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Enterprise Products

ENTERPRISE PRODUCTS PARTNERS L.P.
ENTERPRISE PRODUCTS HOLDINGS LLC
(General Partner)

ENTERPRISE PRODUCTS OPERATING LLC

November 7, 2013

Return Receipt Requested
7010 1010 0003 7361 4369

Mr. Glenn von Gonten
New Mexico Energy, Minerals & Natural Resources
Department - Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

Attn: Jim Griswold

Re: 3rd Quarter 2013 Groundwater Monitoring Report
Lateral K-31 December 2011 Pipeline Release
SE¼ SW¼, Section 16, T25N, R6W
Rio Arriba County, New Mexico

Dear Mr. von Gonten:

Enterprise Field Services, LLC (Enterprise) is submitting two copies and one CD of the enclosed report entitled: *3rd Quarter 2013 Groundwater Monitoring Report,* dated October 22, 2013. This report documents the results of the fourth groundwater monitoring event conducted at the above-referenced release site during September 2013.

During this quarterly event, a total of nine monitor wells (MW-1 through MW-9) were monitored and sampled at the release site. Dissolved-phase benzene concentrations exceeding applicable Water Quality Control Commission (WQCC) Groundwater Quality Standards were present in three wells, including MW-1 (24 µg/L), MW-6 (40 µg/L), and MW-8 (34 µg/L). Dissolved-phase concentrations of toluene, ethylbenzene, and xylene were below applicable WQCC standards.

Enterprise will continue to monitor and sample site monitor wells on a quarterly basis. If groundwater concentrations of contaminants increase over time, Enterprise will evaluate additional remedial options. The next groundwater sampling event is tentatively scheduled for December 2013.

If you have any questions concerning the enclosed report, please do not hesitate to contact me at (713) 381-2286, or via email at: drsmith@eprod.com.

Sincerely,

David R. Smith, P.G.
Sr. Environmental Scientist

Gregory E. Miller, P.G.
Supervisor, Environmental

/dep

P. O. BOX 4324
HOUSTON, TX 77210-4324
713.381.6500

1100 LOUISIANA STREET
HOUSTON, TX 77002-5227
www.enterpriseproducts.com

Enclosure – *3rd Quarter 2013 Groundwater Monitoring Report - Lateral K-31 December 2011 Pipeline Release*

cc: Brandon Powell, New Mexico Oil Conservation Division, 1000 Rio Brazos Road, Aztec, NM

ec: Melissa Armijo New Mexico State Land Office , Santa Fe, NM
Lany Cupps – Animas Environmental Services, Farmington, NM

Animas Environmental Services, LLC
www.animasenvironmental.com
624 E. Comanche
Farmington, NM 87401
505-564-2281
Durango, Colorado
970-403-3084

October 30, 2013

David Smith
Enterprise Products Operating, LLC
1100 Louisiana, Rm 13.037
Houston, Texas 77002-5227

RE: 3rd Quarter 2013 Groundwater Monitoring Report
Enterprise Field Services, LLC
Lateral K-31 December 2011 Pipeline Release
SE¼ SW¼, Section 16, T25N, R6W
Rio Arriba County, New Mexico

Dear Mr. Smith:

Animas Environmental Services, LLC (AES), on behalf of Enterprise Field Services, LLC (Enterprise), has prepared this *3rd Quarter 2013 Groundwater Monitoring Report* for the Lateral K-31 December 2011 Pipeline Release in accordance with New Mexico Oil Conservation Division (NMOCD) and New Mexico Environment Department (NMED) Ground Water Quality Bureau (GWQB) regulations.

A release was reported at the location on December 2, 2011, by Enterprise personnel, and on the same date Enterprise personnel were dispatched to locate and isolate the leak in the pipeline. The line repair was also completed on December 2, 2011. The cause of the release was identified as a corrosion hole on the underside of the line.

An initial release assessment was conducted by AES in December 2011, and a site investigation was conducted in March 2012. A groundwater investigation was completed in September 2012 in accordance with a workplan previously prepared by AES and dated July 30, 2012.

1.0 Site Information

1.1 Site Location and NMOCD Ranking

The release area is located on state land under jurisdiction of the New Mexico State Land Office within the SE¼ SW¼, Section 16, T25N, R6W, Rio Arriba County, New Mexico. Latitude and longitude of the release were recorded as N36.39373 and W107.47519, respectively. A topographic site location map is included as Figure 1, and an aerial map showing the release location is included as Figure 2.

In accordance with NMOCD release protocols, action levels were established per NMOCD *Guidelines for Remediation of Leaks, Spills, and Releases* (August 1993) prior to the initial assessment. The release was given a ranking score of 20 based on the following factors:

- **Depth to Groundwater:** Known depth to groundwater is less than 20 feet below ground surface (bgs). (20 points)
- **Wellhead Protection Area:** The release location is not within a wellhead protection area. (0 points)
- **Distance to Surface Water Body:** The release location is within the floodplain of Largo Canyon wash, which is approximately 1,550 feet to the east. (0 points)

1.2 Previous Site Activities

Initial Release Assessment – December 2011

On December 8, 2011, four test holes (TP-1 through TP-4) were each excavated to a total depth of 15.5 feet bgs, from which a total of six soil samples were collected for laboratory analysis. A groundwater sample from an existing monitor well labeled MW-4, which is located near the release area, was collected for laboratory analysis. Soil laboratory analytical results for total benzene, toluene, ethylbenzene, and xylenes (BTEX) and total petroleum hydrocarbons (TPH) exceeded applicable NMOCD action levels in two of the four test holes. Groundwater was not encountered in the test holes; however, depth to water was measured at 14 feet bgs in the nearby groundwater monitor well. The laboratory analytical results for the groundwater sample collected from this well showed reported BTEX concentrations below laboratory detection limits. Details of the initial release assessment were submitted to Enterprise in a letter report dated January 20, 2012.

Site Investigation – March 2012

On March 15 and 16, 2012, AES completed a site investigation in order to delineate the full extent of hydrocarbon impact on subsurface soils and groundwater resulting from the release. The investigation included the installation of 12 soil borings (SB-1 through SB-12) and the collection of soil and groundwater samples. Soil samples collected for laboratory analysis showed that contaminant concentrations exceeded NMOCD action levels for TPH in borings SB-1, SB-9, and SB-11. The highest TPH concentration was reported in SB-9 with 8,700 mg/kg.

Dissolved phase analytical results from the March 2012 site investigation indicated groundwater was impacted above the New Mexico Water Quality Control Commission (WQCC) standard for benzene in SB-1W through SB-4W, SB-7W, SB-9W, SB-11W, and SB-12W. The highest concentration for benzene was reported in SB-11W with 1,400 µg/L. Concentration contours of dissolved phase contaminants indicated that migration of the plume is primarily north along the pipeline corridor and to the northeast (following

gradient) towards Largo Canyon. The highest dissolved phase concentrations of BTEX were noted in SB-3W and SB-11W.

Groundwater Investigation – September 2012

On August 20 through September 5, 2012, AES completed a groundwater investigation in order to further delineate the extent of the dissolved phase hydrocarbon contaminants associated with the Lateral K-31 pipeline release. During the site investigation, AES personnel installed nine soil borings which were advanced to a total depth of 25 feet bgs and completed as monitor wells (MW-1 through MW-9).

The local site lithology consisted of alluvium and floodplain material which constitutes the wash of Largo Canyon. Bedrock was not encountered in the soil borings. Soil observed during the investigation consisted primarily of dark gray, fine grained, moist sand in the upper 5 feet, grading to sandy clay with depth, which was brown to dark gray to black, moist to wet, and sometimes exhibiting a strong odor and heavy staining. Brown, fine grained, wet sand with no odor or staining was encountered at depths greater than approximately 15 feet bgs.

Soil and groundwater samples were collected from each soil boring/monitor well. Soil laboratory analytical results indicated benzene, total BTEX, and TPH concentrations were not above NMOCD action levels in any of the soil borings. However, laboratory results confirmed dissolved phase benzene concentrations at or above the WQCC standard of 10 µg/L in four wells, including MW-1 (18 µg/L), MW-5 (10 µg/L), MW-6 (37 µg/L), and MW-8 (20 µg/L). Dissolved phase toluene, ethylbenzene, and xylenes concentrations were below WQCC standards in all monitor wells.

Groundwater Monitoring and Sampling – December 2012

Site monitor wells were monitored and sampled by AES on December 20, 2012. Laboratory results confirmed dissolved phase benzene concentrations at or above the WQCC standard of 10 µg/L in six wells, including MW-1 (11 µg/L), MW-2 (17 µg/L), MW-4 (19 µg/L), MW-5 (10 µg/L), MW-6 (82 µg/L), and MW-8 (25 µg/L). Dissolved phase toluene, ethylbenzene, and xylenes concentrations were below WQCC standards in all monitor wells. Details of the groundwater sampling event were presented in the *Quarterly Groundwater Sampling Report* dated February 22, 2013.

Groundwater Monitoring and Sampling – March 2013

Site monitor wells were monitored and sampled by AES on March 21, 2013. Dissolved phase benzene concentrations were reported above the WQCC standard of 10 µg/L in four wells, including MW-1 (29 µg/L), MW-2 (18 µg/L), MW-6 (130 µg/L), and MW-8 (26 µg/L). Dissolved phase toluene, ethylbenzene, and xylenes concentrations were below WQCC standards in all monitor wells. Details of the groundwater sampling event were included in the *Quarterly Groundwater Sampling Report* dated May 3, 2013.

