3R-438

Groundwater Investigation Report

Date: 10/31/2012

91

Animas Environmental Services, LLC
www.animasenvironmental.com
624 E. Comanche
Farmington, NM 87401
505-564-2281
Durango, Colorado
970-403-3274

Prepared for:
Jonathan Kelly
New Mexico Oil Conservation Division
1000 Rio Brazos Road
Aztec, New Mexico 87410

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

Groundwater Investigation Report
Enterprise Products Company
Lateral 6C September 2011
Pipeline Release
NE¼ SW¼ Section 26, T28N, R11W
San Juan County, New Mexico

October 31, 2012

Prepared on behalf of:
Enterprise Products Company
614 Reilly Avenue
Farmington, NM 87401

Prepared by:
Animas Environmental Services, LLC
624 E. Comanche
Farmington, New Mexico 87401

Contents

Figures

Tables

Appendices

Appendix A.	Soil Boring Logs
Appendix B.	Disposal Documents and Monitor Well Development Form
Appendix C.	Soil Laboratory Analytical Reports (Hall 1208975 and 1208B01)
Appendix D.	Groundwater Sampling Form, Laboratory Analytical Reports (Hall 1209283)

1.0 Introduction

Animas Environmental Services, LLC (AES), on behalf of Enterprise Products Company, Inc. (Enterprise), has prepared this Groundwater Investigation Report for the Lateral 6Cpipeline release that was discovered in September 2011. This investigation was conducted in accordance with the work plan prepared by AES and entitled *Groundwater Investigation Work Plan for the Lateral 6C September 2011 Pipeline Release,* dated August 3, 2012, and submitted to Enterprise and New Mexico Oil Conservation Division (NMOCD). Note that details of the initial release assessment and investigation were submitted in the AES *Soil and Groundwater Sampling Results Letter Report* dated October 28, 2011, and *Site Investigation Report* dated February 20, 2012.

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. 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. Based on measurements from the site investigation, depth to groundwater is approximately 14 to 16 feet below ground surface (bgs). 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 ranking score was obtained in part by reviewing available records of nearby oil/gas wells using the NMOCD online database; however, no records were found to aid in the assessment. Additionally, the New Mexico Office of the State Engineer (NMOSE) database was reviewed for the presence of nearby water wells, and no registered water wells were reported to be located within 1,000 feet of the location. Google Earth and the New Mexico Tech Petroleum Recovery Research Center online mapping tool (http://ford.nmt.edu/react/pitrules_index.html) were accessed to aid in the identification of downgradient surface water.

Once on site, AES personnel further assessed the ranking using topographical interpretation, Global Positioning System (GPS) elevation readings, and visual reconnaissance. AES personnel confirmed that depth to groundwater at the site was less than 50 feet below ground surface (bgs). Kutz Wash is located approximately 165 feet northeast of the release location. Based on this information, the release location was assessed a ranking score of 30.

1.2 Initial Release Assessment and Investigation

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.

1.2.1 Release Assessment, October 2011

On October 11, 2011, AES completed four test hole excavations (TP-1 through TP-4) 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. Six soil samples were collected from TP-1 through TP-4. One sample was collected at 10 feet bgs from both TP-1 and TP-3. Two samples were collected from TP-2 and TP-4 at 12 feet and 15 feet bgs.

Soil concentrations for total benzene, toluene, ethylbenzene, and xylene (BTEX) and total petroleum hydrocarbons (TPH) for gasoline range organics (GRO) in sample TP-1 @ 10 feet exceeded the applicable New Mexico Oil Conservation Division (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 @ 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. 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. Laboratory results were summarized in Table 1 of the AES letter report entitled *Soil and Groundwater Sampling Results* and dated October 28, 2011.

Groundwater samples were collected for laboratory analysis from TP-2 and TP-4. During sample collection, a sheen of condensate 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 Table 2 of 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.

1.2.2 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 in accordance with U.S. Environmental Protection Agency (USEPA) Environmental Response Team's Standard Operating Procedures (SOPs) and applicable American Society for Testing and Methods (ASTM) standards.

A total of eight soil borings (SB-1 through SB-8) 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 installing up to five permanent groundwater monitor wells and collecting additional monitoring and sampling data from which a corrective action plan could be developed. A work plan for additional site investigation was submitted to NMOCD on August 3, 2012.

2.0 Groundwater Investigation – August and 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 monitor wells (MW-1 through MW-9). Work was completed in accordance with NMOCD guidelines, AES SOPs, USEPA Environmental Response Team's SOPs, and applicable ASTM standards.

2.1 Pre-Field Coordination and Job Safety Analysis

Prior to field work, AES utilized the New Mexico One-Call system to identify and mark all underground utilities at the site and submitted required 48 hour notifications to representatives of Enterprise, BLM, and NMOCD, in writing and by telephone. Additionally, AES prepared and implemented a comprehensive site-specific Job Safety Analysis (JSA) addressing the site investigation activities associated with monitoring well installation and soil and groundwater sampling. All employees were required to read and sign the JSA to acknowledge their understanding of the information contained within the JSA. The JSA was implemented and enforced on site by the assigned Site Safety and Health Officer.

2.2 Installation of Soil Borings

On August 20 through 23, 2012, AES installed nine soil borings within and adjacent to the September 2011 release area in order to delineate the extent of the groundwater hydrocarbon contamination. The soil borings were each advanced to a total depth of 25 feet bgs and completed as monitor wells (MW-1 through MW-9). The locations of monitor wells are presented on Figure 3.

2.2.1 Drilling Methods

Soil borings were advanced to a total depth of 25 feet bgs with a CME-75 truck mounted drill rig equipped with hollow stem augers and 4-inch outer diameter (OD) core barrel. The drill rig was operated by Kyvek Energy Services, Inc. of Aztec, New Mexico.

2.2.2 Soil Sample Collection

Soil samples were collected from continuously driven core-barrel samplers during advancement of the soil borings. At 5-foot intervals, a soil sample was collected from the core barrel sampler and transferred to appropriately labeled sample containers. The sample was split for field screening of VOCs with a PID-OVM and laboratory analysis. Two soil samples were collected from each soil boring for laboratory analysis.

For each soil boring, a Soil Boring Log was completed. These logs recorded sample identification, depth collected, and method of collection, as well as observations of soil moisture, color, grain size, contaminant presence, and overall stratigraphy. Soil Boring Logs are included in Appendix A.

2.2.3 Soil Field Screening

Samples were collected at 5-foot intervals from each soil sampling location and field screened for VOCs utilizing a PID-OVM, which was calibrated to 100 ppm with isobutylene gas. Field screening followed AES SOPs and results were recorded onto Soil Borings Logs.

2.2.4 Soil Lithology

The local site lithology consists of alluvium and fluvial material from the adjacent Kutz Wash overlaying sandstone bedrock. Soil observed during 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.

2.3 Groundwater Monitor Well Installation

2.3.1 Groundwater Monitor Well Installation and Construction

Groundwater monitor wells were installed within all of the nine soil borings to a total depth of 23 to 25 feet bgs. Monitor well construction consisted of 2.375-inch outside diameter (OD) [2.067-inch inside diameter (ID)] Schedule 40 PVC screen and 2.0-inch blank riser casing. The screened interval extended 15 feet across the water table and was constructed of 2.375-inch OD PVC well screen (0.010-inch slot). Colorado silica sand (filter pack) was placed from total depth to approximately 2 feet above the top of the well screen. A 2 foot bentonite seal was placed above the sand pack, and concrete grout with approximately 5 percent bentonite was poured from the top of the bentonite plug up to within 0.5 feet of ground surface. An above grade locking steel protective casing, enclosed with a shroud of concrete, was installed on the well to prevent unauthorized access and damage. Monitor well schematics are presented on the Soil Boring Logs in Appendix A.

2.3.2 Groundwater Monitor Well Development

Following monitor well installation and completion, each well was developed in order to remove fine-grained sediments and to increase hydraulic conductivity through the well screen. Each well was developed by a combination of surging and bailing techniques. Groundwater purged from the wells was contained in labeled and sealed 55-gallon drums and transported to Envirotech Landfarm for proper disposal. Monitor wells were developed in accordance with AES SOPs. Disposal manifests and a groundwater monitor well development form are presented in Appendix B.

2.3.3 Professional Survey

The location and elevation of the top of each well casing was surveyed to the nearest 0.01 foot with reference to mean sea level by Enterprise personnel in order to accurately determine the local groundwater depth and flow direction beneath the site. Each well was tied to an existing USGS benchmark.

2.4 *Groundwater Monitoring and Sampling*

On September 7, 2012, nine monitor wells (MW-1 through MW-9) were gauged to determine water table elevation and direction of groundwater flow. The wells were purged of a minimum of three well volumes, and a groundwater sample was collected from each well with a new disposable bailer equipped with a low-flow release valve. Purging data, including pH, temperature, conductivity, oxidation-reduction potential, and dissolved oxygen, were measured with a YSI water quality meter and documented on water sample collection forms along with purged water volume and sample depth. All sampling equipment was thoroughly decontaminated between uses. Purged water was contained and labeled in a sealed 55-gallon drum and transported to the Envirotech Landfarm for proper disposal. Disposal documents for the purged water are included in Appendix B.

2.5 *Soil and Groundwater Laboratory Analyses*

All samples were submitted to Hall Environmental Analysis Laboratory (Hall), Albuquerque, New Mexico, for analysis of the following parameters:

- BTEX per USEPA Method 8021.

Additionally, soil samples were analyzed for:

- TPH – GRO/DRO per USEPA Method 8015B.

Once collected, all samples were preserved in laboratory-supplied containers and stored in an insulated cooler containing ice. Samples were shipped by Hall personnel in insulated coolers containing ice at less than 6°C via bus to the laboratory.

2.6 *Soil Field Screening and Laboratory Analytical Results*

During the August 2012 site investigation, field screening readings showed VOC concentrations ranging from 0.3 ppm in MW-9 at 5 feet bgs up to 219 ppm in MW-8 at 5 to 7 feet bgs. Soil laboratory analytical results for benzene, total BTEX and TPH were below laboratory detection limits in each sample. Tabulated field screening and laboratory analytical results are presented in Table 1. Soil laboratory analytical reports are provided in Appendix C.

2.7 *Groundwater Field Measurements and Laboratory Analytical Results*

The site investigation revealed a hydraulic gradient to the northwest at an incline of 0.008 foot/foot. Depth to water was gauged, and water quality measurements were recorded prior to sample collection. Depth to water ranged from 14.96 feet bgs in MW-8 to 19.35 feet bgs in MW-5, and groundwater elevations ranged from 5562.85 feet above mean sea level (amsl) in MW-8 to 5564.93 feet amsl in MW-9.

Temperature readings ranged from 14.89°C in MW-5 to 17.31°C in MW-1. Conductivity readings were between 4.068 mS in MW-8 and 5.706 mS in MW-3, and pH ranged from 7.02 in MW-1 to 7.59 in MW-7. Dissolved oxygen ranged from 1.03 mg/L in MW-2 to 2.24 mg/L in MW-3. Water quality measurements are tabulated in Table 2, groundwater elevation contours are presented on Figure 4, and water sample collection forms are included in Appendix D.

Groundwater laboratory analytical results showed that dissolved phase benzene concentrations were above WQCC standard of 10 µg/L in MW-1 (2,200 µg/L), MW-2 (270 µg/L), MW-4 (18 µg/L), and MW-8 (41 µg/L). Dissolved phase toluene concentrations above the WQCC standard of 750 µg/L were reported in MW-2 (1,100 µg/L), and ethylbenzene concentrations were below the WQCC standard of 750 µg/L in all wells. Dissolved phase xylene concentrations above the WQCC standard of 620 µg/L in three wells, including MW-1 (650 µg/L), MW-2 (1,800 µg/L), and MW-6 (2,200 µg/L). Tabulated groundwater analytical results are presented in Table 3 and on Figure 5. Dissolved phase benzene, toluene, and xylene concentration contours are presented on Figures 6 through 8, respectively. Groundwater laboratory analytical reports are presented in Appendix D.

3.0 Conclusions and Recommendations

AES completed an additional site investigation in August and September 2012. During the investigation, soil field screening of VOCs by OVM showed concentrations above the NMOCD action level of 100 ppm in MW-1 at 10 feet bgs (190 ppm), MW-2 at 5 feet bgs (108 ppm), MW-8 at 5 feet bgs (219 ppm), and MW-8 at 10 feet bgs (144 ppm). However, soil laboratory analytical results showed that petroleum hydrocarbon concentrations were not above NMOCD action levels in any of the soil borings. Site lithology was found to consist of alluvium and fluvial material from the adjacent Kutz Wash overlaying sandstone bedrock, and soils included brown to tan, fine to medium grained, silty to clayey sand, with some gravel at depths greater than 20 feet bgs. Bedrock material was grey, fine grained, firm to moderately hard, wet sandstone.

Hydraulic gradient was calculated to have a magnitude of 0.008 foot/foot in a northwest direction. Laboratory analytical results confirmed 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).

Based on laboratory analytical results from the August and September 2012 investigation, groundwater continues to be impacted above WQCC standards in the vicinity of the September 2011 release. Additionally, the lateral extent of the dissolved phase benzene has not been fully defined in the downgradient direction (near MW-8). Therefore, AES recommends installation of an additional monitor well northwest of MW-8. Additionally, this site may be appropriate for consideration of an application of an oxygen release compound to enhance bioremediation of residual contaminants. Details will be included within the corrective action plan, which will be submitted under separate cover.

4.0 Certification

I, the undersigned, am personally familiar with the information presented in this Site InvestigationReport, prepared on behalf of Enterprise Products Company, Inc. for the Lateral 6C September 2011 pipeline release. I attest that it is true and complete to the best of my knowledge.

Tami C. Ross

Tami C. Ross, CHMM
Project Manager

Elizabeth D McNally

Elizabeth McNally, P.E.
Principal

5.0 References

American Society for Testing and Materials (ASTM) International. *D5730 Guide for Site Characterization for Environmental Purposes with Emphasis on Soil, Rock, the Vadose Zone and Groundwater.*

ASTM International. ASTM D5092 - 04(2010)e1. *Standard Practice for Design and Installation of Groundwater Monitoring Wells,* 2010.

Animas Environmental Services, LLC (AES). Enterprise *Lateral 6C Letter Report, October 28, 2011*

AES. *Enterprise Lateral 6C Site Investigation Report*, February 20, 2012.

AES. *Groundwater Investigation Work Plan for the Lateral 6C September 2011 Pipeline Release,* August 3, 2012.New Mexico Oil Conservation Division. *Guidelines for Remediation of Leaks, Spills, and Releases. August 13, 1993.*

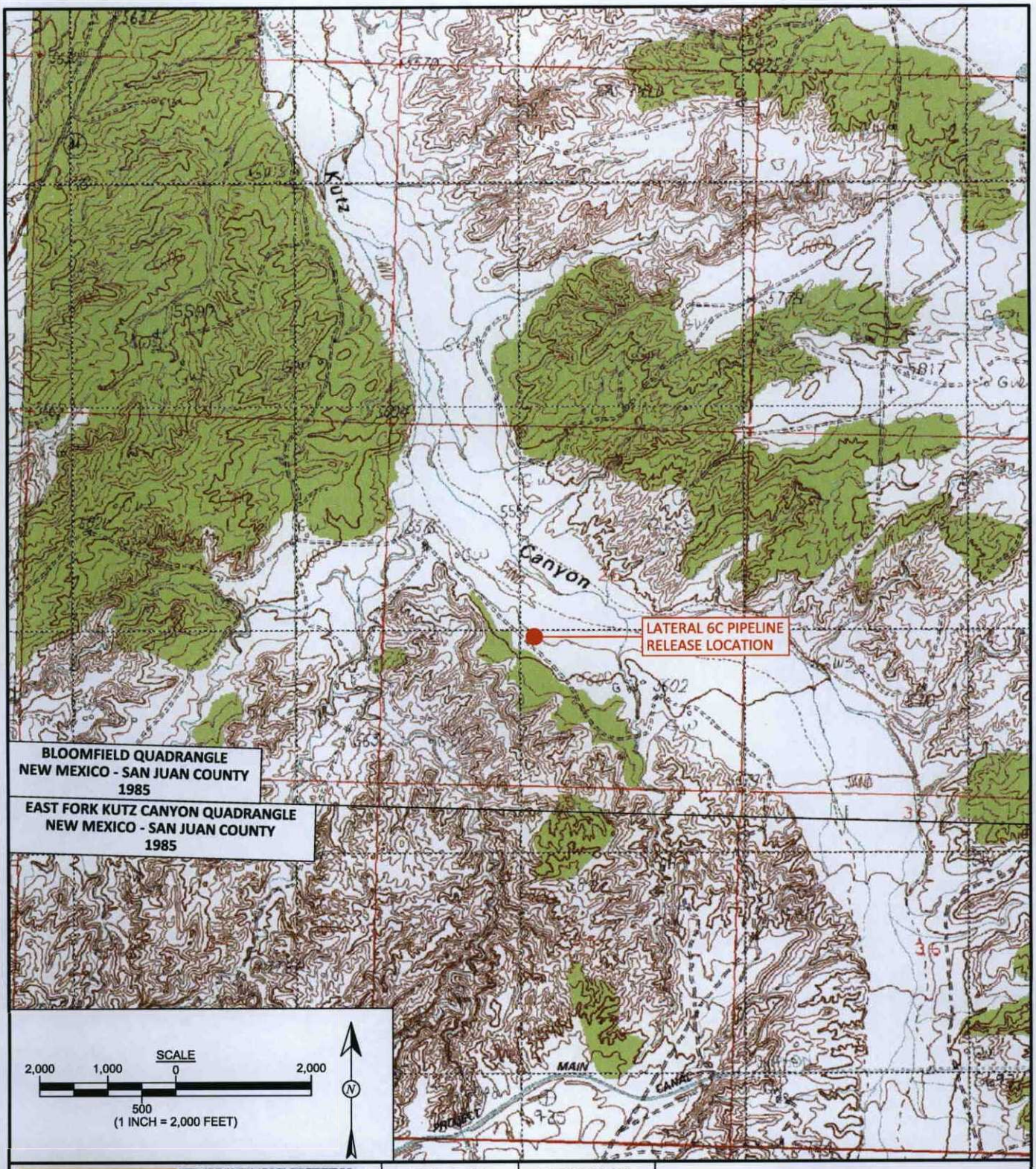
U.S. Department of Interior (USDI) Bureau of Land Management. 2008. *Natural Resource Damage Assessment and Restoration Handbook.* Release 1-1712. May, 2008.

U.S. Environmental Protection Agency (USEPA). 1982. *Methods for Chemical Analysis for Water and Wastes.* Document EPA-600, July, 1982.

USEPA. 1992. SW-846, 3rd Edition, *Test Methods for Evaluating Solid Waste: Physical Chemical Methods*, dated November, 1986, and as amended by Update One, July, 1992.

USEPA. 1991. *Site Characterization for Subsurface Remediation*, EPA 625/4-91-026, November, 1991.

USEPA. 2001. Contract Laboratory Program (CLP) Guidance for Field Samplers. OSWER 9240.0-35, EPA 540-R-00-003. June, 2001.

