlorobenzene	U		0.348	1.00	1	12/26/2016 08:33	WG938408
Chlorodibromomethane	U		0.327	1.00	1	12/26/2016 08:33	WG938408
Chloroethane	U	J4	0.453	5.00	1	12/26/2016 08:33	WG938408
Chloroform	U		0.324	5.00	1	12/26/2016 08:33	WG938408
Chloromethane	U		0.276	2.50	1	12/26/2016 08:33	WG938408
Dibromomethane	U		0.346	1.00	1	12/26/2016 08:33	WG938408
1,2-Dibromoethane	U		0.381	1.00	1	12/26/2016 08:33	WG938408
1,2-Dibromo-3-Chloropropane	U		1.33	5.00	1	12/26/2016 08:33	WG938408
1,2-Dichlorobenzene	U		0.349	1.00	1	12/26/2016 08:33	WG938408
1,4-Dichlorobenzene	U		0.274	1.00	1	12/26/2016 08:33	WG938408
trans-1,4-Dichloro-2-butene	U		0.866	2.50	1	12/26/2016 08:33	WG938408
1,1-Dichloroethane	U		0.259	1.00	1	12/26/2016 08:33	WG938408
1,2-Dichloroethane	U		0.361	1.00	1	12/26/2016 08:33	WG938408
1,1-Dichloroethene	U		0.398	1.00	1	12/26/2016 08:33	WG938408
cis-1,2-Dichloroethene	U		0.260	1.00	1	12/26/2016 08:33	WG938408
trans-1,2-Dichloroethene	U		0.396	1.00	1	12/26/2016 08:33	WG938408
1,2-Dichloropropane	U		0.306	1.00	1	12/26/2016 08:33	WG938408
cis-1,3-Dichloropropene	U		0.418	1.00	1	12/26/2016 08:33	WG938408
trans-1,3-Dichloropropene	U		0.419	1.00	1	12/26/2016 08:33	WG938408
Ethylbenzene	U		0.384	1.00	1	12/26/2016 08:33	WG938408
2-Hexanone	U		3.82	10.0	1	12/26/2016 08:33	WG938408
Iodomethane	U		1.71	10.0	1	12/26/2016 08:33	WG938408
2-Butanone (MEK)	U		3.93	15.0	1	12/26/2016 08:33	WG938408
Methylene Chloride	U		1.00	5.00	1	12/26/2016 08:33	WG938408
4-Methyl-2-pentanone (MIBK)	U		2.14	10.0	1	12/26/2016 08:33	WG938408
Styrene	U		0.307	1.00	1	12/26/2016 08:33	WG938408
1,1,1,2-Tetrachloroethane	U		0.385	1.00	1	12/26/2016 08:33	WG938408
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	12/26/2016 08:33	WG938408
Tetrachloroethene	U		0.372	1.00	1	12/26/2016 08:33	WG938408
Toluene	U		0.412	1.00	1	12/26/2016 08:33	WG938408
1,1,1-Trichloroethane	U		0.319	1.00	1	12/26/2016 08:33	WG938408
1,1,2-Trichloroethane	U		0.383	1.00	1	12/26/2016 08:33	WG938408
Trichloroethene	U		0.398	1.00	1	12/26/2016 08:33	WG938408
Trichlorofluoromethane	U		1.20	5.00	1	12/26/2016 08:33	WG938408
1,2,3-Trichloropropane	U		0.807	2.50	1	12/26/2016 08:33	WG938408
Vinyl acetate	U		1.63	10.0	1	12/26/2016 08:33	WG938408
Vinyl chloride	U		0.259	1.00	1	12/26/2016 08:33	WG938408
Xylenes, Total	U		1.06	3.00	1	12/26/2016 08:33	WG938408
(S) Toluene-d8	100			90.0-115		12/26/2016 08:33	WG938408
(S) Dibromofluoromethane	102			79.0-121		12/26/2016 08:33	WG938408
(S) 4-Bromofluorobenzene	92.4			80.1-120		12/26/2016 08:33	WG938408





Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Dissolved Solids	458000		2820	10000	1	12/27/2016 15:37	WG938474

1 Cp

2 Tc

Wet Chemistry by Method 4500S2 D-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Sulfide	U		6.50	50.0	1	12/22/2016 22:27	WG938032

3 Ss

4 Cn

Wet Chemistry by Method 9012B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Cyanide	U		1.80	5.00	1	12/29/2016 09:44	WG938805

5 Sr

6 Gl

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	4110		51.9	1000	1	12/27/2016 16:41	WG938354
Sulfate	41900		77.4	5000	1	12/27/2016 16:41	WG938354

7 Al

8 Sc

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	1790		102	1000	1	12/28/2016 16:55	WG938824

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Mercury	U		0.0490	0.200	1	12/23/2016 15:27	WG938137

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Antimony	U		0.754	2.00	1	12/29/2016 23:57	WG938047
Arsenic	4.58		0.250	2.00	1	12/29/2016 23:57	WG938047
Barium	41.9		0.360	5.00	1	12/29/2016 23:57	WG938047
Beryllium	U		0.120	2.00	1	12/29/2016 23:57	WG938047
Cadmium	1.28		0.160	1.00	1	12/29/2016 23:57	WG938047
Chromium	5.71		0.540	2.00	1	12/29/2016 23:57	WG938047
Copper	4.00	B J	0.520	5.00	1	12/29/2016 23:57	WG938047
Cobalt	1.06	J	0.260	2.00	1	12/29/2016 23:57	WG938047
Iron	247		15.0	100	1	12/29/2016 23:57	WG938047
Lead	1.48	B J	0.240	2.00	1	12/29/2016 23:57	WG938047
Manganese	16.6		0.250	5.00	1	12/29/2016 23:57	WG938047
Nickel	18.7		0.350	2.00	1	12/29/2016 23:57	WG938047
Selenium	U		0.380	2.00	1	12/29/2016 23:57	WG938047
Silver	U		0.310	2.00	1	12/29/2016 23:57	WG938047
Thallium	0.547	J	0.190	2.00	1	12/29/2016 23:57	WG938047
Tin	0.531	B J	0.300	2.00	1	12/29/2016 23:57	WG938047
Vanadium	0.569	J	0.180	5.00	1	12/29/2016 23:57	WG938047
Zinc	656		2.56	25.0	1	12/29/2016 23:57	WG938047



Collected date/time: 12/20/16 10:42

L880396

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		10.0	50.0	1	12/26/2016 08:57	WG938408
Acrylonitrile	U		1.87	10.0	1	12/26/2016 08:57	WG938408
Benzene	U		0.331	1.00	1	12/26/2016 08:57	WG938408
Bromochloromethane	U	J4	0.520	1.00	1	12/26/2016 08:57	WG938408
Bromodichloromethane	U		0.380	1.00	1	12/26/2016 08:57	WG938408
Bromoform	U		0.469	1.00	1	12/26/2016 08:57	WG938408
Bromomethane	U		0.866	5.00	1	12/26/2016 08:57	WG938408
Carbon disulfide	U		0.275	1.00	1	12/26/2016 08:57	WG938408
Carbon tetrachloride	U		0.379	1.00	1	12/26/2016 08:57	WG938408
Chlorobenzene	U		0.348	1.00	1	12/26/2016 08:57	WG938408
Chlorodibromomethane	U		0.327	1.00	1	12/26/2016 08:57	WG938408
Chloroethane	U	J4	0.453	5.00	1	12/26/2016 08:57	WG938408
Chloroform	U		0.324	5.00	1	12/26/2016 08:57	WG938408
Chloromethane	U		0.276	2.50	1	12/26/2016 08:57	WG938408
Dibromomethane	U		0.346	1.00	1	12/26/2016 08:57	WG938408
1,2-Dibromoethane	U		0.381	1.00	1	12/26/2016 08:57	WG938408
1,2-Dibromo-3-Chloropropane	U		1.33	5.00	1	12/26/2016 08:57	WG938408
1,2-Dichlorobenzene	U		0.349	1.00	1	12/26/2016 08:57	WG938408
1,4-Dichlorobenzene	U		0.274	1.00	1	12/26/2016 08:57	WG938408
trans-1,4-Dichloro-2-butene	U		0.866	2.50	1	12/26/2016 08:57	WG938408
1,1-Dichloroethane	U		0.259	1.00	1	12/26/2016 08:57	WG938408
1,2-Dichloroethane	U		0.361	1.00	1	12/26/2016 08:57	WG938408
1,1-Dichloroethene	U		0.398	1.00	1	12/26/2016 08:57	WG938408
cis-1,2-Dichloroethene	U		0.260	1.00	1	12/26/2016 08:57	WG938408
trans-1,2-Dichloroethene	U		0.396	1.00	1	12/26/2016 08:57	WG938408
1,2-Dichloropropane	U		0.306	1.00	1	12/26/2016 08:57	WG938408
cis-1,3-Dichloropropene	U		0.418	1.00	1	12/26/2016 08:57	WG938408
trans-1,3-Dichloropropene	U		0.419	1.00	1	12/26/2016 08:57	WG938408
Ethylbenzene	U		0.384	1.00	1	12/26/2016 08:57	WG938408
2-Hexanone	U		3.82	10.0	1	12/26/2016 08:57	WG938408
Iodomethane	U		1.71	10.0	1	12/26/2016 08:57	WG938408
2-Butanone (MEK)	U		3.93	15.0	1	12/26/2016 08:57	WG938408
Methylene Chloride	U		1.00	5.00	1	12/26/2016 08:57	WG938408
4-Methyl-2-pentanone (MIBK)	U		2.14	10.0	1	12/26/2016 08:57	WG938408
Styrene	U		0.307	1.00	1	12/26/2016 08:57	WG938408
1,1,1,2-Tetrachloroethane	U		0.385	1.00	1	12/26/2016 08:57	WG938408
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	12/26/2016 08:57	WG938408
Tetrachloroethene	U		0.372	1.00	1	12/26/2016 08:57	WG938408
Toluene	U		0.412	1.00	1	12/26/2016 08:57	WG938408
1,1,1-Trichloroethane	U		0.319	1.00	1	12/26/2016 08:57	WG938408
1,1,2-Trichloroethane	U		0.383	1.00	1	12/26/2016 08:57	WG938408
Trichloroethene	U		0.398	1.00	1	12/26/2016 08:57	WG938408
Trichlorofluoromethane	U		1.20	5.00	1	12/26/2016 08:57	WG938408
1,2,3-Trichloropropane	U		0.807	2.50	1	12/26/2016 08:57	WG938408
Vinyl acetate	U		1.63	10.0	1	12/26/2016 08:57	WG938408
Vinyl chloride	U		0.259	1.00	1	12/26/2016 08:57	WG938408
Xylenes, Total	U		1.06	3.00	1	12/26/2016 08:57	WG938408
(S) Toluene-d8	101			90.0-115		12/26/2016 08:57	WG938408
(S) Dibromofluoromethane	102			79.0-121		12/26/2016 08:57	WG938408
(S) 4-Bromofluorobenzene	93.1			80.1-120		12/26/2016 08:57	WG938408

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Gl
7 Al
8 Sc



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Dissolved Solids	399000		2820	10000	1	12/27/2016 15:37	WG938474

1 Cp

2 Tc

Wet Chemistry by Method 4500S2 D-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Sulfide	U		6.50	50.0	1	12/22/2016 22:27	WG938032

3 Ss

4 Cn

Wet Chemistry by Method 9012B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Cyanide	U		1.80	5.00	1	12/29/2016 09:47	WG938805

5 Sr

6 Gl

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	3050		51.9	1000	1	12/27/2016 16:52	WG938354
Sulfate	29700		77.4	5000	1	12/27/2016 16:52	WG938354

7 Al

8 Sc

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	1610	P1	102	1000	1	12/28/2016 17:06	WG938824

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Mercury	U		0.0490	0.200	1	12/23/2016 15:29	WG938137

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Antimony	U		0.754	2.00	1	12/30/2016 00:01	WG938047
Arsenic	5.74		0.250	2.00	1	12/30/2016 00:01	WG938047
Barium	23.0		0.360	5.00	1	12/30/2016 00:01	WG938047
Beryllium	U		0.120	2.00	1	12/30/2016 00:01	WG938047
Cadmium	U		0.160	1.00	1	12/30/2016 00:01	WG938047
Chromium	7.44		0.540	2.00	1	12/30/2016 00:01	WG938047
Copper	5.29	B	0.520	5.00	1	12/30/2016 00:01	WG938047
Cobalt	0.774	J	0.260	2.00	1	12/30/2016 00:01	WG938047
Iron	400		15.0	100	1	12/30/2016 00:01	WG938047
Lead	5.55	B	0.240	2.00	1	12/30/2016 00:01	WG938047
Manganese	7.01		0.250	5.00	1	12/30/2016 00:01	WG938047
Nickel	19.5		0.350	2.00	1	12/30/2016 00:01	WG938047
Selenium	U		0.380	2.00	1	12/30/2016 00:01	WG938047
Silver	U		0.310	2.00	1	12/30/2016 00:01	WG938047
Thallium	U		0.190	2.00	1	12/30/2016 00:01	WG938047
Tin	U		0.300	2.00	1	12/30/2016 00:01	WG938047
Vanadium	0.359	J	0.180	5.00	1	12/30/2016 00:01	WG938047
Zinc	43.0	B	2.56	25.0	1	12/30/2016 00:01	WG938047



Collected date/time: 12/20/16 15:15

L880396

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		10.0	50.0	1	12/26/2016 09:20	WG938408
Acrylonitrile	U		1.87	10.0	1	12/26/2016 09:20	WG938408
Benzene	U		0.331	1.00	1	12/26/2016 09:20	WG938408
Bromochloromethane	U	J4	0.520	1.00	1	12/26/2016 09:20	WG938408
Bromodichloromethane	U		0.380	1.00	1	12/26/2016 09:20	WG938408
Bromoform	U		0.469	1.00	1	12/26/2016 09:20	WG938408
Bromomethane	U		0.866	5.00	1	12/26/2016 09:20	WG938408
Carbon disulfide	U		0.275	1.00	1	12/26/2016 09:20	WG938408
Carbon tetrachloride	U		0.379	1.00	1	12/26/2016 09:20	WG938408
Chlorobenzene	U		0.348	1.00	1	12/26/2016 09:20	WG938408
Chlorodibromomethane	U		0.327	1.00	1	12/26/2016 09:20	WG938408
Chloroethane	U	J4	0.453	5.00	1	12/26/2016 09:20	WG938408
Chloroform	U		0.324	5.00	1	12/26/2016 09:20	WG938408
Chloromethane	U		0.276	2.50	1	12/26/2016 09:20	WG938408
Dibromomethane	U		0.346	1.00	1	12/26/2016 09:20	WG938408
1,2-Dibromoethane	U		0.381	1.00	1	12/26/2016 09:20	WG938408
1,2-Dibromo-3-Chloropropane	U		1.33	5.00	1	12/26/2016 09:20	WG938408
1,2-Dichlorobenzene	U		0.349	1.00	1	12/26/2016 09:20	WG938408
1,4-Dichlorobenzene	U		0.274	1.00	1	12/26/2016 09:20	WG938408
trans-1,4-Dichloro-2-butene	U		0.866	2.50	1	12/26/2016 09:20	WG938408
1,1-Dichloroethane	U		0.259	1.00	1	12/26/2016 09:20	WG938408
1,2-Dichloroethane	U		0.361	1.00	1	12/26/2016 09:20	WG938408
1,1-Dichloroethene	U		0.398	1.00	1	12/26/2016 09:20	WG938408
cis-1,2-Dichloroethene	U		0.260	1.00	1	12/26/2016 09:20	WG938408
trans-1,2-Dichloroethene	U		0.396	1.00	1	12/26/2016 09:20	WG938408
1,2-Dichloropropane	U		0.306	1.00	1	12/26/2016 09:20	WG938408
cis-1,3-Dichloropropene	U		0.418	1.00	1	12/26/2016 09:20	WG938408
trans-1,3-Dichloropropene	U		0.419	1.00	1	12/26/2016 09:20	WG938408
Ethylbenzene	U		0.384	1.00	1	12/26/2016 09:20	WG938408
2-Hexanone	U		3.82	10.0	1	12/26/2016 09:20	WG938408
Iodomethane	U		1.71	10.0	1	12/26/2016 09:20	WG938408
2-Butanone (MEK)	U		3.93	15.0	1	12/26/2016 09:20	WG938408
Methylene Chloride	U		1.00	5.00	1	12/26/2016 09:20	WG938408
4-Methyl-2-pentanone (MIBK)	U		2.14	10.0	1	12/26/2016 09:20	WG938408
Styrene	U		0.307	1.00	1	12/26/2016 09:20	WG938408
1,1,1,2-Tetrachloroethane	U		0.385	1.00	1	12/26/2016 09:20	WG938408
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	12/26/2016 09:20	WG938408
Tetrachloroethene	U		0.372	1.00	1	12/26/2016 09:20	WG938408
Toluene	U		0.412	1.00	1	12/26/2016 09:20	WG938408
1,1,1-Trichloroethane	U		0.319	1.00	1	12/26/2016 09:20	WG938408
1,1,2-Trichloroethane	U		0.383	1.00	1	12/26/2016 09:20	WG938408
Trichloroethene	U		0.398	1.00	1	12/26/2016 09:20	WG938408
Trichlorofluoromethane	U		1.20	5.00	1	12/26/2016 09:20	WG938408
1,2,3-Trichloropropane	U		0.807	2.50	1	12/26/2016 09:20	WG938408
Vinyl acetate	U		1.63	10.0	1	12/26/2016 09:20	WG938408
Vinyl chloride	U		0.259	1.00	1	12/26/2016 09:20	WG938408
Xylenes, Total	U		1.06	3.00	1	12/26/2016 09:20	WG938408
(S) Toluene-d8	103			90.0-115		12/26/2016 09:20	WG938408
(S) Dibromofluoromethane	102			79.0-121		12/26/2016 09:20	WG938408
(S) 4-Bromofluorobenzene	93.5			80.1-120		12/26/2016 09:20	WG938408

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Gl

7 Al

8 Sc



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Dissolved Solids	371000		2820	10000	1	12/27/2016 15:37	WG938474

1 Cp

2 Tc

Wet Chemistry by Method 4500S2 D-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Sulfide	U		6.50	50.0	1	12/22/2016 22:09	WG938033

3 Ss

4 Cn

Wet Chemistry by Method 9012B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Cyanide	U		1.80	5.00	1	12/29/2016 09:48	WG938805

5 Sr

6 Gl

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	2230		51.9	1000	1	12/27/2016 17:02	WG938354
Sulfate	11200		77.4	5000	1	12/27/2016 17:02	WG938354

7 Al

8 Sc

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	23300		102	1000	1	12/28/2016 17:32	WG938824

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Mercury	U		0.0490	0.200	1	12/23/2016 15:31	WG938137

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Antimony	U		0.754	2.00	1	12/30/2016 00:04	WG938047
Arsenic	3.54		0.250	2.00	1	12/30/2016 00:04	WG938047
Barium	31.9		0.360	5.00	1	12/30/2016 00:04	WG938047
Beryllium	U		0.120	2.00	1	12/30/2016 00:04	WG938047
Cadmium	0.291	J	0.160	1.00	1	12/30/2016 00:04	WG938047
Chromium	U		0.540	2.00	1	12/30/2016 00:04	WG938047
Copper	0.959	B J	0.520	5.00	1	12/30/2016 00:04	WG938047
Cobalt	U		0.260	2.00	1	12/30/2016 00:04	WG938047
Iron	37.8	J	15.0	100	1	12/30/2016 00:04	WG938047
Lead	0.583	B J	0.240	2.00	1	12/30/2016 00:04	WG938047
Manganese	4.05	J	0.250	5.00	1	12/30/2016 00:04	WG938047
Nickel	U		0.350	2.00	1	12/30/2016 00:04	WG938047
Selenium	U		0.380	2.00	1	12/30/2016 00:04	WG938047
Silver	U		0.310	2.00	1	12/30/2016 00:04	WG938047
Thallium	U		0.190	2.00	1	12/30/2016 00:04	WG938047
Tin	U		0.300	2.00	1	12/30/2016 00:04	WG938047
Vanadium	0.351	J	0.180	5.00	1	12/30/2016 00:04	WG938047
Zinc	7.99	B J	2.56	25.0	1	12/30/2016 00:04	WG938047



Collected date/time: 12/20/16 07:00

L880396

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		10.0	50.0	1	12/26/2016 09:43	WG938408
Acrylonitrile	U		1.87	10.0	1	12/26/2016 09:43	WG938408
Benzene	U		0.331	1.00	1	12/26/2016 09:43	WG938408
Bromochloromethane	U	J4	0.520	1.00	1	12/26/2016 09:43	WG938408
Bromodichloromethane	U		0.380	1.00	1	12/26/2016 09:43	WG938408
Bromoform	U		0.469	1.00	1	12/26/2016 09:43	WG938408
Bromomethane	U		0.866	5.00	1	12/26/2016 09:43	WG938408
Carbon disulfide	U		0.275	1.00	1	12/26/2016 09:43	WG938408
Carbon tetrachloride	U		0.379	1.00	1	12/26/2016 09:43	WG938408
Chlorobenzene	U		0.348	1.00	1	12/26/2016 09:43	WG938408
Chlorodibromomethane	U		0.327	1.00	1	12/26/2016 09:43	WG938408
Chloroethane	U	J4	0.453	5.00	1	12/26/2016 09:43	WG938408
Chloroform	U		0.324	5.00	1	12/26/2016 09:43	WG938408
Chloromethane	U		0.276	2.50	1	12/26/2016 09:43	WG938408
Dibromomethane	U		0.346	1.00	1	12/26/2016 09:43	WG938408
1,2-Dibromoethane	U		0.381	1.00	1	12/26/2016 09:43	WG938408
1,2-Dibromo-3-Chloropropane	U		1.33	5.00	1	12/26/2016 09:43	WG938408
1,2-Dichlorobenzene	U		0.349	1.00	1	12/26/2016 09:43	WG938408
1,4-Dichlorobenzene	U		0.274	1.00	1	12/26/2016 09:43	WG938408
trans-1,4-Dichloro-2-butene	U		0.866	2.50	1	12/26/2016 09:43	WG938408
1,1-Dichloroethane	U		0.259	1.00	1	12/26/2016 09:43	WG938408
1,2-Dichloroethane	U		0.361	1.00	1	12/26/2016 09:43	WG938408
1,1-Dichloroethene	U		0.398	1.00	1	12/26/2016 09:43	WG938408
cis-1,2-Dichloroethene	U		0.260	1.00	1	12/26/2016 09:43	WG938408
trans-1,2-Dichloroethene	U		0.396	1.00	1	12/26/2016 09:43	WG938408
1,2-Dichloropropane	U		0.306	1.00	1	12/26/2016 09:43	WG938408
cis-1,3-Dichloropropene	U		0.418	1.00	1	12/26/2016 09:43	WG938408
trans-1,3-Dichloropropene	U		0.419	1.00	1	12/26/2016 09:43	WG938408
Ethylbenzene	U		0.384	1.00	1	12/26/2016 09:43	WG938408
2-Hexanone	U		3.82	10.0	1	12/26/2016 09:43	WG938408
Iodomethane	U		1.71	10.0	1	12/26/2016 09:43	WG938408
2-Butanone (MEK)	U		3.93	15.0	1	12/26/2016 09:43	WG938408
Methylene Chloride	U		1.00	5.00	1	12/26/2016 09:43	WG938408
4-Methyl-2-pentanone (MIBK)	U		2.14	10.0	1	12/26/2016 09:43	WG938408
Styrene	U		0.307	1.00	1	12/26/2016 09:43	WG938408
1,1,1,2-Tetrachloroethane	U		0.385	1.00	1	12/26/2016 09:43	WG938408
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	12/26/2016 09:43	WG938408
Tetrachloroethene	U		0.372	1.00	1	12/26/2016 09:43	WG938408
Toluene	U		0.412	1.00	1	12/26/2016 09:43	WG938408
1,1,1-Trichloroethane	U		0.319	1.00	1	12/26/2016 09:43	WG938408
1,1,2-Trichloroethane	U		0.383	1.00	1	12/26/2016 09:43	WG938408
Trichloroethene	U		0.398	1.00	1	12/26/2016 09:43	WG938408
Trichlorofluoromethane	U		1.20	5.00	1	12/26/2016 09:43	WG938408
1,2,3-Trichloropropane	U		0.807	2.50	1	12/26/2016 09:43	WG938408
Vinyl acetate	U		1.63	10.0	1	12/26/2016 09:43	WG938408
Vinyl chloride	U		0.259	1.00	1	12/26/2016 09:43	WG938408
Xylenes, Total	U		1.06	3.00	1	12/26/2016 09:43	WG938408
(S) Toluene-d8	101			90.0-115		12/26/2016 09:43	WG938408
(S) Dibromofluoromethane	105			79.0-121		12/26/2016 09:43	WG938408
(S) 4-Bromofluorobenzene	95.8			80.1-120		12/26/2016 09:43	WG938408

¹ Cp
² Tc
³ Ss
⁴ Cn
⁵ Sr
⁶ Gl
⁷ Al
⁸ Sc



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Dissolved Solids	395000		2820	10000	1	12/27/2016 15:37	WG938474

1 Cp

2 Tc

Wet Chemistry by Method 4500S2 D-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Sulfide	U		6.50	50.0	1	12/22/2016 22:10	WG938033

3 Ss

4 Cn

Wet Chemistry by Method 9012B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Cyanide	U		1.80	5.00	1	12/29/2016 09:51	WG938805

5 Sr

6 Gl

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	6420		51.9	1000	1	12/27/2016 17:42	WG938354
Sulfate	16000		77.4	5000	1	12/27/2016 17:42	WG938354

7 Al

8 Sc

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	1230		102	1000	1	12/28/2016 17:43	WG938824

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Mercury	U		0.0490	0.200	1	12/23/2016 15:33	WG938137

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Antimony	U		0.754	2.00	1	12/30/2016 00:08	WG938047
Arsenic	1.36	J	0.250	2.00	1	12/30/2016 00:08	WG938047
Barium	34.0		0.360	5.00	1	12/30/2016 00:08	WG938047
Beryllium	U		0.120	2.00	1	12/30/2016 00:08	WG938047
Cadmium	6.21		0.160	1.00	1	12/30/2016 00:08	WG938047
Chromium	2.33		0.540	2.00	1	12/30/2016 00:08	WG938047
Copper	2.62	B J	0.520	5.00	1	12/30/2016 00:08	WG938047
Cobalt	0.342	J	0.260	2.00	1	12/30/2016 00:08	WG938047
Iron	882		15.0	100	1	12/30/2016 00:08	WG938047
Lead	2.90	B	0.240	2.00	1	12/30/2016 00:08	WG938047
Manganese	14.9		0.250	5.00	1	12/30/2016 00:08	WG938047
Nickel	2.83		0.350	2.00	1	12/30/2016 00:08	WG938047
Selenium	U		0.380	2.00	1	12/30/2016 00:08	WG938047
Silver	U		0.310	2.00	1	12/30/2016 00:08	WG938047
Thallium	U		0.190	2.00	1	12/30/2016 00:08	WG938047
Tin	0.307	B J	0.300	2.00	1	12/30/2016 00:08	WG938047
Vanadium	2.56	J	0.180	5.00	1	12/30/2016 00:08	WG938047
Zinc	457		2.56	25.0	1	12/30/2016 00:08	WG938047



Collected date/time: 12/20/16 14:15

L880396

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		10.0	50.0	1	12/26/2016 10:07	WG938408
Acrylonitrile	U		1.87	10.0	1	12/26/2016 10:07	WG938408
Benzene	U		0.331	1.00	1	12/26/2016 10:07	WG938408
Bromochloromethane	U	J4	0.520	1.00	1	12/26/2016 10:07	WG938408
Bromodichloromethane	U		0.380	1.00	1	12/26/2016 10:07	WG938408
Bromoform	U		0.469	1.00	1	12/26/2016 10:07	WG938408
Bromomethane	U		0.866	5.00	1	12/26/2016 10:07	WG938408
Carbon disulfide	U		0.275	1.00	1	12/26/2016 10:07	WG938408
Carbon tetrachloride	U		0.379	1.00	1	12/26/2016 10:07	WG938408
Chlorobenzene	U		0.348	1.00	1	12/26/2016 10:07	WG938408
Chlorodibromomethane	U		0.327	1.00	1	12/26/2016 10:07	WG938408
Chloroethane	U	J4	0.453	5.00	1	12/26/2016 10:07	WG938408
Chloroform	U		0.324	5.00	1	12/26/2016 10:07	WG938408
Chloromethane	U		0.276	2.50	1	12/26/2016 10:07	WG938408
Dibromomethane	U		0.346	1.00	1	12/26/2016 10:07	WG938408
1,2-Dibromoethane	U		0.381	1.00	1	12/26/2016 10:07	WG938408
1,2-Dibromo-3-Chloropropane	U		1.33	5.00	1	12/26/2016 10:07	WG938408
1,2-Dichlorobenzene	U		0.349	1.00	1	12/26/2016 10:07	WG938408
1,4-Dichlorobenzene	U		0.274	1.00	1	12/26/2016 10:07	WG938408
trans-1,4-Dichloro-2-butene	U		0.866	2.50	1	12/26/2016 10:07	WG938408
1,1-Dichloroethane	U		0.259	1.00	1	12/26/2016 10:07	WG938408
1,2-Dichloroethane	U		0.361	1.00	1	12/26/2016 10:07	WG938408
1,1-Dichloroethene	U		0.398	1.00	1	12/26/2016 10:07	WG938408
cis-1,2-Dichloroethene	U		0.260	1.00	1	12/26/2016 10:07	WG938408
trans-1,2-Dichloroethene	U		0.396	1.00	1	12/26/2016 10:07	WG938408
1,2-Dichloropropane	U		0.306	1.00	1	12/26/2016 10:07	WG938408
cis-1,3-Dichloropropene	U		0.418	1.00	1	12/26/2016 10:07	WG938408
trans-1,3-Dichloropropene	U		0.419	1.00	1	12/26/2016 10:07	WG938408
Ethylbenzene	U		0.384	1.00	1	12/26/2016 10:07	WG938408
2-Hexanone	U		3.82	10.0	1	12/26/2016 10:07	WG938408
Iodomethane	U		1.71	10.0	1	12/26/2016 10:07	WG938408
2-Butanone (MEK)	U		3.93	15.0	1	12/26/2016 10:07	WG938408
Methylene Chloride	U		1.00	5.00	1	12/26/2016 10:07	WG938408
4-Methyl-2-pentanone (MIBK)	U		2.14	10.0	1	12/26/2016 10:07	WG938408
Styrene	U		0.307	1.00	1	12/26/2016 10:07	WG938408
1,1,1,2-Tetrachloroethane	U		0.385	1.00	1	12/26/2016 10:07	WG938408
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	12/26/2016 10:07	WG938408
Tetrachloroethene	U		0.372	1.00	1	12/26/2016 10:07	WG938408
Toluene	U		0.412	1.00	1	12/26/2016 10:07	WG938408
1,1,1-Trichloroethane	U		0.319	1.00	1	12/26/2016 10:07	WG938408
1,1,2-Trichloroethane	U		0.383	1.00	1	12/26/2016 10:07	WG938408
Trichloroethene	U		0.398	1.00	1	12/26/2016 10:07	WG938408
Trichlorofluoromethane	U		1.20	5.00	1	12/26/2016 10:07	WG938408
1,2,3-Trichloropropane	U		0.807	2.50	1	12/26/2016 10:07	WG938408
Vinyl acetate	U		1.63	10.0	1	12/26/2016 10:07	WG938408
Vinyl chloride	U		0.259	1.00	1	12/26/2016 10:07	WG938408
Xylenes, Total	U		1.06	3.00	1	12/26/2016 10:07	WG938408
(S) Toluene-d8	103			90.0-115		12/26/2016 10:07	WG938408
(S) Dibromofluoromethane	104			79.0-121		12/26/2016 10:07	WG938408
(S) 4-Bromofluorobenzene	97.3			80.1-120		12/26/2016 10:07	WG938408





Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Dissolved Solids	398000		2820	10000	1	12/27/2016 15:37	WG938474

1 Cp

2 Tc

Wet Chemistry by Method 4500S2 D-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Sulfide	U		6.50	50.0	1	12/22/2016 22:10	WG938033

3 Ss

4 Cn

Wet Chemistry by Method 9012B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Cyanide	U		1.80	5.00	1	12/29/2016 09:52	WG938805

5 Sr

6 Gl

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	2480		51.9	1000	1	12/27/2016 17:53	WG938354
Sulfate	20200		77.4	5000	1	12/27/2016 17:53	WG938354

7 Al

8 Sc

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	1140		102	1000	1	12/28/2016 17:55	WG938824

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Mercury	U		0.0490	0.200	1	12/23/2016 15:36	WG938137

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Antimony	U		0.754	2.00	1	12/30/2016 00:12	WG938047
Arsenic	1.39	J	0.250	2.00	1	12/30/2016 00:12	WG938047
Barium	23.3		0.360	5.00	1	12/30/2016 00:12	WG938047
Beryllium	U		0.120	2.00	1	12/30/2016 00:12	WG938047
Cadmium	U		0.160	1.00	1	12/30/2016 00:12	WG938047
Chromium	U		0.540	2.00	1	12/30/2016 00:12	WG938047
Copper	0.986	B J	0.520	5.00	1	12/30/2016 00:12	WG938047
Cobalt	U		0.260	2.00	1	12/30/2016 00:12	WG938047
Iron	189		15.0	100	1	12/30/2016 00:12	WG938047
Lead	0.479	B J	0.240	2.00	1	12/30/2016 00:12	WG938047
Manganese	4.84	J	0.250	5.00	1	12/30/2016 00:12	WG938047
Nickel	4.80		0.350	2.00	1	12/30/2016 00:12	WG938047
Selenium	U		0.380	2.00	1	12/30/2016 00:12	WG938047
Silver	U		0.310	2.00	1	12/30/2016 00:12	WG938047
Thallium	U		0.190	2.00	1	12/30/2016 00:12	WG938047
Tin	U		0.300	2.00	1	12/30/2016 00:12	WG938047
Vanadium	0.297	J	0.180	5.00	1	12/30/2016 00:12	WG938047
Zinc	U		2.56	25.0	1	12/30/2016 00:12	WG938047



Collected date/time: 12/20/16 12:10

L880396

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		10.0	50.0	1	12/26/2016 10:30	WG938408
Acrylonitrile	U		1.87	10.0	1	12/26/2016 10:30	WG938408
Benzene	U		0.331	1.00	1	12/26/2016 10:30	WG938408
Bromochloromethane	U	J4	0.520	1.00	1	12/26/2016 10:30	WG938408
Bromodichloromethane	U		0.380	1.00	1	12/26/2016 10:30	WG938408
Bromoform	U		0.469	1.00	1	12/26/2016 10:30	WG938408
Bromomethane	U		0.866	5.00	1	12/26/2016 10:30	WG938408
Carbon disulfide	U		0.275	1.00	1	12/26/2016 10:30	WG938408
Carbon tetrachloride	U		0.379	1.00	1	12/26/2016 10:30	WG938408
Chlorobenzene	U		0.348	1.00	1	12/26/2016 10:30	WG938408
Chlorodibromomethane	U		0.327	1.00	1	12/26/2016 10:30	WG938408
Chloroethane	U	J4	0.453	5.00	1	12/26/2016 10:30	WG938408
Chloroform	U		0.324	5.00	1	12/26/2016 10:30	WG938408
Chloromethane	U		0.276	2.50	1	12/26/2016 10:30	WG938408
Dibromomethane	U		0.346	1.00	1	12/26/2016 10:30	WG938408
1,2-Dibromoethane	U		0.381	1.00	1	12/26/2016 10:30	WG938408
1,2-Dibromo-3-Chloropropane	U		1.33	5.00	1	12/26/2016 10:30	WG938408
1,2-Dichlorobenzene	U		0.349	1.00	1	12/26/2016 10:30	WG938408
1,4-Dichlorobenzene	U		0.274	1.00	1	12/26/2016 10:30	WG938408
trans-1,4-Dichloro-2-butene	U		0.866	2.50	1	12/26/2016 10:30	WG938408
1,1-Dichloroethane	U		0.259	1.00	1	12/26/2016 10:30	WG938408
1,2-Dichloroethane	U		0.361	1.00	1	12/26/2016 10:30	WG938408
1,1-Dichloroethene	U		0.398	1.00	1	12/26/2016 10:30	WG938408
cis-1,2-Dichloroethene	U		0.260	1.00	1	12/26/2016 10:30	WG938408
trans-1,2-Dichloroethene	U		0.396	1.00	1	12/26/2016 10:30	WG938408
1,2-Dichloropropane	U		0.306	1.00	1	12/26/2016 10:30	WG938408
cis-1,3-Dichloropropene	U		0.418	1.00	1	12/26/2016 10:30	WG938408
trans-1,3-Dichloropropene	U		0.419	1.00	1	12/26/2016 10:30	WG938408
Ethylbenzene	U		0.384	1.00	1	12/26/2016 10:30	WG938408
2-Hexanone	U		3.82	10.0	1	12/26/2016 10:30	WG938408
Iodomethane	U		1.71	10.0	1	12/26/2016 10:30	WG938408
2-Butanone (MEK)	U		3.93	15.0	1	12/26/2016 10:30	WG938408
Methylene Chloride	U		1.00	5.00	1	12/26/2016 10:30	WG938408
4-Methyl-2-pentanone (MIBK)	U		2.14	10.0	1	12/26/2016 10:30	WG938408
Styrene	U		0.307	1.00	1	12/26/2016 10:30	WG938408
1,1,1,2-Tetrachloroethane	U		0.385	1.00	1	12/26/2016 10:30	WG938408
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	12/26/2016 10:30	WG938408
Tetrachloroethene	U		0.372	1.00	1	12/26/2016 10:30	WG938408
Toluene	U		0.412	1.00	1	12/26/2016 10:30	WG938408
1,1,1-Trichloroethane	U		0.319	1.00	1	12/26/2016 10:30	WG938408
1,1,2-Trichloroethane	U		0.383	1.00	1	12/26/2016 10:30	WG938408
Trichloroethene	U		0.398	1.00	1	12/26/2016 10:30	WG938408
Trichlorofluoromethane	U		1.20	5.00	1	12/26/2016 10:30	WG938408
1,2,3-Trichloropropane	U		0.807	2.50	1	12/26/2016 10:30	WG938408
Vinyl acetate	U		1.63	10.0	1	12/26/2016 10:30	WG938408
Vinyl chloride	U		0.259	1.00	1	12/26/2016 10:30	WG938408
Xylenes, Total	U		1.06	3.00	1	12/26/2016 10:30	WG938408
(S) Toluene-d8	101			90.0-115		12/26/2016 10:30	WG938408
(S) Dibromofluoromethane	103			79.0-121		12/26/2016 10:30	WG938408
(S) 4-Bromofluorobenzene	97.7			80.1-120		12/26/2016 10:30	WG938408

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Gl

7 Al

8 Sc



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Dissolved Solids	408000		2820	10000	1	12/27/2016 14:58	WG938475

1 Cp

2 Tc

Wet Chemistry by Method 4500S2 D-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Sulfide	U		6.50	50.0	1	12/22/2016 22:10	WG938033

3 Ss

4 Cn

Wet Chemistry by Method 9012B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Cyanide	U		1.80	5.00	1	12/29/2016 09:53	WG938805

