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**GWMR**

**10 / 31 / 2012**



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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

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## 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 6C pipeline 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](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.

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## **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.

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### 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.

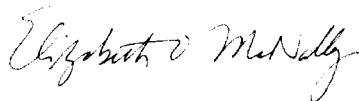
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#### 4.0 Certification

I, the undersigned, am personally familiar with the information presented in this Site Investigation Report, 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, CHMM  
Project Manager

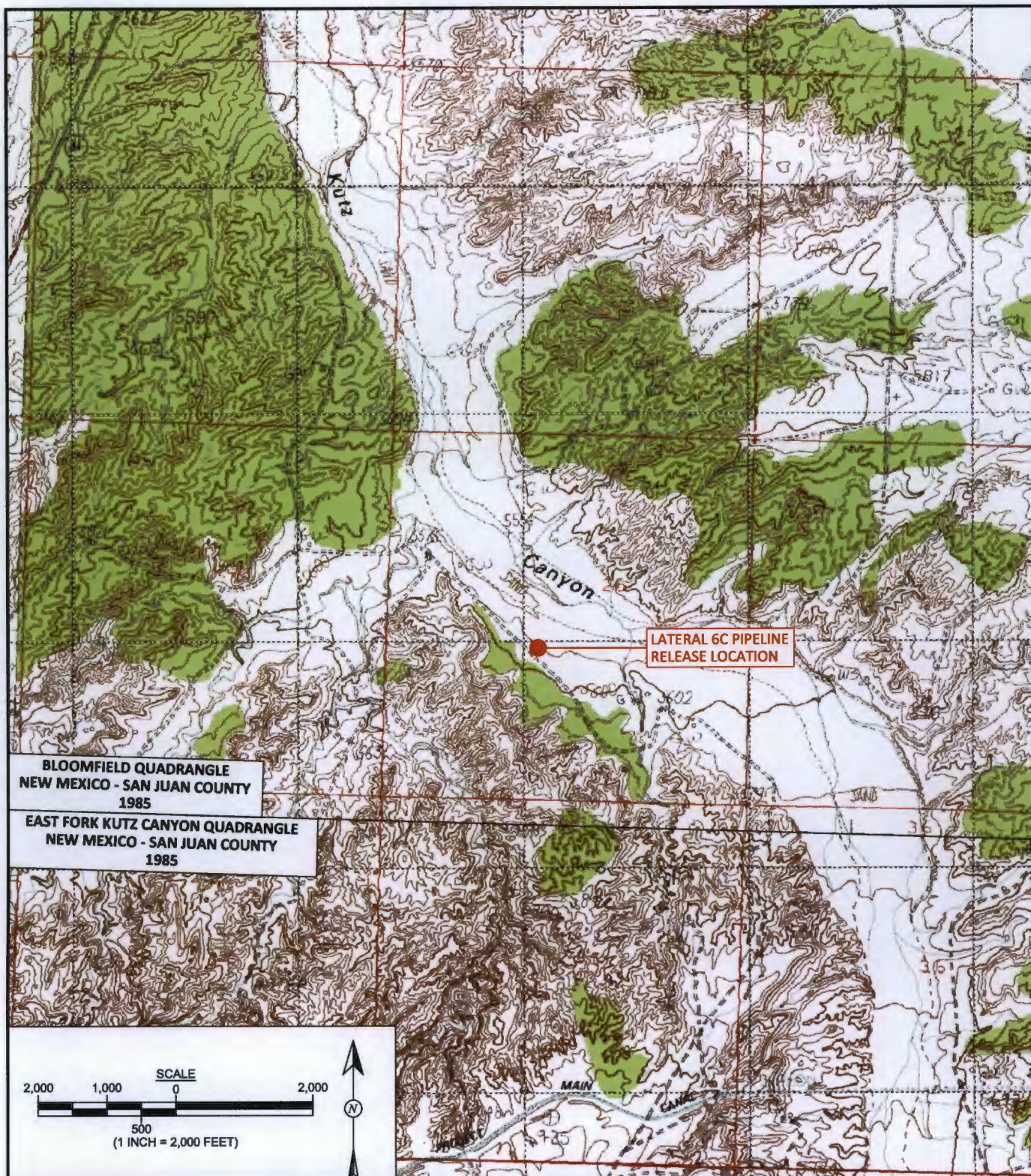



Elizabeth McNally, P.E.  
Principal

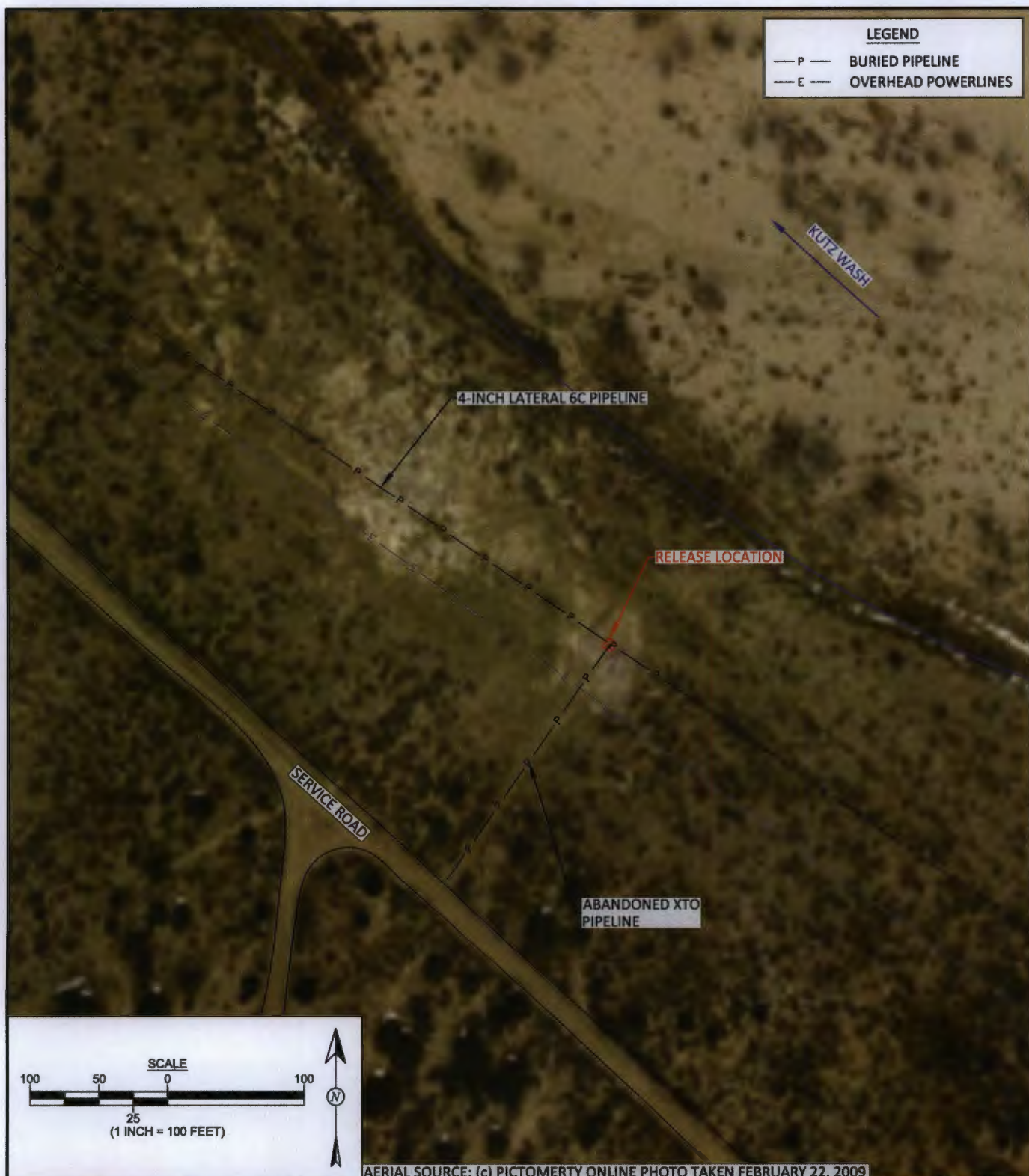
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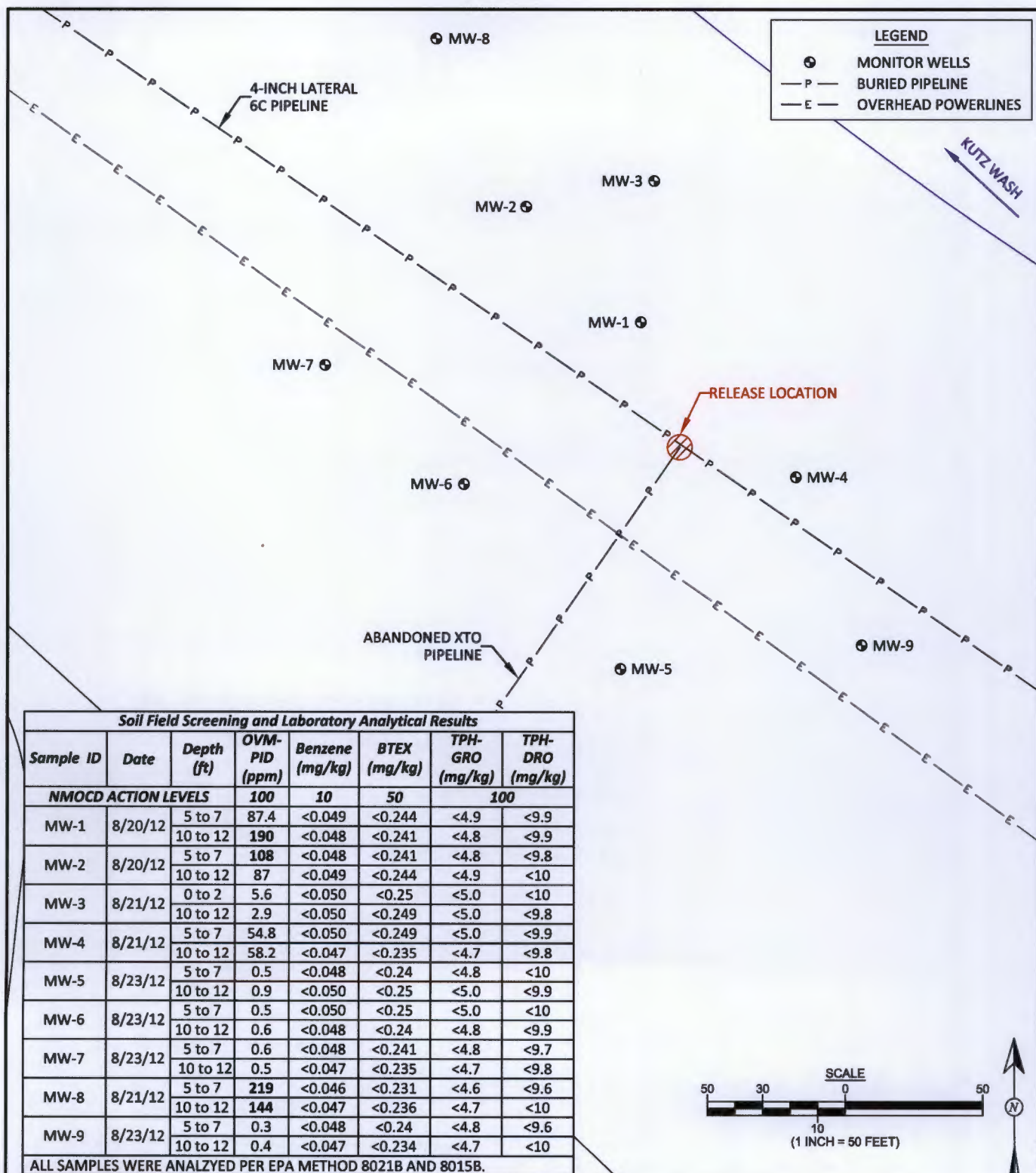
 <b>AES</b> Animas Environmental Services, LLC	<b>DRAWN BY:</b> C. Lameman	<b>DATE DRAWN:</b> September 18, 2012	<b>FIGURE 1</b>  <b>TOPOGRAPHIC SITE LOCATION MAP</b> ENTERPRISE PRODUCTS COMPANY LATERAL 6C PIPELINE RELEASE GROUNDWATER INVESTIGATION SAN JUAN COUNTY, NEW MEXICO NE¼ SW¼, SECTION 26, T28N, R11W N36.63202, W107.97400
	<b>REVISIONS BY:</b> C. Lameman	<b>DATE REVISED:</b> October 1, 2012	
	<b>CHECKED BY:</b> T. Ross	<b>DATE CHECKED:</b> October 1, 2012	
	<b>APPROVED BY:</b> E. McNally	<b>DATE APPROVED:</b> October 2, 2012	



