3R - 438

Q4 GWMR

02 / 22 / 2013

3R-438 Lat 6C

Enterprise Products

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

ENTERPRISE PRODUCTS OPERATING LLC

March 19, 2013

Return Receipt Requested
7010 1870 0001 2945 4085

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: 4th Quarter 2012 Groundwater Monitoring Report
Lateral 6C September 2011 Pipeline Release
NE¼ SW¼, Section 26, T28N, R11W
San Juan County, New Mexico

Dear Mr. von Gonten:

Enterprise Field Services, LLC (Enterprise) is submitting the enclosed report entitled: *4th Quarter 2012 Groundwater Monitoring Report,* dated February 22, 2013. This report documents the results of the second quarterly groundwater monitoring event conducted at the above-referenced release site during December 2012.

On September 21, 2011, a release of natural gas condensate and produced water was discovered at this release site, and promptly reported to the Bureau of Land Management (BLM) and New Mexico Oil Conservation Division (MMOCD). Following initial site investigations conducted during 2011, a groundwater investigation was completed at the site during September 2012. A total of nine monitor wells (MW-1 through MW-9) were installed during this investigation. Laboratory results from the recent December 20, 2012 groundwater monitoring event confirmed dissolved-phase benzene concentrations above the New Mexico Water Quality Control Commission (WQCC) standard of 10 µg/L in two wells; including MW-1 (1,100 µg/L), and MW-2 (26 µg/L). Also, dissolved-phase xylene concentrations were above the WQCC standard of 620 µg /L in MW-6 (1,200 µg/L). Dissolved-phase toluene and ethylbenzene concentrations were below WQCC standards in all monitor wells.

Note that dissolved-phase benzene and xylene concentrations have decreased significantly since the initial groundwater monitoring event performed during September 2012. Enterprise will evaluate the results of the next quarterly groundwater monitoring event, tentatively scheduled for March 2013, to determine if further remedial actions are necessary to complete site closure.

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

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

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

Rodney M. Sartor, REM
Manager, Remediation

/dep

Enclosure – *4th Quarter 2012 Groundwater Monitoring Report - Lateral 6C September 2011 Pipeline Release*

cc: Sherrie Landon, Bureau of Land Management, 6251 College Blvd., Suite A, Farmington, NM
Jonathan Kelly, New Mexico Oil Conservation Division, 1000 Rio Brazos Road, Aztec, NM

ec: Tami Ross – 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

February 22, 2013

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

RE: 4th Quarter 2012 Groundwater Monitoring Report
Enterprise Field Services, LLC
Lateral 6C September 2011 Pipeline Release
NE¼ SW¼, Section 26, T28N, R11W
San Juan County, New Mexico

Dear Mr. von Gonten:

Animas Environmental Services, LLC (AES), on behalf of Enterprise Field Services, LLC (Enterprise), has prepared this *4th Quarter 2012 Groundwater Monitoring Report* for the Lateral 6C September 2011 Pipeline Release in accordance with New Mexico Oil Conservation Division (NMOCD) and New Mexico Environment Department (NMED) Ground Water Quality Bureau (GWQB) regulations. This is the second consecutive quarterly monitoring and sampling event for the subject release location.

A groundwater investigation was completed September 7, 2012, in accordance with a workplan previously prepared by AES and dated August 3, 2012. The workplan was submitted to the NMOCD for review prior to implementing the proposed scope of work.

1.0 Site Information

1.1 Site Location and NMOCD Ranking

The release area is located on Federal land under jurisdiction of the Bureau of Land Management (BLM) within the NE¼ SW¼, Section 26, T28N, R11W, San Juan County, New Mexico. Latitude and longitude of the release were recorded as N36.63202 and W107.97400, 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, and the release was given a ranking score of 30.

The release location is within the floodplain of Kutz Wash, which is located 165 feet to the northeast. Kutz Wash flows north and ultimately discharges into the San Juan River.

1.2 Initial Release Assessment and Investigation

1.2.1 Initial Release Assessment

AES personnel met with Enterprise representatives at the release location on September 22, 2011. Due to the apparent size of the release, AES suggested that Enterprise repair the line and then contact AES when excavation of contaminant impacted soil could be completed. Following the repair, on September 23, 2011, AES collected one soil sample from the base of the small repair excavation at 6 feet below ground surface (bgs). The sample was field screened for volatile organic compounds (VOCs) with a photo-ionization detector (PID) organic vapor meter (OVM). Based on the field screening reading of 3,974 parts per million (ppm) and the anticipated shallow depth of groundwater, AES and Enterprise determined that a limited investigation of the release extent would be appropriate prior to implementing further contaminant mitigation measures.

1.2.2 Release Assessment - October 2011

On October 11, 2011, AES completed four test hole excavations around the original release location and at distances of up to 100 feet from the release point. AES recorded the encountered soil materials, collected field screening samples and soil samples for laboratory analysis from each test hole, and collected groundwater samples from two of the test holes.

Soil concentrations for total benzene, toluene, ethylbenzene, and xylene (BTEX) and total petroleum hydrocarbons (TPH) for gasoline range organics (GRO) in sample TP-1 at 10 feet exceeded the applicable NMOCD action levels with 169 mg/kg total BTEX and 1,429 mg/kg TPH. Benzene, total BTEX, TPH-GRO, and TPH for diesel range organics (DRO) concentrations in sample TP-2 at 15 feet also exceeded the applicable NMOCD action levels with 45 mg/kg benzene, 513 mg/kg total BTEX, and 5,170 mg/kg TPH (GRO/DRO). Although some elevated OVM field screening values were recorded, BTEX and TPH concentrations in the remaining soil samples were either below laboratory detection limits or below applicable NMOCD action levels.

Groundwater samples were collected for laboratory analysis from TP-2 and TP-4. During sample collection, a petroleum sheen was observed in TP-2. Dissolved phase benzene, toluene, and xylene concentrations were reported above the New Mexico Water Quality Control Commission (WQCC) standards in TP-2 with 9,800 µg/L benzene, 15,000 µg/L toluene, and 6,700 µg/L xylene. Detailed laboratory results were summarized in the AES letter report entitled *Soil and Groundwater Sampling Results* and dated October 28, 2011.

Based on field screening and laboratory analytical results, AES recommended that Enterprise conduct further delineation of the soil and groundwater contamination in order to determine the most effective mitigation of the release.

1.2.3 Site Investigation - November 2011

On November 30, 2011, AES completed an additional site investigation with the purpose of delineating the full extent of petroleum hydrocarbon impact on subsurface soils and groundwater resulting from the release. The investigation included the installation of eight soil borings and the collection of soil and groundwater samples.

A total of eight soil borings were installed by AES on November 30, 2011. Soil samples showed that contaminant concentrations exceeded NMOCD action levels in borings SB-2, SB-7, and SB-8. The highest benzene and total BTEX concentrations were reported in SB-2, with 31 mg/kg benzene and 580 mg/kg total BTEX. The highest TPH concentration was also reported in SB-2 with 7,500 mg/kg.

Dissolved phase analytical results indicated groundwater was impacted above the WQCC standard in SB-2W (benzene, toluene, and xylene), SB-3W (benzene), and SB-7W (benzene and toluene). The highest concentrations for benzene, toluene, and xylenes were reported in SB-2W with 2,800 µg/L benzene, 5,700 µg/L toluene, and 4,000 µg/L xylenes.

Based on the depth and lateral extent of contaminant impacted soil and groundwater, AES recommended conducting a groundwater investigation and installing up to nine permanent groundwater monitor wells. A work plan for additional site investigation was submitted to NMOCD on August 3, 2012.

1.2.4 Groundwater Investigation – September 2012

On August 20 through September 7, 2012, AES completed a groundwater investigation in order to further delineate the extent of the dissolved phase hydrocarbon contaminants associated with the Lateral 6C 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 consists of alluvium and fluvial material from the adjacent Kutz Wash overlaying sandstone bedrock. Soil observed during the investigation was brown to tan, fine to medium grained, silty to clayey sand, with some gravel at depths greater than 20 feet bgs. Moisture level increased with depth from dry to moist in the upper 10 feet to moist to wet down to contact with bedrock. Bedrock material was grey, fine grained, firm to moderately hard, wet sandstone.