5 Sr

6 Gl

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	2490		51.9	1000	1	12/27/2016 18:03	WG938354
Sulfate	14200		77.4	5000	1	12/27/2016 18:03	WG938354

7 Al

8 Sc

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	579	<u>B J</u>	102	1000	1	12/29/2016 12:57	WG938825

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Mercury	U		0.0490	0.200	1	12/23/2016 15:42	WG938137

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Antimony	U		0.754	2.00	1	12/30/2016 00:15	WG938047
Arsenic	0.733	<u>J</u>	0.250	2.00	1	12/30/2016 00:15	WG938047
Barium	27.7		0.360	5.00	1	12/30/2016 00:15	WG938047
Beryllium	U		0.120	2.00	1	12/30/2016 00:15	WG938047
Cadmium	U		0.160	1.00	1	12/30/2016 00:15	WG938047
Chromium	1.18	<u>J</u>	0.540	2.00	1	12/30/2016 00:15	WG938047
Copper	2.56	<u>B J</u>	0.520	5.00	1	12/30/2016 00:15	WG938047
Cobalt	U		0.260	2.00	1	12/30/2016 00:15	WG938047
Iron	143		15.0	100	1	12/30/2016 00:15	WG938047
Lead	1.24	<u>B J</u>	0.240	2.00	1	12/30/2016 00:15	WG938047
Manganese	8.03		0.250	5.00	1	12/30/2016 00:15	WG938047
Nickel	1.53	<u>J</u>	0.350	2.00	1	12/30/2016 00:15	WG938047
Selenium	U		0.380	2.00	1	12/30/2016 00:15	WG938047
Silver	U		0.310	2.00	1	12/30/2016 00:15	WG938047
Thallium	U		0.190	2.00	1	12/30/2016 00:15	WG938047
Tin	0.472	<u>B J</u>	0.300	2.00	1	12/30/2016 00:15	WG938047
Vanadium	0.508	<u>J</u>	0.180	5.00	1	12/30/2016 00:15	WG938047
Zinc	5.23	<u>B J</u>	2.56	25.0	1	12/30/2016 00:15	WG938047



Collected date/time: 12/20/16 09:31

L880396

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		10.0	50.0	1	12/26/2016 10:53	WG938408
Acrylonitrile	U		1.87	10.0	1	12/26/2016 10:53	WG938408
Benzene	U		0.331	1.00	1	12/26/2016 10:53	WG938408
Bromochloromethane	U	J4	0.520	1.00	1	12/26/2016 10:53	WG938408
Bromodichloromethane	U		0.380	1.00	1	12/26/2016 10:53	WG938408
Bromoform	U		0.469	1.00	1	12/26/2016 10:53	WG938408
Bromomethane	U		0.866	5.00	1	12/26/2016 10:53	WG938408
Carbon disulfide	U		0.275	1.00	1	12/26/2016 10:53	WG938408
Carbon tetrachloride	U		0.379	1.00	1	12/26/2016 10:53	WG938408
Chlorobenzene	U		0.348	1.00	1	12/26/2016 10:53	WG938408
Chlorodibromomethane	U		0.327	1.00	1	12/26/2016 10:53	WG938408
Chloroethane	U	J4	0.453	5.00	1	12/26/2016 10:53	WG938408
Chloroform	U		0.324	5.00	1	12/26/2016 10:53	WG938408
Chloromethane	U		0.276	2.50	1	12/26/2016 10:53	WG938408
Dibromomethane	U		0.346	1.00	1	12/26/2016 10:53	WG938408
1,2-Dibromoethane	U		0.381	1.00	1	12/26/2016 10:53	WG938408
1,2-Dibromo-3-Chloropropane	U		1.33	5.00	1	12/26/2016 10:53	WG938408
1,2-Dichlorobenzene	U		0.349	1.00	1	12/26/2016 10:53	WG938408
1,4-Dichlorobenzene	U		0.274	1.00	1	12/26/2016 10:53	WG938408
trans-1,4-Dichloro-2-butene	U		0.866	2.50	1	12/26/2016 10:53	WG938408
1,1-Dichloroethane	U		0.259	1.00	1	12/26/2016 10:53	WG938408
1,2-Dichloroethane	U		0.361	1.00	1	12/26/2016 10:53	WG938408
1,1-Dichloroethene	U		0.398	1.00	1	12/26/2016 10:53	WG938408
cis-1,2-Dichloroethene	U		0.260	1.00	1	12/26/2016 10:53	WG938408
trans-1,2-Dichloroethene	U		0.396	1.00	1	12/26/2016 10:53	WG938408
1,2-Dichloropropane	U		0.306	1.00	1	12/26/2016 10:53	WG938408
cis-1,3-Dichloropropene	U		0.418	1.00	1	12/26/2016 10:53	WG938408
trans-1,3-Dichloropropene	U		0.419	1.00	1	12/26/2016 10:53	WG938408
Ethylbenzene	U		0.384	1.00	1	12/26/2016 10:53	WG938408
2-Hexanone	U		3.82	10.0	1	12/26/2016 10:53	WG938408
Iodomethane	U		1.71	10.0	1	12/26/2016 10:53	WG938408
2-Butanone (MEK)	U		3.93	15.0	1	12/26/2016 10:53	WG938408
Methylene Chloride	U		1.00	5.00	1	12/26/2016 10:53	WG938408
4-Methyl-2-pentanone (MIBK)	U		2.14	10.0	1	12/26/2016 10:53	WG938408
Styrene	U		0.307	1.00	1	12/26/2016 10:53	WG938408
1,1,1,2-Tetrachloroethane	U		0.385	1.00	1	12/26/2016 10:53	WG938408
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	12/26/2016 10:53	WG938408
Tetrachloroethene	U		0.372	1.00	1	12/26/2016 10:53	WG938408
Toluene	U		0.412	1.00	1	12/26/2016 10:53	WG938408
1,1,1-Trichloroethane	U		0.319	1.00	1	12/26/2016 10:53	WG938408
1,1,2-Trichloroethane	U		0.383	1.00	1	12/26/2016 10:53	WG938408
Trichloroethene	U		0.398	1.00	1	12/26/2016 10:53	WG938408
Trichlorofluoromethane	U		1.20	5.00	1	12/26/2016 10:53	WG938408
1,2,3-Trichloropropane	U		0.807	2.50	1	12/26/2016 10:53	WG938408
Vinyl acetate	U		1.63	10.0	1	12/26/2016 10:53	WG938408
Vinyl chloride	U		0.259	1.00	1	12/26/2016 10:53	WG938408
Xylenes, Total	U		1.06	3.00	1	12/26/2016 10:53	WG938408
(S) Toluene-d8	102			90.0-115		12/26/2016 10:53	WG938408
(S) Dibromofluoromethane	104			79.0-121		12/26/2016 10:53	WG938408
(S) 4-Bromofluorobenzene	94.2			80.1-120		12/26/2016 10:53	WG938408





Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Dissolved Solids	366000		2820	10000	1	12/27/2016 14:58	WG938475

1 Cp

2 Tc

Wet Chemistry by Method 4500S2 D-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Sulfide	U		6.50	50.0	1	12/22/2016 22:11	WG938033

3 Ss

4 Cn

Wet Chemistry by Method 9012B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Cyanide	U		1.80	5.00	1	12/29/2016 09:54	WG938805

5 Sr

6 Gl

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	15400		51.9	1000	1	12/27/2016 18:13	WG938354
Sulfate	10600		77.4	5000	1	12/27/2016 18:13	WG938354

7 Al

8 Sc

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	1530	B	102	1000	1	12/29/2016 13:46	WG938825

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Mercury	U		0.0490	0.200	1	12/23/2016 15:45	WG938137

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Antimony	U		0.754	2.00	1	12/30/2016 00:19	WG938047
Arsenic	0.414	J	0.250	2.00	1	12/30/2016 00:19	WG938047
Barium	41.0		0.360	5.00	1	12/30/2016 00:19	WG938047
Beryllium	U		0.120	2.00	1	12/30/2016 00:19	WG938047
Cadmium	1.67		0.160	1.00	1	12/30/2016 00:19	WG938047
Chromium	1.74	J	0.540	2.00	1	12/30/2016 00:19	WG938047
Copper	3.51	B J	0.520	5.00	1	12/30/2016 00:19	WG938047
Cobalt	U		0.260	2.00	1	12/30/2016 00:19	WG938047
Iron	54.8	J	15.0	100	1	12/30/2016 00:19	WG938047
Lead	0.434	B J	0.240	2.00	1	12/30/2016 00:19	WG938047
Manganese	3.50	J	0.250	5.00	1	12/30/2016 00:19	WG938047
Nickel	4.65		0.350	2.00	1	12/30/2016 00:19	WG938047
Selenium	U		0.380	2.00	1	12/30/2016 00:19	WG938047
Silver	U		0.310	2.00	1	12/30/2016 00:19	WG938047
Thallium	U		0.190	2.00	1	12/30/2016 00:19	WG938047
Tin	0.552	B J	0.300	2.00	1	12/30/2016 00:19	WG938047
Vanadium	0.561	J	0.180	5.00	1	12/30/2016 00:19	WG938047
Zinc	283		2.56	25.0	1	12/30/2016 00:19	WG938047



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		10.0	50.0	1	12/26/2016 11:17	WG938408
Acrylonitrile	U		1.87	10.0	1	12/26/2016 11:17	WG938408
Benzene	U		0.331	1.00	1	12/26/2016 11:17	WG938408
Bromochloromethane	U	J4	0.520	1.00	1	12/26/2016 11:17	WG938408
Bromodichloromethane	U		0.380	1.00	1	12/26/2016 11:17	WG938408
Bromoform	U		0.469	1.00	1	12/26/2016 11:17	WG938408
Bromomethane	U		0.866	5.00	1	12/26/2016 11:17	WG938408
Carbon disulfide	U		0.275	1.00	1	12/26/2016 11:17	WG938408
Carbon tetrachloride	U		0.379	1.00	1	12/26/2016 11:17	WG938408
Chlorobenzene	U		0.348	1.00	1	12/26/2016 11:17	WG938408
Chlorodibromomethane	U		0.327	1.00	1	12/26/2016 11:17	WG938408
Chloroethane	U	J4	0.453	5.00	1	12/26/2016 11:17	WG938408
Chloroform	U		0.324	5.00	1	12/26/2016 11:17	WG938408
Chloromethane	U		0.276	2.50	1	12/26/2016 11:17	WG938408
Dibromomethane	U		0.346	1.00	1	12/26/2016 11:17	WG938408
1,2-Dibromoethane	U		0.381	1.00	1	12/26/2016 11:17	WG938408
1,2-Dibromo-3-Chloropropane	U		1.33	5.00	1	12/26/2016 11:17	WG938408
1,2-Dichlorobenzene	U		0.349	1.00	1	12/26/2016 11:17	WG938408
1,4-Dichlorobenzene	U		0.274	1.00	1	12/26/2016 11:17	WG938408
trans-1,4-Dichloro-2-butene	U		0.866	2.50	1	12/26/2016 11:17	WG938408
1,1-Dichloroethane	1.97		0.259	1.00	1	12/26/2016 11:17	WG938408
1,2-Dichloroethane	U		0.361	1.00	1	12/26/2016 11:17	WG938408
1,1-Dichloroethene	U		0.398	1.00	1	12/26/2016 11:17	WG938408
cis-1,2-Dichloroethene	0.607	J	0.260	1.00	1	12/26/2016 11:17	WG938408
trans-1,2-Dichloroethene	U		0.396	1.00	1	12/26/2016 11:17	WG938408
1,2-Dichloropropane	U		0.306	1.00	1	12/26/2016 11:17	WG938408
cis-1,3-Dichloropropene	U		0.418	1.00	1	12/26/2016 11:17	WG938408
trans-1,3-Dichloropropene	U		0.419	1.00	1	12/26/2016 11:17	WG938408
Ethylbenzene	U		0.384	1.00	1	12/26/2016 11:17	WG938408
2-Hexanone	U		3.82	10.0	1	12/26/2016 11:17	WG938408
Iodomethane	U		1.71	10.0	1	12/26/2016 11:17	WG938408
2-Butanone (MEK)	U		3.93	15.0	1	12/26/2016 11:17	WG938408
Methylene Chloride	U		1.00	5.00	1	12/26/2016 11:17	WG938408
4-Methyl-2-pentanone (MIBK)	U		2.14	10.0	1	12/26/2016 11:17	WG938408
Styrene	U		0.307	1.00	1	12/26/2016 11:17	WG938408
1,1,1,2-Tetrachloroethane	U		0.385	1.00	1	12/26/2016 11:17	WG938408
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	12/26/2016 11:17	WG938408
Tetrachloroethene	U		0.372	1.00	1	12/26/2016 11:17	WG938408
Toluene	U		0.412	1.00	1	12/26/2016 11:17	WG938408
1,1,1-Trichloroethane	U		0.319	1.00	1	12/26/2016 11:17	WG938408
1,1,2-Trichloroethane	U		0.383	1.00	1	12/26/2016 11:17	WG938408
Trichloroethene	U		0.398	1.00	1	12/26/2016 11:17	WG938408
Trichlorofluoromethane	U		1.20	5.00	1	12/26/2016 11:17	WG938408
1,2,3-Trichloropropane	U		0.807	2.50	1	12/26/2016 11:17	WG938408
Vinyl acetate	U		1.63	10.0	1	12/26/2016 11:17	WG938408
Vinyl chloride	U		0.259	1.00	1	12/26/2016 11:17	WG938408
Xylenes, Total	U		1.06	3.00	1	12/26/2016 11:17	WG938408
(S) Toluene-d8	103			90.0-115		12/26/2016 11:17	WG938408
(S) Dibromofluoromethane	103			79.0-121		12/26/2016 11:17	WG938408
(S) 4-Bromofluorobenzene	96.8			80.1-120		12/26/2016 11:17	WG938408

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Gl

7 Al

8 Sc



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Dissolved Solids	1660000		2820	10000	1	12/25/2016 00:15	WG938167

1 Cp

2 Tc

Wet Chemistry by Method 4500S2 D-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Sulfide	U		6.50	50.0	1	12/22/2016 22:11	WG938033

3 Ss

4 Cn

Wet Chemistry by Method 9012B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Cyanide	U		1.80	5.00	1	12/29/2016 09:58	WG938805

5 Sr

6 Gl

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	24900		51.9	1000	1	12/27/2016 18:23	WG938354
Sulfate	737000		1550	100000	20	12/28/2016 12:47	WG939061

7 Al

8 Sc

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	12400		102	1000	1	12/29/2016 14:15	WG938825

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Mercury	U		0.0490	0.200	1	12/23/2016 15:47	WG938137

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Antimony	U		0.754	2.00	1	12/29/2016 22:24	WG938047
Arsenic	1.99	J	0.250	2.00	1	12/29/2016 22:24	WG938047
Barium	18.5	O1	0.360	5.00	1	12/29/2016 22:24	WG938047
Beryllium	U		0.120	2.00	1	12/29/2016 22:24	WG938047
Cadmium	U		0.160	1.00	1	12/29/2016 22:24	WG938047
Chromium	U		0.540	2.00	1	12/29/2016 22:24	WG938047
Copper	1.46	B J	0.520	5.00	1	12/29/2016 22:24	WG938047
Cobalt	0.603	J	0.260	2.00	1	12/29/2016 22:24	WG938047
Iron	600		15.0	100	1	12/29/2016 22:24	WG938047
Lead	1.23	B J	0.240	2.00	1	12/29/2016 22:24	WG938047
Manganese	22.0		0.250	5.00	1	12/29/2016 22:24	WG938047
Nickel	7.19		0.350	2.00	1	12/29/2016 22:24	WG938047
Selenium	0.467	J	0.380	2.00	1	12/29/2016 22:24	WG938047
Silver	U		0.310	2.00	1	12/29/2016 22:24	WG938047
Thallium	U		0.190	2.00	1	12/29/2016 22:24	WG938047
Tin	0.305	B J	0.300	2.00	1	12/29/2016 22:24	WG938047
Vanadium	0.924	J	0.180	5.00	1	12/29/2016 22:24	WG938047
Zinc	79.7		2.56	25.0	1	12/29/2016 22:24	WG938047



Collected date/time: 12/19/16 11:50

L880396

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		10.0	50.0	1	12/26/2016 11:40	WG938408
Acrylonitrile	U		1.87	10.0	1	12/26/2016 11:40	WG938408
Benzene	U		0.331	1.00	1	12/26/2016 11:40	WG938408
Bromochloromethane	U	J4	0.520	1.00	1	12/26/2016 11:40	WG938408
Bromodichloromethane	U		0.380	1.00	1	12/26/2016 11:40	WG938408
Bromoform	U		0.469	1.00	1	12/26/2016 11:40	WG938408
Bromomethane	U		0.866	5.00	1	12/26/2016 11:40	WG938408
Carbon disulfide	U		0.275	1.00	1	12/26/2016 11:40	WG938408
Carbon tetrachloride	U		0.379	1.00	1	12/26/2016 11:40	WG938408
Chlorobenzene	U		0.348	1.00	1	12/26/2016 11:40	WG938408
Chlorodibromomethane	U		0.327	1.00	1	12/26/2016 11:40	WG938408
Chloroethane	U	J4	0.453	5.00	1	12/26/2016 11:40	WG938408
Chloroform	U		0.324	5.00	1	12/26/2016 11:40	WG938408
Chloromethane	U		0.276	2.50	1	12/26/2016 11:40	WG938408
Dibromomethane	U		0.346	1.00	1	12/26/2016 11:40	WG938408
1,2-Dibromoethane	U		0.381	1.00	1	12/26/2016 11:40	WG938408
1,2-Dibromo-3-Chloropropane	U		1.33	5.00	1	12/26/2016 11:40	WG938408
1,2-Dichlorobenzene	U		0.349	1.00	1	12/26/2016 11:40	WG938408
1,4-Dichlorobenzene	U		0.274	1.00	1	12/26/2016 11:40	WG938408
trans-1,4-Dichloro-2-butene	U		0.866	2.50	1	12/26/2016 11:40	WG938408
1,1-Dichloroethane	U		0.259	1.00	1	12/26/2016 11:40	WG938408
1,2-Dichloroethane	U		0.361	1.00	1	12/26/2016 11:40	WG938408
1,1-Dichloroethene	U		0.398	1.00	1	12/26/2016 11:40	WG938408
cis-1,2-Dichloroethene	U		0.260	1.00	1	12/26/2016 11:40	WG938408
trans-1,2-Dichloroethene	U		0.396	1.00	1	12/26/2016 11:40	WG938408
1,2-Dichloropropane	U		0.306	1.00	1	12/26/2016 11:40	WG938408
cis-1,3-Dichloropropene	U		0.418	1.00	1	12/26/2016 11:40	WG938408
trans-1,3-Dichloropropene	U		0.419	1.00	1	12/26/2016 11:40	WG938408
Ethylbenzene	U		0.384	1.00	1	12/26/2016 11:40	WG938408
2-Hexanone	U		3.82	10.0	1	12/26/2016 11:40	WG938408
Iodomethane	U		1.71	10.0	1	12/26/2016 11:40	WG938408
2-Butanone (MEK)	U		3.93	15.0	1	12/26/2016 11:40	WG938408
Methylene Chloride	U		1.00	5.00	1	12/26/2016 11:40	WG938408
4-Methyl-2-pentanone (MIBK)	U		2.14	10.0	1	12/26/2016 11:40	WG938408
Styrene	U		0.307	1.00	1	12/26/2016 11:40	WG938408
1,1,1,2-Tetrachloroethane	U		0.385	1.00	1	12/26/2016 11:40	WG938408
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	12/26/2016 11:40	WG938408
Tetrachloroethene	U		0.372	1.00	1	12/26/2016 11:40	WG938408
Toluene	U		0.412	1.00	1	12/26/2016 11:40	WG938408
1,1,1-Trichloroethane	U		0.319	1.00	1	12/26/2016 11:40	WG938408
1,1,2-Trichloroethane	U		0.383	1.00	1	12/26/2016 11:40	WG938408
Trichloroethene	U		0.398	1.00	1	12/26/2016 11:40	WG938408
Trichlorofluoromethane	U		1.20	5.00	1	12/26/2016 11:40	WG938408
1,2,3-Trichloropropane	U		0.807	2.50	1	12/26/2016 11:40	WG938408
Vinyl acetate	U		1.63	10.0	1	12/26/2016 11:40	WG938408
Vinyl chloride	U		0.259	1.00	1	12/26/2016 11:40	WG938408
Xylenes, Total	U		1.06	3.00	1	12/26/2016 11:40	WG938408
(S) Toluene-d8	102			90.0-115		12/26/2016 11:40	WG938408
(S) Dibromofluoromethane	103			79.0-121		12/26/2016 11:40	WG938408
(S) 4-Bromofluorobenzene	95.6			80.1-120		12/26/2016 11:40	WG938408





Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Dissolved Solids	347000		2820	10000	1	12/27/2016 14:58	WG938475

1 Cp

2 Tc

Wet Chemistry by Method 4500S2 D-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Sulfide	U		6.50	50.0	1	12/22/2016 22:11	WG938033

3 Ss

4 Cn

Wet Chemistry by Method 9012B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Cyanide	U		1.80	5.00	1	12/29/2016 17:43	WG939301

5 Sr

6 Gl

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	5540		51.9	1000	1	12/27/2016 18:33	WG938354
Sulfate	15300		77.4	5000	1	12/27/2016 18:33	WG938354

7 Al

8 Sc

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	1600		102	1000	1	12/31/2016 11:59	WG939610

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Mercury	U		0.0490	0.200	1	12/23/2016 17:37	WG938138

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Antimony	U		0.754	2.00	1	12/30/2016 01:36	WG938049
Arsenic	0.766	J	0.250	2.00	1	12/30/2016 01:36	WG938049
Barium	128		0.360	5.00	1	12/30/2016 01:36	WG938049
Beryllium	U		0.120	2.00	1	12/30/2016 01:36	WG938049
Cadmium	0.181	J	0.160	1.00	1	12/30/2016 01:36	WG938049
Chromium	U		0.540	2.00	1	12/30/2016 01:36	WG938049
Copper	0.727	B J	0.520	5.00	1	12/30/2016 01:36	WG938049
Cobalt	0.394	J	0.260	2.00	1	12/30/2016 01:36	WG938049
Iron	62.0	B J	15.0	100	1	12/30/2016 01:36	WG938049
Lead	0.515	B J	0.240	2.00	1	12/30/2016 01:36	WG938049
Manganese	32.9		0.250	5.00	1	12/30/2016 01:36	WG938049
Nickel	3.64		0.350	2.00	1	12/30/2016 01:36	WG938049
Selenium	U		0.380	2.00	1	12/30/2016 01:36	WG938049
Silver	U		0.310	2.00	1	12/30/2016 01:36	WG938049
Thallium	U		0.190	2.00	1	12/30/2016 01:36	WG938049
Tin	0.476	B J	0.300	2.00	1	12/30/2016 01:36	WG938049
Vanadium	0.460	J	0.180	5.00	1	12/30/2016 01:36	WG938049
Zinc	41.1		2.56	25.0	1	12/30/2016 10:18	WG939602



Collected date/time: 12/20/16 07:30

L880396

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		10.0	50.0	1	12/26/2016 00:57	WG938588
Acrylonitrile	U		1.87	10.0	1	12/26/2016 00:57	WG938588
Benzene	U		0.331	1.00	1	12/26/2016 00:57	WG938588
Bromochloromethane	U		0.520	1.00	1	12/26/2016 00:57	WG938588
Bromodichloromethane	U		0.380	1.00	1	12/26/2016 00:57	WG938588
Bromoform	U		0.469	1.00	1	12/26/2016 00:57	WG938588
Bromomethane	U		0.866	5.00	1	12/26/2016 00:57	WG938588
Carbon disulfide	U		0.275	1.00	1	12/26/2016 00:57	WG938588
Carbon tetrachloride	U		0.379	1.00	1	12/26/2016 00:57	WG938588
Chlorobenzene	U		0.348	1.00	1	12/26/2016 00:57	WG938588
Chlorodibromomethane	U		0.327	1.00	1	12/26/2016 00:57	WG938588
Chloroethane	U		0.453	5.00	1	12/26/2016 00:57	WG938588
Chloroform	U		0.324	5.00	1	12/26/2016 00:57	WG938588
Chloromethane	U		0.276	2.50	1	12/26/2016 00:57	WG938588
Dibromomethane	U		0.346	1.00	1	12/26/2016 00:57	WG938588
1,2-Dibromoethane	U		0.381	1.00	1	12/26/2016 00:57	WG938588
1,2-Dibromo-3-Chloropropane	U		1.33	5.00	1	12/26/2016 00:57	WG938588
1,2-Dichlorobenzene	U		0.349	1.00	1	12/26/2016 00:57	WG938588
1,4-Dichlorobenzene	U		0.274	1.00	1	12/26/2016 00:57	WG938588
trans-1,4-Dichloro-2-butene	U		0.866	2.50	1	12/26/2016 00:57	WG938588
1,1-Dichloroethane	U		0.259	1.00	1	12/26/2016 00:57	WG938588
1,2-Dichloroethane	U		0.361	1.00	1	12/26/2016 00:57	WG938588
1,1-Dichloroethene	U		0.398	1.00	1	12/26/2016 00:57	WG938588
cis-1,2-Dichloroethene	U		0.260	1.00	1	12/26/2016 00:57	WG938588
trans-1,2-Dichloroethene	U		0.396	1.00	1	12/26/2016 00:57	WG938588
1,2-Dichloropropane	U		0.306	1.00	1	12/26/2016 00:57	WG938588
cis-1,3-Dichloropropene	U		0.418	1.00	1	12/26/2016 00:57	WG938588
trans-1,3-Dichloropropene	U		0.419	1.00	1	12/26/2016 00:57	WG938588
Ethylbenzene	U		0.384	1.00	1	12/26/2016 00:57	WG938588
2-Hexanone	U		3.82	10.0	1	12/26/2016 00:57	WG938588
Iodomethane	U		1.71	10.0	1	12/26/2016 00:57	WG938588
2-Butanone (MEK)	U		3.93	15.0	1	12/26/2016 00:57	WG938588
Methylene Chloride	U		1.00	5.00	1	12/26/2016 00:57	WG938588
4-Methyl-2-pentanone (MIBK)	U		2.14	10.0	1	12/26/2016 00:57	WG938588
Styrene	U		0.307	1.00	1	12/26/2016 00:57	WG938588
1,1,1,2-Tetrachloroethane	U		0.385	1.00	1	12/26/2016 00:57	WG938588
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	12/26/2016 00:57	WG938588
Tetrachloroethene	U		0.372	1.00	1	12/26/2016 00:57	WG938588
Toluene	U		0.412	1.00	1	12/26/2016 00:57	WG938588
1,1,1-Trichloroethane	U		0.319	1.00	1	12/26/2016 00:57	WG938588
1,1,2-Trichloroethane	U		0.383	1.00	1	12/26/2016 00:57	WG938588
Trichloroethene	U		0.398	1.00	1	12/26/2016 00:57	WG938588
Trichlorofluoromethane	U		1.20	5.00	1	12/26/2016 00:57	WG938588
1,2,3-Trichloropropane	U		0.807	2.50	1	12/26/2016 00:57	WG938588
Vinyl acetate	U		1.63	10.0	1	12/26/2016 00:57	WG938588
Vinyl chloride	U		0.259	1.00	1	12/26/2016 00:57	WG938588
Xylenes, Total	U		1.06	3.00	1	12/26/2016 00:57	WG938588
(S) Toluene-d8	98.5			90.0-115		12/26/2016 00:57	WG938588
(S) Dibromofluoromethane	101			79.0-121		12/26/2016 00:57	WG938588
(S) 4-Bromofluorobenzene	100			80.1-120		12/26/2016 00:57	WG938588

¹ Cp
² Tc
³ Ss
⁴ Cn
⁵ Sr
⁶ Gl
⁷ Al
⁸ Sc



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Dissolved Solids	398000		2820	10000	1	12/28/2016 14:22	WG938690

1 Cp

2 Tc

Wet Chemistry by Method 4500S2 D-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Sulfide	U		6.50	50.0	1	12/22/2016 22:12	WG938033

3 Ss

4 Cn

Wet Chemistry by Method 9012B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Cyanide	U		1.80	5.00	1	12/29/2016 17:44	WG939301

5 Sr

6 Gl

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Sulfate	22400		77.4	5000	1	12/28/2016 12:57	WG939061

7 Al

8 Sc

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	663	J	102	1000	1	12/31/2016 12:34	WG939610

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Mercury	U		0.0490	0.200	1	12/23/2016 17:39	WG938138

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Antimony	U		0.754	2.00	1	12/30/2016 01:40	WG938049
Arsenic	1.57	J	0.250	2.00	1	12/30/2016 01:40	WG938049
Barium	32.8		0.360	5.00	1	12/30/2016 01:40	WG938049
Beryllium	U		0.120	2.00	1	12/30/2016 01:40	WG938049
Cadmium	U		0.160	1.00	1	12/30/2016 01:40	WG938049
Chromium	3.12		0.540	2.00	1	12/30/2016 01:40	WG938049
Copper	1.89	B J	0.520	5.00	1	12/30/2016 01:40	WG938049
Cobalt	0.682	J	0.260	2.00	1	12/30/2016 01:40	WG938049
Iron	345		15.0	100	1	12/30/2016 01:40	WG938049
Lead	1.02	B J	0.240	2.00	1	12/30/2016 01:40	WG938049
Manganese	15.3		0.250	5.00	1	12/30/2016 01:40	WG938049
Nickel	7.82		0.350	2.00	1	12/30/2016 01:40	WG938049
Selenium	U		0.380	2.00	1	12/30/2016 01:40	WG938049
Silver	U		0.310	2.00	1	12/30/2016 01:40	WG938049
Thallium	U		0.190	2.00	1	12/30/2016 01:40	WG938049
Tin	0.323	B J	0.300	2.00	1	12/30/2016 01:40	WG938049
Vanadium	0.521	J	0.180	5.00	1	12/30/2016 01:40	WG938049
Zinc	202		2.56	25.0	1	12/30/2016 10:22	WG939602



Collected date/time: 12/21/16 08:20

L880396

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		10.0	50.0	1	12/26/2016 01:21	WG938588
Acrylonitrile	U		1.87	10.0	1	12/26/2016 01:21	WG938588
Benzene	U		0.331	1.00	1	12/26/2016 01:21	WG938588
Bromochloromethane	U		0.520	1.00	1	12/26/2016 01:21	WG938588
Bromodichloromethane	U		0.380	1.00	1	12/26/2016 01:21	WG938588
Bromoform	U		0.469	1.00	1	12/26/2016 01:21	WG938588
Bromomethane	U		0.866	5.00	1	12/26/2016 01:21	WG938588
Carbon disulfide	U		0.275	1.00	1	12/26/2016 01:21	WG938588
Carbon tetrachloride	U		0.379	1.00	1	12/26/2016 01:21	WG938588
Chlorobenzene	U		0.348	1.00	1	12/26/2016 01:21	WG938588
Chlorodibromomethane	U		0.327	1.00	1	12/26/2016 01:21	WG938588
Chloroethane	U		0.453	5.00	1	12/26/2016 01:21	WG938588
Chloroform	U		0.324	5.00	1	12/26/2016 01:21	WG938588
Chloromethane	U		0.276	2.50	1	12/26/2016 01:21	WG938588
Dibromomethane	U		0.346	1.00	1	12/26/2016 01:21	WG938588
1,2-Dibromoethane	U		0.381	1.00	1	12/26/2016 01:21	WG938588
1,2-Dibromo-3-Chloropropane	U		1.33	5.00	1	12/26/2016 01:21	WG938588
1,2-Dichlorobenzene	U		0.349	1.00	1	12/26/2016 01:21	WG938588
1,4-Dichlorobenzene	U		0.274	1.00	1	12/26/2016 01:21	WG938588
trans-1,4-Dichloro-2-butene	U		0.866	2.50	1	12/26/2016 01:21	WG938588
1,1-Dichloroethane	U		0.259	1.00	1	12/26/2016 01:21	WG938588
1,2-Dichloroethane	U		0.361	1.00	1	12/26/2016 01:21	WG938588
1,1-Dichloroethene	U		0.398	1.00	1	12/26/2016 01:21	WG938588
cis-1,2-Dichloroethene	U		0.260	1.00	1	12/26/2016 01:21	WG938588
trans-1,2-Dichloroethene	U		0.396	1.00	1	12/26/2016 01:21	WG938588
1,2-Dichloropropane	U		0.306	1.00	1	12/26/2016 01:21	WG938588
cis-1,3-Dichloropropene	U		0.418	1.00	1	12/26/2016 01:21	WG938588
trans-1,3-Dichloropropene	U		0.419	1.00	1	12/26/2016 01:21	WG938588
Ethylbenzene	U		0.384	1.00	1	12/26/2016 01:21	WG938588
2-Hexanone	U		3.82	10.0	1	12/26/2016 01:21	WG938588
Iodomethane	U		1.71	10.0	1	12/26/2016 01:21	WG938588
2-Butanone (MEK)	U		3.93	15.0	1	12/26/2016 01:21	WG938588
Methylene Chloride	U		1.00	5.00	1	12/26/2016 01:21	WG938588
4-Methyl-2-pentanone (MIBK)	U		2.14	10.0	1	12/26/2016 01:21	WG938588
Styrene	U		0.307	1.00	1	12/26/2016 01:21	WG938588
1,1,1,2-Tetrachloroethane	U		0.385	1.00	1	12/26/2016 01:21	WG938588
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	12/26/2016 01:21	WG938588
Tetrachloroethene	U		0.372	1.00	1	12/26/2016 01:21	WG938588
Toluene	U		0.412	1.00	1	12/26/2016 01:21	WG938588
1,1,1-Trichloroethane	U		0.319	1.00	1	12/26/2016 01:21	WG938588
1,1,2-Trichloroethane	U		0.383	1.00	1	12/26/2016 01:21	WG938588
Trichloroethene	U		0.398	1.00	1	12/26/2016 01:21	WG938588
Trichlorofluoromethane	U		1.20	5.00	1	12/26/2016 01:21	WG938588
1,2,3-Trichloropropane	U		0.807	2.50	1	12/26/2016 01:21	WG938588
Vinyl acetate	U		1.63	10.0	1	12/26/2016 01:21	WG938588
Vinyl chloride	U		0.259	1.00	1	12/26/2016 01:21	WG938588
Xylenes, Total	U		1.06	3.00	1	12/26/2016 01:21	WG938588
(S) Toluene-d8	99.6			90.0-115		12/26/2016 01:21	WG938588
(S) Dibromofluoromethane	98.8			79.0-121		12/26/2016 01:21	WG938588
(S) 4-Bromofluorobenzene	102			80.1-120		12/26/2016 01:21	WG938588

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Gl

7 Al

8 Sc



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Dissolved Solids	928000		2820	10000	1	12/27/2016 14:58	WG938475

1 Cp

2 Tc

Wet Chemistry by Method 4500S2 D-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Sulfide	U		6.50	50.0	1	12/22/2016 22:12	WG938033

3 Ss

4 Cn

Wet Chemistry by Method 9012B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Cyanide	U		1.80	5.00	1	12/29/2016 17:47	WG939301

5 Sr

6 Gl

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	102000		104	2000	2	12/27/2016 19:34	WG938354
Sulfate	23700		155	10000	2	12/27/2016 19:34	WG938354

7 Al

8 Sc

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	7520		102	1000	1	12/31/2016 12:52	WG939610

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Mercury	0.715		0.0490	0.200	1	12/23/2016 17:41	WG938138

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Antimony	U		0.754	2.00	1	12/30/2016 01:43	WG938049
Arsenic	62.7		0.250	2.00	1	12/30/2016 01:43	WG938049
Barium	173		0.360	5.00	1	12/30/2016 01:43	WG938049
Beryllium	U		0.120	2.00	1	12/30/2016 01:43	WG938049
Cadmium	0.239	J	0.160	1.00	1	12/30/2016 01:43	WG938049
Chromium	1.68	J	0.540	2.00	1	12/30/2016 01:43	WG938049
Copper	4.93	B J	0.520	5.00	1	12/30/2016 01:43	WG938049
Cobalt	69.2		0.260	2.00	1	12/30/2016 01:43	WG938049
Iron	23700		15.0	100	1	12/30/2016 01:43	WG938049
Lead	2.41	B	0.240	2.00	1	12/30/2016 01:43	WG938049
Manganese	346		0.250	5.00	1	12/30/2016 01:43	WG938049
Nickel	80.2		0.350	2.00	1	12/30/2016 01:43	WG938049
Selenium	U		0.380	2.00	1	12/30/2016 01:43	WG938049
Silver	U		0.310	2.00	1	12/30/2016 01:43	WG938049
Thallium	1.64	J	0.190	2.00	1	12/30/2016 01:43	WG938049
Tin	1.43	B J	0.300	2.00	1	12/30/2016 01:43	WG938049
Vanadium	0.450	J	0.180	5.00	1	12/30/2016 01:43	WG938049
Zinc	1600		5.12	50.0	2	12/30/2016 11:12	WG939602



