# 3R – 454

# GW WORKPLAN

# 09 / 28 / 2011

LAT 2D-1LP(Olmer 4) 1204

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

*Prepared for:*
Mr. Glenn von Gonten
New Mexico Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

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

# Groundwater Investigation Workplan
Enterprise Products Company
Lateral 2D-1LP (Olmer #4) August 2011
Pipeline Release
SW¼ NE¼, Section 26, T28N, R10W,
San Juan County, New Mexico

September 28, 2011

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

# Contents

## Figures

# 1.0 Introduction

Animas Environmental Services, LLC (AES), on behalf of Enterprise Products Company (Enterprise), has prepared a workplan for groundwater investigation and report for the Lateral 2D-1LP (Olmer #4) release site. A release was reported at the location on August 2, 2011, by Shane Cooley of Enterprise. Excavation and interim groundwater remedial activities were conducted on August 8, August 22, and August 23, 2011. Remedial activities and results of confirmation sampling were detailed in letter reports dated August 19, 2011, and September 9, 2011.

# 2.0 Site Information

## *2.1 Site Location*

The release is located along the Enterprise Lateral 2D-1LP leading from the Olmer #4 well tie within the SW¼ NE¼, Section 26, T28N, R10W, San Juan County, New Mexico. Latitude and longitude of the release were recorded as N36° 38.033' and W107° 51.832'. Note that the project area is located on U.S. Department of Interior (USDI) Bureau of Land Management (BLM) land with an active grazing lease. A topographic site location map is included as Figure 1.

The location of the release is within a floodplain associated with Armenta Wash. Surface runoff drains north to an unnamed arroyo which discharges into the Armenta Wash, and depth of groundwater is approximately 8 feet below ground surface (bgs).

## *2.2 Spill History*

AES was initially contacted by Aaron Dailey of Enterprise on August 3, 2011, and on August 8, 2011, Tami Ross of AES met with Enterprise representatives at the release location. The cause of the release was attributed to a line leak due to corrosion. Initial excavation activities were conducted on August 8, 2011, and representatives from Enterprise, AES and Southwest Field Services were present on-site during site activities.

During initial excavation activities, Tami Ross of AES collected soil samples from the base and mid-walls of the excavation, which measured approximately 20 ft by 20 ft by 8 ft deep. BTEX and TPH concentrations for all three soil samples collected were either below laboratory detection limits or below applicable New Mexico Oil Conservation Division (NMOCD) action levels. Of the volume of soil excavated, approximately 12 cubic yards were transported by Southwest Field Services for disposal at Envirotech Landfarm, near Bloomfield, New Mexico. The remaining soils (overburden) were field screened and determined not to have been impacted by the release. These soils were stockpiled for future use as backfill.

A grab sample from groundwater was also collected from near the base of the excavation for laboratory analysis. Dissolved phase benzene, toluene, and total xylene concentrations were reported above the New Mexico Water Quality Control Commission (WQCC) standards for groundwater. Ethylbenzene was detected at 280 µg/L, which is below the WQCC standard of 750 µg/L. Upon completion of the initial excavation activities and associated sampling, AES requested that Enterprise not backfill the excavation until the analytical results were obtained. A fence was installed around the excavation area after completing the repair of the line leak.

AES returned to the site location on August 22, 2011. Tami Ross and Ross Kennemer of AES met with Aaron Dailey of Enterprise at the release location. Representatives from Enterprise, AES and Southwest Field Services were present on-site during site activities.

Two test holes were excavated within the right-of-way and were located approximately 30 feet from the original release area of the pipeline. The first test hole was excavated north of the release area, and one soil and one groundwater sample were collected. The second test hole was excavated east of the release area, and one soil and one groundwater sample were also collected. Benzene, toluene, ethylbenzene, and total xylenes (BTEX) and total petroleum hydrocarbons (TPH) concentrations for the two soil samples were below laboratory detection limits. Dissolved phase benzene concentrations were reported above the WQCC standard for groundwater in the N Test Hole GW with 240 µg/L.