During the investigation, soil laboratory analytical results showed that petroleum hydrocarbon concentrations were not above NMOCD action levels in any of the soil borings. Laboratory analytical results showed groundwater contaminant concentrations above the WQCC standard of 10 µg/L for benzene in MW-1 (2,200 µg/L), MW-2 (270 µg/L), MW-4 (18 µg/L), and MW-8 (41 µg/L). Additionally, dissolved phase toluene above

the WQCC standard of 750 µg/L was reported in MW-2 with 1,100 µg/L, and xylene above the WQCC standard of 620 µg/L was reported in MW-1 (650 µg/L), MW-2 (1,800 µg/L), and MW-6 (2,200 µg/L).

2.0 Groundwater Monitoring and Sampling – December 2012

On December 20, 2012, 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 August 3, 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. Depths to groundwater varied across the site and were observed to range from 14.87 feet below top of casing (TOC) in MW-8 to 19.28 feet below TOC in MW-5. The groundwater gradient was calculated to be approximately 0.008 foot/foot to the northwest, and groundwater gradient contours are included on Figure 3.

Following depth to water measurement, each well was purged with a disposable bailer until recorded temperature, pH, conductivity, and DO measurements were stabilized. All data was recorded onto Water Sample Collection Forms. Groundwater temperature ranged from 13.06°C in MW-9 to 16.71°C in MW-1, and conductivity ranged from 3.339 mS in MW-8 to 4.567 mS in MW-1. DO concentrations were between 0.97 mg/L in MW-8 and 2.65 mg/L in MW-5, and pH ranged from 7.00 in MW-5 to 7.61 in MW-2. Although DO was recorded during field activities, it should be noted that due to the use of bailers, the accuracy of dissolved oxygen measurements is limited. 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 with new disposable bailers from a total of nine monitor wells 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 above the WQCC standard of 10 µg /L in MW-1 (1,100 µg/L) and MW-2 (26 µg/L). Dissolved phase xylene concentrations were above the WQCC standard of 620 µg /L in MW-6 with 1,200 µg/L. Concentrations of dissolved phase toluene and ethylbenzene were below the WQCC standard of 750 µg/L in all wells. Tabulated groundwater analytical results are presented in Table 2 and on Figure 4, and dissolved phase benzene and xylene contours are presented on Figure 5 and 6, respectively. 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 6C September 2011 pipeline release location by AES on December 20, 2012. Laboratory results confirmed dissolved phase benzene concentrations above the WQCC standard of 10 µg/L in two wells, including MW-1 (1,100 µg/L) and MW-2 (26 µg/L). Also, dissolved phase xylene concentrations were above the WQCC standard of 620 µg /L in MW-6 with 1,200 µg/L. Note that dissolved phase benzene and xylene concentrations have decreased significantly across the site since the September 2012 sampling event. Dissolved phase toluene and ethylbenzene concentrations were below WQCC standards in all monitor wells.

Based on laboratory analytical results from the December 2012 sampling event, groundwater continues to be impacted above the WQCC standard for benzene but concentrations have decreased over time. The next groundwater sampling event is tentatively scheduled for March 2013.

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

Sincerely,

Tami Ross

Tami C. Ross, CHMM
Project Manager

Elizabeth McNally, P.E.

Attachments:

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

Figures
Figure 1. Topographic Site Location Map
Figure 2. Aerial Site Map
Figure 3. Groundwater Elevation Contours, December 2012
Figure 4. Groundwater Contaminant Concentrations, December 2012
Figure 5. Dissolved Benzene Concentration Contours, December 2012
Figure 6. Dissolved Xylene Concentration Contours, December 2012

Appendix
Water Sample Collection Forms
Groundwater Analytical Laboratory Reports (Hall 1212996)

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

Aaron Dailey
Enterprise Field Services, LLC
614 Reilly Avenue
Farmington, New Mexico 87401

TABLE 1

SUMMARY OF GROUNDWATER MEASUREMENTS AND WATER QUALITY DATA

Enterprise Field Services, LLC Lateral 6C September 2011 Pipeline Release

San Juan County, New Mexico

Well ID	Date	Depth to Water (ft below TOC)	Surveyed TOC (ft)	GW Elev. (ft)	pH	Conductivity (mS)	Dissolved Oxygen (mg/L)	Temp. (ºC)	Purge Volume (gallons)
MW-1	07-Sep-12	15.78	5579.73	5563.95	7.02	5.616	1.72	17.31	5.80
MW-1	20-Dec-12	15.69	5579.73	5564.04	7.38	4.567	1.41	16.71	6.00
MW-2	07-Sep-12	16.29	5579.39	5563.10	7.31	4.234	1.03	16.67	4.90
MW-2	20-Dec-12	16.22	5579.39	5563.17	7.61	3.511	1.45	15.42	5.00
MW-3	07-Sep-12	15.98	5579.52	5563.54	7.33	5.706	2.24	15.29	4.85
MW-3	20-Dec-12	15.79	5579.52	5563.73	7.13	4.496	2.30	13.84	5.00
MW-4	07-Sep-12	15.59	5580.36	5564.77	7.30	5.564	1.46	15.77	4.35
MW-4	20-Dec-12	15.51	5580.36	5564.85	7.06	4.106	1.51	14.94	4.00
MW-5	07-Sep-12	19.35	5583.53	5564.18	7.34	4.137	1.53	14.89	3.25
MW-5	20-Dec-12	19.28	5583.53	5564.25	7.00	3.438	2.65	13.74	3.00
MW-6	07-Sep-12	18.55	5582.22	5563.67	7.38	4.833	1.24	15.43	3.35
MW-6	20-Dec-12	18.49	5582.22	5563.73	7.46	3.932	1.09	14.08	3.00
MW-7	07-Sep-12	19.03	5582.24	5563.21	7.59	4.542	1.38	15.24	3.60
MW-7	20-Dec-12	18.97	5582.24	5563.27	7.53	3.660	1.16	13.86	4.00
MW-8	07-Sep-12	14.96	5577.81	5562.85	7.57	4.068	1.30	16.16	5.00
MW-8	20-Dec-12	14.87	5577.81	5562.94	7.56	3.339	0.97	15.25	5.00
MW-9	07-Sep-12	17.55	5582.48	5564.93	7.45	4.583	1.48	15.61	4.25
MW-9	20-Dec-12	17.47	5582.48	5565.01	7.14	3.369	2.29	13.06	4.00

