

**3R-1011**

**Release Report/ General  
Correspondence**

**Enterprise SJ**

**Date: Jul-Sep 2013**

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
811 S. First St., Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources

Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-141  
Revised August 8, 2011

Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

**Release Notification and Corrective Action**

**OPERATOR**

Initial Report  Final Report

Name of Company Enterprise Field Services	Contact: Runell Seale / Jim Lieb
Address 614 Reilly Ave., Farmington, NM 87401	Telephone No. 505-599-2124 / 505-599-2159
Facility Name Lateral 2A-3 Gathering Line	Facility Type: Natural gas gathering line

Surface Owner: BLM	Mineral Owner BLM	API No.
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**LOCATION OF RELEASE**

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
D	27	27N	10W					San Juan

Latitude\_N 36.55191 \_ Longitude\_W 107.88884 (Decimal Degrees) \_\_

**NATURE OF RELEASE**

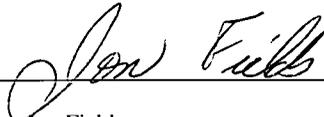
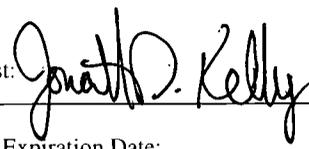
Type of Release: Natural Gas Pipeline Release	Volume of Release Unknown	Volume Recovered: Approximately 51 cubic yards of contaminated soil was removed from the location.
Source of Release: Corrosion hole	Date and Hour of Occurrence: Unknown	Date and Hour of Discovery 7.11.2013 @ 15:00 hours
Was Immediate Notice Given? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom? <b>RCVD SEP 30 '13</b>	
By Whom?	Date and Hour	<b>OIL CONSV. DIV.</b>
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse. <b>DIST. 3</b>	

If a Watercourse was Impacted, Describe Fully.\*

Describe Cause of Problem and Remedial Action Taken.\* Enterprise gas control was notified of a possible line leak from a third party. Enterprise Operations responded to the reported location and verified the leak, isolated the pipeline, and coordinated for repairs. Contractor and Enterprise Operations/Environmental worked to mitigate the release location by removing the stained soil on the surface of the pipe release location until permanent repairs could be made.

Describe Area Affected and Cleanup Action Taken.\* Enterprise Environmental was dispatched to the location to verify that water/condensate mix released from the pipe leak was mitigated prior to equipment arrival. A third party environmental contractor was dispatched to the leak location upon successful repairs and provided cleanup guidance. Approximately 51 cubic yards of contaminated soil was hauled to an OCD permitted land farm facility to achieve closure standards. Please find attached associated third party corrective action report with this "final" c-141 report.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: 	<b>OIL CONSERVATION DIVISION</b>	
Printed Name: Jon Fields	Approved by Environmental Specialist: 	
Title: Director, Field Environmental	Approval Date: 10/23/2013	Expiration Date:
E-mail Address: jefields@eprod.com	Conditions of Approval:	Attached <input type="checkbox"/>
Date: 9-24-2013 Phone: 832-501-4078		

\* Attach Additional Sheets If Necessary

nJK 1329652126  
1413

Enterprise Products  
Lateral 2A-3 Pipeline Release  
Latitude North 36.55191, Longitude West -107.88884  
NW1/4, NW1/4 Section 27 T27N R10W  
San Juan County, New Mexico

RCVD SEP 30 '13  
OIL CONS. DIV.  
DIST. 3



**Submitted To:**

Enterprise Products  
Field Environmental-San Juan Basin  
614 Reilly Avenue  
Farmington, NM 87401

**Submitted By:**

Souder, Miller & Associates  
2101 San Juan Boulevard  
Farmington, NM 87401  
(505)325-7535



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## 1.0 Executive Summary

On July 16, 2013, Souder, Miller & Associates (SMA) responded to a hydrocarbon release associated with the Lateral 2A-3 pipeline. On August 7, 2013, SMA sampled a wash that was located to the north of the main excavation associated with the release. The table below summarizes information about the release and remediation activities.

TABLE 1: RELEASE INFORMATION				
Name	Lateral 2A-3 Pipeline Release			
Location	Latitude/Longitude		Section, Township, Range	
		36.55191	-107.88884	Unit D NW ¼ NW ¼ Section 27
Date Reported	July 11, 2013			
	Aaron Dailey			
Land Owner	Bureau of Land Management (BLM)			
Reported To	New Mexico Oil Conservation Division (NMOCD) and BLM			
Diameter of Pipeline	14 inches			
Source of Release	Internal Corrosion			
Release Contents	Natural Gas Liquids/Condensate			
Release Volume	Unknown			
Nearest Waterway	Kutz Wash			
Depth to Groundwater	Assumed to be less than 50 feet			
Nearest Domestic Water Source	Greater than 200 feet			
NMOCD Ranking	30			
SMA Response Dates	July 16, 2013 & August 7, 2013			
Subcontractors	Energy Maintenance Services (EMS)			
Disposal Facility	Envirotech Landfarm			
Yd <sup>3</sup> Contaminated Soil Excavated and Disposed	51			

## 2.0 Introduction

On behalf of Enterprise Products Operating, LLC. (Enterprise), SMA has prepared this report that describes remediation of a hydrocarbon release associated with the Lateral 2A-3 pipeline. The Lateral 2A-3 pipeline release was a result of internal corrosion of the steel pipeline. The release was reported on July 11, 2013. The pipeline is located in Unit D (NW ¼, NW ¼) Section 27, Township 27 North, Range 10W, 36.55191, -107.88884, San Juan County, New Mexico. Figure 1, Vicinity Map, illustrates the location of the release.

### 3.0 Site Ranking and Land Jurisdiction

The release site is located approximately 300 feet northeast of Kutz Wash with an elevation of approximately 6,151 feet above sea level. After evaluation of the site using aerial photography and topographic maps, depth to groundwater is estimated to be less than 50 feet below ground surface (bgs).

SMA searched the New Mexico State Engineer's Office online water well data base for water wells in the vicinity of the release. No wells were located in sections 15, 16, or 27. This release location has been assigned a NMOCD ranking of 30. The physical location of this release is within the jurisdiction of the BLM and NMOCD and requires soil remediation to below 10 parts per million (ppm) benzene, 50 ppm total benzene, toluene, ethyl-benzene, and total xylenes (BTEX), and 100 ppm total petroleum hydrocarbons (TPH). Table 2 illustrates site ranking rationale.

### 4.0 Summary of Field Activities

On July 16, 2013, under the supervision of SMA, EMS excavated the hydrocarbon impacted soil while making repairs to the Lateral 2A-3 pipeline. SMA personnel guided the excavation activities by collecting soil samples for field screening with a calibrated photo-ionization detector (PID). Table 3 summarizes the field screening results. After field screening results indicated that the hydrocarbon impacted soil had been removed, SMA collected five composite soil samples for laboratory analysis. SMA also collected a composite sample from the southern portion of a small wash located to the west of the main excavation.

On August 7, 2013, SMA returned to sample the northern portion and below the convergence of the north and south portions of the wash located to the west of the main excavation associated with the release. A total of five composite soil samples were collected from this wash. All laboratory soil samples were field screened with a calibrated PID and submitted for laboratory analysis per United States Environmental Protection Agency Method 8021 BTEX, and 8015 Diesel Range Organics (DRO) and Gasoline Range Organics (GRO) to Hall Environmental Analysis Laboratory of Albuquerque, New Mexico. Figure 2 illustrates the extent of the excavation and composite soil sample locations.

The final excavation dimensions were approximately 40 feet long by 14 feet wide by 4 feet deep. Field notes are included in Appendix A. Site photography is included in Appendix B. Approximately 51 cubic yards of hydrocarbon contaminated soil were excavated and transported by EMS to Envirotech Land Farm near Bloomfield, New Mexico for proper disposal. Soil disposal documentation is included in Appendix C. Clean imported soil was transported to the site and used as backfill.

### 5.0 Conclusions and Recommendations

As noted in Section 3.0 of this report, NMOCD Guidelines for Remediation of Leaks, Spills, and Releases have established the following action levels for contaminants of concern with a site ranking of 30: 10 ppm benzene, 50 ppm total BTEX, and 100 ppm TPH. Based on laboratory

analysis, all of the soil samples collected were either below laboratory detection limits or below NMOCD soil remediation standards. Soil contaminant concentrations are illustrated in Figure 2. A summary of laboratory analysis is included in Table 4. Laboratory reports are included in Appendix D.

SMA recommends no further action at this site.

## 6.0 Closure and Limitations

The scope of our services consisted of the performance of a preliminary spill assessment and stabilization, regulatory liaison, oversight and control of remediation operations, disposal arrangements and documentation, project management, and preparation of this summary report. All work has been performed in accordance with generally accepted professional environmental consulting practices.

If there are any questions regarding this report, please contact either Thomas Long or Reid Allan at 505-325-7535.

Submitted by:

Reviewed by:

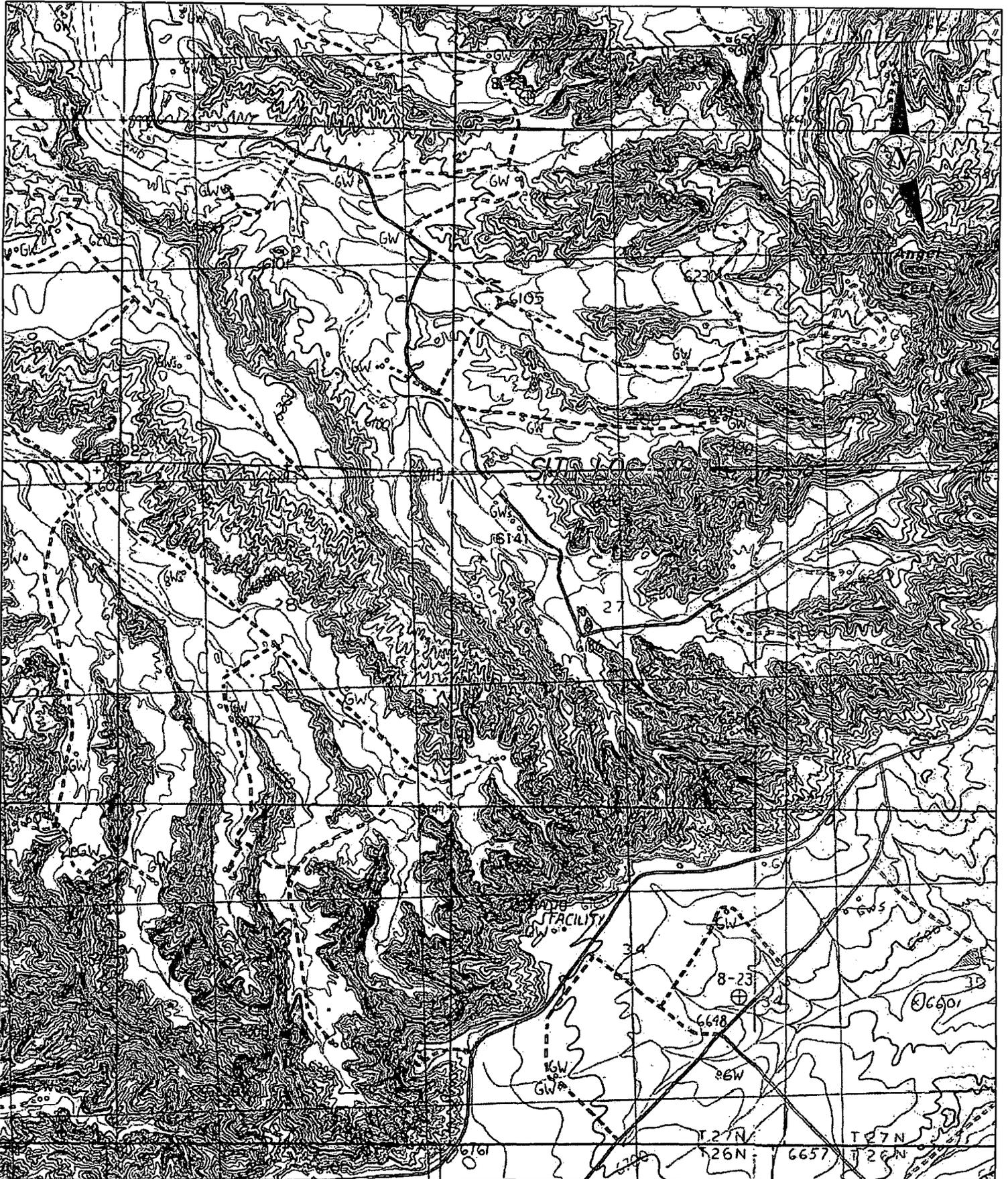
SOUDER, MILLER & ASSOCIATES



Thomas J. Long  
Project Scientist



Reid S. Allan, PG  
Principal Scientist



SCALE



2101 SAN JUAN BLVD  
FARMINGTON, NM 87401

FAX (505) 327-1496  
PH. (505) 325-5667

APPROVED: RSA  
DRAWN BY: TLONG  
REVISIONS BY:  
PROJECT # 5122104

DATE: 7/18/2013  
DATE: 7/18/2013  
DATE:  
FIGURE: 1

VICINITY MAP  
LATERAL 2A-3  
NW 1/4 NW 1/4 SECTION 27 T27N R10W  
SAN JUAN COUNTY, NEW MEXICO



EXTENT OF EXCAVATION  
40 FEET X 14 FEET X 4 FEET DEEP

DIRT ROAD

SC-2 (7/16/2013)  
BENZENE = <0.047  
BTEX = <0.095  
DRO = <10  
GRO = <4.7

SC-4 (7/16/2013)  
BENZENE = <0.048  
BTEX = <0.097  
DRO = <9.9  
GRO = <4.8

SC-6 (7/16/2013)  
BENZENE = <0.046  
BTEX = <0.093  
DRO = <10  
GRO = <4.6

SC-3 (7/16/2013)  
BENZENE = <0.047  
BTEX = <0.094  
DRO = <10  
GRO = <4.7

SC-1 (8/7/2013)

BENZENE = <0.046  
BTEX = <0.093  
DRO = 17  
GRO = <4.6

BENZENE = <0.047  
BTEX = <0.095  
DRO = <10  
GRO = <4.7

SC-2 (8/7/2013)

SC-5 (7/16/2013)  
BENZENE = <0.047  
BTEX = <0.093  
DRO = <10  
GRO = <4.7

SMALL WASH

SC-1 (7/16/2013)  
BENZENE = <0.047  
BTEX = <0.093  
DRO = <4.7  
GRO = <10

SC-3 (8/7/2013)

BENZENE = <0.048  
BTEX = <0.095  
DRO = 15  
GRO = <4.8

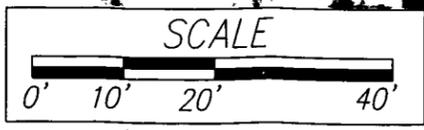
SC-4 (8/7/2013)

SMALL WASH

BENZENE = <0.048  
BTEX = <0.096  
DRO = <10  
GRO = <4.8

BENZENE = <0.049  
BTEX = <0.097  
DRO = 13  
GRO = <4.8

SC-5 (8/7/2013)



LEGEND:

SC-3  
○ - COMPOSITE SOIL SAMPLE LOCATION (RESULTS IN mg/Kg)

□ - EXTENT OF EXCAVATION

By: [Blank]	Checked: [Blank]
Description: [Blank]	Date: [Blank]
Revision: [Blank]	Date: [Blank]
SAN JUAN COUNTY, NEW MEXICO	
ENTERPRISE PRODUCTS COMPANY	
SITE AND SOIL CONTAMINANT CONCENTRATION MAP	
LATERAL 2A-3 PIPELINE RELEASE	
NW 1/4 NW 1/4 SECTION 27 T27N R10W	
SOUDEY, MILLER & ASSOCIATES	
1101 SAN JUAN BLVD.	
FARMINGTON, NM 87401	
Phone: (505) 325-7335 Toll-Free (800) 519-4098	
Fax: (505) 326-0045	
Designed: T.J.L.	Checked: RSA
Drawn: T.J.L.	Scale: Horiz: 1" = 20'
Date: 08/21/2013	Vert: N/A
Project No: 5122104	Figure: 2

Depth to Groundwater	NMOCD Numeric Rank for this Site	Source for Ranking	Notes
< 50 BGS = 20	20	USGS Topo Maps; Google Earth Elevation Difference from the site and the unnamed wash to the north	Kutz Wash is located approximately 300 feet to the southwest; Site elevation is approximately 10 feet above Kutz Wash
50' to 99' = 10			
>100' = 0			
Ranking Criteria for Horizontal Distance to Nearest Surface Water	NMOCD Numeric Rank for this Site	Source for Ranking	Notes
< 200' = 20	10	USGS Topo Maps; Google Earth (An unnamed wash ~600' to the north); PRCC Mapping Tool	Kutz Wash is located approximately 300 feet to the southwest
200'-1000' = 10			
>1000'			
Ranking Criteria for Horizontal Distance to a Water Well or Water Source	NMOCD Numeric Rank for this Site	Source for Ranking	Notes
<1000' from a water source? <200' for a private domestic water source? YES OR NO to BOTH. YES = 20, NO = 0	0	NM State Engineer Water Well Database	No Wells in Sections 15, 16 and 27
<b>Total Site Ranking</b>	<b>30</b>		
<b>Soil Remediation Standards</b>	0 to 9	10 to 19	>19
<b>Benzene</b>	10 PPM	10 PPM	10 PPM
<b>BTEX</b>	50 PPM	50 PPM	50 PPM
<b>TPH</b>	5000 PPM	1000 PPM	100 PPM



Enterprise Products  
 Table 3: Summary of Field Screening Results  
 (PPM)

Lateral 2A-3 Pipeline Release  
 8/1/2013  
 Revised 8/29/13

FIELD SCREENING RESULTS SUMMARY					
Date	Time	Field Screening Reference	Sample Depth (Feet BGS)	PID Results	Lab Sample Collected Y/N
7/16/2013	13:10	S-1 (small wash)	0.5	0.8	N
7/16/2013	13:11	S-2 (small wash)	0.5	0.2	N
7/16/2013	13:12	S-3 (small wash)	0.5	0.2	N
7/16/2013	13:15	SC-1 (small wash)	0.5	0.3	Y
7/16/2013	14:05	S-4/SC-2	0-4	13.3	Y
7/16/2013	14:06	S-5/SC-3	0-4	28.3	Y
7/16/2013	14:07	S-6/SC-4	0-4	83.4	Y
7/16/2013	15:00	S-7/SC-5	0-4	9.9	Y
7/16/2013	15:03	S-8/SC-6 (Base)	4	149.0	Y
8/7/2013	14:10	SC-1	0.5	0.5	Y
8/7/2013	14:11	SC-2	0.5	0.7	Y
8/7/2013	14:12	SC-3	0.5	0.3	Y
8/7/2013	14:13	SC-4	0.5	0.2	Y
8/7/2013	14:14	SC-5	0.5	0.5	Y



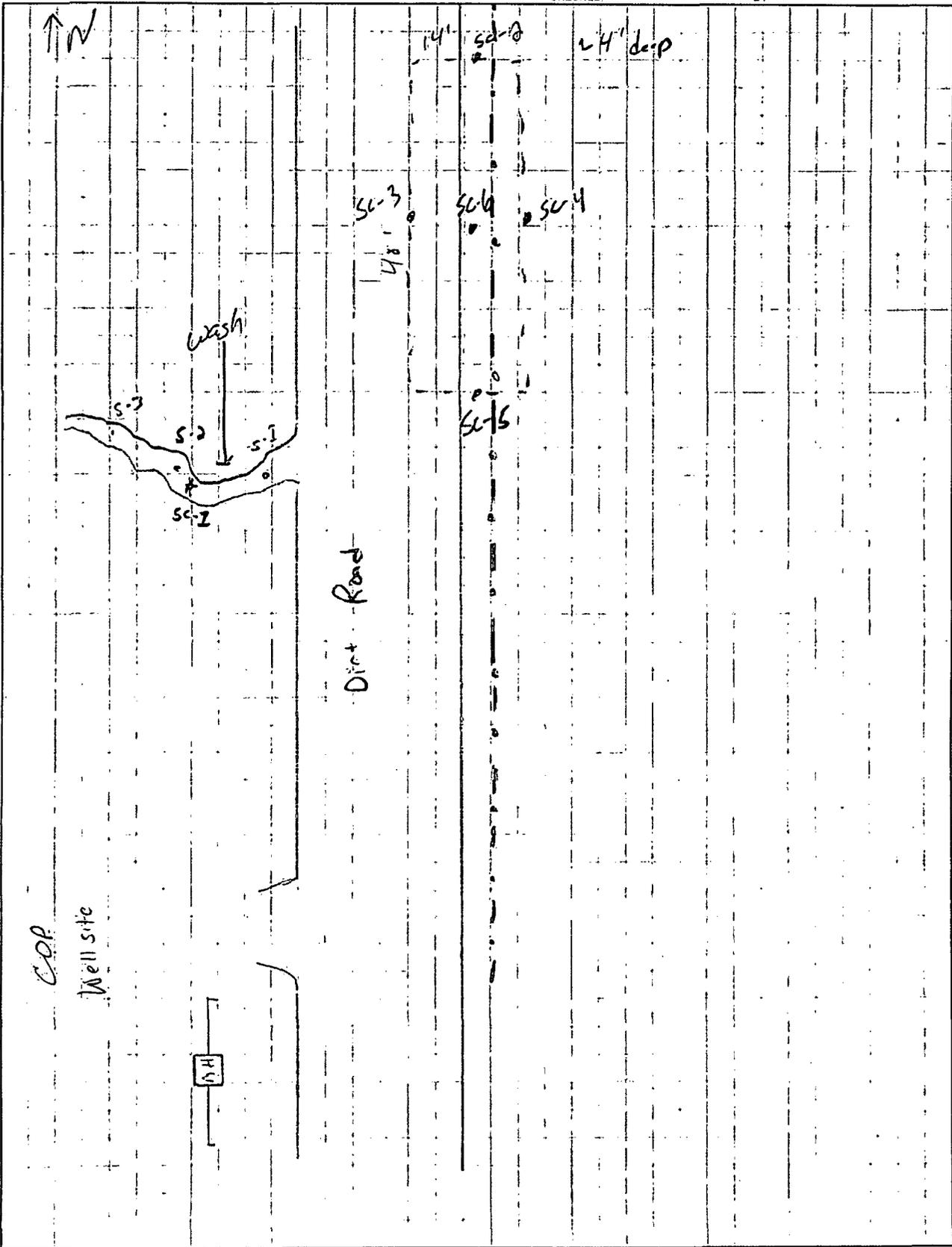
Enterprise Products  
 Table 4: Summary of Laboratory Analysis  
 Results in Kg/mg

Lateral 2A-3 Pipeline Release  
 8/1/2013  
 Revised 8/29/2013

LABORATORY ANALYTICAL SUMMARY							
Date	Time	Sample ID	Sample Depth (Feet BGS)	Method 8015 GRO	Method 8015 DRO	Method 8021 Benzene	Method 8021 BTEX
7/16/2013	13:15	SC-1 (Small Wash)	0.5	<4.7	<10	<0.047	<0.093
7/16/2013	14:05	SC-2	0-4	<4.7	<10	<0.047	<0.095
7/16/2013	14:06	SC-3	0-4	<4.7	<10	<0.047	<0.094
7/16/2013	14:07	SC-4	0-4	<4.8	<9.9	<0.048	<0.097
7/16/2013	15:00	SC-5	0-4	<4.7	<10	<0.047	<0.093
7/16/2013	15:03	SC-6	4	<4.6	<10	<0.046	<0.093
8/7/2013	14:10	SC-1	0.5	<4.6	17	<0.046	<0.093
8/7/2013	14:11	SC-2	0.5	<4.7	<10	<0.047	<0.095
8/7/2013	14:12	SC-3	0.5	<4.8	15	<0.048	<0.095
8/7/2013	14:13	SC-4	0.5	<4.8	13	<0.049	<0.097
8/7/2013	14:14	SC-5	0.5	<4.8	<10	<0.048	<0.096



CHECKED: BY



CHECKED BY

onsite @ ISS, EMS + Enterprise excavating around PL  
Fill out ISA, Sign in, map site

1300 Collect samples from small wash on west side of Road

	PPM	Time
S-1	2.8	1310
S-2	0.2	1311
S-3	0.2	1312

SC-1 (Wash c 0.5')	1315	0.3 ppm	
S-4 (N Wall Comp)	1405	13.3 ppm	SC-2
S-5 (W. Wall Comp)	1406	28.3 ppm	SC-3
S-6 (E. Wall Comp)	1407	83.4 ppm	SC-4
S-7 (S. Wall Comp)	1500	9.9 ppm	SC-5
S-8 (Base c 4' >)	1503	1.49 ppm	SC-6



1515 load up; EMS to Z Rap PL and leave excavation  
Open  
1530 off site

1345 onsite; walk wash with A.D. of Enterprise  
1400 Collect Composite Samples from wash

SC-1 @ 2-3" 0.5 ppm @ 1410

SC-2 @ ~3" 0.7 ppm @ 1411

SC-3 @ ~3" 0.3 ppm @ 1412

SC-4 @ ~3" 0.2 ppm @ 1413

SC-5 @ ~3" 0.5 ppm 1414

1430 off site

Site Photography  
Enterprise Products  
Lateral 2A-3 Pipeline Release  
NW 1/4, NW1/4 Section 27 T27N R10W  
San Juan County, New Mexico

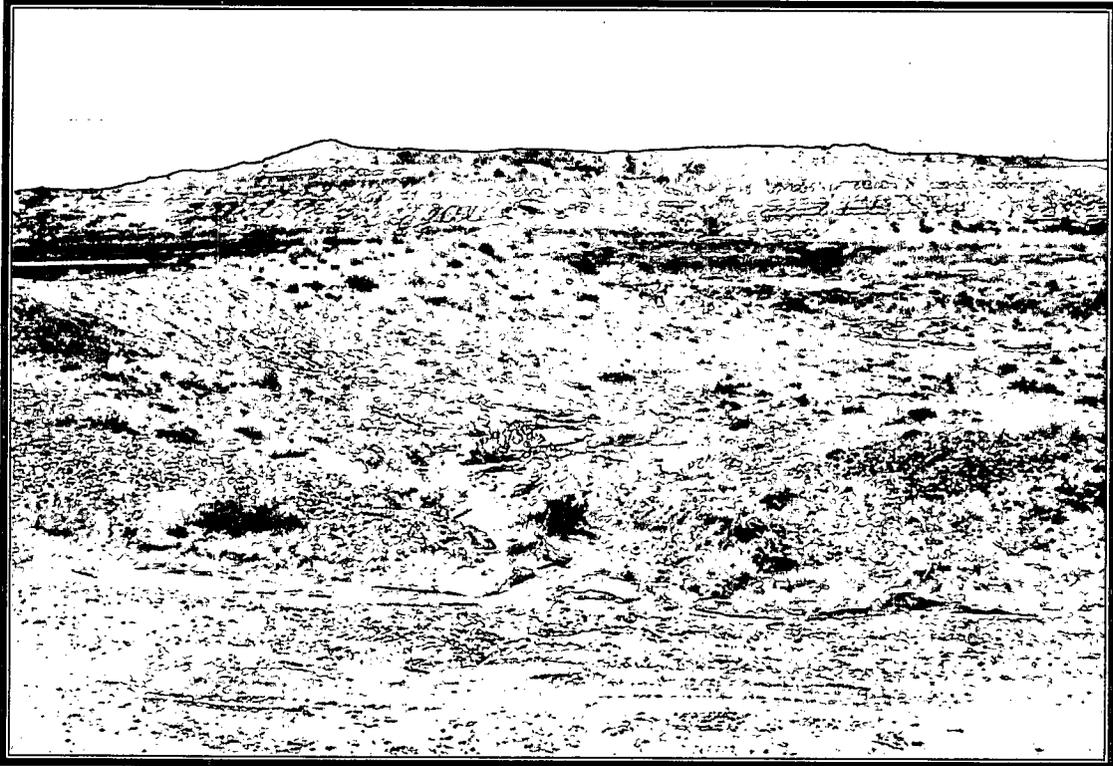


Photo 1: View of the small wash across the road from the Lateral 2A-3 excavation.

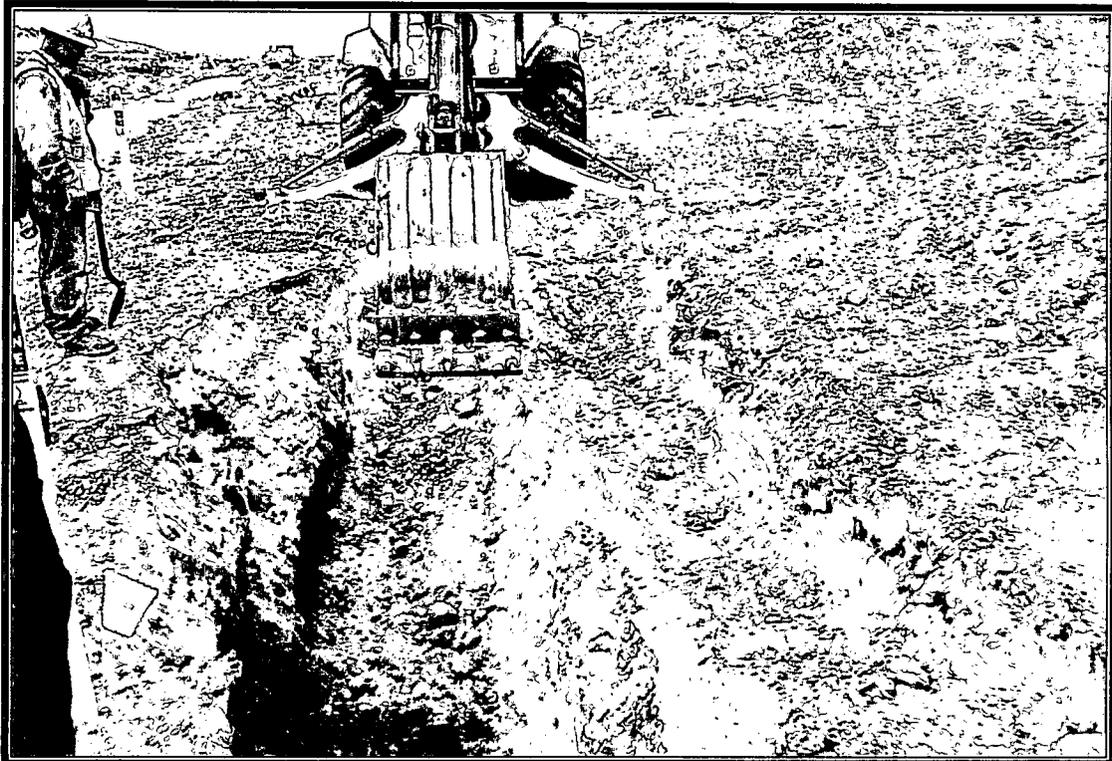


Photo 2: View of the excavation for the Lateral 2A-3 pipeline release.

Site Photography  
Enterprise Products  
Lateral 2A-3 Pipeline Release  
NW 1/4, NW1/4 Section 27 T27N R10W  
San Juan County, New Mexico



Photo 3: View of the excavation and the Lateral 2A-3 pipeline.



Photo 4: View of the excavation and the Lateral 2A-3 pipeline.

