



EA Engineering, Science, & Technology, Inc., PBC
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December 27, 2016

Ms. Susan von Gonten
New Mexico Environment Department
Petroleum Storage Tank Bureau
2905 Rodeo Park Drive East, Building 1
Santa Fe, New Mexico 87505

Dear Ms. von Gonten:

EA Engineering, Science, and Technology, Inc., PBC (EA) is submitting the Groundwater Monitoring, Plume Delineation, and NAPL Recovery Report for the Fairview Station Site located at 1626 North Riverside Drive, Espanola, Rio Arriba County, New Mexico (Site). The report summarizes the groundwater monitoring and non-aqueous phase liquid (NAPL) recovery activities conducted to fulfill requirements stated in the New Mexico Administrative Code, Title 20, Chapter 5, Part 12, and the New Mexico Environment Department Petroleum Storage Tank Bureau (PSTB) Guidelines for Corrective Action.

The total approved scope of work was not completed. Wells MW-12, MW-15, and MW-18 were scheduled for groundwater sampling; however, access was not granted for well MW-12, and wells MW-15 and MW-18 contained NAPL; therefore, groundwater in these three wells was not sampled. Costs will be discounted for two groundwater samples (\$120.00 each). The new total is \$5,837.80 including NMGRT.

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

Sincerely,

Teri McMillan
Project Manager

Jay Snyder
Senior Hydrogeologist

Enclosure

Cc: Ms. Lucille Roybal, P.E.
File – EA Engineering, Science, and Technology, Inc., PBC



**GROUNDWATER MONITORING,
& NAPL RECOVERY REPORT
FAIRVIEW STATION
PSTB FACILITY #28779
1626 NORTH RIVERSIDE DRIVE
ESPAÑOLA, NEW MEXICO**

Prepared by:

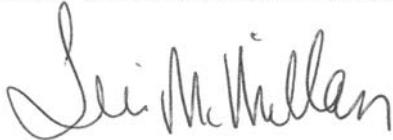
EA Engineering, Science,
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320 Gold Avenue SW, Suite 1300
Albuquerque, New Mexico 87102

December 2016

EA Project No. 6289821 04

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: Teri McMillan

Affiliation: EA Engineering, Science, and Technology, Inc., PBC

Title: Senior Geologist

Date: December 27, 2016

I. INTRODUCTION

EA Engineering, Science, and Technology, Inc., PBC (EA) has completed the groundwater monitoring and NAPL recovery event at Fairview Station (Site) located in Espanola, New Mexico. The groundwater monitoring and NAPL recovery event was completed under state-lead contract #14-667-2000-0030 and in accordance with the *Work Plan for, Access, Groundwater Monitoring, Plume Delineation, and NAPL Recovery, Fairview Station, Espanola, New Mexico* prepared by EA to satisfy the requirements stated in the New Mexico Administrative Code, Title 20, Chapter 5, Section 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 May 17, 2016 under work plan identification number (WPID# 3862). This is the fourth deliverable under WPID #3862-4.

The Site is located at 1626 North Riverside Drive, Espanola, New Mexico (Figure 1). The site operated as a gasoline service station from the 1970s until the underground storage tanks (USTs) were removed in July 2012. The Site was temporarily closed from December 1988 to August 1989 due to a UST system replacement. After the original UST system was removed in December 1988, no release was reported. In July 2012, three USTs, associated piping, and dispensers were removed; field observations indicated a release had occurred. On August 6, 2012, the NMED issued a confirmed release letter to the property owner, Mr. José C. Roybal. Since then, field activities have been conducted including the installation of 21 groundwater monitoring wells, groundwater sampling, and NAPL recovery. On April 28, 2015, NMED designated the Site as State Lead Status. The Site is located south of a second possible release site which currently is occupied by a Dairy Queen, and the NAPL and dissolved phase plumes may be comingled.

During this monitoring event the following was completed:

- Groundwater samples were collected from nine monitoring wells (MW-4, MW-5, MW-7, MW-13, MW-16, MW-17, MW-19, MW-20, and MW-21).
- NAPL was hand bailed from well MW-8.
- Passive skimmers were emptied in wells MW-1, MW-2, and MW-3. The remaining NAPL in the wells was hand bailed before reinstalling the skimmers.
- Absorbent socks were replaced in wells MW-6, MW-9, MW-10, MW-11, MW-14, MW-15, and MW-18 after hand bailing NAPL.

This report summarizes the results of the groundwater monitoring and NAPL recovery event.

II. ACTIVITIES PERFORMED DURING THIS EVENT

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

A. Brief Description of Remediation System and Date Installed

A summary of recent corrective action activities conducted at the Site follows:

- July 2012, UST system removed from Site;
- August 6, 2012, confirmed release letter issued;
- March 12, 2013, Terracon submitted Minimum Site Assessment (MSA) Report to NMED;
- December 23, 2013, Terracon submitted Addendum MSA Report to NMED;
- October 13, 2014, Terracon submitted a second Addendum MSA Report to NMED;
- January 19, 2015, Terracon submitted Groundwater Monitoring Report to NMED;
- April 28, 2015, NMED designated the Site as State Lead Status;
- October 13, 2015, NMED approves EA's work plan to conduct groundwater monitoring and NAPL recovery;
- January 2016, EA conducted groundwater monitoring and NAPL recovery at the Site;
- July 2016, EA installed seven additional monitoring wells, conducted groundwater monitoring and NAPL recovery;
- Currently, EA is conducting groundwater monitoring and NAPL recovery at the Site.

B. Description of Activities Performed to Keep System Operating Properly

Currently, no active remediation activities are taking place at the site.

C. Monitoring Activities Performed

Gauging

On November 3, 2016, an EA representative gauged fluid levels in all installed and existing site wells (excepting MW-12) with an electronic water level meter or interface probe. On December 21, 2016, the wells that did not contain product were re-gauged. A potentiometric surface map was constructed based on the data collected (Figure 2). Results of the gauging as

well as historical data are summarized in Table 2. Field forms and notes are provided in Appendix B.

Monitoring Well Sampling Activities

On November 3, wells MW-4, MW-5, MW-7, MW-13, MW-16, MW-17, MW-19, MW-20, and MW-21 were purged and then sampled using disposable bailers. Three wells (MW-12, MW-15, and MW-18) were scheduled to be sampled; however, access was not granted for MW-12 and the other wells contained NAPL. Wells were sampled from clean to dirty to the extent possible to minimize cross-contamination. All equipment was decontaminated between wells with an Alconox™ solution to further 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 new disposable bailers into the sample containers

EA measured field parameters, specific conductance, pH and temperature, with an Oakton PC 300 water quality meter during purging and prior to sampling. DO was measured from the first bailer retrieved using a YSI Pro DO meter. DO, specific conductance, pH and temperature were 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. Monitoring well sampling field forms are provided in Appendix B.

Sample containers, preservatives, analytical methods, and holding times are specified in Table 1. Samples for VOC analysis were collected such that no headspace existed in the sample vial. All samples were preserved in accordance with method requirements, then immediately cooled to less than 6°C with ice and delivered under chain-of-custody to Hall Environmental Analysis Laboratory in Albuquerque, New Mexico. The analytical laboratory report is provided in Appendix A.

NAPL

On November 3, 2016, NAPL was observed in wells MW-1, MW-2, MW-3, MW-6, MW-8, MW-9, MW-10, MW-11, MW-14, MW-15, and MW-18. In well MW-8, 5.21 feet of NAPL was measured. NAPL was hand bailed from well MW-18 for 30 minutes. Wells MW-1, MW-2 and MW-3 contained skimmers. The skimmers were emptied and any remaining NAPL present in the well was hand bailed until less than 1/8-inch of NAPL remained. The skimmers were then reinstalled in the wells. Wells MW-6, MW-9, MW-10, MW-11, MW-14 MW-15 and MW-18 contained absorbent socks. The socks were removed from the wells and the amount of NAPL staining on the sock was recorded. The remaining NAPL if any present in the wells were hand bailed until less than 1/8-inch remained. All recovered NAPL during this event was place in a 55 gallon steel drum that is located behind the building and secured to a pole with a chain. All used absorbent socks were transported to the Fina Truck Stop Site in Albuquerque, New Mexico to await disposal. The total NAPL recovered during this quarter (July to November 2016) has been approximately 137 gallons. NAPL recovery is summarized in Table 3.

Groundwater Sampling Results

Dissolved phase hydrocarbon concentrations exceeded New Mexico Water Quality Control Commission (NMWQCC) and/or New Mexico Environmental Improvement Board (NMEIB) standards in all monitoring wells sampled except wells MW-17, MW-20, and MW-21. Wells MW-17, MW-20, and MW-21 were below method detection limits for all contaminants of concern. Well MW-4 had detectable concentrations of hydrocarbons, but was below NMWQCC standards. Wells MW-5, MW-7, MW-13, MW-16, and MW-19 exceeded the NMWQCC standard with respect to benzene with concentrations ranging from 12,000 µg/L in well MW-5 to 20 µg/L in well MW-19. Wells MW-5 and MW-7 exceeded the NMEIB standard with respect to MTBE with concentrations of 2,200 µg/L and 3,400 µg/L, respectively. Wells MW-5, MW-7, MW-13, and MW-16 exceeded the NMWQCC standard with respect to naphthalenes with concentrations ranging from 230 µg/L in well MW-5 to 59 µg/L in well MW-13. Well MW-17 also exceeded the NMWQCC standard with respect to EDC with concentrations of 28 µg/L. The laboratory analytical results for select organic compounds are summarized in Table 4, and field parameters are summarized in Table 5. Distribution of organic contaminants in groundwater is presented in Figure 3.

D. System Performance and Effectiveness

Currently, no system is installed at the site.

E. Statement Verifying Containment of Release

The dissolved phase hydrocarbon plume and the NAPL plume are not defined. The dissolved phase contaminant plume is not defined north, southwest, south, or southeast of the Site. The extent of the NAPL plume is not defined to the southwest of well MW-15 and may be present in the utility corridor along the east side of North Riverside Drive.

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 overall direction of groundwater flow is to the east-southeast at a gradient of 0.004 foot per foot. A Potentiometric Surface Map is presented in Figure 2 and hydrographs for monitoring wells are provided in Appendix C.

NAPL remains persistent at the site with approximately 137 gallons recovered since July 2016. NAPL is currently present in 11 wells at the Site.

Five of the nine wells sampled at the site contain hydrocarbon concentrations above the NMWQCC and NMEIB standards. Benzene concentrations increased in wells MW-7 and MW-16 from 4,800 µg/L in July 2016 to 7,000 µg/L during this event and from 67 µg/L in July 2016 to 73 µg/L this event, respectively. Benzene concentration decreased slightly or remained the same in the other wells sampled. MTBE concentrations increased slightly in wells MW-7, MW-13 and MW-16 when compared to the previous sampling event in July 2016. Total naphthalene concentrations decreased or remained the same in all wells sampled this event. Figure 3 presents the distribution of groundwater contamination. Concentration trends are presented in Appendix D.

Field parameters measurement are provided in Table 5. Field parameters appear to be fairly consistent with previous sampling events.

B. Ongoing Assessment of Remediation System

No active remediation system is operating at the Site.

C. Recommendations

Based on the results of the groundwater monitoring, the following recommendation is provided:

- Continue to conduct discretionary NAPL recovery events consisting of emptying skimmers, removing absorbent socks, bailing NAPL, resetting skimmers, and replacing absorbent socks at the Site.
- Continue groundwater monitoring.
- Complete a passive soil gas survey to delineate the extend of NAPL.
- Install additional monitoring wells to delineate the extent of the dissolved phase plume.

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**TABLE 1. SUMMARY OF FLUID GAUGING DATA
FAIRVIEW STATION, ESPANOLA, NEW MEXICO**

Monitoring Well	Date Measured	Northing	Easting	Casing Elevation ¹	Passive NAPL Recovery Device	Depth to Product ¹	Product Thickness ²	Depth to Water ¹	Groundwater Elevation ²
MW-1	3-Nov-16	1825407.387	1695429.115	5621.88	SK	14.83	2.40	17.23	5606.45
	22-Jul-16				SK	15.61	2.45	18.06	5605.66
	14-Jul-16					14.45	4.70	19.15	5606.26
	19-Jan-16					13.84	3.93	17.77	5607.06
	9-Jan-15					14.20	3.49	17.69	5606.81
	10-Dec-14					15.51	3.20	18.71	5605.57
	3-Oct-14					14.81	0.04	14.85	5607.06
	26-Nov-13					13.82	1.08	14.90	5607.79
	12-Nov-13					15.37	0.46	15.83	5606.40
	29-Oct-13					13.36	1.89	15.25	5608.05
	10-Jul-13					14.21	0.24	14.45	5607.61
	27-Jun-13					14.43	0.37	14.80	5607.36
	3-Jun-13					13.92	0.28	14.20	5607.89
	27-Feb-13					14.06	0.34	14.40	5607.74
	4-Feb-13					NM	NM	NM	NM
	1-Feb-13					NM	NM	NM	NM
MW-2	3-Nov-16	1825384.848	1695384.788	5622.248	SK	15.23	2.52	17.75	5606.39
	22-Jul-16				SK	14.91	3.57	18.48	5606.45
	14-Jul-16					15.23	3.88	19.11	5606.05
	19-Jan-16					14.45	3.60	18.05	5606.90
	9-Jan-15					14.99	3.74	18.73	5606.32
	10-Dec-14					15.77	2.87	18.64	5605.76
	3-Oct-14					14.97	0.08	15.05	5607.26
	26-Nov-13					12.95	5.61	18.56	5607.90
	12-Nov-13					14.34	5.06	19.40	5606.64
	29-Oct-13					12.66	6.02	18.68	5608.08
	10-Jul-13					13.67	3.83	17.50	5607.62
	27-Jun-13					13.98	4.22	18.20	5607.21
	3-Jun-13					13.42	3.97	17.39	5607.84
	27-Feb-13					13.11	5.45	18.56	5607.78
	4-Feb-13					NM	NM	NM	NM
	1-Feb-13					NM	NM	NM	NM
MW-3	3-Nov-16	1825335.555	1695382.273	5622.241	SK	16.29	0.49	16.78	5605.83
	22-Jul-16				SK	14.60	6.48	21.08	5606.02
	14-Jul-16					14.23	7.95	22.18	5606.02
	19-Jan-16					12.69	5.91	18.60	5608.07
	9-Jan-15					13.72	6.90	20.62	5606.80
	10-Dec-14					14.75	7.51	22.26	5605.61
	3-Oct-14					13.96	2.95	16.91	5607.54
	26-Nov-13					13.02	6.00	19.02	5607.72
	12-Nov-13					13.19	7.43	20.62	5607.19
	29-Oct-13					12.50	6.96	19.46	5608.00
	10-Jul-13					13.70	3.98	17.68	5607.55
	27-Jun-13					13.88	4.45	18.33	5607.25
	3-Jun-13					13.46	4.11	17.57	5607.75
	27-Feb-13					13.80	2.89	16.69	5607.72
	4-Feb-13					NM	NM	NM	NM
	1-Feb-13					NM	NM	NM	NM

**TABLE 1. SUMMARY OF FLUID GAUGING DATA
FAIRVIEW STATION, ESPANOLA, NEW MEXICO**

Monitoring Well	Date Measured	Northing	Easting	Casing Elevation ¹	Passive NAPL Recovery Device	Depth to Product ¹	Product Thickness ²	Depth to Water ¹	Groundwater Elevation ²
MW-4	21-Dec-16	1825389.858	1695478.155	5622.812	NA	-	-	15.50	5607.31
	3-Nov-16					-	-	16.25	5606.56
	22-Jul-16					-	-	15.10	5607.71
	14-Jul-16					-	-	14.89	5607.92
	19-Jan-16					-	-	14.33	5608.48
	9-Jan-15					-	-	15.88	5606.93
	9-Dec-14					Lost Data			
	3-Oct-14					-	-	16.21	5606.60
	26-Nov-13					-	-	15.20	5607.61
	12-Nov-13					-	-	15.12	5607.69
	29-Oct-13					-	-	14.13	5608.68
MW-5	21-Dec-16	1825285.314	1695368.193	5621.609	NA	-	-	14.93	5606.68
	3-Nov-16					-	-	14.86	5606.75
	22-Jul-16					-	-	14.87	5606.74
	14-Jul-16					-	-	14.17	5607.44
	19-Jan-16					-	-	13.62	5607.99
	9-Jan-15					-	-	14.40	5607.21
	9-Dec-14					Lost Data			
	3-Oct-14					-	-	14.48	5607.13
	26-Nov-13					-	-	14.07	5607.54
	12-Nov-13					-	-	13.93	5607.68
	29-Oct-13					-	-	13.77	5607.84
MW-6	3-Nov-16	1825418.201	1695357.137	5622.01	AB	15.67	0.01	15.68	5606.34
	22-Jul-16					-	-	16.33	5605.68
	14-Jul-16					14.34	0.03	14.37	5607.64
	19-Jan-16				NA	14.99	0.04	15.03	5606.98
	9-Jan-15					15.58	0.04	15.62	5606.39
	10-Dec-14					16.20	0.34	16.54	5605.47
	3-Oct-14					15.60	0.05	15.65	5606.36
	26-Nov-13					14.31	0.02	14.33	5607.68
	12-Nov-13					14.39	0.01	14.40	5607.61
	29-Oct-13					-	-	13.97	5608.04
MW-7	21-Dec-16	1825370.518	1695355.899	5622.09	NA	-	-	15.13	5606.96
	3-Nov-16					-	-	15.77	5606.32
	22-Jul-16					-	-	16.09	5606.00
	14-Jul-16					-	-	14.52	5607.57
	19-Jan-16					-	-	14.00	5608.09
	9-Jan-15					-	-	15.25	5606.84
	10-Dec-14					Lost Data			
	3-Oct-14				NA	-	-	15.84	5606.25
	26-Nov-13					-	-	14.50	5607.59
	12-Nov-13					-	-	14.62	5607.47
	29-Oct-13					-	-	14.17	5607.92
MW-8	3-Nov-16	1825453.301	1695402.237	5623.10	NA	15.33	5.21	20.54	5606.47
	22-Jul-16					15.98	6.72	22.70	5605.44
	14-Jul-16					15.15	6.31	21.46	5606.38
	19-Jan-16				NA	14.34	4.44	18.78	5607.65
	9-Jan-15					15.00	6.45	21.45	5606.49
	10-Dec-14					15.27	6.51	21.78	5606.21
	3-Oct-14					14.95	2.57	17.52	5607.51
	26-Nov-13					14.05	4.25	18.30	5607.99
	12-Nov-13					14.49	6.54	21.03	5606.98
	29-Oct-13					13.80	3.55	17.35	5608.42

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Monitoring Well	Date Measured	Northing	Easting	Casing Elevation ¹	Passive NAPL Recovery Device	Depth to Product ¹	Product Thickness ²	Depth to Water ¹	Groundwater Elevation ²
MW-9	3-Nov-16	1825527.039	1695376.368	5623.105	AB	16.09	0.01	16.10	5607.01
	22-Jul-16				AB	16.92	0.52	17.44	5606.06
	14-Jul-16				NA	15.13	0.63	15.76	5607.82
	19-Jan-16					14.65	0.63	15.28	5608.30
	9-Jan-15					-	-	16.46	5606.65
	10-Dec-14					-	-	17.15	5605.96
	3-Oct-14					-	-	16.69	5606.42
MW-10	3-Nov-16	1825456.216	1695363.611	5623.073	AB	16.23	0.01	16.24	5606.84
	22-Jul-16				AB	-	-	17.22	5605.85
	14-Jul-16				NA	15.37	0.01	15.38	5607.69
	19-Jan-16					Sheen	-	14.89	5608.18
	9-Jan-15					-	-	16.28	5606.79
	9-Dec-14					Lost Data			
	3-Oct-14					-	-	16.78	5606.29
MW-11	3-Nov-16	1825451.121	1695456.836	5623.36	AB	16.85	1.21	18.06	5606.21
	22-Jul-16				SK	17.20	1.50	18.70	5605.79
	14-Jul-16				NA	16.01	3.09	19.10	5606.58
	19-Jan-16					15.47	3.66	19.13	5606.98
	9-Jan-15					15.89	3.36	19.25	5606.63
	10-Dec-14					16.52	3.63	20.15	5605.94
	3-Oct-14					15.55	0.16	15.71	5607.77
MW-12	21-Dec-16	1825373.895	1695248.568	5622.05	NA	-	-	NM	NM
	3-Nov-16					-	-	NM	NM
	22-Jul-16					-	-	NM	NM
	14-Jul-16					-	-	NM	NM
	19-Jan-16					-	-	NM	NM
	9-Jan-15					-	-	15.21	5606.84
	9-Dec-14					-	-	15.94	5606.11
	3-Oct-14					-	-	15.52	5606.53
MW-13	21-Dec-16	1825203.294	1695365.307	5621.52	NA	-	-	14.87	5606.65
	3-Nov-16					-	-	14.57	5606.95
	22-Jul-16					-	-	14.46	5607.06
	14-Jul-16					-	-	14.24	5607.28
	19-Jan-16					-	-	NM	NM
	9-Jan-15					-	-	14.76	5606.76
	9-Dec-14					Lost Data			
	3-Oct-14					-	-	14.81	5606.71
MW-14	3-Nov-16	1825595.649	1695371.248	5622.97	AB	15.90	0.10	16.00	5607.04
	22-Jul-16				AB	16.68	0.38	17.06	5606.19
	14-Jul-16				NA	15.23	0.47	15.70	5607.62
	19-Jan-16					14.40	0.79	15.19	5608.37
	9-Jan-15					15.96	0.49	16.45	5606.88
	10-Dec-14					16.38	2.19	18.57	5606.04
	3-Oct-14					15.76	0.29	16.05	5607.13
MW-15	3-Nov-16	1825307.763	1695360.233	5622.104	AB	15.64	0.01	15.65	5606.46
	22-Jul-16				NA	15.11	3.44	18.55	5606.13
	14-Jul-16					14.35	1.59	15.94	5607.36
MW-16	21-Dec-16	1825306.899	1695428.889	5622.15	NA	-	-	15.17	5606.98
	3-Nov-16					-	-	15.35	5606.80
	22-Jul-16					-	-	15.36	5606.79
	14-Jul-16					-	-	14.54	5607.61

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FAIRVIEW STATION, ESPANOLA, NEW MEXICO**

Monitoring Well	Date Measured	Northing	Easting	Casing Elevation ¹	Passive NAPL Recovery Device	Depth to Product ¹	Product Thickness ²	Depth to Water ¹	Groundwater Elevation ²
MW-17	21-Dec-16	1825469.015	1695521.707	5623.46	NA	-	-	15.84	5607.62
	3-Nov-16					-	-	16.37	5607.09
	22-Jul-16					-	-	16.58	5606.88
	14-Jul-16					-	-	15.20	5608.26
MW-18	3-Nov-16	1825597.296	1695477.297	5623.49	AB	16.10	0.01	16.11	5607.38
	22-Jul-16				NA	16.58	0.01	16.59	5606.90
	14-Jul-16					-	-	15.36	5608.13
MW-19	21-Dec-16	1825621.077	1695402.206	5623.58	NA	-	-	16.17	5607.41
	3-Nov-16					-	-	15.94	5607.64
	22-Jul-16					-	-	16.84	5606.74
	14-Jul-16					-	-	15.80	5607.78
MW-20	21-Dec-16	1825556.586	1695251.168	5623.18	NA	-	-	15.56	5607.62
	3-Nov-16					-	-	15.00	5608.18
	22-Jul-16					-	-	15.31	5607.87
	14-Jul-16					-	-	15.29	5607.89
MW-21	21-Dec-16	1825454.854	1695221.648	5622.16	NA	-	-	15.68	5606.48
	3-Nov-16					-	-	15.59	5606.57
	22-Jul-16					-	-	15.36	5606.80
	14-Jul-16					-	-	15.47	5606.69

NOTES:

¹ Measured in feet below the top of the casing

² Measured in feet

³ Data collected before December 2011 was not collected by an EA representative.