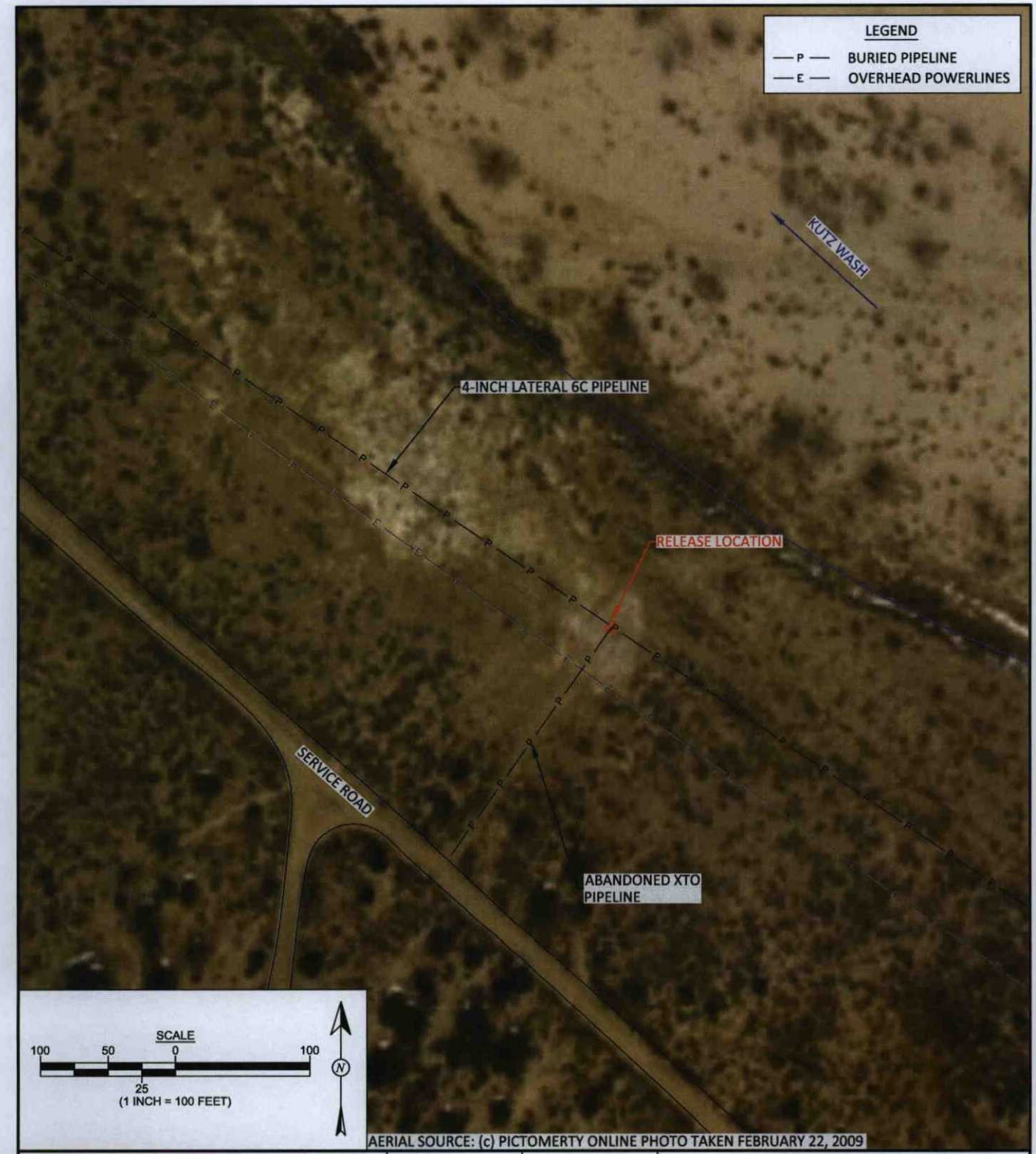


Animas Environmental Services, LLC

DRAWN BY: C. Lameman	**DATE DRAWN:** September 18, 2012
REVISIONS BY: C. Lameman	**DATE REVISED:** October 1, 2012
CHECKED BY: T. Ross	**DATE CHECKED:** October 1, 2012
APPROVED BY: E. McNally	**DATE APPROVED:** October 2, 2012

FIGURE 1

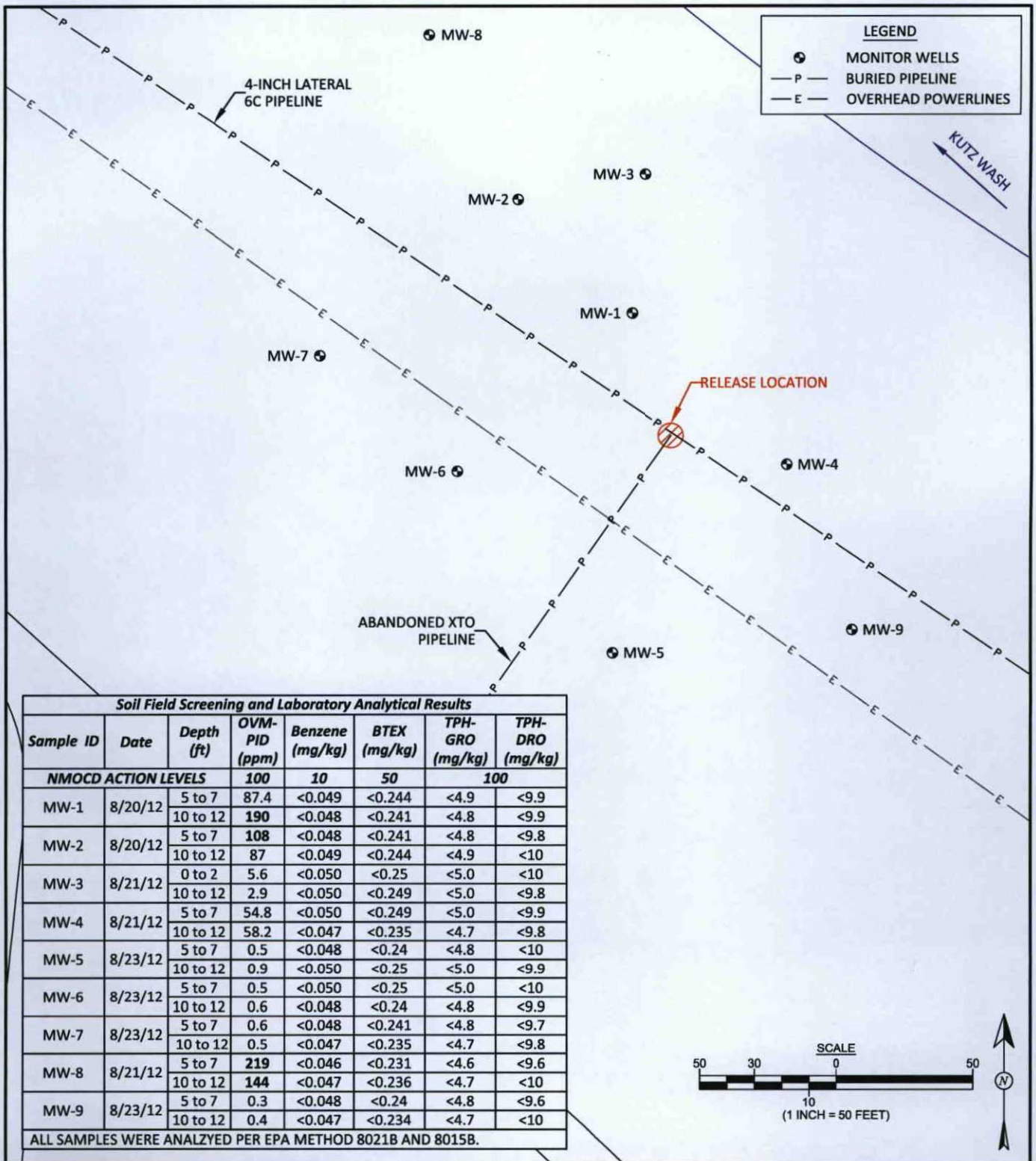
TOPOGRAPHIC SITE LOCATION MAP
ENTERPRISE PRODUCTS COMPANY
LATERAL 6C PIPELINE RELEASE
GROUNDWATER INVESTIGATION
SAN JUAN COUNTY, NEW MEXICO
NE¼ SW¼, SECTION 26, T28N, R11W
N36.63202, W107.97400



AERIAL SOURCE: (c) PICTOMERTY ONLINE PHOTO TAKEN FEBRUARY 22, 2009

Animas Environmental Services, LLC

DRAWN BY: C. Lameman	**DATE DRAWN:** September 18, 2012	**FIGURE 2**
REVISIONS BY: C. Lameman	**DATE REVISED:** October 1, 2012	**AERIAL SITE MAP** ENTERPRISE PRODUCTS COMPANY LATERAL 6C PIPELINE RELEASE GROUNDWATER INVESTIGATION SAN JUAN COUNTY, NEW MEXICO NE¼ SW¼, SECTION 26, T28N, R11W N36.63202, W107.97400
CHECKED BY: T. Ross	**DATE CHECKED:** October 1, 2012	
APPROVED BY: E. McNally	**DATE APPROVED:** October 2, 2012	



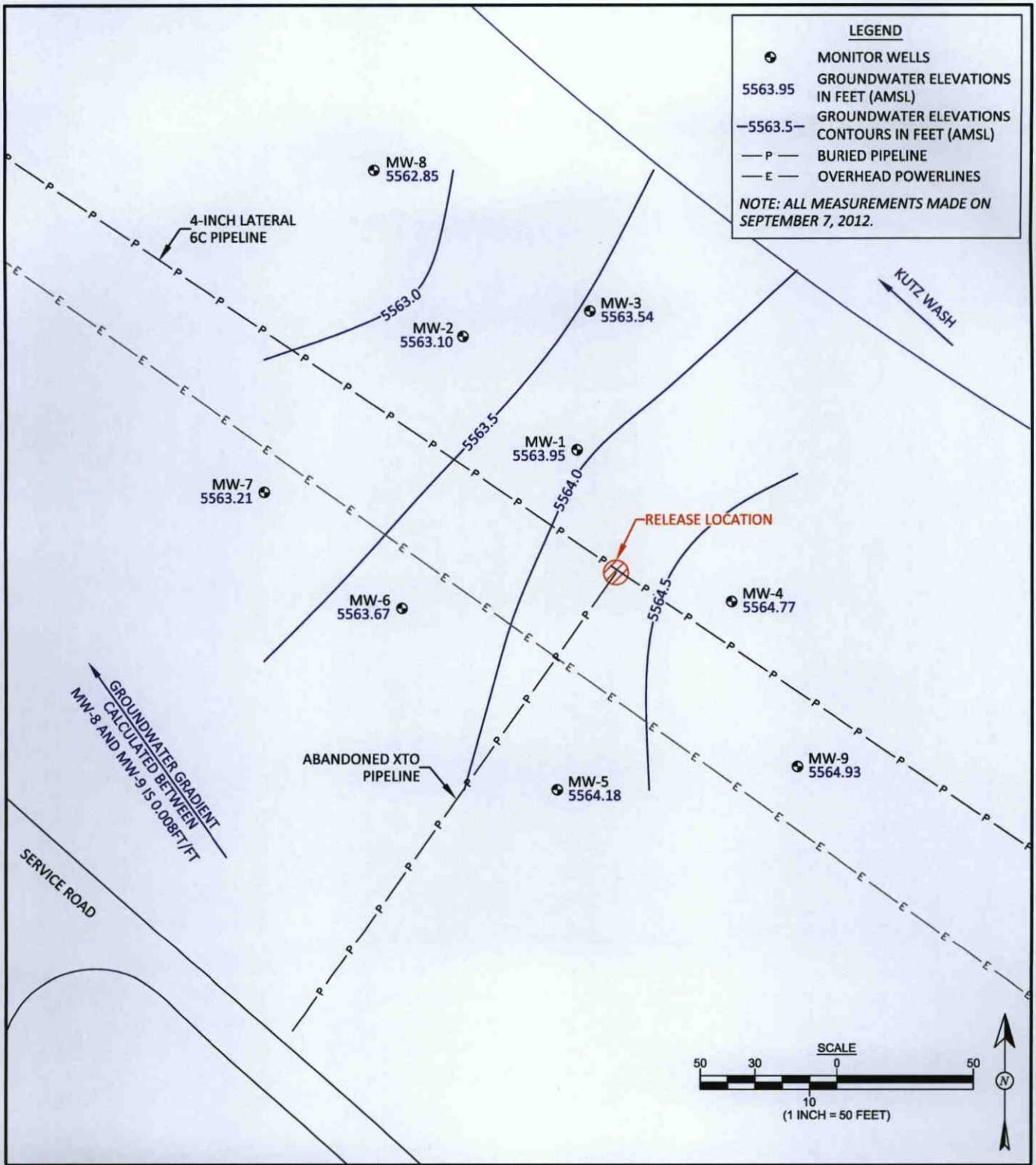
Soil Field Screening and Laboratory Analytical Results							
Sample ID	Date	Depth (ft)	OVM-PID (ppm)	Benzene (mg/kg)	BTEX (mg/kg)	TPH-GRO (mg/kg)	TPH-DRO (mg/kg)
NMOCD ACTION LEVELS			100	10	50	100	
MW-1	8/20/12	5 to 7	87.4	<0.049	<0.244	<4.9	<9.9
		10 to 12	**190**	<0.048	<0.241	<4.8	<9.9
MW-2	8/20/12	5 to 7	**108**	<0.048	<0.241	<4.8	<9.8
		10 to 12	87	<0.049	<0.244	<4.9	<10
MW-3	8/21/12	0 to 2	5.6	<0.050	<0.25	<5.0	<10
		10 to 12	2.9	<0.050	<0.249	<5.0	<9.8
MW-4	8/21/12	5 to 7	54.8	<0.050	<0.249	<5.0	<9.9
		10 to 12	58.2	<0.047	<0.235	<4.7	<9.8
MW-5	8/23/12	5 to 7	0.5	<0.048	<0.24	<4.8	<10
		10 to 12	0.9	<0.050	<0.25	<5.0	<9.9
MW-6	8/23/12	5 to 7	0.5	<0.050	<0.25	<5.0	<10
		10 to 12	0.6	<0.048	<0.24	<4.8	<9.9
MW-7	8/23/12	5 to 7	0.6	<0.048	<0.241	<4.8	<9.7
		10 to 12	0.5	<0.047	<0.235	<4.7	<9.8
MW-8	8/21/12	5 to 7	**219**	<0.046	<0.231	<4.6	<9.6
		10 to 12	**144**	<0.047	<0.236	<4.7	<10
MW-9	8/23/12	5 to 7	0.3	<0.048	<0.24	<4.8	<9.6
		10 to 12	0.4	<0.047	<0.234	<4.7	<10
ALL SAMPLES WERE ANALZYED PER EPA METHOD 8021B AND 8015B.							

Animas Environmental Services, LLC

DRAWN BY: C. Lameman	**DATE DRAWN:** September 18, 2012
REVISIONS BY: C. Lameman	**DATE REVISED:** October 1, 2012
CHECKED BY: T. Ross	**DATE CHECKED:** October 1, 2012
APPROVED BY: E. McNally	**DATE APPROVED:** October 2, 2012

FIGURE 3

SOIL ANALYTICAL RESULTS
AUGUST 2012
ENTERPRISE PRODUCTS COMPANY
LATERAL 6C PIPELINE RELEASE
GROUNDWATER INVESTIGATION
SAN JUAN COUNTY, NEW MEXICO
NE¼ SW¼, SECTION 26, T28N, R11W
N36.63202, W107.97400



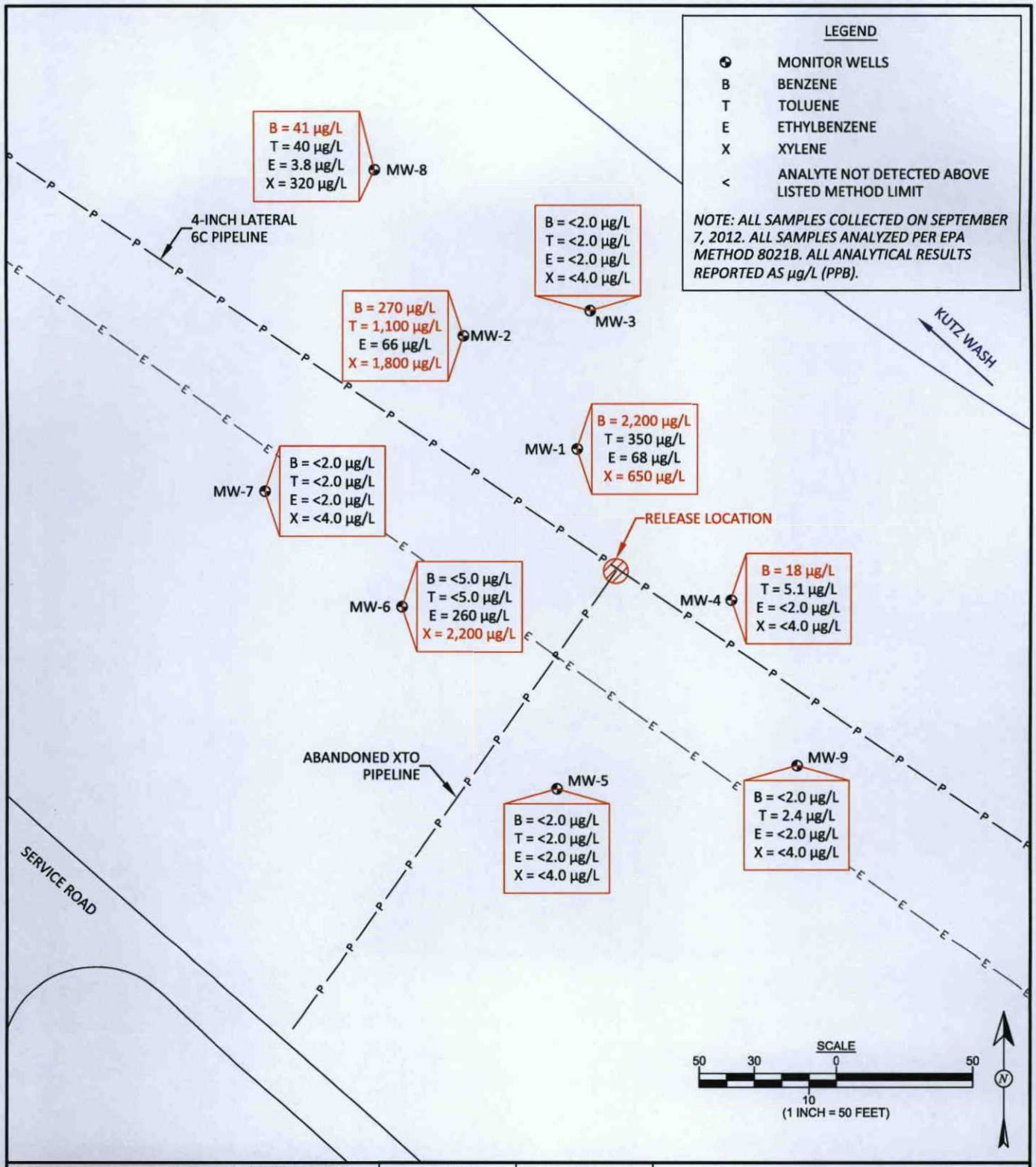
Animas Environmental Services, LLC

DRAWN BY: C. Lameman	**DATE DRAWN:** September 18, 2012
REVISIONS BY: C. Lameman	**DATE REVISED:** October 1, 2012
CHECKED BY: T. Ross	**DATE CHECKED:** October 1, 2012
APPROVED BY: E. McNally	**DATE APPROVED:** October 2, 2012

