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

Prepared by:

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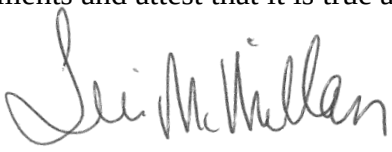
February 2016

EA Project No. 6289814 01

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: 
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I. INTRODUCTION

EA Engineering, Science, and Technology, Inc., PBC (EA) has completed the annual groundwater monitoring and NAPL recovery event at Fairview Station (Site) located at 1626 North Riverside Drive, 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, 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 October 13, 2015 under work plan identification number (WPID# 3836). This is the only deliverable under WPID #3836-1.

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 New Mexico Environment Department (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 14 groundwater monitoring wells, groundwater sampling and NAPL recovery. On April 28, 2015, NMED designated the Site as State Lead Status. On October 13, 2015, NMED approved the work plan for EA to conduct an annual groundwater monitoring and NAPL recovery event.

On January 19, 2016, fluid levels were measured in twelve site wells, MW-1, MW-2, MW-3, MW-4, MW-5, MW-6, MW-7, MW-8, MW-9, MW-10, MW-11, and MW-14. Groundwater samples were collected from three wells, MW-4, MW-5, and MW-7. Access was never granted for wells MW-12 and MW-13, and wells MW-1, MW-2, MW-3, MW-6, MW-8, MW-9, MW-10, MW-11, and MW-14 contained NAPL. Groundwater samples were analyzed for benzene, toluene, ethylbenzene, and xylenes (BTEX), ethylene dichloride (EDC), methyl tertiary butyl ether (MTBE), and total naphthalenes by Environmental Protection Agency (EPA) Method 8260B, and ethylene dibromide (EDB) was analyzed by EPA method 504.1. In addition, pH, specific conductance, and temperature were monitored in the field. Dissolved oxygen (DO) was not measured due to an equipment malfunction.

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

II. ACTIVITIES PERFORMED DURING THIS QUARTER

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 5, 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 19, 2016, EA conducts groundwater monitoring and NAPL recovery at the Site;
- Groundwater monitoring is currently being conducted.

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

Groundwater Sampling Activities

Prior to collecting groundwater samples, fluid levels in twelve site wells were gauged with an electronic water level meter. Table 1 provides a summary of the groundwater gauging data collected from the monitoring network. A Groundwater Elevation Map (Figure 2) with NAPL thicknesses was constructed based on the collected data.

On January 19, 2016, site monitoring wells MW-4, MW-5, and MW-7 were purged and sampled with disposable polyethylene bailers. 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 including specific conductance, pH and temperature, with an Oakton PC 300 water quality meter during purging and prior to sampling. DO was not measured due to an equipment malfunction. Specific conductance, pH and temperature were recorded on monitoring well sampling field forms. The meters were 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 A.

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

NAPL

On January 19, 2016, NAPL was present in wells MW-1, MW-2, MW-3, MW-6, MW-8, MW-9, MW-10, MW-11, and MW-14 ranging from a heavy sheen in well MW-10 to 5.91 feet in well MW-3. NAPL was recovered from wells MW-1, MW-2, MW-3, MW-8, and MW-11 by hand bailing for 30 minutes. NAPL was recovered from wells MW-6, MW-9, and MW-14 by hand bailing until less than 1/8 inch NAPL remained in the well. Approximately 19.5 gallons of NAPL were recovered during this event and stored in a 55 gallon drum located behind the building. A summary of historical NAPL recovery data is provided in Table 3.

Groundwater Sampling Results

Dissolved phase hydrocarbon concentrations were below New Mexico Water Quality Control Commission (NMWQCC) and New Mexico Environmental Improvement Board (NMEIB) standards in only one monitoring well sampled (MW-4). Dissolved phase hydrocarbon concentrations exceeded NMWQCC and NMEIB standards in monitoring wells MW-5 and MW-7. Well MW-5 had concentrations of benzene, ethylbenzene, MTBE, EDC, and naphthalenes of 16,000 micrograms per liter (µg/L), 1,200 µg/L, 2,700 µg/L, 130 µg/L, and 328 µg/L, respectively. Well MW-7 had concentrations of benzene, xylenes, MTBE, and naphthalenes of 3,300 µg/L, 1,000 µg/L, 1,500 µg/L, and 219 µg/L, respectively. 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, west, or south of the Site. The extent of the NAPL plume is not defined to the north, west, or northeast.

III. SUMMARY AND CONCLUSIONS

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

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

The results of groundwater gauging indicate water levels increased by an average of approximately 1 foot since January 2015. The overall direction of groundwater flow cannot be determined due to the extent of NAPL present at the Site; however, it has been previously reported to be in a north-northeast direction. A Groundwater Elevation Map is presented in Figure 2 and hydrographs for monitoring wells are provided in Appendix C.

Since January 2015, NAPL thickness has increased in wells MW-1, MW-9, MW-10, MW-11, and MW-14 with the largest increase of 0.63 feet observed in well MW-9. This is the first event NAPL has been observed in wells MW-9 and MW-10. NAPL thickness has decreased in wells MW-2, MW-3, and MW-8 with the largest decrease of 2.01 feet observed in well MW-8. NAPL thickness remained the same in well MW-6.

Well MW-4 remained below NMWQCC and NMEIB standards with respect to all contaminants of concern. Concentrations of benzene, MTBE, EDC, and naphthalenes in well MW-5 increased from 8,900 µg/L, 1,700 µg/L, <100 µg/L, and 230 µg/L in December 2014 to 16,000 µg/L, 2,700 µg/L, 130 µg/L, and 328 µg/L, respectively. Benzene and MTBE concentrations in well MW-5 have been increasing since the well was installed in October 2013. Concentrations of naphthalenes in well MW-7 increased since December 2014 from 130 µg/L to 219 µg/L. Benzene and xylenes decreased from 4,000 µg/L and 1,100 µg/L to 3,300 µg/L and 1,000 µg/L, respectively, when compared to the sampling event in December 2014, and the concentrations have been decreasing since the well was installed in October 2013. The concentration of MTBE in well MW-7 has remained the same, 1,500 µg/L. Figure 3 presents the distribution of contamination.

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:

- Install at least five additional wells to delineate the NAPL and dissolved phase plumes to the north, west, and northeast.
- Install passive skimmers in wells that contain NAPL.
- Conduct bi-weekly NAPL recovery at the Site for one quarter; then conduct NAPL recovery quarterly for three quarters.
- Continue groundwater monitoring.

TABLES

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

Monitoring Well	Date Measured	Northing	Easting	Casing Elevation[1]	Depth to Product[1]	Product Thickness[2]	Depth to Water[1]	Groundwater Elevation[2]
MW-1	19-Jan-16	-	-	5622.71	13.84	3.93	17.77	5607.89
	9-Jan-15				14.20	3.49	17.69	5607.56
	10-Dec-14				15.51	3.20	18.71	5606.33
	3-Oct-14				14.81	0.04	14.85	5607.89
	26-Nov-13				13.82	1.08	14.90	5608.60
	12-Nov-13				15.37	0.46	15.83	5607.22
	29-Oct-13				13.36	1.89	15.25	5608.84
	10-Jul-13				14.21	0.24	14.45	5608.43
	27-Jun-13				14.43	0.37	14.80	5608.18
	3-Jun-13				13.92	0.28	14.20	5608.71
	27-Feb-13				14.06	0.34	14.40	5608.56
	4-Feb-13				NM	NM	NM	NM
	1-Feb-13				NM	NM	NM	NM
MW-2	19-Jan-16	-	-	5622.99	14.45	3.60	18.05	5607.64
	9-Jan-15				14.99	3.74	18.73	5606.99
	10-Dec-14				15.77	2.87	18.64	5606.44
	3-Oct-14				14.97	0.08	15.05	5608.00
	26-Nov-13				12.95	5.61	18.56	5608.52
	12-Nov-13				14.34	5.06	19.40	5607.28
	29-Oct-13				12.66	6.02	18.68	5608.70
	10-Jul-13				13.67	3.83	17.50	5608.28
	27-Jun-13				13.98	4.22	18.20	5607.87
	3-Jun-13				13.42	3.97	17.39	5608.49
	27-Feb-13				13.11	5.45	18.56	5608.40
	4-Feb-13				NM	NM	NM	NM
	1-Feb-13				NM	NM	NM	NM
MW-3	19-Jan-16	-	-	5623.02	12.69	5.91	18.60	5608.85
	9-Jan-15				13.72	6.90	20.62	5607.43
	10-Dec-14				14.75	7.51	22.26	5606.23
	3-Oct-14				13.96	2.95	16.91	5608.26
	26-Nov-13				13.02	6.00	19.02	5608.37
	12-Nov-13				13.19	7.43	20.62	5607.82
	29-Oct-13				12.50	6.96	19.46	5608.63
	10-Jul-13				13.70	3.98	17.68	5608.24
	27-Jun-13				13.88	4.45	18.33	5607.93
	3-Jun-13				13.46	4.11	17.57	5608.45
	27-Feb-13				13.80	2.89	16.69	5608.44
	4-Feb-13				NM	NM	NM	NM
	1-Feb-13				NM	NM	NM	NM
MW-4	19-Jan-16	-	-	5623.67	-	-	14.33	5609.34
	9-Jan-15				-	-	15.88	5607.79
	9-Dec-14				Lost Data			
	3-Oct-14				-	-	16.21	5607.46
	26-Nov-13				-	-	15.20	5608.47
	12-Nov-13				-	-	15.12	5608.55
	29-Oct-13				-	-	14.13	5609.54