TABLE 2

SUMMARY OF GROUNDWATER LABORATORY ANALYTICALS RESULTS

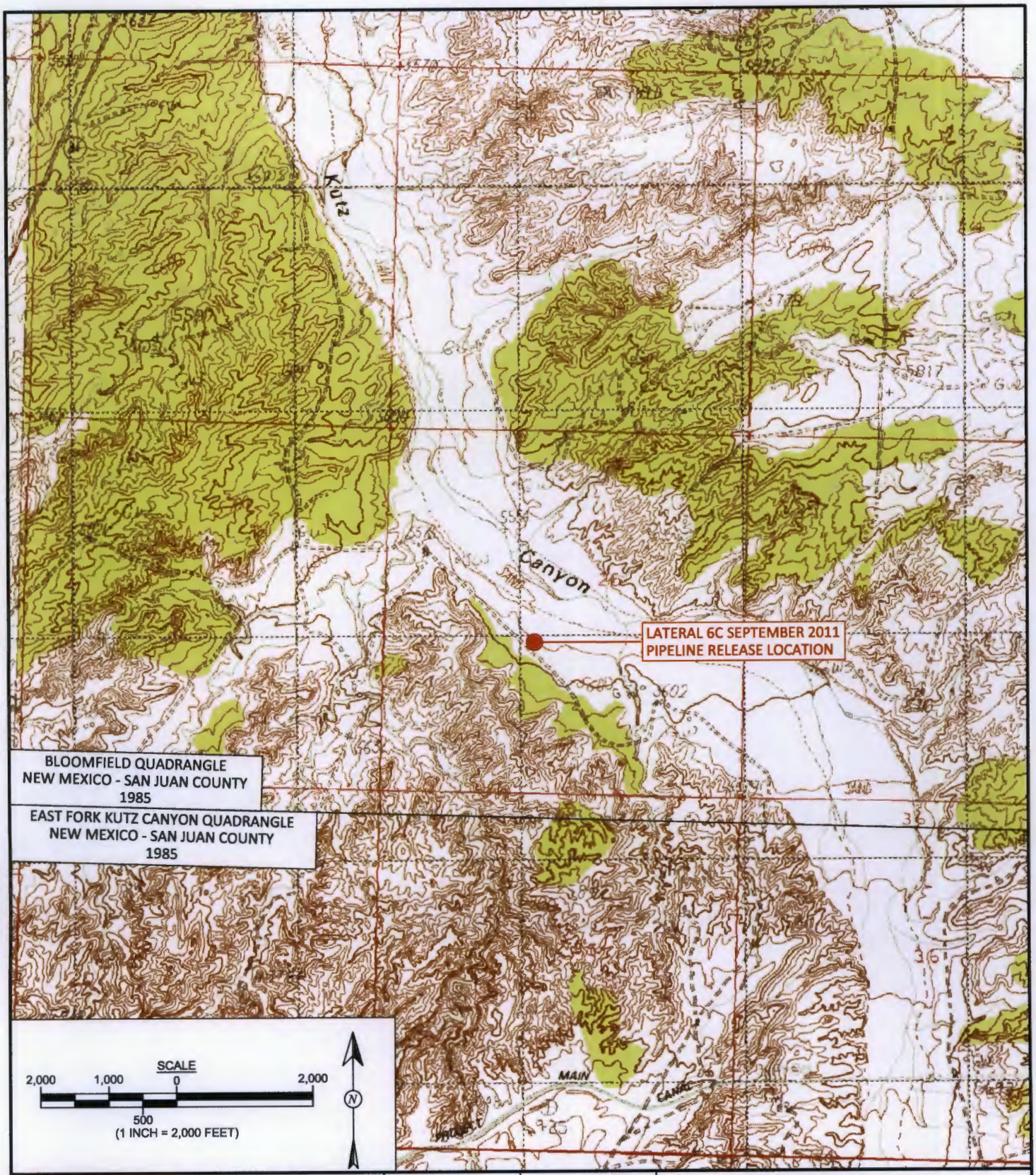
Enterprise Field Services, LLC Lateral 6C September 2011 Pipeline Release

San Juan County, New Mexico

Well ID	*Date Sampled*	*Benzene*	*Toluene*	*Ethyl-benzene*	*Xylenes*
		µg/L	*µg/L*	*µg/L*	*µg/L*
Sample Method		*EPA Method 8021*			
WQCC STANDARD		*10*	*750*	*750*	*620*
MW-1	07-Sep-12	**2,200**	350	68	**650**
MW-1	20-Dec-12	**1,100**	250	37	180
MW-2	07-Sep-12	**270**	**1,100**	66	**1,800**
MW-2	20-Dec-12	**26**	49	5.1	250
MW-3	07-Sep-12	<2.0	<2.0	<2.0	<4.0
MW-3	20-Dec-12	<2.0	<2.0	<2.0	<4.0
MW-4	07-Sep-12	**18**	5.1	<2.0	<4.0
MW-4	20-Dec-12	<2.0	<2.0	<2.0	<4.0
MW-5	07-Sep-12	<2.0	<2.0	<2.0	<4.0
MW-5	20-Dec-12	<2.0	<2.0	<2.0	<4.0
MW-6	07-Sep-12	<5.0	<5.0	260	**2,200**
MW-6	20-Dec-12	<5.0	<5.0	180	**1,200**
MW-7	07-Sep-12	<2.0	<2.0	<2.0	<4.0
MW-7	20-Dec-12	<2.0	<2.0	<2.0	2.4
MW-8	07-Sep-12	**41**	40	3.8	320
MW-8	20-Dec-12	<2.0	<2.0	<2.0	20
MW-9	07-Sep-12	<2.0	2.4	<2.0	<4.0
MW-9	20-Dec-12	<2.0	<2.0	<2.0	<4.0

Notes: **< Analyte not detected above listed method limit**

µg/L Micrograms per liter (ppb)

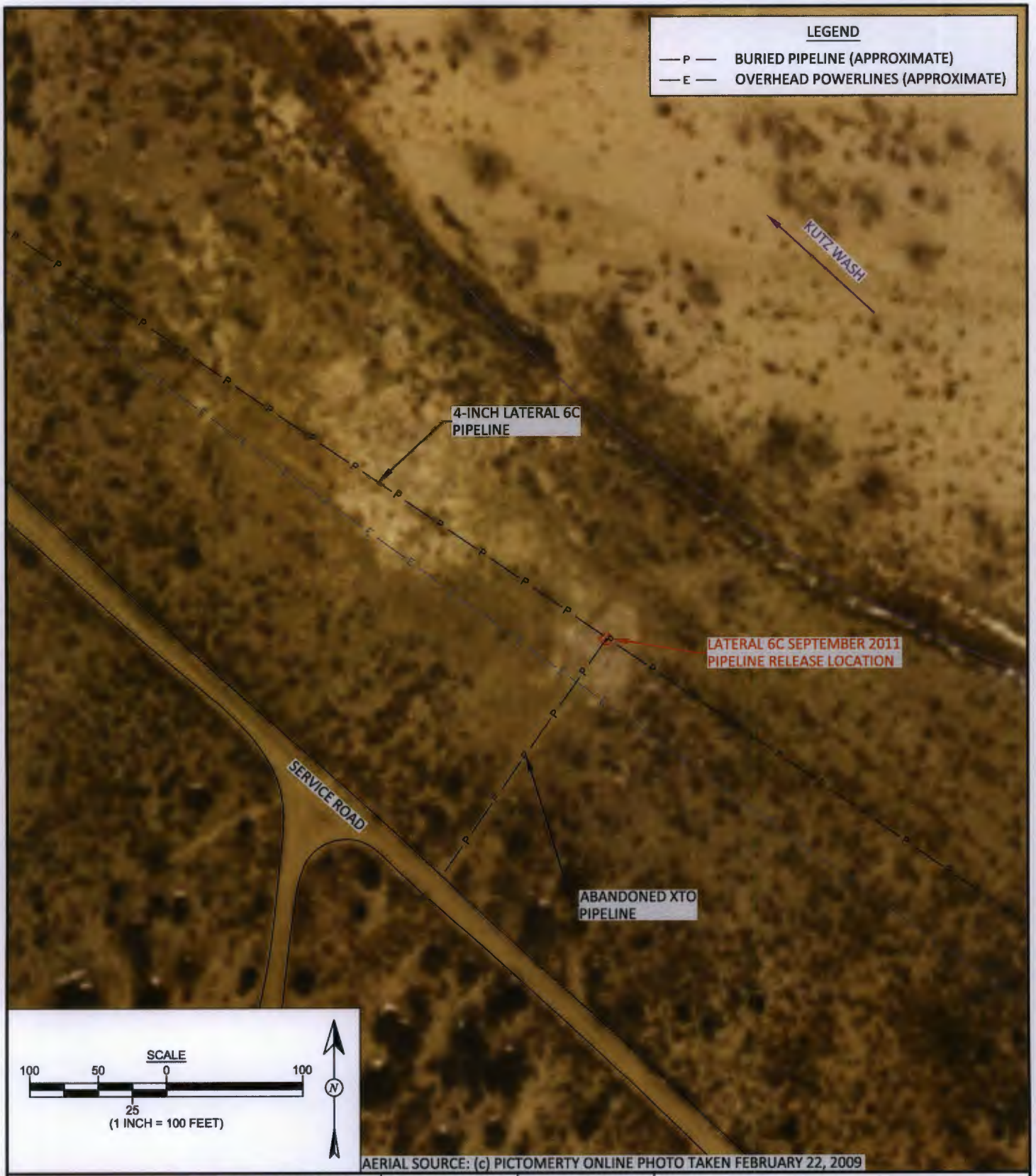


Animas Environmental Services, LLC

DRAWN BY: C. Lameman	**DATE DRAWN:** September 18, 2012
REVISIONS BY: C. Lameman	**DATE REVISED:** February 6, 2013
CHECKED BY: T. Ross	**DATE CHECKED:** February 12, 2013
APPROVED BY: E. McNally	**DATE APPROVED:** February 12, 2013