FIGURE 4

GROUNDWATER ELEVATION CONTOURS SEPTEMBER 2012

ENTERPRISE PRODUCTS COMPANY
LATERAL 6C PIPELINE RELEASE
GROUNDWATER INVESTIGATION
SAN JUAN COUNTY, NEW MEXICO
NE¼ SW¼, SECTION 26, T28N, R11W
N36.63202, W107.97400

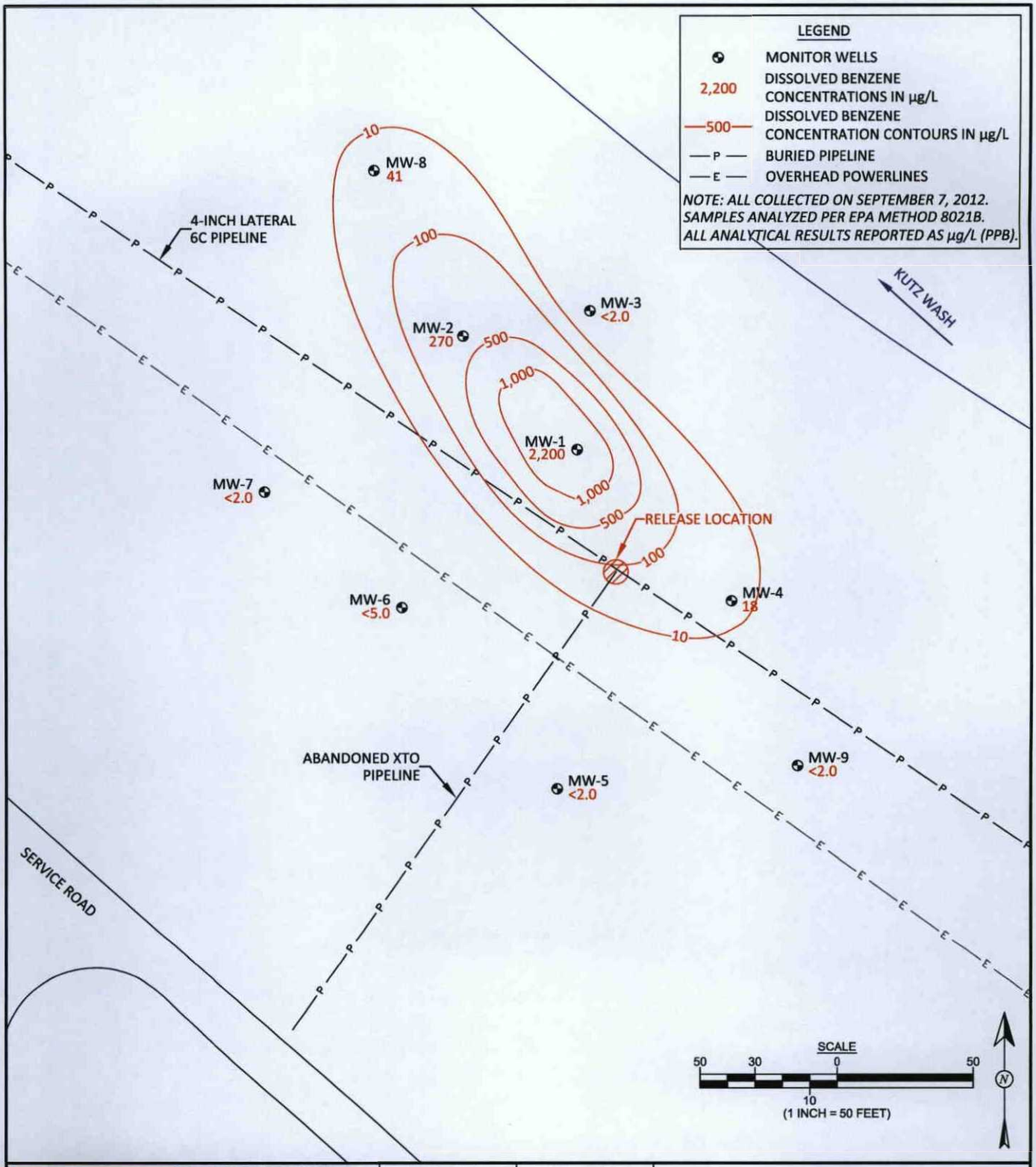


Animas Environmental Services, LLC

DRAWN BY: C. Lameman	**DATE DRAWN:** September 18, 2012
REVISIONS BY: C. Lameman	**DATE REVISED:** October 1, 2012
CHECKED BY: T. Ross	**DATE CHECKED:** October 1, 2012
APPROVED BY: E. McNally	**DATE APPROVED:** October 2, 2012

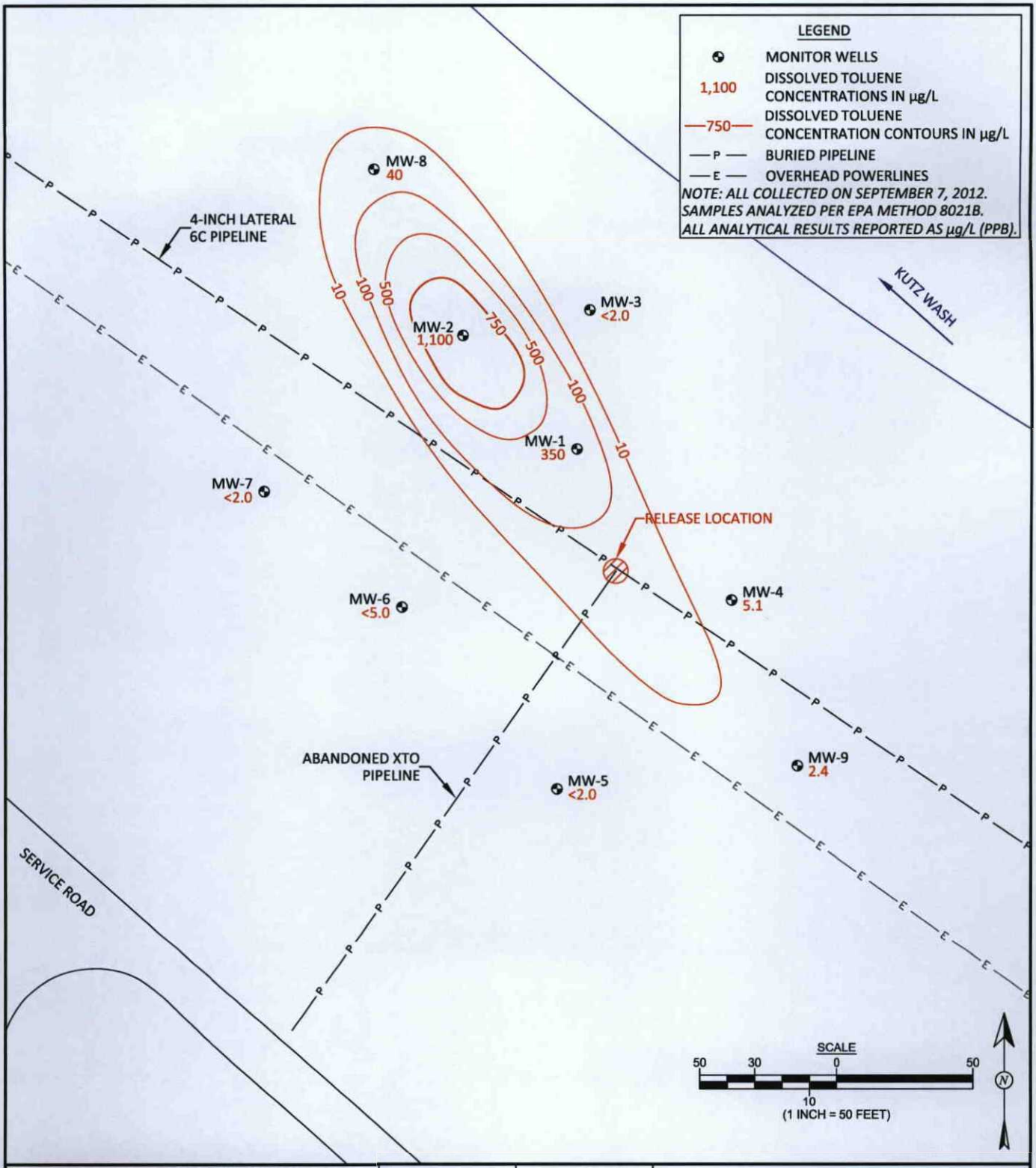
FIGURE 5

GROUNDWATER CONTAMINANT CONCENTRATIONS, SEPTEMBER 2012
ENTERPRISE PRODUCTS COMPANY
LATERAL 6C PIPELINE RELEASE
GROUNDWATER INVESTIGATION
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	**FIGURE 6**
REVISIONS BY: C. Lameman	**DATE REVISED:** October 1, 2012	**DISSOLVED BENZENE CONCENTRATION CONTOURS, SEPTEMBER 2012**
CHECKED BY: T. Ross	**DATE CHECKED:** October 1, 2012	ENTERPRISE PRODUCTS COMPANY LATERAL 6C PIPELINE RELEASE GROUNDWATER INVESTIGATION
APPROVED BY: E. McNally	**DATE APPROVED:** October 2, 2012	SAN JUAN COUNTY, NEW MEXICO NE¼ SW¼, SECTION 26, T28N, R11W N36.63202, W107.97400

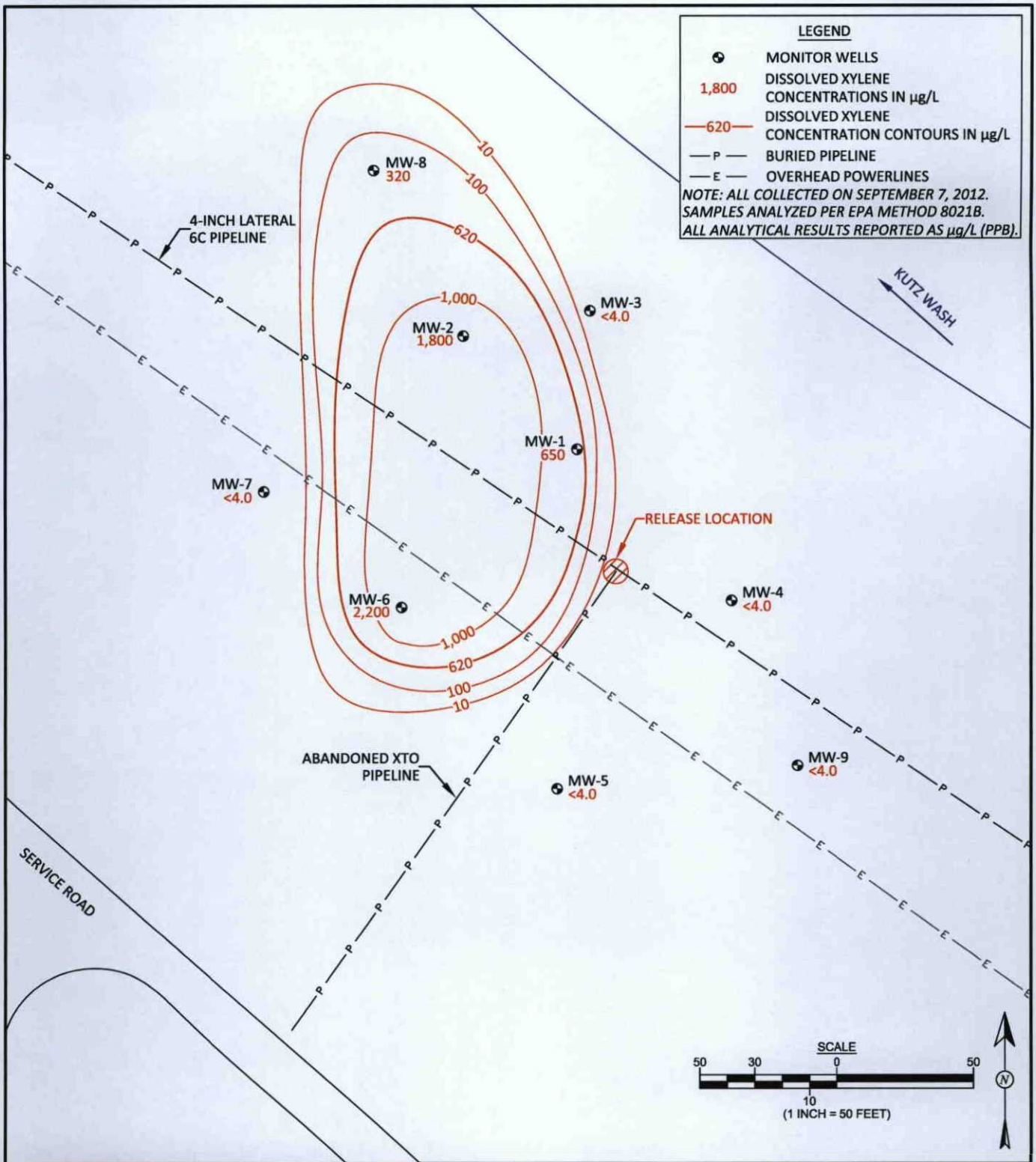


Animas Environmental Services, LLC

DRAWN BY: C. Lameman	DATE DRAWN: September 18, 2012
REVISIONS BY: C. Lameman	DATE REVISED: October 1, 2012
CHECKED BY: T. Ross	DATE CHECKED: October 1, 2012
APPROVED BY: E. McNally	DATE APPROVED: October 1, 2012

FIGURE 7

DISSOLVED TOLUENE CONCENTRATION CONTOURS, SEPTEMBER 2012
ENTERPRISE PRODUCTS COMPANY
LATERAL 6C PIPELINE RELEASE
GROUNDWATER INVESTIGATION
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	**FIGURE 8**
REVISIONS BY: C. Lameman	**DATE REVISED:** October 1, 2012	**DISSOLVED XYLENE CONCENTRATION CONTOURS, SEPTEMBER 2012**
CHECKED BY: T. Ross	**DATE CHECKED:** October 1, 2012	ENTERPRISE PRODUCTS COMPANY LATERAL 6C PIPELINE RELEASE GROUNDWATER INVESTIGATION
APPROVED BY: E. McNally	**DATE APPROVED:** October 2, 2012	SAN JUAN COUNTY, NEW MEXICO NE¼ SW¼, SECTION 26, T28N, R11W N36.63202, W107.97400

TABLE 1

SUMMARY OF SOIL FIELD-SCREENING AND LABORATORY ANALYTICAL RESULTS

Enterprise Products Company Lateral 6C Pipeline Release Groundwater Investigation

San Juan County, New Mexico

Sample ID	Date Sampled	Depth (ft)	OVM Reading	Benzene	Toluene	Ethyl-benzene	Xylene	BTEX	GRO (C6-C10)	DRO (C10-C22)	TPH (GRO+DRO)
			(ppm)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
NMOCD Action Level			100	10	NE	NE	NE	50	NE	NE	100
MW-1	20-Aug-12	5 to 7	87.4	<0.049	<0.049	<0.049	<0.097	<0.244	<4.9	<9.9	<14.8
		10 to 12	**190**	<0.048	<0.048	<0.048	<0.097	<0.241	<4.8	<9.9	<14.7
MW-2	20-Aug-12	5 to 7	**108**	<0.048	<0.048	<0.048	<0.097	<0.241	<4.8	<9.8	<14.6
		10 to 12	87.0	<0.049	<0.049	<0.049	<0.097	<0.244	<4.9	<10	<14.9
MW-3	21-Aug-12	0 to 2	5.6	<0.050	<0.050	<0.050	<0.10	<0.250	<5.0	<10	<15.0
		10 to 12	2.9	<0.050	<0.050	<0.050	<0.099	<0.249	<5.0	<9.8	<14.8
MW-4	21-Aug-12	5 to 7	54.8	<0.050	<0.050	<0.050	<0.099	<0.249	<5.0	<9.9	<14.9
		10 to 12	58.2	<0.047	<0.047	<0.047	<0.094	<0.235	<4.7	<9.8	<14.5
MW-5	23-Aug-12	5 to 7	0.5	<0.048	<0.048	<0.048	<0.096	<0.240	<4.8	<10	<14.8
		10 to 12	0.9	<0.050	<0.050	<0.050	<0.10	<0.250	<5.0	<9.9	<14.9
MW-6	23-Aug-12	5 to 7	0.5	<0.050	<0.050	<0.050	<0.10	<0.250	<5.0	<10	<15.0
		10 to 12	0.6	<0.048	<0.048	<0.048	<0.096	<0.240	<4.8	<9.9	<14.7
MW-7	23-Aug-12	5 to 7	0.6	<0.048	<0.048	<0.048	<0.097	<0.241	<4.8	<9.7	<14.5
		10 to 12	0.5	<0.047	<0.047	<0.047	<0.094	<0.235	<4.7	<9.8	<14.5
MW-8	21-Aug-12	5 to 7	**219**	<0.046	<0.046	<0.046	<0.093	<0.231	<4.6	<9.6	<14.2
		10 to 12	**144**	<0.047	<0.047	<0.047	<0.095	<0.236	<4.7	<10	<14.7
MW-9	23-Aug-12	5 to 7	0.3	<0.048	<0.048	<0.048	<0.096	<0.240	<4.8	<9.6	<14.4
		10 to 12	0.4	<0.047	<0.047	<0.047	<0.093	<0.234	<4.7	<10	<14.7

NOTES NE = Not Established

TABLE 2

SUMMARY OF GROUNDWATER MEASUREMENTS AND WATER QUALITY DATA

Enterprise Products Company Lateral 6C Pipeline Release Groundwater Investigation

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-2	07-Sep-12	16.29	5579.39	5563.10	7.31	4.234	1.03	16.67	4.90
MW-3	07-Sep-12	15.98	5579.52	5563.54	7.33	5.706	2.24	15.29	4.85
MW-4	07-Sep-12	15.59	5580.36	5564.77	7.30	5.564	1.46	15.77	4.35
MW-5	07-Sep-12	19.35	5583.53	5564.18	7.34	4.137	1.53	14.89	3.25
MW-6	07-Sep-12	18.55	5582.22	5563.67	7.38	4.833	1.24	15.43	3.35
MW-7	07-Sep-12	19.03	5582.24	5563.21	7.59	4.542	1.38	15.24	3.60
MW-8	07-Sep-12	14.96	5577.81	5562.85	7.57	4.068	1.30	16.16	5.00
MW-9	07-Sep-12	17.55	5582.48	5564.93	7.45	4.583	1.48	15.61	4.25

TABLE 3

SUMMARY OF GROUNDWATER LABORATORY ANALYTICALS RESULTS

Enterprise Products Company Lateral 6C Pipeline Release Groundwater Investigation