Collected date/time: 12/20/16 16:29

L880396

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		10.0	50.0	1	12/26/2016 01:45	WG938588
Acrylonitrile	U		1.87	10.0	1	12/26/2016 01:45	WG938588
Benzene	0.857	U	0.331	1.00	1	12/26/2016 01:45	WG938588
Bromochloromethane	U		0.520	1.00	1	12/26/2016 01:45	WG938588
Bromodichloromethane	U		0.380	1.00	1	12/26/2016 01:45	WG938588
Bromoform	U		0.469	1.00	1	12/26/2016 01:45	WG938588
Bromomethane	U		0.866	5.00	1	12/26/2016 01:45	WG938588
Carbon disulfide	U		0.275	1.00	1	12/26/2016 01:45	WG938588
Carbon tetrachloride	U		0.379	1.00	1	12/26/2016 01:45	WG938588
Chlorobenzene	1.46		0.348	1.00	1	12/26/2016 01:45	WG938588
Chlorodibromomethane	U		0.327	1.00	1	12/26/2016 01:45	WG938588
Chloroethane	2.07	U	0.453	5.00	1	12/26/2016 01:45	WG938588
Chloroform	U		0.324	5.00	1	12/26/2016 01:45	WG938588
Chloromethane	U		0.276	2.50	1	12/26/2016 01:45	WG938588
Dibromomethane	U		0.346	1.00	1	12/26/2016 01:45	WG938588
1,2-Dibromoethane	U		0.381	1.00	1	12/26/2016 01:45	WG938588
1,2-Dibromo-3-Chloropropane	U		1.33	5.00	1	12/26/2016 01:45	WG938588
1,2-Dichlorobenzene	U		0.349	1.00	1	12/26/2016 01:45	WG938588
1,4-Dichlorobenzene	2.63		0.274	1.00	1	12/26/2016 01:45	WG938588
trans-1,4-Dichloro-2-butene	U		0.866	2.50	1	12/26/2016 01:45	WG938588
1,1-Dichloroethane	16.2		0.259	1.00	1	12/26/2016 01:45	WG938588
1,2-Dichloroethane	0.369	U	0.361	1.00	1	12/26/2016 01:45	WG938588
1,1-Dichloroethene	U		0.398	1.00	1	12/26/2016 01:45	WG938588
cis-1,2-Dichloroethene	10.2		0.260	1.00	1	12/26/2016 01:45	WG938588
trans-1,2-Dichloroethene	0.405	U	0.396	1.00	1	12/26/2016 01:45	WG938588
1,2-Dichloropropane	U		0.306	1.00	1	12/26/2016 01:45	WG938588
cis-1,3-Dichloropropene	U		0.418	1.00	1	12/26/2016 01:45	WG938588
trans-1,3-Dichloropropene	U		0.419	1.00	1	12/26/2016 01:45	WG938588
Ethylbenzene	U		0.384	1.00	1	12/26/2016 01:45	WG938588
2-Hexanone	U		3.82	10.0	1	12/26/2016 01:45	WG938588
Iodomethane	U		1.71	10.0	1	12/26/2016 01:45	WG938588
2-Butanone (MEK)	U		3.93	15.0	1	12/26/2016 01:45	WG938588
Methylene Chloride	U		1.00	5.00	1	12/26/2016 01:45	WG938588
4-Methyl-2-pentanone (MIBK)	U		2.14	10.0	1	12/26/2016 01:45	WG938588
Styrene	U		0.307	1.00	1	12/26/2016 01:45	WG938588
1,1,1,2-Tetrachloroethane	U		0.385	1.00	1	12/26/2016 01:45	WG938588
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	12/26/2016 01:45	WG938588
Tetrachloroethene	U		0.372	1.00	1	12/26/2016 01:45	WG938588
Toluene	U		0.412	1.00	1	12/26/2016 01:45	WG938588
1,1,1-Trichloroethane	U		0.319	1.00	1	12/26/2016 01:45	WG938588
1,1,2-Trichloroethane	U		0.383	1.00	1	12/26/2016 01:45	WG938588
Trichloroethene	1.11		0.398	1.00	1	12/26/2016 01:45	WG938588
Trichlorofluoromethane	U		1.20	5.00	1	12/26/2016 01:45	WG938588
1,2,3-Trichloropropane	U		0.807	2.50	1	12/26/2016 01:45	WG938588
Vinyl acetate	U		1.63	10.0	1	12/26/2016 01:45	WG938588
Vinyl chloride	3.69		0.259	1.00	1	12/26/2016 01:45	WG938588
Xylenes, Total	U		1.06	3.00	1	12/26/2016 01:45	WG938588
(S) Toluene-d8	99.9			90.0-115		12/26/2016 01:45	WG938588
(S) Dibromofluoromethane	97.2			79.0-121		12/26/2016 01:45	WG938588
(S) 4-Bromofluorobenzene	101			80.1-120		12/26/2016 01:45	WG938588

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Gl

7 Al

8 Sc



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Dissolved Solids	275000		2820	10000	1	12/28/2016 14:22	WG938690

1 Cp

2 Tc

Wet Chemistry by Method 4500S2 D-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Sulfide	U		6.50	50.0	1	12/22/2016 22:12	WG938033

3 Ss

4 Cn

Wet Chemistry by Method 9012B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Cyanide	U		1.80	5.00	1	12/29/2016 17:48	WG939301

5 Sr

6 Gl

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	16100		51.9	1000	1	12/27/2016 19:44	WG938354
Sulfate	5170		77.4	5000	1	12/27/2016 19:44	WG938354

7 Al

8 Sc

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	2370		102	1000	1	12/31/2016 13:10	WG939610

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Mercury	U		0.0490	0.200	1	12/23/2016 17:43	WG938138

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Antimony	U		0.754	2.00	1	12/30/2016 01:47	WG938049
Arsenic	4.73		0.250	2.00	1	12/30/2016 01:47	WG938049
Barium	72.7		0.360	5.00	1	12/30/2016 01:47	WG938049
Beryllium	U		0.120	2.00	1	12/30/2016 01:47	WG938049
Cadmium	U		0.160	1.00	1	12/30/2016 01:47	WG938049
Chromium	U		0.540	2.00	1	12/30/2016 01:47	WG938049
Copper	0.792	B J	0.520	5.00	1	12/30/2016 01:47	WG938049
Cobalt	2.71		0.260	2.00	1	12/30/2016 01:47	WG938049
Iron	2050		15.0	100	1	12/30/2016 01:47	WG938049
Lead	0.428	B J	0.240	2.00	1	12/30/2016 01:47	WG938049
Manganese	1140		0.250	5.00	1	12/30/2016 01:47	WG938049
Nickel	3.35		0.350	2.00	1	12/30/2016 01:47	WG938049
Selenium	U		0.380	2.00	1	12/30/2016 01:47	WG938049
Silver	U		0.310	2.00	1	12/30/2016 01:47	WG938049
Thallium	U		0.190	2.00	1	12/30/2016 01:47	WG938049
Tin	U		0.300	2.00	1	12/30/2016 01:47	WG938049
Vanadium	0.281	J	0.180	5.00	1	12/30/2016 01:47	WG938049
Zinc	6.14	B J J3 J4	2.56	25.0	1	12/30/2016 01:47	WG938049



Collected date/time: 12/21/16 11:30

L880396

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		10.0	50.0	1	12/26/2016 02:09	WG938588
Acrylonitrile	U		1.87	10.0	1	12/26/2016 02:09	WG938588
Benzene	U		0.331	1.00	1	12/26/2016 02:09	WG938588
Bromochloromethane	U		0.520	1.00	1	12/26/2016 02:09	WG938588
Bromodichloromethane	U		0.380	1.00	1	12/26/2016 02:09	WG938588
Bromoform	U		0.469	1.00	1	12/26/2016 02:09	WG938588
Bromomethane	U		0.866	5.00	1	12/26/2016 02:09	WG938588
Carbon disulfide	U		0.275	1.00	1	12/26/2016 02:09	WG938588
Carbon tetrachloride	U		0.379	1.00	1	12/26/2016 02:09	WG938588
Chlorobenzene	U		0.348	1.00	1	12/26/2016 02:09	WG938588
Chlorodibromomethane	U		0.327	1.00	1	12/26/2016 02:09	WG938588
Chloroethane	U		0.453	5.00	1	12/26/2016 02:09	WG938588
Chloroform	U		0.324	5.00	1	12/26/2016 02:09	WG938588
Chloromethane	U		0.276	2.50	1	12/26/2016 02:09	WG938588
Dibromomethane	U		0.346	1.00	1	12/26/2016 02:09	WG938588
1,2-Dibromoethane	U		0.381	1.00	1	12/26/2016 02:09	WG938588
1,2-Dibromo-3-Chloropropane	U		1.33	5.00	1	12/26/2016 02:09	WG938588
1,2-Dichlorobenzene	U		0.349	1.00	1	12/26/2016 02:09	WG938588
1,4-Dichlorobenzene	U		0.274	1.00	1	12/26/2016 02:09	WG938588
trans-1,4-Dichloro-2-butene	U		0.866	2.50	1	12/26/2016 02:09	WG938588
1,1-Dichloroethane	U		0.259	1.00	1	12/26/2016 02:09	WG938588
1,2-Dichloroethane	U		0.361	1.00	1	12/26/2016 02:09	WG938588
1,1-Dichloroethene	U		0.398	1.00	1	12/26/2016 02:09	WG938588
cis-1,2-Dichloroethene	U		0.260	1.00	1	12/26/2016 02:09	WG938588
trans-1,2-Dichloroethene	U		0.396	1.00	1	12/26/2016 02:09	WG938588
1,2-Dichloropropane	U		0.306	1.00	1	12/26/2016 02:09	WG938588
cis-1,3-Dichloropropene	U		0.418	1.00	1	12/26/2016 02:09	WG938588
trans-1,3-Dichloropropene	U		0.419	1.00	1	12/26/2016 02:09	WG938588
Ethylbenzene	U		0.384	1.00	1	12/26/2016 02:09	WG938588
2-Hexanone	U		3.82	10.0	1	12/26/2016 02:09	WG938588
Iodomethane	U		1.71	10.0	1	12/26/2016 02:09	WG938588
2-Butanone (MEK)	U		3.93	15.0	1	12/26/2016 02:09	WG938588
Methylene Chloride	U		1.00	5.00	1	12/26/2016 02:09	WG938588
4-Methyl-2-pentanone (MIBK)	U		2.14	10.0	1	12/26/2016 02:09	WG938588
Styrene	U		0.307	1.00	1	12/26/2016 02:09	WG938588
1,1,1,2-Tetrachloroethane	U		0.385	1.00	1	12/26/2016 02:09	WG938588
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	12/26/2016 02:09	WG938588
Tetrachloroethene	U		0.372	1.00	1	12/26/2016 02:09	WG938588
Toluene	U		0.412	1.00	1	12/26/2016 02:09	WG938588
1,1,1-Trichloroethane	U		0.319	1.00	1	12/26/2016 02:09	WG938588
1,1,2-Trichloroethane	U		0.383	1.00	1	12/26/2016 02:09	WG938588
Trichloroethene	U		0.398	1.00	1	12/26/2016 02:09	WG938588
Trichlorofluoromethane	U		1.20	5.00	1	12/26/2016 02:09	WG938588
1,2,3-Trichloropropane	U		0.807	2.50	1	12/26/2016 02:09	WG938588
Vinyl acetate	U		1.63	10.0	1	12/26/2016 02:09	WG938588
Vinyl chloride	U		0.259	1.00	1	12/26/2016 02:09	WG938588
Xylenes, Total	U		1.06	3.00	1	12/26/2016 02:09	WG938588
(S) Toluene-d8	100			90.0-115		12/26/2016 02:09	WG938588
(S) Dibromofluoromethane	99.2			79.0-121		12/26/2016 02:09	WG938588
(S) 4-Bromofluorobenzene	102			80.1-120		12/26/2016 02:09	WG938588

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Gl
7 Al
8 Sc



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Dissolved Solids	359000		2820	10000	1	12/28/2016 14:22	WG938690

1 Cp

2 Tc

Wet Chemistry by Method 4500S2 D-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Sulfide	U		6.50	50.0	1	12/22/2016 22:12	WG938033

3 Ss

4 Cn

Wet Chemistry by Method 9012B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Cyanide	U		1.80	5.00	1	12/29/2016 17:49	WG939301

5 Sr

6 Gl

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	2370		51.9	1000	1	12/27/2016 19:54	WG938354
Sulfate	8170		77.4	5000	1	12/27/2016 19:54	WG938354

7 Al

8 Sc

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	967	J	102	1000	1	12/31/2016 13:29	WG939610

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Mercury	U		0.0490	0.200	1	12/23/2016 17:46	WG938138

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Antimony	U		0.754	2.00	1	12/30/2016 01:50	WG938049
Arsenic	0.375	J	0.250	2.00	1	12/30/2016 01:50	WG938049
Barium	41.8		0.360	5.00	1	12/30/2016 01:50	WG938049
Beryllium	U		0.120	2.00	1	12/30/2016 01:50	WG938049
Cadmium	1.61		0.160	1.00	1	12/30/2016 01:50	WG938049
Chromium	U		0.540	2.00	1	12/30/2016 01:50	WG938049
Copper	1.19	B J	0.520	5.00	1	12/30/2016 01:50	WG938049
Cobalt	1.69	J	0.260	2.00	1	12/30/2016 01:50	WG938049
Iron	118	B	15.0	100	1	12/30/2016 01:50	WG938049
Lead	0.597	B J	0.240	2.00	1	12/30/2016 01:50	WG938049
Manganese	327		0.250	5.00	1	12/30/2016 01:50	WG938049
Nickel	4.46		0.350	2.00	1	12/30/2016 01:50	WG938049
Selenium	U		0.380	2.00	1	12/30/2016 01:50	WG938049
Silver	U		0.310	2.00	1	12/30/2016 01:50	WG938049
Thallium	U		0.190	2.00	1	12/30/2016 01:50	WG938049
Tin	U		0.300	2.00	1	12/30/2016 01:50	WG938049
Vanadium	0.706	J	0.180	5.00	1	12/30/2016 01:50	WG938049
Zinc	122		2.56	25.0	1	12/30/2016 10:36	WG939602



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		10.0	50.0	1	12/26/2016 15:30	WG938676
Acrylonitrile	U		1.87	10.0	1	12/26/2016 15:30	WG938676
Benzene	U		0.331	1.00	1	12/26/2016 15:30	WG938676
Bromochloromethane	U		0.520	1.00	1	12/26/2016 15:30	WG938676
Bromodichloromethane	U		0.380	1.00	1	12/26/2016 15:30	WG938676
Bromoform	U		0.469	1.00	1	12/26/2016 15:30	WG938676
Bromomethane	U		0.866	5.00	1	12/26/2016 15:30	WG938676
Carbon disulfide	U		0.275	1.00	1	12/26/2016 15:30	WG938676
Carbon tetrachloride	U		0.379	1.00	1	12/26/2016 15:30	WG938676
Chlorobenzene	U		0.348	1.00	1	12/26/2016 15:30	WG938676
Chlorodibromomethane	U		0.327	1.00	1	12/26/2016 15:30	WG938676
Chloroethane	U		0.453	5.00	1	12/26/2016 15:30	WG938676
Chloroform	U		0.324	5.00	1	12/26/2016 15:30	WG938676
Chloromethane	U		0.276	2.50	1	12/26/2016 15:30	WG938676
Dibromomethane	U		0.346	1.00	1	12/26/2016 15:30	WG938676
1,2-Dibromoethane	U		0.381	1.00	1	12/26/2016 15:30	WG938676
1,2-Dibromo-3-Chloropropane	U		1.33	5.00	1	12/26/2016 15:30	WG938676
1,2-Dichlorobenzene	U		0.349	1.00	1	12/26/2016 15:30	WG938676
1,4-Dichlorobenzene	U		0.274	1.00	1	12/26/2016 15:30	WG938676
trans-1,4-Dichloro-2-butene	U		0.866	2.50	1	12/26/2016 15:30	WG938676
1,1-Dichloroethane	2.92		0.259	1.00	1	12/26/2016 15:30	WG938676
1,2-Dichloroethane	U		0.361	1.00	1	12/26/2016 15:30	WG938676
1,1-Dichloroethene	U		0.398	1.00	1	12/26/2016 15:30	WG938676
cis-1,2-Dichloroethene	U		0.260	1.00	1	12/26/2016 15:30	WG938676
trans-1,2-Dichloroethene	U		0.396	1.00	1	12/26/2016 15:30	WG938676
1,2-Dichloropropane	U		0.306	1.00	1	12/26/2016 15:30	WG938676
cis-1,3-Dichloropropene	U		0.418	1.00	1	12/26/2016 15:30	WG938676
trans-1,3-Dichloropropene	U		0.419	1.00	1	12/26/2016 15:30	WG938676
Ethylbenzene	U		0.384	1.00	1	12/26/2016 15:30	WG938676
2-Hexanone	U		3.82	10.0	1	12/26/2016 15:30	WG938676
Iodomethane	U		1.71	10.0	1	12/26/2016 15:30	WG938676
2-Butanone (MEK)	U		3.93	15.0	1	12/26/2016 15:30	WG938676
Methylene Chloride	U		1.00	5.00	1	12/26/2016 15:30	WG938676
4-Methyl-2-pentanone (MIBK)	U		2.14	10.0	1	12/26/2016 15:30	WG938676
Styrene	U		0.307	1.00	1	12/26/2016 15:30	WG938676
1,1,1,2-Tetrachloroethane	U		0.385	1.00	1	12/26/2016 15:30	WG938676
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	12/26/2016 15:30	WG938676
Tetrachloroethene	U		0.372	1.00	1	12/26/2016 15:30	WG938676
Toluene	U		0.412	1.00	1	12/26/2016 15:30	WG938676
1,1,1-Trichloroethane	U		0.319	1.00	1	12/26/2016 15:30	WG938676
1,1,2-Trichloroethane	U		0.383	1.00	1	12/26/2016 15:30	WG938676
Trichloroethene	U		0.398	1.00	1	12/26/2016 15:30	WG938676
Trichlorofluoromethane	U		1.20	5.00	1	12/26/2016 15:30	WG938676
1,2,3-Trichloropropane	U		0.807	2.50	1	12/26/2016 15:30	WG938676
Vinyl acetate	U		1.63	10.0	1	12/26/2016 15:30	WG938676
Vinyl chloride	U		0.259	1.00	1	12/26/2016 15:30	WG938676
Xylenes, Total	U		1.06	3.00	1	12/26/2016 15:30	WG938676
(S) Toluene-d8	103			90.0-115		12/26/2016 15:30	WG938676
(S) Dibromofluoromethane	105			79.0-121		12/26/2016 15:30	WG938676
(S) 4-Bromofluorobenzene	113			80.1-120		12/26/2016 15:30	WG938676

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Gl

7 Al

8 Sc



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Dissolved Solids	335000		2820	10000	1	12/28/2016 14:22	WG938690

1 Cp

2 Tc

Wet Chemistry by Method 4500S2 D-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Sulfide	U		6.50	50.0	1	12/22/2016 22:13	WG938033

3 Ss

4 Cn

Wet Chemistry by Method 9012B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Cyanide	U		1.80	5.00	1	12/29/2016 17:52	WG939301

5 Sr

6 Gl

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	12700		51.9	1000	1	12/27/2016 20:05	WG938354
Sulfate	4410	J	77.4	5000	1	12/27/2016 20:05	WG938354

7 Al

8 Sc

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	2380		102	1000	1	12/31/2016 13:50	WG939610

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Mercury	U		0.0490	0.200	1	12/23/2016 17:48	WG938138

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Antimony	U		0.754	2.00	1	12/30/2016 01:54	WG938049
Arsenic	3.00		0.250	2.00	1	12/30/2016 01:54	WG938049
Barium	79.8		0.360	5.00	1	12/30/2016 01:54	WG938049
Beryllium	U		0.120	2.00	1	12/30/2016 01:54	WG938049
Cadmium	U		0.160	1.00	1	12/30/2016 01:54	WG938049
Chromium	U		0.540	2.00	1	12/30/2016 01:54	WG938049
Copper	U		0.520	5.00	1	12/30/2016 01:54	WG938049
Cobalt	2.41		0.260	2.00	1	12/30/2016 01:54	WG938049
Iron	2010		15.0	100	1	12/30/2016 01:54	WG938049
Lead	0.245	B J	0.240	2.00	1	12/30/2016 01:54	WG938049
Manganese	914		0.250	5.00	1	12/30/2016 01:54	WG938049
Nickel	2.36		0.350	2.00	1	12/30/2016 01:54	WG938049
Selenium	U		0.380	2.00	1	12/30/2016 01:54	WG938049
Silver	U		0.310	2.00	1	12/30/2016 01:54	WG938049
Thallium	U		0.190	2.00	1	12/30/2016 01:54	WG938049
Tin	0.379	B J	0.300	2.00	1	12/30/2016 01:54	WG938049
Vanadium	0.288	J	0.180	5.00	1	12/30/2016 01:54	WG938049
Zinc	U	J3 J4	2.56	25.0	1	12/30/2016 01:54	WG938049

LANDFILL ENTRANCE SEEP

Collected date/time: 12/21/16 11:20

SAMPLE RESULTS - 26

L880396

ONE LAB. NATIONWIDE.



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		10.0	50.0	1	12/26/2016 15:43	WG938676
Acrylonitrile	U		1.87	10.0	1	12/26/2016 15:43	WG938676
Benzene	U		0.331	1.00	1	12/26/2016 15:43	WG938676
Bromochloromethane	U		0.520	1.00	1	12/26/2016 15:43	WG938676
Bromodichloromethane	U		0.380	1.00	1	12/26/2016 15:43	WG938676
Bromoform	U		0.469	1.00	1	12/26/2016 15:43	WG938676
Bromomethane	U		0.866	5.00	1	12/26/2016 15:43	WG938676
Carbon disulfide	U		0.275	1.00	1	12/26/2016 15:43	WG938676
Carbon tetrachloride	U		0.379	1.00	1	12/26/2016 15:43	WG938676
Chlorobenzene	U		0.348	1.00	1	12/26/2016 15:43	WG938676
Chlorodibromomethane	U		0.327	1.00	1	12/26/2016 15:43	WG938676
Chloroethane	2.81	U	0.453	5.00	1	12/26/2016 15:43	WG938676
Chloroform	U		0.324	5.00	1	12/26/2016 15:43	WG938676
Chloromethane	U		0.276	2.50	1	12/26/2016 15:43	WG938676
Dibromomethane	U		0.346	1.00	1	12/26/2016 15:43	WG938676
1,2-Dibromoethane	U		0.381	1.00	1	12/26/2016 15:43	WG938676
1,2-Dibromo-3-Chloropropane	U		1.33	5.00	1	12/26/2016 15:43	WG938676
1,2-Dichlorobenzene	U		0.349	1.00	1	12/26/2016 15:43	WG938676
1,4-Dichlorobenzene	U		0.274	1.00	1	12/26/2016 15:43	WG938676
trans-1,4-Dichloro-2-butene	U		0.866	2.50	1	12/26/2016 15:43	WG938676
1,1-Dichloroethane	0.862	U	0.259	1.00	1	12/26/2016 15:43	WG938676
1,2-Dichloroethane	U		0.361	1.00	1	12/26/2016 15:43	WG938676
1,1-Dichloroethene	U		0.398	1.00	1	12/26/2016 15:43	WG938676
cis-1,2-Dichloroethene	0.477	U	0.260	1.00	1	12/26/2016 15:43	WG938676
trans-1,2-Dichloroethene	U		0.396	1.00	1	12/26/2016 15:43	WG938676
1,2-Dichloropropane	U		0.306	1.00	1	12/26/2016 15:43	WG938676
cis-1,3-Dichloropropene	U		0.418	1.00	1	12/26/2016 15:43	WG938676
trans-1,3-Dichloropropene	U		0.419	1.00	1	12/26/2016 15:43	WG938676
Ethylbenzene	U		0.384	1.00	1	12/26/2016 15:43	WG938676
2-Hexanone	U		3.82	10.0	1	12/26/2016 15:43	WG938676
Iodomethane	U		1.71	10.0	1	12/26/2016 15:43	WG938676
2-Butanone (MEK)	U		3.93	15.0	1	12/26/2016 15:43	WG938676
Methylene Chloride	U		1.00	5.00	1	12/26/2016 15:43	WG938676
4-Methyl-2-pentanone (MIBK)	U		2.14	10.0	1	12/26/2016 15:43	WG938676
Styrene	U		0.307	1.00	1	12/26/2016 15:43	WG938676
1,1,1,2-Tetrachloroethane	U		0.385	1.00	1	12/26/2016 15:43	WG938676
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	12/26/2016 15:43	WG938676
Tetrachloroethene	U		0.372	1.00	1	12/26/2016 15:43	WG938676
Toluene	U		0.412	1.00	1	12/26/2016 15:43	WG938676
1,1,1-Trichloroethane	U		0.319	1.00	1	12/26/2016 15:43	WG938676
1,1,2-Trichloroethane	U		0.383	1.00	1	12/26/2016 15:43	WG938676
Trichloroethene	U		0.398	1.00	1	12/26/2016 15:43	WG938676
Trichlorofluoromethane	U		1.20	5.00	1	12/26/2016 15:43	WG938676
1,2,3-Trichloropropane	U		0.807	2.50	1	12/26/2016 15:43	WG938676
Vinyl acetate	U		1.63	10.0	1	12/26/2016 15:43	WG938676
Vinyl chloride	U		0.259	1.00	1	12/26/2016 15:43	WG938676
Xylenes, Total	U		1.06	3.00	1	12/26/2016 15:43	WG938676
(S) Toluene-d8	102			90.0-115		12/26/2016 15:43	WG938676
(S) Dibromofluoromethane	105			79.0-121		12/26/2016 15:43	WG938676
(S) 4-Bromofluorobenzene	115			80.1-120		12/26/2016 15:43	WG938676

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Gl
7 Al
8 Sc



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Dissolved Solids	319000		2820	10000	1	12/28/2016 14:22	WG938690

1 Cp

2 Tc

Wet Chemistry by Method 4500S2 D-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Sulfide	U		6.50	50.0	1	12/22/2016 22:14	WG938033

3 Ss

4 Cn

Wet Chemistry by Method 9012B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Cyanide	U		1.80	5.00	1	12/29/2016 17:54	WG939301

5 Sr

6 Gl

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	45000		51.9	1000	1	12/27/2016 20:15	WG938354
Sulfate	2800	J	77.4	5000	1	12/27/2016 20:15	WG938354

7 Al

8 Sc

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	4230		102	1000	1	12/31/2016 15:26	WG939610

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Mercury	U		0.0490	0.200	1	12/23/2016 17:50	WG938138

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Antimony	U		0.754	2.00	1	12/30/2016 01:57	WG938049
Arsenic	0.799	J	0.250	2.00	1	12/30/2016 01:57	WG938049
Barium	66.1		0.360	5.00	1	12/30/2016 01:57	WG938049
Beryllium	U		0.120	2.00	1	12/30/2016 01:57	WG938049
Cadmium	U		0.160	1.00	1	12/30/2016 01:57	WG938049
Chromium	U		0.540	2.00	1	12/30/2016 01:57	WG938049
Copper	0.709	B J	0.520	5.00	1	12/30/2016 01:57	WG938049
Cobalt	1.08	J	0.260	2.00	1	12/30/2016 01:57	WG938049
Iron	567		15.0	100	1	12/30/2016 01:57	WG938049
Lead	0.762	B J	0.240	2.00	1	12/30/2016 01:57	WG938049
Manganese	464		0.250	5.00	1	12/30/2016 01:57	WG938049
Nickel	3.33		0.350	2.00	1	12/30/2016 01:57	WG938049
Selenium	U		0.380	2.00	1	12/30/2016 01:57	WG938049
Silver	U		0.310	2.00	1	12/30/2016 01:57	WG938049
Thallium	U		0.190	2.00	1	12/30/2016 01:57	WG938049
Tin	0.322	B J	0.300	2.00	1	12/30/2016 01:57	WG938049
Vanadium	0.474	J	0.180	5.00	1	12/30/2016 01:57	WG938049
Zinc	2.99	B J J3 J4	2.56	25.0	1	12/30/2016 01:57	WG938049



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		10.0	50.0	1	12/26/2016 15:57	WG938676
Acrylonitrile	U		1.87	10.0	1	12/26/2016 15:57	WG938676
Benzene	U		0.331	1.00	1	12/26/2016 15:57	WG938676
Bromochloromethane	U		0.520	1.00	1	12/26/2016 15:57	WG938676
Bromodichloromethane	U		0.380	1.00	1	12/26/2016 15:57	WG938676
Bromoform	U		0.469	1.00	1	12/26/2016 15:57	WG938676
Bromomethane	U		0.866	5.00	1	12/26/2016 15:57	WG938676
Carbon disulfide	U		0.275	1.00	1	12/26/2016 15:57	WG938676
Carbon tetrachloride	U		0.379	1.00	1	12/26/2016 15:57	WG938676
Chlorobenzene	U		0.348	1.00	1	12/26/2016 15:57	WG938676
Chlorodibromomethane	U		0.327	1.00	1	12/26/2016 15:57	WG938676
Chloroethane	U		0.453	5.00	1	12/26/2016 15:57	WG938676
Chloroform	U		0.324	5.00	1	12/26/2016 15:57	WG938676
Chloromethane	U		0.276	2.50	1	12/26/2016 15:57	WG938676
Dibromomethane	U		0.346	1.00	1	12/26/2016 15:57	WG938676
1,2-Dibromoethane	U		0.381	1.00	1	12/26/2016 15:57	WG938676
1,2-Dibromo-3-Chloropropane	U		1.33	5.00	1	12/26/2016 15:57	WG938676
1,2-Dichlorobenzene	U		0.349	1.00	1	12/26/2016 15:57	WG938676
1,4-Dichlorobenzene	U		0.274	1.00	1	12/26/2016 15:57	WG938676
trans-1,4-Dichloro-2-butene	U		0.866	2.50	1	12/26/2016 15:57	WG938676
1,1-Dichloroethane	U		0.259	1.00	1	12/26/2016 15:57	WG938676
1,2-Dichloroethane	U		0.361	1.00	1	12/26/2016 15:57	WG938676
1,1-Dichloroethene	U		0.398	1.00	1	12/26/2016 15:57	WG938676
cis-1,2-Dichloroethene	U		0.260	1.00	1	12/26/2016 15:57	WG938676
trans-1,2-Dichloroethene	U		0.396	1.00	1	12/26/2016 15:57	WG938676
1,2-Dichloropropane	U		0.306	1.00	1	12/26/2016 15:57	WG938676
cis-1,3-Dichloropropene	U		0.418	1.00	1	12/26/2016 15:57	WG938676
trans-1,3-Dichloropropene	U		0.419	1.00	1	12/26/2016 15:57	WG938676
Ethylbenzene	U		0.384	1.00	1	12/26/2016 15:57	WG938676
2-Hexanone	U		3.82	10.0	1	12/26/2016 15:57	WG938676
Iodomethane	U		1.71	10.0	1	12/26/2016 15:57	WG938676
2-Butanone (MEK)	U		3.93	15.0	1	12/26/2016 15:57	WG938676
Methylene Chloride	U		1.00	5.00	1	12/26/2016 15:57	WG938676
4-Methyl-2-pentanone (MIBK)	U		2.14	10.0	1	12/26/2016 15:57	WG938676
Styrene	U		0.307	1.00	1	12/26/2016 15:57	WG938676
1,1,1,2-Tetrachloroethane	U		0.385	1.00	1	12/26/2016 15:57	WG938676
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	12/26/2016 15:57	WG938676
Tetrachloroethene	U		0.372	1.00	1	12/26/2016 15:57	WG938676
Toluene	U		0.412	1.00	1	12/26/2016 15:57	WG938676
1,1,1-Trichloroethane	U		0.319	1.00	1	12/26/2016 15:57	WG938676
1,1,2-Trichloroethane	U		0.383	1.00	1	12/26/2016 15:57	WG938676
Trichloroethene	U		0.398	1.00	1	12/26/2016 15:57	WG938676
Trichlorofluoromethane	U		1.20	5.00	1	12/26/2016 15:57	WG938676
1,2,3-Trichloropropane	U		0.807	2.50	1	12/26/2016 15:57	WG938676
Vinyl acetate	U		1.63	10.0	1	12/26/2016 15:57	WG938676
Vinyl chloride	U		0.259	1.00	1	12/26/2016 15:57	WG938676
Xylenes, Total	U		1.06	3.00	1	12/26/2016 15:57	WG938676
(S) Toluene-d8	103			90.0-115		12/26/2016 15:57	WG938676
(S) Dibromofluoromethane	104			79.0-121		12/26/2016 15:57	WG938676
(S) 4-Bromofluorobenzene	113			80.1-120		12/26/2016 15:57	WG938676

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Gl
7 Al
8 Sc



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Dissolved Solids	1830000		2820	10000	1	12/27/2016 14:58	WG938475

1 Cp

2 Tc

Wet Chemistry by Method 4500S2 D-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Sulfide	U		6.50	50.0	1	12/22/2016 22:14	WG938033

3 Ss

4 Cn

Wet Chemistry by Method 9012B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Cyanide	U		1.80	5.00	1	12/29/2016 17:55	WG939301

5 Sr

6 Gl

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	659000		519	10000	10	12/27/2016 20:35	WG938354
Sulfate	11200		77.4	5000	1	12/27/2016 20:25	WG938354

7 Al

8 Sc

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	60000		102	1000	1	12/31/2016 15:46	WG939610

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Mercury	U		0.0490	0.200	1	12/23/2016 17:52	WG938138

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Antimony	U		0.754	2.00	1	12/30/2016 02:01	WG938049
Arsenic	9.12		0.250	2.00	1	12/30/2016 02:01	WG938049
Barium	2560		1.80	25.0	5	12/30/2016 02:24	WG938049
Beryllium	U		0.120	2.00	1	12/30/2016 02:01	WG938049
Cadmium	U		0.160	1.00	1	12/30/2016 02:01	WG938049
Chromium	30.7		0.540	2.00	1	12/30/2016 02:01	WG938049
Copper	12.2	B	0.520	5.00	1	12/30/2016 02:01	WG938049
Cobalt	6.24		0.260	2.00	1	12/30/2016 02:01	WG938049
Iron	49400		15.0	100	1	12/30/2016 02:01	WG938049
Lead	3.15	B	0.240	2.00	1	12/30/2016 02:01	WG938049
Manganese	1220		0.250	5.00	1	12/30/2016 02:01	WG938049
Nickel	49.9		0.350	2.00	1	12/30/2016 02:01	WG938049
Selenium	0.627	J	0.380	2.00	1	12/30/2016 02:01	WG938049
Silver	U		0.310	2.00	1	12/30/2016 02:01	WG938049
Thallium	U		0.190	2.00	1	12/30/2016 02:01	WG938049
Tin	6.32		0.300	2.00	1	12/30/2016 02:01	WG938049
Vanadium	2.08	J	0.180	5.00	1	12/30/2016 02:01	WG938049
Zinc	66.6		2.56	25.0	1	12/30/2016 10:39	WG939602



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	23.6	U	10.0	50.0	1	12/26/2016 16:10	WG938676
Acrylonitrile	U		1.87	10.0	1	12/26/2016 16:10	WG938676
Benzene	U		0.331	1.00	1	12/26/2016 16:10	WG938676
Bromochloromethane	U		0.520	1.00	1	12/26/2016 16:10	WG938676
Bromodichloromethane	U		0.380	1.00	1	12/26/2016 16:10	WG938676
Bromoform	U		0.469	1.00	1	12/26/2016 16:10	WG938676
Bromomethane	U		0.866	5.00	1	12/26/2016 16:10	WG938676
Carbon disulfide	U		0.275	1.00	1	12/26/2016 16:10	WG938676
Carbon tetrachloride	U		0.379	1.00	1	12/26/2016 16:10	WG938676
Chlorobenzene	U		0.348	1.00	1	12/26/2016 16:10	WG938676
Chlorodibromomethane	U		0.327	1.00	1	12/26/2016 16:10	WG938676
Chloroethane	0.565	U	0.453	5.00	1	12/26/2016 16:10	WG938676
Chloroform	U		0.324	5.00	1	12/26/2016 16:10	WG938676
Chloromethane	U		0.276	2.50	1	12/26/2016 16:10	WG938676
Dibromomethane	U		0.346	1.00	1	12/26/2016 16:10	WG938676
1,2-Dibromoethane	U		0.381	1.00	1	12/26/2016 16:10	WG938676
1,2-Dibromo-3-Chloropropane	U		1.33	5.00	1	12/26/2016 16:10	WG938676
1,2-Dichlorobenzene	U		0.349	1.00	1	12/26/2016 16:10	WG938676
1,4-Dichlorobenzene	1.40		0.274	1.00	1	12/26/2016 16:10	WG938676
trans-1,4-Dichloro-2-butene	U		0.866	2.50	1	12/26/2016 16:10	WG938676
1,1-Dichloroethane	0.565	U	0.259	1.00	1	12/26/2016 16:10	WG938676
1,2-Dichloroethane	U		0.361	1.00	1	12/26/2016 16:10	WG938676
1,1-Dichloroethene	U		0.398	1.00	1	12/26/2016 16:10	WG938676
cis-1,2-Dichloroethene	U		0.260	1.00	1	12/26/2016 16:10	WG938676
trans-1,2-Dichloroethene	U		0.396	1.00	1	12/26/2016 16:10	WG938676
1,2-Dichloropropane	U		0.306	1.00	1	12/26/2016 16:10	WG938676
cis-1,3-Dichloropropene	U		0.418	1.00	1	12/26/2016 16:10	WG938676
trans-1,3-Dichloropropene	U		0.419	1.00	1	12/26/2016 16:10	WG938676
Ethylbenzene	U		0.384	1.00	1	12/26/2016 16:10	WG938676
2-Hexanone	U		3.82	10.0	1	12/26/2016 16:10	WG938676
Iodomethane	U		1.71	10.0	1	12/26/2016 16:10	WG938676
2-Butanone (MEK)	U		3.93	15.0	1	12/26/2016 16:10	WG938676
Methylene Chloride	U		1.00	5.00	1	12/26/2016 16:10	WG938676
4-Methyl-2-pentanone (MIBK)	2.87	U	2.14	10.0	1	12/26/2016 16:10	WG938676
Styrene	U		0.307	1.00	1	12/26/2016 16:10	WG938676
1,1,1,2-Tetrachloroethane	U		0.385	1.00	1	12/26/2016 16:10	WG938676
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	12/26/2016 16:10	WG938676
Tetrachloroethene	U		0.372	1.00	1	12/26/2016 16:10	WG938676
Toluene	U		0.412	1.00	1	12/26/2016 16:10	WG938676
1,1,1-Trichloroethane	U		0.319	1.00	1	12/26/2016 16:10	WG938676
1,1,2-Trichloroethane	U		0.383	1.00	1	12/26/2016 16:10	WG938676
Trichloroethene	U		0.398	1.00	1	12/26/2016 16:10	WG938676
Trichlorofluoromethane	U		1.20	5.00	1	12/26/2016 16:10	WG938676
1,2,3-Trichloropropane	U		0.807	2.50	1	12/26/2016 16:10	WG938676
Vinyl acetate	U		1.63	10.0	1	12/26/2016 16:10	WG938676
Vinyl chloride	0.463	U	0.259	1.00	1	12/26/2016 16:10	WG938676
Xylenes, Total	2.04	U	1.06	3.00	1	12/26/2016 16:10	WG938676
(S) Toluene-d8	104			90.0-115		12/26/2016 16:10	WG938676
(S) Dibromofluoromethane	105			79.0-121		12/26/2016 16:10	WG938676
(S) 4-Bromofluorobenzene	114			80.1-120		12/26/2016 16:10	WG938676

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Gl

7 Al

8 Sc



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Dissolved Solids	459000		2820	10000	1	12/28/2016 14:22	WG938690

1 Cp

2 Tc

Wet Chemistry by Method 4500S2 D-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Sulfide	U		6.50	50.0	1	12/22/2016 22:14	WG938033

3 Ss

4 Cn

Wet Chemistry by Method 9012B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Cyanide	U		1.80	5.00	1	12/29/2016 17:56	WG939301

5 Sr

6 Gl

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	20800		51.9	1000	1	12/27/2016 20:45	WG938354
Sulfate	8320		77.4	5000	1	12/27/2016 20:45	WG938354

7 Al

8 Sc

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	1390		102	1000	1	12/31/2016 16:01	WG939610

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Mercury	U		0.0490	0.200	1	12/23/2016 17:55	WG938138

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Antimony	U		0.754	2.00	1	12/30/2016 02:05	WG938049
Arsenic	0.422	J	0.250	2.00	1	12/30/2016 02:05	WG938049
Barium	48.2		0.360	5.00	1	12/30/2016 02:05	WG938049
Beryllium	U		0.120	2.00	1	12/30/2016 02:05	WG938049
Cadmium	0.470	J	0.160	1.00	1	12/30/2016 02:05	WG938049
Chromium	U		0.540	2.00	1	12/30/2016 02:05	WG938049
Copper	1.60	B J	0.520	5.00	1	12/30/2016 02:05	WG938049
Cobalt	U		0.260	2.00	1	12/30/2016 02:05	WG938049
Iron	63.7	B J	15.0	100	1	12/30/2016 02:05	WG938049
Lead	0.635	B J	0.240	2.00	1	12/30/2016 02:05	WG938049
Manganese	1.34	B J	0.250	5.00	1	12/30/2016 02:05	WG938049
Nickel	0.804	J	0.350	2.00	1	12/30/2016 02:05	WG938049
Selenium	U		0.380	2.00	1	12/30/2016 02:05	WG938049
Silver	U		0.310	2.00	1	12/30/2016 02:05	WG938049
Thallium	U		0.190	2.00	1	12/30/2016 02:05	WG938049
Tin	0.326	B J	0.300	2.00	1	12/30/2016 02:05	WG938049
Vanadium	0.306	J	0.180	5.00	1	12/30/2016 02:05	WG938049
Zinc	41.6		2.56	25.0	1	12/30/2016 10:43	WG939602