A vacuum truck was used to pump out the groundwater from the excavation that was originally dug on August 8, 2011. Fresh groundwater had been allowed to infiltrate into the excavation, and a groundwater sample was collected. The sample was not submitted for laboratory analysis since strong hydrocarbon odors were detected. Based on this observation, AES and Enterprise personnel discussed continued excavation options at the site.

On August 23, 2011, Enterprise personnel, Tami Ross of AES, and IMI personnel returned to the site. A track hoe was used to extend the excavation. The track hoe allowed the excavation to be deepened approximately 4 feet below the pipeline, for a total depth of 12 feet bgs. The excavation was extended horizontally to the west about 10 feet, resulting in an excavation area approximately 30 feet by 15 feet. As the side walls sloughed off into the excavation, the soils were removed and stockpiled. Excavation activities were halted once the sloughing was occurring at a rate greater than the excavating. A bermed pad of clean overburden was created northwest of the excavation, and the wet soils were stockpiled within this area. Approximately 48 cubic yards of soil was stockpiled for disposal at a NMOCD approved landfarm facility.

Fresh groundwater was allowed to infiltrate into the excavation, and a sample was collected for laboratory analysis. Dissolved phase benzene concentrations were reported above the WQCC standard for groundwater in the BTM Pit #2 with 31 µg/L. No soil samples were collected during the August 23, 2011, excavation activities since the soil samples collected from the excavation on August 8, 2011, were below NMOCD regulatory limits.

# 3.0 Regional and Local Geology and Hydrogeology

## *3.1 Geology*

San Juan County, New Mexico, is located in the San Juan Basin, which is a large, structural depression encompassing approximately 22,000 square miles and contains deep Tertiary fill resting on rocks of Late Cretaceous age. The lithology consists primarily of the Mesa Verde Formation, composed mostly of sandstones. The topography is broad and mostly flat, surrounded by mountains and deep canyons. Major rivers carved deep canyons and mesas, and physical erosion from wind and water chipped and polished the exposed rocks in the canyons.

The local site geology consists of arroyo sands from surface to 8 feet bgs. Clay was encountered approximately 10 to 12 feet bgs.

## *3.2 Hydrogeology*

The location of the release is within a floodplain associated with Armenta Wash. Surface runoff drains north to an unnamed arroyo which discharges into the Armenta Wash, and depth of groundwater is approximately 8 feet below ground surface (bgs).

## *3.3 Sensitive Receptors*

The project is located within a rural area, and there are no known schools, day care centers, nursing homes or senior centers within the immediate vicinity.

# 4.0 Proposed Scope of Work

Site investigation activities will be initiated in order to delineate the full extent of petroleum hydrocarbon impacted groundwater and to further confirm the successful removal of impacted soils (lateral extent only). The investigation procedures are designed to be protective of both surface water and groundwater and are based upon protocols outlined in the NMOCD *Environmental Handbook: Guidelines for Remediation of Leaks, Spills, and Releases* (1993) and USDI-BLM *Natural Resource Damage Assessment and Restoration Handbook* (2008).

## 4.1 Access Agreements

Prior to initiating the field work, AES will work with Enterprise and BLM for a Temporary Use Area (TUA) permit.

## 4.2 Archaeological Clearances

In the event that any evidence of artifacts and/or human remains are encountered, all work will be stopped immediately, and the BLM Archaeologist and the State Historic Preservation Office (SHPO) will be contacted, and appropriate mitigation measures will be implemented.

## 4.3 Office of State Engineer Permits

Prior to initiating the site investigation, AES will consult with New Mexico's State Engineer's Office for groundwater monitoring well permits that may be required for this project. These permits have not been required in the past with NMOCD groundwater investigations in the San Juan Basin; however, this protocol will be confirmed with the local State Engineer's Office prior to field activities.

## 4.4 Utilities Notification

AES will utilize the New Mexico One-Call system to identify and mark all underground utilities at the site before the start of any proposed field activities which could impact buried utilities. Any local utilities not participating in the New Mexico One-Call system will be contacted separately by AES for utility locations.

## 4.5 Health and Safety Plan

AES has a Health and Safety Program in place to ensure the health and safety of all AES employees. The Health and Safety Program defines safety practices and procedures to be instituted in all AES work places, as applicable. The program meets the requirements promulgated by the Occupational Safety and Health Act (OSHA). All AES personnel are appropriately trained in accordance with OSHA 40 CFR 1910.120.