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<b>CHECKED BY:</b> T. Ross	<b>DATE CHECKED:</b> October 1, 2012
<b>APPROVED BY:</b> E. McNally	<b>DATE APPROVED:</b> October 2, 2012

**FIGURE 2**

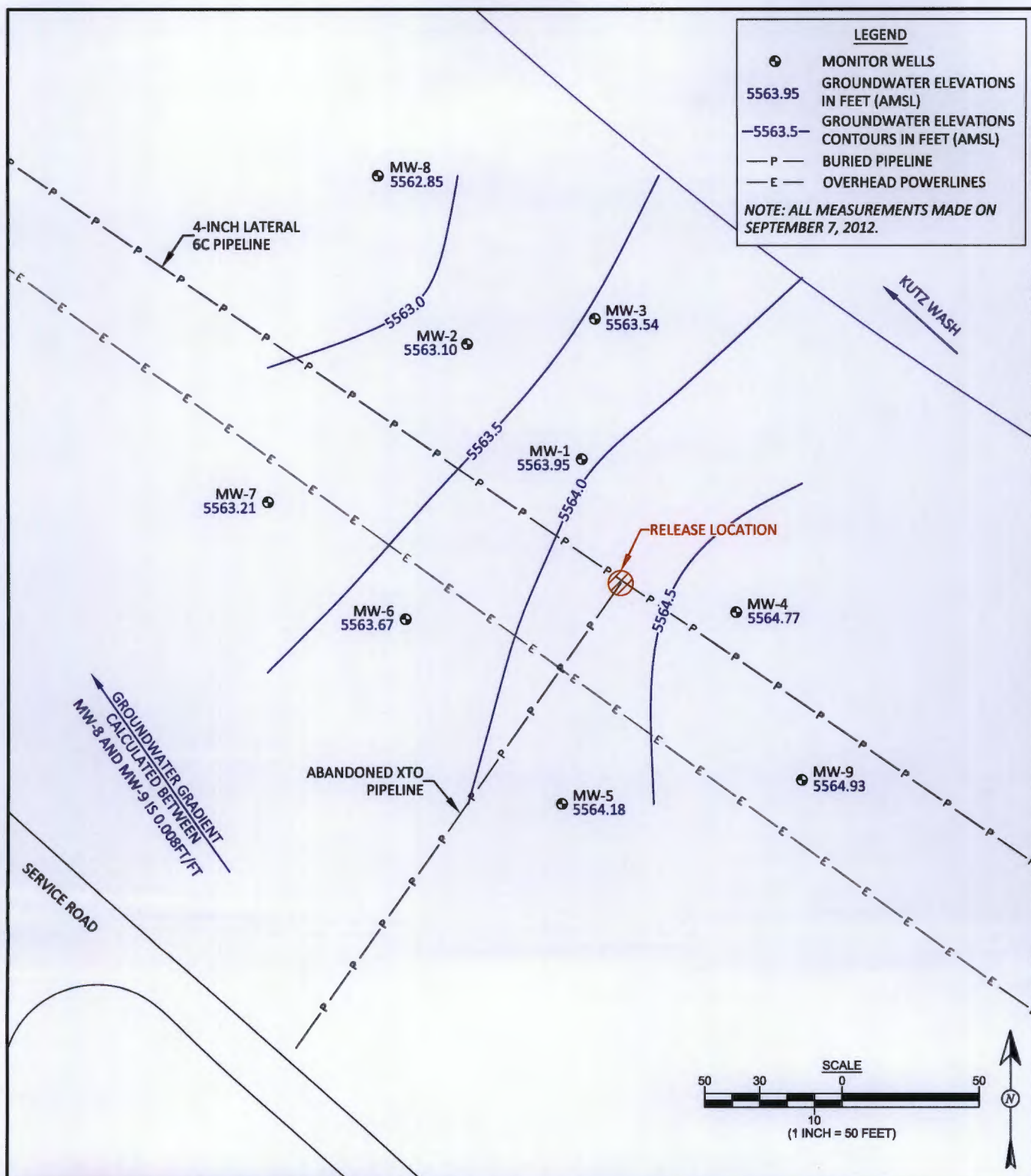
**AERIAL SITE MAP**  
 ENTERPRISE PRODUCTS COMPANY  
 LATERAL 6C PIPELINE RELEASE  
 GROUNDWATER INVESTIGATION  
 SAN JUAN COUNTY, NEW MEXICO  
 NE¼ SW¼, SECTION 26, T28N, R11W  
 N36.63202, W107.97400



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<b>CHECKED BY:</b> T. Ross	<b>DATE CHECKED:</b> October 1, 2012
<b>APPROVED BY:</b> E. McNally	<b>DATE APPROVED:</b> 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



