



EA Engineering, Science, & Technology, Inc., PBC
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January 23, 2018

Mr. Jack Dickey
New Mexico Environment Department
Petroleum Storage Tank Bureau
121 Tijeras Avenue NE, Suite 1000
Albuquerque, New Mexico 87102

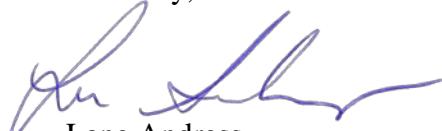
Dear Mr. Dickey:

EA Engineering, Science, and Technology, Inc., PBC (EA) is submitting the Annual Groundwater Monitoring Report for Atex #213 located at 3501 Isleta Boulevard, Albuquerque, New Mexico. The report summarizes the activities conducted to fulfill requirements stated in the New Mexico Administrative Code, Title 20, Chapter 5, Part 12 and the New Mexico Environment Department Petroleum Storage Tank Bureau Guidelines for Corrective Action.

The full scope of work was implemented, with exception of sampling well MW-1R. The total cost for the Semi-Annual Groundwater Monitoring and Report under deliverable ID 3942-1 is \$5,826.84, including NMGRT.

Please let me know if you have any questions regarding the information provided in this report

Sincerely,



Lane Andress
Project Manager

A handwritten signature in blue ink, appearing to read "Lane Andress", is written over a stylized, horizontal blue line. Below the signature, the name "Lane Andress" is printed in a black serif font, followed by "Project Manager" in a smaller black sans-serif font.

Enclosure
Cc: File



ANNUAL GROUNDWATER MONITORING REPORT

**ATEX #213
PSTB FACILITY # 31815
3501 ISLETA BOULEVARD,
ALBUQUERQUE, NEW MEXICO**

Prepared by:

EA Engineering, Science,
and Technology, Inc., PBC
320 Gold Avenue SW, Suite 1210
Albuquerque, New Mexico 87102

January 2018

STATEMENT OF FAMILIARITY

I, the undersigned, am personally familiar with the information submitted in this report and the attached documents and attest that it is true and complete.

Signature:



Name: Lane Andress
Affiliation: EA Engineering, Science, and Technology, Inc., PBC
Title: Project Manager
Date: January 23, 2018

I. INTRODUCTION

EA Engineering, Science and Technology, Inc., PBC (EA) has completed the annual groundwater monitoring and public and private well search event at Atex #213 located at 3501 Isleta Boulevard, Albuquerque, New Mexico. The monitoring event was conducted in accordance with the *Work Plan for Annual Groundwater Monitoring Including Private and Public Well Search* prepared by EA to satisfy the requirements stated in the New Mexico Administrative Code, Title 20, Chapter 5, Part 12 and the New Mexico Environment Department (NMED) Petroleum Storage Tank Bureau (PSTB) Guidelines for Corrective Action (GCA). The work plan was approved by the NMED PSTB on November 28, 2017. All work was completed under work plan identification number (WPID #) 3942 and Deliverable ID 3942-1.

The Site is located at the intersection of Del Sur Drive and Isleta Boulevard in the South Valley area of Albuquerque, New Mexico. The main parcel of the site is currently a vacant lot. The site contains fast food restaurants to the north and east, and there is an electric substation to the south of the main parcel. A Middle Rio Grande Conservancy District (MRGCD) irrigation ditch is located south of the electric substation, and to the south of the irrigation ditch is another fast food restaurant (Figure 1).

On December 20, 2017, EA measured fluid levels and collected groundwater samples from twelve (12) monitoring wells: MW-2, MW-3, MW-4R, MW-38, BB-2, NMW-1, NMW-4R, MW-6RR, W-35, W-36, RNMW-2, and RNMW-3. MW-1R was gauged, but not sampled due to insufficient water in the well. The groundwater samples were analyzed for volatile organic compounds (VOCs), including benzene, toluene, ethylbenzene, and xylenes (BTEX), methyl tertiary butyl ether (MTBE), 1,2 dibromoethane (EDB), 1,2 dichloroethane (EDC), and total naphthalenes by Environmental Protection Agency (EPA) Method 8260B. In addition, specific conductance, dissolved oxygen (DO), oxidation-reduction potential (ORP), pH, and temperature were monitored in the field.

This report summarizes the results of the monitoring event.

II. ACTIVITIES PERFORMED DURING THIS PERIOD

This section provides a brief description of monitoring activities performed during this monitoring period.

A. Brief Description of Remediation System and Date Installed

Billings & Associates installed a pump and treat remediation system at the Site in 1988. The system consisted of four recovery wells located along the southern property boundary, an air stripper and eight injection wells southwest of the site. The system was ineffective and had biofouling problems and was shut down in late 1989. A summary of corrective action activities conducted at the Site follows:

- Site sampled December 2006 by Souder, Miller & Associates
- The Work Plan for the first two semi-annual groundwater monitoring events was approved by NMED on December 16, 2011.
- EA completed its 1st semi-annual sampling event in February 2012; EA continued to monitor the site on a semi-annual basis from this time through October 2013.
- EA performed additional monitoring well installation, well plugging and abandonment, and groundwater sampling in April and May 2014.
- EA submitted a work plan for semi-annual groundwater monitoring in August 2014; it was approved by NMED-PSTB in October 2014.
- On November 17, 2014 it was noted that monitoring wells MW-1R, NMW-1, and RNMW-2 were damaged, and well MW-6R could not be located
- December 2014 damaged wells were repaired and MW-6R was replaced with a new monitoring well; MW-6RR.
- EA performed annual groundwater monitoring and a private and public well search in January 2017
- Currently, EA is conducting groundwater monitoring at the site.

B. Description of Activities Performed to Keep System Operating Properly

The system is no longer operational; it was shut down in late 1989. No equipment from the system remains on site.

C. Monitoring Activities Performed

Groundwater Sampling Activities

On December 20, 2017, fluid levels in 13 monitoring wells (MW-1R, MW-2, MW-3, MW-4R, MW-38, BB-2, NMW-1, NMW-4R, MW-6RR, W-35, W-36, RNMW-2, and RNMW-3) were gauged with an electronic water level meter to the nearest 100th of a foot. No non-aqueous phase liquid was present in any monitoring wells during this event. Table 1 provides a summary of the groundwater gauging data collected from the monitoring network. A groundwater potentiometric surface map (Figure 2) was constructed based on the collected data. A hydrograph for select monitoring wells is provided in Appendix A.

Monitoring wells were sampled with disposable bailers on December 20, 2017. All equipment was decontaminated between wells with an Alconox™ solution to ensure sample quality. Purge water was ground discharged in accordance with Section 1.7.2 of the GCA. Sampling was accomplished by carefully pouring groundwater from the bailer into the sample containers.

Field parameters were measured with a Hanna HI 98194 multi-parameter meter during purging and prior to sampling. Specific conductance, pH, DO, ORP and temperature were monitored and recorded on monitoring well sampling field forms. The meter was calibrated and/or checked against a standard in accordance with manufacturer's specifications prior to use. Field forms are provided in Appendix B.

Sample containers, preservatives, analytical methods, and holding times are specified in Table 2. Samples for VOC analysis were collected such that no headspace existed in the sample vial. All samples were preserved in accordance with method requirements, then immediately cooled to less than 6°C with ice and delivered under chain-of-custody to Hall Environmental Analysis Laboratory in Albuquerque, New Mexico. The analytical laboratory reports are provided in Appendix C.

Groundwater Sampling Results

During this sampling event, dissolved phase hydrocarbon concentrations were above New Mexico Water Quality Control Commission (NMWQCC) groundwater quality standards in 4 (MW-3, NMW-1, W-35 and W-36) of the 12 wells sampled. Well NMW-1 contained a benzene concentration of 79 micrograms per liter ($\mu\text{g}/\text{L}$), and is the only well with benzene concentrations over NMWQCC standards. Monitoring wells MW-3, W-35, and W-36 contained total naphthalenes above NMWQCC standards at concentrations of 190 $\mu\text{g}/\text{L}$, 127.9 $\mu\text{g}/\text{L}$ and 70.1 $\mu\text{g}/\text{L}$ respectively. The NMWQCC groundwater quality standards for benzene and total naphthalenes are 10 $\mu\text{g}/\text{L}$ and 30 $\mu\text{g}/\text{L}$, respectively. Laboratory results are summarized in Table 3, and analytical laboratory reports are provided in Appendix C.

D. System Performance and Effectiveness

The system is no longer operational; it was shut down in late 1989. No equipment from the system remains on site.

E. Statement Verifying Containment of Release

The dissolved phase benzene plume is adequately defined. The dissolved phase total naphthalenes plume has migrated off-site and is not defined down and cross-gradient to the southwest.

III. SUMMARY AND CONCLUSIONS

This section summarizes the results, contains a brief discussion of site trends, and provides recommendations for future site activities.

A. Discussion of any Trends or Changes Noted in Analytical Results or Site Conditions

The results of groundwater gauging indicate that groundwater rose by approximately 0.13 feet relative to the previous groundwater gauging conducted in January 2017. Hydrographs are included in Appendix A. The overall direction of groundwater flow is to the south-southeast with a gradient of 0.0015 ft/ft. (Figure 2).

Both benzene and total naphthalene concentrations are present above NMWQCC standards at the site. Total naphthalenes concentrations in well MW-3 increased from 166 µg/L in January 2017 to 190 µg/L during this event. Total naphthalenes concentrations in well W-35 decreased from 525 µg/L in January 2017 to 127.9 µg/L during this event. Total naphthalenes concentrations in well W-36 increased from 18 µg/L in January 2017 to 70.1 µg/L, rising above the NMWQCC standard. Total naphthalenes concentrations decreased in NMW-1 from 59 µg/L in January 2017 to 23.3 µg/L, falling below the NMWQCC standard of 30 µg/L.

Benzene concentrations decreased in NMW-1 from 220 µg/L to 79 µg/L; however, it remains above the NMWQCC standard of 10 µg/L. All other monitoring wells remained below the NMWQCC standard for benzene. The December 20, 2017 distribution of dissolved phase organic contaminants is shown on Figure 3. Contaminant concentration trend graphs for selected analyses and wells are included in Appendix A.

Field parameters including pH, DO, ORP, specific conductance, and temperature were measured during sampling. The field parameters are summarized in Table 4.

Monitoring well MW-1R was dry with a total depth of 9.24 feet below ground surface and unable to be sampled during this event. This well was installed in April 2014 with a total depth of 19.00 feet below ground surface. It is likely that small roots from the nearby tree are obstructing access to the groundwater in the well.

B. Ongoing Assessment of Remediation System

The system was ineffective and had biofouling problems and was shut down in late 1989. The system is no longer operational. No equipment from the system remains on site.

C. Recommendations

Based on the results of annual groundwater monitoring at the site, EA recommends the following:

- EA recommends continued annual groundwater monitoring at the site.
- Breaking up and removing roots from MW-1R
- Collect tap samples from the two domestic wells located close to the site.

TABLES

TABLE 1. SUMMARY OF FLUID GAUGING DATA
ATEX # 213, ALBUQUERQUE, NEW MEXICO

Monitor Well	Date Measured	Casing Elevation ²	Depth to Water ³	Groundwater Elevation ²
MW-1	29-Apr-14	4929.78	Well Plugged and Abandoned	
	1-Oct-13		Dry	NM
	25-Mar-13		Dry	NM
	22-Aug-12		Dry	NM
	21-Feb-12		Dry	NM
	26-Dec-06		Dry	NM
	25-Sep-06		Dry	NM
	17-May-06		Dry	NM
	31-Jan-06		Dry	NM
	3-Nov-05		Dry	NM
	28-Jul-05		Dry	NM
	22-Apr-04		9.25	4920.53
MW-1R	20-Dec-17	4932.08	8.87	4923.21
	17-Jan-17		8.98	4923.10
	19-May-15		8.86	4923.22
	17-Nov-14		***	-
	2-May-14		4932.03	9.06
MW-2	20-Dec-17	4934.72	11.61	4923.11
	17-Jan-17		11.73	4922.99
	19-May-15		11.59	4923.13
	17-Nov-14		11.96	4922.76
	2-May-14		11.74	4922.98
	1-Oct-13		11.64	4923.08
	25-Mar-13		11.96	4922.76
	22-Aug-12		11.68	4923.04
	21-Feb-12		12.13	4922.59
	26-Dec-06		11.94	4922.78
	25-Sep-06		11.82	4922.90
	17-May-06		11.72	4923.00
	31-Jan-06		12.27	4922.45
	3-Nov-05		11.45	4923.27
	28-Jul-05		11.39	4923.33
	22-Apr-04		11.43	4923.29
MW-3	20-Dec-17	4932.98	9.87	4923.11
	17-Jan-17		9.98	4923.00
	19-May-15		9.82	4923.16
	17-Nov-14		10.19	4922.79
	2-May-14		10.00	4922.98
	1-Oct-13		9.80	4923.18
	25-Mar-13		10.25	4922.73
	22-Aug-12		9.92	4923.06
	21-Feb-12		10.42	4922.56
	26-Dec-06		10.27	4922.71
	25-Sep-06		10.05	4922.93
	17-May-06		10.02	4922.96
	31-Jan-06		10.57	4922.41
	3-Nov-05		9.78	4923.20
	28-Jul-05		9.65	4923.33
	22-Apr-04		9.71	4923.27

TABLE 1. SUMMARY OF FLUID GAUGING DATA
ATEX # 213, ALBUQUERQUE, NEW MEXICO

Monitor Well	Date Measured	Casing Elevation ²	Depth to Water ³	Groundwater Elevation ²
MW-4	29-Apr-14	4932.55	Plugged and Abandoned	
	1-Oct-13		Well Destroyed	
	25-Mar-13		12.64	4919.91
	22-Aug-12		12.32	4920.23
	21-Feb-12		12.81	4919.74
	26-Dec-06		12.64	4919.91
	25-Sep-06		12.42	4920.13
	17-May-06		12.35	4920.20
	31-Jan-06		12.94	4919.61
	3-Nov-05		12.19	4920.36
	28-Jul-05		12.03	4920.52
	22-Apr-04		12.07	4920.48
MW-4R	20-Dec-17	4933.42	10.39	4923.03
	17-Jan-17		10.57	4922.85
	19-May-15		10.36	4923.06
	17-Nov-14		10.74	4922.68
	2-May-14		10.56	4922.86
MW-5	1-May-14	4931.85	Plugged and Abandoned	
	1-Oct-13		Dry	NM
	25-Mar-13		Dry	NM
	22-Aug-12		Dry	NM
	21-Feb-12		Dry	NM
	26-Dec-06		11.54	4920.31
	25-Sep-06		11.15	4920.70
	17-May-06		11.12	4920.73
	31-Jan-06		11.83	4920.02
	3-Nov-05		11.00	4920.85
	28-Jul-05		10.78	4921.07
	22-Apr-04		11.44	4920.41
MW-6	29-Apr-14	4931.51	Plugged and Abandoned	
	1-Oct-13		13.18	4918.33
	25-Mar-13		13.14	4918.37
	22-Aug-12		13.00	4918.51
	21-Feb-12		11.58	4919.93
	26-Dec-06		11.89	4919.62
	25-Sep-06		11.37	4920.14
	17-May-06		11.31	4920.20
	31-Jan-06		11.92	4919.59
	3-Nov-05		11.22	4920.29
	28-Jul-05		11.03	4920.48
	22-Apr-04		11.04	4920.47
MW-6R	17-Nov-14	4934.26	Well Destroyed	
	2-May-14		11.36	4922.90

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Monitor Well	Date Measured	Casing Elevation ²	Depth to Water ³	Groundwater Elevation ²
MW-6RR	20-Dec-17	4933.90	10.78	4923.12
	17-Jan-17		10.90	4923.00
	19-May-15		10.73	4923.17
	22-Dec-14		‡	‡
MW-10	26-Dec-06	4930.98	Plugged	
	25-Sep-06		Plugged	
	17-May-06		Plugged	
	31-Jan-06		Plugged	
	3-Nov-05		Plugged	
	28-Jul-05		Plugged	
	22-Apr-04		Plugged	
MW-29	1-May-14	4930.19	Plugged and Abandoned	
	1-Oct-13		9.81	4920.38
	25-Mar-13		10.11	4920.08
	22-Aug-12		9.87	4920.32
	21-Feb-12		10.32	4919.87
	26-Dec-06		11.14	4919.05
	25-Sep-06		10.01	4920.18
	17-May-06		9.89	4920.30
	31-Jan-06		10.45	4919.74
	3-Nov-05		9.66	4920.53
	28-Jul-05		9.56	4920.63
	22-Apr-04		9.60	4920.59
MW-38	20-Dec-17	4931.87	8.83	4923.04
	17-Jan-17		8.96	4922.91
	19-May-15		8.78	4923.09
	17-Nov-14		9.18	4922.69
	2-May-14		8.96	4922.91
	1-Oct-13	4929.10	8.85	4923.02
	25-Mar-13		9.15	4922.72
	22-Aug-12		8.88	4922.99
	21-Feb-12		9.38	4922.49
	26-Dec-06		9.19	4922.68
	25-Sep-06		8.97	4922.90
	17-May-06		8.90	4922.97
	31-Jan-06		9.49	4922.38
	3-Nov-05		8.70	4923.17
	28-Jul-05		8.56	4923.31
	22-Apr-04		8.62	4923.25

TABLE 1. SUMMARY OF FLUID GAUGING DATA
ATEX # 213, ALBUQUERQUE, NEW MEXICO

Monitor Well	Date Measured	Casing Elevation ²	Depth to Water ³	Groundwater Elevation ²
BB-2	20-Dec-17	4934.64	11.69	4922.95
	17-Jan-17		11.82	4922.82
	19-May-15		11.56	4923.08
	17-Nov-14		12.06	4922.58
	2-May-14		11.81	4922.83
	1-Oct-13		11.70	4922.94
	25-Mar-13		12.05	4922.59
	22-Aug-12		11.69	4922.95
	21-Feb-12		12.24	4922.40
	26-Dec-06		12.04	4922.60
	25-Sep-06		11.72	4922.92
	17-May-06		11.66	4922.98
	31-Jan-06		12.36	4922.28
	3-Nov-05		11.56	4923.08
	28-Jul-05		11.34	4923.30
	22-Apr-04		10.88	4923.76
NMW-1	20-Dec-17	4932.63	9.39	4923.24
	17-Jan-17		9.57	4923.06
	19-May-15		9.38	4923.25
	17-Nov-14		9.72	NA
	2-May-14		9.55	4923.07
	1-Oct-13		9.41	4920.40
	25-Mar-13		9.75	4920.06
	22-Aug-12		9.48	4920.33
	21-Feb-12		9.93	4919.88
	26-Dec-06		9.75	4920.06
	25-Sep-06		9.62	4920.19
	17-May-06		9.53	4920.28
	31-Jan-06		10.70	4919.11
	3-Nov-05		9.31	4920.50
	28-Jul-05		9.22	4920.59
	22-Apr-04		9.24	4920.57
NMW-2*	28-Jul-05	4930.38	Destroyed	NM
	22-Apr-04		10.03	4920.35
NMW-3*	28-Jul-05	4930.56	Destroyed	NM
	22-Apr-04		10.28	4920.28
NMW-4	30-Apr-14	4929.02	Plugged and Abandoned	
	1-Oct-13		9.59	4919.43
	25-Mar-13		9.90	4919.12
	22-Aug-12		9.59	4919.43
	21-Feb-12		10.12	4918.90
	26-Dec-06		10.94	4918.08
	25-Sep-06		9.59	4919.43
	17-May-06		NM	NM
	31-Jan-06		NM	NM
	3-Nov-05		NM	NM
	28-Jul-05		NM	NM
	22-Apr-04		10.33	4918.69

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ATEX # 213, ALBUQUERQUE, NEW MEXICO

Monitor Well	Date Measured	Casing Elevation ²	Depth to Water ³	Groundwater Elevation ²
NMW-4R	20-Dec-17	4932.53	9.75	4922.78
	17-Jan-17		9.88	4922.65
	19-May-15		9.68	4922.85
	17-Nov-14		10.12	4922.41
	2-May-14		9.91	4922.62
W-34	1-May-14	4928.70	Plugged and Abandoned Well Paved Over	
	1-Oct-13		8.61	4920.09
	25-Mar-13		8.33	4920.37
	22-Aug-12		8.77	4919.93
	21-Feb-12		8.61	4920.09
	26-Dec-06		8.51	4920.19
	25-Sep-06		8.40	4920.30
	17-May-06		8.92	4919.78
	31-Jan-06		8.11	4920.59
	3-Nov-05		8.09	4920.61
	28-Jul-05		7.92	4920.78
	22-Apr-04			
W-35	20-Dec-17	4931.50	8.47	4923.03
	17-Jan-17		8.56	4922.94
	19-May-15		8.44	4923.06
	17-Nov-14		8.78	4922.72
	2-May-14		8.65	4922.85
	1-Oct-13	4928.93	Well Paved Over	
	25-Mar-13		8.85	4922.65
	22-Aug-12		8.55	4922.95
	21-Feb-12		8.99	4922.51
	26-Dec-06		8.83	4922.67
	25-Sep-06		8.74	4922.76
	17-May-06		8.64	4922.86
	31-Jan-06		9.14	4922.36
	3-Nov-05		8.31	4923.19
	28-Jul-05		8.29	4923.21
	22-Apr-04		8.14	4923.36
W-36	20-Dec-17	4932.00	8.63	4923.37
	17-Jan-17		8.76	4923.24
	19-May-15		8.62	4923.38
	17-Nov-14		8.97	4923.03
	2-May-14		8.80	4923.20
	1-Oct-13	4929.11	Well Paved Over	
	25-Mar-13		9.01	4922.99
	22-Aug-12		8.72	4923.28
	21-Feb-12		9.15	4922.85
	26-Dec-06		8.97	4923.03
	25-Sep-06		8.92	4923.08
	17-May-06		8.79	4923.21
	31-Jan-06		9.30	4922.70
	3-Nov-05		8.50	4923.50
	28-Jul-05		8.48	4923.52
	22-Apr-04		8.31	4923.69

TABLE 1. SUMMARY OF FLUID GAUGING DATA
ATEX # 213, ALBUQUERQUE, NEW MEXICO

Monitor Well	Date Measured	Casing Elevation ²	Depth to Water ³	Groundwater Elevation ²
W-37	1-May-14	4930.10	Plugged and Abandoned	
	1-Oct-13		Well Paved Over	
	25-Mar-13		9.97	4920.13
	22-Aug-12		9.67	4920.43
	21-Feb-12		10.09	4920.01
	26-Dec-06		8.78	4921.32
	25-Sep-06		9.90	4920.20
	17-May-06		9.74	4920.36
	31-Jan-06		10.22	4919.88
	3-Nov-05		9.49	4920.61
	28-Jul-05		9.43	4920.67
	22-Apr-04		9.26	4920.84
RNMW-2**	20-Dec-17	4933.45	10.31	4923.14
	17-Jan-17		10.44	4923.01
	19-May-15		10.27	4923.18
	17-Nov-14		10.87	NA
	2-May-14		10.70	4923.04
	1-Oct-13		10.57	4920.31
	25-Mar-13		10.90	4919.98
	22-Aug-12		10.61	4920.27
	21-Feb-12		11.09	4919.79
	26-Dec-06		10.92	4919.96
	25-Sep-06		10.72	4920.16
	17-May-06		10.64	4920.24
	31-Jan-06		11.23	4919.65
	3-Nov-05		10.44	4920.44
	28-Jul-05		10.33	4920.55
RNMW-3**	20-Dec-17	4933.22	10.09	4923.13
	17-Jan-17		10.22	4923.00
	19-May-15		10.06	4923.16
	17-Nov-14		10.45	4922.77
	2-May-14		10.23	4922.99
	1-Oct-13	4930.42	10.12	4923.10
	25-Mar-13		10.45	4922.77
	22-Aug-12		10.17	4923.05
	21-Feb-12		10.65	4922.57
	26-Dec-06		10.49	4922.73
	25-Sep-06		10.27	4922.95
	17-May-06		10.20	4923.02
	31-Jan-06		10.80	4922.42
	3-Nov-05		9.99	4923.23
	28-Jul-05		9.89	4923.33

NOTES:

The top of casing elevation for wells MW-2 and MW-3 were adjusted by -0.17 and -0.89, respectively from the survey point top of well steel plate on pipe.

¹ Horizontal control to NM State Plane Coordinates Central NAD83 Grid Coordinates (in feet)

² Vertical Control to NAVD88 Datum in feet above mean sea level

³ Measured in feet below the top of casing at survey point on north side of well

* = Well Destroyed during source area excavation.

** = Replacement well installed 4/27/05.

*** = Surface completion/casing damaged at time of measurement

†=Waiting for survey data

NM = not measured.

**TABLE 2. SAMPLE ANALYTICAL REQUIREMENTS
ATEX #213, ALBUQUERQUE, NEW MEXICO**

Target Analytes	Matrix	Analytical Method	Sample Container	Preservative	Holding Time
VOCs	Water	EPA 8260B	3 x 40- mL glass vials	Mercuric Chloride; Cool to < 6°C	14 days
NOTE:					
VOCs = Volatile Organic Compounds with naphthalenes					

TABLE 3. SUMMARY OF GROUNDWATER SAMPLE RESULTS
VOLATILE ORGANIC COMPOUNDS
ATEX # 213, ALBUQUERQUE, NEW MEXICO

Well Number	Date Sampled	Benzene	Toluene	Ethyl Benzene	Total Xylenes	MTBE	Total Naphthalenes		
MW-1	29-Apr-14			Plugged and Abandoned					
	1-Oct-13	Dry	Dry	Dry	Dry	Dry	Dry		
	22-Aug-12	Dry	Dry	Dry	Dry	Dry	Dry		
	21-Feb-12	Dry	Dry	Dry	Dry	Dry	Dry		
	26-Dec-06	Dry	Dry	Dry	Dry	Dry	Dry		
	25-Sep-06	Dry	Dry	Dry	Dry	Dry	Dry		
	17-May-06	Dry	Dry	Dry	Dry	Dry	Dry		
	31-Jan-06	Dry	Dry	Dry	Dry	Dry	Dry		
	3-Nov-05	Dry	Dry	Dry	Dry	Dry	Dry		
	28-Jul-05	Dry	Dry	Dry	Dry	Dry	Dry		
	22-Apr-04	<1.0	<1.0	4.8	<1.0	<1.0	4.3		
	Jan-98	ND	110	320	370	2,200	NA		
MW-1R	20-Dec-17	Dry	Dry	Dry	Dry	Dry	Dry		
	17-Jan-17	<2.0	<2.0	<2.0	<3.0	<2.0	<8.0		
	19-May-15	<1.0	<1.0	21	<1.5	<1.0	13		
	17-Nov-14	<1.0	1.6	50	4.6	<1.0	59.9		
	1-May-14	<10	<10	440	260	<10	534		
MW-2	20-Dec-17	<1.0	<1.0	<1.0	<1.5	<1.0	<4.0		
	17-Jan-17	<1.0	<1.0	<1.0	<1.5	<1.0	<4.0		
	19-May-15	<1.0	<1.0	<1.0	<1.5	<1.0	<4.0		
	17-Nov-14	<1.0	<1.0	<1.0	<1.5	<1.0	<4.0		
	1-May-14	<1.0	<1.0	<1.0	<1.5	<1.0	<4.0		
	1-Oct-13	<1.0	<1.0	<1.0	<1.5	<1.0	<4.0		
	25-Mar-13	<1.0	<1.0	<1.0	<1.5	<1.0	<4.0		
	22-Aug-12	<1.0	<1.0	<1.0	<1.5	3.0	<4.0		
	21-Feb-12	<1.0	<1.0	<1.0	<1.5	<1.0	<4.0		
	26-Dec-06	NS	NS	NS	NS	NS	NS		
	25-Sep-06	<1.0	<1.0	<1.0	<3.0	2.5	<10.0		
	17-May-06	<1.0	<1.0	<1.0	<3.0	1.9	<10.0		
	31-Jan-06	<1.0	<1.0	<1.0	<1.0	<1.0	<10.0		
	3-Nov-05	NS	NS	NS	NS	NS	NS		
	28-Jul-05	<1.0	<1.0	<1.0	<1.0	3.6	<10.0		
	22-Apr-04	<1.0	<1.0	<1.0	<1.0	<1.0	<10.0		
	Jan-98	1.9	ND	0.7	0.7	10	NA		
MW-3	20-Dec-17	2.4	1.4	17	7.1	<1.0	190		
	17-Jan-17	1.7	1.6	16	7.2	<1.0	166		
	19-May-15	2.3	1.4	12	8.4	<1.0	127		
	17-Nov-14	3.5	<2.0	17	8.6	<2.0	119		
	1-May-14	<1.0	<1.0	3.6	2.4	<1.0	24.6		
	26-Mar-13	3.7	1.8	18	22	<1.0	108		
	23-Aug-12	6.4	<5.0	19	28	<5.0	60		
	21-Feb-12	7.4	<5.0	37	55	<5.0	142		
	26-Dec-06	160	58	220	460	530	610		
	25-Sep-06	62	11	37	100	230	180		
	17-May-06	46	6.5	29	55	230	142		
	31-Jan-06	60	<20	83	110	500	170		
	3-Nov-05	180	9.7	58	47	920	438		
	28-Jul-05	52	<10	14	<10	410	90		
	22-Apr-04	100	<10	25	11	320	98		
	Jan-98	2,400	110	320	370	2,200	NA		