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-2	07-Sep-12	**270**	**1,100**	66	**1,800**
MW-3	07-Sep-12	<2.0	<2.0	<2.0	<4.0
MW-4	07-Sep-12	**18**	5.1	<2.0	<4.0
MW-5	07-Sep-12	<2.0	<2.0	<2.0	<4.0
MW-6	07-Sep-12	<5.0	<5.0	260	**2,200**
MW-7	07-Sep-12	<2.0	<2.0	<2.0	<4.0
MW-8	07-Sep-12	**41**	40	3.8	320
MW-9	07-Sep-12	<2.0	2.4	<2.0	<4.0

Notes:

< **Analyte not detected above listed method limi**

µg/L **Micrograms per liter (ppb)**

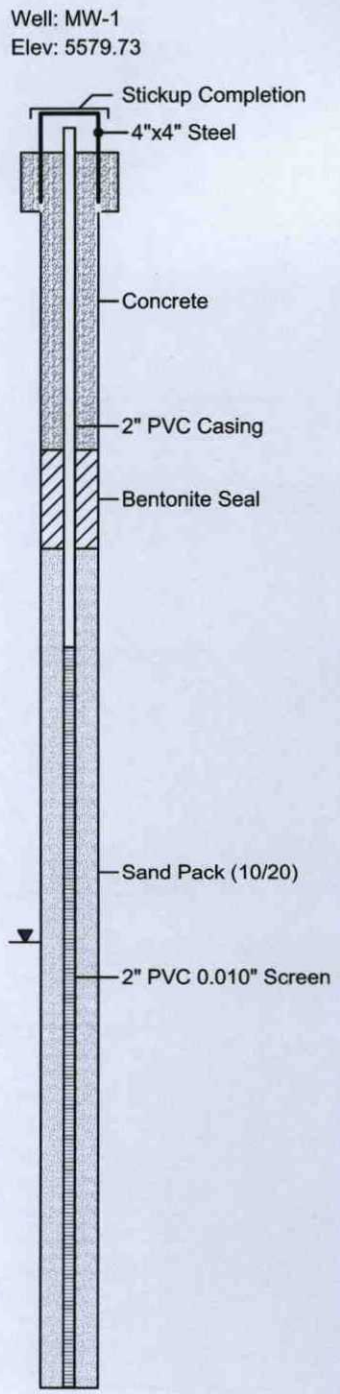
Animas Environmental Services, LLC.
624 East Comanche
Farmington, NM 87401

MW-1

ENTERPRISE PRODUCTS COMPANY
LATERAL 6C PIPELINE GW INVESTIGATION
SAN JUAN COUNTY, NEW MEXICO
NE1/4 SW1/4, SEC. 26, T28N, R11W
N36.63202, W107.97400

Date Started	: 8/20/12	Lat.	: N36.63216
Date Completed	: 8/20/12	Long.	: W107.97405
Hole Diameter	: 2.25	Survey By	: Enterprise Products Co.
Drilling Method	: HSA	Logged By	: Tom Long
Sampling Method	: Split Spoon		

Depth in Feet	Surf. Elev. 5577	USCS	GRAPHIC	DESCRIPTION	Blow Count	PID (ppm)
0	5577	SC		Clayey Sand, Brown, Dry, No Odor, No Staining		85.8
2	5575					
4	5573					
6	5571	SM		Silty Sand, Brown, Fine Grained, Dry, No Odor, No Staining		87.4
8	5569					
10	5567	SP		Sand, Brown/Tan, Moist, No Odor, No Staining		190
12	5565					
14	5563					
16	5561	SP		Sand, Brown, Fine Grained, Wet, Very Little Recovery, Slight Odor		NA
18	5559					
20	5557	CG		Cobble/Gravel, Brown, Wet, No Odor, No Staining		2.4
22	5555					
24	5553					
26		SP		Sand, Gray, Fine Grained, Wet, Slight Odor, Slight Staining		15.3



11-05-2012 R:\Animas 2000\2012 Projects\Enterprise\Lateral 6C\Soil Boring Logs\GW Investigation\MW-1.bor

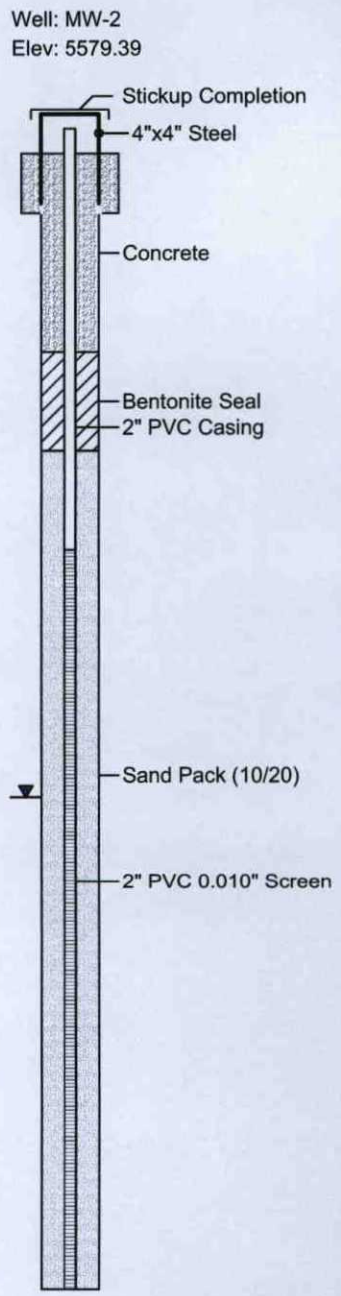
Animas Environmental Services, LLC.
624 East Comanche
Farmington, NM 87401

MW-2

ENTERPRISE PRODUCTS COMPANY
LATERAL 6C PIPELINE GW INVESTIGATION
SAN JUAN COUNTY, NEW MEXICO
NE1/4 SW1/4, SEC. 26, T28N, R11W
N36.63202, W107.97400

Date Started	: 8/20/12	Lat.	: N36.63228
Date Completed	: 8/20/12	Long.	: W107.97419
Hole Diameter	: 2.25	Survey By	: Enterprise Products Co.
Drilling Method	: HSA	Logged By	: Tom Long
Sampling Method	: Split Spoon		

Depth in Feet	Surf. Elev. 5577	USCS	GRAPHIC	DESCRIPTION	Blow Count	PID (ppm)
0	5577	SP		Sand, Brown, Fine Grained, Moist, No Odor, No Staining		93.1
2	5575					
4	5573					
6	5571					
8	5569					108
10	5567	SP		Sand, Brown, Moist/Wet, No Odor, No Staining		87.0
12	5565					
14	5563					
16	5561	SP		Sand, Brown, Medium Grained, Wet, Very Little Recovery, No Odor, No Staining		NA
18	5559					
20	5557	CG		Cobble/Gravel, Brown, Wet, Slight Odor, No Staining		38.7
22	5555					
24	5553					
26		SS		Sandstone, Gray, Fine Grained, Wet, Slight Odor, No Staining		16.1



11-05-2012 R:\Animas 2000\2012 Projects\Enterprise\Lateral 6C\Soil Boring Logs\GW Investigation\MW-2.bor

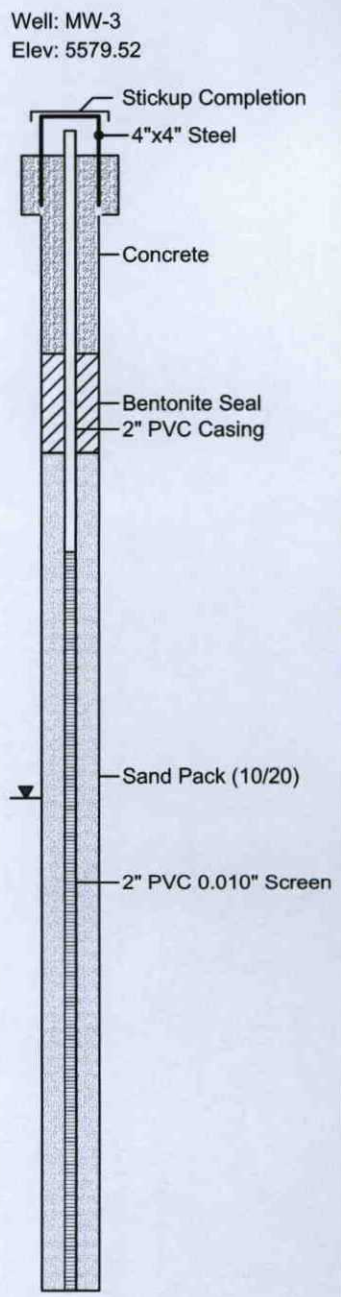
Animas Environmental Services, LLC.
624 East Comanche
Farmington, NM 87401

MW-3

ENTERPRISE PRODUCTS COMPANY
LATERAL 6C PIPELINE GW INVESTIGATION
SAN JUAN COUNTY, NEW MEXICO
NE1/4 SW1/4, SEC. 26, T28N, R11W
N36.63202, W107.97400

Date Started	: 8/21/12	Lat.	: N36.63230
Date Completed	: 8/21/12	Long.	: W107.97403
Hole Diameter	: 2.25	Survey By	: Enterprise Products Co.
Drilling Method	: HSA	Logged By	: Tom Long
Sampling Method	: Split Spoon		

Depth in Feet	Surf. Elev. 5577	USCS	GRAPHIC	DESCRIPTION	Blow Count	PID (ppm)
0	5577	SP		Sand, Brown, Fine Grained, Dry, No Odor, No Staining		5.6
2	5575					
4	5573					
6	5571					2.8
8	5569					
10	5567	SP		Sand, Brown, Fine Grained, Wet, No Odor, No Staining		2.9
12	5565					
14	5563					
16	5561	SP		Sand, Gray, Fine to Medium Grained, Wet, No Odor, No Staining		0.8
18	5559					
20	5557	SP		Sand, Gray, Fine to Coarse Grained, Some Gravel, Wet, No Odor, No Staining		2.1
22	5555					
24	5553					
26		SS		Sandstone, Gray, Fine Grained, Wet, No Odor, No Staining		2.3



11-05-2012 R:\Animas 2000\2012 Projects\Enterprise\Lateral 6C\Soil Boring Logs\GW Investigation\MW-3.bor

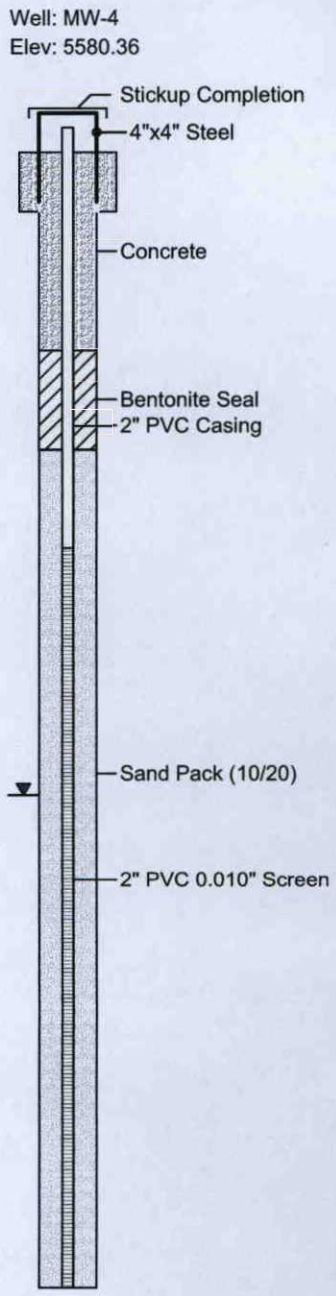
Animas Environmental Services, LLC.
624 East Comanche
Farmington, NM 87401

MW-4

ENTERPRISE PRODUCTS COMPANY
LATERAL 6C PIPELINE GW INVESTIGATION
SAN JUAN COUNTY, NEW MEXICO
NE1/4 SW1/4, SEC. 26, T28N, R11W
N36.63202, W107.97400

Date Started	: 8/21/12	Lat.	: N36.63230
Date Completed	: 8/21/12	Long.	: W107.97403
Hole Diameter	: 2.25	Survey By	: Enterprise Products Co.
Drilling Method	: HSA	Logged By	: Tom Long
Sampling Method	: Split Spoon		

Depth in Feet	Surf. Elev. 5578	USCS	GRAPHIC	DESCRIPTION	Blow Count	PID (ppm)
0	5578	SC		Interbedded Sand and Clay, Brown, Fine Grained, Dry, No Odor, No Staining		22.1
2	5576					
4	5574					
6	5572	SP		Sand, Brown, Fine Grained, Dry, No Odor, No Staining		54.8
8	5570					
10	5568	SP		Sand, Brown, Fine Grained, Wet, No Odor, No Staining		58.2
12	5566					
14	5564					
16	5562	SP		Sand, Brown, Fine Grained, Wet, No Odor, No Staining, Very Little Recovery		NA
18	5560					
20	5558	SP		No Recovery		NA
22	5556					
24	5554					
26		SS		Sandstone, Gray, Fine Grained, Wet, No Odor, No Staining		3.6



11-05-2012 R:\Animas 2000\2012 Projects\Enterprise\Lateral 6C\Soil Boring Logs\GW Investigation\MW-4.bor

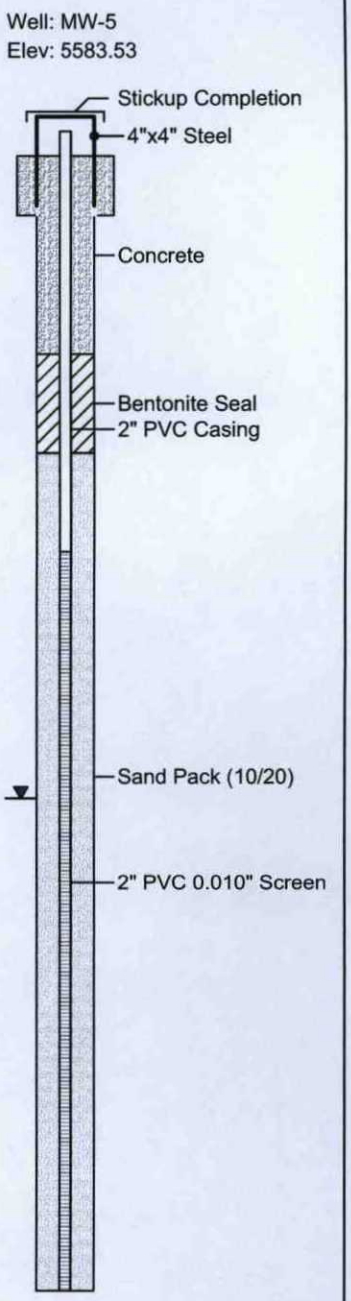
Animas Environmental Services, LLC.
624 East Comanche
Farmington, NM 87401

MW-5

ENTERPRISE PRODUCTS COMPANY
LATERAL 6C PIPELINE GW INVESTIGATION
SAN JUAN COUNTY, NEW MEXICO
NE1/4 SW1/4, SEC. 26, T28N, R11W
N36.63202, W107.97400

Date Started	: 8/23/12	Lat.	: N36.63182
Date Completed	: 8/23/12	Long.	: W107.97417
Hole Diameter	: 2.25	Survey By	: Enterprise Products Co.
Drilling Method	: HSA	Logged By	: Tom Long
Sampling Method	: Split Spoon		

Depth in Feet	Surf. Elev. 5581	USCS	GRAPHIC	DESCRIPTION	Blow Count	PID (ppm)
0	5581					
2	5579	SC		Interbedded Sand and Clay, Brown, Fine Grained, Dry, No Odor, No Staining		0.4
4	5577					
6	5575	SC		Clayey Sand, Brown, Fine Grained, Dry, No Odor, No Staining		0.5
8	5573					
10	5571	SP		Sand, Brown, Fine Grained, Wet, No Odor, No Staining		0.9
12	5569					
14	5567					
16	5565	SC		Clayey Sand, Brown, Fine Grained, Wet, No Odor, No Staining		0.7
18	5563					
20	5561	SP		Sand, Brown, Fine to Coarse Grained, Wet, Some Gravel, No Odor, No Staining		0.6
22	5559					
24	5557					
26		SS		Sandstone, Gray, Fine Grained, Wet, No Odor, No Staining		0.8



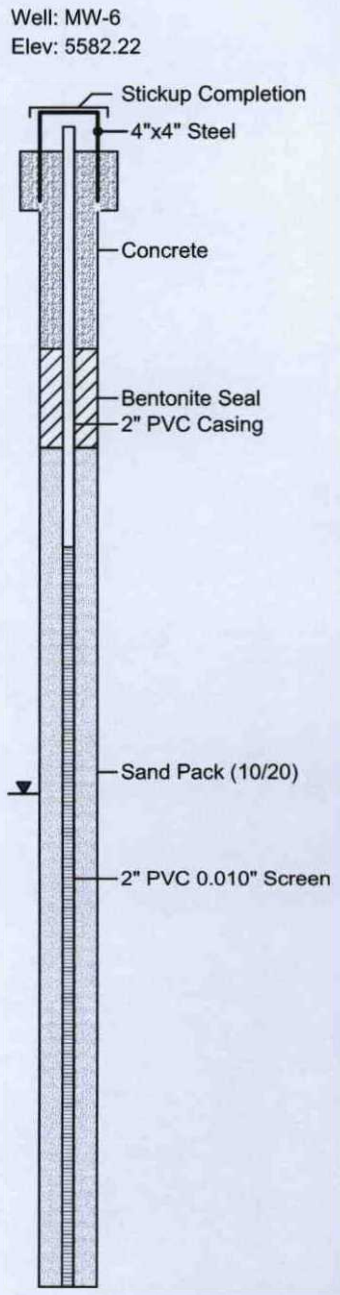
Animas Environmental Services, LLC.
624 East Comanche
Farmington, NM 87401

MW-6

ENTERPRISE PRODUCTS COMPANY
LATERAL 6C PIPELINE GW INVESTIGATION
SAN JUAN COUNTY, NEW MEXICO
NE1/4 SW1/4, SEC. 26, T28N, R11W
N36.63202, W107.97400

Date Started	: 8/23/12	Lat.	: N36.63201
Date Completed	: 8/23/12	Long.	: W107.97427
Hole Diameter	: 2.25	Survey By	: Enterprise Products Co.
Drilling Method	: HSA	Logged By	: Tom Long
Sampling Method	: Split Spoon		

Depth in Feet	Surf. Elev. 5580	USCS	GRAPHIC	DESCRIPTION	Blow Count	PID (ppm)
0	5580	SM		Silty Sand, Brown, Fine Grained, Dry, No Odor, No Staining		0.3
2	5578					
4	5576					
6	5574	SP		Sand, Brown, Fine Grained, Dry, No Odor, No Staining		0.5
8	5572					
10	5570	SP		Sand, Brown, Fine Grained, Wet, No Odor, No Staining		0.6
12	5568					
14	5566					
16	5564	SP		Sand, Brown, Fine Grained, Some Clay, Wet, Slight Odor, Slight Staining		3.0
18	5562					
20	5560	SP		Sand, Brown, Fine to Coarse Grained, Some Gravel, Very Little Recovery, No Staining		NA
22	5558					
24	5556					
26		SS		Sandstone, Gray, Fine Grained, Wet, No Odor, No Staining		1.9