2.0 Groundwater Monitoring and Sampling – September 2013

On September 4, 2013, groundwater monitoring and sampling were conducted by AES in MW-1 through MW-9. Work was completed in accordance with the workplan prepared by AES and dated July 30, 2012, and also in accordance with U.S. Environmental Protection Agency (USEPA) Environmental Response Team's Standard Operating Procedures (SOPs), and applicable American Society of Testing and Materials (ASTM) standards.

2.1 Groundwater Measurements and Water Quality

Prior to sample collection, depth to groundwater in each well was measured with a Keck Water Level Indicator, and water quality data was measured with a YSI Water Quality Meter. Water quality measurements were recorded and included pH, temperature, conductivity, dissolved oxygen (DO), and oxidation reduction potential (ORP). Depth to groundwater measurements and water quality data were recorded onto Water Sample Collection forms. Groundwater elevations decreased by an average of 0.90 feet across the site, and depths to groundwater were observed to range from 15.91 feet below top of casing (TOC) in MW-5 to 19.49 feet below TOC in MW-1. The groundwater gradient was calculated to be approximately 0.005 foot/foot to the north-northwest, and groundwater elevations and gradient contours are included on Figure 3.

Following depth to water measurement, each well was purged with a peristaltic pump until recorded temperature, pH, conductivity, and DO measurements were stabilized. All data was recorded onto Water Sample Collection Forms. Groundwater temperature ranged from 14.10°C in MW-3 to 15.89°C in MW-5, and conductivity ranged from 12.15 mS in MW-7 to 17.56 mS in MW-5. DO concentrations were between 0.55 mg/L in MW-1 and 1.39 mg/L in MW-2, and pH ranged from 7.23 in MW-6 to 7.53 in MW-5. Depth to groundwater measurements and water quality data are summarized in Table 1. Water Sample Collection forms are presented in the Appendix.

2.2 Groundwater Laboratory Analyses

Groundwater samples were collected using low flow purging techniques with a peristaltic pump from MW-1 through MW-9 and transferred into appropriate sample containers, labeled accordingly, and documented on Water Sample Collection Forms. Samples were shipped in insulated coolers containing ice at less than 6°C to Hall Environmental Analytical Laboratory (Hall) in Albuquerque, New Mexico. All groundwater analytical samples were analyzed for BTEX per USEPA Method 8021B.

2.2.1 Groundwater Analytical Results

Groundwater laboratory analytical results showed that dissolved phase benzene concentrations were at or above the WQCC standard of 10 µg /L in three wells, including

MW-1 (24 µg/L), MW-6 (40 µg/L), and MW-8 (34 µg/L). Concentrations of dissolved phase toluene, ethylbenzene, and xylene were below the WQCC standards of 750 µg/L, 750 µg/L, and 620 µg/L, respectively, in all wells. Tabulated groundwater analytical results are presented in Table 2 and on Figure 4, and dissolved phase benzene contours are presented on Figure 5. Groundwater laboratory analytical reports are presented in the Appendix.

3.0 Conclusion and Recommendations

A total of nine monitor wells (MW-1 through MW-9) were monitored and sampled at the Lateral K-31 release location by AES on September 4, 2013, in accordance with the work plan submitted by AES in July 2012. Laboratory results confirmed dissolved phase benzene concentrations above the WQCC standard of 10 µg/L in three wells, with the highest concentration reported in MW-6 (40 µg/L). Dissolved phase toluene, ethylbenzene, and xylenes concentrations were below WQCC standards in all monitor wells.

Based on laboratory analytical results from the September 2013 sampling event, groundwater continues to be impacted above the WQCC standard for benzene in the vicinity of the December 2011 release. However, because concentrations are not significantly high, the site appears to be appropriate for monitored natural attenuation. AES recommends continued quarterly monitoring and sampling. If groundwater concentrations of contaminants increase over time, AES recommends evaluation of an oxygen release compound (ORC) to promote biodegradation of residual contaminants.

If you have any questions regarding site conditions or this report, please do not hesitate to contact Heather Woods or Ross Kennemer at (505) 564-2281.

Sincerely,

Stephanie Lynn
Environmental Engineer

Elizabeth McNally, P.E.

Attachments:
Tables
Table 1. Summary of Groundwater Measurements and Water Quality Data
Table 2. Summary of Groundwater Analytical Results

Figures
Figure 1. Topographic Site Location Map
Figure 2. Aerial Site Map
Figure 3. Groundwater Elevation Contours, September 2013
Figure 4. Groundwater Contaminant Concentrations, September 2013
Figure 5. Dissolved Benzene Concentration Contours, September 2013

Appendix
Water Sample Collection Forms
Groundwater Analytical Laboratory Reports (Hall 1309239)

cc: Glenn von Gonten
New Mexico Oil Conservation Division
1220 S. St. Francis Drive
Santa Fe, NM 87505

Brandon Powell
New Mexico Oil Conservation Division
1000 Rio Brazos Road
Aztec, NM 87410

Melissa Armijo
Via email with delivery confirmation receipt
marmijo@slo.state.nm.us
New Mexico State Land Office
P.O. Box 1148
Santa Fe, NM 87504

TABLE 1
SUMMARY OF GROUNDWATER MEASUREMENTS AND WATER QUALITY DATA
Enterprise Field Services, LLC Lateral K-31 December 2011 Pipeline Release
Rio Arriba County, New Mexico

Well ID	Date	Depth to Water (ft)	Surveyed TOC (ft)	GW Elev. (ft)	pH	Conductivity (mS)	Dissolved Oxygen (mg/L)	Temp. (ºC)	ORP (mV)
MW-1	05-Sep-12	19.44	6245.24	6225.80	7.40	7.623	0.86	14.52	-90.7
MW-1	20-Dec-12	19.02	6245.24	6226.22	7.48	7.556	0.61	13.75	-59.0
MW-1	21-Mar-13	18.59	6245.24	6226.65	7.32	12.39	0.75	14.06	-93.4
MW-1	04-Sep-13	19.49	6245.24	6225.75	7.32	12.55	0.55	14.70	-120.7
MW-2	05-Sep-12	16.69	6242.58	6225.89	7.39	8.519	1.30	15.35	-48.7
MW-2	20-Dec-12	16.33	6242.58	6226.25	7.43	8.592	0.95	13.42	-21.4
MW-2	21-Mar-13	15.90	6242.58	6226.68	7.30	13.50	1.87	13.45	-70.8
MW-2	04-Sep-13	16.72	6242.58	6225.86	7.25	13.89	1.39	14.63	-99.2
MW-3	05-Sep-12	18.93	6245.48	6226.55	7.42	7.631	0.97	14.93	-63.9
MW-3	20-Dec-12	18.51	6245.48	6226.97	7.23	7.920	0.91	12.81	NM
MW-3	21-Mar-13	18.07	6245.48	6227.41	7.27	12.95	1.23	13.37	-70.6
MW-3	04-Sep-13	18.97	6245.48	6226.51	7.29	12.26	1.20	14.10	-101.5
MW-4	05-Sep-12	17.55	6244.08	6226.53	7.42	10.05	1.97	14.61	-46.7
MW-4	20-Dec-12	17.14	6244.08	6226.94	7.45	10.14	0.90	13.92	-16.4
MW-4	21-Mar-13	16.71	6244.08	6227.37	7.32	16.46	1.30	13.62	-61.8
MW-4	04-Sep-13	17.59	6244.08	6226.49	7.33	16.53	1.24	14.82	-72.6
MW-5	05-Sep-12	15.88	6241.41	6225.53	7.61	10.637	2.76	15.74	-105.0
MW-5	20-Dec-12	15.44	6241.41	6225.97	7.70	10.580	0.57	15.51	-106.6
MW-5	21-Mar-13	15.00	6241.41	6226.41	7.54	17.63	1.23	14.18	-126.7
MW-5	04-Sep-13	15.91	6241.41	6225.50	7.53	17.56	0.83	15.89	-151.3

TABLE 1

SUMMARY OF GROUNDWATER MEASUREMENTS AND WATER QUALITY DATA

Enterprise Field Services, LLC Lateral K-31 December 2011 Pipeline Release

Rio Arriba County, New Mexico

Well ID	Date	Depth to Water (ft)	Surveyed TOC (ft)	GW Elev. (ft)	pH	Conductivity (mS)	Dissolved Oxygen (mg/L)	Temp. (ºC)	ORP (mV)
MW-6	05-Sep-12	17.41	6242.91	6225.50	7.38	8.370	0.90	15.48	-48.3
MW-6	20-Dec-12	16.97	6242.91	6225.94	7.47	8.564	1.15	13.50	-33.7
MW-6	21-Mar-13	16.53	6242.91	6226.38	7.29	13.31	1.04	13.01	-74.3
MW-6	04-Sep-13	17.45	6242.91	6225.46	7.23	14.03	0.66	14.44	-101.9
MW-7	05-Sep-12	17.61	6243.27	6225.66	7.39	7.542	1.19	15.25	-57.2
MW-7	20-Dec-12	17.18	6243.27	6226.09	7.37	7.567	0.75	14.51	-34.6
MW-7	21-Mar-13	16.74	6243.27	6226.53	7.30	12.30	1.03	14.12	-75.0
MW-7	04-Sep-13	17.65	6243.27	6225.62	7.28	12.15	0.87	15.09	-105.6
MW-8	05-Sep-12	16.55	6242.01	6225.46	7.49	8.827	0.62	15.54	-76.3
MW-8	20-Dec-12	16.09	6242.01	6225.92	7.61	8.963	0.59	14.40	-56.8
MW-8	21-Mar-13	15.65	6242.01	6226.36	7.43	14.90	1.64	14.85	-90.3
MW-8	04-Sep-13	16.57	6243.01	6225.44	7.48	14.76	0.73	15.21	-132.9
MW-9	05-Sep-12	16.33	6241.59	6225.26	7.28	8.183	1.02	14.95	-40.5
MW-9	20-Dec-12	15.84	6241.59	6225.75	7.37	8.072	1.08	14.27	-16.5
MW-9	21-Mar-13	15.39	6241.59	6226.20	7.25	13.28	1.93	14.00	-62.8
MW-9	04-Sep-13	16.32	6242.59	6225.27	7.24	13.10	1.11	14.96	-84.2