Site Photography  
Enterprise Products  
Lateral 2A-3 Pipeline Release  
NW 1/4, NW1/4 Section 27 T27N R10W  
San Juan County, New Mexico

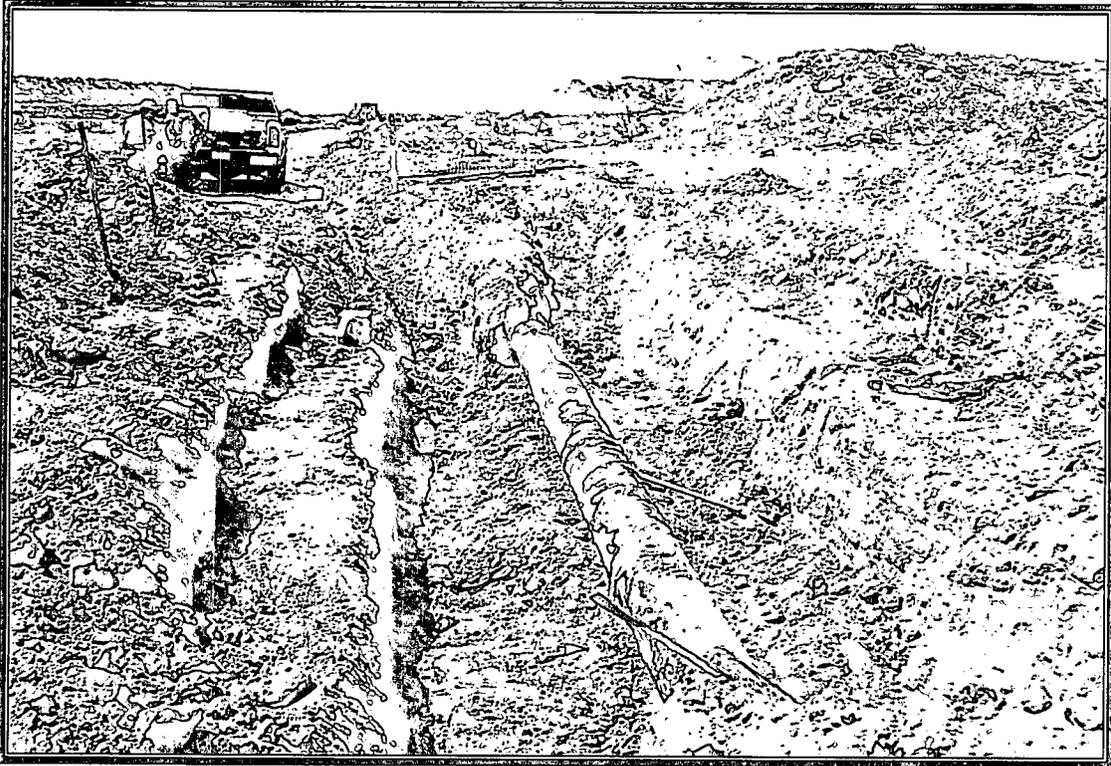


Photo 5: View of the excavation and the Lateral 2A-3 pipeline.



Photo 6: View of the excavation and the Lateral 2A-3 pipeline.

Site Photography  
Enterprise Products  
Lateral 2A-3 Pipeline Release  
NW 1/4, NW1/4 Section 27 T27N R10W  
San Juan County, New Mexico

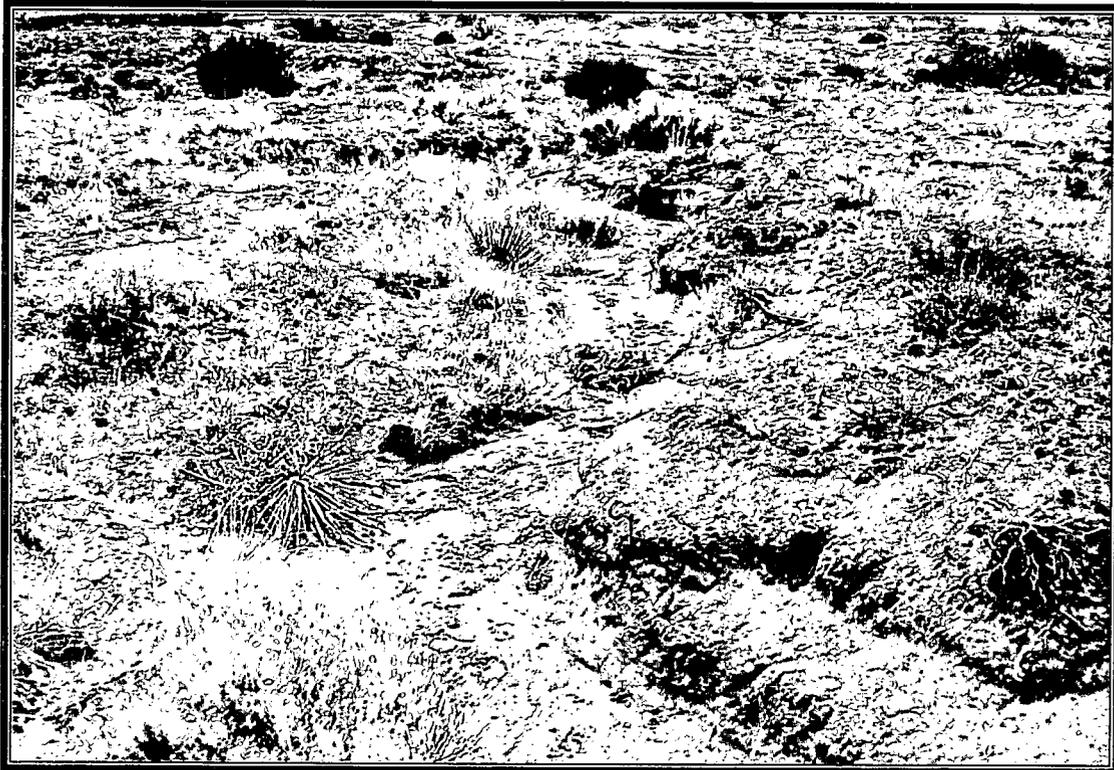


Photo 7: View of the northern wash that was sampled.



Photo 8: View of the northern wash that was sampled.





# Bill of Lading

MANIFEST # 44186

DATE 7-17-13 JOB # 91057-0573

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

LOAD NO.	COMPLETE DESCRIPTION OF SHIPMENT						TRANSPORTING COMPANY			
	POINT OF ORIGIN	DESTINATION	MATERIAL	GRID	YDS	BBLS	COMPANY	TRK#	TIME	DRIVER SIGNATURE
1	EMAPPOSE/EMS Lot 2A-3 PIPELINE	CFE	CON S612	2-3	10	-	EMS	310-309	11:40	Reginald Tsosie
2	"	"	"	AA-3	10	-	EMS	310-309	14:25	Reginald Tsosie
					20					
RESULTS:		LANDFARM EMPLOYEE:		NOTES:						
-202	CHLORIDE TEST	1	Certification of above receipt & placement							
	PAINT FILTER TEST	1								

By signing as the driver/transporter, I certify the material hauled from the above location has not been added to or tampered with. I certify the material is from the above mentioned Generator/Point of Origin and that no additional material has been added or mixed into the load.

TRANSPORTER CO. EMS NAME Reginald Tsosie SIGNATURE Reginald Tsosie  
 COMPANY CONTACT Mike Sanchez PHONE (505) 333-2053 DATE 7-17-13

Signatures required prior to distribution of the legal document.

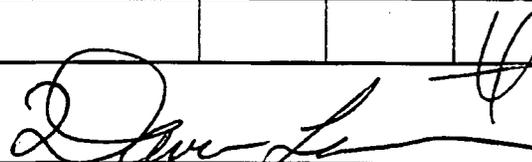


# Bill of Lading

MANIFEST # 44187

DATE 7-17-13 JOB # 97057-0573

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

LOAD NO.	COMPLETE DESCRIPTION OF SHIPMENT						TRANSPORTING COMPANY				
	POINT OF ORIGIN	DESTINATION	MATERIAL	GRID	YDS	BBLs	COMPANY	TRK#	TIME	DRIVER SIGNATURE	
1	E-tech	SANRA PLUSE/EMS CLEAN		-	10	-	EMS	310-309	11:40	Reynold Tsosie	
2	"	Lot 2A-3 APPLIC Fill		-	10	-	EMS	310-309	14:25	Reynold Tsosie	
					20						
RESULTS:		LANDFARM EMPLOYEE:						NOTES:			
<input checked="" type="checkbox"/>	CHLORIDE TEST										
<input checked="" type="checkbox"/>	PAINT FILTER TEST			Certification of above receipt & placement							

By signing as the driver/transporter, I certify the material hauled from the above location has not been added to or tampered with. I certify the material is from the above mentioned Generator/Point of Origin and that no additional material has been added or mixed into the load.

TRANSPORTER CO. EMS NAME Reynold Tsosie SIGNATURE Reynold Tsosie  
 COMPANY CONTACT Nike Sanchez PHONE (505) 333-2003 DATE 7-17-13

Signatures required prior to distribution of the legal document.



# Bill of Lading

MANIFEST # 44188

DATE 2-17-13 JOB # 1057-0573

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

LOAD NO.	COMPLETE DESCRIPTION OF SHIPMENT						TRANSPORTING COMPANY				
	POINT OF ORIGIN	DESTINATION	MATERIAL	GRID	YDS	BBLS	COMPANY	TRK#	TIME	DRIVER SIGNATURE	
1	Enterprise/EMS LAT 2A-3 PIPELINE	LFII	CONT SOIL	2-3	10	-	YUCCA	AFC	12:10	<i>[Signature]</i>	
2	"	"	"	2-3	10	-	YUCCA	AFC	15:20	<i>[Signature]</i>	
3	"	"	"	2-3	10	-	YUCCA	AFC	15:20	<i>[Signature]</i>	
					<u>30</u>						
RESULTS:		LANDFARM EMPLOYEE:		<i>[Signature]</i>				NOTES:			
<u>2/2</u>	CHLORIDE TEST	1									
	PAINT FILTER TEST	1	Certification of above receipt & placement								

By signing as the driver/transporter, I certify the material hauled from the above location has not been added to or tampered with. I certify the material is from the above mentioned Generator/Point of Origin and that no additional material has been added or mixed into the load.

TRANSPORTER CO. Yucca Welding & Excav. NAME Reed Rogers SIGNATURE *[Signature]*  
 COMPANY CONTACT Henry Armenta PHONE \_\_\_\_\_ DATE 2-17-13

Signatures required prior to distribution of the legal document.





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)

July 25, 2013

Thomas Long  
Souder, Miller and Associates  
2101 San Juan Boulevard  
Farmington, NM 87401  
TEL: (505) 325-7535  
FAX

RE: Lateral 2A-3

OrderNo.: 1307865

Dear Thomas Long:

Hall Environmental Analysis Laboratory received 6 sample(s) on 7/18/2013 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to [www.hallenvironmental.com](http://www.hallenvironmental.com) or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

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

**Hall Environmental Analysis Laboratory, Inc.**

**CLIENT:** Souder, Miller and Associates  
**Project:** Lateral 2A-3  
**Lab ID:** 1307865-001

**Client Sample ID:** SC-1 0.5'  
**Collection Date:** 7/16/2013 1:15:00 PM  
**Received Date:** 7/18/2013 10:00:00 AM

**Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015D: DIESEL RANGE ORGANICS</b>							Analyst: <b>JME</b>
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	7/22/2013 2:21:20 PM	8427
Surr: DNOP	108	63-147		%REC	1	7/22/2013 2:21:20 PM	8427
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>DAM</b>
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	7/22/2013 2:55:43 PM	8464
Surr: BFB	98.6	80-120		%REC	1	7/22/2013 2:55:43 PM	8464
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>DAM</b>
Benzene	ND	0.047		mg/Kg	1	7/22/2013 2:55:43 PM	8464
Toluene	ND	0.047		mg/Kg	1	7/22/2013 2:55:43 PM	8464
Ethylbenzene	ND	0.047		mg/Kg	1	7/22/2013 2:55:43 PM	8464
Xylenes, Total	ND	0.093		mg/Kg	1	7/22/2013 2:55:43 PM	8464
Surr: 4-Bromofluorobenzene	96.6	80-120		%REC	1	7/22/2013 2:55:43 PM	8464

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

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates      Client Sample ID: SC-2 N. Wall 0-4'  
 Project: Lateral 2A-3      Collection Date: 7/16/2013 2:05:00 PM  
 Lab ID: 1307865-002      Matrix: SOIL      Received Date: 7/18/2013 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015D: DIESEL RANGE ORGANICS</b>							Analyst: <b>JME</b>
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	7/22/2013 2:51:58 PM	8427
Surr: DNOP	84.6	63-147		%REC	1	7/22/2013 2:51:58 PM	8427
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>DAM</b>
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	7/22/2013 3:24:19 PM	8464
Surr: BFB	93.5	80-120		%REC	1	7/22/2013 3:24:19 PM	8464
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>DAM</b>
Benzene	ND	0.047		mg/Kg	1	7/22/2013 3:24:19 PM	8464
Toluene	ND	0.047		mg/Kg	1	7/22/2013 3:24:19 PM	8464
Ethylbenzene	ND	0.047		mg/Kg	1	7/22/2013 3:24:19 PM	8464
Xylenes, Total	ND	0.095		mg/Kg	1	7/22/2013 3:24:19 PM	8464
Surr: 4-Bromofluorobenzene	95.8	80-120		%REC	1	7/22/2013 3:24:19 PM	8464

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

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

**Hall Environmental Analysis Laboratory, Inc.**

CLIENT: Souder, Miller and Associates

Client Sample ID: SC-3 W. Wall 0-4'

Project: Lateral 2A-3

Collection Date: 7/16/2013 2:06:00 PM

Lab ID: 1307865-003

Matrix: SOIL

Received Date: 7/18/2013 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015D: DIESEL RANGE ORGANICS</b>							Analyst: <b>JME</b>
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	7/22/2013 3:22:36 PM	8427
Surr: DNOP	101	63-147		%REC	1	7/22/2013 3:22:36 PM	8427
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>DAM</b>
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	7/22/2013 3:52:56 PM	8464
Surr: BFB	93.4	80-120		%REC	1	7/22/2013 3:52:56 PM	8464
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>DAM</b>
Benzene	ND	0.047		mg/Kg	1	7/22/2013 3:52:56 PM	8464
Toluene	ND	0.047		mg/Kg	1	7/22/2013 3:52:56 PM	8464
Ethylbenzene	ND	0.047		mg/Kg	1	7/22/2013 3:52:56 PM	8464
Xylenes, Total	ND	0.094		mg/Kg	1	7/22/2013 3:52:56 PM	8464
Surr: 4-Bromofluorobenzene	95.4	80-120		%REC	1	7/22/2013 3:52:56 PM	8464

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

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

Analytical Report

Lab Order 1307865

Date Reported: 7/25/2013

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates

Client Sample ID: SC-4 E. Wall 0-4'

Project: Lateral 2A-3

Collection Date: 7/16/2013 2:07:00 PM

Lab ID: 1307865-004

Matrix: SOIL

Received Date: 7/18/2013 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015D: DIESEL RANGE ORGANICS</b>							Analyst: JME
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	7/22/2013 3:53:25 PM	8427
Surr: DNOP	117	63-147		%REC	1	7/22/2013 3:53:25 PM	8427
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: DAM
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	7/23/2013 12:15:10 PM	8464
Surr: BFB	91.8	80-120		%REC	1	7/23/2013 12:15:10 PM	8464
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: DAM
Benzene	ND	0.048		mg/Kg	1	7/23/2013 12:15:10 PM	8464
Toluene	ND	0.048		mg/Kg	1	7/23/2013 12:15:10 PM	8464
Ethylbenzene	ND	0.048		mg/Kg	1	7/23/2013 12:15:10 PM	8464
Xylenes, Total	ND	0.097		mg/Kg	1	7/23/2013 12:15:10 PM	8464
Surr: 4-Bromofluorobenzene	93.4	80-120		%REC	1	7/23/2013 12:15:10 PM	8464

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

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

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates

Client Sample ID: SC-5 S. Wall 0-4'

Project: Lateral 2A-3

Collection Date: 7/16/2013 3:00:00 PM

Lab ID: 1307865-005

Matrix: SOIL

Received Date: 7/18/2013 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015D: DIESEL RANGE ORGANICS</b>							Analyst: <b>JME</b>
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	7/22/2013 4:24:01 PM	8427
Surr: DNOP	101	63-147		%REC	1	7/22/2013 4:24:01 PM	8427
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>DAM</b>
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	7/22/2013 9:36:05 PM	8464
Surr: BFB	90.9	80-120		%REC	1	7/22/2013 9:36:05 PM	8464
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>DAM</b>
Benzene	ND	0.047		mg/Kg	1	7/22/2013 9:36:05 PM	8464
Toluene	ND	0.047		mg/Kg	1	7/22/2013 9:36:05 PM	8464
Ethylbenzene	ND	0.047		mg/Kg	1	7/22/2013 9:36:05 PM	8464
Xylenes, Total	ND	0.093		mg/Kg	1	7/22/2013 9:36:05 PM	8464
Surr: 4-Bromofluorobenzene	93.2	80-120		%REC	1	7/22/2013 9:36:05 PM	8464

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

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

**Hall Environmental Analysis Laboratory, Inc.**

CLIENT: Souder, Miller and Associates

Client Sample ID: SC-6 Base @4'

Project: Lateral 2A-3

Collection Date: 7/16/2013 3:03:00 PM

Lab ID: 1307865-006

Matrix: SOIL

Received Date: 7/18/2013 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015D: DIESEL RANGE ORGANICS</b>							Analyst: JME
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	7/22/2013 4:54:41 PM	8427
Surr: DNOP	92.2	63-147		%REC	1	7/22/2013 4:54:41 PM	8427
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: DAM
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	7/22/2013 11:01:52 PM	8464
Surr: BFB	91.4	80-120		%REC	1	7/22/2013 11:01:52 PM	8464
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: DAM
Benzene	ND	0.046		mg/Kg	1	7/22/2013 11:01:52 PM	8464
Toluene	ND	0.046		mg/Kg	1	7/22/2013 11:01:52 PM	8464
Ethylbenzene	ND	0.046		mg/Kg	1	7/22/2013 11:01:52 PM	8464
Xylenes, Total	ND	0.093		mg/Kg	1	7/22/2013 11:01:52 PM	8464
Surr: 4-Bromofluorobenzene	94.0	80-120		%REC	1	7/22/2013 11:01:52 PM	8464

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

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

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1307865

25-Jul-13

Client: Souder, Miller and Associates

Project: Lateral 2A-3

Sample ID	<b>MB-8427</b>	SampType:	<b>MBLK</b>	TestCode:	<b>EPA Method 8015D: Diesel Range Organics</b>					
Client ID:	<b>PBS</b>	Batch ID:	<b>8427</b>	RunNo:	<b>12086</b>					
Prep Date:	<b>7/17/2013</b>	Analysis Date:	<b>7/22/2013</b>	SeqNo:	<b>343714</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Surr: DNOP	9.2		10.00		92.3	63	147			

Sample ID	<b>LCS-8427</b>	SampType:	<b>LCS</b>	TestCode:	<b>EPA Method 8015D: Diesel Range Organics</b>					
Client ID:	<b>LCSS</b>	Batch ID:	<b>8427</b>	RunNo:	<b>12086</b>					
Prep Date:	<b>7/17/2013</b>	Analysis Date:	<b>7/22/2013</b>	SeqNo:	<b>343814</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	48	10	50.00	0	97.0	77.1	128			
Surr: DNOP	5.1		5.000		101	63	147			

### Qualifiers:

\* Value exceeds Maximum Contaminant Level.  
E Value above quantitation range  
J Analyte detected below quantitation limits  
O RSD is greater than RSDlimit  
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
P Sample pH greater than 2 for VOA and TOC only.  
RL Reporting Detection Limit

**QC SUMMARY REPORT**  
**Hall Environmental Analysis Laboratory, Inc.**

WO#: 1307865  
 25-Jul-13

**Client:** Souder, Miller and Associates  
**Project:** Lateral 2A-3

Sample ID <b>MB-8464</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>PBS</b>	Batch ID: <b>8464</b>		RunNo: <b>12092</b>							
Prep Date: <b>7/19/2013</b>	Analysis Date: <b>7/22/2013</b>		SeqNo: <b>344247</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	930		1000		92.6	80	120			

Sample ID <b>LCS-8464</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>8464</b>		RunNo: <b>12092</b>							
Prep Date: <b>7/19/2013</b>	Analysis Date: <b>7/22/2013</b>		SeqNo: <b>344248</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	27	5.0	25.00	0	110	62.6	136			
Surr: BFB	1000		1000		101	80	120			

Sample ID <b>MB-8488</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>PBS</b>	Batch ID: <b>8488</b>		RunNo: <b>12124</b>							
Prep Date: <b>7/22/2013</b>	Analysis Date: <b>7/23/2013</b>		SeqNo: <b>345356</b>		Units: <b>%REC</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1200		1000		116	80	120			

**Qualifiers:**

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

# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1307865

25-Jul-13

Client: Souder, Miller and Associates

Project: Lateral 2A-3

Sample ID	<b>MB-8464</b>	SampType:	<b>MBLK</b>	TestCode:	<b>EPA Method 8021B: Volatiles</b>					
Client ID:	<b>PBS</b>	Batch ID:	<b>8464</b>	RunNo:	<b>12092</b>					
Prep Date:	<b>7/19/2013</b>	Analysis Date:	<b>7/22/2013</b>	SeqNo:	<b>344510</b>	Units:	<b>mg/Kg</b>			
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	0.96		1.000		96.3	80	120			

Sample ID	<b>LCS-8464</b>	SampType:	<b>LCS</b>	TestCode:	<b>EPA Method 8021B: Volatiles</b>					
Client ID:	<b>LCSS</b>	Batch ID:	<b>8464</b>	RunNo:	<b>12092</b>					
Prep Date:	<b>7/19/2013</b>	Analysis Date:	<b>7/22/2013</b>	SeqNo:	<b>344511</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.050	1.000	0	101	80	120			
Toluene	1.0	0.050	1.000	0	101	80	120			
Ethylbenzene	1.0	0.050	1.000	0	100	80	120			
Xylenes, Total	3.0	0.10	3.000	0	102	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		100	80	120			

Sample ID	<b>MB-8488</b>	SampType:	<b>MBLK</b>	TestCode:	<b>EPA Method 8021B: Volatiles</b>					
Client ID:	<b>PBS</b>	Batch ID:	<b>8488</b>	RunNo:	<b>12124</b>					
Prep Date:	<b>7/22/2013</b>	Analysis Date:	<b>7/23/2013</b>	SeqNo:	<b>345371</b>	Units:	<b>%REC</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.98		1.000		98.0	80	120			

Sample ID	<b>LCS-8488</b>	SampType:	<b>LCS</b>	TestCode:	<b>EPA Method 8021B: Volatiles</b>					
Client ID:	<b>LCSS</b>	Batch ID:	<b>8488</b>	RunNo:	<b>12124</b>					
Prep Date:	<b>7/22/2013</b>	Analysis Date:	<b>7/23/2013</b>	SeqNo:	<b>345372</b>	Units:	<b>%REC</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.1		1.000		111	80	120			

### Qualifiers:

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

**Sample Log-In Check List**

Client Name: SMA-FARM

Work Order Number: 1307865

RcptNo: 1

Received by/date: LB 07/18/13  
 Logged By: Lindsay Mangin 7/18/2013 10:00:00 AM *Judy Mangin*  
 Completed By: Lindsay Mangin 7/18/2013 1:49:22 PM *Judy Mangin*  
 Reviewed By: mg 07/19/13

**Chain of Custody**

- 1. Custody seals intact on sample bottles? Yes  No  Not Present
- 2. Is Chain of Custody complete? Yes  No  Not Present
- 3. How was the sample delivered? Courier

**Log In**

- 4. Was an attempt made to cool the samples? Yes  No  NA
- 5. Were all samples received at a temperature of >0° C to 6.0°C Yes  No  NA
- 6. Sample(s) in proper container(s)? Yes  No
- 7. Sufficient sample volume for indicated test(s)? Yes  No
- 8. Are samples (except VOA and ONG) properly preserved? Yes  No
- 9. Was preservative added to bottles? Yes  No  NA
- 10. VOA vials have zero headspace? Yes  No  No VOA Vials
- 11. Were any sample containers received broken? Yes  No
- 12. Does paperwork match bottle labels? (Note discrepancies on chain of custody) Yes  No
- 13. Are matrices correctly identified on Chain of Custody? Yes  No
- 14. Is it clear what analyses were requested? Yes  No
- 15. Were all holding times able to be met? (If no, notify customer for authorization.) Yes  No

# of preserved bottles checked for pH: \_\_\_\_\_  
 (<2 or >12 unless noted)  
 Adjusted? \_\_\_\_\_  
 Checked by: \_\_\_\_\_

**Special Handling (if applicable)**

- 16. Was client notified of all discrepancies with this order? Yes  No  NA

Person Notified: \_\_\_\_\_ Date: \_\_\_\_\_  
 By Whom: \_\_\_\_\_ Via:  eMail  Phone  Fax  In Person  
 Regarding: \_\_\_\_\_  
 Client Instructions: \_\_\_\_\_

17. Additional remarks:

**18. Cooler Information**

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

# Chain-of-Custody Record

Client: SMA

Mailing Address: 2101 San Juan Blvd.  
Farmington, NM 87401

Phone #: 505.325-7535

email or Fax#: tom.longe@scudermiller.com

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

Accreditation  
 NELAP     Other \_\_\_\_\_

EDD (Type) \_\_\_\_\_

Turn-Around Time:  
 Standard     Rush

Project Name: Lateral 2A-3

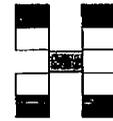
Project #: 5122104

Project Manager: Thomas Long

Sampler: Thomas Long

On Ice:  Yes     No

Sample Temperature: 10



## HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975    Fax 505-345-4107

### Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No	Analysis Request											Air Bubbles (Y or N)						
							BTEX + MTBE + TMB's (#021)	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO <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)							
7-16-13	1315	Soil	SC-1 <del>0.5</del> 0.5'	4oz Jar	Cool	-001	X	X																
	1405		SC-2 N. Wall 0-4'			-002	X	X																
	1406		SC-3 W. Wall 0-4'			-003	X	X																
	1407		SC-4 E. Wall 0-4'			-004	X	X																
	1500		SC-5 S. Wall 0-4'			-005	X	X																
	1503		SC-6 Base e 4'			-006	X	X																

Date: 7-17-13 Time: 1546 Relinquished by: Thomas Long Received by: Christine Waelen Date: 7/17/13 Time: 1546 Remarks: Bill To Enterprise

Date: 7/17/13 Time: 1747 Relinquished by: Christine Waelen Received by: [Signature] Date: 07/18/13 Time: 1000

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.



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

August 15, 2013

Thomas Long  
Souder, Miller and Associates  
2101 San Juan Boulevard  
Farmington, NM 87401  
TEL: (505) 325-7535  
FAX

RE: Lateral 2A-3

OrderNo.: 1308352

Dear Thomas Long:

Hall Environmental Analysis Laboratory received 5 sample(s) on 8/8/2013 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to [www.hallenvironmental.com](http://www.hallenvironmental.com) or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

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

**Hall Environmental Analysis Laboratory, Inc.**

**CLIENT:** Souder, Miller and Associates

**Client Sample ID:** SC-1

**Project:** Lateral 2A-3

**Collection Date:** 8/7/2013 2:10:00 PM

**Lab ID:** 1308352-001

**Matrix:** SOIL

**Received Date:** 8/8/2013 9:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015D: DIESEL RANGE ORGANICS</b>							Analyst: <b>JME</b>
Diesel Range Organics (DRO)	17	9.9		mg/Kg	1	8/12/2013 9:41:27 PM	8796
Surr: DNOP	102	63-147		%REC	1	8/12/2013 9:41:27 PM	8796
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	8/12/2013 2:14:04 PM	8800
Surr: BFB	87.9	80-120		%REC	1	8/12/2013 2:14:04 PM	8800
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.046		mg/Kg	1	8/12/2013 2:14:04 PM	8800
Toluene	ND	0.046		mg/Kg	1	8/12/2013 2:14:04 PM	8800
Ethylbenzene	ND	0.046		mg/Kg	1	8/12/2013 2:14:04 PM	8800
Xylenes, Total	ND	0.093		mg/Kg	1	8/12/2013 2:14:04 PM	8800
Surr: 4-Bromofluorobenzene	103	80-120		%REC	1	8/12/2013 2:14:04 PM	8800

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

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

**Hall Environmental Analysis Laboratory, Inc.**

CLIENT: Souder, Miller and Associates

Client Sample ID: SC-2

Project: Lateral 2A-3

Collection Date: 8/7/2013 2:11:00 PM

Lab ID: 1308352-002

Matrix: SOIL

Received Date: 8/8/2013 9:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015D: DIESEL RANGE ORGANICS</b>							Analyst: <b>JME</b>
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	8/12/2013 10:46:52 PM	8796
Surr: DNOP	105	63-147		%REC	1	8/12/2013 10:46:52 PM	8796
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	8/12/2013 3:39:58 PM	8800
Surr: BFB	88.6	80-120		%REC	1	8/12/2013 3:39:58 PM	8800
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.047		mg/Kg	1	8/12/2013 3:39:58 PM	8800
Toluene	ND	0.047		mg/Kg	1	8/12/2013 3:39:58 PM	8800
Ethylbenzene	ND	0.047		mg/Kg	1	8/12/2013 3:39:58 PM	8800
Xylenes, Total	ND	0.095		mg/Kg	1	8/12/2013 3:39:58 PM	8800
Surr: 4-Bromofluorobenzene	105	80-120		%REC	1	8/12/2013 3:39:58 PM	8800

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

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

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates

Client Sample ID: SC-3

Project: Lateral 2A-3

Collection Date: 8/7/2013 2:12:00 PM

Lab ID: 1308352-003

Matrix: SOIL

Received Date: 8/8/2013 9:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015D: DIESEL RANGE ORGANICS</b>							Analyst: <b>JME</b>
Diesel Range Organics (DRO)	15	10		mg/Kg	1	8/12/2013 11:08:35 PM	8796
Surr: DNOP	99.6	63-147		%REC	1	8/12/2013 11:08:35 PM	8796
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	8/12/2013 5:05:46 PM	8800
Surr: BFB	89.5	80-120		%REC	1	8/12/2013 5:05:46 PM	8800
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.048		mg/Kg	1	8/12/2013 5:05:46 PM	8800
Toluene	ND	0.048		mg/Kg	1	8/12/2013 5:05:46 PM	8800
Ethylbenzene	ND	0.048		mg/Kg	1	8/12/2013 5:05:46 PM	8800
Xylenes, Total	ND	0.095		mg/Kg	1	8/12/2013 5:05:46 PM	8800
Surr: 4-Bromofluorobenzene	104	80-120		%REC	1	8/12/2013 5:05:46 PM	8800

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

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

Analytical Report

Lab Order 1308352

Date Reported: 8/15/2013

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates

Client Sample ID: SC-4

Project: Lateral 2A-3

Collection Date: 8/7/2013 2:13:00 PM

Lab ID: 1308352-004

Matrix: SOIL

Received Date: 8/8/2013 9:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015D: DIESEL RANGE ORGANICS</b>							Analyst: <b>JME</b>
Diesel Range Organics (DRO)	13	10		mg/Kg	1	8/12/2013 11:30:18 PM	8796
Surr: DNOP	98.3	63-147		%REC	1	8/12/2013 11:30:18 PM	8796
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/12/2013 5:34:27 PM	8800
Surr: BFB	89.1	80-120		%REC	1	8/12/2013 5:34:27 PM	8800
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.049		mg/Kg	1	8/12/2013 5:34:27 PM	8800
Toluene	ND	0.049		mg/Kg	1	8/12/2013 5:34:27 PM	8800
Ethylbenzene	ND	0.049		mg/Kg	1	8/12/2013 5:34:27 PM	8800
Xylenes, Total	ND	0.097		mg/Kg	1	8/12/2013 5:34:27 PM	8800
Surr: 4-Bromofluorobenzene	105	80-120		%REC	1	8/12/2013 5:34:27 PM	8800

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

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

Analytical Report

Lab Order 1308352

Date Reported: 8/15/2013

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates

Client Sample ID: SC-5

Project: Lateral 2A-3

Collection Date: 8/7/2013 2:14:00 PM

Lab ID: 1308352-005

Matrix: SOIL

Received Date: 8/8/2013 9:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015D: DIESEL RANGE ORGANICS</b>							
Analyst: <b>JME</b>							
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	8/12/2013 11:52:01 PM	8796
Surr: DNOP	98.3	63-147		%REC	1	8/12/2013 11:52:01 PM	8796
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							
Analyst: <b>NSB</b>							
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	8/12/2013 6:03:12 PM	8800
Surr: BFB	88.7	80-120		%REC	1	8/12/2013 6:03:12 PM	8800
<b>EPA METHOD 8021B: VOLATILES</b>							
Analyst: <b>NSB</b>							
Benzene	ND	0.048		mg/Kg	1	8/12/2013 6:03:12 PM	8800
Toluene	ND	0.048		mg/Kg	1	8/12/2013 6:03:12 PM	8800
Ethylbenzene	ND	0.048		mg/Kg	1	8/12/2013 6:03:12 PM	8800
Xylenes, Total	ND	0.096		mg/Kg	1	8/12/2013 6:03:12 PM	8800
Surr: 4-Bromofluorobenzene	104	80-120		%REC	1	8/12/2013 6:03:12 PM	8800