RED = Indicates measurement taken after skimmer or sock removed; measurement not representative

AB = Aborbent sock installed

SK = Skimmerinstalled

NAPL = Nonaqueous phase liquid

NA = Not applicable

NM = Not measured

**TABLE 2. SAMPLE ANALYTICAL AND QUALITY CONTROL REQUIREMENTS
FAIRVIEW STATION, ESPANOLA, 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
NOTES:					
<6°C = Less than 6 degrees Celsius					
EPA = U.S. Environmental Protection Agency					
VOCs = Volatile organic compounds + naphthalenes					

**TABLE 3. SUMMARY OF NAPL RECOVERY
FAIRVIEW STATION, ESPANOLA, NEW MEXICO**

Monitor Well	Date Recovered	NAPL Thickness Prior to Bailing ¹	NAPL Thickness After Bailing ¹	Total NAPL Recovered ²	Comments
MW-1	3-Nov-16	2.40	0.10	1.50	skimmer 1/2 full
	21-Oct-16	1.12	0.27	0.75	skimmer 1/2 full
	6-Oct-16	2.34	0.01	1.25	skimmer 1/2 full
	22-Sep-16	0.83	0.11	0.75	skimmer 1/2 full
	15-Sep-16	3.68	0.01	1.50	skimmer 1/2 full
	31-Aug-16	4.48	0.05	3.00	skimmer 1/2 full
	18-Aug-16	4.80	0.75	3.50	skimmer 1/2 full
	11-Aug-16	4.75	0.80	4.00	skimmer 1/2 full
	4-Aug-16	4.87	0.94	5.00	skimmer 1/2 full
	28-Jul-16	4.55	0.16	3.00	skimmer 1/2 full
	22-Jul-16	2.45	1.55	3.25	skimmer 1/2 full
	14-Jul-16	4.70	0.01	3.25	set skimmer
	19-Jan-16	3.93	1.21	4.50	
	9-Jan-15	3.49	NM	NM	
	10-Dec-14	3.20	NM	NM	
	3-Oct-14	0.04	NM	0.00	
	26-Nov-13	1.08	NM	0.30	
	12-Nov-13	0.46	NM	0.30	
	29-Oct-13	1.89	NM	1.50	
	10-Jul-13	0.24	NM	0.00	
	27-Jun-13	0.37	NM	0.10	
	3-Jun-13	0.28	NM	0.50	
	27-Feb-13	0.34	NM	0.00	
	4-Feb-13	NM	NM	0.00	
	1-Feb-13	NM	NM	0.00	
MW-2	3-Nov-16	2.52	0.15	2.00	skimmer full
	21-Oct-16	2.94	0.01	2.25	skimmer 1/2 full
	6-Oct-16	4.30	0.20	2.50	skimmer full
	22-Sep-16	3.88	0.26	2.25	skimmer full
	15-Sep-16	5.30	0.24	3.00	skimmer full
	31-Aug-16	5.36	0.26	2.50	skimmer full
	18-Aug-16	3.07	0.38	3.00	skimmer full
	11-Aug-16	3.41	0.27	3.00	skimmer full
	4-Aug-16	3.00	0.36	3.00	skimmer full
	28-Jul-16	3.59	0.18	2.25	skimmer full
	22-Jul-16	3.57	0.06	2.50	skimmer full
	14-Jul-16	3.88	0.01	2.75	set skimmer
	19-Jan-16	3.60	0.85	3.75	
	9-Jan-15	3.74	NM	NM	
	10-Dec-14	2.87	NM	NM	
	3-Oct-14	0.08	NM	0.00	
	26-Nov-13	5.61	NM	3.00	
	12-Nov-13	5.06	NM	2.80	
	29-Oct-13	6.02	NM	3.50	
	10-Jul-13	3.83	NM	2.50	
	27-Jun-13	4.22	NM	3.00	
	3-Jun-13	3.97	NM	4.50	
	27-Feb-13	5.45	NM	0.00	
	4-Feb-13	NM	NM	5.00	
	1-Feb-13	NM	NM	4.50	

**TABLE 3. SUMMARY OF NAPL RECOVERY
FAIRVIEW STATION, ESPANOLA, NEW MEXICO**

Monitor Well	Date Recovered	NAPL Thickness Prior to Bailing ¹	NAPL Thickness After Bailing ¹	Total NAPL Recovered ²	Comments
MW-3	3-Nov-16	0.49	0.10	0.25	skimmer 1/2 full
	21-Oct-16	0.70	0.01	0.50	skimmer 1/3 full
	6-Oct-16	1.49	0.11	1.00	skimmer full
	22-Sep-16	1.81	0.07	1.25	skimmer full
	15-Sep-16	3.82	0.24	2.50	skimmer full
	31-Aug-16	3.12	0.13	2.25	skimmer full
	18-Aug-16	2.78	0.20	2.50	skimmer full
	11-Aug-16	3.10	0.28	3.00	skimmer full
	4-Aug-16	3.57	0.47	3.00	skimmer full of water only; replaced skimmer with skimmer from MW-11
	28-Jul-16	6.41	0.17	3.00	skimmer full of water only; soaked filter in NAPL
	22-Jul-16	6.48	0.15	5.50	skimmer full of water only
	14-Jul-16	7.95	0.01	5.50	set skimmer
	19-Jan-16	5.91	1.10	5.00	
	9-Jan-15	6.90	NM	NM	
	10-Dec-14	7.51	NM	NM	
	3-Oct-14	2.95	NM	0.00	
	26-Nov-13	6.00	NM	4.30	
	12-Nov-13	7.43	NM	5.00	
	29-Oct-13	6.96	NM	7.00	
	10-Jul-13	3.98	NM	3.00	
	27-Jun-13	4.45	NM	3.50	
	3-Jun-13	4.11	NM	4.50	
	27-Feb-13	2.89	NM	0.00	
	4-Feb-13	NM	NM	2.00	
	1-Feb-13	NM	NM	0.50	
MW-6	3-Nov-16	0.01	-	0.06	12 inches of staining; set new sock
	21-Oct-16	0.00	-	0.01	1 inch of staining; set new sock
	6-Oct-16	0.01	-	0.04	8 inches of staining; set new sock
	22-Sep-16	0.01	-	0.00	no staining; reset same sock
	15-Sep-16	0.00	-	0.06	11 inches of staining; set new sock
	31-Aug-16	0.01	-	0.07	14 inches of staining; set new sock
	18-Aug-16	0.01	-	0.08	16 inches of staining; set new sock
	11-Aug-16	0.00	-	0.08	16 inches of staining; set new sock
	4-Aug-16	0.00	-	0.08	16 inches of staining; set new sock
	28-Jul-16	0.00	-	0.00	no staining; reset same sock
	22-Jul-16	0.00	-	0.01	2 inches of staining; set new sock
	14-Jul-16	0.03	0.00	negligible	set new sock
	19-Jan-16	0.04	0.00	negligible	
	9-Jan-15	0.04	NM	0.00	
	10-Dec-14	0.34	NM	0.00	
	3-Oct-14	0.05	NM	0.00	
	26-Nov-13	0.02	NM	0.00	
	12-Nov-13	0.01	NM	0.00	
	29-Oct-13	-	-	0.00	

**TABLE 3. SUMMARY OF NAPL RECOVERY
FAIRVIEW STATION, ESPANOLA, NEW MEXICO**

Monitor Well	Date Recovered	NAPL Thickness Prior to Bailing ¹	NAPL Thickness After Bailing ¹	Total NAPL Recovered ²	Comments
MW-8	3-Nov-16	5.21	0.07	2.00	
	21-Oct-16	6.09	0.05	2.00	
	6-Oct-16	6.57	0.20	2.25	
	22-Sep-16	5.91	0.05	2.25	
	15-Sep-16	4.36	0.15	2.50	skimmer 1/2 full of NAPL, 1/2 full water; removed skimmer
	31-Aug-16	3.86	0.30	2.50	skimmer 1/3 full of NAPL, 2/3 full water; soaked filter in NAPL
	18-Aug-16	6.41	0.04	3.00	skimmer full
	11-Aug-16	6.05	0.06	3.00	skimmer full
	4-Aug-16	3.72	0.17	3.00	skimmer full
	28-Jul-16	6.88	0.13	1.75	skimmer full
	22-Jul-16	6.72	0.10	3.00	skimmer 3/4 full
	14-Jul-16	6.31	0.01	3.00	set skimmer
	19-Jan-16	4.44	0.55	3.25	
	9-Jan-15	6.45	NM	NM	
	10-Dec-14	6.51	NM	NM	
	3-Oct-14	2.57	NM	0.00	
	26-Nov-13	4.25	NM	3.50	
	12-Nov-13	6.54	NM	3.00	
	29-Oct-13	3.55	NM	2.50	
MW-9	3-Nov-16	0.01	-	0.05	9 inches of staining; set new sock
	21-Oct-16	0.01	-	0.01	2 inches of staining; set new sock
	6-Oct-16	0.00	-	0.03	6 inches of staining; set new sock
	22-Sep-16	0.00	-	0.00	no staining; reset same sock
	15-Sep-16	0.00	-	0.00	no staining; reset same sock
	31-Aug-16	0.01	-	0.06	11 inches of staining; set new sock
	18-Aug-16	0.00	-	0.07	13 inches of staining; set new sock
	11-Aug-16	0.00	-	0.00	no staining; reset same sock
	4-Aug-16	0.01	-	0.08	16 inches of staining; set new sock
	28-Jul-16	0.01	-	0.12	2 feet of staining; set new sock
	22-Jul-16	0.52	0.11	0.31	1 foot of staining; set new sock
	14-Jul-16	0.63	0.01	0.25	set new sock
	19-Jan-16	0.63	0.01	negligible	
	9-Jan-15	-	-	0.00	
	10-Dec-14	-	-	0.00	
	3-Oct-14	-	-	0.00	
MW-10	3-Nov-16	0.01	-	0.03	6 inches of staining; set new sock
	21-Oct-16	0.00	-	0.00	no staining; reset same sock
	6-Oct-16	0.00	-	0.03	5 inches of staining; set new sock
	22-Sep-16	0.00	-	0.00	no staining; reset same sock
	15-Sep-16	0.00	-	0.02	4.5 inches of staining; set new sock
	31-Aug-16	0.00	-	0.06	11 inches of staining; set new sock
	18-Aug-16	0.00	-	0.06	11 inches of staining; set new sock
	11-Aug-16	0.00	-	0.06	1 foot of staining; set new sock
	4-Aug-16	0.00	-	0.00	no staining; reset same sock
	28-Jul-16	0.00	-	0.06	1 foot of staining; set new sock
	22-Jul-16	0.00	-	0.07	14 inches of staining; set new sock
	14-Jul-16	0.01	-	0.00	set new sock
	19-Jan-16	Sheen		0.00	
	9-Jan-15	-	-	0.00	
	9-Dec-14	Lost Data		0.00	
	3-Oct-14	-	-	0.00	

**TABLE 3. SUMMARY OF NAPL RECOVERY
FAIRVIEW STATION, ESPANOLA, NEW MEXICO**

Monitor Well	Date Recovered	NAPL Thickness Prior to Bailing ¹	NAPL Thickness After Bailing ¹	Total NAPL Recovered ²	Comments
MW-11	3-Nov-16	1.21	0.01	0.29	7 inches of staining; set new sock
	21-Oct-16	1.74	0.05	0.77	3 inches of staining; set new sock
	6-Oct-16	1.88	0.09	0.79	8 inches of staining; set new sock
	22-Sep-16	0.85	0.05	0.29	7 inches of staining; set new sock
	15-Sep-16	0.52	0.01	0.06	11 inches of staining; set new sock
	31-Aug-16	0.20	0.01	0.09	18 inches of staining; set new sock
	18-Aug-16	0.36	0.01	0.08	15 inches of staining; set new sock
	11-Aug-16	0.26	0.01	0.06	1 foot of staining; set new sock
	4-Aug-16	0.18	0.01	0.25	skimmer 1/2 full; removed skimmer; installed sock
	28-Jul-16	0.25	0.01	0.10	skimmer 1/2 full
	22-Jul-16	1.50	0.16	1.25	skimmer full
	14-Jul-16	3.09	0.01	2.00	set skimmer
	19-Jan-16	3.66	0.62	2.75	
	9-Jan-15	3.36	NM	NM	
	10-Dec-14	3.63	NM	NM	
	3-Oct-14	0.16	NM	0.00	
MW-14	3-Nov-16	0.10	0.01	0.07	13 inches of staining; set new sock
	21-Oct-16	0.12	0.01	0.01	2 inches of staining; set new sock
	6-Oct-16	0.05	0.00	0.03	6 inches of staining; set new sock
	22-Sep-16	0.01	-	0.02	4 inches of staining; set new sock
	15-Sep-16	0.01	-	0.02	4 inches of staining; set new sock
	31-Aug-16	0.00	-	0.06	11 inches of staining; set new sock
	18-Aug-16	0.01	-	0.07	14 inches of staining; set new sock
	11-Aug-16	0.00	-	0.02	3 inches of staining; set new sock
	4-Aug-16	0.01	-	0.01	2 inches of staining; set new sock
	28-Jul-16	0.12	0.01	0.10	19 inches of staining; set new sock
	22-Jul-16	0.38	0.19	0.33	16 inches of staining; set new sock
	14-Jul-16	0.47	0.01	0.10	set new sock
	19-Jan-16	0.79	0.01	0.25	
	9-Jan-15	0.49	NM	NM	
	10-Dec-14	2.19	NM	NM	
	3-Oct-14	0.29	NM	0.00	
MW-15	3-Nov-16	0.01	-	0.03	5 inches of staining; set new sock
	21-Oct-16	0.27	0.01	0.04	8.5 inches of staining; set new sock
	6-Oct-16	0.20	0.01	0.08	16 inches of staining; set new sock
	22-Sep-16	0.08	0.01	0.08	16 inches of staining; set new sock
	15-Sep-16	0.13	0.01	0.10	19 inches of staining; set new sock
	31-Aug-16	0.06	0.00	0.15	29 inches of staining; set new sock
	18-Aug-16	1.05	0.01	0.15	30 inches of staining; set new sock
	11-Aug-16	0.32	0.04	0.00	no staining; reset same sock
	4-Aug-16	0.60	0.03	0.93	3 feet of staining; set new sock
	28-Jul-16	0.73	0.01	0.25	set new sock
	22-Jul-16	3.44	0.87	2.50	
	14-Jul-16	1.59	0.01	1.50	

**TABLE 3. SUMMARY OF NAPL RECOVERY
FAIRVIEW STATION, ESPANOLA, NEW MEXICO**

Monitor Well	Date Recovered	NAPL Thickness Prior to Bailing ¹	NAPL Thickness After Bailing ¹	Total NAPL Recovered ²	Comments
MW-18	3-Nov-16	0.01	-	0.09	18 inches of staining; set new sock
	21-Oct-16	0.00	-	0.02	3 inches of staining; set new sock
	6-Oct-16	0.01	-	0.03	6 inches of staining; set new sock
	22-Sep-16	0.00	-	0.00	no staining; reset same sock
	15-Sep-16	0.00	-	0.09	17 inches of staining; set new sock
	31-Aug-16	0.00	-	0.09	18 inches of staining; set new sock
	18-Aug-16	0.00	-	0.11	21 inches of staining; set new sock
	11-Aug-16	0.00	-	0.09	18 inches of staining; set new sock
	4-Aug-16	0.00	-	0.00	no staining; reset same sock
	28-Jul-16	0.00	-	0.08	15 inches of staining; set new sock
Total NAPL Recovered July 2016 Through November 3, 2016²				137.28	
Cumulative Total NAPL Recovered at the Site²				227.08	
NOTES:					
NAPL - Non Aqueous Phase Liquid					
¹ Measured in feet.					
² Measured in gallons.					
Absorbent sock capacity = 0.005 gallons per inch					
All NAPL recovered is placed in a drum located at the Fairview Station Site in Espanola, NM.					

TABLE 4. SUMMARY OF GROUNDWATER SAMPLE RESULTS VOLATILE ORGANIC COMPOUNDS AND DISSOLVED LEAD
FAIRVIEW STATION, ESPANOLA, NEW MEXICO

Monitoring Well	Date Measured	Benzene ($\mu\text{g/L}$)	Toluene ($\mu\text{g/L}$)	Ethylbenzene ($\mu\text{g/L}$)	Xylene ($\mu\text{g/L}$)	MTBE ($\mu\text{g/L}$)	EDB ($\mu\text{g/L}$)	EDC ($\mu\text{g/L}$)	Naphthalene ¹ ($\mu\text{g/L}$)	1-Methylnaphthalene ¹ ($\mu\text{g/L}$)	2-Methylnaphthalene ¹ ($\mu\text{g/L}$)	Total Naphthalenes ¹ ($\mu\text{g/L}$)	Dissolved Lead (mg/L)
MW-1	3-Nov-16								NAPL - Not Sampled				
	14-Jul-16								NAPL - Not Sampled				
	19-Jan-16								NAPL - Not Sampled				
	9-Dec-14								NAPL - Not Sampled				
	4-Feb-13	16,000	21,000	3,700	14,000	3,900	<10	64	630	190	350	1,170	0.0035
MW-2	3-Nov-16								NAPL - Not Sampled				
	14-Jul-16								NAPL - Not Sampled				
	19-Jan-16								NAPL - Not Sampled				
	10-Dec-14	24,000	23,000	2,600	12,000	27,000	0.2	<500	<1000	<2,000	<2,000	<2,000	NA
	4-Feb-13								NAPL - Not Sampled				
MW-3	3-Nov-16								NAPL - Not Sampled				
	14-Jul-16								NAPL - Not Sampled				
	19-Jan-16								NAPL - Not Sampled				
	9-Dec-14								NAPL - Not Sampled				
	4-Feb-13								NAPL - Not Sampled				
MW-4	3-Nov-16	3.4	<1.0	<1.0	<1.5	61	<1.0	4.6	<2.0	<4.0	<4.0	<4.0	NA
	13-Jul-16	4.8	<1.0	<1.0	<1.5	130	<0.010	17	<2.0	<4.0	<4.0	<4.0	NA
	19-Jan-16	<1.0	<1.0	<1.0	<1.5	42	<0.010	7.1	<2.0	<4.0	<4.0	<4.0	NA
	9-Dec-14	<1.0	<1.0	<1.0	<1.5	13	<0.01	2.4	<2.0	<4.0	<4.0	<4.0	NA
	29-Oct-13	<1.0	<1.0	<1.0	<2.0	31	<0.01	8.8	NA	NA	NA	NA	<0.005
MW-5	3-Nov-16	12,000	540	1,200	580	2,200	<100	<100	230	<400	<400	230	NA
	14-Jul-16	13,000	930	1,200	820	2,600	<1.0	<1.0	270	48	80	398	NA
	19-Jan-16	16,000	470	1,200	390	2,700	<0.010	130	260	<40	68	328	NA
	9-Dec-14	8,900	940	1,200	1,500	1,700	<0.01	<100	230	<400	<400	230	NA
	29-Oct-13	4,300	1,100	740	2,000	540	<0.01	44	130	36	69	235	<0.005
MW-6	3-Nov-16								NAPL - Not Sampled				
	14-Jul-16								NAPL - Not Sampled				
	19-Jan-16								NAPL - Not Sampled				
	10-Dec-14	5,500	29,000	5,100	28,000	<500	<0.01	<500	1,100	<2,000	<2,000	1,100	NA
	29-Oct-13	10,000	23,000	3,100	13,000	110	<0.01	<50	450	92	170	712	<0.005
MW-7	3-Nov-16	7,000	1,600	630	1,500	3,400	<20	28	220	<80	<80	220	NA
	14-Jul-16	4,800	500	360	590	2,500	<1.0	<1.0	150	37	46	233	NA
	19-Jan-16	3,300	640	460	1,000	1,500	<0.010	5.7	160	22	37	219	NA
	9-Dec-14	4,000	420	510	1,100	1,500	<0.01	<50	130	<200	<200	130	NA
	29-Oct-13	7,700	7,400	1,700	8,900	3,500	<0.01	<50	370	88	180	638	<0.005
MW-8	3-Nov-16								NAPL - Not Sampled				
	14-Jul-16								NAPL - Not Sampled				
	19-Jan-16								NAPL - Not Sampled				
	9-Dec-14								NAPL - Not Sampled				
	29-Oct-13								NAPL - Not Sampled				
MW-9	3-Nov-16								NAPL - Not Sampled				
	14-Jul-16								NAPL - Not Sampled				
	19-Jan-16								NAPL - Not Sampled				
	9-Dec-14	2,300	2,600	2,600	12,000	<100	<0.01	<100	720	<400	450	1,170	NA
	21-Jul-14	2,000	1,100	1,800	6,600	<100	<0.01	<100	330	110	200	640	0.014
MW-10	3-Nov-16								NAPL - Not Sampled				
	14-Jul-16								NAPL - Not Sampled				
	19-Jan-16								NAPL - Not Sampled				
	9-Dec-14	3,900	2,000	2,000	6,100	<100	<0.01	<100	410	<400	<400	410	NA
	22-Jul-14	4,200	5,900	2,700	10,000	170	<0.01	<100	470	160	310	940	0.084
MW-11	3-Nov-16								NAPL - Not Sampled				
	14-Jul-16								NAPL - Not Sampled				
	19-Jan-16								NAPL - Not Sampled				
	9-Dec-14								NAPL - Not Sampled				
	22-Jul-14	10,000	16,000	2,600	11,000	330	<0.01	<100	540	190	360	1,090	0.088
MW-12	3-Nov-16								No Access - Not Sampled				
	14-Jul-16								No Access - Not Sampled				
	19-Jan-16								No Access - Not Sampled				
	9-Dec-14	1,900	310	470	710	100	<0.01	<50	<100	<200	<200	<200	NA
	21-Aug-14	1,800	110	340	810	230	<0.01	<10	50	8.0	13	71	0.130
MW-13	3-Nov-16	1,900	18	220	73	10	<10	<10	59	<40	<40	59	NA
	14-Jul-16	1,900	13	280	71	9.5	<1.0	<1.0	42	9.8	14	66	NA
	19-Jan-16								No Access - Not Sampled				
	9-Dec-14	420	5.0	78	90	<5.0	<0.01	<5.0	24	<20	<20	24	NA
	18-Jul-14	130	<10	35	24	<10	<0.01	<10	9.6	20	35	65	0.062
MW-14	3-Nov-16								NAPL - Not Sampled				
	14-Jul-16								NAPL - Not Sampled				
	19-Jan-16								NAPL - Not Sampled				
	9-Dec-14	780	1,700	290	1,700	<100	15	170	200	<400	<400	200	NA
	21-Aug-14	480	210	65	160	<10	2.3	84	18	3.7	3.3	25	0.020