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

Monitoring Well	Date Measured	Northing	Easting	Casing Elevation[1]	Depth to Product[1]	Product Thickness[2]	Depth to Water[1]	Groundwater Elevation[2]
MW-5	19-Jan-16	-	-	5622.41	-	-	13.62	5608.79
	9-Jan-15				-	-	14.40	5608.01
	9-Dec-14				Lost Data			
	3-Oct-14				-	-	14.48	5607.93
	26-Nov-13				-	-	14.07	5608.34
	12-Nov-13				-	-	13.93	5608.48
	29-Oct-13				-	-	13.77	5608.64
MW-6	19-Jan-16	-	-	5622.80	14.99	0.04	15.03	5607.80
	9-Jan-15				15.58	0.04	15.62	5607.21
	10-Dec-14				16.20	0.34	16.54	5606.51
	3-Oct-14				15.60	0.05	15.65	5607.19
	26-Nov-13				14.31	0.02	14.33	5608.48
	12-Nov-13				14.39	0.01	14.40	5608.41
	29-Oct-13				-	-	13.97	5608.83
MW-7	19-Jan-16	-	-	5622.86	-	-	14.00	5608.86
	9-Jan-15				-	-	15.25	5607.61
	10-Dec-14				Lost Data			
	3-Oct-14				-	-	15.84	5607.02
	26-Nov-13				-	-	14.50	5608.36
	12-Nov-13				-	-	14.62	5608.24
	29-Oct-13				-	-	14.17	5608.69
MW-8	19-Jan-16	-	-	5623.90	14.34	4.44	18.78	5608.45
	9-Jan-15				15.00	6.45	21.45	5607.15
	10-Dec-14				15.27	6.51	21.78	5606.87
	3-Oct-14				14.95	2.57	17.52	5608.25
	26-Nov-13				14.05	4.25	18.30	5608.70
	12-Nov-13				14.49	6.54	21.03	5607.64
	29-Oct-13				13.80	3.55	17.35	5609.14
MW-9	19-Jan-16	-	-	5623.83	14.65	0.63	15.28	5609.02
	9-Jan-15				-	-	16.46	5607.37
	10-Dec-14				-	-	17.15	5606.68
	3-Oct-14				-	-	16.69	5607.14
MW-10	19-Jan-16	-	-	5623.87	Sheen		14.89	5608.98
	9-Jan-15				-	-	16.28	5607.59
	9-Dec-14				Lost Data			
	3-Oct-14				-	-	16.78	5607.09
MW-11	19-Jan-16	-	-	5624.13	15.47	3.66	19.13	5607.75
	9-Jan-15				15.89	3.36	19.25	5607.33
	10-Dec-14				16.52	3.63	20.15	5606.63
	3-Oct-14				15.55	0.16	15.71	5608.54

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

Monitoring Well	Date Measured	Northing	Easting	Casing Elevation[1]	Depth to Product[1]	Product Thickness[2]	Depth to Water[1]	Groundwater Elevation[2]
MW-12	19-Jan-16	-	-	5622.84	-	-	NM	NM
	9-Jan-15				-	-	15.21	5607.63
	9-Dec-14				-	-	15.94	5606.90
	3-Oct-14				-	-	15.52	5607.32
MW-13	19-Jan-16	-	-	5622.32	-	-	NM	NM
	9-Jan-15				-	-	14.76	5607.56
	9-Dec-14				Lost Data			
	3-Oct-14				-	-	14.81	5607.51
MW-14	19-Jan-16	-	-	5623.75	14.40	0.79	15.19	5609.15
	9-Jan-15				15.96	0.49	16.45	5607.66
	10-Dec-14				16.38	2.19	18.57	5606.78
	3-Oct-14				15.76	0.29	16.05	5607.91

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.

NM = Not measured

TABLE 2. SUMMARY OF SAMPLE ANALYTICAL AND QUALITY CONTROL REQUIREMENTS
FAIRVIEW STATION, ESPANOLA, NEW MEXICO

Target Analytes	Matrix	Analytical Method	Sample Container	Preservative	Holding Time
VOCs	Water	EPA 8260	3 x 40- mL glass vials	Mercuric Chloride; Cool to <6°C	14 days
EDB	Water	EPA 504.1	2 x 40- mL glass vials	Mercuric Chloride; Cool to <6°C	14 days

NOTES:
VOCs = Volatile organic compounds + naphthalenes
EPA = U.S. Environmental Protection Agency
°C = degrees Celcius
< = less than
mL = milliliter

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]
MW-1	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	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
MW-3	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

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]
MW-6	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
MW-8	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	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	19-Jan-16	Sheen		0.00
	9-Jan-15	-	-	0.00
	9-Dec-14	Lost Data		0.00
	3-Oct-14	-	-	0.00
MW-11	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	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
Cumulative Total NAPL Recovered at the Site[2]				**89.80**

NOTES:

NAPL - Non Aqueous Phase Liquid

[1] Measured in feet.

[2] Measured in gallons.

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
FAIRVIEW STATION, ESPANOLA, NEW MEXICO

Monitoring Well	Date Measured	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylene (µg/L)	MTBE (µg/L)	EDB (µg/L)	EDC (µg/L)	Napthalene[1] (µg/L)	1-Methylnapthalene[1] (µg/L)	2-Methylnapthalene[1] (µg/L)	Dissolved Lead (mg/L)
MW-1	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	0.0035
MW-2	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	NA
	4-Feb-13	NAPL - Not Sampled										
MW-3	19-Jan-16	NAPL - Not Sampled										
	9-Dec-14	NAPL - Not Sampled										
	4-Feb-13	NAPL - Not Sampled										
MW-4	19-Jan-16	<1.0	<1.0	<1.0	<1.5	42	<0.010	7.1	<2.0	<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	NA
	29-Oct-13	<1.0	<1.0	<1.0	<2.0	31	<0.01	8.8	NA	NA	NA	<0.005
MW-5	19-Jan-16	16,000	470	1,200	390	2,700	<0.010	130	260	<40	68	NA
	9-Dec-14	8,900	940	1,200	1,500	1,700	<0.01	<100	230	<400	<400	NA
	29-Oct-13	4,300	1,100	740	2,000	540	<0.01	44	130	36	69	<0.005
MW-6	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	NA
	29-Oct-13	10,000	23,000	3,100	13,000	110	<0.01	<50	450	92	170	<0.005
MW-7	19-Jan-16	3,300	640	460	1,000	1,500	<0.010	5.7	160	22	37	NA
	9-Dec-14	4,000	420	510	1,100	1,500	<0.01	<50	130	<200	<200	NA
	29-Oct-13	7,700	7,400	1,700	8,900	3,500	<0.01	<50	370	88	180	<0.005
MW-8	19-Jan-16	NAPL - Not Sampled										
	9-Dec-14	NAPL - Not Sampled										
	29-Oct-13	NAPL - Not Sampled										
MW-9	19-Jan-16	NAPL - Not Sampled										
	9-Dec-14	2,300	2,600	2,600	12,000	<100	<0.01	<100	720	<400	450	NA
	21-Jul-14	2,000	1,100	1,800	6,600	<100	<0.01	<100	330	110	200	0.014
MW-10	19-Jan-16	NAPL - Not Sampled										
	9-Dec-14	3,900	2,000	2,000	6,100	<100	<0.01	<100	410	<400	<400	NA
	22-Jul-14	4,200	5,900	2,700	10,000	170	<0.01	<100	470	160	310	0.084
MW-11	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	0.088

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

Monitoring Well	Date Measured	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylene (µg/L)	MTBE (µg/L)	EDB (µg/L)	EDC (µg/L)	Napthalene[1] (µg/L)	1-Methylnapthalene[1] (µg/L)	2-Methylnapthalene[1] (µg/L)	Dissolved Lead (mg/L)
MW-12	19-Jan-16	No Access - Not Sampled										
	9-Dec-14	1,900	310	470	710	100	<0.01	<50	<100	<200	<200	NA
	21-Aug-14	1,800	110	340	810	230	<0.01	<10	50	8	13	0.130
MW-13	19-Jan-16	No Access - Not Sampled										
	9-Dec-14	420	5.0	78	90	<5.0	<0.01	<5.0	24	<20	<20	NA
	18-Jul-14	130	<10	35	24	<10	<0.01	<10	9.6	20	35	0.062
MW-14	19-Jan-16	NAPL - Not Sampled										
	9-Dec-14	780	1,700	290	1,700	<100	15	170	200	<400	<400	NA
	21-Aug-14	480	210	65	160	<10	2.3	84	18	3.7	3.3	0.020
NMWQCC and EIB Standards		10	750	750	620	100	0.1	10	30*			0.05

NOTES:
All concentrations in micrograms per liter (ug/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-Methylnapthalenes, and 2-Methylnaphthalenes
[1] = Naphthalene, 1-methylnaphthalene, and 2-methylnaphthalene were analized 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	19-Jan-16	NAPL - Not Measured			
MW-2	19-Jan-16	NAPL - Not Measured			
MW-3	19-Jan-16	NAPL - Not Measured			
MW-4	19-Jan-16	6.74	706	16.0	NM
MW-5	19-Jan-16	7.18	1,808	15.8	NM
MW-6	19-Jan-16	NAPL - Not Measured			
MW-7	19-Jan-16	7.17	1,069	16.6	NM
MW-8	19-Jan-16	NAPL - Not Measured			
MW-9	19-Jan-16	NAPL - Not Measured			
MW-10	19-Jan-16	6.86	1,642	16.2	NM
MW-11	19-Jan-16	NAPL - Not Measured			
MW-12	19-Jan-16	No Access			
MW-13	19-Jan-16	No Access			
MW-14	19-Jan-16	NAPL - Not Measured			

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-2 — MONITORING WELL
- SB-1 — SOIL BORING
- BUILDING
- UNDERGROUND STORAGE TANK (UST)
- SITE BOUNDARY

NOTE:
AERIAL SOURCE: GOOGLE EARTH 2013

50 25 0 50

SCALE IN FEET

FAIRVIEW STATION
ESPANOLA, NEW MEXICO

FIGURE 1
SITE MAP

PROJECT #:	6289814	PROJECT PHASE:	01	PROJECT MANAGER:	TM

320 Gold Avenue, SW Suite 1300
Albuquerque, NM 87102
Phone: (505) 224-9013
Fax: (505) 224-9016
EA ENGINEERING, SCIENCE, AND TECHNOLOGY, INC., PBC

LEGEND:

MW-2 5607.64	MONITORING WELL
SB-1	SOIL BORING
	BUILDING
	UNDERGROUND STORAGE TANK (UST)
	SITE BOUNDARY
	HISTORIC DIRECTION OF GROUNDWATER FLOW
NAPL	NON-AQUEOUS PHASE LIQUID
NM	NOT MEASURED