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

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

# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1308352

15-Aug-13

**Client:** Souder, Miller and Associates

**Project:** Lateral 2A-3

Sample ID <b>MB-8796</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015D: Diesel Range Organics</b>								
Client ID: <b>PBS</b>	Batch ID: <b>8796</b>	RunNo: <b>12540</b>								
Prep Date: <b>8/9/2013</b>	Analysis Date: <b>8/12/2013</b>	SeqNo: <b>357283</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Surr: DNOP	9.7		10.00		97.2	63	147			

Sample ID <b>LCS-8796</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015D: Diesel Range Organics</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>8796</b>	RunNo: <b>12540</b>								
Prep Date: <b>8/9/2013</b>	Analysis Date: <b>8/12/2013</b>	SeqNo: <b>357284</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	40	10	50.00	0	79.9	77.1	128			
Surr: DNOP	3.8		5.000		76.5	63	147			

Sample ID <b>MB-8810</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015D: Diesel Range Organics</b>								
Client ID: <b>PBS</b>	Batch ID: <b>8810</b>	RunNo: <b>12540</b>								
Prep Date: <b>8/12/2013</b>	Analysis Date: <b>8/12/2013</b>	SeqNo: <b>357705</b>	Units: <b>%REC</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.9		10.00		99.3	63	147			

Sample ID <b>LCS-8810</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015D: Diesel Range Organics</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>8810</b>	RunNo: <b>12540</b>								
Prep Date: <b>8/12/2013</b>	Analysis Date: <b>8/12/2013</b>	SeqNo: <b>357950</b>	Units: <b>%REC</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.1		5.000		81.3	63	147			

Sample ID <b>1308352-001AMS</b>	SampType: <b>MS</b>	TestCode: <b>EPA Method 8015D: Diesel Range Organics</b>								
Client ID: <b>SC-1</b>	Batch ID: <b>8796</b>	RunNo: <b>12540</b>								
Prep Date: <b>8/9/2013</b>	Analysis Date: <b>8/12/2013</b>	SeqNo: <b>357951</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	43	10	50.30	17.04	51.5	61.3	138			S
Surr: DNOP	4.4		5.030		87.0	63	147			

Sample ID <b>1308352-001AMSD</b>	SampType: <b>MSD</b>	TestCode: <b>EPA Method 8015D: Diesel Range Organics</b>								
Client ID: <b>SC-1</b>	Batch ID: <b>8796</b>	RunNo: <b>12540</b>								
Prep Date: <b>8/9/2013</b>	Analysis Date: <b>8/12/2013</b>	SeqNo: <b>357952</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	49	9.9	49.70	17.04	64.0	61.3	138	12.9	20	
Surr: DNOP	4.2		4.970		83.8	63	147	0	0	

**Qualifiers:**

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

# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1308352

15-Aug-13

**Client:** Souder, Miller and Associates

**Project:** Lateral 2A-3

Sample ID	1308420-001AMS	SampType:	MS	TestCode:	EPA Method 8015D: Diesel Range Organics					
Client ID:	BatchQC	Batch ID:	8810	RunNo:	12540					
Prep Date:	8/12/2013	Analysis Date:	8/12/2013	SeqNo:	357965	Units:	%REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.0		4.995		81.0	63	147			

Sample ID	1308420-001AMSD	SampType:	MSD	TestCode:	EPA Method 8015D: Diesel Range Organics					
Client ID:	BatchQC	Batch ID:	8810	RunNo:	12540					
Prep Date:	8/12/2013	Analysis Date:	8/12/2013	SeqNo:	357966	Units:	%REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.4		4.931		88.9	63	147	0	\ 0	

**Qualifiers:**

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

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1308352

15-Aug-13

**Client:** Souder, Miller and Associates

**Project:** Lateral 2A-3

Sample ID <b>MB-8800</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>PBS</b>	Batch ID: <b>R12570</b>	RunNo: <b>12570</b>								
Prep Date: <b>8/9/2013</b>	Analysis Date: <b>8/12/2013</b>	SeqNo: <b>358060</b>	Units: <b>%REC</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	870		1000		86.9	80	120			

Sample ID <b>LCS-8800</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>R12570</b>	RunNo: <b>12570</b>								
Prep Date: <b>8/9/2013</b>	Analysis Date: <b>8/12/2013</b>	SeqNo: <b>358068</b>	Units: <b>%REC</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	940		1000		93.7	80	120			

Sample ID <b>MB-8800</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>PBS</b>	Batch ID: <b>8800</b>	RunNo: <b>12570</b>								
Prep Date: <b>8/9/2013</b>	Analysis Date: <b>8/12/2013</b>	SeqNo: <b>358118</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	870		1000		86.9	80	120			

Sample ID <b>LCS-8800</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>8800</b>	RunNo: <b>12570</b>								
Prep Date: <b>8/9/2013</b>	Analysis Date: <b>8/12/2013</b>	SeqNo: <b>358119</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	25.00	0	100	62.6	136			
Surr: BFB	940		1000		93.7	80	120			

Sample ID <b>1308352-002AMS</b>	SampType: <b>MS</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>SC-2</b>	Batch ID: <b>8800</b>	RunNo: <b>12570</b>								
Prep Date: <b>8/9/2013</b>	Analysis Date: <b>8/12/2013</b>	SeqNo: <b>358122</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	4.8	24.18	0	92.0	76	156			
Surr: BFB	930		967.1		96.2	80	120			

Sample ID <b>1308352-002AMSD</b>	SampType: <b>MSD</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>SC-2</b>	Batch ID: <b>8800</b>	RunNo: <b>12570</b>								
Prep Date: <b>8/9/2013</b>	Analysis Date: <b>8/12/2013</b>	SeqNo: <b>358123</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	4.8	24.20	0	95.4	76	156	3.73	17.7	
Surr: BFB	930		968.1		96.2	80	120	0	0	

**Qualifiers:**

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

# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1308352

15-Aug-13

Client: Souder, Miller and Associates

Project: Lateral 2A-3

Sample ID	MB-8800	SampType:	MBLK	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	PBS	Batch ID:	R12570	RunNo:	12570					
Prep Date:	8/9/2013	Analysis Date:	8/12/2013	SeqNo:	358141	Units:	%REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.0		1.000		103	80	120			

Sample ID	LCS-8800	SampType:	LCS	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	LCSS	Batch ID:	R12570	RunNo:	12570					
Prep Date:	8/9/2013	Analysis Date:	8/12/2013	SeqNo:	358142	Units:	%REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.0		1.000		105	80	120			

Sample ID	MB-8800	SampType:	MBLK	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	PBS	Batch ID:	8800	RunNo:	12570					
Prep Date:	8/9/2013	Analysis Date:	8/12/2013	SeqNo:	358149	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-8800	SampType:	LCS	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	LCSS	Batch ID:	8800	RunNo:	12570					
Prep Date:	8/9/2013	Analysis Date:	8/12/2013	SeqNo:	358150	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.050	1.000	0	102	80	120			
Toluene	1.0	0.050	1.000	0	101	80	120			
Ethylbenzene	1.0	0.050	1.000	0	103	80	120			
Xylenes, Total	3.1	0.10	3.000	0	104	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		105	80	120			

Sample ID	1308352-001AMS	SampType:	MS	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	SC-1	Batch ID:	8800	RunNo:	12570					
Prep Date:	8/9/2013	Analysis Date:	8/12/2013	SeqNo:	358152	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.93	0.047	0.9443	0	98.6	67.3	145			
Toluene	0.91	0.047	0.9443	0	96.1	66.8	144			
Ethylbenzene	0.94	0.047	0.9443	0	99.1	61.9	153			
Xylenes, Total	2.8	0.094	2.833	0	100	65.8	149			

**Qualifiers:**

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

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1308352

15-Aug-13

**Client:** Souder, Miller and Associates

**Project:** Lateral 2A-3

Sample ID	<b>1308352-001AMS</b>	SampType:	<b>MS</b>	TestCode:	<b>EPA Method 8021B: Volatiles</b>					
Client ID:	<b>SC-1</b>	Batch ID:	<b>8800</b>	RunNo:	<b>12570</b>					
Prep Date:	<b>8/9/2013</b>	Analysis Date:	<b>8/12/2013</b>	SeqNo:	<b>358152</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.0		0.9443		107	80	120			

Sample ID	<b>1308352-001AMSD</b>	SampType:	<b>MSD</b>	TestCode:	<b>EPA Method 8021B: Volatiles</b>					
Client ID:	<b>SC-1</b>	Batch ID:	<b>8800</b>	RunNo:	<b>12570</b>					
Prep Date:	<b>8/9/2013</b>	Analysis Date:	<b>8/12/2013</b>	SeqNo:	<b>358154</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.89	0.047	0.9443	0	93.8	67.3	145	4.98	20	
Toluene	0.86	0.047	0.9443	0	91.5	66.8	144	4.93	20	
Ethylbenzene	0.88	0.047	0.9443	0	93.5	61.9	153	5.83	20	
Xylenes, Total	2.7	0.094	2.833	0	94.5	65.8	149	6.13	20	
Surr: 4-Bromofluorobenzene	1.0		0.9443		106	80	120	0	0	

**Qualifiers:**

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

**Sample Log-In Check List**

Client Name: SMA-FARM

Work Order Number: 1308352

RcptNo: 1

Received by/date:

*AG*

08/08/13

Logged By:

Ashley Gallegos

8/8/2013 9:55:00 AM

*AG*

Completed By:

Ashley Gallegos

8/8/2013 12:42:55 PM

*AG*

Reviewed By:

TO

08/08/13

**Chain of Custody**

- 1. Custody seals intact on sample bottles? Yes  No  Not Present
- 2. Is Chain of Custody complete? Yes  No  Not Present
- 3. How was the sample delivered? Courier

**Log In**

- 4. Was an attempt made to cool the samples? Yes  No  NA
- 5. Were all samples received at a temperature of >0° C to 6.0° C Yes  No  NA
- 6. Sample(s) in proper container(s)? Yes  No
- 7. Sufficient sample volume for indicated test(s)? Yes  No
- 8. Are samples (except VOA and ONG) properly preserved? Yes  No
- 9. Was preservative added to bottles? Yes  No  NA
- 10. VOA vials have zero headspace? Yes  No  No VOA Vials
- 11. Were any sample containers received broken? Yes  No
- 12. Does paperwork match bottle labels? Yes  No  # of preserved bottles checked for pH: ( <2 or >12 unless noted)
- 13. Are matrices correctly identified on Chain of Custody? Yes  No  Adjusted?
- 14. Is it clear what analyses were requested? Yes  No
- 15. Were all holding times able to be met? Yes  No  Checked by:
- (If no, notify customer for authorization.)

**Special Handling (if applicable)**

- 16. Was client notified of all discrepancies with this order? Yes  No  NA

Person Notified: \_\_\_\_\_ Date: \_\_\_\_\_  
 By Whom: \_\_\_\_\_ Via:  eMail  Phone  Fax  In Person  
 Regarding: \_\_\_\_\_  
 Client Instructions: \_\_\_\_\_

17. Additional remarks:

**18. Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.4	Good	Yes			

# Chain-of-Custody Record

Client: SMA

Mailing Address: 2101 San Juan Blvd.

Farmington NM 87401

Phone #: 505.325.7535

email or Fax#: long.long@southernmiller.com

QA/QC Package:

Standard  Level 4 (Full Validation)

Accreditation

NELAP  Other \_\_\_\_\_

EDD (Type) \_\_\_\_\_

Turn-Around Time:

Standard  Rush

Project Name:

Lateral 2A-3

Project #:

S122104

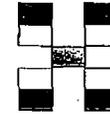
Project Manager:

Thomas Long

Sampler: Thomas Long

On Ice:  Yes  No

Sample Temperature: 1/24



## HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

### Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO <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)	
7-6-13	1410	Soil	SC-1			1308352	X	X											
	1411		SC-2			-001	X	Y											
	1412		SC-3			-002	X	Y											
	1413		SC-4			-003	X	Y											
	1414		SC-5			-004	X	X											
						-005	X	X											

Date: 7-13 Time: 1705 Relinquished by: Thomas Long

Received by: Christine Waelder Date: 8/13 Time: 1705

Remarks: Bill to Enterprise

Date: 7/10 Time: 1737 Relinquished by: Christine Waelder

Received by: [Signature] Date: 08/08/13 Time: 0955

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
811 S. First St., Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources

Form C-141  
Revised August 8, 2011

Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

**Release Notification and Corrective Action**

**OPERATOR**

Initial Report  Final Report

Name of Company Enterprise Field Services	Contact: Runell Seale / Jim Lieb
Address 614 Reilly Ave., Farmington, NM 87401	Telephone No. 505-599-2124 / 505-599-2159
Facility Name Lateral 10D-2 Gathering Line	Facility Type: Natural gas gathering line

Surface Owner: <i>Navajo</i> <i>JK 10/23/2013</i>	Mineral Owner	API No.
--	---------------	---------

**LOCATION OF RELEASE**

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
J	17	26N	11W					San Juan

Latitude\_N 36.48801 \_ Longitude\_W 108.02705 (Decimal Degrees) \_\_

**NATURE OF RELEASE**

Type of Release: Natural Gas Pipeline Release (Gas, liquid)	Volume of Release Unknown	Volume Recovered: 280 cubic yards of contaminated soil was removed from the location.
Source of Release: Corrosion hole	Date and Hour of Occurrence: Unknown	Date and Hour of Discovery 7/24/2013 @ 07:00 hours
Was Immediate Notice Given? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom?	
By Whom?	Date and Hour	<b>RCUD SEP 27 '13</b>
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse. <b>OIL CONS. DIV. DIST. 3</b>	

If a Watercourse was Impacted, Describe Fully.\*

Describe Cause of Problem and Remedial Action Taken.\* A possible line leak was identified during a routine line patrol. Leak was verified upon excavation. Pipeline was isolated, LOTO applied, and repairs were made. An additional leak was discovered in the excavation by a third party environmental contractor providing environmental assessment support to Enterprise Field Services. Additional successful repairs were made on July 28, 2013.

Describe Area Affected and Cleanup Action Taken.\* Third party environmental contractor was dispatched to the location to perform cleanup. Approximately 280 cubic yards of contaminated soil were excavated and hauled to an OCD permitted landfarm facility to achieve closure standards. Associated third party corrective action report is attached to this "final" c-141 report.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

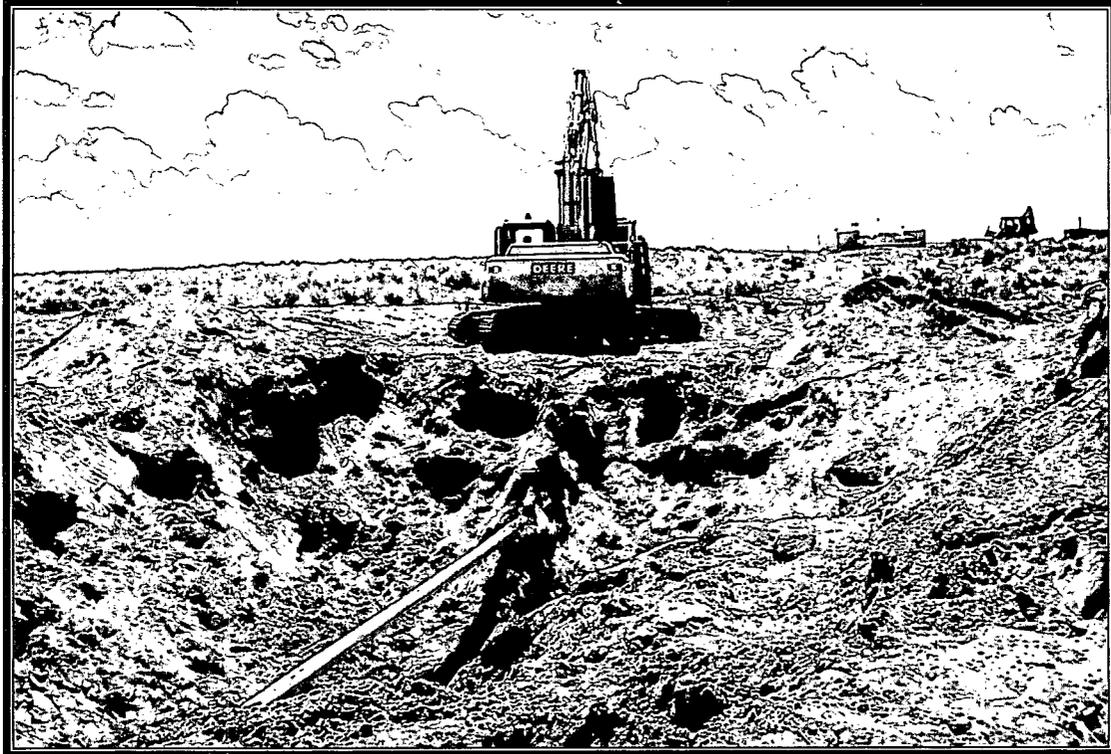
Signature: <i>Jon Fields</i>	<b>OIL CONSERVATION DIVISION</b>	
Printed Name: Jon Fields	Approved by Environmental Specialist: <i>Jonathan D. Kelly</i>	
Title: Director, Field Environmental	Approval Date: <i>10/23/2013</i>	Expiration Date:
E-mail Address: jefields@eprod.com	Conditions of Approval:	Attached <input type="checkbox"/>
Date: <i>9-18-2013</i> Phone: 832-501-4078		

\* Attach Additional Sheets If Necessary

*NSK1329653408*

**Enterprise Products**  
Lateral 10D-2 (Federal 26-11 17 #2) Pipeline Release  
Latitude North 36.48800, Longitude West -108.02704  
NW1/4, SE 1/4 Section 17 T26N R11W  
San Juan County, New Mexico

RCVD SEP 27 '13  
OIL CONS. DIV.  
DIST. 3



**Submitted To:**

Enterprise Products  
Field Environmental-San Juan Basin  
614 Reilly Avenue  
Farmington, NM 87401

**Submitted By:**

Souder, Miller & Associates  
2101 San Juan Boulevard  
Farmington, NM 87401  
(505)325-7535



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4.0	Summary of Field Activities .....	4
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Figure 1: Vicinity Map

Figure 2: Site and Soil Contaminant Concentration Map

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Table 2: Site Ranking

Table 3: Summary of Field Screening Results

Table 4: Summary of Laboratory Analysis

### Appendices:

Appendix A: Field Notes

Appendix B: Site Photography

Appendix C: Soil Disposal Documentation

Appendix D: Laboratory Analytical Reports

## 1.0 Executive Summary

On July 26, 2013, July 30, 2013 and August 14, 2013, Souder, Miller & Associates (SMA) responded to a hydrocarbon release associated with the Lateral 10D-2 (Federal 26-11 17 #2) pipeline. The table below summarizes information about the release and remediation activities.

TABLE 1: RELEASE INFORMATION				
Name	Lateral 10D-2 (Federal 26-11 17 #2) Pipeline Release			
Location	Latitude/Longitude		Section, Township, Range	
	36.48800	-108.020704	Unit J NW ¼ SE ¼ Section 17	T 26N, R 11W
Date Reported	July 25, 2013			
	Aaron Dailey			
Land Owner	Navajo Nation, Navajo Agricultural Products Industry (NAPI)			
Reported To	New Mexico Oil Conservation Division (NMOCD), Navajo Nation Environmental Protection (NNEPA) Agency, NAPI and BLM			
Diameter of Pipeline	8 inches			
Source of Release	Internal Corrosion			
Release Contents	Natural Gas Liquids/Condensate			
Release Volume	Unknown			
Nearest Waterway	Tributary to Gallegos Wash			
Depth to Groundwater	Assumed to be less than 50 feet			
Nearest Domestic Water Source	Greater than 200 feet			
NMOCD Ranking	40			
SMA Response Dates	July 26, 2013, July 30, 2013 and August 14, 2013			
Subcontractors	West States Energy Contractors (WSEC)			
Disposal Facility	Envirotech Landfarm			
Yd <sup>3</sup> Contaminated Soil Excavated and Disposed	280			

## 2.0 Introduction

On behalf of Enterprise Products Operating, LLC. (Enterprise), SMA has prepared this report that describes remediation of a hydrocarbon release associated with the Lateral 10D-2 (Federal 26-11 17 #2) pipeline. The Lateral 10D-2 (Federal 26-11 17 #2) pipeline release was a result of internal corrosion of the steel pipeline. The release was reported on July 25, 2013. The pipeline is located in Unit J (NW ¼, SE ¼) Section 17, Township 26 North, Range 11 West, 36.48800, -108.02704, San Juan County, New Mexico. Figure 1, Vicinity Map, illustrates the location of the release.

### 3.0 Site Ranking and Land Jurisdiction

The release site is located in a tributary of Gallegos Wash on land owned by the Navajo Agricultural Products Industry (NAPI) with an elevation of approximately 6,167 feet above sea level. After evaluation of the site using aerial photography and topographic maps, depth to groundwater is estimated to be less than 50 feet below ground surface (bgs).

SMA searched the New Mexico State Engineer's Office online water well data base for water wells in the vicinity of the release. No wells were located in Section 17 and the release is located in the approximate center of the section. The physical location of this release is within the jurisdiction of NAPI and NNEPA. In the absence of NNEPA regulations related to oil and gas releases, this release defaults to the most stringent NMOCD soil remediation standard. This release location has been assigned a NMOCD ranking of 40 which requires a soil remediation standard of 10 parts per million (ppm) benzene, 50 ppm total benzene, toluene, ethyl-benzene, and total xylenes (BTEX), and 100 ppm total petroleum hydrocarbons (TPH). Table 2 illustrates site ranking rationale.

### 4.0 Summary of Field Activities

On July 26, 2013 and July 30, 2013, SMA mobilized to the release site to delineate the release area and conduct field screening on the excavation side walls, base and stock piled soil. During the first event, the pipeline was still leaking and the side walls and base exceeded regulatory soil remediation standards. During the second event, the side walls and base of the excavation continued to exceed regulatory soil remediation standards. Field screening results indicated that the northern stockpiles of soil were below regulatory standards and would be used as backfill. Field notes for both events are included in Appendix A.

On August 14, 2013, under the supervision of SMA, WSEC excavated the hydrocarbon impacted soil for the Lateral 10D-2 (Federal 26-11 17 #2) pipeline release. SMA personnel guided the excavation activities by collecting soil samples for field screening with a calibrated photo-ionization detector (PID). Table 3 summarizes the field screening results. After field screening results indicated that the hydrocarbon impacted soil had been removed, SMA collected nine composite soil samples for laboratory analysis. All laboratory soil samples were field screened with a calibrated PID and submitted for laboratory analysis per United States Environmental Protection Agency Method 8021 BTEX, and 8015 Diesel Range Organics (DRO) and Gasoline Range Organics (GRO) to Hall Environmental Analysis Laboratory of Albuquerque, New Mexico. Figure 2 illustrates the extent of the excavation and composite soil sample locations and laboratory results.

The final excavation dimensions were approximately 57 feet long by 27 feet wide by 12 feet deep, covering an area of approximately 2,029 square feet. Site photography is included in Appendix B. Approximately 280 cubic yards of hydrocarbon contaminated soil were excavated and transported by WSEC to Envirotech Land Farm near Bloomfield, New Mexico for proper disposal. Soil disposal documentation is included in Appendix C. As per the request of NAPI, clean soil from the site was used as backfill for the excavation.

---

## 5.0 Conclusions and Recommendations

As noted in Section 3.0 of this report, in the absence of NNEPA regulations related to oil and gas releases, this release defaults to the most stringent NMOCD soil remediation standards. NMOCD Guidelines for Remediation of Leaks, Spills, and Releases have established the following action levels for contaminants of concern with a site ranking of 40: 10 ppm benzene, 50 ppm total BTEX, and 100 ppm TPH. Based on laboratory analysis, all of the soil samples collected were below laboratory detection limits. Soil contaminant concentrations are illustrated in Figure 2. A summary of laboratory analysis is included in Table 4. Laboratory reports are included in Appendix D.

SMA recommends no further action at this site.

## 6.0 Closure and Limitations

The scope of our services consisted of the performance of a preliminary spill assessment and stabilization, regulatory liaison, oversight and control of remediation operations, disposal arrangements and documentation, project management, and preparation of this summary report. All work has been performed in accordance with generally accepted professional environmental consulting practices.

If there are any questions regarding this report, please contact either Thomas Long or Reid Allan at 505-325-7535.

Submitted by:

Reviewed by:

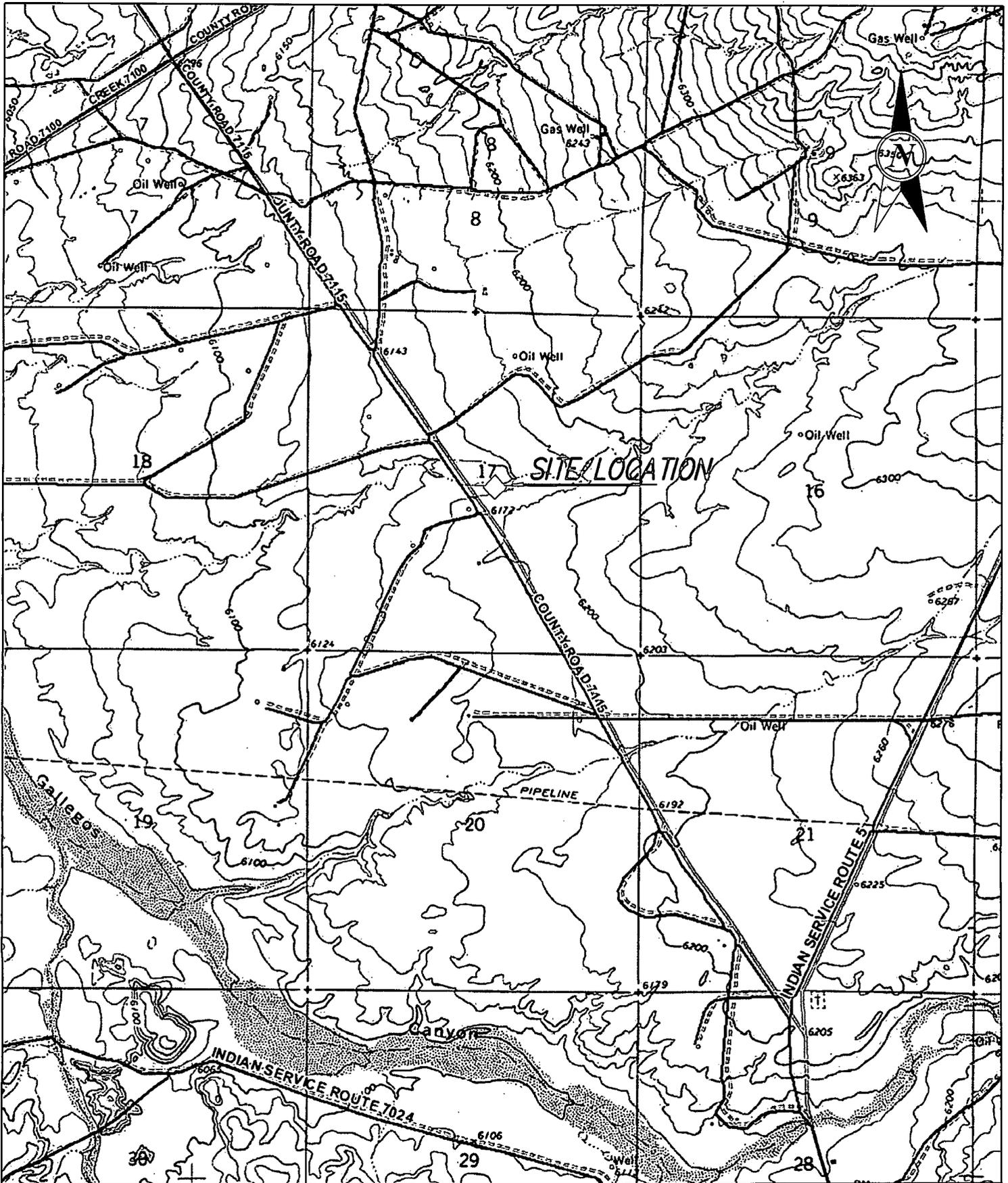
SOUDER, MILLER & ASSOCIATES



Thomas J. Long  
Project Scientist



Reid S. Allan, PG  
Principal Scientist



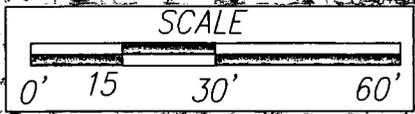
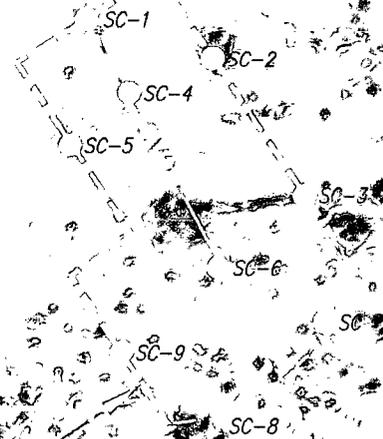
 <p>Engineering Environmental Surveying</p>	<p>2101 SAN JUAN BLVD FARMINGTON, NM 87401</p> <p>FAX (505) 327-1498 PH. (505) 325-5687</p>	APPROVED: RSA	DATE: 8/8/2013	<p>VICINITY MAP LATERAL 10D-2 (FEDERAL 26-11 17 #2) PIPELINE RELEASE SW 1/4 NE 1/4 SECTION 17 T26N R11W SAN JUAN COUNTY, NEW MEXICO</p>
		DRAWN BY: TLONG	DATE: 8/8/2013	
		REVISIONS BY:	DATE:	
		PROJECT # 5122104	FIGURE: 1	

**LABORATORY ANALYTICAL SUMMARY**

Date	Time	Sample ID	Sample Depth (Feet BGS)	Method 8015 GRO	Method 8015 DRO	Method 8021 Benzene	Method 8021 BTEX
8/14/2013	12:03	SC-1 N. Wall	2 thru 9	<4.8	<10	<0.048	<0.096
8/14/2013	12:05	SC-2 E. Wall - North Side	2 thru 9	<4.6	<9.9	<0.046	<0.092
8/14/2013	12:07	SC-3 E. Wall - South Site	2 thru 9	<4.7	<10	<0.047	<0.095
8/14/2013	13:24	SC-4 N. Base	11.0	<4.9	<10	<0.049	<0.097
8/14/2013	13:26	SC-5 W. Wall - North Side	2 thru 9	<4.8	<10	<0.048	<0.096
8/14/2013	13:50	SC-6 S. Base	12.0	<4.7	<10	<0.047	<0.094
8/14/2013	13:52	SC-7 S. Wall - East Side	2 thru 9	<4.8	<10	<0.048	<0.096
8/14/2013	13:54	SC-8 S.W. Wall	2 thru 9	<4.9	<10	<0.049	<0.097
8/14/2013	13:56	SC-9 S.W. Wall (Leg)	2 thru 9	<4.9	<9.9	<0.047	<0.094



FINAL EXCAVATION DIMENSIONS =  
 57 FEET LONG BY 27 FEET  
 FEET WIDE BY 12 FEET  
 APPROXIMATELY 2,029  
 SQUARE FEET



**LEGEND:**  
 ○ SC-3 - COMPOSITE SOIL SAMPLE LOCATION (RESULTS IN mg/Kg)  
 [ ] - EXTENT OF EXCAVATION



2101 SAN JUAN BLVD  
 FARMINGTON, NM 87401  
 FAX (505) 327-1496  
 PH. (505) 325-5867

APPROVED: RSA	DATE: 8/23/2013
DRAWN BY: TLONG	DATE: 8/23/2013
REVISIONS BY:	DATE:
PROJECT # 5122104	FIGURE: 2

SITE MAP SOIL CONCENTRATION MAP  
 LATERAL 10D-2 (FEDERAL 26-11 17 #2)  
 PIPELINE RELEASE  
 SW 1/4 NE 1/4 SECTION 17 T26N R11W  
 SAN JUAN COUNTY, NEW MEXICO