FIGURE 1

TOPOGRAPHIC SITE LOCATION MAP
ENTERPRISE FIELD SERVICES, LLC
LATERAL 6C SEPTEMBER 2011 PIPELINE RELEASE
SAN JUAN COUNTY, NEW MEXICO
NE¼ SW¼, SECTION 26, T28N, R11W
N36.63202, W107.97400

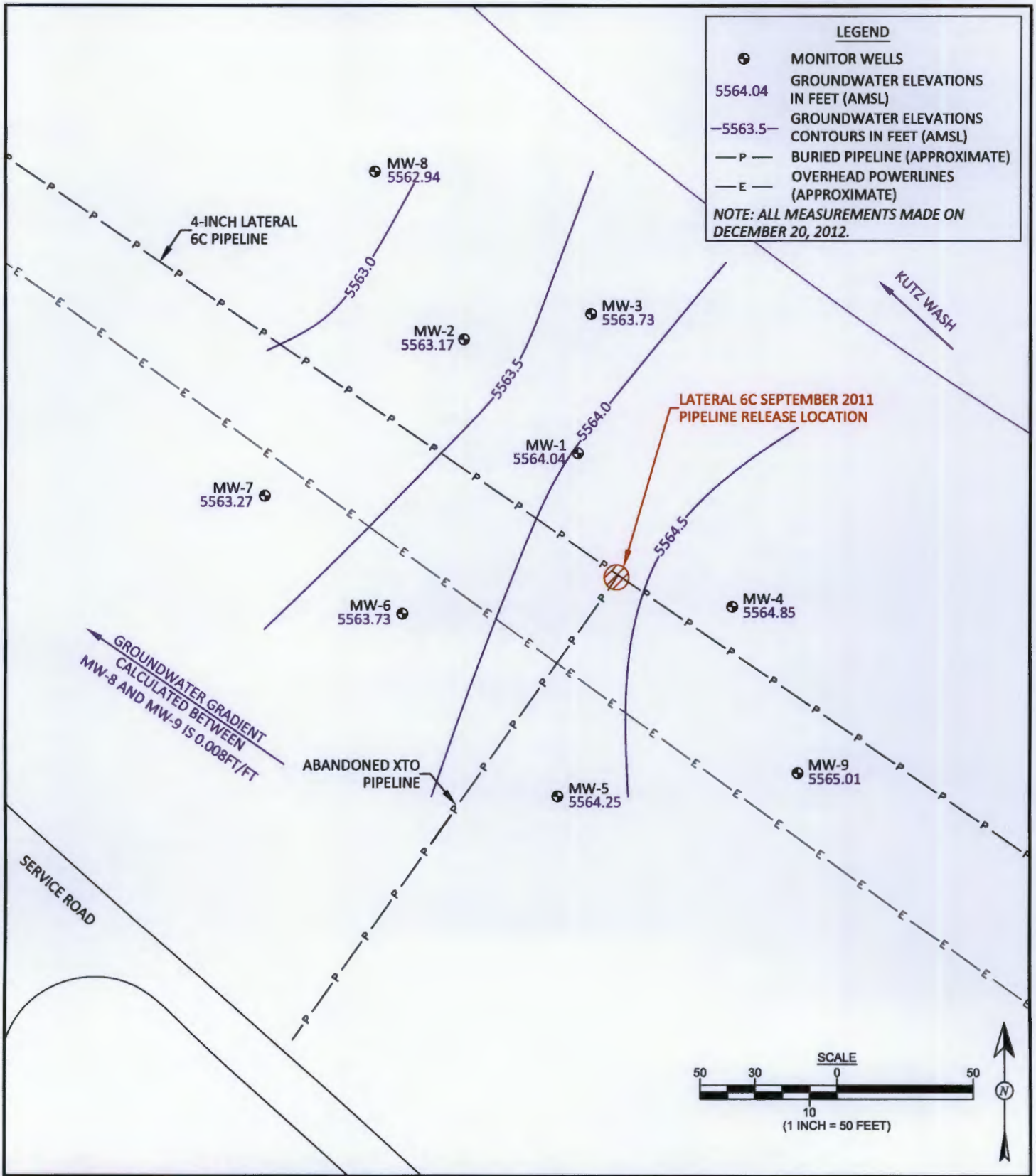


Animas Environmental Services, LLC

DRAWN BY: C. Lameman	**DATE DRAWN:** September 18, 2012
REVISIONS BY: C. Lameman	**DATE REVISED:** February 6, 2013
CHECKED BY: T. Ross	**DATE CHECKED:** February 12, 2013
APPROVED BY: E. McNally	**DATE APPROVED:** February 12, 2013

FIGURE 2

AERIAL SITE MAP
ENTERPRISE FIELD SERVICES, LLC
LATERAL 6C SEPTEMBER 2011 PIPELINE RELEASE
SAN JUAN COUNTY, NEW MEXICO
NE¼ SW¼, SECTION 26, T28N, R11W
N36.63202, W107.97400



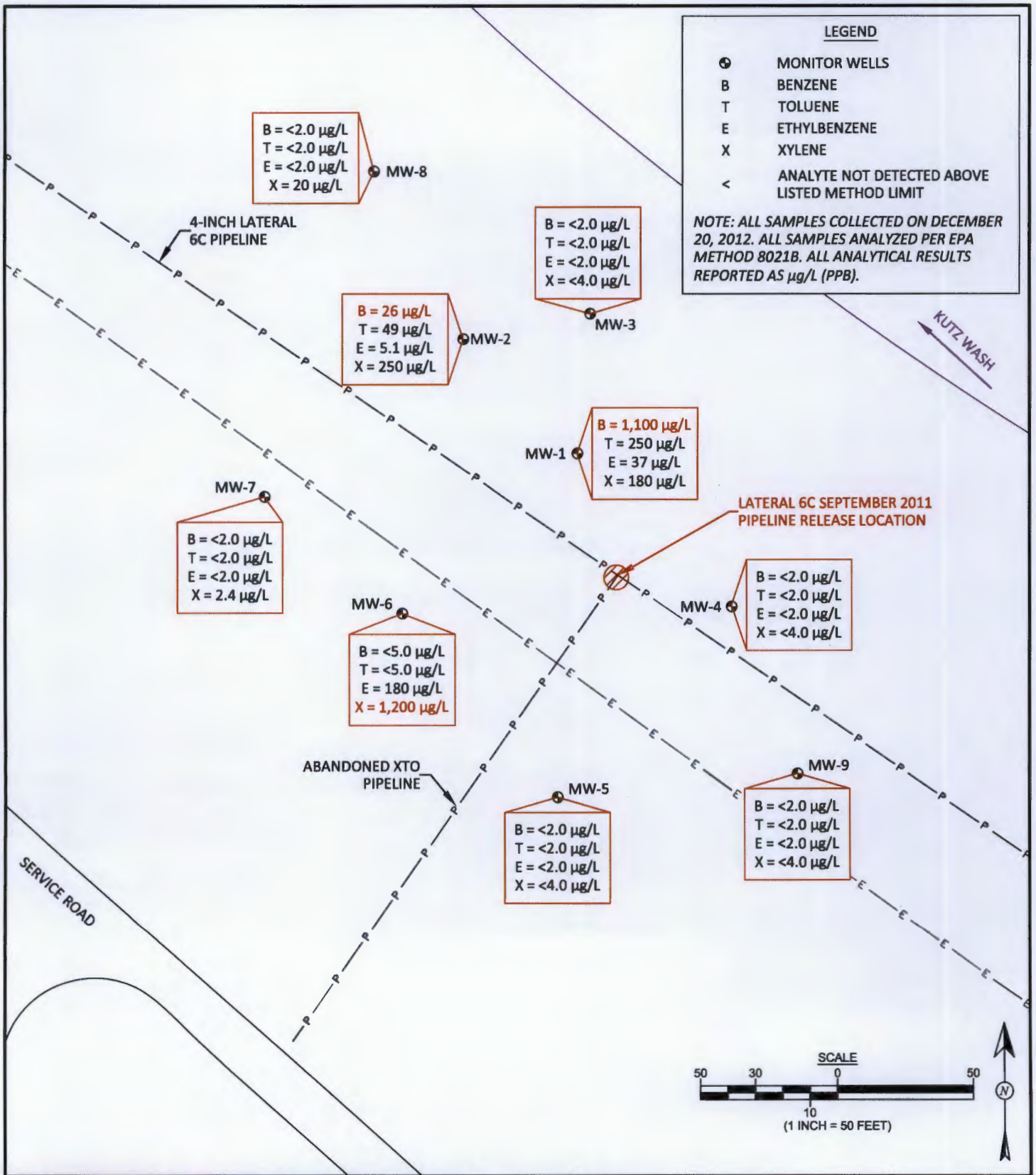
Animas Environmental Services, LLC

DRAWN BY: C. Lameman	DATE DRAWN: September 18, 2012
REVISIONS BY: C. Lameman	DATE REVISED: February 6, 2013
CHECKED BY: T. Ross	DATE CHECKED: February 12, 2013
APPROVED BY: E. McNally	DATE APPROVED: February 12, 2013