**TABLE 4. SUMMARY OF GROUNDWATER SAMPLE RESULTS VOLATILE ORGANIC COMPOUNDS AND DISSOLVED LEAD
FAIRVIEW STATION, ESPANOLA, NEW MEXICO**

Monitoring Well	Date Measured	Benzene ($\mu\text{g/L}$)	Toluene ($\mu\text{g/L}$)	Ethylbenzene ($\mu\text{g/L}$)	Xylene ($\mu\text{g/L}$)	MTBE ($\mu\text{g/L}$)	EDB ($\mu\text{g/L}$)	EDC ($\mu\text{g/L}$)	Naphthalene ¹ ($\mu\text{g/L}$)	1-Methylnaphthalene ¹ ($\mu\text{g/L}$)	2-Methylnaphthalene ¹ ($\mu\text{g/L}$)	Total Naphthalenes ¹ ($\mu\text{g/L}$)	Dissolved Lead (mg/L)
MW-15	3-Nov-16												
	14-Jul-16												
MW-16	3-Nov-16	73	23	80	110	3.4	<1.0	<1.0	42	11	16	69	NA
	14-Jul-16	67	78	150	290	<1.0	<1.0	<1.0	67	17	23	107	NA
MW-17	3-Nov-16	<1.0	<1.0	<1.0	<1.5	<1.0	<1.0	<1.0	<2.0	<4.0	<4.0	<4.0	NA
	14-Jul-16	<1.0	<1.0	<1.0	<1.5	<1.0	<1.0	<1.0	<2.0	<4.0	<4.0	<4.0	NA
MW-18	3-Nov-16												
	14-Jul-16	1,800	610	1,500	4,300	<1.0	<1.0	<1.0	460	76	140	676	NA
MW-19	3-Nov-16	20	2.3	<1.0	5.7	<1.0	<1.0	1.4	<2.0	<4.0	<4.0	<4.0	NA
	14-Jul-16	75	160	45	110	<1.0	<1.0	3.2	15	6.4	12	33	NA
MW-20	3-Nov-16	<1.0	<1.0	<1.0	<1.5	<1.0	<1.0	<1.0	<2.0	<4.0	<4.0	<4.0	NA
	14-Jul-16	<1.0	<1.0	<1.0	<1.5	<1.0	<1.0	<1.0	<2.0	<4.0	<4.0	<4.0	NA
MW-21	3-Nov-16	<1.0	<1.0	<1.0	<1.5	<1.0	<1.0	<1.0	<2.0	<4.0	<4.0	<4.0	NA
	14-Jul-16	<1.0	<1.0	<1.0	<1.5	<1.0	<1.0	1.1	<2.0	<4.0	<4.0	<4.0	NA
NMWQCC and EIB Standards		10	750	750	620	100	0.1	10				30*	0.05

NOTES:

All concentrations in micrograms per liter ($\mu\text{g/L}$) which is equivalent to parts per billion (ppb)

All samples analyzed for volatile organic compounds by EPA method 8260B

EDB = Ethylene dibromide; Sample was analyzed for EDB using EPA method 504.1

EDC = Ethylene dichloride

EIB = Environmental Improvement Board

MTBE = Methyl tertiary butyl ether

NA = Not analyzed

NMWQCC = New Mexico Water Quality Control Commission

Dissolved lead analyzed by EPA method 6010B

* Standard for Total Naphthalenes = sum of Naphthalenes, 1-Methylnaphthalenes, and 2-Methylnaphthalenes

¹ = Naphthalene, 1-methylnaphthalene, and 2-methylnaphthalene were analyzed by EPA method 8270C prior to December 2014

**TABLE 5. SUMMARY OF FIELD PARAMETERS
FAIRVIEW STATION, ESPANOLA, NEW MEXICO**

Well Number	Date Sampled	pH	SpC (uS/cm)	Temp	DO (mg/L)
MW-1	3-Nov-16		NAPL - Not Measured		
	14-Jul-16		NAPL - Not Measured		
	19-Jan-16		NAPL - Not Measured		
MW-2	3-Nov-16		NAPL - Not Measured		
	14-Jul-16		NAPL - Not Measured		
	19-Jan-16		NAPL - Not Measured		
MW-3	3-Nov-16		NAPL - Not Measured		
	14-Jul-16		NAPL - Not Measured		
	19-Jan-16		NAPL - Not Measured		
MW-4	3-Nov-16	7.14	1,375	16.1	2.32
	13-Jul-16	7.10	1,624	15.9	NM
	19-Jan-16	6.74	706	16.0	NM
MW-5	3-Nov-16	7.26	2,110	17.1	1.90
	14-Jul-16	7.14	1,600	15.6	NM
	19-Jan-16	7.18	1,808	15.8	NM
MW-6	3-Nov-16		NAPL - Not Measured		
	14-Jul-16		NAPL - Not Measured		
	19-Jan-16		NAPL - Not Measured		
MW-7	3-Nov-16	7.18	1,259	17.5	1.66
	14-Jul-16	7.10	1,088	16.0	NM
	19-Jan-16	7.17	1,069	16.6	NM
MW-8	3-Nov-16		NAPL - Not Measured		
	14-Jul-16		NAPL - Not Measured		
	19-Jan-16		NAPL - Not Measured		
MW-9	3-Nov-16		NAPL - Not Measured		
	14-Jul-16		NAPL - Not Measured		
	19-Jan-16		NAPL - Not Measured		
MW-10	3-Nov-16		NAPL - Not Measured		
	14-Jul-16		NAPL - Not Measured		
	19-Jan-16	6.86	1,642	16.2	NM
MW-11	3-Nov-16		NAPL - Not Measured		
	14-Jul-16		NAPL - Not Measured		
	19-Jan-16		NAPL - Not Measured		
MW-12	3-Nov-16		No Access		
	14-Jul-16		No Access		
	19-Jan-16		No Access		
MW-13	3-Nov-16	7.26	1,830	15.3	4.17
	14-Jul-16	7.24	1,584	14.8	NM
	19-Jan-16		No Access		

**TABLE 5. SUMMARY OF FIELD PARAMETERS
FAIRVIEW STATION, ESPANOLA, NEW MEXICO**

Well Number	Date Sampled	pH	SpC (uS/cm)	Temp	DO (mg/L)
MW-14	14-Jul-16		NAPL - Not Measured		
	14-Jul-16		NAPL - Not Measured		
	19-Jan-16		NAPL - Not Measured		
MW-15	3-Nov-16		NAPL - Not Measured		
	14-Jul-16	7.80	790	17.9	NM
MW-16	3-Nov-16	7.45	1,278	16.7	2.19
	14-Jul-16	7.75	770	16.3	NM
MW-17	3-Nov-16	7.34	895.5	16.7	5.22
	14-Jul-16	7.65	682	16.8	NM
MW-18	3-Nov-16		NAPL - Not Measured		
	14-Jul-16	7.81	951	16.4	NM
MW-19	3-Nov-16	7.16	4,050	16.6	2.16
	14-Jul-16	7.70	1,758	16.8	NM
MW-20	3-Nov-16	6.98	7,850	17.6	1.78
	14-Jul-16	7.71	5,380	17.7	NM
MW-21	3-Nov-16	7.07	6,230	17.1	2.05
	14-Jul-16	7.71	966	18.3	NM
NOTES:					
DO = Dissolved oxygen					
mg/L = Milligrams per liter					
NAPL = Non-aqueous phase liquid					
SpC = Specific conductance					
uS/cm = Microsiemens per centimeter					

FIGURES



LEGEND:

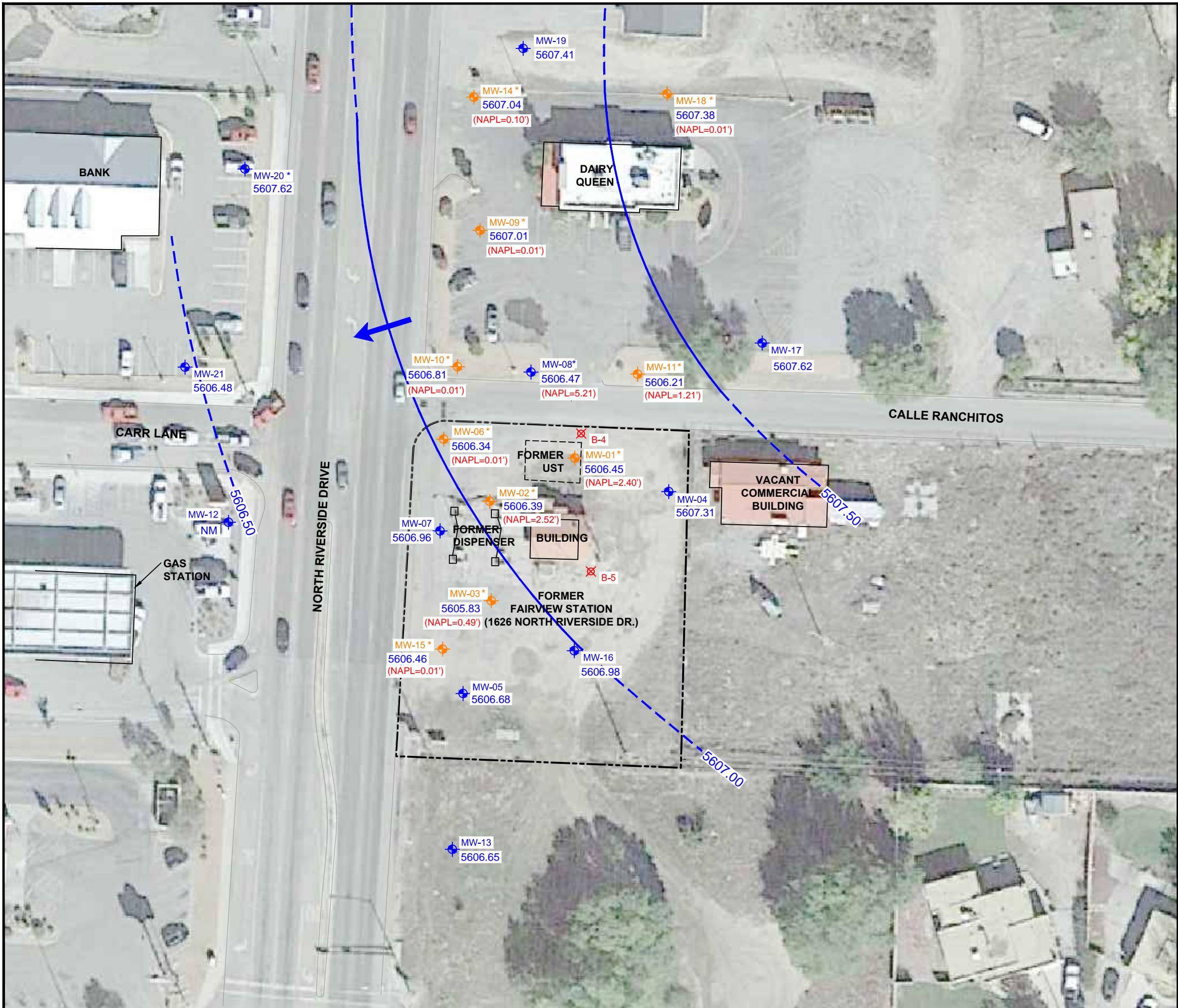
- MW-1** MONITORING WELL
- MW-8** MONITORING WELL WITH SKIMMER OR ABSORBENT SOCK INSTALLED
- B-4** SOIL BORING
- BUILDING**
- UNDERGROUND STORAGE TANK (UST)**
- SITE BOUNDARY**

FIGURE 1
SITE MAP

PROJECT #: 6288921 PROJECT PHASE: 01 PROJECT MANAGER: TM

320 Gold Avenue, SW Suite 1300
Albuquerque, NM 87102
Phone: (505) 224-9013
Fax: (505) 224-9016

EA
EA ENGINEERING, SCIENCE, AND TECHNOLOGY, INC., PBC



LEGEND:	
	MW-1 MONITORING WELL
	MW-8 MONITORING WELL WITH SKIMMER OR ABSORBENT SOCK INSTALLED
	B-4 SOIL BORING
	BUILDING
	UNDERGROUND STORAGE TANK (UST)
	SITE BOUNDARY
	HISTORIC DIRECTION OF GROUNDWATER FLOW
	NAPL NON-AQUEOUS PHASE LIQUID
	NM NOT MEASURED
	5607.00 GROUNDWATER POTENTIOMETRIC ELEVATION CONTOUR IN FEET ABOVE MSL (DASHED WHERE INFERRED)
*	WELL NOT USED IN CONTOURING

NOTES:

1. AERIAL SOURCE: GOOGLE EARTH 2015.
2. GAUGING DATA FOR WELL WITHOUT NAPC IS FROM 12-21-16. GAUGING DATA FOR WELLS WITH NAPL IS FROM 11-3-16.
3. MW-20 NOT USED IN CONTOURING. WELL IS UNDER PRESSURE AND WATER LEVEL WAS NOT AN ACCURATE MEASUREMENT.



50 25 0 50
SCALE IN FEET

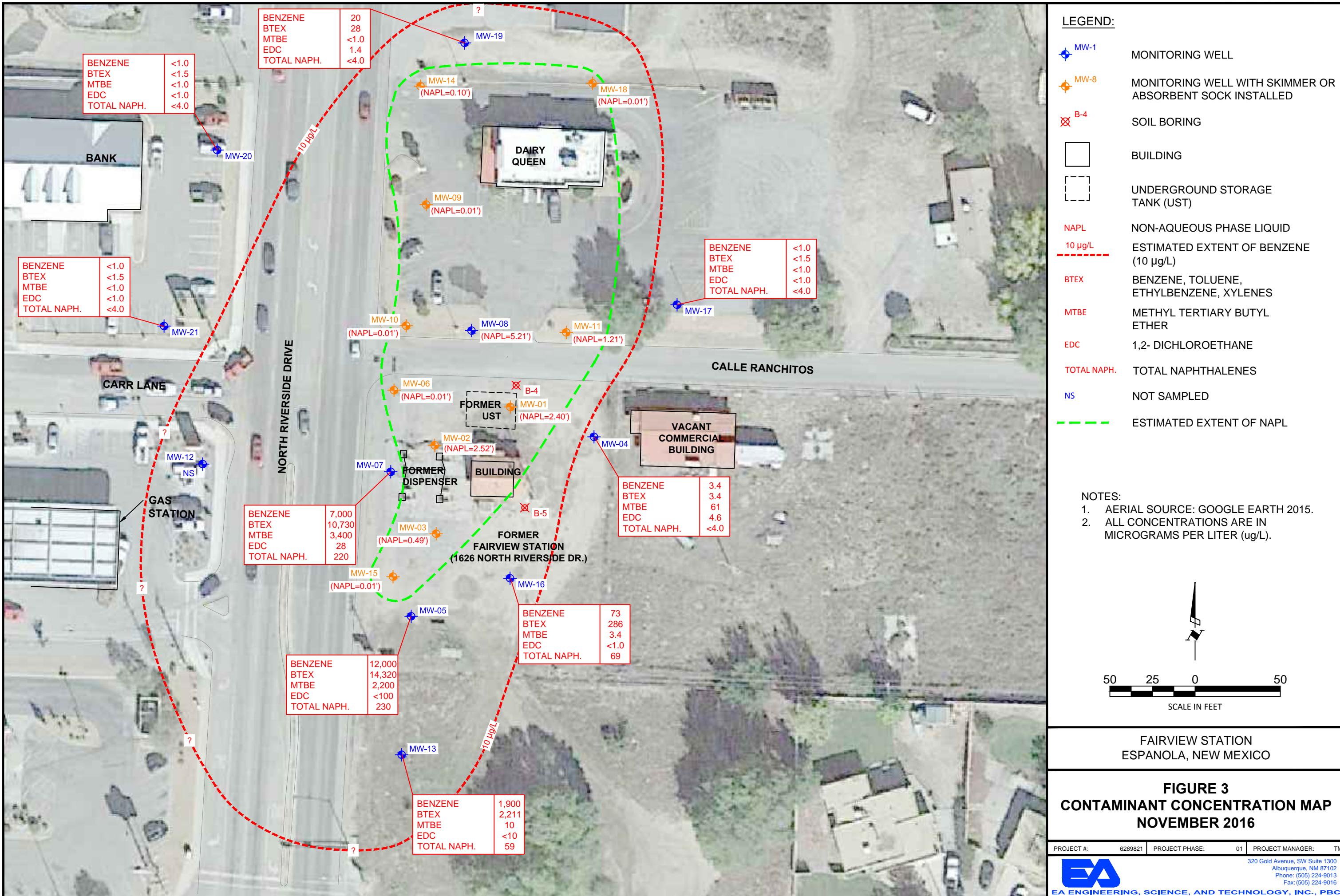
FAIRVIEW STATION
ESPAÑOLA, NEW MEXICO

FIGURE 5
POTENTIOMETRIC SURFACE MAP
NOVEMBER/ DECEMBER 2016

PROJECT #: 6288921 PROJECT PHASE: 01 PROJECT MANAGER: TM

320 Gold Avenue, SW Suite 1300
Albuquerque, NM 87102
Phone: (505) 224-9013
Fax: (505) 224-9016

EA
EA ENGINEERING, SCIENCE, AND TECHNOLOGY, INC., PBC



APPENDIX A
LABORATORY REPORT



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

November 15, 2016

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

RE: Fairview

OrderNo.: 1611252

Dear Teri McMillan:

Hall Environmental Analysis Laboratory received 11 sample(s) on 11/4/2016 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 qualifiers 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,

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

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1611252

Date Reported: 11/15/2016

CLIENT: EA Engineering

Project: Fairview

Lab ID: 1611252-001

Client Sample ID: MW-04

Collection Date: 11/3/2016 12:00:00 PM

Matrix: AQUEOUS

Received Date: 11/4/2016 12:25:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							
Benzene	3.4	1.0		µg/L	1	11/9/2016 8:00:06 PM	W38593
Toluene	ND	1.0		µg/L	1	11/9/2016 8:00:06 PM	W38593
Ethylbenzene	ND	1.0		µg/L	1	11/9/2016 8:00:06 PM	W38593
Methyl tert-butyl ether (MTBE)	61	1.0		µg/L	1	11/9/2016 8:00:06 PM	W38593
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/9/2016 8:00:06 PM	W38593
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/9/2016 8:00:06 PM	W38593
1,2-Dichloroethane (EDC)	4.6	1.0		µg/L	1	11/9/2016 8:00:06 PM	W38593
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/9/2016 8:00:06 PM	W38593
Naphthalene	ND	2.0		µg/L	1	11/9/2016 8:00:06 PM	W38593
1-Methylnaphthalene	ND	4.0		µg/L	1	11/9/2016 8:00:06 PM	W38593
2-Methylnaphthalene	ND	4.0		µg/L	1	11/9/2016 8:00:06 PM	W38593
Acetone	ND	10		µg/L	1	11/9/2016 8:00:06 PM	W38593
Bromobenzene	ND	1.0		µg/L	1	11/9/2016 8:00:06 PM	W38593
Bromodichloromethane	ND	1.0		µg/L	1	11/9/2016 8:00:06 PM	W38593
Bromoform	ND	1.0		µg/L	1	11/9/2016 8:00:06 PM	W38593
Bromomethane	ND	3.0		µg/L	1	11/9/2016 8:00:06 PM	W38593
2-Butanone	ND	10		µg/L	1	11/9/2016 8:00:06 PM	W38593
Carbon disulfide	ND	10		µg/L	1	11/9/2016 8:00:06 PM	W38593
Carbon Tetrachloride	ND	1.0		µg/L	1	11/9/2016 8:00:06 PM	W38593
Chlorobenzene	ND	1.0		µg/L	1	11/9/2016 8:00:06 PM	W38593
Chloroethane	ND	2.0		µg/L	1	11/9/2016 8:00:06 PM	W38593
Chloroform	ND	1.0		µg/L	1	11/9/2016 8:00:06 PM	W38593
Chloromethane	ND	3.0		µg/L	1	11/9/2016 8:00:06 PM	W38593
2-Chlorotoluene	ND	1.0		µg/L	1	11/9/2016 8:00:06 PM	W38593
4-Chlorotoluene	ND	1.0		µg/L	1	11/9/2016 8:00:06 PM	W38593
cis-1,2-DCE	ND	1.0		µg/L	1	11/9/2016 8:00:06 PM	W38593
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/9/2016 8:00:06 PM	W38593
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/9/2016 8:00:06 PM	W38593
Dibromochloromethane	ND	1.0		µg/L	1	11/9/2016 8:00:06 PM	W38593
Dibromomethane	ND	1.0		µg/L	1	11/9/2016 8:00:06 PM	W38593
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/9/2016 8:00:06 PM	W38593
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/9/2016 8:00:06 PM	W38593
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/9/2016 8:00:06 PM	W38593
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/9/2016 8:00:06 PM	W38593
1,1-Dichloroethane	ND	1.0		µg/L	1	11/9/2016 8:00:06 PM	W38593
1,1-Dichloroethene	ND	1.0		µg/L	1	11/9/2016 8:00:06 PM	W38593
1,2-Dichloropropane	ND	1.0		µg/L	1	11/9/2016 8:00:06 PM	W38593
1,3-Dichloropropane	ND	1.0		µg/L	1	11/9/2016 8:00:06 PM	W38593
2,2-Dichloropropane	ND	2.0		µg/L	1	11/9/2016 8:00:06 PM	W38593

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

Qualifiers:

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1611252**

Date Reported: **11/15/2016**

CLIENT: EA Engineering

Project: Fairview

Lab ID: 1611252-001

Client Sample ID: MW-04

Collection Date: 11/3/2016 12:00:00 PM

Matrix: AQUEOUS

Received Date: 11/4/2016 12:25:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							
1,1-Dichloropropene	ND	1.0		µg/L	1	11/9/2016 8:00:06 PM	W38593
Hexachlorobutadiene	ND	1.0		µg/L	1	11/9/2016 8:00:06 PM	W38593
2-Hexanone	ND	10		µg/L	1	11/9/2016 8:00:06 PM	W38593
Isopropylbenzene	ND	1.0		µg/L	1	11/9/2016 8:00:06 PM	W38593
4-Isopropyltoluene	ND	1.0		µg/L	1	11/9/2016 8:00:06 PM	W38593
4-Methyl-2-pentanone	ND	10		µg/L	1	11/9/2016 8:00:06 PM	W38593
Methylene Chloride	ND	3.0		µg/L	1	11/9/2016 8:00:06 PM	W38593
n-Butylbenzene	ND	3.0		µg/L	1	11/9/2016 8:00:06 PM	W38593
n-Propylbenzene	ND	1.0		µg/L	1	11/9/2016 8:00:06 PM	W38593
sec-Butylbenzene	ND	1.0		µg/L	1	11/9/2016 8:00:06 PM	W38593
Styrene	ND	1.0		µg/L	1	11/9/2016 8:00:06 PM	W38593
tert-Butylbenzene	ND	1.0		µg/L	1	11/9/2016 8:00:06 PM	W38593
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/9/2016 8:00:06 PM	W38593
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/9/2016 8:00:06 PM	W38593
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/9/2016 8:00:06 PM	W38593
trans-1,2-DCE	ND	1.0		µg/L	1	11/9/2016 8:00:06 PM	W38593
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/9/2016 8:00:06 PM	W38593
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/9/2016 8:00:06 PM	W38593
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/9/2016 8:00:06 PM	W38593
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/9/2016 8:00:06 PM	W38593
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/9/2016 8:00:06 PM	W38593
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/9/2016 8:00:06 PM	W38593
Trichlorofluoromethane	ND	1.0		µg/L	1	11/9/2016 8:00:06 PM	W38593
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/9/2016 8:00:06 PM	W38593
Vinyl chloride	ND	1.0		µg/L	1	11/9/2016 8:00:06 PM	W38593
Xylenes, Total	ND	1.5		µg/L	1	11/9/2016 8:00:06 PM	W38593
Surr: 1,2-Dichloroethane-d4	96.6	70-130		%Rec	1	11/9/2016 8:00:06 PM	W38593
Surr: 4-Bromofluorobenzene	95.5	70-130		%Rec	1	11/9/2016 8:00:06 PM	W38593
Surr: Dibromofluoromethane	98.9	70-130		%Rec	1	11/9/2016 8:00:06 PM	W38593
Surr: Toluene-d8	99.6	70-130		%Rec	1	11/9/2016 8:00:06 PM	W38593

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

Qualifiers: * Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

Page 2 of 23

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1611252**

Date Reported: **11/15/2016**

CLIENT: EA Engineering

Project: Fairview

Lab ID: 1611252-002

Client Sample ID: MW-05

Collection Date: 11/3/2016 1:15:00 PM

Matrix: AQUEOUS

Received Date: 11/4/2016 12:25:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							
Benzene	12000	1000		µg/L	1E	11/9/2016 9:25:57 PM	W38593
Toluene	540	100		µg/L	100	11/9/2016 9:54:26 PM	W38593
Ethylbenzene	1200	100		µg/L	100	11/9/2016 9:54:26 PM	W38593
Methyl tert-butyl ether (MTBE)	2200	100		µg/L	100	11/9/2016 9:54:26 PM	W38593
1,2,4-Trimethylbenzene	460	100		µg/L	100	11/9/2016 9:54:26 PM	W38593
1,3,5-Trimethylbenzene	ND	100		µg/L	100	11/9/2016 9:54:26 PM	W38593
1,2-Dichloroethane (EDC)	ND	100		µg/L	100	11/9/2016 9:54:26 PM	W38593
1,2-Dibromoethane (EDB)	ND	100		µg/L	100	11/9/2016 9:54:26 PM	W38593
Naphthalene	230	200		µg/L	100	11/9/2016 9:54:26 PM	W38593
1-Methylnaphthalene	ND	400		µg/L	100	11/9/2016 9:54:26 PM	W38593
2-Methylnaphthalene	ND	400		µg/L	100	11/9/2016 9:54:26 PM	W38593
Acetone	ND	1000		µg/L	100	11/9/2016 9:54:26 PM	W38593
Bromobenzene	ND	100		µg/L	100	11/9/2016 9:54:26 PM	W38593
Bromodichloromethane	ND	100		µg/L	100	11/9/2016 9:54:26 PM	W38593
Bromoform	ND	100		µg/L	100	11/9/2016 9:54:26 PM	W38593
Bromomethane	ND	300		µg/L	100	11/9/2016 9:54:26 PM	W38593
2-Butanone	ND	1000		µg/L	100	11/9/2016 9:54:26 PM	W38593
Carbon disulfide	ND	1000		µg/L	100	11/9/2016 9:54:26 PM	W38593
Carbon Tetrachloride	ND	100		µg/L	100	11/9/2016 9:54:26 PM	W38593
Chlorobenzene	ND	100		µg/L	100	11/9/2016 9:54:26 PM	W38593
Chloroethane	ND	200		µg/L	100	11/9/2016 9:54:26 PM	W38593
Chloroform	ND	100		µg/L	100	11/9/2016 9:54:26 PM	W38593
Chloromethane	ND	300		µg/L	100	11/9/2016 9:54:26 PM	W38593
2-Chlorotoluene	ND	100		µg/L	100	11/9/2016 9:54:26 PM	W38593
4-Chlorotoluene	ND	100		µg/L	100	11/9/2016 9:54:26 PM	W38593
cis-1,2-DCE	ND	100		µg/L	100	11/9/2016 9:54:26 PM	W38593
cis-1,3-Dichloropropene	ND	100		µg/L	100	11/9/2016 9:54:26 PM	W38593
1,2-Dibromo-3-chloropropane	ND	200		µg/L	100	11/9/2016 9:54:26 PM	W38593
Dibromochloromethane	ND	100		µg/L	100	11/9/2016 9:54:26 PM	W38593
Dibromomethane	ND	100		µg/L	100	11/9/2016 9:54:26 PM	W38593
1,2-Dichlorobenzene	ND	100		µg/L	100	11/9/2016 9:54:26 PM	W38593
1,3-Dichlorobenzene	ND	100		µg/L	100	11/9/2016 9:54:26 PM	W38593
1,4-Dichlorobenzene	ND	100		µg/L	100	11/9/2016 9:54:26 PM	W38593
Dichlorodifluoromethane	ND	100		µg/L	100	11/9/2016 9:54:26 PM	W38593
1,1-Dichloroethane	ND	100		µg/L	100	11/9/2016 9:54:26 PM	W38593
1,1-Dichloroethene	ND	100		µg/L	100	11/9/2016 9:54:26 PM	W38593
1,2-Dichloropropane	ND	100		µg/L	100	11/9/2016 9:54:26 PM	W38593
1,3-Dichloropropane	ND	100		µg/L	100	11/9/2016 9:54:26 PM	W38593
2,2-Dichloropropane	ND	200		µg/L	100	11/9/2016 9:54:26 PM	W38593

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

Qualifiers:

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

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

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Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1611252

Date Reported: 11/15/2016

CLIENT: EA Engineering

Project: Fairview

Lab ID: 1611252-002

Client Sample ID: MW-05

Collection Date: 11/3/2016 1:15:00 PM

Matrix: AQUEOUS

Received Date: 11/4/2016 12:25:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							
1,1-Dichloropropene	ND	100		µg/L	100	11/9/2016 9:54:26 PM	W38593
Hexachlorobutadiene	ND	100		µg/L	100	11/9/2016 9:54:26 PM	W38593
2-Hexanone	ND	1000		µg/L	100	11/9/2016 9:54:26 PM	W38593
Isopropylbenzene	ND	100		µg/L	100	11/9/2016 9:54:26 PM	W38593
4-Isopropyltoluene	ND	100		µg/L	100	11/9/2016 9:54:26 PM	W38593
4-Methyl-2-pentanone	ND	1000		µg/L	100	11/9/2016 9:54:26 PM	W38593
Methylene Chloride	ND	300		µg/L	100	11/9/2016 9:54:26 PM	W38593
n-Butylbenzene	ND	300		µg/L	100	11/9/2016 9:54:26 PM	W38593
n-Propylbenzene	ND	100		µg/L	100	11/9/2016 9:54:26 PM	W38593
sec-Butylbenzene	ND	100		µg/L	100	11/9/2016 9:54:26 PM	W38593
Styrene	ND	100		µg/L	100	11/9/2016 9:54:26 PM	W38593
tert-Butylbenzene	ND	100		µg/L	100	11/9/2016 9:54:26 PM	W38593
1,1,1,2-Tetrachloroethane	ND	100		µg/L	100	11/9/2016 9:54:26 PM	W38593
1,1,2,2-Tetrachloroethane	ND	200		µg/L	100	11/9/2016 9:54:26 PM	W38593
Tetrachloroethene (PCE)	ND	100		µg/L	100	11/9/2016 9:54:26 PM	W38593
trans-1,2-DCE	ND	100		µg/L	100	11/9/2016 9:54:26 PM	W38593
trans-1,3-Dichloropropene	ND	100		µg/L	100	11/9/2016 9:54:26 PM	W38593
1,2,3-Trichlorobenzene	ND	100		µg/L	100	11/9/2016 9:54:26 PM	W38593
1,2,4-Trichlorobenzene	ND	100		µg/L	100	11/9/2016 9:54:26 PM	W38593
1,1,1-Trichloroethane	ND	100		µg/L	100	11/9/2016 9:54:26 PM	W38593
1,1,2-Trichloroethane	ND	100		µg/L	100	11/9/2016 9:54:26 PM	W38593
Trichloroethene (TCE)	ND	100		µg/L	100	11/9/2016 9:54:26 PM	W38593
Trichlorofluoromethane	ND	100		µg/L	100	11/9/2016 9:54:26 PM	W38593
1,2,3-Trichloropropane	ND	200		µg/L	100	11/9/2016 9:54:26 PM	W38593
Vinyl chloride	ND	100		µg/L	100	11/9/2016 9:54:26 PM	W38593
Xylenes, Total	580	150		µg/L	100	11/9/2016 9:54:26 PM	W38593
Surr: 1,2-Dichloroethane-d4	94.4	70-130	%Rec		100	11/9/2016 9:54:26 PM	W38593
Surr: 4-Bromofluorobenzene	93.6	70-130	%Rec		100	11/9/2016 9:54:26 PM	W38593
Surr: Dibromofluoromethane	94.9	70-130	%Rec		100	11/9/2016 9:54:26 PM	W38593
Surr: Toluene-d8	99.8	70-130	%Rec		100	11/9/2016 9:54:26 PM	W38593

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

Qualifiers:

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1611252**

Date Reported: **11/15/2016**

CLIENT: EA Engineering

Project: Fairview

Lab ID: 1611252-003

Matrix: AQUEOUS

Client Sample ID: MW-07

Collection Date: 11/3/2016 12:27:00 PM

Received Date: 11/4/2016 12:25:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch	Analyst: DJF
EPA METHOD 8260B: VOLATILES								
Benzene	7000	200		µg/L	20	11/9/2016 11:48:52 PM	W38593	
Toluene	1600	20		µg/L	20	11/10/2016 12:17:23 AM	W38593	
Ethylbenzene	630	20		µg/L	20	11/10/2016 12:17:23 AM	W38593	
Methyl tert-butyl ether (MTBE)	3400	20		µg/L	20	11/10/2016 12:17:23 AM	W38593	
1,2,4-Trimethylbenzene	730	20		µg/L	20	11/10/2016 12:17:23 AM	W38593	
1,3,5-Trimethylbenzene	230	20		µg/L	20	11/10/2016 12:17:23 AM	W38593	
1,2-Dichloroethane (EDC)	28	20		µg/L	20	11/10/2016 12:17:23 AM	W38593	
1,2-Dibromoethane (EDB)	ND	20		µg/L	20	11/10/2016 12:17:23 AM	W38593	
Naphthalene	220	40		µg/L	20	11/10/2016 12:17:23 AM	W38593	
1-Methylnaphthalene	ND	80		µg/L	20	11/10/2016 12:17:23 AM	W38593	
2-Methylnaphthalene	ND	80		µg/L	20	11/10/2016 12:17:23 AM	W38593	
Acetone	ND	200		µg/L	20	11/10/2016 12:17:23 AM	W38593	
Bromobenzene	ND	20		µg/L	20	11/10/2016 12:17:23 AM	W38593	
Bromodichloromethane	ND	20		µg/L	20	11/10/2016 12:17:23 AM	W38593	
Bromoform	ND	20		µg/L	20	11/10/2016 12:17:23 AM	W38593	
Bromomethane	ND	60		µg/L	20	11/10/2016 12:17:23 AM	W38593	
2-Butanone	ND	200		µg/L	20	11/10/2016 12:17:23 AM	W38593	
Carbon disulfide	ND	200		µg/L	20	11/10/2016 12:17:23 AM	W38593	
Carbon Tetrachloride	ND	20		µg/L	20	11/10/2016 12:17:23 AM	W38593	
Chlorobenzene	ND	20		µg/L	20	11/10/2016 12:17:23 AM	W38593	
Chloroethane	ND	40		µg/L	20	11/10/2016 12:17:23 AM	W38593	
Chloroform	ND	20		µg/L	20	11/10/2016 12:17:23 AM	W38593	
Chloromethane	ND	60		µg/L	20	11/10/2016 12:17:23 AM	W38593	
2-Chlorotoluene	ND	20		µg/L	20	11/10/2016 12:17:23 AM	W38593	
4-Chlorotoluene	ND	20		µg/L	20	11/10/2016 12:17:23 AM	W38593	
cis-1,2-DCE	ND	20		µg/L	20	11/10/2016 12:17:23 AM	W38593	
cis-1,3-Dichloropropene	ND	20		µg/L	20	11/10/2016 12:17:23 AM	W38593	
1,2-Dibromo-3-chloropropane	ND	40		µg/L	20	11/10/2016 12:17:23 AM	W38593	
Dibromochloromethane	ND	20		µg/L	20	11/10/2016 12:17:23 AM	W38593	
Dibromomethane	ND	20		µg/L	20	11/10/2016 12:17:23 AM	W38593	
1,2-Dichlorobenzene	ND	20		µg/L	20	11/10/2016 12:17:23 AM	W38593	
1,3-Dichlorobenzene	ND	20		µg/L	20	11/10/2016 12:17:23 AM	W38593	
1,4-Dichlorobenzene	ND	20		µg/L	20	11/10/2016 12:17:23 AM	W38593	
Dichlorodifluoromethane	ND	20		µg/L	20	11/10/2016 12:17:23 AM	W38593	
1,1-Dichloroethane	ND	20		µg/L	20	11/10/2016 12:17:23 AM	W38593	
1,1-Dichloroethene	ND	20		µg/L	20	11/10/2016 12:17:23 AM	W38593	
1,2-Dichloropropane	ND	20		µg/L	20	11/10/2016 12:17:23 AM	W38593	
1,3-Dichloropropane	ND	20		µg/L	20	11/10/2016 12:17:23 AM	W38593	
2,2-Dichloropropane	ND	40		µg/L	20	11/10/2016 12:17:23 AM	W38593	

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

Qualifiers:

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

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

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Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1611252**

Date Reported: **11/15/2016**

CLIENT: EA Engineering

Project: Fairview

Lab ID: 1611252-003

Client Sample ID: MW-07

Collection Date: 11/3/2016 12:27:00 PM

Matrix: AQUEOUS

Received Date: 11/4/2016 12:25:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							
1,1-Dichloropropene	ND	20		µg/L	20	11/10/2016 12:17:23 AM	W38593
Hexachlorobutadiene	ND	20		µg/L	20	11/10/2016 12:17:23 AM	W38593
2-Hexanone	ND	200		µg/L	20	11/10/2016 12:17:23 AM	W38593
Isopropylbenzene	25	20		µg/L	20	11/10/2016 12:17:23 AM	W38593
4-Isopropyltoluene	ND	20		µg/L	20	11/10/2016 12:17:23 AM	W38593
4-Methyl-2-pentanone	ND	200		µg/L	20	11/10/2016 12:17:23 AM	W38593
Methylene Chloride	ND	60		µg/L	20	11/10/2016 12:17:23 AM	W38593
n-Butylbenzene	ND	60		µg/L	20	11/10/2016 12:17:23 AM	W38593
n-Propylbenzene	77	20		µg/L	20	11/10/2016 12:17:23 AM	W38593
sec-Butylbenzene	ND	20		µg/L	20	11/10/2016 12:17:23 AM	W38593
Styrene	ND	20		µg/L	20	11/10/2016 12:17:23 AM	W38593
tert-Butylbenzene	ND	20		µg/L	20	11/10/2016 12:17:23 AM	W38593
1,1,1,2-Tetrachloroethane	ND	20		µg/L	20	11/10/2016 12:17:23 AM	W38593
1,1,2,2-Tetrachloroethane	ND	40		µg/L	20	11/10/2016 12:17:23 AM	W38593
Tetrachloroethene (PCE)	ND	20		µg/L	20	11/10/2016 12:17:23 AM	W38593
trans-1,2-DCE	ND	20		µg/L	20	11/10/2016 12:17:23 AM	W38593
trans-1,3-Dichloropropene	ND	20		µg/L	20	11/10/2016 12:17:23 AM	W38593
1,2,3-Trichlorobenzene	ND	20		µg/L	20	11/10/2016 12:17:23 AM	W38593
1,2,4-Trichlorobenzene	ND	20		µg/L	20	11/10/2016 12:17:23 AM	W38593
1,1,1-Trichloroethane	ND	20		µg/L	20	11/10/2016 12:17:23 AM	W38593
1,1,2-Trichloroethane	ND	20		µg/L	20	11/10/2016 12:17:23 AM	W38593
Trichloroethene (TCE)	ND	20		µg/L	20	11/10/2016 12:17:23 AM	W38593
Trichlorofluoromethane	ND	20		µg/L	20	11/10/2016 12:17:23 AM	W38593
1,2,3-Trichloropropane	ND	40		µg/L	20	11/10/2016 12:17:23 AM	W38593
Vinyl chloride	ND	20		µg/L	20	11/10/2016 12:17:23 AM	W38593
Xylenes, Total	1500	30		µg/L	20	11/10/2016 12:17:23 AM	W38593
Surr: 1,2-Dichloroethane-d4	95.3	70-130		%Rec	20	11/10/2016 12:17:23 AM	W38593
Surr: 4-Bromofluorobenzene	95.4	70-130		%Rec	20	11/10/2016 12:17:23 AM	W38593
Surr: Dibromofluoromethane	93.3	70-130		%Rec	20	11/10/2016 12:17:23 AM	W38593
Surr: Toluene-d8	95.8	70-130		%Rec	20	11/10/2016 12:17:23 AM	W38593

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

Qualifiers:

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1611252**

Date Reported: **11/15/2016**

CLIENT: EA Engineering

Project: Fairview

Lab ID: 1611252-005

Client Sample ID: MW-13

Collection Date: 11/3/2016 8:55:00 AM

Matrix: AQUEOUS

Received Date: 11/4/2016 12:25:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch	Analyst: DJF
EPA METHOD 8260B: VOLATILES								
Benzene	1900	100		µg/L	100	11/10/2016 1:14:39 AM	W38593	
Toluene	18	10		µg/L	10	11/10/2016 1:43:09 AM	W38593	
Ethylbenzene	220	10		µg/L	10	11/10/2016 1:43:09 AM	W38593	
Methyl tert-butyl ether (MTBE)	10	10		µg/L	10	11/10/2016 1:43:09 AM	W38593	
1,2,4-Trimethylbenzene	70	10		µg/L	10	11/10/2016 1:43:09 AM	W38593	
1,3,5-Trimethylbenzene	14	10		µg/L	10	11/10/2016 1:43:09 AM	W38593	
1,2-Dichloroethane (EDC)	ND	10		µg/L	10	11/10/2016 1:43:09 AM	W38593	
1,2-Dibromoethane (EDB)	ND	10		µg/L	10	11/10/2016 1:43:09 AM	W38593	
Naphthalene	59	20		µg/L	10	11/10/2016 1:43:09 AM	W38593	
1-Methylnaphthalene	ND	40		µg/L	10	11/10/2016 1:43:09 AM	W38593	
2-Methylnaphthalene	ND	40		µg/L	10	11/10/2016 1:43:09 AM	W38593	
Acetone	ND	100		µg/L	10	11/10/2016 1:43:09 AM	W38593	
Bromobenzene	ND	10		µg/L	10	11/10/2016 1:43:09 AM	W38593	
Bromodichloromethane	ND	10		µg/L	10	11/10/2016 1:43:09 AM	W38593	
Bromoform	ND	10		µg/L	10	11/10/2016 1:43:09 AM	W38593	
Bromomethane	ND	30		µg/L	10	11/10/2016 1:43:09 AM	W38593	
2-Butanone	ND	100		µg/L	10	11/10/2016 1:43:09 AM	W38593	
Carbon disulfide	ND	100		µg/L	10	11/10/2016 1:43:09 AM	W38593	
Carbon Tetrachloride	ND	10		µg/L	10	11/10/2016 1:43:09 AM	W38593	
Chlorobenzene	ND	10		µg/L	10	11/10/2016 1:43:09 AM	W38593	
Chloroethane	ND	20		µg/L	10	11/10/2016 1:43:09 AM	W38593	
Chloroform	ND	10		µg/L	10	11/10/2016 1:43:09 AM	W38593	
Chloromethane	ND	30		µg/L	10	11/10/2016 1:43:09 AM	W38593	
2-Chlorotoluene	ND	10		µg/L	10	11/10/2016 1:43:09 AM	W38593	
4-Chlorotoluene	ND	10		µg/L	10	11/10/2016 1:43:09 AM	W38593	
cis-1,2-DCE	ND	10		µg/L	10	11/10/2016 1:43:09 AM	W38593	
cis-1,3-Dichloropropene	ND	10		µg/L	10	11/10/2016 1:43:09 AM	W38593	
1,2-Dibromo-3-chloropropane	ND	20		µg/L	10	11/10/2016 1:43:09 AM	W38593	
Dibromochloromethane	ND	10		µg/L	10	11/10/2016 1:43:09 AM	W38593	
Dibromomethane	ND	10		µg/L	10	11/10/2016 1:43:09 AM	W38593	
1,2-Dichlorobenzene	ND	10		µg/L	10	11/10/2016 1:43:09 AM	W38593	
1,3-Dichlorobenzene	ND	10		µg/L	10	11/10/2016 1:43:09 AM	W38593	
1,4-Dichlorobenzene	ND	10		µg/L	10	11/10/2016 1:43:09 AM	W38593	
Dichlorodifluoromethane	ND	10		µg/L	10	11/10/2016 1:43:09 AM	W38593	
1,1-Dichloroethane	ND	10		µg/L	10	11/10/2016 1:43:09 AM	W38593	
1,1-Dichloroethene	ND	10		µg/L	10	11/10/2016 1:43:09 AM	W38593	
1,2-Dichloropropane	ND	10		µg/L	10	11/10/2016 1:43:09 AM	W38593	
1,3-Dichloropropane	ND	10		µg/L	10	11/10/2016 1:43:09 AM	W38593	
2,2-Dichloropropane	ND	20		µg/L	10	11/10/2016 1:43:09 AM	W38593	