TABLE 2
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
Enterprise Field Services, LLC Lateral K-31 December 2011 Pipeline Release
Rio Arriba County, New Mexico

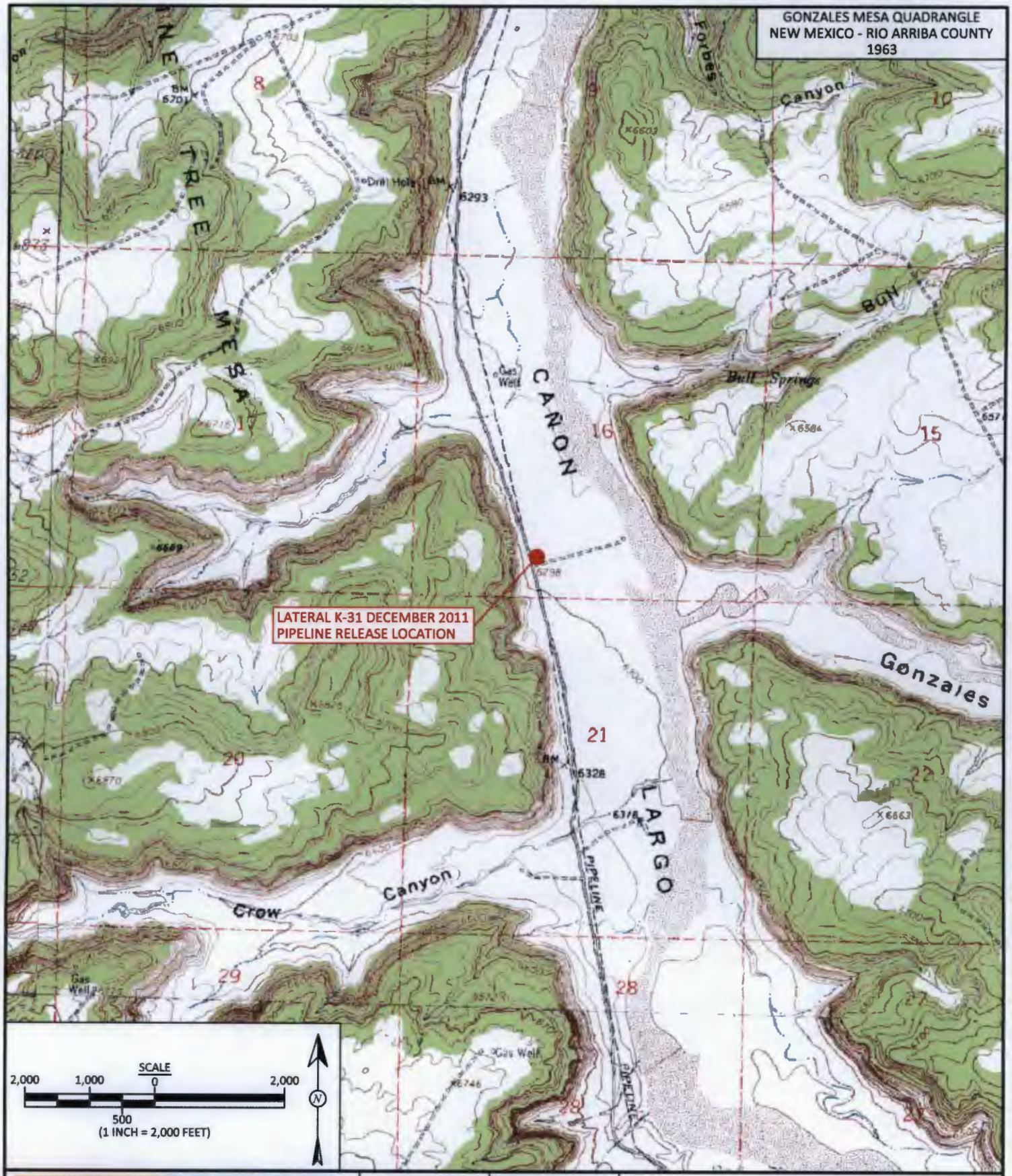
Well ID	*Date Sampled*	*Benzene* µg/L	*Toluene* µg/L	*Ethyl-benzene* µg/L	*Xylenes* µg/L
	Sample Method	*EPA Method 8021*			
	WQCC STANDARD	***10***	***750***	***750***	***620***
MW-1	05-Sep-12	**18**	2.9	3.3	25
MW-1	20-Dec-12	**11**	<2.0	<2.0	5.8
MW-1	21-Mar-13	**29**	14	<2.0	6.8
MW-1	04-Sep-13	**24**	3.0	<2.0	10
MW-2	05-Sep-12	9.5	9.2	<2.0	30
MW-2	20-Dec-12	**17**	<2.0	<2.0	41
MW-2	21-Mar-13	**18**	<2.0	<2.0	18
MW-2	04-Sep-13	8.0	<2.0	<2.0	4.2
MW-3	05-Sep-12	<2.0	<2.0	<2.0	<4.0
MW-3	20-Dec-12	<2.0	<2.0	<2.0	<4.0
MW-3	21-Mar-13	<2.0	<2.0	<2.0	<4.0
MW-3	04-Sep-13	5.4	<2.0	<2.0	<4.0
MW-4	05-Sep-12	<2.0	<2.0	<2.0	<4.0
MW-4	20-Dec-12	**19**	<2.0	<2.0	<4.0
MW-4	21-Mar-13	4.8	<2.0	<2.0	<4.0
MW-4	04-Sep-13	<2.0	<2.0	<2.0	<4.0
MW-5	05-Sep-12	**10**	<2.0	<2.0	<4.0
MW-5	20-Dec-12	**10**	<2.0	<2.0	<4.0
MW-5	21-Mar-13	9.0	<2.0	<2.0	<4.0
MW-5	04-Sep-13	9.3	<2.0	<2.0	<4.0
MW-6	05-Sep-12	**37**	8.3	<2.0	14
MW-6	20-Dec-12	**82**	5.8	<2.0	<4.0
MW-6	21-Mar-13	**130**	5.1	<2.0	<4.0
MW-6	04-Sep-13	**40**	22	<2.0	13
MW-7	05-Sep-12	3.6	<2.0	<2.0	<4.0
MW-7	20-Dec-12	5.9	<2.0	<2.0	<4.0
MW-7	21-Mar-13	<2.0	<2.0	<2.0	<4.0
MW-7	04-Sep-13	6.2	<2.0	<2.0	<4.0

TABLE 2
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
Enterprise Field Services, LLC Lateral K-31 December 2011 Pipeline Release
Rio Arriba County, New Mexico

Well ID	*Date Sampled*	*Benzene* µg/L	*Toluene* µg/L	*Ethyl-benzene* µg/L	*Xylenes* µg/L
	Sample Method	*EPA Method 8021*			
	WQCC STANDARD	*10*	*750*	*750*	*620*
MW-8	05-Sep-12	**20**	<2.0	<2.0	<4.0
MW-8	20-Dec-12	**25**	<2.0	<2.0	<4.0
MW-8	21-Mar-13	**26**	<2.0	<2.0	<4.0
MW-8	04-Sep-13	**34**	<2.0	<2.0	<4.0
MW-9	05-Sep-12	<2.0	<2.0	<2.0	<4.0
MW-9	20-Dec-12	<2.0	<2.0	<2.0	<4.0
MW-9	21-Mar-13	<2.0	<2.0	<2.0	<4.0
MW-9	04-Sep-13	<2.0	<2.0	<2.0	<4.0

Notes:

<	**Analyte not detected above listed method limit**
NE	**Not established**
µg/L	**Micrograms per liter (ppb)**



DRAWN BY: C. Lameman	**DATE DRAWN:** September 12, 2012
REVISIONS BY: C. Lameman	**DATE REVISED:** October 14, 2013
CHECKED BY: H. Woods	**DATE CHECKED:** October 14, 2013
APPROVED BY: E. McNally	**DATE APPROVED:** October 14, 2013