TABLE 3. SUMMARY OF GROUNDWATER SAMPLE RESULTS
VOLATILE ORGANIC COMPOUNDS
ATEX # 213, ALBUQUERQUE, NEW MEXICO

Well Number	Date Sampled	Benzene	Toluene	Ethyl Benzene	Total Xylenes	MTBE	Total Naphthalenes
MW-4	29-Apr-14	Plugged and Abandoned					
	1-Oct-13	Well Destroyed					
	25-Mar-13	<1.0	<1.0	<1.0	<1.5	62	<4.0
	23-Aug-12	<1.0	<1.0	<1.0	<1.5	46	<4.0
	22-Feb-12	<1.0	<1.0	<1.0	<1.5	18	<4.0
	26-Dec-06	93	<10	<10	<30	790	<100
	25-Sep-06	<1.0	<1.0	<1.0	<3.0	580	<10.0
	17-May-06	<1.0	<1.0	<1.0	<3.0	180	<10.0
	31-Jan-06	<1.0	<1.0	<1.0	<1.0	220	<10.0
	3-Nov-05	<5.0	<5.0	<5.0	<5.0	500	<50
MW-4R	28-Jul-05	<1.0	<1.0	<1.0	<1.0	720	<10.0
	22-Apr-04	590	<10	<10	<10	1400	<100
	20-Dec-17	<1.0	<1.0	<1.0	<1.5	<1.0	<4.0
	17-Jan-17	<1.0	<1.0	<1.0	<1.5	7.0	<4.0
	19-May-15	<1.0	<1.0	<1.0	<1.5	3.5	<4.0
MW-5	17-Nov-14	<1.0	<1.0	<1.0	<1.5	8.0	<4.0
	1-May-14	Plugged and Abandoned					
	1-Oct-13	Dry	Dry	Dry	Dry	Dry	Dry
	25-Mar-13	Dry	Dry	Dry	Dry	Dry	Dry
	22-Aug-12	Dry	Dry	Dry	Dry	Dry	Dry
	21-Feb-12	Dry	Dry	Dry	Dry	Dry	Dry
	26-Dec-06	<1.0	<1.0	<1.0	<3.0	25	<10.0
	25-Sep-06	<1.0	<1.0	<1.0	<3.0	<1.5	<10.0
	17-May-06	<1.0	<1.0	<1.0	<3.0	<1.5	<10.0
	31-Jan-06	<1.0	<1.0	<1.0	<1.0	190	<10.0
	3-Nov-05	<1.0	<1.0	<1.0	<1.0	<1.0	<10.0
	29-Jul-05	<1.0	<1.0	<1.0	<1.0	<2.0	<10.0
	22-Apr-04	<1.0	<1.0	<1.0	<1.0	280	<10.0
MW-6	Jun-94	<0.5	<0.5	<0.5	<0.5	<2.5	NA
	29-Apr-14	Plugged and Abandoned					
	1-Oct-13	Dry	Dry	Dry	Dry	Dry	Dry
	25-Mar-13	<1.0	<1.0	<1.0	<1.5	1.1	<4.0
	22-Aug-12	<1.0	<1.0	<1.0	<1.5	1.8	<4.0
	22-Feb-12	<1.0	<1.0	<1.0	<1.5	<1.0	<4.0
	26-Dec-06	33	<10	16	<30	720	395
	25-Sep-06	84	<5.0	32	15	1,200	630
	17-May-06	20	<10	11	<30	490	160
	31-Jan-06	24	<10	20	13	730	253
	3-Nov-05	46	<5.0	28	16	570	380
	29-Jul-05	45	<20	<20	<20	800	210
MW-6R	23-Apr-04	50	<10	14	15	830	140
	17-Nov-14	Well Destroyed					
	1-May-14	1.6	<1.0	6.6	<1.5	6.2	55.5
MW-6RR	20-Dec-17	3.4	<1.0	<1.0	<1.5	1.5	7.2
	17-Jan-17	<1.0	<1.0	<1.0	<1.5	<1.0	4.3
	19-May-15	<1.0	<1.0	24	3.2	4.6	38.8
	22-Dec-14	<5.0	<5.0	130	27	13	262

**TABLE 3. SUMMARY OF GROUNDWATER SAMPLE RESULTS
VOLATILE ORGANIC COMPOUNDS
ATEX # 213, ALBUQUERQUE, NEW MEXICO**

Well Number	Date Sampled	Benzene	Toluene	Ethyl Benzene	Total Xylenes	MTBE	Total Naphthalenes	
MW-29	1-May-14			Plugged and Abandoned				
	1-Oct-13	<1.0	<1.0	<1.0	<1.5	<1.0	<4.0	
	25-Mar-13	<1.0	<1.0	<1.0	<1.5	<1.0	<4.0	
	23-Aug-12	<1.0	<1.0	<1.0	<1.5	<1.0	<4.0	
	21-Feb-12	<1.0	<1.0	<1.0	<1.5	<1.0	<4.0	
	26-Dec-06	NS	NS	NS	NS	NS	NS	
	25-Sep-06	<1.0	<1.0	<1.0	<1.0	7.5	<10.0	
	17-May-06	NS	NS	NS	NS	NS	NS	
	31-Jan-06	NS	NS	NS	NS	NS	NS	
	3-Nov-05	NS	NS	NS	NS	NS	NS	
	29-Jul-05	<1.0	<1.0	<1.0	<1.0	6.8	<10.0	
	22-Apr-04	<1.0	<1.0	<1.0	<1.0	14	<10.0	
	1-Jun-94	<0.5	<0.5	<0.5	<0.5	<2.5	NA	
MW-38	20-Dec-17	<1.0	<1.0	<1.0	<1.5	<1.0	<4.0	
	17-Jan-17	<1.0	<1.0	<1.0	<1.5	<1.0	<4.0	
	19-May-15	<1.0	<1.0	<1.0	<1.5	<1.0	<4.0	
	17-Nov-14	<1.0	<1.0	<1.0	<1.5	<1.0	<4.0	
	1-May-14	<1.0	<1.0	<1.0	<1.5	<1.0	<4.0	
	1-Oct-13	<1.0	<1.0	<1.0	<1.5	<1.0	<4.0	
	25-Mar-13	<1.0	<1.0	<1.0	<1.5	<1.0	<4.0	
	23-Aug-12	1.5	<1.0	<1.0	<1.5	1.2	15	
	21-Feb-12	<1.0	<1.0	<1.0	<1.5	<1.0	<4.0	
	26-Dec-06	13	<1.0	2.5	<3.0	<1.5	12	
	25-Sep-06	1.5	<1.0	<1.0	<3.0	<1.5	3.1	
	17-May-06	1.4	<1.0	<1.0	<3.0	<1.5	<10.0	
	31-Jan-06	2.5	<1.0	<1.0	<1.0	<1.0	2.5	
	3-Nov-05	<1.0	<1.0	<1.0	<1.0	<1.0	<10.0	
	29-Jul-05	1.4	<1.0	<1.0	<1.0	<1.0	<10.0	
	22-Apr-04	1.7	<1.0	<1.0	<1.0	<1.0	<10.0	
	Jan-98	46	1.2	8.1	7.6	9	NA	
BB-2	20-Dec-17	<1.0	<1.0	<1.0	<1.5	20	4.2	
	17-Jan-17	<1.0	<1.0	<1.0	<1.5	41	3.9	
	19-May-15	<1.0	<1.0	<1.0	<1.5	27	3.9	
	17-Nov-14	<1.0	<1.0	<1.0	<1.5	26	<4.0	
	1-May-14	<1.0	<1.0	<1.0	<1.5	17	<4.0	
	1-Oct-13	<1.0	<1.0	<1.0	<1.5	53	<4.0	
	25-Mar-13	<1.0	<1.0	<1.0	<1.5	150	<4.0	
	23-Aug-12	<1.0	<1.0	1.3	<1.5	94	17.0	
	21-Feb-12	<1.0	<1.0	<1.0	<1.5	290	<4.0	
	26-Dec-06	NS	NS	NS	NS	NS	NS	
	25-Sep-06	<1.0	<1.0	1.1	<1.0	<1.5	15.5	
	17-May-06	NS	NS	NS	NS	NS	NS	
	31-Jan-06	NS	NS	NS	NS	NS	NS	
	3-Nov-05	NS	NS	NS	NS	NS	NS	
	29-Jul-05	<1.0	<1.0	4.6	<1.0	<2.0	7.6	
	22-Apr-04	<1.0	<1.0	<1.0	<1.0	<1.0	<10.0	
	Jan-98	5.8	ND	50	21	1,200	NA	

**TABLE 3. SUMMARY OF GROUNDWATER SAMPLE RESULTS
VOLATILE ORGANIC COMPOUNDS
ATEX # 213, ALBUQUERQUE, NEW MEXICO**

Well Number	Date Sampled	Benzene	Toluene	Ethyl Benzene	Total Xylenes	MTBE	Total Naphthalenes
NMW-1	20-Dec-17	79	1.0	3.0	4.7	11	23.3
	17-Jan-17	220	<5.0	47	32	16	59
	19-May-15	430	11	100	140	62	140
	17-Nov-14	52	<5.0	5.3	19	9.3	<20
	2-May-14	190	1.6	5.9	6.3	35	25.4
	1-Oct-13	290	8.4	3.1	39	44	52.1
	26-Mar-13	510	17	22	71	130	126
	23-Aug-12	490	<10	23	70	94	48
	21-Feb-12	390	<10	33	38	110	92
	26-Dec-06	950	55	44	900	750	760
	25-Sep-06	410	<10	<10	86	420	140
	17-May-06	340	95	<20	1,700	320	840
	31-Jan-06	810	56	<50	1,100	570	220
	3-Nov-05	710	170	<50	640	480	190
	28-Jul-05	1,100	390	<50	3,600	840	920
	22-Apr-04	990	200	28	1,100	580	272
	Jan-98	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL
NMW-2/RNMW-2	20-Dec-17	<1.0	<1.0	<1.0	<1.5	18	<4.0
	17-Jan-17	<1.0	<1.0	<1.0	<1.5	23	<4.0
	19-May-15	12	<1.0	<1.0	<1.5	50	2.3
	17-Nov-14	<1.0	<1.0	<1.0	<1.5	62	<4.0
	2-May-14	12	<1.0	<1.0	<1.5	72	<4.0
	1-Oct-13	<1.0	<1.0	<1.0	<1.5	61	<4.0
	26-Mar-13	99	1.2	1.7	2.2	220	7.4
	22-Aug-12	54	<1.0	<1.0	<1.5	290	9.6
	21-Feb-12	<1.0	<1.0	<1.0	<1.5	83	<4.0
	26-Dec-06	47	<10	<10	<30	1,000	20
	25-Sep-06	20	<10	16	<30	1,300	<100
	17-May-06	310	<1.0	31	19	550	14
	31-Jan-06	11	<1.0	45	4.1	560	3.0
	3-Nov-05	74	1.1	160	52	590	27.4
	28-Jul-05	320	11	710	120	1300	39
	23-Apr-04	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL
NMW-3/RNMW-3	20-Dec-17	2.0	<1.0	<1.0	<1.5	61	10
	17-Jan-17	1.3	<1.0	<1.0	<1.5	64	10
	19-May-15	<1.0	<1.0	<1.0	<1.5	46	<4.0
	17-Nov-14	1.1	<1.0	<1.0	<1.5	63	<4.0
	2-May-14	<1.0	<1.0	<1.0	<1.5	31	<4.0
	1-Oct-13	1.2	<1.0	<1.0	<1.5	83	4.0
	26-Mar-13	4.6	<1.0	<1.0	<1.5	86	5.4
	23-Aug-12	1.2	<1.0	<1.0	<1.5	170	5.5
	21-Feb-12	1.8	<1.0	<1.0	<1.5	120	4.9
	26-Dec-06	6.4	<5.0	<5.0	<15	580	<50
	25-Sep-06	220	<5	64.0	<15	1,400	110
	17-May-06	16	<1.0	7.9	<3.0	370	<10.0
	31-Jan-06	11	<1.0	16	6.4	550	3.3
	3-Nov-05	130	7.7	89	170	1,400	32.4
	28-Jul-05	150	23	270	130	1,200	32.3
	23-Apr-04	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL
	Jan-98	NAPL	NAPL	NAPL	NAPL	NAPL	NAPL

TABLE 3. SUMMARY OF GROUNDWATER SAMPLE RESULTS
VOLATILE ORGANIC COMPOUNDS
ATEX # 213, ALBUQUERQUE, NEW MEXICO

Well Number	Date Sampled	Benzene	Toluene	Ethyl Benzene	Total Xylenes	MTBE	Total Naphthalenes
NMW-4	30-Apr-14	Plugged and Abandoned					
	1-Oct-13	<1.0	<1.0	<1.0	<1.5	<1.0	<4.0
	25-Mar-13	<1.0	<1.0	<1.0	<1.5	<1.0	<4.0
	23-Aug-12	<1.0	<1.0	<1.0	<1.5	<1.0	<4.0
	22-Feb-12	<1.0	<1.0	<1.0	<1.5	<1.0	<4.0
	26-Dec-06	<1.0	<1.0	<1.0	<3.0	<1.5	<10.0
	25-Sep-06	<1.0	<1.0	<1.0	<3.0	<1.5	<10.0
	17-May-06	<1.0	<1.0	<1.0	<3.0	9.7	<10.0
	31-Jan-06	<1.0	<1.0	<1.0	<1.0	<1.0	<10.0
	3-Nov-05	<1.0	<1.0	<1.0	<1.0	<1.0	<10.0
	29-Jul-05	<1.0	<1.0	<1.0	<1.0	<2.0	<10.0
	23-Apr-04	<1.0	<1.0	<1.0	<1.0	2.7	<10.0
	Jun-94	<0.5	<0.5	<0.5	<0.5	<2.5	NA
NMW-4R	20-Dec-17	<1.0	<1.0	<1.0	<1.5	<1.0	<4.0
	17-Jan-17	<1.0	<1.0	<1.0	<1.5	2.0	<4.0
	19-May-15	<1.0	<1.0	<1.0	<1.5	18	<4.0
	17-Nov-14	<1.0	<1.0	<1.0	<1.5	<1.0	<4.0
	1-May-14	8.0	2.6	<1.0	<1.5	11	<4.0
W-34	1-May-14	Plugged and Abandoned					
	1-Oct-13	Well Paved Over					
	25-Mar-13	<1.0	<1.0	<1.0	<1.5	<1.0	<4.0
	22-Aug-12	<1.0	<1.0	<1.0	<1.5	<1.0	<4.0
	21-Feb-12	<1.0	<1.0	<1.0	<1.5	<1.0	<4.0
	26-Dec-06	NS	NS	NS	NS	NS	NS
	25-Sep-06	<1.0	<1.0	<1.0	<3.0	<1.5	<10.0
	17-May-06	NS	NS	NS	NS	NS	NS
	31-Jan-06	NS	NS	NS	NS	NS	NS
	3-Nov-05	NS	NS	NS	NS	NS	NS
	28-Jul-05	<1.0	<1.0	3.7	1.3	<1.0	<10.0
	6-May-04	<1.0	<1.0	6.7	3.4	<1.0	<10.0
	Jan-98	1.2	ND	7.6	7.2	<2.5	NA
W-35	20-Dec-17	<2.0	<2.0	5.2	<3.0	<2.0	127.9
	17-Jan-17	<1.0	<1.0	16	<1.5	<1.0	525
	19-May-15	<1.0	<1.0	3.6	<1.5	<1.0	45
	17-Nov-14	<1.0	<1.0	15	<1.5	<1.0	98.9
	2-May-14	<1.0	<1.0	7.5	<1.5	<1.0	124
	1-Oct-13	Well Paved Over ¹					
	25-Mar-13	<1.0	<1.0	32	<1.5	<1.0	399
	22-Aug-12	<1.0	<1.0	6.9	<1.5	<1.0	55.3
	21-Feb-12	<1.0	<1.0	<1.0	<1.5	<1.0	<4.0
	26-Dec-06	NS	NS	NS	NS	NS	NS
	25-Sep-06	<1.0	<1.0	12	<3.0	<1.5	188
	17-May-06	NS	NS	NS	NS	NS	NS
	31-Jan-06	NS	NS	NS	NS	NS	NS
	3-Nov-05	NS	NS	NS	NS	NS	NS
	28-Jul-05	<5.0	<5.0	250	42	<5.0	400
	6-May-04	<1.0	<1.0	110	96	<1.0	164
	Jan-98	ND	190	1700	5,600	ND	NA

**TABLE 3. SUMMARY OF GROUNDWATER SAMPLE RESULTS
VOLATILE ORGANIC COMPOUNDS
ATEX # 213, ALBUQUERQUE, NEW MEXICO**

Well Number	Date Sampled	Benzene	Toluene	Ethyl Benzene	Total Xylenes	MTBE	Total Naphthalenes
W-36	20-Dec-17	<1.0	<1.0	4.1	<1.5	<1.0	70.1
	17-Jan-17	<1.0	<1.0	1.1	<1.5	<1.0	18
	19-May-15	<1.0	<1.0	2.6	<1.5	<1.0	31
	17-Nov-14	<1.0	<1.0	3.8	<1.5	<1.0	17
	2-May-14	<1.0	<1.0	2.4	<1.5	<1.0	12
	1-Oct-13	Well Paved Over ¹					
	25-Mar-13	<1.0	<1.0	<1.0	<1.5	<1.0	<4.0
	22-Aug-12	<1.0	<1.0	2.3	<1.5	<1.0	11
	21-Feb-12	<1.0	<1.0	<1.0	<1.5	<1.0	<4.0
	26-Dec-06	<1.0	<1.0	15	4.5	<1.5	55.3
	25-Sep-06	<1.0	<1.0	23	3.0	<1.5	81.7
	17-May-06	<1.0	<1.0	3.0	<3.0	<1.5	4.1
	31-Jan-06	<1.0	<1.0	<1.0	<1.0	<1.0	<10.0
	3-Nov-05	<1.0	<1.0	2.9	3.6	<1.0	3.3
	28-Jul-05	<1.0	<1.0	55	77	<1.0	76.5
	6-May-04	<10	<10	190	390	<10	230
	Jan-98	ND	4.4	39	56	12	NA
W-37	1-May-14	Plugged and Abandoned					
	1-Oct-13	Well Paved Over					
	25-Mar-13	<1.0	<1.0	<1.0	<1.5	<1.0	<4.0
	22-Aug-12	<1.0	<1.0	<1.0	<1.5	<1.0	<4.0
	21-Feb-12	<1.0	<1.0	<1.0	<1.5	<1.0	<4.0
	26-Dec-06	NS	NS	NS	NS	NS	NS
	25-Sep-06	<1.0	<1.0	12	<3.0	<1.5	<10.0
	17-May-06	NS	NS	NS	NS	NS	NS
	31-Jan-06	NS	NS	NS	NS	NS	NS
	3-Nov-05	NS	NS	NS	NS	NS	NS
	28-Jul-05	<1.0	<1.0	<1.0	<1.0	<1.0	<10.0
	6-May-04	<1.0	<1.0	<1.0	<1.0	<1.0	<10.0
	Jun-94	<0.5	<0.5	<0.5	<0.5	<2.5	NA

NOTES:

¹ In May 2014, well was uncovered and a new vault cover, a new well seal, and a new "j-plug" were emplaced.
All data reported prior to 2012 from *Groundwater Monitoring Report, Atex #213 UST Release Site - Albuquerque, New Mexico* (Souder Miller Associates, 2007)

All concentrations reported in parts per billion (micrograms per liter)

NA = Not analyzed

NS = Not sampled

ND = Not detected

MTBE = methyl tertiary butyl ether

**TABLE 4. SUMMARY OF FIELD PARAMETERS
ATEX 213, ALBUQUERQUE, NEW MEXICO**

Well Number	Date Sampled	pH	SpC (µS/cm)	Temp	DO (mg/L)
MW-1	1-Oct-13	DRY - Plugged and Abandoned April 2014			
	25-Mar-13	DRY			
	22-Aug-12	DRY			
	21-Feb-12	DRY			
MW-1R	20-Dec-17	Not enough water to sample			
	17-Jan-17	Well bailed dry			
	19-May-15	Well bailed dry			
	17-Nov-14	7.56	913	21.8	1.18
	1-May-14	7.8	803	19.4	1.55
MW-2	20-Dec-17	6.82	1,225	22.6	1.14
	17-Jan-17	7.11	1,060	20.6	2.02
	19-May-15	7.21	816	19.1	1.86
	17-Nov-14	7.1	1,009	22.9	1.70
	1-May-14	7.63	981	18.8	1.40
	1-Oct-13	6.31	1,023	25.5	--
	25-Mar-13	6.29	1,111	18.4	1.04
	22-Aug-12	8.17	950	24.5	1.31
	21-Feb-12	NM	761	19.7	1.35
MW-3	20-Dec-17	7.21	934	21.8	0.48
	17-Jan-17	7.37	907	20.6	1.55
	19-May-15	7.52	994	19.8	3.33
	17-Nov-14	7.45	941	20.9	1.35
	1-May-14	7.70	1,043	19.1	1.77
	10-Oct-13	7.23	942	22.6	1.15
	25-Mar-13	6.64	1,021	17.6	0.97
	23-Aug-12	8.48	963	20.9	1.07
	21-Feb-12	NM	898	18.4	1.15
	1-Oct-13	Well Destroyed - Plugged and Abandoned April 2014			
MW-4	25-Mar-13	6.42	946	18.0	1.20
	23-Aug-12	8.11	980	24.9	1.38
	22-Feb-12	6.09	981	13.8	1.21
	20-Dec-17	7.35	771	22.5	1.04
MW-4R	17-Jan-17	7.35	864	20.3	1.73
	19-May-15	7.60	664	19.8	1.32
	17-Nov-14	7.50	649	21.6	0.85
	1-May-14	7.69	922	20.0	2.18
	1-Oct-13	DRY - Plugged and Abandoned April 2014			
MW-5	25-Mar-13	DRY			
	22-Aug-12	DRY			
	21-Feb-12	DRY			
	29-Apr-14	DRY - Plugged and Abandoned April 2014			
MW-6	1-Oct-13 ¹	NM	NM	NM	NM
	25-Mar-13	NM	NM	NM	NM
	22-Aug-12	NM	NM	NM	NM
	22-Feb-12	6.37	6,310	15.6	NM
	17-Nov-14	Well Destroyed			
MW-6R	1-May-14	7.93	880	20.0	2.19
	20-Dec-17	7.39	770	22.0	1.00
MW-6RR	17-Jan-17	7.37	780	21.0	1.63
	19-May-15	7.54	734	19.7	1.10
	22-Dec-14	7.18	815	21.1	10.4

TABLE 4. SUMMARY OF FIELD PARAMETERS
ATEX 213, ALBUQUERQUE, NEW MEXICO

Well Number	Date Sampled	pH	SpC (µS/cm)	Temp	DO (mg/L)
MW-29	1-May-14		Plugged and Abandoned May 2014		
	1-Oct-13	6.29	1,024	24.9	--
	25-Mar-13	6.35	1,231	16.2	1.34
	23-Aug-12	7.18	1,179	26.3	0.99
	21-Feb-12	NM	884	16.7	1.82
MW-38	20-Dec-17	6.87	975	18.9	1.60
	17-Jan-17	6.96	950	19.1	1.48
	19-May-15	7.06	488	19.3	2.82
	17-Nov-14	7.2	880	21.7	1.76
	1-May-14	7.59	984	19.0	1.53
	1-Oct-13	6.13	1,003	25.4	--
	25-Mar-13	6.41	1,034	17.4	0.77
	23-Aug-12	7.79	1,090	25.1	2.1
	21-Feb-12	NM	859	17.8	1.08
BB-2	20-Dec-17	7.26	824	20.5	1.11
	17-Jan-17	7.47	838	18.7	2.40
	19-May-15	7.44	882	18.1	2.39
	17-Nov-14	7.37	862	19.8	1.92
	1-May-14	7.77	945	17.7	1.74
	1-Oct-13	6.27	952	23.2	--
	25-Mar-13	6.43	1,009	17.1	1.47
	23-Aug-12	7.61	1,002	26.9	1.19
	21-Feb-12	NM	798	17.5	2.32
NMW-1	20-Dec-17	6.85	1,097	22.6	0.28
	17-Jan-17	7.03	948	20.1	1.42
	19-May-15	6.92	1,015	19.9	1.22
	17-Nov-14	7.09	986	23.1	1.06
	2-May-14	7.29	1,174	19.0	1.31
	1-Oct-13	6.30	1,091	26.0	--
	26-Mar-13	6.31	1,124	17.1	0.63
	23-Aug-12	8.43	1,066	24.1	1.11
	21-Feb-12	NM	904	18.2	1.18
RNMW-2	20-Dec-17	7.04	1,232	22.0	1.30
	17-Jan-17	7.26	933	20.4	1.78
	19-May-15	7.35	847	19.7	1.33
	17-Nov-14	7.32	871	22.2	0.56
	2-May-14	7.47	1,053	19.2	1.30
	1-Oct-13	6.49	1,051	24.5	--
	26-Mar-13	6.43	1,048	18.6	0.74
	22-Aug-12	7.84	1,176	23.1	1.28
	21-Feb-12	NM	852	19.3	1.14
RNMW-3	20-Dec-17	7.23	1,117	21.2	0.40
	17-Jan-17	7.25	628	20.8	2.01
	19-May-15	7.36	889	20.3	1.31
	17-Nov-14	7.32	1,007	22.5	1.48
	2-May-14	7.53	1,009	19.7	1.54
	1-Oct-13	6.37	1,065	25.0	--
	26-Mar-13	6.71	1,002	18.5	0.70
	23-Aug-12	8.28	1,128	25.2	1.21
	21-Feb-12	NM	976	19.1	1.52

**TABLE 4. SUMMARY OF FIELD PARAMETERS
ATEX 213, ALBUQUERQUE, NEW MEXICO**

Well Number	Date Sampled	pH	SpC ($\mu\text{S}/\text{cm}$)	Temp	DO (mg/L)
NMW-4	30-Apr-14		Plugged and Abandoned April 2014		
	1-Oct-131	NM	NM	NM	NM
	25-Mar-13	NM	NM	NM	NM
	23-Aug-12	NM	NM	NM	NM
	21-Feb-12	NM	NM	NM	NM
NMW-4R	20-Dec-17	7.28	433	21.4	0.37
	17-Jan-17	7.42	567	19.3	1.75
	19-May-15	7.44	784	19.2	2.12
	17-Nov-14	7.36	513	20.9	1.31
	1-May-14	Developed at 4 gallons per minute; ~180 gallons removed.			
W-34	1-Oct-13	Paved Over - Plugged and Abandoned May 2014			
	25-Mar-13	6.55	1,129	17.3	0.77
	22-Aug-12	7.59	822	23.4	1.02
	21-Feb-12	NM	820	18.5	1.07
W-35	20-Dec-17	7.25	960	22.1	0.92
	17-Jan-17	7.31	818	19.6	1.69
	19-May-15	7.37	889	21.0	1.78
	17-Nov-14	7.28	1065	22.6	2.48
	2-May-14	7.44	1148	19.5	0.91
	1-Oct-13	Paved Over - Well uncovered May 2014			
	25-Mar-13	6.63	1,238	16.7	0.84
	22-Aug-12	7.73	1,091	25.0	0.96
	21-Feb-12	NM	852	17.7	0.97
	20-Dec-17	7.20	990	21.8	0.55
W-36	17-Jan-17	7.19	862	19.6	1.82
	19-May-15	7.22	677	19.6	1.63
	17-Nov-14	7.24	847	22.1	1.66
	2-May-14	7.39	878	18.8	3.03
	1-Oct-13	Paved Over - Well uncovered May 2014			
	25-Mar-13	6.24	1,143	17.5	0.75
	22-Aug-12	8.14	976	24.6	1.06
W-37	21-Feb-12	NM	863	18.0	1.25
	1-Oct-13	Paved Over - Plugged and Abandoned May 2014			
	25-Mar-13	6.86	1,085	19.1	1.04
	22-Aug-12	6.82	1,012	24.3	1.15
	21-Feb-12	NM	819	19.9	1.21

NOTES:

¹ - Unable to obtain parameters due to extremely poor recharge

DO = Dissolved oxygen. Meter malfunctioning during the October 2013 event

mg/L = Milligrams per liter

NM = Not Measured

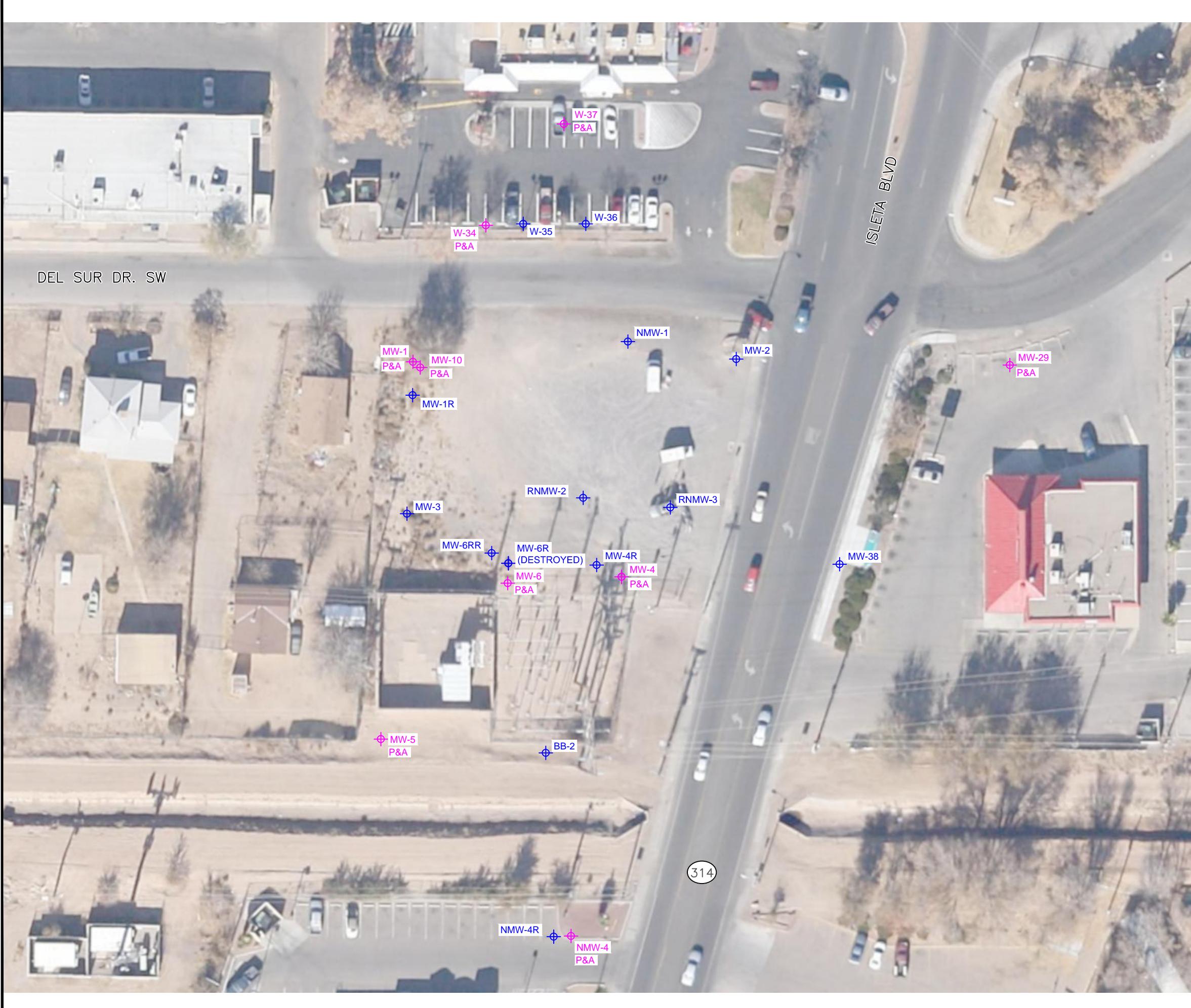
SpC = Specific conductance measured in micro siemens per centimeter ($\mu\text{S}/\text{cm}$)

Temp = Temperature in degrees Celsius

-- = meter malfunction, parameter not taken

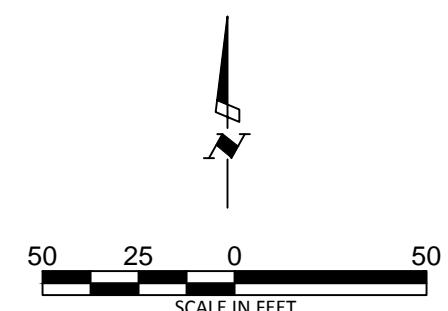
$\mu\text{S}/\text{cm}$ = Microsiemens per centimeter

FIGURES



LEGEND:

- MW-2 MONITORING WELL
- MW-6 P&A MONITORING WELL PLUGGED AND ABANDONED

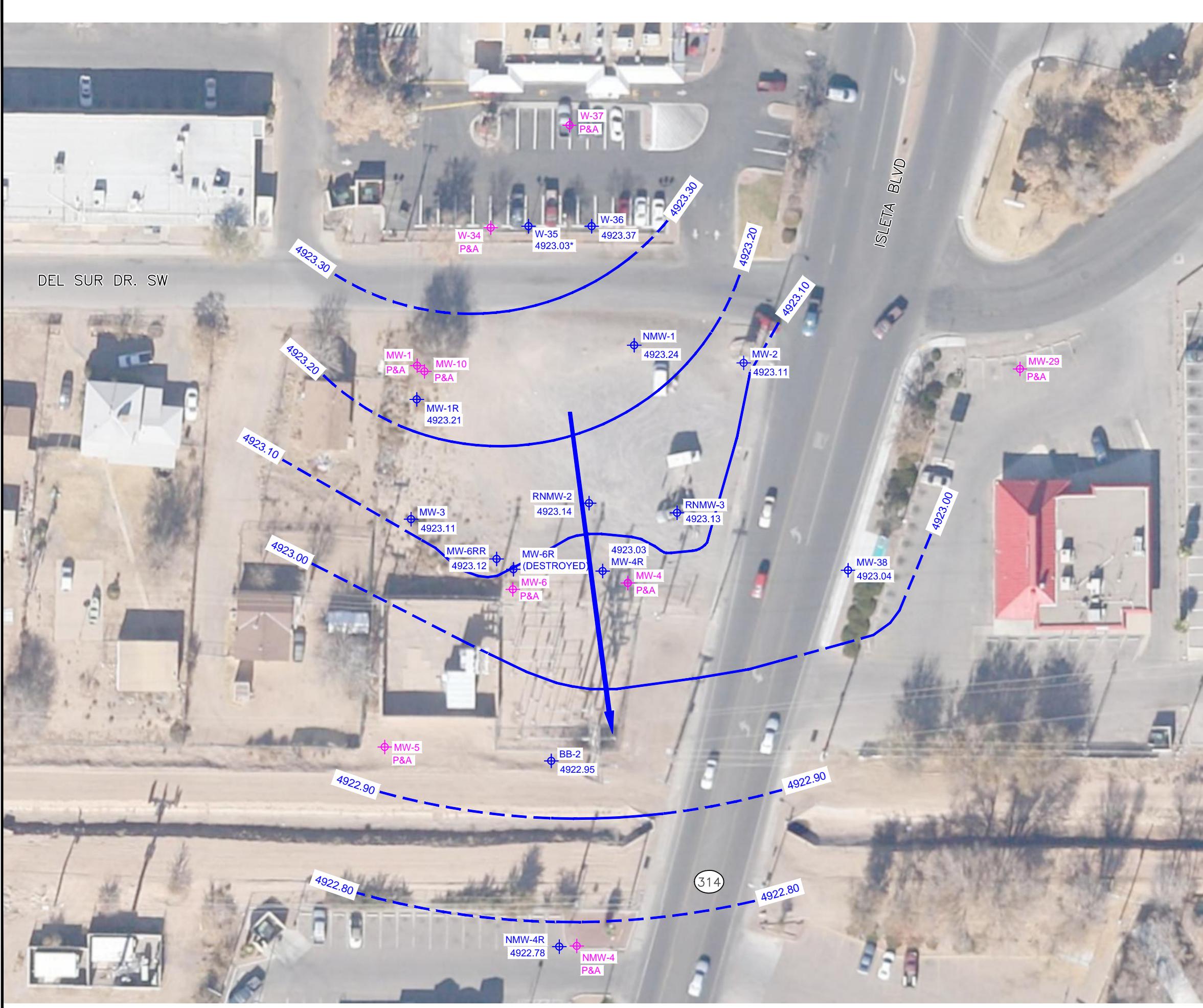


ATEX #213
SOUTH VALLEY AREA,
ALBUQUERQUE, BERNALILLO COUNTY,
NEW MEXICO

FIGURE 1
SITE MAP
DECEMBER 2017

PROJECT #: 6289829 | PROJECT PHASE: 01 | PROJECT MANAGER: LA

320 Gold Avenue, SW Suite 1300
Albuquerque, NM 87102
Phone: (505) 224-9013



ATEX #213
SOUTH VALLEY AREA,
ALBUQUERQUE, BERNALILLO COUNTY,
NEW MEXICO

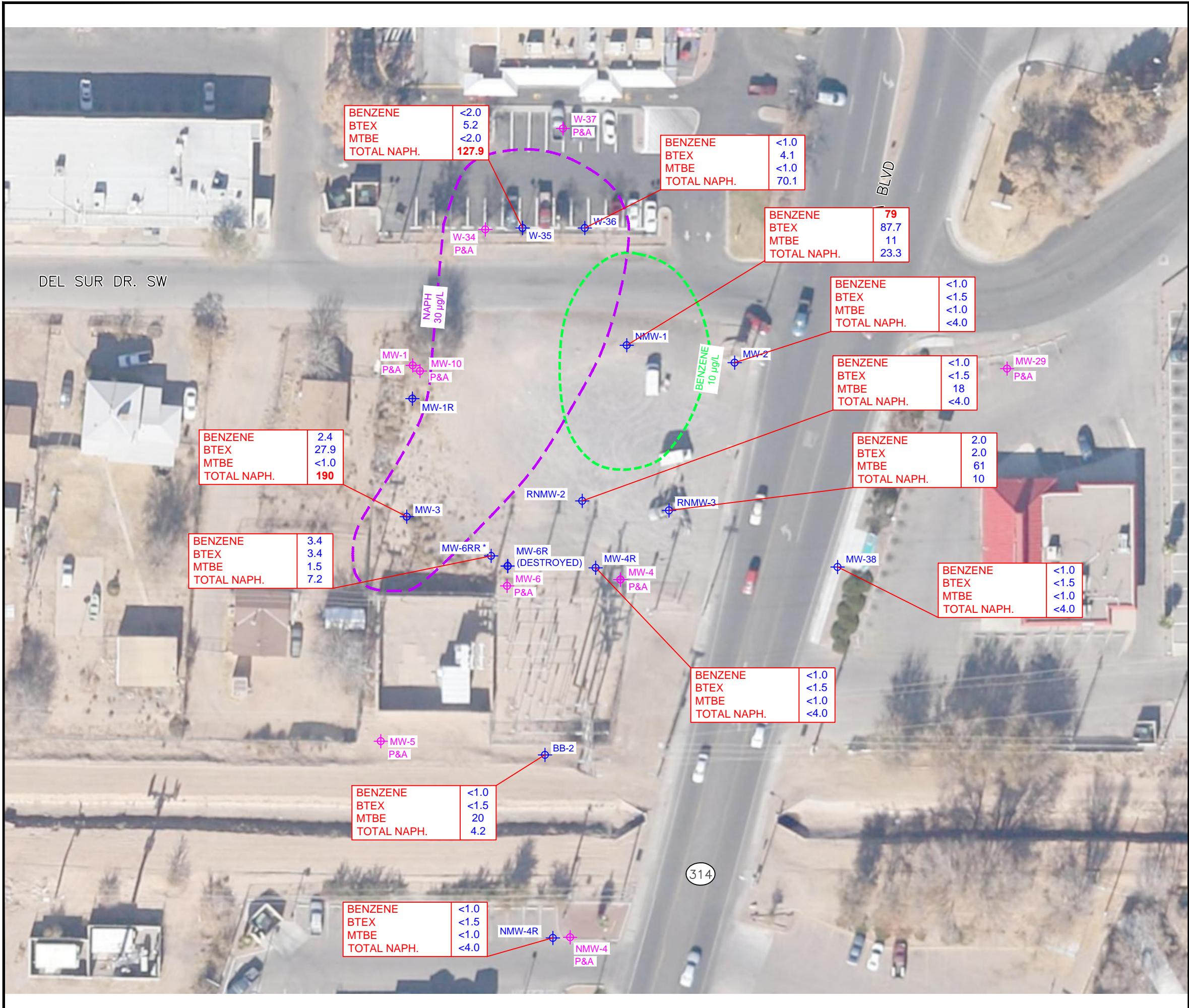
FIGURE 2
POTENTIOMETRIC SURFACE MAP
DECEMBER 2017

PROJECT #: 6289826 PROJECT PHASE: 01 PROJECT MANAGER: LA

320 Gold Avenue, SW Suite 1300
Albuquerque, NM 87102
Phone: (505) 224-9013



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LEGEND:

MW-2	MONITORING WELL
MW-6	MONITORING WELL PLUGGED AND ABANDONED
BTEX	BENZENE, TOLUENE, ETHYLBENZENE, TOTAL XYLENES
MTBE	METHYL TERTIARY BUTYL ETHER
TOTAL NAPH.	TOTAL NAPHTHALENES
---	ESTIMATED EXTENT OF BENZENE (10 $\mu\text{g/L}$)
---	ESTIMATED EXTENT OF TOTAL NAPHTHALENES (30 $\mu\text{g/L}$)
*	WELL INSTALLED 12/22/2014

- NOTES:
1. ALL CONCENTRATIONS ARE IN MICROGRAMS PER LITER ($\mu\text{g/L}$)
 2. RED TEXT INDICATES CONCENTRATIONS ARE ABOVE NEW MEXICO WATER QUALITY CONTROL COMMISSION (NMWQCC) STANDARDS.



50 25 0 50
SCALE IN FEET

ATEX #213
SOUTH VALLEY AREA,
ALBUQUERQUE, BERNALILLO COUNTY,
NEW MEXICO

FIGURE 3
CONTAMINANT CONCENTRATION MAP
DECEMBER 2017

PROJECT #: 6289826 PROJECT PHASE: 01 PROJECT MANAGER: LA

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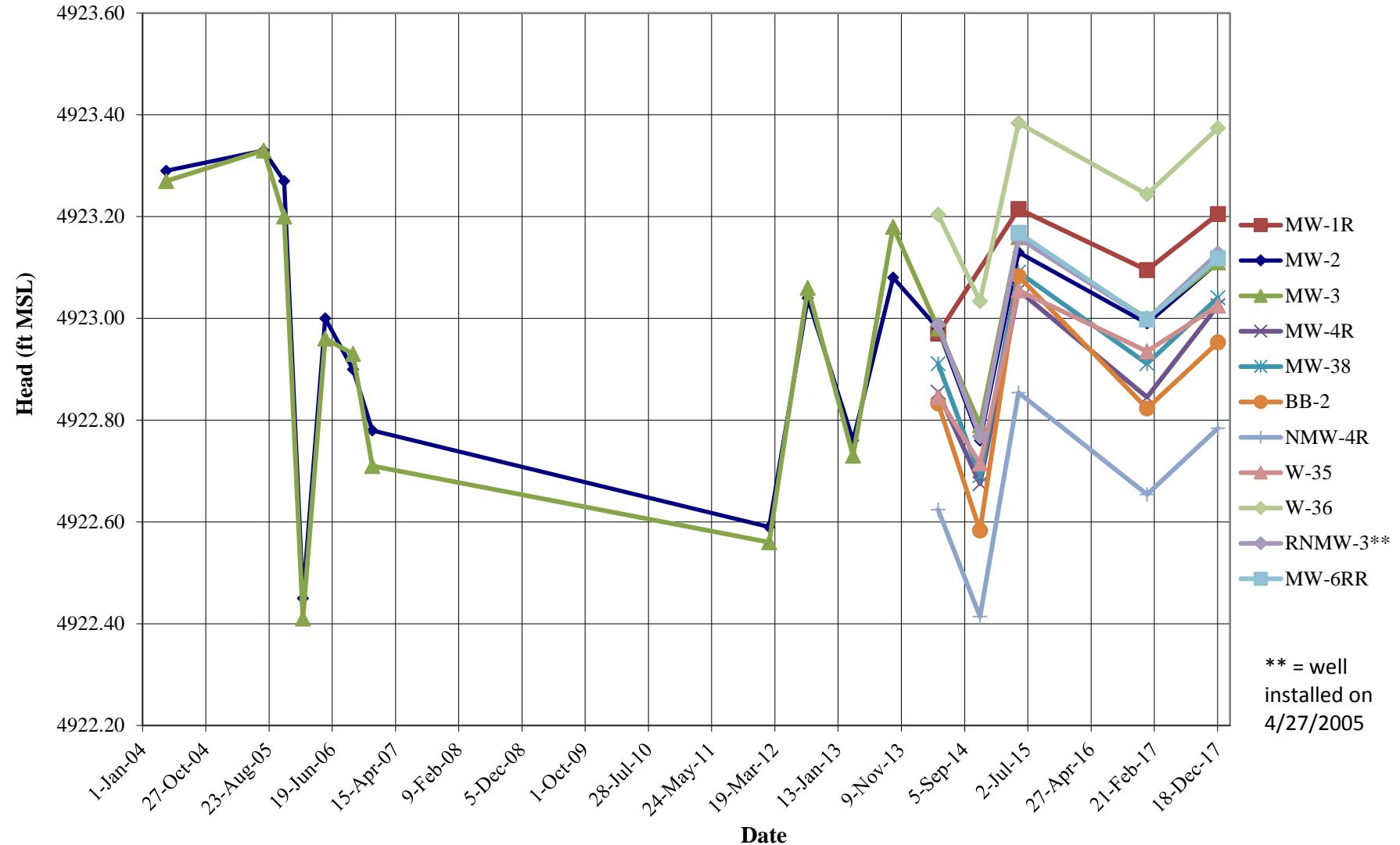


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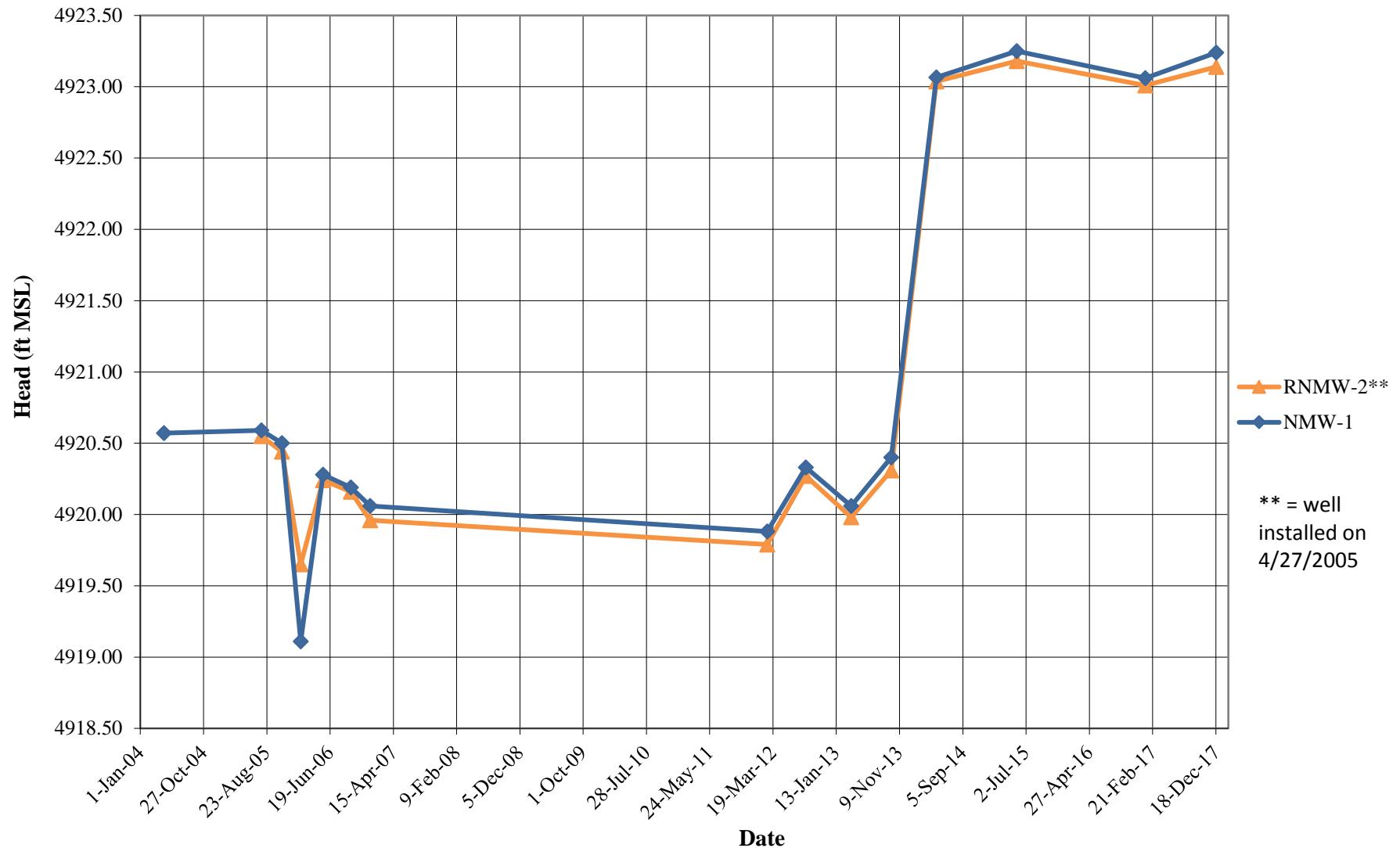
APPENDIX A

HYDROGRAPHS AND CONCENTRATION TRENDS

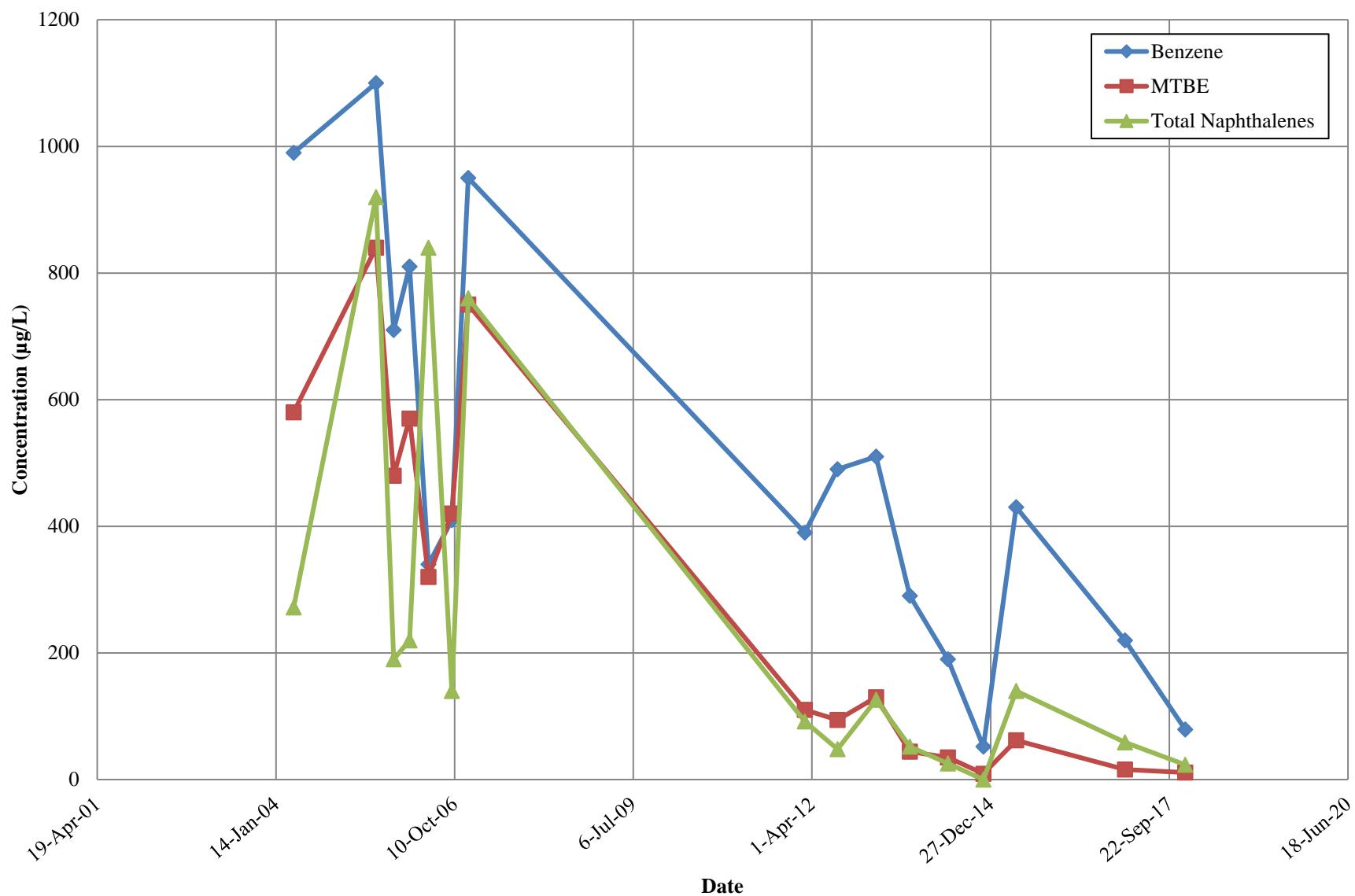
ATEX 213
HYDROGRAPH FOR SELECT MONITORING WELLS



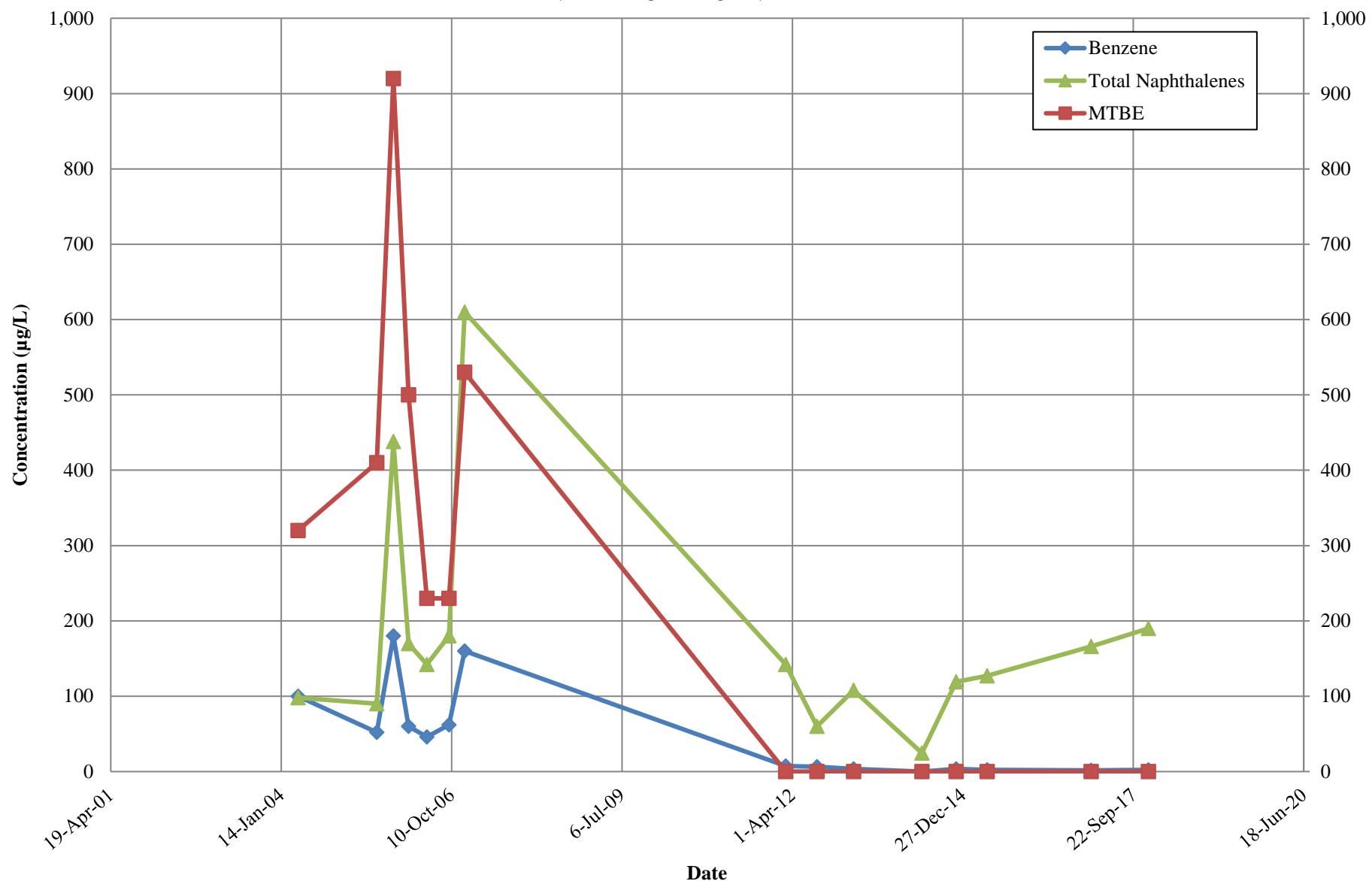
ATEX 213
HYDROGRAPH FOR SELECT MONITORING WELLS