Collected date/time: 12/21/16 09:50

L880396

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		10.0	50.0	1	12/26/2016 16:24	WG938676
Acrylonitrile	U		1.87	10.0	1	12/26/2016 16:24	WG938676
Benzene	U		0.331	1.00	1	12/26/2016 16:24	WG938676
Bromochloromethane	U		0.520	1.00	1	12/26/2016 16:24	WG938676
Bromodichloromethane	U		0.380	1.00	1	12/26/2016 16:24	WG938676
Bromoform	U		0.469	1.00	1	12/26/2016 16:24	WG938676
Bromomethane	U		0.866	5.00	1	12/26/2016 16:24	WG938676
Carbon disulfide	U		0.275	1.00	1	12/26/2016 16:24	WG938676
Carbon tetrachloride	U		0.379	1.00	1	12/26/2016 16:24	WG938676
Chlorobenzene	U		0.348	1.00	1	12/26/2016 16:24	WG938676
Chlorodibromomethane	U		0.327	1.00	1	12/26/2016 16:24	WG938676
Chloroethane	U		0.453	5.00	1	12/26/2016 16:24	WG938676
Chloroform	U		0.324	5.00	1	12/26/2016 16:24	WG938676
Chloromethane	U		0.276	2.50	1	12/26/2016 16:24	WG938676
Dibromomethane	U		0.346	1.00	1	12/26/2016 16:24	WG938676
1,2-Dibromoethane	U		0.381	1.00	1	12/26/2016 16:24	WG938676
1,2-Dibromo-3-Chloropropane	U		1.33	5.00	1	12/26/2016 16:24	WG938676
1,2-Dichlorobenzene	U		0.349	1.00	1	12/26/2016 16:24	WG938676
1,4-Dichlorobenzene	U		0.274	1.00	1	12/26/2016 16:24	WG938676
trans-1,4-Dichloro-2-butene	U		0.866	2.50	1	12/26/2016 16:24	WG938676
1,1-Dichloroethane	U		0.259	1.00	1	12/26/2016 16:24	WG938676
1,2-Dichloroethane	U		0.361	1.00	1	12/26/2016 16:24	WG938676
1,1-Dichloroethene	U		0.398	1.00	1	12/26/2016 16:24	WG938676
cis-1,2-Dichloroethene	U		0.260	1.00	1	12/26/2016 16:24	WG938676
trans-1,2-Dichloroethene	U		0.396	1.00	1	12/26/2016 16:24	WG938676
1,2-Dichloropropane	U		0.306	1.00	1	12/26/2016 16:24	WG938676
cis-1,3-Dichloropropene	U		0.418	1.00	1	12/26/2016 16:24	WG938676
trans-1,3-Dichloropropene	U		0.419	1.00	1	12/26/2016 16:24	WG938676
Ethylbenzene	U		0.384	1.00	1	12/26/2016 16:24	WG938676
2-Hexanone	U		3.82	10.0	1	12/26/2016 16:24	WG938676
Iodomethane	U		1.71	10.0	1	12/26/2016 16:24	WG938676
2-Butanone (MEK)	U		3.93	15.0	1	12/26/2016 16:24	WG938676
Methylene Chloride	U		1.00	5.00	1	12/26/2016 16:24	WG938676
4-Methyl-2-pentanone (MIBK)	U		2.14	10.0	1	12/26/2016 16:24	WG938676
Styrene	U		0.307	1.00	1	12/26/2016 16:24	WG938676
1,1,1,2-Tetrachloroethane	U		0.385	1.00	1	12/26/2016 16:24	WG938676
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	12/26/2016 16:24	WG938676
Tetrachloroethene	U		0.372	1.00	1	12/26/2016 16:24	WG938676
Toluene	U		0.412	1.00	1	12/26/2016 16:24	WG938676
1,1,1-Trichloroethane	U		0.319	1.00	1	12/26/2016 16:24	WG938676
1,1,2-Trichloroethane	U		0.383	1.00	1	12/26/2016 16:24	WG938676
Trichloroethene	U		0.398	1.00	1	12/26/2016 16:24	WG938676
Trichlorofluoromethane	U		1.20	5.00	1	12/26/2016 16:24	WG938676
1,2,3-Trichloropropane	U		0.807	2.50	1	12/26/2016 16:24	WG938676
Vinyl acetate	U		1.63	10.0	1	12/26/2016 16:24	WG938676
Vinyl chloride	U		0.259	1.00	1	12/26/2016 16:24	WG938676
Xylenes, Total	U		1.06	3.00	1	12/26/2016 16:24	WG938676
(S) Toluene-d8	104			90.0-115		12/26/2016 16:24	WG938676
(S) Dibromofluoromethane	101			79.0-121		12/26/2016 16:24	WG938676
(S) 4-Bromofluorobenzene	111			80.1-120		12/26/2016 16:24	WG938676





Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Dissolved Solids	26000		2820	10000	1	12/28/2016 14:22	WG938690

1 Cp

2 Tc

Wet Chemistry by Method 4500S2 D-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Sulfide	U		6.50	50.0	1	12/22/2016 22:15	WG938033

3 Ss

4 Cn

Wet Chemistry by Method 9012B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Cyanide	U		1.80	5.00	1	12/29/2016 17:58	WG939301

5 Sr

6 Gl

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	122	J	51.9	1000	1	12/27/2016 18:29	WG938517
Sulfate	U		77.4	5000	1	12/27/2016 18:29	WG938517

7 Al

8 Sc

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	397	J	102	1000	1	12/31/2016 16:20	WG939610

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Mercury	U		0.0490	0.200	1	12/23/2016 18:04	WG938138

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Antimony	U		0.754	2.00	1	12/30/2016 01:00	WG938049
Arsenic	U		0.250	2.00	1	12/30/2016 01:00	WG938049
Barium	U		0.360	5.00	1	12/30/2016 01:00	WG938049
Beryllium	U		0.120	2.00	1	12/30/2016 01:00	WG938049
Cadmium	U		0.160	1.00	1	12/30/2016 01:00	WG938049
Chromium	U		0.540	2.00	1	12/30/2016 01:00	WG938049
Copper	6.19	B	0.520	5.00	1	12/30/2016 01:00	WG938049
Cobalt	U		0.260	2.00	1	12/30/2016 01:00	WG938049
Iron	46.6	B J	15.0	100	1	12/30/2016 01:00	WG938049
Lead	0.543	B J	0.240	2.00	1	12/30/2016 01:00	WG938049
Manganese	0.294	B J	0.250	5.00	1	12/30/2016 01:00	WG938049
Nickel	U		0.350	2.00	1	12/30/2016 01:00	WG938049
Selenium	U		0.380	2.00	1	12/30/2016 01:00	WG938049
Silver	U		0.310	2.00	1	12/30/2016 01:00	WG938049
Thallium	U		0.190	2.00	1	12/30/2016 01:00	WG938049
Tin	0.331	B J	0.300	2.00	1	12/30/2016 01:00	WG938049
Vanadium	U		0.180	5.00	1	12/30/2016 01:00	WG938049
Zinc	U		2.56	25.0	1	12/30/2016 01:00	WG938049
Zinc	U		2.56	25.0	1	12/30/2016 10:46	WG939602



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		10.0	50.0	1	12/26/2016 16:37	WG938676
Acrylonitrile	U		1.87	10.0	1	12/26/2016 16:37	WG938676
Benzene	U		0.331	1.00	1	12/26/2016 16:37	WG938676
Bromochloromethane	U		0.520	1.00	1	12/26/2016 16:37	WG938676
Bromodichloromethane	U		0.380	1.00	1	12/26/2016 16:37	WG938676
Bromoform	U		0.469	1.00	1	12/26/2016 16:37	WG938676
Bromomethane	U		0.866	5.00	1	12/26/2016 16:37	WG938676
Carbon disulfide	U		0.275	1.00	1	12/26/2016 16:37	WG938676
Carbon tetrachloride	U		0.379	1.00	1	12/26/2016 16:37	WG938676
Chlorobenzene	U		0.348	1.00	1	12/26/2016 16:37	WG938676
Chlorodibromomethane	U		0.327	1.00	1	12/26/2016 16:37	WG938676
Chloroethane	U		0.453	5.00	1	12/26/2016 16:37	WG938676
Chloroform	U		0.324	5.00	1	12/26/2016 16:37	WG938676
Chloromethane	U		0.276	2.50	1	12/26/2016 16:37	WG938676
Dibromomethane	U		0.346	1.00	1	12/26/2016 16:37	WG938676
1,2-Dibromoethane	U		0.381	1.00	1	12/26/2016 16:37	WG938676
1,2-Dibromo-3-Chloropropane	U		1.33	5.00	1	12/26/2016 16:37	WG938676
1,2-Dichlorobenzene	U		0.349	1.00	1	12/26/2016 16:37	WG938676
1,4-Dichlorobenzene	U		0.274	1.00	1	12/26/2016 16:37	WG938676
trans-1,4-Dichloro-2-butene	U		0.866	2.50	1	12/26/2016 16:37	WG938676
1,1-Dichloroethane	U		0.259	1.00	1	12/26/2016 16:37	WG938676
1,2-Dichloroethane	U		0.361	1.00	1	12/26/2016 16:37	WG938676
1,1-Dichloroethene	U		0.398	1.00	1	12/26/2016 16:37	WG938676
cis-1,2-Dichloroethene	U		0.260	1.00	1	12/26/2016 16:37	WG938676
trans-1,2-Dichloroethene	U		0.396	1.00	1	12/26/2016 16:37	WG938676
1,2-Dichloropropane	U		0.306	1.00	1	12/26/2016 16:37	WG938676
cis-1,3-Dichloropropene	U		0.418	1.00	1	12/26/2016 16:37	WG938676
trans-1,3-Dichloropropene	U		0.419	1.00	1	12/26/2016 16:37	WG938676
Ethylbenzene	U		0.384	1.00	1	12/26/2016 16:37	WG938676
2-Hexanone	U		3.82	10.0	1	12/26/2016 16:37	WG938676
Iodomethane	U		1.71	10.0	1	12/26/2016 16:37	WG938676
2-Butanone (MEK)	U		3.93	15.0	1	12/26/2016 16:37	WG938676
Methylene Chloride	U		1.00	5.00	1	12/26/2016 16:37	WG938676
4-Methyl-2-pentanone (MIBK)	U		2.14	10.0	1	12/26/2016 16:37	WG938676
Styrene	U		0.307	1.00	1	12/26/2016 16:37	WG938676
1,1,1,2-Tetrachloroethane	U		0.385	1.00	1	12/26/2016 16:37	WG938676
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	12/26/2016 16:37	WG938676
Tetrachloroethene	U		0.372	1.00	1	12/26/2016 16:37	WG938676
Toluene	0.865	U	0.412	1.00	1	12/26/2016 16:37	WG938676
1,1,1-Trichloroethane	U		0.319	1.00	1	12/26/2016 16:37	WG938676
1,1,2-Trichloroethane	U		0.383	1.00	1	12/26/2016 16:37	WG938676
Trichloroethene	U		0.398	1.00	1	12/26/2016 16:37	WG938676
Trichlorofluoromethane	U		1.20	5.00	1	12/26/2016 16:37	WG938676
1,2,3-Trichloropropane	U		0.807	2.50	1	12/26/2016 16:37	WG938676
Vinyl acetate	U		1.63	10.0	1	12/26/2016 16:37	WG938676
Vinyl chloride	U		0.259	1.00	1	12/26/2016 16:37	WG938676
Xylenes, Total	U		1.06	3.00	1	12/26/2016 16:37	WG938676
(S) Toluene-d8	103			90.0-115		12/26/2016 16:37	WG938676
(S) Dibromofluoromethane	104			79.0-121		12/26/2016 16:37	WG938676
(S) 4-Bromofluorobenzene	115			80.1-120		12/26/2016 16:37	WG938676

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Gl

7 Al

8 Sc



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		10.0	50.0	1	12/26/2016 16:50	WG938676
Acrylonitrile	U		1.87	10.0	1	12/26/2016 16:50	WG938676
Benzene	U		0.331	1.00	1	12/26/2016 16:50	WG938676
Bromochloromethane	U		0.520	1.00	1	12/26/2016 16:50	WG938676
Bromodichloromethane	U		0.380	1.00	1	12/26/2016 16:50	WG938676
Bromoform	U		0.469	1.00	1	12/26/2016 16:50	WG938676
Bromomethane	U		0.866	5.00	1	12/26/2016 16:50	WG938676
Carbon disulfide	U		0.275	1.00	1	12/26/2016 16:50	WG938676
Carbon tetrachloride	U		0.379	1.00	1	12/26/2016 16:50	WG938676
Chlorobenzene	U		0.348	1.00	1	12/26/2016 16:50	WG938676
Chlorodibromomethane	U		0.327	1.00	1	12/26/2016 16:50	WG938676
Chloroethane	U		0.453	5.00	1	12/26/2016 16:50	WG938676
Chloroform	U		0.324	5.00	1	12/26/2016 16:50	WG938676
Chloromethane	U		0.276	2.50	1	12/26/2016 16:50	WG938676
Dibromomethane	U		0.346	1.00	1	12/26/2016 16:50	WG938676
1,2-Dibromoethane	U		0.381	1.00	1	12/26/2016 16:50	WG938676
1,2-Dibromo-3-Chloropropane	U		1.33	5.00	1	12/26/2016 16:50	WG938676
1,2-Dichlorobenzene	U		0.349	1.00	1	12/26/2016 16:50	WG938676
1,4-Dichlorobenzene	U		0.274	1.00	1	12/26/2016 16:50	WG938676
trans-1,4-Dichloro-2-butene	U		0.866	2.50	1	12/26/2016 16:50	WG938676
1,1-Dichloroethane	U		0.259	1.00	1	12/26/2016 16:50	WG938676
1,2-Dichloroethane	U		0.361	1.00	1	12/26/2016 16:50	WG938676
1,1-Dichloroethene	U		0.398	1.00	1	12/26/2016 16:50	WG938676
cis-1,2-Dichloroethene	U		0.260	1.00	1	12/26/2016 16:50	WG938676
trans-1,2-Dichloroethene	U		0.396	1.00	1	12/26/2016 16:50	WG938676
1,2-Dichloropropane	U		0.306	1.00	1	12/26/2016 16:50	WG938676
cis-1,3-Dichloropropene	U		0.418	1.00	1	12/26/2016 16:50	WG938676
trans-1,3-Dichloropropene	U		0.419	1.00	1	12/26/2016 16:50	WG938676
Ethylbenzene	U		0.384	1.00	1	12/26/2016 16:50	WG938676
2-Hexanone	U		3.82	10.0	1	12/26/2016 16:50	WG938676
Iodomethane	U		1.71	10.0	1	12/26/2016 16:50	WG938676
2-Butanone (MEK)	U		3.93	15.0	1	12/26/2016 16:50	WG938676
Methylene Chloride	U		1.00	5.00	1	12/26/2016 16:50	WG938676
4-Methyl-2-pentanone (MIBK)	U		2.14	10.0	1	12/26/2016 16:50	WG938676
Styrene	U		0.307	1.00	1	12/26/2016 16:50	WG938676
1,1,1,2-Tetrachloroethane	U		0.385	1.00	1	12/26/2016 16:50	WG938676
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	12/26/2016 16:50	WG938676
Tetrachloroethene	U		0.372	1.00	1	12/26/2016 16:50	WG938676
Toluene	0.820	J	0.412	1.00	1	12/26/2016 16:50	WG938676
1,1,1-Trichloroethane	U		0.319	1.00	1	12/26/2016 16:50	WG938676
1,1,2-Trichloroethane	U		0.383	1.00	1	12/26/2016 16:50	WG938676
Trichloroethene	U		0.398	1.00	1	12/26/2016 16:50	WG938676
Trichlorofluoromethane	U		1.20	5.00	1	12/26/2016 16:50	WG938676
1,2,3-Trichloropropane	U		0.807	2.50	1	12/26/2016 16:50	WG938676
Vinyl acetate	U		1.63	10.0	1	12/26/2016 16:50	WG938676
Vinyl chloride	U		0.259	1.00	1	12/26/2016 16:50	WG938676
Xylenes, Total	U		1.06	3.00	1	12/26/2016 16:50	WG938676
(S) Toluene-d8	104			90.0-115		12/26/2016 16:50	WG938676
(S) Dibromofluoromethane	105			79.0-121		12/26/2016 16:50	WG938676
(S) 4-Bromofluorobenzene	114			80.1-120		12/26/2016 16:50	WG938676





Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		10.0	50.0	1	12/25/2016 19:07	WG938588
Acrylonitrile	U		1.87	10.0	1	12/25/2016 19:07	WG938588
Benzene	U		0.331	1.00	1	12/25/2016 19:07	WG938588
Bromochloromethane	U		0.520	1.00	1	12/25/2016 19:07	WG938588
Bromodichloromethane	U		0.380	1.00	1	12/25/2016 19:07	WG938588
Bromoform	U		0.469	1.00	1	12/25/2016 19:07	WG938588
Bromomethane	U		0.866	5.00	1	12/25/2016 19:07	WG938588
Carbon disulfide	U		0.275	1.00	1	12/25/2016 19:07	WG938588
Carbon tetrachloride	U		0.379	1.00	1	12/25/2016 19:07	WG938588
Chlorobenzene	U		0.348	1.00	1	12/25/2016 19:07	WG938588
Chlorodibromomethane	U		0.327	1.00	1	12/25/2016 19:07	WG938588
Chloroethane	U		0.453	5.00	1	12/25/2016 19:07	WG938588
Chloroform	U		0.324	5.00	1	12/25/2016 19:07	WG938588
Chloromethane	U		0.276	2.50	1	12/25/2016 19:07	WG938588
Dibromomethane	U		0.346	1.00	1	12/25/2016 19:07	WG938588
1,2-Dibromoethane	U		0.381	1.00	1	12/25/2016 19:07	WG938588
1,2-Dibromo-3-Chloropropane	U		1.33	5.00	1	12/25/2016 19:07	WG938588
1,2-Dichlorobenzene	U		0.349	1.00	1	12/25/2016 19:07	WG938588
1,4-Dichlorobenzene	U		0.274	1.00	1	12/25/2016 19:07	WG938588
trans-1,4-Dichloro-2-butene	U		0.866	2.50	1	12/25/2016 19:07	WG938588
1,1-Dichloroethane	U		0.259	1.00	1	12/25/2016 19:07	WG938588
1,2-Dichloroethane	U		0.361	1.00	1	12/25/2016 19:07	WG938588
1,1-Dichloroethene	U		0.398	1.00	1	12/25/2016 19:07	WG938588
cis-1,2-Dichloroethene	U		0.260	1.00	1	12/25/2016 19:07	WG938588
trans-1,2-Dichloroethene	U		0.396	1.00	1	12/25/2016 19:07	WG938588
1,2-Dichloropropane	U		0.306	1.00	1	12/25/2016 19:07	WG938588
cis-1,3-Dichloropropene	U		0.418	1.00	1	12/25/2016 19:07	WG938588
trans-1,3-Dichloropropene	U		0.419	1.00	1	12/25/2016 19:07	WG938588
Ethylbenzene	U		0.384	1.00	1	12/25/2016 19:07	WG938588
2-Hexanone	U		3.82	10.0	1	12/25/2016 19:07	WG938588
Iodomethane	U		1.71	10.0	1	12/25/2016 19:07	WG938588
2-Butanone (MEK)	U		3.93	15.0	1	12/25/2016 19:07	WG938588
Methylene Chloride	U		1.00	5.00	1	12/25/2016 19:07	WG938588
4-Methyl-2-pentanone (MIBK)	U		2.14	10.0	1	12/25/2016 19:07	WG938588
Styrene	U		0.307	1.00	1	12/25/2016 19:07	WG938588
1,1,1,2-Tetrachloroethane	U		0.385	1.00	1	12/25/2016 19:07	WG938588
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	12/25/2016 19:07	WG938588
Tetrachloroethene	U		0.372	1.00	1	12/25/2016 19:07	WG938588
Toluene	U		0.412	1.00	1	12/25/2016 19:07	WG938588
1,1,1-Trichloroethane	U		0.319	1.00	1	12/25/2016 19:07	WG938588
1,1,2-Trichloroethane	U		0.383	1.00	1	12/25/2016 19:07	WG938588
Trichloroethene	U		0.398	1.00	1	12/25/2016 19:07	WG938588
Trichlorofluoromethane	U		1.20	5.00	1	12/25/2016 19:07	WG938588
1,2,3-Trichloropropane	U		0.807	2.50	1	12/25/2016 19:07	WG938588
Vinyl acetate	U		1.63	10.0	1	12/25/2016 19:07	WG938588
Vinyl chloride	U		0.259	1.00	1	12/25/2016 19:07	WG938588
Xylenes, Total	U		1.06	3.00	1	12/25/2016 19:07	WG938588
(S) Toluene-d8	98.7			90.0-115		12/25/2016 19:07	WG938588
(S) Dibromofluoromethane	98.3			79.0-121		12/25/2016 19:07	WG938588
(S) 4-Bromofluorobenzene	99.5			80.1-120		12/25/2016 19:07	WG938588





Abbreviations and Definitions

SDG	Sample Delivery Group.
MDL	Method Detection Limit.
RDL	Reported Detection Limit.
U	Not detected at the Reporting Limit (or MDL where applicable).
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.

Qualifier	Description
B	The same analyte is found in the associated blank.
J	The identification of the analyte is acceptable; the reported value is an estimate.
J3	The associated batch QC was outside the established quality control range for precision.
J4	The associated batch QC was outside the established quality control range for accuracy.
J5	The sample matrix interfered with the ability to make any accurate determination; spike value is high.
O1	The analyte failed the method required serial dilution test and/or subsequent post-spike criteria. These failures indicate matrix interference.
P1	RPD value not applicable for sample concentrations less than 5 times the reporting limit.

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Gl⁷ Al⁸ Sc



ESC Lab Sciences is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our "one location" design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be **YOUR LAB OF CHOICE**.

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

State Accreditations

Alabama	40660	Nevada	TN-03-2002-34
Alaska	UST-080	New Hampshire	2975
Arizona	AZ0612	New Jersey–NELAP	TN002
Arkansas	88-0469	New Mexico	TN00003
California	01157CA	New York	11742
Colorado	TN00003	North Carolina	Env375
Connecticut	PH-0197	North Carolina ¹	DW21704
Florida	E87487	North Carolina ²	41
Georgia	NELAP	North Dakota	R-140
Georgia ¹	923	Ohio–VAP	CL0069
Idaho	TN00003	Oklahoma	9915
Illinois	200008	Oregon	TN200002
Indiana	C-TN-01	Pennsylvania	68-02979
Iowa	364	Rhode Island	221
Kansas	E-10277	South Carolina	84004
Kentucky ¹	90010	South Dakota	n/a
Kentucky ²	16	Tennessee ¹⁴	2006
Louisiana	AI30792	Texas	T 104704245-07-TX
Maine	TN0002	Texas ⁵	LAB0152
Maryland	324	Utah	6157585858
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	109
Minnesota	047-999-395	Washington	C1915
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA
Nebraska	NE-OS-15-05		

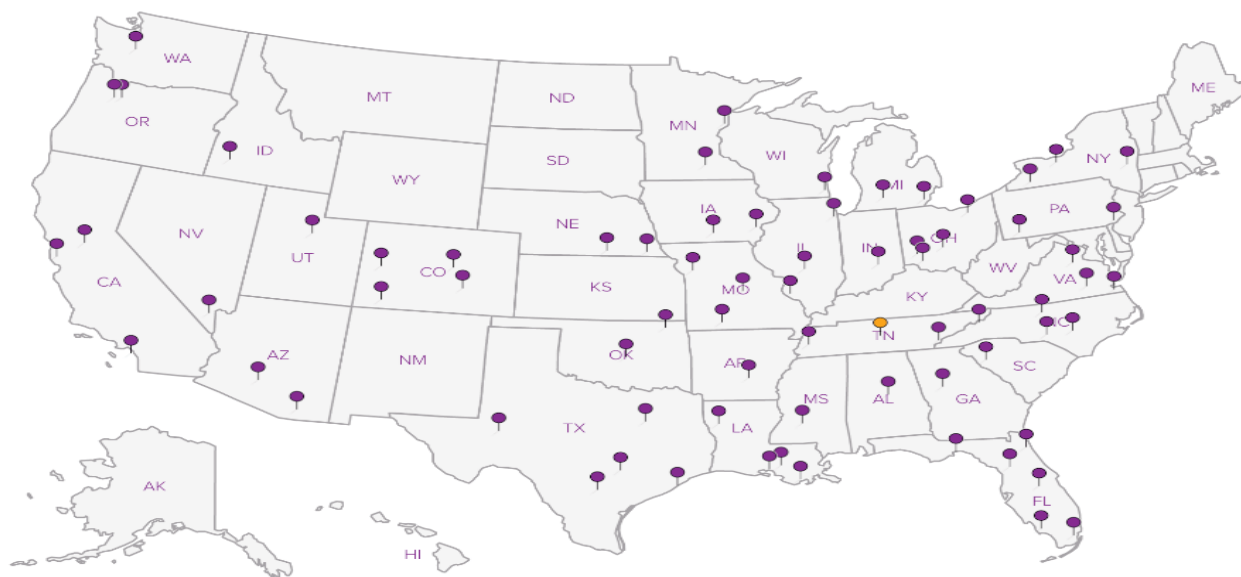
Third Party & Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	S-67674
EPA–Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ^{n/a} Accreditation not applicable

Our Locations

ESC Lab Sciences has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. **ESC Lab Sciences performs all testing at our central laboratory.**



SCS Engineers - Little Rock, AR

11219 Richardson Drive
North Little Rock, AR 72113

Billing Information & Quote Number:

Accounts Payable
11219 Richardson Drive
N. Little Rock, AR 72113

Report to:
Stacie Whitmer

Email To: swhitmer@scsengineers.com

Project
Description: Nabors Landfill

City/State: *Mountain Home*
Collected: *AR*

Phone: 501-812-4551
Fax:

Client Project #

Lab Project #
CHIROCKAR-NABORS

Collected by (print):

Site/Facility ID #

P.O. #

Collected by (signature):

Rush? (Lab MUST Be Notified)

Date Results Needed

Immediately
Packed on Ice N Y X

Same Day200%
Next Day100%
Two Day50%
Three Day25%

Email? No X YesFAX? No YesNo.
of
Cntrs

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	CN 250mlHDPEAmb-NaOH	Cl, SO4, TDS 250mlHDPE-NoPres	M6010AP1 + Fe,Mn,Sn 250mlHDPE-HNO3	SULFIDE 125mlAmb-S-NaOH+ZnAc	TOC 250mlAmb-HCl	V8260AP1 40mlAmb-HCl	V8260AP1- Trip Blk 40mlAmb-HCl				
MW-1	G	GW		12-20-16	1558	7	X	X	X	X	X	X					
MW-2	G	GW		12-20-16	1652	7	X	X	X	X	X	X					01
MW-3	G	GW		12-21-16	804	7	X	X	X	X	X	X					02
MW-4	G	GW		12-21-16	847	7	X	X	X	X	X	X					03
MW-5	G	GW		12-21-16	911	7	X	X	X	X	X	X					04
MW-6	G	GW		12-21-16	946	7	X	X	X	X	X	X					05
MW-7	G	GW		12-20-16	1438	7	X	X	X	X	X	X					06
CAO-1	G	GW		12-21-16	1022	7	X	X	X	X	X	X					07
CAO-2	G	GW		12-21-16	748	7	X	X	X	X	X	X					08
CAO-3	G	GW		12-21-16	720	7	X	X	X	X	X	X					09
																	10

* Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other GW

Remarks:

pH _____ Temp _____

Flow _____ Other _____

Hold #

Relinquished by: (Signature)

Date:

Time:

Received by: (Signature)

Samples returned via: ☐ UPS

Condition: (lab use only)

Relinquished by: (Signature)

Date:

Time:

Received by: (Signature)

Temp: 2.6 °C Bottles Received: 221AB59

Relinquished by: (Signature)

Date:

Time:

Received for lab by: (Signature)

Date: 12-22-16 Time: 0930COC Seal Intact: Y N NA

pH Checked:

NCF:



YOUR LAB OF CHOICE

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

L # 830396

Table #

Acctnum: CHIROCKAR

Template: T98870

Prelogin: P577243

TSR: 134 - Mark W. Beasley

PB: JA 11-23-16

Shipped Via: FedEX Ground

Rem./Contaminant Sample # (lab only)

SCS Engineers - Little Rock, AR

11219 Richardson Drive
North Little Rock, AR 72113

Billing Information & Quote Number:

Accounts Payable
11219 Richardson Drive
N. Little Rock, AR 72113Report to:
Stacie Whitmer

Email To: swhitmer@scsengineers.com

Project
Description: Nabors LandfillCity/State
Collected: Mtn Home, ARPhone: 501-812-4551
Fax:

Client Project #

Lab Project #
CHIROCKAR-NABORS

Collected by (print):

Site/Facility ID #

P.O. #

Collected by (signature):

Rush? (Lab MUST Be Notified)

Date Results Needed

Immediately
Packed on Ice N Y X

☐ Same Day200%
☐ Next Day100%
☐ Two Day50%
☐ Three Day25%

Email? ☐ No ☒ YesFAX? ☐ No ☐ YesNo.
of
Cntrs

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	CN 250mlHDPEAmb-NaOH	Cl, SO4, TDS 250mlHDPE-NoPres	M6010AP1 + Fe,Mn,Sn 250mlHDPE-HNO3	SULFIDE 125mlAmb-S-NaOH+ZnAc	TOC 250mlAmb-HCl	V8260AP1 40mlAmb-HCl	V8260AP1 - Trip Blk 40mlAmb-HCl				
NAB-1		GW				7	X	X	X	X	X	X					
NAB-2	6	GW		12-20-16	1253	7	X	X	X	X	X	X					
NAB-3	6	GW		12-20-16	819	7	X	X	X	X	X	X					11
NAB-4	6	GW		12-20-16	1042	7	X	X	X	X	X	X					12
NAB-7	6	GW		12-20-16	1515	7	X	X	X	X	X	X					13
NAB-8	6	GW		12-20-16	708	7	X	X	X	X	X	X					14
MW-509D	6	GW		12-20-16	1415	7	X	X	X	X	X	X					15
MW-577	6	GW		12-20-16	1210	7	X	X	X	X	X	X					16
MW-689D	6	GW		12-20-16	931	7	X	X	X	X	X	X					17
MW-633D	6	GW		12-20-16	1130	7	X	X	X	X	X	X					18

* Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other GW

Remarks:

pH _____ Temp _____

Flow _____ Other _____

Hold #

Relinquished by: (Signature)

Date:

Time:

Received by: (Signature)

Samples returned via: ☐ UPS

Condition:

(lab use only)

Relinquished by: (Signature)

Date:

Time:

Received by: (Signature)

Temp: _____ °C Bottles Received:

COC Seal Intact: ☐ Y ☐ N ☐ NA

NCF:

Relinquished by: (Signature)

Date:

Time:

Received for lab by: (Signature)

Date:

Time:

pH Checked:

NCF:

Chain of Custody Page ____ of ____



YOUR LAB OF CHOICE

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

L# 830396

1038

Acctnum: CHIROCKAR

Template: T98870

Prelogin: P577243

TSR: 134 - Mark W. Beasley

PB: JBT 1123-16

Shipped Via: FedEx Ground

Rem./Contaminant Sample # (lab only)

SCS Engineers - Little Rock, AR 11219 Richardson Drive North Little Rock, AR 72113				Billing Information & Quote Number: Accounts Payable 11219 Richardson Drive N. Little Rock, AR 72113				Analysis / Container / Preservative										Chain of Custody Page ____ of ____					
				Report to: Stacie Whitmer				Email To: swhitmer@scsengineers.com				 ESC L.A.B S.C.I.E.N.C.E.S YOUR LAB OF CHOICE 12065 Lebanon Rd Mount Juliet, TN 37122 Phone: 615-758-5858 Phone: 800-767-5859 Fax: 615-758-5859											
Project Description: Nabors Landfill				City/State <u>MT. Home</u> Collected: <u>AR</u>				<u>712</u> CN 250mlHDPEAmb-NaOH Cl, SO4, TDS 250mlHDPE-NoPres <u>712</u> M6010AP1 + Fe,Mn,Sn 250mlHDPE-HNO3 <u>712</u> SULFIDE 125mlAmb-S-NaOH+ZnAc <u>712</u> TOC 250mlAmb-HCl <u>712</u> V8260AP1 40mlAmb-HCl V8260AP1- Trip Blk 40mlAmb-HCl										L# <u>880396</u>					
Phone: 501-812-4551 Fax:				Client Project #														Lab Project # CHIROCKAR-NABORS		Table #			
Collected by (print): <u>Darren Motley</u>				Site/Facility ID #														P.O. #		Acctnum: CHIROCKAR			
Collected by (signature):				Rush? (Lab MUST Be Notified) _____ Same Day200% _____ Next Day100% _____ Two Day50% _____ Three Day25%														Date Results Needed				Template: T98870	
Immediately Packed on Ice N <u> </u> Y <u>X</u>				Email? <u> </u> No <u>X</u> Yes FAX? <u> </u> No <u> </u> Yes														No. of Cntrs				Prelogin: P577243	
Sample ID				Comp/Grab		Matrix *		Depth		Date		Time		No. of Cntrs		Rem./Contaminant		Sample # (lab only)					
NE-2				G		GW				12-19-16		1150		7				20					
NE-3				G		GW				12-20-16		730		7				21					
NE-6				G		GW				12-21-16		820		7				22					
MW-1R				G		GW				12-20-16		1629		7				23					
TSP-1						GW								7									
TSP-2						GW								7									
TSP-3						GW								7									
TSP-4						GW								7									
SP-4						GW								7									
SP-5						GW								7									

* Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other GW

Remarks:

pH _____ Temp _____
 Flow _____ Other _____

Relinquished by : (Signature) <u>Darren Motley</u>		Date: <u>12-21-16</u>		Time: <u>1300</u>		Received by: (Signature) <u>[Signature]</u>		Samples returned via: ☐ UPS ☒ FedEx ☐ Courier ☐ _____		Condition: <u>1150</u> (lab use only)	
Relinquished by : (Signature) <u>[Signature]</u>		Date:		Time:		Received by: (Signature) <u>[Signature]</u>		Temp: <u>2.6</u> °C Bottles Received: <u>221</u>		COC Seal Intact: <u> </u> Y <u> </u> N <u> </u> NA	
Relinquished by : (Signature) <u>[Signature]</u>		Date:		Time:		Received for lab by: (Signature) <u>M...</u>		Date: <u>12-22-16</u> Time: <u>0930</u>		pH Checked: <u>6.2, 7.12</u> NCF:	

SCS Engineers - Little Rock, AR

11219 Richardson Drive
North Little Rock, AR 72113

Billing Information & Quote Number:

Accounts Payable
11219 Richardson Drive
N. Little Rock, AR 72113

Report to:
Stacie Whitmer

Email To: swhitmer@scsengineers.com

Project
Description: Nabors Landfill

City/State
Collected: *MT. Home
Ar*

Phone: 501-812-4551
Fax:

Client Project #

Lab Project #
CHIROCKAR-NABORS

Collected by (print):

Site/Facility ID #

P.O. #

Collected by (signature):

Rush? (Lab MUST Be Notified)

Date Results Needed

Immediately
Packed on Ice N Y X

Same Day200%
Next Day100%
Two Day50%
Three Day25%

Email? No X YesFAX? No YesNo.
of
Cnts

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cnts	CN 250mlHDPEAmb-NaOH	Cl, SO4, TDS 250mlHDPE-NoPres	M5010AP1 + Fe,Mn,Sn 250mlHDPE-HNO3	SULFIDE 125mlAmb-S-NaOH+ZnAc	TOC 250mlAmb-HCl	V8260AP1 40mlAmb-HCl	V8260AP1- Trip Blk 40mlAmb-HCl					
SP-7	6	GW		12-21-16	1130	7	X	X	X	X	X	X						24
SPRING-A	6	GW		12-21-16	1140	7	X	X	X	X	X	X						25
SPRING-B		GW				7	X	X	X	X	X	X						
SP-NE-3		GW				7	X	X	X	X	X	X						
LANDFILL ENTRANCE SEEP	6	GW		12-21-16	1120	7	X	X	X	X	X	X						26
CLASS IV DRAW		GW				7	X	X	X	X	X	X						
CLASS I DRAW	6	GW		12-21-16	1105	7	X	X	X	X	X	X						27
LEACHATE	6	GW		12-21-16	1705	7	X	X	X	X	X	X						28
DUPLICATE	6	GW		12-21-16	950	7	X	X	X	X	X	X						29
FIELD BLANK	6	GW		12-21-16	955	7	X	X	X	X	X	X						30

* Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other GW

Remarks:

pH _____ Temp _____

Flow _____ Other _____

Hold #

Relinquished by: (Signature)

Date:

Time:

Received by: (Signature)

Samples returned via: ☐ UPS☒ FedEx ☐ Courier ☐ _____

Condition: (lab use only)

Relinquished by: (Signature)

Date:

Time:

Received by: (Signature)

Temp: 26 °C Bottles Received: 221COC Seal Intact: Y N NA

Relinquished by: (Signature)

Date:

Time:

Received for lab by: (Signature)

Date: 12-22-16 Time: 0930pH Checked: L2, 712

NCF:

Chain of Custody Page ____ of ____



YOUR LAB OF CHOICE

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

L# 820396

Table #

Acctnum: CHIROCKAR

Template: T98870

Prelogin: P577243

TSR: 134 - Mark W. Beasley

PB: JB 1123-16

Shipped Via: FedEx Ground

Rem./Contaminant Sample # (lab only)

SCS Engineers - Little Rock, AR

11219 Richardson Drive
North Little Rock, AR 72113

Billing Information & Quote Number:

Accounts Payable
11219 Richardson Drive
N. Little Rock, AR 72113

Report to:
Stacie Whitmer

Email To: swhitmer@scsengineers.com

Project
Description: Nabors Landfill

City/State *MT. HOME AR*
Collected:

Phone: 501-812-4551
Fax:

Client Project #

Lab Project #
CHIROCKAR-NABORS

Collected by (print):

Site/Facility ID #

P.O. #

Collected by (signature):

Rush? (Lab MUST Be Notified)

Date Results Needed

Immediately
Packed on Ice N Y

 Same Day200%
 Next Day100%
 Two Day50%
 Three Day25%

Email? No X Yes
FAX? No Yes

No.
of
Cntrs

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	CN 250mlHDPEAmb-NaOH	Cl, SO4, TDS 250mlHDPE-NoPres	M6010AP1 + Fe,Mn,Sn 250mlHDPE-HNO3	SULFIDE 125mlAmb-S-NaOH+ZnAc	TOC 250mlAmb-HCl	V8260AP1 40mlAmb-HCl	V8260AP1- Trip Blk 40mlAmb-HCl				
		GW				7	X	X	X	X	X	X					
		GW				7	X	X	X	X	X	X					
		GW				7	X	X	X	X	X	X					
EQUIPMENT BLANK	6	GW		12-21-16	957	2						X					31
TRIP BLANK		GW		12-21-16	1000	1							X				32
		GW				7	X	X	X	X	X	X					
		GW				7	X	X	X	X	X	X					
		GW				7	X	X	X	X	X	X					
		GW				7	X	X	X	X	X	X					
		GW				7	X	X	X	X	X	X					

* Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other

MW 12-22-16

pH _____ Temp _____

Flow _____ Other _____

Remarks:

Hold #

Relinquished by: (Signature)

Date:

Time:

Received by: (Signature)

Samples returned via: ☐ UPS

Condition: (lab use only)

Relinquished by: (Signature)

Date:

Time:

Received by: (Signature)

Temp: °C Bottles Received:

COC Seal Intact: ☒ Y ☐ N ☐ NA

Relinquished by: (Signature)

Date:

Time:

Received for lab by: (Signature)

Date: Time:

pH Checked:

NCF:



YOUR LAB OF CHOICE

Cooler Receipt Form

Client:	<i>Chirac KAR</i>	SDG#	<i>880396</i>
Cooler Received/Opened On:	<i>12/22/16</i>	Temperature Upon Receipt:	<i>2.6 °C</i>
Received By: Michael Witherspoon			
Signature: <i>M Wat</i>			
Receipt Check List			
	Yes	No	N/A
Were custody seals on outside of cooler and intact?	☒	☐	☐
Were custody papers properly filled out?	☒	☐	☐
Did all bottles arrive in good condition?	☒	☐	☐
Were correct bottles used for the analyses requested?	☒	☐	☐
Was sufficient amount of sample sent in each bottle?	☒	☐	☐
Were all applicable sample containers correctly preserved and checked for preservation? (Any not in accepted range noted on COC)	☒	☐	☐
If applicable, was an observable VOA headspace present?	☐	☒	☐
Non Conformance Generated. (If yes see attached NCF)	☐	☒	☐

APPENDIX D

STATISTICAL DATABASE

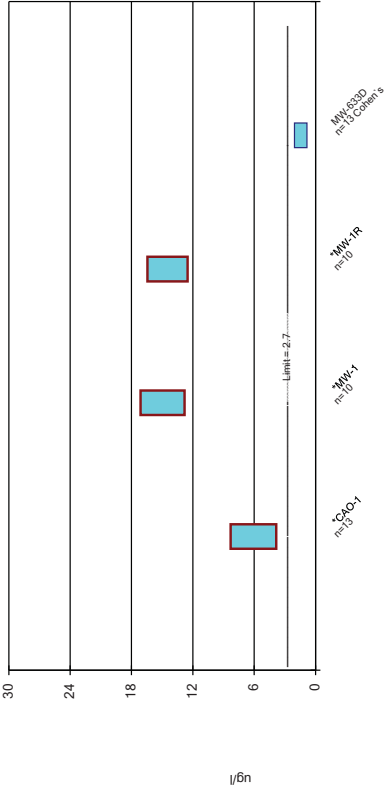
**AN ELECTRONIC DATABASE FILE IS INCLUDED WITH THIS
REPORT SUBMITTAL**

APPENDIX E

STATISTICAL EVALUATION

Parametric Confidence Interval

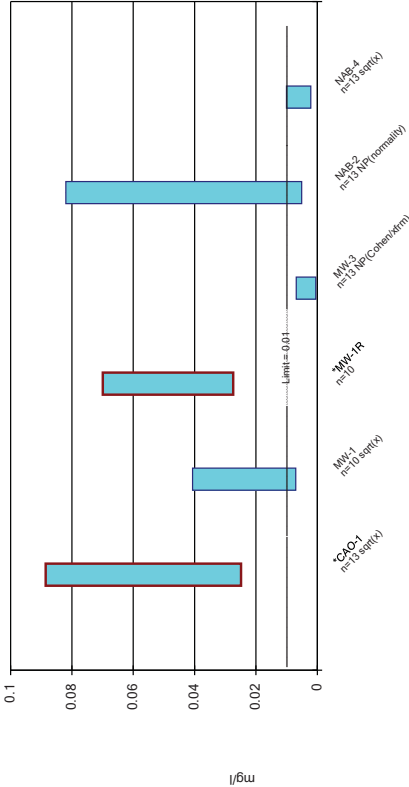
Compliance limit is exceeded.* Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: 1,1-Dichloroethane Analysis Run 2/28/2017 10:10 AM
NABORS Client: SCS Engineers Data: NABORS_DATABASE_SanitasMatrix

Parametric and Non-Parametric (NP) Confidence Interval

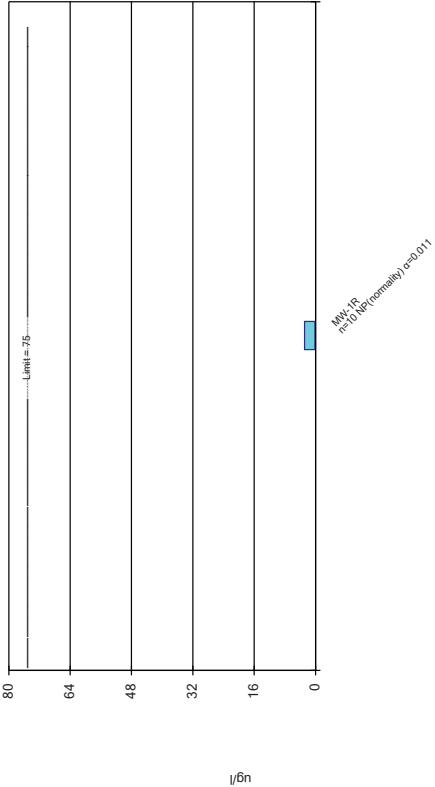
Compliance limit is exceeded.* Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Arsenic Analysis Run 2/28/2017 10:10 AM
NABORS Client: SCS Engineers Data: NABORS_DATABASE_SanitasMatrix

Non-Parametric Confidence Interval

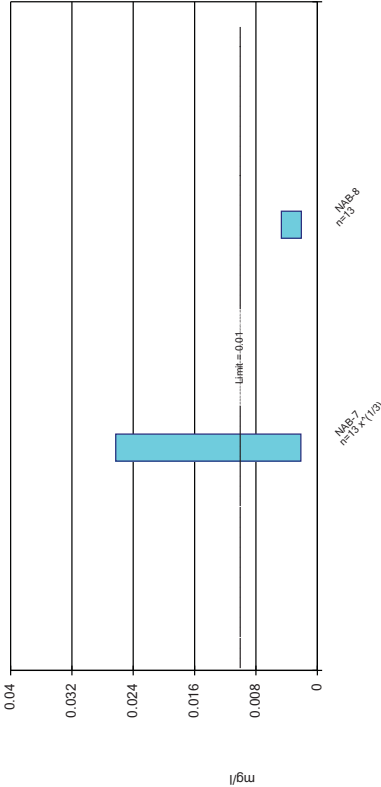
Compliance Limit is not exceeded.



Constituent: 1,4-Dichlorobenzene Analysis Run 2/28/2017 10:10 AM
NABORS Client: SCS Engineers Data: NABORS_DATABASE_SanitasMatrix

Parametric Confidence Interval

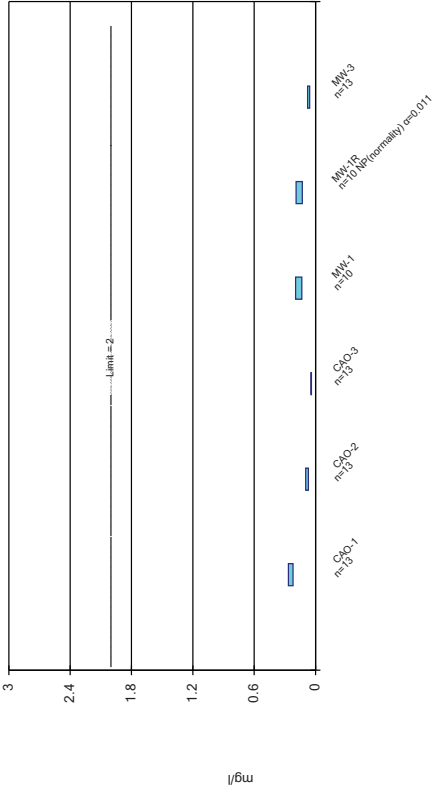
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Arsenic Analysis Run 2/28/2017 10:10 AM
NABORS Client: SCS Engineers Data: NABORS_DATABASE_SanitasMatrix

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

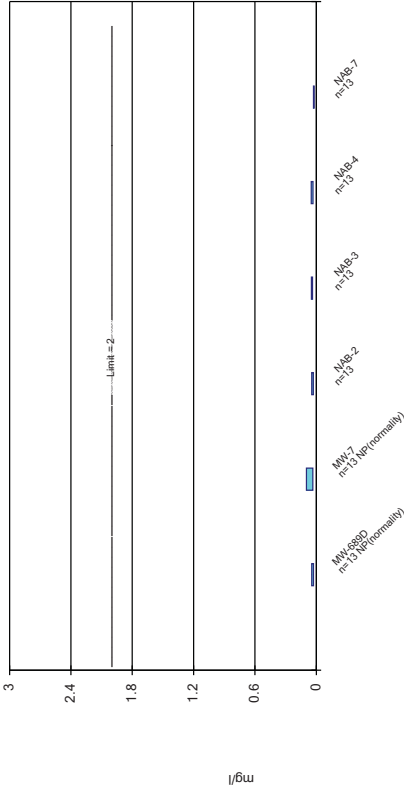


Constituent: Barium Analysis Run 2/28/2017 10:10 AM

NABORS Client: SCS Engineers Data: NABORS_DATABASE_SanitasMatrix

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

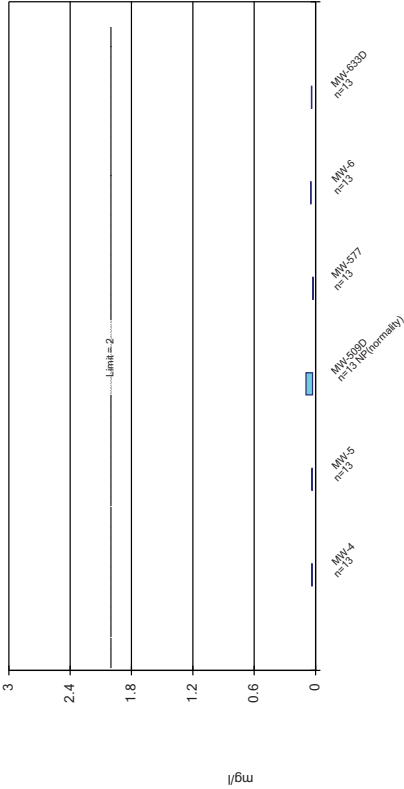


Constituent: Barium Analysis Run 2/28/2017 10:10 AM

NABORS Client: SCS Engineers Data: NABORS_DATABASE_SanitasMatrix

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

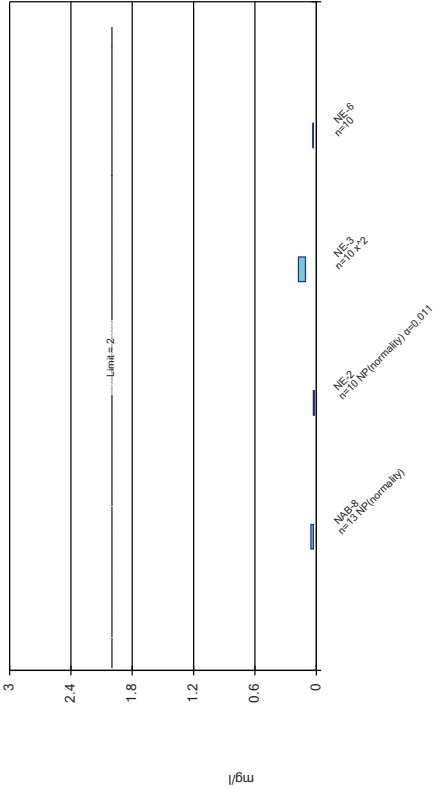


Constituent: Barium Analysis Run 2/28/2017 10:10 AM

NABORS Client: SCS Engineers Data: NABORS_DATABASE_SanitasMatrix

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

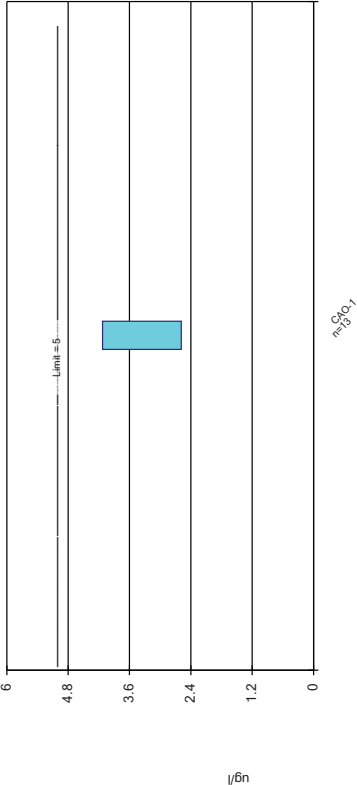


Constituent: Barium Analysis Run 2/28/2017 10:10 AM

NABORS Client: SCS Engineers Data: NABORS_DATABASE_SanitasMatrix

Parametric Confidence Interval

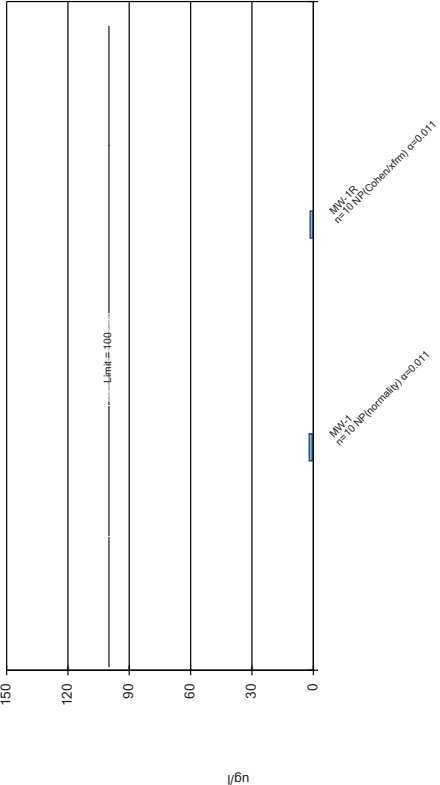
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Benzene Analysis Run 2/28/2017 10:10 AM
NABORS Client: SCS Engineers Data: NABORS_DATABASE_SanitasMatrix

Non-Parametric Confidence Interval

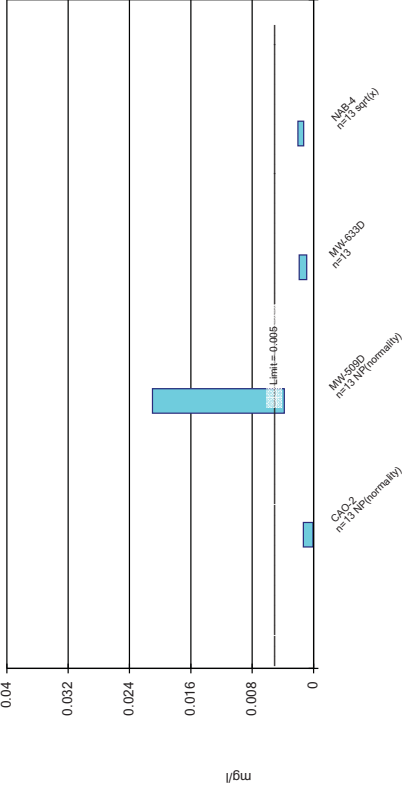
Compliance Limit is not exceeded.



Constituent: Chlorobenzene Analysis Run 2/28/2017 10:10 AM
NABORS Client: SCS Engineers Data: NABORS_DATABASE_SanitasMatrix

Parametric and Non-Parametric (NP) Confidence Interval

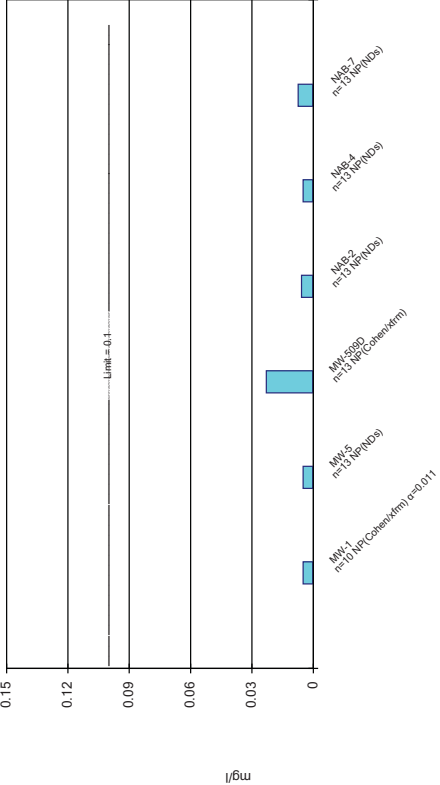
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cadmium Analysis Run 2/28/2017 10:10 AM
NABORS Client: SCS Engineers Data: NABORS_DATABASE_SanitasMatrix

Non-Parametric Confidence Interval

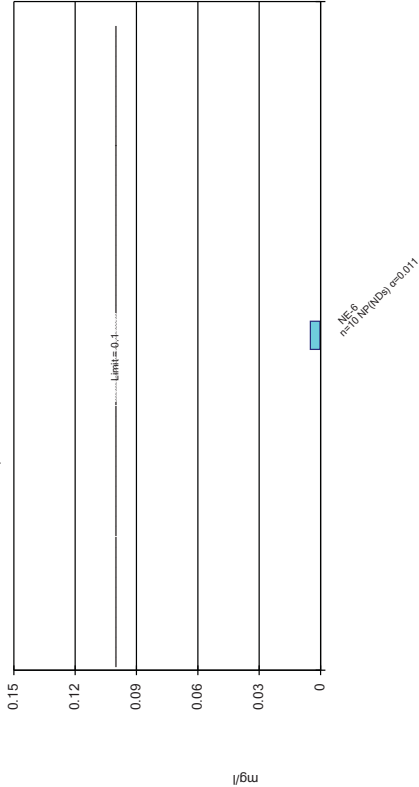
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.



Constituent: Chromium Analysis Run 2/28/2017 10:10 AM
NABORS Client: SCS Engineers Data: NABORS_DATABASE_SanitasMatrix

Non-Parametric Confidence Interval

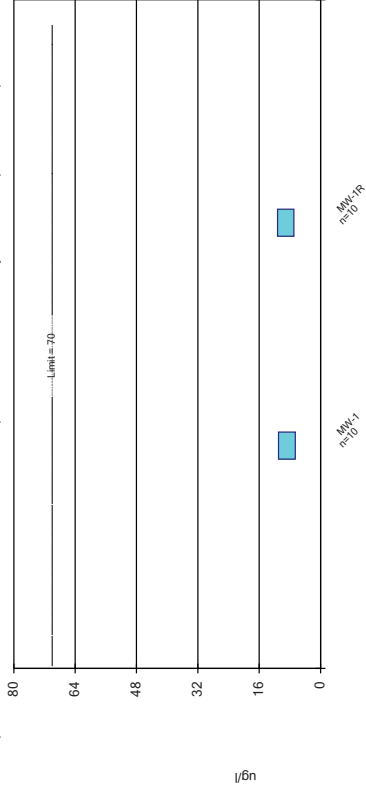
Compliance Limit is not exceeded.



Constituent: Chromium Analysis Run 2/28/2017 10:10 AM
NABORS Client: SCS Engineers Data: NABORS_DATABASE_SanitasMatrix

Parametric Confidence Interval

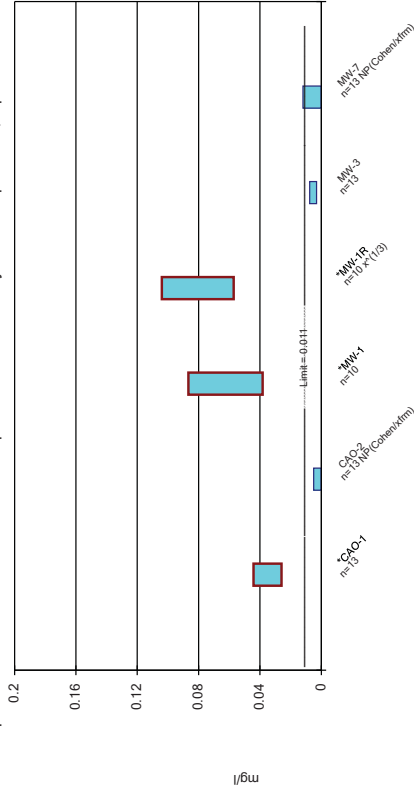
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: cis-1,2-Dichloroethene Analysis Run 2/28/2017 10:10 AM
NABORS Client: SCS Engineers Data: NABORS_DATABASE_SanitasMatrix

Parametric and Non-Parametric (NP) Confidence Interval

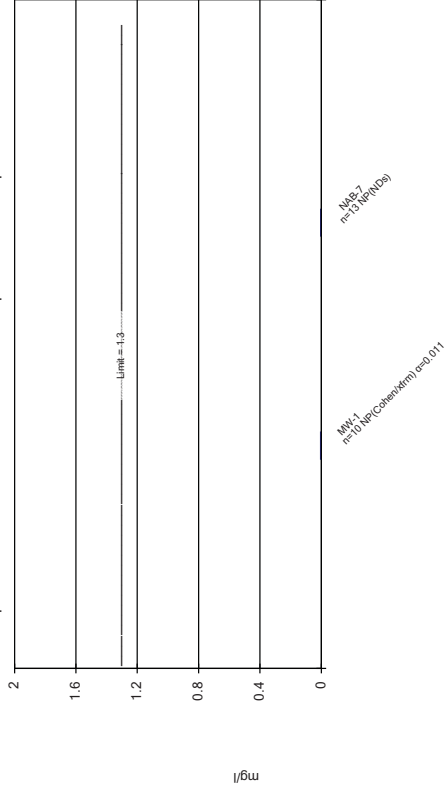
Compliance limit is exceeded.* Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cobalt Analysis Run 2/28/2017 10:10 AM
NABORS Client: SCS Engineers Data: NABORS_DATABASE_SanitasMatrix

Non-Parametric Confidence Interval

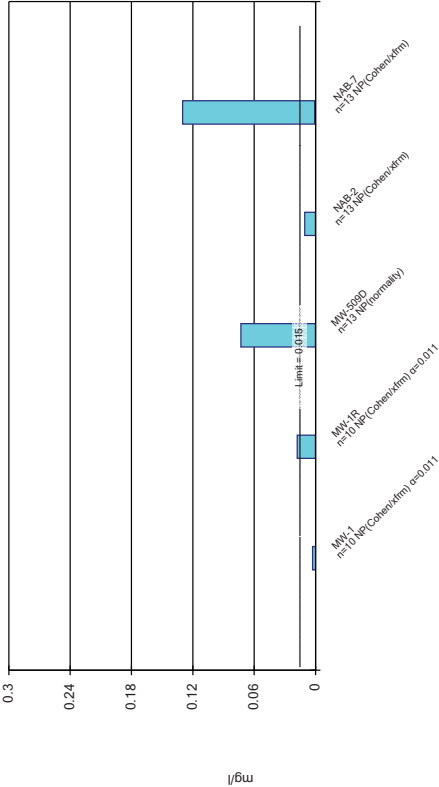
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.



Constituent: Copper Analysis Run 2/28/2017 10:11 AM
NABORS Client: SCS Engineers Data: NABORS_DATABASE_SanitasMatrix

Non-Parametric Confidence Interval

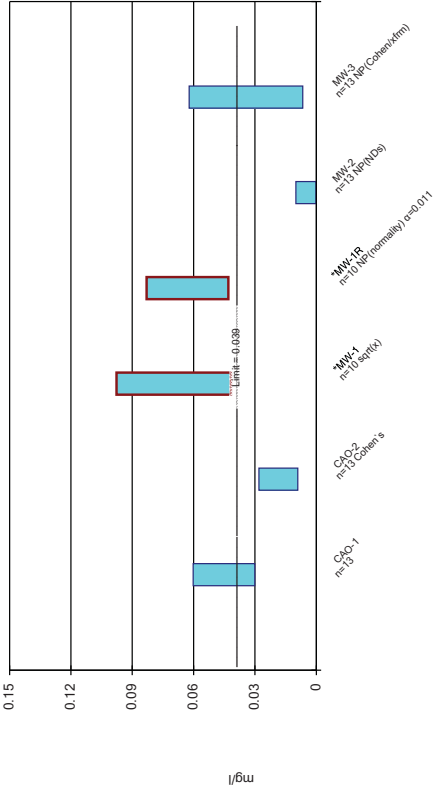
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.



Constituent: Lead Analysis Run 2/28/2017 10:11 AM
NABORS Client: SCS Engineers Data: NABORS_DATABASE_SanitasMatrix

Parametric and Non-Parametric (NP) Confidence Interval

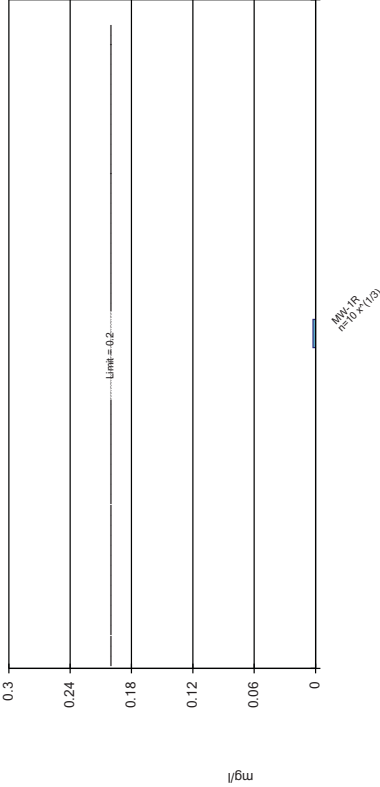
Compliance limit is exceeded. * Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Nickel Analysis Run 2/28/2017 10:11 AM
NABORS Client: SCS Engineers Data: NABORS_DATABASE_SanitasMatrix

Parametric Confidence Interval

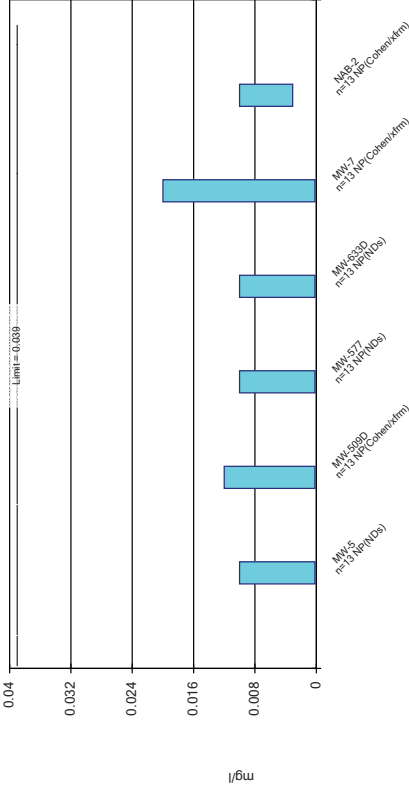
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Mercury Analysis Run 2/28/2017 10:11 AM
NABORS Client: SCS Engineers Data: NABORS_DATABASE_SanitasMatrix

Non-Parametric Confidence Interval

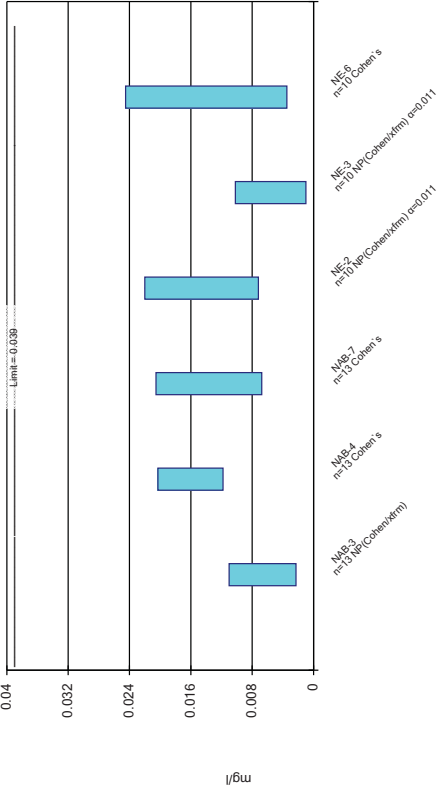
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Nickel Analysis Run 2/28/2017 10:11 AM
NABORS Client: SCS Engineers Data: NABORS_DATABASE_SanitasMatrix

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

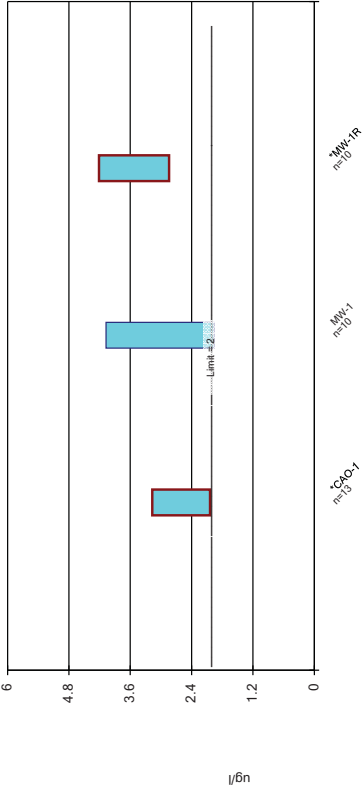


Constituent: Nickel Analysis Run 2/28/2017 10:11 AM

NABORS Client: SCS Engineers Data: NABORS_DATABASE_SanitasMatrix

Parametric Confidence Interval

Compliance limit is exceeded.* Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

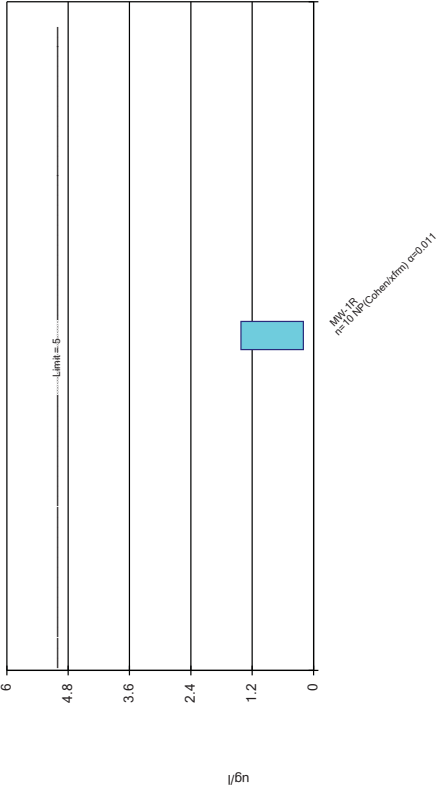


Constituent: Vinyl chloride Analysis Run 2/28/2017 10:11 AM

NABORS Client: SCS Engineers Data: NABORS_DATABASE_SanitasMatrix

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.

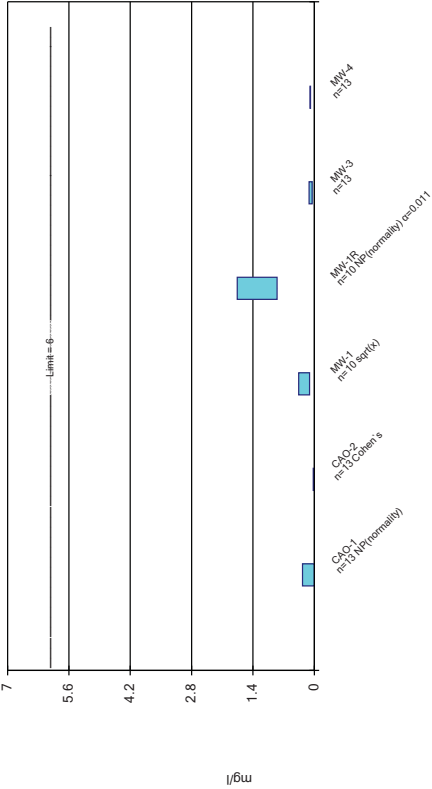


Constituent: Trichloroethene Analysis Run 2/28/2017 10:11 AM

NABORS Client: SCS Engineers Data: NABORS_DATABASE_SanitasMatrix

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

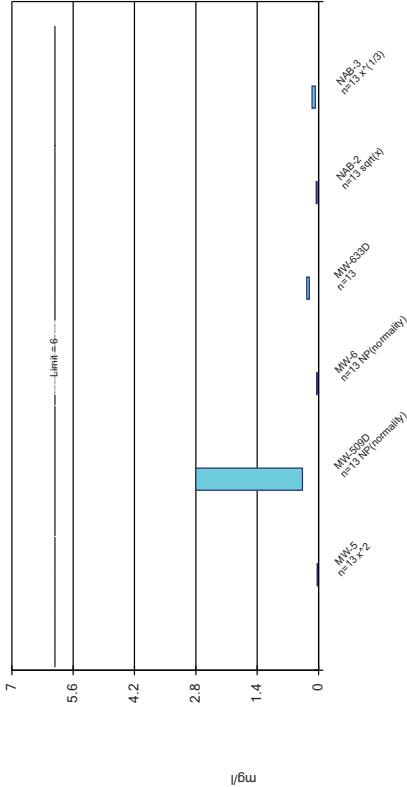


Constituent: Zinc Analysis Run 2/28/2017 10:11 AM

NABORS Client: SCS Engineers Data: NABORS_DATABASE_SanitasMatrix

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

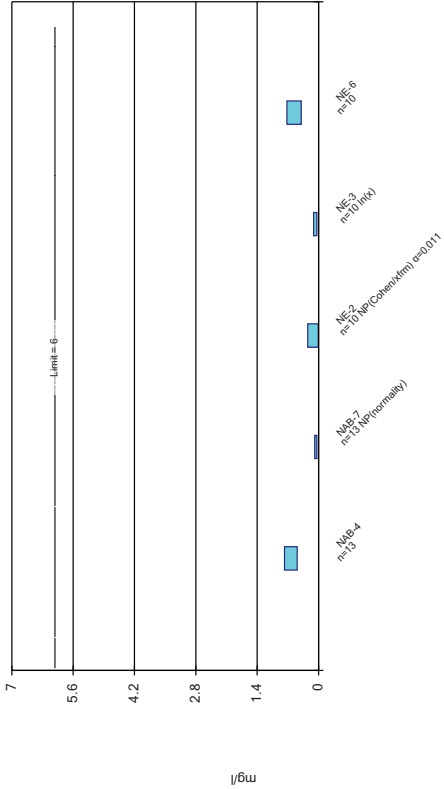


Constituent: Zinc Analysis Run 2/28/2017 10:11 AM

NABORS Client: SCS Engineers Data: NABORS_DATABASE_SanitasMatrix

Parametric and Non-Parametric (NP) Confidence Interval

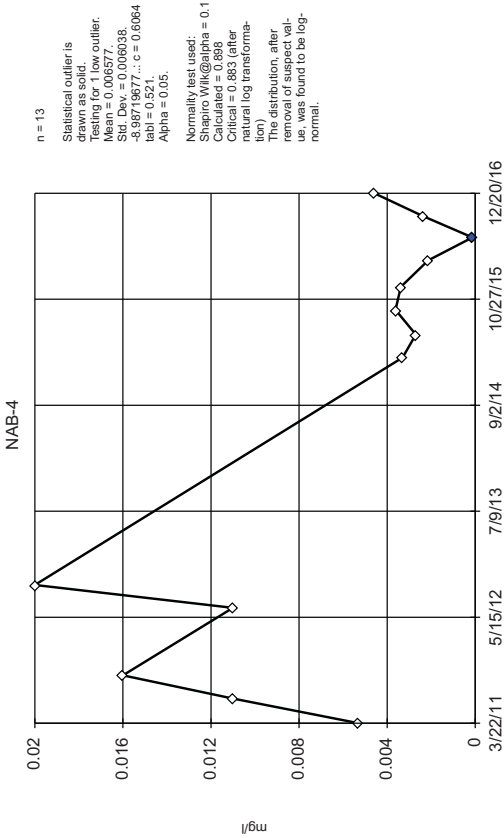
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Zinc Analysis Run 2/28/2017 10:11 AM