Animas Environmental Services, LLC

FIGURE 1

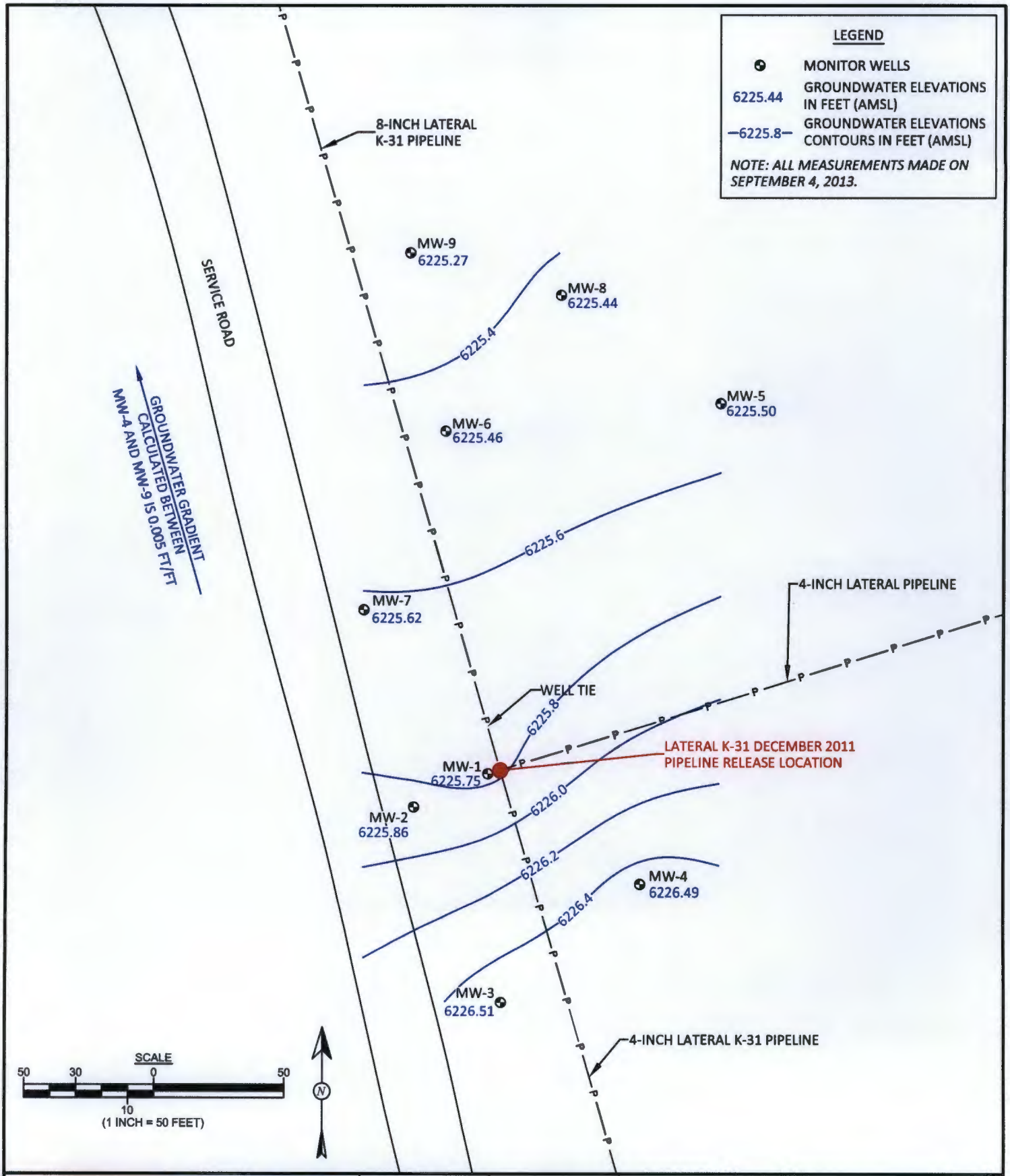
TOPOGRAPHIC SITE LOCATION MAP
ENTERPRISE FIELD SERVICES, LLC
LATERAL K-31 DECEMBER 2011 PIPELINE RELEASE
SE¼ SW¼, SECTION 16, T25N, R6W
RIO ARRIBA COUNTY, NEW MEXICO
N36.39373, W107.47519

Animas Environmental Services, LLC

DRAWN BY: C. Lameman	**DATE DRAWN:** September 14, 2012
REVISIONS BY: C. Lameman	**DATE REVISED:** October 14, 2013
CHECKED BY: H. Woods	**DATE CHECKED:** October 14, 2013
APPROVED BY: E. McNally	**DATE APPROVED:** October 14, 2013

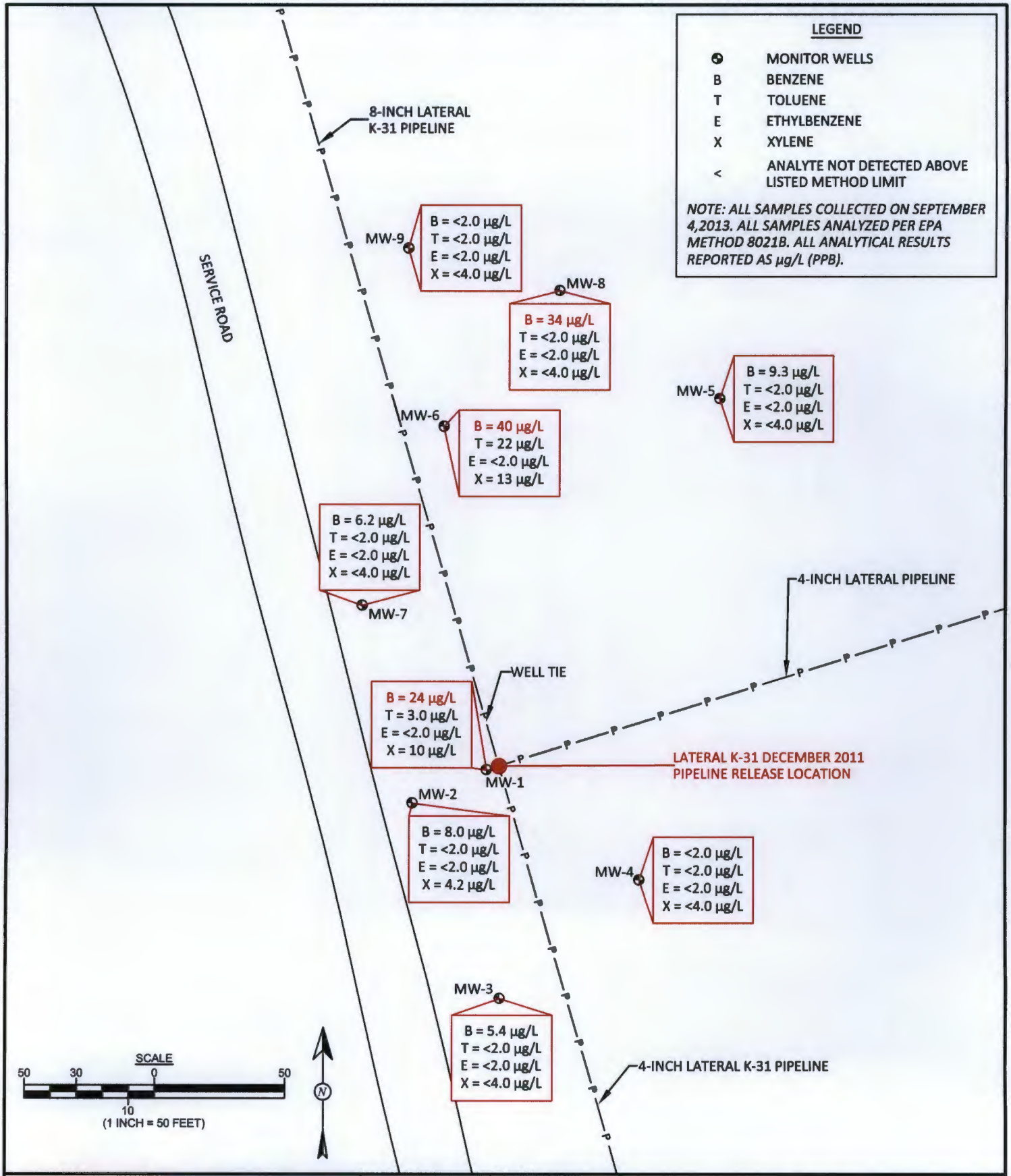
FIGURE 2

AERIAL SITE MAP
ENTERPRISE FIELD SERVICES, LLC
LATERAL K-31 DECEMBER 2011 PIPELINE RELEASE
SE¼ SW¼, SECTION 16, T25N, R6W
RIO ARRIBA COUNTY, NEW MEXICO
N36.39373, W107.47519



DRAWN BY: C. Lameman	**DATE DRAWN:** September 14, 2013	**FIGURE 3**
REVISIONS BY: C. Lameman	**DATE REVISED:** October 14, 2013	**GROUNDWATER ELEVATION CONTOURS SEPTEMBER 2013**
CHECKED BY: H. Woods	**DATE CHECKED:** October 14, 2013	ENTERPRISE FIELD SERVICES, LLC LATERAL K-31 DECEMBER 2011 PIPELINE RELEASE
APPROVED BY: E. McNally	**DATE APPROVED:** October 14, 2013	SE¼ SW¼, SECTION 16, T25N, R6W RIO ARRIBA COUNTY, NEW MEXICO N36.39373, W107.47519

