WELL PLUGGING AND ABANDONMENT, WELL INSTALLATION, AND GROUNDWATER MONITORING REPORT ATEX #213 PSTB FACILITY # 31815 3501 ISLETA BOULEVARD, ALBUQUERQUE, NEW MEXICO

Prepared by:

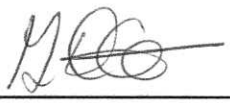
EA Engineering, Science,
and Technology, Inc.
320 Gold Avenue SW, Suite 1210
Albuquerque, New Mexico 87102

May 2014

EA Project No.6250106.05

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: Gary Desselle
Affiliation: EA Engineering, Science, and Technology, Inc.
Title: Project Manager
Date: May 22, 2014

I. INTRODUCTION

EA Engineering, Science and Technology, Inc. (EA) has completed well plugging and abandonment, well installation, and a groundwater monitoring event at Atex #213 located at 3501 Isleta Boulevard, Albuquerque, New Mexico. The monitoring event was completed in accordance with the *Work Plan for Well Installation, Well Plugging and Abandonment, and Groundwater Sampling, Atex 213, Albuquerque, New Mexico,* 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 February 17, 2014, and a 33-day extension of time to obtain site access was approved on April 15, 2014. A change order for additional labor needed to obtain site access was approved on April 21, 2014. All work was completed under work plan identification number (WPID #) 3731-1.

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).

Work was completed between April 29, 2014 and May 2, 2014. Eight monitor wells were plugged and abandoned (MW-1, MW-4, MW-5, MW-6, MW-29, NMW-4, W-34, and W-37), and four monitor wells (MW-1R, MW-4R, MW-6R, and NMW-4R) were installed by Rodgers and Company, Inc., using a CME 75 drilling rig equipped with a hollow-stem auger. Wells W-35 and W-36 were found to have been paved over during the October 2013 groundwater monitoring event; these wells were located and the asphalt was removed. There was no need to install new well pads. Instead, new well seals and well plugs were installed on these wells and they are now both accessible for future groundwater monitoring. Monitor well MW-5R was scheduled to be installed, however, the location for this well is beneath high-voltage, overhead power lines associated with the electric substation. It was determined that a drill rig could not operate safely beneath the installation area.

Groundwater from all newly installed wells and existing wells BB-2, MW-2, MW-3, MW-38, NMW-1, RNMW-2, RNMW-3, MW-35 and W-36 was collected and submitted for laboratory analysis. Groundwater samples collected were analyzed for benzene, toluene, ethylbenzene, and xylenes (BTEX), methyl tertiary butyl ether (MTBE), and total naphthalenes by Environmental Protection Agency (EPA) Method 8260B. In addition, pH, specific conductance, dissolved oxygen, and temperature were monitored for existing wells prior to sampling. Specific conductance, pH, and temperature were monitored in the newly installed wells during development and subsequent sampling.

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

A remediation system is not installed at the Site; however, 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 submitted a work plan for well installation, well plugging and abandonment, and groundwater sampling in January 2014; it was approved by NMED in February 2014.

B. Description of Activities Performed to Keep System Operating Properly

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.

C. Monitoring Activities Performed

Site Access

The following is a summary of activities performed in order to gain access to all parcels within the site.

- Five parcels were identified within the site: Three fast food restaurants, the Public Service Company of New Mexico (PNM) substation, and one private owner.
- The fast food restaurants provided access in a timely manner.
- The private parcel owner did not respond to letters sent by EA and did not return phone messages. EA attempted to hand-deliver the access agreement, but the owner was not home. A phone number given by another resident of the home was not answered.
    - The start date of drilling activities was postponed due to lack of access to the main parcel.
    - NMED PSTB sent an access letter on April 3, 2014.
    - The property owner signed an access agreement on April 8, 2014.
- PNM agreed to provide access for one week; however, this access agreement expired due to the postponement of work. Another access agreement was executed after work was rescheduled.

Drilling and Monitoring Well Installation

Four groundwater monitoring wells were installed at the site between April 29, 2014 and April 30, 2014.

Soil samples collected from the borings indicate that the subsurface lithology beneath the site consists of predominantly well graded and poorly graded sands, silty sands, sandy clay and minor clays. All borings (except the boring for well MW-1R) contained a mixture of well graded and poorly graded sands and silty sands, with a sandy clay/clay at a depth of approximately 9 feet below ground surface (ft bgs). The boring for well MW-1R contained a mixture of well graded and poorly graded sands only. The total depth of all four borings was approximately 21 ft bgs. Groundwater was noted at approximately 9 to 11 ft bgs, and was generally deeper moving north to south.

Replacement monitoring wells MW-1R, MW-4R, MW-6R, and NMW-4R were constructed with 2-inch Schedule 40 polyvinyl chloride (PVC) flush thread-jointed casing and 15 feet of 0.010-inch machine-slotted screen. The screen was placed in order to have approximately 5 feet of screen above the water table and 10 feet of screen below the water table. Each monitoring well was completed with 10/20 Colorado silica sand placed approximately one to two feet above the top of the screen, followed by a hydrated bentonite seal to just beneath the surface. Each well was completed with a flush-mounted, traffic-rated well vault set in Portland cement.

Soil Sampling

Soil samples were not collected from the borings for laboratory analysis. Soil samples were obtained from a 2-foot split spoon sampler for lithologic characterization and for field screening. Field screening was conducted with a photoionization detector (PID) using the heated headspace method as described in the Guidelines for Corrective Action (NMED, 2000).

Drill cuttings were placed into 55-gallon drums. One composite soil sample of the drill cuttings was collected for investigation-derived waste (IDW), and was characterized for lead, total petroleum hydrocarbons, and benzene, toluene, ethylbenzene, and total xylenes (BTEX). Soil drums were disposed of by Rhino Environmental. Holding times, analytical methods, sample containers and method preservatives are displayed in Table 2. The waste manifest is provided in Appendix A. Boring logs (including PID results) and well completion diagrams are presented in Appendix B. Photographs are included as Appendix C. Field notes are included as Appendix D.

Well Plugging and Abandonment

Monitor wells MW-1, MW-4, MW-5, MW-6, MW-29, NMW-4, W-34, and W-37 were plugged and abandoned with cement grout from the bottom of the well casing using a tremmie pipe to approximately two-feet bgs. The casing was then removed to the extent practicable, and the vault or stick-up mount was removed. The well plugging and abandonment report is included in Appendix E.

Surveying

Newly installed wells and existing wells BB-2, MW-2, MW-3, MW-38, NMW-1, RNMW-2, RNMW-3, MW-35 and W-36 were surveyed by Dennis Engineering on May 8, 2014. New survey information is included in Table 1 and Appendix F. Note that wells MW-2 and MW-3 were locked during the survey; only the ground surface and the top of the well shroud could be surveyed. However, the top of casing was corrected by measuring the distance from the top of the well shroud to the top of the well casing.

Well Development and Groundwater Sampling Activities – Installed Wells

After the installed wells were allowed to set for approximately 24 hours, each well was developed by purging at least 10 well volumes with a surge block and a pump. Field parameters (pH, specific conductance, temperature) were recorded during purging and development (except for NMW-4R, see Table 4). After development a groundwater sample from each well was collected, preserved, and delivered to the analytical laboratory. Purge/development water was ground discharged in accordance with Section 1.7.2 of the GCA. All installed wells were sampled on May 1, 2014.

On May 2, 2014, after installed wells had been developed and allowed to remain undisturbed for at least 24 hours, they were were gauged with an electronic water level meter for data to be included in Table 1, Figure 2, and Appendix G.

Groundwater Sampling Activities – Existing Wells

Prior to collecting groundwater samples, fluid levels in all existing wells were gauged with an electronic water level meter. 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 elevation map (Figure 2) was constructed based on the collected data. Hydrographs for select monitor wells are provided in Appendix G.

Existing monitoring wells were sampled with disposable bailers between May 1 and May 2, 2014. 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 YSI 63 water quality meter during purging and prior to sampling. Dissolved oxygen was measured using an YSI Pro DO water quality meter. Specific conductance, pH, dissolved oxygen, 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 H.

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 HEAL in Albuquerque, New Mexico. The analytical laboratory report is provided in Appendix I.

Groundwater Sampling Results

During this sampling event, dissolved phase hydrocarbon concentrations were above New Mexico Water Quality Control Commission (NMWQCC) groundwater quality standards in 6 (MW-1R, MW-4R, MW-6R, NMW-1, RNMW-2, and W-35) of the 13 wells sampled. The NMWQCC groundwater quality standard for benzene is 10 µg/L and is 30 µg/L for total naphthalenes. Well MW-4R contained benzene and total naphthalenes at concentrations of 29 micrograms per liter (µg/L) and 64.6 µg/L, respectively. Well NMW-1 and well RNMW-2 contained benzene at concentrations of 190 µg/L and 12 µg/L, respectively. Respective total naphthalene concentrations in wells MW-1R, MW-6R, and W-35 were 534 µg/L, 55.5 µg/L, and 124 µg/L. Laboratory results are summarized in Table 3.

D. System Performance and Effectiveness

A remediation system has not been installed at the site.

E. Statement Verifying Containment of Release

The dissolved-phase hydrocarbon plumes are adequately defined. Both benzene and naphthalene dissolved phase plumes have migrated off-site.

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 water levels have all dropped by approximately one-tenth to two-tenths of a foot when compared to the previous groundwater gauging conducted in October 2013. Hydrographs for select wells are included in Appendix G. The overall direction of groundwater flow is to the south with a gradient of 0.001 ft/ft. (Figure 2).

Hydrocarbon concentrations in existing monitoring wells have generally dropped when compared to the October 2013 event. Notable results from newly installed wells indicate a further western distribution of naphthalenes (MW-1R) to the north of the site than previously observed, and replacement wells MW-4R and MW-6R both contained naphthalenes above NMWQCC standards. Well MW-4 has not contained naphthalenes above standards since monitoring began, and well MW-6 has not contained naphthalenes above standards since December 2006. Downgradient, replacement well NMW-4R contained detectable benzene (8.0 µg/L) that was never detected in NMW-4. The April 2014 distribution of dissolved phase organic contaminants is shown on Figure 3. Contaminant concentration trend graphs for selected analytes and wells are included in Appendix G.

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

B. Ongoing Assessment of Remediation System

A remediation system has not been installed at the site.

C. Recommendations

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

- EA recommends semi-annual groundwater monitoring at 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	2-May-14	4932.03	9.06	4922.97
MW-2	2-May-14	4934.72	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	2-May-14	4932.98	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
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	2-May-14	4933.42	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

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-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	2-May-14	4934.26	11.36	4922.90
MW-10	26-Dec-06	4930.98	Plugged	
	25-Sep-06			
	17-May-06			
	31-Jan-06			
	3-Nov-05			
	28-Jul-05			
	22-Apr-04			
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	2-May-14	4931.87	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
BB-2	2-May-14	4934.64	11.81	4922.83
	1-Oct-13	4931.31	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

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]
NMW-1	2-May-14	4932.62	9.55	4923.07
	1-Oct-13	4929.81	9.41	4923.21
	25-Mar-13		9.75	4922.87
	22-Aug-12		9.48	4923.14
	21-Feb-12		9.93	4922.69
	26-Dec-06		9.75	4922.87
	25-Sep-06		9.62	4923.00
	17-May-06		9.53	4923.09
	31-Jan-06		10.70	4921.92
	3-Nov-05		9.31	4923.31
	28-Jul-05		9.22	4923.40
	22-Apr-04		9.24	4923.38
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
NMW-4R	2-May-14	4932.53	9.91	4922.62
W-34	1-May-14	4928.70	Plugged and Abandoned	
	1-Oct-13		Well Paved Over	
	25-Mar-13		8.61	4920.09
	22-Aug-12		8.33	4920.37
	21-Feb-12		8.77	4919.93
	26-Dec-06		8.61	4920.09
	25-Sep-06		8.51	4920.19
	17-May-06		8.40	4920.30
	31-Jan-06		8.92	4919.78
	3-Nov-05		8.11	4920.59
	28-Jul-05		8.09	4920.61
	22-Apr-04		7.92	4920.78
W-35	2-May-14	4931.50	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	2-May-14	4932.00	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**	2-May-14	4933.74	10.70	4923.04
	1-Oct-13	4930.88	10.57	4923.17
	25-Mar-13		10.90	4922.84
	22-Aug-12		10.61	4923.13
	21-Feb-12		11.09	4922.65
	26-Dec-06		10.92	4922.82
	25-Sep-06		10.72	4923.02
	17-May-06		10.64	4923.10
	31-Jan-06		11.23	4922.51
	3-Nov-05		10.44	4923.30
	28-Jul-05		10.33	4923.41
RNMW-3**	2-May-14	4933.22	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.

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
Lead	Soil	EPA 6010	125 mL/4 oz. glass jar	Mercuric Chloride; Cool to < 6°C	6 months
TPH - Full Range	Soil	EPA 8015B	125 mL/4 oz. glass jar	Mercuric Chloride; Cool to < 6°C	14 days
BTEX	Soil	EPA 8021B	124 mL/4 oz. glass jar	Mercuric Chloride; Cool to < 6°C	14 days

NOTES:
BTEX - benzene, toluene, ethylbenzene, total xylenes
TPH - Total Petroleum Hydrocarbons
EPA = U.S. Environmental Protection Agency
VOCs = Volatile Organic Compounds with naphthalenes

TABLE 3. SUMMARY OF FIELD PARAMETERS
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	1-May-14	<10	<10	440	260	<10	534
MW-2	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	1-May-14	<1.0	<1.0	3.6	2.4	<1.0	24.6
	1-Oct-13	8.1	2.3	23	21	<1.0	178
	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
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
	28-Jul-05	<1.0	<1.0	<1.0	<1.0	720	<10.0
	22-Apr-04	590	<10	<10	<10	1400	<100

TABLE 3. SUMMARY OF FIELD PARAMETERS
ATEX # 213, ALBUQUERQUE, NEW MEXICO

Well Number	Date Sampled	Benzene	Toluene	Ethyl Benzene	Total Xylenes	MTBE	Total Naphthalenes
MW-4R	1-May-14	29	<1.0	3.8	<1.5	55	64.6
MW-5	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
	Jun-94	<0.5	<0.5	<0.5	<0.5	<2.5	NA
MW-6	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
	23-Apr-04	50	<10	14	15	830	140
MW-6R	1-May-14	1.6	<1.0	6.6	<1.5	6.2	55.5
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

TABLE 3. SUMMARY OF FIELD PARAMETERS
ATEX # 213, ALBUQUERQUE, NEW MEXICO

Well Number	Date Sampled	Benzene	Toluene	Ethyl Benzene	Total Xylenes	MTBE	Total Naphthalenes
MW-38	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	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
NMW-1	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	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

TABLE 3. SUMMARY OF FIELD PARAMETERS
ATEX # 213, ALBUQUERQUE, NEW MEXICO

Well Number	Date Sampled	Benzene	Toluene	Ethyl Benzene	Total Xylenes	MTBE	Total Naphthalenes
NMW-3/RNMW-3	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
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	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

TABLE 3. SUMMARY OF FIELD PARAMETERS
ATEX # 213, ALBUQUERQUE, NEW MEXICO

Well Number	Date Sampled	Benzene	Toluene	Ethyl Benzene	Total Xylenes	MTBE	Total Naphthalenes
W-35	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
W-36	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	1-May-14	7.8	803	19.4	1.55
MW-2	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	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
MW-4	1-Oct-13	Well Destroyed - Plugged and Abandoned April 2014			
	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
MW-4R	1-May-14	7.69	922	20.0	2.18
MW-5	1-Oct-13	DRY - Plugged and Abandoned April 2014			
	25-Mar-13	DRY			
	22-Aug-12	DRY			
	21-Feb-12	DRY			
MW-6	29-Apr-14	DRY - Plugged and Abandoned April 2014			
	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
MW-6R	1-May-14	7.93	880	20.0	2.19
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	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

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

Well Number	Date Sampled	pH	SpC (µS/cm)	Temp	DO (mg/L)
BB-2	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	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	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	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
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	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	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
W-36	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
	21-Feb-12	NM	863	18.0	1.25

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

Well Number	Date Sampled	pH	SpC (µS/cm)	Temp	DO (mg/L)
W-37	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 (µS/cm)
Temp = Temperature in degrees Celsius
-- = meter malfunction, parameter not taken
µS/cm = Microsiemens per centimeter

FIGURES

LEGEND:

MW-2 — MONITORING WELL

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

50 25 0 50

SCALE IN FEET

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

FIGURE 1
SITE MAP
MAY 2014

PROJECT #:	6250106	PROJECT PHASE:	05	PROJECT MANAGER:	GD

EA ENGINEERING, SCIENCE, AND TECHNOLOGY, INC.
320 Gold Avenue, SW Suite 1210
Albuquerque, NM 87102
Phone: (505) 224-9013
Fax: (505) 224-9016

LEGEND:

MW-1R 4920.37	MONITORING WELL
MW-6 P&A	MONITORING WELL PLUGGED AND ABANDONED
4923.00	GROUNDWATER CONTOURS, (DASHED WHERE INFERRED) FEET ABOVE MEAN SEA LEVEL
→	GROUNDWATER FLOW DIRECTION
*	MONITORING WELL NOT USED IN POTENTIOMETRIC CONTOURING

50 25 0 50

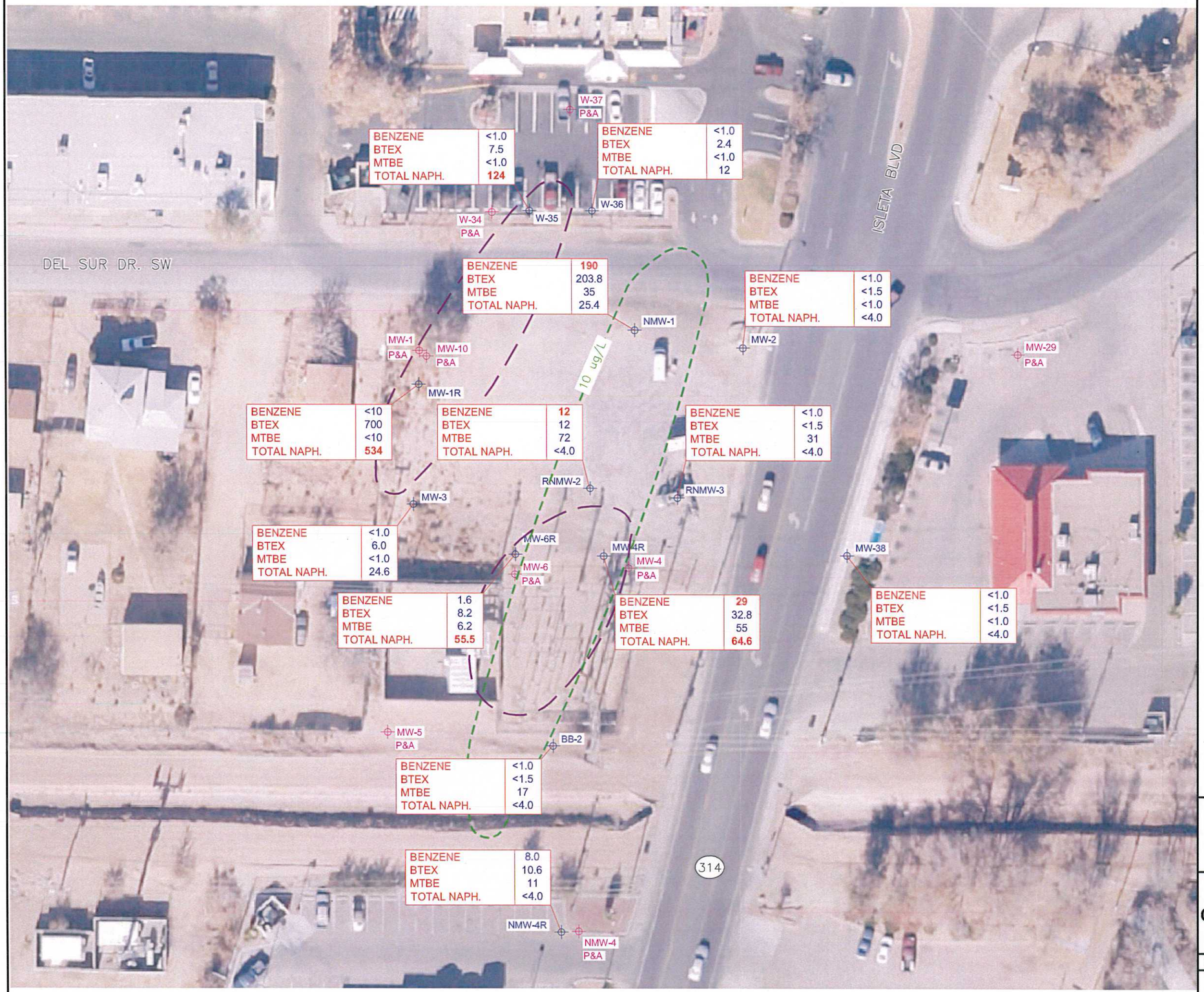
SCALE IN FEET

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

FIGURE 2
POTENTIOMETRIC SURFACE MAP
MAY 2014

PROJECT #:	6250106	PROJECT PHASE:	05	PROJECT MANAGER:	GD

EA ENGINEERING, SCIENCE, AND TECHNOLOGY, INC.
320 Gold Avenue, SW Suite 1210
Albuquerque, NM 87102
Phone: (505) 224-9013
Fax: (505) 224-9016



LEGEND:

MW-2	MONITORING WELL
MW-6 P&A	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 ug/L)
— — —	ESTIMATED EXTENT OF TOTAL NAPHTHALENES (30 ug/L)

NOTES:
1. ALL CONCENTRATIONS ARE IN MICROGRAMS PER LITER (ug/L)
2. **RED NUMBER** 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
MAY 2014

PROJECT #:	6250106	PROJECT PHASE:	05	PROJECT MANAGER:	GD

EA ENGINEERING, SCIENCE, AND TECHNOLOGY, INC.
320 Gold Avenue, SW Suite 1210
Albuquerque, NM 87102
Phone: (505) 224-9013
Fax: (505) 224-9016

APPENDIX A

WASTE MANIFEST

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
NM State ID#	1	(800) 762-0241	050214-02

GENERATOR

5. Generator's Name and Mailing Address
NMED PSTB District 1 Office
5500 San Antonio Dr., NE
Albuquerque, NM 87109
Generator's Phone: (575) 648-2574

Generator's Site Address (if different than mailing address)
ATEX 213
3501 Isleta Blvd
Albuquerque, NM

6. Transporter 1 Company Name: Rhino Environmental Services, 4601 Hondo Pass, Ste. K, El Paso, TX (915) 866-4355
U.S. EPA ID Number: NM State ID # 494

7. Transporter 2 Company Name: NA
U.S. EPA ID Number: NA

8. Designated Facility Name and Site Address
Rhino's DP-1051 Landfarm Facility
1.7 miles N of NM/TX state line
Hwy 54, Otero County, NM
Facility's Phone: (915) 886-4355

U.S. EPA ID Number: State ID # DP1051

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	Non-Hazardous Petroleum Contaminated Soil	4 075	DR	1.05 ~~2.13~~	CY	
2.						
3.						
4.						

13. Special Handling Instructions and Additional Information
Waste Description: Gasoline Impacted
Stage Pending Lab Results. DB
Cell O

14. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name: LANE ANDREES As Agent for Generator
Signature:
Month: 05 Day: 02 Year: 14

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Danny Herrera Truck # 375
Signature:
Month: 5 Day: 2 Year: 14

Transporter 2 Printed/Typed Name:
Signature:
Month: Day: Year:

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator)
U.S. EPA ID Number:
Facility's Phone:

17c. Signature of Alternate Facility (or Generator)
Month: Day: Year:

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name: Danny Herrera
Signature: Danny Herrera
Month: 5 Day: 2 Year: 14

169-BLS-C 5 11979 (Rev. 9/09)

DESIGNATED FACILITY TO GENERATOR

APPENDIX B

SOIL BORING LOGS AND WELL CONSTRUCTION DIAGRAMS

EA Engineering, Science, and Technology, Inc.

BORING/WELL CONSTRUCTION LOG

Project:	Atex 213	Project Number:	6250106.05
Drilling Company:	Rodgers Drilling	Start Time/Date:	1105; 4-29-2014
Drilling Rig/Bit:	CME-75 HSA, 24" split spoon	Completion Time/Date:	1239; 4-29-2014
Driller:	John Tanner	Final Depth:	21 feet
Boring/Well ID:	MW-1R	Logged By:	L. Andress

Sample Type	Recovery (in)	Sample Interval	PID Reading (ppmv)	USCS Soil Type	Depth, ft bgs	Soil Description (soil type, color, density/consistency, plasticity, moisture, grain size, angularity/minerology, other)	Boring and/or Well Details
Cuttings	NA				1-4	0-4.0', sand, brown, loose, dry	Bentonite / PVC / Bentonite
24" Split Spoon	24		0.0	SP	5-6	4'-6', poorly graded sand, brown (7.5 YR 5/3), loose, dry, fine grained, with occasional medium size grains (subrounded quartz and feldspar),	Sand / PVC / Sand
					7-8		
	14.5		1470.0	SP	9-10	8'-11', poorly graded sand, dark gray (7.5YR 4/1), loose, wet, medium grained, strong petroleum hydrocarbon odor	
				SW	11-13	11'-14', Same as above but well graded with a grain size decreasing to a medium to coarse grained sand.	
					14		
	12		292.0	SP	15-16	14'-19', poorly graded sand, gray (7.5 YR 5/1), loose, wet, coarse grained occasional gravel up to 3mm, subrounded grains (quartz, plagioclase,	
					17-19	feldspars, rock (igneous, sedimentary, metamorphic) strong petroleum hydrocarbon odor	
	6		26.7	SW	20-21	19'-21', well graded sand with gravel,multi-colored, loose, wet subrounded-subangular grains (as above) 1-5mm. Faint petroleum odor.	
						21': Total Depth	

5.5" pointed end cap: ~19.5'-19'
0.010" Slot Screen: 19'-4'
2" Schedule 40 PVC riser: 4'-0.5'
10-20 Silica Sand: 21'-3'
Hydrated, Coated Bentonite Pellets 3'-0.5'

SS = Split Spoon CUT = Drill Cuttings

EA Engineering, Science, and Technology, Inc.

BORING/WELL CONSTRUCTION LOG

Project:	Atex 213	Project Number:	6250106.05
Drilling Company:	Rodgers Drilling	Start Time/Date:	1326; 4-30-2014
Drilling Rig/Bit:	CME-75 HSA, 24" split spoon	Completion Time/Date:	1430; 4-30-2014
Driller:	John Tanner	Final Depth:	21 feet
Boring/Well ID:	MW-4R	Logged By:	L. Andress

Sample Type	Recovery (in)	Sample Interval	PID Reading (ppmv)	USCS Soil Type	Depth, ft bgs	Soil Description (soil type, color, density/consistency, plasticity, moisture, grain size, angularity/minerology, other)	Boring and/or Well Details
Cuttings	NA			SM	1	0-4.0', silty sand, reddish brown (5YR 5/3) loose, damp, fine grained	Bentonite
					2		
					3		
					4		
24" Split Spoon	3		0.0	SP	5	4'-6', poorly graded sand, brown (7.5 YR 5/3), loose, damp, fine grained	Sand
					6		
					7		
					8		
					9		
	22		4.9	CL / ML	10	9'-11', silt, sand, and clay, very dark gray (5YR 3/1), dense,	
					11	highly plastic, moist. Petroleum hydrocarbon odor at 10.5 feet.	
					12	Wet at 11 feet.	
					13		
					14		
	18		2.7	SW	15	14'-16', well graded sand, dark reddish gray (5YR 3/2), loose, wet,	
					16	alternating bands of medium and coarse grained sand,	
					17	subangular to subrounded grains (quartz, plagioclase, feldspars,	
					18	and lithics (igneous, sedimentary, metamorphic)	
					19		
	0.5		NA	SW	20	19'-21', well graded sand, multi-colored, loose, wet, fine to coarse grained,	
					21	grains from 1mm up to 1.5 cm, as above.	
					22	21': Total Depth	PVC
					23		
					24	5.5" pointed end cap: ~21.5'-21'	
					25	0.010" Slot Screen: 21'-6'	
					26	2" Schedule 40 PVC riser: 6'-0.5'	
					27	10-20 Silica Sand: 21'-3.5'	
					28	Hydrated, Coated Bentonite Pellets ~3.5'-0.5'	
					29		
					30		
					31		
					32		
					33		
					34		
					35		
					36		
					37		
					38		
					39		
					40		
					41		Bentonite
					42		
					43		
					44		
					45		

SS = Split Spoon CUT = Drill Cuttings

EA Engineering, Science, and Technology, Inc.

BORING/WELL CONSTRUCTION LOG

Project:	Atex 213	Project Number:	6250106.05
Drilling Company:	Rodgers Drilling	Start Time/Date:	1352; 4-29-2014
Drilling Rig/Bit:	CME-75 HSA, 24" split spoon	Completion Time/Date:	1435; 4-29-2014
Driller:	John Tanner	Final Depth:	21.3 feet
Boring/Well ID:	MW-6R	Logged By:	L. Andress 1 of 1

Sample Type	Recovery (in)	Sample Interval	PID Reading (ppmv)	USCS Soil Type	Depth, ft bgs	Soil Description (soil type, color, density/consistency, plasticity, moisture, grain size, angularity/minerology, other)	Boring and/or Well Details
Hand Auger	NA			SM	1	0-4.0', silty sand, reddish brown (5YR 5/3) loose, damp, fine grained,	Bentonite
					2	occasional gravel	
					3		
					4		
24" Split Spoon	3		2.0	SP	5	4'-6', poorly graded sand, brown (7.5 YR 5/3), loose, dry, fine grained	Sand
					6	with some medium sized grains	
					7		PVC
					8		
					9		
	22		24.7	CL / ML	10	9'-11', silty sand fining downwards to clay at 10 feet;	
					11	silty sand: reddish brown (5YR 4/3), dense, moist	
					12	clay: dark gray (5YR 4/1), firm, moderately plastic, moist, faint petroleum	
					13	hydrocarbon odor, water at 11.5 feet	
					14		
	18		36.9	SW	15	14'-16', well graded sand, multi-colored with gray tint, loose, wet, medium	
					16	to coarse grained, grain size 1-3mm, subangular to subrounded (quartz,	
					17	plagioclase, feldspars) and lithics (igneous, sedimentary, metamorphic)	
					18		
					19		
	0.5		11.6	SW	20	19'-21', sand, multi-colored, loose, wet, well graded, coarse grained,	Sand
					21	grains from 1-4 mm, as above.	
					22	21.3': Total Depth	
					23		
					24	5.5" pointed end cap: ~21.5'-21'	
					25	0.010" Slot Screen: 21'-6'	
					26	2" Schedule 40 PVC riser: 6'-0.5'	
					27	10-20 Silica Sand: 21'-4.0'	
					28	Hydrated, Coated Bentonite Pellets ~4.0'-0.5'	
					29		
					30		
					31		
					32		
					33		
					34		
					35		
					36		
					37		
					38		
					39		
					40		
					41		
					42		
					43		
					44		
					45		

SS = Split Spoon CUT = Drill Cuttings

BORING/WELL CONSTRUCTION LOG

EA Engineering, Science, and Technology, Inc.

Project:	Atex 213	Project Number:	6250106.05
Drilling Company:	Rodgers Drilling	Start Time/Date:	0834; 4-30-2014
Drilling Rig/Bit:	CME-75 HSA, 24" split spoon	Completion Time/Date:	1107; 4-30-2014
Driller:	John Tanner	Final Depth:	21 feet
Boring/Well ID:	NMW-4R	Logged By:	L. Andress

Sample Type	Recovery (in)	Sample Interval	PID Reading (ppmv)	USCS Soil Type	Depth, ft bgs	Soil Description (soil type, color, density/consistency, plasticity, moisture, grain size, angularity/minerology, other)	Boring and/or Well Details
Hand Auger	NA				1	0-0.5', asphalt	Bentonite
				SM / SC	2	0.5'-2.5', silty sand with gravel, reddish brown (5YR 5/4), dry, loose	
			0.0		3	at 2.5' moist, less gravel, no cobbles	PVC
					4	at 3' sandy clay, dark reddish brown (5YR 3/3), firm moderately plastic	
24" Split Spoon	16		0.0	SM	5	4'-6', silty sand, reddish brown (5YR 4/3), moderately dense, moist	Sand
					6		
					7		
					8		
					9		
	8		0.0	SC / SP	10	9'-10', sandy clay, reddish brown (5YR 4/3), dense, moderately plastic	
					11	at 10 feet poorly graded sand, reddish brown (5YR 3/3), loose, wet,	
					12	medium grained, subangular to angular quartz, feldspar, and lithics.	
					13		
					14		
	3		0.0	SP	15	14' -16', poorly graded sand, dark gray (5YR 4/1), loose, wet, fine grained, no c	
					16		
					17		
					18		
					19		
	9		0.0	SP	20	19' to 21', same as above	
					21		
					22	21.3': Total Depth	
					23		
					24	5.5" pointed end cap: ~20.5'-20'	
					25	0.010" Slot Screen: 20'-5'	
					26	2" Schedule 40 PVC riser: 5'-0.5'	
					27	10-20 Silica Sand: 21'-3.5'	
					28	Hydrated, Coated Bentonite Pellets ~3.5'-0.5'	
					29		
					30		
					31		
					32		
					33		
					34		
					35		
					36		
					37		
					38		
					39		
					40		
					41		
					42		
					43		
					44		
					45		

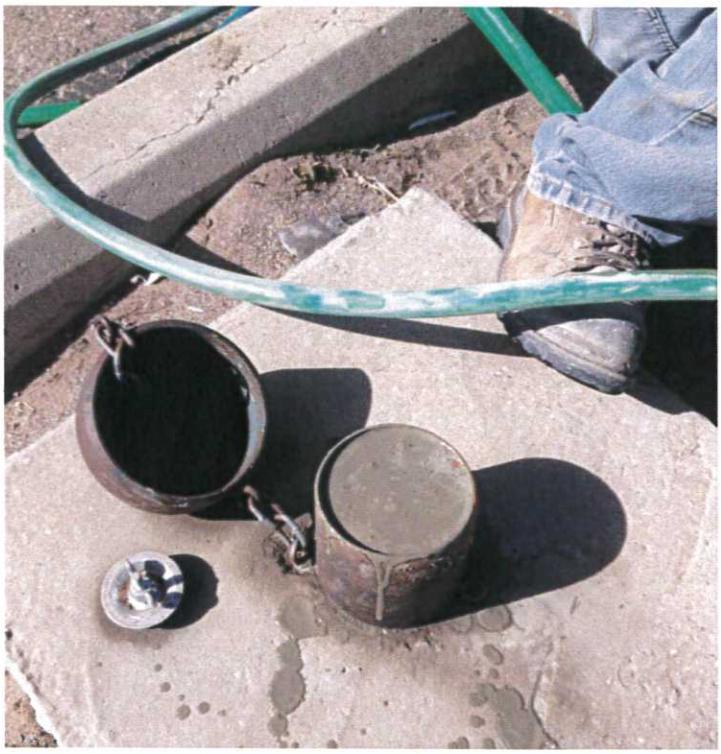
SS = Split Spoon CUT = Drill Cuttings

APPENDIX C

PHOTOGRAPHS

Photograph No. 1
Well MW-1 pre-abandonment.