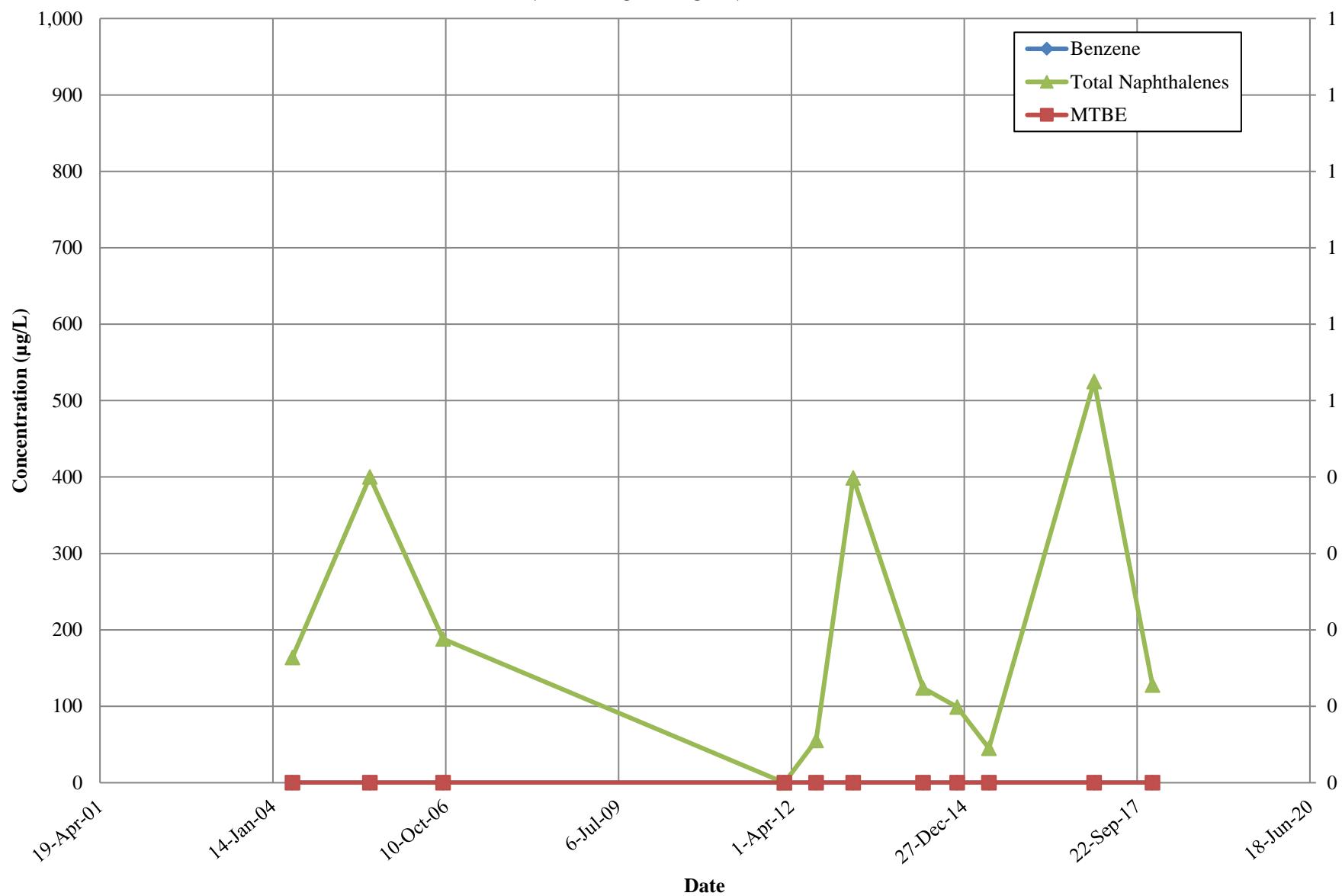
CONCENTRATION TRENDS IN NMW-1
ATEX # 213, ALBUQUERQUE, NEW MEXICO



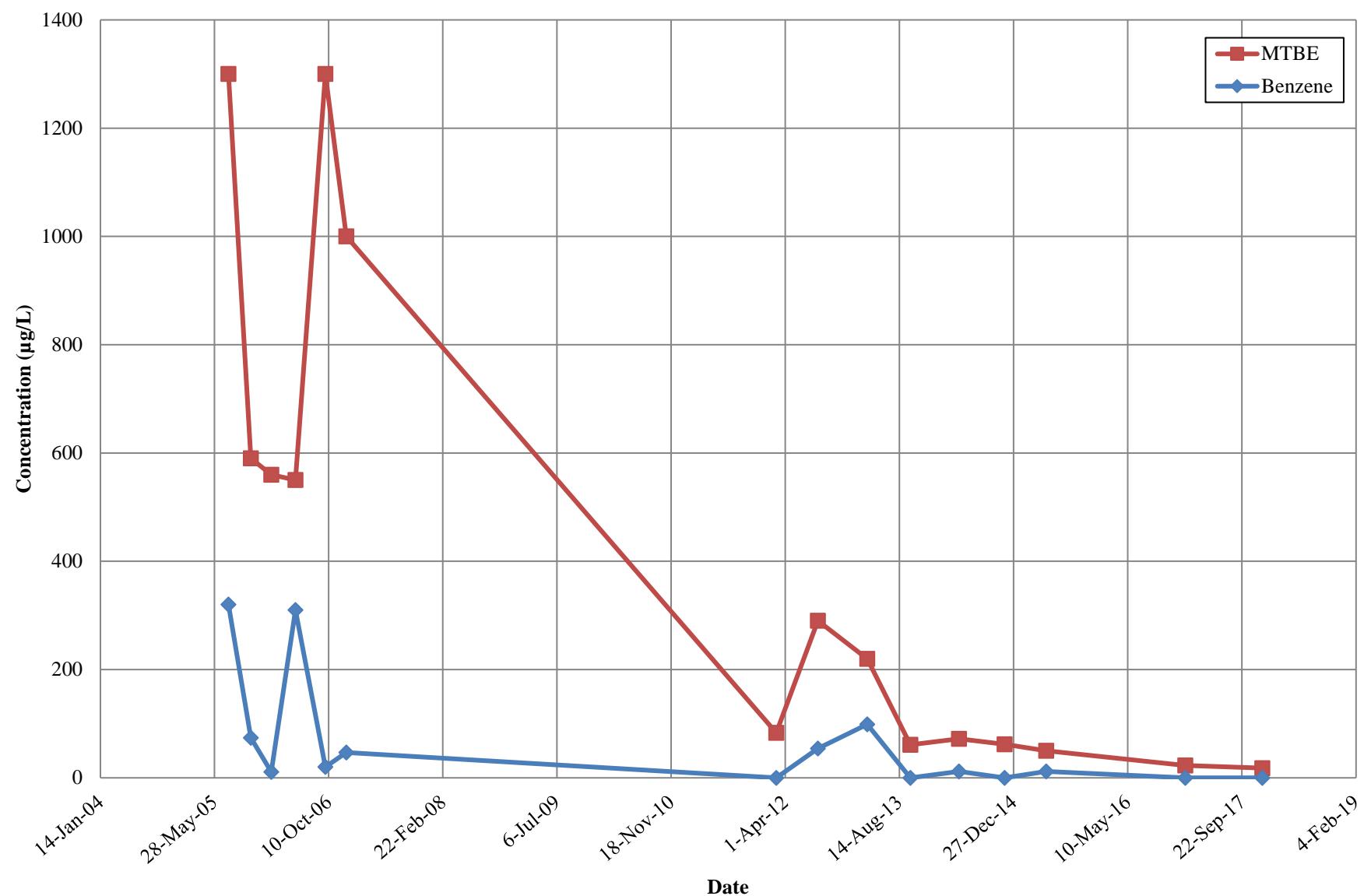
**CONCENTRATION TRENDS IN MW-3
ATEX # 213, ALBUQUERQUE, NEW MEXICO**



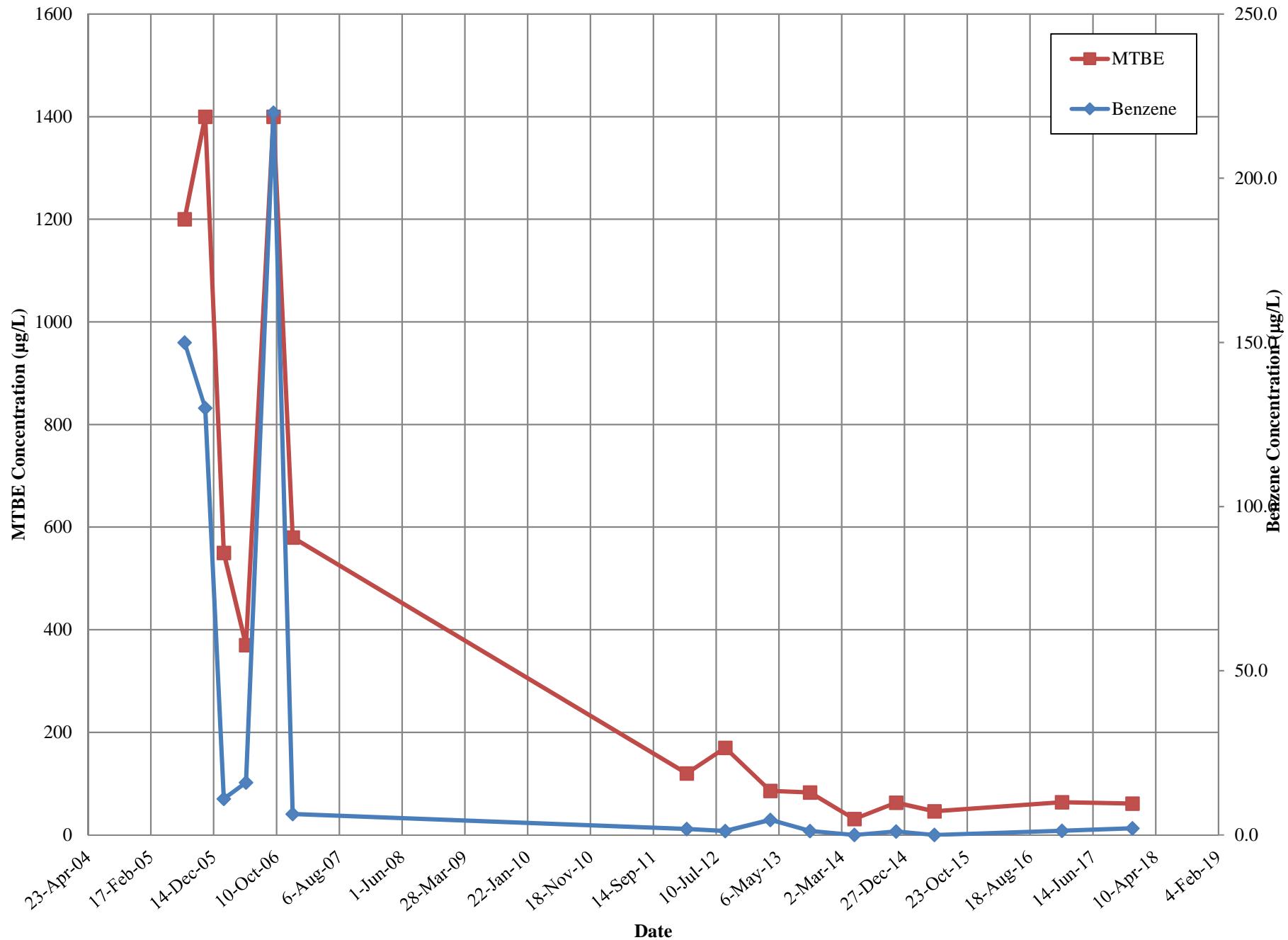
CONCENTRATION TRENDS IN W-35
ATEX # 213, ALBUQUERQUE, NEW MEXICO



**CONCENTRATION TRENDS IN RNMW-2
ATEX # 213, ALBUQUERQUE, NEW MEXICO**



CONCENTRATION TRENDS IN RNMW-3
ATEX # 213, ALBUQUERQUE, NEW MEXICO



APPENDIX B

FIELD FORMS



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Albuquerque, NM 87102
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MONITORING WELL SAMPLING FIELD FORM

FLUID LEVEL DATA

Well ID	MW-1R		Date gauged	12/20/17
Site	ATEX 213		Time gauged	1105
Depth to PSH	— Feet	Well diameter	2 Inches	After Bailing NAPL
Depth to water	6.87 Feet	Height of fluid column	0.37 Feet	Depth to PSH _____ Feet
Total depth	9.24 Feet	Volume in well	0.62 Gallons	Depth to water _____ Feet
NAPL thickness	— Feet	(3 well volumes = 0.19 gallons)		
			NAPL Recovered	_____ Gallons

GROUNDWATER SAMPLING DATA

Time/date purged	1105 12/20/17		Purge Method	Baler		
Time	Purge Volume (gal)	Temp (°C)	SpC (µs/cm)	pH	ORP (mV)	DO (mg/L)
—	—	—	—	—	—	—

Actual purge volume _____ gal. Field measurements stabilized within $\pm 10\%$? _____

Time/date sampled _____ Purged/sampled by Flaller

Sample method _____

Requested analyses _____

Comments/observations Not enough water to sample.

Well Casing Volumes

2" diameter = 0.17 gal/ft 4" diameter = 0.66 gal/ft 6" diameter = 1.50 gal/ft



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MONITORING WELL SAMPLING FIELD FORM

FLUID LEVEL DATA

Well ID	<u>NMW-1</u>	Date gauged	<u>12/20/17</u>
Site	<u>ATEX 213</u>	Time gauged	<u>1452</u>
Depth to PSH	<u>—</u> Feet	Well diameter	<u>2</u> Inches
Depth to water	<u>9.39</u> Feet	Height of fluid column	<u>5.79</u> Feet
Total depth	<u>15.18</u> Feet	Volume in well	<u>0.98</u> Gallons
NAPL thickness	<u>—</u> Feet	(3 well volumes = <u>2.95</u> gallons)	
After Bailing NAPL			
Depth to PSH	Feet	Depth to water	Feet
NAPL thickness	Feet	NAPL Recovered	Gallons

GROUNDWATER SAMPLING DATA

Time/date purged	Purge Volume (gal)	Temp (°C)	SpC (µS/cm)	pH	ORP (mV)	DO (mg/L)
1456	0.25	22.24	1055	6.99	150.3	0.28
1459	1.00	22.45	1058	6.87	—	—
1501	2.00	22.36	1090	6.84	—	—
1503	3.00	22.57	1097	6.85		

Actual purge volume 2.95 gal. Field measurements stabilized within $\pm 10\%$? Y

Time/date sampled 1505 12/20/17 Purged/sampled by Haller

Sample method New Baile & Twine

Requested analyses VOC 8260

Comments/observations

Well Casing Volumes

2" diameter = 0.17 gal/ft 4" diameter = 0.66 gal/ft 6" diameter = 1.50 gal/ft



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MONITORING WELL SAMPLING FIELD FORM

FLUID LEVEL DATA

Well ID	<u>MW-2</u>	Date gauged	<u>12/20/17</u>
Site	<u>ATEX 213</u>	Time gauged	<u>0945</u>
Depth to PSH	<u>—</u> Feet	Well diameter	<u>2</u> Inches
Depth to water	<u>11.61</u> Feet	Height of fluid column	<u>6.22</u> Feet
Total depth	<u>17.83</u> Feet	Volume in well	<u>1.06</u> Gallons
NAPL thickness	<u>—</u> Feet	(3 well volumes = <u>3.17</u> gallons)	
		Depth to PSH	Feet
		Depth to water	Feet
		NAPL thickness	Feet
		NAPL Recovered	Gallons

GROUNDWATER SAMPLING DATA

Time/date purged	Purge Volume (gal)	Temp (°C)	SpC (µS/cm)	pH	ORP (mV)	DO (mg/L)
0949	0.25	20.62	1110	6.98	206.2	1.14
0954	1.25	22.25	1235	6.84	—	—
0956	2.25	22.22	1238	6.87	—	—
0959	3.25	22.59	1225	6.82	—	—

Actual purge volume 3.17 gal. Field measurements stabilized within $\pm 10\%$? /

Time/date sampled 1002 12/20/17 Purged/sampled by Haller

Sample method New Baile & Twine
Requested analyses 8260

Comments/observations

Well Casing Volumes

2" diameter = 0.17 gal/ft 4" diameter = 0.66 gal/ft 6" diameter = 1.50 gal/ft



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MONITORING WELL SAMPLING FIELD FORM

FLUID LEVEL DATA

Well ID	<u>B8-7</u>	Date gauged	<u>12/20/17</u>
Site	<u>ATEK 213</u>	Time gauged	<u>1245</u>
Depth to PSH	<u>—</u> Feet	Well diameter	<u>2</u> Inches
Depth to water	<u>11.69</u> Feet	Height of fluid column	<u>2.91</u> Feet
Total depth	<u>14.60</u> Feet	Volume in well	<u>0.49</u> Gallons
NAPL thickness	<u>—</u> Feet	(3 well volumes = <u>1.48</u> gallons)	
After Bailing NAPL			
Depth to PSH	<u>—</u> Feet		
Depth to water	<u>—</u> Feet		
NAPL thickness	<u>—</u> Feet		
NAPL Recovered	<u>—</u> Gallons		

GROUNDWATER SAMPLING DATA

Time/date purged	Purge Method	Bailer				
Time	Purge Volume (gal)	Temp (°C)	SpC (μs/cm)	pH	ORP (mV)	DO (mg/L)
1249	0.25	20.05	855	7.67	188.6	1.11
1250	0.50	20.50	846	7.26	—	—
1252	1.00	20.51	845	7.21	—	—
1254	1.50	20.53	824	7.26	—	—

Actual purge volume 1.48 gal. Field measurements stabilized within $\pm 10\%$? Y

Time/date sampled 1256 Purged/sampled by Heller

Sample method New Bailer & Twine

Requested analyses VOC 8260

Comments/observations

Well Casing Volumes

2" diameter = 0.17 gal/ft 4" diameter = 0.66 gal/ft 6" diameter = 1.50 gal/ft



EA Engineering, Science, and Technology, Inc., PBC
320 Gold Avenue SW, Suite 1300
Albuquerque, NM 87102
Phone: (505) 224-9013

MONITORING WELL SAMPLING FIELD FORM

FLUID LEVEL DATA

Well ID	RNMW-7	Date gauged	12/20/17
Site	ATEX 213	Time gauged	1346
Depth to PSH	— Feet	Well diameter	2 inches
Depth to water	10.31 Feet	Height of fluid column	5.13 Feet
Total depth	15.44 Feet	Volume in well	0.87 Gallons
NAPL thickness	— Feet	(3 well volumes = 2.61 gallons)	
After Bailing NAPL			
		Depth to PSH	Feet
		Depth to water	Feet
		NAPL thickness	Feet
		NAPL Recovered	Gallons

GROUNDWATER SAMPLING DATA

Time/date purged	Purge Volume (gal)	Temp (°C)	SpC (µs/cm)	pH	ORP (mV)	DO (mg/L)
1350	0.25	20.61	2255	6.99	164.7	1.30
1353	1.00	21.59	1756	6.96	—	—
1355	2.00	21.80	1385	6.99	—	—
1357	2.75	22.03	1232	7.04	—	—

Actual purge volume 2.61 gal.

Field measurements stabilized within ± 10%?

N

Time/date sampled 12/10 12/20/17

Purged/sampled by

Heller

Sample method New Baile & Twine

Requested analyses VOC 8260

Comments/observations Slight Odor. Did not stabilize within 10% for SpC.

Well Casing Volumes

2" diameter = 0.17 gal/ft

4" diameter = 0.66 gal/ft 6" diameter = 1.50 gal/ft



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MONITORING WELL SAMPLING FIELD FORM

FLUID LEVEL DATA

Well ID	<u>MW-3</u>	Date gauged	<u>12/20/17</u>
Site	<u>ATEX Z13</u>	Time gauged	<u>1423</u>
Depth to PSH	<u>—</u> Feet	Well diameter	<u>2</u> Inches
Depth to water	<u>9.87</u> Feet	Height of fluid column	<u>6.31</u> Feet
Total depth	<u>16.18</u> Feet	Volume in well	<u>1.07</u> Gallons
NAPL thickness	<u>—</u> Feet	(3 well volumes = <u>3.21</u> gallons)	
		Depth to PSH	<u>—</u> Feet
		Depth to water	<u>—</u> Feet
		NAPL thickness	<u>—</u> Feet
		NAPL Recovered	<u>—</u> Gallons

GROUNDWATER SAMPLING DATA

Time/date purged	Purge Method	Bailer				
<u>1425</u> <u>12/20/17</u>						
<u>1426</u>	<u>0.25</u>	<u>21.35</u>	<u>1016</u>	<u>7.45</u>	<u>164.3</u>	<u>0.48</u>
<u>1431</u>	<u>1.25</u>	<u>22.06</u>	<u>955</u>	<u>7.26</u>	<u>—</u>	<u>—</u>
<u>1433</u>	<u>2.25</u>	<u>21.97</u>	<u>918</u>	<u>7.22</u>	<u>—</u>	<u>—</u>
<u>1435</u>	<u>3.25</u>	<u>21.84</u>	<u>934</u>	<u>7.21</u>	<u>—</u>	<u>—</u>

Actual purge volume 3.21 gal.

Field measurements stabilized within $\pm 10\%$? Y

Time/date sampled 1937 12/20/17

Purged/sampled by Haller

Sample method

New Bailer & Twine

Requested analyses

VOC 8260

Comments/observations

Well Casing Volumes

2" diameter = 0.17 gal/ft

4" diameter = 0.66 gal/ft 6" diameter = 1.50 gal/ft



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MONITORING WELL SAMPLING FIELD FORM

FLUID LEVEL DATA

Well ID	<u>RN MW-3</u>	Date gauged	<u>12/20/17</u>
Site	<u>ATEX 713</u>	Time gauged	<u>13:33</u>
Depth to PSH	<u>—</u> Feet	Well diameter	<u>2</u> Inches
Depth to water	<u>10.09</u> Feet	Height of fluid column	<u>6.01</u> Feet
Total depth	<u>16.1</u> Feet	Volume in well	<u>1.02</u> Gallons
NAPL thickness	<u>—</u> Feet	(3 well volumes = <u>3.07</u> gallons)	
		After Bailing NAPL	
		Depth to PSH	Feet
		Depth to water	Feet
		NAPL thickness	Feet
		NAPL Recovered	Gallons

GROUNDWATER SAMPLING DATA

Time/date purged	13:16 12/20/17	Purge Method	Bailer
13:18	0.25	21.34	1849
13:21	1.25	21.78	1610
13:24	2.25	21.86	1301
13:26	3.25	21.21	1117
13:28			

Actual purge volume 3.07 gal.

Field measurements stabilized within $\pm 10\%$? N

Time/date sampled 13:30 12/20/17 Purged/sampled by Haller

Sample method New Bailer & Twine

Requested analyses VOC 8260

Comments/observations Slight odor. SpC did not stabilize within 10%

Well Casing Volumes

2" diameter = 0.17 gal/ft 4" diameter = 0.66 gal/ft 6" diameter = 1.50 gal/ft



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MONITORING WELL SAMPLING FIELD FORM

FLUID LEVEL DATA

Well ID	<u>MW-4R</u>	Date gauged	<u>12/20/17</u>
Site	<u>ATEX 213</u>	Time gauged	<u>1148</u>
Depth to PSH	<u>—</u> Feet	Well diameter	<u>2</u> Inches
Depth to water	<u>10.39</u> Feet	Height of fluid column	<u>10.69</u> Feet
Total depth	<u>21.08</u> Feet	Volume in well	<u>1.82</u> Gallons
NAPL thickness	<u>—</u> Feet	(3 well volumes = <u>5.45</u> gallons)	
		Depth to PSH	<u>—</u> Feet
		Depth to water	<u>—</u> Feet
		NAPL thickness	<u>—</u> Feet
		NAPL Recovered	<u>—</u> Gallons

GROUNDWATER SAMPLING DATA

Time/date purged	Purge Volume (gal)	Temp (°C)	SpC (µs/cm)	pH	ORP (mV)	DO (mg/L)
1150	0.25	22.29	733	7.64	193.1	1.04
1200	2.00	21.98	787	7.46	—	—
1203	4.00	22.55	794	7.35	—	—
1206	5.50	22.49	771	7.35	—	—

Actual purge volume 5.45 gal.

Field measurements stabilized within ± 10%? ✓

Time/date sampled

1208 12/20/17

Purged/sampled by

Haller

Sample method

New Bailes i Turine

Requested analyses

VOC 8260

Comments/observations

Well Casing Volumes

2" diameter = 0.17 gal/ft

4" diameter = 0.66 gal/ft

6" diameter = 1.50 gal/ft



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MONITORING WELL SAMPLING FIELD FORM

FLUID LEVEL DATA

Well ID	<u>NMW-412</u>		Date gauged	<u>12/20/17</u>	
Site	<u>ATEX Z13</u>		Time gauged	<u>1025</u>	
Depth to PSH	<u>—</u> Feet	Well diameter	<u>2</u> Inches	After Bailing NAPL	
Depth to water	<u>9.75</u> Feet	Height of fluid column	<u>10.18</u> Feet	Depth to PSH	Feet
Total depth	<u>19.93</u> Feet	Volume in well	<u>1.73</u> Gallons	Depth to water	Feet
NAPL thickness	<u>—</u> Feet	(3 well volumes = <u>5.1</u> gallons)			
NAPL Recovered _____ Gallons					

GROUNDWATER SAMPLING DATA

Time/date purged	<u>1027 12/20/17</u>		Purge Method	<u>Bailey</u>		
Time	Purge Volume (gal)	Temp (°C)	SpC (µs/cm)	pH	ORP (mV)	DO (mg/L)
1029	<u>0.25</u>	<u>20.76</u>	<u>429</u>	<u>7.62</u>	<u>192.2</u>	<u>0.37</u>
1033	<u>2.00</u>	<u>21.33</u>	<u>427</u>	<u>7.38</u>	—	—
1036	<u>4.00</u>	<u>21.32</u>	<u>435</u>	<u>7.36</u>	—	—
1038	<u>5.25</u>	<u>21.43</u>	<u>433</u>	<u>7.28</u>	—	—

Actual purge volume 5.2 gal.

Field measurements stabilized within ± 10%? ✓

Time/date sampled 1040 / 12/20/17

Purged/sampled by Heller

Sample method

New Baileys Twine

Requested analyses

VOC 8260

Comments/observations

Well Casing Volumes

2" diameter = 0.17 gal/ft

4" diameter = 0.66 gal/ft 6" diameter = 1.50 gal/ft



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MONITORING WELL SAMPLING FIELD FORM

FLUID LEVEL DATA

Well ID	<u>MW - 6RR*</u>	Date gauged	<u>12/20/17</u>
Site	<u>ATEX 213</u>	Time gauged	<u>1119</u>
Depth to PSH	<u>—</u> Feet	Well diameter	<u>7</u> inches
Depth to water	<u>10.78</u> Feet	Height of fluid column	<u>9.25</u> Feet
Total depth	<u>20.03</u> Feet	Volume in well	<u>1.57</u> Gallons
NAPL thickness	<u>—</u> Feet	(3 well volumes = <u>4.70</u> gallons)	
		Depth to PSH	Feet
		Depth to water	Feet
		NAPL thickness	Feet
		NAPL Recovered	Gallons

GROUNDWATER SAMPLING DATA

Time/date purged	1121 12/20/17	Purge Method	Bailer			
1127	0.25	22.32	804	7.42	193.6	1.00
1130	2.00	22.30	780	7.25	—	—
1133	3.50	22.60	781	7.21	—	—
1136	4.75	21.98	770	7.39	—	—

Actual purge volume 4.70 gal. Field measurements stabilized within $\pm 10\%$? Y

Time/date sampled 1138 12/20/17 Purged/sampled by Haller

Sample method Bailer & Twine

Requested analyses VOC 8260

Comments/observations

Well Casing Volumes

2" diameter = 0.17 gal/ft 4" diameter = 0.66 gal/ft 6" diameter = 1.50 gal/ft



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MONITORING WELL SAMPLING FIELD FORM

FLUID LEVEL DATA

Well ID	<u>W-35</u>		Date gauged	<u>12/20/17</u>	
Site	<u>ATEX 213</u>		Time gauged	<u>1552</u>	
Depth to PSH	Feet	Well diameter	Inches	After Bailing NAPL	
Depth to water	<u>8.97</u> Feet	Height of fluid column	<u>5.43</u> Feet	Depth to PSH	Feet
Total depth	<u>13.90</u> Feet	Volume in well	<u>0.92</u> Gallons	Depth to water	Feet
NAPL thickness	Feet	(3 well volumes = <u>2.77</u> gallons)			
		NAPL Recovered	Gallons		

GROUNDWATER SAMPLING DATA

Time/date purged	Purge Volume (gal)	Temp (°C)	SpC (µs/cm)	pH	ORP (mV)	DO (mg/L)
1554	12/20/17	Purge Method	Bailer			
1555	0.25	21.51	922	7.76	189.7	0.92
1558	1.00	22.00	944	7.36	—	—
1600	2.00	21.97	955	7.26	—	—
1601	3.00	22.06	960	7.25	—	—

Actual purge volume 2.77 gal. Field measurements stabilized within $\pm 10\%?$ ✓

Time/date sampled 1604 12/20/17 Purged/sampled by flaffer

Sample method New Bailer & Twine

Requested analyses VOC B260

Comments/observations Well casing submerged in water, cap ~~had to~~
tough to remove.

Well Casing Volumes

2" diameter = 0.17 gal/ft 4" diameter = 0.66 gal/ft 6" diameter = 1.50 gal/ft



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Phone: (505) 224-9013

MONITORING WELL SAMPLING FIELD FORM

W-36
MW-36/1

FLUID LEVEL DATA

Well ID

Date gauged

Site

Time gauged

Depth to PSH

— Feet

Well diameter

2 Inches

Depth to water

8.63 Feet

Height of fluid column

3.49 Feet

Total depth

12.12 Feet

Volume in well

0.59 Gallons

NAPL thickness

— Feet

(3 well volumes = 1.78 gallons)

12/20/17

12/17

After Bailing NAPL

Depth to PSH _____ Feet

Depth to water _____ Feet

NAPL thickness _____ Feet

NAPL Recovered _____ Gallons

GROUNDWATER SAMPLING DATA

Time/date purged

12/20 12/20/17

Purge Method

Bailer

Time	Purge Volume (gal)	Temp (°C)	SpC (µs/cm)	pH	ORP (mV)	DO (mg/L)
12/24	0.25	21.42	940	7.46	183.6	0.55
12/26	0.75	21.68	988	7.27	—	—
12/28	1.25	21.97	982	7.25	—	—
12/30	2.00	21.76	990	7.20	—	—

Actual purge volume 1.78 gal.

Field measurements stabilized within ± 10%?