Depth to Groundwater	NMOCD Numeric Rank for this Site	Source for Ranking	Notes
< 50 BGS = 20	20	USGS Topo Maps; Google Earth Elevation Difference from the site and the unnamed wash to the north	Release is located within a tributary of Gallegos Wash
50' to 99' = 10			
>100' = 0			
Ranking Criteria for Horizontal Distance to Nearest Surface Water	NMOCD Numeric Rank for this Site	Source for Ranking	Notes
< 200' = 20	20	USGS Topo Maps; Google Earth ; PRCC Mapping Tool	Release is located within a tributary of Gallegos Wash
200'-1000' = 10			
>1000'			
Ranking Criteria for Horizontal Distance to a Water Well or Water Source	NMOCD Numeric Rank for this Site	Source for Ranking	Notes
<1000' from a water source? <200' for a private domestic water source? YES OR NO to BOTH. YES = 20, NO = 0	0	NM State Engineer Water Well Database	Release is located in the center of section 17 and no wells are in section 17
<b>Total Site Ranking</b>	<b>40</b>		
<b>Soil Remediation Standards</b>	0 to 9	10 to 19	>19
<b>Benzene</b>	10 PPM	10 PPM	10 PPM
<b>BTEX</b>	50 PPM	50 PPM	50 PPM
<b>TPH</b>	5000 PPM	1000 PPM	100 PPM



Enterprise Products  
 Table 3: Summary of Field Screening Results  
 (PPM)

Lateral 10D-2 (Federal 26-11 17 #2)  
 Pipeline Release  
 8/29/2013

<b>FIELD SCREENING RESULTS SUMMARY</b>					
Date	Time	Field Screening Reference	Sample Depth (Feet BGS)	PID Results	Lab Sample Collected Y/N
8/14/2013	10:11	S-1 Base	11	475.0	N
8/14/2013	10:12	S-2 W. Wall - Center	2 thru 9	28.0	N
8/14/2013	10:13	S-3 SE Corner Wall	2 thru 9	403.0	N
8/14/2013	10:50	S-4 SW Corner Wall	2 thru 9	445.0	N
8/14/2013	10:51	S-5 S. Wall - West Side	2 thru 9	114.0	N
8/14/2013	10:52	S-6 S.W. Base	9	316.0	N
8/14/2013	15:08	S-7 Base	11	21.0	N
8/14/2013	11:09	S-8 E. Wall - Center	2 thru 9	298.0	N
8/14/2013	11:35	S-9 S. Base - East Side	12	16.7	N
8/14/2013	11:36	S-10 S.E. Corner Wall	3 thru 9	49.0	N
8/14/2013	11:37	S-11 S. Wall - East Side	2 thru 9	36.0	N
8/14/2013	11:48	S-12 S.W. Base	12.0	12.3	N
8/14/2013	11:49	S-13 S. Wall - West Side	2 thru 9	3.7	N
8/14/2013	12:02	S-14 West Base	12.0	198.0	N
8/14/2013	12:03	SC-1 N. Wall	2 thru 9	0.4	Y
8/14/2013	12:05	SC-2 E. Wall - North Side	2 thru 9	9.6	Y
8/14/2013	12:07	SC-3 E. Wall - South Site	2 thru 9	58.0	Y
8/14/2013	13:24	SC-4 N. Base	11.0	97.0	Y
8/14/2013	13:26	SC-5 W. Wall - North Side	2 thru 9	16.0	Y
8/14/2013	13:28	S-15 S.W. Corner Wall	2 thru 9	49.0	N
8/14/2013	13:29	S-16 S.W. Wall	2 thru 9	26.0	N
8/14/2013	13:50	SC-6 S. Base	12.0	102.0	Y
8/14/2013	13:52	SC-7 S. Wall	2 thru 9	45.0	Y
8/14/2013	13:54	SC-8 S.W. Wall	2 thru 9	16.0	Y
8/14/2013	13:56	SC-9 S.W. Wall (Leg)	2 thru 9	36.0	Y



Enterprise Products  
 Table 4: Summary of Laboratory Analysis  
 Results in Kg/mg

Lateral 10D-2 (Federal 26-11 17 #2)  
 Pipeline Release  
 8/29/2013

LABORATORY ANALYTICAL SUMMARY							
Date	Time	Sample ID	Sample Depth (Feet BGS)	Method 8015 GRO	Method 8015 DRO	Method 8021 Benzene	Method 8021 BTEX
8/14/2013	12:03	SC-1 N. Wall	2 thru 9	<4.8	<10	<0.048	<0.096
8/14/2013	12:05	SC-2 E. Wall - North Side	2 thru 9	<4.6	<9.9	<0.046	<0.092
8/14/2013	12:07	SC-3 E. Wall - South Site	2 thru 9	<4.7	<10	<0.047	<0.095
8/14/2013	13:24	SC-4 N. Base	11.0	<4.9	<10	<0.049	<0.097
8/14/2013	13:26	SC-5 W. Wall - North Side	2 thru 9	<4.8	<10	<0.048	<0.096
8/14/2013	13:50	SC-6 S. Base	12.0	<4.7	<10	<0.047	<0.094
8/14/2013	13:52	SC-7 S. Wall	2 thru 9	<4.8	<10	<0.048	<0.096
8/14/2013	13:54	SC-8 S.W. Wall	2 thru 9	<4.9	<10	<0.049	<0.097
8/14/2013	13:56	SC-9 S.W. Wall (Leg)	2 thru 9	<4.9	<9.9	<0.047	<0.094



5122104 BG14 Lateral 10D-2 EPCO 7/26/13 S. Masked

- on site @ 0940

- conduct site assessment, perform HASP.

- monitor excavation w/ vents Mx4 for Atmospheric conditions.

~~20.8~~ 20.8 % O<sub>2</sub>

0 ppm CO

0 ppm H<sub>2</sub>S

0% LEL

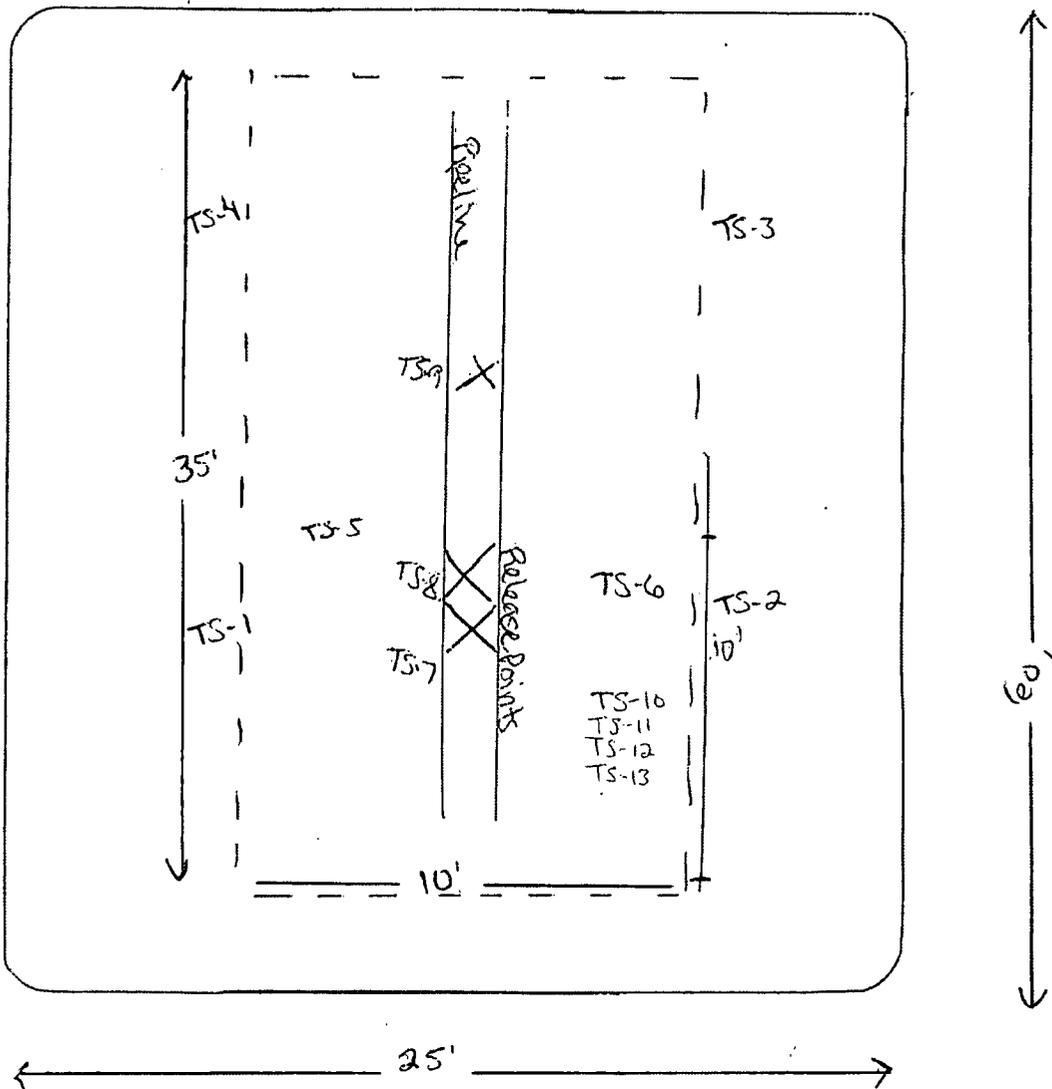
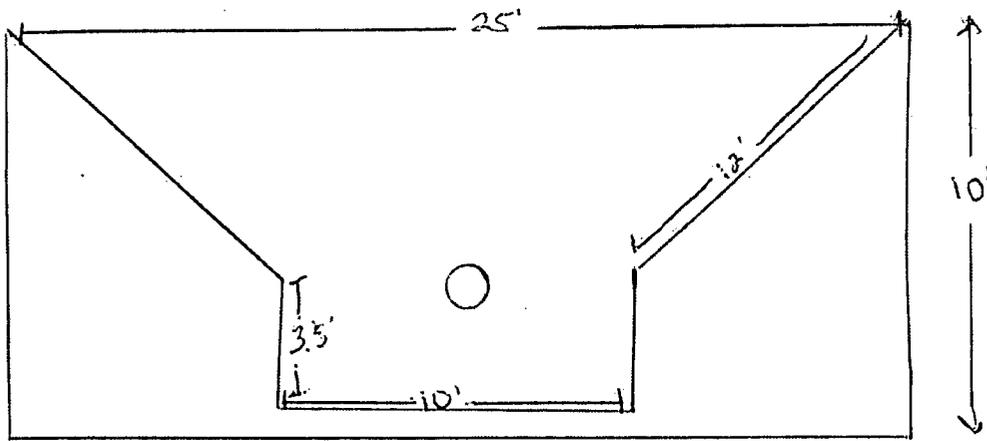
- calibrate PID

Sample	PID (ppm)	Time
TS-1 @ 7'	167.6	1045
TS-2 @ 7'	649.9	1046
TS-3 @ 5'	1.6	1047
TS-4 @ 5'	1.2	1047
TS-5 @ 10'	223.7	1048
TS-6 @ 10'	<del>339.1</del>	1049 540.2
TS-7 @ 10'	147.8	1105
TS-8 @ 10'	194.7	1106
TS-9 @ 10'	157.4	1107
TS-10 @ 2' BOT	96.4	1139
TS-11 @ 3' BOT	72.6	1140
TS-12 @ 4' BOT	53.4	1141
TS-13 @ 5' BOT	73.5	1141

- off site @ 11:55

BOT = from bottom of trench

5122104 BG14 lateral 100-2 EPCO 7/26/13 S. Moskal



CHECKED BY

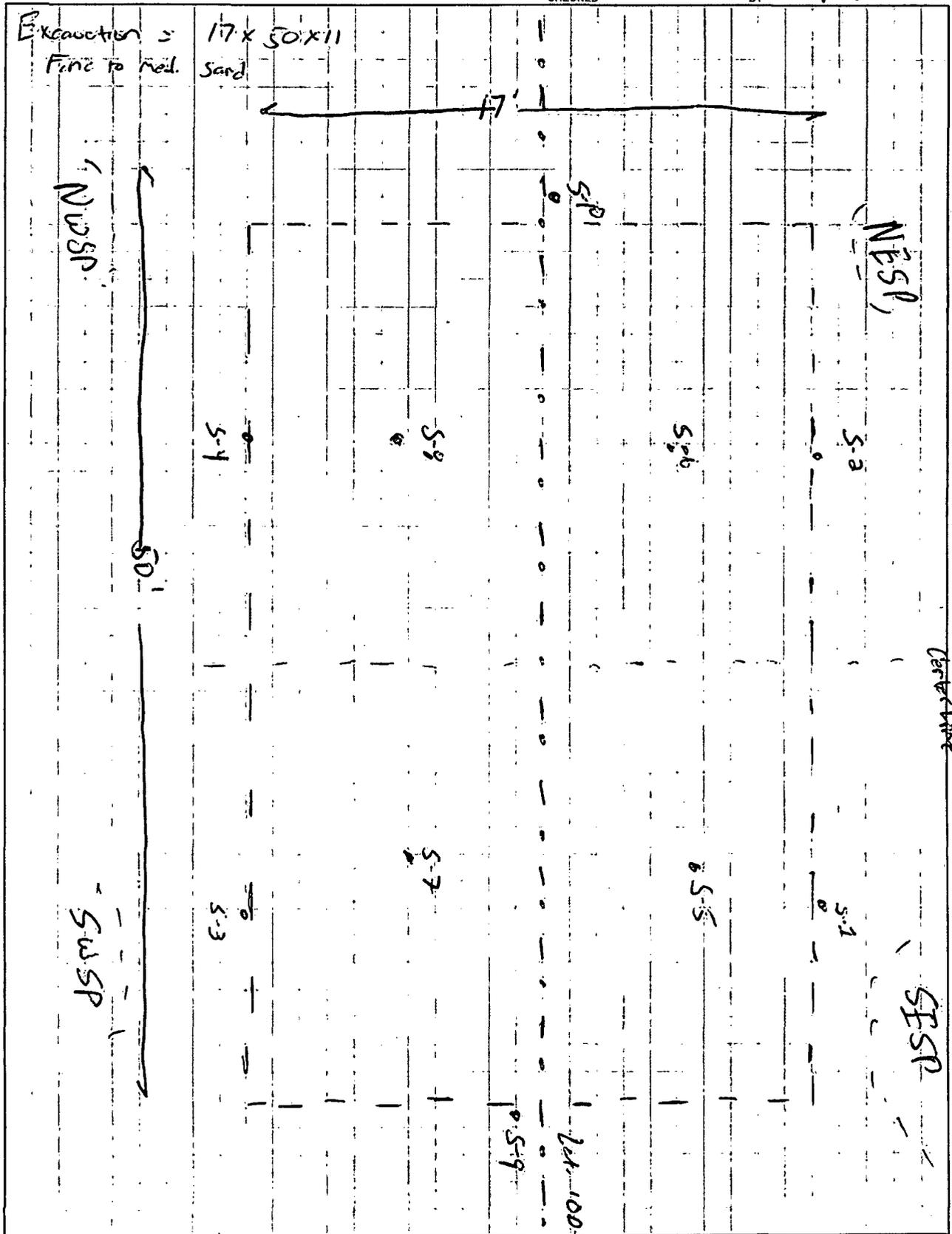
	<u>Time</u>	<u>PPM</u>		<u>Time</u>	<u>PPM</u>
0945 onsite, fill out JSA; Photograph Excavation, Check Atmosphere: 0 LEL, 0 H <sub>2</sub> S, 20.7 O <sub>2</sub> , 0 CO					
0955 Map site - 8" dia PL					
1000 Collect Composite Soil Samples for Field Screening					
S-1 0-11"	1026	848	NE SP	1107	4ppm
S-2 0-11"	1027	4.9	SE SP	1108	679ppm
S-3 0-11"	1028	628			
S-4 0-11"	1029 3:0	3.0			
S-5 11"	1030 <del>495</del>	495			
S-6 11"	1031	105			
S-7 11"	1032	414			
S-8 11"	1033	236			
S-9 0-11"	1100	7.1			
S-10 0-11"	1101	2.9			
NW SP	1104	4.3			
SW SP	1105	629			

1110 Phone call with C.T.  
I let him know that we have to dig the side walls & Base more. Haul off Southern SP

11:15 Phone call with D.B.  
Told him to dig more on the side walls & Base and haul off Southern Stock piles.

D.B. said he would call SMA when they have it scheduled.  
All field samples were 5-pt.  
Composite Head Space

1135 Load Equipment  
1145 off site



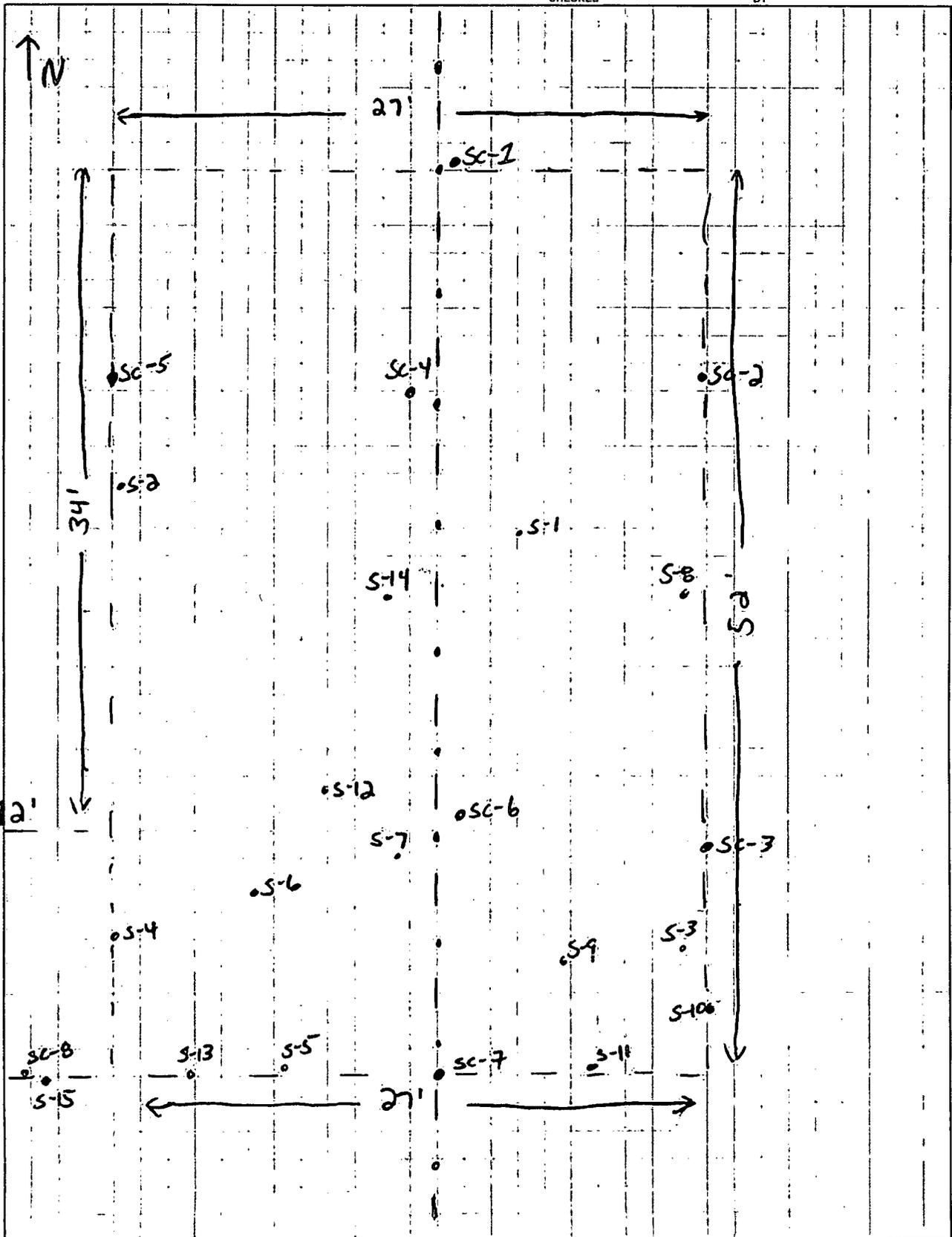
CHECKED BY

0900 - onsite; WSEC digging out contaminated soil and transporting to E7 LF; Excavation has water at the bottom. The two Southern Stock p.b.s have been transported to E7 LF.		
Calibrate P10 = 103 ppm		
1000 collect soil samples from Excavation:		
S-1	Bottom center e-11	475 ppm 1011
S-2	West wall center	28 ppm 1012
S-3	SE corner wall	403 ppm 1013
S-4	SW corner wall	445 ppm 1050
S-5	S. wall (west)	114 ppm 1051
S-6	S. w. Bottom e 2' PL	316 ppm 1052
S-7	Bottom e 11' PL	21 ppm 1108
S-8	E wall center	298 ppm 1209
S-9	S. Bottom (East e 11')	16.7 ppm 1135
S-10	SE. corner wall (3-9')	49 ppm 1136
S-11	S. wall (E side)	36 ppm 1137
S-12	S. w. Bottom e 12'	12.3 ppm 1148
S-13	S. wall west side	37 ppm 1149
S-14	West Bottom center PL	198 ppm 1202

CHECKED

BY

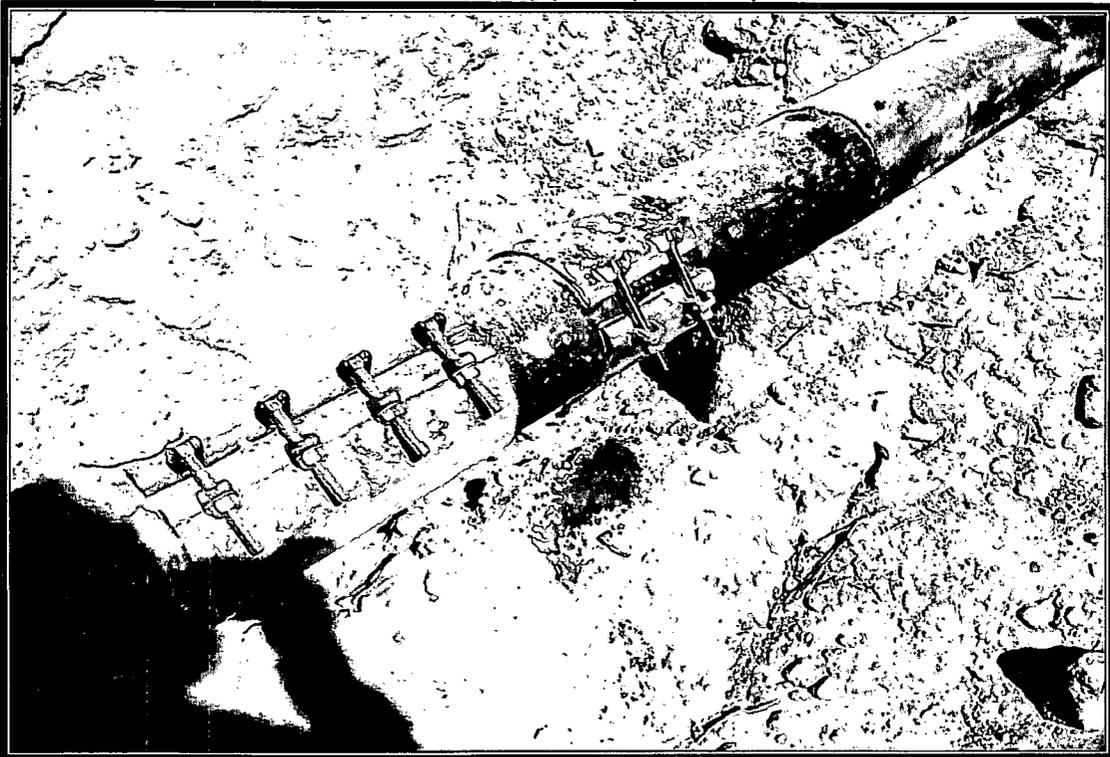
SC-1	N. Wall 2-9'	= 0.4 ppm	1303
SC-2	E. Wall (N) 2-9'	= 9.6 ppm	1305
SC-3	E. Wall (S) 2-9'	= 58 ppm	1307
SC-4	N. Bottom (2-11')	= 97 ppm	1324
SC-5	West Wall (2-9') (N)	= 16 ppm	1326
S-15	SW corner wall (2-9')	= 49 ppm	1328
<del>S-15</del> S-16	SW wall 2-9'	= 26 ppm	1329
SC-6	South Bottom c 12'	= 102 ppm	1350
SC-7	South wall 2-9'	= 45 ppm	1352
SC-8	SW wall 2-9'	= 16 ppm	1354
SC-9	SW Bell/Lobe 2-9'	= 36 ppm	1356
QDS = 36.48800, 108.02704			
1400 WSEC Begin to Backfill excavation with onsite material as per NARZ			
offsite @ 1420			



Site Photography  
Enterprise Products  
Lateral 10D-2 (Federal 26-11 17 #2) Pipeline Release  
NW 1/4, SE1/4 Section 17 T26N R11W  
San Juan County, New Mexico



**Photo 1: View of the pipeline prior to repairs.**



**Photo 2: View of the pipeline leaking prior to repairs**

Site Photography  
Enterprise Products  
Lateral 10D-2 (Federal 26-11 17 #2) Pipeline Release  
NW 1/4, SE1/4 Section 17 T26N R11W  
San Juan County, New Mexico

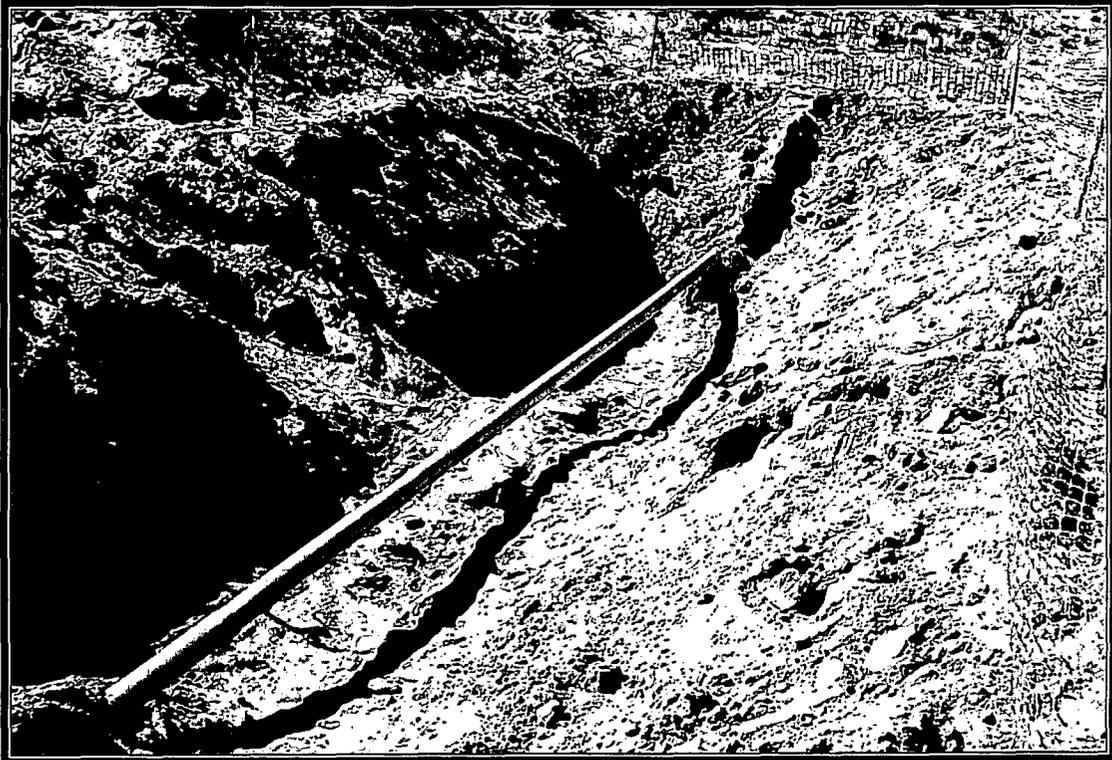


Photo 3: View of the small pipeline and excavation after repairs.



Photo 4: View of the excavation for the Lateral 10D-2 pipeline release.

Site Photography  
Enterprise Products  
Lateral 10D-2 (Federal 26-11 17.#2) Pipeline Release  
NW 1/4, SE1/4 Section 17 T26N R11W  
San Juan County, New Mexico

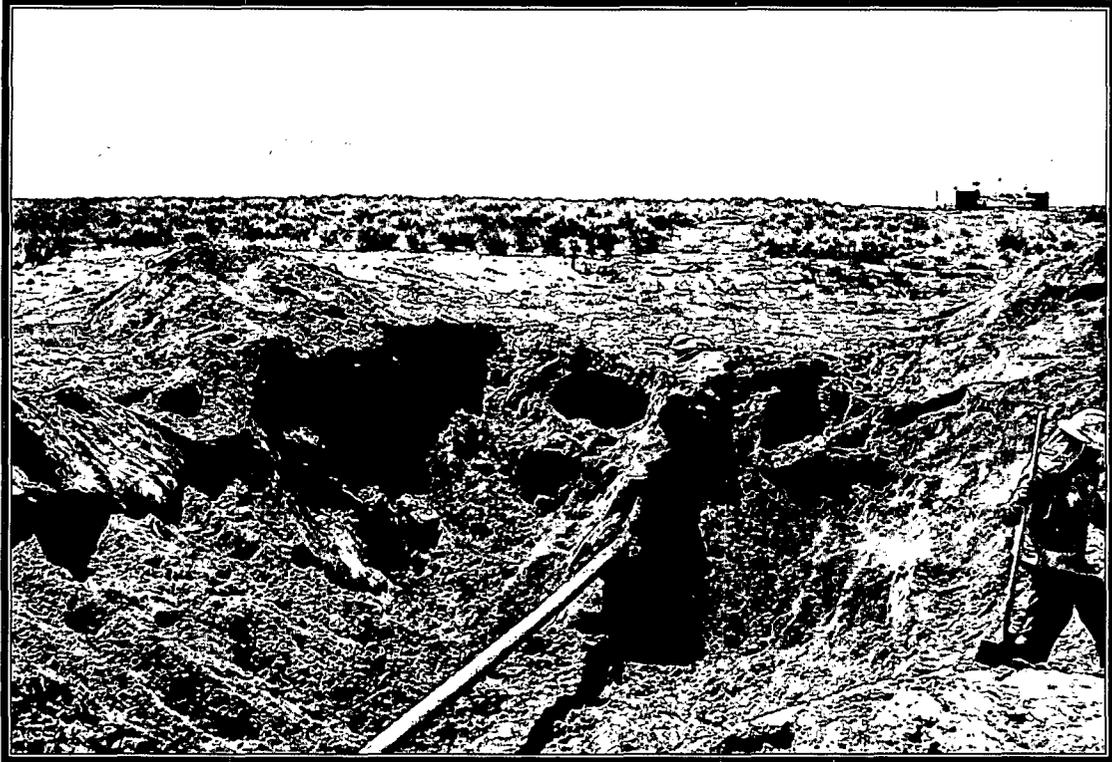


Photo 5: View of the excavation for the Lateral 10D-2 pipeline release.



Photo 6: View of the excavation for the Lateral 10D-2 pipeline release.