NABORS Client: SCS Engineers Data: NABORS_DATABASE_SanitasMatrix

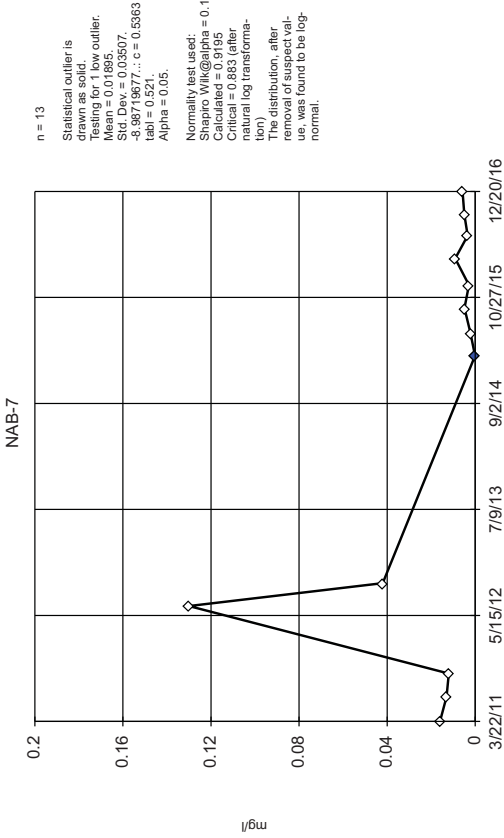
Dixon's Outlier Test



Constituent: Arsenic Analysis Run 2/28/2017 10:00 AM

NABORS Client: SCS Engineers Data: NABORS_DATABASE_SanitasMatrix

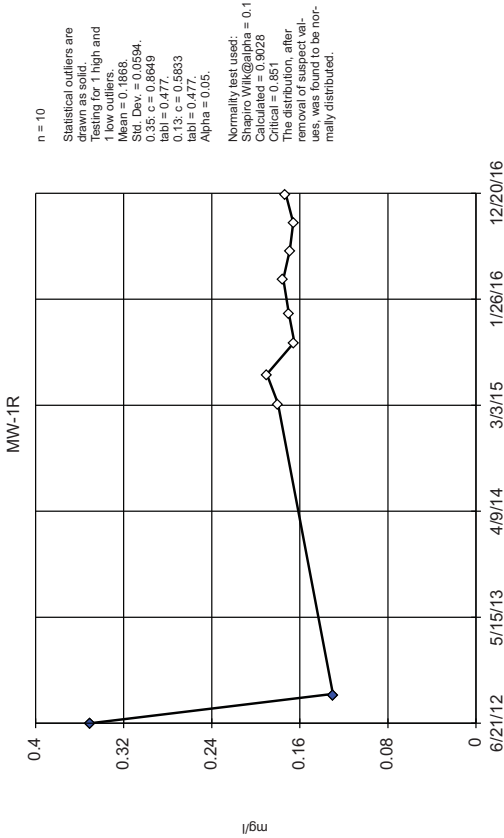
Dixon's Outlier Test



Constituent: Arsenic Analysis Run 2/28/2017 10:00 AM

NABORS Client: SCS Engineers Data: NABORS_DATABASE_SanitasMatrix

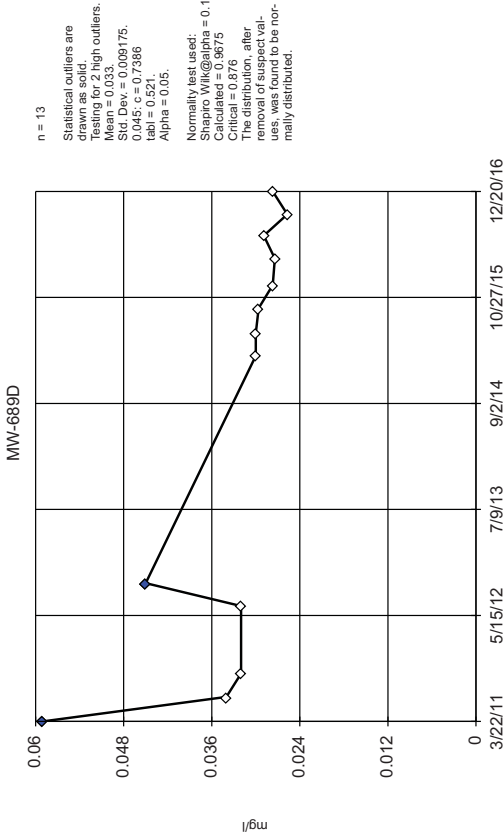
Dixon's Outlier Test



Constituent: Barium Analysis Run 2/28/2017 10:00 AM

NABORS Client: SCS Engineers Data: NABORS_DATABASE_SanitasMatrix

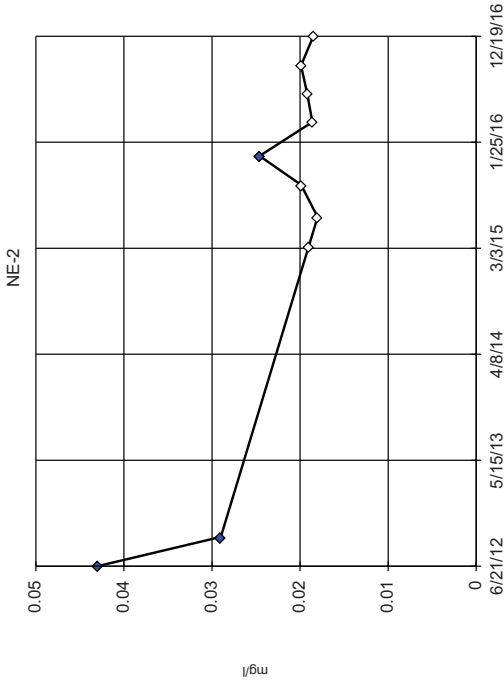
Dixon's Outlier Test



Constituent: Barium Analysis Run 2/28/2017 10:01 AM

NABORS Client: SCS Engineers Data: NABORS_DATABASE_SanitasMatrix

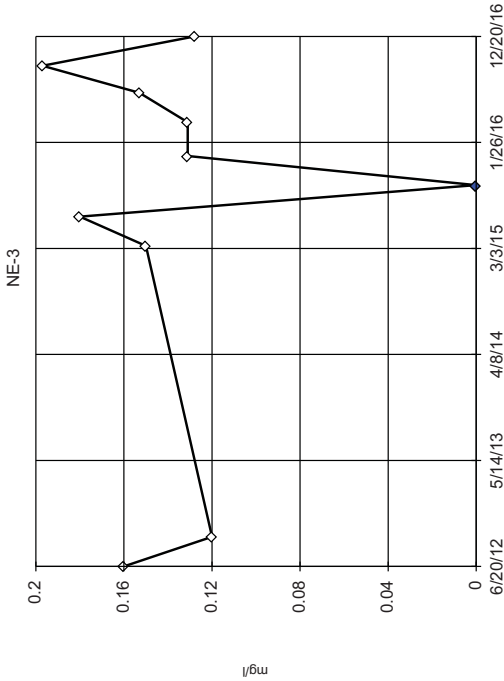
Dixon's Outlier Test



Constituent: Barium Analysis Run 2/28/2017 10:01 AM

NABORS Client: SCS Engineers Data: NABORS_DATABASE_SanitasMatrix

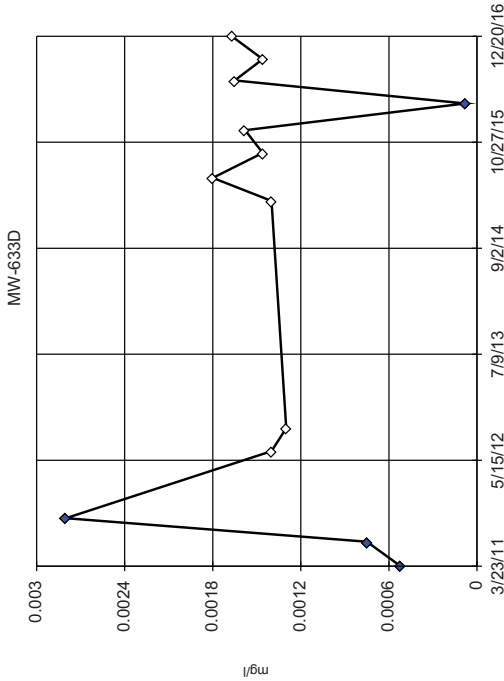
Dixon's Outlier Test



Constituent: Barium Analysis Run 2/28/2017 10:01 AM

NABORS Client: SCS Engineers Data: NABORS_DATABASE_SanitasMatrix

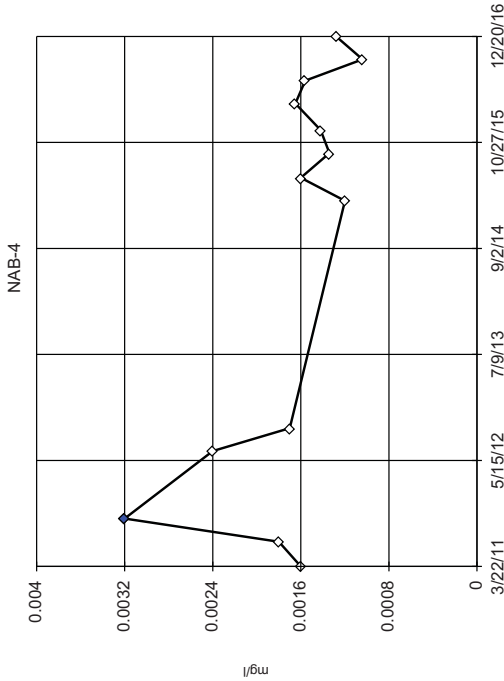
Dixon's Outlier Test



Constituent: Cadmium Analysis Run 2/28/2017 10:01 AM

NABORS Client: SCS Engineers Data: NABORS_DATABASE_SanitasMatrix

Dixon's Outlier Test

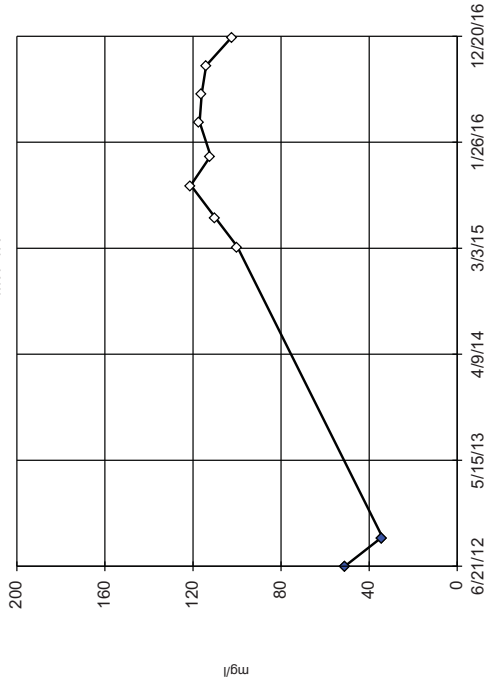


Constituent: Cadmium Analysis Run 2/28/2017 10:01 AM

NABORS Client: SCS Engineers Data: NABORS_DATABASE_SanitasMatrix

Dixon's Outlier Test

MW-1R

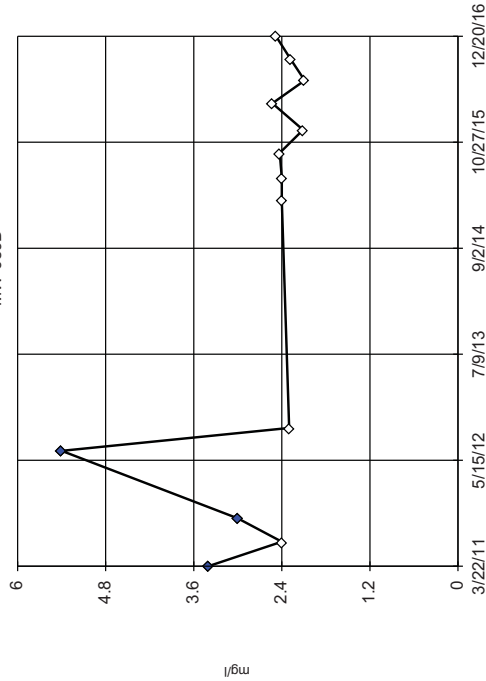


Constituent: Chloride Analysis Run 2/28/2017 10:01 AM

NABORS Client: SCS Engineers Data: NABORS_DATABASE_SanitasMatrix

Dixon's Outlier Test

MW-689D

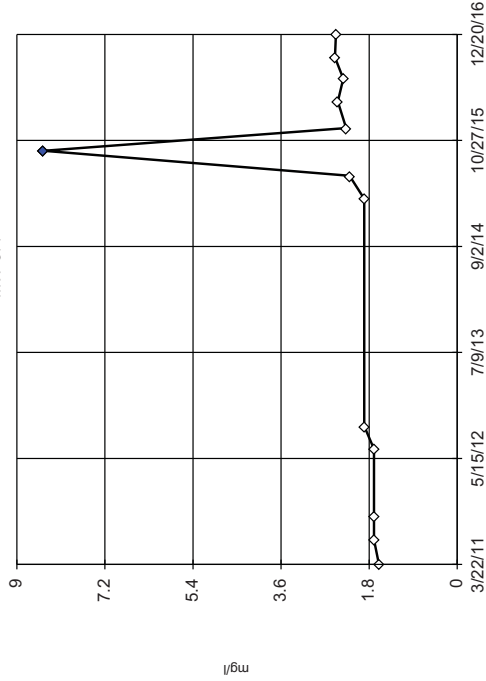


Constituent: Chloride Analysis Run 2/28/2017 10:01 AM

NABORS Client: SCS Engineers Data: NABORS_DATABASE_SanitasMatrix

Tukey's Outlier Screening

MW-577

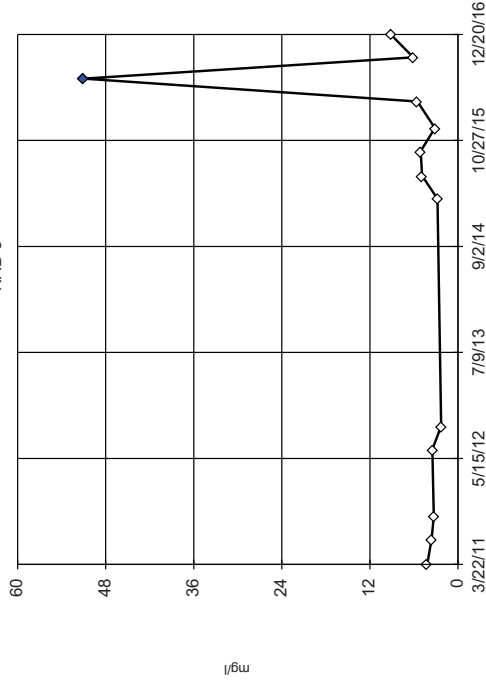


Constituent: Chloride Analysis Run 2/28/2017 10:01 AM

NABORS Client: SCS Engineers Data: NABORS_DATABASE_SanitasMatrix

Dixon's Outlier Test

NAB-3

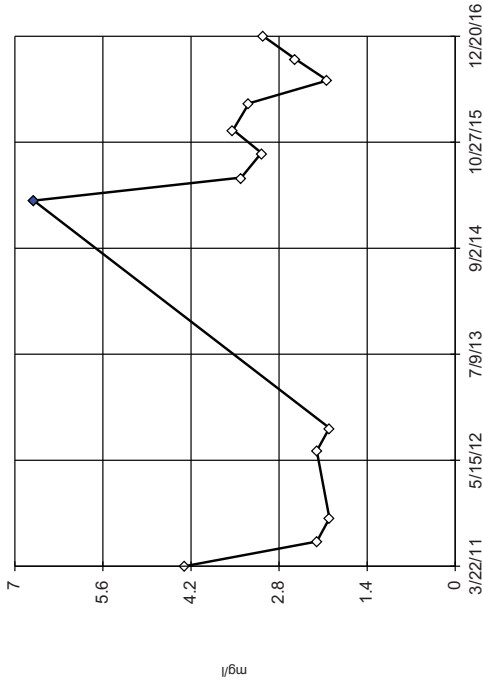


Constituent: Chloride Analysis Run 2/28/2017 10:01 AM

NABORS Client: SCS Engineers Data: NABORS_DATABASE_SanitasMatrix

Dixon's Outlier Test

NAB-7

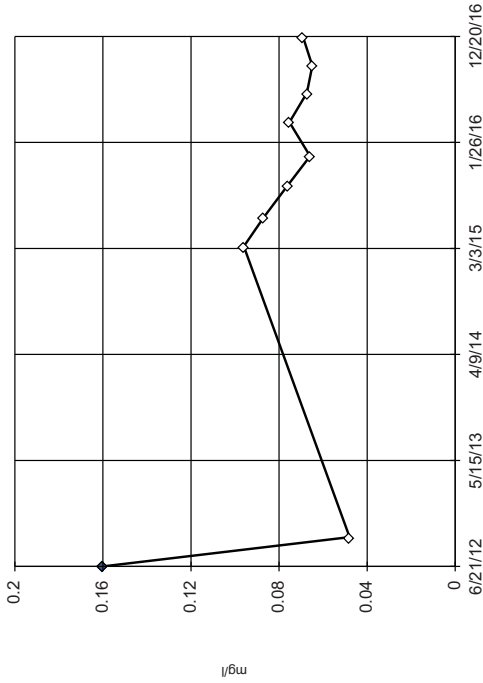


Constituent: Chloride Analysis Run 2/28/2017 10:01 AM

NABORS Client: SCS Engineers Data: NABORS_DATABASE_SanitasMatrix

Dixon's Outlier Test

MW-1R

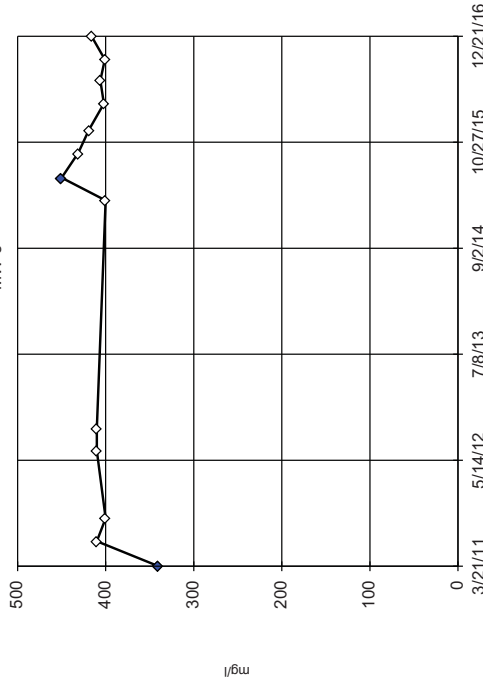


Constituent: Cobalt Analysis Run 2/28/2017 10:01 AM

NABORS Client: SCS Engineers Data: NABORS_DATABASE_SanitasMatrix

Dixon's Outlier Test

MW-5

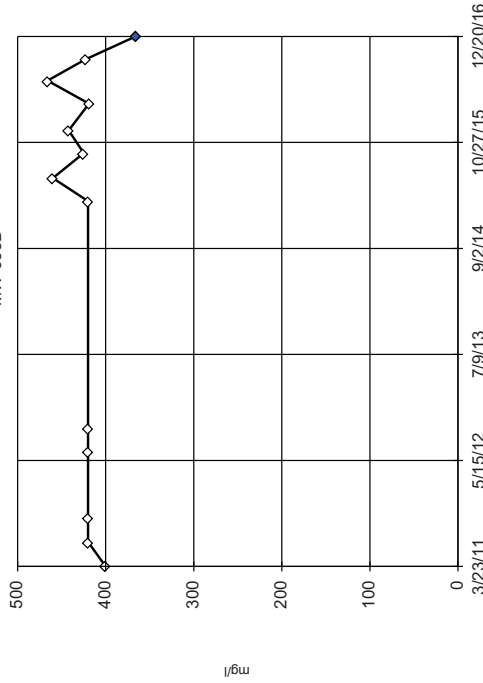


Constituent: Dissolved Solids Analysis Run 2/28/2017 10:01 AM

NABORS Client: SCS Engineers Data: NABORS_DATABASE_SanitasMatrix

Tukey's Outlier Screening

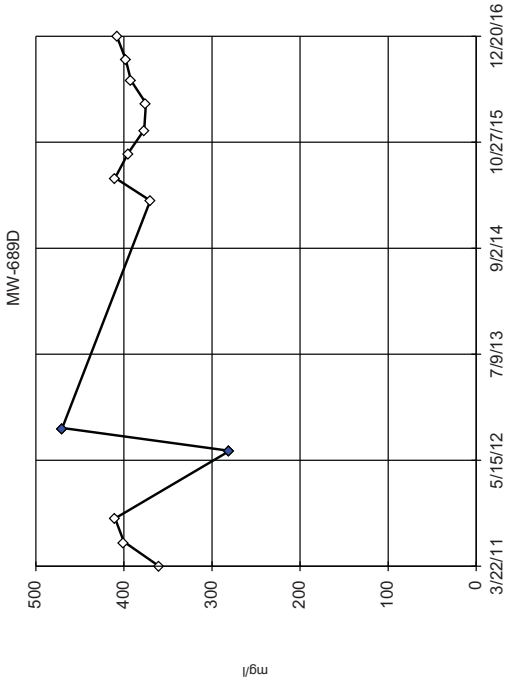
MW-633D



Constituent: Dissolved Solids Analysis Run 2/28/2017 10:01 AM

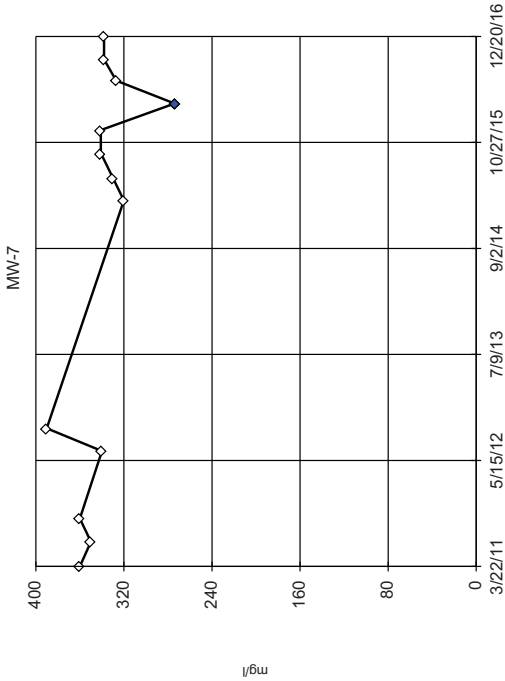
NABORS Client: SCS Engineers Data: NABORS_DATABASE_SanitasMatrix

Dixon's Outlier Test



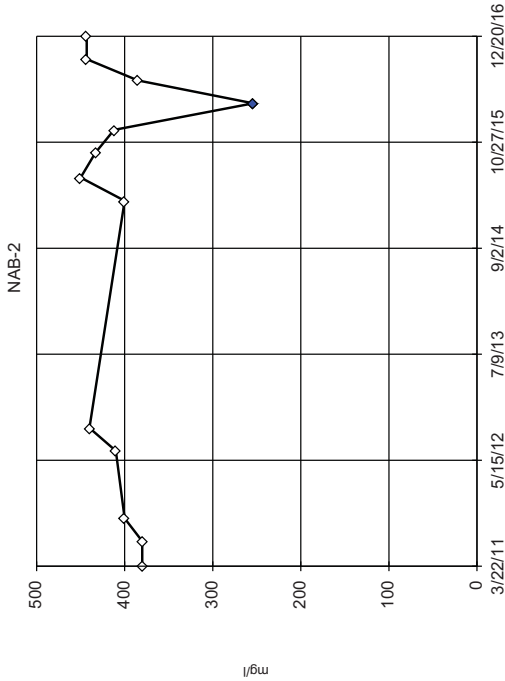
Constituent: Dissolved Solids Analysis Run 2/28/2017 10:01 AM
NABORS Client: SCS Engineers Data: NABORS_DATABASE_SanitasMatrix

Dixon's Outlier Test



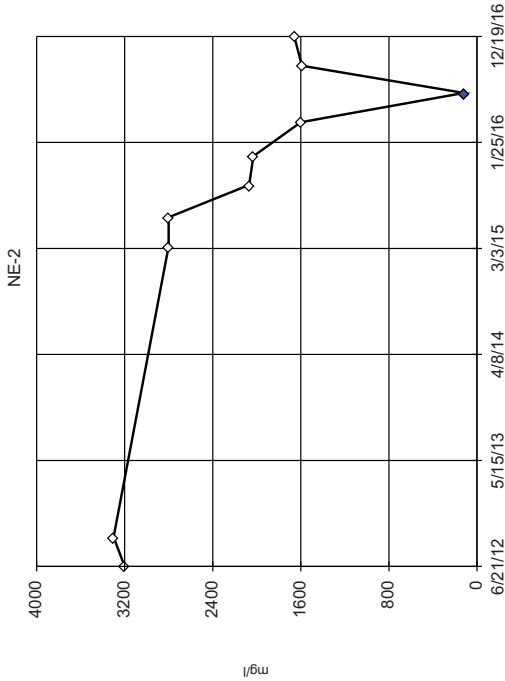
Constituent: Dissolved Solids Analysis Run 2/28/2017 10:01 AM
NABORS Client: SCS Engineers Data: NABORS_DATABASE_SanitasMatrix

Dixon's Outlier Test



Constituent: Dissolved Solids Analysis Run 2/28/2017 10:01 AM
NABORS Client: SCS Engineers Data: NABORS_DATABASE_SanitasMatrix

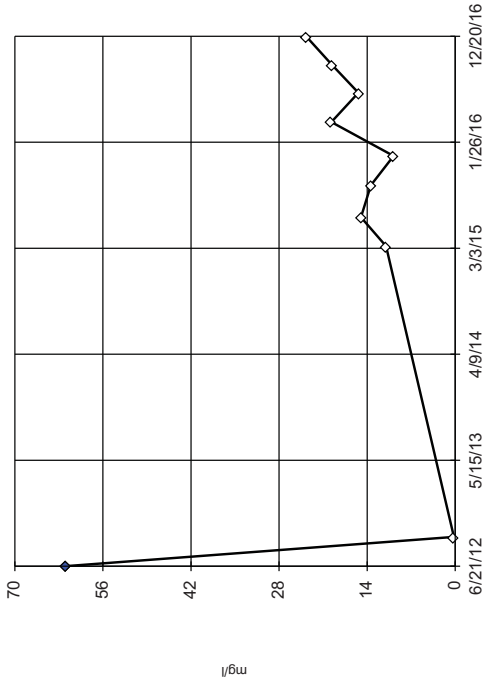
Dixon's Outlier Test



Constituent: Dissolved Solids Analysis Run 2/28/2017 10:01 AM
NABORS Client: SCS Engineers Data: NABORS_DATABASE_SanitasMatrix

Dixon's Outlier Test

MW-1R

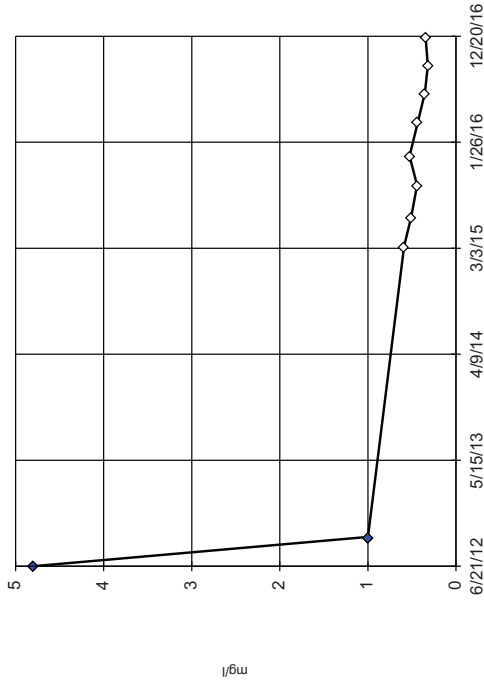


Constituent: Iron Analysis Run 2/28/2017 10:01 AM

NABORS Client: SCS Engineers Data: NABORS_DATABASE_SanitasMatrix

Dixon's Outlier Test

MW-1R

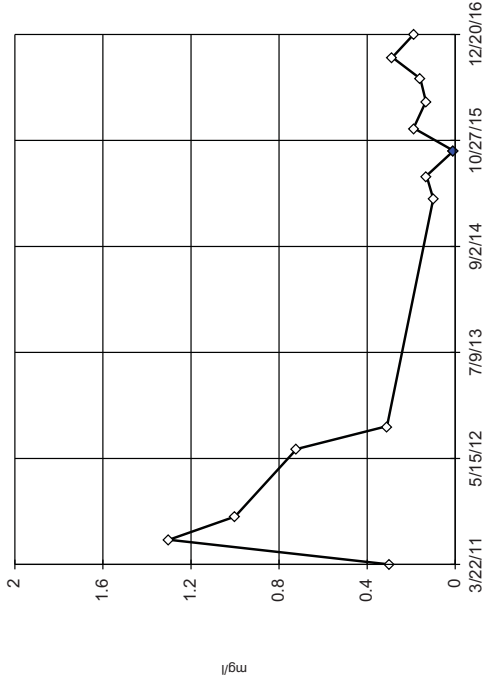


Constituent: Manganese Analysis Run 2/28/2017 10:02 AM

NABORS Client: SCS Engineers Data: NABORS_DATABASE_SanitasMatrix

Dixon's Outlier Test

MW-577

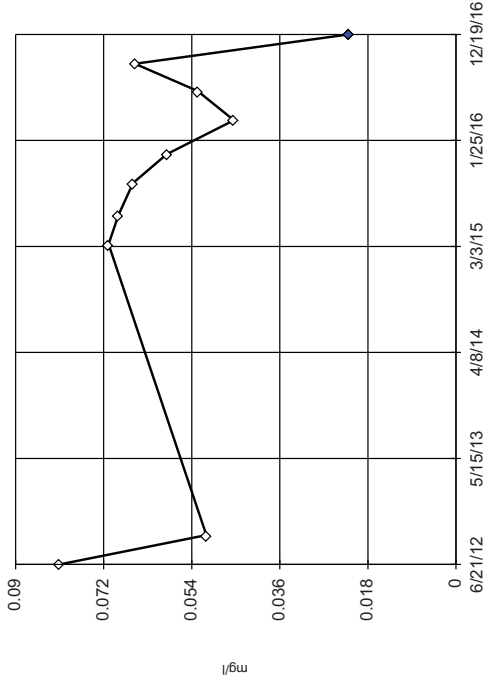


Constituent: Iron Analysis Run 2/28/2017 10:01 AM

NABORS Client: SCS Engineers Data: NABORS_DATABASE_SanitasMatrix

Dixon's Outlier Test

NE-2

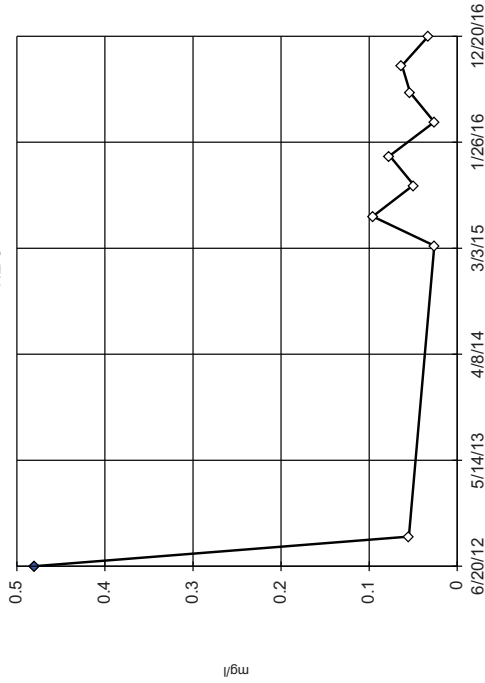


Constituent: Manganese Analysis Run 2/28/2017 10:02 AM

NABORS Client: SCS Engineers Data: NABORS_DATABASE_SanitasMatrix

Dixon's Outlier Test

NE-3

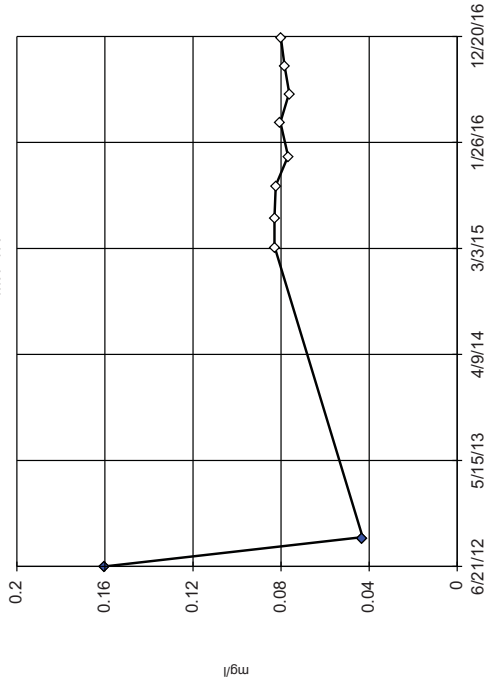


Constituent: Manganese Analysis Run 2/28/2017 10:02 AM

NABORS Client: SCS Engineers Data: NABORS_DATABASE_SanitasMatrix

Dixon's Outlier Test

MW-1R

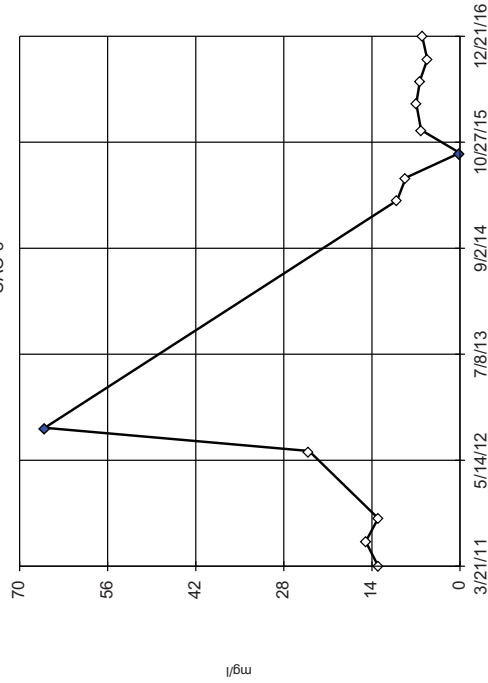


Constituent: Nickel Analysis Run 2/28/2017 10:02 AM

NABORS Client: SCS Engineers Data: NABORS_DATABASE_SanitasMatrix

Dixon's Outlier Test

CAO-3

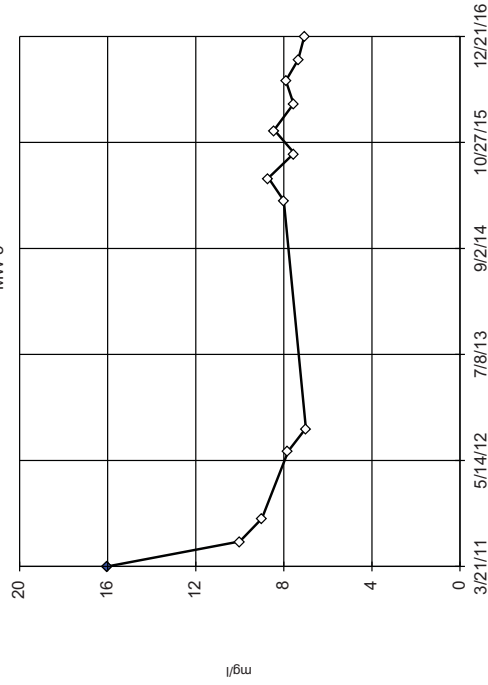


Constituent: Sulfate Analysis Run 2/28/2017 10:02 AM

NABORS Client: SCS Engineers Data: NABORS_DATABASE_SanitasMatrix

Dixon's Outlier Test

MW-5

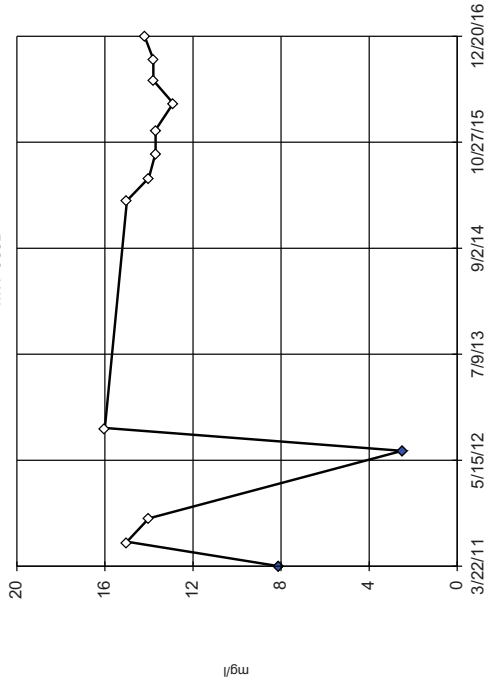


Constituent: Sulfate Analysis Run 2/28/2017 10:02 AM

NABORS Client: SCS Engineers Data: NABORS_DATABASE_SanitasMatrix

Dixon's Outlier Test

MW-689D

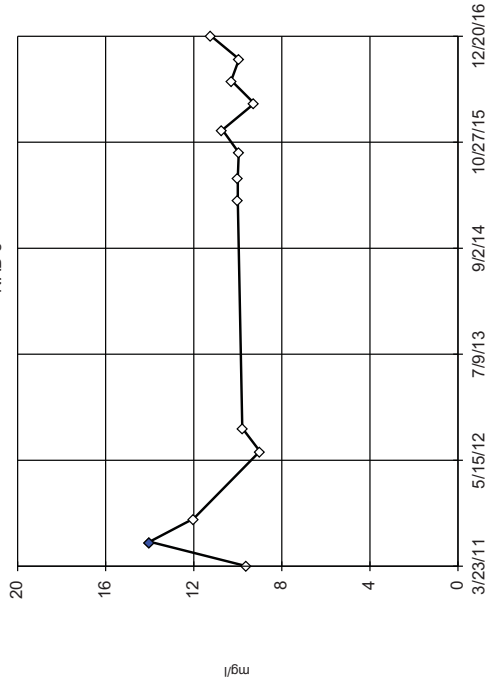


Constituent: Sulfate Analysis Run 2/28/2017 10:02 AM

NABORS Client: SCS Engineers Data: NABORS_DATABASE_SanitasMatrix

Dixon's Outlier Test

NAB-8

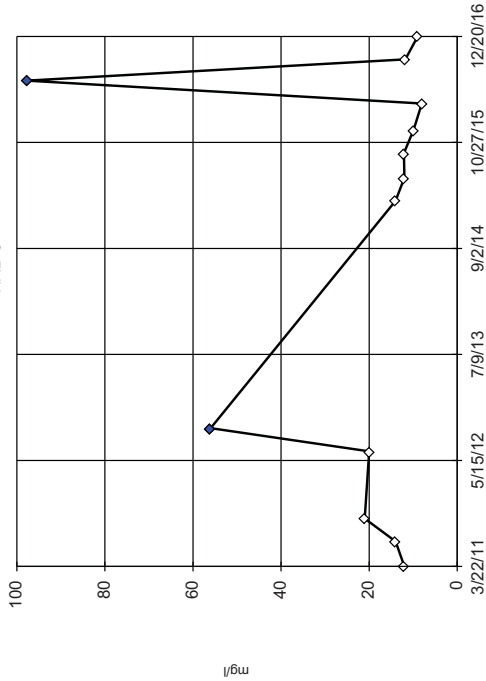


Constituent: Sulfate Analysis Run 2/28/2017 10:02 AM

NABORS Client: SCS Engineers Data: NABORS_DATABASE_SanitasMatrix

Dixon's Outlier Test

NAB-3

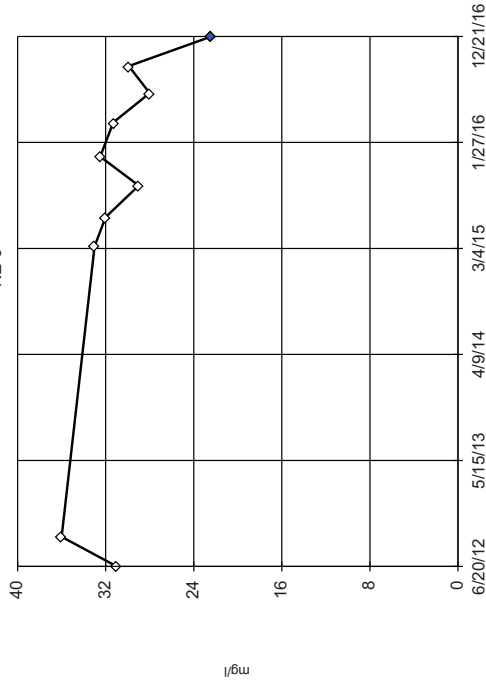


Constituent: Sulfate Analysis Run 2/28/2017 10:02 AM

NABORS Client: SCS Engineers Data: NABORS_DATABASE_SanitasMatrix

Dixon's Outlier Test

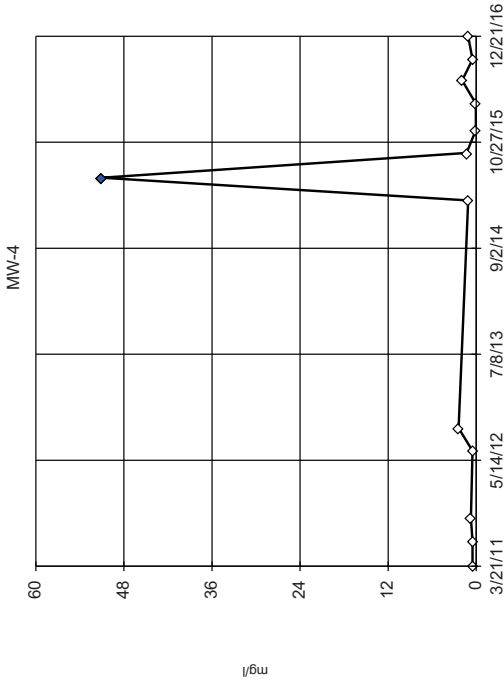
NE-6



Constituent: Sulfate Analysis Run 2/28/2017 10:02 AM

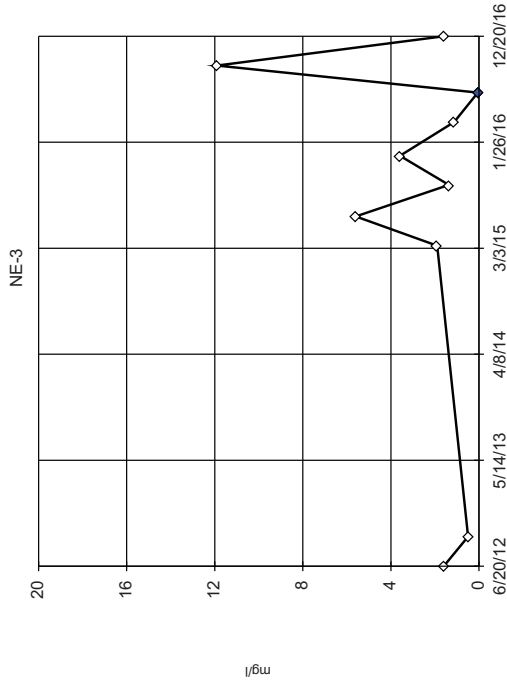
NABORS Client: SCS Engineers Data: NABORS_DATABASE_SanitasMatrix