Time/date sampled 12/33 12/20/17

Purged/sampled by

Haller

Sample method

New Bailer & Turne

Requested analyses

VOC 8260

Comments/observations

Well Casing Volumes

2" diameter = 0.17 gal/ft 4" diameter = 0.66 gal/ft 6" diameter = 1.50 gal/ft



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MONITORING WELL SAMPLING FIELD FORM

FLUID LEVEL DATA

Well ID	<u>MW-38</u>	Date gauged	<u>12/20/17</u>
Site	<u>ATEX 213</u>	Time gauged	<u>0855</u>
Depth to PSH	<u>—</u> Feet	Well diameter	<u>2</u> Inches
Depth to water	<u>8.83</u> Feet	Height of fluid column	<u>3.33</u> Feet
Total depth	<u>12.16</u> Feet	Volume in well	<u>0.57</u> Gallons
NAPL thickness	<u>—</u> Feet		<u>1.70</u>
(3 well volumes = <u>0.59</u> gallons)			
After Bailing NAPL			
Depth to PSH	<u>—</u> Feet		
Depth to water	<u>—</u> Feet		
NAPL thickness	<u>—</u> Feet		
NAPL Recovered	<u>—</u> Gallons		

GROUNDWATER SAMPLING DATA

Time/date purged	Purge Volume (gal)	Temp (°C)	SpC (μs/cm)	pH	ORP (mV)	DO (mg/L)
0906	0.25	16.30	1047	6.84	182.6	1.60
0910	0.75	18.81	1074	6.91	—	—
0913	1.25	18.86	1027	6.94	—	—
0916	2.00	18.91	975	6.87	—	—

Actual purge volume 1.70 gal. Field measurements stabilized within ± 10%? ✓

Time/date sampled 0920 12/20/17 Purged/sampled by Heller

Sample method New Baler & Tonne

Requested analyses 8260

Comments/observations Strong Odor

Well Casing Volumes

2" diameter = 0.17 gal/ft 4" diameter = 0.66 gal/ft 6" diameter = 1.50 gal/ft

Chain-of-Custody Record

Client: <i>Hall Environmental</i>		Turn-Around Time:							
Mailing Address: <i>300 S. Locust St.</i>		<input checked="" type="checkbox"/> Standard <input type="checkbox"/> Rush							
Phone #: <i>505-247-1212</i>		Project Name: <i>BTEX 14309</i>							
email or Fax#: <i>505-247-1212</i>		Project Manager: <i>D. Heller</i>							
QA/QC Package:		<input checked="" type="checkbox"/> Standard <input type="checkbox"/> Level 4 (Full Validation)							
Accreditation		<input type="checkbox"/> NELAP <input type="checkbox"/> Other _____							
□ EDD (Type)		Analysis Request							
Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.			
BTEX + MTBE + TMB's (8021)							Tel. 505-345-3975 Fax 505-345-4107		
BTEX + MTBE + TPH (Gas only)							4901 Hawkins NE - Albuquerque, NM 87109		
TPH 8015B (GRO / DRO / MRO)							www.hallenvironmental.com		
TPH (Method 418.1)									
EDB (Method 504.1)									
PAH's (8310 or 8270 SIMS)									
RCRA 8 Metals									
Anions (F,Cl,NO ₃ ,NO ₂ ,PO ₄ ,SO ₄)									
8081 Pesticides / 8082 PCB's									
8260B (VOA)									
8270 (Semi-VOA)									
Air Bubbles (Y or N)									
Date: <i>10/17/07</i>		Time: <i>12:00 PM</i>		Received by: <i>D. Heller</i>		Date: <i>10/17/07</i>		Time: <i>12:00 PM</i>	
Date: <i>10/17/07</i>		Time: <i>12:00 PM</i>		Received by: <i>D. Heller</i>		Date: <i>10/17/07</i>		Time: <i>12:00 PM</i>	
Remarks:									

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly noted on the analytical report.

APPENDIX C
LABORATORY REPORT



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

January 15, 2018

David Werth

EA Engineering, Science and Technology
320 Gold Ave SW Suite 1210
Albuquerque, NM 87102
TEL: (505) 224-9013
FAX

RE: Atex 213

OrderNo.: 1712C71

Dear David Werth:

Hall Environmental Analysis Laboratory received 13 sample(s) on 12/20/2017 for the analyses presented in the following report.

This report is a revised report and it replaces the original report issued December 29, 2017.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. All samples are reported as received unless otherwise indicated.

Please don't hesitate to contact HEAL for any additional information or clarifications.

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman".

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1712C71

Date Reported: 1/15/2018

CLIENT: EA Engineering, Science and Technology
Project: Atex 213
Lab ID: 1712C71-001

Matrix: AQUEOUS

Client Sample ID: MW-38

Collection Date: 12/20/2017 9:20:00 AM
Received Date: 12/20/2017 4:46:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							
Benzene	ND	1.0		µg/L	1	12/27/2017 5:01:00 PM	R48055
Toluene	ND	1.0		µg/L	1	12/27/2017 5:01:00 PM	R48055
Ethylbenzene	ND	1.0		µg/L	1	12/27/2017 5:01:00 PM	R48055
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	12/27/2017 5:01:00 PM	R48055
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	12/27/2017 5:01:00 PM	R48055
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	12/27/2017 5:01:00 PM	R48055
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	12/27/2017 5:01:00 PM	R48055
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	12/27/2017 5:01:00 PM	R48055
Naphthalene	ND	2.0		µg/L	1	12/27/2017 5:01:00 PM	R48055
1-Methylnaphthalene	ND	4.0		µg/L	1	12/27/2017 5:01:00 PM	R48055
2-Methylnaphthalene	ND	4.0		µg/L	1	12/27/2017 5:01:00 PM	R48055
Acetone	ND	10		µg/L	1	12/27/2017 5:01:00 PM	R48055
Bromobenzene	ND	1.0		µg/L	1	12/27/2017 5:01:00 PM	R48055
Bromodichloromethane	ND	1.0		µg/L	1	12/27/2017 5:01:00 PM	R48055
Bromoform	ND	1.0		µg/L	1	12/27/2017 5:01:00 PM	R48055
Bromomethane	ND	3.0		µg/L	1	12/27/2017 5:01:00 PM	R48055
2-Butanone	ND	10		µg/L	1	12/27/2017 5:01:00 PM	R48055
Carbon disulfide	ND	10		µg/L	1	12/27/2017 5:01:00 PM	R48055
Carbon Tetrachloride	ND	1.0		µg/L	1	12/27/2017 5:01:00 PM	R48055
Chlorobenzene	ND	1.0		µg/L	1	12/27/2017 5:01:00 PM	R48055
Chloroethane	ND	2.0		µg/L	1	12/27/2017 5:01:00 PM	R48055
Chloroform	ND	1.0		µg/L	1	12/27/2017 5:01:00 PM	R48055
Chloromethane	ND	3.0		µg/L	1	12/27/2017 5:01:00 PM	R48055
2-Chlorotoluene	ND	1.0		µg/L	1	12/27/2017 5:01:00 PM	R48055
4-Chlorotoluene	ND	1.0		µg/L	1	12/27/2017 5:01:00 PM	R48055
cis-1,2-DCE	ND	1.0		µg/L	1	12/27/2017 5:01:00 PM	R48055
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	12/27/2017 5:01:00 PM	R48055
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	12/27/2017 5:01:00 PM	R48055
Dibromochloromethane	ND	1.0		µg/L	1	12/27/2017 5:01:00 PM	R48055
Dibromomethane	ND	1.0		µg/L	1	12/27/2017 5:01:00 PM	R48055
1,2-Dichlorobenzene	ND	1.0		µg/L	1	12/27/2017 5:01:00 PM	R48055
1,3-Dichlorobenzene	ND	1.0		µg/L	1	12/27/2017 5:01:00 PM	R48055
1,4-Dichlorobenzene	ND	1.0		µg/L	1	12/27/2017 5:01:00 PM	R48055
Dichlorodifluoromethane	ND	1.0		µg/L	1	12/27/2017 5:01:00 PM	R48055
1,1-Dichloroethane	ND	1.0		µg/L	1	12/27/2017 5:01:00 PM	R48055
1,1-Dichloroethene	ND	1.0		µg/L	1	12/27/2017 5:01:00 PM	R48055
1,2-Dichloropropane	ND	1.0		µg/L	1	12/27/2017 5:01:00 PM	R48055
1,3-Dichloropropane	ND	1.0		µg/L	1	12/27/2017 5:01:00 PM	R48055
2,2-Dichloropropane	ND	2.0		µg/L	1	12/27/2017 5:01:00 PM	R48055

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

Page 1 of 32

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1712C71

Date Reported: 1/15/2018

CLIENT: EA Engineering, Science and Technology
Project: Atex 213
Lab ID: 1712C71-001

Matrix: AQUEOUS

Client Sample ID: MW-38

Collection Date: 12/20/2017 9:20:00 AM
Received Date: 12/20/2017 4:46:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							
1,1-Dichloropropene	ND	1.0		µg/L	1	12/27/2017 5:01:00 PM	R48055
Hexachlorobutadiene	ND	1.0		µg/L	1	12/27/2017 5:01:00 PM	R48055
2-Hexanone	ND	10		µg/L	1	12/27/2017 5:01:00 PM	R48055
Isopropylbenzene	ND	1.0		µg/L	1	12/27/2017 5:01:00 PM	R48055
4-Isopropyltoluene	ND	1.0		µg/L	1	12/27/2017 5:01:00 PM	R48055
4-Methyl-2-pentanone	ND	10		µg/L	1	12/27/2017 5:01:00 PM	R48055
Methylene Chloride	ND	3.0		µg/L	1	12/27/2017 5:01:00 PM	R48055
n-Butylbenzene	ND	3.0		µg/L	1	12/27/2017 5:01:00 PM	R48055
n-Propylbenzene	ND	1.0		µg/L	1	12/27/2017 5:01:00 PM	R48055
sec-Butylbenzene	ND	1.0		µg/L	1	12/27/2017 5:01:00 PM	R48055
Styrene	ND	1.0		µg/L	1	12/27/2017 5:01:00 PM	R48055
tert-Butylbenzene	ND	1.0		µg/L	1	12/27/2017 5:01:00 PM	R48055
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	12/27/2017 5:01:00 PM	R48055
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	12/27/2017 5:01:00 PM	R48055
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	12/27/2017 5:01:00 PM	R48055
trans-1,2-DCE	ND	1.0		µg/L	1	12/27/2017 5:01:00 PM	R48055
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	12/27/2017 5:01:00 PM	R48055
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	12/27/2017 5:01:00 PM	R48055
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	12/27/2017 5:01:00 PM	R48055
1,1,1-Trichloroethane	ND	1.0		µg/L	1	12/27/2017 5:01:00 PM	R48055
1,1,2-Trichloroethane	ND	1.0		µg/L	1	12/27/2017 5:01:00 PM	R48055
Trichloroethene (TCE)	ND	1.0		µg/L	1	12/27/2017 5:01:00 PM	R48055
Trichlorofluoromethane	ND	1.0		µg/L	1	12/27/2017 5:01:00 PM	R48055
1,2,3-Trichloropropane	ND	2.0		µg/L	1	12/27/2017 5:01:00 PM	R48055
Vinyl chloride	ND	1.0		µg/L	1	12/27/2017 5:01:00 PM	R48055
Xylenes, Total	ND	1.5		µg/L	1	12/27/2017 5:01:00 PM	R48055
Surr: 1,2-Dichloroethane-d4	93.7	70-130		%Rec	1	12/27/2017 5:01:00 PM	R48055
Surr: 4-Bromofluorobenzene	97.8	70-130		%Rec	1	12/27/2017 5:01:00 PM	R48055
Surr: Dibromofluoromethane	95.8	70-130		%Rec	1	12/27/2017 5:01:00 PM	R48055
Surr: Toluene-d8	94.0	70-130		%Rec	1	12/27/2017 5:01:00 PM	R48055

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1712C71

Date Reported: 1/15/2018

CLIENT: EA Engineering, Science and Technology
Project: Atex 213
Lab ID: 1712C71-002

Matrix: AQUEOUS

Client Sample ID: MW-2

Collection Date: 12/20/2017 10:02:00 AM
Received Date: 12/20/2017 4:46:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							
Benzene	ND	1.0		µg/L	1	12/27/2017 6:12:00 PM	R48055
Toluene	ND	1.0		µg/L	1	12/27/2017 6:12:00 PM	R48055
Ethylbenzene	ND	1.0		µg/L	1	12/27/2017 6:12:00 PM	R48055
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	12/27/2017 6:12:00 PM	R48055
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	12/27/2017 6:12:00 PM	R48055
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	12/27/2017 6:12:00 PM	R48055
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	12/27/2017 6:12:00 PM	R48055
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	12/27/2017 6:12:00 PM	R48055
Naphthalene	ND	2.0		µg/L	1	12/27/2017 6:12:00 PM	R48055
1-Methylnaphthalene	ND	4.0		µg/L	1	12/27/2017 6:12:00 PM	R48055
2-Methylnaphthalene	ND	4.0		µg/L	1	12/27/2017 6:12:00 PM	R48055
Acetone	ND	10		µg/L	1	12/27/2017 6:12:00 PM	R48055
Bromobenzene	ND	1.0		µg/L	1	12/27/2017 6:12:00 PM	R48055
Bromodichloromethane	ND	1.0		µg/L	1	12/27/2017 6:12:00 PM	R48055
Bromoform	ND	1.0		µg/L	1	12/27/2017 6:12:00 PM	R48055
Bromomethane	ND	3.0		µg/L	1	12/27/2017 6:12:00 PM	R48055
2-Butanone	ND	10		µg/L	1	12/27/2017 6:12:00 PM	R48055
Carbon disulfide	ND	10		µg/L	1	12/27/2017 6:12:00 PM	R48055
Carbon Tetrachloride	ND	1.0		µg/L	1	12/27/2017 6:12:00 PM	R48055
Chlorobenzene	ND	1.0		µg/L	1	12/27/2017 6:12:00 PM	R48055
Chloroethane	ND	2.0		µg/L	1	12/27/2017 6:12:00 PM	R48055
Chloroform	ND	1.0		µg/L	1	12/27/2017 6:12:00 PM	R48055
Chloromethane	ND	3.0		µg/L	1	12/27/2017 6:12:00 PM	R48055
2-Chlorotoluene	ND	1.0		µg/L	1	12/27/2017 6:12:00 PM	R48055
4-Chlorotoluene	ND	1.0		µg/L	1	12/27/2017 6:12:00 PM	R48055
cis-1,2-DCE	ND	1.0		µg/L	1	12/27/2017 6:12:00 PM	R48055
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	12/27/2017 6:12:00 PM	R48055
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	12/27/2017 6:12:00 PM	R48055
Dibromochloromethane	ND	1.0		µg/L	1	12/27/2017 6:12:00 PM	R48055
Dibromomethane	ND	1.0		µg/L	1	12/27/2017 6:12:00 PM	R48055
1,2-Dichlorobenzene	ND	1.0		µg/L	1	12/27/2017 6:12:00 PM	R48055
1,3-Dichlorobenzene	ND	1.0		µg/L	1	12/27/2017 6:12:00 PM	R48055
1,4-Dichlorobenzene	ND	1.0		µg/L	1	12/27/2017 6:12:00 PM	R48055
Dichlorodifluoromethane	ND	1.0		µg/L	1	12/27/2017 6:12:00 PM	R48055
1,1-Dichloroethane	ND	1.0		µg/L	1	12/27/2017 6:12:00 PM	R48055
1,1-Dichloroethene	ND	1.0		µg/L	1	12/27/2017 6:12:00 PM	R48055
1,2-Dichloropropane	ND	1.0		µg/L	1	12/27/2017 6:12:00 PM	R48055
1,3-Dichloropropane	ND	1.0		µg/L	1	12/27/2017 6:12:00 PM	R48055
2,2-Dichloropropane	ND	2.0		µg/L	1	12/27/2017 6:12:00 PM	R48055

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1712C71

Date Reported: 1/15/2018

CLIENT: EA Engineering, Science and Technology
Project: Atex 213
Lab ID: 1712C71-002

Matrix: AQUEOUS

Client Sample ID: MW-2

Collection Date: 12/20/2017 10:02:00 AM
Received Date: 12/20/2017 4:46:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							
1,1-Dichloropropene	ND	1.0		µg/L	1	12/27/2017 6:12:00 PM	R48055
Hexachlorobutadiene	ND	1.0		µg/L	1	12/27/2017 6:12:00 PM	R48055
2-Hexanone	ND	10		µg/L	1	12/27/2017 6:12:00 PM	R48055
Isopropylbenzene	ND	1.0		µg/L	1	12/27/2017 6:12:00 PM	R48055
4-Isopropyltoluene	ND	1.0		µg/L	1	12/27/2017 6:12:00 PM	R48055
4-Methyl-2-pentanone	ND	10		µg/L	1	12/27/2017 6:12:00 PM	R48055
Methylene Chloride	ND	3.0		µg/L	1	12/27/2017 6:12:00 PM	R48055
n-Butylbenzene	ND	3.0		µg/L	1	12/27/2017 6:12:00 PM	R48055
n-Propylbenzene	ND	1.0		µg/L	1	12/27/2017 6:12:00 PM	R48055
sec-Butylbenzene	ND	1.0		µg/L	1	12/27/2017 6:12:00 PM	R48055
Styrene	ND	1.0		µg/L	1	12/27/2017 6:12:00 PM	R48055
tert-Butylbenzene	ND	1.0		µg/L	1	12/27/2017 6:12:00 PM	R48055
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	12/27/2017 6:12:00 PM	R48055
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	12/27/2017 6:12:00 PM	R48055
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	12/27/2017 6:12:00 PM	R48055
trans-1,2-DCE	ND	1.0		µg/L	1	12/27/2017 6:12:00 PM	R48055
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	12/27/2017 6:12:00 PM	R48055
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	12/27/2017 6:12:00 PM	R48055
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	12/27/2017 6:12:00 PM	R48055
1,1,1-Trichloroethane	ND	1.0		µg/L	1	12/27/2017 6:12:00 PM	R48055
1,1,2-Trichloroethane	ND	1.0		µg/L	1	12/27/2017 6:12:00 PM	R48055
Trichloroethene (TCE)	ND	1.0		µg/L	1	12/27/2017 6:12:00 PM	R48055
Trichlorofluoromethane	ND	1.0		µg/L	1	12/27/2017 6:12:00 PM	R48055
1,2,3-Trichloropropane	ND	2.0		µg/L	1	12/27/2017 6:12:00 PM	R48055
Vinyl chloride	ND	1.0		µg/L	1	12/27/2017 6:12:00 PM	R48055
Xylenes, Total	ND	1.5		µg/L	1	12/27/2017 6:12:00 PM	R48055
Surr: 1,2-Dichloroethane-d4	96.7	70-130		%Rec	1	12/27/2017 6:12:00 PM	R48055
Surr: 4-Bromofluorobenzene	96.0	70-130		%Rec	1	12/27/2017 6:12:00 PM	R48055
Surr: Dibromofluoromethane	98.6	70-130		%Rec	1	12/27/2017 6:12:00 PM	R48055
Surr: Toluene-d8	93.9	70-130		%Rec	1	12/27/2017 6:12:00 PM	R48055

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1712C71

Date Reported: 1/15/2018

CLIENT: EA Engineering, Science and Technology
Project: Atex 213
Lab ID: 1712C71-003

Matrix: AQUEOUS

Client Sample ID: NMW-4R

Collection Date: 12/20/2017 10:40:00 AM
Received Date: 12/20/2017 4:46:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							
Benzene	ND	1.0		µg/L	1	12/27/2017 6:36:00 PM	R48055
Toluene	ND	1.0		µg/L	1	12/27/2017 6:36:00 PM	R48055
Ethylbenzene	ND	1.0		µg/L	1	12/27/2017 6:36:00 PM	R48055
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	12/27/2017 6:36:00 PM	R48055
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	12/27/2017 6:36:00 PM	R48055
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	12/27/2017 6:36:00 PM	R48055
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	12/27/2017 6:36:00 PM	R48055
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	12/27/2017 6:36:00 PM	R48055
Naphthalene	ND	2.0		µg/L	1	12/27/2017 6:36:00 PM	R48055
1-Methylnaphthalene	ND	4.0		µg/L	1	12/27/2017 6:36:00 PM	R48055
2-Methylnaphthalene	ND	4.0		µg/L	1	12/27/2017 6:36:00 PM	R48055
Acetone	ND	10		µg/L	1	12/27/2017 6:36:00 PM	R48055
Bromobenzene	ND	1.0		µg/L	1	12/27/2017 6:36:00 PM	R48055
Bromodichloromethane	ND	1.0		µg/L	1	12/27/2017 6:36:00 PM	R48055
Bromoform	ND	1.0		µg/L	1	12/27/2017 6:36:00 PM	R48055
Bromomethane	ND	3.0		µg/L	1	12/27/2017 6:36:00 PM	R48055
2-Butanone	ND	10		µg/L	1	12/27/2017 6:36:00 PM	R48055
Carbon disulfide	ND	10		µg/L	1	12/27/2017 6:36:00 PM	R48055
Carbon Tetrachloride	ND	1.0		µg/L	1	12/27/2017 6:36:00 PM	R48055
Chlorobenzene	ND	1.0		µg/L	1	12/27/2017 6:36:00 PM	R48055
Chloroethane	ND	2.0		µg/L	1	12/27/2017 6:36:00 PM	R48055
Chloroform	ND	1.0		µg/L	1	12/27/2017 6:36:00 PM	R48055
Chloromethane	ND	3.0		µg/L	1	12/27/2017 6:36:00 PM	R48055
2-Chlorotoluene	ND	1.0		µg/L	1	12/27/2017 6:36:00 PM	R48055
4-Chlorotoluene	ND	1.0		µg/L	1	12/27/2017 6:36:00 PM	R48055
cis-1,2-DCE	ND	1.0		µg/L	1	12/27/2017 6:36:00 PM	R48055
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	12/27/2017 6:36:00 PM	R48055
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	12/27/2017 6:36:00 PM	R48055
Dibromochloromethane	ND	1.0		µg/L	1	12/27/2017 6:36:00 PM	R48055
Dibromomethane	ND	1.0		µg/L	1	12/27/2017 6:36:00 PM	R48055
1,2-Dichlorobenzene	ND	1.0		µg/L	1	12/27/2017 6:36:00 PM	R48055
1,3-Dichlorobenzene	ND	1.0		µg/L	1	12/27/2017 6:36:00 PM	R48055
1,4-Dichlorobenzene	ND	1.0		µg/L	1	12/27/2017 6:36:00 PM	R48055
Dichlorodifluoromethane	ND	1.0		µg/L	1	12/27/2017 6:36:00 PM	R48055
1,1-Dichloroethane	ND	1.0		µg/L	1	12/27/2017 6:36:00 PM	R48055
1,1-Dichloroethene	ND	1.0		µg/L	1	12/27/2017 6:36:00 PM	R48055
1,2-Dichloropropane	ND	1.0		µg/L	1	12/27/2017 6:36:00 PM	R48055
1,3-Dichloropropane	ND	1.0		µg/L	1	12/27/2017 6:36:00 PM	R48055
2,2-Dichloropropane	ND	2.0		µg/L	1	12/27/2017 6:36:00 PM	R48055

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E Value above quantitation range
H	Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	Page 5 of 32
PQL	Practical Quantitative Limit	P Sample pH Not In Range
S	% Recovery outside of range due to dilution or matrix	RL Reporting Detection Limit
		W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1712C71

Date Reported: 1/15/2018

CLIENT: EA Engineering, Science and Technology
Project: Atex 213
Lab ID: 1712C71-003

Matrix: AQUEOUS

Client Sample ID: NMW-4R

Collection Date: 12/20/2017 10:40:00 AM
Received Date: 12/20/2017 4:46:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							
1,1-Dichloropropene	ND	1.0		µg/L	1	12/27/2017 6:36:00 PM	R48055
Hexachlorobutadiene	ND	1.0		µg/L	1	12/27/2017 6:36:00 PM	R48055
2-Hexanone	ND	10		µg/L	1	12/27/2017 6:36:00 PM	R48055
Isopropylbenzene	ND	1.0		µg/L	1	12/27/2017 6:36:00 PM	R48055
4-Isopropyltoluene	ND	1.0		µg/L	1	12/27/2017 6:36:00 PM	R48055
4-Methyl-2-pentanone	ND	10		µg/L	1	12/27/2017 6:36:00 PM	R48055
Methylene Chloride	ND	3.0		µg/L	1	12/27/2017 6:36:00 PM	R48055
n-Butylbenzene	ND	3.0		µg/L	1	12/27/2017 6:36:00 PM	R48055
n-Propylbenzene	ND	1.0		µg/L	1	12/27/2017 6:36:00 PM	R48055
sec-Butylbenzene	ND	1.0		µg/L	1	12/27/2017 6:36:00 PM	R48055
Styrene	ND	1.0		µg/L	1	12/27/2017 6:36:00 PM	R48055
tert-Butylbenzene	ND	1.0		µg/L	1	12/27/2017 6:36:00 PM	R48055
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	12/27/2017 6:36:00 PM	R48055
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	12/27/2017 6:36:00 PM	R48055
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	12/27/2017 6:36:00 PM	R48055
trans-1,2-DCE	ND	1.0		µg/L	1	12/27/2017 6:36:00 PM	R48055
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	12/27/2017 6:36:00 PM	R48055
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	12/27/2017 6:36:00 PM	R48055
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	12/27/2017 6:36:00 PM	R48055
1,1,1-Trichloroethane	ND	1.0		µg/L	1	12/27/2017 6:36:00 PM	R48055
1,1,2-Trichloroethane	ND	1.0		µg/L	1	12/27/2017 6:36:00 PM	R48055
Trichloroethene (TCE)	ND	1.0		µg/L	1	12/27/2017 6:36:00 PM	R48055
Trichlorofluoromethane	ND	1.0		µg/L	1	12/27/2017 6:36:00 PM	R48055
1,2,3-Trichloropropane	ND	2.0		µg/L	1	12/27/2017 6:36:00 PM	R48055
Vinyl chloride	ND	1.0		µg/L	1	12/27/2017 6:36:00 PM	R48055
Xylenes, Total	ND	1.5		µg/L	1	12/27/2017 6:36:00 PM	R48055
Surr: 1,2-Dichloroethane-d4	94.5	70-130		%Rec	1	12/27/2017 6:36:00 PM	R48055
Surr: 4-Bromofluorobenzene	94.9	70-130		%Rec	1	12/27/2017 6:36:00 PM	R48055
Surr: Dibromofluoromethane	96.8	70-130		%Rec	1	12/27/2017 6:36:00 PM	R48055
Surr: Toluene-d8	93.1	70-130		%Rec	1	12/27/2017 6:36:00 PM	R48055

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1712C71

Date Reported: 1/15/2018

CLIENT: EA Engineering, Science and Technology

Project: Atex 213

Lab ID: 1712C71-004

Client Sample ID: MW-6RR*

Collection Date: 12/20/2017 11:38:00 AM

Matrix: AQUEOUS

Received Date: 12/20/2017 4:46:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							
Benzene	3.4	1.0		µg/L	1	12/27/2017 7:00:00 PM	R48055
Toluene	ND	1.0		µg/L	1	12/27/2017 7:00:00 PM	R48055
Ethylbenzene	ND	1.0		µg/L	1	12/27/2017 7:00:00 PM	R48055
Methyl tert-butyl ether (MTBE)	1.5	1.0		µg/L	1	12/27/2017 7:00:00 PM	R48055
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	12/27/2017 7:00:00 PM	R48055
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	12/27/2017 7:00:00 PM	R48055
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	12/27/2017 7:00:00 PM	R48055
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	12/27/2017 7:00:00 PM	R48055
Naphthalene	7.2	2.0		µg/L	1	12/27/2017 7:00:00 PM	R48055
1-Methylnaphthalene	ND	4.0		µg/L	1	12/27/2017 7:00:00 PM	R48055
2-Methylnaphthalene	ND	4.0		µg/L	1	12/27/2017 7:00:00 PM	R48055
Acetone	ND	10		µg/L	1	12/27/2017 7:00:00 PM	R48055
Bromobenzene	ND	1.0		µg/L	1	12/27/2017 7:00:00 PM	R48055
Bromodichloromethane	ND	1.0		µg/L	1	12/27/2017 7:00:00 PM	R48055
Bromoform	ND	1.0		µg/L	1	12/27/2017 7:00:00 PM	R48055
Bromomethane	ND	3.0		µg/L	1	12/27/2017 7:00:00 PM	R48055
2-Butanone	ND	10		µg/L	1	12/27/2017 7:00:00 PM	R48055
Carbon disulfide	ND	10		µg/L	1	12/27/2017 7:00:00 PM	R48055
Carbon Tetrachloride	ND	1.0		µg/L	1	12/27/2017 7:00:00 PM	R48055
Chlorobenzene	ND	1.0		µg/L	1	12/27/2017 7:00:00 PM	R48055
Chloroethane	ND	2.0		µg/L	1	12/27/2017 7:00:00 PM	R48055
Chloroform	ND	1.0		µg/L	1	12/27/2017 7:00:00 PM	R48055
Chloromethane	ND	3.0		µg/L	1	12/27/2017 7:00:00 PM	R48055
2-Chlorotoluene	ND	1.0		µg/L	1	12/27/2017 7:00:00 PM	R48055
4-Chlorotoluene	ND	1.0		µg/L	1	12/27/2017 7:00:00 PM	R48055
cis-1,2-DCE	ND	1.0		µg/L	1	12/27/2017 7:00:00 PM	R48055
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	12/27/2017 7:00:00 PM	R48055
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	12/27/2017 7:00:00 PM	R48055
Dibromochloromethane	ND	1.0		µg/L	1	12/27/2017 7:00:00 PM	R48055
Dibromomethane	ND	1.0		µg/L	1	12/27/2017 7:00:00 PM	R48055
1,2-Dichlorobenzene	ND	1.0		µg/L	1	12/27/2017 7:00:00 PM	R48055
1,3-Dichlorobenzene	ND	1.0		µg/L	1	12/27/2017 7:00:00 PM	R48055
1,4-Dichlorobenzene	ND	1.0		µg/L	1	12/27/2017 7:00:00 PM	R48055
Dichlorodifluoromethane	ND	1.0		µg/L	1	12/27/2017 7:00:00 PM	R48055
1,1-Dichloroethane	ND	1.0		µg/L	1	12/27/2017 7:00:00 PM	R48055
1,1-Dichloroethene	ND	1.0		µg/L	1	12/27/2017 7:00:00 PM	R48055
1,2-Dichloropropane	ND	1.0		µg/L	1	12/27/2017 7:00:00 PM	R48055
1,3-Dichloropropane	ND	1.0		µg/L	1	12/27/2017 7:00:00 PM	R48055
2,2-Dichloropropane	ND	2.0		µg/L	1	12/27/2017 7:00:00 PM	R48055