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September 18, 2012

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C. Lameman

**DATE REVISED:**  
October 1, 2012

**CHECKED BY:**  
T. Ross

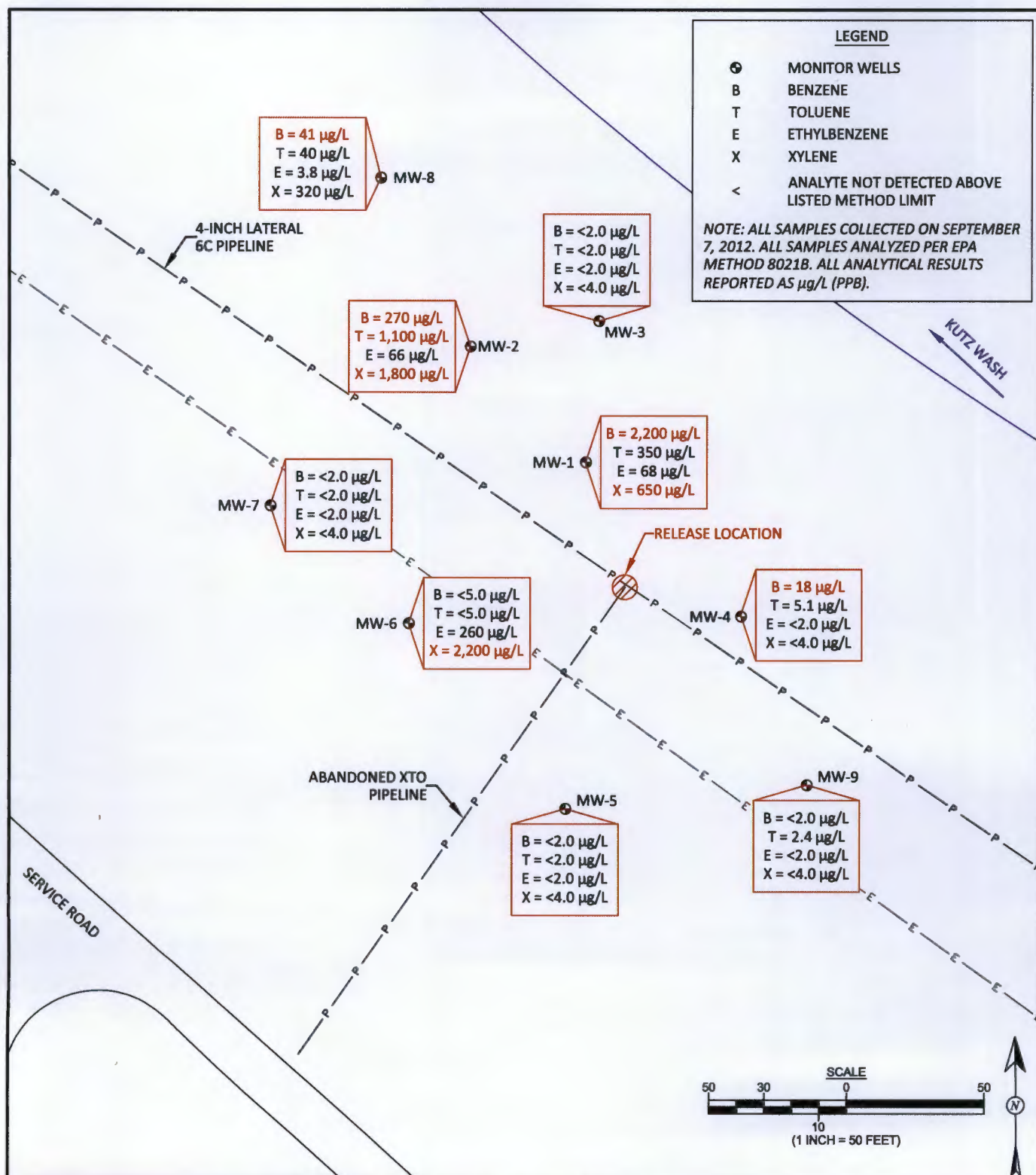
**DATE CHECKED:**  
October 1, 2012

**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



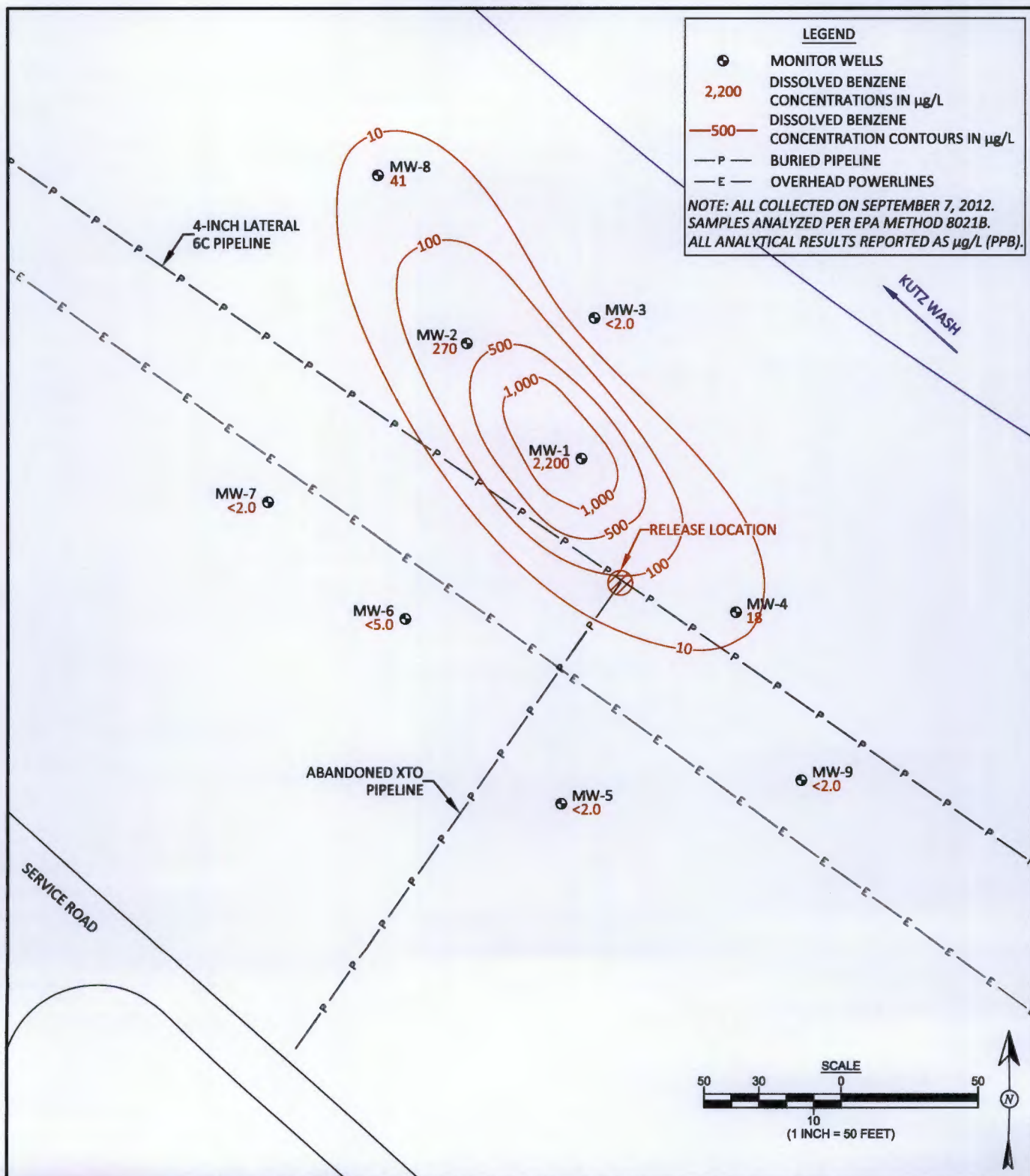
**FIGURE 5**

**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



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<b>APPROVED BY:</b> E. McNally	<b>DATE APPROVED:</b> October 2, 2012



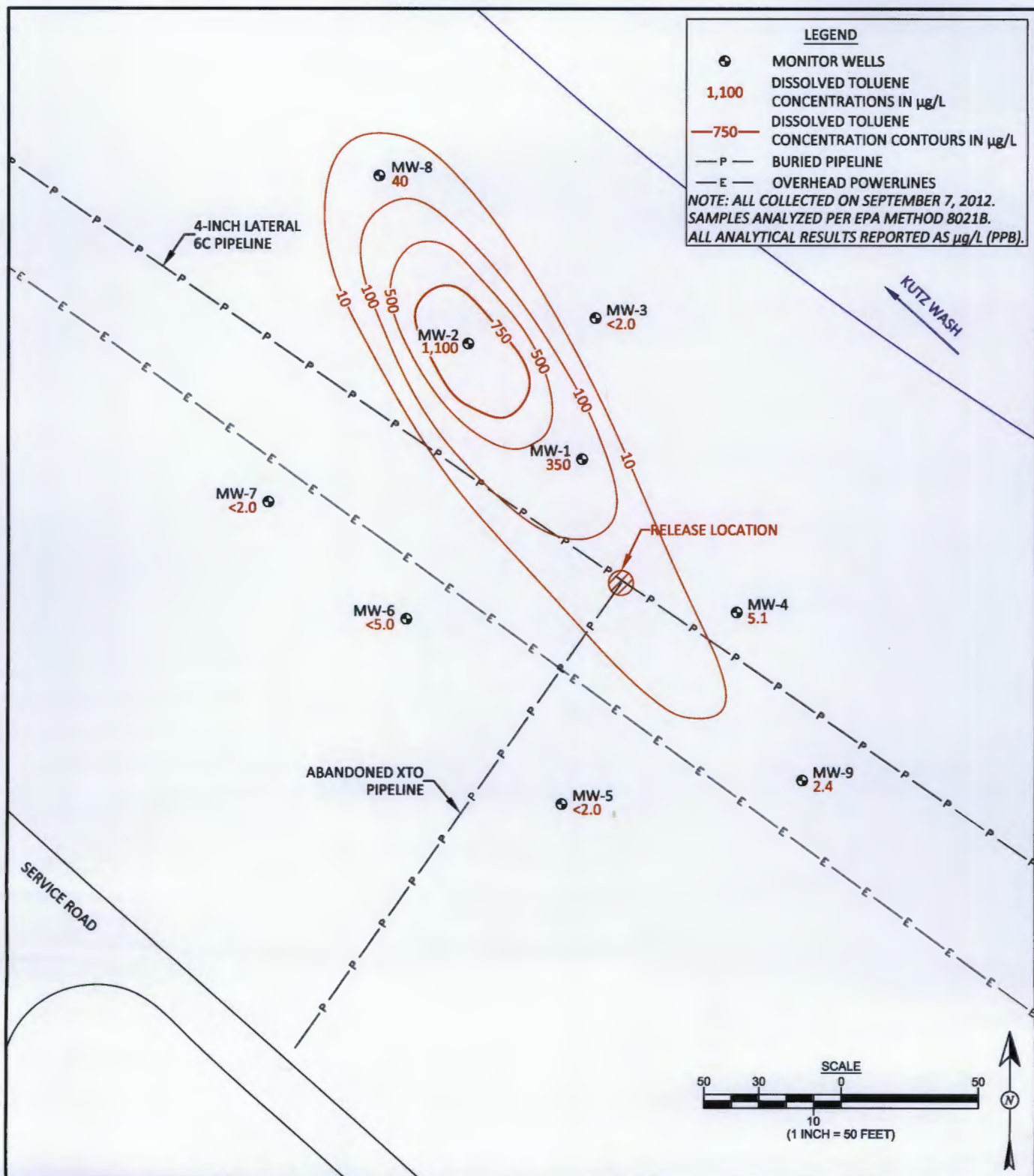
Animas Environmental Services, LLC

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<b>APPROVED BY:</b> E. McNally	<b>DATE APPROVED:</b> October 2, 2012

**FIGURE 6**

**DISSOLVED BENZENE 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

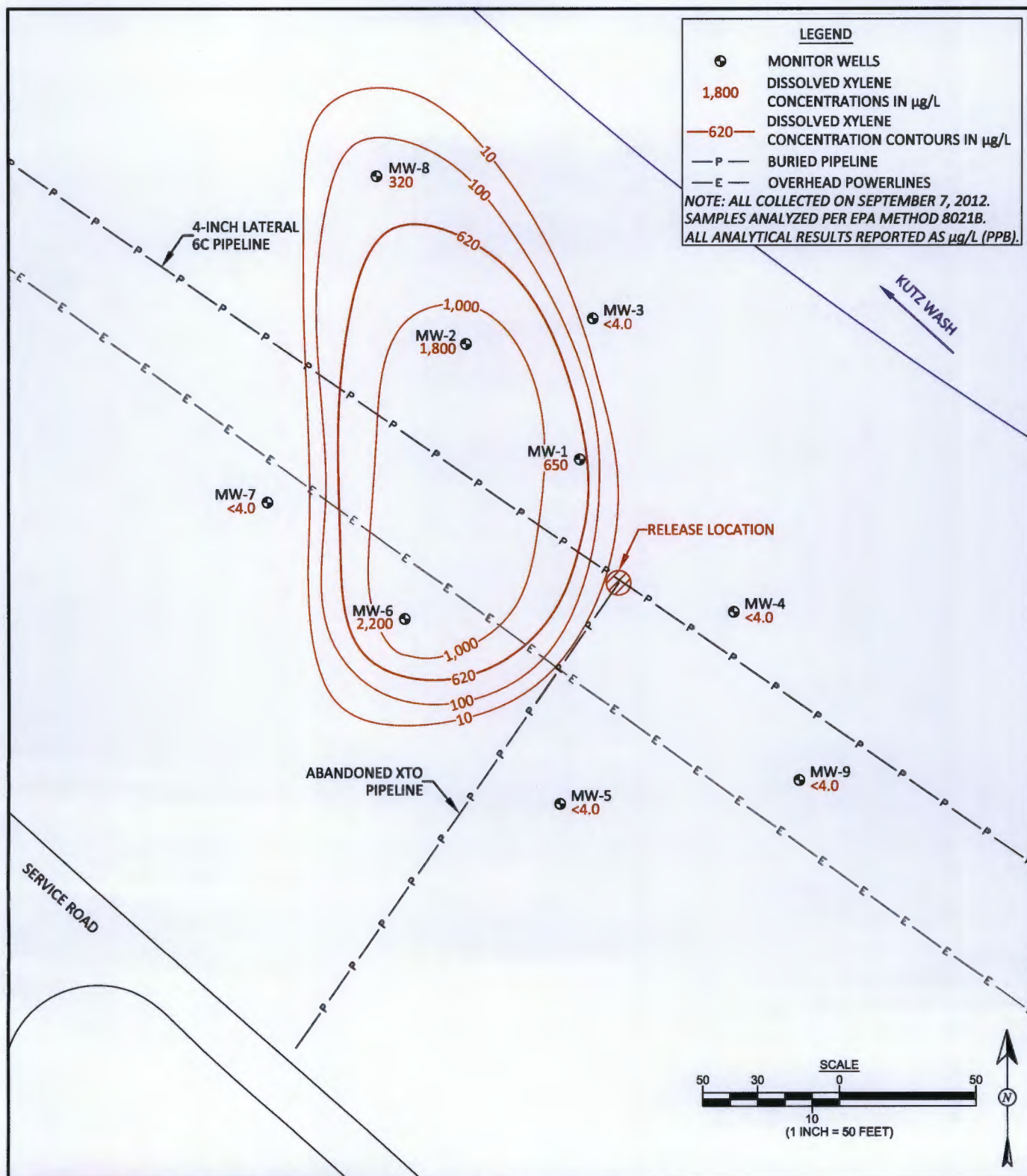


**FIGURE 7**

**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



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



**FIGURE 8**

**DISSOLVED XYLENE 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

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

**AES**

Animas Environmental Services, LLC

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)
<b>NMOCAD Action Level</b>			<b>100</b>	<b>10</b>	<b>NE</b>	<b>NE</b>	<b>NE</b>	<b>50</b>	<b>NE</b>	<b>NE</b>	<b>100</b>
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