Photograph No. 2
Grouting well MW-1. All wells cement grouted from the bottom up with a pump and a tremmie pipe.



Photograph No. 3
Well MW-1 grouted prior to removal of steel casing and concrete pad.

Photograph No. 4
Well MW-1 after removal of steel casing and concrete pad.

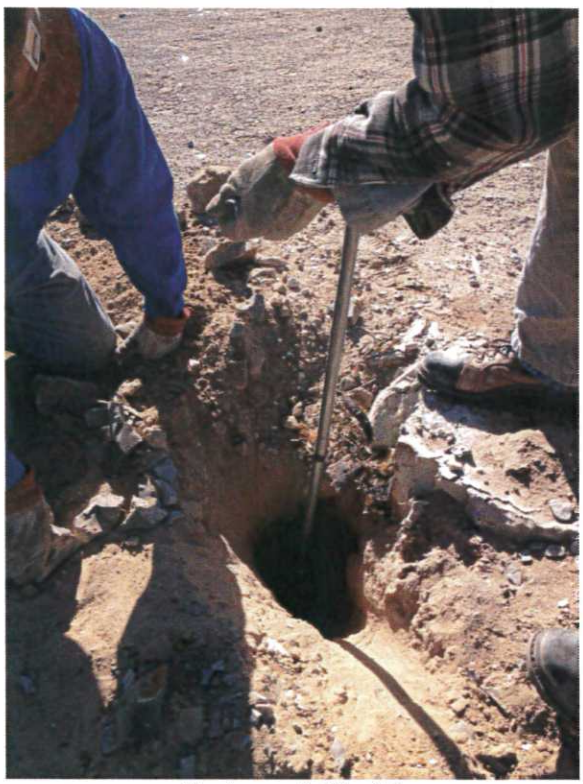
Photograph No. 5
Typical surface restoration in soil (well MW-1).

Photograph No. 6
Well MW-1 drill core showing petroleum contamination at groundwater interface.

Photograph No. 7
Completed replacement groundwater monitoring well MW-1R.

Photograph No. 8
Well MW-4 with bent steel casing (including location of MW-4R marked with cairn).

Photograph No. 9
Well MW-4 showing well casing was broken off inside steel casing.



Photograph No. 10
Hand augering to find broken PVC well casing on well MW-4 to abandon.

Photograph No. 11
PVC well casing on well MW-4 was located and found to be plugged with native soil. Hole backfilled with cement grout.

Photograph No. 12
Grout cap placed on exposed PVC of well MW-4.

Photograph No. 13
Well vault for replacement well MW-4R with location of abandoned well MW-4 (upper left).

Photograph No. 14
Steel stick up for well MW-5 pre-abandonment.

Photograph No. 15
Steel well vault removed and well MW-5 grouted to surface.

Photograph No. 16
Area of well MW-5 post abandonment.

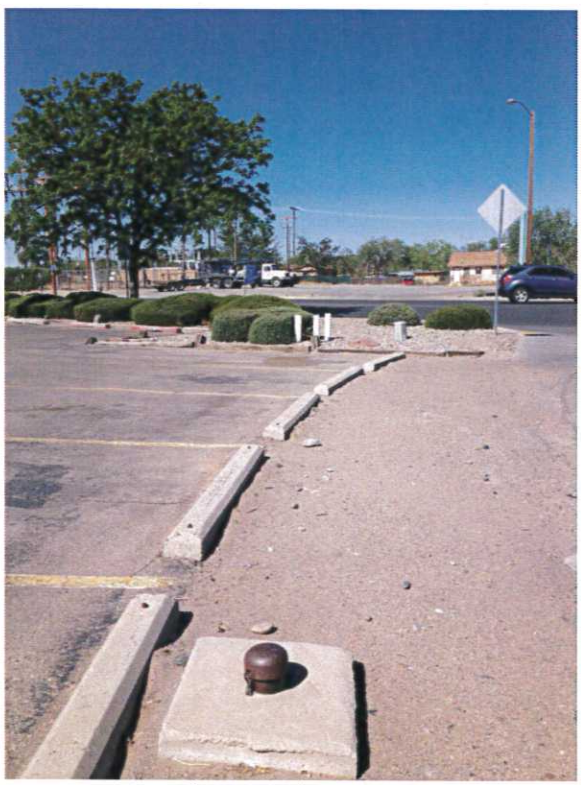
Photograph No. 17
Well MW-6 pre-abandonment.

Photograph No. 18
Replacement well MW-6R with area of well MW-6 post abandonment (middle left).

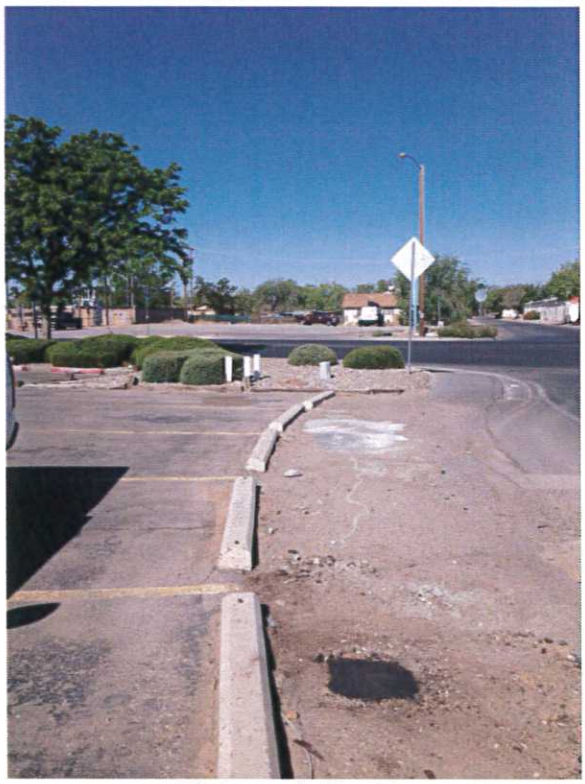
Photograph No. 19
Well NMW-4 during abandonment and setting well vault for replacement well NMW-4R.

Photograph No. 20
Well NMW-4 grouted to surface and well vault/pad area for replacement well NMW-4R.

Photograph No. 21
Surface restoration for well NMW-4 and surface completion for replacement well NMW-4R.



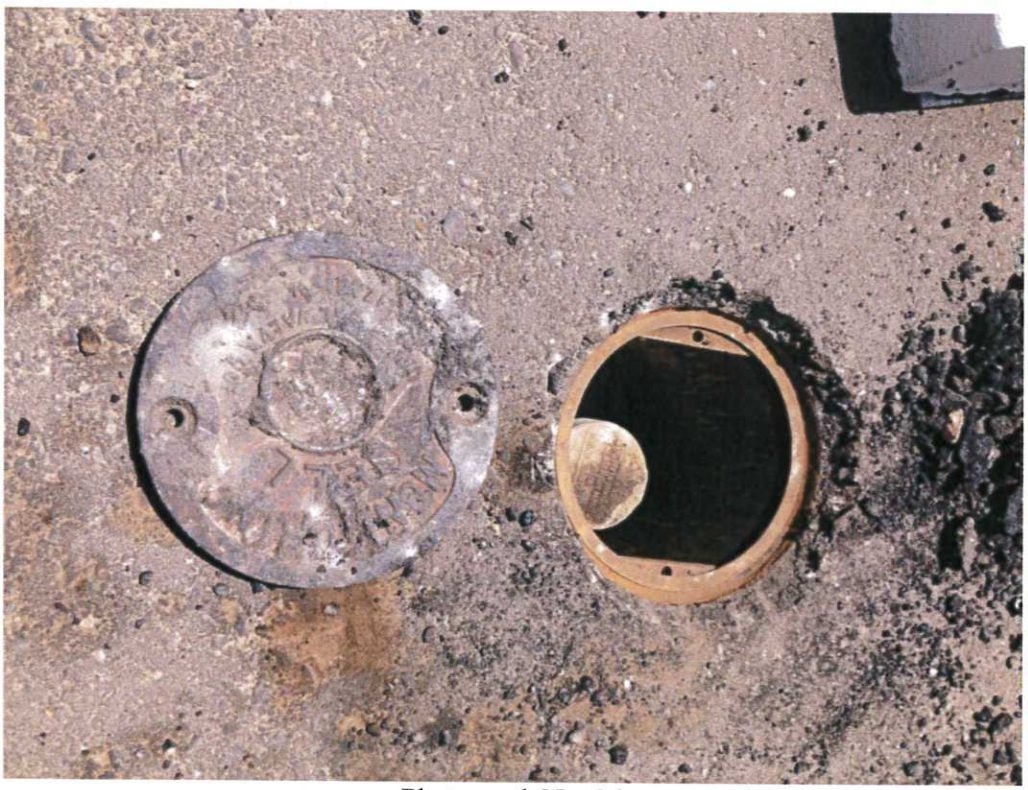
Photograph No. 22
Well MW-29 pre-abandonment.



Photograph No. 23
Well MW-29 post-abandonment.

Photograph No. 24
Well W-34 pre-abandonment.

Photograph No. 25
Locating Well W-35 under asphalt.

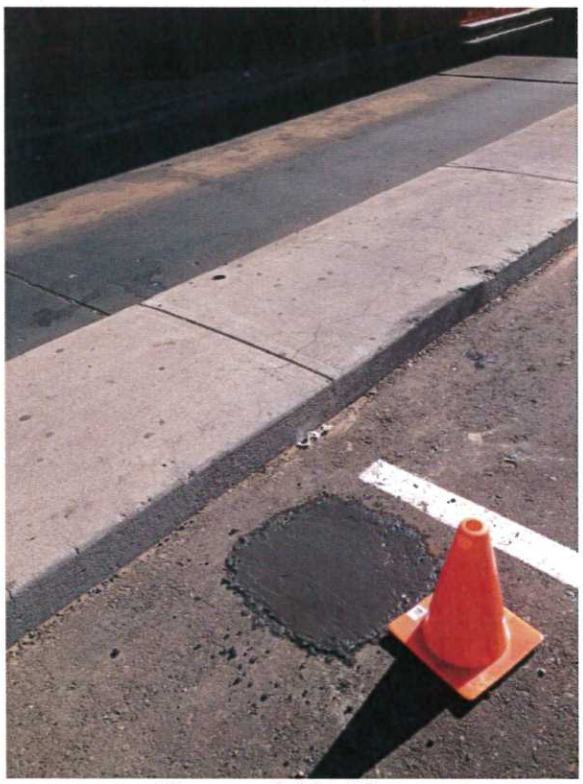


Photograph No. 26
Well W-35 exposed and opened.

Photograph No. 27
Well W-36 partially paved over.

Photograph No. 28
Well W-36 opened.

Photograph No. 29
Well W-37 partially paved over, pre-abandonment.



Photograph No. 30
Well W-37 post abandonment.

APPENDIX D

FIELD NOTES

Location Atex #213 Date 4/29/14 5

Project / Client Albuquerque, Isleta & Broadway

Clear, cold - 39°F, breeze

0700 - Load truck, EA-7
mileage: 191599

0715 - Head to site

0740 Arrive on site, Rogers Drilling
On site -
John Tanner & Mike [illegible]
- Discuss well locations & adjacent property owner's time constraints

0750 - H&S Brief
- Setting up to install NMW-4R at Taco Bell first.

0800 - Sites do not appear to have any utility markings
Rogers has confirmation that One-Call utility staked but there are no markings
- John has a little hand held magnetometer that picked up a utility line at location of NMW-4 - called EA PM & Jeff Peters
- Stand down until we can confirm site has been utility located

0823 - going to start by P&Aing wells instead

6

Location: Atex 213 Date: 4/29/14

Project / Client:

50°F Clear, breezy wind 10-15 mph - N

- Abandon MW-4, MW-6, MW-1
  - steel casing vault on MW-4 was bent - casing broken off inside - well casing exposed
  - ~3 ft bgs packed full of sand, tried to drive stake through - No luck - grouted to surface (w/in 1ft of surface)

1015 Jeff Peters called, he confirmed w/ One-call No utilities where we are to drill

- finish tremie grouting wells

1048 - Set up to drill MW-1R

1105 Begin to drill MW-1R

- Bump check PID w/ 100ppm Isobutylene = 97.7 ppm

1239 - complete well, set well vault & pad

1315 Set up to drill on MW-6R

1340 @ 7 ft bgs Noticed Drillers were running dirty auger from last hole in this hole - had them pull all augers out & move location 2 feet to West & start a new hole

1415 finish setting MW-6R & well

7

Location: Atex 213 Date: 4/29/14

Project / Client: 58°F, wind 9mph NW, clear

pad & vault

- Label 2 drums of petroleum contaminated soil that will be left on site.
- Site clean up

1625 - Break up concrete around Abandoned MW-1, sledge hammer broke - will continue tomorrow

1634 All personnel off site

1700 Truck back to EA - end mileage 191617

[signature] 4-29-14

8

Location Atex 213-ABQ Date 4/30/14

Project / Client

0635 Load truck EA-7
Start Mileage: 191617
0645 Head to Site
0708 Arrive on Site, get ice for samples
0715 John Tanner & Mike Berenger arrive (Rogers) H&S Brief
0720 Check in w/ Taco Bell Mgr, Staging to drill here on NMW-4R
0730 Drillers set up. John located well & hand augered to ~1.5 ft where it was yesterday - he can't hand auger deeper due to cobbles - he did not want to relocate, he said he would go slow & careful
- at 1.8 ft bgs a pipe of some sort was exposed, not impacted At all
0750 - Moved 3 ft to East told them to hand auger to same depth. I called Project manager Gary Dissette at EA

9

Location Atex 213 ABQ Date 4/30/14

Project / Client

45°F, hazy, wind 18mph E

- while Discussing situation, drillers were setting up to auger w/ Rig again - I stopped them, they said "there are too many cobbles & too much gravel to hand auger
- I told them we are NOT drilling w/ the rig w/ lines near by
- Gary will check on placing well in asphalt & call me back
- I suggested to drillers they may want to start w/ abandonment of NMW-4

0809 - Discuss w/ Ian McMillan, they can put well in asphalt w/ 2'x2' saw cut concrete pad & they must hand auger every hole to 5 ft or use post hole digger
- I tell Drillers, they are beginning abandonment of NMW-4

Location Alex 213 Date 4/30/14

Project / Client

0823 Abandonment of NMW-4 done - grouted to fill well vault

0834 Begin to cure asphalt for NMW-4R
- bump test PID w/ 100ppm isobutylene gas = 98.6 ppm
- Teri McMillan on site

1058 Teri McMillen off site

1107 Complete NMW-4R.
- site clean up-

1120 Begin Saw getting asphalt for well pad for NMW-4R

1200 - Removing well vault & well pad on NMW-4

1243 surface completion finished & corddoned off to prevent people driving over in today

1303 Set up on MW-4R to drill
- Hand augering to 4-5 feet first

1326 - Cleared Begin drilling

1336 They ran out of Drums for soil - stopping drilling while they go to their shop to get one. - Mike goes John stays & Drills by himself

Location Alex 213 Date 4/30/14

Project / Client

1358 Mike Returns w/ drum for cuttings

1438 Collect Soil FDW SAMPLE
FDW-ATEX 213
for Lead 6010
TPH Ext 8015B
BTEX 8021 - put sample on ice

1620 - finish well vault completion on MW-4R
- site clean up, seal & Label Soil Drum

1632 - Rogers off site

1635 EA off site

1657 Arrive CA office
Mileage 191633

4/30/14

12

Location Alex 213 Date 5/1/14

Project / Client

38°F, Mostly Cloudy, Wind 15mph E

0700 Load truck Ef-7
0720 Head to site, Start Mileage: 191633
0730 - try to Locate well lock keys in office w/ Teri M.
0740 - head to site.
0805 - Arrive on site - Roger on site John Tanner, Mike Biringer
- Discuss plan for day:
  - 2 MW abandonments at McD's
  - 2 New well vaults/completions @ McD's
  - P&A remaining wells
  - well development
  - Low sampling MW's
- Health & Safety Brief
  - stressed traffic safety & awareness in busy McDonalds parking lot → wear safety vests
  - Ear protection w/ Jackhammer
0950 - Begin Sampling ~~MW-3~~ SB-2 Next to abandonment of MW-5
- Pump check ~~oakton~~ water for pH 7 = 7.10 - okay - Did not sample yet. - only grabbed

Location Alex 213 Date 5/1/14 13

Project / Client

1035 Begin development of MW-1R
- Sample MW-3, can not sample all wells clean to dirty, Need to supervise well development will adhere to strict and thorough decon between wells.
1116 - garage MW-3 Begin Bailing
1130 - MW-1R 40-45 gal removed water clear, checked parameters:

Time	Temp °C	pH	cond us/cm	DO mg/L
1134	19.4	7.76	813	2.06
1136	19.5	7.78	805	2.30
1138	19.4	17.80	803	1.55

→ parameters stable, can sample
1152 Collect Sample MW-3
1250 MW-6R developed - parameters
Time | Stable °C Temp | pH | cond us/cm | DO mg/L
1253 | 20.1 | 7.96 | 881 | 2.02
1255 | 20.0 | 7.99 | 882 | 2.20
(256) | 20.0 | 7.93 | 880 | 2.19

14

Location Atex 213 Date 5/1/14

Project / Client

1313 Found asphalted wells W-35 and W-36, well valves & lids in good condition, carefully dug at from asphalt (~1" deep) to minimize damage to McDonalds parking lot
- P&A'ed W-34 & W-37 by filling w/ bentonite grout
- Abandoned MW-29 by filling w/ grout

1315 Begin developing MW-4R
1326 Began purging MW-2 to sample
1342 take sample MW-2
1353 Chat w/ John Tanner doing well development
- Surge/bailing w/ 5ft stainless steel Bailer ~3 gallons
- then pump w/ monsoon/ hurricane type pump @ 4 gpm mini
- Removed 60 gal from MW-1R

15

Location Atex 213 Date 5/1/14

Project / Client

- Removed 75 gal from MW-6R
- So far removed ~100gal from MW-4R by letting it flow on ground instead of filling up 5gal buckets & stopping to dump bucket

1403 - Checked parameters in MW-4R it is stable:

time	temp °C	cond. ms/cm	pH	DO mg/L
1404	19.8	921	7.53	2.07
1406	20.0	915	7.68	2.09
1408	20.0	922	7.69	2.18

- Decontaminating pump hose & cord in Between wells
- using "New" bailer for each well - steam cleaned at Rogers.

1424 - Set up to develop MW-4R
1438 take sample MW-3S
1515 take sample BB-2
1519 - Stand free watch as Mike cuts steel casing on Abandoned MW-5

16 Location Alex 213 Date 5/1/14

Project / Client

Not cutting - Mike needs Johns help

1540 John Lane developing NMW-4
- pump Quit before I get parameters
- pumped 35 min @ 4 gpm + 40 gal in buckets & 3 gal w/ bailers = ~183 gal

1600 take Sample MW-1R
1629 take Sample MW-6R
1647 take Sample MW-4R
1702 take Sample NMW-4R

1720 finish putting equipment away - Drillers left the site at same point
- Made sure there were no open well ~~Ass~~ Vaults in McDonalds parking Lot
- place cone on W-37 so no one would trip on grated well
- Drillers Need to finish surface Restorations & site clean up tomorrow

1742 Check on MW-1 & MW-5 abandonments

17 Location Alex 213 Date 5/1/14

Project / Client

- grout ~ 1 1/2 Ft Below ground surface, steel casings cut & Not visible - will cover w/ Native surface sand remaining

1750 - Leave off site
1805 - Arrive at EA office
end milage 191650

[signature] 5/1/14

18 Location Alex 213 Date 5/2/14

Project / Client

0755 Leave EA office w/ EA-7 Mileage 191650

0810 Meet Danny from Rhino, sign manifest for them to dispose of 5 drums of soil

- Rodgers on site: John Tanner & Mike Beringer they help load drums

0820 - Inspect abandonments, have drills restore areas to how they were at start of work

0930 Rogers to sweep up around MW-29 abandonment & will be finished at site

0950 Take DTW BTOC water Level Measurements from all wells Sampled yesterday:

MW-1R - 9.06 ft BTOC
MW-3 - 10.00 ft BTOC
MW-6R - 11.36 ft btoc
MW-4R - 10.56 " "
BB-2 - 11.81 ft btoc

Location Alex 213 Date 5/2/14 19

Project / Client

9.91

NMW-4R → ~~11.74~~ ft btoc
8.96 BTOC → MW-38 - ~~11.84~~ ft btoc
Ft BTOC MW-2 - 11.74
and Simple remaining 5 wells
note: All DTW measurements taken on North side of casing for New wells
- Bump Check Oakton PH meter 7.00 cal soln = 7.03

1011 take sample MW-36
1142 take sample RNMW-2
1212 take sample RNMW-3
1247 John Tanner Returns from Rodgers w/ New 5-plugs for MW-35 & MW-36 he does not have seals/gaskets Returns to Shop to get them
1252 take Sample NMW-1
1325 take Sample MW-35
1330 - Replace locks on MW-2 & MW-3
- get ice & lunch
1430 - off site

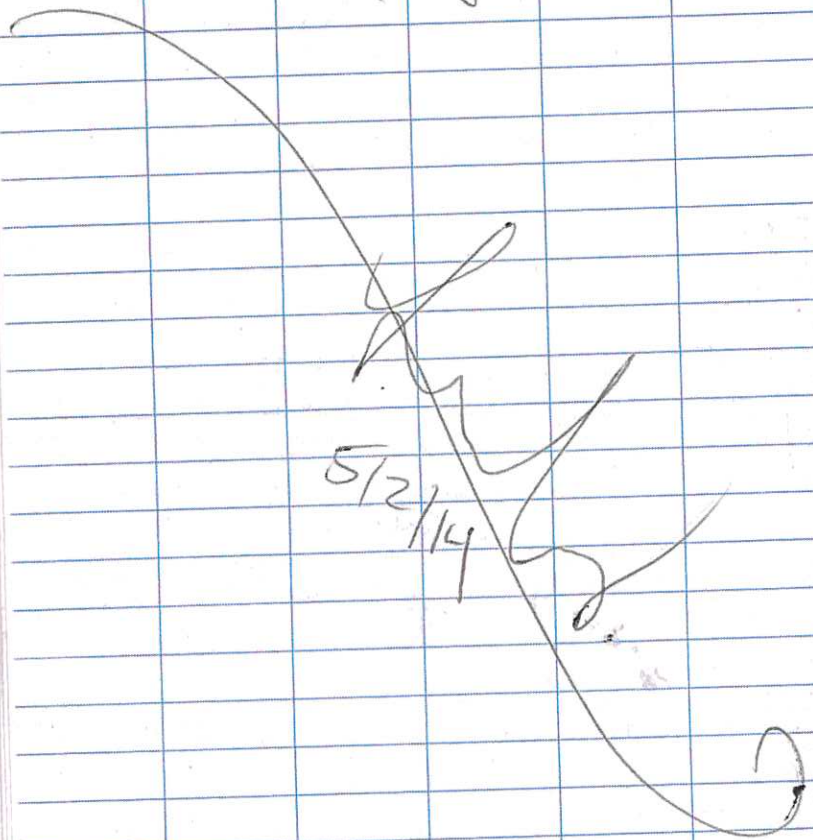
20

Location Atoy 213 Date 5/2/14

Project / Client

1510 Drop samples (Soil & water) all at Lab

1542 Arrive back at EA office -end Mileage 19674



21

Location Date

Project / Client

APPENDIX E

WELL PLUGGING AND ABANDONMENT REPORT

PLUGGING RECORD

NOTE: A Well Plugging Plan of Operations shall be approved by the State Engineer prior to plugging - 19.27.4 NMAC

I. GENERAL / WELL OWNERSHIP:

State Engineer Well Number: None; replaced by well drilled under permit # RG 94637

Well owner: Atex c/o Rodgers & Co., Inc. Phone No.: 505-877-1030

Mailing address: 2615 Isleta Blvd SW

City: Albuquerque State: NM Zip code: 87105

II. WELL PLUGGING INFORMATION:

1) Name of well drilling company that plugged well: Rodgers & Co., Inc.

2) New Mexico Well Driller License No.: WD225 Expiration Date: 1/31/15

3) Well plugging activities were supervised by the following well driller(s)/rig supervisor(s): Jeff Watson

4) Date well plugging began: 4/29/14 Date well plugging concluded: 5/1/14

5) GPS Well Location: Latitude: 35 deg, 1 min, 32.61 sec
Well MW-1 Longitude: 106 deg, 40 min, 53.07 sec, WGS 84

6) Depth of well confirmed at initiation of plugging as: 15 ft below ground level (bgl), by the following manner: well sounder

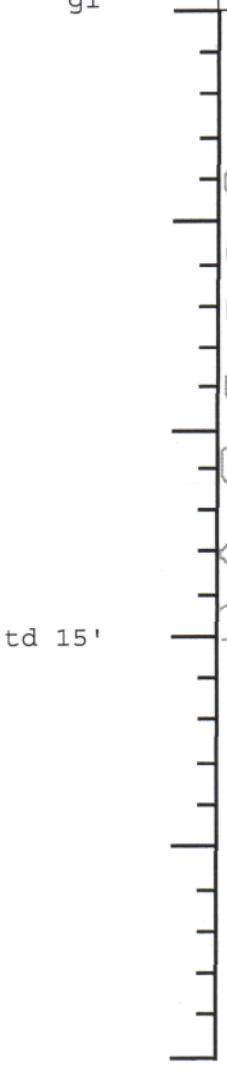
7) Static water level measured at initiation of plugging: 10 ft bgl

8) Date well plugging plan of operations was approved by the State Engineer: 5/20/14

9) Were all plugging activities consistent with an approved plugging plan? yes If not, please describe differences between the approved plugging plan and the well as it was plugged (attach additional pages as needed):

10) Log of Plugging Activities - Label vertical scale with depths, and indicate separate plugging intervals with horizontal lines as necessary to illustrate material or methodology changes. Attach additional pages if necessary.

For each interval plugged, describe within the following columns:



Depth (ft bgl)	Plugging Material Used (include any additives used)	Volume of Material Placed (gallons)	Theoretical Volume of Borehole/ Casing (gallons)	Placement Method (tremie pipe, other)	Comments ("casing perforated first", "open annular space also plugged", etc.)
	2" PVC casing	2.5 gal	2.5 gal	tremie	well head excavated to approx 1', surface completion capped with concrete

MULTIPLY		BY		AND OBTAIN
cubic feet	x	7.4805	=	gallons
cubic yards	x	201.97	=	gallons

III. SIGNATURE:

I, Jeff Watson , say that I am familiar with the rules of the Office of the State Engineer pertaining to the plugging of wells and that each and all of the statements in this Plugging Record and attachments are true to the best of my knowledge and belief.

Jeff Watson RG — Signature of Well Driller

May 30, 2014 — Date

PLUGGING RECORD

NOTE: A Well Plugging Plan of Operations shall be approved by the State Engineer prior to plugging - 19.27.4 NMAC

I. GENERAL / WELL OWNERSHIP:

State Engineer Well Number: None; replaced by well drilled under permit # RG 94637

Well owner: Atex c/o Rodgers & Co., Inc. Phone No.: 505-877-1030

Mailing address: 2615 Isleta Blvd SW

City: Albuquerque State: NM Zip code: 87105

II. WELL PLUGGING INFORMATION:

1) Name of well drilling company that plugged well: Rodgers & Co., Inc.

2) New Mexico Well Driller License No.: WD225 Expiration Date: 1/31/15

3) Well plugging activities were supervised by the following well driller(s)/rig supervisor(s): Jeff Watson

4) Date well plugging began: 4/29/14 Date well plugging concluded: 5/1/14

5) GPS Well Location: Latitude: 35 deg, 1 min, 31.31 sec
Well MW-4 Longitude: 106 deg, 40 min, 51.89 sec, WGS 84

6) Depth of well confirmed at initiation of plugging as: _____ ft below ground level (bgl), by the following manner: _____

7) Static water level measured at initiation of plugging: _____ ft bgl

8) Date well plugging plan of operations was approved by the State Engineer: 5/20/14

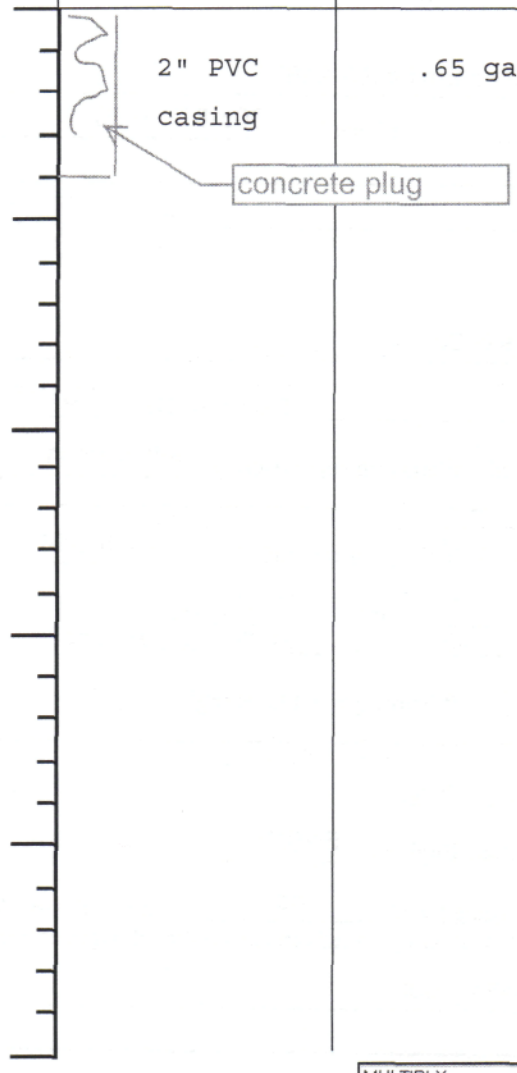
9) Were all plugging activities consistent with an approved plugging plan? no If not, please describe differences between the approved plugging plan and the well as it was plugged (attach additional pages as needed):

Well was destroyed. Excavated down four feet and filled with grout.

10) Log of Plugging Activities - Label vertical scale with depths, and indicate separate plugging intervals with horizontal lines as necessary to illustrate material or methodology changes. Attach additional pages if necessary.

For each interval plugged, describe within the following columns:

Depth (ft bgl)	Plugging Material Used (include any additives used)	Volume of Material Placed (gallons)	Theoretical Volume of Borehole/ Casing (gallons)	Placement Method (tremie pipe, other)	Comments ("casing perforated first", "open annular space also plugged", etc.)
gl	2" PVC casing	.65 gal	.65 gal	tremie	This monitor well was already damaged and partially filled. The casing was excavated to a depth of 4', removed and the hole filled with concrete.
4'	concrete plug				



MULTIPLY		BY		AND OBTAIN
cubic feet	x	7.4805	=	gallons
cubic yards	x	201.97	=	gallons

III. SIGNATURE:

I, Jeff Watson, say that I am familiar with the rules of the Office of the State Engineer pertaining to the plugging of wells and that each and all of the statements in this Plugging Record and attachments are true to the best of my knowledge and belief.

Jeff Watson ITS — Signature of Well Driller

May 30, 2014 — Date

PLUGGING RECORD

NOTE: A Well Plugging Plan of Operations shall be approved by the State Engineer prior to plugging - 19.27.4 NMAC

I. GENERAL / WELL OWNERSHIP:

State Engineer Well Number: None; replaced by well drilled under permit # RG 94637

Well owner: Atex c/o Rodgers & Co., Inc. Phone No.: 505-877-1030

Mailing address: 2615 Isleta Blvd SW

City: Albuquerque State: NM Zip code: 87105

II. WELL PLUGGING INFORMATION:

1) Name of well drilling company that plugged well: Rodgers & Co., Inc.