A comprehensive site-specific Health and Safety Plan (HASP) addressing the site investigation and associated sampling will be prepared prior to the start of the field work. All employees and subcontractors will be required to read and sign the HASP to acknowledge their understanding of the information contained within it. The HASP will be implemented and enforced on site by the assigned Site Safety and Health Officer. Daily tailgate meetings will be held and documented during field activities and will address specific health and safety concerns or issues.

## *4.6 Installation of Soil Borings*

AES proposes to install four soil borings which will be completed as groundwater monitoring wells within the release area to define the extent of the groundwater petroleum hydrocarbon contamination. The August 2011 soil excavation confirmed the proposed lateral extent of petroleum hydrocarbon contaminated soil. Soil borings will be advanced with a DT 6620 track-mounted direct push rig, manufactured by Geoprobe®, and equipped with a 2-inch outer diameter (OD) core barrel. Direct push drilling will be provided by Earth Worx, Los Lunas, New Mexico. The locations of the proposed soil borings/monitoring wells are shown on Figure 2.

## *4.7 Soil Sampling and Analyses*

### 4.7.1 Soil Sample Collection

All soil borings will be advanced to approximately 15 feet bgs, where it is anticipated that groundwater will be encountered at approximately 7 to 8 feet bgs. Each boring will be logged for lithology and sampled continuously for field screening of volatile organic compounds (VOCs) with a photo-ionization detector (PID) organic vapor meter (OVM). A minimum of one soil sample will be collected from each boring for laboratory analysis. The sample will be collected from the capillary fringe just above groundwater.

For each soil boring, a Soil Boring Log will be completed. These logs will record sample identification, depth collected, and method of collection, as well as observations of soil moisture, color, density, grain size, plasticity, contaminant presence, and overall stratigraphy.

Soil samples will be collected from continuously driven core-barrel samplers during advancement of the soil borings. Discrete samples will be collected based on PID-OVM screening measurements from the core barrel sampler and transferred to appropriately labeled sample containers. Soil sample collection will be completed in strict accordance with AES's Standard Operating Procedures (SOPs), which are available upon request.

### 4.7.2 Field Screening

Samples will be field-screened for VOC vapors utilizing a PID-OVM calibrated with isobutylene gas to obtain preliminary data regarding potential petroleum hydrocarbon-impacted soil.

Once collected, the soil sample to be field-screened will be placed immediately in a clean 16 ounce glass jar, filled approximately half full, and sealed with a threaded ring lid and a sheet of aluminum foil. The sample jar will then be placed in a warm water bath where it will be warmed to approximately 80˚F. Approximately 10 minutes will be allowed for the soil to be heated and for any VOCs in the soil to accumulate in the head space of the jar. During the

initial stages of headspace development, the sample will be gently shaken for one minute to promote vapor development and disaggregate the sample. Volatile gases will then be measured by piercing the aluminum foil with the sample probe of the PID-OVM. The highest (peak) measurement will be recorded. PID-OVM readings will be recorded onto the Soil Boring Logs. All field screening will be completed in strict accordance with AES SOPs.

### 4.7.3 Laboratory Analyses - Soil

Analytical samples collected from soil borings will be submitted to an EPA-approved laboratory, Hall Environmental Analysis Laboratory, Albuquerque, New Mexico, or one of its subcontractors for analysis of the following parameters:

Table 1. Soil Analytical Parameters

| ***Parameter*** | ***Analytical Method*** | ***Analyzing Laboratory*** |
|---|---|---|
| BTEX | EPA Method 8021 | Hall Environmental Analysis Laboratory<br>4901 Hawkins NE, Suite D<br>Albuquerque, NM<br>(505) 345-3975 |
| Total Petroleum Hydrocarbons (TPH) (C6-C36) | EPA Method 8015B Modified | Hall Environmental Analysis Laboratory<br>4901 Hawkins NE, Suite D<br>Albuquerque, NM<br>(505) 345-3975 |

Additional soil samples will be collected and submitted for laboratory analyses if warranted by field observation. Therefore, based on four proposed soil borings, a minimum of four soil samples will be submitted for laboratory analyses.