Dixon's Outlier Test



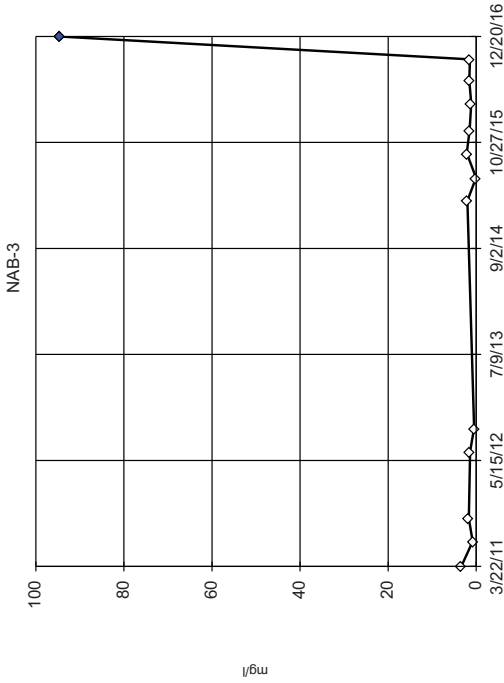
Constituent: TOC [Total Organic Carbon] Analysis Run 2/28/2017 10:02 AM
NABORS Client: SCS Engineers Data: NABORS_DATABASE_SanitasMatrix

Dixon's Outlier Test



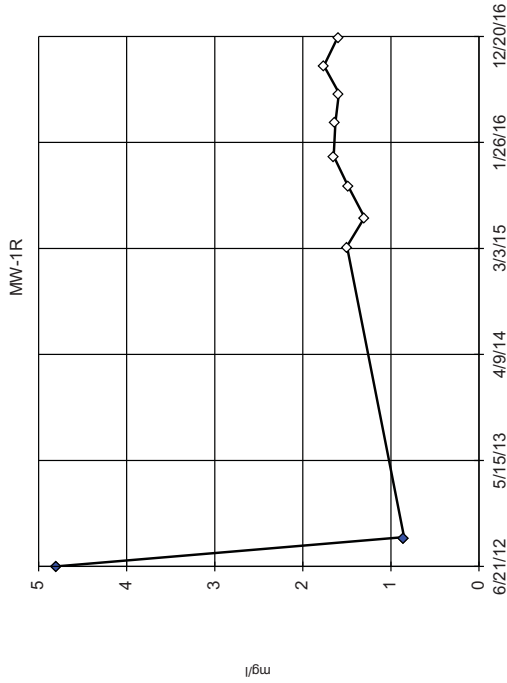
Constituent: TOC [Total Organic Carbon] Analysis Run 2/28/2017 10:02 AM
NABORS Client: SCS Engineers Data: NABORS_DATABASE_SanitasMatrix

Dixon's Outlier Test



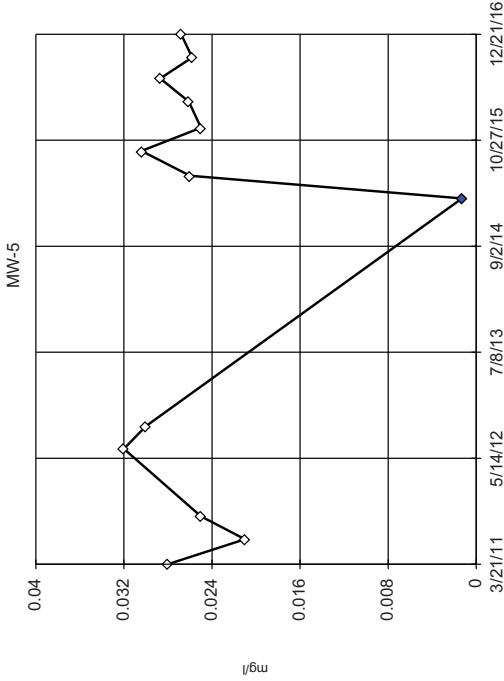
Constituent: TOC [Total Organic Carbon] Analysis Run 2/28/2017 10:02 AM
NABORS Client: SCS Engineers Data: NABORS_DATABASE_SanitasMatrix

Dixon's Outlier Test



Constituent: Zinc Analysis Run 2/28/2017 10:02 AM
NABORS Client: SCS Engineers Data: NABORS_DATABASE_SanitasMatrix

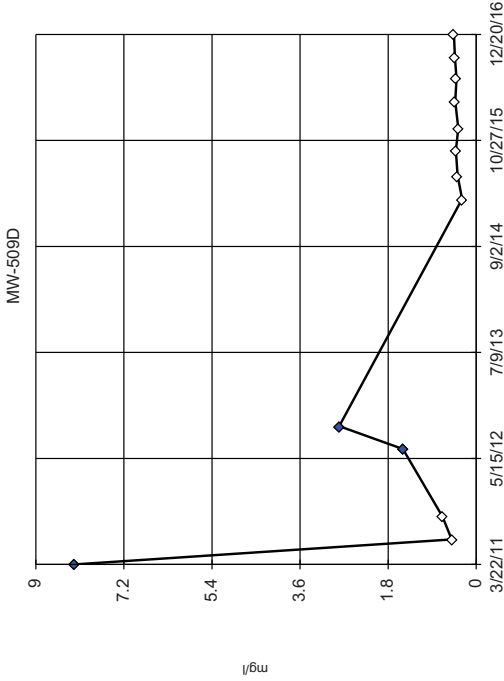
Dixon's Outlier Test



Constituent: Zinc Analysis Run 2/28/2017 10:02 AM

NABORS Client: SCS Engineers Data: NABORS_DATABASE_SanitasMatrix

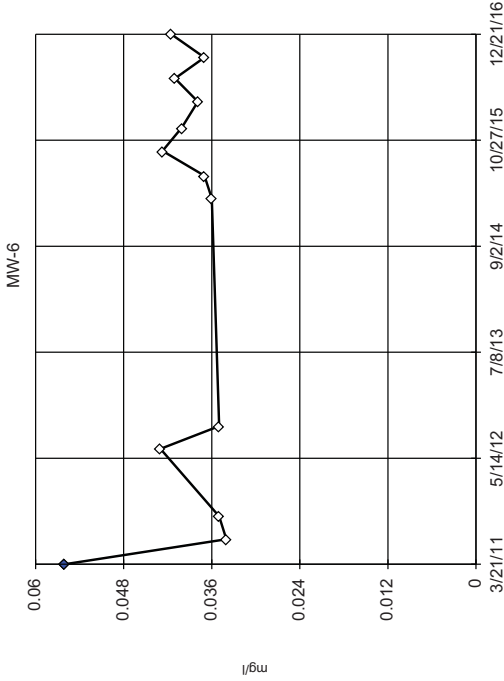
Dixon's Outlier Test



Constituent: Zinc Analysis Run 2/28/2017 10:02 AM

NABORS Client: SCS Engineers Data: NABORS_DATABASE_SanitasMatrix

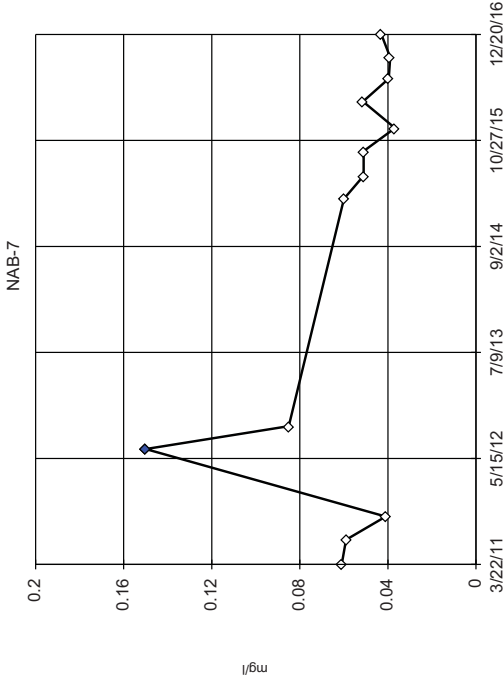
Dixon's Outlier Test



Constituent: Zinc Analysis Run 2/28/2017 10:02 AM

NABORS Client: SCS Engineers Data: NABORS_DATABASE_SanitasMatrix

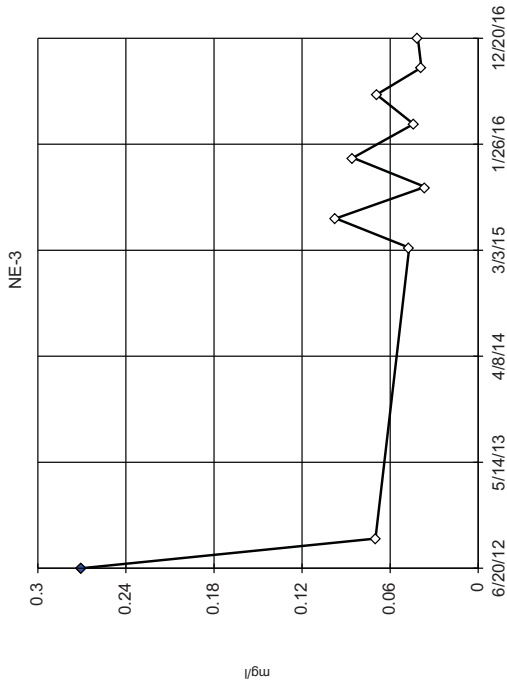
Dixon's Outlier Test



Constituent: Zinc Analysis Run 2/28/2017 10:02 AM

NABORS Client: SCS Engineers Data: NABORS_DATABASE_SanitasMatrix

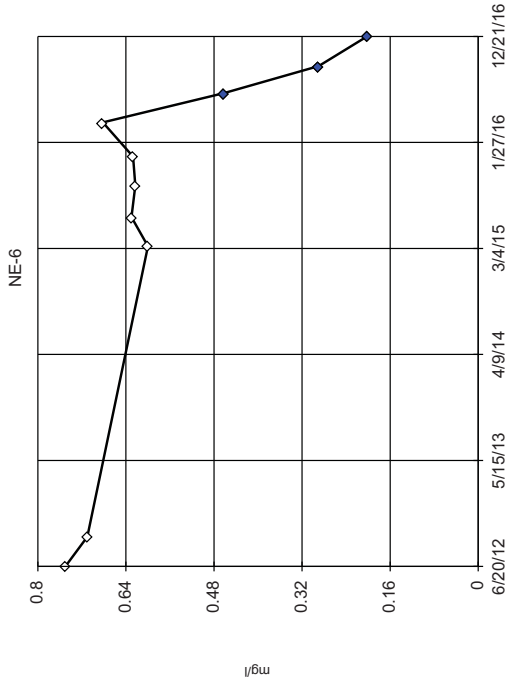
Dixon's Outlier Test



Constituent: Zinc Analysis Run 2/28/2017 10:02 AM

NABORS Client: SCS Engineers Data: NABORS_DATABASE_SanitasMatrix

Dixon's Outlier Test

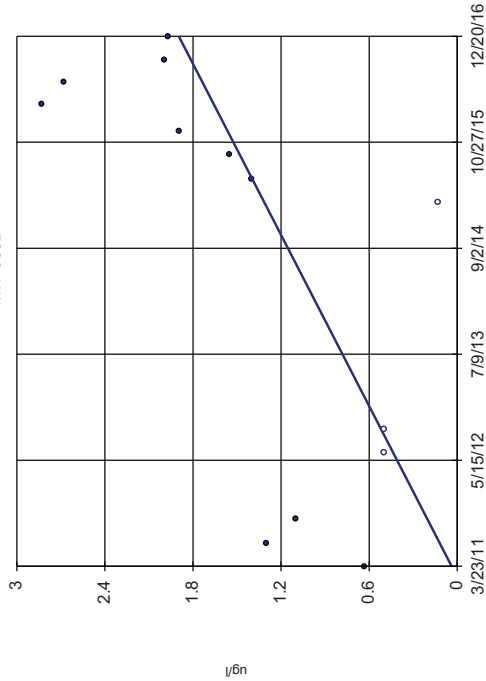


Constituent: Zinc Analysis Run 2/28/2017 10:02 AM

NABORS Client: SCS Engineers Data: NABORS_DATABASE_SanitasMatrix

Sen's Slope Estimator

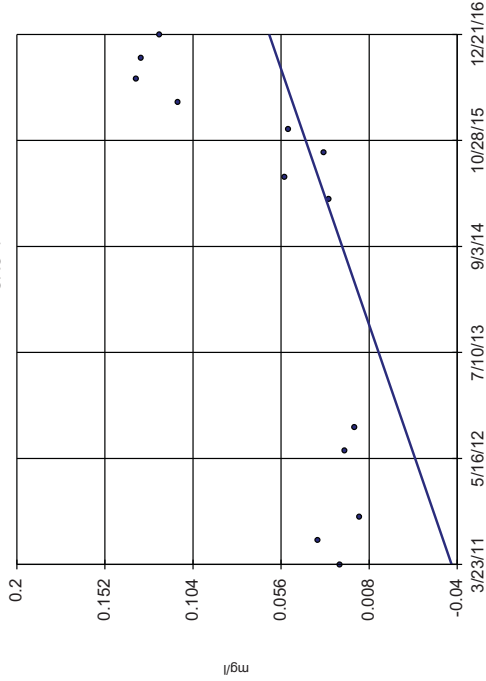
MW-633D



Constituent: 1,1-Dichloroethane Analysis Run 2/28/2017 10:03 AM
NABORS Client: SCS Engineers Data: NABORS_DATABASE_SanitasMatrix

Sen's Slope Estimator

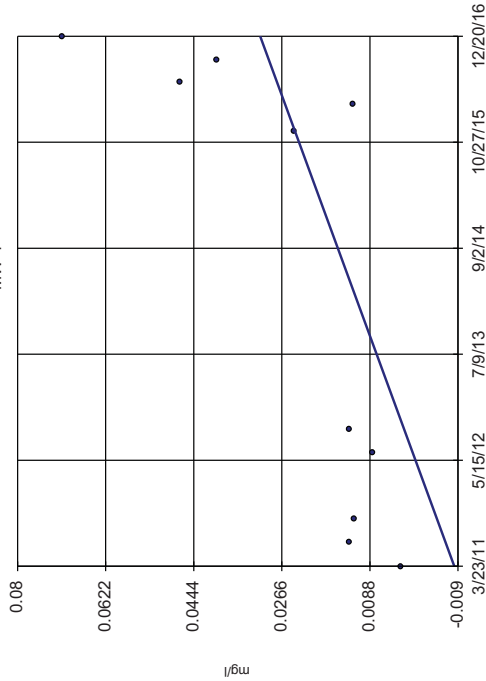
CAO-1



Constituent: Arsenic Analysis Run 2/28/2017 10:03 AM
NABORS Client: SCS Engineers Data: NABORS_DATABASE_SanitasMatrix

Sen's Slope Estimator

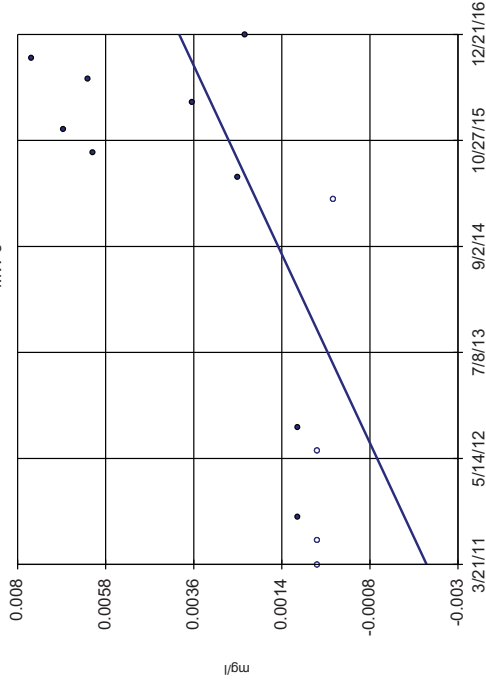
MW-1



Constituent: Arsenic Analysis Run 2/28/2017 10:03 AM
NABORS Client: SCS Engineers Data: NABORS_DATABASE_SanitasMatrix

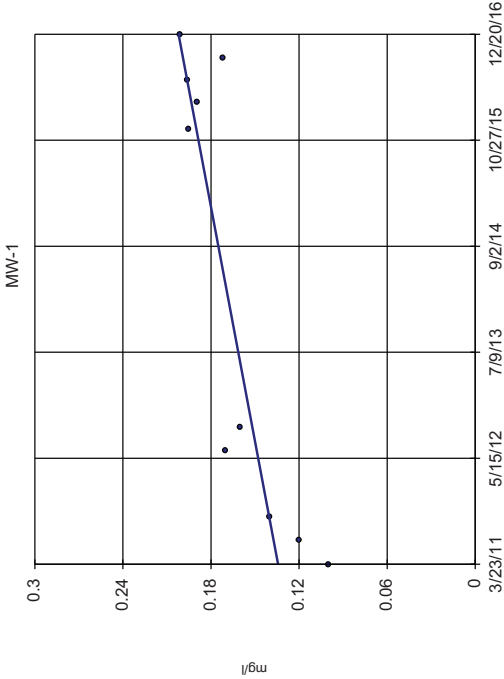
Sen's Slope Estimator

MW-3



Constituent: Arsenic Analysis Run 2/28/2017 10:03 AM
NABORS Client: SCS Engineers Data: NABORS_DATABASE_SanitasMatrix