NOTE:
AERIAL SOURCE: GOOGLE EARTH 2013

50 25 0 50

SCALE IN FEET

FAIRVIEW STATION
ESPANOLA, NEW MEXICO

FIGURE 2
GROUNDWATER ELEVATION MAP
JANUARY 2016

PROJECT #:	6289814	PROJECT PHASE:	01	PROJECT MANAGER:	TM

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Fax: (505) 224-9016
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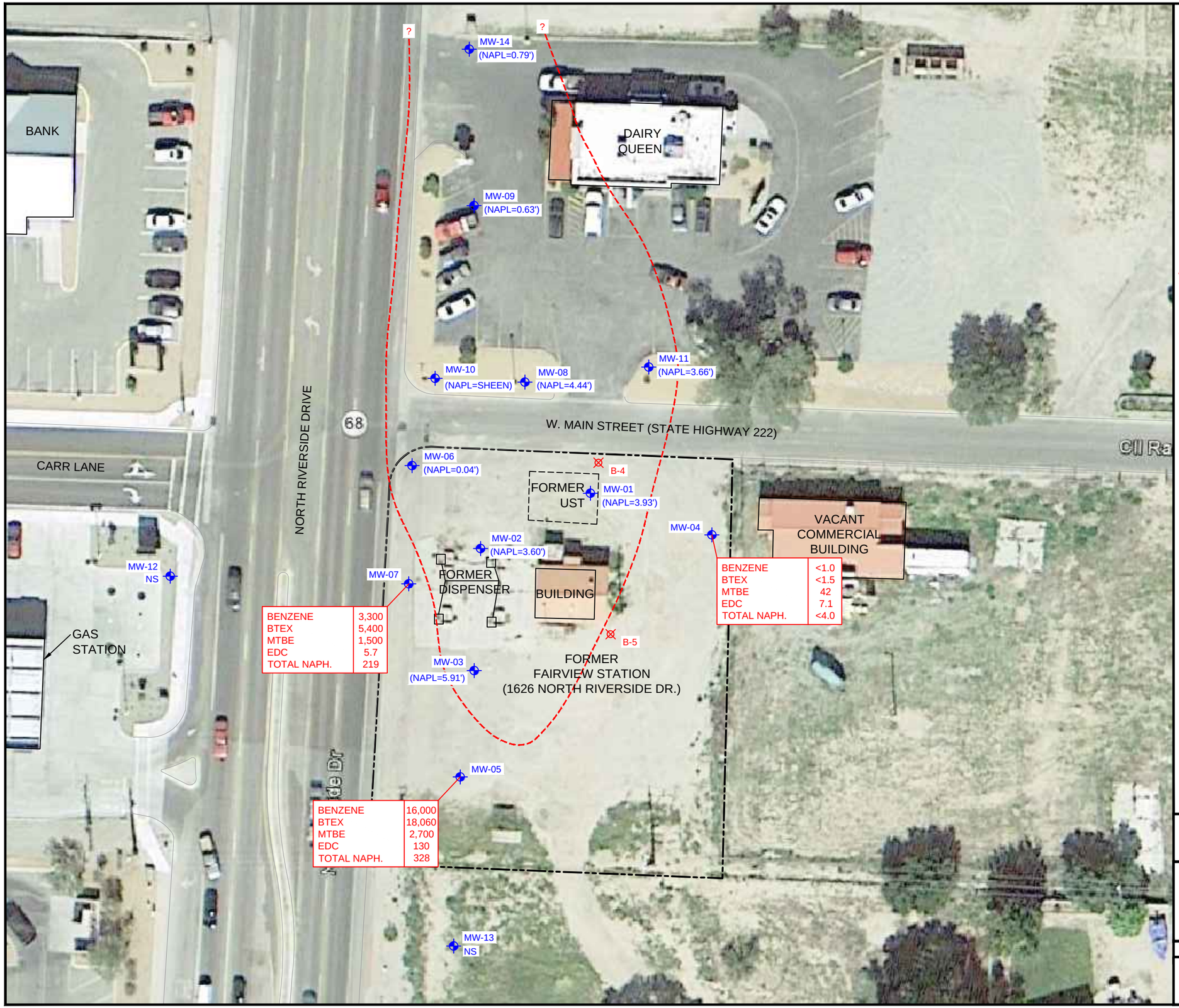

LEGEND:

MW-2	MONITORING WELL
SB-1	SOIL BORING
	BUILDING
	UNDERGROUND STORAGE TANK (UST)
	SITE BOUNDARY
NAPL	NON-AQUEOUS PHASE LIQUID
	ESTIMATED EXTENT OF NAPL
BTEX	BENZENE, TOLUENE, ETHYLBENZENE, XYLENES
MTBE	METHYL TERTIARY BUTYL ETHER
EDC	1,2- DICHLORORTHANE
TOTAL NAPH.	TOTAL NAPHTHALENES
NS	NOT SAMPLED

NOTES:
1. AERIAL SOURCE: GOOGLE EARTH 2013.
2. ALL CONCENTRATIONS ARE IN MICROGRAMS PER LITER (ug/L).

50 25 0 50
SCALE IN FEET

FAIRVIEW STATION
ESPANOLA, NEW MEXICO

FIGURE 3
GROUNDWATER ANALYTICAL RESULTS JANUARY 2016

PROJECT #:	6289814	PROJECT PHASE:	01	PROJECT MANAGER:	TM

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APPENDIX A

FIELD FORMS

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Phone: (505) 224-9013

MONITOR WELL SAMPLING FIELD FORM

FLUID LEVEL DATA

Well ID: MW-1
Site: Fairview Station
Depth to PSH: 13.84 Feet
Depth to water: 17.77 Feet
Total depth: _____ Feet
NAPL thickness: 3.93 Feet

Date gauged: 1-19-16
Time gauged: 1144
Well diameter: _____ Inches
Height of fluid column: _____ Feet
Volume in well: _____ Gallons

(3 well volumes = _____ gallons)

After Bailing NAPL
Depth to PSH: 14.53 Feet
Depth to water: 15.74 Feet
NAPL thickness: 1.21 Feet
NAPL Recovered: 4.5 Gallons

GROUNDWATER SAMPLING DATA

Time/date purged: _____
Purge Method: bailer

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

NAPL

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

Time/date sampled: _____
Purged/sampled by: MC

Sample method: _____
Requested analyses: _____
Comments/observations: bailed for 30 mins

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: MW-2
Site: Fairview Station
Depth to PSH: 14.45 Feet
Depth to water: 18.05 Feet
Total depth: _____ Feet
NAPL thickness: 3.6 Feet

Date gauged: 1-19-16
Time gauged: 1108
Well diameter: _____ Inches
Height of fluid column: _____ Feet
Volume in well: _____ Gallons

(3 well volumes = _____ gallons)

After Bailing NAPL
Depth to PSH: 14.95 Feet
Depth to water: 15.80 Feet
NAPL thickness: 0.85 Feet
NAPL Recovered: 3.75 Gallons

GROUNDWATER SAMPLING DATA

Time/date purged: _____
Purge Method: bailer

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

NAPL

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

Time/date sampled: _____
Purged/sampled by: [signature]

Sample method: _____
Requested analyses: _____
Comments/observations: bailed for 30 mins

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

MONITOR WELL SAMPLING FIELD FORM

FLUID LEVEL DATA

Well ID: MW-3
Site: Fairview Station
Depth to PSH: 12.69 Feet
Depth to water: 18.60 Feet
Total depth: _____ Feet
NAPL thickness: 5.91 Feet

Date gauged: 1-19-16
Time gauged: 1032
Well diameter: _____ Inches
Height of fluid column: _____ Feet
Volume in well: _____ Gallons

(3 well volumes = _____ gallons)

After Bailing NAPL
Depth to PSH: 15.80 Feet
Depth to water: 16.90 Feet
NAPL thickness: 1.10 Feet
NAPL Recovered: 5 Gallons

GROUNDWATER SAMPLING DATA

Time/date purged: _____
Purge Method: hand bail

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

NAPL

Actual purge volume _____ gal.
Field measurements stabilized within ± 10%? _____
Time/date sampled _____
Purged/sampled by _____
Sample method _____
Requested analyses _____
Comments/observations: bailed for 30 mins

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: MW-4
Site: Fairview Station
Date gauged: 1-19-16
Time gauged: 0847

Depth to PSH: _____ Feet
Well diameter: 2 Inches
Depth to water: 14.33 Feet
Height of fluid column: 12.77 Feet
Total depth: 27.10 Feet
Volume in well: 2.2 Gallons
NAPL thickness: _____ Feet

(3 well volumes = 6.5 gallons)

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

GROUNDWATER SAMPLING DATA

Time/date purged: 0852
Purge Method: bailer

Time	Purge Volume (gal)	Temp (°C)	SpC (µs/cm)	pH	ORP (mV)	DO (mg/L)
0852	0.25	15.1	664	6.54		
0856	3.25	16.0	685	6.68		
0859	6.25	16.0	706	6.74		

Actual purge volume: 6.5 gal.
Field measurements stabilized within ± 10%?: Y
Time/date sampled: 0900 1-19-16
Purged/sampled by: [signature]
Sample method: disposable bailer
Requested analyses: 8260B 504.1
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: MW-5
Site: Fairview Station
Date gauged: 1-19-16
Time gauged: 1010

Depth to PSH: _____ Feet
Well diameter: 2 Inches
Depth to water: 13.62 Feet
Height of fluid column: 8.16 Feet
Total depth: 21.80 Feet
Volume in well: 1.4 Gallons
NAPL thickness: _____ Feet

(3 well volumes = 4.2 gallons)

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

GROUNDWATER SAMPLING DATA

Time/date purged: 1014
Purge Method: bailer

Time	Purge Volume (gal)	Temp (°C)	SpC (µs/cm)	pH	ORP (mV)	DO (mg/L)
1014	0.25	15.8	1808	7.18		

Actual purge volume: 1.25 gal.
Field measurements stabilized within ± 10%? N
Time/date sampled: 1020 1-19-16
Purged/sampled by: [signature]
Sample method: disposable bailer
Requested analyses: 8260B 504.1
Comments/observations: bailing dry; took sample