FIGURE 3

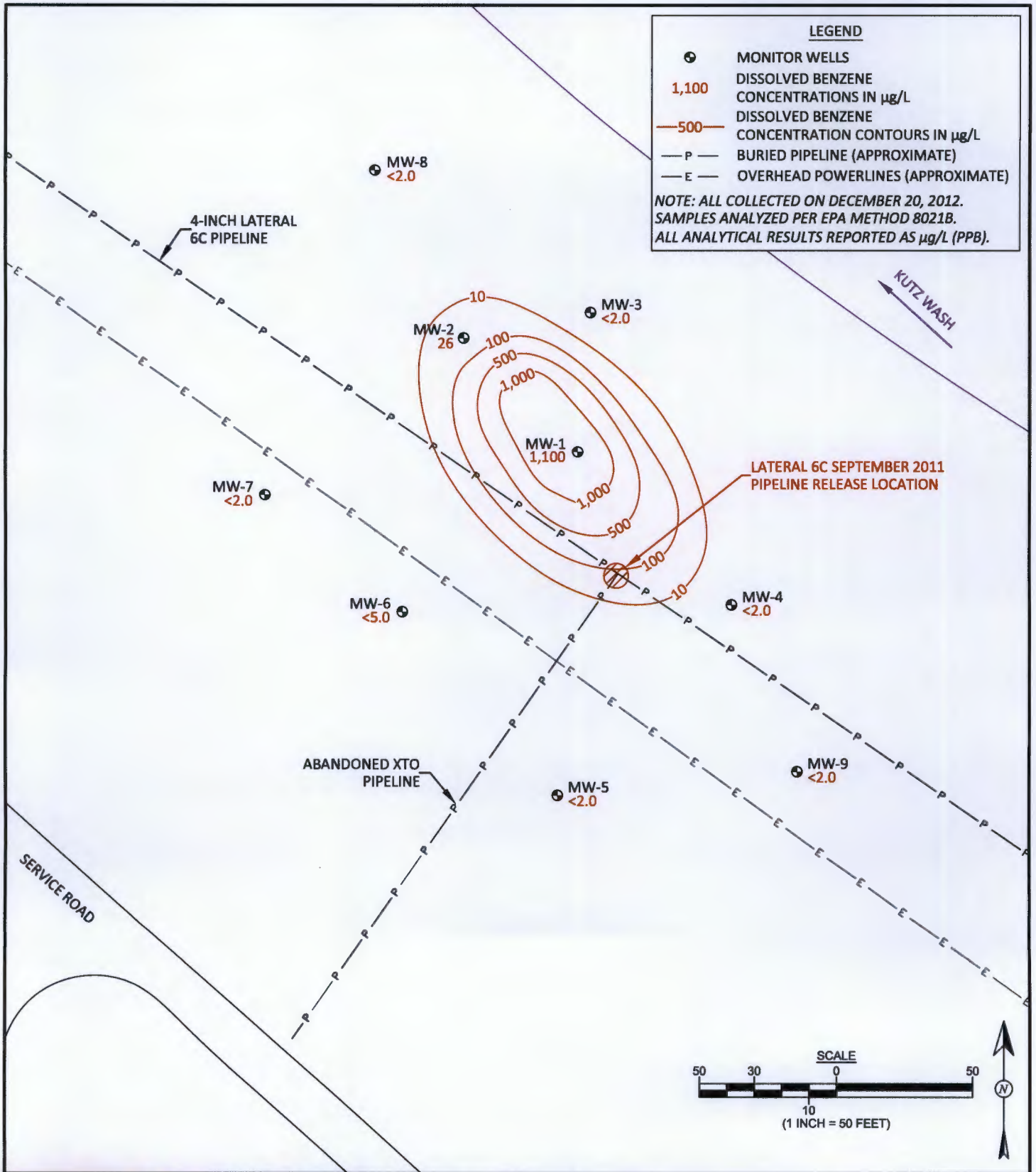
GROUNDWATER ELEVATION CONTOURS DECEMBER 2012

ENTERPRISE FIELD SERVICES, LLC
LATERAL 6C SEPTEMBER 2011 PIPELINE RELEASE
SAN JUAN COUNTY, NEW MEXICO
NE¼ SW¼, SECTION 26, T28N, R11W
N36.63202, W107.97400



DRAWN BY: C. Lameman	**DATE DRAWN:** September 18, 2012	**FIGURE 4**
REVISIONS BY: C. Lameman	**DATE REVISED:** February 6, 2013	**GROUNDWATER CONTAMINANT CONCENTRATIONS, DECEMBER 2012**
CHECKED BY: T. Ross	**DATE CHECKED:** February 12, 2013	ENTERPRISE FIELD SERVICES, LLC
APPROVED BY: E. McNally	**DATE APPROVED:** February 12, 2013	LATERAL 6C SEPTEMBER 2011 PIPELINE RELEASE SAN JUAN COUNTY, NEW MEXICO NE¼ SW¼, SECTION 26, T28N, R11W N36.63202, W107.97400