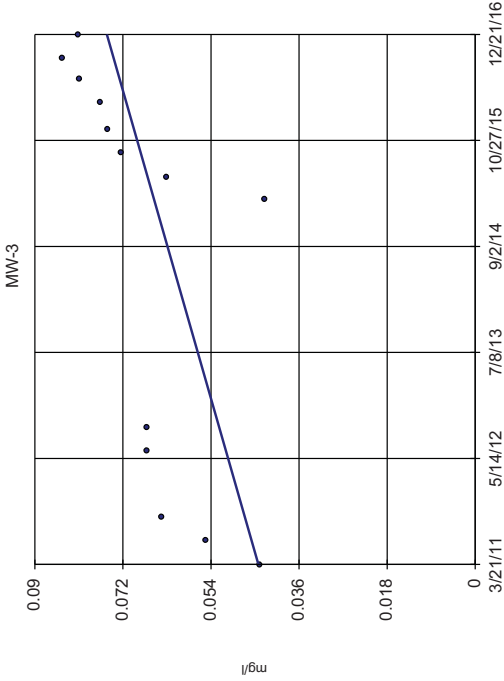
Sen's Slope Estimator



Constituent: Barium Analysis Run 2/28/2017 10:03 AM

NABORS Client: SCS Engineers Data: NABORS_DATABASE_SanitasMatrix

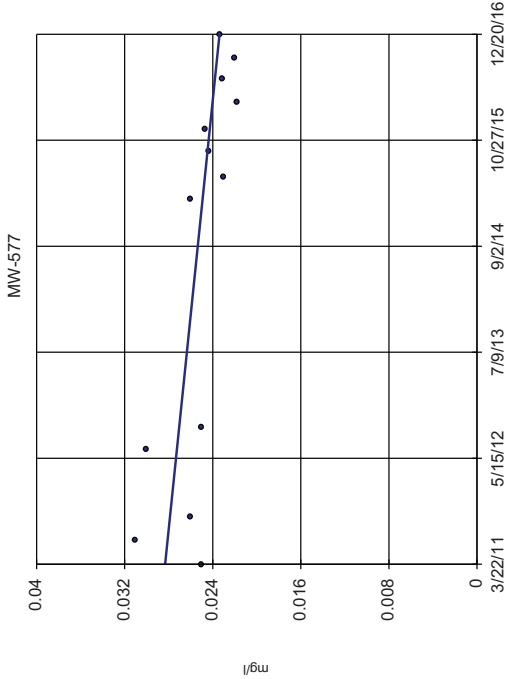
Sen's Slope Estimator



Constituent: Barium Analysis Run 2/28/2017 10:03 AM

NABORS Client: SCS Engineers Data: NABORS_DATABASE_SanitasMatrix

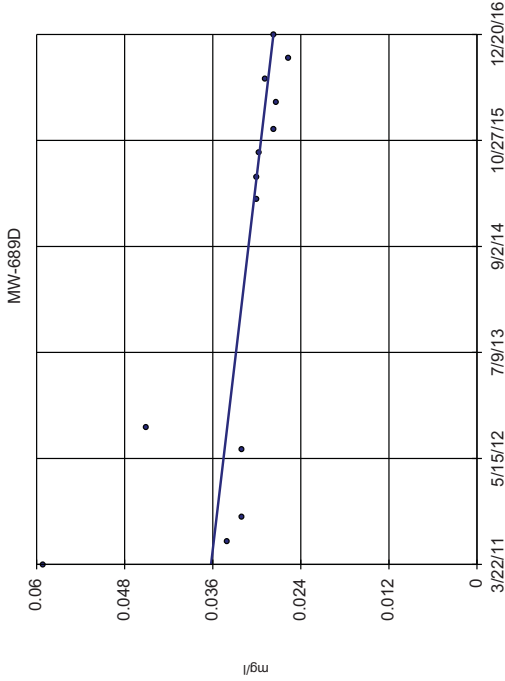
Sen's Slope Estimator



Constituent: Barium Analysis Run 2/28/2017 10:03 AM

NABORS Client: SCS Engineers Data: NABORS_DATABASE_SanitasMatrix

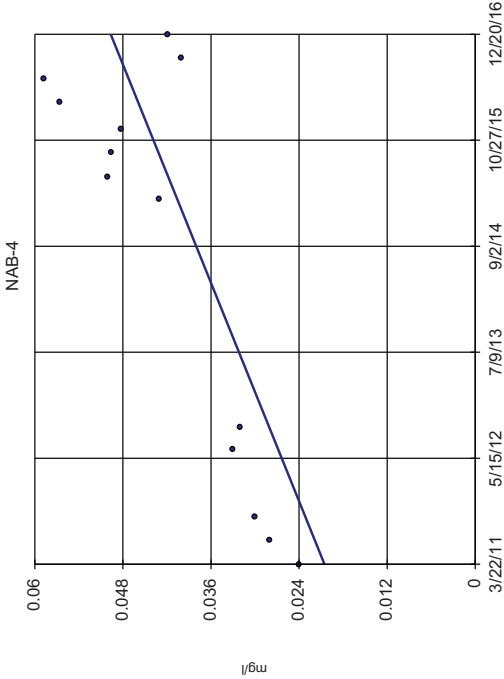
Sen's Slope Estimator



Constituent: Barium Analysis Run 2/28/2017 10:03 AM

NABORS Client: SCS Engineers Data: NABORS_DATABASE_SanitasMatrix

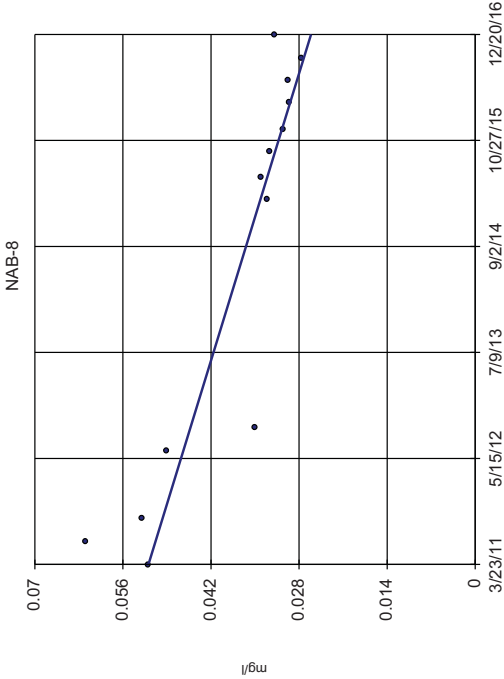
Sen's Slope Estimator



Constituent: Barium Analysis Run 2/28/2017 10:03 AM

NABORS Client: SCS Engineers Data: NABORS_DATABASE_SanitasMatrix

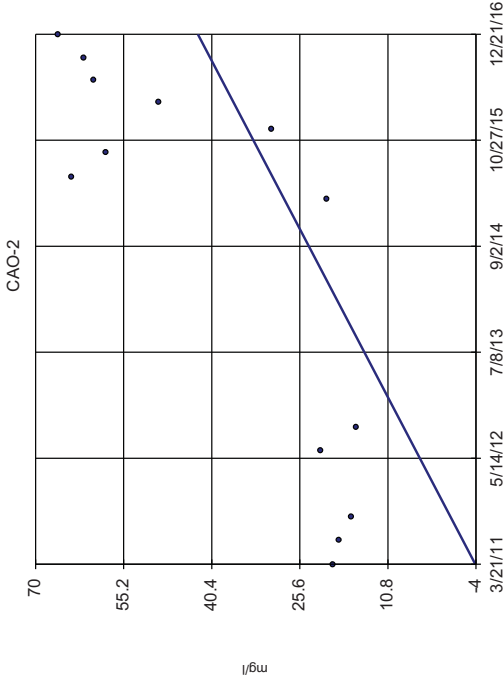
Sen's Slope Estimator



Constituent: Barium Analysis Run 2/28/2017 10:03 AM

NABORS Client: SCS Engineers Data: NABORS_DATABASE_SanitasMatrix

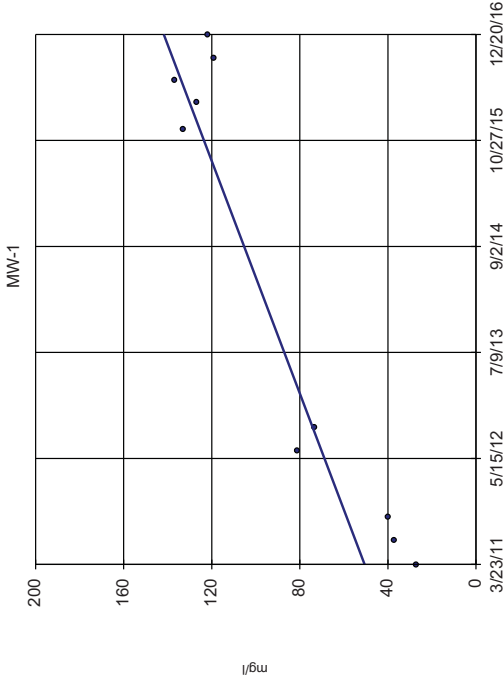
Sen's Slope Estimator



Constituent: Chloride Analysis Run 2/28/2017 10:03 AM

NABORS Client: SCS Engineers Data: NABORS_DATABASE_SanitasMatrix

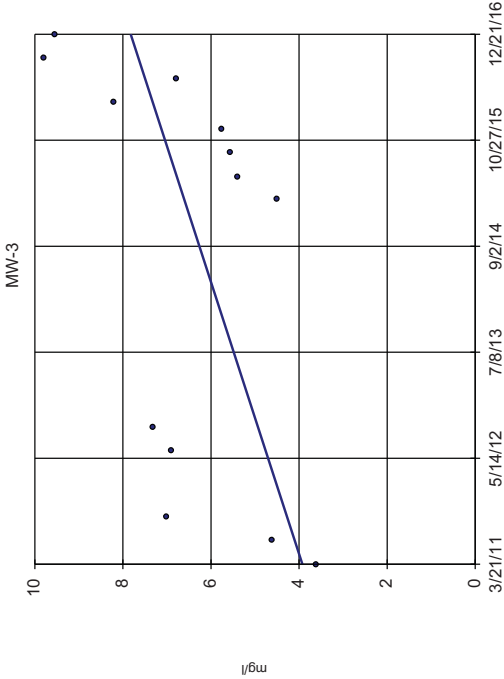
Sen's Slope Estimator



Constituent: Chloride Analysis Run 2/28/2017 10:03 AM

NABORS Client: SCS Engineers Data: NABORS_DATABASE_SanitasMatrix

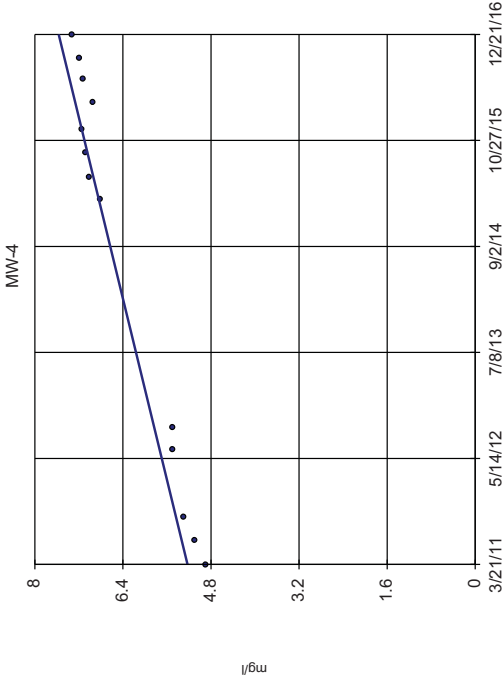
Sen's Slope Estimator



Constituent: Chloride Analysis Run 2/28/2017 10:03 AM

NABORS Client: SCS Engineers Data: NABORS_DATABASE_SanitasMatrix

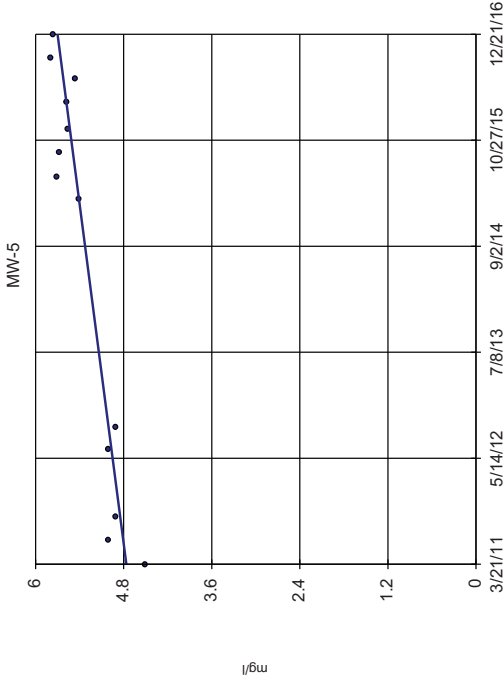
Sen's Slope Estimator



Constituent: Chloride Analysis Run 2/28/2017 10:03 AM

NABORS Client: SCS Engineers Data: NABORS_DATABASE_SanitasMatrix

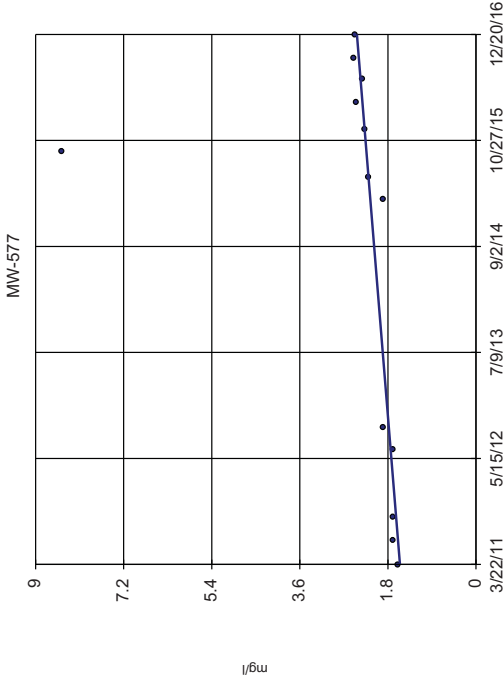
Sen's Slope Estimator



Constituent: Chloride Analysis Run 2/28/2017 10:03 AM

NABORS Client: SCS Engineers Data: NABORS_DATABASE_SanitasMatrix

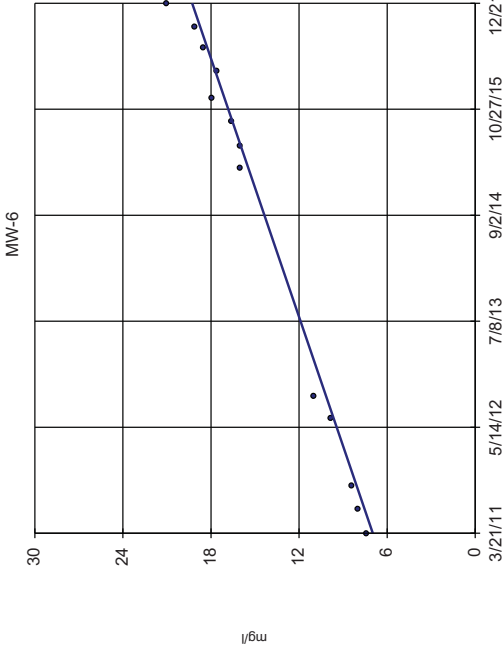
Sen's Slope Estimator



Constituent: Chloride Analysis Run 2/28/2017 10:03 AM

NABORS Client: SCS Engineers Data: NABORS_DATABASE_SanitasMatrix

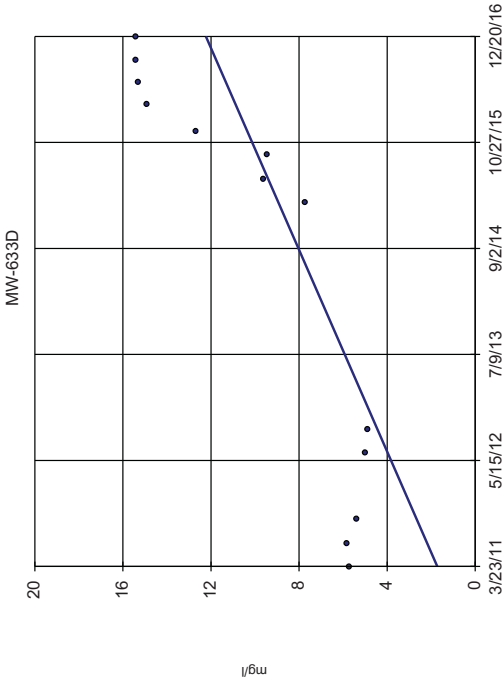
Sen's Slope Estimator



Constituent: Chloride Analysis Run 2/28/2017 10:03 AM

NABORS Client: SCS Engineers Data: NABORS_DATABASE_SanitasMatrix

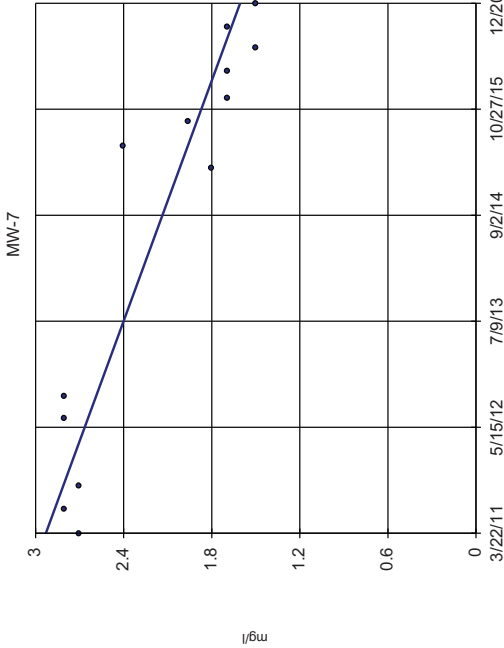
Sen's Slope Estimator



Constituent: Chloride Analysis Run 2/28/2017 10:03 AM

NABORS Client: SCS Engineers Data: NABORS_DATABASE_SanitasMatrix

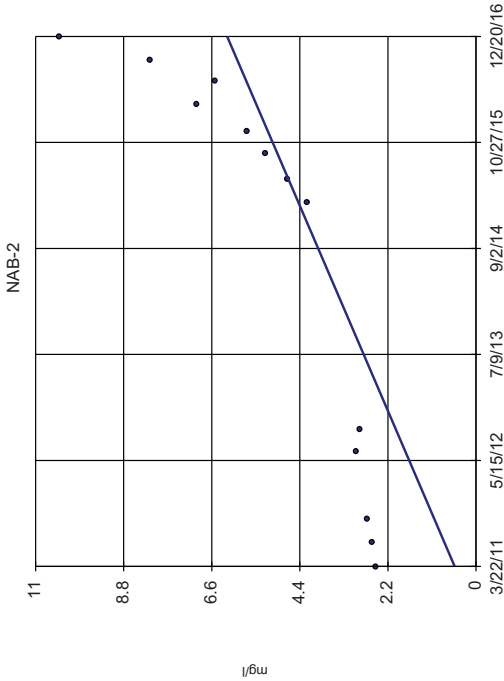
Sen's Slope Estimator



Constituent: Chloride Analysis Run 2/28/2017 10:03 AM

NABORS Client: SCS Engineers Data: NABORS_DATABASE_SanitasMatrix

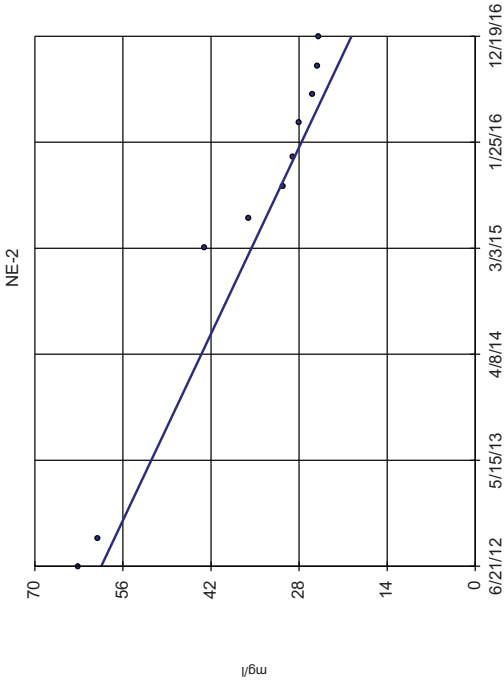
Sen's Slope Estimator



Constituent: Chloride Analysis Run 2/28/2017 10:03 AM

NABORS Client: SCS Engineers Data: NABORS_DATABASE_SanitasMatrix

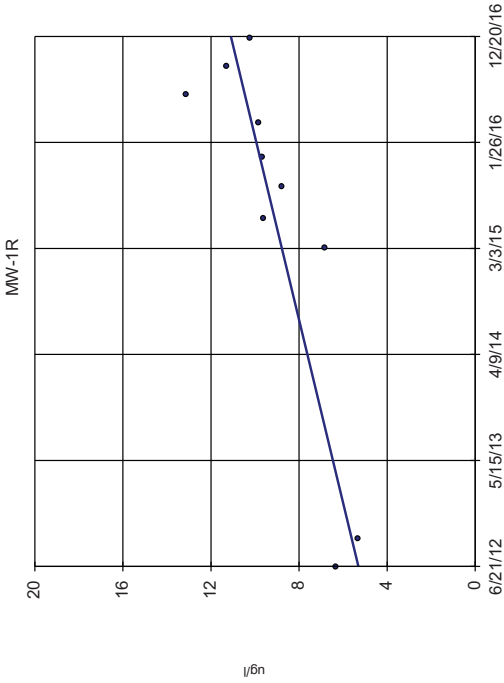
Sen's Slope Estimator



Constituent: Chloride Analysis Run 2/28/2017 10:03 AM

NABORS Client: SCS Engineers Data: NABORS_DATABASE_SanitasMatrix

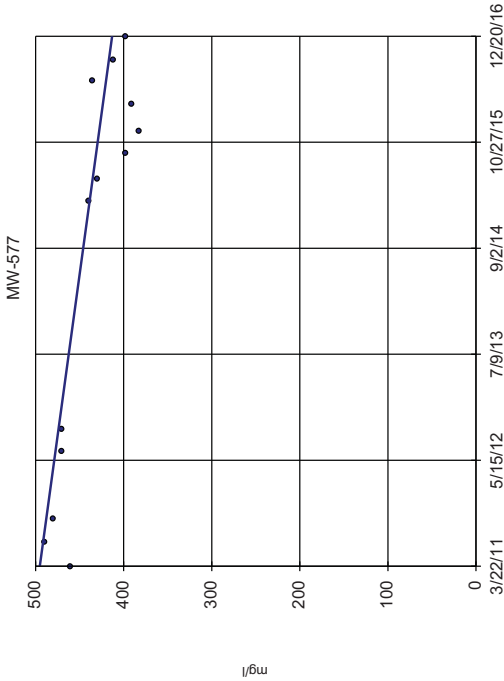
Sen's Slope Estimator



Constituent: cis-1,2-Dichloroethene Analysis Run 2/28/2017 10:04 AM

NABORS Client: SCS Engineers Data: NABORS_DATABASE_SanitasMatrix

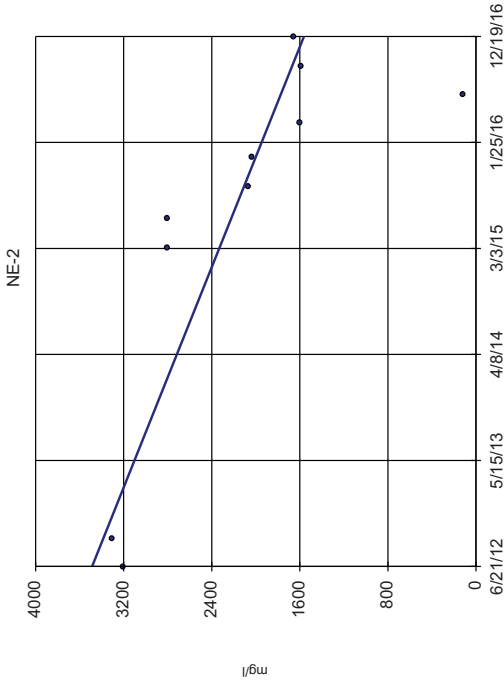
Sen's Slope Estimator



Constituent: Dissolved Solids Analysis Run 2/28/2017 10:04 AM

NABORS Client: SCS Engineers Data: NABORS_DATABASE_SanitasMatrix

Sen's Slope Estimator

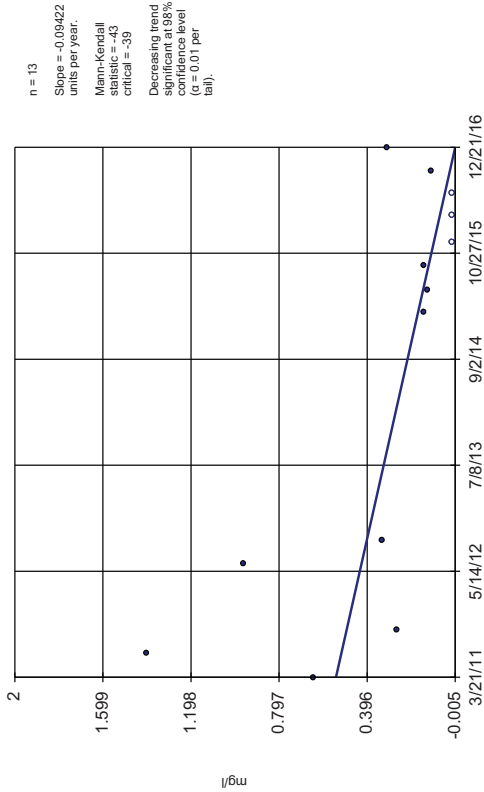


Constituent: Dissolved Solids Analysis Run 2/28/2017 10:04 AM

NABORS Client: SCS Engineers Data: NABORS_DATABASE_SanitasMatrix

Sen's Slope Estimator

CAO-2

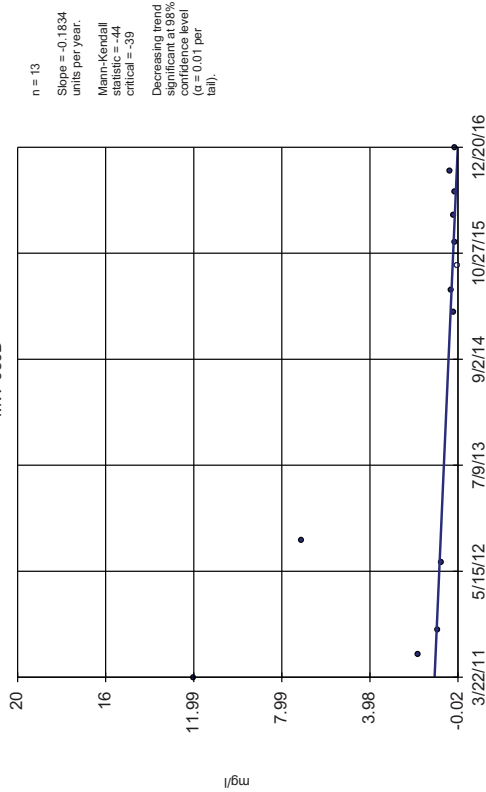


Constituent: Iron Analysis Run 2/28/2017 10:04 AM

NABORS Client: SCS Engineers Data: NABORS_DATABASE_SanitasMatrix

Sen's Slope Estimator

MW-689D

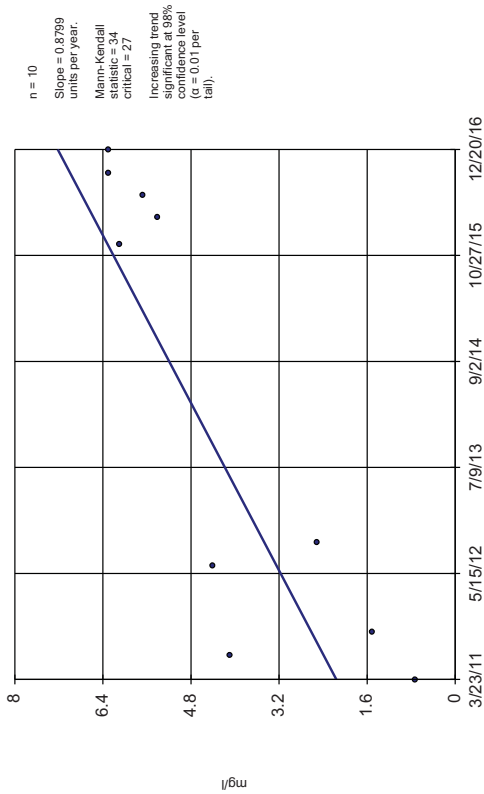


Constituent: Iron Analysis Run 2/28/2017 10:04 AM

NABORS Client: SCS Engineers Data: NABORS_DATABASE_SanitasMatrix

Sen's Slope Estimator

MW-1

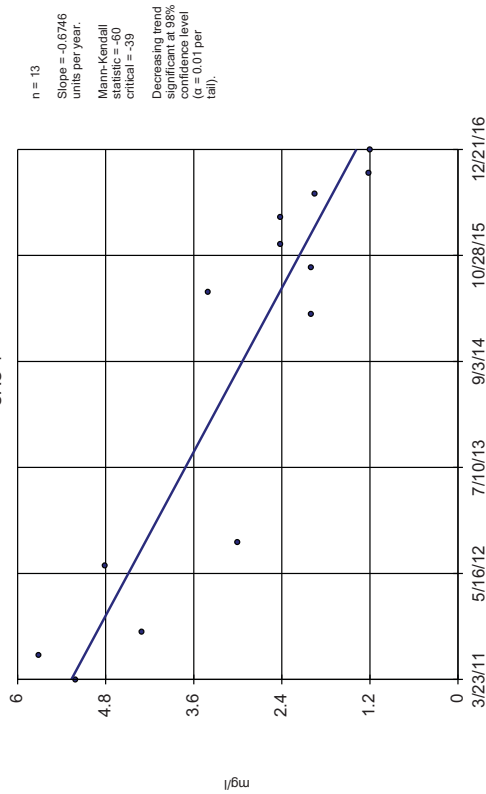


Constituent: Iron Analysis Run 2/28/2017 10:04 AM

NABORS Client: SCS Engineers Data: NABORS_DATABASE_SanitasMatrix

Sen's Slope Estimator

CAO-1

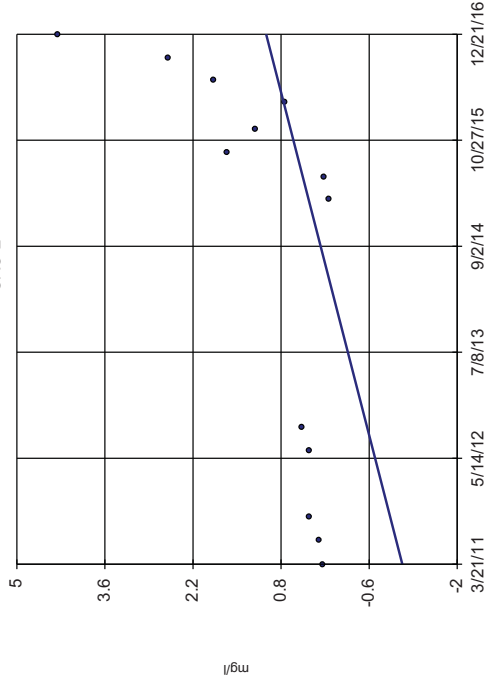


Constituent: Manganese Analysis Run 2/28/2017 10:04 AM

NABORS Client: SCS Engineers Data: NABORS_DATABASE_SanitasMatrix

Sen's Slope Estimator

CAO-2

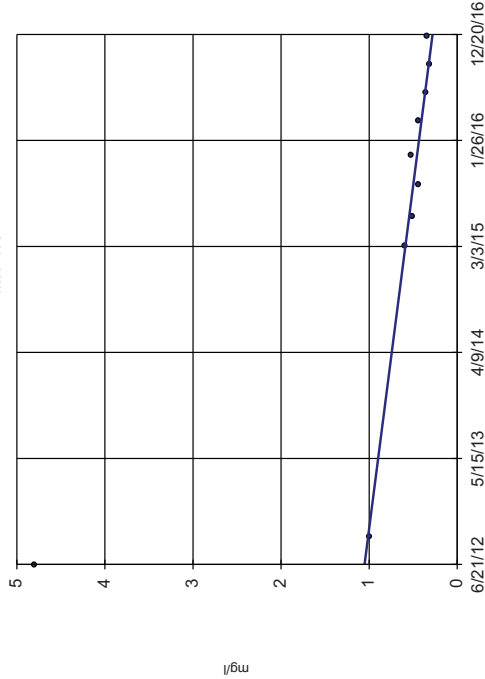


n = 13
Slope = -0.3756
units per year.
Mann-Kendall
statistic = 51
critical = 39
Increasing trend
significant at 98%
confidence level
($\alpha = 0.01$ per
tail).

Constituent: Manganese Analysis Run 2/28/2017 10:04 AM
NABORS Client: SCS Engineers Data: NABORS_DATABASE_SanitasMatrix

Sen's Slope Estimator

MW-1R

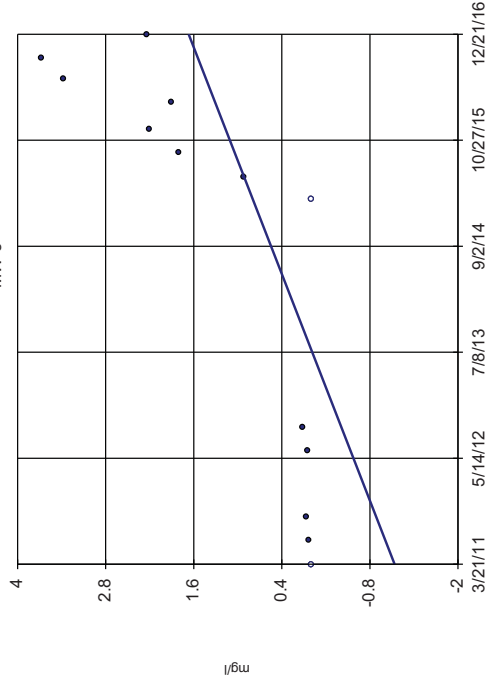


n = 10
Slope = -0.1715
units per year.
Mann-Kendall
statistic = -39
critical = 27
Decreasing trend
significant at 98%
confidence level
($\alpha = 0.01$ per
tail).

Constituent: Manganese Analysis Run 2/28/2017 10:04 AM
NABORS Client: SCS Engineers Data: NABORS_DATABASE_SanitasMatrix

Sen's Slope Estimator

MW-3

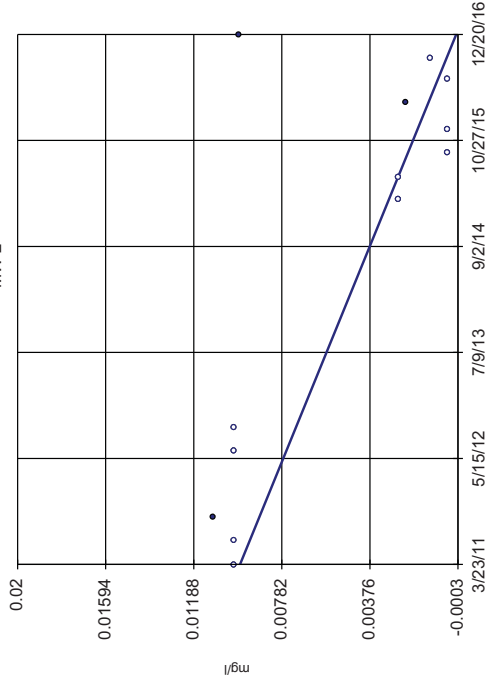


n = 13
Slope = 0.4872
units per year.
Mann-Kendall
statistic = 60
critical = 39
Increasing trend
significant at 98%
confidence level
($\alpha = 0.01$ per
tail).

Constituent: Manganese Analysis Run 2/28/2017 10:04 AM
NABORS Client: SCS Engineers Data: NABORS_DATABASE_SanitasMatrix

Sen's Slope Estimator

MW-2

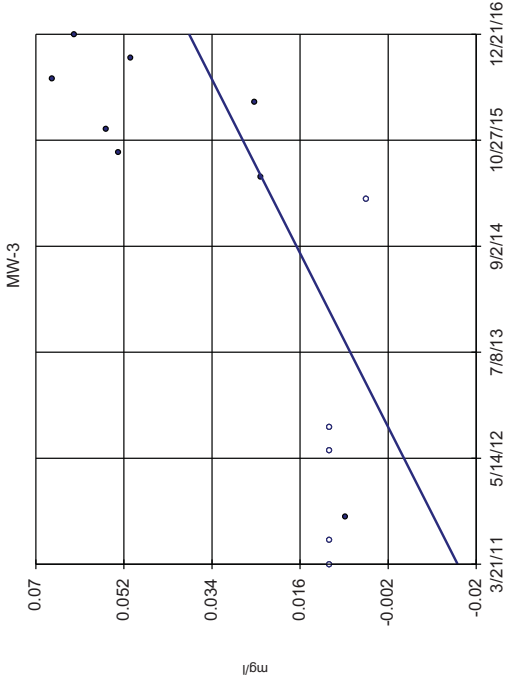


n = 13
Slope = -0.001732
units per year.
Mann-Kendall
statistic = -40
critical = -39
Decreasing trend
significant at 98%
confidence level
($\alpha = 0.01$ per
tail).

Constituent: Nickel Analysis Run 2/28/2017 10:04 AM
NABORS Client: SCS Engineers Data: NABORS_DATABASE_SanitasMatrix

Sanitas™ v.9.5.30 Software licensed to SCS Engineers, UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

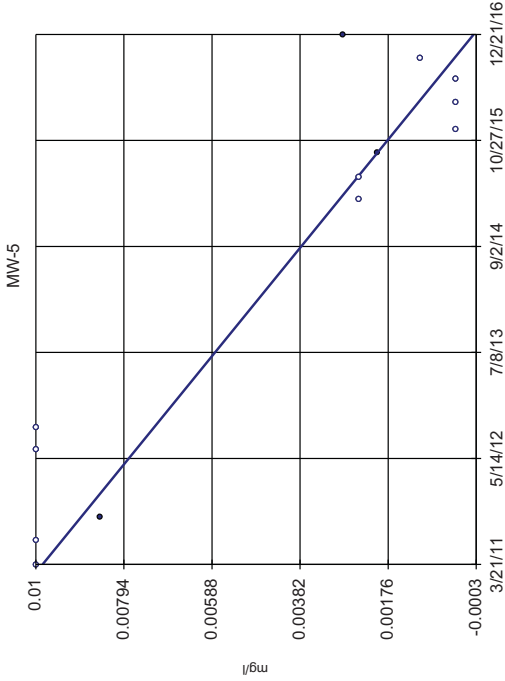


Constituent: Nickel Analysis Run 2/28/2017 10:04 AM

NABORS Client: SCS Engineers Data: NABORS_DATABASE_SanitasMatrix

Sanitas™ v.9.5.30 Software licensed to SCS Engineers, UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

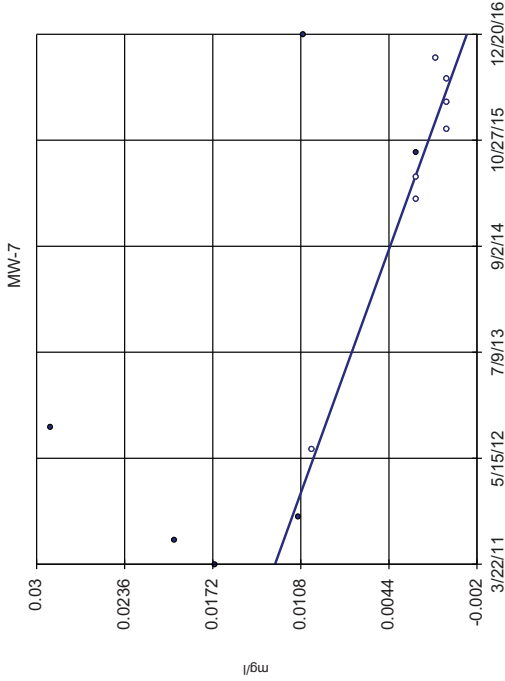


Constituent: Nickel Analysis Run 2/28/2017 10:04 AM

NABORS Client: SCS Engineers Data: NABORS_DATABASE_SanitasMatrix

Sanitas™ v.9.5.30 Software licensed to SCS Engineers, UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

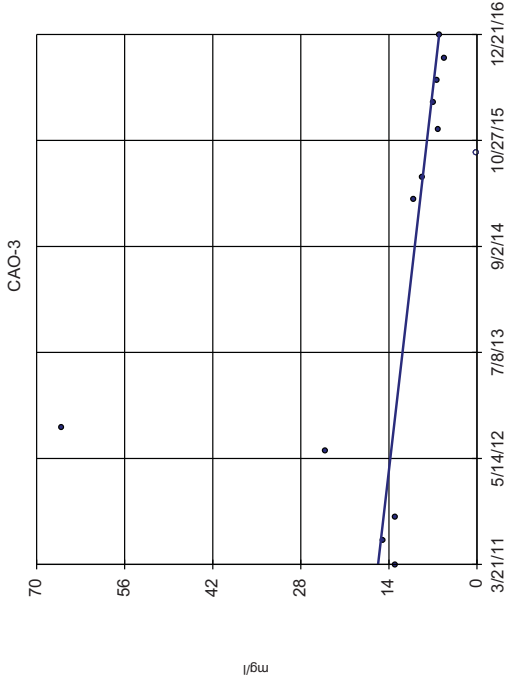


Constituent: Nickel Analysis Run 2/28/2017 10:04 AM

NABORS Client: SCS Engineers Data: NABORS_DATABASE_SanitasMatrix

Sanitas™ v.9.5.30 Software licensed to SCS Engineers, UG
Hollow symbols indicate censored values.

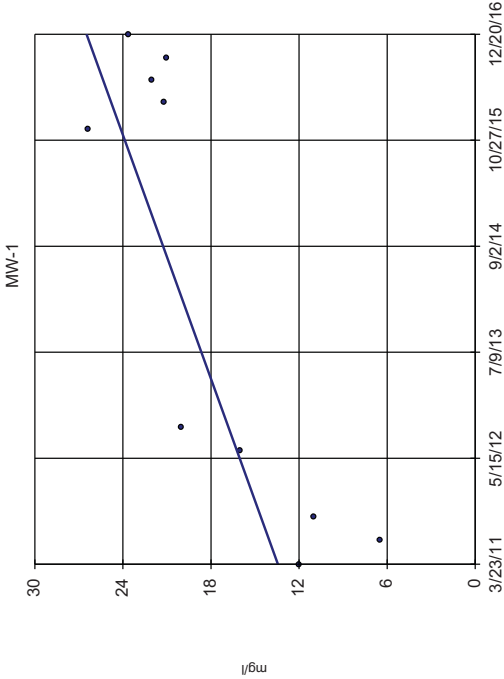
Sen's Slope Estimator



Constituent: Sulfate Analysis Run 2/28/2017 10:04 AM

NABORS Client: SCS Engineers Data: NABORS_DATABASE_SanitasMatrix

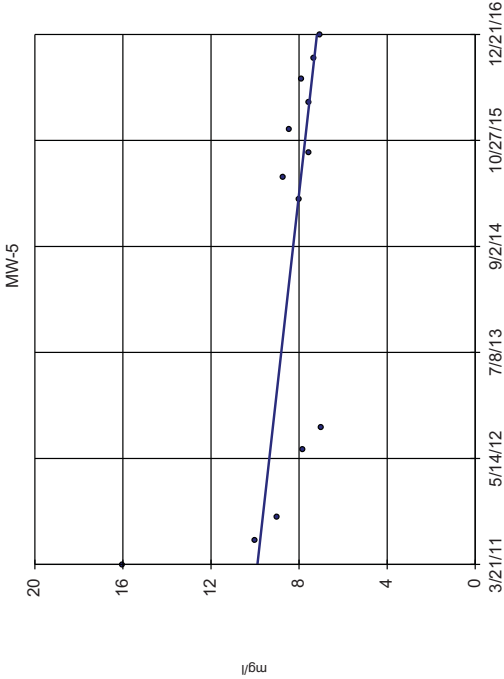
Sen's Slope Estimator



Constituent: Sulfate Analysis Run 2/28/2017 10:04 AM

NABORS Client: SCS Engineers Data: NABORS_DATABASE_SanitasMatrix

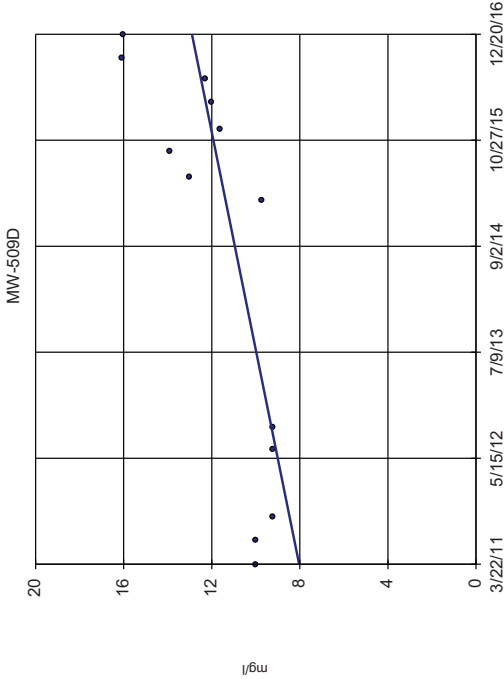
Sen's Slope Estimator



Constituent: Sulfate Analysis Run 2/28/2017 10:04 AM

NABORS Client: SCS Engineers Data: NABORS_DATABASE_SanitasMatrix

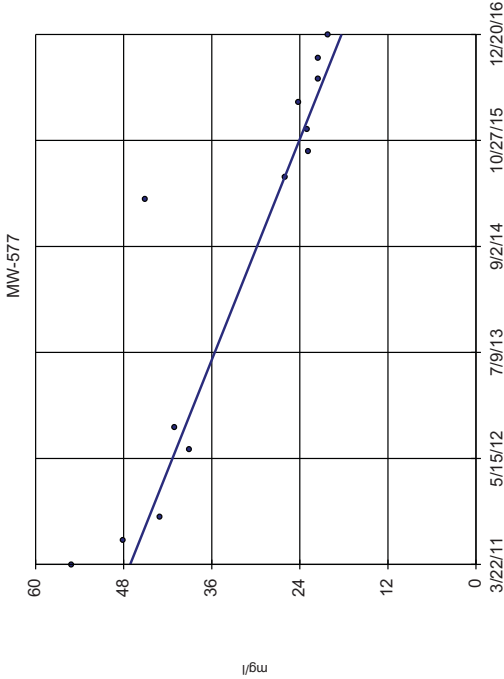
Sen's Slope Estimator



Constituent: Sulfate Analysis Run 2/28/2017 10:05 AM

NABORS Client: SCS Engineers Data: NABORS_DATABASE_SanitasMatrix

Sen's Slope Estimator

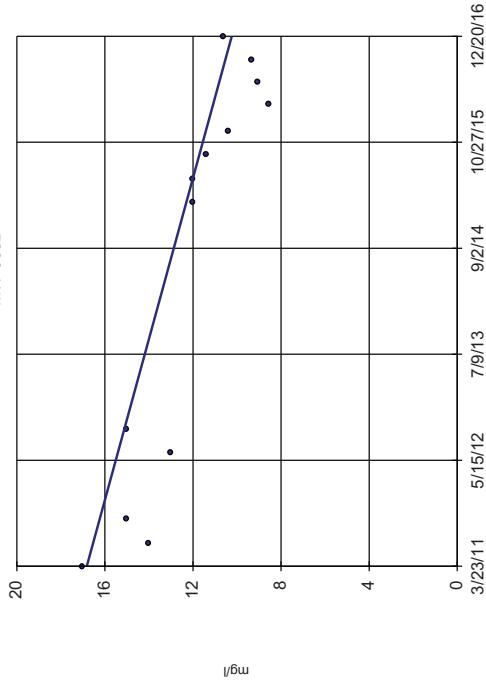


Constituent: Sulfate Analysis Run 2/28/2017 10:05 AM

NABORS Client: SCS Engineers Data: NABORS_DATABASE_SanitasMatrix

Sen's Slope Estimator

MW-633D

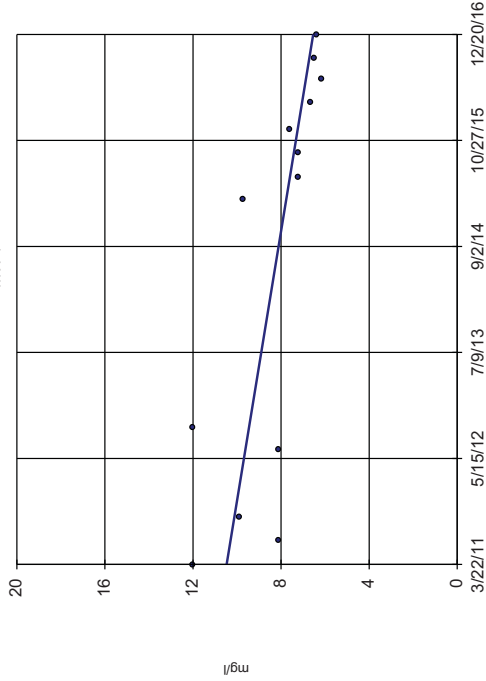


Constituent: Sulfate Analysis Run 2/28/2017 10:05 AM

NABORS Client: SCS Engineers Data: NABORS_DATABASE_SanitasMatrix

Sen's Slope Estimator

MW-7

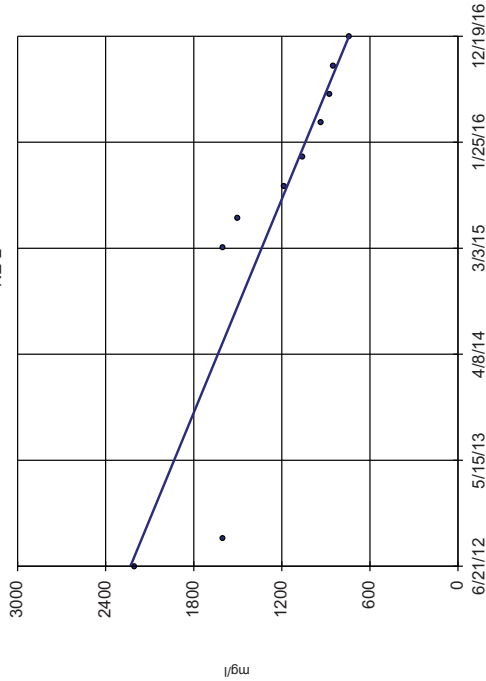


Constituent: Sulfate Analysis Run 2/28/2017 10:05 AM

NABORS Client: SCS Engineers Data: NABORS_DATABASE_SanitasMatrix

Sen's Slope Estimator

NE-2

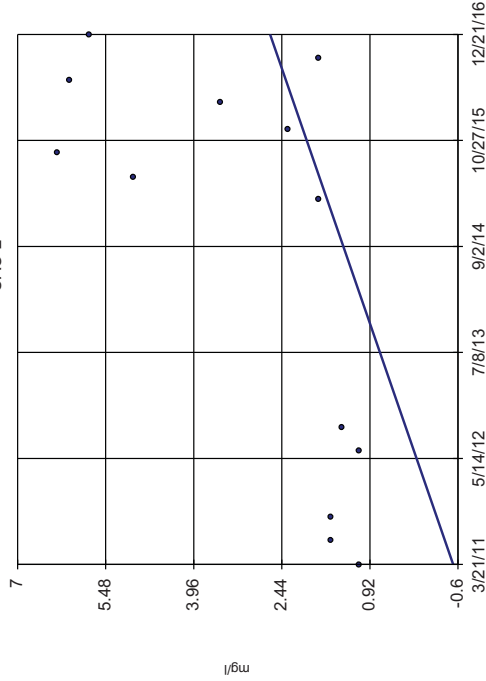


Constituent: Sulfate Analysis Run 2/28/2017 10:05 AM

NABORS Client: SCS Engineers Data: NABORS_DATABASE_SanitasMatrix

Sen's Slope Estimator

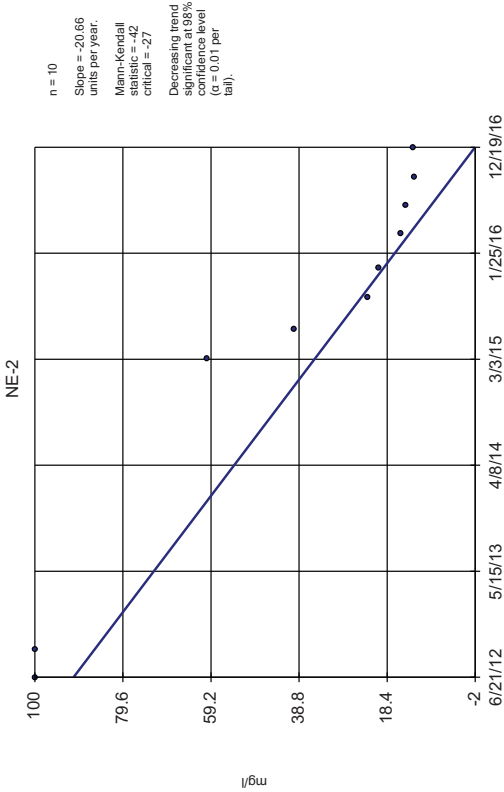
CAO-2



Constituent: TOC [Total Organic Carbon] Analysis Run 2/28/2017 10:05 AM

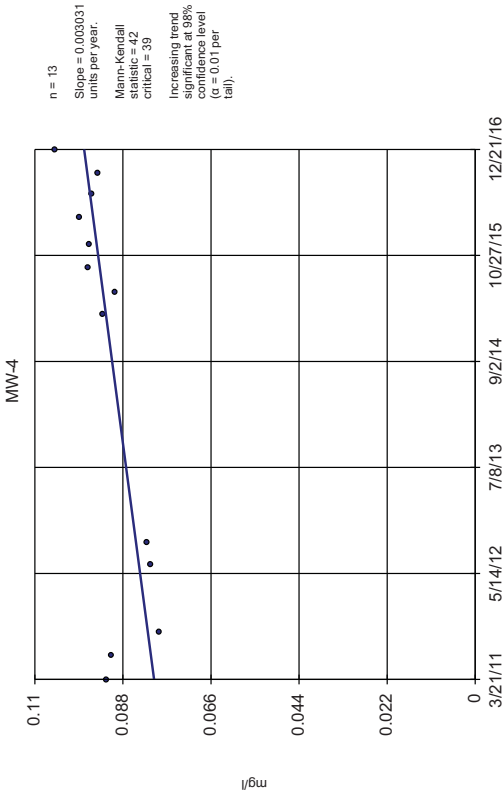
NABORS Client: SCS Engineers Data: NABORS_DATABASE_SanitasMatrix

Sen's Slope Estimator



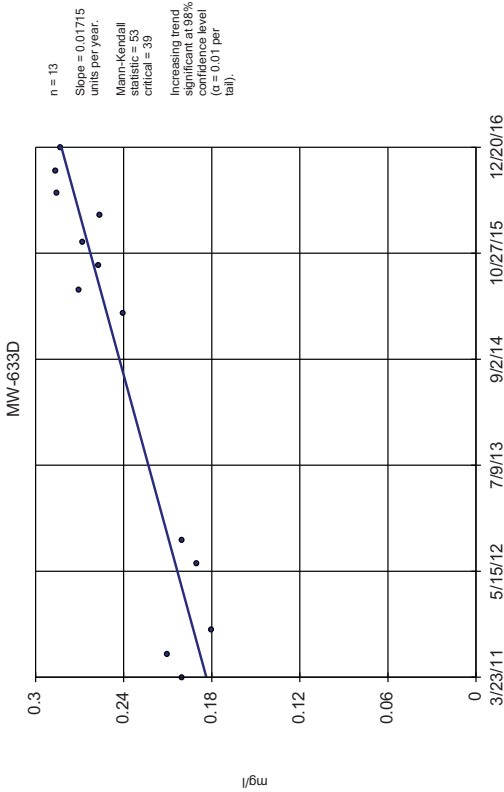
Constituent: TOC [Total Organic Carbon] Analysis Run 2/28/2017 10:05 AM
NABORS Client: SCS Engineers Data: NABORS_DATABASE_SanitasMatrix

Sen's Slope Estimator



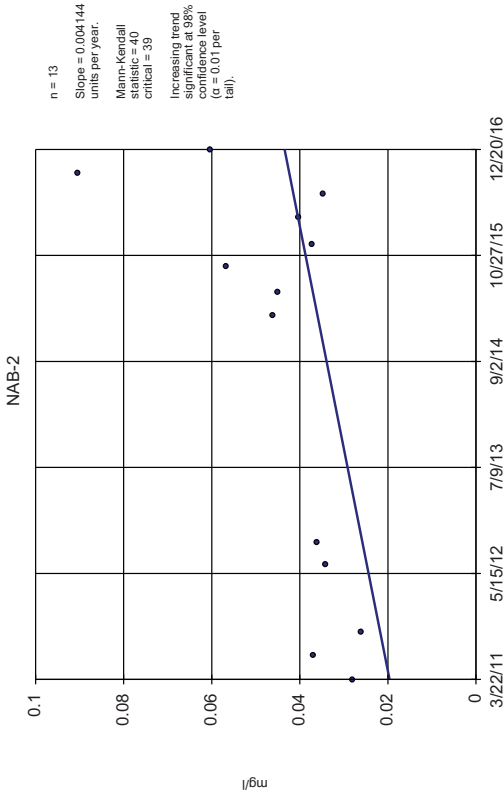
Constituent: Zinc Analysis Run 2/28/2017 10:05 AM
NABORS Client: SCS Engineers Data: NABORS_DATABASE_SanitasMatrix

Sen's Slope Estimator

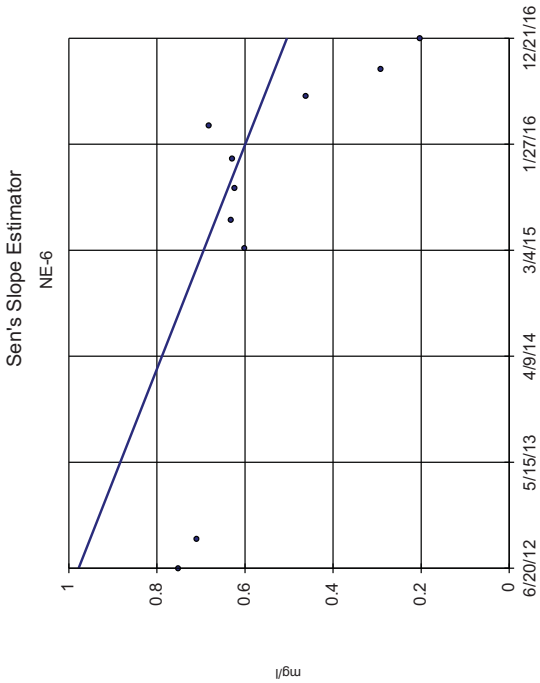


Constituent: Zinc Analysis Run 2/28/2017 10:05 AM
NABORS Client: SCS Engineers Data: NABORS_DATABASE_SanitasMatrix

Sen's Slope Estimator



Constituent: Zinc Analysis Run 2/28/2017 10:05 AM
NABORS Client: SCS Engineers Data: NABORS_DATABASE_SanitasMatrix



Constituent: Zinc Analysis Run 2/28/2017 10:05 AM
NABORS Client: SCS Engineers Data: NABORS_DATABASE_SanitasMatrix