AES
Animas Environmental Services, LLC

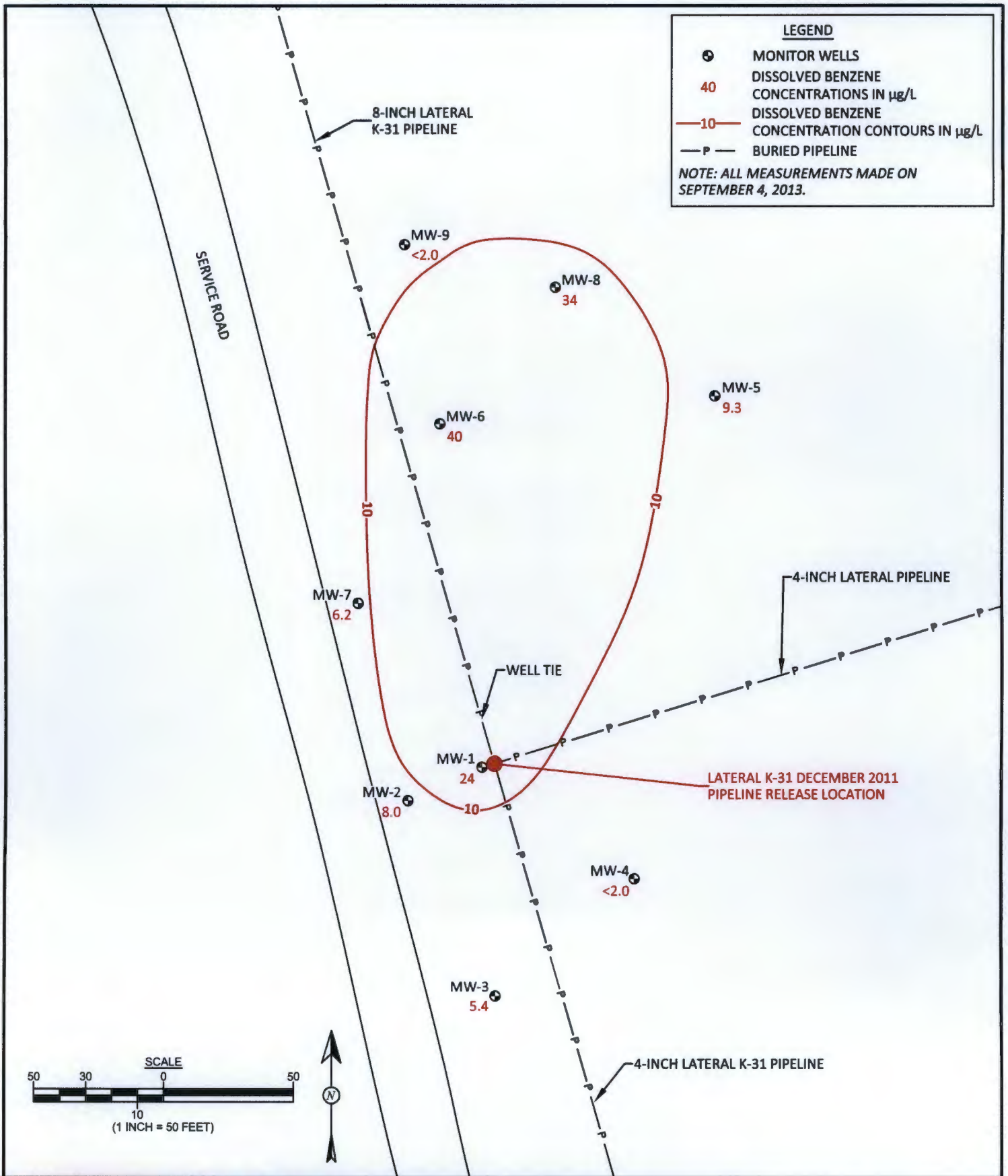


DRAWN BY: C. Lameman	**DATE DRAWN:** September 14, 2012
REVISIONS BY: C. Lameman	**DATE REVISED:** October 14, 2013
CHECKED BY: H. Woods	**DATE CHECKED:** October 14, 2013
APPROVED BY: E. McNally	**DATE APPROVED:** October 14, 2013

Animas Environmental Services, LLC

FIGURE 4

GROUNDWATER CONTAMINANT CONCENTRATIONS, SEPTEMBER 2013
ENTERPRISE FIELD SERVICES, LLC
LATERAL K-31 DECEMBER 2011 PIPELINE RELEASE
SE¼ SW¼, SECTION 16, T25N, R6W
RIO ARRIBA COUNTY, NEW MEXICO
N36.39373, W107.47519



Animas Environmental Services, LLC

DRAWN BY: C. Lameman	DATE DRAWN: September 14, 2012
REVISIONS BY: C. Lameman	DATE REVISED: October 14, 2013
CHECKED BY: H. Woods	DATE CHECKED: October 14, 2013
APPROVED BY: E. McNally	DATE APPROVED: October 14, 2013

FIGURE 5

DISSOLVED BENZENE CONCENTRATION CONTOURS, SEPTEMBER 2013
ENTERPRISE FIELD SERVICES, LLC
LATERAL K-31 DECEMBER 2011 PIPELINE RELEASE
SE¼ SW¼, SECTION 16, T25N, R6W
RIO ARRIBA COUNTY, NEW MEXICO
N36.39373, W107.47519

DEPTH TO GROUNDWATER MEASUREMENT FORM

Animas Environmental Services
624 E. Comanche, Farmington NM 87401
Tel. (505) 564-2281 Fax (505) 324-2022

Project: Groundwater Sampling
Site: Enterprise Field Services, LLC
Location: Lateral K-31
Tech: Lamone, L.

Project No.: AES 111120
Date: 04 Sept. 2013
Time: 0840
Form:

Well I.D.	Depth to NAPL (ft.)	Depth to Water (ft.)	NAPL Thickness (ft.)	Notes / Observations
MW-3		18.97		26.07 0840
mw-9		16.32		26.52 0843
MW-7		17.65		26.23 0849
MW4		17.59		26.88 0852
MW-5		15.91		25.17 0905
mw-8		16.57		26.60 0909
MW-1		19.49		27.00 0916
MW-6		17.45		27.10 0922
MW-2		16.72		24.66 0942

Wells measured with KECK water level or KECK interface tape, decontaminated between each well measurement.

MONITORING WELL SAMPLING RECORD

Monitor Well No: MW-1

Animas Environmental Services
624 E. Comanche, Farmington NM 87401
Tel. (505) 564-2281 Fax (505) 324-2022

Site: Groundwater Sampling
Location: Enterprise Field Services, LLC
Project: Lateral K-31
Sampling Technician: Lamone, L.
Purge / No Purge: Purge
Well Diameter (in): 2
Initial D.T.W. (ft): 19.49 **Time:** 0916 *(taken at initial gauging of all wells)*
Confirm D.T.W. (ft): 19.50 **Time:** 1407 *(taken prior to purging well)*
Final D.T.W. (ft): 19.85 **Time:** 1423 *(taken after sample collection)*
If NAPL Present: D.T.P.:_____ D.T.W.:_____ Thickness:_____ Time:_____

Project No.: AES 111120
Date: 9-4-2013
Arrival Time: 1405 (1425 SAMPLE)
Air Temp: 94° F
T.O.C. Elev. (ft): 6245.24
Total Well Depth (ft): 27.00

Water Quality Parameters - Recorded During Well Purging

Time	Temp (deg C)	Conductivity (µS) (mS)	DO (mg/L)	pH	ORP (mV)	PURGED VOLUME (see reverse for calc.)	Notes/Observations
1415	16.04	12.55	0.89	7.39	-127.6	1st Bailer	clear
1418	14.93	12.54	0.55	7.38	-132.9	1.5 gal	gray/black H2o
1421	14.52	12.46	5.97	7.34	-126.3	2.5 gal.	black H2o
1425	14.70	12.55	11.13	7.32	-120.7	3.5 gal	black H2o
1427	17.60	6.453	9.84	7.40	-115.8	Same bailer	black H2o

Analytical Parameters (include analysis method and number and type of sample containers)

BTEX 8021B (3x40mL VOA w/ HCL)

Disposal of Purged Water: Into 55 gal. drum - to land farm
Collected Samples Stored on Ice in Cooler: Yes
Chain of Custody Record Complete: Yes
Analytical Laboratory: Hall Environmental Analysis Laboratory, Albuquerque, NM
Equipment Used During Sampling: Keck Water Level or Keck Interface Level, YSI Water Quality Meter and New Disposable Bailer

Notes/Comments:

7.50 H2o column
1.22 H2o volume
3.50 To Be purged

MW has soot like amber in well
Smells like H2S meter did not register high levels.

revised: 08/10/09

MONITORING WELL SAMPLING RECORD

Monitor Well No: MW-2

Animas Environmental Services
624 E. Comanche, Farmington NM 87401
Tel. (505) 564-2281 Fax (505) 324-2022

Site: Groundwater Sampling
Location: Enterprise Field Services, LLC
Project: Lateral K-31
Sampling Technician: Lamone, L.
Purge / No Purge: Purge
Well Diameter (in): 2
Initial D.T.W. (ft): 16.72 **Time:** 0942 *(taken at initial gauging of all wells)*
Confirm D.T.W. (ft): 16.71 **Time:** 1256 *(taken prior to purging well)*
Final D.T.W. (ft): 18.90 **Time:** 1311 *(taken after sample collection)*
If NAPL Present: D.T.P.:_____ D.T.W.:_____ Thickness:_____ Time:_____

Project No.: AES 111120
Date: 9-4-2013
Arrival Time: 1253 (1313 Sample)
Air Temp: 92° F
T.O.C. Elev. (ft): 6242.58
Total Well Depth (ft): 24.66

Water Quality Parameters - Recorded During Well Purging

Time	Temp (deg C)	Conductivity (µS) (mS)	DO (mg/L)	pH	ORP (mV)	PURGED VOLUME (see reverse for calc.)	Notes/Observations
1301	16.17	13.92	1.21	7.38	-107.9	1st Bailee	Clear H2o
1304	15.30	13.93	1.05	7.31	-102.9	1.0 gal	Lt Tan H20
1307	14.67	13.91	.99	7.28	-99.9	2.0 gal.	Lt Tan H20
1309	14.48	13.90	1.39	7.26	-100.2	3.0 gal.	Lt Tan H20
1313	14.63	13.89	11.66	7.25	-99.2	4.0 gal	Lt Tan H20