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers: * Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quantitative Limit

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits Page 7 of 32

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1712C71

Date Reported: 1/15/2018

CLIENT: EA Engineering, Science and Technology

Project: Atex 213

Lab ID: 1712C71-004

Client Sample ID: MW-6RR*

Collection Date: 12/20/2017 11:38:00 AM

Matrix: AQUEOUS

Received Date: 12/20/2017 4:46:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							
1,1-Dichloropropene	ND	1.0		µg/L	1	12/27/2017 7:00:00 PM	R48055
Hexachlorobutadiene	ND	1.0		µg/L	1	12/27/2017 7:00:00 PM	R48055
2-Hexanone	ND	10		µg/L	1	12/27/2017 7:00:00 PM	R48055
Isopropylbenzene	5.3	1.0		µg/L	1	12/27/2017 7:00:00 PM	R48055
4-Isopropyltoluene	ND	1.0		µg/L	1	12/27/2017 7:00:00 PM	R48055
4-Methyl-2-pentanone	ND	10		µg/L	1	12/27/2017 7:00:00 PM	R48055
Methylene Chloride	ND	3.0		µg/L	1	12/27/2017 7:00:00 PM	R48055
n-Butylbenzene	ND	3.0		µg/L	1	12/27/2017 7:00:00 PM	R48055
n-Propylbenzene	10	1.0		µg/L	1	12/27/2017 7:00:00 PM	R48055
sec-Butylbenzene	1.3	1.0		µg/L	1	12/27/2017 7:00:00 PM	R48055
Styrene	ND	1.0		µg/L	1	12/27/2017 7:00:00 PM	R48055
tert-Butylbenzene	ND	1.0		µg/L	1	12/27/2017 7:00:00 PM	R48055
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	12/27/2017 7:00:00 PM	R48055
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	12/27/2017 7:00:00 PM	R48055
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	12/27/2017 7:00:00 PM	R48055
trans-1,2-DCE	ND	1.0		µg/L	1	12/27/2017 7:00:00 PM	R48055
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	12/27/2017 7:00:00 PM	R48055
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	12/27/2017 7:00:00 PM	R48055
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	12/27/2017 7:00:00 PM	R48055
1,1,1-Trichloroethane	ND	1.0		µg/L	1	12/27/2017 7:00:00 PM	R48055
1,1,2-Trichloroethane	ND	1.0		µg/L	1	12/27/2017 7:00:00 PM	R48055
Trichloroethene (TCE)	ND	1.0		µg/L	1	12/27/2017 7:00:00 PM	R48055
Trichlorofluoromethane	ND	1.0		µg/L	1	12/27/2017 7:00:00 PM	R48055
1,2,3-Trichloropropane	ND	2.0		µg/L	1	12/27/2017 7:00:00 PM	R48055
Vinyl chloride	ND	1.0		µg/L	1	12/27/2017 7:00:00 PM	R48055
Xylenes, Total	ND	1.5		µg/L	1	12/27/2017 7:00:00 PM	R48055
Surr: 1,2-Dichloroethane-d4	94.1	70-130		%Rec	1	12/27/2017 7:00:00 PM	R48055
Surr: 4-Bromofluorobenzene	96.8	70-130		%Rec	1	12/27/2017 7:00:00 PM	R48055
Surr: Dibromofluoromethane	95.4	70-130		%Rec	1	12/27/2017 7:00:00 PM	R48055
Surr: Toluene-d8	94.5	70-130		%Rec	1	12/27/2017 7:00:00 PM	R48055

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers: * Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits Page 8 of 32

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1712C71

Date Reported: 1/15/2018

CLIENT: EA Engineering, Science and Technology
Project: Atex 213
Lab ID: 1712C71-005

Matrix: AQUEOUS

Client Sample ID: MW-4R

Collection Date: 12/20/2017 12:08:00 PM
Received Date: 12/20/2017 4:46:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							
Benzene	ND	1.0		µg/L	1	12/27/2017 7:23:00 PM	R48055
Toluene	ND	1.0		µg/L	1	12/27/2017 7:23:00 PM	R48055
Ethylbenzene	ND	1.0		µg/L	1	12/27/2017 7:23:00 PM	R48055
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	12/27/2017 7:23:00 PM	R48055
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	12/27/2017 7:23:00 PM	R48055
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	12/27/2017 7:23:00 PM	R48055
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	12/27/2017 7:23:00 PM	R48055
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	12/27/2017 7:23:00 PM	R48055
Naphthalene	ND	2.0		µg/L	1	12/27/2017 7:23:00 PM	R48055
1-Methylnaphthalene	ND	4.0		µg/L	1	12/27/2017 7:23:00 PM	R48055
2-Methylnaphthalene	ND	4.0		µg/L	1	12/27/2017 7:23:00 PM	R48055
Acetone	ND	10		µg/L	1	12/27/2017 7:23:00 PM	R48055
Bromobenzene	ND	1.0		µg/L	1	12/27/2017 7:23:00 PM	R48055
Bromodichloromethane	ND	1.0		µg/L	1	12/27/2017 7:23:00 PM	R48055
Bromoform	ND	1.0		µg/L	1	12/27/2017 7:23:00 PM	R48055
Bromomethane	ND	3.0		µg/L	1	12/27/2017 7:23:00 PM	R48055
2-Butanone	ND	10		µg/L	1	12/27/2017 7:23:00 PM	R48055
Carbon disulfide	ND	10		µg/L	1	12/27/2017 7:23:00 PM	R48055
Carbon Tetrachloride	ND	1.0		µg/L	1	12/27/2017 7:23:00 PM	R48055
Chlorobenzene	ND	1.0		µg/L	1	12/27/2017 7:23:00 PM	R48055
Chloroethane	ND	2.0		µg/L	1	12/27/2017 7:23:00 PM	R48055
Chloroform	ND	1.0		µg/L	1	12/27/2017 7:23:00 PM	R48055
Chloromethane	ND	3.0		µg/L	1	12/27/2017 7:23:00 PM	R48055
2-Chlorotoluene	ND	1.0		µg/L	1	12/27/2017 7:23:00 PM	R48055
4-Chlorotoluene	ND	1.0		µg/L	1	12/27/2017 7:23:00 PM	R48055
cis-1,2-DCE	ND	1.0		µg/L	1	12/27/2017 7:23:00 PM	R48055
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	12/27/2017 7:23:00 PM	R48055
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	12/27/2017 7:23:00 PM	R48055
Dibromochloromethane	ND	1.0		µg/L	1	12/27/2017 7:23:00 PM	R48055
Dibromomethane	ND	1.0		µg/L	1	12/27/2017 7:23:00 PM	R48055
1,2-Dichlorobenzene	ND	1.0		µg/L	1	12/27/2017 7:23:00 PM	R48055
1,3-Dichlorobenzene	ND	1.0		µg/L	1	12/27/2017 7:23:00 PM	R48055
1,4-Dichlorobenzene	ND	1.0		µg/L	1	12/27/2017 7:23:00 PM	R48055
Dichlorodifluoromethane	ND	1.0		µg/L	1	12/27/2017 7:23:00 PM	R48055
1,1-Dichloroethane	ND	1.0		µg/L	1	12/27/2017 7:23:00 PM	R48055
1,1-Dichloroethene	ND	1.0		µg/L	1	12/27/2017 7:23:00 PM	R48055
1,2-Dichloropropane	ND	1.0		µg/L	1	12/27/2017 7:23:00 PM	R48055
1,3-Dichloropropane	ND	1.0		µg/L	1	12/27/2017 7:23:00 PM	R48055
2,2-Dichloropropane	ND	2.0		µg/L	1	12/27/2017 7:23:00 PM	R48055

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1712C71

Date Reported: 1/15/2018

CLIENT: EA Engineering, Science and Technology
Project: Atex 213
Lab ID: 1712C71-005

Matrix: AQUEOUS

Client Sample ID: MW-4R

Collection Date: 12/20/2017 12:08:00 PM
Received Date: 12/20/2017 4:46:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							
1,1-Dichloropropene	ND	1.0		µg/L	1	12/27/2017 7:23:00 PM	R48055
Hexachlorobutadiene	ND	1.0		µg/L	1	12/27/2017 7:23:00 PM	R48055
2-Hexanone	ND	10		µg/L	1	12/27/2017 7:23:00 PM	R48055
Isopropylbenzene	ND	1.0		µg/L	1	12/27/2017 7:23:00 PM	R48055
4-Isopropyltoluene	ND	1.0		µg/L	1	12/27/2017 7:23:00 PM	R48055
4-Methyl-2-pentanone	ND	10		µg/L	1	12/27/2017 7:23:00 PM	R48055
Methylene Chloride	ND	3.0		µg/L	1	12/27/2017 7:23:00 PM	R48055
n-Butylbenzene	ND	3.0		µg/L	1	12/27/2017 7:23:00 PM	R48055
n-Propylbenzene	ND	1.0		µg/L	1	12/27/2017 7:23:00 PM	R48055
sec-Butylbenzene	ND	1.0		µg/L	1	12/27/2017 7:23:00 PM	R48055
Styrene	ND	1.0		µg/L	1	12/27/2017 7:23:00 PM	R48055
tert-Butylbenzene	ND	1.0		µg/L	1	12/27/2017 7:23:00 PM	R48055
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	12/27/2017 7:23:00 PM	R48055
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	12/27/2017 7:23:00 PM	R48055
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	12/27/2017 7:23:00 PM	R48055
trans-1,2-DCE	ND	1.0		µg/L	1	12/27/2017 7:23:00 PM	R48055
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	12/27/2017 7:23:00 PM	R48055
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	12/27/2017 7:23:00 PM	R48055
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	12/27/2017 7:23:00 PM	R48055
1,1,1-Trichloroethane	ND	1.0		µg/L	1	12/27/2017 7:23:00 PM	R48055
1,1,2-Trichloroethane	ND	1.0		µg/L	1	12/27/2017 7:23:00 PM	R48055
Trichloroethene (TCE)	ND	1.0		µg/L	1	12/27/2017 7:23:00 PM	R48055
Trichlorofluoromethane	ND	1.0		µg/L	1	12/27/2017 7:23:00 PM	R48055
1,2,3-Trichloropropane	ND	2.0		µg/L	1	12/27/2017 7:23:00 PM	R48055
Vinyl chloride	ND	1.0		µg/L	1	12/27/2017 7:23:00 PM	R48055
Xylenes, Total	ND	1.5		µg/L	1	12/27/2017 7:23:00 PM	R48055
Surr: 1,2-Dichloroethane-d4	93.7	70-130		%Rec	1	12/27/2017 7:23:00 PM	R48055
Surr: 4-Bromofluorobenzene	95.9	70-130		%Rec	1	12/27/2017 7:23:00 PM	R48055
Surr: Dibromofluoromethane	97.0	70-130		%Rec	1	12/27/2017 7:23:00 PM	R48055
Surr: Toluene-d8	93.8	70-130		%Rec	1	12/27/2017 7:23:00 PM	R48055

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

Page 10 of 32

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1712C71

Date Reported: 1/15/2018

CLIENT: EA Engineering, Science and Technology

Project: Atex 213

Lab ID: 1712C71-006

Matrix: AQUEOUS

Client Sample ID: W-36

Collection Date: 12/20/2017 12:33:00 PM

Received Date: 12/20/2017 4:46:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							
Benzene	ND	1.0		µg/L	1	12/27/2017 7:46:00 PM	R48055
Toluene	ND	1.0		µg/L	1	12/27/2017 7:46:00 PM	R48055
Ethylbenzene	4.1	1.0		µg/L	1	12/27/2017 7:46:00 PM	R48055
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	12/27/2017 7:46:00 PM	R48055
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	12/27/2017 7:46:00 PM	R48055
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	12/27/2017 7:46:00 PM	R48055
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	12/27/2017 7:46:00 PM	R48055
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	12/27/2017 7:46:00 PM	R48055
Naphthalene	49	2.0		µg/L	1	12/27/2017 7:46:00 PM	R48055
1-Methylnaphthalene	13	4.0		µg/L	1	12/27/2017 7:46:00 PM	R48055
2-Methylnaphthalene	8.1	4.0		µg/L	1	12/27/2017 7:46:00 PM	R48055
Acetone	ND	10		µg/L	1	12/27/2017 7:46:00 PM	R48055
Bromobenzene	ND	1.0		µg/L	1	12/27/2017 7:46:00 PM	R48055
Bromodichloromethane	ND	1.0		µg/L	1	12/27/2017 7:46:00 PM	R48055
Bromoform	ND	1.0		µg/L	1	12/27/2017 7:46:00 PM	R48055
Bromomethane	ND	3.0		µg/L	1	12/27/2017 7:46:00 PM	R48055
2-Butanone	ND	10		µg/L	1	12/27/2017 7:46:00 PM	R48055
Carbon disulfide	ND	10		µg/L	1	12/27/2017 7:46:00 PM	R48055
Carbon Tetrachloride	ND	1.0		µg/L	1	12/27/2017 7:46:00 PM	R48055
Chlorobenzene	ND	1.0		µg/L	1	12/27/2017 7:46:00 PM	R48055
Chloroethane	ND	2.0		µg/L	1	12/27/2017 7:46:00 PM	R48055
Chloroform	ND	1.0		µg/L	1	12/27/2017 7:46:00 PM	R48055
Chloromethane	ND	3.0		µg/L	1	12/27/2017 7:46:00 PM	R48055
2-Chlorotoluene	ND	1.0		µg/L	1	12/27/2017 7:46:00 PM	R48055
4-Chlorotoluene	ND	1.0		µg/L	1	12/27/2017 7:46:00 PM	R48055
cis-1,2-DCE	ND	1.0		µg/L	1	12/27/2017 7:46:00 PM	R48055
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	12/27/2017 7:46:00 PM	R48055
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	12/27/2017 7:46:00 PM	R48055
Dibromochloromethane	ND	1.0		µg/L	1	12/27/2017 7:46:00 PM	R48055
Dibromomethane	ND	1.0		µg/L	1	12/27/2017 7:46:00 PM	R48055
1,2-Dichlorobenzene	ND	1.0		µg/L	1	12/27/2017 7:46:00 PM	R48055
1,3-Dichlorobenzene	ND	1.0		µg/L	1	12/27/2017 7:46:00 PM	R48055
1,4-Dichlorobenzene	ND	1.0		µg/L	1	12/27/2017 7:46:00 PM	R48055
Dichlorodifluoromethane	ND	1.0		µg/L	1	12/27/2017 7:46:00 PM	R48055
1,1-Dichloroethane	ND	1.0		µg/L	1	12/27/2017 7:46:00 PM	R48055
1,1-Dichloroethene	ND	1.0		µg/L	1	12/27/2017 7:46:00 PM	R48055
1,2-Dichloropropane	ND	1.0		µg/L	1	12/27/2017 7:46:00 PM	R48055
1,3-Dichloropropane	ND	1.0		µg/L	1	12/27/2017 7:46:00 PM	R48055
2,2-Dichloropropane	ND	2.0		µg/L	1	12/27/2017 7:46:00 PM	R48055

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers: * Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quantitative Limit

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

Page 11 of 32

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1712C71

Date Reported: 1/15/2018

CLIENT: EA Engineering, Science and Technology

Project: Atex 213

Lab ID: 1712C71-006

Client Sample ID: W-36

Collection Date: 12/20/2017 12:33:00 PM

Matrix: AQUEOUS

Received Date: 12/20/2017 4:46:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							
1,1-Dichloropropene	ND	1.0		µg/L	1	12/27/2017 7:46:00 PM	R48055
Hexachlorobutadiene	ND	1.0		µg/L	1	12/27/2017 7:46:00 PM	R48055
2-Hexanone	ND	10		µg/L	1	12/27/2017 7:46:00 PM	R48055
Isopropylbenzene	17	1.0		µg/L	1	12/27/2017 7:46:00 PM	R48055
4-Isopropyltoluene	ND	1.0		µg/L	1	12/27/2017 7:46:00 PM	R48055
4-Methyl-2-pentanone	ND	10		µg/L	1	12/27/2017 7:46:00 PM	R48055
Methylene Chloride	ND	3.0		µg/L	1	12/27/2017 7:46:00 PM	R48055
n-Butylbenzene	4.0	3.0		µg/L	1	12/27/2017 7:46:00 PM	R48055
n-Propylbenzene	46	1.0		µg/L	1	12/27/2017 7:46:00 PM	R48055
sec-Butylbenzene	4.8	1.0		µg/L	1	12/27/2017 7:46:00 PM	R48055
Styrene	ND	1.0		µg/L	1	12/27/2017 7:46:00 PM	R48055
tert-Butylbenzene	ND	1.0		µg/L	1	12/27/2017 7:46:00 PM	R48055
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	12/27/2017 7:46:00 PM	R48055
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	12/27/2017 7:46:00 PM	R48055
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	12/27/2017 7:46:00 PM	R48055
trans-1,2-DCE	ND	1.0		µg/L	1	12/27/2017 7:46:00 PM	R48055
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	12/27/2017 7:46:00 PM	R48055
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	12/27/2017 7:46:00 PM	R48055
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	12/27/2017 7:46:00 PM	R48055
1,1,1-Trichloroethane	ND	1.0		µg/L	1	12/27/2017 7:46:00 PM	R48055
1,1,2-Trichloroethane	ND	1.0		µg/L	1	12/27/2017 7:46:00 PM	R48055
Trichloroethene (TCE)	ND	1.0		µg/L	1	12/27/2017 7:46:00 PM	R48055
Trichlorofluoromethane	ND	1.0		µg/L	1	12/27/2017 7:46:00 PM	R48055
1,2,3-Trichloropropane	ND	2.0		µg/L	1	12/27/2017 7:46:00 PM	R48055
Vinyl chloride	ND	1.0		µg/L	1	12/27/2017 7:46:00 PM	R48055
Xylenes, Total	ND	1.5		µg/L	1	12/27/2017 7:46:00 PM	R48055
Surr: 1,2-Dichloroethane-d4	92.5	70-130	%Rec		1	12/27/2017 7:46:00 PM	R48055
Surr: 4-Bromofluorobenzene	101	70-130	%Rec		1	12/27/2017 7:46:00 PM	R48055
Surr: Dibromofluoromethane	96.1	70-130	%Rec		1	12/27/2017 7:46:00 PM	R48055
Surr: Toluene-d8	92.2	70-130	%Rec		1	12/27/2017 7:46:00 PM	R48055

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers: * Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

Page 12 of 32

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1712C71

Date Reported: 1/15/2018

CLIENT: EA Engineering, Science and Technology
Project: Atex 213
Lab ID: 1712C71-007

Matrix: AQUEOUS

Client Sample ID: BB-2

Collection Date: 12/20/2017 12:56:00 PM
Received Date: 12/20/2017 4:46:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							
Benzene	ND	1.0		µg/L	1	12/27/2017 8:10:00 PM	R48055
Toluene	ND	1.0		µg/L	1	12/27/2017 8:10:00 PM	R48055
Ethylbenzene	ND	1.0		µg/L	1	12/27/2017 8:10:00 PM	R48055
Methyl tert-butyl ether (MTBE)	20	1.0		µg/L	1	12/27/2017 8:10:00 PM	R48055
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	12/27/2017 8:10:00 PM	R48055
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	12/27/2017 8:10:00 PM	R48055
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	12/27/2017 8:10:00 PM	R48055
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	12/27/2017 8:10:00 PM	R48055
Naphthalene	4.2	2.0		µg/L	1	12/27/2017 8:10:00 PM	R48055
1-Methylnaphthalene	ND	4.0		µg/L	1	12/27/2017 8:10:00 PM	R48055
2-Methylnaphthalene	ND	4.0		µg/L	1	12/27/2017 8:10:00 PM	R48055
Acetone	ND	10		µg/L	1	12/27/2017 8:10:00 PM	R48055
Bromobenzene	ND	1.0		µg/L	1	12/27/2017 8:10:00 PM	R48055
Bromodichloromethane	ND	1.0		µg/L	1	12/27/2017 8:10:00 PM	R48055
Bromoform	ND	1.0		µg/L	1	12/27/2017 8:10:00 PM	R48055
Bromomethane	ND	3.0		µg/L	1	12/27/2017 8:10:00 PM	R48055
2-Butanone	ND	10		µg/L	1	12/27/2017 8:10:00 PM	R48055
Carbon disulfide	ND	10		µg/L	1	12/27/2017 8:10:00 PM	R48055
Carbon Tetrachloride	ND	1.0		µg/L	1	12/27/2017 8:10:00 PM	R48055
Chlorobenzene	ND	1.0		µg/L	1	12/27/2017 8:10:00 PM	R48055
Chloroethane	ND	2.0		µg/L	1	12/27/2017 8:10:00 PM	R48055
Chloroform	ND	1.0		µg/L	1	12/27/2017 8:10:00 PM	R48055
Chloromethane	ND	3.0		µg/L	1	12/27/2017 8:10:00 PM	R48055
2-Chlorotoluene	ND	1.0		µg/L	1	12/27/2017 8:10:00 PM	R48055
4-Chlorotoluene	ND	1.0		µg/L	1	12/27/2017 8:10:00 PM	R48055
cis-1,2-DCE	ND	1.0		µg/L	1	12/27/2017 8:10:00 PM	R48055
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	12/27/2017 8:10:00 PM	R48055
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	12/27/2017 8:10:00 PM	R48055
Dibromochloromethane	ND	1.0		µg/L	1	12/27/2017 8:10:00 PM	R48055
Dibromomethane	ND	1.0		µg/L	1	12/27/2017 8:10:00 PM	R48055
1,2-Dichlorobenzene	ND	1.0		µg/L	1	12/27/2017 8:10:00 PM	R48055
1,3-Dichlorobenzene	ND	1.0		µg/L	1	12/27/2017 8:10:00 PM	R48055
1,4-Dichlorobenzene	ND	1.0		µg/L	1	12/27/2017 8:10:00 PM	R48055
Dichlorodifluoromethane	ND	1.0		µg/L	1	12/27/2017 8:10:00 PM	R48055
1,1-Dichloroethane	ND	1.0		µg/L	1	12/27/2017 8:10:00 PM	R48055
1,1-Dichloroethene	ND	1.0		µg/L	1	12/27/2017 8:10:00 PM	R48055
1,2-Dichloropropane	ND	1.0		µg/L	1	12/27/2017 8:10:00 PM	R48055
1,3-Dichloropropane	ND	1.0		µg/L	1	12/27/2017 8:10:00 PM	R48055
2,2-Dichloropropane	ND	2.0		µg/L	1	12/27/2017 8:10:00 PM	R48055

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1712C71

Date Reported: 1/15/2018

CLIENT: EA Engineering, Science and Technology
Project: Atex 213
Lab ID: 1712C71-007

Matrix: AQUEOUS

Client Sample ID: BB-2

Collection Date: 12/20/2017 12:56:00 PM
Received Date: 12/20/2017 4:46:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							
1,1-Dichloropropene	ND	1.0		µg/L	1	12/27/2017 8:10:00 PM	R48055
Hexachlorobutadiene	ND	1.0		µg/L	1	12/27/2017 8:10:00 PM	R48055
2-Hexanone	ND	10		µg/L	1	12/27/2017 8:10:00 PM	R48055
Isopropylbenzene	3.5	1.0		µg/L	1	12/27/2017 8:10:00 PM	R48055
4-Isopropyltoluene	ND	1.0		µg/L	1	12/27/2017 8:10:00 PM	R48055
4-Methyl-2-pentanone	ND	10		µg/L	1	12/27/2017 8:10:00 PM	R48055
Methylene Chloride	ND	3.0		µg/L	1	12/27/2017 8:10:00 PM	R48055
n-Butylbenzene	ND	3.0		µg/L	1	12/27/2017 8:10:00 PM	R48055
n-Propylbenzene	9.6	1.0		µg/L	1	12/27/2017 8:10:00 PM	R48055
sec-Butylbenzene	2.1	1.0		µg/L	1	12/27/2017 8:10:00 PM	R48055
Styrene	ND	1.0		µg/L	1	12/27/2017 8:10:00 PM	R48055
tert-Butylbenzene	ND	1.0		µg/L	1	12/27/2017 8:10:00 PM	R48055
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	12/27/2017 8:10:00 PM	R48055
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	12/27/2017 8:10:00 PM	R48055
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	12/27/2017 8:10:00 PM	R48055
trans-1,2-DCE	ND	1.0		µg/L	1	12/27/2017 8:10:00 PM	R48055
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	12/27/2017 8:10:00 PM	R48055
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	12/27/2017 8:10:00 PM	R48055
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	12/27/2017 8:10:00 PM	R48055
1,1,1-Trichloroethane	ND	1.0		µg/L	1	12/27/2017 8:10:00 PM	R48055
1,1,2-Trichloroethane	ND	1.0		µg/L	1	12/27/2017 8:10:00 PM	R48055
Trichloroethene (TCE)	ND	1.0		µg/L	1	12/27/2017 8:10:00 PM	R48055
Trichlorofluoromethane	ND	1.0		µg/L	1	12/27/2017 8:10:00 PM	R48055
1,2,3-Trichloropropane	ND	2.0		µg/L	1	12/27/2017 8:10:00 PM	R48055
Vinyl chloride	ND	1.0		µg/L	1	12/27/2017 8:10:00 PM	R48055
Xylenes, Total	ND	1.5		µg/L	1	12/27/2017 8:10:00 PM	R48055
Surr: 1,2-Dichloroethane-d4	92.5	70-130		%Rec	1	12/27/2017 8:10:00 PM	R48055
Surr: 4-Bromofluorobenzene	95.9	70-130		%Rec	1	12/27/2017 8:10:00 PM	R48055
Surr: Dibromofluoromethane	94.9	70-130		%Rec	1	12/27/2017 8:10:00 PM	R48055
Surr: Toluene-d8	93.6	70-130		%Rec	1	12/27/2017 8:10:00 PM	R48055

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1712C71

Date Reported: 1/15/2018

CLIENT: EA Engineering, Science and Technology
Project: Atex 213
Lab ID: 1712C71-008

Matrix: AQUEOUS

Client Sample ID: RNMW-3

Collection Date: 12/20/2017 1:30:00 PM
Received Date: 12/20/2017 4:46:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							
Benzene	2.0	1.0		µg/L	1	12/27/2017 8:33:00 PM	R48055
Toluene	ND	1.0		µg/L	1	12/27/2017 8:33:00 PM	R48055
Ethylbenzene	ND	1.0		µg/L	1	12/27/2017 8:33:00 PM	R48055
Methyl tert-butyl ether (MTBE)	61	1.0		µg/L	1	12/27/2017 8:33:00 PM	R48055
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	12/27/2017 8:33:00 PM	R48055
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	12/27/2017 8:33:00 PM	R48055
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	12/27/2017 8:33:00 PM	R48055
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	12/27/2017 8:33:00 PM	R48055
Naphthalene	10	2.0		µg/L	1	12/27/2017 8:33:00 PM	R48055
1-Methylnaphthalene	ND	4.0		µg/L	1	12/27/2017 8:33:00 PM	R48055
2-Methylnaphthalene	ND	4.0		µg/L	1	12/27/2017 8:33:00 PM	R48055
Acetone	ND	10		µg/L	1	12/27/2017 8:33:00 PM	R48055
Bromobenzene	ND	1.0		µg/L	1	12/27/2017 8:33:00 PM	R48055
Bromodichloromethane	ND	1.0		µg/L	1	12/27/2017 8:33:00 PM	R48055
Bromoform	ND	1.0		µg/L	1	12/27/2017 8:33:00 PM	R48055
Bromomethane	ND	3.0		µg/L	1	12/27/2017 8:33:00 PM	R48055
2-Butanone	ND	10		µg/L	1	12/27/2017 8:33:00 PM	R48055
Carbon disulfide	ND	10		µg/L	1	12/27/2017 8:33:00 PM	R48055
Carbon Tetrachloride	ND	1.0		µg/L	1	12/27/2017 8:33:00 PM	R48055
Chlorobenzene	ND	1.0		µg/L	1	12/27/2017 8:33:00 PM	R48055
Chloroethane	ND	2.0		µg/L	1	12/27/2017 8:33:00 PM	R48055
Chloroform	ND	1.0		µg/L	1	12/27/2017 8:33:00 PM	R48055
Chloromethane	ND	3.0		µg/L	1	12/27/2017 8:33:00 PM	R48055
2-Chlorotoluene	ND	1.0		µg/L	1	12/27/2017 8:33:00 PM	R48055
4-Chlorotoluene	ND	1.0		µg/L	1	12/27/2017 8:33:00 PM	R48055
cis-1,2-DCE	ND	1.0		µg/L	1	12/27/2017 8:33:00 PM	R48055
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	12/27/2017 8:33:00 PM	R48055
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	12/27/2017 8:33:00 PM	R48055
Dibromochloromethane	ND	1.0		µg/L	1	12/27/2017 8:33:00 PM	R48055
Dibromomethane	ND	1.0		µg/L	1	12/27/2017 8:33:00 PM	R48055
1,2-Dichlorobenzene	ND	1.0		µg/L	1	12/27/2017 8:33:00 PM	R48055
1,3-Dichlorobenzene	ND	1.0		µg/L	1	12/27/2017 8:33:00 PM	R48055
1,4-Dichlorobenzene	ND	1.0		µg/L	1	12/27/2017 8:33:00 PM	R48055
Dichlorodifluoromethane	ND	1.0		µg/L	1	12/27/2017 8:33:00 PM	R48055
1,1-Dichloroethane	ND	1.0		µg/L	1	12/27/2017 8:33:00 PM	R48055
1,1-Dichloroethene	ND	1.0		µg/L	1	12/27/2017 8:33:00 PM	R48055
1,2-Dichloropropane	ND	1.0		µg/L	1	12/27/2017 8:33:00 PM	R48055
1,3-Dichloropropane	ND	1.0		µg/L	1	12/27/2017 8:33:00 PM	R48055
2,2-Dichloropropane	ND	2.0		µg/L	1	12/27/2017 8:33:00 PM	R48055