Once collected, sample containers will be packed with ice in insulated coolers and shipped via UPS or Greyhound Bus to the analyzing laboratory. Typical laboratory regular turn around time is 12 to 15 business days.

For all laboratory samples, quality assurance and quality control (QA/QC) procedures, sample preservation, apparatus required, and analyses performed will be in accordance with USEPA Document EPA-600, "Methods for Chemical Analysis for Water and Wastes" dated July 1982; and USEPA document SW-846, 3rd Edition, "Test Methods for Evaluating Solid Waste: Physical Chemical Methods", dated November 1986.

## *4.8 Groundwater Monitor Well Installation*

### 4.8.1 Groundwater Monitor Well Installation and Construction

Groundwater monitoring wells will be installed within all of the four soil borings. Monitoring well construction will consist of 1.4-inch outside diameter (OD) [0.75-inch inside diameter (ID)] Schedule 40 PVC screen and 1.0-inch blank riser casing. The screened interval will extend 10 feet across the water table. The wells will be constructed of a 1.4-inch OD (0.75-inch ID) pre-packed screen (0.010-inch slot). The screen is factory packed with 20/40 Colorado silica sand. A bentonite seal will be placed above the sand pack, and concrete grout with approximately 5 percent bentonite will be 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, will be installed on the well to prevent unauthorized access and damage from runoff and debris within the wash. Monitoring wells will be installed in strict accordance with the AES SOPs and applicable ASTM standards.

### 4.8.2 Professional Survey

The location and elevation of the top of each well casing will be surveyed to the nearest 0.01 foot with reference to mean sea level by a licensed surveyor in order to accurately determine the local groundwater depth and flow direction beneath the site. Each well will be tied to an existing USGS benchmark. AES will arrange with a New Mexico Licensed Professional Surveyor to complete the survey upon completion of the monitoring well installation.

### 4.8.3 Groundwater Monitor Well Development

Following monitor well installation and completion, each well will be developed by a combination of surging and bailing techniques. It is estimated that approximately one gallon of water will be generated during development of the 1-inch diameter shallow groundwater monitor wells. Groundwater purged from the wells will be contained in labeled and sealed 55-gallon drums. Development water will be transported back to the AES yard and kept in a secure location until proper disposal. Monitoring wells will be developed in strict accordance with AES SOPs and applicable ASTM standards.

### 4.8.4 Groundwater Monitor Well Monitoring and Sampling

Upon completion and development, the monitor wells will be allowed to sit undisturbed for a minimum of one week. The groundwater monitor wells will then be gauged to determine water table elevation and direction of groundwater flow. The wells will then be purged of a minimum of three well volumes, and a groundwater sample will be collected from each well.

Groundwater samples will be 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, will be measured with a

YSI water quality meter and documented on a Water Sample Collection Form along with purged water volume. All sampling equipment will be thoroughly decontaminated between uses.

Duplicate groundwater samples will be collected from each monitoring well and held in the event that further laboratory analyses are required. All sample collection data, including sample collection depth, will be documented on a Water Sample Collection Form. A Chain of Custody Record will be completed in the field as samples are being collected. Samples will be stored in a chilled, insulated cooler at 6°C until delivered to the analyzing laboratory. Groundwater monitoring, well installation, well development, and sampling will be completed in strict accordance with AES SOPs and applicable ASTM standards.

### 4.8.5 Laboratory Analyses - Groundwater

All groundwater analytical samples collected from the monitoring wells will be submitted to, Hall, Albuquerque, New Mexico, or one of its subcontractors for analysis of the following parameters:

Table 2. Groundwater Analytical Parameters, MW-1 through MW-4

| ***Parameter*** | ***Analytical Method*** | ***Analyzing Laboratory*** |
|---|---|---|
| BTEX | EPA Method 8260 | Hall Environmental Analysis Laboratory<br>4901 Hawkins NE, Suite D<br>Albuquerque, NM<br>(505) 345-3975 |
| TPH<br>(C6-C36) | EPA Method 8015<br>Modified | Hall Environmental Analysis Laboratory<br>4901 Hawkins NE, Suite D<br>Albuquerque, NM<br>(505) 345-3975 |
| Chloride - for waste water disposal purpose only | EPA Method 300 | Hall Environmental Analysis Laboratory<br>4901 Hawkins NE, Suite D<br>Albuquerque, NM<br>(505) 345-3975 |

A travel blank and field blank will be analyzed for BTEX per EPA Method 8260. Once collected, sample containers will be packed with ice in insulated coolers and shipped via UPS or Greyhound Bus to the laboratory. Typical laboratory regular turnaround time is 12 to 15 days.

For all laboratory samples, QA/QC procedures, sample preservation, apparatus required, and analyses performed will be per USEPA Document EPA-600, "Methods for Chemical Analysis for Water and Wastes" dated July 1982; and USEPA document SW-846, 3rd Edition, "Test Methods for Evaluating Solid Waste: Physical Chemical Methods", dated November 1986, as amended by Update One, July 1992.

## 4.9 Equipment Decontamination

In order to prevent cross-contamination between sampling locations, strict decontamination procedures will be employed during the investigation. All drilling equipment will be decontaminated after completing each soil boring, and sampling equipment (i.e. hand auger, spoon sampler, and other hand tools) will be decontaminated following each use at an individual depth or location.

All decontamination of equipment will be completed within clean 5-gallon plastic buckets, which will contain the effluent. At least two tubs will be used, one designated for push rods and the other for small sampling equipment. On an as-needed basis, effluent from the tubs will be transferred by small pump or bucket into 55-gallon DOT approved drums, which will then be marked with identification labels and sealed. Decontamination procedures to be utilized are outlined below.

For small equipment such as hand augers, hand tools, and spoon samplers:

1. Physical removal of gross contamination and all debris with brushes
2. Hand wash with non-phosphate detergent
3. Hand wash with non-phosphate detergent and water using brush
4. Rinse with water
5. Second rinse with water
6. Air dry

All decontamination procedures will be completed in strict accordance with AES SOPs and applicable USEPA guidelines.

## 4.10 Investigation Derived Waste

### 4.10.1 Investigation Derived Waste – Equipment Decontamination Water

All decontamination and rinse water will be managed in accordance with applicable State and Federal regulations. Decontamination wash water will be stored on-site within 55-gallon DOT approved drums, which will then be labeled and sealed. Equipment decontamination water will then be disposed of at the Envirotech Landfarm. Disposal manifests will be included within the investigation report.

### 4.10.2 Investigation Derived Waste - Groundwater

Contaminated water will be managed in accordance with applicable State and Federal regulations. Groundwater obtained from monitoring well development and pre-sample purging will be stored on-site within 55-gallon DOT approved drums, which will then be labeled and sealed. This water will then be disposed of at the Envirotech Landfarm. Disposal manifests will be included within the investigation report.

## *4.11 Quality Assurance/Quality Control and Chain of Custody Procedures*

### 4.11.1 Quality Control Samples

Field quality control (QC) samples will be collected in order to assess variability of the media being sampled and to detect contamination and sampling error in the field. Field QC samples will include field duplicates, trip blanks and, if applicable, equipment rinsate blanks.

- One field duplicate sample will be collected for every ten field samples collected for laboratory analysis in order to check for reproducibility of laboratory and field procedures.

- One trip blank sample will be utilized per sampling event to check for contamination of volatile organic samples during handling and shipment from the field to the analyzing laboratory.

Laboratory QC samples will be analyzed by the laboratory and will consist of matrix spike and matrix spike duplicates for organic samples in order to identify, measure, and control the sources of error that may be introduced from the time of sample bottle preparation through analysis.