11-05-2012 R:\Animas 2000\2012 Projects\Enterprise\Lateral 6C\Soil Boring Logs\GW Investigation\MW-6.bor

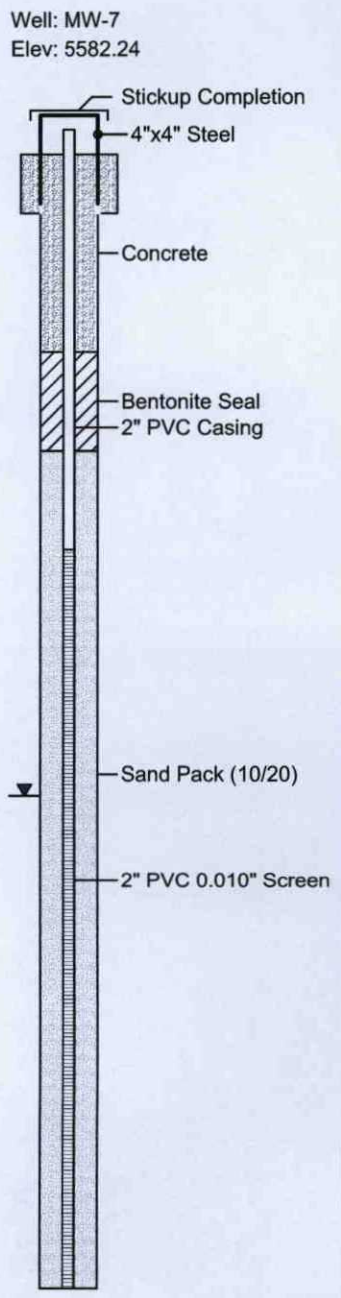
Animas Environmental Services, LLC.
624 East Comanche
Farmington, NM 87401

MW-7

ENTERPRISE PRODUCTS COMPANY
LATERAL 6C PIPELINE GW INVESTIGATION
SAN JUAN COUNTY, NEW MEXICO
NE1/4 SW1/4, SEC. 26, T28N, R11W
N36.63202, W107.97400

Date Started	: 8/23/12	Lat.	: N36.632122
Date Completed	: 8/23/12	Long.	: W107.97444
Hole Diameter	: 2.25	Survey By	: Enterprise Products Co.
Drilling Method	: HSA	Logged By	: Tom Long
Sampling Method	: Split Spoon		

Depth in Feet	Surf. Elev. 5579	USCS	GRAPHIC	DESCRIPTION	Blow Count	PID (ppm)
0	5579					
2	5577	SM		Silty Sand, Brown, Fine Grained, Dry, No Odor, No Staining		0.5
4	5575					
6	5573	SC		Clayey Sand, Brown, Moist, No Odor, No Staining		0.6
8	5571					
10	5569	SP		Sand, Brown, Fine Grained, Moist, No Odor, No Staining		0.5
12	5567					
14	5565					
16	5563	SP		Sand, Brown, Fine Grained, Some Clay, Wet, Slight Odor, Slight Staining		0.7
18	5561					
20	5559	SP		Sand, Brown, Fine to Coarse Grained, Some Gravel, Wet, No Odor, No Staining		0.5
22	5557					
24	5555					
26		SS		Sandstone, Gray, Fine Grained, Wet, No Odor, No Staining		0.8



Animas Environmental Services, LLC.
624 East Comanche
Farmington, NM 87401

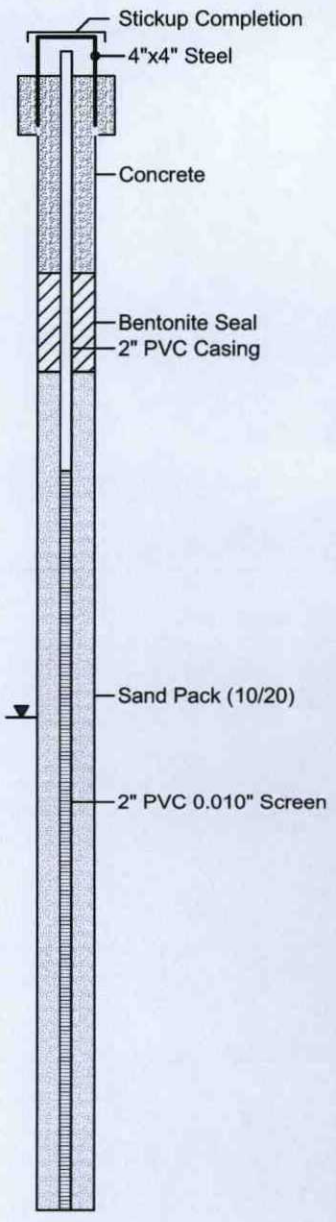
MW-8

ENTERPRISE PRODUCTS COMPANY
LATERAL 6C PIPELINE GW INVESTIGATION
SAN JUAN COUNTY, NEW MEXICO
NE1/4 SW1/4, SEC. 26, T28N, R11W
N36.63202, W107.97400

Date Started	: 8/21/12	Lat.	: N36.63245
Date Completed	: 8/21/12	Long.	: W107.97430
Hole Diameter	: 2.25	Survey By	: Enterprise Products Co.
Drilling Method	: HSA	Logged By	: Tom Long
Sampling Method	: Split Spoon		

Depth in Feet	Surf. Elev. 5576	USCS	GRAPHIC	DESCRIPTION	Blow Count	PID (ppm)
0	5576					
2	5574	SP		Sand, Brown, Fine Grained, Dry, No Odor, No Staining		82.8
4	5572					
6	5570	SP		Sand, Brown, Fine Grained, Dry, No Odor, No Staining		219
8	5568					
10	5566	SP		Sand, Brown, Fine Grained, Wet, Slight Odor, No Staining		144
12	5564					
14	5562					
16	5560	SP		Sand, Gray, Fine to Medium Grained, Wet, Slight Odor, No Staining		147
18	5558					
20	5556	SP		Sand, Gray, Fine to Medium Grained, Some Gravel, Wet, Slight Odor, No Staining		87.3
22	5554					
24	5552					
26		SS		Sandstone, Gray, Fine Grained, Wet, Slight Odor, No Staining		16.9

Well: MW-8
Elev: 5577.81



11-05-2012 R:\Animas 2000\2012 Projects\Enterprise\Lateral 6C\Soil Boring Logs\GW Investigation\MW-8.bor

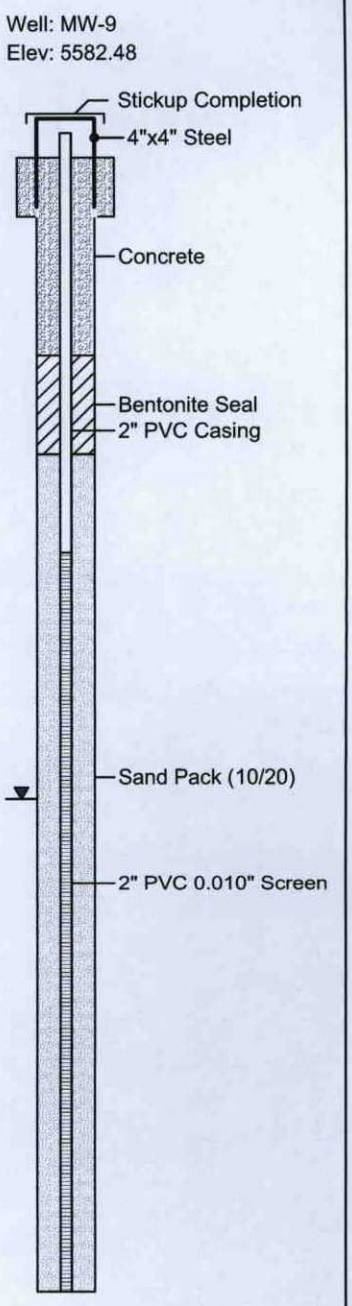
Animas Environmental Services, LLC.
624 East Comanche
Farmington, NM 87401

MW-9

ENTERPRISE PRODUCTS COMPANY
LATERAL 6C PIPELINE GW INVESTIGATION
SAN JUAN COUNTY, NEW MEXICO
NE1/4 SW1/4, SEC. 26, T28N, R11W
N36.63202, W107.97400

Date Started	: 8/23/12	Lat.	: N36.63185
Date Completed	: 8/23/12	Long.	: W107.97378
Hole Diameter	: 2.25	Survey By	: Enterprise Products Co.
Drilling Method	: HSA	Logged By	: Tom Long
Sampling Method	: Split Spoon		

Depth in Feet	Surf. Elev. 5580	USCS	GRAPHIC	DESCRIPTION	Blow Count	PID (ppm)
0	5580	SP		Sand, Brown, Fine Grained, Dry, No Odor, No Staining		0.3
2	5578					
4	5576	SM		Silty Sand, Brown, Fine Grained, Dry, No Odor, No Staining		0.3
6	5574					
8	5572	SP		Sand, Brown, Fine Grained, Moist, No Odor, No Staining		0.4
10	5570					
12	5568					
14	5566	SP		Sand, Gray, Fine to Medium Grained, Wet, No Odor, No Staining		0.2
16	5564					
18	5562	SP		Sand, Gray, Some Gravel, Wet, No Odor, No Staining		0.1
20	5560					
22	5558					
24	5556	SS		Sandstone, Gray, Fine Grained, Wet, No Odor, No Staining		
26						



envirotech

Bill of Lading

MANIFEST # 41957

DATE 8-21-12 JOB # 97057-0520

PHONE: (505) 632-0615 • 5796 U.S. HIGHWAY 64 • FARMINGTON, NEW MEXICO 87401

LOAD NO.	COMPLETE DESCRIPTION OF SHIPMENT						TRANSPORTING COMPANY			
	POINT OF ORIGIN	DESTINATION	MATERIAL	GRID	YDS	BBLS	COMPANY	TRK#	TIME	DRIVER SIGNATURE
1	ENTERPRISE ANIMAS ~~C-6~~ ENVIRONMENTAL	LFII-5	Cont Soil	A-6	2	—	KYUCK	057	13:50	Kelly Padilla
	LATERAL 6 C				2					

RESULTS:			LANDFARM EMPLOYEE:	NOTES:
-292	CHLORIDE TEST	1	Dave Lamb	Paykey EG11580
	PAINT FILTER TEST	1	Certification of above receival & placement	

"I certify the material hauled from the above location has not been added to or mixed with, and is the same material received from the above mentioned Generator, and that no additional materials have been added."

TRANSPORTER CO. Kyuck NAME Kelly Padilla SIGNATURE Kelly Padilla

COMPANY CONTACT _____ PHONE _____ DATE _____

Signatures required prior to distribution of the legal document.

White - Company Records, Yellow - Billing, Pink - Customer

san juan reproduction 578-126

envirotech

Bill of Lading

MANIFEST # 41995

DATE 8-28-12 JOB # 97057-0520

PHONE: (505) 632-0615 • 5796 U.S. HIGHWAY 64 • FARMINGTON, NEW MEXICO 87401

LOAD NO.	COMPLETE DESCRIPTION OF SHIPMENT						TRANSPORTING COMPANY			
	POINT OF ORIGIN	DESTINATION	MATERIAL	GRID	YDS	BBLS	COMPANY	TRK#	TIME	DRIVER SIGNATURE
1	Enterprise Cat #6C	BF	~~Gas~~ Produced Salt Water	B-2	1	3	Animas Environmental Services	1	952	Zachary Trujillo
						3				

RESULTS:			LANDFARM EMPLOYEE:	NOTES:
292	CHLORIDE TEST	1	Dave Lane	
	PAINT FILTER TEST	1	Certification of above receival & placement	

"I certify the material hauled from the above location has not been added to or mixed with, and is the same material received from the above mentioned Generator, and that no additional materials have been added."

TRANSPORTER CO. Animas Environmental Services LLC NAME Zachary Trujillo SIGNATURE Zachary Trujillo

COMPANY CONTACT 1-505-564-2281 PHONE 1-505-215-3689 DATE 8-28-12

Signatures required prior to distribution of the legal document.

White - Company Records, Yellow - Billing, Pink - Customer

san juan reproduction 578-126

envirotech

Bill of Lading

MANIFEST # 42042

DATE 9/7/12 JOB # 97057-0520

PHONE: (505) 632-0615 • 5796 U.S. HIGHWAY 64 • FARMINGTON, NEW MEXICO 87401

LOAD NO.	COMPLETE DESCRIPTION OF SHIPMENT						TRANSPORTING COMPANY			
	POINT OF ORIGIN	DESTINATION	MATERIAL	GRID	YDS	BBLS	COMPANY	TRK#	TIME	DRIVER SIGNATURE
1	Enterprise Latitude 6C	BF	purdge H2O	D-2	—	1	Animas	1	12:52	
						1				
						1				

RESULTS:

292 CHLORIDE TEST

PAINT FILTER TEST

LANDFARM EMPLOYEE: Jessica Kelley

Certification of above receival & placement

NOTES:

"I certify the material hauled from the above location has not been added to or mixed with, and is the same material received from the above mentioned Generator, and that no additional materials have been added."

TRANSPORTER CO. LAVINA LAMONE NAME SIGNATURE

COMPANY CONTACT AES | TAMI ROSS PHONE 505-564-2281 DATE 9-7-2012

Signatures required prior to distribution of the legal document.

White - Company Records, Yellow - Billing, Pink - Customer

san juan reproduction 578-126

DEPTH TO GROUNDWATER MEASUREMENT FORM

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

Project: Well Development
Site: Lateral 6C
Location:
Tech: LL & ZT

Project No.:
Date: 8 28 2012
Time: 1000
Form:

Well I.D.	Time	Depth to NAPL (ft.)	Depth to Water (ft.)	NAPL Thickness (ft.)	Notes / Observations
MW-1	1057		15.70		No PVC CAP TOW 26.5 (30")
MW-2	1059		16.25		No PVC CAP TOW 26.42 32"
MW-3	1043		15.84		No PVC CAP 31"(h) well TOW 25.96
MW-4	1026		15.54		No PVC Cap TOW 25.44
MW-5	1048		19.31		No PVC CAP TOW 25.72 (30")
MW-6	1053		18.51		No PVC cap TOW 25.36 (30")
MW-7	1033		19.00		No PVC CAP TOW 26.75
MW-8	1038		14.89		No PVC CAP TOW 25.26
MW-9	1015		17.53		No PVC CAP TOW 26.26

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

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

Project:
Site:
Location:
Tech:

Project No.:
Date:
Time:
Form:

Well ID	Depth to NAPL (ft.)	Depth to Water (ft.)	Purged Volume (gal.)	1500-1400 Method / Notes / Observations
MW-1		16.25	23	1-10 - Blackish . odor 10-15 gray 15-20 - Lite gray 20-23 - Tan H_2O
Well ID	Depth to NAPL (ft.)	Depth to Water (ft.)	Purged Volume (gal.)	1349 Method / Notes / Observations
MW-2		16.25	15 gal	5-10 - Gallons Brown / Black 15 - Clear 1608
Well ID	Depth to NAPL (ft.)	Depth to Water (ft.)	Purged Volume (gal.)	Method / Notes / Observations
Well ID	Depth to NAPL (ft.)	Depth to Water (ft.)	Purged Volume (gal.)	Method / Notes / Observations
Well ID	Depth to NAPL (ft.)	Depth to Water (ft.)	Purged Volume (gal.)	Method / Notes / Observations
Well ID	Depth to NAPL (ft.)	Depth to Water (ft.)	Purged Volume (gal.)	Method / Notes / Observations
Well ID	Depth to NAPL (ft.)	Depth to Water (ft.)	Purged Volume (gal.)	Method / Notes / Observations

Puged Water Storage, Transport, and Disposal Information:

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

Project:	9 MW Development	Project No.:	
Site:	Lateral 6C	Date:	8-22 2012
Location:		Time:	1020
Tech:	LL & ZT	Form:	

Well ID	Depth to NAPL (ft.)	Depth to Water (ft.)	Purged Volume (gal.)	Method / Notes / Observations
				11.43 - 1210
9	[illegible]	17.53	17 gal.	1-5 gal - silt drown grayish water 7.00 5-10 gal. " lite brown 15-17 gal lite tan.. 17 gal clear 26.26
				12.45 -
4		15.54		1-5 gal - Brown water 15.74 Depth to 25.44 5-10 gal Brown/gray water 19.2°C water 6.48 pH 23 gallons 15 gal Gray/Brown 15-20 33.7 DO% -4.2 ORP
				1245 - 1312
7		19.00	19 gal.	5-10 gal grey H2O .. "stink" odor; silt 10-15 - tan color 15-19 - Clear H2O
				1300
8		~~15.20~~ 14.89	20 gal.	5-10 - gallon Gray 20 - gallon Clear 10-15 - gallon Gray 1416
				~~1335~~ 1410 - 1455
3		15.84	17	1-17 silt brown H2O 17-18 tan clear H2O
6		18.51	15 gal	5-10 - gallons Black 15 gallons ~~15 gallons Clear~~ Clear 1445
5		19.31	10 gal	5 - gallon Brown 10 gallon - Clean 1511

Puged Water Storage, Transport, and Disposal Information:

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

August 29, 2012

Tami Ross

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

RE: Enterprise Lateral 6C OrderNo.: 1208B01

Dear Tami Ross:

Hall Environmental Analysis Laboratory received 8 sample(s) on 8/24/2012 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 **1208B01**
Date Reported: **8/29/2012**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Project: Enterprise Lateral 6C
Lab ID: 1208B01-001 **Matrix:** SOIL

Client Sample ID: MW-9 5-7'
Collection Date: 8/23/2012 8:34:00 AM
Received Date: 8/24/2012 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	8/28/2012 10:05:19 AM
Surr: DNOP	105	77.6-140		%REC	1	8/28/2012 10:05:19 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	8/29/2012 12:15:05 AM
Surr: BFB	97.0	84-116		%REC	1	8/29/2012 12:15:05 AM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.048		mg/Kg	1	8/29/2012 12:15:05 AM
Toluene	ND	0.048		mg/Kg	1	8/29/2012 12:15:05 AM
Ethylbenzene	ND	0.048		mg/Kg	1	8/29/2012 12:15:05 AM
Xylenes, Total	ND	0.096		mg/Kg	1	8/29/2012 12:15:05 AM
Surr: 4-Bromofluorobenzene	99.2	80-120		%REC	1	8/29/2012 12:15:05 AM

Qualifiers:

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	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits
X	Value exceeds Maximum Contaminant Level.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Project: Enterprise Lateral 6C
Lab ID: 1208B01-002 **Matrix:** SOIL

Client Sample ID: MW-9 10-12'
Collection Date: 8/23/2012 8:37:00 AM
Received Date: 8/24/2012 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	8/28/2012 10:30:17 AM
Surr: DNOP	102	77.6-140		%REC	1	8/28/2012 10:30:17 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	8/29/2012 12:43:49 AM
Surr: BFB	97.0	84-116		%REC	1	8/29/2012 12:43:49 AM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.047		mg/Kg	1	8/29/2012 12:43:49 AM
Toluene	ND	0.047		mg/Kg	1	8/29/2012 12:43:49 AM
Ethylbenzene	ND	0.047		mg/Kg	1	8/29/2012 12:43:49 AM
Xylenes, Total	ND	0.093		mg/Kg	1	8/29/2012 12:43:49 AM
Surr: 4-Bromofluorobenzene	99.7	80-120		%REC	1	8/29/2012 12:43:49 AM