2) New Mexico Well Driller License No.: WD225 Expiration Date: 1/31/15

3) Well plugging activities were supervised by the following well driller(s)/rig supervisor(s): Jeff Watson

4) Date well plugging began: 4/29/14 Date well plugging concluded: 5/1/14

5) GPS Well Location: Latitude: 35 deg, 1 min, 30.53 sec
Well MW-5 Longitude: 106 deg, 40 min, 53.01 sec, WGS 84

6) Depth of well confirmed at initiation of plugging as: 15 ft below ground level (bgl), by the following manner: well sounder

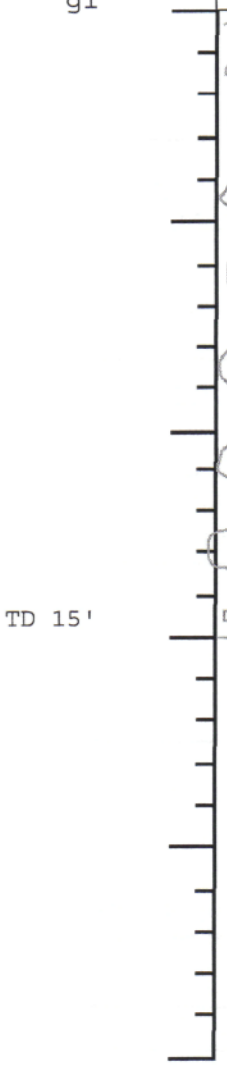
7) Static water level measured at initiation of plugging: 10 ft bgl

8) Date well plugging plan of operations was approved by the State Engineer: 5/20/14

9) Were all plugging activities consistent with an approved plugging plan? yes If not, please describe differences between the approved plugging plan and the well as it was plugged (attach additional pages as needed):

10) Log of Plugging Activities - Label vertical scale with depths, and indicate separate plugging intervals with horizontal lines as necessary to illustrate material or methodology changes. Attach additional pages if necessary.

For each interval plugged, describe within the following columns:



Depth (ft bgl)	Plugging Material Used (include any additives used)	Volume of Material Placed (gallons)	Theoretical Volume of Borehole/ Casing (gallons)	Placement Method (tremie pipe, other)	Comments ("casing perforated first", "open annular space also plugged", etc.)
	2" PVC casing	2.5 gal	2.5 gal	tremie	Well was grouted to surface. Removed well cover to 1' below grade. Capped with concrete

MULTIPLY		BY		AND OBTAIN
cubic feet	x	7.4805	=	gallons
cubic yards	x	201.97	=	gallons

III. SIGNATURE:

I, Jeff Watson, say that I am familiar with the rules of the Office of the State Engineer pertaining to the plugging of wells and that each and all of the statements in this Plugging Record and attachments are true to the best of my knowledge and belief.

Jeff Watson /TR — Signature of Well Driller

May 30, 2014 — Date

PLUGGING RECORD

NOTE: A Well Plugging Plan of Operations shall be approved by the State Engineer prior to plugging - 19.27.4 NMAC

I. GENERAL / WELL OWNERSHIP:

State Engineer Well Number: None; replaced by well drilled under permit # RG 94637

Well owner: Atex c/o Rodgers & Co., Inc. Phone No.: 505-877-1030

Mailing address: 2615 Isleta Blvd SW

City: Albuquerque State: NM Zip code: 87105

II. WELL PLUGGING INFORMATION:

1) Name of well drilling company that plugged well: Rodgers & Co., Inc.

2) New Mexico Well Driller License No.: WD225 Expiration Date: 1/31/15

3) Well plugging activities were supervised by the following well driller(s)/rig supervisor(s): Jeff Watson

4) Date well plugging began: 4/29/14 Date well plugging concluded: 5/1/14

5) GPS Well Location: Latitude: 35 deg, 1 min, 31.32 sec
Well MW-6 Longitude: 106 deg, 40 min, 51.89 sec, WGS 84

6) Depth of well confirmed at initiation of plugging as: 15 ft below ground level (bgl), by the following manner: well sounder

7) Static water level measured at initiation of plugging: 10 ft bgl

8) Date well plugging plan of operations was approved by the State Engineer: 5/20/14

9) Were all plugging activities consistent with an approved plugging plan? yes If not, please describe differences between the approved plugging plan and the well as it was plugged (attach additional pages as needed):

10) Log of Plugging Activities - Label vertical scale with depths, and indicate separate plugging intervals with horizontal lines as necessary to illustrate material or methodology changes. Attach additional pages if necessary.

For each interval plugged, describe within the following columns:

Depth (ft bgl)	Plugging Material Used (include any additives used)	Volume of Material Placed (gallons)	Theoretical Volume of Borehole/ Casing (gallons)	Placement Method (tremie pipe, other)	Comments ("casing perforated first", "open annular space also plugged", etc.)
	1-1/4" galv pipe	1 gal	1 gal	tremie	removed above ground well cover and capped with concrete

MULTIPLY		BY		AND OBTAIN
cubic feet	x	7.4805	=	gallons
cubic yards	x	201.97	=	gallons

III. SIGNATURE:

I, Jeff Watson , say that I am familiar with the rules of the Office of the State Engineer pertaining to the plugging of wells and that each and all of the statements in this Plugging Record and attachments are true to the best of my knowledge and belief.

Jeff Watson/TQ
Signature of Well Driller

May 30, 2014
Date

PLUGGING RECORD

NOTE: A Well Plugging Plan of Operations shall be approved by the State Engineer prior to plugging - 19.27.4 NMAC

I. GENERAL / WELL OWNERSHIP:

State Engineer Well Number: None; replaced by well drilled under permit # RG 94637 (reported as MW2, actually MW-29)

Well owner: Atex c/o Rodgers & Co., Inc. Phone No.: 505-877-1030

Mailing address: 2615 Isleta Blvd SW

City: Albuquerque State: NM Zip code: 87105

II. WELL PLUGGING INFORMATION:

1) Name of well drilling company that plugged well: Rodgers & Co., Inc.

2) New Mexico Well Driller License No.: WD225 Expiration Date: 1/31/15

3) Well plugging activities were supervised by the following well driller(s)/rig supervisor(s): Jeff Watson

4) Date well plugging began: 4/29/14 Date well plugging concluded: 5/1/14

5) GPS Well Location: Well MW-29 Latitude: 35 deg, 1 min, 32.55 sec
Longitude: 106 deg, 40 min, 49.24 sec, WGS 84

6) Depth of well confirmed at initiation of plugging as: 15 ft below ground level (bgl), by the following manner: well sounder

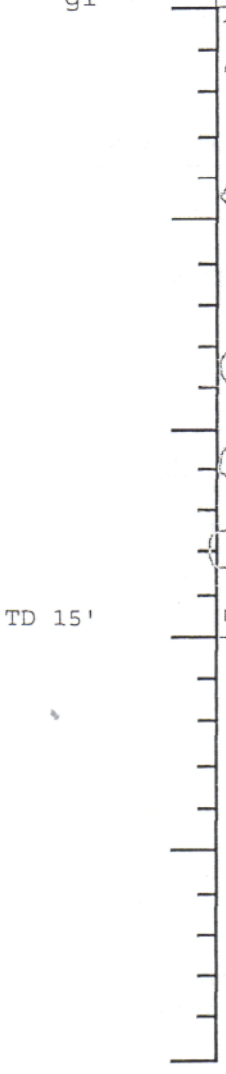
7) Static water level measured at initiation of plugging: 10 ft bgl

8) Date well plugging plan of operations was approved by the State Engineer: 5/20/14

9) Were all plugging activities consistent with an approved plugging plan? yes If not, please describe differences between the approved plugging plan and the well as it was plugged (attach additional pages as needed):

10) Log of Plugging Activities - Label vertical scale with depths, and indicate separate plugging intervals with horizontal lines as necessary to illustrate material or methodology changes. Attach additional pages if necessary.

For each interval plugged, describe within the following columns:



Depth (ft bgl)	Plugging Material Used (include any additives used)	Volume of Material Placed (gallons)	Theoretical Volume of Borehole/ Casing (gallons)	Placement Method (tremie pipe, other)	Comments ("casing perforated first", "open annular space also plugged", etc.)
	2" PVC casing bentonite grout	2.5 gal	2.5 gal	tremie	Well was grouted to surface. Above ground protector was removed. Surface was excavated to approx. 1' and capped with concrete

MULTIPLY		BY		AND OBTAIN
cubic feet	x	7.4805	=	gallons
cubic yards	x	201.97	=	gallons

III. SIGNATURE:

I, Jeff Watson , say that I am familiar with the rules of the Office of the State Engineer pertaining to the plugging of wells and that each and all of the statements in this Plugging Record and attachments are true to the best of my knowledge and belief.

Jeff Watson ITG
Signature of Well Driller

May 30, 2014
Date

PLUGGING RECORD

NOTE: A Well Plugging Plan of Operations shall be approved by the State Engineer prior to plugging - 19.27.4 NMAC

I. GENERAL / WELL OWNERSHIP:

State Engineer Well Number: None; replaced by well drilled under permit # RG 94637

Well owner: Atex c/o Rodgers & Co., Inc. Phone No.: 505-877-1030

Mailing address: 2615 Isleta Blvd SW

City: Albuquerque State: NM Zip code: 87105

II. WELL PLUGGING INFORMATION:

1) Name of well drilling company that plugged well: Rodgers & Co., Inc.

2) New Mexico Well Driller License No.: WD225 Expiration Date: 1/31/15

3) Well plugging activities were supervised by the following well driller(s)/rig supervisor(s): Jeff Watson

4) Date well plugging began: 4/29/14 Date well plugging concluded: 5/1/14

5) GPS Well Location: Latitude: 35 deg, 1 min, 29.49 sec
Well NMW-4 Longitude: 106 deg, 40 min, 51.99 sec, WGS 84

6) Depth of well confirmed at initiation of plugging as: 15 ft below ground level (bgl), by the following manner: well sounder

7) Static water level measured at initiation of plugging: 10 ft bgl

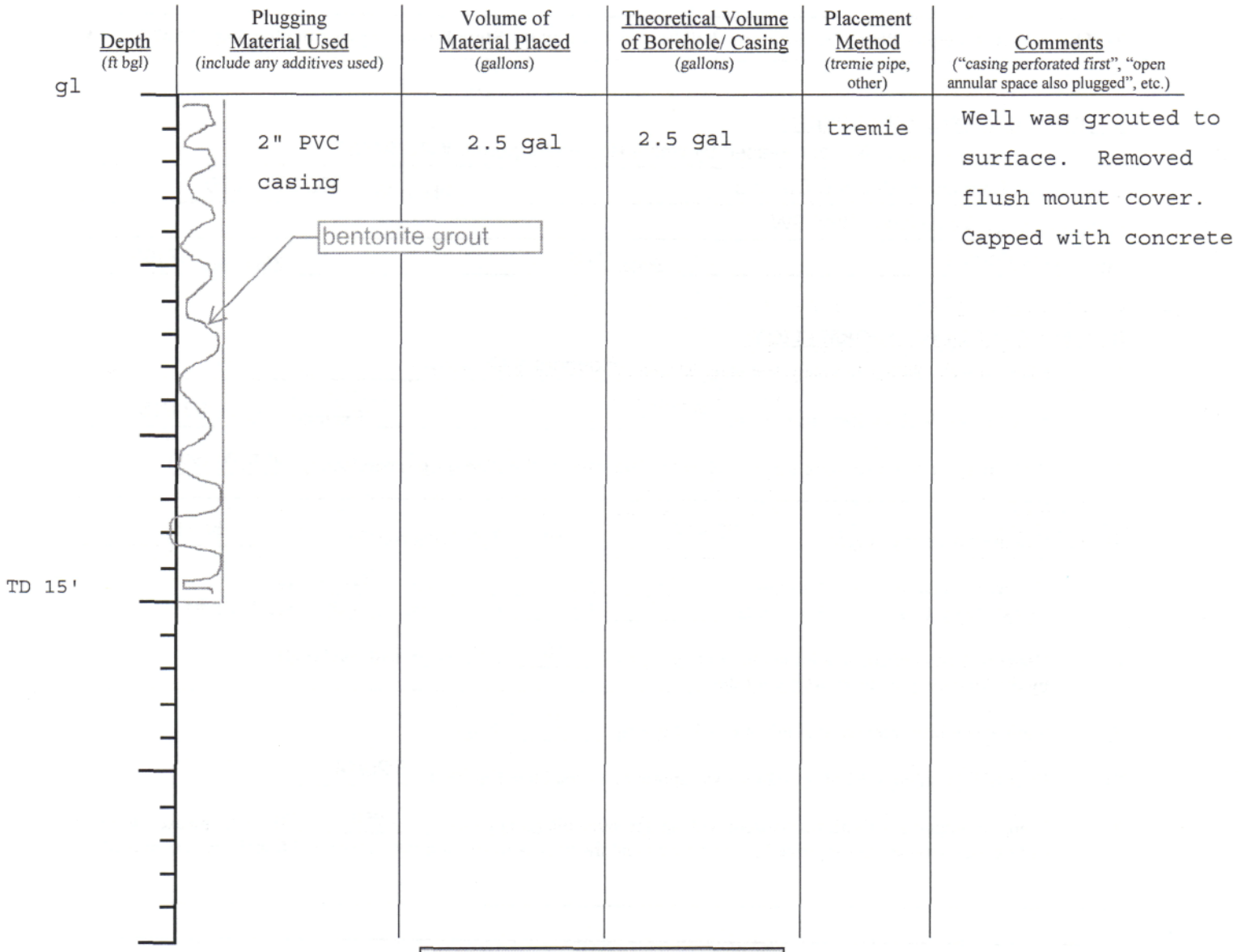
8) Date well plugging plan of operations was approved by the State Engineer: 5/20/14

9) Were all plugging activities consistent with an approved plugging plan? yes If not, please describe differences between the approved plugging plan and the well as it was plugged (attach additional pages as needed):

NMW-4 previously replaced (newly replaced by RG-94637)

10) Log of Plugging Activities - Label vertical scale with depths, and indicate separate plugging intervals with horizontal lines as necessary to illustrate material or methodology changes. Attach additional pages if necessary.

For each interval plugged, describe within the following columns:



Depth (ft bgl)	Plugging Material Used (include any additives used)	Volume of Material Placed (gallons)	Theoretical Volume of Borehole/ Casing (gallons)	Placement Method (tremie pipe, other)	Comments ("casing perforated first", "open annular space also plugged", etc.)
	2" PVC casing	2.5 gal	2.5 gal	tremie	Well was grouted to surface. Removed flush mount cover. Capped with concrete

MULTIPLY		BY		AND OBTAIN
cubic feet	x	7.4805	=	gallons
cubic yards	x	201.97	=	gallons

III. SIGNATURE:

I, Jeff Watson, say that I am familiar with the rules of the Office of the State Engineer pertaining to the plugging of wells and that each and all of the statements in this Plugging Record and attachments are true to the best of my knowledge and belief.

Jeff Watson / JR — Signature of Well Driller

May 30, 2014 — Date

PLUGGING RECORD

NOTE: A Well Plugging Plan of Operations shall be approved by the State Engineer prior to plugging - 19.27.4 NMAC

I. GENERAL / WELL OWNERSHIP:

State Engineer Well Number: None; replaced by well drilled under permit # RG 94637

Well owner: Atex c/o Rodgers & Co., Inc. Phone No.: 505-877-1030

Mailing address: 2615 Isleta Blvd SW

City: Albuquerque State: NM Zip code: 87105

II. WELL PLUGGING INFORMATION:

1) Name of well drilling company that plugged well: Rodgers & Co., Inc.

2) New Mexico Well Driller License No.: WD225 Expiration Date: 1/31/15

3) Well plugging activities were supervised by the following well driller(s)/rig supervisor(s): Jeff Watson

4) Date well plugging began: 4/29/14 Date well plugging concluded: 5/1/14

5) GPS Well Location: Latitude: 35 deg, 1 min, 33.17 sec
Well MW-34 Longitude: 106 deg, 40 min, 52.55 sec, WGS 84

6) Depth of well confirmed at initiation of plugging as: 15 ft below ground level (bgl), by the following manner: well sounder

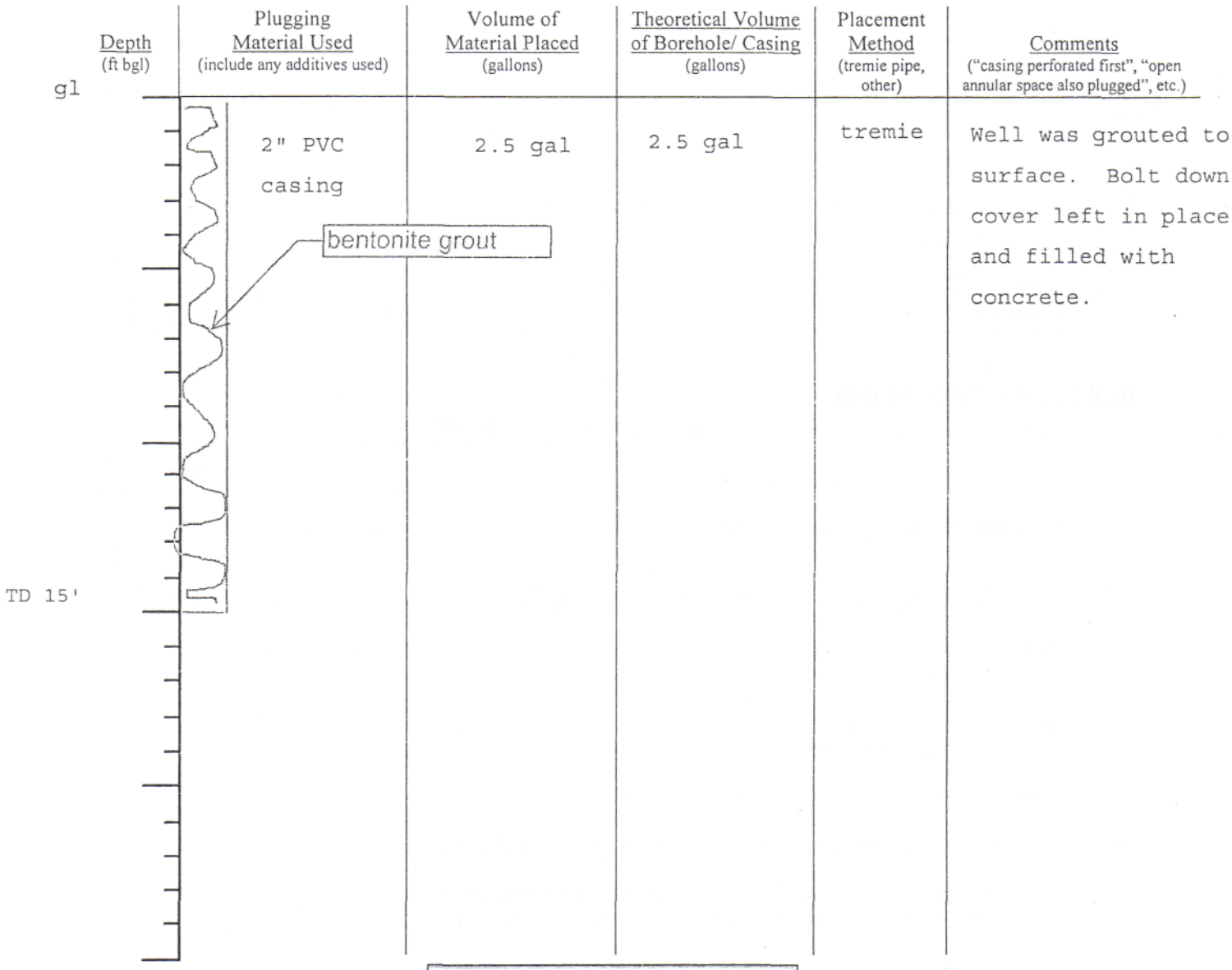
7) Static water level measured at initiation of plugging: 10 ft bgl

8) Date well plugging plan of operations was approved by the State Engineer: 5/20/14

9) Were all plugging activities consistent with an approved plugging plan? yes If not, please describe differences between the approved plugging plan and the well as it was plugged (attach additional pages as needed):

10) Log of Plugging Activities - Label vertical scale with depths, and indicate separate plugging intervals with horizontal lines as necessary to illustrate material or methodology changes. Attach additional pages if necessary.

For each interval plugged, describe within the following columns:



Depth (ft bgl)	Plugging Material Used (include any additives used)	Volume of Material Placed (gallons)	Theoretical Volume of Borehole/ Casing (gallons)	Placement Method (tremie pipe, other)	Comments ("casing perforated first", "open annular space also plugged", etc.)
gl	2" PVC casing bentonite grout	2.5 gal	2.5 gal	tremie	Well was grouted to surface. Bolt down cover left in place and filled with concrete.
TD 15'					

MULTIPLY		BY		AND OBTAIN
cubic feet	x	7.4805	=	gallons
cubic yards	x	201.97	=	gallons

III. SIGNATURE:

I, Jeff Watson, say that I am familiar with the rules of the Office of the State Engineer pertaining to the plugging of wells and that each and all of the statements in this Plugging Record and attachments are true to the best of my knowledge and belief.

Jeff Watson ITG — Signature of Well Driller

June 3, 2014 — Date

PLUGGING RECORD

NOTE: A Well Plugging Plan of Operations shall be approved by the State Engineer prior to plugging - 19.27.4 NMAC

I. GENERAL / WELL OWNERSHIP:

State Engineer Well Number: None; replaced by well drilled under permit # RG 94637

Well owner: Atex c/o Rodgers & Co., Inc. Phone No.: 505-877-1030

Mailing address: 2615 Isleta Blvd SW

City: Albuquerque State: NM Zip code: 87105

II. WELL PLUGGING INFORMATION:

1) Name of well drilling company that plugged well: Rodgers & Co., Inc.

2) New Mexico Well Driller License No.: WD225 Expiration Date: 1/31/15

3) Well plugging activities were supervised by the following well driller(s)/rig supervisor(s): Jeff Watson

4) Date well plugging began: 4/29/14 Date well plugging concluded: 5/1/14

5) GPS Well Location: Well MW-37
Latitude: 35 deg, 1 min, 33.58 sec
Longitude: 106 deg, 40 min, 52.02 sec, WGS 84

6) Depth of well confirmed at initiation of plugging as: 15 ft below ground level (bgl), by the following manner: well sounder

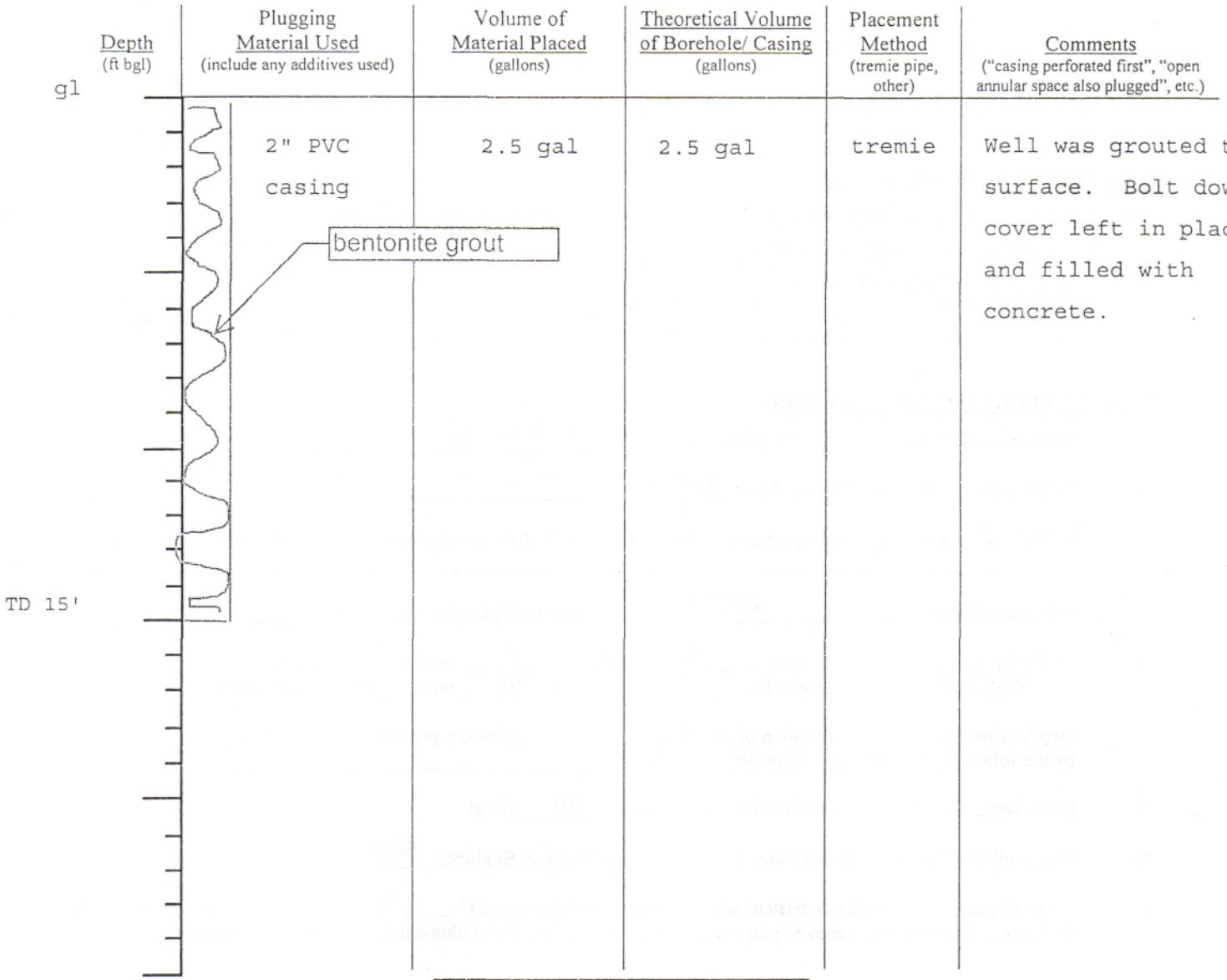
7) Static water level measured at initiation of plugging: 10 ft bgl

8) Date well plugging plan of operations was approved by the State Engineer: 5/20/14

9) Were all plugging activities consistent with an approved plugging plan? yes If not, please describe differences between the approved plugging plan and the well as it was plugged (attach additional pages as needed):

10) Log of Plugging Activities - Label vertical scale with depths, and indicate separate plugging intervals with horizontal lines as necessary to illustrate material or methodology changes. Attach additional pages if necessary.

For each interval plugged, describe within the following columns:



MULTIPLY		BY		AND OBTAIN
cubic feet	x	7.4805	=	gallons
cubic yards	x	201.97	=	gallons

III. SIGNATURE:

I, Jeff Watson, say that I am familiar with the rules of the Office of the State Engineer pertaining to the plugging of wells and that each and all of the statements in this Plugging Record and attachments are true to the best of my knowledge and belief.

Jeff Watson TRS — Signature of Well Driller

June 3, 2014 — Date

APPENDIX F

SITE SURVEY

Project Information		Coordinate System	
Name:	DEC-EA-Atcx213-May8-14.vce	Name:	State Plane 1983 (ITRF to NAD83)
Size:	260 KB	Datum:	ITRF to NAD 1983 (2011)
Modified:	5/8/2014	Zone:	New Mexico Central 3002
Time zone:	Mountain Daylight Time	Geoid:	GEOID09 (Conus)
Reference number:		Vertical datum:	NAVD88
Description:			

Point List

ID	Northing (US survey foot)	Easting (US survey foot)	Elevation (US survey foot)	Feature Code
2	1464845.424	1511357.869	4933.738	RNMW-2 TOP PVC NOTCH
3	1464837.565	1511267.331	4933.872	MW-3 TOP STEEL PLATE ON PIPE
4	1464810.892	1511364.815	4933.415	MW-4R TOP N-SIDE PVC
5	1464840.514	1511402.687	4933.218	RNMW-3 TOP PVC NOTCH
6	1464811.757	1511319.423	4934.255	MW-6R TOP N-SIDE PVC
7	1464925.823	1511380.936	4932.616	RNMW-1 TOP PVC NOTCH
8	1464898.232	1511270.112	4932.030	MW-1R TOP N-SIDE PVC
9	1464920.191	1511435.930	4934.866	MW-2 TOP PLATE ON PIPE
10	1464919.349	1511435.805	4934.028	MW-2 GND
11	1464811.313	1511489.824	4931.871	MW-38 TOP N-SIDE PVC
12	1464619.599	1511342.727	4932.534	NMW-4R TOP N-SIDE PVC
13	1464714.230	1511338.674	4934.643	BB-2 TOP PVC AT NOTCH
14	1464986.456	1511359.253	4932.004	W-36 TOP N-SIDE PVC PLATE
15	1464986.442	1511327.040	4931.495	W-35 TOP N-SIDE PVC PLATE
30	1464837.291	1511267.248	4932.838	MW-3 GND
100	1464799.716	1511248.658	4938.034	CIND BLK WALL
101	1464818.922	1511245.181	4932.410	PWR LINE N-S
102	1464827.251	1511244.113	4933.163	CH LNK FNC
103	1464931.043	1511250.981	4931.663	CH LNK FNC
104	1464944.093	1511249.947	4931.585	EOP
105	1464969.564	1511248.705	4931.572	EOP
106	1464935.994	1511251.987	4931.711	CONC
107	1464935.830	1511258.795	4931.825	CONC
108	1464930.886	1511258.656	4931.429	CONC
109	1464931.134	1511251.854	4931.739	CONC
110	1464924.624	1511352.901	4932.912	WATER METER
111	1464941.030	1511394.710	4931.268	EOP

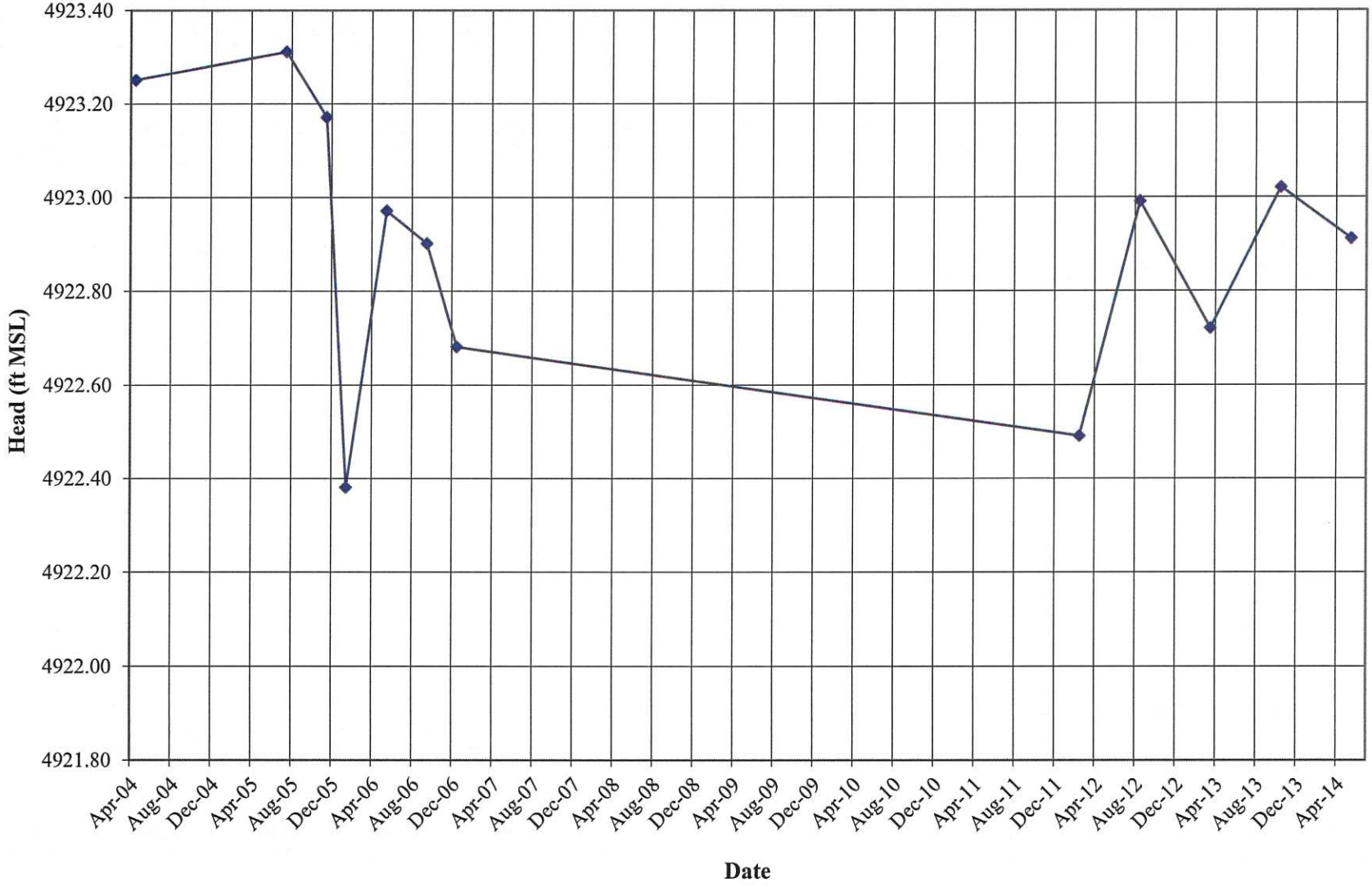
ID	Northing (US survey foot)	Easting (US survey foot)	Elevation (US survey foot)	Feature Code
112	1464970.816	1511395.925	4931.624	EOP
113	1464972.069	1511438.026	4932.261	TOP BK CURB
114	1464972.104	1511454.685	4932.286	TOP BK CURB
115	1464974.331	1511460.036	4932.296	TOP BK CURB
116	1464978.364	1511461.689	4932.251	TOP BK CURB
117	1464937.597	1511427.688	4931.802	TOP BK CURB
118	1464936.606	1511442.102	4932.408	TOP BK CURB
119	1464933.273	1511447.208	4932.291	TOP BK CURB
120	1464926.929	1511449.035	4932.754	TOP BK CURB
121	1464914.964	1511447.049	4932.524	TOP BK CURB
122	1464875.498	1511439.821	4932.740	TOP BK CURB
123	1464841.090	1511433.503	4932.685	TOP BK CURB
124	1464793.100	1511424.147	4932.518	TOP BK CURB
125	1464794.309	1511404.926	4933.088	CH LNK FNC
126	1464790.646	1511396.882	4932.543	PWR POLE 2FT W
127	1464796.340	1511382.126	4933.632	CH LNK FNC OR
128	1464798.003	1511309.038	4932.871	CNDR BLK COR 2FT S
129	1464797.907	1511255.977	4933.113	PWR POLE 2FN W
130	1464979.464	1511260.119	4932.327	PWR POLE 2FT N
131	1464869.280	1511434.563	4932.875	BK WALK
5000	1464832.208	1511273.296	4932.972	NAIL SET

NOTE: Horizontal and Vertical control calibration was created using the National Geodetic Survey's (NGS) Online Positioning User Service (OPUS) on May 8, 2014 with observations at the base point 5000. All work was completed by James A. Botsford, NMPS No. 5211 and Certified Federal Surveyor No. 1516 on May 8, 2014.