AES
Animas Environmental Services, LLC

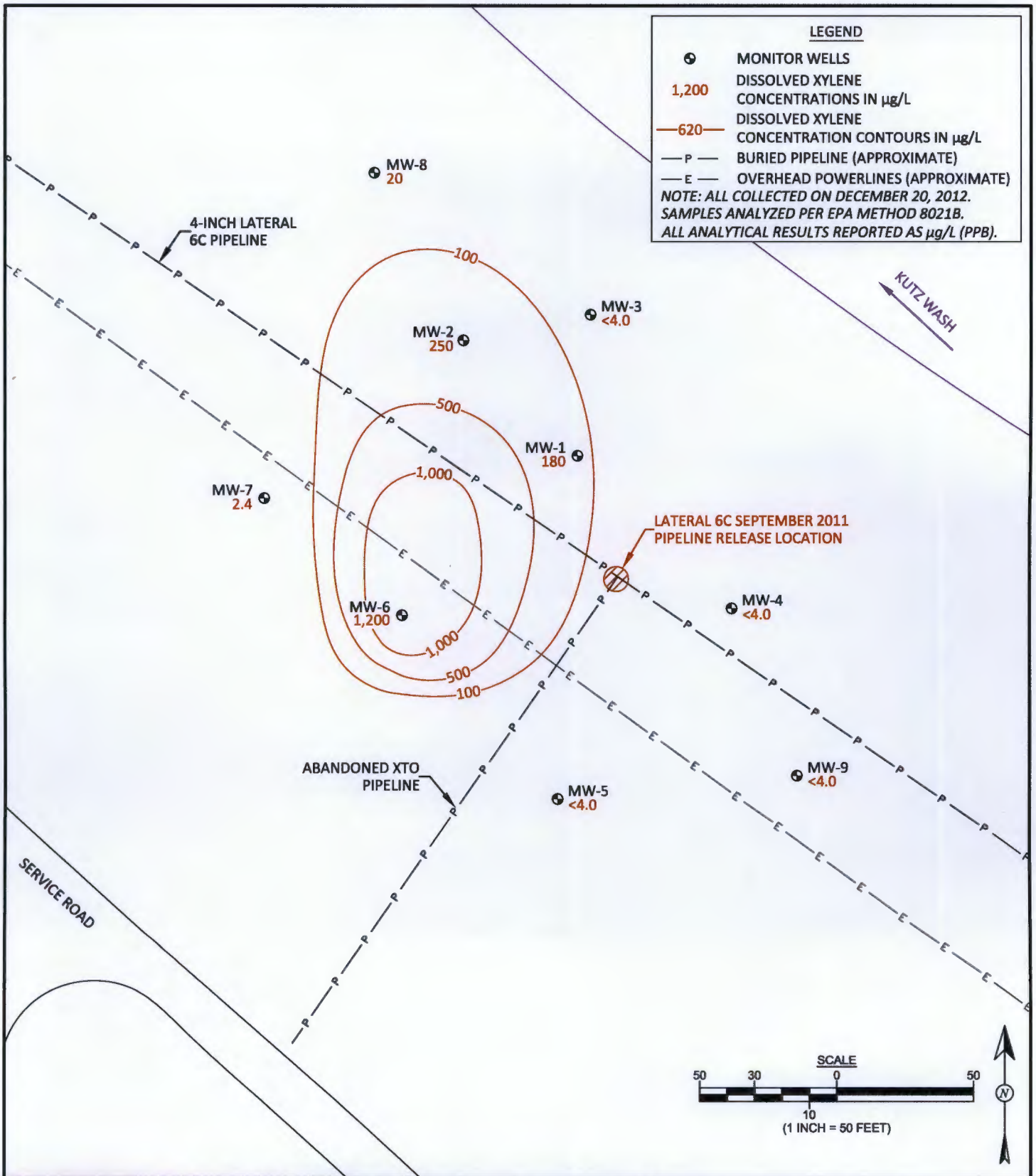


Animas Environmental Services, LLC

DRAWN BY: C. Lameman	DATE DRAWN: September 18, 2012
REVISIONS BY: C. Lameman	DATE REVISED: February 6, 2013
CHECKED BY: T. Ross	DATE CHECKED: February 12, 2013
APPROVED BY: E. McNally	DATE APPROVED: February 12, 2013

FIGURE 5

DISSOLVED BENZENE CONCENTRATION CONTOURS, DECEMBER 2012
ENTERPRISE FIELD SERVICES, LLC
LATERAL 6C SEPTEMBER 2011 PIPELINE RELEASE
SAN JUAN COUNTY, NEW MEXICO
NE¼ SW¼, SECTION 26, T28N, R11W
N36.63202, W107.97400



Animas Environmental Services, LLC

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REVISIONS BY: C. Lameman	**DATE REVISED:** February 6, 2013
CHECKED BY: T. Ross	**DATE CHECKED:** February 12, 2013
APPROVED BY: E. McNally	**DATE APPROVED:** February 12, 2013

FIGURE 6

DISSOLVED XYLENE CONCENTRATION CONTOURS, DECEMBER 2012
ENTERPRISE FIELD SERVICES, LLC
LATERAL 6C SEPTEMBER 2011 PIPELINE RELEASE
SAN JUAN COUNTY, NEW MEXICO
NE¼ SW¼, SECTION 26, T28N, R11W
N36.63202, W107.97400

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 6C
Tech: C. Lameman / Z. Trujillo

Project No.: AES 110904
Date: 12-20-12
Time: 1030
Form:

Well I.D.	Depth to NAPL	Depth to Water (ft.)	NAPL Thickness (ft.)	Notes / Observations
MW-1	-	15.69	-	
MW-2	-	16.22	-	
MW-3	-	15.79	-	
MW-4	-	15.51	-	
MW-5	-	19.28	-	
MW-6	-	18.49	-	
MW-7	-	18.97	-	
MW-8	-	14.87	-	
MW-9	-	17.47	-	

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 6C
Sampling Technician: C.Lanemaan/Z.Trujillo
Purge / No Purge: Purge
Well Diameter (in): 2
Initial D.T.W. (ft): 16.66 **Time:** 1322 *(taken at initial gauging of all wells)*
Confirm D.T.W. (ft): 16.69 **Time:** 1324 *(taken prior to purging well)*
Final D.T.W. (ft): **Time:** *(taken after sample collection)*
If NAPL Present: D.T.P.:_____ D.T.W.:_____ Thickness:_____ Time:_____

Project No.: AES 110904
Date: 12-20-12
Arrival Time: 1313
Air Temp:
T.O.C. Elev. (ft): 5579.73
Total Well Depth (ft): 27.6

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
1325	14.61	4.667	1.18	7.86	-204.2	0.25	Dk. Gray
1327	16.19	4.698	1.14	7.39	-292.5	1	Gray / Sl. Hydrocarbon Odor
1328	16.74	4.570	1.35	7.34	-302.3	2	"
1330	17.01	4.552	1.16	7.33	-307.8	3	"
1332	16.73	4.561	1.38	7.34	-306.1	4	Dk. Gray / Sl. Hydrocarbon Odor
1335	16.82	4.548	1.43	7.35	-305.7	5	"
1337	16.71	4.567	1.41	7.38	-303.4	6	"
1340							Samples Collected

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

BTEX ( ) - 3-40mL glass HCl

Disposal of Purged Water: 55 Gal Drum
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: Slight Hydrocarbon Odor.

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 6C
Sampling Technician: C. Lawerence / Z. Trujillo
Purge / No Purge: Purge
Well Diameter (in): 2
Initial D.T.W. (ft): 16.21 **Time:** 1343 *(taken at initial gauging of all wells)*
Confirm D.T.W. (ft): 16.22 **Time:** 1345 *(taken prior to purging well)*
Final D.T.W. (ft): **Time:** *(taken after sample collection)*
If NAPL Present: **D.T.P.:** **D.T.W.:** **Thickness:** **Time:**

Project No.: AES 110904
Date: 12-20-12
Arrival Time: 1342
Air Temp:
T.O.C. Elev. (ft): 5579.39
Total Well Depth (ft): 26.3

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
1347	14.50	3.171	2.70	7.75	-227.1	0.25	Clear
1350	15.21	3.437	2.76	7.58	-297.8	1	Dk. Gray
1353	15.94	3.438	1.51	7.57	-301.6	2	Gray
1355	15.82	3.452	1.44	7.57	-305.3	3	"
1357	15.72	3.452	1.22	7.57	-304.6	4	"
1400	15.42	3.511	1.45	7.61	-302.6	5	
1405							Samples Collected

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

BTEX ( ) - 3-40mL glass HCl

Disposal of Purged Water: 55 Gal Drum
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: Slight Hydrocarbon Odor.

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 6C
Sampling Technician: C. Lameman/Z. Trujillo
Purge / No Purge: Purge
Well Diameter (in): 2
Initial D.T.W. (ft): 15.78 **Time:** 1146 *(taken at initial gauging of all wells)*
Confirm D.T.W. (ft): 15.79 **Time:** 1149 *(taken prior to purging well)*
Final D.T.W. (ft): **Time:** *(taken after sample collection)*
If NAPL Present: D.T.P.: **D.T.W.:** **Thickness:** **Time:**

Project No.: AES 110904
Date: 12-20-12
Arrival Time: 1144
Air Temp:
T.O.C. Elev. (ft): 5579.52
Total Well Depth (ft): 25.88

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
1149	13.89	4.370	1.70	7.26	40.3	0.25	Clear
1151	13.93	4.808	1.51	7.18	40.0	1	Sediment/ Tan/Gray
1154	14.24	4.903	1.80	7.18	47.4	2	"
1156	14.13	4.835	2.24	7.16	55.2	3	"
1158	14.04	4.484	2.26	7.14	47.8	4	"
1201	13.84	4.496	2.30	7.13	46.3	5	"
1206	—	—	—	—	—	—	Samples Collected

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

BTEX ( ) - 3-40 mL glass HCl

Disposal of Purged Water: 55-gal. Drum
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:

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 6C
Sampling Technician: C. Lameman / Z. Trujillo
Purge / No Purge: Purge
Well Diameter (in): 2
Initial D.T.W. (ft): 15.48 **Time:** 1127 *(taken at initial gauging of all wells)*
Confirm D.T.W. (ft): 15.51 **Time:** 1130 *(taken prior to purging well)*
Final D.T.W. (ft): **Time:** *(taken after sample collection)*
If NAPL Present: **D.T.P.:** **D.T.W.:** **Thickness:** **Time:**