Qualifiers:

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	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits
X	Value exceeds Maximum Contaminant Level.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Project: Enterprise Lateral 6C
Lab ID: 1208B01-003 **Matrix:** SOIL

Client Sample ID: MW-5 5-7'
Collection Date: 8/23/2012 9:26:00 AM
Received Date: 8/24/2012 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	8/28/2012 10:55:38 AM
Surr: DNOP	103	77.6-140		%REC	1	8/28/2012 10:55:38 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	8/29/2012 1:12:33 AM
Surr: BFB	97.4	84-116		%REC	1	8/29/2012 1:12:33 AM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.048		mg/Kg	1	8/29/2012 1:12:33 AM
Toluene	ND	0.048		mg/Kg	1	8/29/2012 1:12:33 AM
Ethylbenzene	ND	0.048		mg/Kg	1	8/29/2012 1:12:33 AM
Xylenes, Total	ND	0.096		mg/Kg	1	8/29/2012 1:12:33 AM
Surr: 4-Bromofluorobenzene	99.4	80-120		%REC	1	8/29/2012 1:12:33 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
RL	Reporting Detection Limit
X	Value exceeds Maximum Contaminant Level.
E	Value above quantitation range
J	Analyte detected below quantitation limits
R	RPD outside accepted recovery limits
S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Project: Enterprise Lateral 6C
Lab ID: 1208B01-004 **Matrix:** SOIL

Client Sample ID: MW-5 10-12'
Collection Date: 8/23/2012 9:30:00 AM
Received Date: 8/24/2012 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	8/28/2012 12:14:41 PM
Surr: DNOP	102	77.6-140		%REC	1	8/28/2012 12:14:41 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	8/29/2012 1:41:15 AM
Surr: BFB	96.3	84-116		%REC	1	8/29/2012 1:41:15 AM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.050		mg/Kg	1	8/29/2012 1:41:15 AM
Toluene	ND	0.050		mg/Kg	1	8/29/2012 1:41:15 AM
Ethylbenzene	ND	0.050		mg/Kg	1	8/29/2012 1:41:15 AM
Xylenes, Total	ND	0.10		mg/Kg	1	8/29/2012 1:41:15 AM
Surr: 4-Bromofluorobenzene	97.1	80-120		%REC	1	8/29/2012 1:41:15 AM

Qualifiers:

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	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits
X	Value exceeds Maximum Contaminant Level.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Project: Enterprise Lateral 6C
Lab ID: 1208B01-005 **Matrix:** SOIL

Client Sample ID: MW-6 5-7'
Collection Date: 8/23/2012 10:35:00 AM
Received Date: 8/24/2012 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	8/28/2012 12:40:24 PM
Surr: DNOP	104	77.6-140		%REC	1	8/28/2012 12:40:24 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	8/29/2012 2:09:56 AM
Surr: BFB	97.1	84-116		%REC	1	8/29/2012 2:09:56 AM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.050		mg/Kg	1	8/29/2012 2:09:56 AM
Toluene	ND	0.050		mg/Kg	1	8/29/2012 2:09:56 AM
Ethylbenzene	ND	0.050		mg/Kg	1	8/29/2012 2:09:56 AM
Xylenes, Total	ND	0.10		mg/Kg	1	8/29/2012 2:09:56 AM
Surr: 4-Bromofluorobenzene	98.8	80-120		%REC	1	8/29/2012 2:09:56 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
RL	Reporting Detection Limit
X	Value exceeds Maximum Contaminant Level.
E	Value above quantitation range
J	Analyte detected below quantitation limits
R	RPD outside accepted recovery limits
S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Project: Enterprise Lateral 6C
Lab ID: 1208B01-006 **Matrix:** SOIL

Client Sample ID: MW-6 10-12'
Collection Date: 8/23/2012 10:40:00 AM
Received Date: 8/24/2012 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	8/28/2012 1:06:20 PM
Surr: DNOP	101	77.6-140		%REC	1	8/28/2012 1:06:20 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	8/29/2012 2:38:38 AM
Surr: BFB	98.0	84-116		%REC	1	8/29/2012 2:38:38 AM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.048		mg/Kg	1	8/29/2012 2:38:38 AM
Toluene	ND	0.048		mg/Kg	1	8/29/2012 2:38:38 AM
Ethylbenzene	ND	0.048		mg/Kg	1	8/29/2012 2:38:38 AM
Xylenes, Total	ND	0.096		mg/Kg	1	8/29/2012 2:38:38 AM
Surr: 4-Bromofluorobenzene	100	80-120		%REC	1	8/29/2012 2:38:38 AM

Qualifiers:

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	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits
X	Value exceeds Maximum Contaminant Level.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Project: Enterprise Lateral 6C
Lab ID: 1208B01-007 **Matrix:** SOIL

Client Sample ID: MW-7 5-7'
Collection Date: 8/23/2012 12:16:00 PM
Received Date: 8/24/2012 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	8/28/2012 1:32:30 PM
Surr: DNOP	100	77.6-140		%REC	1	8/28/2012 1:32:30 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	8/29/2012 3:07:25 AM
Surr: BFB	96.7	84-116		%REC	1	8/29/2012 3:07:25 AM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.048		mg/Kg	1	8/29/2012 3:07:25 AM
Toluene	ND	0.048		mg/Kg	1	8/29/2012 3:07:25 AM
Ethylbenzene	ND	0.048		mg/Kg	1	8/29/2012 3:07:25 AM
Xylenes, Total	ND	0.097		mg/Kg	1	8/29/2012 3:07:25 AM
Surr: 4-Bromofluorobenzene	97.0	80-120		%REC	1	8/29/2012 3:07:25 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
RL	Reporting Detection Limit
X	Value exceeds Maximum Contaminant Level.
E	Value above quantitation range
J	Analyte detected below quantitation limits
R	RPD outside accepted recovery limits
S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Project: Enterprise Lateral 6C
Lab ID: 1208B01-008 **Matrix:** SOIL

Client Sample ID: MW-7 10-12'
Collection Date: 8/23/2012 12:21:00 PM
Received Date: 8/24/2012 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	8/28/2012 1:58:38 PM
Surr: DNOP	101	77.6-140		%REC	1	8/28/2012 1:58:38 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	8/29/2012 3:36:12 AM
Surr: BFB	98.5	84-116		%REC	1	8/29/2012 3:36:12 AM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.047		mg/Kg	1	8/29/2012 3:36:12 AM
Toluene	ND	0.047		mg/Kg	1	8/29/2012 3:36:12 AM
Ethylbenzene	ND	0.047		mg/Kg	1	8/29/2012 3:36:12 AM
Xylenes, Total	ND	0.094		mg/Kg	1	8/29/2012 3:36:12 AM
Surr: 4-Bromofluorobenzene	101	80-120		%REC	1	8/29/2012 3:36:12 AM

Qualifiers:

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	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits
X	Value exceeds Maximum Contaminant Level.		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1208B01**

29-Aug-12

Client: Animas Environmental Services
Project: Enterprise Lateral 6C

Sample ID **MB-3497**	SampType: **MBLK**			TestCode: **EPA Method 8015B: Diesel Range Organics**					
Client ID: **PBS**	Batch ID: **3497**			RunNo: **5130**					
Prep Date: **8/27/2012**	Analysis Date: **8/28/2012**			SeqNo: **145851**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Surr: DNOP	11		10.00		108	77.6	140			

Sample ID **LCS-3497**	SampType: **LCS**			TestCode: **EPA Method 8015B: Diesel Range Organics**					
Client ID: **LCSS**	Batch ID: **3497**			RunNo: **5130**					
Prep Date: **8/27/2012**	Analysis Date: **8/28/2012**			SeqNo: **146003**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	44	10	50.00	0	88.4	52.6	130			
Surr: DNOP	4.3		5.000		86.4	77.6	140			

Sample ID **1208C15-001AMS**	SampType: **MS**			TestCode: **EPA Method 8015B: Diesel Range Organics**					
Client ID: **BatchQC**	Batch ID: **3509**			RunNo: **5159**					
Prep Date: **8/28/2012**	Analysis Date: **8/29/2012**			SeqNo: **146661**		Units: **%REC**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.4		5.149		85.9	77.6	140			

Sample ID **1208C15-001AMSD**	SampType: **MSD**			TestCode: **EPA Method 8015B: Diesel Range Organics**					
Client ID: **BatchQC**	Batch ID: **3509**			RunNo: **5159**					
Prep Date: **8/28/2012**	Analysis Date: **8/29/2012**			SeqNo: **147002**		Units: **%REC**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.4		4.931		88.3	77.6	140	0	0	

Qualifiers:

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1208B01**

29-Aug-12

Client: Animas Environmental Services
Project: Enterprise Lateral 6C

Sample ID **5ML RB**	SampType: **MBLK**	TestCode: **EPA Method 8015B: Gasoline Range**							
Client ID: **PBS**	Batch ID: **R5146**	RunNo: **5146**							
Prep Date:	Analysis Date: **8/28/2012**	SeqNo: **146743**	Units: **%REC**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	970		1000		96.6	84	116			

Sample ID **2.5UG GRO LCS**	SampType: **LCS**	TestCode: **EPA Method 8015B: Gasoline Range**							
Client ID: **LCSS**	Batch ID: **R5146**	RunNo: **5146**							
Prep Date:	Analysis Date: **8/28/2012**	SeqNo: **146744**	Units: **%REC**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1000		1000		101	84	116			

Sample ID **1208C16-001AMS**	SampType: **MS**	TestCode: **EPA Method 8015B: Gasoline Range**							
Client ID: **BatchQC**	Batch ID: **R5146**	RunNo: **5146**							
Prep Date:	Analysis Date: **8/28/2012**	SeqNo: **146746**	Units: **%REC**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	700		679.7		102	84	116			

Sample ID **1208C16-001AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015B: Gasoline Range**							
Client ID: **BatchQC**	Batch ID: **R5146**	RunNo: **5146**							
Prep Date:	Analysis Date: **8/28/2012**	SeqNo: **146747**	Units: **%REC**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	690		679.7		102	84	116	0	0	

Sample ID **MB-2494**	SampType: **MBLK**	TestCode: **EPA Method 8015B: Gasoline Range**							
Client ID: **PBS**	Batch ID: **R5146**	RunNo: **5146**							
Prep Date:	Analysis Date: **8/28/2012**	SeqNo: **146758**	Units: **%REC**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	960		1000		96.4	84	116			

Sample ID **LCS-3494**	SampType: **LCS**	TestCode: **EPA Method 8015B: Gasoline Range**							
Client ID: **LCSS**	Batch ID: **3494**	RunNo: **5146**							
Prep Date: **8/27/2012**	Analysis Date: **8/28/2012**	SeqNo: **146759**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	5.0	25.00	0	86.8	74	117			
Surr: BFB	1000		1000		102	84	116			

Sample ID **1208B01-001AMS**	SampType: **MS**	TestCode: **EPA Method 8015B: Gasoline Range**							
Client ID: **MW-9 5-7'**	Batch ID: **3494**	RunNo: **5146**							
Prep Date: **8/27/2012**	Analysis Date: **8/28/2012**	SeqNo: **146761**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

- 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
- R RPD outside accepted recovery limits
- RL Reporting Detection Limit
- S Spike Recovery outside accepted recovery limits

50

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1208B01**

29-Aug-12

Client: Animas Environmental Services

Project: Enterprise Lateral 6C

Sample ID **1208B01-001AMS**	SampType: **MS**			TestCode: **EPA Method 8015B: Gasoline Range**						
Client ID: **MW-9 5-7'**	Batch ID: **3494**			RunNo: **5146**						
Prep Date: **8/27/2012**	Analysis Date: **8/28/2012**			SeqNo: **146761**		Units: **mg/Kg**				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	4.7	23.74	0	90.6	70	130			
Surr: BFB	940		949.7		99.5	84	116			

Sample ID **1208B01-001AMSD**	SampType: **MSD**			TestCode: **EPA Method 8015B: Gasoline Range**						
Client ID: **MW-9 5-7'**	Batch ID: **3494**			RunNo: **5146**						
Prep Date: **8/27/2012**	Analysis Date: **8/28/2012**			SeqNo: **146762**		Units: **mg/Kg**				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	4.7	23.39	0	97.2	70	130	5.48	22.1	
Surr: BFB	940		935.5		100	84	116	0	0	

Qualifiers:

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1208B01**

29-Aug-12

Client: Animas Environmental Services
Project: Enterprise Lateral 6C

Sample ID **5ML RB** SampType: **MBLK** TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS** Batch ID: **R5146** RunNo: **5146**
Prep Date: Analysis Date: **8/28/2012** SeqNo: **146803** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.98		1.000		98.2	80	120			

Sample ID **100NG BTEX LCS** SampType: **LCS** TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS** Batch ID: **R5146** RunNo: **5146**
Prep Date: Analysis Date: **8/28/2012** SeqNo: **146804** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.0		1.000		104	80	120			

Sample ID **1208C15-001AMS** SampType: **MS** TestCode: **EPA Method 8021B: Volatiles**
Client ID: **BatchQC** Batch ID: **R5146** RunNo: **5146**
Prep Date: Analysis Date: **8/28/2012** SeqNo: **146814** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.87		0.8373		104	80	120			

Sample ID **1208C15-001AMSD** SampType: **MSD** TestCode: **EPA Method 8021B: Volatiles**
Client ID: **BatchQC** Batch ID: **R5146** RunNo: **5146**
Prep Date: Analysis Date: **8/28/2012** SeqNo: **146828** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.88		0.8373		105	80	120	0	0	

Sample ID **MB-2494** SampType: **MBLK** TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS** Batch ID: **R5146** RunNo: **5146**
Prep Date: Analysis Date: **8/28/2012** SeqNo: **146847** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.99		1.000		99.5	80	120			

Sample ID **LCS-3494** SampType: **LCS** TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS** Batch ID: **3494** RunNo: **5146**
Prep Date: **8/27/2012** Analysis Date: **8/28/2012** SeqNo: **146848** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.94	0.050	1.000	0	93.9	76.3	117			
Toluene	0.97	0.050	1.000	0	97.3	80	120			
Ethylbenzene	0.98	0.050	1.000	0	98.4	77	116			
Xylenes, Total	3.0	0.10	3.000	0	99.3	76.7	117			
Surr: 4-Bromofluorobenzene	1.0		1.000		104	80	120			

Qualifiers:

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

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: 1208B01

Received by/date: RM 08/24/12

Logged By: **Ashley Gallegos** 8/24/2012 10:00:00 AM AG

Completed By: **Ashley Gallegos** 8/24/2012 12:52:13 PM AG

Reviewed By: AT 08/24/12

Chain of Custody

1. Were seals intact? Yes ☐ No ☐ Not Present ☑
2. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
3. How was the sample delivered? Courier

Log In

4. Coolers are present? (see 19. for cooler specific information) Yes ☑ No ☐ NA ☐
5. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
6. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
7. Sample(s) in proper container(s)? Yes ☑ No ☐
8. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
9. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
10. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
11. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☑
12. Were any sample containers received broken? Yes ☐ No ☑
13. Does paperwork match bottle labels? (Note discrepancies on chain of custody) Yes ☑ No ☐
14. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
15. Is it clear what analyses were requested? Yes ☑ No ☐
16. 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)

17. 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: _____

18. Additional remarks:

19. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.0	Good	Yes			

Chain-of-Custody Record

Client: Animas Environmental Services

Mailing Address: 624 E Comanche Farmington NM
Farmington, NM 87401

Phone #: 505-564-2281

email or Fax#: 505-324-2022

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

Accreditation:
☐ NELAP ☐ Other_____

☐ EDD (Type) _____

☑ Standard ☐ Rush_____

Project Name: Enterprise Lateral 6C

Project #:

Project Manager: Tami Ross

Sampler: Thomas Long

On Ice: ☑ Yes ☐ No

Sample Temperature: 4.0

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1208601	8021 BTEX	8015 DRO/GRO	Air Bubbles (Y or N)
8-23-12	0834	Soil	MW-9 5-7'	4oz Jar	Ice	-001	X	X	
	0837		MW-9 10-12'			-002	X	X	
	0926		MW-5 5-7'			-003	X	X	
	0930		MW-5 10-12'			-004	X	X	
	1035		MW-6 5-7'			-005	X	X	
	1040		MW-6 10-12'			-006	X	X	
	1216		MW-7 5-7'			-007	X	X	
	1221		MW-7 10-12'			-008	X	X	

Date:	Time:	Relinquished by:	Received by:	Date	Time
8-23-12	1546	Thomas Long	Christine Walker	8/23/12	1540
8/23/12	1637	Christine Walker		08/24/12	1000

Remarks: Bill To Enterprise

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.