Analytical Parameters (include analysis method and number and type of sample containers)

BTEX 8021B (3x40mL VOA w/ HCL)

Disposal of Purged Water: Into 55 gal. drum delivered to landfarm
Collected Samples Stored on Ice in Cooler: Yes
Chain of Custody Record Complete: Yes
Analytical Laboratory: Hall Environmental Analysis Laboratory, Albuquerque, NM
Equipment Used During Sampling: Keck Water Level or Keck Interface Level, YSI Water Quality Meter and New Disposable Bailer

Notes/Comments:

7.95 H2o column
1.30 H2o volume
4.0 gal. to be purged

Due to recent thunderstorm. Monitory well was buried under 4" of sand.

revised: 08/10/09

MONITORING WELL SAMPLING RECORD

Monitor Well No: MW-3

Animas Environmental Services
624 E. Comanche, Farmington NM 87401
Tel. (505) 564-2281 Fax (505) 324-2022

Site: Groundwater Sampling
Location: Enterprise Field Services, LLC
Project: Lateral K-31
Sampling Technician: Lamone, L.
Purge / No Purge: Purge
Well Diameter (in): 2
Initial D.T.W. (ft): 18.97 **Time:** 0840 *(taken at initial gauging of all wells)*
Confirm D.T.W. (ft): 18.97 **Time:** 1000 *(taken prior to purging well)*
Final D.T.W. (ft): 18.99 **Time:** 1024 *(taken after sample collection)*
If NAPL Present: D.T.P.: _____ **D.T.W.:** _____ **Thickness:** _____ **Time:** _____

Project No.: AES 111120
Date: 9-4-2013
Arrival Time: 0945 (1022 Sample)
Air Temp: 80°F
T.O.C. Elev. (ft): 6245.48
Total Well Depth (ft): 26.07

Water Quality Parameters - Recorded During Well Purging

Time	Temp (deg C)	Conductivity (µS) (mS)	DO (mg/L)	pH	ORP (mV)	PURGED VOLUME (see reverse for calc.)	Notes/Observations
1008	14.75	11.87	1.08	7.35	-105.4	1st Bailer	Clear H2O
1011	1405	11.97	0.82	7.32	-108.5	1.5 gal.	Tan H2O
1018	13.96	12.03	7.88	7.31	-105.0	2.5 gal.	Tan H2O
1022	14.10	12.26	1.20	7.29	-104.5	3.5 gal.	Tan H2O

Analytical Parameters (include analysis method and number and type of sample containers)

BTEX 8021B (3x40mL VOA w/ HCL)

Disposal of Purged Water: Into 55 gal. drum to LANDFARM
Collected Samples Stored on Ice in Cooler: Yes
Chain of Custody Record Complete: Yes
Analytical Laboratory: Hall Environmental Analysis Laboratory, Albuquerque, NM
Equipment Used During Sampling: Keck Water Level or Keck Interface Level, YSI Water Quality Meter and New Disposable Bailer

Notes/Comments:

7.10 gal. H2O Column
1.14 H2O Volume
3.5 gal. to be purged

revised: 08/10/09

MONITORING WELL SAMPLING RECORD

Monitor Well No: MW-4

Animas Environmental Services
624 E. Comanche, Farmington NM 87401
Tel. (505) 564-2281 Fax (505) 324-2022

Site: Groundwater Sampling
Location: Enterprise Field Services, LLC
Project: Lateral K-31
Sampling Technician: Lamone, L
Purge / No Purge: Purge
Well Diameter (in): 2

Project No.: AES 111120
Date: 9-4-2013
Arrival Time: 1136 (1206 Sample)
Air Temp: 86° F
T.O.C. Elev. (ft): 6244.08
Total Well Depth (ft): 26.88

Initial D.T.W. (ft): 17.59 **Time:** 0852 *(taken at initial gauging of all wells)*
Confirm D.T.W. (ft): 17.60 **Time:** 1139 *(taken prior to purging well)*
Final D.T.W. (ft): 17.75 **Time:** 1200 *(taken after sample collection)*
If NAPL Present: **D.T.P.:**_____ **D.T.W.:**_____ **Thickness:**_____ **Time:**_____

Water Quality Parameters - Recorded During Well Purging

Time	Temp (deg C)	Conductivity (µS) (mS)	DO (mg/L)	pH	ORP (mV)	PURGED VOLUME (see reverse for calc.)	Notes/Observations
1148	16.62	16.05	4.79	7.39	-85.3	1st Bailer	Clear H2O
1151	15.06	16.11	0.89	7.34	-80.3	1.0 gal.	Tan H2O
1153	14.59	16.27	8.88	7.33	-82.6	2.0 gal	Tan H2O
1158	14.73	16.43	1.27	7.34	-84.6	3.0 gal	Tan H2O
1206	14.82	16.53	1.24	7.33	-72.6	4.50 gal	Tan H2O

Analytical Parameters (include analysis method and number and type of sample containers)

BTEX 8021B (3x40mL VOA w/ HCL)

Disposal of Purged Water: Into 55 gal. drum delivered to landfarm
Collected Samples Stored on Ice in Cooler: Yes
Chain of Custody Record Complete: Yes
Analytical Laboratory: Hall Environmental Analysis Laboratory, Albuquerque, NM
Equipment Used During Sampling: Keck Water Level or Keck Interface Level, YSI Water Quality Meter and New Disposable Bailer

Notes/Comments:

9.28 H2O Column
1.51 H2O volume
4.50 gal. to be purged

revised: 08/10/09

MONITORING WELL SAMPLING RECORD

Monitor Well No: MW-5

Animas Environmental Services
624 E. Comanche, Farmington NM 87401
Tel. (505) 564-2281 Fax (505) 324-2022

Site: Groundwater Sampling
Location: Enterprise Field Services, LLC
Project: Lateral K-31
Sampling Technician: Lamone, L.
Purge / No Purge: Purge
Well Diameter (in): 2
Initial D.T.W. (ft): 15.91 **Time:** 0905 *(taken at initial gauging of all wells)*
Confirm D.T.W. (ft): 15.91 **Time:** 1218 *(taken prior to purging well)*
Final D.T.W. (ft): 15.95 **Time:** 12.35 *(taken after sample collection)*
If NAPL Present: D.T.P.:_____ D.T.W.:_____ Thickness:_____ Time:_____

Project No.: AES 111120
Date: 9-4-2013
Arrival Time: 1216 (1237 Sample)
Air Temp: 92°F
T.O.C. Elev. (ft): 6241.41
Total Well Depth (ft): 25.17

Water Quality Parameters - Recorded During Well Purging

Time	Temp (deg C)	Conductivity (µS) (mS)	DO (mg/L)	pH	ORP (mV)	PURGED VOLUME (see reverse for calc.)	Notes/Observations
1225	17.47	17.50	0.68	7.58	-171.1	1st Bailer	Clear H2O
1227	16.08	17.48	0.69	7.57	-160.8	1.50 gal.	Lt Tan H2O
1230	15.93	17.45	0.64	7.55	-155.2	2.50 gal	Lt Tan H2O
1232	15.77	17.48	0.74	7.54	-152.7	3.50 gal.	Lt Tan H2O
1237	15.89	17.56	0.83	7.53	-151.3	4.50 gal.	Lt Tan H2O

Analytical Parameters (include analysis method and number and type of sample containers)

BTEX 8021B (3x40mL VOA w/ HCL)

Disposal of Purged Water: Into 55 gal. drum delived to Landfarm
Collected Samples Stored on Ice in Cooler: Yes
Chain of Custody Record Complete: Yes
Analytical Laboratory: Hall Environmental Analysis Laboratory, Albuquerque, NM
Equipment Used During Sampling: Keck Water Level or Keck Interface Level, YSI Water Quality Meter and New Disposable Bailer

Notes/Comments:

9.26 H2O Column
1.51 H2O Volume
4.50 gal. Purged

revised: 08/16/09

MONITORING WELL SAMPLING RECORD

Monitor Well No: MW-6

Animas Environmental Services
624 E. Comanche, Farmington NM 87401
Tel. (505) 564-2281 Fax (505) 324-2022

Site: Groundwater Sampling
Location: Enterprise Field Services, LLC
Project: Lateral K-31
Sampling Technician: Lamone, L.
Purge / No Purge: Purge
Well Diameter (in): 2
Initial D.T.W. (ft): 17.45 **Time:** 0932 *(taken at initial gauging of all wells)*
Confirm D.T.W. (ft): 17.45 **Time:** 1440 *(taken prior to purging well)*
Final D.T.W. (ft): 18.00 **Time:** 14.56 *(taken after sample collection)*
If NAPL Present: D.T.P.: _____ **D.T.W.:** _____ **Thickness:** _____ **Time:** _____

Project No.: AES 111120
Date: 9-4-2013
Arrival Time: ~~1438~~ 1438 (1458 sample)
Air Temp: 97°F
T.O.C. Elev. (ft): 6242.91
Total Well Depth (ft): 27.10

Water Quality Parameters - Recorded During Well Purging

Time	Temp (deg C)	Conductivity (µS) (mS)	DO (mg/L)	pH	ORP (mV)	PURGED VOLUME (see reverse for calc.)	Notes/Observations
1448	16.06	14.27	0.94	7.33	-103.7	1st Bailer.	Clear H2O
1450	15.24	14.11	0.96	7.29	-104.4	1.75 gal	Clear - Lt Tan H2O
1452	14.77	10.50	6.95	7.24	-102.7	2.75 gal	Lt Tan H2O
1454	14.19	13.98	6.97	7.24	-99.3	3.75 gal	Lt Tan H2O
1458	14.44	14.03	0.66	7.23	-101.9	4.75 gal	Lt Tan H2O