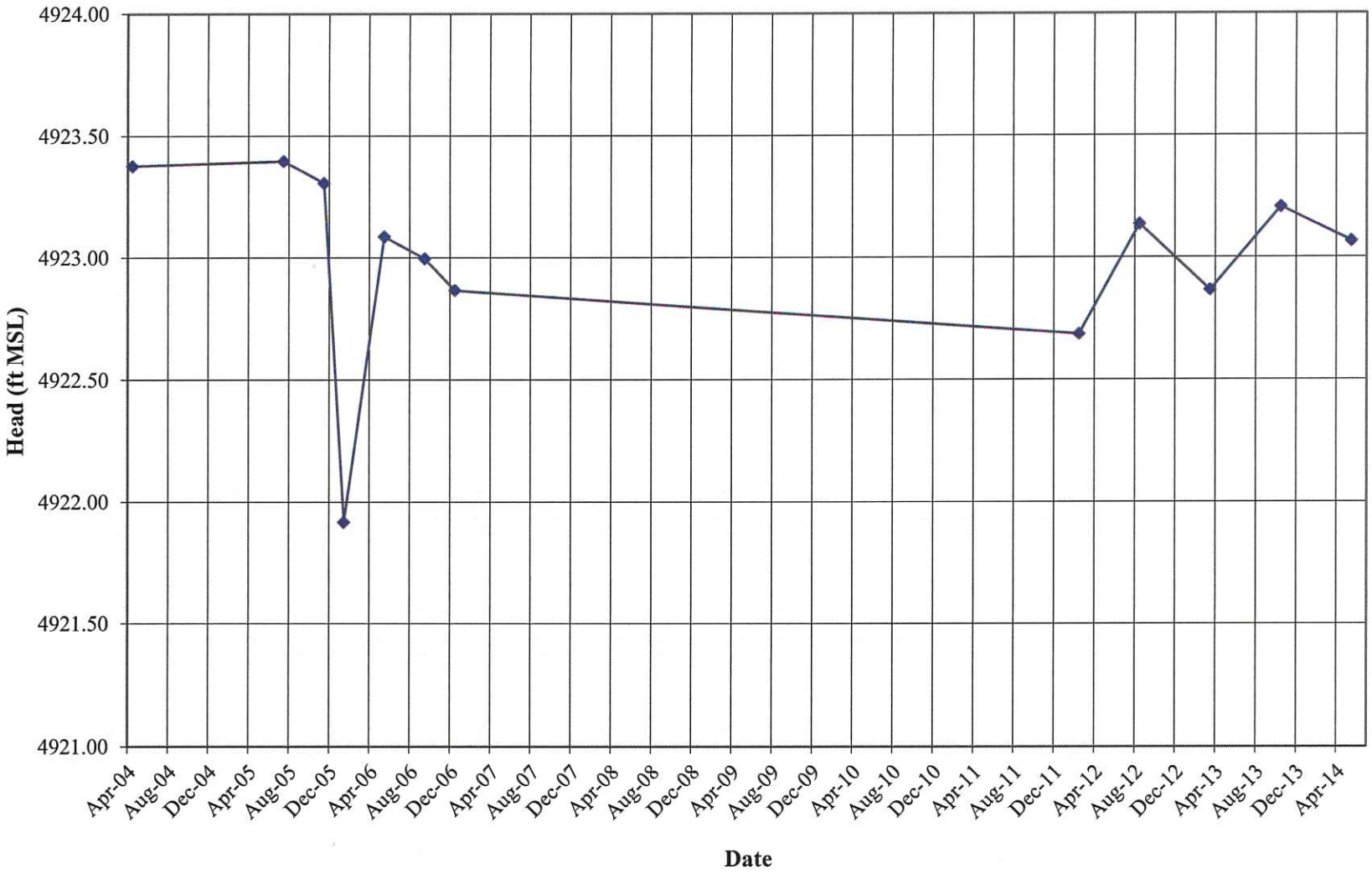
APPENDIX G

HYDROGRAPHS AND CONCENTRATION TRENDS

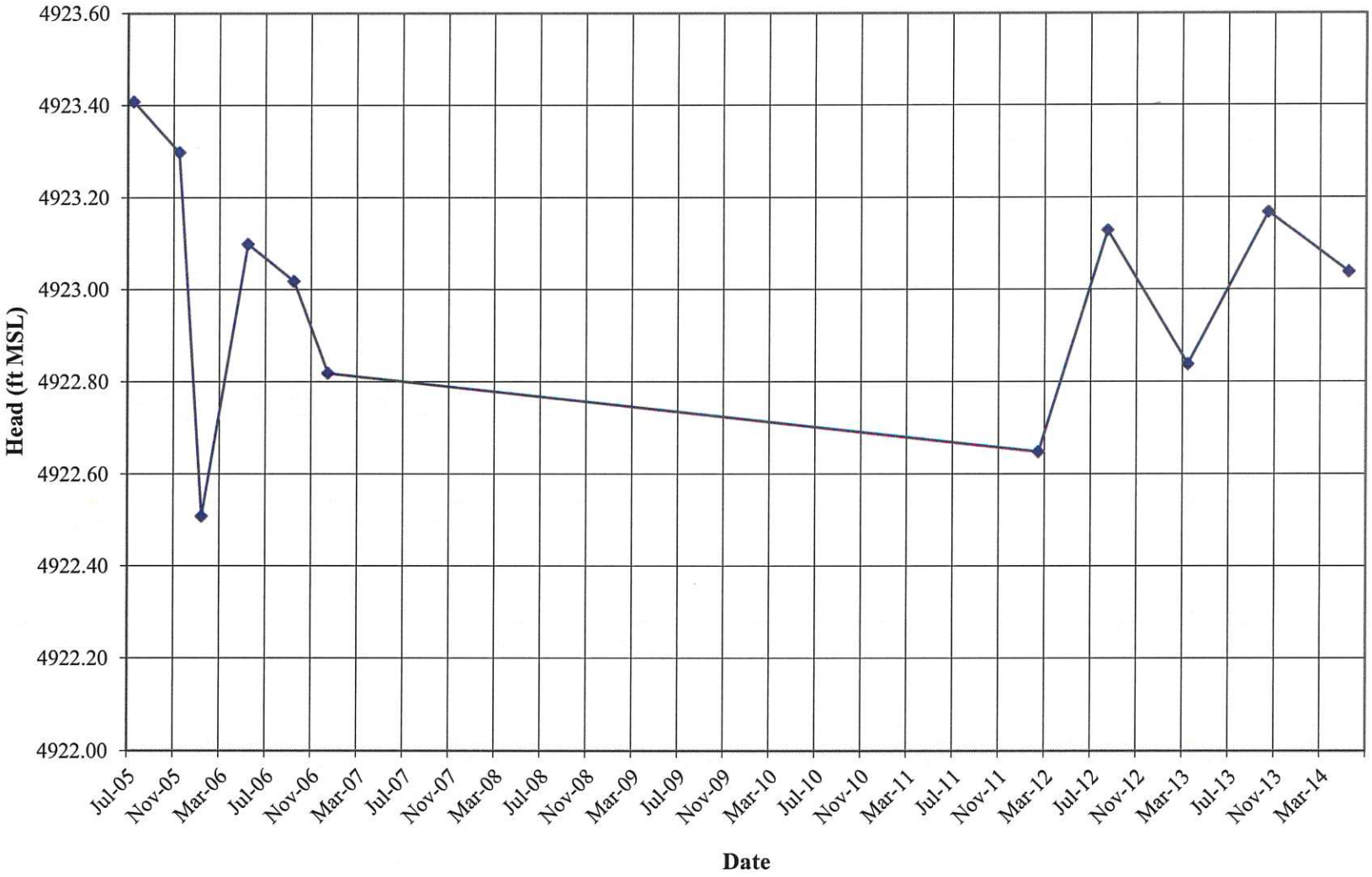
HYDROGRAPH FOR WELL MW-38



HYDROGRAPH FOR WELL NMW-1

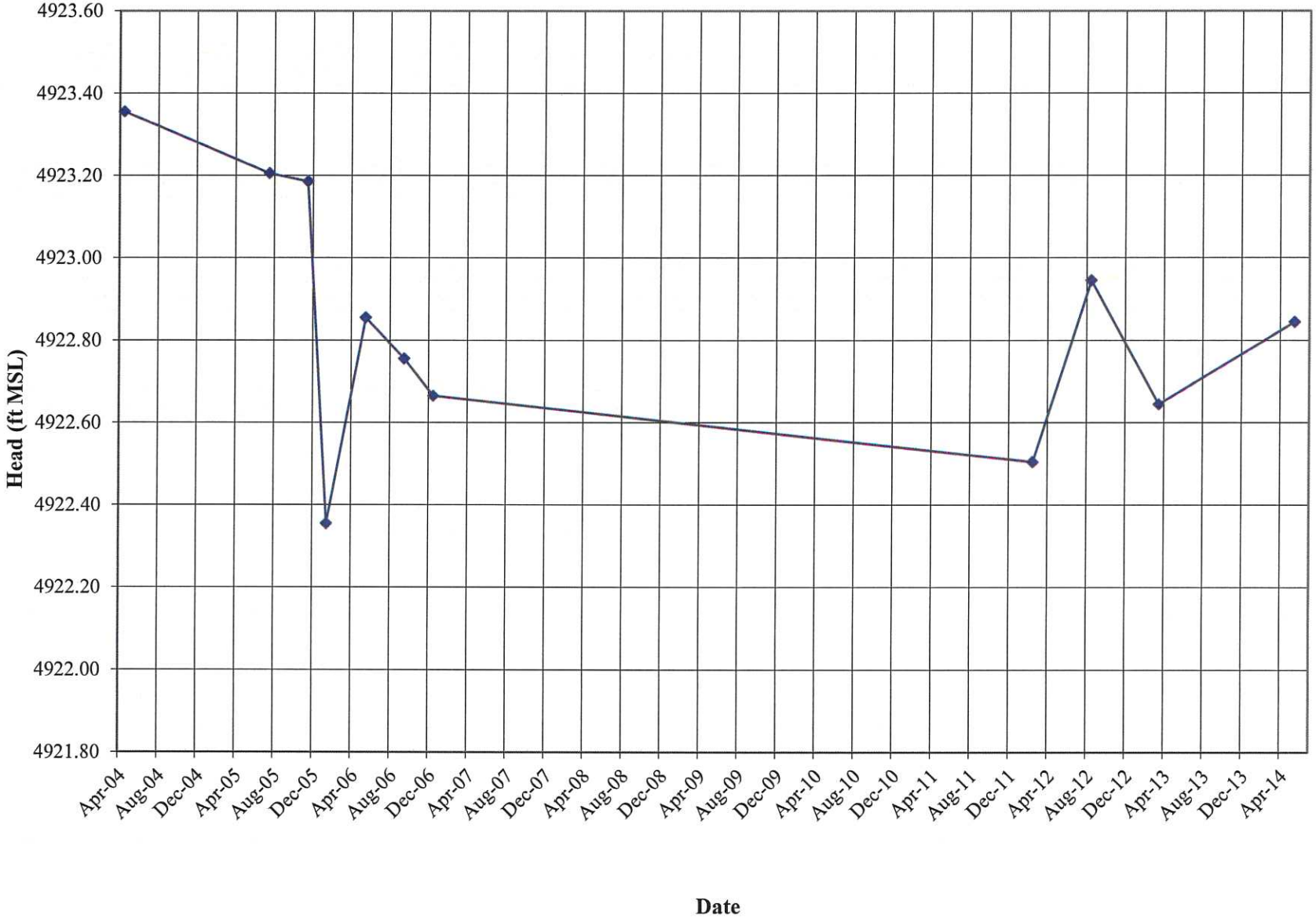


HYDROGRAPH FOR WELL RNMW-2

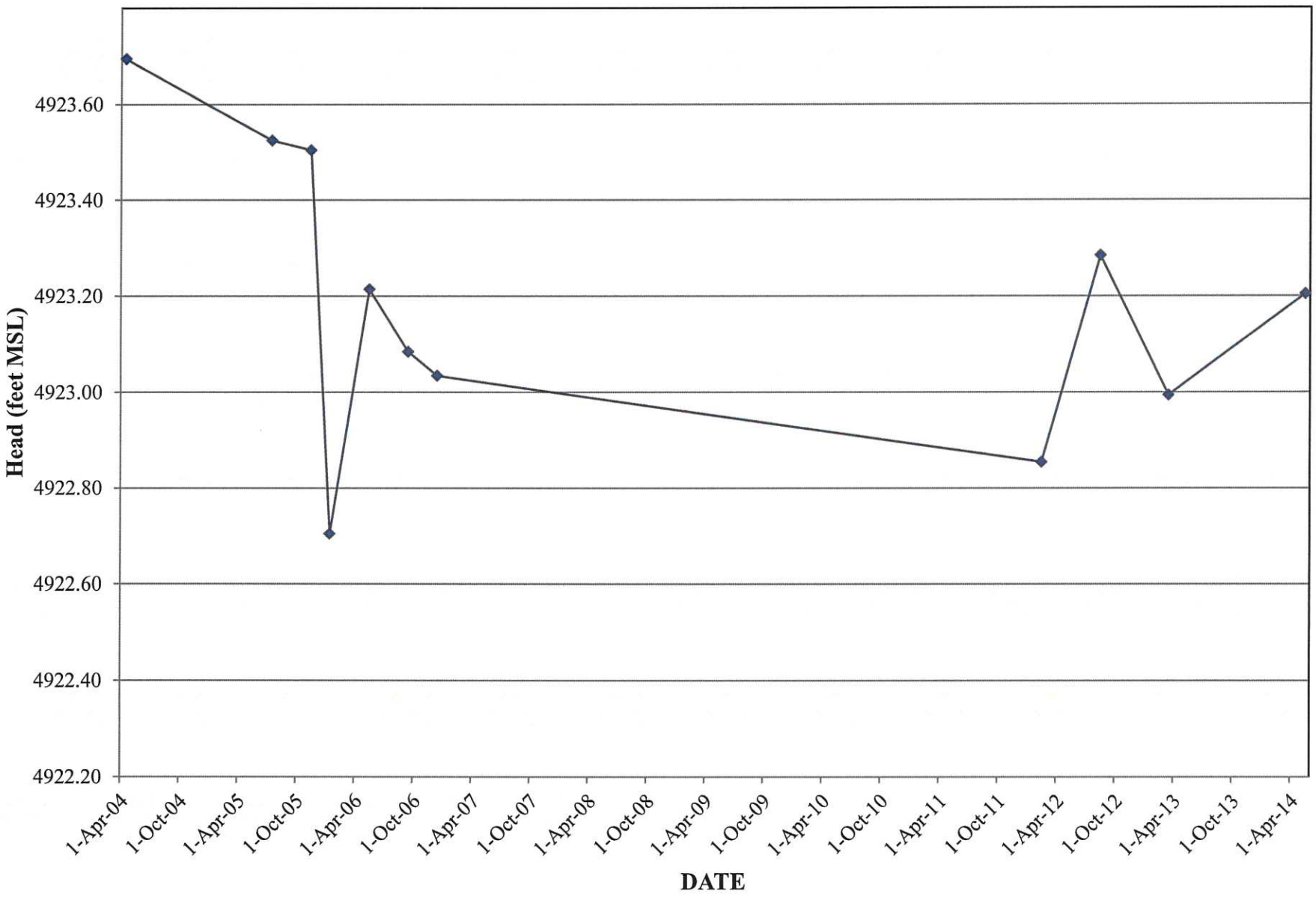


HYDROGRAPH FOR WELL RNMW-3

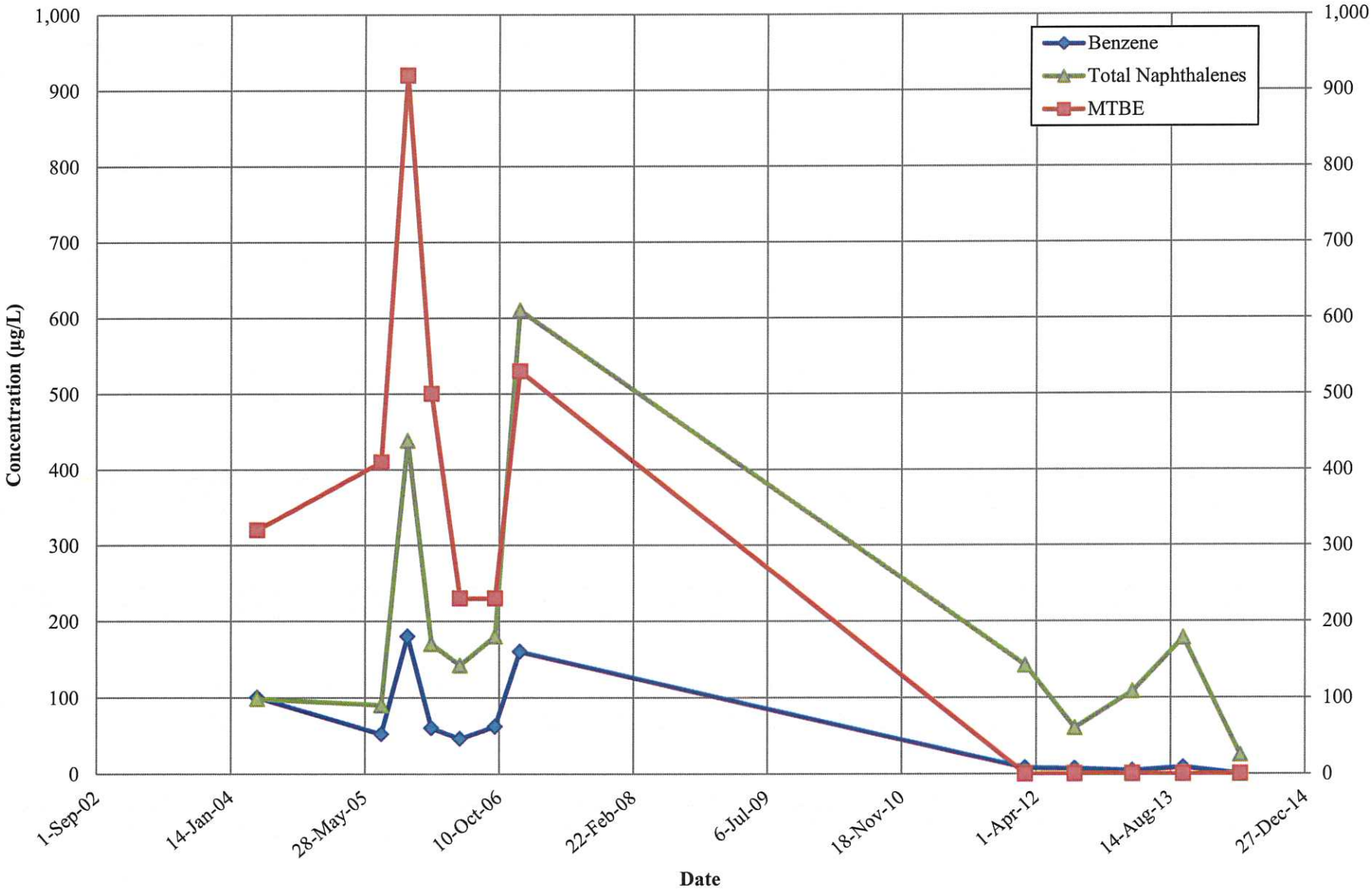
HYDROGRAPH FOR WELL W-35



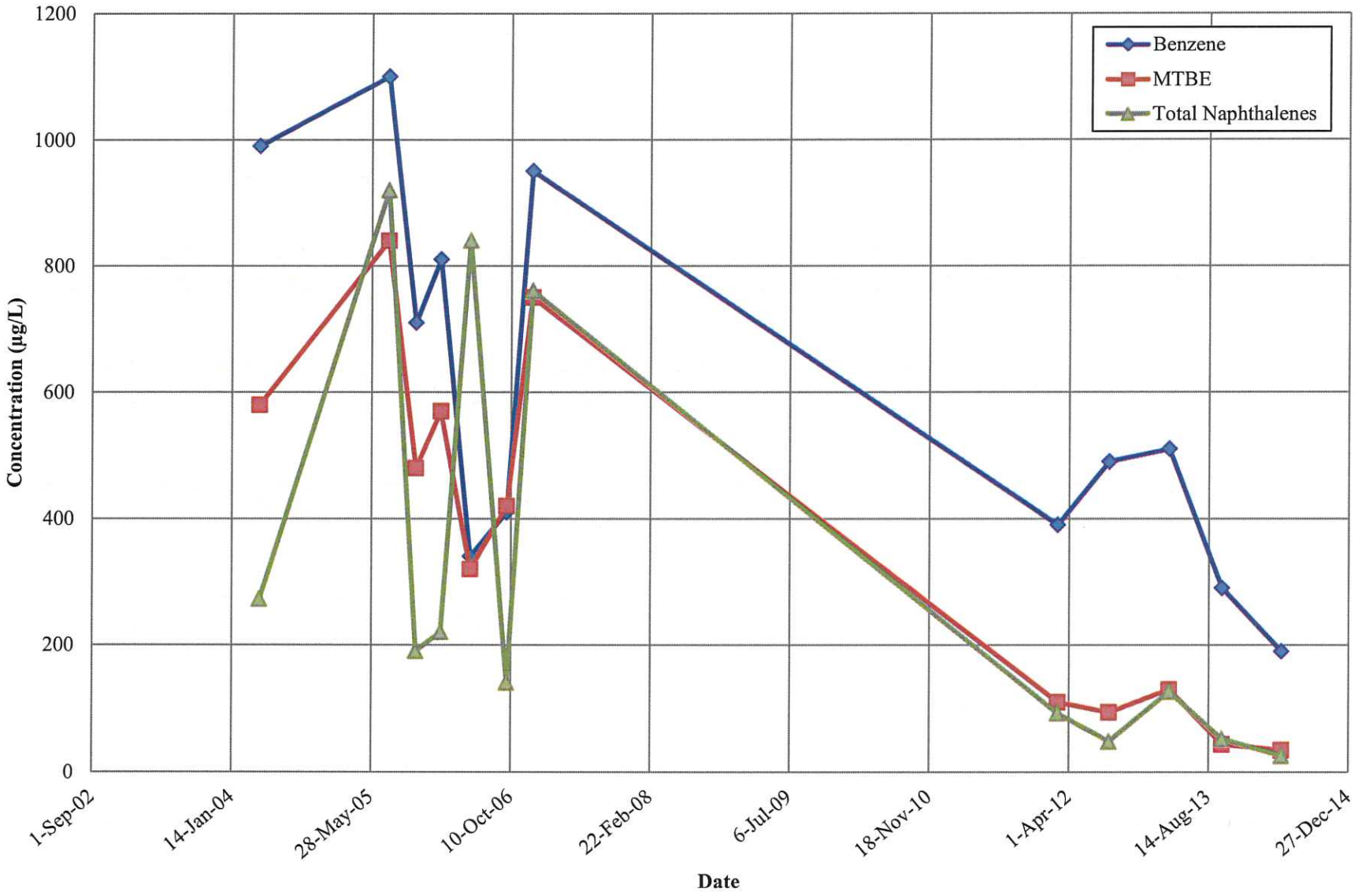
HYDROGRAPH FOR WELL W-36



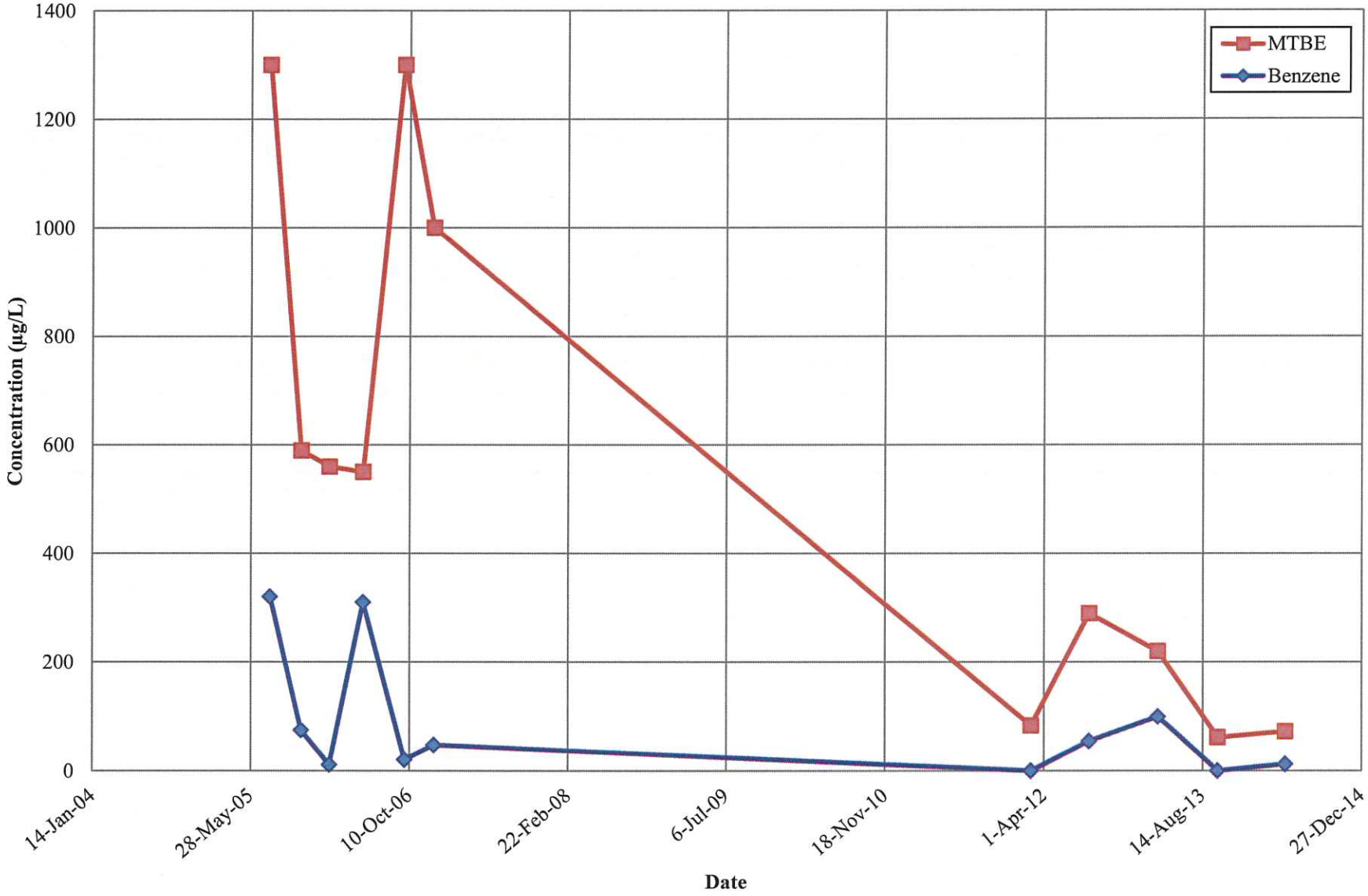
CONCENTRATION TRENDS IN MW-3



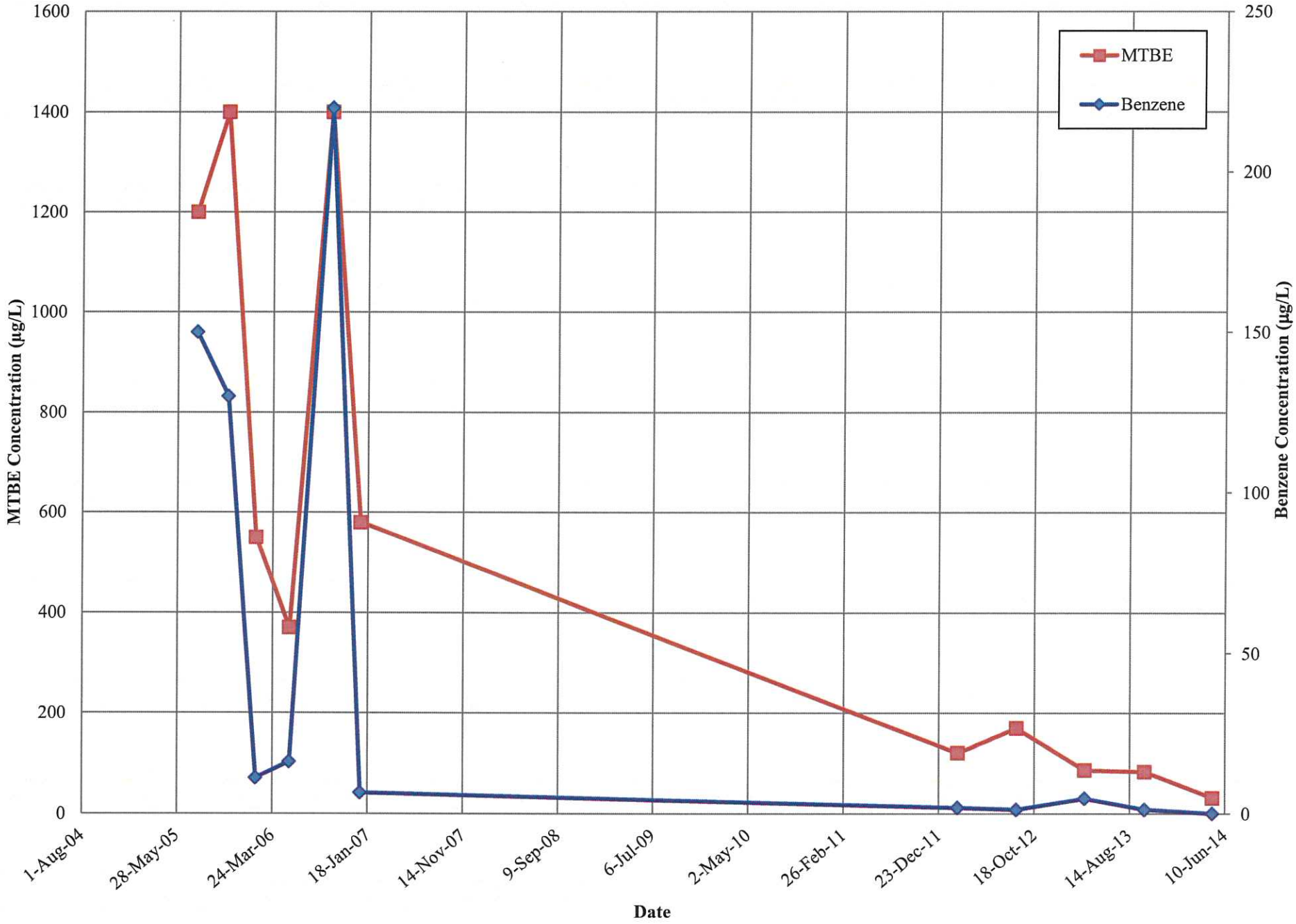
CONCENTRATION TRENDS IN NMW-1



CONCENTRATION TRENDS IN RNMW-2



CONCENTRATION TRENDS IN RNMW-3



APPENDIX H

FIELD FORMS

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

MONITOR WELL SAMPLING FIELD FORM

FLUID LEVEL DATA

Well ID: MW-1R
Site: Atex 213
Date gauged: 5/1/14
Time gauged: 1552

Depth to PSH: — Feet
Depth to water: 9.04 Feet
Total depth: 18.85 Feet
NAPL thickness: — Feet

Well diameter: 2" Inches
Height of fluid column: _____ Feet
Volume in well: _____ Gallons

(3 well volumes = _____ gallons)

After Bailing NAPL
Depth to PSH: _____ Feet
Depth to water: _____ Feet
NAPL thickness: _____ Feet
NAPL Recovered: _____ Gallons

GROUNDWATER SAMPLING DATA

Time/date purged: 1035 - 1130 5/1/14 Purge Method: surge bail & pump @ 4 gpm

Time	Purge Volume (gal)	Temp (°C)	SpC (µs/cm)	pH	ORP (mV)	DO (mg/L)
			Development after installation See field Notes			

Actual purge volume: ~60 gal.
Field measurements stabilized within ± 10%? NA
Time/date sampled: 1600 5/1/14 ~~5/1/14~~
Purged/sampled by: Lane Andress
Sample method: Disposable Bailer
Requested analyses: 8260
Comments/observations: petroleum H-C odor