### 4.11.2 Sample Quality Assurance Elements

Sample quality assurance elements will include the following:

1. Sample documentation (location, date and time collected, batch, etc.)
2. Complete chain of custody records
3. Initial and periodic calibration of field equipment
4. Determination and documentation of applicable detection limits
5. Analyte(s) identification
6. Analyte(s) quantification

### 4.11.3 Chain of Custody Record

A Chain of Custody Record will be maintained from the time of sample collection until final deposition. Every transfer of custody will be noted and signed for, and a copy of the record will be kept by each individual who has signed it. The Chain of Custody Record will include the following information:

1. Sample identification
2. Sample location
3. Sample collection date
4. Sample information, i.e., matrix, number of bottles collected, etc.
5. Names and signatures of samplers

6. Signatures of all individuals who have had custody of the samples

When samples are not under direct control of the individual currently responsible for them, the samples will be stored in a locked container which has been sealed with a Custody Seal.

### 4.11.4 Custody Seal

Custody seals demonstrate that a sample container has not been opened or tampered with. The individual who has custody of the samples will sign and date the seal and affix it to the container in such a manner that it cannot be opened without breaking the seal.

## 5.0 Deliverables

Following completion of the groundwater investigation activities, a Groundwater Investigation Report summarizing the investigation activities will be submitted to Enterprise. The report will include the following:

1. A summary of all work conducted in the implementation of the investigation;
2. Maps of all sampling locations, including soil and groundwater contamination plumes;
3. Geologic cross-section
4. All laboratory data and quality assurance and quality control information; and
5. Recommendations of further sampling which needs to be conducted as a result of the sampling pursuant to the investigation.
6. Recommendations for further remediation measures

## 6.0 Implementation Schedule

AES proposes the following timeline to implement groundwater investigation activities, once NMOCD approval has been received. This schedule assumes that no inclement weather occurs, which could result in a delay in implementing field activities.

| ***Task*** | ***Days from NMOCD Workplan Concurrence*** |
|---|---|
| 1. BLM and OSE consultation. Schedule direct push rig for soil borings and monitor well installation; provide notification to NMOCD and Enterprise of scheduled site activities. | 8 |
| 2. Complete installation of soil borings and groundwater monitor wells; collect and submit soil and groundwater samples for laboratory analysis. | 5 |
| 3. Receive laboratory analytical reports for soil and groundwater samples. | 30 |
| 4. Prepare and submit Groundwater Investigation Report. | 45 |

## 7.0 Certification

AES has prepared this Groundwater Investigation workplan on behalf of Enterprise to complete a groundwater investigation associated with the Lateral 2D-1LP (Olmer #4) Release, which was discovered on August 3, 2011.