Site Photography  
Enterprise Products  
Lateral 10D-2 (Federal 26-11 17 #2) Pipeline Release  
NW 1/4, SE1/4 Section 17 T26N R11W  
San Juan County, New Mexico

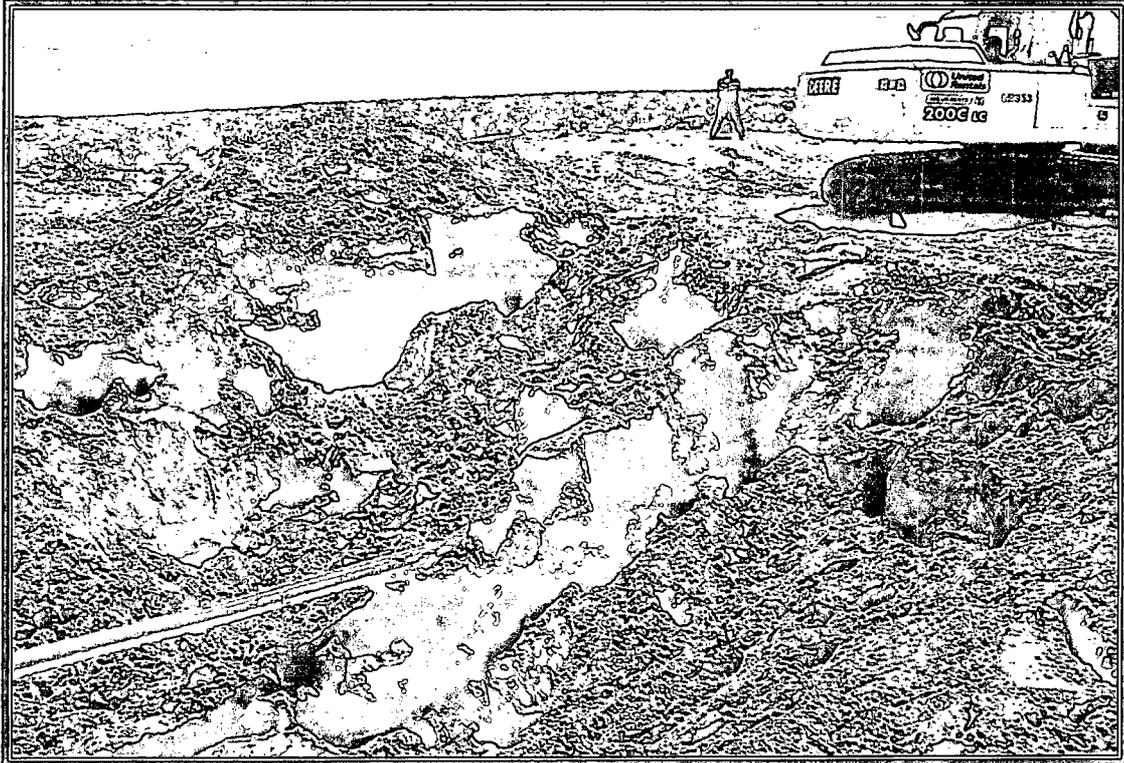


Photo 7: View of the excavation for the Lateral 10D-2 pipeline release.



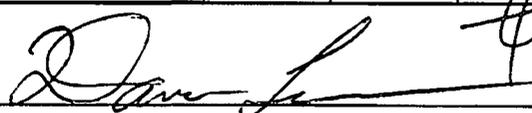
Photo 8: View of the excavation for the Lateral 10D-2 pipeline release.



# Bill of Lading

MANIFEST # 44414  
 DATE 8-13-13 JOB # PT1057-0582

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

LOAD NO.	COMPLETE DESCRIPTION OF SHIPMENT						TRANSPORTING COMPANY				
	POINT OF ORIGIN	DESTINATION	MATERIAL	GRID	YDS	BBLs	COMPANY	TRK#	TIME	DRIVER SIGNATURE	
2	ENTERPRISE LATERAL 10 D-2 Pile line	LFII	cont SOIL	C-22	12	-	MOSS	47	11:20	Lee Moss	
2	"	"	"	C-22	10	-	MOSS	15	11:20	Math BME	
3	"	"	"	C-22	12	-	MOSS	47	12:20	Lee Moss	
4	"	"	"	C-22	10	-	MOSS	15	12:25	Math BME	
5	"	"	"	C-22	12	-	MOSS	47	13:35	Lee Moss	
6	"	"	"	C-22	10	-	MOSS	15	13:35	Math BME	
7	"	"	"	C-22	12	-	MOSS	47	14:19	Lee Moss	
8	"	"	"	C-22	10	-	MOSS	15	14:53	Math BME	
9	"	"	"	C-22	12	-	MOSS	47	15:51	Lee Moss	
10	"	"	"	C-22	10	-	MOSS	15	15:04	Math BME	
110											
RESULTS:		LANDFARM EMPLOYEE:		NOTES:							
292	CHLORIDE TEST	3	 Certification of above receipt & placement								
	PAINT FILTER TEST	3									

By signing as the driver/transporter, I certify the material hauled from the above location has not been added to or tampered with. I certify the material is from the above mentioned Generator/Point of Origin and that no additional material has been added or mixed into the load.

TRANSPORTER CO. Moss Excavation NAME Lee Moss SIGNATURE Lee Moss  
 COMPANY CONTACT Gary Maestas PHONE \_\_\_\_\_ DATE 8-13-13

Signatures required prior to distribution of the legal document.



# Bill of Lading

MANIFEST # 44419  
 DATE 8-14-13 JOB # 97057-0582

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

LOAD NO.	COMPLETE DESCRIPTION OF SHIPMENT						TRANSPORTING COMPANY			
	POINT OF ORIGIN	DESTINATION	MATERIAL	GRID	YDS	BBLs	COMPANY	TRK#	TIME	DRIVER SIGNATURE
1	Enterprise CAT 10D-2	LII	cont Soil	C-22	10	-	MOSS	15	9:35	<i>[Signature]</i>
2	"	"	"	C-22	10	-	MOSS	15	10:30	<i>[Signature]</i>
3	"	"	"	C-22	10	-	MOSS	15	11:28	<i>[Signature]</i>
4	"	"	"	B-22	10	-	MOSS	15	12:15	<i>[Signature]</i>
5	"	"	"	B-22	10	-	MOSS	15	13:05	<i>[Signature]</i>
6	"	"	"	A-24	10	-	MOSS	15	13:55	<i>[Signature]</i>
7	"	"	"	A-24	10	-	MOSS	15	14:40	<i>[Signature]</i>
8	"	"	"	A-24	10	-	MOSS	15	15:30	<i>[Signature]</i>
9	"	"	"	A-24	10	-	MOSS	15	16:30	<i>[Signature]</i>
						90				
RESULTS:		LANDFARM EMPLOYEE:		<i>[Signature]</i> NOTES:						
292	CHLORIDE TEST	2								
	PAINT FILTER TEST	2								
Certification of above receipt & placement										

By signing as the driver/transporter, I certify the material hauled from the above location has not been added to or tampered with. I certify the material is from the above mentioned Generator/Point of Origin and that no additional material has been added or mixed into the load.

TRANSPORTER CO. Moss Excavation NAME NATHAN B MCKENNEY SIGNATURE *[Signature]*  
 COMPANY CONTACT \_\_\_\_\_ PHONE \_\_\_\_\_ DATE 8-14-13

Signatures required prior to distribution of the legal document.



# Bill of Lading

MANIFEST # 44420

DATE 8-14-13 JOB # 97057-0582

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

LOAD NO.	COMPLETE DESCRIPTION OF SHIPMENT						TRANSPORTING COMPANY				
	POINT OF ORIGIN	DESTINATION	MATERIAL	GRID	YDS	BBLS	COMPANY	TRK#	TIME	DRIVER SIGNATURE	
1	ENTRAPPISU CAT 10D-2	CFII	cont soil	C-22	10	-	FLYING M	15	9:35	Mark Lopez	
2	"	"	"	C-22	10	-	"	15	10:40	M Lopez	
3	"	"	"	C-22	10	-	"	15	11:35	M Lopez	
4	"	"	"	C-22	10	-	"	15	12:25	M Lopez	
5	"	"	"	B-22	10	-	"	15	13:15	M Lopez	
6	"	"	"	A-24	10	-	"	15	14:10	M Lopez	
7	"	"	"	A-24	10	-	"	15	15:00	M Lopez	
8	"	"	"	A-24	10	-	"	15	15:52	M Lopez	
					80						
RESULTS:		LANDFARM EMPLOYEE:						NOTES:			
292	CHLORIDE TEST	2									
	PAINT FILTER TEST	2	Certification of above receipt & placement								

By signing as the driver/transporter, I certify the material hauled from the above location has not been added to or tampered with. I certify the material is from the above mentioned Generator/Point of Origin and that no additional material has been added or mixed into the load.

TRANSPORTER CO. MOSS EXCAVATION NAME MARK LOPEZ SIGNATURE

COMPANY CONTACT \_\_\_\_\_ PHONE \_\_\_\_\_ DATE 8-17-13

Signatures required prior to distribution of the legal document.



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 20, 2013

Tom Long  
Souder, Miller and Associates  
2101 San Juan Boulevard  
Farmington, NM 87401  
TEL: (505) 330-0868  
FAX

RE: Enterprise Lateral 10D-2

OrderNo.: 1308700

Dear Tom Long:

Hall Environmental Analysis Laboratory received 9 sample(s) on 8/15/2013 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to [www.hallenvironmental.com](http://www.hallenvironmental.com) or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

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

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates

Client Sample ID: SC-1

Project: Enterprise Lateral 10D-2

Collection Date: 8/14/2013 12:03:00 PM

Lab ID: 1308700-001

Matrix: SOIL

Received Date: 8/15/2013 10:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015D: DIESEL RANGE ORGANICS</b>							Analyst: <b>JME</b>
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	8/19/2013 5:10:25 PM	8897
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	8/19/2013 5:10:25 PM	8897
Surr: DNOP	81.0	63-147		%REC	1	8/19/2013 5:10:25 PM	8897
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	8/19/2013 2:53:26 PM	8906
Surr: BFB	91.8	80-120		%REC	1	8/19/2013 2:53:26 PM	8906
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.048		mg/Kg	1	8/19/2013 2:53:26 PM	8906
Toluene	ND	0.048		mg/Kg	1	8/19/2013 2:53:26 PM	8906
Ethylbenzene	ND	0.048		mg/Kg	1	8/19/2013 2:53:26 PM	8906
Xylenes, Total	ND	0.096		mg/Kg	1	8/19/2013 2:53:26 PM	8906
Surr: 4-Bromofluorobenzene	105	80-120		%REC	1	8/19/2013 2:53:26 PM	8906

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

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

**Hall Environmental Analysis Laboratory, Inc.**

CLIENT: Souder, Miller and Associates

Client Sample ID: SC-2

Project: Enterprise Lateral 10D-2

Collection Date: 8/14/2013 12:05:00 PM

Lab ID: 1308700-002

Matrix: SOIL

Received Date: 8/15/2013 10:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015D: DIESEL RANGE ORGANICS</b>							Analyst: <b>JME</b>
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	8/19/2013 5:32:26 PM	8897
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	8/19/2013 5:32:26 PM	8897
Surr: DNOP	86.6	63-147		%REC	1	8/19/2013 5:32:26 PM	8897
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	8/19/2013 4:19:24 PM	8906
Surr: BFB	92.6	80-120		%REC	1	8/19/2013 4:19:24 PM	8906
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.046		mg/Kg	1	8/19/2013 4:19:24 PM	8906
Toluene	ND	0.046		mg/Kg	1	8/19/2013 4:19:24 PM	8906
Ethylbenzene	ND	0.046		mg/Kg	1	8/19/2013 4:19:24 PM	8906
Xylenes, Total	ND	0.092		mg/Kg	1	8/19/2013 4:19:24 PM	8906
Surr: 4-Bromofluorobenzene	104	80-120		%REC	1	8/19/2013 4:19:24 PM	8906

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

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

**Hall Environmental Analysis Laboratory, Inc.**

CLIENT: Souder, Miller and Associates

Client Sample ID: SC-3

Project: Enterprise Lateral 10D-2

Collection Date: 8/14/2013 12:07:00 PM

Lab ID: 1308700-003

Matrix: SOIL

Received Date: 8/15/2013 10:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015D: DIESEL RANGE ORGANICS</b>							Analyst: <b>JME</b>
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	8/19/2013 5:54:33 PM	8897
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	8/19/2013 5:54:33 PM	8897
Surr: DNOP	83.0	63-147		%REC	1	8/19/2013 5:54:33 PM	8897
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	8/19/2013 4:47:59 PM	8906
Surr: BFB	92.7	80-120		%REC	1	8/19/2013 4:47:59 PM	8906
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.047		mg/Kg	1	8/19/2013 4:47:59 PM	8906
Toluene	ND	0.047		mg/Kg	1	8/19/2013 4:47:59 PM	8906
Ethylbenzene	ND	0.047		mg/Kg	1	8/19/2013 4:47:59 PM	8906
Xylenes, Total	ND	0.095		mg/Kg	1	8/19/2013 4:47:59 PM	8906
Surr: 4-Bromofluorobenzene	104	80-120		%REC	1	8/19/2013 4:47:59 PM	8906

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

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

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates

Client Sample ID: SC-4

Project: Enterprise Lateral 10D-2

Collection Date: 8/14/2013 1:24:00 PM

Lab ID: 1308700-004

Matrix: SOIL

Received Date: 8/15/2013 10:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015D: DIESEL RANGE ORGANICS</b>							Analyst: <b>JME</b>
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	8/19/2013 6:38:30 PM	8897
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	8/19/2013 6:38:30 PM	8897
Surr: DNOP	76.9	63-147		%REC	1	8/19/2013 6:38:30 PM	8897
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/19/2013 5:16:45 PM	8906
Surr: BFB	92.4	80-120		%REC	1	8/19/2013 5:16:45 PM	8906
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.049		mg/Kg	1	8/19/2013 5:16:45 PM	8906
Toluene	ND	0.049		mg/Kg	1	8/19/2013 5:16:45 PM	8906
Ethylbenzene	ND	0.049		mg/Kg	1	8/19/2013 5:16:45 PM	8906
Xylenes, Total	ND	0.097		mg/Kg	1	8/19/2013 5:16:45 PM	8906
Surr: 4-Bromofluorobenzene	104	80-120		%REC	1	8/19/2013 5:16:45 PM	8906

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

<b>Qualifiers:</b>	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
E Value above quantitation range	H Holding times for preparation or analysis exceeded	
J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit	Page 4 of 12
O RSD is greater than RSDlimit	P Sample pH greater than 2 for VOA and TOC only.	
R RPD outside accepted recovery limits	RL Reporting Detection Limit	
S Spike Recovery outside accepted recovery limits		

**Hall Environmental Analysis Laboratory, Inc.**

CLIENT: Souder, Miller and Associates

Client Sample ID: SC-5

Project: Enterprise Lateral 10D-2

Collection Date: 8/14/2013 1:26:00 PM

Lab ID: 1308700-005

Matrix: SOIL

Received Date: 8/15/2013 10:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015D: DIESEL RANGE ORGANICS</b>							Analyst: <b>JME</b>
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	8/19/2013 7:00:27 PM	8897
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	8/19/2013 7:00:27 PM	8897
Surr: DNOP	80.5	63-147		%REC	1	8/19/2013 7:00:27 PM	8897
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	8/19/2013 5:45:29 PM	8906
Surr: BFB	91.5	80-120		%REC	1	8/19/2013 5:45:29 PM	8906
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.048		mg/Kg	1	8/19/2013 5:45:29 PM	8906
Toluene	ND	0.048		mg/Kg	1	8/19/2013 5:45:29 PM	8906
Ethylbenzene	ND	0.048		mg/Kg	1	8/19/2013 5:45:29 PM	8906
Xylenes, Total	ND	0.096		mg/Kg	1	8/19/2013 5:45:29 PM	8906
Surr: 4-Bromofluorobenzene	103	80-120		%REC	1	8/19/2013 5:45:29 PM	8906

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

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

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates

Client Sample ID: SC-6

Project: Enterprise Lateral 10D-2

Collection Date: 8/14/2013 1:50:00 PM

Lab ID: 1308700-006

Matrix: SOIL

Received Date: 8/15/2013 10:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015D: DIESEL RANGE ORGANICS</b>							Analyst: <b>JME</b>
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	8/19/2013 7:22:23 PM	8897
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	8/19/2013 7:22:23 PM	8897
Surr: DNOP	88.4	63-147		%REC	1	8/19/2013 7:22:23 PM	8897
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	8/19/2013 6:14:09 PM	8906
Surr: BFB	93.3	80-120		%REC	1	8/19/2013 6:14:09 PM	8906
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.047		mg/Kg	1	8/19/2013 6:14:09 PM	8906
Toluene	ND	0.047		mg/Kg	1	8/19/2013 6:14:09 PM	8906
Ethylbenzene	ND	0.047		mg/Kg	1	8/19/2013 6:14:09 PM	8906
Xylenes, Total	ND	0.094		mg/Kg	1	8/19/2013 6:14:09 PM	8906
Surr: 4-Bromofluorobenzene	102	80-120		%REC	1	8/19/2013 6:14:09 PM	8906

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

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

**Hall Environmental Analysis Laboratory, Inc.**

CLIENT: Souder, Miller and Associates

Client Sample ID: SC-7

Project: Enterprise Lateral 10D-2

Collection Date: 8/14/2013 1:52:00 PM

Lab ID: 1308700-007

Matrix: SOIL

Received Date: 8/15/2013 10:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015D: DIESEL RANGE ORGANICS</b>							Analyst: <b>JME</b>
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	8/19/2013 7:44:17 PM	8897
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	8/19/2013 7:44:17 PM	8897
Surr: DNOP	77.2	63-147		%REC	1	8/19/2013 7:44:17 PM	8897
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	8/19/2013 6:42:46 PM	8906
Surr: BFB	91.3	80-120		%REC	1	8/19/2013 6:42:46 PM	8906
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.048		mg/Kg	1	8/19/2013 6:42:46 PM	8906
Toluene	ND	0.048		mg/Kg	1	8/19/2013 6:42:46 PM	8906
Ethylbenzene	ND	0.048		mg/Kg	1	8/19/2013 6:42:46 PM	8906
Xylenes, Total	ND	0.096		mg/Kg	1	8/19/2013 6:42:46 PM	8906
Surr: 4-Bromofluorobenzene	102	80-120		%REC	1	8/19/2013 6:42:46 PM	8906

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

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

**Hall Environmental Analysis Laboratory, Inc.**

CLIENT: Souder, Miller and Associates

Client Sample ID: SC-8

Project: Enterprise Lateral 10D-2

Collection Date: 8/14/2013 1:54:00 PM

Lab ID: 1308700-008

Matrix: SOIL

Received Date: 8/15/2013 10:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015D: DIESEL RANGE ORGANICS</b>							Analyst: <b>JME</b>
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	8/19/2013 8:06:17 PM	8897
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	8/19/2013 8:06:17 PM	8897
Surr: DNOP	82.2	63-147		%REC	1	8/19/2013 8:06:17 PM	8897
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/19/2013 7:11:24 PM	8906
Surr: BFB	92.2	80-120		%REC	1	8/19/2013 7:11:24 PM	8906
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.049		mg/Kg	1	8/19/2013 7:11:24 PM	8906
Toluene	ND	0.049		mg/Kg	1	8/19/2013 7:11:24 PM	8906
Ethylbenzene	ND	0.049		mg/Kg	1	8/19/2013 7:11:24 PM	8906
Xylenes, Total	ND	0.097		mg/Kg	1	8/19/2013 7:11:24 PM	8906
Surr: 4-Bromofluorobenzene	103	80-120		%REC	1	8/19/2013 7:11:24 PM	8906

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

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

**Hall Environmental Analysis Laboratory, Inc.**

CLIENT: Souder, Miller and Associates

Client Sample ID: SC-9

Project: Enterprise Lateral 10D-2

Collection Date: 8/14/2013 1:56:00 PM

Lab ID: 1308700-009

Matrix: SOIL

Received Date: 8/15/2013 10:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015D: DIESEL RANGE ORGANICS</b>							Analyst: <b>JME</b>
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	8/19/2013 8:28:07 PM	8897
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	8/19/2013 8:28:07 PM	8897
Surr: DNOP	80.0	63-147		%REC	1	8/19/2013 8:28:07 PM	8897
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	8/19/2013 7:40:03 PM	8906
Surr: BFB	91.3	80-120		%REC	1	8/19/2013 7:40:03 PM	8906
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.047		mg/Kg	1	8/19/2013 7:40:03 PM	8906
Toluene	ND	0.047		mg/Kg	1	8/19/2013 7:40:03 PM	8906
Ethylbenzene	ND	0.047		mg/Kg	1	8/19/2013 7:40:03 PM	8906
Xylenes, Total	ND	0.094		mg/Kg	1	8/19/2013 7:40:03 PM	8906
Surr: 4-Bromofluorobenzene	103	80-120		%REC	1	8/19/2013 7:40:03 PM	8906

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

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

# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1308700

20-Aug-13

Client: Souder, Miller and Associates

Project: Enterprise Lateral 10D-2

Sample ID	<b>MB-8897</b>	SampType:	<b>MBLK</b>	TestCode:	<b>EPA Method 8015D: Diesel Range Organics</b>					
Client ID:	<b>PBS</b>	Batch ID:	<b>8897</b>	RunNo:	<b>12670</b>					
Prep Date:	<b>8/16/2013</b>	Analysis Date:	<b>8/16/2013</b>	SeqNo:	<b>361127</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.0		10.00		90.0	63	147			

Sample ID	<b>LCS-8897</b>	SampType:	<b>LCS</b>	TestCode:	<b>EPA Method 8015D: Diesel Range Organics</b>					
Client ID:	<b>LCSS</b>	Batch ID:	<b>8897</b>	RunNo:	<b>12670</b>					
Prep Date:	<b>8/16/2013</b>	Analysis Date:	<b>8/16/2013</b>	SeqNo:	<b>361260</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	46	10	50.00	0	92.9	77.1	128			
Surr: DNOP	3.5		5.000		69.8	63	147			

### Qualifiers:

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

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1308700

20-Aug-13

**Client:** Souder, Miller and Associates

**Project:** Enterprise Lateral 10D-2

Sample ID: <b>MB-8906</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>PBS</b>	Batch ID: <b>8906</b>	RunNo: <b>12721</b>								
Prep Date: <b>8/16/2013</b>	Analysis Date: <b>8/19/2013</b>	SeqNo: <b>362533</b>			Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	900		1000		90.0	80	120			

Sample ID: <b>LCS-8906</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>8906</b>	RunNo: <b>12721</b>								
Prep Date: <b>8/16/2013</b>	Analysis Date: <b>8/19/2013</b>	SeqNo: <b>362534</b>			Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	5.0	25.00	0	105	74.5	126			
Surr: BFB	980		1000		98.3	80	120			

Sample ID: <b>1308700-001AMS</b>	SampType: <b>MS</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>SC-1</b>	Batch ID: <b>8906</b>	RunNo: <b>12721</b>								
Prep Date: <b>8/16/2013</b>	Analysis Date: <b>8/19/2013</b>	SeqNo: <b>362537</b>			Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	4.8	23.90	0	102	76	156			
Surr: BFB	950		956.0		99.4	80	120			

Sample ID: <b>1308700-001AMSD</b>	SampType: <b>MSD</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>SC-1</b>	Batch ID: <b>8906</b>	RunNo: <b>12721</b>								
Prep Date: <b>8/16/2013</b>	Analysis Date: <b>8/19/2013</b>	SeqNo: <b>362538</b>			Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	4.8	23.88	0	106	76	156	4.01	17.7	
Surr: BFB	960		955.1		101	80	120	0	0	

**Qualifiers:**

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

# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1308700

20-Aug-13

Client: Souder, Miller and Associates

Project: Enterprise Lateral 10D-2

Sample ID	<b>MB-8906</b>	SampType:	<b>MBLK</b>	TestCode:	<b>EPA Method 8021B: Volatiles</b>					
Client ID:	<b>PBS</b>	Batch ID:	<b>8906</b>	RunNo:	<b>12721</b>					
Prep Date:	<b>8/16/2013</b>	Analysis Date:	<b>8/19/2013</b>	SeqNo:	<b>362557</b>	Units:	<b>mg/Kg</b>			
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		104	80	120			

Sample ID	<b>LCS-8906</b>	SampType:	<b>LCS</b>	TestCode:	<b>EPA Method 8021B: Volatiles</b>					
Client ID:	<b>LCSS</b>	Batch ID:	<b>8906</b>	RunNo:	<b>12721</b>					
Prep Date:	<b>8/16/2013</b>	Analysis Date:	<b>8/19/2013</b>	SeqNo:	<b>362558</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.050	1.000	0	105	80	120			
Toluene	1.0	0.050	1.000	0	99.8	80	120			
Ethylbenzene	1.0	0.050	1.000	0	101	80	120			
Xylenes, Total	3.1	0.10	3.000	0	103	80	120			
Surr: 4-Bromofluorobenzene	1.1		1.000		108	80	120			

## Qualifiers:

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

**Sample Log-In Check List**

Client Name: SMA-FARM

Work Order Number: 1308700

RcptNo: 1

Received by/date:

*LM* 08/15/13

Logged By: Lindsay Mangin

8/15/2013 10:10:00 AM

*Jessie H...*

Completed By: Lindsay Mangin

8/16/2013 6:45:36 AM

*Jessie H...*

Reviewed By:

*IO* 08/16/13

**Chain of Custody**

- 1. Custody seals intact on sample bottles? Yes  No  Not Present
- 2. Is Chain of Custody complete? Yes  No  Not Present
- 3. How was the sample delivered? Courier

**Log In**

- 4. Was an attempt made to cool the samples? Yes  No  NA
- 5. Were all samples received at a temperature of >0° C to 6.0°C Yes  No  NA
- 6. Sample(s) in proper container(s)? Yes  No
- 7. Sufficient sample volume for indicated test(s)? Yes  No
- 8. Are samples (except VOA and ONG) properly preserved? Yes  No
- 9. Was preservative added to bottles? Yes  No  NA
- 10. VOA vials have zero headspace? Yes  No  No VOA Vials
- 11. Were any sample containers received broken? Yes  No
- 12. Does paperwork match bottle labels? Yes  No  # of preserved bottles checked for pH: (<2 or >12 unless noted)
- (Note discrepancies on chain of custody)
- 13. Are matrices correctly identified on Chain of Custody? Yes  No  Adjusted?
- 14. Is it clear what analyses were requested? Yes  No
- 15. Were all holding times able to be met? Yes  No  Checked by:
- (If no, notify customer for authorization.)

**Special Handling (if applicable)**

- 16. Was client notified of all discrepancies with this order? Yes  No  NA

Person Notified: Thomas Long Date: 8/16/2013  
 By Whom: Ashley Gallegos Via:  eMail  Phone  Fax  In Person  
 Regarding: Sample IDs. (see section 19.)  
 Client Instructions: Go with IDs on the jars.

17. Additional remarks:

Sample -001 label says SC-1 lid says SC-2, Sample -002 label says SC-2 lid says SC-1. AMG 08/16/2013

*AMG 08/16/13*

**18. Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.6	Good	Yes			

Client: SMA

Standard  Rush



# HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Mailing Address: 2101 San Juan Blvd.

Project Name: Enterprise Lateral 100-2

Farmington NM 87401

Project #: S122104

Phone #: 505.325.7535

email or Fax#: tom.lange@southernmill.com

Project Manager:

QA/QC Package:

Standard  Level 4 (Full Validation)

Other

EDD (Type)

Thomas, Long

Sampler: 73L

On Ice  Yes  No

Sample Temperature: 16

## Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.	BTEX + MTBE + TMBE (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH (8310 or 8270SIMS)	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)
8-14-13	1203	Soil	SC-1	4oz Jar	Cool	1308700-001	X	X										
	1205		SC-2			-002	X	X										
	1207		SC-3			-003	X	X										
	1324		SC-4			-004	X	X										
	1326		SC-5			-005	X	X										
	1350		SC-6			-006	X	X										
	1352		SC-7			-007	X	X										
	1354		SC-8			-008	X	X										
	1356		SC-9			-009	X	X										

Date: 8-14-13 Time: 1700 Relinquished by: Thomas Long

Received by: Christina Weale Date Time: 8/14/13 1700

Remarks: Bill to Enterprise

Date: 8/14/13 Time: 1743 Relinquished by: Christina Weale

Received by: [Signature] Date Time: 08/15/13 1010

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
811 S. First St., Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources

Form C-141  
Revised August 8, 2011

Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Submit 1 Copy to appropriate District Office in  
accordance with 19.15.29 NMAC.

**Release Notification and Corrective Action**

**OPERATOR**

Initial Report  Final Report

Name of Company <b>Enterprise Field Services LLC</b>	Contact <b>Runell Seale/</b>
Address <b>614 Reilly Ave, Farmington, NM 87401</b>	Telephone No. <b>(505) 599-2124</b>
Facility Name <b>Trunk K</b>	Facility Type <b>Pipeline</b>

Surface Owner <b>BLM</b>	Mineral Owner <b>BLM</b>	API No.
--------------------------	--------------------------	---------

**LOCATION OF RELEASE**

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
<b>B</b>	<b>26</b>	<b>27N</b>	<b>8W</b>					<b>San Juan</b>

Latitude N36.549087 Longitude W107.64863

**NATURE OF RELEASE**

Type of Release <b>Natural Gas condensate and produced water</b>	Volume of Release <b>10bbbls &amp; 50+MCF</b>	Volume Recovered
Source of Release <b>16" spiral weld pipeline</b>	Date and Hour of Occurrence <b>9/4/2013</b>	Date and Hour of Discovery <b>9/4/2013 Late afternoon</b>
Was Immediate Notice Given? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom? <b>Brandon Powell, NMOCD, notified by email</b>	
By Whom? <b>Runell Seale, Enterprise</b>	Date and Hour <b>9/5/13 16:46</b>	<b>RCVD SEP 27 13</b>
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse. <b>OIL CONS. DIV. DIST. 3</b>	

If a Watercourse was Impacted, Describe Fully.\*

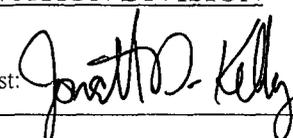
Describe Cause of Problem and Remedial Action Taken.\*

**After the pipeline leak was detected, the line was blown down, an emergency one call was conducted, and the line was excavated and repaired on 9/9/2013. Stained soils were removed from the location and hauled to an OCD approved landfarm.**

Describe Area Affected and Cleanup Action Taken.\*

**A third party environmental contractor is investigating the affected area and providing recommendations for excavation extents based on field screening and laboratory analytical results. A C-141 "Final" report and third party environmental corrective action report will be submitted once site closure standards have been met.**

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: 	<b>OIL CONSERVATION DIVISION</b>	
Printed Name: Jon E. Fields	Approved by Environmental Specialist: 	
Title: Director - Field Compliance	Approval Date: <b>10/22/2013</b>	Expiration Date:
E-mail Address: jefields@eprod.com	Conditions of Approval:	Attached <input type="checkbox"/>
Date: 9/16/2013 Phone: 713-381-6684		

\* Attach Additional Sheets If Necessary

NJK 1329541249

①

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
811 S. First St., Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources

Form C-141  
Revised August 8, 2011

Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

**Release Notification and Corrective Action**

**OPERATOR**

Initial Report

Final Report

Name of Company Enterprise Field Services, LLC	Contact Aaron Dailey
Address 614 Reilly Avenue, Farmington NM 87401	Telephone No. (505)599-2286
Facility Name Lateral 3B-71 Pipeline	Facility Type Natural gas pipeline

Surface Owner BLM	Mineral Owner BLM	API No.
-------------------	-------------------	---------

**LOCATION OF RELEASE**

Unit Letter G	Section 7	Township 29N	Range 8W	Feet from the	North/South Line	Feet from the	East/West Line	County San Juan
---------------	-----------	--------------	----------	---------------	------------------	---------------	----------------	-----------------

Latitude\_N 36.7406 Longitude\_W 107.7102\_ (Decimal Degrees)\_\_\_

**NATURE OF RELEASE**

Type of Release Natural gas vapor and some liquid	Volume of Release 1592 MCF gas and 15-25 gallons liquid	Volume Recovered 0 gas, remediation completed to OCD and BLM standard
Source of Release Natural gas pipeline	Date and Hour of Occurrence 12/23/2012 @ 06:00 hours (estimated)	Date and Hour of Discovery 12/24/2012 @ 14:00 hours
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Brandon Powell, NM OCD Aztec District, Sherrie Landon, BLM	
By Whom? Aaron Dailey	Date and Hour 12/24/2012 @ 23:43 hours (e-mail), follow up phone call and e-mail on 12/27/2012 @ 08:30 hours	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

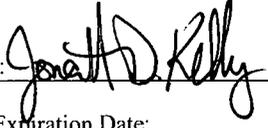
RCVD SEP 3 '13  
OIL CONS. DIV.  
DIST. 2

If a Watercourse was Impacted, Describe Fully.\*

Describe Cause of Problem and Remedial Action Taken.\*  
Third party contacted Enterprise gas control about a pipeline leak. Enterprise personnel verified leak to be a split leg-off 4 inch pipeline near mile marker 81 off of US highway 64, which was caused by recent cold weather events. The pipeline was isolated and rendered out of service. Cleanup was conducted in warmer weather when snow and ice melted to allow for safer access to the cliff area.