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

Qualifiers:

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

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

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Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1611252

Date Reported: 11/15/2016

CLIENT: EA Engineering

Project: Fairview

Lab ID: 1611252-005

Client Sample ID: MW-13

Collection Date: 11/3/2016 8:55:00 AM

Matrix: AQUEOUS

Received Date: 11/4/2016 12:25:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch	Analyst: DJF
EPA METHOD 8260B: VOLATILES								
1,1-Dichloropropene	ND	10		µg/L	10	11/10/2016 1:43:09 AM	W38593	
Hexachlorobutadiene	ND	10		µg/L	10	11/10/2016 1:43:09 AM	W38593	
2-Hexanone	ND	100		µg/L	10	11/10/2016 1:43:09 AM	W38593	
Isopropylbenzene	12	10		µg/L	10	11/10/2016 1:43:09 AM	W38593	
4-Isopropyltoluene	ND	10		µg/L	10	11/10/2016 1:43:09 AM	W38593	
4-Methyl-2-pentanone	ND	100		µg/L	10	11/10/2016 1:43:09 AM	W38593	
Methylene Chloride	ND	30		µg/L	10	11/10/2016 1:43:09 AM	W38593	
n-Butylbenzene	ND	30		µg/L	10	11/10/2016 1:43:09 AM	W38593	
n-Propylbenzene	27	10		µg/L	10	11/10/2016 1:43:09 AM	W38593	
sec-Butylbenzene	ND	10		µg/L	10	11/10/2016 1:43:09 AM	W38593	
Styrene	ND	10		µg/L	10	11/10/2016 1:43:09 AM	W38593	
tert-Butylbenzene	ND	10		µg/L	10	11/10/2016 1:43:09 AM	W38593	
1,1,1,2-Tetrachloroethane	ND	10		µg/L	10	11/10/2016 1:43:09 AM	W38593	
1,1,2,2-Tetrachloroethane	ND	20		µg/L	10	11/10/2016 1:43:09 AM	W38593	
Tetrachloroethene (PCE)	ND	10		µg/L	10	11/10/2016 1:43:09 AM	W38593	
trans-1,2-DCE	ND	10		µg/L	10	11/10/2016 1:43:09 AM	W38593	
trans-1,3-Dichloropropene	ND	10		µg/L	10	11/10/2016 1:43:09 AM	W38593	
1,2,3-Trichlorobenzene	ND	10		µg/L	10	11/10/2016 1:43:09 AM	W38593	
1,2,4-Trichlorobenzene	ND	10		µg/L	10	11/10/2016 1:43:09 AM	W38593	
1,1,1-Trichloroethane	ND	10		µg/L	10	11/10/2016 1:43:09 AM	W38593	
1,1,2-Trichloroethane	ND	10		µg/L	10	11/10/2016 1:43:09 AM	W38593	
Trichloroethene (TCE)	ND	10		µg/L	10	11/10/2016 1:43:09 AM	W38593	
Trichlorofluoromethane	ND	10		µg/L	10	11/10/2016 1:43:09 AM	W38593	
1,2,3-Trichloropropane	ND	20		µg/L	10	11/10/2016 1:43:09 AM	W38593	
Vinyl chloride	ND	10		µg/L	10	11/10/2016 1:43:09 AM	W38593	
Xylenes, Total	73	15		µg/L	10	11/10/2016 1:43:09 AM	W38593	
Surr: 1,2-Dichloroethane-d4	89.3	70-130		%Rec	10	11/10/2016 1:43:09 AM	W38593	
Surr: 4-Bromofluorobenzene	95.1	70-130		%Rec	10	11/10/2016 1:43:09 AM	W38593	
Surr: Dibromofluoromethane	91.2	70-130		%Rec	10	11/10/2016 1:43:09 AM	W38593	
Surr: Toluene-d8	98.3	70-130		%Rec	10	11/10/2016 1:43:09 AM	W38593	

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

Qualifiers:

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

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

Page 8 of 23

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1611252**

Date Reported: **11/15/2016**

CLIENT: EA Engineering

Project: Fairview

Lab ID: 1611252-006

Client Sample ID: MW-16

Collection Date: 11/3/2016 12:35:00 PM

Matrix: AQUEOUS

Received Date: 11/4/2016 12:25:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch	Analyst: DJF
EPA METHOD 8260B: VOLATILES								
Benzene	73	1.0		µg/L	1	11/10/2016 2:40:14 AM	W38593	
Toluene	23	1.0		µg/L	1	11/10/2016 2:40:14 AM	W38593	
Ethylbenzene	80	1.0		µg/L	1	11/10/2016 2:40:14 AM	W38593	
Methyl tert-butyl ether (MTBE)	3.4	1.0		µg/L	1	11/10/2016 2:40:14 AM	W38593	
1,2,4-Trimethylbenzene	120	10		µg/L	10	11/10/2016 2:11:42 AM	W38593	
1,3,5-Trimethylbenzene	27	1.0		µg/L	1	11/10/2016 2:40:14 AM	W38593	
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/10/2016 2:40:14 AM	W38593	
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/10/2016 2:40:14 AM	W38593	
Naphthalene	42	2.0		µg/L	1	11/10/2016 2:40:14 AM	W38593	
1-Methylnaphthalene	11	4.0		µg/L	1	11/10/2016 2:40:14 AM	W38593	
2-Methylnaphthalene	16	4.0		µg/L	1	11/10/2016 2:40:14 AM	W38593	
Acetone	ND	10		µg/L	1	11/10/2016 2:40:14 AM	W38593	
Bromobenzene	ND	1.0		µg/L	1	11/10/2016 2:40:14 AM	W38593	
Bromodichloromethane	ND	1.0		µg/L	1	11/10/2016 2:40:14 AM	W38593	
Bromoform	ND	1.0		µg/L	1	11/10/2016 2:40:14 AM	W38593	
Bromomethane	ND	3.0		µg/L	1	11/10/2016 2:40:14 AM	W38593	
2-Butanone	ND	10		µg/L	1	11/10/2016 2:40:14 AM	W38593	
Carbon disulfide	ND	10		µg/L	1	11/10/2016 2:40:14 AM	W38593	
Carbon Tetrachloride	ND	1.0		µg/L	1	11/10/2016 2:40:14 AM	W38593	
Chlorobenzene	ND	1.0		µg/L	1	11/10/2016 2:40:14 AM	W38593	
Chloroethane	ND	2.0		µg/L	1	11/10/2016 2:40:14 AM	W38593	
Chloroform	ND	1.0		µg/L	1	11/10/2016 2:40:14 AM	W38593	
Chloromethane	ND	3.0		µg/L	1	11/10/2016 2:40:14 AM	W38593	
2-Chlorotoluene	ND	1.0		µg/L	1	11/10/2016 2:40:14 AM	W38593	
4-Chlorotoluene	ND	1.0		µg/L	1	11/10/2016 2:40:14 AM	W38593	
cis-1,2-DCE	ND	1.0		µg/L	1	11/10/2016 2:40:14 AM	W38593	
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/10/2016 2:40:14 AM	W38593	
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/10/2016 2:40:14 AM	W38593	
Dibromochloromethane	ND	1.0		µg/L	1	11/10/2016 2:40:14 AM	W38593	
Dibromomethane	ND	1.0		µg/L	1	11/10/2016 2:40:14 AM	W38593	
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/10/2016 2:40:14 AM	W38593	
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/10/2016 2:40:14 AM	W38593	
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/10/2016 2:40:14 AM	W38593	
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/10/2016 2:40:14 AM	W38593	
1,1-Dichloroethane	ND	1.0		µg/L	1	11/10/2016 2:40:14 AM	W38593	
1,1-Dichloroethene	ND	1.0		µg/L	1	11/10/2016 2:40:14 AM	W38593	
1,2-Dichloropropane	ND	1.0		µg/L	1	11/10/2016 2:40:14 AM	W38593	
1,3-Dichloropropane	ND	1.0		µg/L	1	11/10/2016 2:40:14 AM	W38593	
2,2-Dichloropropane	ND	2.0		µg/L	1	11/10/2016 2:40:14 AM	W38593	

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

Qualifiers:

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

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

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Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1611252**

Date Reported: **11/15/2016**

CLIENT: EA Engineering

Project: Fairview

Lab ID: 1611252-006

Client Sample ID: MW-16

Collection Date: 11/3/2016 12:35:00 PM

Matrix: AQUEOUS

Received Date: 11/4/2016 12:25:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch	Analyst: DJF
EPA METHOD 8260B: VOLATILES								
1,1-Dichloropropene	ND	1.0		µg/L	1	11/10/2016 2:40:14 AM	W38593	
Hexachlorobutadiene	ND	1.0		µg/L	1	11/10/2016 2:40:14 AM	W38593	
2-Hexanone	ND	10		µg/L	1	11/10/2016 2:40:14 AM	W38593	
Isopropylbenzene	9.6	1.0		µg/L	1	11/10/2016 2:40:14 AM	W38593	
4-Isopropyltoluene	ND	1.0		µg/L	1	11/10/2016 2:40:14 AM	W38593	
4-Methyl-2-pentanone	ND	10		µg/L	1	11/10/2016 2:40:14 AM	W38593	
Methylene Chloride	ND	3.0		µg/L	1	11/10/2016 2:40:14 AM	W38593	
n-Butylbenzene	ND	3.0		µg/L	1	11/10/2016 2:40:14 AM	W38593	
n-Propylbenzene	17	1.0		µg/L	1	11/10/2016 2:40:14 AM	W38593	
sec-Butylbenzene	2.4	1.0		µg/L	1	11/10/2016 2:40:14 AM	W38593	
Styrene	ND	1.0		µg/L	1	11/10/2016 2:40:14 AM	W38593	
tert-Butylbenzene	ND	1.0		µg/L	1	11/10/2016 2:40:14 AM	W38593	
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/10/2016 2:40:14 AM	W38593	
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/10/2016 2:40:14 AM	W38593	
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/10/2016 2:40:14 AM	W38593	
trans-1,2-DCE	ND	1.0		µg/L	1	11/10/2016 2:40:14 AM	W38593	
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/10/2016 2:40:14 AM	W38593	
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/10/2016 2:40:14 AM	W38593	
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/10/2016 2:40:14 AM	W38593	
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/10/2016 2:40:14 AM	W38593	
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/10/2016 2:40:14 AM	W38593	
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/10/2016 2:40:14 AM	W38593	
Trichlorofluoromethane	ND	1.0		µg/L	1	11/10/2016 2:40:14 AM	W38593	
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/10/2016 2:40:14 AM	W38593	
Vinyl chloride	ND	1.0		µg/L	1	11/10/2016 2:40:14 AM	W38593	
Xylenes, Total	110	1.5		µg/L	1	11/10/2016 2:40:14 AM	W38593	
Surr: 1,2-Dichloroethane-d4	86.9	70-130		%Rec	1	11/10/2016 2:40:14 AM	W38593	
Surr: 4-Bromofluorobenzene	94.5	70-130		%Rec	1	11/10/2016 2:40:14 AM	W38593	
Surr: Dibromofluoromethane	85.3	70-130		%Rec	1	11/10/2016 2:40:14 AM	W38593	
Surr: Toluene-d8	99.3	70-130		%Rec	1	11/10/2016 2:40:14 AM	W38593	

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

Qualifiers:

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

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

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Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1611252

Date Reported: 11/15/2016

CLIENT: EA Engineering

Project: Fairview

Lab ID: 1611252-007

Client Sample ID: MW-17

Collection Date: 11/3/2016 11:35:00 AM

Matrix: AQUEOUS

Received Date: 11/4/2016 12:25:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch	Analyst: DJF
EPA METHOD 8260B: VOLATILES								
Benzene	ND	1.0		µg/L	1	11/10/2016 3:08:46 AM	W38593	
Toluene	ND	1.0		µg/L	1	11/10/2016 3:08:46 AM	W38593	
Ethylbenzene	ND	1.0		µg/L	1	11/10/2016 3:08:46 AM	W38593	
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/10/2016 3:08:46 AM	W38593	
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/10/2016 3:08:46 AM	W38593	
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/10/2016 3:08:46 AM	W38593	
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/10/2016 3:08:46 AM	W38593	
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/10/2016 3:08:46 AM	W38593	
Naphthalene	ND	2.0		µg/L	1	11/10/2016 3:08:46 AM	W38593	
1-Methylnaphthalene	ND	4.0		µg/L	1	11/10/2016 3:08:46 AM	W38593	
2-Methylnaphthalene	ND	4.0		µg/L	1	11/10/2016 3:08:46 AM	W38593	
Acetone	ND	10		µg/L	1	11/10/2016 3:08:46 AM	W38593	
Bromobenzene	ND	1.0		µg/L	1	11/10/2016 3:08:46 AM	W38593	
Bromodichloromethane	ND	1.0		µg/L	1	11/10/2016 3:08:46 AM	W38593	
Bromoform	ND	1.0		µg/L	1	11/10/2016 3:08:46 AM	W38593	
Bromomethane	ND	3.0		µg/L	1	11/10/2016 3:08:46 AM	W38593	
2-Butanone	ND	10		µg/L	1	11/10/2016 3:08:46 AM	W38593	
Carbon disulfide	ND	10		µg/L	1	11/10/2016 3:08:46 AM	W38593	
Carbon Tetrachloride	ND	1.0		µg/L	1	11/10/2016 3:08:46 AM	W38593	
Chlorobenzene	ND	1.0		µg/L	1	11/10/2016 3:08:46 AM	W38593	
Chloroethane	ND	2.0		µg/L	1	11/10/2016 3:08:46 AM	W38593	
Chloroform	ND	1.0		µg/L	1	11/10/2016 3:08:46 AM	W38593	
Chloromethane	ND	3.0		µg/L	1	11/10/2016 3:08:46 AM	W38593	
2-Chlorotoluene	ND	1.0		µg/L	1	11/10/2016 3:08:46 AM	W38593	
4-Chlorotoluene	ND	1.0		µg/L	1	11/10/2016 3:08:46 AM	W38593	
cis-1,2-DCE	ND	1.0		µg/L	1	11/10/2016 3:08:46 AM	W38593	
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/10/2016 3:08:46 AM	W38593	
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/10/2016 3:08:46 AM	W38593	
Dibromochloromethane	ND	1.0		µg/L	1	11/10/2016 3:08:46 AM	W38593	
Dibromomethane	ND	1.0		µg/L	1	11/10/2016 3:08:46 AM	W38593	
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/10/2016 3:08:46 AM	W38593	
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/10/2016 3:08:46 AM	W38593	
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/10/2016 3:08:46 AM	W38593	
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/10/2016 3:08:46 AM	W38593	
1,1-Dichloroethane	ND	1.0		µg/L	1	11/10/2016 3:08:46 AM	W38593	
1,1-Dichloroethene	ND	1.0		µg/L	1	11/10/2016 3:08:46 AM	W38593	
1,2-Dichloropropane	ND	1.0		µg/L	1	11/10/2016 3:08:46 AM	W38593	
1,3-Dichloropropane	ND	1.0		µg/L	1	11/10/2016 3:08:46 AM	W38593	
2,2-Dichloropropane	ND	2.0		µg/L	1	11/10/2016 3:08:46 AM	W38593	

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

Qualifiers:

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

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1611252

Date Reported: 11/15/2016

CLIENT: EA Engineering

Project: Fairview

Lab ID: 1611252-007

Client Sample ID: MW-17

Collection Date: 11/3/2016 11:35:00 AM

Matrix: AQUEOUS

Received Date: 11/4/2016 12:25:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch	Analyst: DJF
EPA METHOD 8260B: VOLATILES								
1,1-Dichloropropene	ND	1.0		µg/L	1	11/10/2016 3:08:46 AM	W38593	
Hexachlorobutadiene	ND	1.0		µg/L	1	11/10/2016 3:08:46 AM	W38593	
2-Hexanone	ND	10		µg/L	1	11/10/2016 3:08:46 AM	W38593	
Isopropylbenzene	ND	1.0		µg/L	1	11/10/2016 3:08:46 AM	W38593	
4-Isopropyltoluene	ND	1.0		µg/L	1	11/10/2016 3:08:46 AM	W38593	
4-Methyl-2-pentanone	ND	10		µg/L	1	11/10/2016 3:08:46 AM	W38593	
Methylene Chloride	ND	3.0		µg/L	1	11/10/2016 3:08:46 AM	W38593	
n-Butylbenzene	ND	3.0		µg/L	1	11/10/2016 3:08:46 AM	W38593	
n-Propylbenzene	ND	1.0		µg/L	1	11/10/2016 3:08:46 AM	W38593	
sec-Butylbenzene	ND	1.0		µg/L	1	11/10/2016 3:08:46 AM	W38593	
Styrene	ND	1.0		µg/L	1	11/10/2016 3:08:46 AM	W38593	
tert-Butylbenzene	ND	1.0		µg/L	1	11/10/2016 3:08:46 AM	W38593	
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/10/2016 3:08:46 AM	W38593	
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/10/2016 3:08:46 AM	W38593	
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/10/2016 3:08:46 AM	W38593	
trans-1,2-DCE	ND	1.0		µg/L	1	11/10/2016 3:08:46 AM	W38593	
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/10/2016 3:08:46 AM	W38593	
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/10/2016 3:08:46 AM	W38593	
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/10/2016 3:08:46 AM	W38593	
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/10/2016 3:08:46 AM	W38593	
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/10/2016 3:08:46 AM	W38593	
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/10/2016 3:08:46 AM	W38593	
Trichlorofluoromethane	ND	1.0		µg/L	1	11/10/2016 3:08:46 AM	W38593	
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/10/2016 3:08:46 AM	W38593	
Vinyl chloride	ND	1.0		µg/L	1	11/10/2016 3:08:46 AM	W38593	
Xylenes, Total	ND	1.5		µg/L	1	11/10/2016 3:08:46 AM	W38593	
Surr: 1,2-Dichloroethane-d4	94.3	70-130		%Rec	1	11/10/2016 3:08:46 AM	W38593	
Surr: 4-Bromofluorobenzene	92.6	70-130		%Rec	1	11/10/2016 3:08:46 AM	W38593	
Surr: Dibromofluoromethane	95.7	70-130		%Rec	1	11/10/2016 3:08:46 AM	W38593	
Surr: Toluene-d8	99.8	70-130		%Rec	1	11/10/2016 3:08:46 AM	W38593	

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

Qualifiers:

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

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

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Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1611252

Date Reported: 11/15/2016

CLIENT: EA Engineering

Project: Fairview

Lab ID: 1611252-008

Client Sample ID: MW-19

Collection Date: 11/3/2016 11:10:00 AM

Matrix: AQUEOUS

Received Date: 11/4/2016 12:25:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch	Analyst: DJF
EPA METHOD 8260B: VOLATILES								
Benzene	20	1.0		µg/L	1	11/10/2016 4:05:40 AM	W38593	
Toluene	2.3	1.0		µg/L	1	11/10/2016 4:05:40 AM	W38593	
Ethylbenzene	ND	1.0		µg/L	1	11/10/2016 4:05:40 AM	W38593	
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/10/2016 4:05:40 AM	W38593	
1,2,4-Trimethylbenzene	5.5	1.0		µg/L	1	11/10/2016 4:05:40 AM	W38593	
1,3,5-Trimethylbenzene	1.5	1.0		µg/L	1	11/10/2016 4:05:40 AM	W38593	
1,2-Dichloroethane (EDC)	1.4	1.0		µg/L	1	11/10/2016 4:05:40 AM	W38593	
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/10/2016 4:05:40 AM	W38593	
Naphthalene	ND	2.0		µg/L	1	11/10/2016 4:05:40 AM	W38593	
1-Methylnaphthalene	ND	4.0		µg/L	1	11/10/2016 4:05:40 AM	W38593	
2-Methylnaphthalene	ND	4.0		µg/L	1	11/10/2016 4:05:40 AM	W38593	
Acetone	ND	10		µg/L	1	11/10/2016 4:05:40 AM	W38593	
Bromobenzene	ND	1.0		µg/L	1	11/10/2016 4:05:40 AM	W38593	
Bromodichloromethane	ND	1.0		µg/L	1	11/10/2016 4:05:40 AM	W38593	
Bromoform	ND	1.0		µg/L	1	11/10/2016 4:05:40 AM	W38593	
Bromomethane	ND	3.0		µg/L	1	11/10/2016 4:05:40 AM	W38593	
2-Butanone	ND	10		µg/L	1	11/10/2016 4:05:40 AM	W38593	
Carbon disulfide	ND	10		µg/L	1	11/10/2016 4:05:40 AM	W38593	
Carbon Tetrachloride	ND	1.0		µg/L	1	11/10/2016 4:05:40 AM	W38593	
Chlorobenzene	ND	1.0		µg/L	1	11/10/2016 4:05:40 AM	W38593	
Chloroethane	ND	2.0		µg/L	1	11/10/2016 4:05:40 AM	W38593	
Chloroform	ND	1.0		µg/L	1	11/10/2016 4:05:40 AM	W38593	
Chloromethane	ND	3.0		µg/L	1	11/10/2016 4:05:40 AM	W38593	
2-Chlorotoluene	ND	1.0		µg/L	1	11/10/2016 4:05:40 AM	W38593	
4-Chlorotoluene	ND	1.0		µg/L	1	11/10/2016 4:05:40 AM	W38593	
cis-1,2-DCE	ND	1.0		µg/L	1	11/10/2016 4:05:40 AM	W38593	
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/10/2016 4:05:40 AM	W38593	
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/10/2016 4:05:40 AM	W38593	
Dibromochloromethane	ND	1.0		µg/L	1	11/10/2016 4:05:40 AM	W38593	
Dibromomethane	ND	1.0		µg/L	1	11/10/2016 4:05:40 AM	W38593	
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/10/2016 4:05:40 AM	W38593	
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/10/2016 4:05:40 AM	W38593	
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/10/2016 4:05:40 AM	W38593	
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/10/2016 4:05:40 AM	W38593	
1,1-Dichloroethane	ND	1.0		µg/L	1	11/10/2016 4:05:40 AM	W38593	
1,1-Dichloroethene	ND	1.0		µg/L	1	11/10/2016 4:05:40 AM	W38593	
1,2-Dichloropropane	ND	1.0		µg/L	1	11/10/2016 4:05:40 AM	W38593	
1,3-Dichloropropane	ND	1.0		µg/L	1	11/10/2016 4:05:40 AM	W38593	
2,2-Dichloropropane	ND	2.0		µg/L	1	11/10/2016 4:05:40 AM	W38593	