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

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MONITOR WELL SAMPLING FIELD FORM

FLUID LEVEL DATA

Well ID: MW-6
Site: Fairview Station
Date gauged: 1-19-16
Time gauged: 1220

Depth to PSH: 14.99 Feet
Depth to water: 15.03 Feet
Total depth: _____ Feet
NAPL thickness: 0.04 Feet

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

(3 well volumes = _____ gallons)

After Bailing NAPL
Depth to PSH: _____ Feet
Depth to water: 15.61 Feet
NAPL thickness: 0.00 Feet
NAPL Recovered: Negligible Gallons

GROUNDWATER SAMPLING DATA

Time/date purged: _____ Purge Method: _____

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

NAPL

Actual purge volume _____ gal.
Field measurements stabilized within ± 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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Albuquerque, NM 87102
Phone: (505) 224-9013

MONITOR WELL SAMPLING FIELD FORM

FLUID LEVEL DATA

Well ID: MW-7
Site: Fairview Station
Date gauged: 1-19-16
Time gauged: 0946

Depth to PSH: _____ Feet
Well diameter: 2 Inches
Depth to water: 14.00 Feet
Height of fluid column: 10.60 Feet
Total depth: 24.60 Feet
Volume in well: 1.8 Gallons
NAPL thickness: _____ Feet
(3 well volumes = 5.4 gallons)

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

GROUNDWATER SAMPLING DATA

Time/date purged: 0950
Purge Method: Low flow

Time	Purge Volume (gal)	Temp (°C)	SpC (µs/cm)	pH	ORP (mV)	DO (mg/L)
0950	0.25	16.0	1400	7.18		
0953	2.75	17.0	1375	7.11		
0956	5.25	16.6	1069	7.17		

Actual purge volume: 5.5 gal.
Field measurements stabilized within ± 10%? N
Time/date sampled: 1000 1-19-16
Purged/sampled by: [signature]
Sample method: Disposable bailer
Requested analyses: 8260B 504.1
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: MW-8
Site: Fairview Station
Depth to PSH: 14.34 Feet
Depth to water: 18.78 Feet
Total depth: _____ Feet
NAPL thickness: 4.44 Feet

Date gauged: 1-19-16
Time gauged: 1311
Well diameter: _____ Inches
Height of fluid column: _____ Feet
Volume in well: _____ Gallons

(3 well volumes = _____ gallons)

After Bailing NAPL
Depth to PSH: 15.85 Feet
Depth to water: 16.40 Feet
NAPL thickness: 0.55 Feet
NAPL Recovered: 3.25 Gallons

GROUNDWATER SAMPLING DATA

Time/date purged: _____
Purge Method: bailer

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

NAPL

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

Time/date sampled: _____
Purged/sampled by: _____

Sample method: _____
Requested analyses: _____
Comments/observations: bailed for 30 mins

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: MW-9
Site: Fairview Station
Depth to PSH: 14.65 Feet
Depth to water: 15.28 Feet
Total depth: _____ Feet
NAPL thickness: 0.63 Feet

Date gauged: 1-19-16
Time gauged: 0921
Well diameter: _____ Inches
Height of fluid column: _____ Feet
Volume in well: _____ Gallons

(3 well volumes = _____ gallons)

After Bailing NAPL
Depth to PSH: 15.10 Feet
Depth to water: 15.11 Feet
NAPL thickness: 0.01 Feet
NAPL Recovered: negligible Gallons

GROUNDWATER SAMPLING DATA

Time/date purged: _____ Purge Method: bailed

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

NAPL

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

Time/date sampled: _____
Purged/sampled by: [signature]

Sample method: disposable bailer
Requested analyses: ~~8260B~~ ~~504.1~~
Comments/observations: has NAPL will return to bail

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: MW-10
Site: Fairview Station
Depth to PSH: heavy sheen ~~Feet~~
Depth to water: 14.89 Feet
Total depth: 24.20 Feet
NAPL thickness: _____ Feet

Date gauged: 1-19-16
Time gauged: 0932
Well diameter: 2 Inches
Height of fluid column: 9.31 Feet
Volume in well: 1.6 Gallons

(3 well volumes = 4.7 gallons)

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

GROUNDWATER SAMPLING DATA

Time/date purged: 0936
Purge Method: bailer

Time	Purge Volume (gal)	Temp (°C)	SpC (µs/cm)	pH	ORP (mV)	DO (mg/L)
0936	0.25	16.2	1642	6.86		
		heavy sheen not sampled				

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

Time/date sampled _____
Purged/sampled by: [signature]

Sample method: disposable bailer
Requested analyses: ~~8260B SO4~~

Comments/observations: did not sample; heavy sheen in purge bucket after 0.25 gal removed.

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: MW-11
Site: Fairview Station
Date gauged: 1-19-16
Time gauged: 1238

Depth to PSH: 15.47 Feet
Depth to water: 19.13 Feet
Total depth: _____ Feet
NAPL thickness: 3.66 Feet

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

(3 well volumes = _____ gallons)

After Bailing NAPL
Depth to PSH: 16.33 Feet
Depth to water: 16.95 Feet
NAPL thickness: 0.62 Feet
NAPL Recovered: 2.75 Gallons

GROUNDWATER SAMPLING DATA

Time/date purged: _____
Purge Method: bailer

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

NAPL

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

Time/date sampled: _____
Purged/sampled by: [illegible]

Sample method: _____
Requested analyses: _____
Comments/observations: bailed for 30 mins

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: MW-12 | Date gauged: 1-19-16

Site: Fairview Station | Time gauged: _____

Depth to PSH	_____ Feet	Well diameter	_____ Inches		
Depth to water	_____ Feet	Height of fluid column	_____ Feet		
Total depth	_____ Feet	Volume in well	_____ Gallons		
NAPL thickness	_____ Feet				

(3 well volumes = _____ gallons)

After Bailing NAPL

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

GROUNDWATER SAMPLING DATA

Time/date purged _____ Purge Method _____

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

NO Written Access

Actual purge volume _____ gal. Field measurements stabilized within ± 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: MW-13 | Date gauged: 1-19-16

Site: Fairview Station | Time gauged: _____

Depth to PSH	_____ Feet	Well diameter	_____ Inches		
Depth to water	_____ Feet	Height of fluid column	_____ Feet		
Total depth	_____ Feet	Volume in well	_____ Gallons		
NAPL thickness	_____ Feet				

(3 well volumes = _____ gallons)

After Bailing NAPL

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

GROUNDWATER SAMPLING DATA

Time/date purged _____ Purge Method _____

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

No Water Access

Actual purge volume _____ gal. Field measurements stabilized within ± 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: MW-14
Site: Fairview Station
Depth to PSH: 14.40 Feet
Depth to water: 15.19 Feet
Total depth: _____ Feet
NAPL thickness: 0.79 Feet

Date gauged: 1-19-16
Time gauged: 0909
Well diameter: _____ Inches
Height of fluid column: _____ Feet
Volume in well: _____ Gallons

(3 well volumes = _____ gallons)

After Bailing NAPL
Depth to PSH: 15.15 Feet
Depth to water: 15.16 Feet
NAPL thickness: 0.01 Feet
NAPL Recovered: 0.25 Gallons

GROUNDWATER SAMPLING DATA

Time/date purged: _____
Purge Method: bailer

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

NAPL

Actual purge volume _____ gal.
Field measurements stabilized within ± 10%? _____
Time/date sampled: _____
Purged/sampled by: [signature]
Sample method: disposable bailer
Requested analyses: ~~8260B~~ ~~8041~~
Comments/observations: has NAPL will return to bail last

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

APPENDIX B

LABORATORY REPORTS

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

February 02, 2016

Teri McMillan

EA Engineering
320 Gold Ave SW Suite 1210
Albuquerque, NM 87102
TEL: (505) 259-6779
FAX

RE: Fairview Station OrderNo.: 1601680

Dear Teri McMillan:

Hall Environmental Analysis Laboratory received 4 sample(s) on 1/19/2016 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 qualifers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