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1712C71

Date Reported: 1/15/2018

CLIENT: EA Engineering, Science and Technology

Project: Atex 213

Lab ID: 1712C71-008

Client Sample ID: RNMW-3

Collection Date: 12/20/2017 1:30:00 PM

Matrix: AQUEOUS

Received Date: 12/20/2017 4:46:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							
1,1-Dichloropropene	ND	1.0		µg/L	1	12/27/2017 8:33:00 PM	R48055
Hexachlorobutadiene	ND	1.0		µg/L	1	12/27/2017 8:33:00 PM	R48055
2-Hexanone	ND	10		µg/L	1	12/27/2017 8:33:00 PM	R48055
Isopropylbenzene	5.1	1.0		µg/L	1	12/27/2017 8:33:00 PM	R48055
4-Isopropyltoluene	ND	1.0		µg/L	1	12/27/2017 8:33:00 PM	R48055
4-Methyl-2-pentanone	ND	10		µg/L	1	12/27/2017 8:33:00 PM	R48055
Methylene Chloride	ND	3.0		µg/L	1	12/27/2017 8:33:00 PM	R48055
n-Butylbenzene	ND	3.0		µg/L	1	12/27/2017 8:33:00 PM	R48055
n-Propylbenzene	13	1.0		µg/L	1	12/27/2017 8:33:00 PM	R48055
sec-Butylbenzene	1.3	1.0		µg/L	1	12/27/2017 8:33:00 PM	R48055
Styrene	ND	1.0		µg/L	1	12/27/2017 8:33:00 PM	R48055
tert-Butylbenzene	ND	1.0		µg/L	1	12/27/2017 8:33:00 PM	R48055
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	12/27/2017 8:33:00 PM	R48055
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	12/27/2017 8:33:00 PM	R48055
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	12/27/2017 8:33:00 PM	R48055
trans-1,2-DCE	ND	1.0		µg/L	1	12/27/2017 8:33:00 PM	R48055
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	12/27/2017 8:33:00 PM	R48055
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	12/27/2017 8:33:00 PM	R48055
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	12/27/2017 8:33:00 PM	R48055
1,1,1-Trichloroethane	ND	1.0		µg/L	1	12/27/2017 8:33:00 PM	R48055
1,1,2-Trichloroethane	ND	1.0		µg/L	1	12/27/2017 8:33:00 PM	R48055
Trichloroethene (TCE)	ND	1.0		µg/L	1	12/27/2017 8:33:00 PM	R48055
Trichlorofluoromethane	ND	1.0		µg/L	1	12/27/2017 8:33:00 PM	R48055
1,2,3-Trichloropropane	ND	2.0		µg/L	1	12/27/2017 8:33:00 PM	R48055
Vinyl chloride	ND	1.0		µg/L	1	12/27/2017 8:33:00 PM	R48055
Xylenes, Total	ND	1.5		µg/L	1	12/27/2017 8:33:00 PM	R48055
Surr: 1,2-Dichloroethane-d4	92.3	70-130		%Rec	1	12/27/2017 8:33:00 PM	R48055
Surr: 4-Bromofluorobenzene	96.7	70-130		%Rec	1	12/27/2017 8:33:00 PM	R48055
Surr: Dibromofluoromethane	96.9	70-130		%Rec	1	12/27/2017 8:33:00 PM	R48055
Surr: Toluene-d8	95.5	70-130		%Rec	1	12/27/2017 8:33:00 PM	R48055

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers: * Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

Page 16 of 32

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1712C71

Date Reported: 1/15/2018

CLIENT: EA Engineering, Science and Technology
Project: Atex 213
Lab ID: 1712C71-009

Matrix: AQUEOUS

Client Sample ID: RNMW-2

Collection Date: 12/20/2017 2:00:00 PM
Received Date: 12/20/2017 4:46:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							
Benzene	ND	1.0		µg/L	1	12/27/2017 8:56:00 PM	R48055
Toluene	ND	1.0		µg/L	1	12/27/2017 8:56:00 PM	R48055
Ethylbenzene	ND	1.0		µg/L	1	12/27/2017 8:56:00 PM	R48055
Methyl tert-butyl ether (MTBE)	18	1.0		µg/L	1	12/27/2017 8:56:00 PM	R48055
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	12/27/2017 8:56:00 PM	R48055
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	12/27/2017 8:56:00 PM	R48055
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	12/27/2017 8:56:00 PM	R48055
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	12/27/2017 8:56:00 PM	R48055
Naphthalene	ND	2.0		µg/L	1	12/27/2017 8:56:00 PM	R48055
1-Methylnaphthalene	ND	4.0		µg/L	1	12/27/2017 8:56:00 PM	R48055
2-Methylnaphthalene	ND	4.0		µg/L	1	12/27/2017 8:56:00 PM	R48055
Acetone	ND	10		µg/L	1	12/27/2017 8:56:00 PM	R48055
Bromobenzene	ND	1.0		µg/L	1	12/27/2017 8:56:00 PM	R48055
Bromodichloromethane	ND	1.0		µg/L	1	12/27/2017 8:56:00 PM	R48055
Bromoform	ND	1.0		µg/L	1	12/27/2017 8:56:00 PM	R48055
Bromomethane	ND	3.0		µg/L	1	12/27/2017 8:56:00 PM	R48055
2-Butanone	ND	10		µg/L	1	12/27/2017 8:56:00 PM	R48055
Carbon disulfide	ND	10		µg/L	1	12/27/2017 8:56:00 PM	R48055
Carbon Tetrachloride	ND	1.0		µg/L	1	12/27/2017 8:56:00 PM	R48055
Chlorobenzene	ND	1.0		µg/L	1	12/27/2017 8:56:00 PM	R48055
Chloroethane	ND	2.0		µg/L	1	12/27/2017 8:56:00 PM	R48055
Chloroform	ND	1.0		µg/L	1	12/27/2017 8:56:00 PM	R48055
Chloromethane	ND	3.0		µg/L	1	12/27/2017 8:56:00 PM	R48055
2-Chlorotoluene	ND	1.0		µg/L	1	12/27/2017 8:56:00 PM	R48055
4-Chlorotoluene	ND	1.0		µg/L	1	12/27/2017 8:56:00 PM	R48055
cis-1,2-DCE	ND	1.0		µg/L	1	12/27/2017 8:56:00 PM	R48055
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	12/27/2017 8:56:00 PM	R48055
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	12/27/2017 8:56:00 PM	R48055
Dibromochloromethane	ND	1.0		µg/L	1	12/27/2017 8:56:00 PM	R48055
Dibromomethane	ND	1.0		µg/L	1	12/27/2017 8:56:00 PM	R48055
1,2-Dichlorobenzene	ND	1.0		µg/L	1	12/27/2017 8:56:00 PM	R48055
1,3-Dichlorobenzene	ND	1.0		µg/L	1	12/27/2017 8:56:00 PM	R48055
1,4-Dichlorobenzene	ND	1.0		µg/L	1	12/27/2017 8:56:00 PM	R48055
Dichlorodifluoromethane	ND	1.0		µg/L	1	12/27/2017 8:56:00 PM	R48055
1,1-Dichloroethane	ND	1.0		µg/L	1	12/27/2017 8:56:00 PM	R48055
1,1-Dichloroethene	ND	1.0		µg/L	1	12/27/2017 8:56:00 PM	R48055
1,2-Dichloropropane	ND	1.0		µg/L	1	12/27/2017 8:56:00 PM	R48055
1,3-Dichloropropane	ND	1.0		µg/L	1	12/27/2017 8:56:00 PM	R48055
2,2-Dichloropropane	ND	2.0		µg/L	1	12/27/2017 8:56:00 PM	R48055

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers: * Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Detection Limit
W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1712C71

Date Reported: 1/15/2018

CLIENT: EA Engineering, Science and Technology
Project: Atex 213
Lab ID: 1712C71-009

Matrix: AQUEOUS

Client Sample ID: RNMW-2

Collection Date: 12/20/2017 2:00:00 PM
Received Date: 12/20/2017 4:46:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							
1,1-Dichloropropene	ND	1.0		µg/L	1	12/27/2017 8:56:00 PM	R48055
Hexachlorobutadiene	ND	1.0		µg/L	1	12/27/2017 8:56:00 PM	R48055
2-Hexanone	ND	10		µg/L	1	12/27/2017 8:56:00 PM	R48055
Isopropylbenzene	ND	1.0		µg/L	1	12/27/2017 8:56:00 PM	R48055
4-Isopropyltoluene	ND	1.0		µg/L	1	12/27/2017 8:56:00 PM	R48055
4-Methyl-2-pentanone	ND	10		µg/L	1	12/27/2017 8:56:00 PM	R48055
Methylene Chloride	ND	3.0		µg/L	1	12/27/2017 8:56:00 PM	R48055
n-Butylbenzene	ND	3.0		µg/L	1	12/27/2017 8:56:00 PM	R48055
n-Propylbenzene	ND	1.0		µg/L	1	12/27/2017 8:56:00 PM	R48055
sec-Butylbenzene	ND	1.0		µg/L	1	12/27/2017 8:56:00 PM	R48055
Styrene	ND	1.0		µg/L	1	12/27/2017 8:56:00 PM	R48055
tert-Butylbenzene	ND	1.0		µg/L	1	12/27/2017 8:56:00 PM	R48055
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	12/27/2017 8:56:00 PM	R48055
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	12/27/2017 8:56:00 PM	R48055
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	12/27/2017 8:56:00 PM	R48055
trans-1,2-DCE	ND	1.0		µg/L	1	12/27/2017 8:56:00 PM	R48055
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	12/27/2017 8:56:00 PM	R48055
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	12/27/2017 8:56:00 PM	R48055
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	12/27/2017 8:56:00 PM	R48055
1,1,1-Trichloroethane	ND	1.0		µg/L	1	12/27/2017 8:56:00 PM	R48055
1,1,2-Trichloroethane	ND	1.0		µg/L	1	12/27/2017 8:56:00 PM	R48055
Trichloroethene (TCE)	ND	1.0		µg/L	1	12/27/2017 8:56:00 PM	R48055
Trichlorofluoromethane	ND	1.0		µg/L	1	12/27/2017 8:56:00 PM	R48055
1,2,3-Trichloropropane	ND	2.0		µg/L	1	12/27/2017 8:56:00 PM	R48055
Vinyl chloride	ND	1.0		µg/L	1	12/27/2017 8:56:00 PM	R48055
Xylenes, Total	ND	1.5		µg/L	1	12/27/2017 8:56:00 PM	R48055
Surr: 1,2-Dichloroethane-d4	94.2	70-130		%Rec	1	12/27/2017 8:56:00 PM	R48055
Surr: 4-Bromofluorobenzene	99.1	70-130		%Rec	1	12/27/2017 8:56:00 PM	R48055
Surr: Dibromofluoromethane	95.5	70-130		%Rec	1	12/27/2017 8:56:00 PM	R48055
Surr: Toluene-d8	93.9	70-130		%Rec	1	12/27/2017 8:56:00 PM	R48055

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1712C71

Date Reported: 1/15/2018

CLIENT: EA Engineering, Science and Technology

Project: Atex 213

Lab ID: 1712C71-010

Matrix: AQUEOUS

Client Sample ID: MW-3

Collection Date: 12/20/2017 2:37:00 PM

Received Date: 12/20/2017 4:46:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							
Benzene	2.4	1.0		µg/L	1	12/27/2017 9:20:00 PM	R48055
Toluene	1.4	1.0		µg/L	1	12/27/2017 9:20:00 PM	R48055
Ethylbenzene	17	1.0		µg/L	1	12/27/2017 9:20:00 PM	R48055
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	12/27/2017 9:20:00 PM	R48055
1,2,4-Trimethylbenzene	2.6	1.0		µg/L	1	12/27/2017 9:20:00 PM	R48055
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	12/27/2017 9:20:00 PM	R48055
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	12/27/2017 9:20:00 PM	R48055
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	12/27/2017 9:20:00 PM	R48055
Naphthalene	110	20		µg/L	10	12/28/2017 4:21:00 PM	R48087
1-Methylnaphthalene	35	4.0		µg/L	1	12/27/2017 9:20:00 PM	R48055
2-Methylnaphthalene	45	4.0		µg/L	1	12/27/2017 9:20:00 PM	R48055
Acetone	ND	10		µg/L	1	12/27/2017 9:20:00 PM	R48055
Bromobenzene	ND	1.0		µg/L	1	12/27/2017 9:20:00 PM	R48055
Bromodichloromethane	ND	1.0		µg/L	1	12/27/2017 9:20:00 PM	R48055
Bromoform	ND	1.0		µg/L	1	12/27/2017 9:20:00 PM	R48055
Bromomethane	ND	3.0		µg/L	1	12/27/2017 9:20:00 PM	R48055
2-Butanone	ND	10		µg/L	1	12/27/2017 9:20:00 PM	R48055
Carbon disulfide	ND	10		µg/L	1	12/27/2017 9:20:00 PM	R48055
Carbon Tetrachloride	ND	1.0		µg/L	1	12/27/2017 9:20:00 PM	R48055
Chlorobenzene	ND	1.0		µg/L	1	12/27/2017 9:20:00 PM	R48055
Chloroethane	ND	2.0		µg/L	1	12/27/2017 9:20:00 PM	R48055
Chloroform	ND	1.0		µg/L	1	12/27/2017 9:20:00 PM	R48055
Chloromethane	ND	3.0		µg/L	1	12/27/2017 9:20:00 PM	R48055
2-Chlorotoluene	ND	1.0		µg/L	1	12/27/2017 9:20:00 PM	R48055
4-Chlorotoluene	ND	1.0		µg/L	1	12/27/2017 9:20:00 PM	R48055
cis-1,2-DCE	ND	1.0		µg/L	1	12/27/2017 9:20:00 PM	R48055
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	12/27/2017 9:20:00 PM	R48055
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	12/27/2017 9:20:00 PM	R48055
Dibromochloromethane	ND	1.0		µg/L	1	12/27/2017 9:20:00 PM	R48055
Dibromomethane	ND	1.0		µg/L	1	12/27/2017 9:20:00 PM	R48055
1,2-Dichlorobenzene	ND	1.0		µg/L	1	12/27/2017 9:20:00 PM	R48055
1,3-Dichlorobenzene	ND	1.0		µg/L	1	12/27/2017 9:20:00 PM	R48055
1,4-Dichlorobenzene	ND	1.0		µg/L	1	12/27/2017 9:20:00 PM	R48055
Dichlorodifluoromethane	ND	1.0		µg/L	1	12/27/2017 9:20:00 PM	R48055
1,1-Dichloroethane	ND	1.0		µg/L	1	12/27/2017 9:20:00 PM	R48055
1,1-Dichloroethene	ND	1.0		µg/L	1	12/27/2017 9:20:00 PM	R48055
1,2-Dichloropropane	ND	1.0		µg/L	1	12/27/2017 9:20:00 PM	R48055
1,3-Dichloropropane	ND	1.0		µg/L	1	12/27/2017 9:20:00 PM	R48055
2,2-Dichloropropane	ND	2.0		µg/L	1	12/27/2017 9:20:00 PM	R48055

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1712C71

Date Reported: 1/15/2018

CLIENT: EA Engineering, Science and Technology
Project: Atex 213
Lab ID: 1712C71-010

Matrix: AQUEOUS

Client Sample ID: MW-3

Collection Date: 12/20/2017 2:37:00 PM
Received Date: 12/20/2017 4:46:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							
1,1-Dichloropropene	ND	1.0		µg/L	1	12/27/2017 9:20:00 PM	R48055
Hexachlorobutadiene	ND	1.0		µg/L	1	12/27/2017 9:20:00 PM	R48055
2-Hexanone	ND	10		µg/L	1	12/27/2017 9:20:00 PM	R48055
Isopropylbenzene	25	1.0		µg/L	1	12/27/2017 9:20:00 PM	R48055
4-Isopropyltoluene	ND	1.0		µg/L	1	12/27/2017 9:20:00 PM	R48055
4-Methyl-2-pentanone	ND	10		µg/L	1	12/27/2017 9:20:00 PM	R48055
Methylene Chloride	ND	3.0		µg/L	1	12/27/2017 9:20:00 PM	R48055
n-Butylbenzene	21	3.0		µg/L	1	12/27/2017 9:20:00 PM	R48055
n-Propylbenzene	85	1.0		µg/L	1	12/27/2017 9:20:00 PM	R48055
sec-Butylbenzene	11	1.0		µg/L	1	12/27/2017 9:20:00 PM	R48055
Styrene	ND	1.0		µg/L	1	12/27/2017 9:20:00 PM	R48055
tert-Butylbenzene	ND	1.0		µg/L	1	12/27/2017 9:20:00 PM	R48055
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	12/27/2017 9:20:00 PM	R48055
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	12/27/2017 9:20:00 PM	R48055
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	12/27/2017 9:20:00 PM	R48055
trans-1,2-DCE	ND	1.0		µg/L	1	12/27/2017 9:20:00 PM	R48055
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	12/27/2017 9:20:00 PM	R48055
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	12/27/2017 9:20:00 PM	R48055
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	12/27/2017 9:20:00 PM	R48055
1,1,1-Trichloroethane	ND	1.0		µg/L	1	12/27/2017 9:20:00 PM	R48055
1,1,2-Trichloroethane	ND	1.0		µg/L	1	12/27/2017 9:20:00 PM	R48055
Trichloroethene (TCE)	ND	1.0		µg/L	1	12/27/2017 9:20:00 PM	R48055
Trichlorofluoromethane	ND	1.0		µg/L	1	12/27/2017 9:20:00 PM	R48055
1,2,3-Trichloropropane	ND	2.0		µg/L	1	12/27/2017 9:20:00 PM	R48055
Vinyl chloride	ND	1.0		µg/L	1	12/27/2017 9:20:00 PM	R48055
Xylenes, Total	7.1	1.5		µg/L	1	12/27/2017 9:20:00 PM	R48055
Surr: 1,2-Dichloroethane-d4	91.7	70-130	%Rec		1	12/27/2017 9:20:00 PM	R48055
Surr: 4-Bromofluorobenzene	104	70-130	%Rec		1	12/27/2017 9:20:00 PM	R48055
Surr: Dibromofluoromethane	96.4	70-130	%Rec		1	12/27/2017 9:20:00 PM	R48055
Surr: Toluene-d8	91.3	70-130	%Rec		1	12/27/2017 9:20:00 PM	R48055

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1712C71

Date Reported: 1/15/2018

CLIENT: EA Engineering, Science and Technology
Project: Atex 213
Lab ID: 1712C71-011

Matrix: AQUEOUS

Client Sample ID: NMW-1

Collection Date: 12/20/2017 3:05:00 PM
Received Date: 12/20/2017 4:46:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							
Benzene	79	1.0		µg/L	1	12/28/2017 4:45:00 PM	R48087
Toluene	1.0	1.0		µg/L	1	12/28/2017 4:45:00 PM	R48087
Ethylbenzene	3.0	1.0		µg/L	1	12/28/2017 4:45:00 PM	R48087
Methyl tert-butyl ether (MTBE)	11	1.0		µg/L	1	12/28/2017 4:45:00 PM	R48087
1,2,4-Trimethylbenzene	3.2	1.0		µg/L	1	12/28/2017 4:45:00 PM	R48087
1,3,5-Trimethylbenzene	1.1	1.0		µg/L	1	12/28/2017 4:45:00 PM	R48087
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	12/28/2017 4:45:00 PM	R48087
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	12/28/2017 4:45:00 PM	R48087
Naphthalene	17	2.0		µg/L	1	12/28/2017 4:45:00 PM	R48087
1-Methylnaphthalene	6.3	4.0		µg/L	1	12/28/2017 4:45:00 PM	R48087
2-Methylnaphthalene	ND	4.0		µg/L	1	12/28/2017 4:45:00 PM	R48087
Acetone	ND	10		µg/L	1	12/28/2017 4:45:00 PM	R48087
Bromobenzene	ND	1.0		µg/L	1	12/28/2017 4:45:00 PM	R48087
Bromodichloromethane	ND	1.0		µg/L	1	12/28/2017 4:45:00 PM	R48087
Bromoform	ND	1.0		µg/L	1	12/28/2017 4:45:00 PM	R48087
Bromomethane	ND	3.0		µg/L	1	12/28/2017 4:45:00 PM	R48087
2-Butanone	ND	10		µg/L	1	12/28/2017 4:45:00 PM	R48087
Carbon disulfide	ND	10		µg/L	1	12/28/2017 4:45:00 PM	R48087
Carbon Tetrachloride	ND	1.0		µg/L	1	12/28/2017 4:45:00 PM	R48087
Chlorobenzene	ND	1.0		µg/L	1	12/28/2017 4:45:00 PM	R48087
Chloroethane	ND	2.0		µg/L	1	12/28/2017 4:45:00 PM	R48087
Chloroform	ND	1.0		µg/L	1	12/28/2017 4:45:00 PM	R48087
Chloromethane	ND	3.0		µg/L	1	12/28/2017 4:45:00 PM	R48087
2-Chlorotoluene	ND	1.0		µg/L	1	12/28/2017 4:45:00 PM	R48087
4-Chlorotoluene	ND	1.0		µg/L	1	12/28/2017 4:45:00 PM	R48087
cis-1,2-DCE	ND	1.0		µg/L	1	12/28/2017 4:45:00 PM	R48087
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	12/28/2017 4:45:00 PM	R48087
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	12/28/2017 4:45:00 PM	R48087
Dibromochloromethane	ND	1.0		µg/L	1	12/28/2017 4:45:00 PM	R48087
Dibromomethane	ND	1.0		µg/L	1	12/28/2017 4:45:00 PM	R48087
1,2-Dichlorobenzene	ND	1.0		µg/L	1	12/28/2017 4:45:00 PM	R48087
1,3-Dichlorobenzene	ND	1.0		µg/L	1	12/28/2017 4:45:00 PM	R48087
1,4-Dichlorobenzene	ND	1.0		µg/L	1	12/28/2017 4:45:00 PM	R48087
Dichlorodifluoromethane	ND	1.0		µg/L	1	12/28/2017 4:45:00 PM	R48087
1,1-Dichloroethane	ND	1.0		µg/L	1	12/28/2017 4:45:00 PM	R48087
1,1-Dichloroethene	ND	1.0		µg/L	1	12/28/2017 4:45:00 PM	R48087
1,2-Dichloropropane	ND	1.0		µg/L	1	12/28/2017 4:45:00 PM	R48087
1,3-Dichloropropane	ND	1.0		µg/L	1	12/28/2017 4:45:00 PM	R48087
2,2-Dichloropropane	ND	2.0		µg/L	1	12/28/2017 4:45:00 PM	R48087

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers: * Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Detection Limit
W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1712C71

Date Reported: 1/15/2018

CLIENT: EA Engineering, Science and Technology
Project: Atex 213
Lab ID: 1712C71-011

Matrix: AQUEOUS

Client Sample ID: NMW-1

Collection Date: 12/20/2017 3:05:00 PM
Received Date: 12/20/2017 4:46:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							
1,1-Dichloropropene	ND	1.0		µg/L	1	12/28/2017 4:45:00 PM	R48087
Hexachlorobutadiene	ND	1.0		µg/L	1	12/28/2017 4:45:00 PM	R48087
2-Hexanone	ND	10		µg/L	1	12/28/2017 4:45:00 PM	R48087
Isopropylbenzene	6.3	1.0		µg/L	1	12/28/2017 4:45:00 PM	R48087
4-Isopropyltoluene	ND	1.0		µg/L	1	12/28/2017 4:45:00 PM	R48087
4-Methyl-2-pentanone	ND	10		µg/L	1	12/28/2017 4:45:00 PM	R48087
Methylene Chloride	ND	3.0		µg/L	1	12/28/2017 4:45:00 PM	R48087
n-Butylbenzene	ND	3.0		µg/L	1	12/28/2017 4:45:00 PM	R48087
n-Propylbenzene	16	1.0		µg/L	1	12/28/2017 4:45:00 PM	R48087
sec-Butylbenzene	1.9	1.0		µg/L	1	12/28/2017 4:45:00 PM	R48087
Styrene	ND	1.0		µg/L	1	12/28/2017 4:45:00 PM	R48087
tert-Butylbenzene	ND	1.0		µg/L	1	12/28/2017 4:45:00 PM	R48087
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	12/28/2017 4:45:00 PM	R48087
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	12/28/2017 4:45:00 PM	R48087
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	12/28/2017 4:45:00 PM	R48087
trans-1,2-DCE	ND	1.0		µg/L	1	12/28/2017 4:45:00 PM	R48087
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	12/28/2017 4:45:00 PM	R48087
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	12/28/2017 4:45:00 PM	R48087
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	12/28/2017 4:45:00 PM	R48087
1,1,1-Trichloroethane	ND	1.0		µg/L	1	12/28/2017 4:45:00 PM	R48087
1,1,2-Trichloroethane	ND	1.0		µg/L	1	12/28/2017 4:45:00 PM	R48087
Trichloroethene (TCE)	ND	1.0		µg/L	1	12/28/2017 4:45:00 PM	R48087
Trichlorofluoromethane	ND	1.0		µg/L	1	12/28/2017 4:45:00 PM	R48087
1,2,3-Trichloropropane	ND	2.0		µg/L	1	12/28/2017 4:45:00 PM	R48087
Vinyl chloride	ND	1.0		µg/L	1	12/28/2017 4:45:00 PM	R48087
Xylenes, Total	4.7	1.5		µg/L	1	12/28/2017 4:45:00 PM	R48087
Surr: 1,2-Dichloroethane-d4	82.7	70-130	%Rec		1	12/28/2017 4:45:00 PM	R48087
Surr: 4-Bromofluorobenzene	86.8	70-130	%Rec		1	12/28/2017 4:45:00 PM	R48087
Surr: Dibromofluoromethane	81.4	70-130	%Rec		1	12/28/2017 4:45:00 PM	R48087
Surr: Toluene-d8	85.6	70-130	%Rec		1	12/28/2017 4:45:00 PM	R48087

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1712C71

Date Reported: 1/15/2018

CLIENT: EA Engineering, Science and Technology
Project: Atex 213
Lab ID: 1712C71-012