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
320 Gold Avenue SW, Suite 1210
Albuquerque, NM 87102
Phone: (505) 224-9013

MONITOR WELL SAMPLING FIELD FORM

FLUID LEVEL DATA

Well ID: MW-2
Site: Atex 213
Date gauged: 5/1/14
Time gauged: 1326

Depth to PSH: — Feet
Well diameter: 2" Inches
Depth to water: 11.71 Feet
Height of fluid column: 5.82 Feet
Total depth: 17.53 Feet
Volume in well: 0.99 Gallons
NAPL thickness: — Feet
(3 well volumes = 3.00 gallons)

After Bailing NAPL
Depth to PSH: _____ Feet
Depth to water: _____ Feet
NAPL thickness: _____ Feet
NAPL Recovered: _____ Gallons

GROUNDWATER SAMPLING DATA

Time/date purged: 1332 5/1/14
Purge Method: Hand Bail

Time	Purge Volume (gal)	Temp (°C)	SpC (µs/cm)	pH	ORP (mV)	DO (mg/L)
1332	0.25	20.0	1008	7.76	—	1.40
1335	1.5	19.3	969	7.73	—	↓
1337	2.25	18.8	971	7.63	—	
1339	2.75	18.8	981	7.63	—	↓

Actual purge volume: 3.25 gal.
Field measurements stabilized within ± 10%? Y
Time/date sampled: 1342 5/1/14
Purged/sampled by: Lane Andress
Sample method: Disposable Bailer
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

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

MONITOR WELL SAMPLING FIELD FORM

FLUID LEVEL DATA

Well ID: MW-3
Site: Atex 213
Date gauged: ~~5/1/14~~ 5/1/14
Time gauged: 1116

Depth to PSH: — Feet
Depth to water: 10.00 Feet
Total depth: 15.90 Feet
NAPL thickness: — Feet

Well diameter: 2" Inches
Height of fluid column: 5.90 Feet
Volume in well: 1.00 Gallons

(3 well volumes = 3.00 gallons)

After Bailing NAPL
Depth to PSH: _____ Feet
Depth to water: _____ Feet
NAPL thickness: _____ Feet
NAPL Recovered: _____ Gallons

GROUNDWATER SAMPLING DATA

Time/date purged: 1124 5/1/14
Purge Method: hand bail

Time	Purge Volume (gal)	Temp (°C)	SpC (µs/cm)	pH	ORP (mV)	DO (mg/L)
1124	0.25	19.9	1164	7.55	—	1.77
1128	1.50	19.4	1086	7.63	—	↓
1145	2.00	19.1	1080	7.73	—	
1147	3.75	19.2	1040	7.70	—	
1148	3.25	19.1	1041	7.72	—	↓
1149	3.50	19.1	1043	7.70	—	↓

Actual purge volume: 3.75 gal.
Field measurements stabilized within ± 10%? Yes
Time/date sampled: 1152 5/1/14
Purged/sampled by: Lane Andress
Sample method: Disposable bailer
Requested analyses: 8260
Comments/observations: Black flecks in gray water petroleum HC odor

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
320 Gold Avenue SW, Suite 1210
Albuquerque, NM 87102
Phone: (505) 224-9013

MONITOR WELL SAMPLING FIELD FORM

FLUID LEVEL DATA

Well ID: MW-4R
Site: Atex 213
Date gauged: 5/1/14
Time gauged: 1638

Depth to PSH: — Feet
Depth to water: 10.55 Feet
Total depth: 20.95 Feet
NAPL thickness: — Feet

Well diameter: 2" Inches
Height of fluid column: _____ Feet
Volume in well: _____ Gallons

(3 well volumes = _____ gallons)

After Bailing NAPL
Depth to PSH _____ Feet
Depth to water _____ Feet
NAPL thickness _____ Feet
NAPL Recovered _____ Gallons

GROUNDWATER SAMPLING DATA

Time/date purged: 1353 5/1/14
Purge Method: surge bail & pump @ 4gpm

Time	Purge Volume (gal)	Temp (°C)	SpC (µs/cm)	pH	ORP (mV)	DO (mg/L)
			Developed by Drillers			

Actual purge volume: ~100 gal.
Field measurements stabilized within ± 10%? _____
Time/date sampled: 1642 5/1/14
Purged/sampled by: Lane Andress
Sample method: Disposable Bailer
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

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

MONITOR WELL SAMPLING FIELD FORM

FLUID LEVEL DATA

Well ID: MW-6R
Site: Atex 213
Date gauged: 5/1/14
Time gauged: 1620

Depth to PSH: — Feet
Depth to water: 11.35 Feet
Total depth: 20.94 Feet
NAPL thickness: — Feet

Well diameter: 2" Inches
Height of fluid column: _____ Feet
Volume in well: _____ Gallons

(3 well volumes = _____ gallons)

After Bailing NAPL
Depth to PSH: _____ Feet
Depth to water: _____ Feet
NAPL thickness: _____ Feet
NAPL Recovered: _____ Gallons

GROUNDWATER SAMPLING DATA

Time/date purged: 1252 5/1/14
Purge Method: surge bail & pump @ 4gpm

Time	Purge Volume (gal)	Temp (°C)	SpC (µs/cm)	pH	ORP (mV)	DO (mg/L)
		well development by drillers				

Actual purge volume: ~75 gal.
Field measurements stabilized within ± 10%?: _____
Time/date sampled: 1629 5/1/14
Purged/sampled by: Lane Andress
Sample method: Disposable bailer
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

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

MONITOR WELL SAMPLING FIELD FORM

FLUID LEVEL DATA

Well ID: MW-38
Site: Atex 213
Date gauged: 5/1/14
Time gauged: 1424

Depth to PSH: — Feet
Well diameter: 2" Inches
Depth to water: 8.94 Feet
Height of fluid column: 2.99 Feet
Total depth: 11.93 Feet
Volume in well: 0.50 Gallons
NAPL thickness: — Feet
(3 well volumes = 1.52 gallons)

After Bailing NAPL
Depth to PSH: _____ Feet
Depth to water: _____ Feet
NAPL thickness: _____ Feet
NAPL Recovered: _____ Gallons

GROUNDWATER SAMPLING DATA

Time/date purged: 5/1/14 Purge Method: hand bail

Time	Purge Volume (gal)	Temp (°C)	SpC (µs/cm)	pH	ORP (mV)	DO (mg/L)
1430	0.25	20.0	966	7.58	—	1.53
1433	1.25	19.6	977	7.58	—	↓
1436	2.25	19.0	984	7.59	—	↓
~~1438~~	~~3.25~~				—	↓
1438	sampled					

Actual purge volume: 2.50 gal.
Field measurements stabilized within ± 10%? _____
Time/date sampled: 1438 5/1/14
Purged/sampled by: Lane Andress
Sample method: Disposable Bailer
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

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

MONITOR WELL SAMPLING FIELD FORM

FLUID LEVEL DATA

Well ID: BB-2
Site: Atex 213
Date gauged: 5/1/14
Time gauged: 1005

Depth to PSH: — Feet
Well diameter: 2" Inches
Depth to water: 11.80 Feet
Height of fluid column: 2.55 Feet
Total depth: 14.35 Feet
Volume in well: 0.43 Gallons
NAPL thickness: — Feet
(3 well volumes = 1.30 gallons)

After Bailing NAPL
Depth to PSH: _____ Feet
Depth to water: _____ Feet
NAPL thickness: _____ Feet
NAPL Recovered: _____ Gallons

GROUNDWATER SAMPLING DATA

Time/date purged: 1510 5/1/14
Purge Method: hand Bail

Time	Purge Volume (gal)	Temp (°C)	SpC (µs/cm)	pH	ORP (mV)	DO (mg/L)
1511	0.25	18.8	955	7.77	—	1.78
1513	1.00	17.9	947	7.78	—	↓
1514	1.25	17.7	945	7.77	—	✓

Actual purge volume: 1.5 gal.
Field measurements stabilized within ± 10%?
Time/date sampled: 1515 5/1/14
Purged/sampled by: Lane Andress
Sample method: Disposable Bailer
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

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

MONITOR WELL SAMPLING FIELD FORM

FLUID LEVEL DATA

Well ID: NMW-1
Site: Atex 213
Date gauged: 5/2/14
Time gauged: 1234

Depth to PSH: ~~/~~ Feet
Depth to water: 9.55 Feet
Total depth: 14.50 Feet
NAPL thickness: ~~/~~ Feet

Well diameter: 2" Inches
Height of fluid column: 4.95 ~~5.0~~ Feet
Volume in well: 0.84 Gallons

(3 well volumes = 2.52 gallons)

After Bailing NAPL
Depth to PSH _____ Feet
Depth to water _____ Feet
NAPL thickness _____ Feet
NAPL Recovered _____ Gallons

GROUNDWATER SAMPLING DATA

Time/date purged: 1242 5/2/14
Purge Method: Hand bail

Time	Purge Volume (gal)	Temp (°C)	SpC (µs/cm)	pH	ORP (mV)	DO (mg/L)
1243	0.25	19.3	1173	7.53	—	1.3
1245	1.25	19.2	1168	7.27	—	↓
1247	2.25	19.0	1174	7.29	—	
~~1248~~	~~2.50~~ ~~2.75~~				—	

Actual purge volume: 2.75 gal.
Field measurements stabilized within ± 10%? Y

Time/date sampled: 1252 5/2/14
Purged/sampled by: Lane Andress

Sample method: Disposable Bailer
Requested analyses: 8260
Comments/observations: Slight petroleum odor

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
320 Gold Avenue SW, Suite 1210
Albuquerque, NM 87102
Phone: (505) 224-9013

MONITOR WELL SAMPLING FIELD FORM

FLUID LEVEL DATA

Well ID: RNMW-2
Site: Atex 213
Date gauged: 5/2/14
Time gauged: 1130
Depth to PSH: — Feet
Well diameter: 2" Inches
Depth to water: 10.70 Feet
Height of fluid column: ~~6.90~~ 5.3 ft Feet
Total depth: 16.00 Feet
Volume in well: ~~1.13~~ 0.90 Gallons
NAPL thickness: — Feet
(3 well volumes = 2.71 gallons)

After Bailing NAPL
Depth to PSH: _____ Feet
Depth to water: _____ Feet
NAPL thickness: _____ Feet
NAPL Recovered: _____ Gallons

GROUNDWATER SAMPLING DATA

Time/date purged: 1135 5/2/14
Purge Method: hand Bail

Time	Purge Volume (gal)	Temp (°C)	SpC (µs/cm)	pH	ORP (mV)	DO (mg/L)
1136	0.25	19.7	1073	7.46	—	1.30
1138	1.25	19.4	1065	7.44	—	?
1140	2.25	19.3	1054	7.47	—	?
1141	2.50	19.2	1053	7.47	—	✓

Actual purge volume: 2.75 gal.
Field measurements stabilized within ± 10%? Y
Time/date sampled: 1142 5/2/14
Purged/sampled by: Lane Andress
Sample method: Disposable Bailer
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

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

MONITOR WELL SAMPLING FIELD FORM

FLUID LEVEL DATA

Well ID: RNMW-3
Site: Atex 213
Date gauged: 5/2/14
Time gauged: 1202

Depth to PSH: — Feet
Well diameter: 2" Inches
Depth to water: 10.23 Feet
Height of fluid column: 5.59 Feet
Total depth: 15.82 Feet
Volume in well: 0.95 Gallons
NAPL thickness: — Feet
(3 well volumes = 2.85 gallons)

After Bailing NAPL
Depth to PSH: _____ Feet
Depth to water: _____ Feet
NAPL thickness: _____ Feet
NAPL Recovered: _____ Gallons

GROUNDWATER SAMPLING DATA

Time/date purged: 5/2/14 Purge Method: Hand Bail

Time	Purge Volume (gal)	Temp (°C)	SpC (µs/cm)	pH	ORP (mV)	DO (mg/L)
1206	0.25	19.8	1130	7.50	—	1.54
1207	1.25	19.6	1103	7.48	—	↓
1209	2.25	19.6	1042	7.53	—	↓
1210	2.75	19.7	1009	7.53	—	✓

Actual purge volume: 3.0 gal.
Field measurements stabilized within ± 10%? _____
Time/date sampled: ~~1209~~ 1212 5/2/14
Purged/sampled by: Lane Andress
Sample method: Disposable Bailer
Requested analyses: 8260
Comments/observations: petroleum H.C odor

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
320 Gold Avenue SW, Suite 1210
Albuquerque, NM 87102
Phone: (505) 224-9013

MONITOR WELL SAMPLING FIELD FORM

FLUID LEVEL DATA

Well ID: NMW-4R
Site: Atex 213
Date gauged: 5/1/14
Time gauged: 1658

Depth to PSH: — Feet
Well diameter: 2 4 Inches
Depth to water: 9.91 Feet
Height of fluid column: _____ Feet
Total depth: 19.77 Feet
Volume in well: _____ Gallons
NAPL thickness: — Feet

(3 well volumes = _____ gallons)

After Bailing NAPL
Depth to PSH: _____ Feet
Depth to water: _____ Feet
NAPL thickness: _____ Feet
NAPL Recovered: _____ Gallons

GROUNDWATER SAMPLING DATA

Time/date purged: 5/1/14
Purge Method: surge bail & pump @ 4gpm

Time	Purge Volume (gal)	Temp (°C)	SpC (µs/cm)	pH	ORP (mV)	DO (mg/L)
			Development by Drillers			

Actual purge volume: ~183 gal.
Field measurements stabilized within ± 10%?
Time/date sampled: 1702 5/1/14
Purged/sampled by: Lane Andress
Sample method: Disposable Bailer
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

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

MONITOR WELL SAMPLING FIELD FORM

FLUID LEVEL DATA

Well ID: W-35
Site: Atex 213
Date gauged: 5/2/14
Time gauged: 1310
Depth to PSH: — Feet
Well diameter: 2 Inches
Depth to water: 8.65 Feet
Height of fluid column: 5.02 Feet
Total depth: 13.67 Feet
Volume in well: 0.85 Gallons
NAPL thickness: _____ Feet
(3 well volumes = 2.56 gallons)

After Bailing NAPL
Depth to PSH: _____ Feet
Depth to water: _____ Feet
NAPL thickness: _____ Feet
NAPL Recovered: _____ Gallons

GROUNDWATER SAMPLING DATA

Time/date purged: 1315 5/2/14
Purge Method: Hand Bail

Time	Purge Volume (gal)	Temp (°C)	SpC (µs/cm)	pH	ORP (mV)	DO (mg/L)
1316	0.25	20.0	1187	7.38	—	0.91
1319	1.25	19.5	1192	7.43	—	↓
1320	2.25	19.6	1137	7.43	—	↓
1321	2.75	19.5	1148	7.44	—	↓

Actual purge volume: 3.0 gal.
Field measurements stabilized within ± 10%? Y
Time/date sampled: 1325 5/2/14
Purged/sampled by: Lane Andress
Sample method: Disposable Bailer
Requested analyses: 8260
Comments/observations: slight petroleum H-C odor

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
320 Gold Avenue SW, Suite 1210
Albuquerque, NM 87102
Phone: (505) 224-9013

MONITOR WELL SAMPLING FIELD FORM

FLUID LEVEL DATA

Well ID: W-36
Site: Atex 213
Date gauged: 5/2/14
Time gauged: 1056

Depth to PSH: — Feet
Well diameter: 2" Inches
Depth to water: 8.80 Feet
Height of fluid column: 3.15 Feet
Total depth: 11.95 Feet
Volume in well: 0.54 Gallons
NAPL thickness: — Feet
(3 well volumes = 1.61 gallons)

After Bailing NAPL
Depth to PSH: _____ Feet
Depth to water: _____ Feet
NAPL thickness: _____ Feet
NAPL Recovered: _____ Gallons

GROUNDWATER SAMPLING DATA

Time/date purged: 1059 5/2/14
Purge Method: handbail

Time	Purge Volume (gal)	Temp (°C)	SpC (µs/cm)	pH	ORP (mV)	DO (mg/L)
1105	0.25	19.4	887	7.23	—	3.03
1106	1.00	18.9	877	7.35	—	↓
1107	1.50	18.8	880	7.37	—	↓
1109	1.75	18.8	878	7.34	—	✓

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

Time/date sampled: ~~1111~~ 1111 5/2/14
Purged/sampled by: Lane Andress
Sample method: Disposable Bailer
Requested analyses: 8260
Comments/observations: faint petroleum HC 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: EA Engineering
320 Gold Ave Ste 1210
Mailing Address: ABQ NM 87102

Phone #: 505-224-9013
email or Fax#: 505-224-9016

QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)

Accreditation
☐ NELAP ☐ Other ____
☐ EDD (Type) ____

Turn-Around Time:
☒ Standard ☐ Rush ____

Project Name: Atex 213

Project #: PO# 12145-2.0

Project Manager: Gary Desselle

Sampler: Lane Andress

On Ice: ☒ Yes ☐ No

Sample Temperature: 5.5

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	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)	Lead EPA 6010				Air Bubbles (Y or N)
30/14	1438	Soil	IDW-Atex 213	4oz Jar(1)	NONE	1	X		X									X				
/1/14	1552	Aq	MW-1R	(3) VOA	$HgCl_2$											X						
/1/14	1326		MW-2																			
/1/14	1116		MW-3																			
/1/14	1638		MW4R																			
/1/14	1629		MW-6R																			
/1/14	1424		MW-38																			
/1/14	1005		BB-2																			
2/14	1234		NMW-1																			
2/14	1130		RNMW-2																			
2/14	1202		RNMW-3																			
/14	1658		NMW-4																			

Date:	Time:	Relinquished by:	Received by:	Date	Time
2/14	1515	[signature]	[signature]	05/02/14	1515
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks: 1 of 2

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 notated on the analytical report.

Chain-of-Custody Record

Client: EA Engineering

320 Gold Ave Ste 1210

Mailing Address: ABQ, NM 87102

Phone #: 224-9013

email or Fax#: 224-9016

QA/QC Package:

☒ Standard ☐ Level 4 (Full Validation)

Accreditation

☐ NELAP ☐ Other _____

☐ EDD (Type) _____

Turn-Around Time:

☒ Standard ☐ Rush _____

Project Name: Atex 213

Project #: PO# 12145-2.0

Project Manager: Gary Dosselle

Sampler: Lane Andress

On Ice: ☑ Yes ☐ No

Sample Temperature: 5.5

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	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)
12/14	1310	Aq	W-35	(3) VOA	HgCl2											X						
12/14	1056	Aq	W-36	"	"											X						

Date: 12/14 Time: 1515 Relinquished by: _____ Received by: _____ Date: 05/12/14 Time: 1515

Date: _____ Time: _____ Relinquished by: _____ Received by: _____ Date: _____ Time: _____

Remarks: 2 of 2

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 notated on the analytical report.

APPENDIX I

LABORATORY REPORTS

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

May 14, 2014

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

RE: Atex 213 OrderNo.: 1405097

Dear Gary Desselle:

Hall Environmental Analysis Laboratory received 15 sample(s) on 5/2/2014 for the analyses presented in the following report.

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. In order to properly interpret your results it is imperative that you review this report in its entirety. 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. When necessary, data qualifers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

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

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order **1405097**
Date Reported: **5/14/2014**

CLIENT: EA Engineering
Project: Atex 213
Lab ID: 1405097-001
Matrix: SOIL
Client Sample ID: IDW-Atez 213
Collection Date: 4/30/2014 2:38:00 PM
Received Date: 5/2/2014 3:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS						Analyst: **BCN**	
Diesel Range Organics (DRO)	21	10		mg/Kg	1	5/6/2014 11:06:42 AM	12995
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	5/6/2014 11:06:42 AM	12995
Surr: DNOP	107	57.9-140		%REC	1	5/6/2014 11:06:42 AM	12995
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	51	9.8		mg/Kg	2	5/8/2014 12:36:06 AM	12999
Surr: BFB	140	74.5-129	S	%REC	2	5/8/2014 12:36:06 AM	12999
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Methyl tert-butyl ether (MTBE)	ND	0.20		mg/Kg	2	5/8/2014 12:36:06 AM	12999
Benzene	0.12	0.098		mg/Kg	2	5/8/2014 12:36:06 AM	12999
Toluene	ND	0.098		mg/Kg	2	5/8/2014 12:36:06 AM	12999
Ethylbenzene	0.31	0.098		mg/Kg	2	5/8/2014 12:36:06 AM	12999
Xylenes, Total	0.30	0.20		mg/Kg	2	5/8/2014 12:36:06 AM	12999
Surr: 4-Bromofluorobenzene	117	80-120		%REC	2	5/8/2014 12:36:06 AM	12999
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**	
Lead	1.9	0.25		mg/Kg	1	5/13/2014 10:29:56 AM	13099

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
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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Atex 213
Lab ID: 1405097-002
Matrix: AQUEOUS
Client Sample ID: MW-1R
Collection Date: 5/1/2014 4:00:00 PM
Received Date: 5/2/2014 3:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
Benzene	ND	10		µg/L	10	5/7/2014 8:58:20 PM	R18468
Toluene	ND	10		µg/L	10	5/7/2014 8:58:20 PM	R18468
Ethylbenzene	440	10		µg/L	10	5/7/2014 8:58:20 PM	R18468
Methyl tert-butyl ether (MTBE)	ND	10		µg/L	10	5/7/2014 8:58:20 PM	R18468
1,2,4-Trimethylbenzene	340	10		µg/L	10	5/7/2014 8:58:20 PM	R18468
1,3,5-Trimethylbenzene	95	10		µg/L	10	5/7/2014 8:58:20 PM	R18468
1,2-Dichloroethane (EDC)	ND	10		µg/L	10	5/7/2014 8:58:20 PM	R18468
1,2-Dibromoethane (EDB)	ND	10		µg/L	10	5/7/2014 8:58:20 PM	R18468
Naphthalene	290	20		µg/L	10	5/7/2014 8:58:20 PM	R18468
1-Methylnaphthalene	84	40		µg/L	10	5/7/2014 8:58:20 PM	R18468
2-Methylnaphthalene	160	40		µg/L	10	5/7/2014 8:58:20 PM	R18468
Acetone	ND	100		µg/L	10	5/7/2014 8:58:20 PM	R18468
Bromobenzene	ND	10		µg/L	10	5/7/2014 8:58:20 PM	R18468
Bromodichloromethane	ND	10		µg/L	10	5/7/2014 8:58:20 PM	R18468
Bromoform	ND	10		µg/L	10	5/7/2014 8:58:20 PM	R18468
Bromomethane	ND	30		µg/L	10	5/7/2014 8:58:20 PM	R18468
2-Butanone	ND	100		µg/L	10	5/7/2014 8:58:20 PM	R18468
Carbon disulfide	ND	100		µg/L	10	5/7/2014 8:58:20 PM	R18468
Carbon Tetrachloride	ND	10		µg/L	10	5/7/2014 8:58:20 PM	R18468
Chlorobenzene	ND	10		µg/L	10	5/7/2014 8:58:20 PM	R18468
Chloroethane	ND	20		µg/L	10	5/7/2014 8:58:20 PM	R18468
Chloroform	ND	10		µg/L	10	5/7/2014 8:58:20 PM	R18468
Chloromethane	ND	30		µg/L	10	5/7/2014 8:58:20 PM	R18468
2-Chlorotoluene	ND	10		µg/L	10	5/7/2014 8:58:20 PM	R18468
4-Chlorotoluene	ND	10		µg/L	10	5/7/2014 8:58:20 PM	R18468
cis-1,2-DCE	ND	10		µg/L	10	5/7/2014 8:58:20 PM	R18468
cis-1,3-Dichloropropene	ND	10		µg/L	10	5/7/2014 8:58:20 PM	R18468
1,2-Dibromo-3-chloropropane	ND	20		µg/L	10	5/7/2014 8:58:20 PM	R18468
Dibromochloromethane	ND	10		µg/L	10	5/7/2014 8:58:20 PM	R18468
Dibromomethane	ND	10		µg/L	10	5/7/2014 8:58:20 PM	R18468
1,2-Dichlorobenzene	ND	10		µg/L	10	5/7/2014 8:58:20 PM	R18468
1,3-Dichlorobenzene	ND	10		µg/L	10	5/7/2014 8:58:20 PM	R18468
1,4-Dichlorobenzene	ND	10		µg/L	10	5/7/2014 8:58:20 PM	R18468
Dichlorodifluoromethane	ND	10		µg/L	10	5/7/2014 8:58:20 PM	R18468
1,1-Dichloroethane	ND	10		µg/L	10	5/7/2014 8:58:20 PM	R18468
1,1-Dichloroethene	ND	10		µg/L	10	5/7/2014 8:58:20 PM	R18468
1,2-Dichloropropane	ND	10		µg/L	10	5/7/2014 8:58:20 PM	R18468
1,3-Dichloropropane	ND	10		µg/L	10	5/7/2014 8:58:20 PM	R18468
2,2-Dichloropropane	ND	20		µg/L	10	5/7/2014 8:58:20 PM	R18468

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
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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Atex 213
Lab ID: 1405097-002

Client Sample ID: MW-1R
Collection Date: 5/1/2014 4:00:00 PM
Matrix: AQUEOUS **Received Date:** 5/2/2014 3:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
1,1-Dichloropropene	ND	10		µg/L	10	5/7/2014 8:58:20 PM	R18468
Hexachlorobutadiene	ND	10		µg/L	10	5/7/2014 8:58:20 PM	R18468
2-Hexanone	ND	100		µg/L	10	5/7/2014 8:58:20 PM	R18468
Isopropylbenzene	79	10		µg/L	10	5/7/2014 8:58:20 PM	R18468
4-Isopropyltoluene	ND	10		µg/L	10	5/7/2014 8:58:20 PM	R18468
4-Methyl-2-pentanone	ND	100		µg/L	10	5/7/2014 8:58:20 PM	R18468
Methylene Chloride	ND	30		µg/L	10	5/7/2014 8:58:20 PM	R18468
n-Butylbenzene	77	30		µg/L	10	5/7/2014 8:58:20 PM	R18468
n-Propylbenzene	260	10		µg/L	10	5/7/2014 8:58:20 PM	R18468
sec-Butylbenzene	27	10		µg/L	10	5/7/2014 8:58:20 PM	R18468
Styrene	ND	10		µg/L	10	5/7/2014 8:58:20 PM	R18468
tert-Butylbenzene	ND	10		µg/L	10	5/7/2014 8:58:20 PM	R18468
1,1,1,2-Tetrachloroethane	ND	10		µg/L	10	5/7/2014 8:58:20 PM	R18468
1,1,2,2-Tetrachloroethane	ND	20		µg/L	10	5/7/2014 8:58:20 PM	R18468
Tetrachloroethene (PCE)	ND	10		µg/L	10	5/7/2014 8:58:20 PM	R18468
trans-1,2-DCE	ND	10		µg/L	10	5/7/2014 8:58:20 PM	R18468
trans-1,3-Dichloropropene	ND	10		µg/L	10	5/7/2014 8:58:20 PM	R18468
1,2,3-Trichlorobenzene	ND	10		µg/L	10	5/7/2014 8:58:20 PM	R18468
1,2,4-Trichlorobenzene	ND	10		µg/L	10	5/7/2014 8:58:20 PM	R18468
1,1,1-Trichloroethane	ND	10		µg/L	10	5/7/2014 8:58:20 PM	R18468
1,1,2-Trichloroethane	ND	10		µg/L	10	5/7/2014 8:58:20 PM	R18468
Trichloroethene (TCE)	ND	10		µg/L	10	5/7/2014 8:58:20 PM	R18468
Trichlorofluoromethane	ND	10		µg/L	10	5/7/2014 8:58:20 PM	R18468
1,2,3-Trichloropropane	ND	20		µg/L	10	5/7/2014 8:58:20 PM	R18468
Vinyl chloride	ND	10		µg/L	10	5/7/2014 8:58:20 PM	R18468
Xylenes, Total	260	15		µg/L	10	5/7/2014 8:58:20 PM	R18468
Surr: 1,2-Dichloroethane-d4	90.3	70-130		%REC	10	5/7/2014 8:58:20 PM	R18468
Surr: 4-Bromofluorobenzene	92.4	70-130		%REC	10	5/7/2014 8:58:20 PM	R18468
Surr: Dibromofluoromethane	92.3	70-130		%REC	10	5/7/2014 8:58:20 PM	R18468
Surr: Toluene-d8	91.8	70-130		%REC	10	5/7/2014 8:58:20 PM	R18468

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
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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Atex 213
Lab ID: 1405097-003
Matrix: AQUEOUS
Client Sample ID: MW-2
Collection Date: 5/1/2014 1:46:00 PM
Received Date: 5/2/2014 3:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
Benzene	ND	1.0		µg/L	1	5/7/2014 9:26:26 PM	R18468
Toluene	ND	1.0		µg/L	1	5/7/2014 9:26:26 PM	R18468
Ethylbenzene	ND	1.0		µg/L	1	5/7/2014 9:26:26 PM	R18468
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	5/7/2014 9:26:26 PM	R18468
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	5/7/2014 9:26:26 PM	R18468
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	5/7/2014 9:26:26 PM	R18468
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	5/7/2014 9:26:26 PM	R18468
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	5/7/2014 9:26:26 PM	R18468
Naphthalene	ND	2.0		µg/L	1	5/7/2014 9:26:26 PM	R18468
1-Methylnaphthalene	ND	4.0		µg/L	1	5/7/2014 9:26:26 PM	R18468
2-Methylnaphthalene	ND	4.0		µg/L	1	5/7/2014 9:26:26 PM	R18468
Acetone	ND	10		µg/L	1	5/7/2014 9:26:26 PM	R18468
Bromobenzene	ND	1.0		µg/L	1	5/7/2014 9:26:26 PM	R18468
Bromodichloromethane	ND	1.0		µg/L	1	5/7/2014 9:26:26 PM	R18468
Bromoform	ND	1.0		µg/L	1	5/7/2014 9:26:26 PM	R18468
Bromomethane	ND	3.0		µg/L	1	5/7/2014 9:26:26 PM	R18468
2-Butanone	ND	10		µg/L	1	5/7/2014 9:26:26 PM	R18468
Carbon disulfide	ND	10		µg/L	1	5/7/2014 9:26:26 PM	R18468
Carbon Tetrachloride	ND	1.0		µg/L	1	5/7/2014 9:26:26 PM	R18468
Chlorobenzene	ND	1.0		µg/L	1	5/7/2014 9:26:26 PM	R18468
Chloroethane	ND	2.0		µg/L	1	5/7/2014 9:26:26 PM	R18468
Chloroform	ND	1.0		µg/L	1	5/7/2014 9:26:26 PM	R18468
Chloromethane	ND	3.0		µg/L	1	5/7/2014 9:26:26 PM	R18468
2-Chlorotoluene	ND	1.0		µg/L	1	5/7/2014 9:26:26 PM	R18468
4-Chlorotoluene	ND	1.0		µg/L	1	5/7/2014 9:26:26 PM	R18468
cis-1,2-DCE	ND	1.0		µg/L	1	5/7/2014 9:26:26 PM	R18468
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	5/7/2014 9:26:26 PM	R18468
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	5/7/2014 9:26:26 PM	R18468
Dibromochloromethane	ND	1.0		µg/L	1	5/7/2014 9:26:26 PM	R18468
Dibromomethane	ND	1.0		µg/L	1	5/7/2014 9:26:26 PM	R18468
1,2-Dichlorobenzene	ND	1.0		µg/L	1	5/7/2014 9:26:26 PM	R18468
1,3-Dichlorobenzene	ND	1.0		µg/L	1	5/7/2014 9:26:26 PM	R18468
1,4-Dichlorobenzene	ND	1.0		µg/L	1	5/7/2014 9:26:26 PM	R18468
Dichlorodifluoromethane	ND	1.0		µg/L	1	5/7/2014 9:26:26 PM	R18468
1,1-Dichloroethane	ND	1.0		µg/L	1	5/7/2014 9:26:26 PM	R18468
1,1-Dichloroethene	ND	1.0		µg/L	1	5/7/2014 9:26:26 PM	R18468
1,2-Dichloropropane	ND	1.0		µg/L	1	5/7/2014 9:26:26 PM	R18468
1,3-Dichloropropane	ND	1.0		µg/L	1	5/7/2014 9:26:26 PM	R18468
2,2-Dichloropropane	ND	2.0		µg/L	1	5/7/2014 9:26:26 PM	R18468

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
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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Atex 213
Lab ID: 1405097-003