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

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

Sincerely,

Andy Freeman

Laboratory Manager

4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Client Sample ID: MW-4
Project: Fairview Station
Collection Date: 1/19/2016 9:00:00 AM
Lab ID: 1601680-001
Matrix: AQUEOUS
Received Date: 1/19/2016 3:37:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8011/504.1: EDB						Analyst: **JME**	
1,2-Dibromoethane	ND	0.010		µg/L	1	1/27/2016 9:31:15 PM	23395
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**	
Benzene	ND	1.0		µg/L	1	1/22/2016 7:33:17 PM	R31657
Toluene	ND	1.0		µg/L	1	1/22/2016 7:33:17 PM	R31657
Ethylbenzene	ND	1.0		µg/L	1	1/22/2016 7:33:17 PM	R31657
Methyl tert-butyl ether (MTBE)	42	1.0		µg/L	1	1/22/2016 7:33:17 PM	R31657
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	1/22/2016 7:33:17 PM	R31657
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	1/22/2016 7:33:17 PM	R31657
1,2-Dichloroethane (EDC)	7.1	1.0		µg/L	1	1/22/2016 7:33:17 PM	R31657
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	1/22/2016 7:33:17 PM	R31657
Naphthalene	ND	2.0		µg/L	1	1/22/2016 7:33:17 PM	R31657
1-Methylnaphthalene	ND	4.0		µg/L	1	1/22/2016 7:33:17 PM	R31657
2-Methylnaphthalene	ND	4.0		µg/L	1	1/22/2016 7:33:17 PM	R31657
Acetone	ND	10		µg/L	1	1/22/2016 7:33:17 PM	R31657
Bromobenzene	ND	1.0		µg/L	1	1/22/2016 7:33:17 PM	R31657
Bromodichloromethane	ND	1.0		µg/L	1	1/22/2016 7:33:17 PM	R31657
Bromoform	ND	1.0		µg/L	1	1/22/2016 7:33:17 PM	R31657
Bromomethane	ND	3.0		µg/L	1	1/22/2016 7:33:17 PM	R31657
2-Butanone	ND	10		µg/L	1	1/22/2016 7:33:17 PM	R31657
Carbon disulfide	ND	10		µg/L	1	1/22/2016 7:33:17 PM	R31657
Carbon Tetrachloride	ND	1.0		µg/L	1	1/22/2016 7:33:17 PM	R31657
Chlorobenzene	ND	1.0		µg/L	1	1/22/2016 7:33:17 PM	R31657
Chloroethane	ND	2.0		µg/L	1	1/22/2016 7:33:17 PM	R31657
Chloroform	ND	1.0		µg/L	1	1/22/2016 7:33:17 PM	R31657
Chloromethane	ND	3.0		µg/L	1	1/22/2016 7:33:17 PM	R31657
2-Chlorotoluene	ND	1.0		µg/L	1	1/22/2016 7:33:17 PM	R31657
4-Chlorotoluene	ND	1.0		µg/L	1	1/22/2016 7:33:17 PM	R31657
cis-1,2-DCE	ND	1.0		µg/L	1	1/22/2016 7:33:17 PM	R31657
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	1/22/2016 7:33:17 PM	R31657
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	1/22/2016 7:33:17 PM	R31657
Dibromochloromethane	ND	1.0		µg/L	1	1/22/2016 7:33:17 PM	R31657
Dibromomethane	ND	1.0		µg/L	1	1/22/2016 7:33:17 PM	R31657
1,2-Dichlorobenzene	ND	1.0		µg/L	1	1/22/2016 7:33:17 PM	R31657
1,3-Dichlorobenzene	ND	1.0		µg/L	1	1/22/2016 7:33:17 PM	R31657
1,4-Dichlorobenzene	ND	1.0		µg/L	1	1/22/2016 7:33:17 PM	R31657
Dichlorodifluoromethane	ND	1.0		µg/L	1	1/22/2016 7:33:17 PM	R31657
1,1-Dichloroethane	ND	1.0		µg/L	1	1/22/2016 7:33:17 PM	R31657
1,1-Dichloroethene	ND	1.0		µg/L	1	1/22/2016 7:33:17 PM	R31657
1,2-Dichloropropane	ND	1.0		µg/L	1	1/22/2016 7:33:17 PM	R31657

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.

CLIENT: EA Engineering
Client Sample ID: MW-4
Project: Fairview Station
Collection Date: 1/19/2016 9:00:00 AM
Lab ID: 1601680-001
Matrix: AQUEOUS
Received Date: 1/19/2016 3:37:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**	
1,3-Dichloropropane	ND	1.0		µg/L	1	1/22/2016 7:33:17 PM	R31657
2,2-Dichloropropane	ND	2.0		µg/L	1	1/22/2016 7:33:17 PM	R31657
1,1-Dichloropropene	ND	1.0		µg/L	1	1/22/2016 7:33:17 PM	R31657
Hexachlorobutadiene	ND	1.0		µg/L	1	1/22/2016 7:33:17 PM	R31657
2-Hexanone	ND	10		µg/L	1	1/22/2016 7:33:17 PM	R31657
Isopropylbenzene	ND	1.0		µg/L	1	1/22/2016 7:33:17 PM	R31657
4-Isopropyltoluene	ND	1.0		µg/L	1	1/22/2016 7:33:17 PM	R31657
4-Methyl-2-pentanone	ND	10		µg/L	1	1/22/2016 7:33:17 PM	R31657
Methylene Chloride	ND	3.0		µg/L	1	1/22/2016 7:33:17 PM	R31657
n-Butylbenzene	ND	3.0		µg/L	1	1/22/2016 7:33:17 PM	R31657
n-Propylbenzene	ND	1.0		µg/L	1	1/22/2016 7:33:17 PM	R31657
sec-Butylbenzene	ND	1.0		µg/L	1	1/22/2016 7:33:17 PM	R31657
Styrene	ND	1.0		µg/L	1	1/22/2016 7:33:17 PM	R31657
tert-Butylbenzene	ND	1.0		µg/L	1	1/22/2016 7:33:17 PM	R31657
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	1/22/2016 7:33:17 PM	R31657
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	1/22/2016 7:33:17 PM	R31657
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	1/22/2016 7:33:17 PM	R31657
trans-1,2-DCE	ND	1.0		µg/L	1	1/22/2016 7:33:17 PM	R31657
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	1/22/2016 7:33:17 PM	R31657
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	1/22/2016 7:33:17 PM	R31657
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	1/22/2016 7:33:17 PM	R31657
1,1,1-Trichloroethane	ND	1.0		µg/L	1	1/22/2016 7:33:17 PM	R31657
1,1,2-Trichloroethane	ND	1.0		µg/L	1	1/22/2016 7:33:17 PM	R31657
Trichloroethene (TCE)	ND	1.0		µg/L	1	1/22/2016 7:33:17 PM	R31657
Trichlorofluoromethane	ND	1.0		µg/L	1	1/22/2016 7:33:17 PM	R31657
1,2,3-Trichloropropane	ND	2.0		µg/L	1	1/22/2016 7:33:17 PM	R31657
Vinyl chloride	ND	1.0		µg/L	1	1/22/2016 7:33:17 PM	R31657
Xylenes, Total	ND	1.5		µg/L	1	1/22/2016 7:33:17 PM	R31657
Surr: 1,2-Dichloroethane-d4	99.1	70-130		%Rec	1	1/22/2016 7:33:17 PM	R31657
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	1/22/2016 7:33:17 PM	R31657
Surr: Dibromofluoromethane	109	70-130		%Rec	1	1/22/2016 7:33:17 PM	R31657
Surr: Toluene-d8	92.1	70-130		%Rec	1	1/22/2016 7:33:17 PM	R31657

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.

CLIENT: EA Engineering
Client Sample ID: MW-5
Project: Fairview Station
Collection Date: 1/19/2016 10:20:00 AM
Lab ID: 1601680-002
Matrix: AQUEOUS
Received Date: 1/19/2016 3:37:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8011/504.1: EDB						Analyst: **JME**	
1,2-Dibromoethane	ND	0.010		µg/L	1	1/27/2016 9:44:33 PM	23395
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**	
Benzene	16000	500		µg/L	500	1/26/2016 1:05:55 PM	R31687
Toluene	470	10		µg/L	10	1/25/2016 6:00:21 PM	R31687
Ethylbenzene	1200	500		µg/L	500	1/26/2016 1:05:55 PM	R31687
Methyl tert-butyl ether (MTBE)	2700	500		µg/L	500	1/26/2016 1:05:55 PM	R31687
1,2,4-Trimethylbenzene	330	10		µg/L	10	1/25/2016 6:00:21 PM	R31687
1,3,5-Trimethylbenzene	47	10		µg/L	10	1/25/2016 6:00:21 PM	R31687
1,2-Dichloroethane (EDC)	130	10		µg/L	10	1/25/2016 6:00:21 PM	R31687
1,2-Dibromoethane (EDB)	ND	10		µg/L	10	1/25/2016 6:00:21 PM	R31687
Naphthalene	260	20		µg/L	10	1/25/2016 6:00:21 PM	R31687
1-Methylnaphthalene	ND	40		µg/L	10	1/25/2016 6:00:21 PM	R31687
2-Methylnaphthalene	68	40		µg/L	10	1/25/2016 6:00:21 PM	R31687
Acetone	ND	100		µg/L	10	1/25/2016 6:00:21 PM	R31687
Bromobenzene	ND	10		µg/L	10	1/25/2016 6:00:21 PM	R31687
Bromodichloromethane	ND	10		µg/L	10	1/25/2016 6:00:21 PM	R31687
Bromoform	ND	10		µg/L	10	1/25/2016 6:00:21 PM	R31687
Bromomethane	ND	30		µg/L	10	1/25/2016 6:00:21 PM	R31687
2-Butanone	ND	100		µg/L	10	1/25/2016 6:00:21 PM	R31687
Carbon disulfide	ND	100		µg/L	10	1/25/2016 6:00:21 PM	R31687
Carbon Tetrachloride	ND	10		µg/L	10	1/25/2016 6:00:21 PM	R31687
Chlorobenzene	ND	10		µg/L	10	1/25/2016 6:00:21 PM	R31687
Chloroethane	ND	20		µg/L	10	1/25/2016 6:00:21 PM	R31687
Chloroform	ND	10		µg/L	10	1/25/2016 6:00:21 PM	R31687
Chloromethane	ND	30		µg/L	10	1/25/2016 6:00:21 PM	R31687
2-Chlorotoluene	ND	10		µg/L	10	1/25/2016 6:00:21 PM	R31687
4-Chlorotoluene	ND	10		µg/L	10	1/25/2016 6:00:21 PM	R31687
cis-1,2-DCE	ND	10		µg/L	10	1/25/2016 6:00:21 PM	R31687
cis-1,3-Dichloropropene	ND	10		µg/L	10	1/25/2016 6:00:21 PM	R31687
1,2-Dibromo-3-chloropropane	ND	20		µg/L	10	1/25/2016 6:00:21 PM	R31687
Dibromochloromethane	ND	10		µg/L	10	1/25/2016 6:00:21 PM	R31687
Dibromomethane	ND	10		µg/L	10	1/25/2016 6:00:21 PM	R31687
1,2-Dichlorobenzene	ND	10		µg/L	10	1/25/2016 6:00:21 PM	R31687
1,3-Dichlorobenzene	ND	10		µg/L	10	1/25/2016 6:00:21 PM	R31687
1,4-Dichlorobenzene	ND	10		µg/L	10	1/25/2016 6:00:21 PM	R31687
Dichlorodifluoromethane	ND	10		µg/L	10	1/25/2016 6:00:21 PM	R31687
1,1-Dichloroethane	ND	10		µg/L	10	1/25/2016 6:00:21 PM	R31687
1,1-Dichloroethene	ND	10		µg/L	10	1/25/2016 6:00:21 PM	R31687
1,2-Dichloropropane	ND	10		µg/L	10	1/25/2016 6:00:21 PM	R31687

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.