<b>Well ID</b>	<b>Date</b>	<b>Depth to Water (ft below TOC)</b>	<b>Surveyed TOC (ft)</b>	<b>GW Elev. (ft)</b>	<b>pH</b>	<b>Conductivity (mS)</b>	<b>Dissolved Oxygen (mg/L)</b>	<b>Temp. (°C)</b>	<b>Purge Volume (gallons)</b>
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 limit  
µg/L                      Micrograms per liter (ppb)



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Farmington, NM 87401

**MW-1**

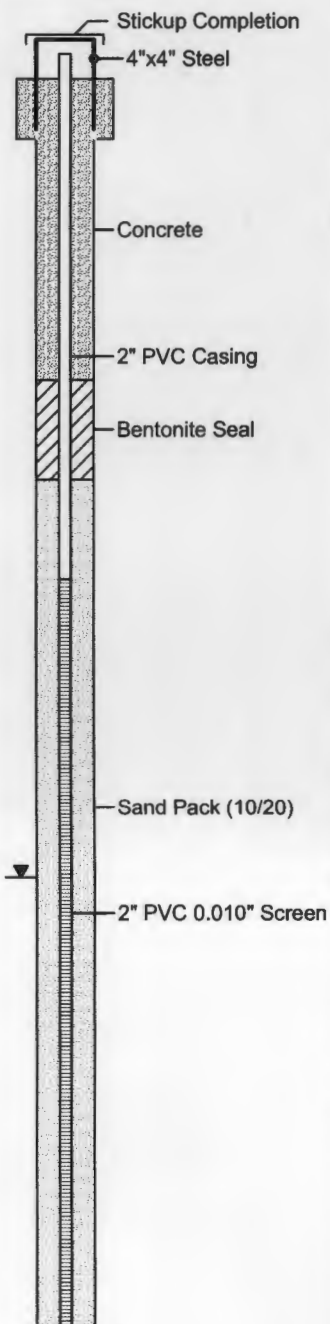
**ENTERPRISE PRODUCTS COMPANY  
LATERAL 6C PIPELINE GW INVESTIGATION  
SAN JUAN COUNTY, NEW MEXICO  
NE 1/4 SW 1/4, SEC. 26, T28N, R11W  
N36.63202, W107.97400**

Date Started : 8/20/12  
Date Completed : 8/20/12  
Hole Diameter : 2.25  
Drilling Method : HSA  
Sampling Method : Split Spoon

Lat. : N36.63216  
Long. : W107.97405  
Survey By : Enterprise Products Co.  
Logged By : Tom Long

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

Well: MW-1  
Elev: 5579.73





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**MW-2**

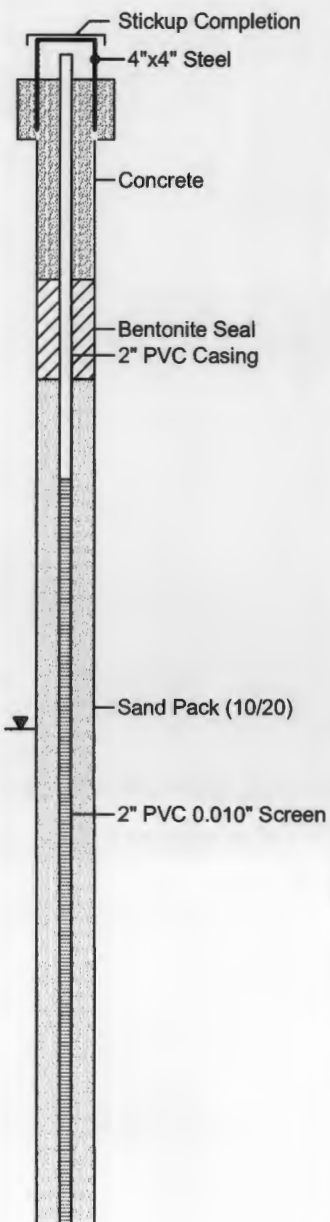
**ENTERPRISE PRODUCTS COMPANY  
LATERAL 6C PIPELINE GW INVESTIGATION  
SAN JUAN COUNTY, NEW MEXICO  
NE1/4 SW1/4, SEC. 26, T28N, R11W  
N36.63202, W107.97400**

Date Started : 8/20/12  
Date Completed : 8/20/12  
Hole Diameter : 2.25  
Drilling Method : HSA  
Sampling Method : Split Spoon

Lat. : N36.63228  
Long. : W107.97419  
Survey By : Enterprise Products Co.  
Logged By : Tom Long

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	SP		Sand, Brown, Moist/Wet, No Odor, No Staining	108	
10	5567					
12	5565					
14	5563	SP		Sand, Brown, Medium Grained, Wet, Very Little Recovery, No Odor, No Staining	87.0	
16	5561					
18	5559	CG		Cobble/Gravel, Brown, Wet, Slight Odor, No Staining	NA	
20	5557					
22	5555	SS			38.7	
24	5553					
26		SS		Sandstone, Gray, Fine Grained, Wet, Slight Odor, No Staining	16.1	

Well: MW-2  
Elev: 5579.39



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MW-3

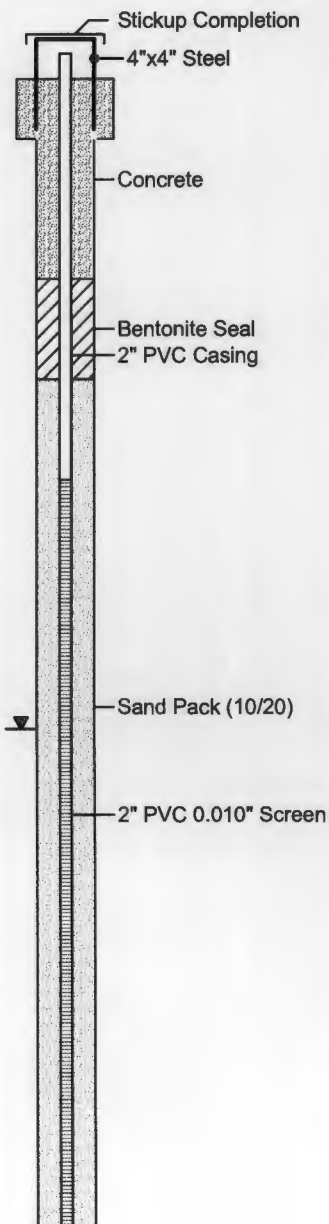
ENTERPRISE PRODUCTS COMPANY  
LATERAL 6C PIPELINE GW INVESTIGATION  
SAN JUAN COUNTY, NEW MEXICO  
NE1/4 SW1/4, SEC. 26, T28N, R11W  
N36.63202, W107.97400

Date Started : 8/21/12  
Date Completed : 8/21/12  
Hole Diameter : 2.25  
Drilling Method : HSA  
Sampling Method : Split Spoon

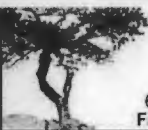
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Long. : W107.97403  
Survey By : Enterprise Products Co.  
Logged By : Tom Long

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					
8	5569	SP		Sand, Brown, Fine Grained, Wet, No Odor, No Staining	2.8	
10	5567					
12	5565					
14	5563	SP		Sand, Gray, Fine to Medium Grained, Wet, No Odor, No Staining	2.9	
16	5561					
18	5559	SP		Sand, Gray, Fine to Coarse Grained, Some Gravel, Wet, No Odor, No Staining	0.8	
20	5557					
22	5555					
24	5553	SS			2.1	
26				Sandstone, Gray, Fine Grained, Wet, No Odor, No Staining		

Well: MW-3  
Elev: 5579.52



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**MW-4**

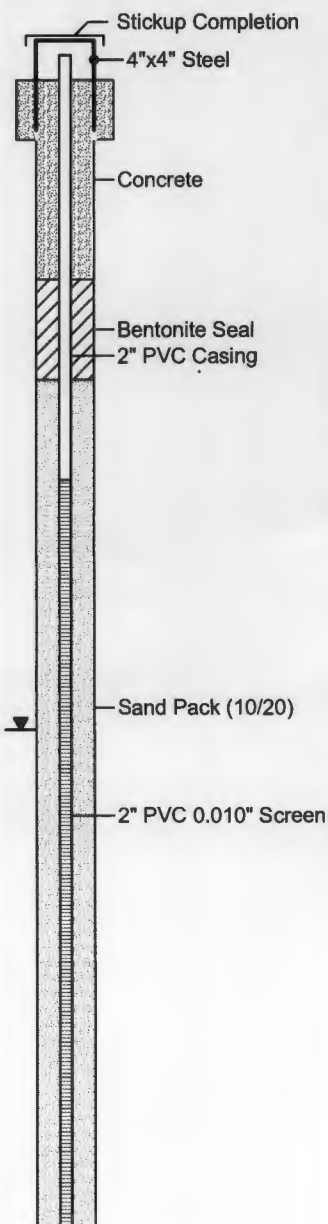
**ENTERPRISE PRODUCTS COMPANY  
LATERAL 6C PIPELINE GW INVESTIGATION  
SAN JUAN COUNTY, NEW MEXICO  
NE 1/4 SW 1/4, SEC. 26, T28N, R11W  
N36.63202, W107.97400**

Date Started : 8/21/12  
Date Completed : 8/21/12  
Hole Diameter : 2.25  
Drilling Method : HSA  
Sampling Method : Split Spoon