Describe Area Affected and Cleanup Action Taken.\*  
Significant gas loss to atmosphere; some overspray and hydrocarbon impacted soil was discovered. A third party contractor applied a mild simple green/water solution to the sandstone cliff to remove the hydrocarbon stains on the sandstone. Any saturated hydrocarbon impacted soil was removed and transported to an OCD approved landfarm facility. Please refer to the attached third party corrective action report for details.

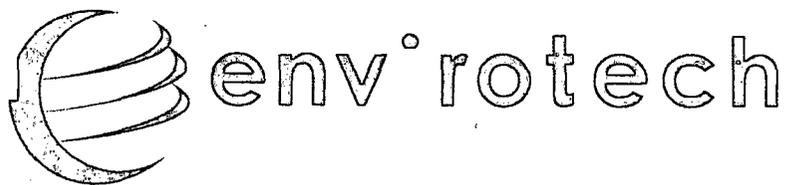
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: 	<b>OIL CONSERVATION DIVISION</b>	
Printed Name: Matt Marra	Approved by Environmental Specialist: 	
Title: Senior Director, Environmental	Approval Date: 12/4/2013	Expiration Date:
E-mail Address: memarra@eprod.com	Conditions of Approval:	Attached <input type="checkbox"/>
Date: 8-29-2013 Phone: (713)381-6684		

\* Attach Additional Sheets If Necessary

nJK1333854667  
228

100



August 21, 2013

Project Number 97057-0538

Mr. Aaron Dailey  
Enterprise Products  
614 Reilly Avenue  
Farmington, New Mexico 87401

Phone: (505) 427-1719

**RE: SPILL CLEANUP REPORT FOR A PIPELINE SPILL AT PIPELINE LATERAL 3B-71 IN  
SAN JUAN COUNTY, NEW MEXICO.**

Dear Mr. Dailey:

Enclosed please find the *Spill Cleanup Report* detailing spill cleanup activities conducted at Pipeline Lateral 3B-71 located in Section 7, Township 29 North, Range 8 West, San Juan County, New Mexico.

We appreciate the opportunity to be of service. If you have any questions or require additional information, please contact our office at (505) 632-0615.

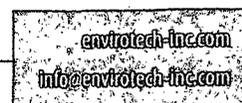
Respectfully submitted,  
**ENVIROTECH, INC.**

A handwritten signature in black ink, appearing to read "Felipe Aragon", written over a horizontal line.

Felipe Aragon, CES  
Project Manager  
[faragon@envirotech-inc.com](mailto:faragon@envirotech-inc.com)

Enclosures: *Spill Cleanup Report*

Cc: Client File Number 97057



**ENTERPRISE PRODUCTS  
SPILL CLEANUP REPORT  
PIPELINE LATERAL 3B-71  
SECTION 7, TOWNSHIP 29 NORTH, RANGE 8 WEST  
SAN JUAN COUNTY, NEW MEXICO**

**TABLE OF CONTENTS**

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**SUMMARY AND CONCLUSIONS.....2**

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              Figure 2, Site Map

Tables:      Table 1, Summary of Analytical Results

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              Appendix B, Site Photography

## **INTRODUCTION**

Envirotech, Inc. of Farmington, New Mexico, was contracted by Enterprise Products to provide spill cleanup activities for a release of liquid hydrocarbon from a pipeline located in San Juan County, New Mexico; see *Figure 1, Vicinity Map*. An unknown amount of liquid hydrocarbons was released from the pipeline lateral 3B-71, no standing puddles were found but staining was apparent on the rock face the pipeline ran down; see *Figure 2, Site Map* and *Appendix B, Site Photography*. Activities included washing the rock face, sample collection, sample analysis, documentation and reporting.

## **ACTIVITIES PERFORMED**

Envirotech, Inc. was contacted on January 2, 2013, with a request to respond to a release that occurred at the above referenced location. Upon arrival, a brief site assessment was conducted. Because distance to surface water is less than 200 feet from the release, depth to groundwater greater than 100 feet, and the well site not located within a well head protection area, the regulatory standards for the site were determined to be 100 parts per million (ppm) total petroleum hydrocarbons (TPH) and 100 ppm organic vapors, pursuant to New Mexico Oil Conservation Division (NMOCD) Guidelines for Remediation of Leaks, Spills, and Releases. The area of release was snow covered so it was determined to return to the site at a later date to complete cleanup activities.

Envirotech personnel returned to the site on March 15, 2013 to conduct cleanup and sampling activities. Site cleanup activities included spraying down the rock face with a power washer and scrubbing the rock face using Micro-Blaze and Simple Green©. Absorbing booms were placed at the bottom of the rock face in order to catch and filter runoff from cleanup activities. The affected area, downgradient of the rock face, was divided into two (2) sections, Section #1 covered the area between the rock face to 20 feet out from the rock face. Section #2 covered the area 20 feet to 40 feet beyond Section #1; see *Figure 2, Site Map*. One (1) sample was collected from each section, both samples were placed into a four (4)-ounce glass jar, capped headspace free, and transported on ice, under chain of custody, to Envirotech's Analytical Laboratory to be analyzed for TPH using USEPA Method 8015 and for total BTEX using USEPA Method 8021. Section #1 returned results below the regulatory standards for all constituents analyzed and Section #2 returned results below regulatory standards for total BTEX, but above the regulatory standard for TPH; see *Table 1, Summary of Analytical Results*.

Micro-Blaze contains nutrients and bacteria that when applied to a hydrocarbon-based contaminant, it begins breaking down the contaminants for more efficient degradation, into byproducts like carbon dioxide, water, and salts. It was determined that Envirotech would return to re-test soils at a later date to allow for microbial breakdown of the impacted area. Envirotech personnel returned to the site on April 1, 2013, to collect one (1) soil sample from Section #2. The Section #2 sample was placed into a four (4)-ounce glass jar, capped headspace free, and transported on ice, under chain of custody, to Envirotech's Analytical Laboratory to be analyzed for TPH using USEPA Method 8015. The sample returned results above the regulatory standard

for TPH; see *Table 1, Summary of Analytical Results*.

Further microbial degradation was allowed for the site, Envirotech personnel returned to the site for the third time on May 8, 2013, to collect one (1) soil sample from Section #2. The Section #2 sample was placed into a four (4)-ounce glass jar, capped headspace free, and transported on ice, under chain of custody, to Envirotech's Analytical Laboratory to be analyzed for TPH using USEPA Method 8015. The sample returned results below the regulatory standard for TPH; see *Table 1, Summary of Analytical Results*. Based on the above mentioned results, Envirotech recommends no further action in regards to this incident.

### SUMMARY AND CONCLUSIONS

Spill cleanup activities were performed for a release of liquid hydrocarbon from a pipeline located in San Juan County, New Mexico. The impacted rock face was cleaned and soils affected by the runoff were monitored for the need of further remediation. Due to analysis results and the microbial degradation, it was determined that no soils needed to be removed. Envirotech, Inc. recommends no further action in regards to this incident.

### STATEMENT OF LIMITATIONS

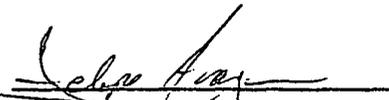
Envirotech, Inc. has completed spill cleanup activities for a release spill cleanup activities for a release of liquid hydrocarbons from a pipeline located in San Juan County, New Mexico. The work and services provided by Envirotech, Inc. were in accordance with the New Mexico Oil Conservation Division standards. All observations and conclusions provided here are based on the information and current site conditions found at the site of the incident.

The undersigned has conducted this service at the above referenced site; this work has been conducted and reported in accordance with generally accepted professional practices in geology, engineering, environmental chemistry and hydrogeology.

We appreciate the opportunity to be of service. If you have any questions or require additional information, please contact our office at (505) 632-0615.

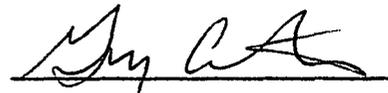
Respectfully Submitted,

**ENVIROTECH, INC.**



Felipe Aragon, CES  
Environmental Field Technician  
[faragon@envirotech-inc.com](mailto:faragon@envirotech-inc.com)

Reviewed by:

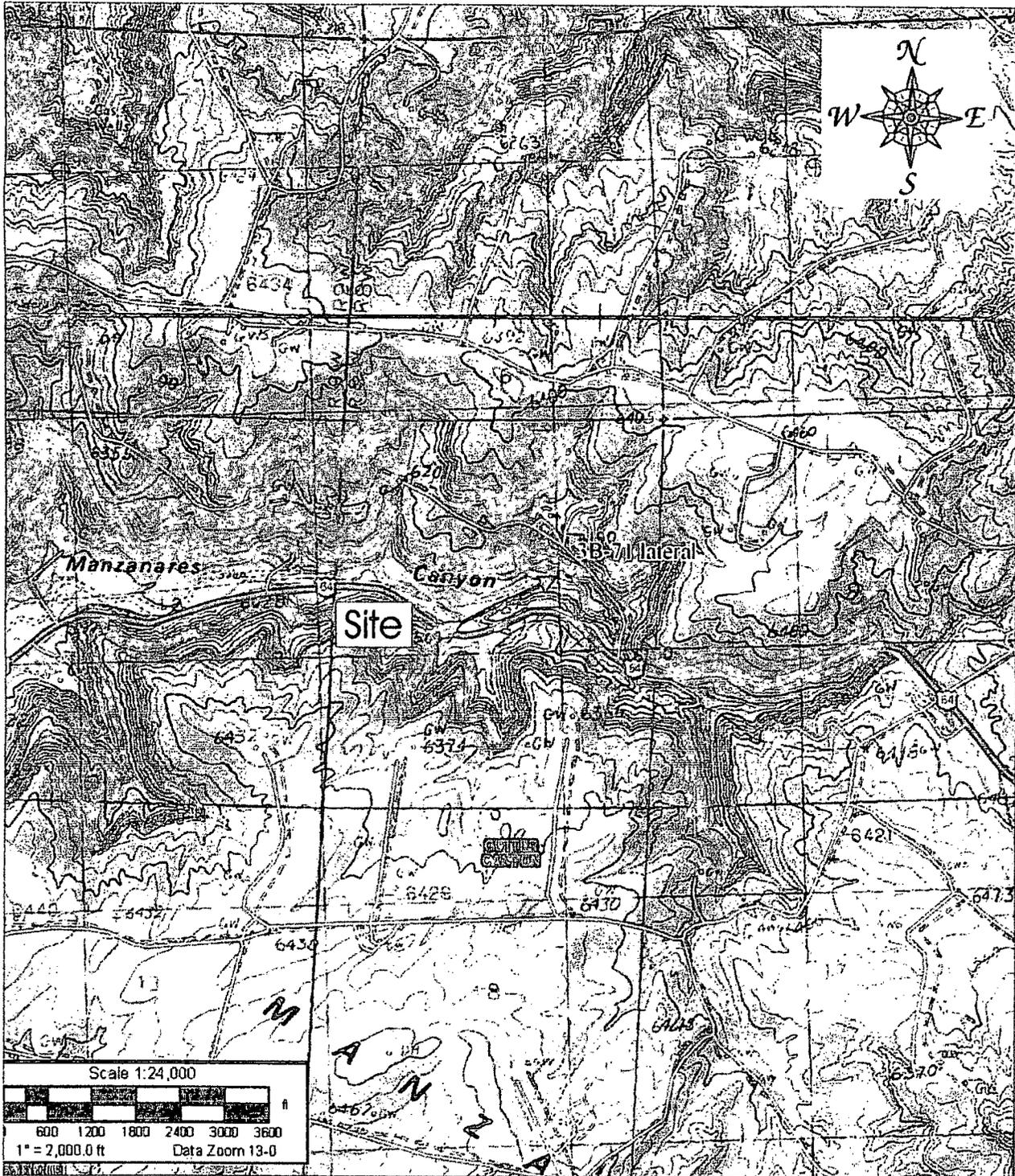


Greg Crabtree, PE  
Environmental Manager  
[gcrabtree@envirotech-inc.com](mailto:gcrabtree@envirotech-inc.com)

**FIGURES**

Figure 1, Vicinity Map

Figure 2, Site Map



Source: 7.5 Minute Bloomfield New Mexico U.S.G.S. Topographic Quadrangle Map  
 Scale: 1:24,000 1" = 2000'

<p>Enterprise Products          Pipeline Lateral 3B-71          Section 7, Township 29N, Range 8W          San Juan County, New Mexico</p>	 <p>ENVIRONMENTAL SCIENTISTS &amp; ENGINEERS</p>	<p>Vicinity Map</p>	
<p>PROJECT Number: 97057-0536    Date Drawn: 8/15/13</p>	<p>5796 U.S. HIGHWAY 64          Farmington, New Mexico 87401          505.632.0615</p>	<p>Figure #1</p>	<p>DRAWN BY:          Jen Allison</p> <p>PROJECT MANAGER:          Greg Crabtree</p>

SECTION #1 FACE OF ROCK  
TO 20 FT OUT SAMPLES  
TAKEN ON  
3/15/13

LATERAL 3B-71

SECTION #2 20 FT TO 40 FT  
OUT SAMPLES TAKEN ON  
3/15/13  
4/1/13  
5/8/13

**KEY:**

—— LATERAL 3B-71

—— SECTION #1 SAMPLE AREA

—— SECTION #2 SAMPLE AREA

**SITE MAP**  
**ENTERPRISE PRODUCTS**  
PIPELINE LATERAL 3B-71  
SEC 7 TWN 29N RNG 8W  
SAN JUAN COUNTY, NEW MEXICO

SCALE: NTS

FIGURE NO. 2

REV

PROJECT N097059-0538

REVISIONS

NO.	DATE	BY	DESCRIPTION
MAP DRWN	JKA	8/15/13	BASE DRWN

ENVIRONMENTAL SCIENTISTS & ENGINEERS  
**ENVIROTECH**

5796 U.S. HIGHWAY 64, FARMINGTON, NM 87410 505-632-0615

## **TABLES**

**Table 1, Summary of Analytical Results**

**Table 1, Summary of Analytical Results**

Enterprise Products

Pipeline Lateral 3B-71

Spill Cleanup Report

Project Number 97057-0538

Date	Sample Description	Sample Number	Method 8015 TPH (ppm)	USEPA Method 8021	
				Benzene (ppm)	BTEX (ppm)
NA	New Mexico Oil Conservation Division Standards	NA	100	10	50
3/15/2013	Section #1: Rock Face to 20' out	Section #1	6.9	ND	1.59
3/15/2013	Section #2: 20'-40' out	Section #2	<b>111</b>	ND	17.4
4/1/2013	Section #2: 20'-40' out	Section #2	<b>813</b>	NS	NS
5/8/2013	Section #2: 20'-40' out	Section #2	47.8	NS	NS

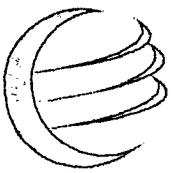
\*Values in **BOLD** above regulatory limits

\*Closure Sample

\*NS - Parameter not sampled \*ND - Parameter not detected

## **APPENDIX A**

### **Analytical Results**



## Analytical Report

### Report Summary

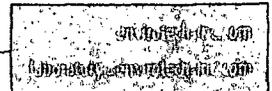
Client: Enterprise Products  
Chain Of Custody Number: 15305  
Samples Received: 3/18/2013 10:20:00AM  
Job Number: 97057-0538  
Work Order: P303057  
Project Name/Location: Spill Clean up/3B-71  
pipeline

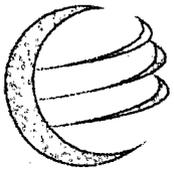
Entire Report Reviewed By:

Date: 3/19/13

Tim Cain, Laboratory Manager

The results in this report apply to the samples submitted to Envirotech's Analytical Laboratory and were analyzed in accordance with the chain of custody document supplied by you, the client, and as such are for your exclusive use only. The results in this report are based on the sample as received unless otherwise noted. Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc. If you have any questions regarding this analytical report, please don't hesitate to contact Envirotech's Laboratory Staff.





**Analytical Report for Samples**

<b>Client Sample ID</b>	<b>Lab Sample ID</b>	<b>Matrix</b>	<b>Sampled</b>	<b>Received</b>	<b>Container</b>
Section #1	P303057-01A	Soil	03/15/13	03/18/13	Glass Jar, 4 oz.
Section #2	P303057-02A	Soil	03/15/13	03/18/13	Glass Jar, 4 oz.

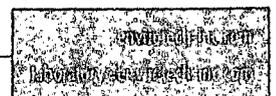
Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc.

5796 US Highway 64, Farmington, NM 87401

Ph (505) 632-0615 Fx (505) 632-1865

Three Springs • 65 Mercado Street, Suite 115, Durango, CO 81301

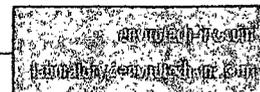
Ph (970) 259-0615 Fr (800) 362-1879



**Section #1**  
**P303057-01 (Solid)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Volatile Organics by EPA 8021</b>									
Benzene	ND	49.9	ug/L	1	1312001	18-Mar-13	18-Mar-13	EPA 8021B	
Toluene	111	49.9	ug/L	1	1312001	18-Mar-13	18-Mar-13	EPA 8021B	
Ethylbenzene	64.5	49.9	ug/L	1	1312001	18-Mar-13	18-Mar-13	EPA 8021B	
p,m-Xylene	1210	49.9	ug/L	1	1312001	18-Mar-13	18-Mar-13	EPA 8021B	
o-Xylene	198	49.9	ug/L	1	1312001	18-Mar-13	18-Mar-13	EPA 8021B	
<b>Total BTEX</b>	<b>1590</b>	<b>49.9</b>	<b>ug/L</b>	<b>1</b>	<b>1312001</b>	<b>18-Mar-13</b>	<b>18-Mar-13</b>	<b>EPA 8021B</b>	
<i>Surrogate: Bromochlorobenzene</i>		<i>136 %</i>	<i>80-120</i>		<i>1312001</i>	<i>18-Mar-13</i>	<i>18-Mar-13</i>	<i>EPA 8021B</i>	<i>SI</i>
<i>Surrogate: 1,4-Difluorobenzene</i>		<i>108 %</i>	<i>80-120</i>		<i>1312001</i>	<i>18-Mar-13</i>	<i>18-Mar-13</i>	<i>EPA 8021B</i>	
<i>Surrogate: Fluorobenzene</i>		<i>106 %</i>	<i>80-120</i>		<i>1312001</i>	<i>18-Mar-13</i>	<i>18-Mar-13</i>	<i>EPA 8021B</i>	
<b>Nonhalogenated Organics by 8015</b>									
Gasoline Range Organics (C6-C10)	ND	5.0	mg/kg	1	1312002	18-Mar-13	18-Mar-13	EPA 8015D	
Diesel Range Organics (C10-C28)	6.9	5.0	mg/kg	1	1312002	18-Mar-13	18-Mar-13	EPA 8015D	
GRO and DRO Combined Fractions	6.9	5.0	mg/kg	1	1312002	18-Mar-13	18-Mar-13	EPA 8015D	

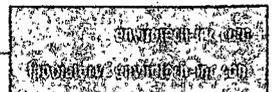
Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc.



**Section #2**  
**P303057-02 (Solid)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Volatile Organics by EPA 8021</b>									
Benzene	ND	499	ug/L	10	1312001	18-Mar-13	18-Mar-13	EPA 8021B	
Toluene	957	499	ug/L	10	1312001	18-Mar-13	18-Mar-13	EPA 8021B	
Ethylbenzene	701	499	ug/L	10	1312001	18-Mar-13	18-Mar-13	EPA 8021B	
p,m-Xylene	12700	499	ug/L	10	1312001	18-Mar-13	18-Mar-13	EPA 8021B	
o-Xylene	3060	499	ug/L	10	1312001	18-Mar-13	18-Mar-13	EPA 8021B	
<b>Total BTEX</b>	<b>17400</b>	<b>499</b>	<b>ug/L</b>	<b>10</b>	<b>1312001</b>	<b>18-Mar-13</b>	<b>18-Mar-13</b>	<b>EPA 8021B</b>	
<i>Surrogate: Bromochlorobenzene</i>		<i>187 %</i>	<i>80-120</i>		<i>1312001</i>	<i>18-Mar-13</i>	<i>18-Mar-13</i>	<i>EPA 8021B</i>	<i>SI</i>
<i>Surrogate: 1,4-Difluorobenzene</i>		<i>100 %</i>	<i>80-120</i>		<i>1312001</i>	<i>18-Mar-13</i>	<i>18-Mar-13</i>	<i>EPA 8021B</i>	
<i>Surrogate: Fluorobenzene</i>		<i>98.7 %</i>	<i>80-120</i>		<i>1312001</i>	<i>18-Mar-13</i>	<i>18-Mar-13</i>	<i>EPA 8021B</i>	
<b>Nonhalogenated Organics by 8015</b>									
Gasoline Range Organics (C6-C10)	32.1	5.0	mg/kg	1	1312002	18-Mar-13	18-Mar-13	EPA 8015D	
Diesel Range Organics (C10-C28)	78.5	5.0	mg/kg	1	1312002	18-Mar-13	18-Mar-13	EPA 8015D	
GRO and DRO Combined Fractions	111	5.0	mg/kg	1	1312002	18-Mar-13	18-Mar-13	EPA 8015D	

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**Volatile Organics by EPA 8021 - Quality Control**

**Envirotech Analytical Laboratory**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 1312001 - Purge and Trap EPA 5030A**

<b>Blank (1312001-BLK1)</b>			Prepared & Analyzed: 18-Mar-13							
Benzene	ND	50.0	ug/L							
Toluene	ND	50.0	"							
Ethylbenzene	ND	50.0	"							
p,m-Xylene	ND	50.0	"							
o-Xylene	ND	50.0	"							
Total BTEX	ND	50.0	"							
<i>Surrogate: Bromochlorobenzene</i>	50.6		"	50.0		101	80-120			
<i>Surrogate: 1,4-Difluorobenzene</i>	48.7		"	50.0		97.5	80-120			
<i>Surrogate: Fluorobenzene</i>	50.5		"	50.0		101	80-120			

<b>Duplicate (1312001-DUP1)</b>			Source: P303056-01		Prepared & Analyzed: 18-Mar-13					
Benzene	ND	50.0	ug/L		ND					30
Toluene	ND	50.0	"		ND					30
Ethylbenzene	ND	50.0	"		ND					30
p,m-Xylene	ND	50.0	"		ND					30
o-Xylene	ND	50.0	"		ND					30
<i>Surrogate: Bromochlorobenzene</i>	51.2		"	50.0		102	80-120			
<i>Surrogate: 1,4-Difluorobenzene</i>	48.2		"	50.0		96.5	80-120			
<i>Surrogate: Fluorobenzene</i>	49.8		"	50.0		99.6	80-120			

<b>Matrix Spike (1312001-MS1)</b>			Source: P303056-01		Prepared & Analyzed: 18-Mar-13					
Benzene	15.8		ug/L	50.0	0.20	31.2	39-150			SP1
Toluene	50.8		"	50.0	0.52	101	46-148			
Ethylbenzene	50.6		"	50.0	0.10	101	32-160			
p,m-Xylene	101		"	100	0.70	100	46-148			
o-Xylene	50.7		"	50.0	0.37	101	46-148			
<i>Surrogate: Bromochlorobenzene</i>	51.6		"	50.0		103	80-120			
<i>Surrogate: 1,4-Difluorobenzene</i>	48.6		"	50.0		97.2	80-120			
<i>Surrogate: Fluorobenzene</i>	48.6		"	50.0		97.2	80-120			

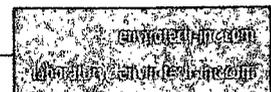
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**Nonhalogenated Organics by 8015 - Quality Control**

**Envirotech Analytical Laboratory**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 1312002 - GRO/DRO Extraction EPA 3550C**

**Blank (1312002-BLK1)** Prepared & Analyzed: 18-Mar-13

Gasoline Range Organics (C6-C10)	ND	5.0	mg/kg							
Diesel Range Organics (C10-C28)	ND	5.0	"							
GRO and DRO Combined Fractions	ND	5.0	"							

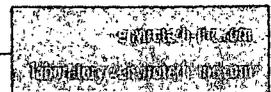
**Duplicate (1312002-DUP1)** Prepared & Analyzed: 18-Mar-13  
**Source: P303056-01**

Gasoline Range Organics (C6-C10)	ND	5.0	mg/kg		ND				30	
Diesel Range Organics (C10-C28)	ND	5.0	"		ND				30	

**Matrix Spike (1312002-MS1)** Prepared & Analyzed: 18-Mar-13  
**Source: P303056-01**

Gasoline Range Organics (C6-C10)	207		mg/L	250	0.5	82.7	75-125			
Diesel Range Organics (C10-C28)	208		"	250	4.6	81.2	75-125			

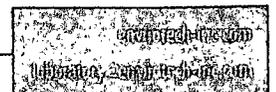
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**Notes and Definitions**

SP1	The spike recovery for this QC sample is outside of control limits.
S1	Surrogate recovery was above acceptable limits.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

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Rush

# CHAIN OF CUSTODY RECORD

15305

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Client: <i>Enterprise</i>	Project Name / Location: <i>Sp. 11 Cleanup / 33-71 Pipeline</i>	ANALYSIS / PARAMETERS	
Email results to: <i>F. Aragon</i>	Sampler Name: <i>F. Aragon</i>	TPH (Method 8015)	BTEX (Method 8021)
Client Phone No.:	Client No.: <i>97057-0538</i>		

Sample No./ Identification	Sample Date	Sample Time	Lab No.	No./Volume of Containers	Preservative			TPH (Method 8015)	BTEX (Method 8021)	VOC (Method 8260)	FCRA 8 Metals	Cation / Anion	RCI	TCLP with H/P	CO Table 910-1	TPH (418.1)	CHLORIDE	Sample Cool	Sample Intact
					HgCl <sub>2</sub>	HCl	cool												
<i>Section #1</i>	<i>3-15-13</i>	<i>14:20</i>	<i>P303057-01</i>	<i>1-402</i>			<i>X</i>	<i>X</i>										<i>X</i>	<i>X</i>
<i>Section #2</i>	<i>3-15-13</i>	<i>14:30</i>	<i>P303057-02</i>	<i>1-402</i>			<i>Y</i>	<i>X</i>											

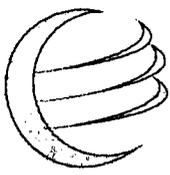
Relinquished by: (Signature) <i>[Signature]</i>	Date <i>3/18/13</i>	Time <i>10:20</i>	Received by: (Signature) <i>[Signature]</i>	Date <i>3/18/13</i>	Time <i>10:20</i>
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Relinquished by: (Signature) <i>[Signature]</i>	Date	Time	Received by: (Signature)	Date	Time
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Sample Matrix  
 Soil  Solid  Sludge  Aqueous  Other

Sample(s) dropped off after hours to secure drop off area.





## Analytical Report

### Report Summary

Client: Enterprise Products

Chain Of Custody Number: 15355

Samples Received: 4/2/2013 10:50:00AM

Job Number: 97057-0538

Work Order: P304005

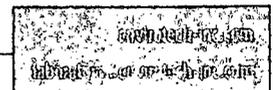
Project Name/Location: Spill Cleanup / 3B-71  
Lateral

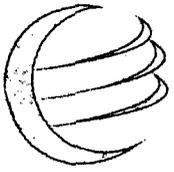
Entire Report Reviewed By:

Date: 4/3/13

\_\_\_\_\_  
Tim Cain, Laboratory Manager

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Enterprise Products 614 Reilly Ave Farmington NM, 87401	Project Name: Spill Cleanup / 3B-71 Lateral Project Number: 97057-0538 Project Manager: Felipe Aragon	Reported: 03-Apr-13 10:41
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**Analytical Report for Samples**

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
Section 2	P304005-01A	Soil	04/01/13	04/02/13	Glass Jar, 4 oz.

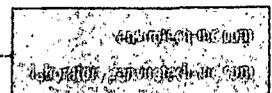
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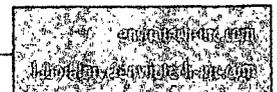


Enterprise Products 614 Reilly Ave Farmington NM, 87401	Project Name: Spill Cleanup / 3B-71 Lateral Project Number: 97057-0538 Project Manager: Felipe Aragon	Reported: 03-Apr-13 10:41
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**Section 2**  
**P304005-01 (Solid)**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
<b>Nonhalogenated Organics by 8015</b>										
Gasoline Range Organics (C6-C10)	88.6	5.00		mg/kg	1	1314018	02-Apr-13	02-Apr-13	EPA 8015D	
Diesel Range Organics (C10-C28)	725	5.00		mg/kg	1	1314018	02-Apr-13	02-Apr-13	EPA 8015D	
GRO and DRO Combined Fractions	813	5.00		mg/kg	1	1314018	02-Apr-13	02-Apr-13	EPA 8015D	

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Enterprise Products 614 Reilly Ave Farmington NM, 87401	Project Name: Spill Cleanup / 3B-71 Lateral Project Number: 97057-0538 Project Manager: Felipe Aragon	Reported: 03-Apr-13 10:41
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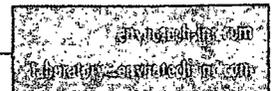
**Nonhalogenated Organics by 8015 - Quality Control**  
**Envirotech Analytical Laboratory**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 1314018 - GRO/DRO Extraction EPA 3550C**

<b>Blank (1314018-BLK1)</b>			Prepared & Analyzed: 02-Apr-13							
Gasoline Range Organics (C6-C10)	ND	5.00	mg/kg							
Diesel Range Organics (C10-C28)	ND	5.00	"							
GRO and DRO Combined Fractions	ND	5.00	"							
<b>Duplicate (1314018-DUP1)</b>			Source: P304005-01		Prepared & Analyzed: 02-Apr-13					
Gasoline Range Organics (C6-C10)	82.6	5.00	mg/kg		88.6			7.02	30	
Diesel Range Organics (C10-C28)	708	5.00	"		725			2.36	30	
<b>Matrix Spike (1314018-MS1)</b>			Source: P304005-01		Prepared & Analyzed: 02-Apr-13					
Gasoline Range Organics (C6-C10)	359	5.26	mg/kg	263	88.6	103	75-125			
Diesel Range Organics (C10-C28)	1010	5.26	"	263	725	107	75-125			

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Enterprise Products  
614 Reilly Ave  
Farmington NM, 87401

Project Name: Spill Cleanup / 3B-71 Lateral  
Project Number: 97057-0538  
Project Manager: Felipe Aragon

Reported:  
03-Apr-13 10:41

#### Notes and Definitions

DET Analyte DETECTED  
ND Analyte NOT DETECTED at or above the reporting limit  
NR Not Reported  
dry Sample results reported on a dry weight basis  
RPD Relative Percent Difference

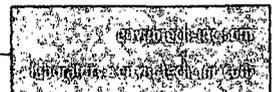
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Rush

# CHAIN OF CUSTODY RECORD

15355

Page 6 of 6

Client: <i>Enterpro. sr</i>	Project Name / Location: <i>Sr. II Cleanup / 35-71 Lotrial</i>	ANALYSIS / PARAMETERS											
Email results to: <i>F. Aragon</i>	Sampler Name: <i>F. Aragon</i>	TPH (Method 8015)	BTEX (Method 8021)	VOC (Method 8260)	RCRA 8 Metals	Cation / Anion	RCI	TCLP with H/P	CO Table 910-1	TPH (418.1)	CHLORIDE	Sample Cool	Sample Intact
Client Phone No.:	Client No.:												

Sample No./ Identification	Sample Date	Sample Time	Lab No.	No./Volume of Containers	Preservative			TPH (Method 8015)	BTEX (Method 8021)	VOC (Method 8260)	RCRA 8 Metals	Cation / Anion	RCI	TCLP with H/P	CO Table 910-1	TPH (418.1)	CHLORIDE	Sample Cool	Sample Intact
					HgCl <sub>2</sub>	HCl	COI												
<i>Section 2</i>	<i>4-1-13</i>	<i>1430</i>	<i>9304005-01</i>	<i>1-402</i>			<i>XX</i>												<i>XX</i>

Relinquished by: (Signature) <i>[Signature]</i>	Date <i>4-2-13</i>	Time <i>10:50</i>	Received by: (Signature) <i>[Signature]</i>	Date <i>4/2/13</i>	Time <i>10:50</i>
Relinquished by: (Signature) <i>[Signature]</i>			Received by: (Signature)		
Sample Matrix Soil <input checked="" type="checkbox"/> Solid <input type="checkbox"/> Sludge <input type="checkbox"/> Aqueous <input type="checkbox"/> Other <input type="checkbox"/>					

Sample(s) dropped off after hours to secure drop off area.