CLIENT: EA Engineering
Client Sample ID: MW-5
Project: Fairview Station
Collection Date: 1/19/2016 10:20:00 AM
Lab ID: 1601680-002
Matrix: AQUEOUS
Received Date: 1/19/2016 3:37:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**	
1,3-Dichloropropane	ND	10		µg/L	10	1/25/2016 6:00:21 PM	R31687
2,2-Dichloropropane	ND	20		µg/L	10	1/25/2016 6:00:21 PM	R31687
1,1-Dichloropropene	ND	10		µg/L	10	1/25/2016 6:00:21 PM	R31687
Hexachlorobutadiene	ND	10		µg/L	10	1/25/2016 6:00:21 PM	R31687
2-Hexanone	ND	100		µg/L	10	1/25/2016 6:00:21 PM	R31687
Isopropylbenzene	37	10		µg/L	10	1/25/2016 6:00:21 PM	R31687
4-Isopropyltoluene	ND	10		µg/L	10	1/25/2016 6:00:21 PM	R31687
4-Methyl-2-pentanone	ND	100		µg/L	10	1/25/2016 6:00:21 PM	R31687
Methylene Chloride	ND	30		µg/L	10	1/25/2016 6:00:21 PM	R31687
n-Butylbenzene	ND	30		µg/L	10	1/25/2016 6:00:21 PM	R31687
n-Propylbenzene	92	10		µg/L	10	1/25/2016 6:00:21 PM	R31687
sec-Butylbenzene	ND	10		µg/L	10	1/25/2016 6:00:21 PM	R31687
Styrene	ND	10		µg/L	10	1/25/2016 6:00:21 PM	R31687
tert-Butylbenzene	ND	10		µg/L	10	1/25/2016 6:00:21 PM	R31687
1,1,1,2-Tetrachloroethane	ND	10		µg/L	10	1/25/2016 6:00:21 PM	R31687
1,1,2,2-Tetrachloroethane	ND	20		µg/L	10	1/25/2016 6:00:21 PM	R31687
Tetrachloroethene (PCE)	ND	10		µg/L	10	1/25/2016 6:00:21 PM	R31687
trans-1,2-DCE	ND	10		µg/L	10	1/25/2016 6:00:21 PM	R31687
trans-1,3-Dichloropropene	ND	10		µg/L	10	1/25/2016 6:00:21 PM	R31687
1,2,3-Trichlorobenzene	ND	10		µg/L	10	1/25/2016 6:00:21 PM	R31687
1,2,4-Trichlorobenzene	ND	10		µg/L	10	1/25/2016 6:00:21 PM	R31687
1,1,1-Trichloroethane	ND	10		µg/L	10	1/25/2016 6:00:21 PM	R31687
1,1,2-Trichloroethane	ND	10		µg/L	10	1/25/2016 6:00:21 PM	R31687
Trichloroethene (TCE)	ND	10		µg/L	10	1/25/2016 6:00:21 PM	R31687
Trichlorofluoromethane	ND	10		µg/L	10	1/25/2016 6:00:21 PM	R31687
1,2,3-Trichloropropane	ND	20		µg/L	10	1/25/2016 6:00:21 PM	R31687
Vinyl chloride	ND	10		µg/L	10	1/25/2016 6:00:21 PM	R31687
Xylenes, Total	390	15		µg/L	10	1/25/2016 6:00:21 PM	R31687
Surr: 1,2-Dichloroethane-d4	92.4	70-130		%Rec	10	1/25/2016 6:00:21 PM	R31687
Surr: 4-Bromofluorobenzene	90.1	70-130		%Rec	10	1/25/2016 6:00:21 PM	R31687
Surr: Dibromofluoromethane	97.0	70-130		%Rec	10	1/25/2016 6:00:21 PM	R31687
Surr: Toluene-d8	91.1	70-130		%Rec	10	1/25/2016 6:00:21 PM	R31687

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.

CLIENT: EA Engineering
Client Sample ID: MW-7
Project: Fairview Station
Collection Date: 1/19/2016 10:00:00 AM
Lab ID: 1601680-003
Matrix: AQUEOUS
Received Date: 1/19/2016 3:37:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8011/504.1: EDB						Analyst: **JME**	
1,2-Dibromoethane	ND	0.010		µg/L	1	1/29/2016 7:06:59 PM	23474
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**	
Benzene	3300	100		µg/L	100	1/25/2016 6:29:07 PM	R31687
Toluene	640	100		µg/L	100	1/25/2016 6:29:07 PM	R31687
Ethylbenzene	460	100		µg/L	100	1/25/2016 6:29:07 PM	R31687
Methyl tert-butyl ether (MTBE)	1500	100		µg/L	100	1/25/2016 6:29:07 PM	R31687
1,2,4-Trimethylbenzene	460	100		µg/L	100	1/25/2016 6:29:07 PM	R31687
1,3,5-Trimethylbenzene	85	1.0		µg/L	1	1/22/2016 8:30:45 PM	R31657
1,2-Dichloroethane (EDC)	5.7	1.0		µg/L	1	1/22/2016 8:30:45 PM	R31657
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	1/22/2016 8:30:45 PM	R31657
Naphthalene	160	100		µg/L	100	1/25/2016 6:29:07 PM	R31687
1-Methylnaphthalene	22	4.0		µg/L	1	1/22/2016 8:30:45 PM	R31657
2-Methylnaphthalene	37	4.0		µg/L	1	1/22/2016 8:30:45 PM	R31657
Acetone	ND	10		µg/L	1	1/22/2016 8:30:45 PM	R31657
Bromobenzene	ND	1.0		µg/L	1	1/22/2016 8:30:45 PM	R31657
Bromodichloromethane	ND	1.0		µg/L	1	1/22/2016 8:30:45 PM	R31657
Bromoform	ND	1.0		µg/L	1	1/22/2016 8:30:45 PM	R31657
Bromomethane	ND	3.0		µg/L	1	1/22/2016 8:30:45 PM	R31657
2-Butanone	ND	10		µg/L	1	1/22/2016 8:30:45 PM	R31657
Carbon disulfide	ND	10		µg/L	1	1/22/2016 8:30:45 PM	R31657
Carbon Tetrachloride	ND	1.0		µg/L	1	1/22/2016 8:30:45 PM	R31657
Chlorobenzene	ND	1.0		µg/L	1	1/22/2016 8:30:45 PM	R31657
Chloroethane	ND	2.0		µg/L	1	1/22/2016 8:30:45 PM	R31657
Chloroform	ND	1.0		µg/L	1	1/22/2016 8:30:45 PM	R31657
Chloromethane	ND	3.0		µg/L	1	1/22/2016 8:30:45 PM	R31657
2-Chlorotoluene	ND	1.0		µg/L	1	1/22/2016 8:30:45 PM	R31657
4-Chlorotoluene	ND	1.0		µg/L	1	1/22/2016 8:30:45 PM	R31657
cis-1,2-DCE	ND	1.0		µg/L	1	1/22/2016 8:30:45 PM	R31657
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	1/22/2016 8:30:45 PM	R31657
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	1/22/2016 8:30:45 PM	R31657
Dibromochloromethane	ND	1.0		µg/L	1	1/22/2016 8:30:45 PM	R31657
Dibromomethane	ND	1.0		µg/L	1	1/22/2016 8:30:45 PM	R31657
1,2-Dichlorobenzene	ND	1.0		µg/L	1	1/22/2016 8:30:45 PM	R31657
1,3-Dichlorobenzene	ND	1.0		µg/L	1	1/22/2016 8:30:45 PM	R31657
1,4-Dichlorobenzene	ND	1.0		µg/L	1	1/22/2016 8:30:45 PM	R31657
Dichlorodifluoromethane	ND	1.0		µg/L	1	1/22/2016 8:30:45 PM	R31657
1,1-Dichloroethane	ND	1.0		µg/L	1	1/22/2016 8:30:45 PM	R31657
1,1-Dichloroethene	ND	1.0		µg/L	1	1/22/2016 8:30:45 PM	R31657
1,2-Dichloropropane	ND	1.0		µg/L	1	1/22/2016 8:30:45 PM	R31657

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.

CLIENT: EA Engineering
Client Sample ID: MW-7
Project: Fairview Station
Collection Date: 1/19/2016 10:00:00 AM
Lab ID: 1601680-003
Matrix: AQUEOUS
Received Date: 1/19/2016 3:37:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**	
1,3-Dichloropropane	ND	1.0		µg/L	1	1/22/2016 8:30:45 PM	R31657
2,2-Dichloropropane	ND	2.0		µg/L	1	1/22/2016 8:30:45 PM	R31657
1,1-Dichloropropene	ND	1.0		µg/L	1	1/22/2016 8:30:45 PM	R31657
Hexachlorobutadiene	ND	1.0		µg/L	1	1/22/2016 8:30:45 PM	R31657
2-Hexanone	ND	10		µg/L	1	1/22/2016 8:30:45 PM	R31657
Isopropylbenzene	19	1.0		µg/L	1	1/22/2016 8:30:45 PM	R31657
4-Isopropyltoluene	2.1	1.0		µg/L	1	1/22/2016 8:30:45 PM	R31657
4-Methyl-2-pentanone	ND	10		µg/L	1	1/22/2016 8:30:45 PM	R31657
Methylene Chloride	ND	3.0		µg/L	1	1/22/2016 8:30:45 PM	R31657
n-Butylbenzene	6.9	3.0		µg/L	1	1/22/2016 8:30:45 PM	R31657
n-Propylbenzene	41	1.0		µg/L	1	1/22/2016 8:30:45 PM	R31657
sec-Butylbenzene	4.1	1.0		µg/L	1	1/22/2016 8:30:45 PM	R31657
Styrene	ND	1.0		µg/L	1	1/22/2016 8:30:45 PM	R31657
tert-Butylbenzene	ND	1.0		µg/L	1	1/22/2016 8:30:45 PM	R31657
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	1/22/2016 8:30:45 PM	R31657
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	1/22/2016 8:30:45 PM	R31657
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	1/22/2016 8:30:45 PM	R31657
trans-1,2-DCE	ND	1.0		µg/L	1	1/22/2016 8:30:45 PM	R31657
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	1/22/2016 8:30:45 PM	R31657
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	1/22/2016 8:30:45 PM	R31657
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	1/22/2016 8:30:45 PM	R31657
1,1,1-Trichloroethane	ND	1.0		µg/L	1	1/22/2016 8:30:45 PM	R31657
1,1,2-Trichloroethane	ND	1.0		µg/L	1	1/22/2016 8:30:45 PM	R31657
Trichloroethene (TCE)	ND	1.0		µg/L	1	1/22/2016 8:30:45 PM	R31657
Trichlorofluoromethane	ND	1.0		µg/L	1	1/22/2016 8:30:45 PM	R31657
1,2,3-Trichloropropane	ND	2.0		µg/L	1	1/22/2016 8:30:45 PM	R31657
Vinyl chloride	ND	1.0		µg/L	1	1/22/2016 8:30:45 PM	R31657
Xylenes, Total	1000	150		µg/L	100	1/25/2016 6:29:07 PM	R31687
Surr: 1,2-Dichloroethane-d4	87.7	70-130		%Rec	1	1/22/2016 8:30:45 PM	R31657
Surr: 4-Bromofluorobenzene	81.9	70-130		%Rec	1	1/22/2016 8:30:45 PM	R31657
Surr: Dibromofluoromethane	88.1	70-130		%Rec	1	1/22/2016 8:30:45 PM	R31657
Surr: Toluene-d8	96.2	70-130		%Rec	1	1/22/2016 8:30:45 PM	R31657

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.