Client Sample ID: MW-2
Collection Date: 5/1/2014 1:46:00 PM
Matrix: AQUEOUS **Received Date:** 5/2/2014 3:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
1,1-Dichloropropene	ND	1.0		µg/L	1	5/7/2014 9:26:26 PM	R18468
Hexachlorobutadiene	ND	1.0		µg/L	1	5/7/2014 9:26:26 PM	R18468
2-Hexanone	ND	10		µg/L	1	5/7/2014 9:26:26 PM	R18468
Isopropylbenzene	ND	1.0		µg/L	1	5/7/2014 9:26:26 PM	R18468
4-Isopropyltoluene	ND	1.0		µg/L	1	5/7/2014 9:26:26 PM	R18468
4-Methyl-2-pentanone	ND	10		µg/L	1	5/7/2014 9:26:26 PM	R18468
Methylene Chloride	ND	3.0		µg/L	1	5/7/2014 9:26:26 PM	R18468
n-Butylbenzene	ND	3.0		µg/L	1	5/7/2014 9:26:26 PM	R18468
n-Propylbenzene	ND	1.0		µg/L	1	5/7/2014 9:26:26 PM	R18468
sec-Butylbenzene	ND	1.0		µg/L	1	5/7/2014 9:26:26 PM	R18468
Styrene	ND	1.0		µg/L	1	5/7/2014 9:26:26 PM	R18468
tert-Butylbenzene	ND	1.0		µg/L	1	5/7/2014 9:26:26 PM	R18468
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	5/7/2014 9:26:26 PM	R18468
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	5/7/2014 9:26:26 PM	R18468
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	5/7/2014 9:26:26 PM	R18468
trans-1,2-DCE	ND	1.0		µg/L	1	5/7/2014 9:26:26 PM	R18468
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	5/7/2014 9:26:26 PM	R18468
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	5/7/2014 9:26:26 PM	R18468
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	5/7/2014 9:26:26 PM	R18468
1,1,1-Trichloroethane	ND	1.0		µg/L	1	5/7/2014 9:26:26 PM	R18468
1,1,2-Trichloroethane	ND	1.0		µg/L	1	5/7/2014 9:26:26 PM	R18468
Trichloroethene (TCE)	ND	1.0		µg/L	1	5/7/2014 9:26:26 PM	R18468
Trichlorofluoromethane	ND	1.0		µg/L	1	5/7/2014 9:26:26 PM	R18468
1,2,3-Trichloropropane	ND	2.0		µg/L	1	5/7/2014 9:26:26 PM	R18468
Vinyl chloride	ND	1.0		µg/L	1	5/7/2014 9:26:26 PM	R18468
Xylenes, Total	ND	1.5		µg/L	1	5/7/2014 9:26:26 PM	R18468
Surr: 1,2-Dichloroethane-d4	90.2	70-130		%REC	1	5/7/2014 9:26:26 PM	R18468
Surr: 4-Bromofluorobenzene	91.1	70-130		%REC	1	5/7/2014 9:26:26 PM	R18468
Surr: Dibromofluoromethane	94.9	70-130		%REC	1	5/7/2014 9:26:26 PM	R18468
Surr: Toluene-d8	89.1	70-130		%REC	1	5/7/2014 9:26:26 PM	R18468

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
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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Atex 213
Lab ID: 1405097-004
Matrix: AQUEOUS
Client Sample ID: MW-3
Collection Date: 5/1/2014 11:52:00 AM
Received Date: 5/2/2014 3:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
Benzene	ND	1.0		µg/L	1	5/7/2014 11:45:09 PM	R18468
Toluene	ND	1.0		µg/L	1	5/7/2014 11:45:09 PM	R18468
Ethylbenzene	3.6	1.0		µg/L	1	5/7/2014 11:45:09 PM	R18468
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	5/7/2014 11:45:09 PM	R18468
1,2,4-Trimethylbenzene	2.0	1.0		µg/L	1	5/7/2014 11:45:09 PM	R18468
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	5/7/2014 11:45:09 PM	R18468
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	5/7/2014 11:45:09 PM	R18468
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	5/7/2014 11:45:09 PM	R18468
Naphthalene	14	2.0		µg/L	1	5/7/2014 11:45:09 PM	R18468
1-Methylnaphthalene	4.6	4.0		µg/L	1	5/7/2014 11:45:09 PM	R18468
2-Methylnaphthalene	6.0	4.0		µg/L	1	5/7/2014 11:45:09 PM	R18468
Acetone	ND	10		µg/L	1	5/7/2014 11:45:09 PM	R18468
Bromobenzene	ND	1.0		µg/L	1	5/7/2014 11:45:09 PM	R18468
Bromodichloromethane	ND	1.0		µg/L	1	5/7/2014 11:45:09 PM	R18468
Bromoform	ND	1.0		µg/L	1	5/7/2014 11:45:09 PM	R18468
Bromomethane	ND	3.0		µg/L	1	5/7/2014 11:45:09 PM	R18468
2-Butanone	ND	10		µg/L	1	5/7/2014 11:45:09 PM	R18468
Carbon disulfide	ND	10		µg/L	1	5/7/2014 11:45:09 PM	R18468
Carbon Tetrachloride	ND	1.0		µg/L	1	5/7/2014 11:45:09 PM	R18468
Chlorobenzene	ND	1.0		µg/L	1	5/7/2014 11:45:09 PM	R18468
Chloroethane	ND	2.0		µg/L	1	5/7/2014 11:45:09 PM	R18468
Chloroform	ND	1.0		µg/L	1	5/7/2014 11:45:09 PM	R18468
Chloromethane	ND	3.0		µg/L	1	5/7/2014 11:45:09 PM	R18468
2-Chlorotoluene	ND	1.0		µg/L	1	5/7/2014 11:45:09 PM	R18468
4-Chlorotoluene	ND	1.0		µg/L	1	5/7/2014 11:45:09 PM	R18468
cis-1,2-DCE	ND	1.0		µg/L	1	5/7/2014 11:45:09 PM	R18468
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	5/7/2014 11:45:09 PM	R18468
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	5/7/2014 11:45:09 PM	R18468
Dibromochloromethane	ND	1.0		µg/L	1	5/7/2014 11:45:09 PM	R18468
Dibromomethane	ND	1.0		µg/L	1	5/7/2014 11:45:09 PM	R18468
1,2-Dichlorobenzene	ND	1.0		µg/L	1	5/7/2014 11:45:09 PM	R18468
1,3-Dichlorobenzene	ND	1.0		µg/L	1	5/7/2014 11:45:09 PM	R18468
1,4-Dichlorobenzene	ND	1.0		µg/L	1	5/7/2014 11:45:09 PM	R18468
Dichlorodifluoromethane	ND	1.0		µg/L	1	5/7/2014 11:45:09 PM	R18468
1,1-Dichloroethane	ND	1.0		µg/L	1	5/7/2014 11:45:09 PM	R18468
1,1-Dichloroethene	ND	1.0		µg/L	1	5/7/2014 11:45:09 PM	R18468
1,2-Dichloropropane	ND	1.0		µg/L	1	5/7/2014 11:45:09 PM	R18468
1,3-Dichloropropane	ND	1.0		µg/L	1	5/7/2014 11:45:09 PM	R18468
2,2-Dichloropropane	ND	2.0		µg/L	1	5/7/2014 11:45:09 PM	R18468

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2.
- RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Atex 213
Lab ID: 1405097-004
Matrix: AQUEOUS
Client Sample ID: MW-3
Collection Date: 5/1/2014 11:52:00 AM
Received Date: 5/2/2014 3:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
1,1-Dichloropropene	ND	1.0		µg/L	1	5/7/2014 11:45:09 PM	R18468
Hexachlorobutadiene	ND	1.0		µg/L	1	5/7/2014 11:45:09 PM	R18468
2-Hexanone	ND	10		µg/L	1	5/7/2014 11:45:09 PM	R18468
Isopropylbenzene	3.7	1.0		µg/L	1	5/7/2014 11:45:09 PM	R18468
4-Isopropyltoluene	ND	1.0		µg/L	1	5/7/2014 11:45:09 PM	R18468
4-Methyl-2-pentanone	ND	10		µg/L	1	5/7/2014 11:45:09 PM	R18468
Methylene Chloride	ND	3.0		µg/L	1	5/7/2014 11:45:09 PM	R18468
n-Butylbenzene	4.5	3.0		µg/L	1	5/7/2014 11:45:09 PM	R18468
n-Propylbenzene	12	1.0		µg/L	1	5/7/2014 11:45:09 PM	R18468
sec-Butylbenzene	1.8	1.0		µg/L	1	5/7/2014 11:45:09 PM	R18468
Styrene	ND	1.0		µg/L	1	5/7/2014 11:45:09 PM	R18468
tert-Butylbenzene	ND	1.0		µg/L	1	5/7/2014 11:45:09 PM	R18468
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	5/7/2014 11:45:09 PM	R18468
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	5/7/2014 11:45:09 PM	R18468
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	5/7/2014 11:45:09 PM	R18468
trans-1,2-DCE	ND	1.0		µg/L	1	5/7/2014 11:45:09 PM	R18468
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	5/7/2014 11:45:09 PM	R18468
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	5/7/2014 11:45:09 PM	R18468
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	5/7/2014 11:45:09 PM	R18468
1,1,1-Trichloroethane	ND	1.0		µg/L	1	5/7/2014 11:45:09 PM	R18468
1,1,2-Trichloroethane	ND	1.0		µg/L	1	5/7/2014 11:45:09 PM	R18468
Trichloroethene (TCE)	ND	1.0		µg/L	1	5/7/2014 11:45:09 PM	R18468
Trichlorofluoromethane	ND	1.0		µg/L	1	5/7/2014 11:45:09 PM	R18468
1,2,3-Trichloropropane	ND	2.0		µg/L	1	5/7/2014 11:45:09 PM	R18468
Vinyl chloride	ND	1.0		µg/L	1	5/7/2014 11:45:09 PM	R18468
Xylenes, Total	2.4	1.5		µg/L	1	5/7/2014 11:45:09 PM	R18468
Surr: 1,2-Dichloroethane-d4	90.0	70-130		%REC	1	5/7/2014 11:45:09 PM	R18468
Surr: 4-Bromofluorobenzene	94.0	70-130		%REC	1	5/7/2014 11:45:09 PM	R18468
Surr: Dibromofluoromethane	93.0	70-130		%REC	1	5/7/2014 11:45:09 PM	R18468
Surr: Toluene-d8	88.0	70-130		%REC	1	5/7/2014 11:45:09 PM	R18468

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
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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Atex 213
Lab ID: 1405097-005
Matrix: AQUEOUS
Client Sample ID: MW-4R
Collection Date: 5/1/2014 4:42:00 PM
Received Date: 5/2/2014 3:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
Benzene	29	1.0		µg/L	1	5/8/2014 12:13:05 AM	R18468
Toluene	ND	1.0		µg/L	1	5/8/2014 12:13:05 AM	R18468
Ethylbenzene	3.8	1.0		µg/L	1	5/8/2014 12:13:05 AM	R18468
Methyl tert-butyl ether (MTBE)	55	1.0		µg/L	1	5/8/2014 12:13:05 AM	R18468
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	5/8/2014 12:13:05 AM	R18468
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	5/8/2014 12:13:05 AM	R18468
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	5/8/2014 12:13:05 AM	R18468
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	5/8/2014 12:13:05 AM	R18468
Naphthalene	41	2.0		µg/L	1	5/8/2014 12:13:05 AM	R18468
1-Methylnaphthalene	9.6	4.0		µg/L	1	5/8/2014 12:13:05 AM	R18468
2-Methylnaphthalene	14	4.0		µg/L	1	5/8/2014 12:13:05 AM	R18468
Acetone	ND	10		µg/L	1	5/8/2014 12:13:05 AM	R18468
Bromobenzene	ND	1.0		µg/L	1	5/8/2014 12:13:05 AM	R18468
Bromodichloromethane	ND	1.0		µg/L	1	5/8/2014 12:13:05 AM	R18468
Bromoform	ND	1.0		µg/L	1	5/8/2014 12:13:05 AM	R18468
Bromomethane	ND	3.0		µg/L	1	5/8/2014 12:13:05 AM	R18468
2-Butanone	ND	10		µg/L	1	5/8/2014 12:13:05 AM	R18468
Carbon disulfide	ND	10		µg/L	1	5/8/2014 12:13:05 AM	R18468
Carbon Tetrachloride	ND	1.0		µg/L	1	5/8/2014 12:13:05 AM	R18468
Chlorobenzene	ND	1.0		µg/L	1	5/8/2014 12:13:05 AM	R18468
Chloroethane	ND	2.0		µg/L	1	5/8/2014 12:13:05 AM	R18468
Chloroform	ND	1.0		µg/L	1	5/8/2014 12:13:05 AM	R18468
Chloromethane	ND	3.0		µg/L	1	5/8/2014 12:13:05 AM	R18468
2-Chlorotoluene	ND	1.0		µg/L	1	5/8/2014 12:13:05 AM	R18468
4-Chlorotoluene	ND	1.0		µg/L	1	5/8/2014 12:13:05 AM	R18468
cis-1,2-DCE	ND	1.0		µg/L	1	5/8/2014 12:13:05 AM	R18468
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	5/8/2014 12:13:05 AM	R18468
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	5/8/2014 12:13:05 AM	R18468
Dibromochloromethane	ND	1.0		µg/L	1	5/8/2014 12:13:05 AM	R18468
Dibromomethane	ND	1.0		µg/L	1	5/8/2014 12:13:05 AM	R18468
1,2-Dichlorobenzene	ND	1.0		µg/L	1	5/8/2014 12:13:05 AM	R18468
1,3-Dichlorobenzene	ND	1.0		µg/L	1	5/8/2014 12:13:05 AM	R18468
1,4-Dichlorobenzene	ND	1.0		µg/L	1	5/8/2014 12:13:05 AM	R18468
Dichlorodifluoromethane	ND	1.0		µg/L	1	5/8/2014 12:13:05 AM	R18468
1,1-Dichloroethane	ND	1.0		µg/L	1	5/8/2014 12:13:05 AM	R18468
1,1-Dichloroethene	ND	1.0		µg/L	1	5/8/2014 12:13:05 AM	R18468
1,2-Dichloropropane	ND	1.0		µg/L	1	5/8/2014 12:13:05 AM	R18468
1,3-Dichloropropane	ND	1.0		µg/L	1	5/8/2014 12:13:05 AM	R18468
2,2-Dichloropropane	ND	2.0		µg/L	1	5/8/2014 12:13:05 AM	R18468

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2.
- RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Atex 213
Lab ID: 1405097-005
Matrix: AQUEOUS
Client Sample ID: MW-4R
Collection Date: 5/1/2014 4:42:00 PM
Received Date: 5/2/2014 3:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
1,1-Dichloropropene	ND	1.0		µg/L	1	5/8/2014 12:13:05 AM	R18468
Hexachlorobutadiene	ND	1.0		µg/L	1	5/8/2014 12:13:05 AM	R18468
2-Hexanone	ND	10		µg/L	1	5/8/2014 12:13:05 AM	R18468
Isopropylbenzene	9.1	1.0		µg/L	1	5/8/2014 12:13:05 AM	R18468
4-Isopropyltoluene	ND	1.0		µg/L	1	5/8/2014 12:13:05 AM	R18468
4-Methyl-2-pentanone	ND	10		µg/L	1	5/8/2014 12:13:05 AM	R18468
Methylene Chloride	ND	3.0		µg/L	1	5/8/2014 12:13:05 AM	R18468
n-Butylbenzene	ND	3.0		µg/L	1	5/8/2014 12:13:05 AM	R18468
n-Propylbenzene	18	1.0		µg/L	1	5/8/2014 12:13:05 AM	R18468
sec-Butylbenzene	2.2	1.0		µg/L	1	5/8/2014 12:13:05 AM	R18468
Styrene	ND	1.0		µg/L	1	5/8/2014 12:13:05 AM	R18468
tert-Butylbenzene	ND	1.0		µg/L	1	5/8/2014 12:13:05 AM	R18468
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	5/8/2014 12:13:05 AM	R18468
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	5/8/2014 12:13:05 AM	R18468
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	5/8/2014 12:13:05 AM	R18468
trans-1,2-DCE	ND	1.0		µg/L	1	5/8/2014 12:13:05 AM	R18468
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	5/8/2014 12:13:05 AM	R18468
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	5/8/2014 12:13:05 AM	R18468
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	5/8/2014 12:13:05 AM	R18468
1,1,1-Trichloroethane	ND	1.0		µg/L	1	5/8/2014 12:13:05 AM	R18468
1,1,2-Trichloroethane	ND	1.0		µg/L	1	5/8/2014 12:13:05 AM	R18468
Trichloroethene (TCE)	ND	1.0		µg/L	1	5/8/2014 12:13:05 AM	R18468
Trichlorofluoromethane	ND	1.0		µg/L	1	5/8/2014 12:13:05 AM	R18468
1,2,3-Trichloropropane	ND	2.0		µg/L	1	5/8/2014 12:13:05 AM	R18468
Vinyl chloride	ND	1.0		µg/L	1	5/8/2014 12:13:05 AM	R18468
Xylenes, Total	ND	1.5		µg/L	1	5/8/2014 12:13:05 AM	R18468
Surr: 1,2-Dichloroethane-d4	89.6	70-130		%REC	1	5/8/2014 12:13:05 AM	R18468
Surr: 4-Bromofluorobenzene	88.2	70-130		%REC	1	5/8/2014 12:13:05 AM	R18468
Surr: Dibromofluoromethane	93.3	70-130		%REC	1	5/8/2014 12:13:05 AM	R18468
Surr: Toluene-d8	88.4	70-130		%REC	1	5/8/2014 12:13:05 AM	R18468

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
E	Value above quantitation range
J	Analyte detected below quantitation limits
O	RSD is greater than RSDlimit
R	RPD outside accepted recovery limits
S	Spike Recovery outside accepted recovery limits
B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2.
RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Atex 213
Lab ID: 1405097-006
Matrix: AQUEOUS
Client Sample ID: MW-6R
Collection Date: 5/1/2014 4:29:00 PM
Received Date: 5/2/2014 3:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
Benzene	1.6	1.0		µg/L	1	5/8/2014 12:41:08 AM	R18468
Toluene	ND	1.0		µg/L	1	5/8/2014 12:41:08 AM	R18468
Ethylbenzene	6.6	1.0		µg/L	1	5/8/2014 12:41:08 AM	R18468
Methyl tert-butyl ether (MTBE)	6.2	1.0		µg/L	1	5/8/2014 12:41:08 AM	R18468
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	5/8/2014 12:41:08 AM	R18468
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	5/8/2014 12:41:08 AM	R18468
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	5/8/2014 12:41:08 AM	R18468
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	5/8/2014 12:41:08 AM	R18468
Naphthalene	32	2.0		µg/L	1	5/8/2014 12:41:08 AM	R18468
1-Methylnaphthalene	8.5	4.0		µg/L	1	5/8/2014 12:41:08 AM	R18468
2-Methylnaphthalene	15	4.0		µg/L	1	5/8/2014 12:41:08 AM	R18468
Acetone	ND	10		µg/L	1	5/8/2014 12:41:08 AM	R18468
Bromobenzene	ND	1.0		µg/L	1	5/8/2014 12:41:08 AM	R18468
Bromodichloromethane	ND	1.0		µg/L	1	5/8/2014 12:41:08 AM	R18468
Bromoform	ND	1.0		µg/L	1	5/8/2014 12:41:08 AM	R18468
Bromomethane	ND	3.0		µg/L	1	5/8/2014 12:41:08 AM	R18468
2-Butanone	ND	10		µg/L	1	5/8/2014 12:41:08 AM	R18468
Carbon disulfide	ND	10		µg/L	1	5/8/2014 12:41:08 AM	R18468
Carbon Tetrachloride	ND	1.0		µg/L	1	5/8/2014 12:41:08 AM	R18468
Chlorobenzene	ND	1.0		µg/L	1	5/8/2014 12:41:08 AM	R18468
Chloroethane	ND	2.0		µg/L	1	5/8/2014 12:41:08 AM	R18468
Chloroform	ND	1.0		µg/L	1	5/8/2014 12:41:08 AM	R18468
Chloromethane	ND	3.0		µg/L	1	5/8/2014 12:41:08 AM	R18468
2-Chlorotoluene	ND	1.0		µg/L	1	5/8/2014 12:41:08 AM	R18468
4-Chlorotoluene	ND	1.0		µg/L	1	5/8/2014 12:41:08 AM	R18468
cis-1,2-DCE	ND	1.0		µg/L	1	5/8/2014 12:41:08 AM	R18468
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	5/8/2014 12:41:08 AM	R18468
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	5/8/2014 12:41:08 AM	R18468
Dibromochloromethane	ND	1.0		µg/L	1	5/8/2014 12:41:08 AM	R18468
Dibromomethane	ND	1.0		µg/L	1	5/8/2014 12:41:08 AM	R18468
1,2-Dichlorobenzene	ND	1.0		µg/L	1	5/8/2014 12:41:08 AM	R18468
1,3-Dichlorobenzene	ND	1.0		µg/L	1	5/8/2014 12:41:08 AM	R18468
1,4-Dichlorobenzene	ND	1.0		µg/L	1	5/8/2014 12:41:08 AM	R18468
Dichlorodifluoromethane	ND	1.0		µg/L	1	5/8/2014 12:41:08 AM	R18468
1,1-Dichloroethane	ND	1.0		µg/L	1	5/8/2014 12:41:08 AM	R18468
1,1-Dichloroethene	ND	1.0		µg/L	1	5/8/2014 12:41:08 AM	R18468
1,2-Dichloropropane	ND	1.0		µg/L	1	5/8/2014 12:41:08 AM	R18468
1,3-Dichloropropane	ND	1.0		µg/L	1	5/8/2014 12:41:08 AM	R18468
2,2-Dichloropropane	ND	2.0		µg/L	1	5/8/2014 12:41:08 AM	R18468

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2.
- RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Atex 213
Lab ID: 1405097-006
Matrix: AQUEOUS
Client Sample ID: MW-6R
Collection Date: 5/1/2014 4:29:00 PM
Received Date: 5/2/2014 3:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
1,1-Dichloropropene	ND	1.0		µg/L	1	5/8/2014 12:41:08 AM	R18468
Hexachlorobutadiene	ND	1.0		µg/L	1	5/8/2014 12:41:08 AM	R18468
2-Hexanone	ND	10		µg/L	1	5/8/2014 12:41:08 AM	R18468
Isopropylbenzene	9.1	1.0		µg/L	1	5/8/2014 12:41:08 AM	R18468
4-Isopropyltoluene	ND	1.0		µg/L	1	5/8/2014 12:41:08 AM	R18468
4-Methyl-2-pentanone	ND	10		µg/L	1	5/8/2014 12:41:08 AM	R18468
Methylene Chloride	ND	3.0		µg/L	1	5/8/2014 12:41:08 AM	R18468
n-Butylbenzene	6.6	3.0		µg/L	1	5/8/2014 12:41:08 AM	R18468
n-Propylbenzene	29	1.0		µg/L	1	5/8/2014 12:41:08 AM	R18468
sec-Butylbenzene	2.6	1.0		µg/L	1	5/8/2014 12:41:08 AM	R18468
Styrene	ND	1.0		µg/L	1	5/8/2014 12:41:08 AM	R18468
tert-Butylbenzene	ND	1.0		µg/L	1	5/8/2014 12:41:08 AM	R18468
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	5/8/2014 12:41:08 AM	R18468
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	5/8/2014 12:41:08 AM	R18468
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	5/8/2014 12:41:08 AM	R18468
trans-1,2-DCE	ND	1.0		µg/L	1	5/8/2014 12:41:08 AM	R18468
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	5/8/2014 12:41:08 AM	R18468
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	5/8/2014 12:41:08 AM	R18468
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	5/8/2014 12:41:08 AM	R18468
1,1,1-Trichloroethane	ND	1.0		µg/L	1	5/8/2014 12:41:08 AM	R18468
1,1,2-Trichloroethane	ND	1.0		µg/L	1	5/8/2014 12:41:08 AM	R18468
Trichloroethene (TCE)	ND	1.0		µg/L	1	5/8/2014 12:41:08 AM	R18468
Trichlorofluoromethane	ND	1.0		µg/L	1	5/8/2014 12:41:08 AM	R18468
1,2,3-Trichloropropane	ND	2.0		µg/L	1	5/8/2014 12:41:08 AM	R18468
Vinyl chloride	ND	1.0		µg/L	1	5/8/2014 12:41:08 AM	R18468
Xylenes, Total	ND	1.5		µg/L	1	5/8/2014 12:41:08 AM	R18468
Surr: 1,2-Dichloroethane-d4	89.9	70-130		%REC	1	5/8/2014 12:41:08 AM	R18468
Surr: 4-Bromofluorobenzene	91.6	70-130		%REC	1	5/8/2014 12:41:08 AM	R18468
Surr: Dibromofluoromethane	92.9	70-130		%REC	1	5/8/2014 12:41:08 AM	R18468
Surr: Toluene-d8	89.2	70-130		%REC	1	5/8/2014 12:41:08 AM	R18468

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
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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Atex 213
Lab ID: 1405097-007
Matrix: AQUEOUS
Client Sample ID: MW-38
Collection Date: 5/1/2014 2:38:00 PM
Received Date: 5/2/2014 3:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
Benzene	ND	1.0		µg/L	1	5/8/2014 1:09:06 AM	R18468
Toluene	ND	1.0		µg/L	1	5/8/2014 1:09:06 AM	R18468
Ethylbenzene	ND	1.0		µg/L	1	5/8/2014 1:09:06 AM	R18468
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	5/8/2014 1:09:06 AM	R18468
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	5/8/2014 1:09:06 AM	R18468
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	5/8/2014 1:09:06 AM	R18468
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	5/8/2014 1:09:06 AM	R18468
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	5/8/2014 1:09:06 AM	R18468
Naphthalene	ND	2.0		µg/L	1	5/8/2014 1:09:06 AM	R18468
1-Methylnaphthalene	ND	4.0		µg/L	1	5/8/2014 1:09:06 AM	R18468
2-Methylnaphthalene	ND	4.0		µg/L	1	5/8/2014 1:09:06 AM	R18468
Acetone	ND	10		µg/L	1	5/8/2014 1:09:06 AM	R18468
Bromobenzene	ND	1.0		µg/L	1	5/8/2014 1:09:06 AM	R18468
Bromodichloromethane	ND	1.0		µg/L	1	5/8/2014 1:09:06 AM	R18468
Bromoform	ND	1.0		µg/L	1	5/8/2014 1:09:06 AM	R18468
Bromomethane	ND	3.0		µg/L	1	5/8/2014 1:09:06 AM	R18468
2-Butanone	ND	10		µg/L	1	5/8/2014 1:09:06 AM	R18468
Carbon disulfide	ND	10		µg/L	1	5/8/2014 1:09:06 AM	R18468
Carbon Tetrachloride	ND	1.0		µg/L	1	5/8/2014 1:09:06 AM	R18468
Chlorobenzene	ND	1.0		µg/L	1	5/8/2014 1:09:06 AM	R18468
Chloroethane	ND	2.0		µg/L	1	5/8/2014 1:09:06 AM	R18468
Chloroform	ND	1.0		µg/L	1	5/8/2014 1:09:06 AM	R18468
Chloromethane	ND	3.0		µg/L	1	5/8/2014 1:09:06 AM	R18468
2-Chlorotoluene	ND	1.0		µg/L	1	5/8/2014 1:09:06 AM	R18468
4-Chlorotoluene	ND	1.0		µg/L	1	5/8/2014 1:09:06 AM	R18468
cis-1,2-DCE	ND	1.0		µg/L	1	5/8/2014 1:09:06 AM	R18468
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	5/8/2014 1:09:06 AM	R18468
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	5/8/2014 1:09:06 AM	R18468
Dibromochloromethane	ND	1.0		µg/L	1	5/8/2014 1:09:06 AM	R18468
Dibromomethane	ND	1.0		µg/L	1	5/8/2014 1:09:06 AM	R18468
1,2-Dichlorobenzene	ND	1.0		µg/L	1	5/8/2014 1:09:06 AM	R18468
1,3-Dichlorobenzene	ND	1.0		µg/L	1	5/8/2014 1:09:06 AM	R18468
1,4-Dichlorobenzene	ND	1.0		µg/L	1	5/8/2014 1:09:06 AM	R18468
Dichlorodifluoromethane	ND	1.0		µg/L	1	5/8/2014 1:09:06 AM	R18468
1,1-Dichloroethane	ND	1.0		µg/L	1	5/8/2014 1:09:06 AM	R18468
1,1-Dichloroethene	ND	1.0		µg/L	1	5/8/2014 1:09:06 AM	R18468
1,2-Dichloropropane	ND	1.0		µg/L	1	5/8/2014 1:09:06 AM	R18468
1,3-Dichloropropane	ND	1.0		µg/L	1	5/8/2014 1:09:06 AM	R18468
2,2-Dichloropropane	ND	2.0		µg/L	1	5/8/2014 1:09:06 AM	R18468

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
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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Atex 213
Lab ID: 1405097-007
Matrix: AQUEOUS
Client Sample ID: MW-38
Collection Date: 5/1/2014 2:38:00 PM
Received Date: 5/2/2014 3:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
1,1-Dichloropropene	ND	1.0		µg/L	1	5/8/2014 1:09:06 AM	R18468
Hexachlorobutadiene	ND	1.0		µg/L	1	5/8/2014 1:09:06 AM	R18468
2-Hexanone	ND	10		µg/L	1	5/8/2014 1:09:06 AM	R18468
Isopropylbenzene	ND	1.0		µg/L	1	5/8/2014 1:09:06 AM	R18468
4-Isopropyltoluene	ND	1.0		µg/L	1	5/8/2014 1:09:06 AM	R18468
4-Methyl-2-pentanone	ND	10		µg/L	1	5/8/2014 1:09:06 AM	R18468
Methylene Chloride	ND	3.0		µg/L	1	5/8/2014 1:09:06 AM	R18468
n-Butylbenzene	ND	3.0		µg/L	1	5/8/2014 1:09:06 AM	R18468
n-Propylbenzene	ND	1.0		µg/L	1	5/8/2014 1:09:06 AM	R18468
sec-Butylbenzene	ND	1.0		µg/L	1	5/8/2014 1:09:06 AM	R18468
Styrene	ND	1.0		µg/L	1	5/8/2014 1:09:06 AM	R18468
tert-Butylbenzene	ND	1.0		µg/L	1	5/8/2014 1:09:06 AM	R18468
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	5/8/2014 1:09:06 AM	R18468
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	5/8/2014 1:09:06 AM	R18468
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	5/8/2014 1:09:06 AM	R18468
trans-1,2-DCE	ND	1.0		µg/L	1	5/8/2014 1:09:06 AM	R18468
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	5/8/2014 1:09:06 AM	R18468
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	5/8/2014 1:09:06 AM	R18468
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	5/8/2014 1:09:06 AM	R18468
1,1,1-Trichloroethane	ND	1.0		µg/L	1	5/8/2014 1:09:06 AM	R18468
1,1,2-Trichloroethane	ND	1.0		µg/L	1	5/8/2014 1:09:06 AM	R18468
Trichloroethene (TCE)	ND	1.0		µg/L	1	5/8/2014 1:09:06 AM	R18468
Trichlorofluoromethane	ND	1.0		µg/L	1	5/8/2014 1:09:06 AM	R18468
1,2,3-Trichloropropane	ND	2.0		µg/L	1	5/8/2014 1:09:06 AM	R18468
Vinyl chloride	ND	1.0		µg/L	1	5/8/2014 1:09:06 AM	R18468
Xylenes, Total	ND	1.5		µg/L	1	5/8/2014 1:09:06 AM	R18468
Surr: 1,2-Dichloroethane-d4	89.6	70-130		%REC	1	5/8/2014 1:09:06 AM	R18468
Surr: 4-Bromofluorobenzene	91.7	70-130		%REC	1	5/8/2014 1:09:06 AM	R18468
Surr: Dibromofluoromethane	95.3	70-130		%REC	1	5/8/2014 1:09:06 AM	R18468
Surr: Toluene-d8	88.1	70-130		%REC	1	5/8/2014 1:09:06 AM	R18468

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
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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Atex 213
Lab ID: 1405097-008
Matrix: AQUEOUS
Client Sample ID: BB-2
Collection Date: 5/1/2014 3:15:00 PM
Received Date: 5/2/2014 3:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
Benzene	ND	1.0		µg/L	1	5/8/2014 1:37:05 AM	R18468
Toluene	ND	1.0		µg/L	1	5/8/2014 1:37:05 AM	R18468
Ethylbenzene	ND	1.0		µg/L	1	5/8/2014 1:37:05 AM	R18468
Methyl tert-butyl ether (MTBE)	17	1.0		µg/L	1	5/8/2014 1:37:05 AM	R18468
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	5/8/2014 1:37:05 AM	R18468
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	5/8/2014 1:37:05 AM	R18468
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	5/8/2014 1:37:05 AM	R18468
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	5/8/2014 1:37:05 AM	R18468
Naphthalene	ND	2.0		µg/L	1	5/8/2014 1:37:05 AM	R18468
1-Methylnaphthalene	ND	4.0		µg/L	1	5/8/2014 1:37:05 AM	R18468
2-Methylnaphthalene	ND	4.0		µg/L	1	5/8/2014 1:37:05 AM	R18468
Acetone	ND	10		µg/L	1	5/8/2014 1:37:05 AM	R18468
Bromobenzene	ND	1.0		µg/L	1	5/8/2014 1:37:05 AM	R18468
Bromodichloromethane	ND	1.0		µg/L	1	5/8/2014 1:37:05 AM	R18468
Bromoform	ND	1.0		µg/L	1	5/8/2014 1:37:05 AM	R18468
Bromomethane	ND	3.0		µg/L	1	5/8/2014 1:37:05 AM	R18468
2-Butanone	ND	10		µg/L	1	5/8/2014 1:37:05 AM	R18468
Carbon disulfide	ND	10		µg/L	1	5/8/2014 1:37:05 AM	R18468
Carbon Tetrachloride	ND	1.0		µg/L	1	5/8/2014 1:37:05 AM	R18468
Chlorobenzene	ND	1.0		µg/L	1	5/8/2014 1:37:05 AM	R18468
Chloroethane	ND	2.0		µg/L	1	5/8/2014 1:37:05 AM	R18468
Chloroform	ND	1.0		µg/L	1	5/8/2014 1:37:05 AM	R18468
Chloromethane	ND	3.0		µg/L	1	5/8/2014 1:37:05 AM	R18468
2-Chlorotoluene	ND	1.0		µg/L	1	5/8/2014 1:37:05 AM	R18468
4-Chlorotoluene	ND	1.0		µg/L	1	5/8/2014 1:37:05 AM	R18468
cis-1,2-DCE	ND	1.0		µg/L	1	5/8/2014 1:37:05 AM	R18468
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	5/8/2014 1:37:05 AM	R18468
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	5/8/2014 1:37:05 AM	R18468
Dibromochloromethane	ND	1.0		µg/L	1	5/8/2014 1:37:05 AM	R18468
Dibromomethane	ND	1.0		µg/L	1	5/8/2014 1:37:05 AM	R18468
1,2-Dichlorobenzene	ND	1.0		µg/L	1	5/8/2014 1:37:05 AM	R18468
1,3-Dichlorobenzene	ND	1.0		µg/L	1	5/8/2014 1:37:05 AM	R18468
1,4-Dichlorobenzene	ND	1.0		µg/L	1	5/8/2014 1:37:05 AM	R18468
Dichlorodifluoromethane	ND	1.0		µg/L	1	5/8/2014 1:37:05 AM	R18468
1,1-Dichloroethane	ND	1.0		µg/L	1	5/8/2014 1:37:05 AM	R18468
1,1-Dichloroethene	ND	1.0		µg/L	1	5/8/2014 1:37:05 AM	R18468
1,2-Dichloropropane	ND	1.0		µg/L	1	5/8/2014 1:37:05 AM	R18468
1,3-Dichloropropane	ND	1.0		µg/L	1	5/8/2014 1:37:05 AM	R18468
2,2-Dichloropropane	ND	2.0		µg/L	1	5/8/2014 1:37:05 AM	R18468