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1611252**

Date Reported: **11/15/2016**

CLIENT: EA Engineering

Project: Fairview

Lab ID: 1611252-008

Client Sample ID: MW-19

Collection Date: 11/3/2016 11:10:00 AM

Matrix: AQUEOUS

Received Date: 11/4/2016 12:25:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch	Analyst: DJF
EPA METHOD 8260B: VOLATILES								
1,1-Dichloropropene	ND	1.0		µg/L	1	11/10/2016 4:05:40 AM	W38593	
Hexachlorobutadiene	ND	1.0		µg/L	1	11/10/2016 4:05:40 AM	W38593	
2-Hexanone	ND	10		µg/L	1	11/10/2016 4:05:40 AM	W38593	
Isopropylbenzene	1.1	1.0		µg/L	1	11/10/2016 4:05:40 AM	W38593	
4-Isopropyltoluene	ND	1.0		µg/L	1	11/10/2016 4:05:40 AM	W38593	
4-Methyl-2-pentanone	ND	10		µg/L	1	11/10/2016 4:05:40 AM	W38593	
Methylene Chloride	ND	3.0		µg/L	1	11/10/2016 4:05:40 AM	W38593	
n-Butylbenzene	ND	3.0		µg/L	1	11/10/2016 4:05:40 AM	W38593	
n-Propylbenzene	ND	1.0		µg/L	1	11/10/2016 4:05:40 AM	W38593	
sec-Butylbenzene	ND	1.0		µg/L	1	11/10/2016 4:05:40 AM	W38593	
Styrene	ND	1.0		µg/L	1	11/10/2016 4:05:40 AM	W38593	
tert-Butylbenzene	ND	1.0		µg/L	1	11/10/2016 4:05:40 AM	W38593	
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/10/2016 4:05:40 AM	W38593	
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/10/2016 4:05:40 AM	W38593	
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/10/2016 4:05:40 AM	W38593	
trans-1,2-DCE	ND	1.0		µg/L	1	11/10/2016 4:05:40 AM	W38593	
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/10/2016 4:05:40 AM	W38593	
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/10/2016 4:05:40 AM	W38593	
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/10/2016 4:05:40 AM	W38593	
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/10/2016 4:05:40 AM	W38593	
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/10/2016 4:05:40 AM	W38593	
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/10/2016 4:05:40 AM	W38593	
Trichlorofluoromethane	ND	1.0		µg/L	1	11/10/2016 4:05:40 AM	W38593	
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/10/2016 4:05:40 AM	W38593	
Vinyl chloride	ND	1.0		µg/L	1	11/10/2016 4:05:40 AM	W38593	
Xylenes, Total	5.7	1.5		µg/L	1	11/10/2016 4:05:40 AM	W38593	
Surr: 1,2-Dichloroethane-d4	87.5	70-130	%Rec		1	11/10/2016 4:05:40 AM	W38593	
Surr: 4-Bromofluorobenzene	93.3	70-130	%Rec		1	11/10/2016 4:05:40 AM	W38593	
Surr: Dibromofluoromethane	88.3	70-130	%Rec		1	11/10/2016 4:05:40 AM	W38593	
Surr: Toluene-d8	99.4	70-130	%Rec		1	11/10/2016 4:05:40 AM	W38593	

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

Qualifiers: * Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

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P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1611252

Date Reported: 11/15/2016

CLIENT: EA Engineering

Project: Fairview

Lab ID: 1611252-009

Client Sample ID: MW-20

Collection Date: 11/3/2016 10:30:00 AM

Matrix: AQUEOUS

Received Date: 11/4/2016 12:25:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							
Benzene	ND	1.0		µg/L	1	11/10/2016 4:34:09 AM	W38593
Toluene	ND	1.0		µg/L	1	11/10/2016 4:34:09 AM	W38593
Ethylbenzene	ND	1.0		µg/L	1	11/10/2016 4:34:09 AM	W38593
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/10/2016 4:34:09 AM	W38593
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/10/2016 4:34:09 AM	W38593
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/10/2016 4:34:09 AM	W38593
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/10/2016 4:34:09 AM	W38593
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/10/2016 4:34:09 AM	W38593
Naphthalene	ND	2.0		µg/L	1	11/10/2016 4:34:09 AM	W38593
1-Methylnaphthalene	ND	4.0		µg/L	1	11/10/2016 4:34:09 AM	W38593
2-Methylnaphthalene	ND	4.0		µg/L	1	11/10/2016 4:34:09 AM	W38593
Acetone	ND	10		µg/L	1	11/10/2016 4:34:09 AM	W38593
Bromobenzene	ND	1.0		µg/L	1	11/10/2016 4:34:09 AM	W38593
Bromodichloromethane	ND	1.0		µg/L	1	11/10/2016 4:34:09 AM	W38593
Bromoform	ND	1.0		µg/L	1	11/10/2016 4:34:09 AM	W38593
Bromomethane	ND	3.0		µg/L	1	11/10/2016 4:34:09 AM	W38593
2-Butanone	ND	10		µg/L	1	11/10/2016 4:34:09 AM	W38593
Carbon disulfide	ND	10		µg/L	1	11/10/2016 4:34:09 AM	W38593
Carbon Tetrachloride	ND	1.0		µg/L	1	11/10/2016 4:34:09 AM	W38593
Chlorobenzene	ND	1.0		µg/L	1	11/10/2016 4:34:09 AM	W38593
Chloroethane	ND	2.0		µg/L	1	11/10/2016 4:34:09 AM	W38593
Chloroform	ND	1.0		µg/L	1	11/10/2016 4:34:09 AM	W38593
Chloromethane	ND	3.0		µg/L	1	11/10/2016 4:34:09 AM	W38593
2-Chlorotoluene	ND	1.0		µg/L	1	11/10/2016 4:34:09 AM	W38593
4-Chlorotoluene	ND	1.0		µg/L	1	11/10/2016 4:34:09 AM	W38593
cis-1,2-DCE	ND	1.0		µg/L	1	11/10/2016 4:34:09 AM	W38593
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/10/2016 4:34:09 AM	W38593
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/10/2016 4:34:09 AM	W38593
Dibromochloromethane	ND	1.0		µg/L	1	11/10/2016 4:34:09 AM	W38593
Dibromomethane	ND	1.0		µg/L	1	11/10/2016 4:34:09 AM	W38593
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/10/2016 4:34:09 AM	W38593
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/10/2016 4:34:09 AM	W38593
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/10/2016 4:34:09 AM	W38593
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/10/2016 4:34:09 AM	W38593
1,1-Dichloroethane	ND	1.0		µg/L	1	11/10/2016 4:34:09 AM	W38593
1,1-Dichloroethene	ND	1.0		µg/L	1	11/10/2016 4:34:09 AM	W38593
1,2-Dichloropropane	ND	1.0		µg/L	1	11/10/2016 4:34:09 AM	W38593
1,3-Dichloropropane	ND	1.0		µg/L	1	11/10/2016 4:34:09 AM	W38593
2,2-Dichloropropane	ND	2.0		µg/L	1	11/10/2016 4:34:09 AM	W38593

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

Qualifiers:

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

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1611252

Date Reported: 11/15/2016

CLIENT: EA Engineering

Project: Fairview

Lab ID: 1611252-009

Client Sample ID: MW-20

Collection Date: 11/3/2016 10:30:00 AM

Matrix: AQUEOUS

Received Date: 11/4/2016 12:25:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch	Analyst: DJF
EPA METHOD 8260B: VOLATILES								
1,1-Dichloropropene	ND	1.0		µg/L	1	11/10/2016 4:34:09 AM	W38593	
Hexachlorobutadiene	ND	1.0		µg/L	1	11/10/2016 4:34:09 AM	W38593	
2-Hexanone	ND	10		µg/L	1	11/10/2016 4:34:09 AM	W38593	
Isopropylbenzene	ND	1.0		µg/L	1	11/10/2016 4:34:09 AM	W38593	
4-Isopropyltoluene	ND	1.0		µg/L	1	11/10/2016 4:34:09 AM	W38593	
4-Methyl-2-pentanone	ND	10		µg/L	1	11/10/2016 4:34:09 AM	W38593	
Methylene Chloride	ND	3.0		µg/L	1	11/10/2016 4:34:09 AM	W38593	
n-Butylbenzene	ND	3.0		µg/L	1	11/10/2016 4:34:09 AM	W38593	
n-Propylbenzene	ND	1.0		µg/L	1	11/10/2016 4:34:09 AM	W38593	
sec-Butylbenzene	ND	1.0		µg/L	1	11/10/2016 4:34:09 AM	W38593	
Styrene	ND	1.0		µg/L	1	11/10/2016 4:34:09 AM	W38593	
tert-Butylbenzene	ND	1.0		µg/L	1	11/10/2016 4:34:09 AM	W38593	
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/10/2016 4:34:09 AM	W38593	
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/10/2016 4:34:09 AM	W38593	
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/10/2016 4:34:09 AM	W38593	
trans-1,2-DCE	ND	1.0		µg/L	1	11/10/2016 4:34:09 AM	W38593	
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/10/2016 4:34:09 AM	W38593	
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/10/2016 4:34:09 AM	W38593	
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/10/2016 4:34:09 AM	W38593	
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/10/2016 4:34:09 AM	W38593	
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/10/2016 4:34:09 AM	W38593	
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/10/2016 4:34:09 AM	W38593	
Trichlorofluoromethane	ND	1.0		µg/L	1	11/10/2016 4:34:09 AM	W38593	
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/10/2016 4:34:09 AM	W38593	
Vinyl chloride	ND	1.0		µg/L	1	11/10/2016 4:34:09 AM	W38593	
Xylenes, Total	ND	1.5		µg/L	1	11/10/2016 4:34:09 AM	W38593	
Surr: 1,2-Dichloroethane-d4	92.4	70-130		%Rec	1	11/10/2016 4:34:09 AM	W38593	
Surr: 4-Bromofluorobenzene	92.9	70-130		%Rec	1	11/10/2016 4:34:09 AM	W38593	
Surr: Dibromofluoromethane	97.8	70-130		%Rec	1	11/10/2016 4:34:09 AM	W38593	
Surr: Toluene-d8	100	70-130		%Rec	1	11/10/2016 4:34:09 AM	W38593	

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

Qualifiers:

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

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

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Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1611252

Date Reported: 11/15/2016

CLIENT: EA Engineering

Project: Fairview

Lab ID: 1611252-010

Client Sample ID: MW-21

Collection Date: 11/3/2016 10:01:00 AM

Matrix: AQUEOUS

Received Date: 11/4/2016 12:25:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							
Benzene	ND	1.0		µg/L	1	11/10/2016 5:02:40 AM	W38593
Toluene	ND	1.0		µg/L	1	11/10/2016 5:02:40 AM	W38593
Ethylbenzene	ND	1.0		µg/L	1	11/10/2016 5:02:40 AM	W38593
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/10/2016 5:02:40 AM	W38593
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/10/2016 5:02:40 AM	W38593
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/10/2016 5:02:40 AM	W38593
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/10/2016 5:02:40 AM	W38593
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/10/2016 5:02:40 AM	W38593
Naphthalene	ND	2.0		µg/L	1	11/10/2016 5:02:40 AM	W38593
1-Methylnaphthalene	ND	4.0		µg/L	1	11/10/2016 5:02:40 AM	W38593
2-Methylnaphthalene	ND	4.0		µg/L	1	11/10/2016 5:02:40 AM	W38593
Acetone	ND	10		µg/L	1	11/10/2016 5:02:40 AM	W38593
Bromobenzene	ND	1.0		µg/L	1	11/10/2016 5:02:40 AM	W38593
Bromodichloromethane	ND	1.0		µg/L	1	11/10/2016 5:02:40 AM	W38593
Bromoform	ND	1.0		µg/L	1	11/10/2016 5:02:40 AM	W38593
Bromomethane	ND	3.0		µg/L	1	11/10/2016 5:02:40 AM	W38593
2-Butanone	ND	10		µg/L	1	11/10/2016 5:02:40 AM	W38593
Carbon disulfide	ND	10		µg/L	1	11/10/2016 5:02:40 AM	W38593
Carbon Tetrachloride	ND	1.0		µg/L	1	11/10/2016 5:02:40 AM	W38593
Chlorobenzene	ND	1.0		µg/L	1	11/10/2016 5:02:40 AM	W38593
Chloroethane	ND	2.0		µg/L	1	11/10/2016 5:02:40 AM	W38593
Chloroform	ND	1.0		µg/L	1	11/10/2016 5:02:40 AM	W38593
Chloromethane	ND	3.0		µg/L	1	11/10/2016 5:02:40 AM	W38593
2-Chlorotoluene	ND	1.0		µg/L	1	11/10/2016 5:02:40 AM	W38593
4-Chlorotoluene	ND	1.0		µg/L	1	11/10/2016 5:02:40 AM	W38593
cis-1,2-DCE	ND	1.0		µg/L	1	11/10/2016 5:02:40 AM	W38593
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/10/2016 5:02:40 AM	W38593
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/10/2016 5:02:40 AM	W38593
Dibromochloromethane	ND	1.0		µg/L	1	11/10/2016 5:02:40 AM	W38593
Dibromomethane	ND	1.0		µg/L	1	11/10/2016 5:02:40 AM	W38593
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/10/2016 5:02:40 AM	W38593
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/10/2016 5:02:40 AM	W38593
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/10/2016 5:02:40 AM	W38593
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/10/2016 5:02:40 AM	W38593
1,1-Dichloroethane	ND	1.0		µg/L	1	11/10/2016 5:02:40 AM	W38593
1,1-Dichloroethene	ND	1.0		µg/L	1	11/10/2016 5:02:40 AM	W38593
1,2-Dichloropropane	ND	1.0		µg/L	1	11/10/2016 5:02:40 AM	W38593
1,3-Dichloropropane	ND	1.0		µg/L	1	11/10/2016 5:02:40 AM	W38593
2,2-Dichloropropane	ND	2.0		µg/L	1	11/10/2016 5:02:40 AM	W38593

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

Qualifiers:

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

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1611252**

Date Reported: **11/15/2016**

CLIENT: EA Engineering

Project: Fairview

Lab ID: 1611252-010

Client Sample ID: MW-21

Collection Date: 11/3/2016 10:01:00 AM

Matrix: AQUEOUS

Received Date: 11/4/2016 12:25:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch	Analyst: DJF
EPA METHOD 8260B: VOLATILES								
1,1-Dichloropropene	ND	1.0		µg/L	1	11/10/2016 5:02:40 AM	W38593	
Hexachlorobutadiene	ND	1.0		µg/L	1	11/10/2016 5:02:40 AM	W38593	
2-Hexanone	ND	10		µg/L	1	11/10/2016 5:02:40 AM	W38593	
Isopropylbenzene	ND	1.0		µg/L	1	11/10/2016 5:02:40 AM	W38593	
4-Isopropyltoluene	ND	1.0		µg/L	1	11/10/2016 5:02:40 AM	W38593	
4-Methyl-2-pentanone	ND	10		µg/L	1	11/10/2016 5:02:40 AM	W38593	
Methylene Chloride	ND	3.0		µg/L	1	11/10/2016 5:02:40 AM	W38593	
n-Butylbenzene	ND	3.0		µg/L	1	11/10/2016 5:02:40 AM	W38593	
n-Propylbenzene	ND	1.0		µg/L	1	11/10/2016 5:02:40 AM	W38593	
sec-Butylbenzene	ND	1.0		µg/L	1	11/10/2016 5:02:40 AM	W38593	
Styrene	ND	1.0		µg/L	1	11/10/2016 5:02:40 AM	W38593	
tert-Butylbenzene	ND	1.0		µg/L	1	11/10/2016 5:02:40 AM	W38593	
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/10/2016 5:02:40 AM	W38593	
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/10/2016 5:02:40 AM	W38593	
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/10/2016 5:02:40 AM	W38593	
trans-1,2-DCE	ND	1.0		µg/L	1	11/10/2016 5:02:40 AM	W38593	
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/10/2016 5:02:40 AM	W38593	
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/10/2016 5:02:40 AM	W38593	
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/10/2016 5:02:40 AM	W38593	
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/10/2016 5:02:40 AM	W38593	
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/10/2016 5:02:40 AM	W38593	
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/10/2016 5:02:40 AM	W38593	
Trichlorofluoromethane	ND	1.0		µg/L	1	11/10/2016 5:02:40 AM	W38593	
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/10/2016 5:02:40 AM	W38593	
Vinyl chloride	ND	1.0		µg/L	1	11/10/2016 5:02:40 AM	W38593	
Xylenes, Total	ND	1.5		µg/L	1	11/10/2016 5:02:40 AM	W38593	
Surr: 1,2-Dichloroethane-d4	95.6	70-130		%Rec	1	11/10/2016 5:02:40 AM	W38593	
Surr: 4-Bromofluorobenzene	93.5	70-130		%Rec	1	11/10/2016 5:02:40 AM	W38593	
Surr: Dibromofluoromethane	98.8	70-130		%Rec	1	11/10/2016 5:02:40 AM	W38593	
Surr: Toluene-d8	97.8	70-130		%Rec	1	11/10/2016 5:02:40 AM	W38593	

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

Qualifiers:

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

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

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Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1611252**

Date Reported: **11/15/2016**

CLIENT: EA Engineering

Project: Fairview

Lab ID: 1611252-011

Client Sample ID: Trip Blank

Collection Date:

Matrix: TRIP BLANK

Received Date: 11/4/2016 12:25:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES							
Benzene	ND	1.0		µg/L	1	11/10/2016 5:31:12 AM	W38593
Toluene	ND	1.0		µg/L	1	11/10/2016 5:31:12 AM	W38593
Ethylbenzene	ND	1.0		µg/L	1	11/10/2016 5:31:12 AM	W38593
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/10/2016 5:31:12 AM	W38593
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/10/2016 5:31:12 AM	W38593
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/10/2016 5:31:12 AM	W38593
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/10/2016 5:31:12 AM	W38593
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/10/2016 5:31:12 AM	W38593
Naphthalene	ND	2.0		µg/L	1	11/10/2016 5:31:12 AM	W38593
1-Methylnaphthalene	ND	4.0		µg/L	1	11/10/2016 5:31:12 AM	W38593
2-Methylnaphthalene	ND	4.0		µg/L	1	11/10/2016 5:31:12 AM	W38593
Acetone	ND	10		µg/L	1	11/10/2016 5:31:12 AM	W38593
Bromobenzene	ND	1.0		µg/L	1	11/10/2016 5:31:12 AM	W38593
Bromodichloromethane	ND	1.0		µg/L	1	11/10/2016 5:31:12 AM	W38593
Bromoform	ND	1.0		µg/L	1	11/10/2016 5:31:12 AM	W38593
Bromomethane	ND	3.0		µg/L	1	11/10/2016 5:31:12 AM	W38593
2-Butanone	ND	10		µg/L	1	11/10/2016 5:31:12 AM	W38593
Carbon disulfide	ND	10		µg/L	1	11/10/2016 5:31:12 AM	W38593
Carbon Tetrachloride	ND	1.0		µg/L	1	11/10/2016 5:31:12 AM	W38593
Chlorobenzene	ND	1.0		µg/L	1	11/10/2016 5:31:12 AM	W38593
Chloroethane	ND	2.0		µg/L	1	11/10/2016 5:31:12 AM	W38593
Chloroform	ND	1.0		µg/L	1	11/10/2016 5:31:12 AM	W38593
Chloromethane	ND	3.0		µg/L	1	11/10/2016 5:31:12 AM	W38593
2-Chlorotoluene	ND	1.0		µg/L	1	11/10/2016 5:31:12 AM	W38593
4-Chlorotoluene	ND	1.0		µg/L	1	11/10/2016 5:31:12 AM	W38593
cis-1,2-DCE	ND	1.0		µg/L	1	11/10/2016 5:31:12 AM	W38593
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/10/2016 5:31:12 AM	W38593
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/10/2016 5:31:12 AM	W38593
Dibromochloromethane	ND	1.0		µg/L	1	11/10/2016 5:31:12 AM	W38593
Dibromomethane	ND	1.0		µg/L	1	11/10/2016 5:31:12 AM	W38593
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/10/2016 5:31:12 AM	W38593
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/10/2016 5:31:12 AM	W38593
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/10/2016 5:31:12 AM	W38593
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/10/2016 5:31:12 AM	W38593
1,1-Dichloroethane	ND	1.0		µg/L	1	11/10/2016 5:31:12 AM	W38593
1,1-Dichloroethene	ND	1.0		µg/L	1	11/10/2016 5:31:12 AM	W38593
1,2-Dichloropropane	ND	1.0		µg/L	1	11/10/2016 5:31:12 AM	W38593
1,3-Dichloropropane	ND	1.0		µg/L	1	11/10/2016 5:31:12 AM	W38593
2,2-Dichloropropane	ND	2.0		µg/L	1	11/10/2016 5:31:12 AM	W38593

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

Qualifiers:

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

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1611252

Date Reported: 11/15/2016

CLIENT: EA Engineering

Project: Fairview

Lab ID: 1611252-011

Client Sample ID: Trip Blank

Collection Date:

Matrix: TRIP BLANK

Received Date: 11/4/2016 12:25:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch	Analyst: DJF
EPA METHOD 8260B: VOLATILES								
1,1-Dichloropropene	ND	1.0		µg/L	1	11/10/2016 5:31:12 AM	W38593	
Hexachlorobutadiene	ND	1.0		µg/L	1	11/10/2016 5:31:12 AM	W38593	
2-Hexanone	ND	10		µg/L	1	11/10/2016 5:31:12 AM	W38593	
Isopropylbenzene	ND	1.0		µg/L	1	11/10/2016 5:31:12 AM	W38593	
4-Isopropyltoluene	ND	1.0		µg/L	1	11/10/2016 5:31:12 AM	W38593	
4-Methyl-2-pentanone	ND	10		µg/L	1	11/10/2016 5:31:12 AM	W38593	
Methylene Chloride	ND	3.0		µg/L	1	11/10/2016 5:31:12 AM	W38593	
n-Butylbenzene	ND	3.0		µg/L	1	11/10/2016 5:31:12 AM	W38593	
n-Propylbenzene	ND	1.0		µg/L	1	11/10/2016 5:31:12 AM	W38593	
sec-Butylbenzene	ND	1.0		µg/L	1	11/10/2016 5:31:12 AM	W38593	
Styrene	ND	1.0		µg/L	1	11/10/2016 5:31:12 AM	W38593	
tert-Butylbenzene	ND	1.0		µg/L	1	11/10/2016 5:31:12 AM	W38593	
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/10/2016 5:31:12 AM	W38593	
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/10/2016 5:31:12 AM	W38593	
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/10/2016 5:31:12 AM	W38593	
trans-1,2-DCE	ND	1.0		µg/L	1	11/10/2016 5:31:12 AM	W38593	
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/10/2016 5:31:12 AM	W38593	
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/10/2016 5:31:12 AM	W38593	
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/10/2016 5:31:12 AM	W38593	
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/10/2016 5:31:12 AM	W38593	
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/10/2016 5:31:12 AM	W38593	
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/10/2016 5:31:12 AM	W38593	
Trichlorofluoromethane	ND	1.0		µg/L	1	11/10/2016 5:31:12 AM	W38593	
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/10/2016 5:31:12 AM	W38593	
Vinyl chloride	ND	1.0		µg/L	1	11/10/2016 5:31:12 AM	W38593	
Xylenes, Total	ND	1.5		µg/L	1	11/10/2016 5:31:12 AM	W38593	
Surr: 1,2-Dichloroethane-d4	92.3	70-130		%Rec	1	11/10/2016 5:31:12 AM	W38593	
Surr: 4-Bromofluorobenzene	94.5	70-130		%Rec	1	11/10/2016 5:31:12 AM	W38593	
Surr: Dibromofluoromethane	96.0	70-130		%Rec	1	11/10/2016 5:31:12 AM	W38593	
Surr: Toluene-d8	98.3	70-130		%Rec	1	11/10/2016 5:31:12 AM	W38593	