Project No.: AES 110904
Date: 12-26-12
Arrival Time: 1124
Air Temp:
T.O.C. Elev. (ft): 5580.32
Total Well Depth (ft): 24.39

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
1129	14.22	3.755	1.04	7.27	33.3	0.25	Clear
1131	14.94	4.076	1.19	7.18	30.3	1.25	Sediment / Gray
1133	14.93	4.129	1.41	7.12	31.3	2.	"
1135	14.96	4.147	1.71	7.09	31.5	3.	Sediment / Light gray
1137	14.94	4.106	1.51	7.06	25.9	4.	"
1142	—					—	Samples Collected

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

BTEX ( ) - 3 - 40mL glass HCl

Disposal of Purged Water: 55 gal Drum
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:

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 6C
Sampling Technician: C. Lameman | Z. Trujillo
Purge / No Purge: Purge
Well Diameter (in): 2

Project No.: AES 110904
Date: 12-20-12
Arrival Time: 1030
Air Temp:
T.O.C. Elev. (ft): 5583.53
Total Well Depth (ft): 25.98

Initial D.T.W. (ft): 19.27 **Time:** 1040 *(taken at initial gauging of all wells)*
Confirm D.T.W. (ft): 19.28 **Time:** 1044 *(taken prior to purging well)*
Final D.T.W. (ft): **Time:** *(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
1043	13.19	3.294	2.16	7.12	67.4	0.25	Clear
1047	13.64	3.427	2.49	7.07	68.6	1	Sediment/Light Brown
1049	13.76	3.466	3.25	7.03	71.6	2	"
1051	13.74	3.438	2.65	7.00	57.3	3	"
1055							Samples Collected

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

BTEX ( ) - 3-40mL glass HCl

Disposal of Purged Water: DRUM
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: Samples were slightly fizzy

revised: 08/10/09

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 6C
Sampling Technician: C. Lameman / Z. Trujillo
Purge / No Purge: Purge
Well Diameter (in): 2
Initial D.T.W. (ft): 18.48 **Time:** 1233 *(taken at initial gauging of all wells)*
Confirm D.T.W. (ft): 18.49 **Time:** 1235 *(taken prior to purging well)*
Final D.T.W. (ft): **Time:** *(taken after sample collection)*
If NAPL Present: **D.T.P.:** **D.T.W.:** **Thickness:** **Time:**

Project No.: AES 110904
Date: 12-20-12
Arrival Time: 1230
Air Temp:
T.O.C. Elev. (ft): 5582.22
Total Well Depth (ft): 25.37

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
1236	12.85	3.511	1.43	7.51	-282.1	0.25	Cloudy / Lt. Gray
1238	14.65	3.917	1.06	7.50	-351.4	1	Cloudy / Gray
1240	14.32	3.918	0.96	7.54	-314.8	2	Cloudy / Gray / Strong Hydrocarbon odor / Sheen Sl.
1242	14.08	3.932	1.09	7.46	-312.0	3	Cloudy / Lt. Gray / Sl. Hydrocarbon odor no sheen
1246							Sample Collected

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

BTEX( ) - 3-40mL glass HCl

Disposal of Purged Water: 55. Gal. Drum
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: Strong Hydrocarbon Odor / Slight Sheen on water on gallon 2 purge. Slight Hydrocarbon odor / no sheen on gallon 3 purge.

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 6C
Sampling Technician: C.Lamoman / Z. Trujillo
Purge / No Purge: Purge
Well Diameter (in): 2
Initial D.T.W. (ft): 18.96 **Time:** 1211 *(taken at initial gauging of all wells)*
Confirm D.T.W. (ft): 18.97 **Time:** 1214 *(taken prior to purging well)*
Final D.T.W. (ft): **Time:** *(taken after sample collection)*
If NAPL Present: D.T.P.: **D.T.W.:** **Thickness:** **Time:**

Project No.: AES 110904
Date: 12-26-12
Arrival Time: 1209
Air Temp:
T.O.C. Elev. (ft): 5582.24
Total Well Depth (ft): 26.33

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
1215	13.31	3.777	1.18	7.37	-249.8	0.25	Milky
1217	13.53	3.687	1.09	7.49	-249.6	1	Light Gray
1219	14.63	3.657	1.26	7.48	-250.2	2	Lt. Gray / Organic odor.
1222	14.01	3.624	1.06	7.54	-225.3	3	Cloudy / Organic odor
1224	13.86	3.660	1.16	7.53	-252.2	4	"
1227							Samples Collected

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

BTEX ( ) - 3-40mL glass HCl

Disposal of Purged Water: 55. Gal. Drum
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: Organic Odor

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 6C
Sampling Technician: C.Lawerence/L.Trujillo
Purge / No Purge: Purge
Well Diameter (in): 2

Project No.: AES 110904
Date: 12-20-12
Arrival Time: 1251
Air Temp:
T.O.C. Elev. (ft): 5577.81
Total Well Depth (ft): 25.26

Initial D.T.W. (ft): 14.86 **Time:** 1252 *(taken at initial gauging of all wells)*
Confirm D.T.W. (ft): 14.87 **Time:** 1254 *(taken prior to purging well)*
Final D.T.W. (ft): **Time:** *(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
1255	12.49	3.215	1.22	8.14	-202.6	0.25	Sl. Cloudy / White
1257	13.41	3.277	1.14	7.93	-214.0	1	[redacted] / Gray
1259	15.45	3.275	1.09	7.79	-225.8	2	Gray
1301	14.97	3.319	1.20	7.70	-236.5	3	[redacted] Cloudy / Lt. Gray
1303	15.69	3.335	1.40	7.60	-244.5	4	"
1305	15.25	3.339	0.97	7.56	-247.3	5	"
1308							Samples Collected

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

BTEX ( ) - 3-40mL glass HCl

Disposal of Purged Water: 55 Gal. Drum
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: Organic Odor

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 6C
Sampling Technician: C. Laneman / Z. Trujillo
Purge / No Purge: Purge
Well Diameter (in): 2

Project No.: AES 110904
Date: 12-20-12
Arrival Time: 1100
Air Temp:
T.O.C. Elev. (ft): 5582.48
Total Well Depth (ft): 26.26

Initial D.T.W. (ft): 17.46 **Time:** 1105 *(taken at initial gauging of all wells)*
Confirm D.T.W. (ft): 17.47 **Time:** 1108 *(taken prior to purging well)*
Final D.T.W. (ft): **Time:** *(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
1108	12.95	3.479	1.48	7.03	97.4	0.25	Clear
1111	13.52	3.357	1.47	7.00	103.0	1	Milky Sediment Light Brown
1113	13.40	3.348	2.09	7.03	97.2	2	"
1115	13.52	3.377	2.07	7.04	95.3	3	"
1118	13.06	3.369	2.29	7.14	96.8	4	Milky Sediment
1123							Samples Collected

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

BTEX ( ) - 3-40 mL glass HCl

Disposal of Purged Water: 55 gal. Drum
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:

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

December 28, 2012

Tami Ross

Animas Environmental Services
624 East Comanche
Farmington, NM 87401
TEL: (505) 793-2072
FAX

RE: Enterprise Lateral 6C OrderNo.: 1212996

Dear Tami Ross:

Hall Environmental Analysis Laboratory received 10 sample(s) on 12/21/2012 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. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. All samples are reported as received unless otherwise indicated. 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.