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

August 29, 2012

Tami Ross

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

RE: Enterprise Lateral 6C OrderNo.: 1208975

Dear Tami Ross:

Hall Environmental Analysis Laboratory received 10 sample(s) on 8/22/2012 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 **1208975**
Date Reported: **8/29/2012**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Project: Enterprise Lateral 6C
Lab ID: 1208975-001 **Matrix:** SOIL

Client Sample ID: MW-1 5-7'
Collection Date: 8/20/2012 1:01:00 PM
Received Date: 8/22/2012 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	8/24/2012 9:48:34 AM
Surr: DNOP	106	77.6-140		%REC	1	8/24/2012 9:48:34 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/24/2012 2:55:14 AM
Surr: BFB	98.3	84-116		%REC	1	8/24/2012 2:55:14 AM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.049		mg/Kg	1	8/24/2012 2:55:14 AM
Toluene	ND	0.049		mg/Kg	1	8/24/2012 2:55:14 AM
Ethylbenzene	ND	0.049		mg/Kg	1	8/24/2012 2:55:14 AM
Xylenes, Total	ND	0.097		mg/Kg	1	8/24/2012 2:55:14 AM
Surr: 4-Bromofluorobenzene	100	80-120		%REC	1	8/24/2012 2:55:14 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
RL	Reporting Detection Limit
X	Value exceeds Maximum Contaminant Level.
E	Value above quantitation range
J	Analyte detected below quantitation limits
R	RPD outside accepted recovery limits
S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Project: Enterprise Lateral 6C
Lab ID: 1208975-002 **Matrix:** SOIL

Client Sample ID: MW-1 10-12'
Collection Date: 8/20/2012 1:05:00 PM
Received Date: 8/22/2012 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	8/24/2012 10:13:40 AM
Surr: DNOP	108	77.6-140		%REC	1	8/24/2012 10:13:40 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	8/24/2012 3:44:29 PM
Surr: BFB	97.5	84-116		%REC	1	8/24/2012 3:44:29 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.048		mg/Kg	1	8/24/2012 3:44:29 PM
Toluene	ND	0.048		mg/Kg	1	8/24/2012 3:44:29 PM
Ethylbenzene	ND	0.048		mg/Kg	1	8/24/2012 3:44:29 PM
Xylenes, Total	ND	0.097		mg/Kg	1	8/24/2012 3:44:29 PM
Surr: 4-Bromofluorobenzene	99.2	80-120		%REC	1	8/24/2012 3:44:29 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
RL	Reporting Detection Limit
X	Value exceeds Maximum Contaminant Level.
E	Value above quantitation range
J	Analyte detected below quantitation limits
R	RPD outside accepted recovery limits
S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Project: Enterprise Lateral 6C
Lab ID: 1208975-003 **Matrix:** SOIL

Client Sample ID: MW-2 5-7'
Collection Date: 8/20/2012 2:34:00 PM
Received Date: 8/22/2012 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	8/24/2012 10:38:51 AM
Surr: DNOP	110	77.6-140		%REC	1	8/24/2012 10:38:51 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	8/24/2012 4:13:17 PM
Surr: BFB	98.7	84-116		%REC	1	8/24/2012 4:13:17 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.048		mg/Kg	1	8/24/2012 4:13:17 PM
Toluene	ND	0.048		mg/Kg	1	8/24/2012 4:13:17 PM
Ethylbenzene	ND	0.048		mg/Kg	1	8/24/2012 4:13:17 PM
Xylenes, Total	ND	0.097		mg/Kg	1	8/24/2012 4:13:17 PM
Surr: 4-Bromofluorobenzene	99.6	80-120		%REC	1	8/24/2012 4:13:17 PM

Qualifiers:

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	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits
X	Value exceeds Maximum Contaminant Level.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Project: Enterprise Lateral 6C
Lab ID: 1208975-004 **Matrix:** SOIL

Client Sample ID: MW-2 10-12'
Collection Date: 8/20/2012 2:40:00 PM
Received Date: 8/22/2012 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	8/24/2012 11:03:47 AM
Surr: DNOP	107	77.6-140		%REC	1	8/24/2012 11:03:47 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/24/2012 4:42:02 PM
Surr: BFB	98.3	84-116		%REC	1	8/24/2012 4:42:02 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.049		mg/Kg	1	8/24/2012 4:42:02 PM
Toluene	ND	0.049		mg/Kg	1	8/24/2012 4:42:02 PM
Ethylbenzene	ND	0.049		mg/Kg	1	8/24/2012 4:42:02 PM
Xylenes, Total	ND	0.097		mg/Kg	1	8/24/2012 4:42:02 PM
Surr: 4-Bromofluorobenzene	99.0	80-120		%REC	1	8/24/2012 4:42:02 PM

Qualifiers:

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	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits
X	Value exceeds Maximum Contaminant Level.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Project: Enterprise Lateral 6C
Lab ID: 1208975-005 **Matrix:** SOIL

Client Sample ID: MW-8 5-7'
Collection Date: 8/21/2012 8:40:00 AM
Received Date: 8/22/2012 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	8/24/2012 11:28:53 AM
Surr: DNOP	109	77.6-140		%REC	1	8/24/2012 11:28:53 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	8/24/2012 5:10:45 PM
Surr: BFB	98.4	84-116		%REC	1	8/24/2012 5:10:45 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.046		mg/Kg	1	8/24/2012 5:10:45 PM
Toluene	ND	0.046		mg/Kg	1	8/24/2012 5:10:45 PM
Ethylbenzene	ND	0.046		mg/Kg	1	8/24/2012 5:10:45 PM
Xylenes, Total	ND	0.093		mg/Kg	1	8/24/2012 5:10:45 PM
Surr: 4-Bromofluorobenzene	99.0	80-120		%REC	1	8/24/2012 5:10:45 PM

Qualifiers:

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	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits
X	Value exceeds Maximum Contaminant Level.		

60

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Project: Enterprise Lateral 6C
Lab ID: 1208975-006 **Matrix:** SOIL

Client Sample ID: MW-8 10-12'
Collection Date: 8/21/2012 8:43:00 AM
Received Date: 8/22/2012 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	8/24/2012 11:54:14 AM
Surr: DNOP	107	77.6-140		%REC	1	8/24/2012 11:54:14 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	8/24/2012 5:39:30 PM
Surr: BFB	98.6	84-116		%REC	1	8/24/2012 5:39:30 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.047		mg/Kg	1	8/24/2012 5:39:30 PM
Toluene	ND	0.047		mg/Kg	1	8/24/2012 5:39:30 PM
Ethylbenzene	ND	0.047		mg/Kg	1	8/24/2012 5:39:30 PM
Xylenes, Total	ND	0.095		mg/Kg	1	8/24/2012 5:39:30 PM
Surr: 4-Bromofluorobenzene	99.7	80-120		%REC	1	8/24/2012 5:39:30 PM

Qualifiers:

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	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits
X	Value exceeds Maximum Contaminant Level.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Project: Enterprise Lateral 6C
Lab ID: 1208975-007 **Matrix:** SOIL

Client Sample ID: MW-3 0-2'
Collection Date: 8/21/2012 10:18:00 AM
Received Date: 8/22/2012 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	8/24/2012 12:19:51 PM
Surr: DNOP	107	77.6-140		%REC	1	8/24/2012 12:19:51 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	8/24/2012 6:08:19 PM
Surr: BFB	98.5	84-116		%REC	1	8/24/2012 6:08:19 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.050		mg/Kg	1	8/24/2012 6:08:19 PM
Toluene	ND	0.050		mg/Kg	1	8/24/2012 6:08:19 PM
Ethylbenzene	ND	0.050		mg/Kg	1	8/24/2012 6:08:19 PM
Xylenes, Total	ND	0.10		mg/Kg	1	8/24/2012 6:08:19 PM
Surr: 4-Bromofluorobenzene	99.9	80-120		%REC	1	8/24/2012 6:08:19 PM

Qualifiers:

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	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits
X	Value exceeds Maximum Contaminant Level.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Project: Enterprise Lateral 6C
Lab ID: 1208975-008 **Matrix:** SOIL

Client Sample ID: MW-3 10-12'
Collection Date: 8/21/2012 10:25:00 AM
Received Date: 8/22/2012 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	8/24/2012 12:45:11 PM
Surr: DNOP	105	77.6-140		%REC	1	8/24/2012 12:45:11 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	8/24/2012 1:29:00 AM
Surr: BFB	97.3	84-116		%REC	1	8/24/2012 1:29:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.050		mg/Kg	1	8/24/2012 1:29:00 AM
Toluene	ND	0.050		mg/Kg	1	8/24/2012 1:29:00 AM
Ethylbenzene	ND	0.050		mg/Kg	1	8/24/2012 1:29:00 AM
Xylenes, Total	ND	0.099		mg/Kg	1	8/24/2012 1:29:00 AM
Surr: 4-Bromofluorobenzene	98.7	80-120		%REC	1	8/24/2012 1:29:00 AM

Qualifiers:

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	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits
X	Value exceeds Maximum Contaminant Level.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Project: Enterprise Lateral 6C
Lab ID: 1208975-009 **Matrix:** SOIL

Client Sample ID: MW-4 5-7'
Collection Date: 8/21/2012 12:25:00 PM
Received Date: 8/22/2012 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	8/24/2012 1:35:56 PM
Surr: DNOP	104	77.6-140		%REC	1	8/24/2012 1:35:56 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	8/24/2012 1:57:46 AM
Surr: BFB	98.2	84-116		%REC	1	8/24/2012 1:57:46 AM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.050		mg/Kg	1	8/24/2012 1:57:46 AM
Toluene	ND	0.050		mg/Kg	1	8/24/2012 1:57:46 AM
Ethylbenzene	ND	0.050		mg/Kg	1	8/24/2012 1:57:46 AM
Xylenes, Total	ND	0.099		mg/Kg	1	8/24/2012 1:57:46 AM
Surr: 4-Bromofluorobenzene	101	80-120		%REC	1	8/24/2012 1:57:46 AM

Qualifiers:

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	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits
X	Value exceeds Maximum Contaminant Level.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Project: Enterprise Lateral 6C
Lab ID: 1208975-010 **Matrix:** SOIL

Client Sample ID: MW-4 10-12'
Collection Date: 8/21/2012 12:30:00 PM
Received Date: 8/22/2012 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	8/24/2012 2:01:24 PM
Surr: DNOP	105	77.6-140		%REC	1	8/24/2012 2:01:24 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	8/24/2012 6:37:12 PM
Surr: BFB	98.0	84-116		%REC	1	8/24/2012 6:37:12 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.047		mg/Kg	1	8/24/2012 6:37:12 PM
Toluene	ND	0.047		mg/Kg	1	8/24/2012 6:37:12 PM
Ethylbenzene	ND	0.047		mg/Kg	1	8/24/2012 6:37:12 PM
Xylenes, Total	ND	0.094		mg/Kg	1	8/24/2012 6:37:12 PM
Surr: 4-Bromofluorobenzene	99.7	80-120		%REC	1	8/24/2012 6:37:12 PM

Qualifiers:

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	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits
X	Value exceeds Maximum Contaminant Level.		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1208975**

29-Aug-12

Client: Animas Environmental Services
Project: Enterprise Lateral 6C

Sample ID **MB-3458**	SampType: **MBLK**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **3458**	RunNo: **5079**
Prep Date: **8/23/2012**	Analysis Date: **8/24/2012**	SeqNo: **143933** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Surr: DNOP	11		10.00		111	77.6	140			

Sample ID **LCS-3458**	SampType: **LCS**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **3458**	RunNo: **5079**
Prep Date: **8/23/2012**	Analysis Date: **8/24/2012**	SeqNo: **143970** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	36	10	50.00	0	71.6	52.6	130			
Surr: DNOP	4.3		5.000		85.0	77.6	140			

Qualifiers:

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1208975**

29-Aug-12

Client: Animas Environmental Services
Project: Enterprise Lateral 6C

Sample ID **MB-3452**	SampType: **MBLK**	TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **PBS**	Batch ID: **3452**	RunNo: **5085**
Prep Date: **8/22/2012**	Analysis Date: **8/23/2012**	SeqNo: **144112** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	990		1000		99.3	84	116			

Sample ID **LCS-3452**	SampType: **LCS**	TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **LCSS**	Batch ID: **3452**	RunNo: **5085**
Prep Date: **8/22/2012**	Analysis Date: **8/23/2012**	SeqNo: **144113** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	93.1	74	117			
Surr: BFB	1000		1000		99.9	84	116			

Qualifiers:

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1208975**

29-Aug-12

Client: Animas Environmental Services

Project: Enterprise Lateral 6C

Sample ID **MB-3452**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **3452**	RunNo: **5085**
Prep Date: **8/22/2012**	Analysis Date: **8/23/2012**	SeqNo: **144142** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.0		1.000		103	80	120			

Sample ID **LCS-3452**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **3452**	RunNo: **5085**
Prep Date: **8/22/2012**	Analysis Date: **8/23/2012**	SeqNo: **144143** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.94	0.050	1.000	0	93.9	76.3	117			
Toluene	0.97	0.050	1.000	0	96.7	80	120			
Ethylbenzene	1.0	0.050	1.000	0	100	77	116			
Xylenes, Total	3.0	0.10	3.000	0	100	76.7	117			
Surr: 4-Bromofluorobenzene	1.1		1.000		107	80	120			

Qualifiers:

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

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: 1208975

Received by/date: AG 08/22/12

Logged By: Anne Thorne — 8/22/2012 10:00:00 AM — Anne Thorne

Completed By: Anne Thorne — 8/22/2012 — Anne Thorne

Reviewed By: 08/22/12

Chain of Custody

1. Were seals intact?	Yes ☐	No ☐	Not Present ☑
2. Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
3. How was the sample delivered?	Courier		

Log In

4. Coolers are present? (see 19. for cooler specific information)	Yes ☑	No ☐	NA ☐
5. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
6. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
7. Sample(s) in proper container(s)?	Yes ☑	No ☐	
8. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
9. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
10. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
11. VOA vials have zero headspace?	Yes ☐	No ☐	No VOA Vials ☑
12. Were any sample containers received broken?	Yes ☐	No ☑	
13. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	
14. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
15. Is it clear what analyses were requested?	Yes ☑	No ☐	
16. 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)

17. 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: _____

18. Additional remarks:

19. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.0	Good	Yes			

Chain-of-Custody Record

Client: Animas Env. Services

Mailing Address: 624 E. Comanche
Farmington NM

Phone #: 505-564-2281

email or Fax#:

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

Accreditation
☐ NELAP ☐ Other

☐ EDD (Type)

Turn-Around Time:
☑ Standard ☐ Rush

Project Name: Enterprise Lateral 6C

Project #:

Project Manager: Tami Ross

Sampler: Thomas Long

On Ice: ☑ Yes ☐ No

Sample Temperature: 2.0

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

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1208	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Air Bubbles (Y or N)
8-20-12	1301	Soil	MW-1 5-7'	4oz Jar	Ice	-001	X		X									
	1305		MW-1 10-12'			-002	X		X									
	1434		MW-2 5-7'			-003	X		X									
	1440		MW-2 10-12'			-004	X		X									
8-21-12	0840		MW-8 5-7'			-005	X		X									
	0843		MW-8 10-12'			-006	X		X									
	1018		MW-3 0-2'			-007	X		X									
	1025		MW-3 10-12'			-008	X		X									
	1225		MW-4 5-7'			-009	X		X									
↓	1230	↓	MW-4 10-12'	↓	↓	-010	X		X									

Date:	Time:	Relinquished by:	Received by:	Date	Time
8-21-12	1746	Thomas Long	Chantal Walk	8/21/12	1740
8/21/12	1751	Chantal Walk		08/22/12	10:00

Remarks: Bill To Enterprise

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
Location: LATERAL 6-C
Tech: L. LAMONE

Project No.: C
Date: 9-7-2012
Time: 0703
Form:

Well I.D.	Depth to NAPL (ft.)	Depth to Water (ft.)	NAPL Thickness (ft.)	Notes / Observations
1		15.78		27.60
2		16.29		26.80
3		15.98		25.88
4		15.59		24.39
5		19.35		25.98
6		18.56		25.37
7		19.03		26.33
8		14.96		25.26
9		17.55		26.26

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

Water Sampling Record

Monitor Well No: MW-1

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

Project: GROUNDWATER SAMPLING
Site: ENTERPRISE
Location: LATERAL 6-C
Sampler: LLAMONE
Sampling Method: BAILER
Depth of Well (ft): 27.60
Depth to Water (ft): 15.78

Project No.:
Date: 9.7.2012
Time: 0756 (0812 Sample)
Weather: Clear
Air Temperature:
Well Diam. (in.): 2
Site Elevation (ft):

Time	Temp (deg C)	Conductivity (µS) (mS)	DO (mg/L)	pH	ORP (mV)	PURGED VOLUME (gallons)	Notes/Observations
0758	17.36	5.520	1.17	6.79	-254.9	1st bail out	odor, very gray
0801	17.48	5.644	1.14	6.88	-257.0	1 gal.	gray H2O
0803	17.22	5.628	1.16	6.93	-259.0	2. gal	gray H2O
0806	17.27	5.589	1.38	6.94	-261.0	3 gal	gray H2O
0808	17.40	5.582	1.39	6.96	-262.0	4 gal.	gray H2O
0810	17.34	5.603	1.48	6.99	-262.3	5 gal	gray H2O
0812	17.31	5.616	1.72	7.02	-263.4	5.80 gal.	gray H2O

Analytical Parameters Sampled For (include Method #): 8021 B BTEX

Disposal of Purged Water: INTO 55 gal. drum (steel) delivered to LANDFARM
Chain of Custody Record Complete? (Y/N) Y
Analytical Laboratory: HALL ENVIROMENTAL ANALYTICAL LAB
Equipment Used During Sampling: YSI; PRODUCT PROBE; BAILER w/ SLOW FLOW; 3 BUCKETS; 3 VOAS; UTILITY KNIFE; 25' of TWINE; 55 gal. DRUM

Other Notes/Comments

11.82 H2O Column	1st gallon the dray gray, odor,
6.93 volume	1 - 5.75 gallon of the gray ... order of sulfur
5.79 purged	No sheen on H2O.

Water Sampling Record

Monitor Well No: MW-2

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

Project: GROUNDWATER SAMPLING
Site: ENTERPRISE
Location: LATERAL 6-C
Sampler: L. LAMONE
Sampling Method: BAILER
Depth of Well (ft): 26.30
Depth to Water (ft): 16.29

Project No.:
Date: 9-7-2017
Time: 0822 (0839 SAMPLE TIME)
Weather: clear / WARM
Air Temperature:
Well Diam. (in.): 2
Site Elevation (ft):

Time	Temp (deg C)	Conductivity (µS) (mS)	DO (mg/L)	pH	ORP (mV)	PURGED VOLUME (gallons)	Notes/Observations
0826	16.52	3.902	2.11	7.56	-136.2	1st bail	clear H2O
0829	16.67	4.243	1.16	7.31	-197.0	1 gal.	gray H2O
0833	16.61	4.182	1.00	7.30	-208.0	3 gal.	gray, silty H2O
0836	16.60	4.252	1.00	7.27	-209.0	4. gal.	gray silty H2O
0839	16.67	4.234	1.03	7.31	-209.6	4.90 gal.	gray silty H2O

Analytical Parameters Sampled For (include Method #): 8021 B BTEX

Disposal of Purged Water: INTO 55 gal. drum (steel) delivered TO LANDFARM
Chain of Custody Record Complete? (Y/N) Y
Analytical Laboratory: HALL ENVIROMENTAL ANALYTICAL LAB
Equipment Used During Sampling: YSI; PRODUCT PROBE; BAILER w/ SLOW FLOW; 3 BUCKETS; 3 VOAS; UTILITY KNIFE; 25' OF TWINE; 55 gal. DRUM

Other Notes/Comments

10.01 H2o column 1.63 volume 4.90 purged	H2o Extremely silty, gray, sulfur odor, recharge on well is good. AK needs CAP.

Water Sampling Record

Monitor Well No: MW-3

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

Project: GROUNDWATER SAMPLING
Site: ENTERPRISE
Location: LATERAL 6-C
Sampler:
Sampling Method: BAILER
Depth of Well (ft): 25.88
Depth to Water (ft): 15.98

Project No.:
Date: 9-7-2012
Time: 0855 (0913 SAMPLE TIME)
Weather:
Air Temperature:
Well Diam. (in.): 2
Site Elevation (ft):

Time	Temp (deg C)	Conductivity (µS) (mS)	DO (mg/L)	pH	ORP (mV)	PURGED VOLUME (gallons)	Notes/Observations
0900	15.58	5.623	1.73	7.49	-41.1	1st bail	TAN H2O
0903	15.38	5.989	1.56	7.39	-36.8	1 gal.	Tan/Clear H2O
0905	15.71	6.160	2.06	7.36	-33.4	2 gal.	TAN Silty H2O
0908	15.46	5.878	1.53	7.33	-33.8	3 gal.	Tan/Silty H2O
0910	15.31	5.593	1.73	7.33	-30.1	4 gal.	Tan/Silty H2O
0913	15.29	5.706	2.24	7.33	26.0	4.85 gal.	Tan Silt

Analytical Parameters Sampled For (include Method #): 8021 B BTEX

Disposal of Purged Water: INTO 55 gal. drum (steel) delivered to LANDFARM
Chain of Custody Record Complete? (Y/N) Y
Analytical Laboratory: HALL ENVIROMENTAL ANALYTICAL LAB
Equipment Used During Sampling: YSI; PRODUCT PROBE; BAILER W/ SLOW FLOW; 3 BUCKETS; 3 VOAS; UTILITY KNIFE; 25' OF TWINE; 55 gal. DRUM