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

Qualifiers:

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

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

Page 20 of 23

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1611252

15-Nov-16

Client: EA Engineering

Project: Fairview

Sample ID	rb	SampType:	MBLK	TestCode: EPA Method 8260B: VOLATILES							
Client ID:	PBW	Batch ID:	W38593	RunNo: 38593							
Prep Date:		Analysis Date:	11/9/2016	SeqNo: 1205422 Units: µg/L							
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		ND	1.0								
Toluene		ND	1.0								
Ethylbenzene		ND	1.0								
Methyl tert-butyl ether (MTBE)		ND	1.0								
1,2,4-Trimethylbenzene		ND	1.0								
1,3,5-Trimethylbenzene		ND	1.0								
1,2-Dichloroethane (EDC)		ND	1.0								
1,2-Dibromoethane (EDB)		ND	1.0								
Naphthalene		ND	2.0								
1-Methylnaphthalene		ND	4.0								
2-Methylnaphthalene		ND	4.0								
Acetone		ND	10								
Bromobenzene		ND	1.0								
Bromodichloromethane		ND	1.0								
Bromoform		ND	1.0								
Bromomethane		ND	3.0								
2-Butanone		ND	10								
Carbon disulfide		ND	10								
Carbon Tetrachloride		ND	1.0								
Chlorobenzene		ND	1.0								
Chloroethane		ND	2.0								
Chloroform		ND	1.0								
Chloromethane		ND	3.0								
2-Chlorotoluene		ND	1.0								
4-Chlorotoluene		ND	1.0								
cis-1,2-DCE		ND	1.0								
cis-1,3-Dichloropropene		ND	1.0								
1,2-Dibromo-3-chloropropane		ND	2.0								
Dibromochloromethane		ND	1.0								
Dibromomethane		ND	1.0								
1,2-Dichlorobenzene		ND	1.0								
1,3-Dichlorobenzene		ND	1.0								
1,4-Dichlorobenzene		ND	1.0								
Dichlorodifluoromethane		ND	1.0								
1,1-Dichloroethane		ND	1.0								
1,1-Dichloroethene		ND	1.0								
1,2-Dichloropropane		ND	1.0								
1,3-Dichloropropane		ND	1.0								
2,2-Dichloropropane		ND	2.0								

Qualifiers:

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

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

Page 21 of 23

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1611252

15-Nov-16

Client: EA Engineering

Project: Fairview

Sample ID	rb	SampType:	MBLK	TestCode: EPA Method 8260B: VOLATILES						
Client ID:	PBW	Batch ID:	W38593	RunNo: 38593						
Prep Date:		Analysis Date:	11/9/2016	SeqNo: 1205422 Units: µg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.3	10.00		93.1	70	130				
Surr: 4-Bromofluorobenzene	9.8	10.00		97.7	70	130				
Surr: Dibromofluoromethane	9.5	10.00		94.6	70	130				
Surr: Toluene-d8	9.8	10.00		98.1	70	130				

Sample ID	100ng lcs	SampType:	LCS	TestCode: EPA Method 8260B: VOLATILES						
Client ID:	LCSW	Batch ID:	W38593	RunNo: 38593						
Prep Date:		Analysis Date:	11/9/2016	SeqNo: 1205423 Units: µg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0	95.7	70	130			
Toluene	21	1.0	20.00	0	105	70	130			
Chlorobenzene	21	1.0	20.00	0	103	70	130			

Qualifiers:

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

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1611252

15-Nov-16

Client: EA Engineering

Project: Fairview

Sample ID	100ng lcs	SampType:	LCS	TestCode: EPA Method 8260B: VOLATILES						
Client ID:	LCSW	Batch ID:	W38593	RunNo: 38593						
Prep Date:		Analysis Date:	11/9/2016	SeqNo: 1205423 Units: µg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene	21	1.0	20.00	0	106	70	130			
Trichloroethene (TCE)	20	1.0	20.00	0	98.4	70	130			
Surr: 1,2-Dichloroethane-d4	9.3		10.00		93.1	70	130			
Surr: 4-Bromofluorobenzene	9.4		10.00		93.9	70	130			
Surr: Dibromofluoromethane	9.6		10.00		95.5	70	130			
Surr: Toluene-d8	9.8		10.00		97.9	70	130			

Sample ID	161125-001A MS	SampType:	MS	TestCode: EPA Method 8260B: VOLATILES						
Client ID:	MW-04	Batch ID:	W38593	RunNo: 38593						
Prep Date:		Analysis Date:	11/9/2016	SeqNo: 1205425 Units: µg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	24	1.0	20.00	3.435	102	70	130			
Toluene	22	1.0	20.00	0	110	70	130			
Chlorobenzene	21	1.0	20.00	0	106	70	130			
1,1-Dichloroethene	20	1.0	20.00	0	100	70	130			
Trichloroethene (TCE)	21	1.0	20.00	0	106	70	130			
Surr: 1,2-Dichloroethane-d4	9.6		10.00		95.5	70	130			
Surr: 4-Bromofluorobenzene	9.6		10.00		95.9	70	130			
Surr: Dibromofluoromethane	9.5		10.00		94.8	70	130			
Surr: Toluene-d8	9.8		10.00		97.7	70	130			

Sample ID	161125-001A MSD	SampType:	MSD	TestCode: EPA Method 8260B: VOLATILES						
Client ID:	MW-04	Batch ID:	W38593	RunNo: 38593						
Prep Date:		Analysis Date:	11/9/2016	SeqNo: 1205426 Units: µg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	23	1.0	20.00	3.435	96.2	70	130	4.94	20	
Toluene	21	1.0	20.00	0	104	70	130	6.11	20	
Chlorobenzene	21	1.0	20.00	0	103	70	130	2.43	20	
1,1-Dichloroethene	19	1.0	20.00	0	93.5	70	130	6.99	20	
Trichloroethene (TCE)	19	1.0	20.00	0	96.9	70	130	8.59	20	
Surr: 1,2-Dichloroethane-d4	9.6		10.00		96.3	70	130	0	0	
Surr: 4-Bromofluorobenzene	9.5		10.00		95.1	70	130	0	0	
Surr: Dibromofluoromethane	9.6		10.00		96.1	70	130	0	0	
Surr: Toluene-d8	9.6		10.00		96.1	70	130	0	0	

Qualifiers:

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

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

Sample Log-In Check List

Client Name: EA Engineering Alb

Work Order Number: 1611252

ReptNo: 1

Received by/date: PF 11/02/16

Logged By: Lindsay Mangin 11/4/2016 12:25:00 PM Lindsay Mangin

Completed By: Lindsay Mangin 11/4/2016 1:54:40 PM Lindsay Mangin

Reviewed By: JM 11/04/16

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
12. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) Yes No
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

of preserved bottles checked for pH:
<2 or >12 unless noted
Adjusted? _____
Checked by: _____

Special Handling (if applicable)

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

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

17. Additional remarks:

18. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.4	Good	Not Present			

APPENDIX B

FIELD FORMS



EA Engineering, Science, and Technology
320 Gold Avenue SW, Suite 1300
Albuquerque, NM 37102
Phone: (505) 224-9013

MONITOR WELL SAMPLING FIELD FORM

FLUID LEVEL DATA

Well ID MW-01
Site Fan View
Depth to PSH 14.83 Feet
Depth to water 7.23 Feet
Total depth _____ Feet
NAPL thickness 2.14 Feet

Date gauged
Time gauged
 Inches
 Feet
Gallons

<u>11/3/16</u>	
<u>1928</u>	
	After Bailing NAPL
Depth to PSH	<u>15.10</u> Feet
Depth to water	<u>15.20</u> Feet
NAPL thickness	<u>0.10</u> Feet
NAPL Recovered	<u>1.5</u> Gallons

(3 well volumes = _____ gallons)

GROUNDWATER SAMPLING DATA

Time/date purged _____

Purge Method

Actual purge volume _____ gal.

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

Time/date sampled _____

Purged/sampled by

C. Montoya

Sample method _____

Requested analyses _____

Comments/observations Blurred 1/2 full Re-employed Skipped



EA Engineering, Science, and Technology
320 Gold Avenue SW Suite 1300
Albuquerque, NM 37102
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MONITOR WELL SAMPLING FIELD FORM

FLUID LEVEL DATA

Well ID	<u>ML-2</u>
Site	<u>FairView</u>
Depth to PSH	<u>15.23</u> Feet
Depth to water	<u>17.75</u> Feet
Total depth	<u> </u> Feet
NAPL thickness	<u>1.52</u> Feet

Date gauged
Time gauged
2 Inches
____ Feet
____ Gallon

11/3/16
1504
After Bailing NAPL
Depth to PSH 15.94 Feet
Depth to water 16.09 Feet
NAPL thickness 0.15 Feet
NAPL Recovered 2.2 Gallons

(3 well volumes = _____ gallons)

GROUNDWATER SAMPLING DATA

Time/date purged _____

Purge Method

Actual purge volume _____ gal.

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

Time/date sampled _____

Purged/sampled by

C Montoya

Sample method _____

Requested analyses

Comments/observations Skimmer Leachman Snow



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MONITOR WELL SAMPLING FIELD FORM

FLUID LEVEL DATA

Well ID	MW-03
Site	FairView
Depth to PSH	<u>16.29</u> Feet
Depth to water	<u>16.78</u> Feet
Total depth	_____ Feet
NAPL thickness	<u>0.49</u> Feet

Date gauged
Time gauged
Z Inches
____ Feet
Gallon

Can
F 11/3/16

(3417)

After Bailing NAPL

Depth to PSH	<u>16.47</u> Feet
Depth to water	<u>16.57</u> Feet
NAPL thickness	<u>0.10</u> Feet
NAPL Recovered	<u>0.25</u> Gallons

(3 well volumes = _____ gallons)

GROUNDWATER SAMPLING DATA

Time/date purged _____

Purge Method

Actual purge volume _____ gal.

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

Time/date sampled _____

Purged/sampled by

C Montoya

Sample method _____

Requested analyses

Comments/observations Skimmer 11 foot, net - 11/1



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MONITOR WELL SAMPLING FIELD FORM

FLUID LEVEL DATA

Well ID	<u>MW-05</u>
Site	<u>FairView</u>
Depth to PSH	_____ Feet
Depth to water	<u>14.86</u> Feet
Total depth	<u>21.94</u> Feet
NAPL thickness	_____ Feet

Date gauged	
Time gauged	
Well diameter	<u>2</u> Inches
Height of fluid column	<u>108</u> Feet
Volume in well	<u>120</u> Gallons

11/3/16
130b

After Bailing NAPL

Depth to PSH _____ Feet

Depth to water _____ Feet

NAPL thickness _____ Feet

NAPL
Recovered _____ Gallons

GROUNDWATER SAMPLING DATA

Time/date purged

13-9

10/31/16

Purge Method

Hard Barked

Actual purge volume 1.50 gal.

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

NIA

Time/date sampled

1315 11/3/16

Purged/sampled by

C Montoya

Sample method

Disposable Boiler

Requested analyses

8262B

Comments/observations

Bailed Dry, took sample



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MONITOR WELL SAMPLING FIELD FORM

FLUID LEVEL DATA

Well ID	<u>MW-06</u>
Site	<u>FairView</u>
Depth to PSH	<u>15.67</u> Feet
Depth to water	<u>15.68</u> Feet
Total depth	_____ Feet
NAPL thickness	<u>0.01</u> Feet

Date gauged
Time gauged
2 Inches
 Feet
Gallon

11/3/16
1544

After Bailing NAPL

Depth to PSH _____ Feet

Depth to water _____ Feet

NAPL thickness _____ Feet

NAPL Recovered _____ Gallons

(3 well volumes = _____ gallons)

GROUNDWATER SAMPLING DATA

Time/date purged _____

Purge Method

Actual purge volume _____ gal.

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

Time/date sampled _____

Purged/sampled by

Sample method _____

Requested analyses

SOLAR SWIM STATION



MONITOR WELL SAMPLING FIELD FORM

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FLUID LEVEL DATA

Well ID	<u>MW-07</u>
Site	<u>FANVIEW</u>
Depth to PSH	<u> </u> Feet
Depth to water	<u>15.77</u> Feet
Total depth	<u>24.65</u> Feet
NAPL thickness	<u> </u> Feet

Date gauged	
Time gauged	
Well diameter	<u>2</u> Inches
Height of fluid column	<u>5.88</u> Feet
Volume in well	<u>1.50</u> Gallons

11/3/16

(214)

After Bailing NAPL

Depth to PSH _____ Feet

Depth to water _____ Feet

NAPL thickness _____ Feet

NAPL
Recovered _____ Gallons

GROUNDWATER SAMPLING DATA

Time/date purged

1217 11/3/16

Purge Method

Hard Baked

Actual purge volume 4.5 gal.

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

Time/date sampled

1727 11/3/16

Purged/sampled by

12

Sample method

Disposable Baiter

Requested analyses

SHOB

Comments/observations

8260B
Water black, cloudy, strong Hc odor.



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MONITOR WELL SAMPLING FIELD FORM

FLUID LEVEL DATA

Well ID	<u>MW-08</u>
Site	<u>Fav View</u>
Depth to PSH	<u>15.33</u> Feet
Depth to water	<u>20.54</u> Feet
Total depth	<u> </u> Feet
NAPL thickness	<u>5.21</u> Feet

Date gauged _____
Time gauged _____
Well diameter 2 Inches
Height of fluid column _____ Feet
Volume in well _____ Gallons

11/31/16
1629
After Bailing NAPL
Depth to PSH 16.67 Feet
Depth to water 16.70 Feet
NAPL thickness 0.07 Feet
NAPL Recovered 2.0 Gallons

DETERMINED SAMPLING DATA

Time/date purged _____

Purge Method

Actual purge volume _____ gal.

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

Time/date sampled _____

Purged/sampled by

Montoya

Sample method

Requested analyses _____

Comments/observations _____



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MONITOR WELL SAMPLING FIELD FORM

FLUID LEVEL DATA

Well ID	<u>MW-09</u>
Site	<u>FairView</u>
Depth to PSH	<u>16.09</u> Feet
Depth to water	<u>16.10</u> Feet
Total depth	_____ Feet
NAPL thickness	<u>0.01</u> Feet

Date gauged
Time gauged
2 Inches
 Feet
Gallons

11/3/16

1718

After Bailing NAPL

Depth to PSH _____ Feet

Depth to water _____ Feet

NAPL thickness _____ Feet

NAPL Recovered _____ Gallons

(3 well volumes = _____ gallons)

GROUNDWATER SAMPLING DATA

Time/date purged _____

Purge Method

Actual purge volume _____ gal.

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

Time/date sampled _____

Purged/sampled by

C Montoya

Sample method _____

Requested analyses _____

Comments/observations SOCK stained = 1, 1 permanent



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MONITOR WELL SAMPLING FIELD FORM

FLUID LEVEL DATA

Well ID	<u>MW-10</u>
Site	<u>Fair View</u>
Depth to PSH	<u>16.23</u> Feet
Depth to water	<u>16.24</u> Feet
Total depth	<u> </u> Feet
NAPL thickness	<u>0.01</u> Feet

Date gauged
Time gauged
7 Inches
____ Feet
Gallon

11/3/16
1704

After Bailing NAPL

Depth to PSH _____ Feet

Depth to water _____ Feet

NAPL thickness _____ Feet

NAPL Recovered _____ Gallons

(3 well volumes = _____ gallons)

GROUNDWATER SAMPLING DATA

Time/date purged _____

Purge Method

Actual purge volume _____ gal.

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

Time/date sampled _____

Purged/sampled by

Sample method _____

Requested analyses _____

Sock stained x 6, ref...
Comments/observations

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MONITOR WELL SAMPLING FIELD FORM

FLUID LEVEL DATA

Well ID	<u>MW-11</u>
Site	<u>Fair View</u>
Depth to PSH	<u>16.85</u> Feet
Depth to water	<u>18.06</u> Feet
Total depth	<u> </u> Feet
NAPL thickness	<u>1.21</u> Feet

Date gauged
Time gauged
2 Inches
 Feet
Gallons

11/3/16
1557
After Bailing NAPL
Depth to PSH 17.19 Feet
Depth to water 17.20 Feet
NAPL thickness 0.01 Feet
NAPL Recovered 20.25 Gallons

GROUNDWATER SAMPLING DATA

Time/date purged _____

Purge Method

Actual purge volume _____ gal.

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

Time/date sampled _____

Purged/sampled by

C Montoya

Sample method _____

Requested analyses _____

Social staining at 1 exposure

Comments/observations _____



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MONITOR WELL SAMPLING FIELD FORM

FLUID LEVEL DATA

Well ID	<u>MW-14</u>	Date gauged	<u>11/31/14</u>
Site	<u>Fan View</u>	Time gauged	<u>1726</u>
Depth to PSH	<u>15.90</u> Feet	Well diameter	<u>2</u> Inches
Depth to water	<u>16.00</u> Feet	Height of fluid column	<u>0.10</u> Feet
Total depth	<u> </u> Feet	Volume in well	<u> </u> Gallons
NAPL thickness	<u>0.10</u> Feet	(3 well volumes = _____ gallons)	
		After Bailing NAPL	
		Depth to PSH	<u>16.11</u> Feet
		Depth to water	<u>16.12</u> Feet
		NAPL thickness	<u>0.01</u> Feet
		NAPL Recovered	<u>NEG</u> Gallons

GROUNDWATER SAMPLING DATA

Actual purge volume _____ gal. Field measurements stabilized at _____

Time/date sampled _____ Purged/sampled by _____

Sample method _____

Requested analyses _____

Social stories = 11/11



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MONITOR WELL SAMPLING FIELD FORM

FLUID LEVEL DATA

Well ID	MW-15
Site	Fairview
Depth to PSH	<u>15.64</u> Feet
Depth to water	<u>15.65</u> Feet
Total depth	_____ Feet
NAPL thickness	<u>0.01</u> Feet

Date gauged

Time gauged

11/3/16

135 cm 1335

Depth to PSH 15.64 Feet

Well diameter 2 inches

Depth to water 5.65 Feet

Height of fluid column _____ Feet

Total depth _____ Feet

Volume in well _____ Gallons

NAPL thickness 0.01 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 _____

Purge Method

Actual purge volume _____ gal.

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

Time/date sampled _____

Purged/sampled by

Sample method _____

Requested analyses _____

SOCIAL STABILITY



MONITOR WELL SAMPLING FIELD FORM

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FLUID LEVEL DATA

Well ID	<u>MW-16</u>	Date gauged	
Site	<u>Fairview</u>	Time gauged	
Depth to PSH	_____ Feet	Well diameter	<u>2</u> Inches
Depth to water	<u>15.35</u> Feet	Height of fluid column	<u>8.15</u> Feet
Total depth	<u>23.50</u> Feet	Volume in well	<u>1.38</u> Gallons
NAPL thickness	_____ Feet		<u>.415</u>

11/3/16
1244

After Bailing NAPL

Depth to PSH _____ Feet

Depth to water _____ Feet

NAPL thickness _____ Feet

NAPL Recovered _____ Gallons

GROUNDWATER SAMPLING DATA

Time/date purged 11/4 11/3/16 Purge Method

Actual purge volume 4.25 gal.

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

Time/date sampled

1255 11/3/16

Purged/sampled by

10

Sample method

Disposable Baileys

2.3. Nested analyses

87603

Comments/observations



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MONITOR WELL SAMPLING FIELD FORM

FLUID LEVEL DATA

Well ID	<u>MW-1D</u>
Site	<u>Fairview</u>
Depth to PSH	<u>16.10</u> Feet
Depth to water	<u>16.11</u> Feet
Total depth	<u> </u> Feet
NAPL thickness	<u>0.01</u> Feet

Date gauged
Time gauged
2 Inches

Feet

Gallons

11/3/16
1743

After Bailing NAPL

Depth to PSH _____ Feet

Depth to water _____ Feet

NAPL thickness _____ Feet

~~NAPL~~
Recovered _____ Gallons

GROUNDWATER SAMPLING DATA

Time/date purged _____

Purge Method

Actual purge volume _____ gal.

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

Time/date sampled _____

Purged/sampled by

C Montoya

Sample method _____

Requested analyses _____

Sale Stained in by Repressor



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MONITOR WELL SAMPLING FIELD FORM

FLUID LEVEL DATA

Well ID	<u>MW-19</u>
Site	<u>Fair View</u>
Depth to PSH	<u> </u> Feet
Depth to water	<u>15.94</u> Feet
Total depth	<u>25.58</u> Feet
NAPL thickness	<u> </u> Feet

Date gauged
Time gauged
Wall diameter 2 Inches
Height of fluid column 9.64 Feet
Volume in well 1.63 Gallons

11/3/16
1055 After Bailing NAPL

Depth to PSH _____ Feet

Depth to water _____ Feet

NAPL thickness _____ Feet

NAPL Recovered _____ Gallons

GROUNDWATER SAMPLING DATA

Time/date purged

11/27 11/3/16

Purge Method

Hard Baited

Actual purge volume 5.0 gal.

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

Time/date sampled

11/31/18

Purged/sampled by

Epitome

• -the method

Disposable Banker

Statistical analyses

9760B

Comments/observations



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FLUID LEVEL DATA

Well ID	<u>MU-20</u>
Site	<u>Fairview</u>
Depth to PSH	_____ Feet
Depth to water	<u>15.00</u> Feet
Total depth	<u>25.00</u> Feet
NAPL thickness	_____ Feet

Date gauged
Time gauged
2 inches
10.00 feet
1.7 Gallons

11/3/16
10/17

After Bailing NAPL

Depth to PSH _____ Feet

Depth to water _____ Feet

NAPL thickness _____ Feet

NAPL Recovered _____ Gallons

GROUNDWATER SAMPLING DATA

Time/date purged 10/20 11/3/16 Purge Method _____

Actual purge volume 5.25 gal.