Lat. : N36.63230  
Long. : W107.97403  
Survey By : Enterprise Products Co.  
Logged By : Tom Long

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

Well: MW-4  
Elev: 5580.36





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Farmington, NM 87401

**MW-5**

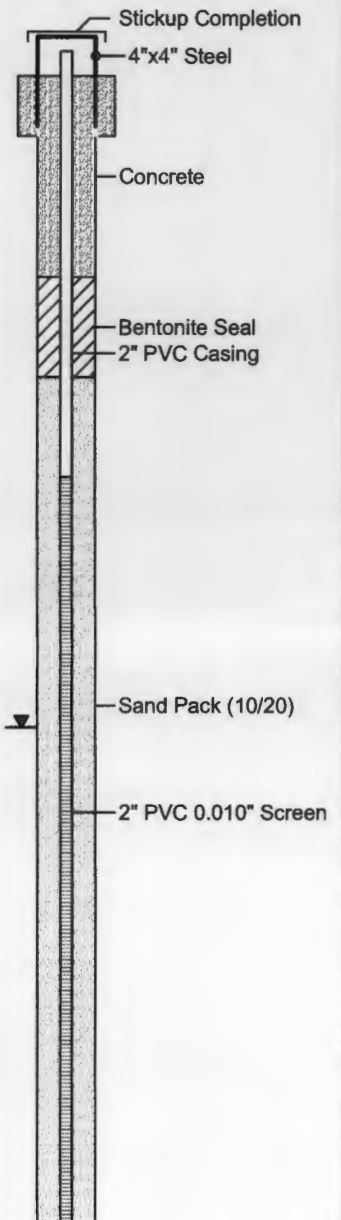
**ENTERPRISE PRODUCTS COMPANY  
LATERAL 6C PIPELINE GW INVESTIGATION  
SAN JUAN COUNTY, NEW MEXICO  
NE1/4 SW1/4, SEC. 26, T28N, R11W  
N36.63202, W107.97400**

Date Started : 8/23/12  
Date Completed : 8/23/12  
Hole Diameter : 2.25  
Drilling Method : HSA  
Sampling Method : Split Spoon

Lat. : N36.63182  
Long. : W107.97417  
Survey By : Enterprise Products Co.  
Logged By : Tom Long

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

Well: MW-5  
Elev: 5583.53





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Farmington, NM 87401

**MW-6**

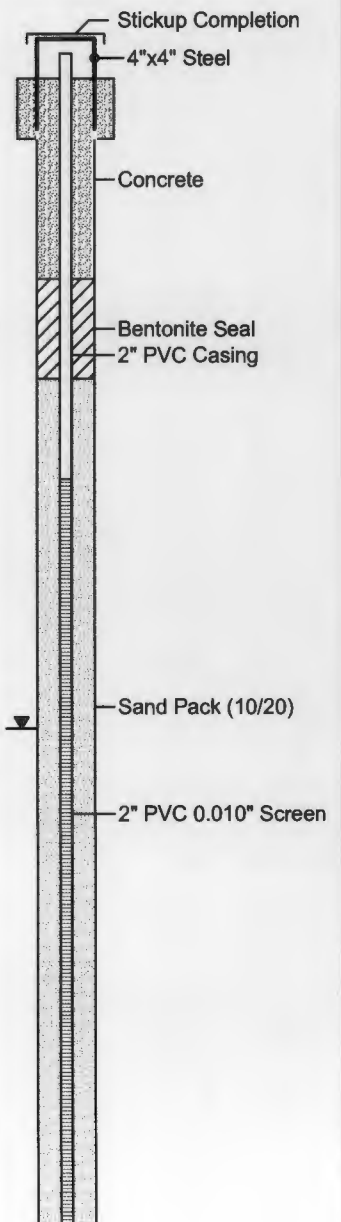
**ENTERPRISE PRODUCTS COMPANY**  
**LATERAL 6C PIPELINE GW INVESTIGATION**  
**SAN JUAN COUNTY, NEW MEXICO**  
**NE 1/4 SW 1/4, SEC. 26, T28N, R11W**  
**N36.63202, W107.97400**

Date Started : 8/23/12  
Date Completed : 8/23/12  
Hole Diameter : 2.25  
Drilling Method : HSA  
Sampling Method : Split Spoon

Lat. : N36.63201  
Long. : W107.97427  
Survey By : Enterprise Products Co.  
Logged By : Tom Long

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

Well: MW-6  
Elev: 5582.22





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Farmington, NM 87401

**MW-7**

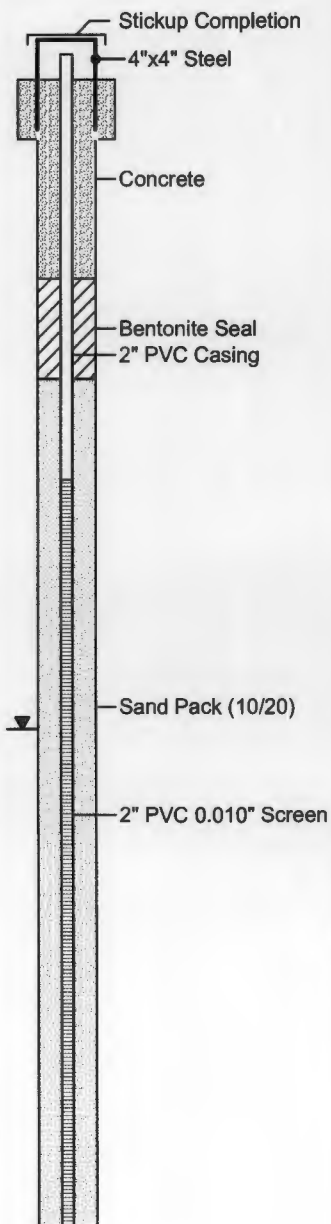
**ENTERPRISE PRODUCTS COMPANY  
LATERAL 6C PIPELINE GW INVESTIGATION  
SAN JUAN COUNTY, NEW MEXICO  
NE1/4 SW1/4, SEC. 26, T28N, R11W  
N36.63202, W107.97400**

Date Started : 8/23/12  
Date Completed : 8/23/12  
Hole Diameter : 2.25  
Drilling Method : HSA  
Sampling Method : Split Spoon

Lat. : N36.632122  
Long. : W107.97444  
Survey By : Enterprise Products Co.  
Logged By : Tom Long

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

Well: MW-7  
Elev: 5582.24





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624 East Comanche  
Farmington, NM 87401

MW-8

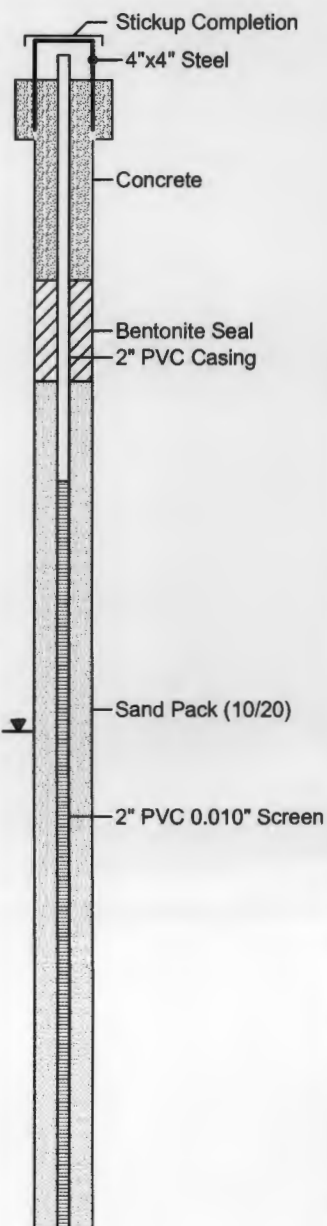
ENTERPRISE PRODUCTS COMPANY  
LATERAL 6C PIPELINE GW INVESTIGATION  
SAN JUAN COUNTY, NEW MEXICO  
NE1/4 SW1/4, SEC. 26, T28N, R11W  
N36.63202, W107.97400

Date Started : 8/21/12  
Date Completed : 8/21/12  
Hole Diameter : 2.25  
Drilling Method : HSA  
Sampling Method : Split Spoon

Lat. : N36.63245  
Long. : W107.97430  
Survey By : Enterprise Products Co.  
Logged By : Tom Long

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

Well: MW-8  
Elev: 5577.81





**MW-9**

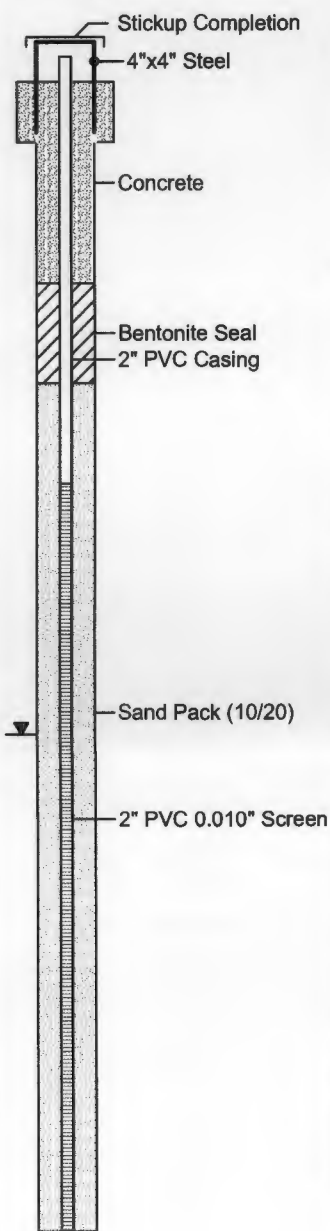
**ENTERPRISE PRODUCTS COMPANY**  
**LATERAL 6C PIPELINE GW INVESTIGATION**  
**SAN JUAN COUNTY, NEW MEXICO**  
**NE 1/4 SW 1/4, SEC. 26, T28N, R11W**  
**N36.63202, W107.97400**

Date Started : 8/23/12  
 Date Completed : 8/23/12  
 Hole Diameter : 2.25  
 Drilling Method : HSA  
 Sampling Method : Split Spoon

Lat. : N36.63185  
 Long. : W107.97378  
 Survey By : Enterprise Products Co.  
 Logged By : Tom Long

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	SP		Sand, Gray, Fine to Medium Grained, Wet, No Odor, No Staining	0.2		
14	5566						
16	5564	SP		Sand, Gray, Some Gravel, Wet, No Odor, No Staining	0.1		
18	5562						
20	5560	SP					
22	5558						
24	5556	SS		Sandstone, Gray, Fine Grained, Wet, No Odor, No Staining			
26							

Well: MW-9  
 Elev: 5582.48





# Bill of Lading

MANIFEST # 41957

DATE 8-21-12 JOB # 105-1507

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

[illegible]