CLIENT: EA Engineering
Client Sample ID: Trip Blank
Project: Fairview Station
Collection Date:
Lab ID: 1601680-004
Matrix: TRIP BLANK
Received Date: 1/19/2016 3:37:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8011/504.1: EDB						Analyst: **JME**	
1,2-Dibromoethane	ND	0.010		µg/L	1	1/29/2016 7:20:26 PM	23474
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**	
Benzene	ND	1.0		µg/L	1	1/25/2016 6:57:49 PM	R31687
Toluene	ND	1.0		µg/L	1	1/25/2016 6:57:49 PM	R31687
Ethylbenzene	ND	1.0		µg/L	1	1/25/2016 6:57:49 PM	R31687
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	1/25/2016 6:57:49 PM	R31687
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	1/25/2016 6:57:49 PM	R31687
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	1/25/2016 6:57:49 PM	R31687
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	1/25/2016 6:57:49 PM	R31687
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	1/25/2016 6:57:49 PM	R31687
Naphthalene	ND	2.0		µg/L	1	1/25/2016 6:57:49 PM	R31687
1-Methylnaphthalene	ND	4.0		µg/L	1	1/25/2016 6:57:49 PM	R31687
2-Methylnaphthalene	ND	4.0		µg/L	1	1/25/2016 6:57:49 PM	R31687
Acetone	ND	10		µg/L	1	1/25/2016 6:57:49 PM	R31687
Bromobenzene	ND	1.0		µg/L	1	1/25/2016 6:57:49 PM	R31687
Bromodichloromethane	ND	1.0		µg/L	1	1/25/2016 6:57:49 PM	R31687
Bromoform	ND	1.0		µg/L	1	1/25/2016 6:57:49 PM	R31687
Bromomethane	ND	3.0		µg/L	1	1/25/2016 6:57:49 PM	R31687
2-Butanone	ND	10		µg/L	1	1/25/2016 6:57:49 PM	R31687
Carbon disulfide	ND	10		µg/L	1	1/25/2016 6:57:49 PM	R31687
Carbon Tetrachloride	ND	1.0		µg/L	1	1/25/2016 6:57:49 PM	R31687
Chlorobenzene	ND	1.0		µg/L	1	1/25/2016 6:57:49 PM	R31687
Chloroethane	ND	2.0		µg/L	1	1/25/2016 6:57:49 PM	R31687
Chloroform	ND	1.0		µg/L	1	1/25/2016 6:57:49 PM	R31687
Chloromethane	ND	3.0		µg/L	1	1/25/2016 6:57:49 PM	R31687
2-Chlorotoluene	ND	1.0		µg/L	1	1/25/2016 6:57:49 PM	R31687
4-Chlorotoluene	ND	1.0		µg/L	1	1/25/2016 6:57:49 PM	R31687
cis-1,2-DCE	ND	1.0		µg/L	1	1/25/2016 6:57:49 PM	R31687
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	1/25/2016 6:57:49 PM	R31687
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	1/25/2016 6:57:49 PM	R31687
Dibromochloromethane	ND	1.0		µg/L	1	1/25/2016 6:57:49 PM	R31687
Dibromomethane	ND	1.0		µg/L	1	1/25/2016 6:57:49 PM	R31687
1,2-Dichlorobenzene	ND	1.0		µg/L	1	1/25/2016 6:57:49 PM	R31687
1,3-Dichlorobenzene	ND	1.0		µg/L	1	1/25/2016 6:57:49 PM	R31687
1,4-Dichlorobenzene	ND	1.0		µg/L	1	1/25/2016 6:57:49 PM	R31687
Dichlorodifluoromethane	ND	1.0		µg/L	1	1/25/2016 6:57:49 PM	R31687
1,1-Dichloroethane	ND	1.0		µg/L	1	1/25/2016 6:57:49 PM	R31687
1,1-Dichloroethene	ND	1.0		µg/L	1	1/25/2016 6:57:49 PM	R31687
1,2-Dichloropropane	ND	1.0		µg/L	1	1/25/2016 6:57:49 PM	R31687

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

Qualifiers:

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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.

CLIENT: EA Engineering
Client Sample ID: Trip Blank
Project: Fairview Station
Collection Date:
Lab ID: 1601680-004
Matrix: TRIP BLANK
Received Date: 1/19/2016 3:37:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**	
1,3-Dichloropropane	ND	1.0		µg/L	1	1/25/2016 6:57:49 PM	R31687
2,2-Dichloropropane	ND	2.0		µg/L	1	1/25/2016 6:57:49 PM	R31687
1,1-Dichloropropene	ND	1.0		µg/L	1	1/25/2016 6:57:49 PM	R31687
Hexachlorobutadiene	ND	1.0		µg/L	1	1/25/2016 6:57:49 PM	R31687
2-Hexanone	ND	10		µg/L	1	1/25/2016 6:57:49 PM	R31687
Isopropylbenzene	ND	1.0		µg/L	1	1/25/2016 6:57:49 PM	R31687
4-Isopropyltoluene	ND	1.0		µg/L	1	1/25/2016 6:57:49 PM	R31687
4-Methyl-2-pentanone	ND	10		µg/L	1	1/25/2016 6:57:49 PM	R31687
Methylene Chloride	ND	3.0		µg/L	1	1/25/2016 6:57:49 PM	R31687
n-Butylbenzene	ND	3.0		µg/L	1	1/25/2016 6:57:49 PM	R31687
n-Propylbenzene	ND	1.0		µg/L	1	1/25/2016 6:57:49 PM	R31687
sec-Butylbenzene	ND	1.0		µg/L	1	1/25/2016 6:57:49 PM	R31687
Styrene	ND	1.0		µg/L	1	1/25/2016 6:57:49 PM	R31687
tert-Butylbenzene	ND	1.0		µg/L	1	1/25/2016 6:57:49 PM	R31687
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	1/25/2016 6:57:49 PM	R31687
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	1/25/2016 6:57:49 PM	R31687
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	1/25/2016 6:57:49 PM	R31687
trans-1,2-DCE	ND	1.0		µg/L	1	1/25/2016 6:57:49 PM	R31687
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	1/25/2016 6:57:49 PM	R31687
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	1/25/2016 6:57:49 PM	R31687
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	1/25/2016 6:57:49 PM	R31687
1,1,1-Trichloroethane	ND	1.0		µg/L	1	1/25/2016 6:57:49 PM	R31687
1,1,2-Trichloroethane	ND	1.0		µg/L	1	1/25/2016 6:57:49 PM	R31687
Trichloroethene (TCE)	ND	1.0		µg/L	1	1/25/2016 6:57:49 PM	R31687
Trichlorofluoromethane	ND	1.0		µg/L	1	1/25/2016 6:57:49 PM	R31687
1,2,3-Trichloropropane	ND	2.0		µg/L	1	1/25/2016 6:57:49 PM	R31687
Vinyl chloride	ND	1.0		µg/L	1	1/25/2016 6:57:49 PM	R31687
Xylenes, Total	ND	1.5		µg/L	1	1/25/2016 6:57:49 PM	R31687
Surr: 1,2-Dichloroethane-d4	100	70-130		%Rec	1	1/25/2016 6:57:49 PM	R31687
Surr: 4-Bromofluorobenzene	99.4	70-130		%Rec	1	1/25/2016 6:57:49 PM	R31687
Surr: Dibromofluoromethane	112	70-130		%Rec	1	1/25/2016 6:57:49 PM	R31687
Surr: Toluene-d8	91.6	70-130		%Rec	1	1/25/2016 6:57:49 PM	R31687

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

Qualifiers:

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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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1601680**

02-Feb-16

Client: EA Engineering

Project: Fairview Station

Sample ID	**MB-23395**	SampType:	**MBLK**	TestCode:	**EPA Method 8011/504.1: EDB**					
Client ID:	**PBW**	Batch ID:	**23395**	RunNo:	**31757**					
Prep Date:	**1/26/2016**	Analysis Date:	**1/27/2016**	SeqNo:	**971813**	Units:	**µg/L**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,2-Dibromoethane	ND	0.010								

Sample ID	**LCS-23395**	SampType:	**LCS**	TestCode:	**EPA Method 8011/504.1: EDB**					
Client ID:	**LCSW**	Batch ID:	**23395**	RunNo:	**31757**					
Prep Date:	**1/26/2016**	Analysis Date:	**1/27/2016**	SeqNo:	**971815**	Units:	**µg/L**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,2-Dibromoethane	0.12	0.010	0.1000	0	120	70	130			

Sample ID	**MB-23474**	SampType:	**MBLK**	TestCode:	**EPA Method 8011/504.1: EDB**					
Client ID:	**PBW**	Batch ID:	**23474**	RunNo:	**31790**					
Prep Date:	**1/29/2016**	Analysis Date:	**1/29/2016**	SeqNo:	**972777**	Units:	**µg/L**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,2-Dibromoethane	ND	0.010								