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1212996**
Date Reported: **12/28/2012**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Project: Enterprise Lateral 6C
Lab ID: 1212996-001 **Matrix:** AQUEOUS

Client Sample ID: MW-1
Collection Date: 12/20/2012 1:40:00 PM
Received Date: 12/21/2012 9:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	1100	20		µg/L	20	12/27/2012 12:27:53 PM
Toluene	250	20		µg/L	20	12/27/2012 12:27:53 PM
Ethylbenzene	37	20		µg/L	20	12/27/2012 12:27:53 PM
Xylenes, Total	180	40		µg/L	20	12/27/2012 12:27:53 PM
Surr: 4-Bromofluorobenzene	127	69.7-152		%REC	20	12/27/2012 12:27:53 PM

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
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: MW-2
Project: Enterprise Lateral 6C
Collection Date: 12/20/2012 2:05:00 PM
Lab ID: 1212996-002 **Matrix:** AQUEOUS **Received Date:** 12/21/2012 9:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	26	20		µg/L	20	12/27/2012 1:38:33 AM
Toluene	49	20		µg/L	20	12/27/2012 1:38:33 AM
Ethylbenzene	5.1	5.0		µg/L	5	12/27/2012 12:57:57 PM
Xylenes, Total	250	40		µg/L	20	12/27/2012 1:38:33 AM
Surr: 4-Bromofluorobenzene	123	69.7-152		%REC	20	12/27/2012 1:38:33 AM

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
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: MW-3
Project: Enterprise Lateral 6C
Collection Date: 12/20/2012 12:06:00 PM
Lab ID: 1212996-003 **Matrix:** AQUEOUS **Received Date:** 12/21/2012 9:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	2.0		µg/L	2	12/27/2012 2:08:39 AM
Toluene	ND	2.0		µg/L	2	12/27/2012 2:08:39 AM
Ethylbenzene	ND	2.0		µg/L	2	12/27/2012 2:08:39 AM
Xylenes, Total	ND	4.0		µg/L	2	12/27/2012 2:08:39 AM
Surr: 4-Bromofluorobenzene	119	69.7-152		%REC	2	12/27/2012 2:08:39 AM

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
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: MW-4
Project: Enterprise Lateral 6C
Collection Date: 12/20/2012 11:42:00 AM
Lab ID: 1212996-004
Matrix: AQUEOUS
Received Date: 12/21/2012 9:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	2.0	P	µg/L	2	12/27/2012 2:38:42 AM
Toluene	ND	2.0	P	µg/L	2	12/27/2012 2:38:42 AM
Ethylbenzene	ND	2.0	P	µg/L	2	12/27/2012 2:38:42 AM
Xylenes, Total	ND	4.0	P	µg/L	2	12/27/2012 2:38:42 AM
Surr: 4-Bromofluorobenzene	119	69.7-152	P	%REC	2	12/27/2012 2:38:42 AM

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
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: MW-5
Project: Enterprise Lateral 6C
Collection Date: 12/20/2012 11:55:00 AM
Lab ID: 1212996-005
Matrix: AQUEOUS
Received Date: 12/21/2012 9:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	2.0		µg/L	2	12/27/2012 3:08:44 AM
Toluene	ND	2.0		µg/L	2	12/27/2012 3:08:44 AM
Ethylbenzene	ND	2.0		µg/L	2	12/27/2012 3:08:44 AM
Xylenes, Total	ND	4.0		µg/L	2	12/27/2012 3:08:44 AM
Surr: 4-Bromofluorobenzene	119	69.7-152		%REC	2	12/27/2012 3:08:44 AM

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
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: MW-6
Project: Enterprise Lateral 6C
Collection Date: 12/20/2012 12:46:00 PM
Lab ID: 1212996-006 **Matrix:** AQUEOUS **Received Date:** 12/21/2012 9:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	5.0		µg/L	5	12/27/2012 3:38:38 AM
Toluene	ND	5.0		µg/L	5	12/27/2012 3:38:38 AM
Ethylbenzene	180	5.0		µg/L	5	12/27/2012 3:38:38 AM
Xylenes, Total	1200	100		µg/L	50	12/27/2012 1:29:33 PM
Surr: 4-Bromofluorobenzene	136	69.7-152		%REC	5	12/27/2012 3:38:38 AM

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
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: MW-7
Project: Enterprise Lateral 6C
Collection Date: 12/20/2012 12:27:00 PM
Lab ID: 1212996-007
Matrix: AQUEOUS
Received Date: 12/21/2012 9:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	1.0		µg/L	1	12/27/2012 4:38:58 AM
Toluene	ND	1.0		µg/L	1	12/27/2012 4:38:58 AM
Ethylbenzene	ND	1.0		µg/L	1	12/27/2012 4:38:58 AM
Xylenes, Total	2.4	2.0		µg/L	1	12/27/2012 4:38:58 AM
Surr: 4-Bromofluorobenzene	123	69.7-152		%REC	1	12/27/2012 4:38:58 AM

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
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: MW-8
Project: Enterprise Lateral 6C
Collection Date: 12/20/2012 1:08:00 PM
Lab ID: 1212996-008 **Matrix:** AQUEOUS **Received Date:** 12/21/2012 9:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	2.0		µg/L	2	12/27/2012 1:59:43 PM
Toluene	ND	2.0		µg/L	2	12/27/2012 1:59:43 PM
Ethylbenzene	ND	2.0		µg/L	2	12/27/2012 1:59:43 PM
Xylenes, Total	20	4.0		µg/L	2	12/27/2012 1:59:43 PM
Surr: 4-Bromofluorobenzene	128	69.7-152		%REC	2	12/27/2012 1:59:43 PM

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
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: MW-9
Project: Enterprise Lateral 6C
Collection Date: 12/20/2012 11:23:00 AM
Lab ID: 1212996-009
Matrix: AQUEOUS
Received Date: 12/21/2012 9:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	2.0		µg/L	2	12/27/2012 2:29:54 PM
Toluene	ND	2.0		µg/L	2	12/27/2012 2:29:54 PM
Ethylbenzene	ND	2.0		µg/L	2	12/27/2012 2:29:54 PM
Xylenes, Total	ND	4.0		µg/L	2	12/27/2012 2:29:54 PM
Surr: 4-Bromofluorobenzene	122	69.7-152		%REC	2	12/27/2012 2:29:54 PM

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
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: Trip Blank
Project: Enterprise Lateral 6C
Collection Date:
Lab ID: 1212996-010
Matrix: TRIP BLANK
Received Date: 12/21/2012 9:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	1.0		µg/L	1	12/27/2012 3:00:06 PM
Toluene	ND	1.0		µg/L	1	12/27/2012 3:00:06 PM
Ethylbenzene	ND	1.0		µg/L	1	12/27/2012 3:00:06 PM
Xylenes, Total	ND	2.0		µg/L	1	12/27/2012 3:00:06 PM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	12/27/2012 3:00:06 PM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	12/27/2012 3:00:06 PM
Surr: 4-Bromofluorobenzene	124	69.7-152		%REC	1	12/27/2012 3:00:06 PM

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
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1212996**

28-Dec-12

Client: Animas Environmental Services

Project: Enterprise Lateral 6C

Sample ID **5ML RB**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBW**	Batch ID: **R7720**	RunNo: **7720**
Prep Date:	Analysis Date: **12/26/2012**	SeqNo: **224422** 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	25		20.00		123	69.7	152			

Sample ID **100NG BTEX LCS**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSW**	Batch ID: **R7720**	RunNo: **7720**
Prep Date:	Analysis Date: **12/26/2012**	SeqNo: **224423** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	107	80	120			
Toluene	22	1.0	20.00	0	108	80	120			
Ethylbenzene	22	1.0	20.00	0	109	80	120			
Xylenes, Total	66	2.0	60.00	0	110	80	120			
Surr: 4-Bromofluorobenzene	26		20.00		131	69.7	152			

Sample ID **5ML RB**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBW**	Batch ID: **R7750**	RunNo: **7750**
Prep Date:	Analysis Date: **12/27/2012**	SeqNo: **225219** 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								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
Surr: 4-Bromofluorobenzene	25		20.00		123	69.7	152			

Sample ID **100NG BTEX LCS**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSW**	Batch ID: **R7750**	RunNo: **7750**
Prep Date:	Analysis Date: **12/27/2012**	SeqNo: **225220** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	104	80	120			
Toluene	21	1.0	20.00	0	106	80	120			
Ethylbenzene	22	1.0	20.00	0	108	80	120			
Xylenes, Total	67	2.0	60.00	0	111	80	120			
1,2,4-Trimethylbenzene	24	1.0	20.00	0	118	80	120			
1,3,5-Trimethylbenzene	24	1.0	20.00	0	121	80	120			S
Surr: 4-Bromofluorobenzene	26		20.00		131	69.7	152			

Qualifiers:

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