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

Time/date sampled 1030 11/3/16

Purged/sampled by

NO

Sample method

Disposable Bailek

— selected analyses

87-60B

Comments/observations



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MONITORING WELL SAMPLING FIELD FORM

FLUID LEVEL DATA

Well ID	<u>MW-04</u>	Date gauged	<u>12-21-16</u>
Site	<u>Fairview Station</u>	Time gauged	<u>1605</u>
Depth to PSH	<u>—</u> Feet	Well diameter	<u> </u> Inches
Depth to water	<u>15.50</u> Feet	Height of fluid column	<u> </u> Feet
Total depth	<u> </u> Feet	Volume in well	<u> </u> Gallons
NAPL thickness	<u>—</u> Feet	(3 well volumes = <u> </u> gallons)	
After Bailing NAPL			
Depth to PSH	<u> </u> Feet		
Depth to water	<u> </u> Feet		
NAPL thickness	<u> </u> Feet		
NAPL Recovered	<u> </u> Gallons		

GROUNDWATER SAMPLING DATA

Time/date purged _____ Purge Method _____

Time (min)	DO (mg/L)
0	0
25	2.5
50	5.0
75	7.5
100	9.5

Actual purge volume _____ gal.

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

Time/date sampled

Purged/sampled by

Sample method

Requested analyses _____

Requested analyses _____

Requested analyses _____

Requested analyses _____

Comments/observations

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WILSON, M.

Outer diameter = 9.17 in² Well Casing Volumes
 4 in diameter = 9.06 in³ 6 in diameter = 1.50 in³

Well Casing Volumes

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



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MONITORING WELL SAMPLING FIELD FORM

FLUID LEVEL DATA

Well ID	<u>MW-05</u>	Date gauged	<u>12-21-16</u>
Site	<u>Fairview Station</u>	Time gauged	<u>1600</u>
Depth to PSH	<u>—</u> Feet	Well diameter	<u> </u> Inches
Depth to water	<u>14.93</u> Feet	Height of fluid column	<u> </u> Feet
Total depth	<u> </u> Feet	Volume in well	<u> </u> Gallons
NAPL thickness	<u>—</u> Feet	(3 well volumes = <u> </u> gallons)	
After Bailing NAPL			
Depth to PSH	<u> </u> Feet		
Depth to water	<u> </u> Feet		
NAPL thickness	<u> </u> Feet		
NAPL Recovered	<u> </u> Gallons		

GROUNDWATER SAMPLING DATA

Time/date purged _____ Purge Method _____

Actual purge volume _____ gal.

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

Time/date sampled _____

Purged/sampled by JL

Sample method _____

Requested analyses _____

Requested analyses _____

Requested analyses _____

Comments/observations _____

Well Casing Volumes

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



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MONITORING WELL SAMPLING FIELD FORM

FLUID LEVEL DATA

Well ID	<u>MW-07</u>	Date gauged	<u>12-21-16</u>
Site	<u>Fairview Station</u>	Time gauged	<u>1609</u>
Depth to PSH	<u>—</u> Feet	Well diameter	<u> </u> Inches
Depth to water	<u>15.13</u> Feet	Height of fluid column	<u> </u> Feet
Total depth	<u> </u> Feet	Volume in well	<u> </u> Gallons
NAPL thickness	<u>—</u> Feet	(3 well volumes = <u> </u> gallons)	
After Bailing NAPL			
Depth to PSH	<u> </u> Feet	Depth to water	<u> </u> Feet
NAPL thickness <u> </u> Feet		NAPL Recovered	<u> </u> Gallons

GROUNDWATER SAMPLING DATA

Time/date purged _____ Purge Method _____

Time (min)	DO (mg/L)
0	1.5
100	10.0

Actual purge volume _____ gal.

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

Time/date sampled _____

Purged/sampled by JL

Sample method _____

Requested analyses _____

Comments/observations _____

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Well Casing Volumes

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



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MONITORING WELL SAMPLING FIELD FORM

FLUID LEVEL DATA

Well ID	<u>MW-13</u>	Date gauged	<u>12-21-16</u>
Site	<u>Fairview Station</u>	Time gauged	<u>1557</u>
Depth to PSH	<u>—</u> Feet	Well diameter	<u> </u> Inches
Depth to water	<u>14.87</u> Feet	Height of fluid column	<u> </u> Feet
Total depth	<u> </u> Feet	Volume in well	<u> </u> Gallons
NAPL thickness	<u>—</u> Feet	(3 well volumes = <u> </u> gallons)	
After Bailing NAPL			
Depth to PSH	<u> </u> Feet		
Depth to water	<u> </u> Feet		
NAPL thickness	<u> </u> Feet		
NAPL Recovered	<u> </u> Gallons		

GROUNDWATER SAMPLING DATA

Time/date purged

Purge Method

Actual purge volume _____ gal.

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

Time/date sampled

Purged/sampled by

Sample method

Requested analyses _____

Requested analyses

Requested analyses

Requested analyses

Comments/observations _____

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WILCOX, MA

Well Casing Volumes

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



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MONITORING WELL SAMPLING FIELD FORM

FLUID LEVEL DATA

Well ID	<u>MW-16</u>	Date gauged	<u>12-21-16</u>
Site	<u>Fairview Station</u>	Time gauged	<u>1602</u>
Depth to PSH	<u>—</u> Feet	Well diameter	<u> </u> Inches
Depth to water	<u>15.17</u> Feet	Height of fluid column	<u> </u> Feet
Total depth	<u> </u> Feet	Volume in well	<u> </u> Gallons
NAPL thickness	<u>—</u> Feet	(3 well volumes = <u> </u> gallons)	
After Bailing NAPL			
Depth to PSH	<u> </u> Feet	Depth to water	<u> </u> Feet
NAPL thickness	<u> </u> Feet	NAPL Recovered	<u> </u> Gallons

GROUNDWATER SAMPLING DATA

Time/date purged

Purge Method

Actual purge volume _____ gal.

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

Time/date sampled _____

Purged/sampled by

Sample method

Requested analyses _____

Requested analyses

Requested analyses

Comments/observations

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Well Casing Volumes

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



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MONITOR WELL SAMPLING FIELD FORM

FLUID LEVEL DATA

Well ID	<u>MW-17</u>	Date gauged	<u>12-21-16</u>
Site	<u>Fairview Station</u>	Time gauged	<u>1611</u>
Depth to PSH	<u>—</u> Feet	Well diameter	<u> </u> Inches
Depth to water	<u>15.84</u> Feet	Height of fluid column	<u> </u> Feet
Total depth	<u> </u> Feet	Volume in well	<u> </u> Gallons
NAPL thickness	<u>—</u> Feet	(3 well volumes = <u> </u> gallons)	
After Bailing NAPL			
Depth to PSH	<u> </u> Feet	Depth to water	<u> </u> Feet
NAPL thickness	<u> </u> Feet	NAPL Recovered	<u> </u> Gallons

GROUNDWATER SAMPLING DATA

Time/date purged _____ Purge Method _____

Time	Purge Volume (gal)	Temp (°C)	SpC ($\mu\text{s}/\text{cm}$)	pH	ORP (mV)	DO (mg/L)
			100			
			110			
			120			
			130			
			140			
			150			
			160			
			170			
			180			
			190			
			200			

Actual purge volume _____ gal.

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

Time/date sampled _____

Purged/sampled by

Sample method

Requested analyses

Comments/observations

Well Casing Volumes

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



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MONITOR WELL SAMPLING FIELD FORM

FLUID LEVEL DATA

Well ID	<u>MW-19</u>	Date gauged	<u>12-21-16</u>
Site	<u>Fairview Station</u>	Time gauged	<u>0 1614</u>
Depth to PSH	<u>-</u> Feet	Well diameter	<u> </u> Inches
Depth to water	<u>16.17</u> Feet	Height of fluid column	<u> </u> Feet
Total depth	<u> </u> Feet	Volume in well	<u> </u> Gallons
NAPL thickness	<u>-</u> Feet	(3 well volumes = _____ gallons)	
After Bailing NAPL			
Depth to PSH	<u> </u> Feet	Depth to water	<u> </u> Feet
NAPL thickness	<u> </u> Feet	NAPL Recovered	<u> </u> Gallons

GROUNDWATER SAMPLING DATA

Time/date purged _____ Purge Method _____

DO (mg/L)	SpC (μs/cm)
0	50
2	55
4	60
6	65
8	70
10	75

Actual purge volume _____ gal.

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

Time/date sampled _____

Purged/sampled by

John

Sample method _____

Requested analyses _____

Comments/observations _____

Well Casing Volumes

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



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Phone: (505) 224-9013

MONITORING WELL SAMPLING FIELD FORM

FLUID LEVEL DATA

Well ID	<u>MW-20</u>	Date gauged	<u>12-21-16</u>
Site	<u>Fairview Station</u>	Time gauged	<u>1621</u>
Depth to PSH	<u>—</u> Feet	Well diameter	<u> </u> Inches
Depth to water	<u>15.56</u> Feet	Height of fluid column	<u> </u> Feet
Total depth	<u> </u> Feet	Volume in well	<u> </u> Gallons
NAPL thickness	<u>—</u> Feet	(3 well volumes = <u> </u> gallons)	
After Bailing NAPL			
Depth to PSH	<u> </u> Feet		
Depth to water	<u> </u> Feet		
NAPL thickness	<u> </u> Feet		
NAPL Recovered	<u> </u> Gallons		

GROUNDWATER SAMPLING DATA

Time/date purged _____ Purge Method _____

Actual purge volume _____ gal.

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

Time/date sampled _____

Purged/sampled by

Sample method _____

Requested analyses _____

Comments/observations _____

Well Casing Volumes

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



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MONITORING WELL SAMPLING FIELD FORM

FLUID LEVEL DATA

Well ID	<u>MW-21</u>	Date gauged	<u>12-21-16</u>
Site	<u>Fairview Station</u>	Time gauged	<u>0 1617</u>
Depth to PSH	<u>—</u> Feet	Well diameter	<u> </u> Inches
Depth to water	<u>15.68</u> Feet	Height of fluid column	<u> </u> Feet
Total depth	<u> </u> Feet	Volume in well	<u> </u> Gallons
NAPL thickness	<u>—</u> Feet	(3 well volumes = _____ gallons)	
After Bailing NAPL			
Depth to PSH	<u> </u> Feet		
Depth to water	<u> </u> Feet		
NAPL thickness	<u> </u> Feet		
NAPL Recovered	<u> </u> Gallons		

GROUNDWATER SAMPLING DATA

Time/date purged _____ Purge Method _____

Time (min)	DO (mg/L)
0	0.5
10	1.5
20	2.5
30	3.5
40	4.5
50	5.5
60	6.5
70	7.5
80	8.5
90	9.5

Actual purge volume _____ gal.

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

Time/date sampled _____

Purged/sampled by

Sample method	<input type="text"/>
Requested analyses	<input type="text"/>
Comments/observations	<input type="text"/>

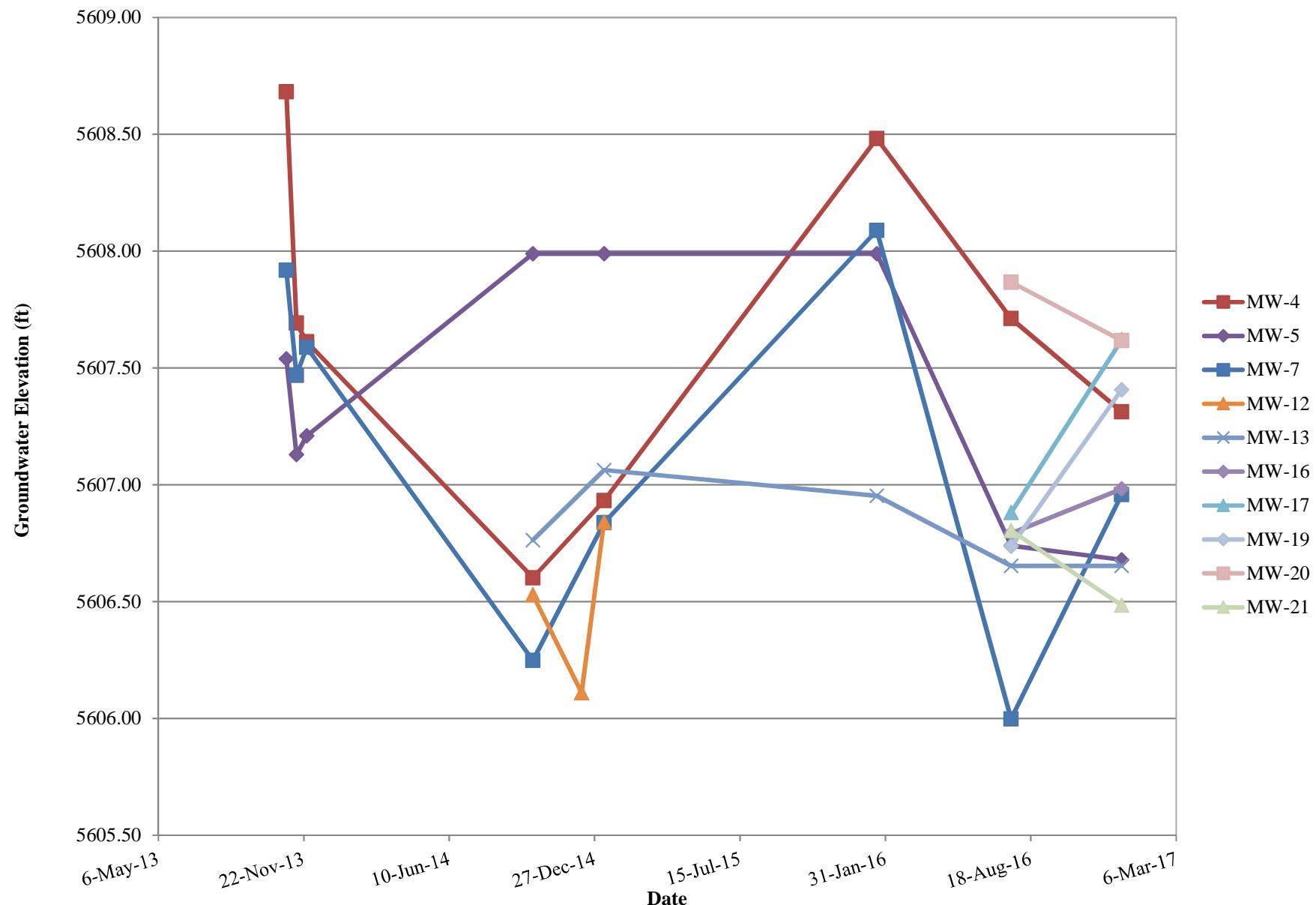
Well Casing Volumes

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

APPENDIX C

HYDROGRAPHS

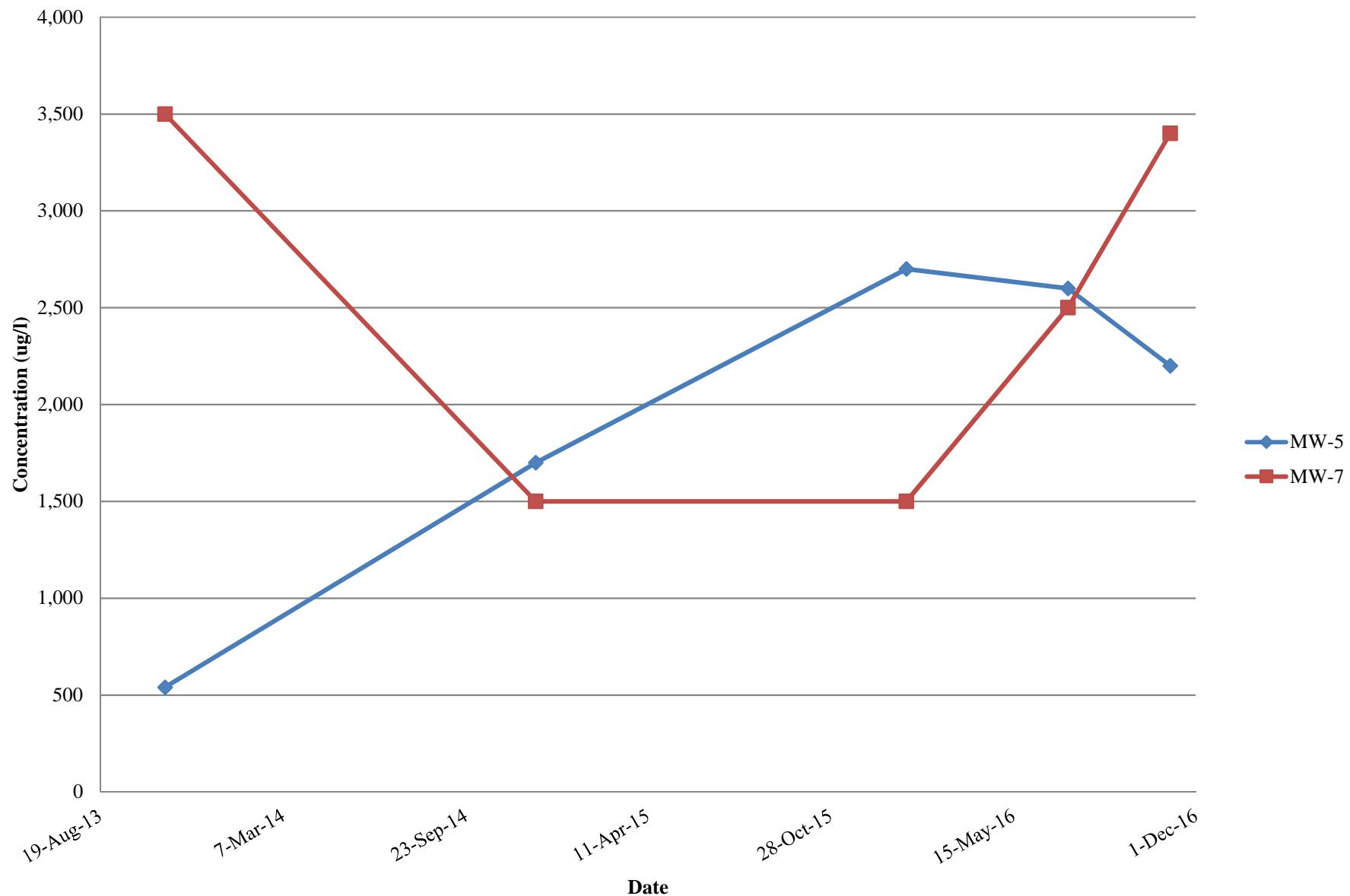
HYDROGRAPHS FOR SELECT MONITORING WELLS
FAIRVIEW STATION, ESPANOLA, NEW MEXICO



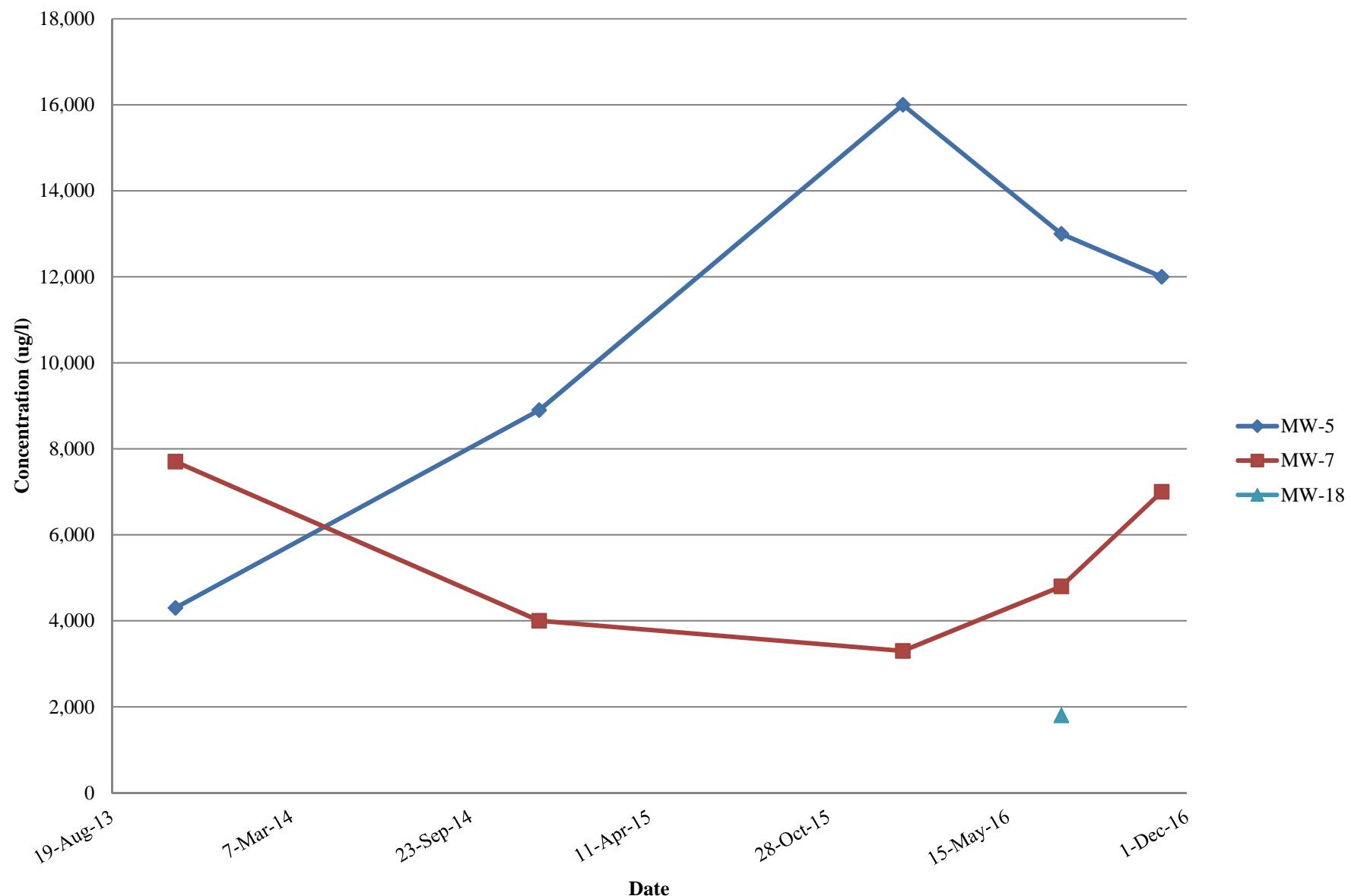
APPENDIX D

TRENDS

MTBE
FAIRVIEW STATION, ESPANOLA, NEW MEXICO



BENZENE
FAIRVIEW STATION, ESPANOLA, NEW MEXICO



BENZENE
FAIRVIEW STATION, ESPANOLA, NEW MEXICO