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## Analytical Report

### Report Summary

Client: Enterprise Products  
Chain Of Custody Number: 15511  
Samples Received: 5/8/2013 4:10:00PM  
Job Number: 97057-0538  
Work Order: P305023  
Project Name/Location: Spill Cleanup / 3B-71  
pipeline

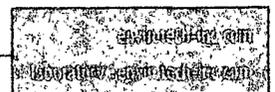
Entire Report Reviewed By:



Date: 5/10/13

Tim Cain, Laboratory Manager

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Analytical Laboratory

Enterprise Products 614 Reilly Ave Farmington NM, 87401	Project Name: Spill Cleanup / 3B-71 pipeline Project Number: 97057-0538 Project Manager: Felipe Aragon	Reported: 10-May-13 11:36
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## Analytical Report for Samples

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
Section 2	P305023-01A	Soil	05/08/13	05/08/13	Glass Jar, 4 oz.

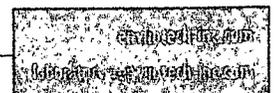
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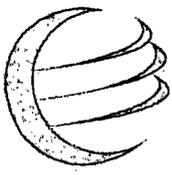
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Enterprise Products 614 Reilly Ave Farmington NM, 87401	Project Name: Spill Cleanup / 3B-71 pipeline Project Number: 97057-0538 Project Manager: Felipe Aragon	Reported: 10-May-13 11:36
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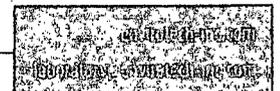
**Section 2**  
**P305023-01 (Solid)**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						

**Nonhalogenated Organics by 8015**

Gasoline Range Organics (C6-C10)	ND	4.99	mg/kg	1	1319019	09-May-13	09-May-13	EPA 8015D	
Diesel Range Organics (C10-C28)	47.8	4.99	mg/kg	1	1319019	09-May-13	09-May-13	EPA 8015D	
GRO and DRO Combined Fractions	47.8	4.99	mg/kg	1	1319019	09-May-13	09-May-13	EPA 8015D	

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Enterprise Products 614 Reilly Ave Farmington NM, 87401	Project Name: Spill Cleanup / 3B-71 pipeline Project Number: 97057-0538 Project Manager: Felipe Aragon	Reported: 10-May-13 11:36
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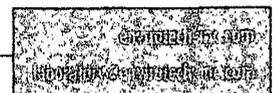
**Nonhalogenated Organics by 8015 - Quality Control**  
**Envirotech Analytical Laboratory**

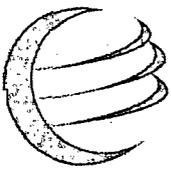
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 1319019 - GRO/DRO Extraction EPA 3550C**

<b>Blank (1319019-BLK1)</b>		Prepared & Analyzed: 09-May-13								
Gasoline Range Organics (C6-C10)	ND	5.00	mg/kg							
Diesel Range Organics (C10-C28)	ND	5.00	"							
GRO and DRO Combined Fractions	ND	5.00	"							
<b>Duplicate (1319019-DUP1)</b>		Source: P305023-01		Prepared & Analyzed: 09-May-13						
Gasoline Range Organics (C6-C10)	ND	5.00	mg/kg		ND				30	
Diesel Range Organics (C10-C28)	17.9	5.00	"		47.8			91.1	30	DJ
<b>Matrix Spike (1319019-MS1)</b>		Source: P305023-01		Prepared & Analyzed: 09-May-13						
Gasoline Range Organics (C6-C10)	267	5.26	mg/kg	263	ND	101	75-125			
Diesel Range Organics (C10-C28)	309	5.26	"	263	47.8	99.4	75-125			

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Analytical Laboratory

Enterprise Products  
614 Reilly Ave  
Farmington NM, 87401

Project Name: Spill Cleanup / 3B-71 pipeline  
Project Number: 97057-0538  
Project Manager: Felipe Aragon

Reported:  
10-May-13 11:36

### Notes and Definitions

- D1 Duplicates or Matrix Spike Duplicates Relative Percent Difference exceeds 30%.
- DET Analyte DETECTED
- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- dry Sample results reported on a dry weight basis
- RPD Relative Percent Difference

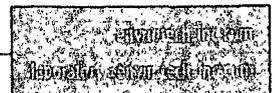
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# CHAIN OF CUSTODY RECORD

15511

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Client: <i>Enterprise</i>	Project Name / Location: <i>Spill Cleanup 133-71 S. rd line</i>	ANALYSIS / PARAMETERS											
Email results to: <i>F. Aragon</i>	Sampler Name: <i>F. Aragon</i>	TPH (Method 8015)	BTEX (Method 8021)	VOC (Method 8260)	RCRA 8 Metals	Cation / Anion	RCI	TCLP with H/P	CO Table 910-1	TPH (418.1)	CHLORIDE	Sample Cool	Sample Intact
Client Phone No.:	Client No.:												

Sample No./ Identification	Sample Date	Sample Time	Lab No.	No./Volume of Containers	Preservative			TPH (Method 8015)	BTEX (Method 8021)	VOC (Method 8260)	RCRA 8 Metals	Cation / Anion	RCI	TCLP with H/P	CO Table 910-1	TPH (418.1)	CHLORIDE	Sample Cool	Sample Intact
					HNO <sub>3</sub>	HCl	CO <sub>2</sub>												
<i>Section 2</i>	<i>5-8-13</i>	<i>14:10</i>	<i>P305023-01</i>	<i>1-402</i>			<i>XX</i>											<i>YY</i>	<i>YY</i>

Relinquished by: (Signature) <i>[Signature]</i>	Date <i>5-8-13</i>	Time <i>16:10</i>	Received by: (Signature) <i>[Signature]</i>	Date <i>5/8/13</i>	Time <i>16:10</i>
Relinquished by: (Signature) <i>[Signature]</i>			Received by: (Signature)		
Sample Matrix Soil <input checked="" type="checkbox"/> Solid <input type="checkbox"/> Sludge <input type="checkbox"/> Aqueous <input type="checkbox"/> Other <input type="checkbox"/>					

Sample(s) dropped off after hours to secure drop off area.

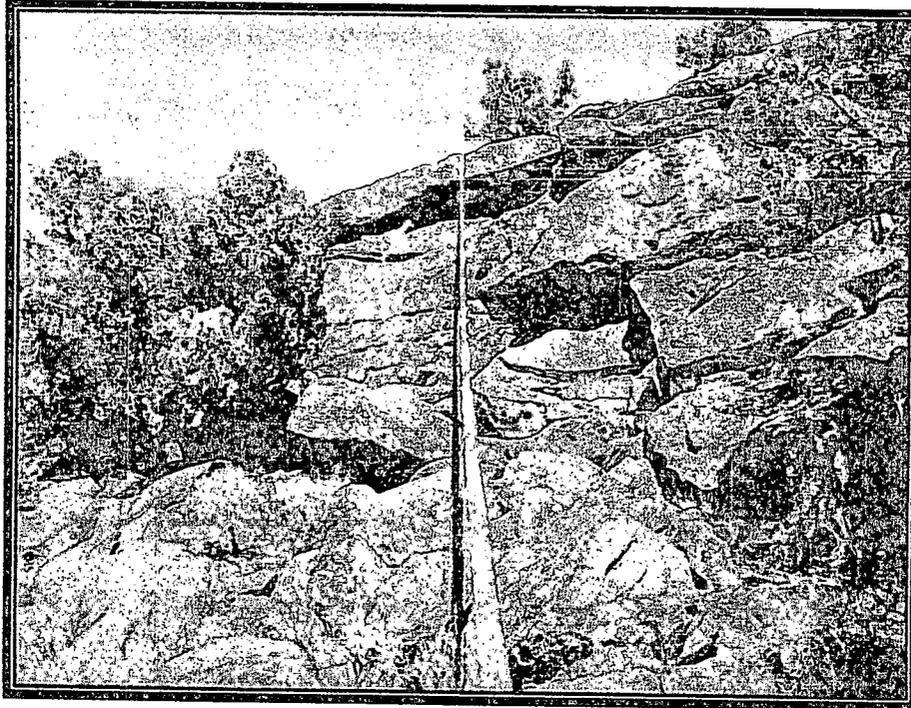


5795 US Highway 64 • Farmington, NM 87401 • 505-632-0615 • Three Springs • 65 Mercado Street, Suite 115, Durango, CO 81301 • laboratory@envirotech-inc.com

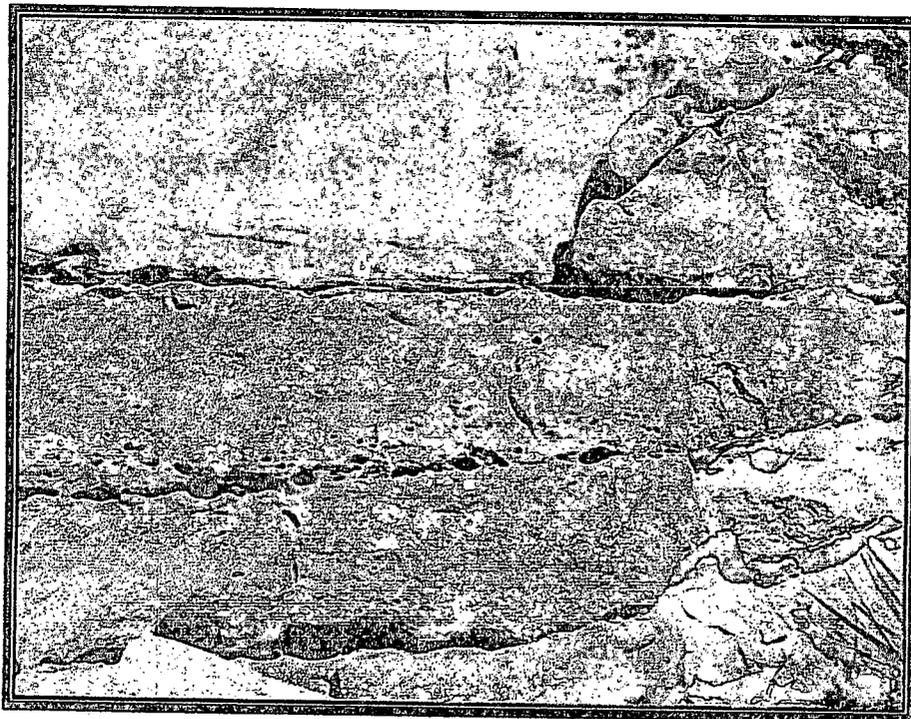
**APPENDIX B**

Site Photography

**SITE PHOTOGRAPHY  
ENTERPRISE PRODUCTS  
SPILL CLEANUP REPORT  
PIPELINE LATERAL 3B-71  
PROJECT NUMBER 97057-0538  
MARCH 2013**

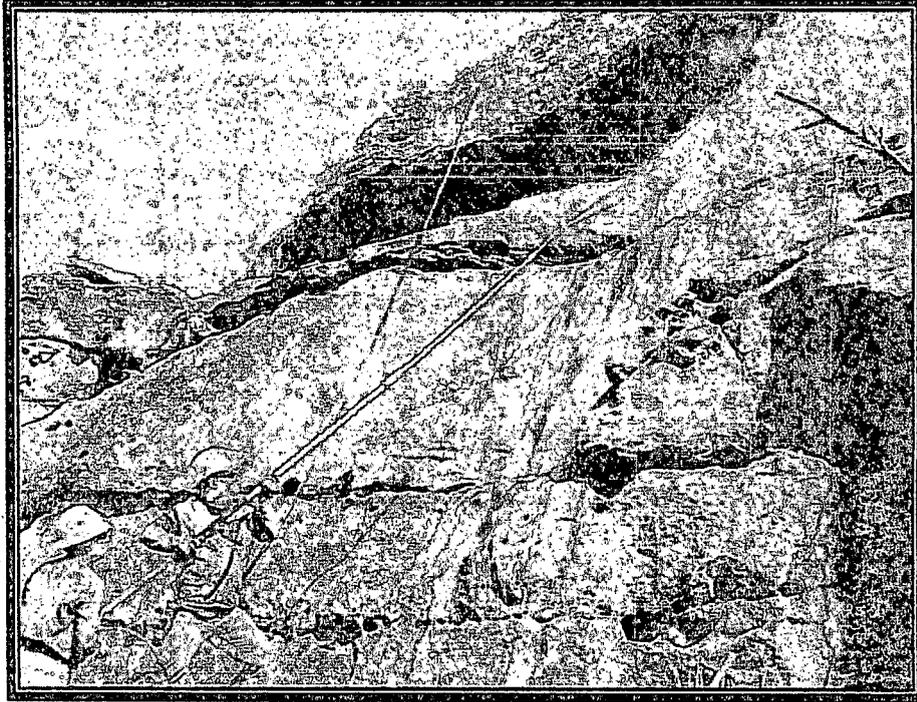


**Picture 1: Release Path on Rock Face (View 1)**



**Picture 2: Release Path on Rock Face (View 2)**

**SITE PHOTOGRAPHY  
ENTERPRISE PRODUCTS  
SPILL CLEANUP REPORT  
PIPELINE LATERAL 3B-71  
PROJECT NUMBER 97057-0538  
MARCH 2013**



**Picture 3: Rock Face Cleanup Activities**



**Picture 4: Booms at the Base of the Rock Face**

**SITE PHOTOGRAPHY  
ENTERPRISE PRODUCTS  
SPILL CLEANUP REPORT  
PIPELINE LATERAL 3B-71  
PROJECT NUMBER 97057-0538  
MARCH 2013**



Picture 5: Rock Face after Cleanup Activities (View 1)



Picture 6: Rock Face after Cleanup Activities (View 2)

District I  
1625 N. French Dr., Hobbs, NM 88240  
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District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources

Form C-141  
Revised August 8, 2011

Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Submit 1 Copy to appropriate District Office in  
accordance with 19.15.29 NMAC.

**Release Notification and Corrective Action**

**OPERATOR**

Initial Report  Final Report

Name of Company Enterprise Field Services	Contact: Aaron Dailey
Address 614 Reilly Ave., Farmington, NM 87401	Telephone No. 505-599-2286
Facility Name Lateral 6B-10 pipeline segment (Gallegos 203 gathering line)	Facility Type: Natural gas gathering line

Surface Owner: BLM	Mineral Owner BLM	API No.
--------------------	-------------------	---------

**LOCATION OF RELEASE—two pipe leaks close together**

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
O	13	28N	12W					
B	24	28N	12W					San Juan

**Two leaks: Latitude** \_\_1) N 36.65657; 2) N36.65390 **Longitude** \_\_1) W 108.05731; 2) W 108.05927\_\_

**NATURE OF RELEASE**

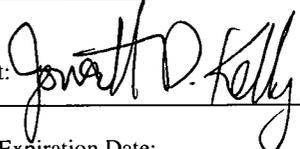
Type of Release: Natural Gas Condensate, Produced Water	Volume of Release Unknown	Volume Recovered: TBD (Dig and Haul Scheduled)
Source of Release: Pipeline	Date and Hour of Occurrence: Unknown	Date and Hour of Discovery Pipe leaks discovered and isolated 8.13.2013 @ 15:00 hours Environmental delineation completed 8.21.2013 @ 09:00 hours
Was Immediate Notice Given? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom?	
By Whom? Aaron Dailey	Date and Hour	RCVD AUG 26 '13
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse. OIL CONS. DIV. DIST. 3	

If a Watercourse was Impacted, Describe Fully.\*

Describe Cause of Problem and Remedial Action Taken.\* Two pipe leaks were discovered in this segment of well tie pipeline during a routine pipeline patrol. Line was isolated and LOTO applied during discovery.

Describe Area Affected and Cleanup Action Taken.\* Third party environmental contractor conducted delineation of pipeline release areas on to determine potential impact on soils surrounding pipeline. It is estimated that as much as 85 yards of contaminated soil will have to be remediated from the Northernmost pipe leak location and that as much as 420 yards of contaminated soil will have to be removed from the Southernmost leak location. Dig and haul to OCD permitted landfarm is being coordinated at this time.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: 		<b>OIL CONSERVATION DIVISION</b>	
Printed Name: Matt Marra		Approved by Environmental Specialist: 	
Title: Sr. Director, Environmental		Approval Date: 9/11/2013	Expiration Date:
E-mail Address: memarra@eprod.com		Conditions of Approval:	
Date: 8-22-2013 Phone: 713-381-6684		Attached <input type="checkbox"/>	

\* Attach Additional Sheets If Necessary

nJK1325450693

①

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
811 S. First St., Artesia, NM 88210  
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1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources

Form C-141  
Revised August 8, 2011

Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

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accordance with 19.15.29 NMAC.

**Release Notification and Corrective Action**

**OPERATOR**

Initial Report  Final Report

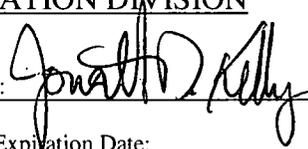
Name of Company Enterprise Field Services, LLC	Contact Aaron Dailey
Address 614 Reilly Avenue, Farmington NM 87401	Telephone No. (505)599-2286
Facility Name Lateral 2A-9 Natural Gas Gathering Line	Facility Type Natural Gas Gathering line
Surface Owner BLM	Mineral Owner BLM
API No.	

**LOCATION OF RELEASE**

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
G	13	27N	10W					San Juan

Latitude\_N 36.57857 \_ Longitude\_W -107.84631 \_

**NATURE OF RELEASE**

Type of Release Natural gas Condensate and Water	Volume of Release Unknown	Volume Recovered TBD
Source of Release Natural Gas Pipeline	Date and Hour of Occurrence Unknown	Date and Hour of Discovery 8/14/2013 @ 11:00 hours gas release identified 8/20/2013 @ 15:14 hours environmental contractor notified Enterprise Field Environmental of significant soil impacts.
Was Immediate Notice Given? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom?	
By Whom?	Date and Hour	RCVD AUG 26 '13
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse. OIL COND. DIV. DIST. 3	
If a Watercourse was Impacted, Describe Fully.*		
Describe Cause of Problem and Remedial Action Taken.* Pipeline leak location discovered by contractor working for Enterprise on line patrol. Line was isolated immediately after discovery. Repairs are being scheduled at this time.		
Describe Area Affected and Cleanup Action Taken.* Third party environmental contractor was dispatched to delineate and determine environmental impact of location. It is estimated that approximately 150 yards of contaminated soil will have to be removed and hauled to an OCD permitted landfarm. A "final" c-141 will be submitted once corrective actions and report have been completed.		
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.		
Signature: 	<b>OIL CONSERVATION DIVISION</b>	
Printed Name: Matt Marra	Approved by Environmental Specialist: 	
Title: Sr. Director, Environmental	Approval Date: 9/11/2013	Expiration Date:
E-mail Address: memarra@eprod.com	Conditions of Approval:	
Date: 8-22-2013 Phone: (713)381-6684	Attached <input type="checkbox"/>	

\* Attach Additional Sheets If Necessary

nJK 1325451527  
1371

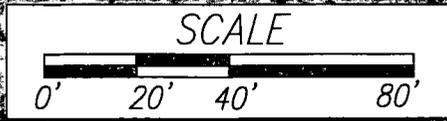
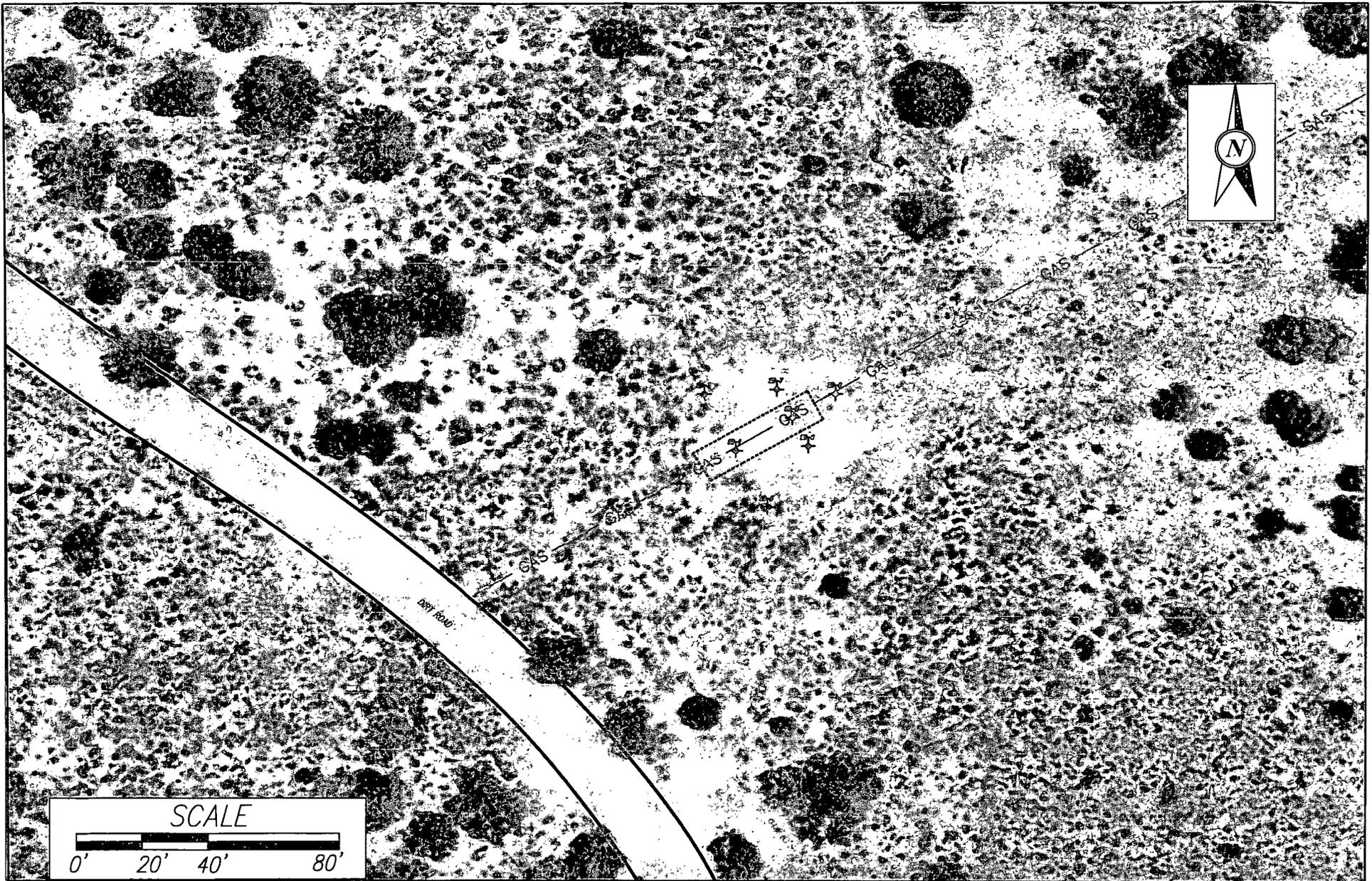
(4)

Enterprise Products  
 Table 1: Summary of Field Screening Results  
 (PPM)

Lateral 2A-9 Western Pipeline Release  
 8/20/2013

FIELD SCREENING RESULTS SUMMARY					
Date	Time	Field Screening Reference	Sample Depth (Feet BGS)	PID Results	Comments
8/19/2013	13:30	SB-1	1	311.0	Heavy Staining
8/19/2013	13:31	SB-1	2	214.0	Heavy Staining
8/19/2013	13:32	SB-1	3	105.0	Heavy Staining
8/19/2013	13:33	SB-1	4	97.0	Heavy Staining
8/19/2013	13:34	SB-1	5	212.0	Heavy Staining
8/19/2013	13:45	SB-2	1	213.0	Heavy Staining
8/19/2013	13:46	SB-2	2	253.0	Heavy Staining
8/19/2013	13:47	SB-2	3	169.0	Heavy Staining
8/19/2013	13:48	SB-2	4	383.0	Heavy Staining
8/19/2013	13:49	SB-2	5	543.0	Heavy Staining
8/19/2013	15:08	SB-2	6	963.0	Heavy Staining
8/19/2013	15:09	SB-2	7	1175.0	Heavy Staining
8/19/2013	15:10	SB-2	8	584.0	Heavy Staining
8/19/2013	15:11	SB-2	9	907.0	Heavy Staining
8/19/2013	15:12	SB-2	10	353.0	Heavy Staining
8/19/2013	13:56	SB-3	1	75.2	
8/19/2013	13:57	SB-3	2	31.0	
8/19/2013	13:58	SB-3	3	44.0	
8/19/2013	13:59	SB-3	4	34.0	
8/19/2013	14:00	SB-3	5	25.0	
8/19/2013	14:07	SB-4	1	76.0	
8/19/2013	14:08	SB-4	2	27.0	
8/19/2013	14:09	SB-4	3	33.0	
8/19/2013	14:10	SB-4	4	17.4	
8/19/2013	14:11	SB-4	5	14.8	
8/19/2013	14:26	SB-5	1	23.0	
8/19/2013	1:27	SB-5	2	21.0	
8/19/2013	14:28	SB-5	3	26.0	
8/19/2013	14:29	SB-5	4	27.0	
8/19/2013	14:30	SB-5	5	11.0	
8/19/2013	13:36	SB-6	1	47.0	
8/19/2013	14:37	SB-6	2	29.0	
8/19/2013	14:38	SB-6	3	34.0	
8/19/2013	14:39	SB-6	4	44.0	
8/19/2013	14:40	SB-6	5	36.0	
8/19/2013	14:51	SB-7	1	32.0	
8/19/2013	14:52	SB-7	2	21.0	
8/19/2013	14:53	SB-7	3	17.0	
8/19/2013	14:54	SB-7	4	16.0	
8/19/2013	14:55	SB-7	5	13.0	
8/19/2013	14:56	SB-8	1	10.0	
8/19/2013	14:57	SB-8	2	20.0	
8/19/2013	14:58	SB-8	3	24.0	
8/19/2013	14:59	SB-8	4	22.0	
8/19/2013	15:00	SB-8	5	14.0	





  
**SMA**  
 Engineering  
 Environmental  
 Surveying  
 2101 SAN JUAN BLVD  
 FARMINGTON, NM 87401  
 FAX (505) 327-1498  
 PH. (505) 325-5667

APPROVED: RSA	DATE: 08/20/13
DRAWN BY: TLONG	DATE: 08/20/13
REVISIONS BY:	DATE:
PROJECT # 5122104	FIGURE: 1

SITE LOCATION MAP  
 LATERAL 2A-9 WESTERN RELEASE  
 SW 1/4 NE 1/4 SECTION 13 T27N R10W  
 SAN JUAN COUNTY, NEW MEXICO

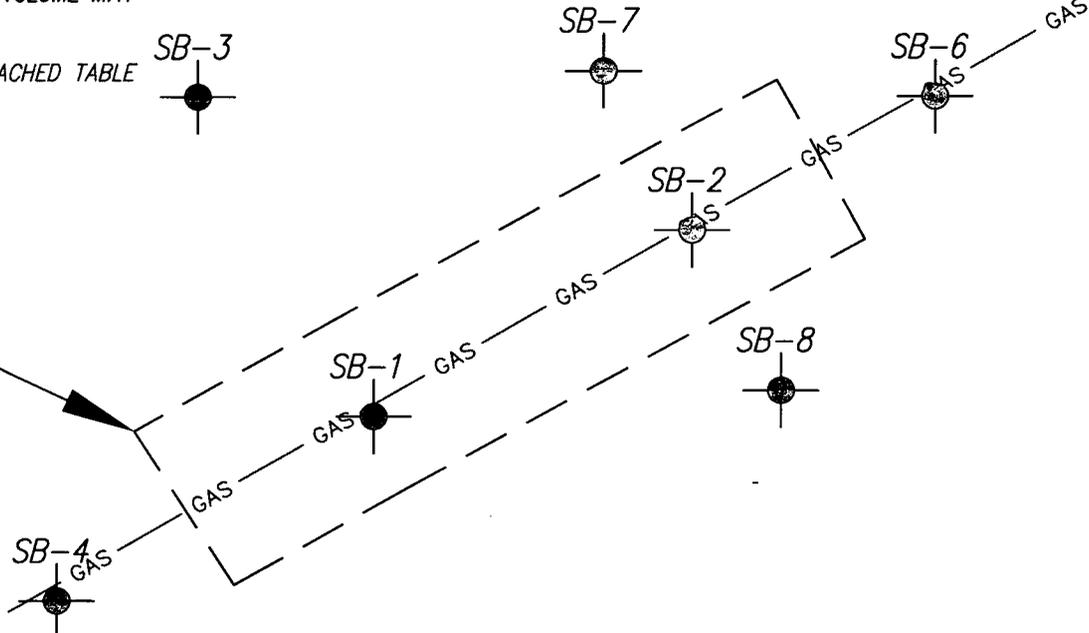
NOTES: NEW MEXICO OIL CONSERVATION DIVISION (NMOCD) SITE RANKING = 30  
 WHERE GROUNDWATER IS LESS 50 FEET BGS AND SURFACE WATER IS LESS  
 THAN 1000 HORIZONTAL FEET AWAY. REMEDIATION STANDARD IN PPM = 5  
 BENZENE, 50 TOTAL BTEX AND 100 TOTAL PETROLEUM HYDROCARBONS.

PROPOSED EXCAVATION = 40' LONG X 10' WIDE X 10' DEEP OR TO  
 BEDROCK = APPROXIMATELY 148 CUBIC YARDS FOR DISPOSAL TO A NMOCD  
 PERMITTED LANDFARM

\*\* PROPOSED EXCAVATION DIMENSIONS AND VOLUME BASED ON FIELD SOIL  
 BORING DATA. PROPOSED EXCAVATION DIMENSIONS AND VOLUME MAY  
 CHANGE GIVEN ACTUAL FIELD CONDITIONS.

\*\*\* FIELD SCREENING RESULTS ARE INCLUDED IN THE ATTACHED TABLE

PROPOSED EXCAVATION  
 40' LONG X 10' WIDE X 10' DEEP



LEGEND:

SB-2  
 - SOIL BORING LOCATION

 - PROPOSED EXCAVATION



2101 SAN JUAN BLVD  
 FARMINGTON, NM 87401

FAX (505) 327-1496  
 PH. (505) 325-5867

APPROVED: RSA

DATE: 08/20/13

DRAWN BY: TLONG

DATE: 08/20/13

REVISIONS BY:

DATE:

PROJECT # 5122104

FIGURE: 2

SITE MAP- PROPOSED EXCAVATION  
 MAP

LATERAL 2A-9 WESTERN RELEASE  
 SW 1/4 NE 1/4 SECTION 13 T27N R10W  
 SAN JUAN COUNTY, NEW MEXICO

District I  
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State of New Mexico  
Energy Minerals and Natural Resources

Form C-141  
Revised August 8, 2011

Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Submit 1 Copy to appropriate District Office in  
accordance with 19.15.29 NMAC.

**Release Notification and Corrective Action**

**OPERATOR**

Initial Report  Final Report

Name of Company Enterprise Field Services, LLC	Contact Thomas Long
Address 614 Reilly Avenue, Farmington NM 87401	Telephone No. (505)599-2286
Facility Name Cedar Hill Compressor Station	Facility Type Natural Gas Compressor Station
Surface Owner Private	Mineral Owner Private
API No.	

**LOCATION OF RELEASE**

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
N	29	32N	10W					San Juan

Latitude N 36deg57'00" Longitude W 107deg54'26" (DDMMSS)  
N 36.95000 W 107.90722 (Decimal Degrees)

**NATURE OF RELEASE**

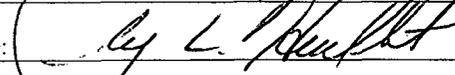
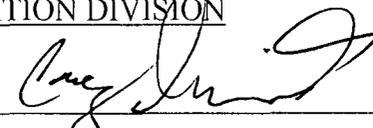
Type of Release Fire, subsequent Emergency Shut Down (ESD) and glycol release	Volume of Release 3-5 barrels glycol, 67 MCF gas (ESD)	Volume Recovered 35 yards of glycol contaminated soil removed
Source of Release Glycol Dehydrator	Date and Hour of Occurrence 4/14/2013 @ 03:00 hours	Date and Hour of Discovery 4/14/2013 @ 03:50 hours
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Monica Keuhling, NM OCD Aztec District. Other agencies notified are as follows: Sandy Spon, NMED AQB; NMED HAZMAT Coordinator Ruth Horowitz; San Juan County LEPC Paula Thomassen; NM Public Regulation Commission	
By Whom? Aaron Dailey	Date and Hour 4/14/2013 @ 08:30 hours (Notification to NM OCD, other notifications followed after this time)	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.\*

Describe Cause of Problem and Remedial Action Taken.\* Enterprise employee was called out to Cedar Hill compressor station by Enterprise Gas Control. Gas Control stated compressor unit #3 was off line. Glycol contaminated soil that fell outside the concrete containment berm was excavated and hauled to an approved disposal facility beginning 5/22/2013. The dehydrator and all equipment is currently taped off and pending further investigation from fire marshal and other investigative personnel. Area inside concrete containment will be cleaned and dehydrator will be dismantled after the fire investigation is complete. Third party environmental contractor completed remediation activities on 5/23/13. Approximately 33 cubic yards of contaminated soil and gravel was excavated and transported to Bondad Landfill in Bondad, Colorado. Third party corrective action report is attached to this "final" c-141 report.