"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. Kylek 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



# Bill of Lading

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

MANIFEST # 41995

DATE 8-28-12 JOB #           

JOB # 9107-0520

LOAD NO.	COMPLETE DESCRIPTION OF SHIPMENT						TRANSPORTING COMPANY			
	POINT OF ORIGIN	DISTINATION	MATERIAL	GRID	YDS	BBL'S	COMPANY	TRK#	TIME	DRIVER SIGNATURE
7	Enterprise Cat #GC	BF	Grap Produced Satz Lager B-2	B-2	/	3	Anima's Environmental Services	1	952	Zachary Turner
RESULTS:							NOTES:			
-272-	CHLORIDE TEST	1								
	PAINT FILTER TEST	1								
			LANDFARM EMPLOYEE:			<i>[Signature]</i>				
			Certification of above receipt & 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. Ainos Environmental Services LLC NAME Zachary Tinsillio

SIGNATURE

Zachary Turner

COMPANY CONTACT 1-505-564-2281

PHONE 1-505-215-3688

DATE 8-28-12

**Signatures required prior to distribution of the legal document.**



# 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

"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.	NAME	PHONE	DATE	SIGNATURE
AES	LAVINIA LAMONTE	505-504-2281	9-7-2013	
COMPANY CONTACT	TAMI ROSS			

*Signatures required prior to distribution of the legal document.*

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

SUN JIAN reproduction 578.126

## Animas Environmental Services

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

Project: Well Development

Site: Interval 10C

**Location:**

Tech: 1L 42T

**Project No.:**

Date: 8 28 2012

Time: 1000

**Form:**

[illegible]

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.)	Method / Notes / Observations
MW-1		16.25	23	1520-1400 1-10 - Blackish - olive 10-15 - gray 15-20 - lite gray 20-23 - Tan 1349
MW-2		16.25	15 gal	5-10 - Gullies 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
Well ID	Depth to NAPL (ft.)	Depth to Water (ft.)	Purged Volume (gal.)	Method / Notes / Observations

Purged 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: Interval 6C

Date: 8-22-2012

Location:

Time: 10:20

Tech: LL & ZT

Form:

Well ID	Depth to NAPL (ft.)	Depth to Water (ft.)	Purged Volume (gal.)	Method / Notes / Observations
9	<del>17.53</del> <sup>41</sup>	17.53	17 gal.	11-43-1210 1-5 gal - silt. brown grayish water 700 5-10 gal. " like brown 15-17 gal like tan 17 gal clear 26.26
Well ID	Depth to NAPL (ft.)	Depth to Water (ft.)	Purged Volume (gal.)	Method / Notes / Observations
4		15.54		11-45- 1-5 gal - Brown water 15.74 Depth to 25.44 5-10 gal Brown/gray water 19.42 water 6.48 Pit 23 15-20 gal Gray/Brown 15-20 32.7 10.7 7 -4.2 28.0
Well ID	Depth to NAPL (ft.)	Depth to Water (ft.)	Purged Volume (gal.)	Method / Notes / Observations
7		19.00	19 gal.	12-45-1312 5-10 gal gray H <sub>2</sub> O "stink" odor; silt 10-15. tan color 15-19 - Clear H <sub>2</sub> O
Well ID	Depth to NAPL (ft.)	Depth to Water (ft.)	Purged Volume (gal.)	Method / Notes / Observations
8		<del>14.89</del> <sup>14.89</sup>	20 gal.	13-10- 5-10 - gallon Gray 20 - gallon Clear 10-15 - gallon Gray 14.89
Well ID	Depth to NAPL (ft.)	Depth to Water (ft.)	Purged Volume (gal.)	Method / Notes / Observations
3		15.84	17	12-15-1410-1455 1-17 - silt brown H <sub>2</sub> O 17-18 tan clear H <sub>2</sub> O
Well ID	Depth to NAPL (ft.)	Depth to Water (ft.)	Purged Volume (gal.)	Method / Notes / Observations
6		19.51	15 gal.	13-10-1410-1455 5-10 - gallon Black 15 gallons 15 - gallon Clear 14.45
Well ID	Depth to NAPL (ft.)	Depth to Water (ft.)	Purged Volume (gal.)	Method / Notes / Observations
5		19.31	10 gal	5 - gallon Brown 10 gallon - Clear 15.11

Purged Water Storage, Transport, and Disposal Information:



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

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a horizontal line.

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**Client Sample ID:** MW-1 5-7'**Project:** Enterprise Lateral 6C**Collection Date:** 8/20/2012 1:01:00 PM**Lab ID:** 1208975-001**Matrix:** SOIL**Received Date:** 8/22/2012 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015B: DIESEL RANGE ORGANICS</b>						Analyst: <b>JMP</b>
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
<b>EPA METHOD 8015B: GASOLINE RANGE</b>						Analyst: <b>NSB</b>
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
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
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.

## Analytical Report

Lab Order 1208975

Date Reported: 8/29/2012

CLIENT: Animas Environmental Services

Client Sample ID: MW-1 10-12'

Project: Enterprise Lateral 6C

Collection Date: 8/20/2012 1:05:00 PM

Lab ID: 1208975-002

Matrix: SOIL

Received Date: 8/22/2012 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015B: DIESEL RANGE ORGANICS</b>						Analyst: <b>JMP</b>
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
<b>EPA METHOD 8015B: GASOLINE RANGE</b>						Analyst: <b>NSB</b>
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
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
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

**Analytical Report**

Lab Order 1208975

Date Reported: 8/29/2012

**Hall Environmental Analysis Laboratory, Inc.****CLIENT:** Animas Environmental Services**Client Sample ID:** MW-2 5-7'**Project:** Enterprise Lateral 6C**Collection Date:** 8/20/2012 2:34:00 PM**Lab ID:** 1208975-003**Matrix:** SOIL**Received Date:** 8/22/2012 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015B: DIESEL RANGE ORGANICS</b>						Analyst: <b>JMP</b>
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
<b>EPA METHOD 8015B: GASOLINE RANGE</b>						Analyst: <b>NSB</b>
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
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
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
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.

## Analytical Report

Lab Order 1208975

Date Reported: 8/29/2012

**CLIENT:** Animas Environmental Services

**Client Sample ID:** MW-2 10-12'

**Project:** Enterprise Lateral 6C

**Collection Date:** 8/20/2012 2:40:00 PM

**Lab ID:** 1208975-004

**Matrix:** SOIL

**Received Date:** 8/22/2012 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015B: DIESEL RANGE ORGANICS</b>						Analyst: <b>JMP</b>
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
<b>EPA METHOD 8015B: GASOLINE RANGE</b>						Analyst: <b>NSB</b>
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
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
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
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

**Analytical Report**

Lab Order 1208975

Date Reported: 8/29/2012

**Hall Environmental Analysis Laboratory, Inc.****CLIENT:** Animas Environmental Services**Client Sample ID:** MW-8 5-7'**Project:** Enterprise Lateral 6C**Collection Date:** 8/21/2012 8:40:00 AM**Lab ID:** 1208975-005**Matrix:** SOIL**Received Date:** 8/22/2012 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015B: DIESEL RANGE ORGANICS</b>						Analyst: <b>JMP</b>
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
<b>EPA METHOD 8015B: GASOLINE RANGE</b>						Analyst: <b>NSB</b>
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
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
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
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.

## Analytical Report

Lab Order 1208975

Date Reported: 8/29/2012

**CLIENT:** Animas Environmental Services

**Client Sample ID:** MW-8 10-12'

**Project:** Enterprise Lateral 6C

**Collection Date:** 8/21/2012 8:43:00 AM

**Lab ID:** 1208975-006

**Matrix:** SOIL

**Received Date:** 8/22/2012 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015B: DIESEL RANGE ORGANICS</b>						Analyst: <b>JMP</b>
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
<b>EPA METHOD 8015B: GASOLINE RANGE</b>						Analyst: <b>NSB</b>
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
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
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
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

**Analytical Report**

Lab Order 1208975

Date Reported: 8/29/2012

**Hall Environmental Analysis Laboratory, Inc.****CLIENT:** Animas Environmental Services**Client Sample ID:** MW-3 0-2'**Project:** Enterprise Lateral 6C**Collection Date:** 8/21/2012 10:18:00 AM**Lab ID:** 1208975-007**Matrix:** SOIL**Received Date:** 8/22/2012 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015B: DIESEL RANGE ORGANICS</b>						Analyst: <b>JMP</b>
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
<b>EPA METHOD 8015B: GASOLINE RANGE</b>						Analyst: <b>NSB</b>
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
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
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
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.****Analytical Report**

Lab Order 1208975

Date Reported: 8/29/2012

**CLIENT:** Animas Environmental Services**Client Sample ID:** MW-3 10-12'**Project:** Enterprise Lateral 6C**Collection Date:** 8/21/2012 10:25:00 AM**Lab ID:** 1208975-008**Matrix:** SOIL**Received Date:** 8/22/2012 10:00:00 AM

<b>Analyses</b>	<b>Result</b>	<b>RL</b>	<b>Qual</b>	<b>Units</b>	<b>DF</b>	<b>Date Analyzed</b>
<b>EPA METHOD 8015B: DIESEL RANGE ORGANICS</b>						Analyst: <b>JMP</b>
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
<b>EPA METHOD 8015B: GASOLINE RANGE</b>						Analyst: <b>NSB</b>
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
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
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

<b>Qualifiers:</b>	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.		

**Analytical Report**

Lab Order 1208975

Date Reported: 8/29/2012

**Hall Environmental Analysis Laboratory, Inc.****CLIENT:** Animas Environmental Services**Client Sample ID:** MW-4 5-7'**Project:** Enterprise Lateral 6C**Collection Date:** 8/21/2012 12:25:00 PM**Lab ID:** 1208975-009**Matrix:** SOIL**Received Date:** 8/22/2012 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015B: DIESEL RANGE ORGANICS</b>						Analyst: <b>JMP</b>
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
<b>EPA METHOD 8015B: GASOLINE RANGE</b>						Analyst: <b>NSB</b>
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
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
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
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.