Other Notes/Comments

9.90 H2O Column	H2O tan in color
1.62 volume	silt, no odor, no sheen
4.85 purged	

Water Sampling Record

Monitor Well No: MW-4

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

Project: GROUNDWATER SAMPLING
Site: ENTERPRISE
Location: LATERAL 6-C
Sampler: L. LAMONE
Sampling Method: BAILER
Depth of Well (ft): 24.39
Depth to Water (ft): 15.59

Project No.:
Date: 9.7.2012
Time: 0923 (0937 SAMPLE)
Weather:
Air Temperature:
Well Diam. (in.): 2
Site Elevation (ft):

Time	Temp (deg C)	Conductivity (µS) (mS)	DO (mg/L)	pH	ORP (mV)	PURGED VOLUME (gallons)	Notes/Observations
0926	15.58	5.208	1.65	7.54	-44.8	1st Bailer	clear
0929	16.31	5.584	1.52	7.37	-30.9	1 gal.	Tan/silt
0931	15.81	5.559	1.28	7.32	-31.8	2.0 gal.	Tan silt
0934	15.13	5.095	0.89	7.34	-44.0	3.0 gal.	Tan silt
0937	15.77	5.564	1.46	7.30	-27.9	4.35 gal	Tan silt H2O

Analytical Parameters Sampled For (include Method #): 8021 B BTEX

Disposal of Purged Water: INTO 55 gal. drum (steel) delivered to LANDFARM
Chain of Custody Record Complete? (Y/N) Y
Analytical Laboratory: HALL ENVIROMENTAL ANALYTICAL LAB
Equipment Used During Sampling: YSI; PRODUCT PROBE; BAILER w/ SLOW FLOW; 3 BUCKETS; 3 VOAS; UTILITY KNIFE; 25' OF TWINE; 55 gal. DRUM

Other Notes/Comments

8.80 H2o Column	H2O extremely silty, tan to brown in color
1.44 volume	NO odor, NO sheen
4.31 purged	

Water Sampling Record

Monitor Well No: MW-5

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

Project: GROUNDWATER SAMPLING
Site: ENTERPRISE
Location: LATERAL 6-C
Sampler: L. LAMONE
Sampling Method: BAILER
Depth of Well (ft): 25.98
Depth to Water (ft): 19.35

Project No.:
Date: 9.7.2012
Time: 0942 (0953 Sample)
Weather: WNRM
Air Temperature:
Well Diam. (in.): 2
Site Elevation (ft):

Time	Temp (deg C)	Conductivity (µS) (mS)	DO (mg/L)	pH	ORP (mV)	PURGED VOLUME (gallons)	Notes/Observations
0944	15.27	4.007	1.87	7.46	-34.8	1st Bailer	Clear
0949	15.77	4.130	1.76	7.35	-20.8	1.0-gal	Tan/silt
0951	15.26	4.250	2.46	7.34	-11.1	2.0 gal.	Tan Some silt
0953	14.89	4.137	1.53	7.34	-15.8	3.25 gal.	Tan/silt

Analytical Parameters Sampled For (include Method #): 8021 B BTEX

Disposal of Purged Water: INTO 55 gal. drum (steel) delivered to LANDFARM
Chain of Custody Record Complete? (Y/N) Y
Analytical Laboratory: HALL ENVIROMENTAL ANALYTICAL LAB
Equipment Used During Sampling: YSI; PRODUCT PROBE; BAILER w/ SLOW FLOW; 3 BUCKETS; 3 VOAS; UTILITY KNIFE; 25' of TWINE; 55 gal. DRUM

Other Notes/Comments

6.63 H2O column
1.08 Volume
3.25 purged

H2O lite tan, silt,

Water Sampling Record

Monitor Well No: MW-6

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

Project: GROUNDWATER SAMPLING
Site: ENTERPRISE
Location: LATERAL 6-C
Sampler: L. LAMONE
Sampling Method: BAILER
Depth of Well (ft): 25.37
Depth to Water (ft): 18.55

Project No.:
Date: 9.7.2012
Time: 1006 (1021 Sample Time)
Weather: WARM
Air Temperature:
Well Diam. (in.): 2
Site Elevation (ft):

Time	Temp (deg C)	Conductivity (µS) (mS)	DO (mg/L)	pH	ORP (mV)	PURGED VOLUME (gallons)	Notes/Observations
1010	15.74	3.662	1.93	7.71	-111.1	1st Bailer	Gray/odor
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1016	15.43	4.599	0.87	7.35	-295.9	1.0 gal.	gray/sheen/odor
1019	15.33	4.662	0.88	7.37	-296.7	2.0 gal	gray/sheen/odor
1021	15.43	4.833	1.24	7.38	-288.4	3.35 gal	gray/sheen/odor

Analytical Parameters Sampled For (include Method #): 8021 B BTEX

Disposal of Purged Water: INTO 55 gal. drum (steel) delivered to LANDFARM
Chain of Custody Record Complete? (Y/N) Y
Analytical Laboratory: HALL ENVIROMENTAL ANALYTICAL LAB
Equipment Used During Sampling: YSI; PRODUCT PROBE; BAILER w/ SLOW FLOW; 3 BUCKETS; 3 VOAS; UTILITY KNIFE; 25' of TWINE; 55 gal. DRUM

Other Notes/Comments

6.82 H2O column
1.11 volume
3.34 purged

H2O is medium grayish color, odor (sulfur) sheen.

Water Sampling Record

Monitor Well No: MW-7

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

Project: GROUNDWATER SAMPLING
Site: ENTERPRISE
Location: LATERAL 6-C
Sampler: C. LAMONE
Sampling Method: BAILER
Depth of Well (ft): 26.33
Depth to Water (ft): 19.03

Project No.:
Date: 9.7.2012
Time: 1038 (1053 Sample Time)
Weather: WARM
Air Temperature:
Well Diam. (in.): 2
Site Elevation (ft):

Time	Temp (deg C)	Conductivity (µS) (mS)	DO (mg/L)	pH	ORP (mV)	PURGED VOLUME (gallons)	Notes/Observations
1043	15.51	4.630	2.05	7.76	-265.6	1st BAILER	Lite gray
1045	15.23	4.590	1.62	7.66	-254.1	1.0 gal.	gray
1048	14.96	4.551	1.40	7.62	-247.2	2.0 gal.	gray H2O Slight Sheen
1050	15.06	4.536	1.49	7.61	-243.8	3.0 gal	gray H2O
1053	15.24	4.542	1.38	7.59	-241.3	3.160 gal	gray/sheen H2O

Analytical Parameters Sampled For (include Method #): 8021 B BTEX

Disposal of Purged Water: INTO 55 gal. drum (steel) delivered to LANDFARM

Chain of Custody Record Complete? (Y/N) Y

Analytical Laboratory: HALL ENVIRONMENTAL ANALYTICAL LAB

Equipment Used During Sampling: YSI; PRODUCT PROBE; BAILER w/ SLOW FLOW; 3 BUCKETS; 3 VOAS; UTILITY KNIFE; 25' of TWINE; 55 gal. DRUM

Other Notes/Comments

7.30 H2O column	H2O, gray, sulfur odor, slight sheen
1.19 volume	
3.57 purged	

Water Sampling Record

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

Monitor Well No: MW-8

Project: GROUNDWATER SAMPLING
Site: ENTERPRISE
Location: LATERAL 6-C
Sampler: L. LAMONE
Sampling Method: BAILER
Depth of Well (ft): 25.26
Depth to Water (ft): 14.96

Project No.:
Date: 9-7-2017
Time: 1105 (1120 Sample Time)
Weather: HOT
Air Temperature:
Well Diam. (in.): 2
Site Elevation (ft):

Time	Temp (deg C)	Conductivity (µS) (mS)	DO (mg/L)	pH	ORP (mV)	PURGED VOLUME (gallons)	Notes/Observations
1109	16.20	4.011	2.42	7.99	-88.9	1st BAILER	CLEAR
1111	16.01	4.015	1.12	7.86	-94.9	1.0 gal	GRAY
1113	16.23	4.015	0.79	7.76	-106.6	2.0 gal	GRAY
1116	16.19	4.019	0.74	7.68	-111.1	3.0 gal	GRAY
1118	16.10	4.032	0.84	7.64	-113.0	4.0 gal	GRAY
1120	16.16	4.048	1.30	7.57	-116.1	5.0 gal	GRAY

Analytical Parameters Sampled For (include Method #): 8021 B BTEX

Disposal of Purged Water: INTO 55 gal. drum (steel) delivered to LANDFARM
Chain of Custody Record Complete? (Y/N) Y
Analytical Laboratory: HALL ENVIROMENTAL ANALYTICAL LAB
Equipment Used During Sampling: YSI; PRODUCT PROBE; BAILER w/ SLOW FLOW; 3 BUCKETS; 3 VOAS; UTILITY KNIFE; 25' OF TWINE; 55 gal. DRUM

Other Notes/Comments

10.30 Ht column
1.68 volume
5.00 purged

GRAY 1120, slight odor, NO sheen.

Water Sampling Record

Monitor Well No: MW-9

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

Project: GROUNDWATER SAMPLING
Site: ENTERPRISE
Location: LATERAL 6-C
Sampler: L. LAMONTE
Sampling Method: BAILER
Depth of Well (ft): 26.26
Depth to Water (ft): 17.55

Project No.:
Date: 9.7.2012
Time: 1129 (1148 SAMPLE TIME)
Weather: HOT
Air Temperature:
Well Diam. (in.): 2
Site Elevation (ft):

Time	Temp (deg C)	Conductivity (µS) (mS)	DO (mg/L)	pH	ORP (mV)	PURGED VOLUME (gallons)	Notes/Observations
1134	15.46	4.674	2.78	7.68	-65.9	1st Bailer	clear H2O
1137	15.36	4.531	1.33	7.54	-36.3	1.0 gal.	clear H2O
1139	14.98	4.506	1.46	7.52	-27.7	2.0 gal	clear H2O
1144	15.65	4.526	1.43	7.46	-25.1	3.0 gal	clear H2O
1148	15.61	4.583	1.48	7.45	-19.5	4.25 gal	clear H2O

Analytical Parameters Sampled For (include Method #): 8021 B BTEX

Disposal of Purged Water: INTO 55 gal. drum (steel) delivered to LANDFARM
Chain of Custody Record Complete? (Y/N) Y
Analytical Laboratory: HALL ENVIROMENTAL ANALYTICAL LAB
Equipment Used During Sampling: YSI; PRODUCT PROBE; BAILER w/ SLOW FLOW; 3 BUCKETS; 3 VOAS; UTILITY KNIFE; 25' of TWINE; 55 gal. DRUM

Other Notes/Comments

8.71 H2O column	H2O "clear" as in lite tan "RIVER color"
1.42 volume	clear. No odor, no sheen
4.26 purged	

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 17, 2012

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

RE: Lateral 6-C

OrderNo.: 1209283

Dear Tami Ross:

Hall Environmental Analysis Laboratory received 9 sample(s) on 9/8/2012 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 **1209283**
Date Reported: **9/17/2012**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Project: Lateral 6-C
Lab ID: 1209283-001 **Matrix:** AQUEOUS

Client Sample ID: MW-1
Collection Date: 9/7/2012 8:12:00 AM
Received Date: 9/8/2012 11:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	2200	50		µg/L	50	9/12/2012 1:01:32 PM
Toluene	350	50		µg/L	50	9/12/2012 1:01:32 PM
Ethylbenzene	68	50		µg/L	50	9/12/2012 1:01:32 PM
Xylenes, Total	650	100		µg/L	50	9/12/2012 1:01:32 PM
Surr: 4-Bromofluorobenzene	101	69.7-152		%REC	50	9/12/2012 1:01:32 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
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: Lateral 6-C
Collection Date: 9/7/2012 8:39:00 AM
Lab ID: 1209283-002
Matrix: AQUEOUS
Received Date: 9/8/2012 11:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	270	20		µg/L	20	9/12/2012 1:31:43 PM
Toluene	1100	20		µg/L	20	9/12/2012 1:31:43 PM
Ethylbenzene	66	20		µg/L	20	9/12/2012 1:31:43 PM
Xylenes, Total	1800	40		µg/L	20	9/12/2012 1:31:43 PM
Surr: 4-Bromofluorobenzene	108	69.7-152		%REC	20	9/12/2012 1:31:43 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
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: Lateral 6-C
Collection Date: 9/7/2012 9:13:00 AM
Lab ID: 1209283-003 **Matrix:** AQUEOUS **Received Date:** 9/8/2012 11:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	2.0		µg/L	2	9/12/2012 5:16:12 PM
Toluene	ND	2.0		µg/L	2	9/12/2012 5:16:12 PM
Ethylbenzene	ND	2.0		µg/L	2	9/12/2012 5:16:12 PM
Xylenes, Total	ND	4.0		µg/L	2	9/12/2012 5:16:12 PM
Surr: 4-Bromofluorobenzene	107	69.7-152		%REC	2	9/12/2012 5:16:12 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
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: Lateral 6-C
Lab ID: 1209283-004 **Matrix:** AQUEOUS

Client Sample ID: MW-4
Collection Date: 9/7/2012 9:37:00 AM
Received Date: 9/8/2012 11:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	18	2.0		µg/L	2	9/12/2012 5:46:35 PM
Toluene	5.1	2.0		µg/L	2	9/12/2012 5:46:35 PM
Ethylbenzene	ND	2.0		µg/L	2	9/12/2012 5:46:35 PM
Xylenes, Total	ND	4.0		µg/L	2	9/12/2012 5:46:35 PM
Surr: 4-Bromofluorobenzene	88.2	69.7-152		%REC	2	9/12/2012 5:46:35 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
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: Lateral 6-C
Collection Date: 9/7/2012 9:53:00 AM
Lab ID: 1209283-005 **Matrix:** AQUEOUS **Received Date:** 9/8/2012 11:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	2.0		µg/L	2	9/12/2012 3:07:13 AM
Toluene	ND	2.0		µg/L	2	9/12/2012 3:07:13 AM
Ethylbenzene	ND	2.0		µg/L	2	9/12/2012 3:07:13 AM
Xylenes, Total	ND	4.0		µg/L	2	9/12/2012 3:07:13 AM
Surr: 4-Bromofluorobenzene	88.2	69.7-152		%REC	2	9/12/2012 3:07:13 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
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: Lateral 6-C
Lab ID: 1209283-006 **Matrix:** AQUEOUS

Client Sample ID: MW-6
Collection Date: 9/7/2012 10:21:00 AM
Received Date: 9/8/2012 11:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	5.0		µg/L	5	9/12/2012 6:16:54 PM
Toluene	ND	5.0		µg/L	5	9/12/2012 6:16:54 PM
Ethylbenzene	260	5.0		µg/L	5	9/12/2012 6:16:54 PM
Xylenes, Total	2200	100		µg/L	50	9/12/2012 6:47:06 PM
Surr: 4-Bromofluorobenzene	120	69.7-152		%REC	5	9/12/2012 6:16:54 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
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: Lateral 6-C
Collection Date: 9/7/2012 10:53:00 AM
Lab ID: 1209283-007
Matrix: AQUEOUS
Received Date: 9/8/2012 11:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	2.0		µg/L	2	9/13/2012 2:12:57 PM
Toluene	ND	2.0		µg/L	2	9/13/2012 2:12:57 PM
Ethylbenzene	ND	2.0		µg/L	2	9/13/2012 2:12:57 PM
Xylenes, Total	ND	4.0		µg/L	2	9/13/2012 2:12:57 PM
Surr: 4-Bromofluorobenzene	116	69.7-152		%REC	2	9/13/2012 2:12:57 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
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: Lateral 6-C
Lab ID: 1209283-008 **Matrix:** AQUEOUS

Client Sample ID: MW-8
Collection Date: 9/7/2012 11:20:00 AM
Received Date: 9/8/2012 11:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	41	2.0		µg/L	2	9/12/2012 11:49:13 PM
Toluene	40	2.0		µg/L	2	9/12/2012 11:49:13 PM
Ethylbenzene	3.8	2.0		µg/L	2	9/12/2012 11:49:13 PM
Xylenes, Total	320	4.0		µg/L	2	9/12/2012 11:49:13 PM
Surr: 4-Bromofluorobenzene	111	69.7-152		%REC	2	9/12/2012 11:49:13 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
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: Lateral 6-C
Collection Date: 9/7/2012 11:48:00 AM
Lab ID: 1209283-009
Matrix: AQUEOUS
Received Date: 9/8/2012 11:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	2.0		µg/L	2	9/13/2012 12:19:23 AM
Toluene	2.4	2.0		µg/L	2	9/13/2012 12:19:23 AM
Ethylbenzene	ND	2.0		µg/L	2	9/13/2012 12:19:23 AM
Xylenes, Total	ND	4.0		µg/L	2	9/13/2012 12:19:23 AM
Surr: 4-Bromofluorobenzene	112	69.7-152		%REC	2	9/13/2012 12:19:23 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
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

90

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1209283**

17-Sep-12

Client: Animas Environmental Services
Project: Lateral 6-C

Sample ID	5ML RB	SampType:	MBLK	TestCode:	EPA Method 8015B: Gasoline Range					
Client ID:	PBW	Batch ID:	R5455	RunNo:	5455					
Prep Date:		Analysis Date:	9/11/2012	SeqNo:	155853	Units:	%REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	17		20.00		84.3	69.8	119			

Sample ID	2.5UG GRO LCS	SampType:	LCS	TestCode:	EPA Method 8015B: Gasoline Range					
Client ID:	LCSW	Batch ID:	R5455	RunNo:	5455					
Prep Date:		Analysis Date:	9/11/2012	SeqNo:	155854	Units:	%REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	24		20.00		118	69.8	119			

Sample ID	5ML RB	SampType:	MBLK	TestCode:	EPA Method 8015B: Gasoline Range					
Client ID:	PBW	Batch ID:	R5492	RunNo:	5492					
Prep Date:		Analysis Date:	9/12/2012	SeqNo:	156953	Units:	%REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	17		20.00		85.8	69.8	119			

Sample ID	2.5UG GRO LCS	SampType:	LCS	TestCode:	EPA Method 8015B: Gasoline Range					
Client ID:	LCSW	Batch ID:	R5492	RunNo:	5492					
Prep Date:		Analysis Date:	9/12/2012	SeqNo:	156954	Units:	%REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	18		20.00		88.0	69.8	119			

Sample ID	5ML RB	SampType:	MBLK	TestCode:	EPA Method 8015B: Gasoline Range					
Client ID:	PBW	Batch ID:	R5522	RunNo:	5522					
Prep Date:		Analysis Date:	9/13/2012	SeqNo:	158006	Units:	%REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	18		20.00		91.2	69.8	119			

Sample ID	2.5UG GRO LCS	SampType:	LCS	TestCode:	EPA Method 8015B: Gasoline Range					
Client ID:	LCSW	Batch ID:	R5522	RunNo:	5522					
Prep Date:		Analysis Date:	9/13/2012	SeqNo:	158007	Units:	%REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	19		20.00		96.2	69.8	119			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD 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
- RL Reporting Detection Limit