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
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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Atex 213
Lab ID: 1405097-008
Matrix: AQUEOUS
Client Sample ID: BB-2
Collection Date: 5/1/2014 3:15:00 PM
Received Date: 5/2/2014 3:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
1,1-Dichloropropene	ND	1.0		µg/L	1	5/8/2014 1:37:05 AM	R18468
Hexachlorobutadiene	ND	1.0		µg/L	1	5/8/2014 1:37:05 AM	R18468
2-Hexanone	ND	10		µg/L	1	5/8/2014 1:37:05 AM	R18468
Isopropylbenzene	1.2	1.0		µg/L	1	5/8/2014 1:37:05 AM	R18468
4-Isopropyltoluene	ND	1.0		µg/L	1	5/8/2014 1:37:05 AM	R18468
4-Methyl-2-pentanone	ND	10		µg/L	1	5/8/2014 1:37:05 AM	R18468
Methylene Chloride	ND	3.0		µg/L	1	5/8/2014 1:37:05 AM	R18468
n-Butylbenzene	ND	3.0		µg/L	1	5/8/2014 1:37:05 AM	R18468
n-Propylbenzene	3.4	1.0		µg/L	1	5/8/2014 1:37:05 AM	R18468
sec-Butylbenzene	1.0	1.0		µg/L	1	5/8/2014 1:37:05 AM	R18468
Styrene	ND	1.0		µg/L	1	5/8/2014 1:37:05 AM	R18468
tert-Butylbenzene	ND	1.0		µg/L	1	5/8/2014 1:37:05 AM	R18468
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	5/8/2014 1:37:05 AM	R18468
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	5/8/2014 1:37:05 AM	R18468
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	5/8/2014 1:37:05 AM	R18468
trans-1,2-DCE	ND	1.0		µg/L	1	5/8/2014 1:37:05 AM	R18468
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	5/8/2014 1:37:05 AM	R18468
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	5/8/2014 1:37:05 AM	R18468
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	5/8/2014 1:37:05 AM	R18468
1,1,1-Trichloroethane	ND	1.0		µg/L	1	5/8/2014 1:37:05 AM	R18468
1,1,2-Trichloroethane	ND	1.0		µg/L	1	5/8/2014 1:37:05 AM	R18468
Trichloroethene (TCE)	ND	1.0		µg/L	1	5/8/2014 1:37:05 AM	R18468
Trichlorofluoromethane	ND	1.0		µg/L	1	5/8/2014 1:37:05 AM	R18468
1,2,3-Trichloropropane	ND	2.0		µg/L	1	5/8/2014 1:37:05 AM	R18468
Vinyl chloride	ND	1.0		µg/L	1	5/8/2014 1:37:05 AM	R18468
Xylenes, Total	ND	1.5		µg/L	1	5/8/2014 1:37:05 AM	R18468
Surr: 1,2-Dichloroethane-d4	89.0	70-130		%REC	1	5/8/2014 1:37:05 AM	R18468
Surr: 4-Bromofluorobenzene	88.8	70-130		%REC	1	5/8/2014 1:37:05 AM	R18468
Surr: Dibromofluoromethane	95.7	70-130		%REC	1	5/8/2014 1:37:05 AM	R18468
Surr: Toluene-d8	88.9	70-130		%REC	1	5/8/2014 1:37:05 AM	R18468

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
E	Value above quantitation range
J	Analyte detected below quantitation limits
O	RSD is greater than RSDlimit
R	RPD outside accepted recovery limits
S	Spike Recovery outside accepted recovery limits
B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2.
RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Atex 213
Lab ID: 1405097-009 **Matrix:** AQUEOUS

Client Sample ID: NMW-1
Collection Date: 5/2/2014 12:52:00 PM
Received Date: 5/2/2014 3:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
Benzene	190	10		µg/L	10	5/8/2014 2:05:06 AM	R18468
Toluene	1.6	1.0		µg/L	1	5/8/2014 2:33:06 AM	R18468
Ethylbenzene	5.9	1.0		µg/L	1	5/8/2014 2:33:06 AM	R18468
Methyl tert-butyl ether (MTBE)	35	1.0		µg/L	1	5/8/2014 2:33:06 AM	R18468
1,2,4-Trimethylbenzene	1.2	1.0		µg/L	1	5/8/2014 2:33:06 AM	R18468
1,3,5-Trimethylbenzene	1.3	1.0		µg/L	1	5/8/2014 2:33:06 AM	R18468
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	5/8/2014 2:33:06 AM	R18468
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	5/8/2014 2:33:06 AM	R18468
Naphthalene	19	2.0		µg/L	1	5/8/2014 2:33:06 AM	R18468
1-Methylnaphthalene	6.4	4.0		µg/L	1	5/8/2014 2:33:06 AM	R18468
2-Methylnaphthalene	ND	4.0		µg/L	1	5/8/2014 2:33:06 AM	R18468
Acetone	ND	10		µg/L	1	5/8/2014 2:33:06 AM	R18468
Bromobenzene	ND	1.0		µg/L	1	5/8/2014 2:33:06 AM	R18468
Bromodichloromethane	ND	1.0		µg/L	1	5/8/2014 2:33:06 AM	R18468
Bromoform	ND	1.0		µg/L	1	5/8/2014 2:33:06 AM	R18468
Bromomethane	ND	3.0		µg/L	1	5/8/2014 2:33:06 AM	R18468
2-Butanone	ND	10		µg/L	1	5/8/2014 2:33:06 AM	R18468
Carbon disulfide	ND	10		µg/L	1	5/8/2014 2:33:06 AM	R18468
Carbon Tetrachloride	ND	1.0		µg/L	1	5/8/2014 2:33:06 AM	R18468
Chlorobenzene	ND	1.0		µg/L	1	5/8/2014 2:33:06 AM	R18468
Chloroethane	ND	2.0		µg/L	1	5/8/2014 2:33:06 AM	R18468
Chloroform	ND	1.0		µg/L	1	5/8/2014 2:33:06 AM	R18468
Chloromethane	ND	3.0		µg/L	1	5/8/2014 2:33:06 AM	R18468
2-Chlorotoluene	ND	1.0		µg/L	1	5/8/2014 2:33:06 AM	R18468
4-Chlorotoluene	ND	1.0		µg/L	1	5/8/2014 2:33:06 AM	R18468
cis-1,2-DCE	ND	1.0		µg/L	1	5/8/2014 2:33:06 AM	R18468
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	5/8/2014 2:33:06 AM	R18468
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	5/8/2014 2:33:06 AM	R18468
Dibromochloromethane	ND	1.0		µg/L	1	5/8/2014 2:33:06 AM	R18468
Dibromomethane	ND	1.0		µg/L	1	5/8/2014 2:33:06 AM	R18468
1,2-Dichlorobenzene	ND	1.0		µg/L	1	5/8/2014 2:33:06 AM	R18468
1,3-Dichlorobenzene	ND	1.0		µg/L	1	5/8/2014 2:33:06 AM	R18468
1,4-Dichlorobenzene	ND	1.0		µg/L	1	5/8/2014 2:33:06 AM	R18468
Dichlorodifluoromethane	ND	1.0		µg/L	1	5/8/2014 2:33:06 AM	R18468
1,1-Dichloroethane	ND	1.0		µg/L	1	5/8/2014 2:33:06 AM	R18468
1,1-Dichloroethene	ND	1.0		µg/L	1	5/8/2014 2:33:06 AM	R18468
1,2-Dichloropropane	ND	1.0		µg/L	1	5/8/2014 2:33:06 AM	R18468
1,3-Dichloropropane	ND	1.0		µg/L	1	5/8/2014 2:33:06 AM	R18468
2,2-Dichloropropane	ND	2.0		µg/L	1	5/8/2014 2:33:06 AM	R18468

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
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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Atex 213
Lab ID: 1405097-009
Matrix: AQUEOUS
Client Sample ID: NMW-1
Collection Date: 5/2/2014 12:52:00 PM
Received Date: 5/2/2014 3:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
1,1-Dichloropropene	ND	1.0		µg/L	1	5/8/2014 2:33:06 AM	R18468
Hexachlorobutadiene	ND	1.0		µg/L	1	5/8/2014 2:33:06 AM	R18468
2-Hexanone	ND	10		µg/L	1	5/8/2014 2:33:06 AM	R18468
Isopropylbenzene	11	1.0		µg/L	1	5/8/2014 2:33:06 AM	R18468
4-Isopropyltoluene	ND	1.0		µg/L	1	5/8/2014 2:33:06 AM	R18468
4-Methyl-2-pentanone	ND	10		µg/L	1	5/8/2014 2:33:06 AM	R18468
Methylene Chloride	ND	3.0		µg/L	1	5/8/2014 2:33:06 AM	R18468
n-Butylbenzene	4.7	3.0		µg/L	1	5/8/2014 2:33:06 AM	R18468
n-Propylbenzene	22	1.0		µg/L	1	5/8/2014 2:33:06 AM	R18468
sec-Butylbenzene	3.1	1.0		µg/L	1	5/8/2014 2:33:06 AM	R18468
Styrene	ND	1.0		µg/L	1	5/8/2014 2:33:06 AM	R18468
tert-Butylbenzene	ND	1.0		µg/L	1	5/8/2014 2:33:06 AM	R18468
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	5/8/2014 2:33:06 AM	R18468
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	5/8/2014 2:33:06 AM	R18468
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	5/8/2014 2:33:06 AM	R18468
trans-1,2-DCE	ND	1.0		µg/L	1	5/8/2014 2:33:06 AM	R18468
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	5/8/2014 2:33:06 AM	R18468
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	5/8/2014 2:33:06 AM	R18468
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	5/8/2014 2:33:06 AM	R18468
1,1,1-Trichloroethane	ND	1.0		µg/L	1	5/8/2014 2:33:06 AM	R18468
1,1,2-Trichloroethane	ND	1.0		µg/L	1	5/8/2014 2:33:06 AM	R18468
Trichloroethene (TCE)	ND	1.0		µg/L	1	5/8/2014 2:33:06 AM	R18468
Trichlorofluoromethane	ND	1.0		µg/L	1	5/8/2014 2:33:06 AM	R18468
1,2,3-Trichloropropane	ND	2.0		µg/L	1	5/8/2014 2:33:06 AM	R18468
Vinyl chloride	ND	1.0		µg/L	1	5/8/2014 2:33:06 AM	R18468
Xylenes, Total	6.3	1.5		µg/L	1	5/8/2014 2:33:06 AM	R18468
Surr: 1,2-Dichloroethane-d4	86.4	70-130		%REC	1	5/8/2014 2:33:06 AM	R18468
Surr: 4-Bromofluorobenzene	91.9	70-130		%REC	1	5/8/2014 2:33:06 AM	R18468
Surr: Dibromofluoromethane	92.5	70-130		%REC	1	5/8/2014 2:33:06 AM	R18468
Surr: Toluene-d8	86.6	70-130		%REC	1	5/8/2014 2:33:06 AM	R18468

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
E	Value above quantitation range
J	Analyte detected below quantitation limits
O	RSD is greater than RSDlimit
R	RPD outside accepted recovery limits
S	Spike Recovery outside accepted recovery limits
B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2.
RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Atex 213
Lab ID: 1405097-010
Matrix: AQUEOUS
Client Sample ID: RNMW-2
Collection Date: 5/2/2014 11:42:00 AM
Received Date: 5/2/2014 3:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
Benzene	12	1.0		µg/L	1	5/8/2014 3:57:11 AM	R18468
Toluene	ND	1.0		µg/L	1	5/8/2014 3:57:11 AM	R18468
Ethylbenzene	ND	1.0		µg/L	1	5/8/2014 3:57:11 AM	R18468
Methyl tert-butyl ether (MTBE)	72	1.0		µg/L	1	5/8/2014 3:57:11 AM	R18468
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	5/8/2014 3:57:11 AM	R18468
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	5/8/2014 3:57:11 AM	R18468
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	5/8/2014 3:57:11 AM	R18468
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	5/8/2014 3:57:11 AM	R18468
Naphthalene	ND	2.0		µg/L	1	5/8/2014 3:57:11 AM	R18468
1-Methylnaphthalene	ND	4.0		µg/L	1	5/8/2014 3:57:11 AM	R18468
2-Methylnaphthalene	ND	4.0		µg/L	1	5/8/2014 3:57:11 AM	R18468
Acetone	ND	10		µg/L	1	5/8/2014 3:57:11 AM	R18468
Bromobenzene	ND	1.0		µg/L	1	5/8/2014 3:57:11 AM	R18468
Bromodichloromethane	ND	1.0		µg/L	1	5/8/2014 3:57:11 AM	R18468
Bromoform	ND	1.0		µg/L	1	5/8/2014 3:57:11 AM	R18468
Bromomethane	ND	3.0		µg/L	1	5/8/2014 3:57:11 AM	R18468
2-Butanone	ND	10		µg/L	1	5/8/2014 3:57:11 AM	R18468
Carbon disulfide	ND	10		µg/L	1	5/8/2014 3:57:11 AM	R18468
Carbon Tetrachloride	ND	1.0		µg/L	1	5/8/2014 3:57:11 AM	R18468
Chlorobenzene	ND	1.0		µg/L	1	5/8/2014 3:57:11 AM	R18468
Chloroethane	ND	2.0		µg/L	1	5/8/2014 3:57:11 AM	R18468
Chloroform	ND	1.0		µg/L	1	5/8/2014 3:57:11 AM	R18468
Chloromethane	ND	3.0		µg/L	1	5/8/2014 3:57:11 AM	R18468
2-Chlorotoluene	ND	1.0		µg/L	1	5/8/2014 3:57:11 AM	R18468
4-Chlorotoluene	ND	1.0		µg/L	1	5/8/2014 3:57:11 AM	R18468
cis-1,2-DCE	ND	1.0		µg/L	1	5/8/2014 3:57:11 AM	R18468
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	5/8/2014 3:57:11 AM	R18468
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	5/8/2014 3:57:11 AM	R18468
Dibromochloromethane	ND	1.0		µg/L	1	5/8/2014 3:57:11 AM	R18468
Dibromomethane	ND	1.0		µg/L	1	5/8/2014 3:57:11 AM	R18468
1,2-Dichlorobenzene	ND	1.0		µg/L	1	5/8/2014 3:57:11 AM	R18468
1,3-Dichlorobenzene	ND	1.0		µg/L	1	5/8/2014 3:57:11 AM	R18468
1,4-Dichlorobenzene	ND	1.0		µg/L	1	5/8/2014 3:57:11 AM	R18468
Dichlorodifluoromethane	ND	1.0		µg/L	1	5/8/2014 3:57:11 AM	R18468
1,1-Dichloroethane	ND	1.0		µg/L	1	5/8/2014 3:57:11 AM	R18468
1,1-Dichloroethene	ND	1.0		µg/L	1	5/8/2014 3:57:11 AM	R18468
1,2-Dichloropropane	ND	1.0		µg/L	1	5/8/2014 3:57:11 AM	R18468
1,3-Dichloropropane	ND	1.0		µg/L	1	5/8/2014 3:57:11 AM	R18468
2,2-Dichloropropane	ND	2.0		µg/L	1	5/8/2014 3:57:11 AM	R18468

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
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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Atex 213
Lab ID: 1405097-010
Matrix: AQUEOUS
Client Sample ID: RNMW-2
Collection Date: 5/2/2014 11:42:00 AM
Received Date: 5/2/2014 3:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
1,1-Dichloropropene	ND	1.0		µg/L	1	5/8/2014 3:57:11 AM	R18468
Hexachlorobutadiene	ND	1.0		µg/L	1	5/8/2014 3:57:11 AM	R18468
2-Hexanone	ND	10		µg/L	1	5/8/2014 3:57:11 AM	R18468
Isopropylbenzene	ND	1.0		µg/L	1	5/8/2014 3:57:11 AM	R18468
4-Isopropyltoluene	ND	1.0		µg/L	1	5/8/2014 3:57:11 AM	R18468
4-Methyl-2-pentanone	ND	10		µg/L	1	5/8/2014 3:57:11 AM	R18468
Methylene Chloride	ND	3.0		µg/L	1	5/8/2014 3:57:11 AM	R18468
n-Butylbenzene	ND	3.0		µg/L	1	5/8/2014 3:57:11 AM	R18468
n-Propylbenzene	ND	1.0		µg/L	1	5/8/2014 3:57:11 AM	R18468
sec-Butylbenzene	ND	1.0		µg/L	1	5/8/2014 3:57:11 AM	R18468
Styrene	ND	1.0		µg/L	1	5/8/2014 3:57:11 AM	R18468
tert-Butylbenzene	ND	1.0		µg/L	1	5/8/2014 3:57:11 AM	R18468
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	5/8/2014 3:57:11 AM	R18468
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	5/8/2014 3:57:11 AM	R18468
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	5/8/2014 3:57:11 AM	R18468
trans-1,2-DCE	ND	1.0		µg/L	1	5/8/2014 3:57:11 AM	R18468
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	5/8/2014 3:57:11 AM	R18468
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	5/8/2014 3:57:11 AM	R18468
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	5/8/2014 3:57:11 AM	R18468
1,1,1-Trichloroethane	ND	1.0		µg/L	1	5/8/2014 3:57:11 AM	R18468
1,1,2-Trichloroethane	ND	1.0		µg/L	1	5/8/2014 3:57:11 AM	R18468
Trichloroethene (TCE)	ND	1.0		µg/L	1	5/8/2014 3:57:11 AM	R18468
Trichlorofluoromethane	ND	1.0		µg/L	1	5/8/2014 3:57:11 AM	R18468
1,2,3-Trichloropropane	ND	2.0		µg/L	1	5/8/2014 3:57:11 AM	R18468
Vinyl chloride	ND	1.0		µg/L	1	5/8/2014 3:57:11 AM	R18468
Xylenes, Total	ND	1.5		µg/L	1	5/8/2014 3:57:11 AM	R18468
Surr: 1,2-Dichloroethane-d4	90.1	70-130		%REC	1	5/8/2014 3:57:11 AM	R18468
Surr: 4-Bromofluorobenzene	88.1	70-130		%REC	1	5/8/2014 3:57:11 AM	R18468
Surr: Dibromofluoromethane	96.5	70-130		%REC	1	5/8/2014 3:57:11 AM	R18468
Surr: Toluene-d8	88.5	70-130		%REC	1	5/8/2014 3:57:11 AM	R18468

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
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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Atex 213
Lab ID: 1405097-011
Matrix: AQUEOUS
Client Sample ID: RNMW-3
Collection Date: 5/2/2014 12:12:00 PM
Received Date: 5/2/2014 3:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
Benzene	ND	1.0		µg/L	1	5/8/2014 4:53:12 AM	R18468
Toluene	ND	1.0		µg/L	1	5/8/2014 4:53:12 AM	R18468
Ethylbenzene	ND	1.0		µg/L	1	5/8/2014 4:53:12 AM	R18468
Methyl tert-butyl ether (MTBE)	31	1.0		µg/L	1	5/8/2014 4:53:12 AM	R18468
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	5/8/2014 4:53:12 AM	R18468
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	5/8/2014 4:53:12 AM	R18468
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	5/8/2014 4:53:12 AM	R18468
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	5/8/2014 4:53:12 AM	R18468
Naphthalene	ND	2.0		µg/L	1	5/8/2014 4:53:12 AM	R18468
1-Methylnaphthalene	ND	4.0		µg/L	1	5/8/2014 4:53:12 AM	R18468
2-Methylnaphthalene	ND	4.0		µg/L	1	5/8/2014 4:53:12 AM	R18468
Acetone	ND	10		µg/L	1	5/8/2014 4:53:12 AM	R18468
Bromobenzene	ND	1.0		µg/L	1	5/8/2014 4:53:12 AM	R18468
Bromodichloromethane	ND	1.0		µg/L	1	5/8/2014 4:53:12 AM	R18468
Bromoform	ND	1.0		µg/L	1	5/8/2014 4:53:12 AM	R18468
Bromomethane	ND	3.0		µg/L	1	5/8/2014 4:53:12 AM	R18468
2-Butanone	ND	10		µg/L	1	5/8/2014 4:53:12 AM	R18468
Carbon disulfide	ND	10		µg/L	1	5/8/2014 4:53:12 AM	R18468
Carbon Tetrachloride	ND	1.0		µg/L	1	5/8/2014 4:53:12 AM	R18468
Chlorobenzene	ND	1.0		µg/L	1	5/8/2014 4:53:12 AM	R18468
Chloroethane	ND	2.0		µg/L	1	5/8/2014 4:53:12 AM	R18468
Chloroform	ND	1.0		µg/L	1	5/8/2014 4:53:12 AM	R18468
Chloromethane	ND	3.0		µg/L	1	5/8/2014 4:53:12 AM	R18468
2-Chlorotoluene	ND	1.0		µg/L	1	5/8/2014 4:53:12 AM	R18468
4-Chlorotoluene	ND	1.0		µg/L	1	5/8/2014 4:53:12 AM	R18468
cis-1,2-DCE	ND	1.0		µg/L	1	5/8/2014 4:53:12 AM	R18468
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	5/8/2014 4:53:12 AM	R18468
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	5/8/2014 4:53:12 AM	R18468
Dibromochloromethane	ND	1.0		µg/L	1	5/8/2014 4:53:12 AM	R18468
Dibromomethane	ND	1.0		µg/L	1	5/8/2014 4:53:12 AM	R18468
1,2-Dichlorobenzene	ND	1.0		µg/L	1	5/8/2014 4:53:12 AM	R18468
1,3-Dichlorobenzene	ND	1.0		µg/L	1	5/8/2014 4:53:12 AM	R18468
1,4-Dichlorobenzene	ND	1.0		µg/L	1	5/8/2014 4:53:12 AM	R18468
Dichlorodifluoromethane	ND	1.0		µg/L	1	5/8/2014 4:53:12 AM	R18468
1,1-Dichloroethane	ND	1.0		µg/L	1	5/8/2014 4:53:12 AM	R18468
1,1-Dichloroethene	ND	1.0		µg/L	1	5/8/2014 4:53:12 AM	R18468
1,2-Dichloropropane	ND	1.0		µg/L	1	5/8/2014 4:53:12 AM	R18468
1,3-Dichloropropane	ND	1.0		µg/L	1	5/8/2014 4:53:12 AM	R18468
2,2-Dichloropropane	ND	2.0		µg/L	1	5/8/2014 4:53:12 AM	R18468

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
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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Atex 213
Lab ID: 1405097-011
Matrix: AQUEOUS
Client Sample ID: RNMW-3
Collection Date: 5/2/2014 12:12:00 PM
Received Date: 5/2/2014 3:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
1,1-Dichloropropene	ND	1.0		µg/L	1	5/8/2014 4:53:12 AM	R18468
Hexachlorobutadiene	ND	1.0		µg/L	1	5/8/2014 4:53:12 AM	R18468
2-Hexanone	ND	10		µg/L	1	5/8/2014 4:53:12 AM	R18468
Isopropylbenzene	ND	1.0		µg/L	1	5/8/2014 4:53:12 AM	R18468
4-Isopropyltoluene	ND	1.0		µg/L	1	5/8/2014 4:53:12 AM	R18468
4-Methyl-2-pentanone	ND	10		µg/L	1	5/8/2014 4:53:12 AM	R18468
Methylene Chloride	ND	3.0		µg/L	1	5/8/2014 4:53:12 AM	R18468
n-Butylbenzene	ND	3.0		µg/L	1	5/8/2014 4:53:12 AM	R18468
n-Propylbenzene	1.1	1.0		µg/L	1	5/8/2014 4:53:12 AM	R18468
sec-Butylbenzene	ND	1.0		µg/L	1	5/8/2014 4:53:12 AM	R18468
Styrene	ND	1.0		µg/L	1	5/8/2014 4:53:12 AM	R18468
tert-Butylbenzene	ND	1.0		µg/L	1	5/8/2014 4:53:12 AM	R18468
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	5/8/2014 4:53:12 AM	R18468
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	5/8/2014 4:53:12 AM	R18468
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	5/8/2014 4:53:12 AM	R18468
trans-1,2-DCE	ND	1.0		µg/L	1	5/8/2014 4:53:12 AM	R18468
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	5/8/2014 4:53:12 AM	R18468
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	5/8/2014 4:53:12 AM	R18468
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	5/8/2014 4:53:12 AM	R18468
1,1,1-Trichloroethane	ND	1.0		µg/L	1	5/8/2014 4:53:12 AM	R18468
1,1,2-Trichloroethane	ND	1.0		µg/L	1	5/8/2014 4:53:12 AM	R18468
Trichloroethene (TCE)	ND	1.0		µg/L	1	5/8/2014 4:53:12 AM	R18468
Trichlorofluoromethane	ND	1.0		µg/L	1	5/8/2014 4:53:12 AM	R18468
1,2,3-Trichloropropane	ND	2.0		µg/L	1	5/8/2014 4:53:12 AM	R18468
Vinyl chloride	ND	1.0		µg/L	1	5/8/2014 4:53:12 AM	R18468
Xylenes, Total	ND	1.5		µg/L	1	5/8/2014 4:53:12 AM	R18468
Surr: 1,2-Dichloroethane-d4	89.8	70-130		%REC	1	5/8/2014 4:53:12 AM	R18468
Surr: 4-Bromofluorobenzene	90.4	70-130		%REC	1	5/8/2014 4:53:12 AM	R18468
Surr: Dibromofluoromethane	95.6	70-130		%REC	1	5/8/2014 4:53:12 AM	R18468
Surr: Toluene-d8	86.5	70-130		%REC	1	5/8/2014 4:53:12 AM	R18468

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
E	Value above quantitation range
J	Analyte detected below quantitation limits
O	RSD is greater than RSDlimit
R	RPD outside accepted recovery limits
S	Spike Recovery outside accepted recovery limits
B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2.
RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Atex 213
Lab ID: 1405097-012
Matrix: AQUEOUS
Client Sample ID: NMW-4R
Collection Date: 5/1/2014 5:02:00 PM
Received Date: 5/2/2014 3:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
Benzene	8.0	1.0		µg/L	1	5/8/2014 5:21:10 AM	R18468
Toluene	2.6	1.0		µg/L	1	5/8/2014 5:21:10 AM	R18468
Ethylbenzene	ND	1.0		µg/L	1	5/8/2014 5:21:10 AM	R18468
Methyl tert-butyl ether (MTBE)	11	1.0		µg/L	1	5/8/2014 5:21:10 AM	R18468
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	5/8/2014 5:21:10 AM	R18468
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	5/8/2014 5:21:10 AM	R18468
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	5/8/2014 5:21:10 AM	R18468
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	5/8/2014 5:21:10 AM	R18468
Naphthalene	ND	2.0		µg/L	1	5/8/2014 5:21:10 AM	R18468
1-Methylnaphthalene	ND	4.0		µg/L	1	5/8/2014 5:21:10 AM	R18468
2-Methylnaphthalene	ND	4.0		µg/L	1	5/8/2014 5:21:10 AM	R18468
Acetone	ND	10		µg/L	1	5/8/2014 5:21:10 AM	R18468
Bromobenzene	ND	1.0		µg/L	1	5/8/2014 5:21:10 AM	R18468
Bromodichloromethane	ND	1.0		µg/L	1	5/8/2014 5:21:10 AM	R18468
Bromoform	ND	1.0		µg/L	1	5/8/2014 5:21:10 AM	R18468
Bromomethane	ND	3.0		µg/L	1	5/8/2014 5:21:10 AM	R18468
2-Butanone	ND	10		µg/L	1	5/8/2014 5:21:10 AM	R18468
Carbon disulfide	ND	10		µg/L	1	5/8/2014 5:21:10 AM	R18468
Carbon Tetrachloride	ND	1.0		µg/L	1	5/8/2014 5:21:10 AM	R18468
Chlorobenzene	ND	1.0		µg/L	1	5/8/2014 5:21:10 AM	R18468
Chloroethane	ND	2.0		µg/L	1	5/8/2014 5:21:10 AM	R18468
Chloroform	ND	1.0		µg/L	1	5/8/2014 5:21:10 AM	R18468
Chloromethane	ND	3.0		µg/L	1	5/8/2014 5:21:10 AM	R18468
2-Chlorotoluene	ND	1.0		µg/L	1	5/8/2014 5:21:10 AM	R18468
4-Chlorotoluene	ND	1.0		µg/L	1	5/8/2014 5:21:10 AM	R18468
cis-1,2-DCE	ND	1.0		µg/L	1	5/8/2014 5:21:10 AM	R18468
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	5/8/2014 5:21:10 AM	R18468
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	5/8/2014 5:21:10 AM	R18468
Dibromochloromethane	ND	1.0		µg/L	1	5/8/2014 5:21:10 AM	R18468
Dibromomethane	ND	1.0		µg/L	1	5/8/2014 5:21:10 AM	R18468
1,2-Dichlorobenzene	ND	1.0		µg/L	1	5/8/2014 5:21:10 AM	R18468
1,3-Dichlorobenzene	ND	1.0		µg/L	1	5/8/2014 5:21:10 AM	R18468
1,4-Dichlorobenzene	ND	1.0		µg/L	1	5/8/2014 5:21:10 AM	R18468
Dichlorodifluoromethane	ND	1.0		µg/L	1	5/8/2014 5:21:10 AM	R18468
1,1-Dichloroethane	ND	1.0		µg/L	1	5/8/2014 5:21:10 AM	R18468
1,1-Dichloroethene	ND	1.0		µg/L	1	5/8/2014 5:21:10 AM	R18468
1,2-Dichloropropane	ND	1.0		µg/L	1	5/8/2014 5:21:10 AM	R18468
1,3-Dichloropropane	ND	1.0		µg/L	1	5/8/2014 5:21:10 AM	R18468
2,2-Dichloropropane	ND	2.0		µg/L	1	5/8/2014 5:21:10 AM	R18468

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2.
- RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Atex 213
Lab ID: 1405097-012
Matrix: AQUEOUS
Client Sample ID: NMW-4R
Collection Date: 5/1/2014 5:02:00 PM
Received Date: 5/2/2014 3:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
1,1-Dichloropropene	ND	1.0		µg/L	1	5/8/2014 5:21:10 AM	R18468
Hexachlorobutadiene	ND	1.0		µg/L	1	5/8/2014 5:21:10 AM	R18468
2-Hexanone	ND	10		µg/L	1	5/8/2014 5:21:10 AM	R18468
Isopropylbenzene	ND	1.0		µg/L	1	5/8/2014 5:21:10 AM	R18468
4-Isopropyltoluene	ND	1.0		µg/L	1	5/8/2014 5:21:10 AM	R18468
4-Methyl-2-pentanone	ND	10		µg/L	1	5/8/2014 5:21:10 AM	R18468
Methylene Chloride	ND	3.0		µg/L	1	5/8/2014 5:21:10 AM	R18468
n-Butylbenzene	ND	3.0		µg/L	1	5/8/2014 5:21:10 AM	R18468
n-Propylbenzene	ND	1.0		µg/L	1	5/8/2014 5:21:10 AM	R18468
sec-Butylbenzene	ND	1.0		µg/L	1	5/8/2014 5:21:10 AM	R18468
Styrene	ND	1.0		µg/L	1	5/8/2014 5:21:10 AM	R18468
tert-Butylbenzene	ND	1.0		µg/L	1	5/8/2014 5:21:10 AM	R18468
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	5/8/2014 5:21:10 AM	R18468
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	5/8/2014 5:21:10 AM	R18468
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	5/8/2014 5:21:10 AM	R18468
trans-1,2-DCE	ND	1.0		µg/L	1	5/8/2014 5:21:10 AM	R18468
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	5/8/2014 5:21:10 AM	R18468
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	5/8/2014 5:21:10 AM	R18468
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	5/8/2014 5:21:10 AM	R18468
1,1,1-Trichloroethane	ND	1.0		µg/L	1	5/8/2014 5:21:10 AM	R18468
1,1,2-Trichloroethane	ND	1.0		µg/L	1	5/8/2014 5:21:10 AM	R18468
Trichloroethene (TCE)	ND	1.0		µg/L	1	5/8/2014 5:21:10 AM	R18468
Trichlorofluoromethane	ND	1.0		µg/L	1	5/8/2014 5:21:10 AM	R18468
1,2,3-Trichloropropane	ND	2.0		µg/L	1	5/8/2014 5:21:10 AM	R18468
Vinyl chloride	ND	1.0		µg/L	1	5/8/2014 5:21:10 AM	R18468
Xylenes, Total	ND	1.5		µg/L	1	5/8/2014 5:21:10 AM	R18468
Surr: 1,2-Dichloroethane-d4	85.9	70-130		%REC	1	5/8/2014 5:21:10 AM	R18468
Surr: 4-Bromofluorobenzene	92.1	70-130		%REC	1	5/8/2014 5:21:10 AM	R18468
Surr: Dibromofluoromethane	94.7	70-130		%REC	1	5/8/2014 5:21:10 AM	R18468
Surr: Toluene-d8	90.1	70-130		%REC	1	5/8/2014 5:21:10 AM	R18468