Analytical Parameters (include analysis method and number and type of sample containers)

BTEX 8021B (3x40mL VOA w/ HCL)

Disposal of Purged Water: Into 55 gal. drum delivered to landfarm
Collected Samples Stored on Ice in Cooler: Yes
Chain of Custody Record Complete: Yes
Analytical Laboratory: Hall Environmental Analysis Laboratory, Albuquerque, NM
Equipment Used During Sampling: Keck Water Level or Keck Interface Level, YSI Water Quality Meter and New Disposable Bailer

Notes/Comments:

9.65 H2O column
1.57 H2O volume
4.75 To be purged

revised: 08/10/09

MONITORING WELL SAMPLING RECORD

Monitor Well No: MW-7

Animas Environmental Services
624 E. Comanche, Farmington NM 87401
Tel. (505) 564-2281 Fax (505) 324-2022

Site: Groundwater Sampling
Location: Enterprise Field Services, LLC
Project: Lateral K-31
Sampling Technician: Lamone, L.
Purge / No Purge: Purge
Well Diameter (in): 2
Initial D.T.W. (ft): 17.65 **Time:** 0848 *(taken at initial gauging of all wells)*
Confirm D.T.W. (ft): 17.65 **Time:** 1111 *(taken prior to purging well)*
Final D.T.W. (ft): 17.85 **Time:** 1125 *(taken after sample collection)*
If NAPL Present: D.T.P.: _____ **D.T.W.:** _____ **Thickness:** _____ **Time:** _____

Project No.: AES 111120
Date: 9-4-2013
Arrival Time: 1107 (1127 Sample)
Air Temp: 83°F
T.O.C. Elev. (ft): 6243.27
Total Well Depth (ft): 26.23

Water Quality Parameters - Recorded During Well Purging

Time	Temp (deg C)	Conductivity (µS) (mS)	DO (mg/L)	pH	ORP (mV)	PURGED VOLUME (see reverse for calc.)	Notes/Observations
1116	16.49	11.98	2.84	7.35	-115.7	1st Bailer	Clear H2O
1118	15.44	12.09	0.78	7.30	-110.3	1.0 gal.	Tan H2O
1120	15.05	1190	3.57	7.29	-108.4	2.0 gal	Tan H2O
1123	14.88	12.13	0.78	7.28	-105.3	3.0 gal	Tan H2O
1127	15.09	12.15	087	7.28	-105.6	4.25 gal	Lt Tan H2O

Analytical Parameters (include analysis method and number and type of sample containers)

BTEX 8021B (3x40mL VOA w/ HCL)

Disposal of Purged Water: Into 55 gal. drum, delivered to landFarm
Collected Samples Stored on Ice in Cooler: Yes
Chain of Custody Record Complete: Yes
Analytical Laboratory: Hall Environmental Analysis Laboratory, Albuquerque, NM
Equipment Used During Sampling: Keck Water Level or Keck Interface Level, YSI Water Quality Meter and New Disposable Bailer

Notes/Comments:

8.58 H2O column
1.40 H2O volume
4.25 gal.

revised: 08/10/09

MONITORING WELL SAMPLING RECORD

Monitor Well No: MW-8

Animas Environmental Services
624 E. Comanche, Farmington NM 87401
Tel. (505) 564-2281 Fax (505) 324-2022

Site: Groundwater Sampling
Location: Enterprise Field Services, LLC
Project: Lateral K-31
Sampling Technician: Lamone, L.
Purge / No Purge: Purge
Well Diameter (in): 2

Project No.: AES 111120
Date: 9-4-2013
Arrival Time: 1328 1352 Sample
Air Temp: 94° F
T.O.C. Elev. (ft): 6242.01
Total Well Depth (ft): 26.60

Initial D.T.W. (ft): 16.57 **Time:** 0909 *(taken at initial gauging of all wells)*
Confirm D.T.W. (ft): 15.58 **Time:** 1330 *(taken prior to purging well)*
Final D.T.W. (ft): 16.62 **Time:** 1351 *(taken after sample collection)*
If NAPL Present: D.T.P.: _____ **D.T.W.:** _____ **Thickness:** _____ **Time:** _____

Water Quality Parameters - Recorded During Well Purging

Time	Temp (deg C)	Conductivity (µS) (mS)	DO (mg/L)	pH	ORP (mV)	PURGED VOLUME (see reverse for calc.)	Notes/Observations
1337	17.54	13.31	11.66	7.75	175.1	1st Bailer	Clear H2O
1340	15.91	13.88	1.08	7.68	162.9	1.5 gal.	Tan H2O
1342	15.40	14.52	5.82	7.55	-141.2	2.5 gal	Tan H2O Slight Green
1346	15.30	14.84	0.69	7.47	-131.6	3.5 gal.	Tan H2O
1349	15.38	14.56	0.77	7.52	-140.2	4.5 gal	Tan H2O
1352	15.21	14.76	0.73	7.48	-132.9	5.5 gal	Tan H2O

Analytical Parameters (include analysis method and number and type of sample containers)

BTEX 8021B (3x40mL VOA w/ HCL)

Disposal of Purged Water: Into 55 gal. drum to ETech landfarm
Collected Samples Stored on Ice in Cooler: Yes
Chain of Custody Record Complete: Yes
Analytical Laboratory: Hall Environmental Analysis Laboratory, Albuquerque, NM
Equipment Used During Sampling: Keck Water Level or Keck Interface Level, YSI Water Quality Meter and New Disposable Bailer

Notes/Comments:

11.02 H2O Column
1.80 H2O Volume
5.50 gal. to be purged.

revised: 08/10/09

MONITORING WELL SAMPLING RECORD

Monitor Well No: MW-9

Animas Environmental Services
624 E. Comanche, Farmington NM 87401
Tel. (505) 564-2281 Fax (505) 324-2022

Site: Groundwater Sampling
Location: Enterprise Field Services, LLC
Project: Lateral K-31
Sampling Technician: Lamone, L
Purge / No Purge: Purge
Well Diameter (in): 2
Initial D.T.W. (ft): 16.32 **Time:** 0843 *(taken at initial gauging of all wells)*
Confirm D.T.W. (ft): 16.32 **Time:** 1035 *(taken prior to purging well)*
Final D.T.W. (ft): 16.40 **Time:** 1058 *(taken after sample collection)*
If NAPL Present: **D.T.P.:** _____ **D.T.W.:** _____ **Thickness:** _____ **Time:** _____

Project No.: AES 111120
Date: 9-4-2013
Arrival Time: 1030 (1057 Sample)
Air Temp: 83° F
T.O.C. Elev. (ft): 6241.59
Total Well Depth (ft): 26.52

Water Quality Parameters - Recorded During Well Purging

Time	Temp (deg C)	Conductivity (µS) (mS)	DO (mg/L)	pH	ORP (mV)	PURGED VOLUME (see reverse for calc.)	Notes/Observations
1042	15.79	12.79	2.44	7.34	-101.3	1st Bailer	Clear H2o
1045	14.77	12.84	1.80	7.29	-95.1	1.0 gal.	Clear H2O
1048	15.08	12.84	0.83	7.27	-94.2	2.0 gal	Tan/Silt H2O
1050	14.65	11.35	9.93	7.23	-93.5	3.0 gal	Tan H2O
1053	14.66	13.05	2.03	7.24	-90.5	4.0 gal.	Tan H2O
1057	14.56	13.10	1.11	7.24	-84.2	5.0 gal	Tan H2O

Analytical Parameters (include analysis method and number and type of sample containers)

BTEX 8021B (3x40mL VOA w/ HCL)

Disposal of Purged Water: Into 55 gal. drum to Land Farm
Collected Samples Stored on Ice in Cooler: Yes
Chain of Custody Record Complete: Yes
Analytical Laboratory: Hall Environmental Analysis Laboratory, Albuquerque, NM
Equipment Used During Sampling: Keck Water Level or Keck Interface Level, YSI Water Quality Meter and New Disposable Bailer

Notes/Comments:

10.20 H2O column
1.66 H2O volume
5.0 gal. To be purged

revised: 08/10/09

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

September 12, 2013

Heather Woods
Animas Environmental Services
624 East Comanche
Farmington, NM 87401
TEL: (505) 716-2787
FAX (505) 324-2022

RE: Enterprise Lateral K-31 OrderNo.: 1309239

Dear Heather Woods:

Hall Environmental Analysis Laboratory received 10 sample(s) on 9/6/2013 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

Analytical Report
Lab Order **1309239**
Date Reported: **9/12/2013**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Project: Enterprise Lateral K-31
Lab ID: 1309239-001 **Matrix:** AQUEOUS

Client Sample ID: MW-1
Collection Date: 9/4/2013 2:25:00 PM
Received Date: 9/6/2013 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	24	2.0		µg/L	2	9/9/2013 4:50:28 PM	R13247
Toluene	3.0	2.0		µg/L	2	9/9/2013 4:50:28 PM	R13247
Ethylbenzene	ND	2.0		µg/L	2	9/9/2013 4:50:28 PM	R13247
Xylenes, Total	10	4.0		µg/L	2	9/9/2013 4:50:28 PM	R13247
Surr: 4-Bromofluorobenzene	110	85-136		%REC	2	9/9/2013 4:50:28 PM	R13247