Matrix: AQUEOUS

Client Sample ID: W-35

Collection Date: 12/20/2017 4:04:00 PM
Received Date: 12/20/2017 4:46:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							
Benzene	ND	2.0		µg/L	2	12/27/2017 10:29:00 PM	R48055
Toluene	ND	2.0		µg/L	2	12/27/2017 10:29:00 PM	R48055
Ethylbenzene	5.2	2.0		µg/L	2	12/27/2017 10:29:00 PM	R48055
Methyl tert-butyl ether (MTBE)	ND	2.0		µg/L	2	12/27/2017 10:29:00 PM	R48055
1,2,4-Trimethylbenzene	ND	2.0		µg/L	2	12/27/2017 10:29:00 PM	R48055
1,3,5-Trimethylbenzene	ND	2.0		µg/L	2	12/27/2017 10:29:00 PM	R48055
1,2-Dichloroethane (EDC)	ND	2.0		µg/L	2	12/27/2017 10:29:00 PM	R48055
1,2-Dibromoethane (EDB)	ND	2.0		µg/L	2	12/27/2017 10:29:00 PM	R48055
Naphthalene	99	4.0		µg/L	2	12/27/2017 10:29:00 PM	R48055
1-Methylnaphthalene	19	8.0		µg/L	2	12/27/2017 10:29:00 PM	R48055
2-Methylnaphthalene	9.9	8.0		µg/L	2	12/27/2017 10:29:00 PM	R48055
Acetone	ND	20		µg/L	2	12/27/2017 10:29:00 PM	R48055
Bromobenzene	ND	2.0		µg/L	2	12/27/2017 10:29:00 PM	R48055
Bromodichloromethane	ND	2.0		µg/L	2	12/27/2017 10:29:00 PM	R48055
Bromoform	ND	2.0		µg/L	2	12/27/2017 10:29:00 PM	R48055
Bromomethane	ND	6.0		µg/L	2	12/27/2017 10:29:00 PM	R48055
2-Butanone	ND	20		µg/L	2	12/27/2017 10:29:00 PM	R48055
Carbon disulfide	ND	20		µg/L	2	12/27/2017 10:29:00 PM	R48055
Carbon Tetrachloride	ND	2.0		µg/L	2	12/27/2017 10:29:00 PM	R48055
Chlorobenzene	ND	2.0		µg/L	2	12/27/2017 10:29:00 PM	R48055
Chloroethane	ND	4.0		µg/L	2	12/27/2017 10:29:00 PM	R48055
Chloroform	ND	2.0		µg/L	2	12/27/2017 10:29:00 PM	R48055
Chloromethane	ND	6.0		µg/L	2	12/27/2017 10:29:00 PM	R48055
2-Chlorotoluene	ND	2.0		µg/L	2	12/27/2017 10:29:00 PM	R48055
4-Chlorotoluene	ND	2.0		µg/L	2	12/27/2017 10:29:00 PM	R48055
cis-1,2-DCE	ND	2.0		µg/L	2	12/27/2017 10:29:00 PM	R48055
cis-1,3-Dichloropropene	ND	2.0		µg/L	2	12/27/2017 10:29:00 PM	R48055
1,2-Dibromo-3-chloropropane	ND	4.0		µg/L	2	12/27/2017 10:29:00 PM	R48055
Dibromochloromethane	ND	2.0		µg/L	2	12/27/2017 10:29:00 PM	R48055
Dibromomethane	ND	2.0		µg/L	2	12/27/2017 10:29:00 PM	R48055
1,2-Dichlorobenzene	ND	2.0		µg/L	2	12/27/2017 10:29:00 PM	R48055
1,3-Dichlorobenzene	ND	2.0		µg/L	2	12/27/2017 10:29:00 PM	R48055
1,4-Dichlorobenzene	ND	2.0		µg/L	2	12/27/2017 10:29:00 PM	R48055
Dichlorodifluoromethane	ND	2.0		µg/L	2	12/27/2017 10:29:00 PM	R48055
1,1-Dichloroethane	ND	2.0		µg/L	2	12/27/2017 10:29:00 PM	R48055
1,1-Dichloroethene	ND	2.0		µg/L	2	12/27/2017 10:29:00 PM	R48055
1,2-Dichloropropane	ND	2.0		µg/L	2	12/27/2017 10:29:00 PM	R48055
1,3-Dichloropropane	ND	2.0		µg/L	2	12/27/2017 10:29:00 PM	R48055
2,2-Dichloropropane	ND	4.0		µg/L	2	12/27/2017 10:29:00 PM	R48055

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

Page 23 of 32

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1712C71

Date Reported: 1/15/2018

CLIENT: EA Engineering, Science and Technology
Project: Atex 213
Lab ID: 1712C71-012

Matrix: AQUEOUS

Client Sample ID: W-35

Collection Date: 12/20/2017 4:04:00 PM
Received Date: 12/20/2017 4:46:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							
1,1-Dichloropropene	ND	2.0		µg/L	2	12/27/2017 10:29:00 PM	R48055
Hexachlorobutadiene	ND	2.0		µg/L	2	12/27/2017 10:29:00 PM	R48055
2-Hexanone	ND	20		µg/L	2	12/27/2017 10:29:00 PM	R48055
Isopropylbenzene	17	2.0		µg/L	2	12/27/2017 10:29:00 PM	R48055
4-Isopropyltoluene	ND	2.0		µg/L	2	12/27/2017 10:29:00 PM	R48055
4-Methyl-2-pentanone	ND	20		µg/L	2	12/27/2017 10:29:00 PM	R48055
Methylene Chloride	ND	6.0		µg/L	2	12/27/2017 10:29:00 PM	R48055
n-Butylbenzene	ND	6.0		µg/L	2	12/27/2017 10:29:00 PM	R48055
n-Propylbenzene	48	2.0		µg/L	2	12/27/2017 10:29:00 PM	R48055
sec-Butylbenzene	4.6	2.0		µg/L	2	12/27/2017 10:29:00 PM	R48055
Styrene	ND	2.0		µg/L	2	12/27/2017 10:29:00 PM	R48055
tert-Butylbenzene	ND	2.0		µg/L	2	12/27/2017 10:29:00 PM	R48055
1,1,1,2-Tetrachloroethane	ND	2.0		µg/L	2	12/27/2017 10:29:00 PM	R48055
1,1,2,2-Tetrachloroethane	ND	4.0		µg/L	2	12/27/2017 10:29:00 PM	R48055
Tetrachloroethene (PCE)	ND	2.0		µg/L	2	12/27/2017 10:29:00 PM	R48055
trans-1,2-DCE	ND	2.0		µg/L	2	12/27/2017 10:29:00 PM	R48055
trans-1,3-Dichloropropene	ND	2.0		µg/L	2	12/27/2017 10:29:00 PM	R48055
1,2,3-Trichlorobenzene	ND	2.0		µg/L	2	12/27/2017 10:29:00 PM	R48055
1,2,4-Trichlorobenzene	ND	2.0		µg/L	2	12/27/2017 10:29:00 PM	R48055
1,1,1-Trichloroethane	ND	2.0		µg/L	2	12/27/2017 10:29:00 PM	R48055
1,1,2-Trichloroethane	ND	2.0		µg/L	2	12/27/2017 10:29:00 PM	R48055
Trichloroethene (TCE)	ND	2.0		µg/L	2	12/27/2017 10:29:00 PM	R48055
Trichlorofluoromethane	ND	2.0		µg/L	2	12/27/2017 10:29:00 PM	R48055
1,2,3-Trichloropropane	ND	4.0		µg/L	2	12/27/2017 10:29:00 PM	R48055
Vinyl chloride	ND	2.0		µg/L	2	12/27/2017 10:29:00 PM	R48055
Xylenes, Total	ND	3.0		µg/L	2	12/27/2017 10:29:00 PM	R48055
Surr: 1,2-Dichloroethane-d4	92.6	70-130		%Rec	2	12/27/2017 10:29:00 PM	R48055
Surr: 4-Bromofluorobenzene	98.4	70-130		%Rec	2	12/27/2017 10:29:00 PM	R48055
Surr: Dibromofluoromethane	96.5	70-130		%Rec	2	12/27/2017 10:29:00 PM	R48055
Surr: Toluene-d8	94.2	70-130		%Rec	2	12/27/2017 10:29:00 PM	R48055

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1712C71

Date Reported: 1/15/2018

CLIENT: EA Engineering, Science and Technology
Project: Atex 213
Lab ID: 1712C71-013

Client Sample ID: Trip Blank
Collection Date:
Matrix: TRIP BLANK **Received Date:** 12/20/2017 4:46:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							
Benzene	ND	1.0		µg/L	1	12/27/2017 10:52:00 PM	R48055
Toluene	ND	1.0		µg/L	1	12/27/2017 10:52:00 PM	R48055
Ethylbenzene	ND	1.0		µg/L	1	12/27/2017 10:52:00 PM	R48055
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	12/27/2017 10:52:00 PM	R48055
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	12/27/2017 10:52:00 PM	R48055
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	12/27/2017 10:52:00 PM	R48055
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	12/27/2017 10:52:00 PM	R48055
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	12/27/2017 10:52:00 PM	R48055
Naphthalene	ND	2.0		µg/L	1	12/27/2017 10:52:00 PM	R48055
1-Methylnaphthalene	ND	4.0		µg/L	1	12/27/2017 10:52:00 PM	R48055
2-Methylnaphthalene	ND	4.0		µg/L	1	12/27/2017 10:52:00 PM	R48055
Acetone	ND	10		µg/L	1	12/27/2017 10:52:00 PM	R48055
Bromobenzene	ND	1.0		µg/L	1	12/27/2017 10:52:00 PM	R48055
Bromodichloromethane	ND	1.0		µg/L	1	12/27/2017 10:52:00 PM	R48055
Bromoform	ND	1.0		µg/L	1	12/27/2017 10:52:00 PM	R48055
Bromomethane	ND	3.0		µg/L	1	12/27/2017 10:52:00 PM	R48055
2-Butanone	ND	10		µg/L	1	12/27/2017 10:52:00 PM	R48055
Carbon disulfide	ND	10		µg/L	1	12/27/2017 10:52:00 PM	R48055
Carbon Tetrachloride	ND	1.0		µg/L	1	12/27/2017 10:52:00 PM	R48055
Chlorobenzene	ND	1.0		µg/L	1	12/27/2017 10:52:00 PM	R48055
Chloroethane	ND	2.0		µg/L	1	12/27/2017 10:52:00 PM	R48055
Chloroform	ND	1.0		µg/L	1	12/27/2017 10:52:00 PM	R48055
Chloromethane	ND	3.0		µg/L	1	12/27/2017 10:52:00 PM	R48055
2-Chlorotoluene	ND	1.0		µg/L	1	12/27/2017 10:52:00 PM	R48055
4-Chlorotoluene	ND	1.0		µg/L	1	12/27/2017 10:52:00 PM	R48055
cis-1,2-DCE	ND	1.0		µg/L	1	12/27/2017 10:52:00 PM	R48055
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	12/27/2017 10:52:00 PM	R48055
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	12/27/2017 10:52:00 PM	R48055
Dibromochloromethane	ND	1.0		µg/L	1	12/27/2017 10:52:00 PM	R48055
Dibromomethane	ND	1.0		µg/L	1	12/27/2017 10:52:00 PM	R48055
1,2-Dichlorobenzene	ND	1.0		µg/L	1	12/27/2017 10:52:00 PM	R48055
1,3-Dichlorobenzene	ND	1.0		µg/L	1	12/27/2017 10:52:00 PM	R48055
1,4-Dichlorobenzene	ND	1.0		µg/L	1	12/27/2017 10:52:00 PM	R48055
Dichlorodifluoromethane	ND	1.0		µg/L	1	12/27/2017 10:52:00 PM	R48055
1,1-Dichloroethane	ND	1.0		µg/L	1	12/27/2017 10:52:00 PM	R48055
1,1-Dichloroethene	ND	1.0		µg/L	1	12/27/2017 10:52:00 PM	R48055
1,2-Dichloropropane	ND	1.0		µg/L	1	12/27/2017 10:52:00 PM	R48055
1,3-Dichloropropane	ND	1.0		µg/L	1	12/27/2017 10:52:00 PM	R48055
2,2-Dichloropropane	ND	2.0		µg/L	1	12/27/2017 10:52:00 PM	R48055

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers: * Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Detection Limit
W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1712C71

Date Reported: 1/15/2018

CLIENT: EA Engineering, Science and Technology
Project: Atex 213
Lab ID: 1712C71-013

Client Sample ID: Trip Blank
Collection Date:
Matrix: TRIP BLANK **Received Date:** 12/20/2017 4:46:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							
1,1-Dichloropropene	ND	1.0		µg/L	1	12/27/2017 10:52:00 PM	R48055
Hexachlorobutadiene	ND	1.0		µg/L	1	12/27/2017 10:52:00 PM	R48055
2-Hexanone	ND	10		µg/L	1	12/27/2017 10:52:00 PM	R48055
Isopropylbenzene	ND	1.0		µg/L	1	12/27/2017 10:52:00 PM	R48055
4-Isopropyltoluene	ND	1.0		µg/L	1	12/27/2017 10:52:00 PM	R48055
4-Methyl-2-pentanone	ND	10		µg/L	1	12/27/2017 10:52:00 PM	R48055
Methylene Chloride	ND	3.0		µg/L	1	12/27/2017 10:52:00 PM	R48055
n-Butylbenzene	ND	3.0		µg/L	1	12/27/2017 10:52:00 PM	R48055
n-Propylbenzene	ND	1.0		µg/L	1	12/27/2017 10:52:00 PM	R48055
sec-Butylbenzene	ND	1.0		µg/L	1	12/27/2017 10:52:00 PM	R48055
Styrene	ND	1.0		µg/L	1	12/27/2017 10:52:00 PM	R48055
tert-Butylbenzene	ND	1.0		µg/L	1	12/27/2017 10:52:00 PM	R48055
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	12/27/2017 10:52:00 PM	R48055
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	12/27/2017 10:52:00 PM	R48055
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	12/27/2017 10:52:00 PM	R48055
trans-1,2-DCE	ND	1.0		µg/L	1	12/27/2017 10:52:00 PM	R48055
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	12/27/2017 10:52:00 PM	R48055
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	12/27/2017 10:52:00 PM	R48055
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	12/27/2017 10:52:00 PM	R48055
1,1,1-Trichloroethane	ND	1.0		µg/L	1	12/27/2017 10:52:00 PM	R48055
1,1,2-Trichloroethane	ND	1.0		µg/L	1	12/27/2017 10:52:00 PM	R48055
Trichloroethene (TCE)	ND	1.0		µg/L	1	12/27/2017 10:52:00 PM	R48055
Trichlorofluoromethane	ND	1.0		µg/L	1	12/27/2017 10:52:00 PM	R48055
1,2,3-Trichloropropane	ND	2.0		µg/L	1	12/27/2017 10:52:00 PM	R48055
Vinyl chloride	ND	1.0		µg/L	1	12/27/2017 10:52:00 PM	R48055
Xylenes, Total	ND	1.5		µg/L	1	12/27/2017 10:52:00 PM	R48055
Surr: 1,2-Dichloroethane-d4	93.2	70-130		%Rec	1	12/27/2017 10:52:00 PM	R48055
Surr: 4-Bromofluorobenzene	95.9	70-130		%Rec	1	12/27/2017 10:52:00 PM	R48055
Surr: Dibromofluoromethane	96.8	70-130		%Rec	1	12/27/2017 10:52:00 PM	R48055
Surr: Toluene-d8	94.5	70-130		%Rec	1	12/27/2017 10:52:00 PM	R48055

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1712C71

15-Jan-18

Client: EA Engineering, Science and Technology

Project: Atex 213

Sample ID	100ng lcs	SampType:	LCS	TestCode: EPA Method 8260B: VOLATILES						
Client ID:	LCSW	Batch ID:	R48055	RunNo: 48055						
Prep Date:		Analysis Date:	12/27/2017	SeqNo: 1539985 Units: µg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	18	1.0	20.00	0	90.3	70	130			
Toluene	18	1.0	20.00	0	89.4	70	130			
Chlorobenzene	18	1.0	20.00	0	91.4	70	130			
1,1-Dichloroethene	20	1.0	20.00	0	100	70	130			
Trichloroethene (TCE)	18	1.0	20.00	0	88.1	70	130			
Surr: 1,2-Dichloroethane-d4	9.4		10.00		94.5	70	130			
Surr: 4-Bromofluorobenzene	9.5		10.00		94.9	70	130			
Surr: Dibromofluoromethane	9.7		10.00		96.9	70	130			
Surr: Toluene-d8	9.4		10.00		94.2	70	130			

Sample ID	1712C71-001AMS	SampType:	MS	TestCode: EPA Method 8260B: VOLATILES						
Client ID:	MW-38	Batch ID:	R48055	RunNo: 48055						
Prep Date:		Analysis Date:	12/27/2017	SeqNo: 1540119 Units: µg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	101	70	130			
Toluene	20	1.0	20.00	0	99.8	70	130			
Chlorobenzene	20	1.0	20.00	0	102	70	130			
1,1-Dichloroethene	23	1.0	20.00	0	113	70	130			
Trichloroethene (TCE)	20	1.0	20.00	0	99.7	70	130			
Surr: 1,2-Dichloroethane-d4	9.3		10.00		92.5	70	130			
Surr: 4-Bromofluorobenzene	9.8		10.00		97.7	70	130			
Surr: Dibromofluoromethane	9.5		10.00		95.4	70	130			
Surr: Toluene-d8	9.5		10.00		95.5	70	130			

Sample ID	1712C71-001AMSD	SampType:	MSD	TestCode: EPA Method 8260B: VOLATILES						
Client ID:	MW-38	Batch ID:	R48055	RunNo: 48055						
Prep Date:		Analysis Date:	12/27/2017	SeqNo: 1540137 Units: µg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	99.7	70	130	1.78	20	
Toluene	19	1.0	20.00	0	95.8	70	130	4.09	20	
Chlorobenzene	19	1.0	20.00	0	97.0	70	130	5.05	20	
1,1-Dichloroethene	22	1.0	20.00	0	110	70	130	2.56	20	
Trichloroethene (TCE)	19	1.0	20.00	0	97.0	70	130	2.72	20	
Surr: 1,2-Dichloroethane-d4	9.1		10.00		90.8	70	130	0	0	
Surr: 4-Bromofluorobenzene	9.7		10.00		97.5	70	130	0	0	
Surr: Dibromofluoromethane	9.7		10.00		96.7	70	130	0	0	
Surr: Toluene-d8	9.3		10.00		93.2	70	130	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
 D Sample Diluted Due to Matrix
 H Holding times for preparation or analysis exceeded
 ND Not Detected at the Reporting Limit
 PQL Practical Quantitative Limit
 S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
 E Value above quantitation range
 J Analyte detected below quantitation limits
 P Sample pH Not In Range
 RL Reporting Detection Limit
 W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1712C71

15-Jan-18

Client: EA Engineering, Science and Technology**Project:** Atex 213

Sample ID	rb	SampType:	MBLK	TestCode: EPA Method 8260B: VOLATILES							
Client ID:	PBW	Batch ID:	R48055	RunNo: 48055							
Prep Date:		Analysis Date:	12/27/2017	SeqNo: 1540318 Units: µg/L							
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		ND	1.0								
Toluene		ND	1.0								
Ethylbenzene		ND	1.0								
Methyl tert-butyl ether (MTBE)		ND	1.0								
1,2,4-Trimethylbenzene		ND	1.0								
1,3,5-Trimethylbenzene		ND	1.0								
1,2-Dichloroethane (EDC)		ND	1.0								
1,2-Dibromoethane (EDB)		ND	1.0								
Naphthalene		ND	2.0								
1-Methylnaphthalene		ND	4.0								
2-Methylnaphthalene		ND	4.0								
Acetone		ND	10								
Bromobenzene		ND	1.0								
Bromodichloromethane		ND	1.0								
Bromoform		ND	1.0								
Bromomethane		ND	3.0								
2-Butanone		ND	10								
Carbon disulfide		ND	10								
Carbon Tetrachloride		ND	1.0								
Chlorobenzene		ND	1.0								
Chloroethane		ND	2.0								
Chloroform		ND	1.0								
Chloromethane		ND	3.0								
2-Chlorotoluene		ND	1.0								
4-Chlorotoluene		ND	1.0								
cis-1,2-DCE		ND	1.0								
cis-1,3-Dichloropropene		ND	1.0								
1,2-Dibromo-3-chloropropane		ND	2.0								
Dibromochloromethane		ND	1.0								
Dibromomethane		ND	1.0								
1,2-Dichlorobenzene		ND	1.0								
1,3-Dichlorobenzene		ND	1.0								
1,4-Dichlorobenzene		ND	1.0								
Dichlorodifluoromethane		ND	1.0								
1,1-Dichloroethane		ND	1.0								
1,1-Dichloroethene		ND	1.0								
1,2-Dichloropropane		ND	1.0								
1,3-Dichloropropane		ND	1.0								
2,2-Dichloropropane		ND	2.0								

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

Page 28 of 32

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1712C71

15-Jan-18

Client: EA Engineering, Science and Technology

Project: Atex 213

Sample ID	rb	SampType:	MBLK	TestCode: EPA Method 8260B: VOLATILES							
Client ID:	PBW	Batch ID:	R48055	RunNo: 48055							
Prep Date:		Analysis Date:	12/27/2017	SeqNo: 1540318 Units: µg/L							
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloropropene		ND	1.0								
Hexachlorobutadiene		ND	1.0								
2-Hexanone		ND	10								
Isopropylbenzene		ND	1.0								
4-Isopropyltoluene		ND	1.0								
4-Methyl-2-pentanone		ND	10								
Methylene Chloride		ND	3.0								
n-Butylbenzene		ND	3.0								
n-Propylbenzene		ND	1.0								
sec-Butylbenzene		ND	1.0								
Styrene		ND	1.0								
tert-Butylbenzene		ND	1.0								
1,1,1,2-Tetrachloroethane		ND	1.0								
1,1,2,2-Tetrachloroethane		ND	2.0								
Tetrachloroethene (PCE)		ND	1.0								
trans-1,2-DCE		ND	1.0								
trans-1,3-Dichloropropene		ND	1.0								
1,2,3-Trichlorobenzene		ND	1.0								
1,2,4-Trichlorobenzene		ND	1.0								
1,1,1-Trichloroethane		ND	1.0								
1,1,2-Trichloroethane		ND	1.0								
Trichloroethene (TCE)		ND	1.0								
Trichlorofluoromethane		ND	1.0								
1,2,3-Trichloropropane		ND	2.0								
Vinyl chloride		ND	1.0								
Xylenes, Total		ND	1.5								
Surr: 1,2-Dichloroethane-d4		9.5		10.00		95.2	70	130			
Surr: 4-Bromofluorobenzene		9.5		10.00		95.5	70	130			
Surr: Dibromofluoromethane		9.6		10.00		96.0	70	130			
Surr: Toluene-d8		9.6		10.00		96.4	70	130			

Sample ID	100ng lcs	SampType:	LCS	TestCode: EPA Method 8260B: VOLATILES							
Client ID:	LCSW	Batch ID:	R48087	RunNo: 48087							
Prep Date:		Analysis Date:	12/28/2017	SeqNo: 1541347 Units: µg/L							
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		19	1.0	20.00	0	94.0	70	130			
Toluene		20	1.0	20.00	0	101	70	130			
Chlorobenzene		21	1.0	20.00	0	104	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
 D Sample Diluted Due to Matrix
 H Holding times for preparation or analysis exceeded
 ND Not Detected at the Reporting Limit
 PQL Practical Quantitative Limit
 S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
 E Value above quantitation range
 J Analyte detected below quantitation limits
 P Sample pH Not In Range
 RL Reporting Detection Limit
 W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1712C71

15-Jan-18

Client: EA Engineering, Science and Technology

Project: Atex 213

Sample ID	100ng lcs	SampType:	LCS	TestCode: EPA Method 8260B: VOLATILES						
Client ID:	LCSW	Batch ID:	R48087	RunNo: 48087						
Prep Date:		Analysis Date:	12/28/2017	SeqNo: 1541347 Units: µg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene	20	1.0	20.00	0	100	70	130			
Trichloroethene (TCE)	18	1.0	20.00	0	91.3	70	130			
Surr: 1,2-Dichloroethane-d4	8.6		10.00		86.4	70	130			
Surr: 4-Bromofluorobenzene	8.4		10.00		83.5	70	130			
Surr: Dibromofluoromethane	8.4		10.00		83.6	70	130			
Surr: Toluene-d8	8.6		10.00		85.7	70	130			

Sample ID	rb	SampType:	MBLK	TestCode: EPA Method 8260B: VOLATILES						
Client ID:	PBW	Batch ID:	R48087	RunNo: 48087						
Prep Date:		Analysis Date:	12/28/2017	SeqNo: 1541348 Units: µg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
 D Sample Diluted Due to Matrix
 H Holding times for preparation or analysis exceeded
 ND Not Detected at the Reporting Limit
 PQL Practical Quantitative Limit
 S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
 E Value above quantitation range
 J Analyte detected below quantitation limits
 P Sample pH Not In Range
 RL Reporting Detection Limit
 W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1712C71

15-Jan-18

Client: EA Engineering, Science and Technology

Project: Atex 213

Sample ID	rb	SampType:	MBLK	TestCode: EPA Method 8260B: VOLATILES							
Client ID:	PBW	Batch ID:	R48087	RunNo: 48087							
Prep Date:		Analysis Date:	12/28/2017	SeqNo: 1541348 Units: µg/L							
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,2-Dibromo-3-chloropropane		ND	2.0								
Dibromochloromethane		ND	1.0								
Dibromomethane		ND	1.0								
1,2-Dichlorobenzene		ND	1.0								
1,3-Dichlorobenzene		ND	1.0								
1,4-Dichlorobenzene		ND	1.0								
Dichlorodifluoromethane		ND	1.0								
1,1-Dichloroethane		ND	1.0								
1,1-Dichloroethene		ND	1.0								
1,2-Dichloropropane		ND	1.0								
1,3-Dichloropropane		ND	1.0								
2,2-Dichloropropane		ND	2.0								
1,1-Dichloropropene		ND	1.0								
Hexachlorobutadiene		ND	1.0								
2-Hexanone		ND	10								
Isopropylbenzene		ND	1.0								
4-Isopropyltoluene		ND	1.0								
4-Methyl-2-pentanone		ND	10								
Methylene Chloride		ND	3.0								
n-Butylbenzene		ND	3.0								
n-Propylbenzene		ND	1.0								
sec-Butylbenzene		ND	1.0								
Styrene		ND	1.0								
tert-Butylbenzene		ND	1.0								
1,1,1,2-Tetrachloroethane		ND	1.0								
1,1,2,2-Tetrachloroethane		ND	2.0								
Tetrachloroethene (PCE)		ND	1.0								
trans-1,2-DCE		ND	1.0								
trans-1,3-Dichloropropene		ND	1.0								
1,2,3-Trichlorobenzene		ND	1.0								
1,2,4-Trichlorobenzene		ND	1.0								
1,1,1-Trichloroethane		ND	1.0								
1,1,2-Trichloroethane		ND	1.0								
Trichloroethene (TCE)		ND	1.0								
Trichlorofluoromethane		ND	1.0								
1,2,3-Trichloropropane		ND	2.0								
Vinyl chloride		ND	1.0								
Xylenes, Total		ND	1.5								
Surr: 1,2-Dichloroethane-d4		8.4		10.00		84.2	70	130			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1712C71

15-Jan-18

Client: EA Engineering, Science and Technology**Project:** Atex 213

Sample ID	rb	SampType:	MBLK	TestCode: EPA Method 8260B: VOLATILES							
Client ID:	PBW	Batch ID:	R48087	RunNo: 48087							
Prep Date:		Analysis Date:	12/28/2017	SeqNo: 1541348 Units: µg/L							
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene		8.3		10.00		83.4	70	130			
Surr: Dibromofluoromethane		8.2		10.00		81.7	70	130			
Surr: Toluene-d8		8.7		10.00		86.8	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Detection Limit
W Sample container temperature is out of limit as specified



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: EA Engineering Alb

Work Order Number: 1712C71

RcpNo: 1

Received By: Sophia Campuzano 12/20/2017 4:46:00 PM

Sophia Campuzano

Completed By: Dennis Suazo 12/21/2017 10:06:52 AM

Dennis Suazo

Reviewed By: SRE 12/21/17

Chain of Custody

1. Custody seals intact on sample bottles? Yes No Not Present
2. Is Chain of Custody complete? Yes No Not Present
3. How was the sample delivered? Client

Log In

4. Was an attempt made to cool the samples? Yes No NA

5. Were all samples received at a temperature of >0° C to 6.0°C Yes No NA
Samples were collected the same day and chilled.

6. Sample(s) in proper container(s)? Yes No

7. Sufficient sample volume for indicated test(s)? Yes No

8. Are samples (except VOA and ONG) properly preserved? Yes No

9. Was preservative added to bottles? Yes No NA

10. VOA vials have zero headspace? Yes No No VOA Vials

11. Were any sample containers received broken? Yes No

12. Does paperwork match bottle labels?
(Note discrepancies on chain of custody)

Yes No

of preserved
bottles checked
for pH:
(<2 or >12 unless noted)

Adjusted? _____

13. Are matrices correctly identified on Chain of Custody? Yes No

14. Is it clear what analyses were requested? Yes No

15. Were all holding times able to be met?
(If no, notify customer for authorization.)

Checked by: _____

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes No NA

Person Notified:	Date:
By Whom:	Via: <input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:	
Client Instructions:	

17. Additional remarks:

18. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	15.5	Good	Not Present			

Chain-of-Custody Record

				Turn-Around Time:			
				<input checked="" type="checkbox"/> Standard	<input type="checkbox"/> Rush		
				Project Name:			
Client: EA Engineering							
Failing Address: 3206 Gold Ave SW		Project #: ATEX #213		Project #: 17309			
Suite 1305 ABC N/M							
Phone #: 505-715-4332							
Email or Fax#: dwerth@east.com		Project Manager:		D. Werth			
AQC Package:		<input type="checkbox"/> Standard <input type="checkbox"/> Level 4 (Full Validation)					
Accreditation		<input type="checkbox"/> NELAP <input type="checkbox"/> Other					
EDD (Type)							
Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.	
10/12/17	0920	A	MW-38	3 UOA	HgCl ₂	001	
10/12/17	1007	A	MW-2	3 UOA	HgCl ₂	002	
10/17/17	1040	A	MW-4R	3 UOA	HgCl ₂	003	
10/17/17	1138	A	MW-6RR*	3 UOA	HgCl ₂	004	
10/17/17	1208	A	MW-4R	3 UOA	HgCl ₂	005	
10/17/17	1233	A	MW-36	3 UOA	HgCl ₂	006	
10/17/17	256	A	B3-2	3 UOA	HgCl ₂	007	
20/17/17	1330	A	RNNW-3	3 UOA	HgCl ₂	008	
20/17/17	1400	A	RNNW-2	3 UOA	HgCl ₂	009	
20/17/17	1437	A	MW-3	3 UOA	HgCl ₂	010	
20/17/17	1505	A	NMW-1	3 UOA	HgCl ₂	011	
20/17/17	1604	A	(a)-35	3 UOA	HgCl ₂	012	
Date:		Relinquished by:		Received by:		Remarks:	
10/17	1647	M. Werth		S. Hall	12/20/17 1646	Blank added as -013.	
Date:		Relinquished by:		Received by:		-ENM 12/21/17	
Date:						Per Lane - Sample 006	
						Should be W-36 - me 01/15/18	

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly noted on the analytical report.