Sample ID	**LCS-23474**	SampType:	**LCS**	TestCode:	**EPA Method 8011/504.1: EDB**					
Client ID:	**LCSW**	Batch ID:	**23474**	RunNo:	**31790**					
Prep Date:	**1/29/2016**	Analysis Date:	**1/29/2016**	SeqNo:	**972778**	Units:	**µg/L**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,2-Dibromoethane	0.11	0.010	0.1000	0	114	70	130			

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1601680**

02-Feb-16

Client: EA Engineering

Project: Fairview Station

Sample ID **100NG LCS**	SampType: **LCS**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW**	Batch ID: **R31657**	RunNo: **31657**
Prep Date:	Analysis Date: **1/22/2016**	SeqNo: **968749** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	100	70	130			
Toluene	19	1.0	20.00	0	93.0	70	130			
Chlorobenzene	17	1.0	20.00	0	86.0	70	130			
1,1-Dichloroethene	20	1.0	20.00	0	99.3	70	130			
Trichloroethene (TCE)	18	1.0	20.00	0	90.2	70	130			
Surr: 1,2-Dichloroethane-d4	9.9		10.00		98.7	70	130			
Surr: 4-Bromofluorobenzene	9.9		10.00		98.8	70	130			
Surr: Dibromofluoromethane	11		10.00		108	70	130			
Surr: Toluene-d8	9.4		10.00		94.4	70	130			

Sample ID **rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW**	Batch ID: **R31657**	RunNo: **31657**
Prep Date:	Analysis Date: **1/22/2016**	SeqNo: **968777** 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								

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1601680**

02-Feb-16

Client: EA Engineering

Project: Fairview Station

Sample ID **rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW**	Batch ID: **R31657**	RunNo: **31657**
Prep Date:	Analysis Date: **1/22/2016**	SeqNo: **968777** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
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								
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								

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1601680**

02-Feb-16

Client: EA Engineering

Project: Fairview Station

Sample ID **rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW**	Batch ID: **R31657**	RunNo: **31657**
Prep Date:	Analysis Date: **1/22/2016**	SeqNo: **968777** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	10		10.00		101	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		105	70	130			
Surr: Dibromofluoromethane	10		10.00		100	70	130			
Surr: Toluene-d8	9.2		10.00		92.3	70	130			

Sample ID **100ng lcs**	SampType: **LCS**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW**	Batch ID: **R31687**	RunNo: **31687**
Prep Date:	Analysis Date: **1/25/2016**	SeqNo: **969734** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	23	1.0	20.00	0	115	70	130			
Toluene	21	1.0	20.00	0	104	70	130			
Chlorobenzene	19	1.0	20.00	0	97.1	70	130			
1,1-Dichloroethene	23	1.0	20.00	0	116	70	130			
Trichloroethene (TCE)	21	1.0	20.00	0	104	70	130			
Surr: 1,2-Dichloroethane-d4	10		10.00		101	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		103	70	130			
Surr: Dibromofluoromethane	10		10.00		101	70	130			
Surr: Toluene-d8	9.3		10.00		92.6	70	130			

Sample ID **mb-23360**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW**	Batch ID: **R31687**	RunNo: **31687**
Prep Date:	Analysis Date: **1/25/2016**	SeqNo: **969757** 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								

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1601680**
02-Feb-16

Client: EA Engineering
Project: Fairview Station

Sample ID **mb-23360**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW**	Batch ID: **R31687**	RunNo: **31687**
Prep Date:	Analysis Date: **1/25/2016**	SeqNo: **969757** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
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								
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								

Qualifiers:

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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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1601680**
02-Feb-16

Client: EA Engineering
Project: Fairview Station

Sample ID **mb-23360**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW**	Batch ID: **R31687**	RunNo: **31687**
Prep Date:	Analysis Date: **1/25/2016**	SeqNo: **969757** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
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	10		10.00		102	70	130			
Surr: 4-Bromofluorobenzene	9.7		10.00		97.1	70	130			
Surr: Dibromofluoromethane	11		10.00		115	70	130			
Surr: Toluene-d8	8.9		10.00		89.4	70	130			

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

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

Sample Log-In Check List

Client Name: EA Engineering Alb | Work Order Number: 1601680 | RcptNo: 1

Received by/date: 01/19/16

Logged By: Lindsay Mangin 1/19/2016 3:37:00 PM

Completed By: Lindsay Mangin 1/20/2016 8:11:06 AM

Reviewed By: JO 01/20/16

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: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

17. Additional remarks:

18. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	5.1	Good	Not Present			

Chain-of-Custody Record

Client: EA Engineering

Mailing Address: 320 Gold Ave SW #1300

Phone #: 505-224-9013

email or Fax#: tmcmillan@eaest.com

QA/QC Package:

☒ Standard ☐ Level 4 (Full Validation)

Accreditation

☐ NELAP ☐ Other _____

☐ EDD (Type) _____

Turn-Around Time:

☒ Standard ☐ Rush _____

Project Name: Fairview Station

Project #: 14589

Project Manager: Teri McMillan

Sampler: DWest

On Ice: ☒ Yes ☐ No

Sample Temperature: 5.1

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1601680	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Air Bubbles (Y or N)
1-19	0900	GW	MW-4	VOA 5	$HgCl_2$	-001					X					X		
1-19	1020	GW	MW-5	VOA #6	$HgCl_2$	-002					X					X		
1-19	1000	GW	MW-7	VOA 5	$HgCl_2$	-003					X					X		
			Trip Blank	VOA 3		-004					X					X		

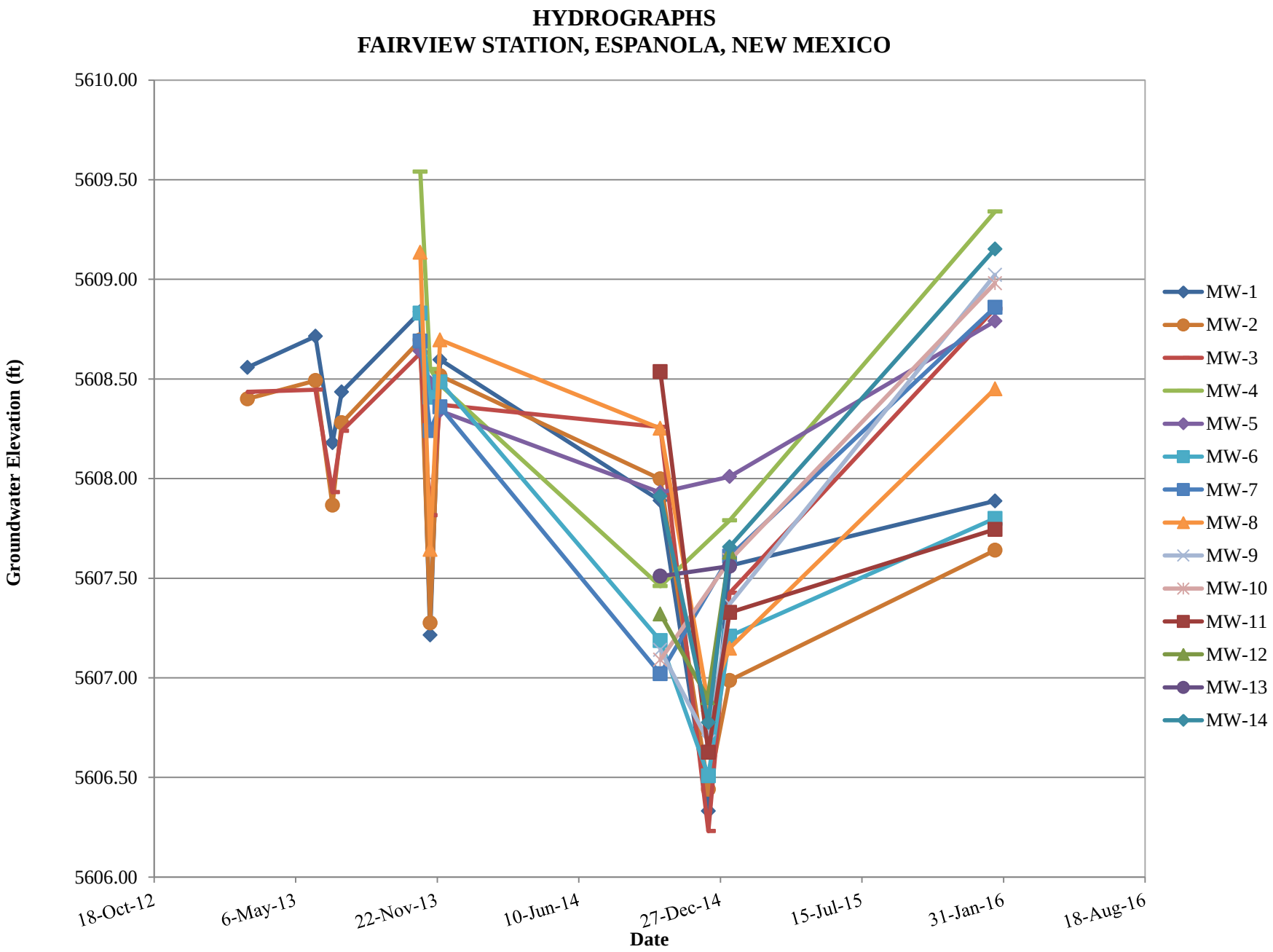
Date:	Time:	Relinquished by:	Received by:	Date	Time
1-19-16	1537			01/19/16	1537
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks:

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

APPENDIX C

HYDROGRAPHS


HYDROGRAPHS
FAIRVIEW STATION, ESPANOLA, NEW MEXICO
Groundwater Elevation (ft)
5610.00
5609.50
5609.00
5608.50
5608.00
5607.50
5607.00
5606.50
5606.00
18-Oct-12
6-May-13
22-Nov-13
10-Jun-14
27-Dec-14
15-Jul-15
31-Jan-16
18-Aug-16
Date
MW-1
MW-2
MW-3
MW-4
MW-5
MW-6
MW-7
MW-8
MW-9
MW-10
MW-11
MW-12
MW-13
MW-14