## Analytical Report

Lab Order 1208975

Date Reported: 8/29/2012

CLIENT: Animas Environmental Services

Client Sample ID: MW-4 10-12'

Project: Enterprise Lateral 6C

Collection Date: 8/21/2012 12:30:00 PM

Lab ID: 1208975-010

Matrix: SOIL

Received Date: 8/22/2012 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015B: DIESEL RANGE ORGANICS</b>						Analyst: <b>JMP</b>
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
<b>EPA METHOD 8015B: GASOLINE RANGE</b>						Analyst: <b>NSB</b>
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
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
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
- 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

# 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  
4901 Hawkins NE  
Albuquerque, NM 87105  
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:

*[Signature]*

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  $>0^{\circ}\text{C}$  to  $6.0^{\circ}\text{C}$ ? 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 $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.0	Good	Yes			

# Chain-of-Custody Record

Client: Amigos Env. Services

Mailing Address: 624 E. Converse

Burmington NM

Phone #: 505-564-2281

email or Fax#:

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

Accreditation  
☐ NELAP ☐ Other

☐ EDD (Type)

Date	Time	Matrix	Sample Request ID
8-20-12	1321	Soil	MW-1 5-7'
	1305		MW-1 10-12'
	1434		MW-2 5-7'
	1440		MW-2 10-12'
8-21-12	0840		MW-8 5-7'
	0843		MW-8 10-12'
	1018		MW-3 0-2'
	1025		MW-3 10-12'
	1025		MW-4 5-7'
	1230		MW-4 10-12'

Date:	Time:	Relinquished by:
8-21-12	1746	Thomas Long
Date:	Time:	Relinquished by:
8-21-12	1751	Pat Webb

Turn-Around Time:

☒ Standard ☐ Rush

Project Name: Enterprise Lateral CC

Project #:

Project Manager:

Tami Ross

Sampler: Thomas Long



Container Type and #

Preservative Type

100 Jar	Ice

Received by:	Date	Time
Pat Webb	8/21/12	1746
Received by:	Date	Time
Pat Webb	8/22/12	1000

Remarks: Bill To Enterprise



**HALL ENVIRONMENTAL ANALYSIS LABORATORY**

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

## Analysis Request

BTEX + MTBE + TPH (Gas only)	BTEX + MTBE + TPH (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	8310 (PMA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO <sub>3</sub> , NO <sub>2</sub> , PO <sub>4</sub> , SO <sub>4</sub> )	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Air Bubbles (Y or N)
X	X	X	X	X	X	X	X	X	X	
X	X	X	X	X	X	X	X	X	X	
X	X	X	X	X	X	X	X	X	X	
X	X	X	X	X	X	X	X	X	X	
X	X	X	X	X	X	X	X	X	X	
X	X	X	X	X	X	X	X	X	X	
X	X	X	X	X	X	X	X	X	X	
X	X	X	X	X	X	X	X	X	X	
X	X	X	X	X	X	X	X	X	X	



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

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

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**Client Sample ID:** MW-9 5-7'**Project:** Enterprise Lateral 6C**Collection Date:** 8/23/2012 8:34:00 AM**Lab ID:** 1208B01-001**Matrix:** SOIL**Received Date:** 8/24/2012 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015B: DIESEL RANGE ORGANICS</b>						Analyst: <b>JMP</b>
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
<b>EPA METHOD 8015B: GASOLINE RANGE</b>						Analyst: <b>NSB</b>
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
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
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
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.

## Analytical Report

Lab Order 1208B01

Date Reported: 8/29/2012

**CLIENT:** Animas Environmental Services

**Client Sample ID:** MW-9 10-12'

**Project:** Enterprise Lateral 6C

**Collection Date:** 8/23/2012 8:37:00 AM

**Lab ID:** 1208B01-002

**Matrix:** SOIL

**Received Date:** 8/24/2012 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015B: DIESEL RANGE ORGANICS</b>						Analyst: <b>JMP</b>
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
<b>EPA METHOD 8015B: GASOLINE RANGE</b>						Analyst: <b>NSB</b>
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
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
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

<b>Qualifiers:</b>	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.		

**Analytical Report**

Lab Order 1208B01

Date Reported: 8/29/2012

**Hall Environmental Analysis Laboratory, Inc.****CLIENT:** Animas Environmental Services**Client Sample ID:** MW-5 5-7'**Project:** Enterprise Lateral 6C**Collection Date:** 8/23/2012 9:26:00 AM**Lab ID:** 1208B01-003**Matrix:** SOIL**Received Date:** 8/24/2012 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015B: DIESEL RANGE ORGANICS</b>						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
<b>EPA METHOD 8015B: GASOLINE RANGE</b>						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
<b>EPA METHOD 8021B: VOLATILES</b>						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.

## Analytical Report

Lab Order 1208B01

Date Reported: 8/29/2012

CLIENT: Animas Environmental Services

Client Sample ID: MW-5 10-12'

Project: Enterprise Lateral 6C

Collection Date: 8/23/2012 9:30:00 AM

Lab ID: 1208B01-004

Matrix: SOIL

Received Date: 8/24/2012 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015B: DIESEL RANGE ORGANICS</b>						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
<b>EPA METHOD 8015B: GASOLINE RANGE</b>						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
<b>EPA METHOD 8021B: VOLATILES</b>						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

<b>Qualifiers:</b>	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.		

**Analytical Report**

Lab Order 1208B01

Date Reported: 8/29/2012

**Hall Environmental Analysis Laboratory, Inc.****CLIENT:** Animas Environmental Services**Client Sample ID:** MW-6 5-7'**Project:** Enterprise Lateral 6C**Collection Date:** 8/23/2012 10:35:00 AM**Lab ID:** 1208B01-005**Matrix:** SOIL**Received Date:** 8/24/2012 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015B: DIESEL RANGE ORGANICS</b>						Analyst: <b>JMP</b>
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
<b>EPA METHOD 8015B: GASOLINE RANGE</b>						Analyst: <b>NSB</b>
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
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
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.

## Analytical Report

Lab Order 1208B01

Date Reported: 8/29/2012

**CLIENT:** Animas Environmental Services

**Client Sample ID:** MW-6 10-12'

**Project:** Enterprise Lateral 6C

**Collection Date:** 8/23/2012 10:40:00 AM

**Lab ID:** 1208B01-006

**Matrix:** SOIL

**Received Date:** 8/24/2012 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015B: DIESEL RANGE ORGANICS</b>						Analyst: <b>JMP</b>
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
<b>EPA METHOD 8015B: GASOLINE RANGE</b>						Analyst: <b>NSB</b>
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
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
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

<b>Qualifiers:</b>	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.		

**Analytical Report**

Lab Order 1208B01

Date Reported: 8/29/2012

**Hall Environmental Analysis Laboratory, Inc.****CLIENT:** Animas Environmental Services**Client Sample ID:** MW-7 5-7'**Project:** Enterprise Lateral 6C**Collection Date:** 8/23/2012 12:16:00 PM**Lab ID:** 1208B01-007**Matrix:** SOIL**Received Date:** 8/24/2012 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015B: DIESEL RANGE ORGANICS</b>						Analyst: <b>JMP</b>
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
<b>EPA METHOD 8015B: GASOLINE RANGE</b>						Analyst: <b>NSB</b>
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
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
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.****Analytical Report**

Lab Order 1208B01

Date Reported: 8/29/2012

**CLIENT:** Animas Environmental Services**Client Sample ID:** MW-7 10-12'**Project:** Enterprise Lateral 6C**Collection Date:** 8/23/2012 12:21:00 PM**Lab ID:** 1208B01-008**Matrix:** SOIL**Received Date:** 8/24/2012 10:00:00 AM

<b>Analyses</b>	<b>Result</b>	<b>RL</b>	<b>Qual</b>	<b>Units</b>	<b>DF</b>	<b>Date Analyzed</b>
<b>EPA METHOD 8015B: DIESEL RANGE ORGANICS</b>						Analyst: <b>JMP</b>
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
<b>EPA METHOD 8015B: GASOLINE RANGE</b>						Analyst: <b>NSB</b>
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
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
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

<b>Qualifiers:</b>	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  
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	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  
4901 Hawkins NE  
Albuquerque, NM 87105  
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

Completed By: Ashley Gallegos

8/24/2012 12:52:13 PM

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  $>0^{\circ}\text{C}$  to  $6.0^{\circ}\text{C}$ ? 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 $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.0	Good	Yes			

# UNIFORM-CUSTOMER 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)

Date Time Matrix Sample Request ID

8-23-12	834	Soil	MW-9 5-7'	
	0837		MW-9 10-12'	
	0926		MW-5 5-7'	
	0930		MW-5 10-12'	
	1035		MW-6 5-7'	
	1040		MW-6 10-12'	
	1216		MW-7 5-7'	
	1221		MW-7 10-12'	

Date: 8-23-12 Time: 1546

Date: 8/23/12 Time: 1637

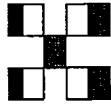
Relinquished by:

Relinquished by:

Received by:

Received by:

Remarks: Bill To Enterprise



## HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

### Analysis Request

Project Manager:

Tami Ross

Sampler: Thomas Long

Container Type and #

Preservative Type

6031 675x  
8015 DRO/GRO

Air Bubbles (Y or N)

## Animas Environmental Services

Project: GROUND WATER SAMPLING

Project No.: C

Site: ENTERPRISE

Date: 9.7.2012

Location: LATERAL 6-C

Time: 0703

Tech: L. LAMONE

**Form:**

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

# Water Sampling Record

## Animas Environmental Services

Monitor Well No: **MW-1**

624 E. Comanche Farmington NM 87401

Tel. (505) 564-2281 Fax (505) 324-2022

Project: **GROUNDWATER SAMPLING**

Project No.:

Site: **ENTERPRISE**

Date: **9.7.2012**

Location: **LATERAL 6-C**

Time: **0756**

Sampler: **LLAMONE**

Weather: **clear**

Sampling Method: **BAILER**

Air Temperature:

Depth of Well (ft): **27.60**

Well Diam. (in.): **2**

Depth to Water (ft): **15.78**

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	-251.9	1 <sup>st</sup> bail out	odor, very gray
0801	17.48	5.644	1.14	6.88	-257.0	1 gal.	gray H <sub>2</sub> O
0803	17.22	5.628	1.16	6.93	-259.0	2 gal	gray H <sub>2</sub> O
0806	17.27	5.589	1.38	6.94	-261.0	3 gal	gray H <sub>2</sub> O
0808	17.40	5.582	1.39	6.96	-262.0	4 gal.	gray H <sub>2</sub> O
0810	17.34	5.603	1.48	6.99	-262.3	5 gal	gray H <sub>2</sub> O
0812	17.31	5.616	1.72	7.02	-263.4	5.80 gal.	gray H <sub>2</sub> O

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

**11.82 H<sub>2</sub>O Column**

**6.93 volume**

**5.79 purged**

**1st gallon H<sub>2</sub>O, dray gray, odor,**

**1 - 5.75 gallon of H<sub>2</sub>O gray... odor of sulfur**

**No sheen on H<sub>2</sub>O.**

# Water Sampling Record

## Animas Environmental Services

Monitor Well No: MW-2

624 E. Comanche, Farmington NM 87401

Tel (505) 564-2281 Fax (505) 324-2022

Project: GROUNDWATER SAMPLING

Project No.:

Site: ENTERPRISE

Date: 9.7.2012

Location: LATERAL 6-C

Time: 0822 0839 SAMPLE

Sampler: L. LAMONE

Weather: clear / warm TIME

Sampling Method: BAILER

Air Temperature:

Depth of Well (ft): 26.30

Well Diam. (in.): 2

Depth to Water (ft): 16.29

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	1 <sup>st</sup> bail	clear H <sub>2</sub> O
0829	16.67	4.243	1.16	7.31	-197.0	1 gal.	gray H <sub>2</sub> O
0833	16.61	4.182	1.00	7.30	-208.0	3 gal.	gray, silty H <sub>2</sub> O
0836	16.60	4.252	1.00	7.27	-209.0	4 gal.	gray silty H <sub>2</sub> O
0839	16.67	4.234	1.03	7.31	-209.6	4.90 gal.	gray silty H <sub>2</sub> O

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

10.01 No column	H <sub>2</sub> O extremely silty, gray, sulfur odor, recharge
1.63 volume	on well is good. A/C needs CAP.
4.90 purged	

# Water Sampling Record

Animas Environmental Services

Monitor Well No: MW-3

624 E. Comanche, Farmington NM 87401

Tel. (505) 564-2281 Fax (505) 324-2022

Project: GROUNDWATER SAMPLING

Project No.: \_\_\_\_\_

Site: ENTERPRISE

Date: 9.7.2012

Location: LATERAL G-C

Time: 0955

0913 SAMPLE TIME

Sampler: \_\_\_\_\_

Weather: \_\_\_\_\_

Sampling Method: BAILER

Air Temperature: \_\_\_\_\_

Depth of Well (ft): 25.88

Well Diam. (in.): 2

Depth to Water (ft): 15.98

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	1 <sup>st</sup> bail	Tan H <sub>2</sub> O
0903	15.38	5.989	1.56	7.39	-36.8	1 gal.	Tan/ Clear H <sub>2</sub> O
0905	15.71	6.160	2.06	7.36	-33.4	2 gal.	Tan Silty H <sub>2</sub> O
0908	15.46	5.878	1.53	7.33	-33.8	3 gal.	Tan/Silty H <sub>2</sub> O
0910	15.31	5.593	1.73	7.33	-30.1	4 gal.	Tan/Silty H <sub>2</sub> O
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 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

9.90 H <sub>2</sub> O Column	H <sub>2</sub> O tan in color
1.62 volume	silt, no odor, no screen
4.85 purged	

# Water Sampling Record

Animas Environmental Services

Monitor Well No: MW-4

624 E. Comanche, Farmington NM 87401

Tel (505) 564-2281 Fax (505) 324-2022

Project: GROUNDWATER SAMPLING

Project No.:

Site: ENTERPRISE

Date: 9-7-2012

Location: LATERAL 6-C

Time: 0923

Sampler: L. LAMONE

Weather:

Sampling Method: BAILER

Air Temperature:

Depth of Well (ft): 24.39

Well Diam. (in.): 2

Depth to Water (ft): 15.59

Site Elevation (ft):

Time	Temp (deg C)	Conductivity (µS) (mS)	DO (mg/L)	pH	ORP (mV)	PURGED VOLUME (gallons)	Notes/Observations
0926	15.98	5.208	1.65	7.54	-44.8	1 <sup>st</sup> Bailer	clear
0929	16.31	5.524	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 11/20

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

3.80 H2O Column

1.44 volume

4.31 purged

H2O extremely silty, tan to brown in color  
NO odor, no sheen

# Water Sampling Record

Animas Environmental Services

Monitor Well No: MW-5

624 E. Comanche Farmington NM 87401

Tel. (505) 564-2281 Fax (505) 324-2022

Project: GROUNDWATER SAMPLING

Project No.:

Site: ENTERPRISE

Date: 9.7.2012

Location: LATERAL 6-C

Time: 0942

Sampler: L. LAMONG

Weather: WARM

Sampling Method: BAILER

Air Temperature:

Depth of Well (ft): 25.98

Well Diam. (in.): 2

Depth to Water (ft): 19.35

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	1 <sup>st</sup> Bailen	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 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

6.63 H<sub>2</sub>O column  
1.08 Volume  
3.25 purged

H<sub>2</sub>O 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

Project No.:

Site: ENTERPRISE

Date: 9.7.2012

Location: LATERAL 6-C

Time: 1006

Sampler: L. LAMONTE

Weather: WARM

Sampling Method: BAILER

Air Temperature:

Depth of Well (ft): 25.37

Well Diam. (in.): 2

Depth to Water (ft): 18.55

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
<del>1006</del>	<del>15.09</del>	<del>4.000</del>	<del>0.87</del>	<del>7.35</del>	<del>-295.9</del>	<del>1.0 gal.</del>	<del>gray/sheen/odor</del>
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 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

6.82 H<sub>2</sub>O column H<sub>2</sub>O is medium grayish color, odor (sulfur)  
1.11 volume sheen.  
3.34 purged

# Water Sampling Record

Animas Environmental Services

Monitor Well No: MW-7

624 E. Comanche, Farmington NM 87401

Tel. (505) 564-2281 Fax (505) 324-2022

Project: GROUNDWATER SAMPLING

Project No.:

Site: ENTERPRISE

Date: 9.7.2012

Location: LATERAL 6-C

Time: 1038

Sampler: L. LAMONE

Weather: WARM

Sampling Method: BAILER

Air Temperature:

Depth of Well (ft): 26.33

Well Diam. (in.): 2

Depth to Water (ft): 19.03

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	1 <sup>st</sup> 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 H <sub>2</sub> O slight sheen
1050	15.06	4.536	1.49	7.61	-243.8	3.0 gal	gray H <sub>2</sub> O
1053	15.24	4.542	1.38	7.59	-241.3	3.60 gal	gray/sheen H <sub>2</sub> O

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 H<sub>2</sub>O column

H<sub>2</sub>O, gray, sulfur odor, slight sheen

1.19 volume

3.57 purged

# Water Sampling Record

Monitor Well No: MW-8

## Animas Environmental Services

624 E. Comanche, Farmington NM 87401

Tel: (505) 564-2281 Fax: (505) 324 2022

Project: GROUNDWATER SAMPLING

Project No.:

Site: ENTERPRISE

Date: 9.7.2013

Location: LATERAL 6-C

Time: 1105

1120 Sample Time

Sampler: L. CAMON

Weather: HOT

Sampling Method: BAILER

Air Temperature:

Depth of Well (ft): 25.26

Well Diam. (in.): 2

Depth to Water (ft): 14.96

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	1 <sup>st</sup> 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	4.068	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 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

10.30 H<sub>2</sub>O column | Gray H<sub>2</sub>O, slight odor, NO sheen  
 1.68 volume  
 5.00 purged

# Water Sampling Record

Animas Environmental Services

Monitor Well No: MW-9

624 E. Comanche Farmington NM 87401

Tel (505) 564-2281 Fax (505) 324-2022

Project: GROUNDWATER SAMPLING

Project No.: \_\_\_\_\_

Site: ENTERPRISE

Date: 9.7.2012

Location: LATERAL 6-C

Time: 1129

Sampler: LA LAMONT

Weather: HOT

Sampling Method: BAILER

Air Temperature: \_\_\_\_\_

Depth of Well (ft): 26.26

Well Diam. (in.): 2

Depth to Water (ft): 17.55

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	25.9	1 <sup>st</sup> Bailer	Clear H <sub>2</sub> O
1137	15.36	4.531	1.33	7.54	-36.3	1.0 gal.	Clear H <sub>2</sub> O
1139	14.98	4.506	1.46	7.52	-27.7	2.0 gal	clear H <sub>2</sub> O
1144	15.65	4.526	1.43	7.46	-25.1	3.0 gal	clear H <sub>2</sub> O
1148	15.61	4.583	1.48	7.45	-19.5	4.25 gal	clear H <sub>2</sub> O

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

3.71 H<sub>2</sub>O column

H<sub>2</sub>O "clear" as in like tan "RIVER color"

1.42 volume

clear. No odor, no sheen

4.26 purged



*Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: [www.hallenvironmental.com](http://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](http://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**Client Sample ID:** MW-1**Project:** Lateral 6-C**Collection Date:** 9/7/2012 8:12:00 AM**Lab ID:** 1209283-001**Matrix:** AQUEOUS**Received Date:** 9/8/2012 11:15:00 AM

<b>Analyses</b>	<b>Result</b>	<b>RL</b>	<b>Qual</b>	<b>Units</b>	<b>DF</b>	<b>Date Analyzed</b>
<b>EPA METHOD 8021B: VOLATILES</b>						<b>Analyst: NSB</b>
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.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1209283

Date Reported: 9/17/2012

**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
<b>EPA METHOD 8021B: VOLATILES</b>						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.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

**Analytical Report**

Lab Order 1209283

Date Reported: 9/17/2012

**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
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
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.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1209283

Date Reported: 9/17/2012

CLIENT: Animas Environmental Services

Client Sample ID: MW-4

Project: Lateral 6-C

Collection Date: 9/7/2012 9:37:00 AM

Lab ID: 1209283-004

Matrix: AQUEOUS

Received Date: 9/8/2012 11:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
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.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

**Analytical Report**Lab Order **1209283**Date Reported: **9/17/2012****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

<b>Analyses</b>	<b>Result</b>	<b>RL</b>	<b>Qual</b>	<b>Units</b>	<b>DF</b>	<b>Date Analyzed</b>
<b>EPA METHOD 8021B: VOLATILES</b>						<b>Analyst: NSB</b>
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.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

**Analytical Report**Lab Order **1209283**

Date Reported: 9/17/2012

**Hall Environmental Analysis Laboratory, Inc.****CLIENT:** Animas Environmental Services**Client Sample ID:** MW-6**Project:** Lateral 6-C**Collection Date:** 9/7/2012 10:21:00 AM**Lab ID:** 1209283-006**Matrix:** AQUEOUS**Received Date:** 9/8/2012 11:15:00 AM

<b>Analyses</b>	<b>Result</b>	<b>RL</b>	<b>Qual</b>	<b>Units</b>	<b>DF</b>	<b>Date Analyzed</b>
<b>EPA METHOD 8021B: VOLATILES</b>						<b>Analyst: NSB</b>
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.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1209283

Date Reported: 9/17/2012

**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
<b>EPA METHOD 8021B: VOLATILES</b>						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.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order **1209283**

Date Reported: 9/17/2012

**CLIENT:** Animas Environmental Services

**Client Sample ID:** MW-8

**Project:** Lateral 6-C

**Collection Date:** 9/7/2012 11:20:00 AM

**Lab ID:** 1209283-008

**Matrix:** AQUEOUS

**Received Date:** 9/8/2012 11:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
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.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

**Analytical Report**

Lab Order 1209283

Date Reported: 9/17/2012

**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
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
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

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# 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			

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