Respectfully submitted,

Tami C. Ross
Project Manager

Elizabeth McNally, PE
Principal

## 8.0 References

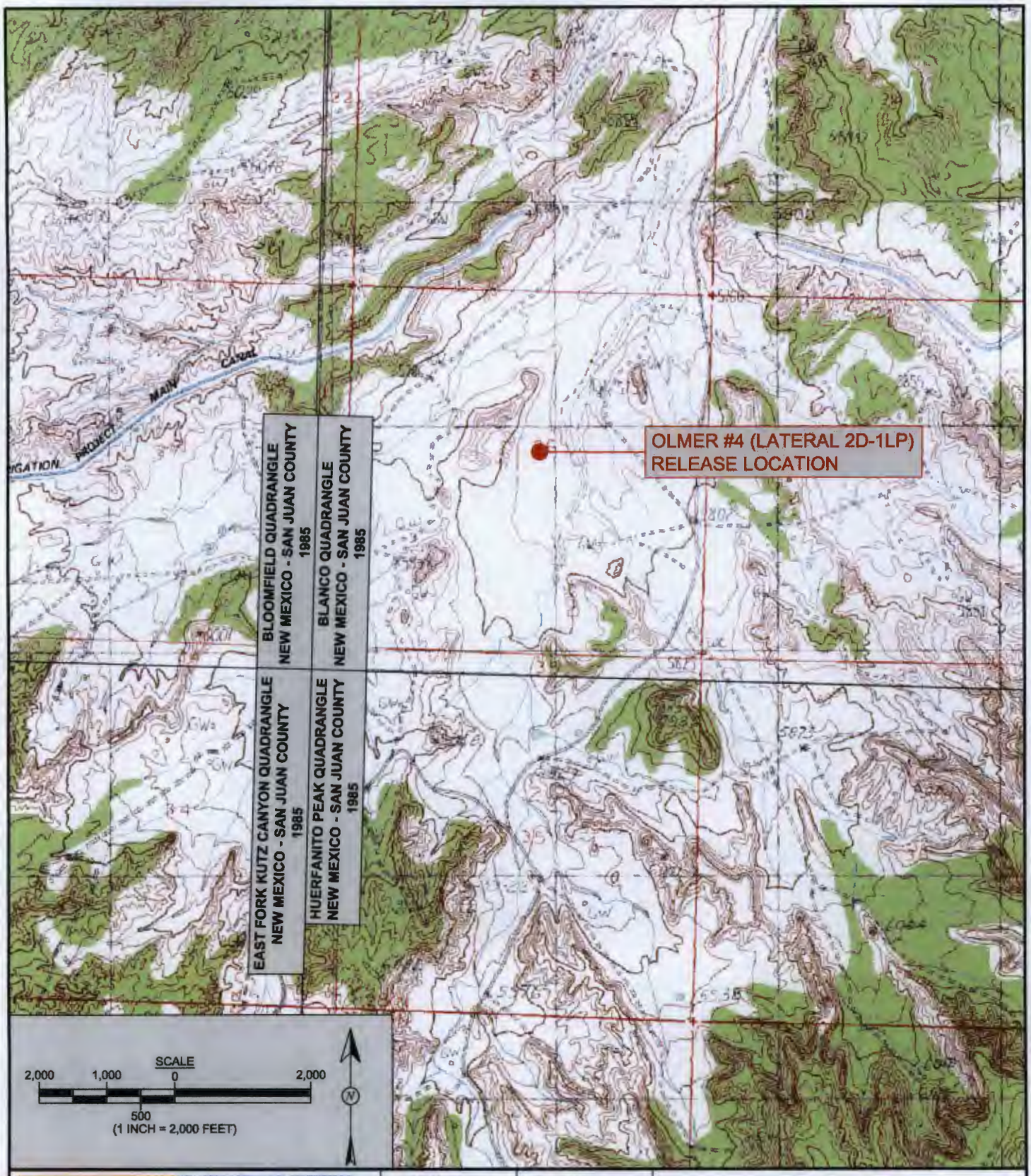
New Mexico Oil Conservation Division. 1993. *Environmental Handbook: Miscellaneous Guidelines: Guidelines for Remediation of Spills, Leaks, and Releases.* August 13, 1993. http://www.emnrd.state.nm.us/ocd/EnvironmentalHandbook.htm