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
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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Atex 213
Lab ID: 1405097-013
Matrix: AQUEOUS
Client Sample ID: W-35
Collection Date: 5/2/2014 1:25:00 PM
Received Date: 5/2/2014 3:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
Benzene	ND	1.0		µg/L	1	5/8/2014 6:17:07 AM	R18468
Toluene	ND	1.0		µg/L	1	5/8/2014 6:17:07 AM	R18468
Ethylbenzene	7.5	1.0		µg/L	1	5/8/2014 6:17:07 AM	R18468
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	5/8/2014 6:17:07 AM	R18468
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	5/8/2014 6:17:07 AM	R18468
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	5/8/2014 6:17:07 AM	R18468
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	5/8/2014 6:17:07 AM	R18468
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	5/8/2014 6:17:07 AM	R18468
Naphthalene	94	2.0		µg/L	1	5/8/2014 6:17:07 AM	R18468
1-Methylnaphthalene	17	4.0		µg/L	1	5/8/2014 6:17:07 AM	R18468
2-Methylnaphthalene	13	4.0		µg/L	1	5/8/2014 6:17:07 AM	R18468
Acetone	ND	10		µg/L	1	5/8/2014 6:17:07 AM	R18468
Bromobenzene	ND	1.0		µg/L	1	5/8/2014 6:17:07 AM	R18468
Bromodichloromethane	ND	1.0		µg/L	1	5/8/2014 6:17:07 AM	R18468
Bromoform	ND	1.0		µg/L	1	5/8/2014 6:17:07 AM	R18468
Bromomethane	ND	3.0		µg/L	1	5/8/2014 6:17:07 AM	R18468
2-Butanone	ND	10		µg/L	1	5/8/2014 6:17:07 AM	R18468
Carbon disulfide	ND	10		µg/L	1	5/8/2014 6:17:07 AM	R18468
Carbon Tetrachloride	ND	1.0		µg/L	1	5/8/2014 6:17:07 AM	R18468
Chlorobenzene	ND	1.0		µg/L	1	5/8/2014 6:17:07 AM	R18468
Chloroethane	ND	2.0		µg/L	1	5/8/2014 6:17:07 AM	R18468
Chloroform	ND	1.0		µg/L	1	5/8/2014 6:17:07 AM	R18468
Chloromethane	ND	3.0		µg/L	1	5/8/2014 6:17:07 AM	R18468
2-Chlorotoluene	ND	1.0		µg/L	1	5/8/2014 6:17:07 AM	R18468
4-Chlorotoluene	ND	1.0		µg/L	1	5/8/2014 6:17:07 AM	R18468
cis-1,2-DCE	ND	1.0		µg/L	1	5/8/2014 6:17:07 AM	R18468
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	5/8/2014 6:17:07 AM	R18468
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	5/8/2014 6:17:07 AM	R18468
Dibromochloromethane	ND	1.0		µg/L	1	5/8/2014 6:17:07 AM	R18468
Dibromomethane	ND	1.0		µg/L	1	5/8/2014 6:17:07 AM	R18468
1,2-Dichlorobenzene	ND	1.0		µg/L	1	5/8/2014 6:17:07 AM	R18468
1,3-Dichlorobenzene	ND	1.0		µg/L	1	5/8/2014 6:17:07 AM	R18468
1,4-Dichlorobenzene	ND	1.0		µg/L	1	5/8/2014 6:17:07 AM	R18468
Dichlorodifluoromethane	ND	1.0		µg/L	1	5/8/2014 6:17:07 AM	R18468
1,1-Dichloroethane	ND	1.0		µg/L	1	5/8/2014 6:17:07 AM	R18468
1,1-Dichloroethene	ND	1.0		µg/L	1	5/8/2014 6:17:07 AM	R18468
1,2-Dichloropropane	ND	1.0		µg/L	1	5/8/2014 6:17:07 AM	R18468
1,3-Dichloropropane	ND	1.0		µg/L	1	5/8/2014 6:17:07 AM	R18468
2,2-Dichloropropane	ND	2.0		µg/L	1	5/8/2014 6:17:07 AM	R18468

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
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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Atex 213
Lab ID: 1405097-013
Matrix: AQUEOUS
Client Sample ID: W-35
Collection Date: 5/2/2014 1:25:00 PM
Received Date: 5/2/2014 3:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
1,1-Dichloropropene	ND	1.0		µg/L	1	5/8/2014 6:17:07 AM	R18468
Hexachlorobutadiene	ND	1.0		µg/L	1	5/8/2014 6:17:07 AM	R18468
2-Hexanone	ND	10		µg/L	1	5/8/2014 6:17:07 AM	R18468
Isopropylbenzene	21	1.0		µg/L	1	5/8/2014 6:17:07 AM	R18468
4-Isopropyltoluene	ND	1.0		µg/L	1	5/8/2014 6:17:07 AM	R18468
4-Methyl-2-pentanone	ND	10		µg/L	1	5/8/2014 6:17:07 AM	R18468
Methylene Chloride	ND	3.0		µg/L	1	5/8/2014 6:17:07 AM	R18468
n-Butylbenzene	7.8	3.0		µg/L	1	5/8/2014 6:17:07 AM	R18468
n-Propylbenzene	54	1.0		µg/L	1	5/8/2014 6:17:07 AM	R18468
sec-Butylbenzene	4.5	1.0		µg/L	1	5/8/2014 6:17:07 AM	R18468
Styrene	ND	1.0		µg/L	1	5/8/2014 6:17:07 AM	R18468
tert-Butylbenzene	ND	1.0		µg/L	1	5/8/2014 6:17:07 AM	R18468
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	5/8/2014 6:17:07 AM	R18468
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	5/8/2014 6:17:07 AM	R18468
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	5/8/2014 6:17:07 AM	R18468
trans-1,2-DCE	ND	1.0		µg/L	1	5/8/2014 6:17:07 AM	R18468
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	5/8/2014 6:17:07 AM	R18468
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	5/8/2014 6:17:07 AM	R18468
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	5/8/2014 6:17:07 AM	R18468
1,1,1-Trichloroethane	ND	1.0		µg/L	1	5/8/2014 6:17:07 AM	R18468
1,1,2-Trichloroethane	ND	1.0		µg/L	1	5/8/2014 6:17:07 AM	R18468
Trichloroethene (TCE)	ND	1.0		µg/L	1	5/8/2014 6:17:07 AM	R18468
Trichlorofluoromethane	ND	1.0		µg/L	1	5/8/2014 6:17:07 AM	R18468
1,2,3-Trichloropropane	ND	2.0		µg/L	1	5/8/2014 6:17:07 AM	R18468
Vinyl chloride	ND	1.0		µg/L	1	5/8/2014 6:17:07 AM	R18468
Xylenes, Total	ND	1.5		µg/L	1	5/8/2014 6:17:07 AM	R18468
Surr: 1,2-Dichloroethane-d4	89.0	70-130		%REC	1	5/8/2014 6:17:07 AM	R18468
Surr: 4-Bromofluorobenzene	90.3	70-130		%REC	1	5/8/2014 6:17:07 AM	R18468
Surr: Dibromofluoromethane	93.8	70-130		%REC	1	5/8/2014 6:17:07 AM	R18468
Surr: Toluene-d8	89.7	70-130		%REC	1	5/8/2014 6:17:07 AM	R18468

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
E	Value above quantitation range
J	Analyte detected below quantitation limits
O	RSD is greater than RSDlimit
R	RPD outside accepted recovery limits
S	Spike Recovery outside accepted recovery limits
B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2.
RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Atex 213
Lab ID: 1405097-014
Matrix: AQUEOUS
Client Sample ID: W-36
Collection Date: 5/2/2014 11:11:00 AM
Received Date: 5/2/2014 3:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
Benzene	ND	1.0		µg/L	1	5/8/2014 7:13:08 AM	R18468
Toluene	ND	1.0		µg/L	1	5/8/2014 7:13:08 AM	R18468
Ethylbenzene	2.4	1.0		µg/L	1	5/8/2014 7:13:08 AM	R18468
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	5/8/2014 7:13:08 AM	R18468
1,2,4-Trimethylbenzene	1.3	1.0		µg/L	1	5/8/2014 7:13:08 AM	R18468
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	5/8/2014 7:13:08 AM	R18468
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	5/8/2014 7:13:08 AM	R18468
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	5/8/2014 7:13:08 AM	R18468
Naphthalene	12	2.0		µg/L	1	5/8/2014 7:13:08 AM	R18468
1-Methylnaphthalene	ND	4.0		µg/L	1	5/8/2014 7:13:08 AM	R18468
2-Methylnaphthalene	ND	4.0		µg/L	1	5/8/2014 7:13:08 AM	R18468
Acetone	ND	10		µg/L	1	5/8/2014 7:13:08 AM	R18468
Bromobenzene	ND	1.0		µg/L	1	5/8/2014 7:13:08 AM	R18468
Bromodichloromethane	ND	1.0		µg/L	1	5/8/2014 7:13:08 AM	R18468
Bromoform	ND	1.0		µg/L	1	5/8/2014 7:13:08 AM	R18468
Bromomethane	ND	3.0		µg/L	1	5/8/2014 7:13:08 AM	R18468
2-Butanone	ND	10		µg/L	1	5/8/2014 7:13:08 AM	R18468
Carbon disulfide	ND	10		µg/L	1	5/8/2014 7:13:08 AM	R18468
Carbon Tetrachloride	ND	1.0		µg/L	1	5/8/2014 7:13:08 AM	R18468
Chlorobenzene	ND	1.0		µg/L	1	5/8/2014 7:13:08 AM	R18468
Chloroethane	ND	2.0		µg/L	1	5/8/2014 7:13:08 AM	R18468
Chloroform	ND	1.0		µg/L	1	5/8/2014 7:13:08 AM	R18468
Chloromethane	ND	3.0		µg/L	1	5/8/2014 7:13:08 AM	R18468
2-Chlorotoluene	ND	1.0		µg/L	1	5/8/2014 7:13:08 AM	R18468
4-Chlorotoluene	ND	1.0		µg/L	1	5/8/2014 7:13:08 AM	R18468
cis-1,2-DCE	ND	1.0		µg/L	1	5/8/2014 7:13:08 AM	R18468
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	5/8/2014 7:13:08 AM	R18468
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	5/8/2014 7:13:08 AM	R18468
Dibromochloromethane	ND	1.0		µg/L	1	5/8/2014 7:13:08 AM	R18468
Dibromomethane	ND	1.0		µg/L	1	5/8/2014 7:13:08 AM	R18468
1,2-Dichlorobenzene	ND	1.0		µg/L	1	5/8/2014 7:13:08 AM	R18468
1,3-Dichlorobenzene	ND	1.0		µg/L	1	5/8/2014 7:13:08 AM	R18468
1,4-Dichlorobenzene	ND	1.0		µg/L	1	5/8/2014 7:13:08 AM	R18468
Dichlorodifluoromethane	ND	1.0		µg/L	1	5/8/2014 7:13:08 AM	R18468
1,1-Dichloroethane	ND	1.0		µg/L	1	5/8/2014 7:13:08 AM	R18468
1,1-Dichloroethene	ND	1.0		µg/L	1	5/8/2014 7:13:08 AM	R18468
1,2-Dichloropropane	ND	1.0		µg/L	1	5/8/2014 7:13:08 AM	R18468
1,3-Dichloropropane	ND	1.0		µg/L	1	5/8/2014 7:13:08 AM	R18468
2,2-Dichloropropane	ND	2.0		µg/L	1	5/8/2014 7:13:08 AM	R18468

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
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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Atex 213
Lab ID: 1405097-014
Matrix: AQUEOUS
Client Sample ID: W-36
Collection Date: 5/2/2014 11:11:00 AM
Received Date: 5/2/2014 3:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
1,1-Dichloropropene	ND	1.0		µg/L	1	5/8/2014 7:13:08 AM	R18468
Hexachlorobutadiene	ND	1.0		µg/L	1	5/8/2014 7:13:08 AM	R18468
2-Hexanone	ND	10		µg/L	1	5/8/2014 7:13:08 AM	R18468
Isopropylbenzene	5.0	1.0		µg/L	1	5/8/2014 7:13:08 AM	R18468
4-Isopropyltoluene	ND	1.0		µg/L	1	5/8/2014 7:13:08 AM	R18468
4-Methyl-2-pentanone	ND	10		µg/L	1	5/8/2014 7:13:08 AM	R18468
Methylene Chloride	ND	3.0		µg/L	1	5/8/2014 7:13:08 AM	R18468
n-Butylbenzene	ND	3.0		µg/L	1	5/8/2014 7:13:08 AM	R18468
n-Propylbenzene	14	1.0		µg/L	1	5/8/2014 7:13:08 AM	R18468
sec-Butylbenzene	1.8	1.0		µg/L	1	5/8/2014 7:13:08 AM	R18468
Styrene	ND	1.0		µg/L	1	5/8/2014 7:13:08 AM	R18468
tert-Butylbenzene	ND	1.0		µg/L	1	5/8/2014 7:13:08 AM	R18468
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	5/8/2014 7:13:08 AM	R18468
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	5/8/2014 7:13:08 AM	R18468
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	5/8/2014 7:13:08 AM	R18468
trans-1,2-DCE	ND	1.0		µg/L	1	5/8/2014 7:13:08 AM	R18468
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	5/8/2014 7:13:08 AM	R18468
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	5/8/2014 7:13:08 AM	R18468
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	5/8/2014 7:13:08 AM	R18468
1,1,1-Trichloroethane	ND	1.0		µg/L	1	5/8/2014 7:13:08 AM	R18468
1,1,2-Trichloroethane	ND	1.0		µg/L	1	5/8/2014 7:13:08 AM	R18468
Trichloroethene (TCE)	ND	1.0		µg/L	1	5/8/2014 7:13:08 AM	R18468
Trichlorofluoromethane	ND	1.0		µg/L	1	5/8/2014 7:13:08 AM	R18468
1,2,3-Trichloropropane	ND	2.0		µg/L	1	5/8/2014 7:13:08 AM	R18468
Vinyl chloride	ND	1.0		µg/L	1	5/8/2014 7:13:08 AM	R18468
Xylenes, Total	ND	1.5		µg/L	1	5/8/2014 7:13:08 AM	R18468
Surr: 1,2-Dichloroethane-d4	89.7	70-130		%REC	1	5/8/2014 7:13:08 AM	R18468
Surr: 4-Bromofluorobenzene	91.2	70-130		%REC	1	5/8/2014 7:13:08 AM	R18468
Surr: Dibromofluoromethane	93.4	70-130		%REC	1	5/8/2014 7:13:08 AM	R18468
Surr: Toluene-d8	86.9	70-130		%REC	1	5/8/2014 7:13:08 AM	R18468

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
E	Value above quantitation range
J	Analyte detected below quantitation limits
O	RSD is greater than RSDlimit
R	RPD outside accepted recovery limits
S	Spike Recovery outside accepted recovery limits
B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2.
RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Atex 213
Lab ID: 1405097-015
Client Sample ID: Trip Blank
Collection Date:
Matrix: TRIP BLANK
Received Date: 5/2/2014 3:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
Benzene	ND	1.0		µg/L	1	5/8/2014 8:37:20 AM	R18468
Toluene	ND	1.0		µg/L	1	5/8/2014 8:37:20 AM	R18468
Ethylbenzene	ND	1.0		µg/L	1	5/8/2014 8:37:20 AM	R18468
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	5/8/2014 8:37:20 AM	R18468
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	5/8/2014 8:37:20 AM	R18468
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	5/8/2014 8:37:20 AM	R18468
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	5/8/2014 8:37:20 AM	R18468
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	5/8/2014 8:37:20 AM	R18468
Naphthalene	ND	2.0		µg/L	1	5/8/2014 8:37:20 AM	R18468
1-Methylnaphthalene	ND	4.0		µg/L	1	5/8/2014 8:37:20 AM	R18468
2-Methylnaphthalene	ND	4.0		µg/L	1	5/8/2014 8:37:20 AM	R18468
Acetone	ND	10		µg/L	1	5/8/2014 8:37:20 AM	R18468
Bromobenzene	ND	1.0		µg/L	1	5/8/2014 8:37:20 AM	R18468
Bromodichloromethane	ND	1.0		µg/L	1	5/8/2014 8:37:20 AM	R18468
Bromoform	ND	1.0		µg/L	1	5/8/2014 8:37:20 AM	R18468
Bromomethane	ND	3.0		µg/L	1	5/8/2014 8:37:20 AM	R18468
2-Butanone	ND	10		µg/L	1	5/8/2014 8:37:20 AM	R18468
Carbon disulfide	ND	10		µg/L	1	5/8/2014 8:37:20 AM	R18468
Carbon Tetrachloride	ND	1.0		µg/L	1	5/8/2014 8:37:20 AM	R18468
Chlorobenzene	ND	1.0		µg/L	1	5/8/2014 8:37:20 AM	R18468
Chloroethane	ND	2.0		µg/L	1	5/8/2014 8:37:20 AM	R18468
Chloroform	ND	1.0		µg/L	1	5/8/2014 8:37:20 AM	R18468
Chloromethane	ND	3.0		µg/L	1	5/8/2014 8:37:20 AM	R18468
2-Chlorotoluene	ND	1.0		µg/L	1	5/8/2014 8:37:20 AM	R18468
4-Chlorotoluene	ND	1.0		µg/L	1	5/8/2014 8:37:20 AM	R18468
cis-1,2-DCE	ND	1.0		µg/L	1	5/8/2014 8:37:20 AM	R18468
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	5/8/2014 8:37:20 AM	R18468
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	5/8/2014 8:37:20 AM	R18468
Dibromochloromethane	ND	1.0		µg/L	1	5/8/2014 8:37:20 AM	R18468
Dibromomethane	ND	1.0		µg/L	1	5/8/2014 8:37:20 AM	R18468
1,2-Dichlorobenzene	ND	1.0		µg/L	1	5/8/2014 8:37:20 AM	R18468
1,3-Dichlorobenzene	ND	1.0		µg/L	1	5/8/2014 8:37:20 AM	R18468
1,4-Dichlorobenzene	ND	1.0		µg/L	1	5/8/2014 8:37:20 AM	R18468
Dichlorodifluoromethane	ND	1.0		µg/L	1	5/8/2014 8:37:20 AM	R18468
1,1-Dichloroethane	ND	1.0		µg/L	1	5/8/2014 8:37:20 AM	R18468
1,1-Dichloroethene	ND	1.0		µg/L	1	5/8/2014 8:37:20 AM	R18468
1,2-Dichloropropane	ND	1.0		µg/L	1	5/8/2014 8:37:20 AM	R18468
1,3-Dichloropropane	ND	1.0		µg/L	1	5/8/2014 8:37:20 AM	R18468
2,2-Dichloropropane	ND	2.0		µg/L	1	5/8/2014 8:37:20 AM	R18468

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
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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Atex 213
Lab ID: 1405097-015

Client Sample ID: Trip Blank
Collection Date:
Matrix: TRIP BLANK
Received Date: 5/2/2014 3:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
1,1-Dichloropropene	ND	1.0		µg/L	1	5/8/2014 8:37:20 AM	R18468
Hexachlorobutadiene	ND	1.0		µg/L	1	5/8/2014 8:37:20 AM	R18468
2-Hexanone	ND	10		µg/L	1	5/8/2014 8:37:20 AM	R18468
Isopropylbenzene	ND	1.0		µg/L	1	5/8/2014 8:37:20 AM	R18468
4-Isopropyltoluene	ND	1.0		µg/L	1	5/8/2014 8:37:20 AM	R18468
4-Methyl-2-pentanone	ND	10		µg/L	1	5/8/2014 8:37:20 AM	R18468
Methylene Chloride	ND	3.0		µg/L	1	5/8/2014 8:37:20 AM	R18468
n-Butylbenzene	ND	3.0		µg/L	1	5/8/2014 8:37:20 AM	R18468
n-Propylbenzene	ND	1.0		µg/L	1	5/8/2014 8:37:20 AM	R18468
sec-Butylbenzene	ND	1.0		µg/L	1	5/8/2014 8:37:20 AM	R18468
Styrene	ND	1.0		µg/L	1	5/8/2014 8:37:20 AM	R18468
tert-Butylbenzene	ND	1.0		µg/L	1	5/8/2014 8:37:20 AM	R18468
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	5/8/2014 8:37:20 AM	R18468
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	5/8/2014 8:37:20 AM	R18468
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	5/8/2014 8:37:20 AM	R18468
trans-1,2-DCE	ND	1.0		µg/L	1	5/8/2014 8:37:20 AM	R18468
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	5/8/2014 8:37:20 AM	R18468
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	5/8/2014 8:37:20 AM	R18468
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	5/8/2014 8:37:20 AM	R18468
1,1,1-Trichloroethane	ND	1.0		µg/L	1	5/8/2014 8:37:20 AM	R18468
1,1,2-Trichloroethane	ND	1.0		µg/L	1	5/8/2014 8:37:20 AM	R18468
Trichloroethene (TCE)	ND	1.0		µg/L	1	5/8/2014 8:37:20 AM	R18468
Trichlorofluoromethane	ND	1.0		µg/L	1	5/8/2014 8:37:20 AM	R18468
1,2,3-Trichloropropane	ND	2.0		µg/L	1	5/8/2014 8:37:20 AM	R18468
Vinyl chloride	ND	1.0		µg/L	1	5/8/2014 8:37:20 AM	R18468
Xylenes, Total	ND	1.5		µg/L	1	5/8/2014 8:37:20 AM	R18468
Surr: 1,2-Dichloroethane-d4	89.7	70-130		%REC	1	5/8/2014 8:37:20 AM	R18468
Surr: 4-Bromofluorobenzene	88.7	70-130		%REC	1	5/8/2014 8:37:20 AM	R18468
Surr: Dibromofluoromethane	96.4	70-130		%REC	1	5/8/2014 8:37:20 AM	R18468
Surr: Toluene-d8	88.8	70-130		%REC	1	5/8/2014 8:37:20 AM	R18468

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
E	Value above quantitation range
J	Analyte detected below quantitation limits
O	RSD is greater than RSDlimit
R	RPD outside accepted recovery limits
S	Spike Recovery outside accepted recovery limits
B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2.
RL	Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1405097**

14-May-14

Client: EA Engineering

Project: Atex 213

Sample ID **MB-12995**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **12995**	RunNo: **18374**
Prep Date: **5/5/2014**	Analysis Date: **5/5/2014**	SeqNo: **530743** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	8.2		10.00		81.9	57.9	140			

Sample ID **LCS-12995**	SampType: **LCS**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **12995**	RunNo: **18374**
Prep Date: **5/5/2014**	Analysis Date: **5/5/2014**	SeqNo: **530744** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	44	10	50.00	0	88.0	60.8	145			
Surr: DNOP	3.9		5.000		78.0	57.9	140			

Sample ID **1405097-001AMS**	SampType: **MS**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **IDW-Atez 213**	Batch ID: **12995**	RunNo: **18405**
Prep Date: **5/5/2014**	Analysis Date: **5/6/2014**	SeqNo: **531853** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	68	10	50.00	20.90	95.2	40.1	152			
Surr: DNOP	5.3		5.000		107	57.9	140			

Sample ID **1405097-001AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **IDW-Atez 213**	Batch ID: **12995**	RunNo: **18405**
Prep Date: **5/5/2014**	Analysis Date: **5/6/2014**	SeqNo: **531854** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	61	10	50.00	20.90	80.0	40.1	152	11.7	32.1	
Surr: DNOP	5.2		5.000		104	57.9	140	0	0	

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- B Analyte detected in the associated Method Blank
- 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
- O RSD is greater than RSDlimit
- P Sample pH greater than 2.
- R RPD outside accepted recovery limits
- RL Reporting Detection Limit
- S Spike Recovery outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1405097**

14-May-14

Client: EA Engineering
Project: Atex 213

Sample ID **MB-12999**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **12999**	RunNo: **18443**
Prep Date: **5/5/2014**	Analysis Date: **5/6/2014**	SeqNo: **532566** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	880		1000		88.4	74.5	129			

Sample ID **LCS-12999**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **12999**	RunNo: **18443**
Prep Date: **5/5/2014**	Analysis Date: **5/6/2014**	SeqNo: **532567** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	91.0	71.7	134			
Surr: BFB	990		1000		98.5	74.5	129			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2.
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1405097**

14-May-14

Client: EA Engineering

Project: Atex 213

Sample ID **MB-12999**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **12999**	RunNo: **18443**
Prep Date: **5/5/2014**	Analysis Date: **5/6/2014**	SeqNo: **532595** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	ND	0.10								
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.0		1.000		105	80	120			

Sample ID **LCS-12999**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **12999**	RunNo: **18443**
Prep Date: **5/5/2014**	Analysis Date: **5/6/2014**	SeqNo: **532596** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	1.3	0.10	1.000	0	125	64.5	131			
Benzene	1.1	0.050	1.000	0	114	80	120			
Toluene	1.1	0.050	1.000	0	107	80	120			
Ethylbenzene	1.1	0.050	1.000	0	107	80	120			
Xylenes, Total	3.1	0.10	3.000	0	105	80	120			
Surr: 4-Bromofluorobenzene	1.1		1.000		113	80	120			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2.
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1405097**

14-May-14

Client: EA Engineering

Project: Atex 213

Sample ID **5mL-rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW**	Batch ID: **R18468**	RunNo: **18468**
Prep Date:	Analysis Date: **5/7/2014**	SeqNo: **533266** 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.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2.
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1405097**

14-May-14

Client: EA Engineering
Project: Atex 213

Sample ID **5mL-rb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R18468** RunNo: **18468**
Prep Date: Analysis Date: **5/7/2014** SeqNo: **533266** 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	8.7		10.00		87.4	70	130			
Surr: 4-Bromofluorobenzene	9.1		10.00		90.9	70	130			
Surr: Dibromofluoromethane	9.1		10.00		91.3	70	130			
Surr: Toluene-d8	8.9		10.00		89.2	70	130			

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R18468** RunNo: **18468**
Prep Date: Analysis Date: **5/7/2014** SeqNo: **533268** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	102	70	130			
Toluene	19	1.0	20.00	0	95.1	80	120			
Chlorobenzene	18	1.0	20.00	0	90.2	70	130			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2.
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1405097**

14-May-14

Client: EA Engineering
Project: Atex 213

Sample ID **100ng lcs**	SampType: **LCS**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW**	Batch ID: **R18468**	RunNo: **18468**
Prep Date:	Analysis Date: **5/7/2014**	SeqNo: **533268** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene	25	1.0	20.00	0	126	90	143			
Trichloroethene (TCE)	19	1.0	20.00	0	94.9	70	130			
Surr: 1,2-Dichloroethane-d4	9.0		10.00		90.2	70	130			
Surr: 4-Bromofluorobenzene	9.0		10.00		90.5	70	130			
Surr: Dibromofluoromethane	9.3		10.00		93.4	70	130			
Surr: Toluene-d8	8.7		10.00		86.8	70	130			

Sample ID **1405097-014a ms**	SampType: **MS**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **W-36**	Batch ID: **R18468**	RunNo: **18468**
Prep Date:	Analysis Date: **5/8/2014**	SeqNo: **533290** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	12	1.0	20.00	0	60.2	70	130			S
Toluene	11	1.0	20.00	0.1994	55.1	67.5	123			S
Chlorobenzene	10	1.0	20.00	0	52.5	70	130			S
1,1-Dichloroethene	14	1.0	20.00	0	67.9	81.9	134			S
Trichloroethene (TCE)	11	1.0	20.00	0	55.5	70	130			S
Surr: 1,2-Dichloroethane-d4	9.3		10.00		93.0	70	130			
Surr: 4-Bromofluorobenzene	9.0		10.00		90.4	70	130			
Surr: Dibromofluoromethane	9.4		10.00		94.4	70	130			
Surr: Toluene-d8	8.8		10.00		88.1	70	130			

Sample ID **1405097-014a msd**	SampType: **MSD**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **W-36**	Batch ID: **R18468**	RunNo: **18468**
Prep Date:	Analysis Date: **5/8/2014**	SeqNo: **533291** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	14	1.0	20.00	0	68.3	70	130	12.6	20	S
Toluene	12	1.0	20.00	0.1994	60.3	67.5	123	8.93	20	S
Chlorobenzene	12	1.0	20.00	0	57.6	70	130	9.29	20	S
1,1-Dichloroethene	15	1.0	20.00	0	76.5	81.9	134	12.0	20	S
Trichloroethene (TCE)	12	1.0	20.00	0	59.8	70	130	7.34	20	S
Surr: 1,2-Dichloroethane-d4	9.0		10.00		90.0	70	130	0	0	
Surr: 4-Bromofluorobenzene	8.9		10.00		89.2	70	130	0	0	
Surr: Dibromofluoromethane	9.7		10.00		96.8	70	130	0	0	
Surr: Toluene-d8	8.7		10.00		87.0	70	130	0	0	

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2.
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1405097**

14-May-14

Client: EA Engineering

Project: Atex 213

Sample ID	**MB-13099**	SampType:	**MBLK**		TestCode:	**EPA Method 6010B: Soil Metals**				
Client ID:	**PBS**	Batch ID:	**13099**		RunNo:	**18564**				
Prep Date:	**5/9/2014**	Analysis Date:	**5/13/2014**		SeqNo:	**536217**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	ND	0.25								

Sample ID	**LCS-13099**	SampType:	**LCS**		TestCode:	**EPA Method 6010B: Soil Metals**				
Client ID:	**LCSS**	Batch ID:	**13099**		RunNo:	**18564**				
Prep Date:	**5/9/2014**	Analysis Date:	**5/13/2014**		SeqNo:	**536245**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	25	0.25	25.00	0	99.4	80	120			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2.
- RL Reporting Detection Limit

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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: 1405097 RcptNo: 1

Received by/date: 05/02/14

Logged By: Lindsay Mangin 5/2/2014 3:15:00 PM

Completed By: Lindsay Mangin 5/2/2014 3:26:36 PM

Reviewed By: CS 05/05/14

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 ☐
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 ☑	# of preserved bottles checked for pH: (<2 or >12 unless noted)
12. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	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.)	Yes ☑	No	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: ☐ eMail ☐ Phone ☐ Fax ☐ 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	5.5	Good	Not Present			

Chain-of-Custody Record

Client: EA Engineering

Mailing Address: 320 Gold Ave, Ste 1210 ABQ, NM 87102

Phone #: 505-224-9013

email or Fax#: 505-224-9016

QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)

Accreditation
☐ NELAP ☐ Other _____

☐ EDD (Type) _____

Turn-Around Time:
☒ Standard ☐ Rush _____

Project Name: Alex 213

Project #: 12145-2.0

Project Manager: Gary Dosselle

Sampler: Lane Andress

On Ice: ☒ Yes ☐ No

Sample Temperature: 5.5

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1405097	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	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)	Lead EPA 6010				Air Bubbles (Y or N)
5/30/14	1438	Soil	IDW-Alex 213	4oz Jar (1)	NONE	-001	X		X									X				
6/1/14	~~1552~~ 1440	Aq	MW-1R	(3) VOA	HgCl2	-002										X						
6/1/14	1326		MW-2			-003																
6/1/14	1452		MW-3			-004																
6/1/14	~~1638~~ 1642		MW4R			-005																
6/1/14	~~1620~~ 1625 1455		MW-6R			-006																
6/1/14	~~1424~~ 1438 1515		MW-38			-007																
6/1/14	~~1005~~ 1515		BB-2			-008																
6/2/14	~~1234~~ 1252		NMW-1			-009																
6/2/14	~~1130~~ 1142		RNMW-2			-010																
6/2/14	~~1202~~ 1212		RNMW-3			-011																
6/2/14	~~1658~~ 1702		NMW-4R			-012																

Date:	Time:	Relinquished by:	Received by:	Date	Time
6/2/14	1515			06/02/14	1515
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks: 1 of 2

06/05/14

ALL THE CORRECTIONS PER LANE

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 notated on the analytical report.

Chain-of-Custody Record

Client: EA Engineering
320 Gold Ave Ste 1210
Mailing Address: ABQ, NM 87102

Phone #: 224-9013
email or Fax#: 224-9016

QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)

Accreditation
☐ NELAP ☐ Other _____
☐ EDD (Type) _____

Turn-Around Time:
☒ Standard ☐ Rush _____

Project Name: Afex 2/3
Project #: ~~PO #~~ 12145-2.0

Project Manager: Gary Desselle

Sampler: Lane Andress
On Ice: ☒ Yes ☐ No
Sample Temperature: 5.5

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	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)
5/2/14	~~1710~~ 1525	Aq	W-35	(3) VOA	$HgCl_2$	1405097-013										X		
5/2/14	~~1056~~ 1111	Aq	W-36	"	"	-014										X		
			TRIP BLANK	2 VOA	$HgCl_2$	-015										K		

05/05/14

Date	Time	Relinquished by:	Received by:	Date	Time
5/2/14 ~~1615~~	1515				
Date:	Time:	Relinquished by:	Received by:	05/02/14 Date	1515 Time

Remarks:
05/05/14 2 of 2
ALL TIME CORRECTIONS PER LANE

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 notated on the analytical report.