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: MW-2
Project: Enterprise Lateral K-31
Collection Date: 9/4/2013 1:13:00 PM
Lab ID: 1309239-002
Matrix: AQUEOUS
Received Date: 9/6/2013 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	8.0	2.0		µg/L	2	9/9/2013 5:20:41 PM	R13247
Toluene	ND	2.0		µg/L	2	9/9/2013 5:20:41 PM	R13247
Ethylbenzene	ND	2.0		µg/L	2	9/9/2013 5:20:41 PM	R13247
Xylenes, Total	4.2	4.0		µg/L	2	9/9/2013 5:20:41 PM	R13247
Surr: 4-Bromofluorobenzene	107	85-136		%REC	2	9/9/2013 5:20:41 PM	R13247

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: MW-3
Project: Enterprise Lateral K-31
Collection Date: 9/4/2013 10:22:00 AM
Lab ID: 1309239-003 **Matrix:** AQUEOUS **Received Date:** 9/6/2013 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	5.4	2.0		µg/L	2	9/9/2013 5:50:50 PM	R13247
Toluene	ND	2.0		µg/L	2	9/9/2013 5:50:50 PM	R13247
Ethylbenzene	ND	2.0		µg/L	2	9/9/2013 5:50:50 PM	R13247
Xylenes, Total	ND	4.0		µg/L	2	9/9/2013 5:50:50 PM	R13247
Surr: 4-Bromofluorobenzene	103	85-136		%REC	2	9/9/2013 5:50:50 PM	R13247

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Project: Enterprise Lateral K-31
Lab ID: 1309239-004 **Matrix:** AQUEOUS

Client Sample ID: MW-4
Collection Date: 9/4/2013 12:06:00 PM
Received Date: 9/6/2013 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	ND	2.0		µg/L	2	9/9/2013 8:22:14 PM	R13247
Toluene	ND	2.0		µg/L	2	9/9/2013 8:22:14 PM	R13247
Ethylbenzene	ND	2.0		µg/L	2	9/9/2013 8:22:14 PM	R13247
Xylenes, Total	ND	4.0		µg/L	2	9/9/2013 8:22:14 PM	R13247
Surr: 4-Bromofluorobenzene	107	85-136		%REC	2	9/9/2013 8:22:14 PM	R13247

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: MW-5
Project: Enterprise Lateral K-31
Collection Date: 9/4/2013 12:37:00 PM
Lab ID: 1309239-005 **Matrix:** AQUEOUS **Received Date:** 9/6/2013 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	9.3	2.0		µg/L	2	9/9/2013 8:52:27 PM	R13247
Toluene	ND	2.0		µg/L	2	9/9/2013 8:52:27 PM	R13247
Ethylbenzene	ND	2.0		µg/L	2	9/9/2013 8:52:27 PM	R13247
Xylenes, Total	ND	4.0		µg/L	2	9/9/2013 8:52:27 PM	R13247
Surr: 4-Bromofluorobenzene	110	85-136		%REC	2	9/9/2013 8:52:27 PM	R13247

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: MW-6
Project: Enterprise Lateral K-31
Collection Date: 9/4/2013 2:58:00 PM
Lab ID: 1309239-006
Matrix: AQUEOUS
Received Date: 9/6/2013 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	40	2.0		µg/L	2	9/9/2013 9:22:35 PM	R13247
Toluene	22	2.0		µg/L	2	9/9/2013 9:22:35 PM	R13247
Ethylbenzene	ND	2.0		µg/L	2	9/9/2013 9:22:35 PM	R13247
Xylenes, Total	13	4.0		µg/L	2	9/9/2013 9:22:35 PM	R13247
Surr: 4-Bromofluorobenzene	110	85-136		%REC	2	9/9/2013 9:22:35 PM	R13247

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: MW-7
Project: Enterprise Lateral K-31
Collection Date: 9/4/2013 11:27:00 AM
Lab ID: 1309239-007
Matrix: AQUEOUS
Received Date: 9/6/2013 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	6.2	2.0		µg/L	2	9/9/2013 9:52:46 PM	R13247
Toluene	ND	2.0		µg/L	2	9/9/2013 9:52:46 PM	R13247
Ethylbenzene	ND	2.0		µg/L	2	9/9/2013 9:52:46 PM	R13247
Xylenes, Total	ND	4.0		µg/L	2	9/9/2013 9:52:46 PM	R13247
Surr: 4-Bromofluorobenzene	107	85-136		%REC	2	9/9/2013 9:52:46 PM	R13247

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: MW-8
Project: Enterprise Lateral K-31
Collection Date: 9/4/2013 1:52:00 PM
Lab ID: 1309239-008 **Matrix:** AQUEOUS **Received Date:** 9/6/2013 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	34	2.0		µg/L	2	9/9/2013 10:22:55 PM	R13247
Toluene	ND	2.0		µg/L	2	9/9/2013 10:22:55 PM	R13247
Ethylbenzene	ND	2.0		µg/L	2	9/9/2013 10:22:55 PM	R13247
Xylenes, Total	ND	4.0		µg/L	2	9/9/2013 10:22:55 PM	R13247
Surr: 4-Bromofluorobenzene	108	85-136		%REC	2	9/9/2013 10:22:55 PM	R13247

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Project: Enterprise Lateral K-31
Lab ID: 1309239-009 **Matrix:** AQUEOUS

Client Sample ID: MW-9
Collection Date: 9/4/2013 10:57:00 AM
Received Date: 9/6/2013 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	ND	2.0		µg/L	2	9/9/2013 10:53:07 PM	R13247
Toluene	ND	2.0		µg/L	2	9/9/2013 10:53:07 PM	R13247
Ethylbenzene	ND	2.0		µg/L	2	9/9/2013 10:53:07 PM	R13247
Xylenes, Total	ND	4.0		µg/L	2	9/9/2013 10:53:07 PM	R13247
Surr: 4-Bromofluorobenzene	107	85-136		%REC	2	9/9/2013 10:53:07 PM	R13247

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: Trip Blank
Project: Enterprise Lateral K-31
Collection Date:
Lab ID: 1309239-010
Matrix: TRIP BLANK
Received Date: 9/6/2013 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	ND	1.0		µg/L	1	9/9/2013 11:23:23 PM	R13247
Toluene	ND	1.0		µg/L	1	9/9/2013 11:23:23 PM	R13247
Ethylbenzene	ND	1.0		µg/L	1	9/9/2013 11:23:23 PM	R13247
Xylenes, Total	ND	2.0		µg/L	1	9/9/2013 11:23:23 PM	R13247
Surr: 4-Bromofluorobenzene	109	85-136		%REC	1	9/9/2013 11:23:23 PM	R13247

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

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1309239**

12-Sep-13

Client: Animas Environmental Services

Project: Enterprise Lateral K-31

Sample ID **100NG BTEX LCS**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSW**	Batch ID: **R13247**	RunNo: **13247**
Prep Date:	Analysis Date: **9/9/2013**	SeqNo: **376877** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	101	80	120			
Toluene	20	1.0	20.00	0	102	80	120			
Ethylbenzene	21	1.0	20.00	0	103	80	120			
Xylenes, Total	63	2.0	60.00	0	105	80	120			
Surr: 4-Bromofluorobenzene	22		20.00		112	85	136			

Sample ID **5ML RB**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBW**	Batch ID: **R13247**	RunNo: **13247**
Prep Date:	Analysis Date: **9/9/2013**	SeqNo: **376899** 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								
Xylenes, Total	ND	2.0								
Surr: 4-Bromofluorobenzene	21		20.00		107	85	136			

Qualifiers:

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: Animas Environmental Work Order Number: 1309239 RcptNo: 1

Received by/date: 09/06/13

Logged By: **Lindsay Mangin** 9/6/2013 10:00:00 AM

Completed By: **Lindsay Mangin** 9/6/2013 5:23:06 PM

Reviewed By: 09/09/13

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? Courier

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	1.2	Good	Yes			

Chain-of-Custody Record

Client: Animas Environmental Services	XStandard ☐ Rush
Mailing Address: 624 E Comanche, Farmington , NM 87401	Project Name: Enterprise Lateral K-31
Phone #: 505-327-1624	Project #: AES 111120
email or Fax#: 505-324-2022	Project Manager: Heather Woods
QA/QC Package: X Standard ☐ Level 4 (Full Validation)	Sampler: LaMonE, L.
Accreditation: ☐ NELAP ☐ Other ☐ EDD (Type)	On Ice: Yes / No; Sample Temperature:

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.	Analysis Request: 8021B BTEX	Air Bubbles (Y or N)
9-4-2013	1425	H2O	MW-1	3 - 40mL glass	HCl	-001	X	
9-4-2013	1313	H2O	MW-2	3 - 40mL glass	HCl	-002	X	
9-4-2013	1022	H2O	MW-3	3 - 40mL glass	HCl	-003	X	
9-4-2013	1206	H2O	MW-4	3 - 40mL glass	HCl	-004	X	
9-4-2013	1237	H2O	MW-5	3 - 40mL glass	HCl	-005	X	
9-4-2013	1458	H2O	MW-6	3 - 40mL glass	HCl	-006	X	
9-4-2013	1127	H2O	MW-7	3 - 40mL glass	HCl	-007	X	
9-4-2013	1352	H2O	MW-8	3 - 40mL glass	HCl	-008	X	
9-4-2013	1057	H2O	MW-9	3 - 40mL glass	HCL	-009	X	
9-4-2013			Trip Blank	2-40mL		-010	X	

Date	Time	Relinquished by	Received by	Date	Time
9/5/13	1649			9/5/13	1645
9/5/13	1710			09/06/13	1000

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.