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

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

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

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



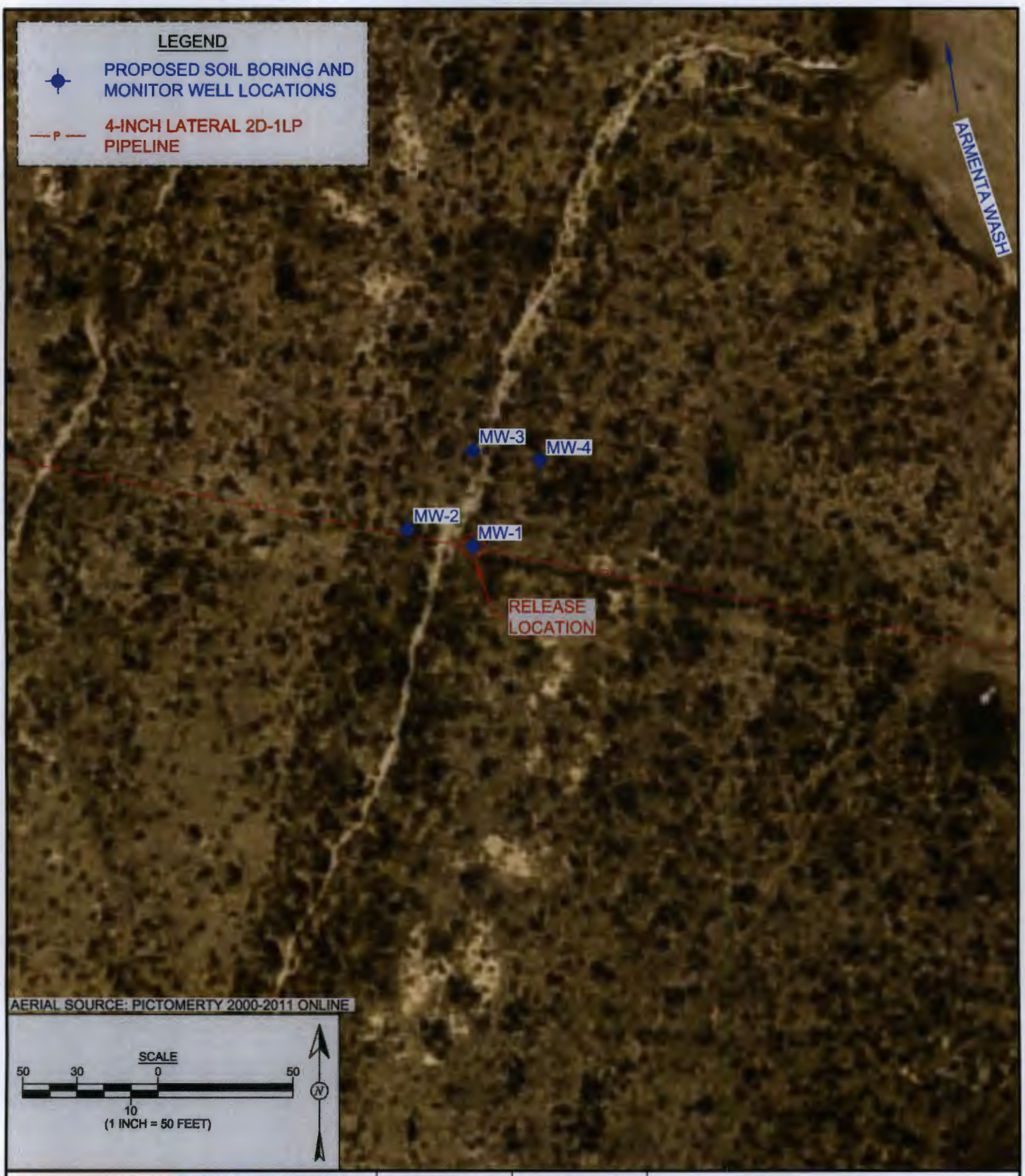

Animas Environmental Services, LLC

| | |
|---|---|
| **DRAWN BY:** C. Lameman | **DATE DRAWN:** August 3, 2011 |
| **REVISIONS BY:** C. Lameman | **DATE REVISED:** September 8, 2011 |
| **CHECKED BY:** T. Ross | **DATE CHECKED:** September 8, 2011 |
| **APPROVED BY:** E. McNally | **DATE APPROVED:** September 9, 2011 |

# FIGURE 1

## TOPOGRAPHIC SITE LOCATION MAP

ENTERPRISE PRODUCTS COMPANY
OLMER #4 (LATERAL 2D-1LP) PIPELINE
RELEASE LOCATION - SITE INVESTIGATION
SAN JUAN COUNTY, NEW MEXICO
SW ¼, NE ¼, SEC. 26, T28N, R10W
36°38.033'N, 107°51.832W




| | | |
|---|---|---|
| **DRAWN BY:** C. Lameman | **DATE DRAWN:** July 19, 2011 | **FIGURE 2** |
| **REVISIONS BY:** C. Lameman | **DATE REVISED:** September 27, 2011 | **PROPOSED SOIL BORING AND MONITOR WELL LOCATIONS** |
| **CHECKED BY:** T. Ross | **DATE CHECKED:** September 27, 2011 | ENTERPRISE PRODUCTS COMPANY<br>OLMER #4 (LATERAL 2D-1LP) PIPELINE<br>RELEASE LOCATION - SITE INVESTIGATION<br>SAN JUAN COUNTY, NEW MEXICO |
| **APPROVED BY:** R. Kennemer | **DATE APPROVED:** September 27, 2011 | SW ¼, NE ¼, SEC. 26, T28N, R10W<br>36°38.033'N, 107°51.832'W |

AES
Animas Environmental Services, LLC