Describe Area Affected and Cleanup Action Taken.\* Dehydrator and all appurtenances are considered to be lost; the insulation in the area was sampled for asbestos, whereby the results came back negative. Glycol contaminated soil that fell outside the concrete containment berm was excavated and hauled to an approved disposal facility beginning 5/22/2013. The dehydrator and all equipment is currently taped off and pending further investigation from fire marshal and other investigative personnel. Area inside concrete containment will be cleaned and dehydrator will be dismantled after the fire investigation is complete. Third party environmental contractor completed remediation activities on 5/23/13. Approximately 33 cubic yards of contaminated soil and gravel was excavated and transported to Bondad Landfill in Bondad, Colorado. Third party corrective action report is attached to this "final" c-141 report.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: 	<b>OIL CONSERVATION DIVISION</b>	
Printed Name: Terry L. Hurlburt	Approved by Environmental Specialist: 	
Title: Group Sr. Vice President	Approval Date: 9/2/14	Expiration Date:
E-mail Address: snolan@eprod.com	Conditions of Approval:	Attached <input type="checkbox"/>
Date: 12-5-2013 Phone: 713-381-6595		

\* Attach Additional Sheets If Necessary

#NCS 1424729700

28



November 13, 2013

Project Number 97057-0562

Ms. Runell Seale  
Enterprise  
614 Reilly Avenue  
Farmington, New Mexico 87401

Phone: (505) 599-2124

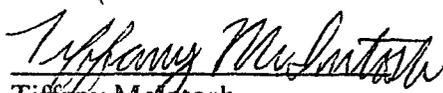
**RE: SPILL CLEANUP REPORT FROM A FIRE AT THE CEDAR HILL COMPRESSOR STATION, 221 ROAD 2300, SAN JUAN COUNTY, NEW MEXICO**

Dear Ms. Seale:

Enclosed please find the *Spill Cleanup Report* detailing spill cleanup activities conducted at the Cedar Hill Compressor Station at 221 Road 2300 in San Juan County, New Mexico.

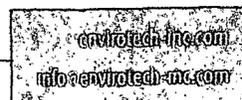
We appreciate the opportunity to be of service. If you have any questions or require additional information, please contact our office at (505) 632-0615.

Respectfully submitted,  
**ENVIROTECH, INC.**

  
Tiffany McIntosh  
Staff Scientist  
[tmcintosh@envirotech-inc.com](mailto:tmcintosh@envirotech-inc.com)

Enclosures: *Spill Cleanup Report*

Cc: Client File Number 97057



**ENTERPRISE  
SPILL CLEANUP REPORT  
CEDAR HILL COMPRESSOR STATION  
221 ROAD 2300  
SAN JUAN COUNTY, NEW MEXICO**

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**SUMMARY AND CONCLUSIONS .....2**

**STATEMENT OF LIMITATIONS .....2**

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                    Figure 2, Site Map

**Tables:**        Table 1, Summary of Analytical Results

**Appendices:** Appendix A, Analytical Results  
                    Appendix B, Site Photography  
                    Appendix C, Bills of Lading

## INTRODUCTION

Envirotech, Inc. of Farmington, New Mexico, was contracted by Enterprise Products to provide spill cleanup activities for a release of glycol resulting from a fire at the Cedar Hill Compressor Station located at 221 Road 2300 in San Juan County, New Mexico; see *Figure 1, Vicinity Map*. The glycol contained in the unit was released and ran approximately 35 feet down a hillside to the north of the release source and branched out into two (2) smaller areas that lead to a wash; see enclosed *Figure 2, Site Map* and *Appendix B, Site Photography*. Activities included excavation, sample collection and analysis, contaminated soil disposal, documentation and reporting.

## ACTIVITIES PERFORMED

Envirotech, Inc. was contacted on May 22, 2013, with a request to respond to a release of glycol that resulted from a fire that occurred at the Cedar Hill Compressor Station. Visual staining was observed along the north side of the release area; see enclosed *Figure 2, Site Map*. Visual staining was also observed on the gravel driveway, next to the blow-down relief stack to the southeast of the release area. Envirotech transported one (1) truck load of clean gravel to the Cedar Hill Compressor Station and staged it on site for backfill material at a later time.

The two (2) areas north of the fence (the smaller, western excavation and the larger, eastern excavation) were the first areas to be excavated. Both areas were excavated to the depth of approximately one (1) foot; see enclosed *Figure 2, Site Map*. All visual staining was removed through the use of hand shovels because the area was inaccessible for a backhoe. One (1) five (5)-point composite sample was collected from each of the two (2) impacted areas north of the fence; see enclosed *Figure 2, Site Map* for locations. Both samples were analyzed in the field for organic vapor using a photoionization detector (PID). The smaller, western excavation returned a result of 2.4 parts per million (ppm) organic vapor and the larger, eastern excavation returned a result of 0.6 ppm organic vapor; see enclosed *Table 1, Summary of Analytical Results*.

A backhoe was then utilized to remove the glycol visually impacted soil between the release area and the fence to the north; see enclosed *Figure 2, Site Map* for location. The area was excavated to the depth of approximately three (3) feet; see enclosed *Figure 2, Site Map*. Envirotech, Inc. transported approximately 33 cubic yards of contaminated soil to the Bondad Landfill for disposal; see enclosed *Appendix C, Bills of Lading*.

One (1) five (5)-point composite sample was collected from the stockpile of contaminated soil; see enclosed *Figure 2, Site Map*. The sample was analyzed in the field for Total Petroleum Hydrocarbons (TPH) using USEPA Method 418.1 and for organic vapor using a PID. The sample returned a result of 220 ppm TPH and 0.4 ppm organic vapor; see enclosed *Appendix A, Analytical Results*. One (1) five (5)-point composite sample was collected from the bottom of the excavation. The sample was analyzed in the field for TPH using USEPA Method 418.1 and

for organic vapor using a PID. The sample returned a result of 188 ppm TPH and 0.3 ppm organic vapor; see enclosed *Appendix A, Analytical Results*.

Envirotech personnel returned to the Cedar Hill Compressor Station on May 23, 2013, with approximately 33 cubic yards of clean-fill soil, to continue cleanup activities. With the use of hand shovels and a backhoe, the excavated area was backfilled with clean soil and restored to pre-incident conditions; see enclosed *Appendix B, Site Photography*. The gravel driveway, next to the blow-down relief stack to the southeast of the release area, at the Cedar Hill Compressor Station was visually contaminated. A backhoe was utilized to remove all of the visually contaminated gravel. The driveway was backfilled with clean gravel and distributed evenly, returning the gravel driveway to pre-incident conditions; see enclosed *Appendix B, Site Photography*.

Approximately 33 cubic yards of glycol contaminated soil and gravel were transported to the Bondad landfill, New Mexico; see *Appendix C, Bills of Lading*.

#### SUMMARY AND CONCLUSIONS

Spill cleanup activities were performed for a release of glycol resulting from a fire at the Cedar Hill Compressor Station, San Juan County, New Mexico. Approximately 33 cubic yards of glycol contaminated soil and gravel were transported to the Bondad landfill. The site was re-contoured to pre-incident conditions. Envirotech, Inc. recommends no further action in regards to this incident.

#### STATEMENT OF LIMITATIONS

Envirotech, Inc. has completed spill cleanup activities for a release of glycol resulting from a fire at the Cedar Hill Compressor Station located at 221 Road 2300 in San Juan County; New Mexico. The work and services provided by Envirotech, Inc. were in accordance with the New Mexico Oil Conservation Division standards. All observations and conclusions provided here are based on the information and current site conditions found at the site of the incident.

The undersigned has conducted this service at the above referenced site; this work has been conducted and reported in accordance with generally accepted professional practices in geology, engineering, environmental chemistry and hydrogeology.

We appreciate the opportunity to be of service. If you have any questions or require additional information, please contact our office at (505) 632-0615.

Respectfully Submitted,

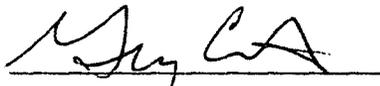
Reviewed by:

**ENVIROTECH, INC.**



Tiffany McIntosh  
Staff Scientist

[tmcintosh@envirotech-inc.com](mailto:tmcintosh@envirotech-inc.com)



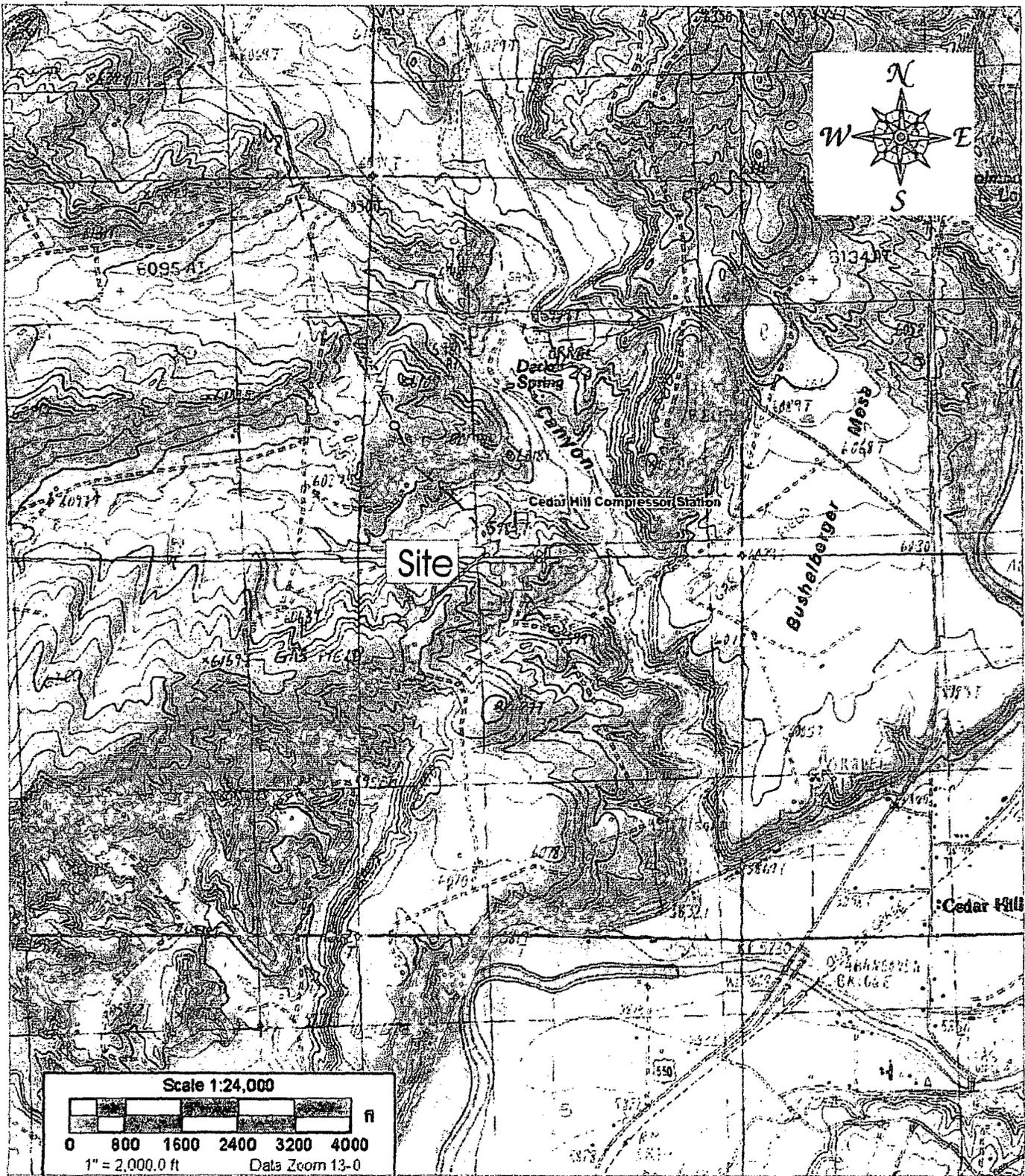
Greg Crabtree, PE  
Environmental Manager

[gcrabtree@envirotech-inc.com](mailto:gcrabtree@envirotech-inc.com)

**FIGURES**

Figure 1, Vicinity Map

Figure 2, Site Map



Site

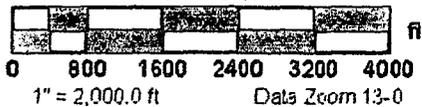
Cedar Hill Compressor Station

Deer Spring

Bushelberger

Cedar Hill

Scale 1:24,000



Source: 7.5 Minute Cedar Hill, New Mexico U.S.G.S. Topographic Quadrangle Map  
 Scale: 1:24,000 1" = 2000'

Enterprise Products  
 Cedar Hill Compressor Station  
 San Juan County, New Mexico



Vicinity Map

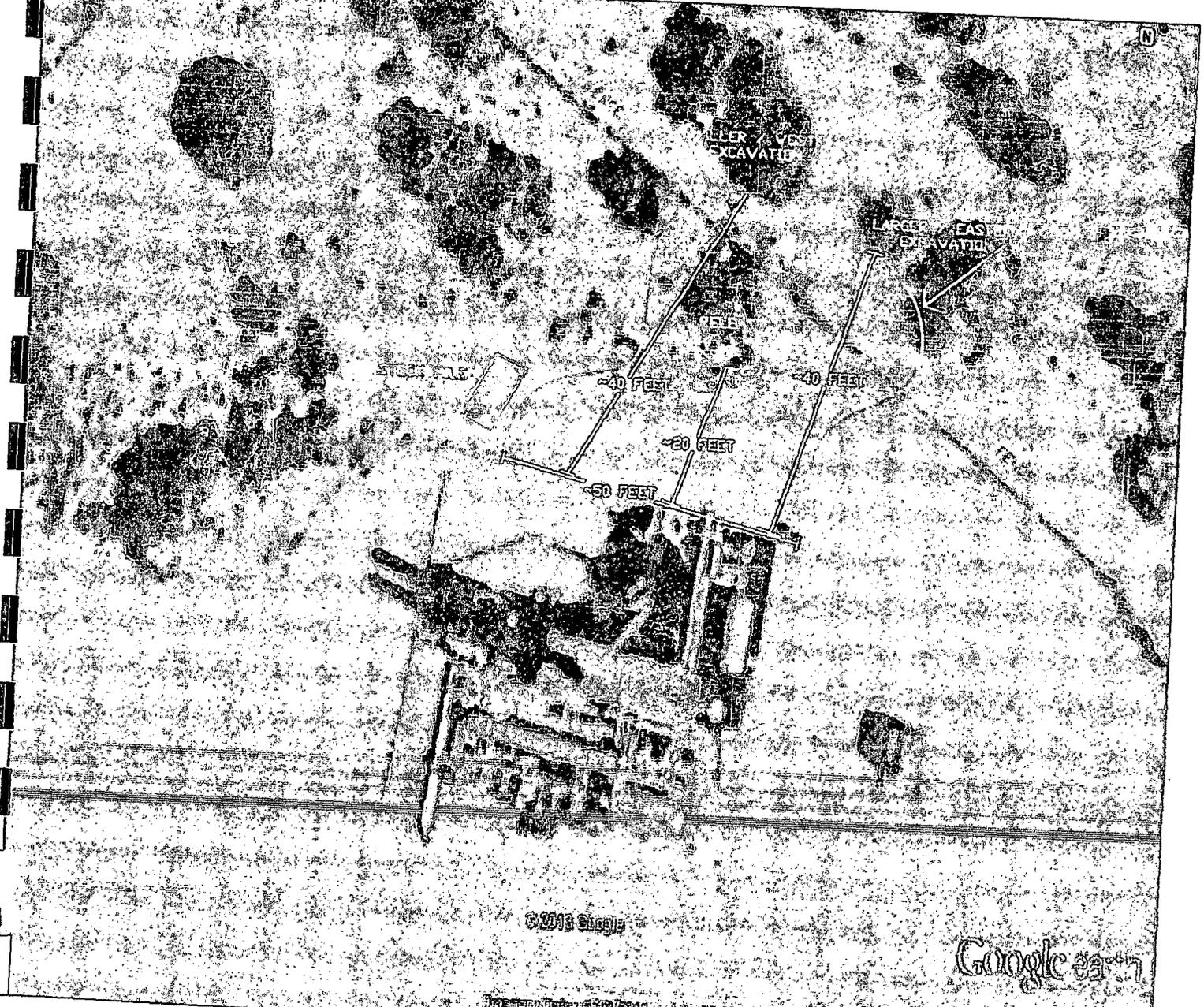
Figure #1

PROJECT Number: 97057-0562 Date Drawn: 5/28/13

5796 U.S. HIGHWAY 64  
 Farmington, New Mexico 87401  
 505.632.0615

DRAWN BY:  
 Tiffany McIntosh

PROJECT MANAGER:  
 Greg Crabtree



**LEGEND**

- X SAMPLE LOCATION
- RELEASE PATH

**SITE MAP**  
**Enterprise**  
 Cedar Hill Compressor Station  
 SAN JUAN COUNTY, NEW MEXICO

SCALE: NTS		FIGURE NO. 2	REV
PROJECT NO97057-0562			
REVISIONS			
NO.	DATE	BY	DESCRIPTION
MAP DRWN	TLM	5/29/13	BASE DRWN TLM 2/25/13



5796 U.S. HIGHWAY 64, FARMINGTON, NM 87401 505-632-0615

**TABLES**

**Table 1, Summary of Analytical Results**

Table 1, Summary of Analytical Results  
Enterprise  
Cedar Hill Compressor Station  
Spill Cleanup Report  
San Juan County, New Mexico  
Project Number 97057-0562

Sample Description	Sample Number	Date	TPH 418.1 (ppm)	OVM (ppm)
NMOCDC/RCRA Standards	NA	NA	NA	NA
Smaller / Western Excavation (5-Point)	1	5/22/2013	NS	2.4
Larger / Eastern Excavation (5-Point)	2	5/22/2013	NS	0.6
Stock Pile Composite (5-Point)	3	5/22/2013	220	0.4
Excavation Composite (5-Point)	4	5/22/2013	188	0.3

NS = Not Sampled  
ND = Non-Detect at Stated Method's Detection Limit  
\* Values in **BOLD** above regulatory standards

## **APPENDIX A**

### **Analytical Results**

Client:	Enterprise	Project #:	97057-0562
Sample No.:	1	Date Reported:	5/28/2013
Sample ID:	Stock Pile Composite	Date Sampled:	5/22/2013
Sample Matrix:	Soil	Date Analyzed:	5/22/2013
Preservative:	Cool	Analysis Needed:	TPH-418.1
Condition:	Cool and Intact		

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
<b>Total Petroleum Hydrocarbons</b>	<b>220</b>	<b>5.0</b>

ND = Parameter not detected at the stated detection limit.

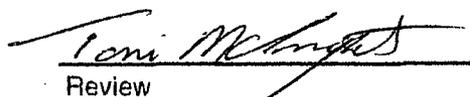
References: Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No. 4551, 1978.

Comments: **Cedar Hill Compressor Station**

Instrument calibrated to 200 ppm standard and zeroed before each sample.

  
\_\_\_\_\_  
Analyst

**Tiffany McIntosh**  
\_\_\_\_\_  
Printed

  
\_\_\_\_\_  
Review

**Toni McKnight, EIT**  
\_\_\_\_\_  
Printed

Client:	Enterprise	Project #:	97057-0562
Sample No.:	2	Date Reported:	5/28/2013
Sample ID:	5-pt Excavation Composite	Date Sampled:	5/22/2013
Sample Matrix:	Soil	Date Analyzed:	5/22/2013
Preservative:	Cool	Analysis Needed:	TPH-418.1
Condition:	Cool and Intact		

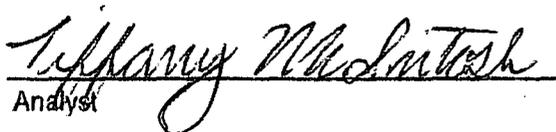
Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	188	5.0

ND = Parameter not detected at the stated detection limit.

References: Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No. 4551, 1978.

Comments: **Cedar Hill Compressor Station**

Instrument calibrated to 200 ppm standard and zeroed before each sample.

  
Analyst

Tiffany McIntosh  
Printed

  
Review

Toni McKnight, EIT  
Printed

Cal. Date: 22-May-13

Parameter	Standard Concentration mg/L	Concentration Reading mg/L
TPH	100	200
	200	
	500	
	1000	

The accepted percent relative deviation (%RSD) of the calibration factor is less than 20% over the working range.

  
Analyst

5/28/2013  
Date

Tiffany McIntosh  
Print Name

  
Review

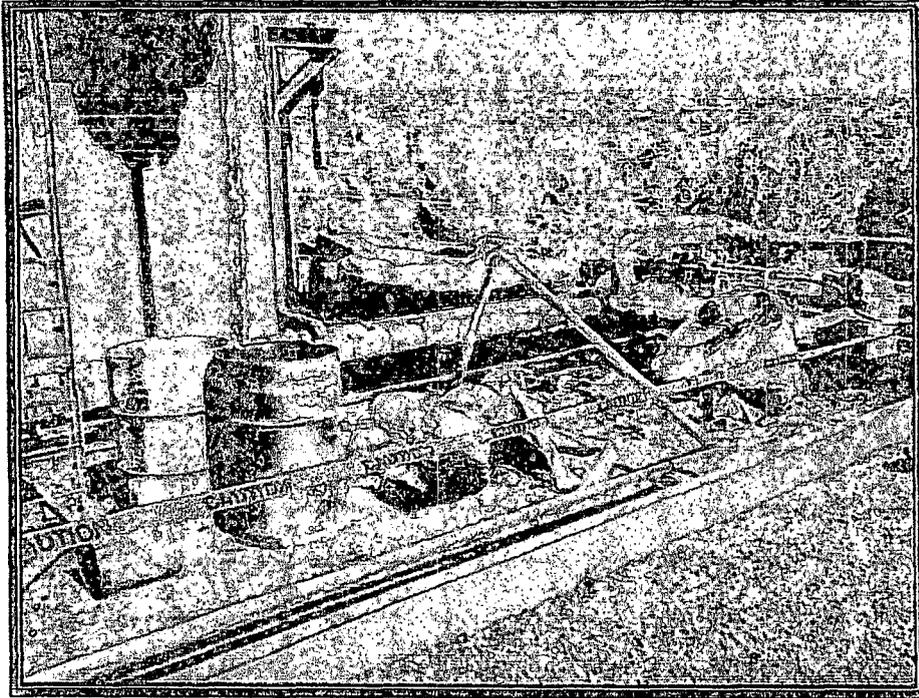
5/28/2013  
Date

Toni McKnight, EIT  
Print Name

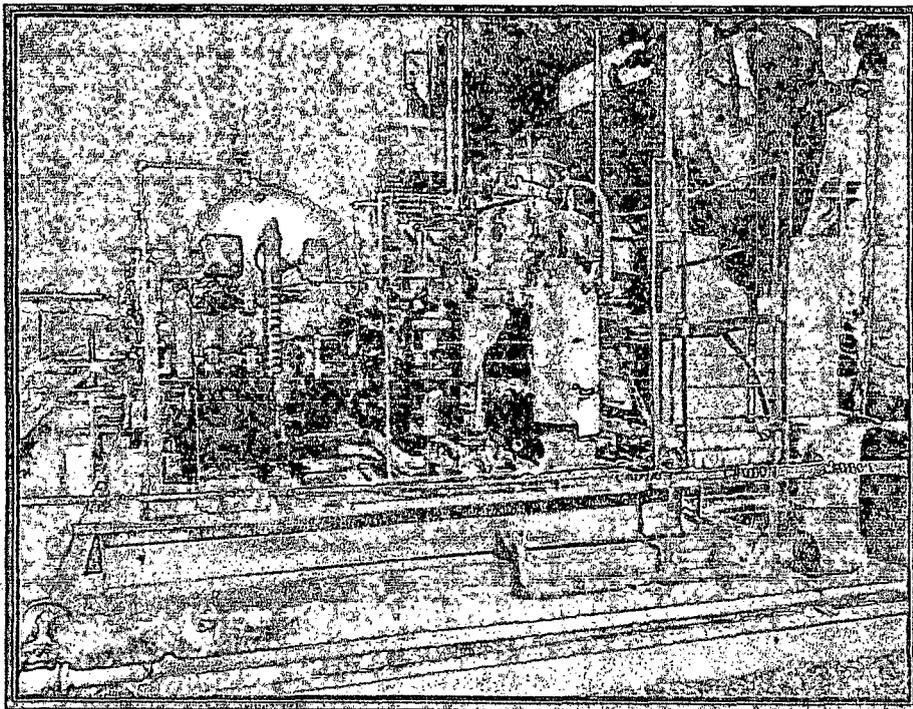
**APPENDIX B**

Site Photography

**SITE PHOTOGRAPHY  
ENTERPRISE  
SPILL CLEANUP REPORT  
CEDAR HILL COMPRESSOR STATION  
PROJECT NUMBER 97057-0562  
MAY 2013**

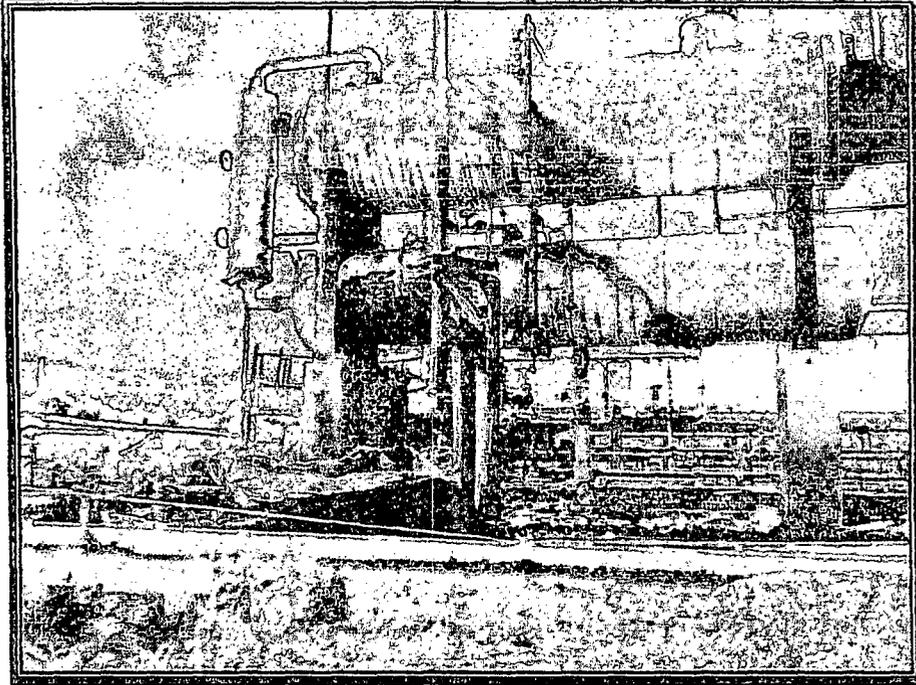


**Picture 1: Release Source (View 1)**

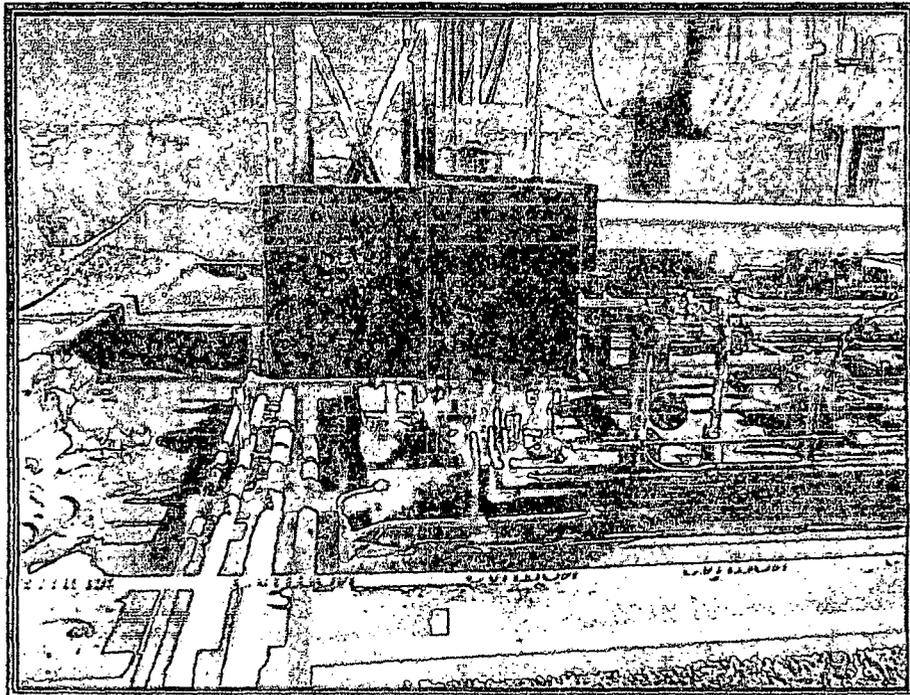


**Picture 2: Release Source (View 2)**

**SITE PHOTOGRAPHY**  
**ENTERPRISE**  
**SPILL CLEANUP REPORT**  
**CEDAR HILL COMPRESSOR STATION**  
**PROJECT NUMBER 97057-0562**  
**MAY 2013**

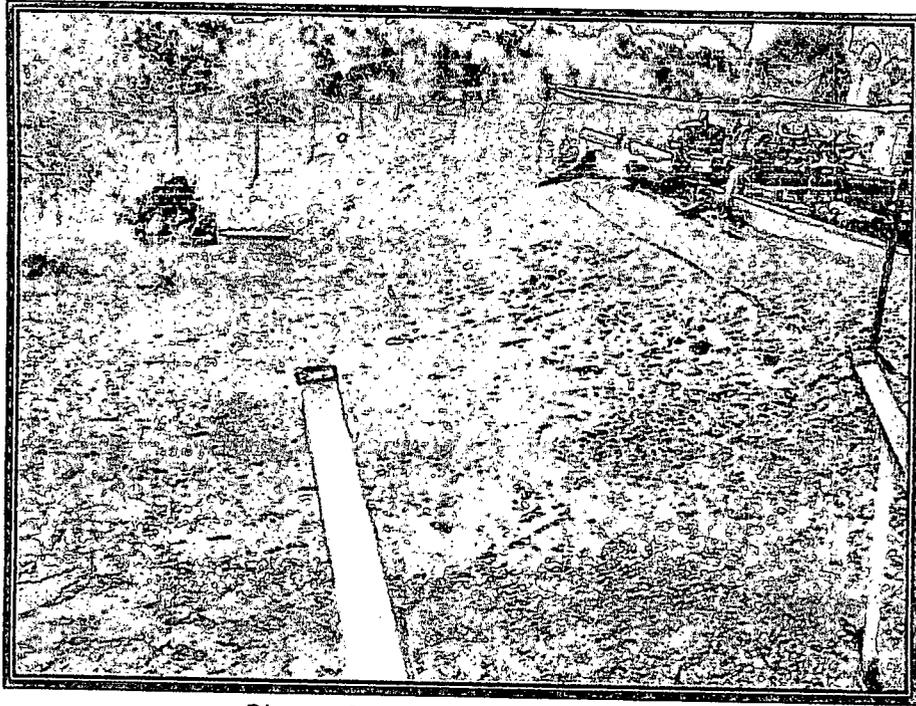


**Picture 3: Release Source (View 3)**

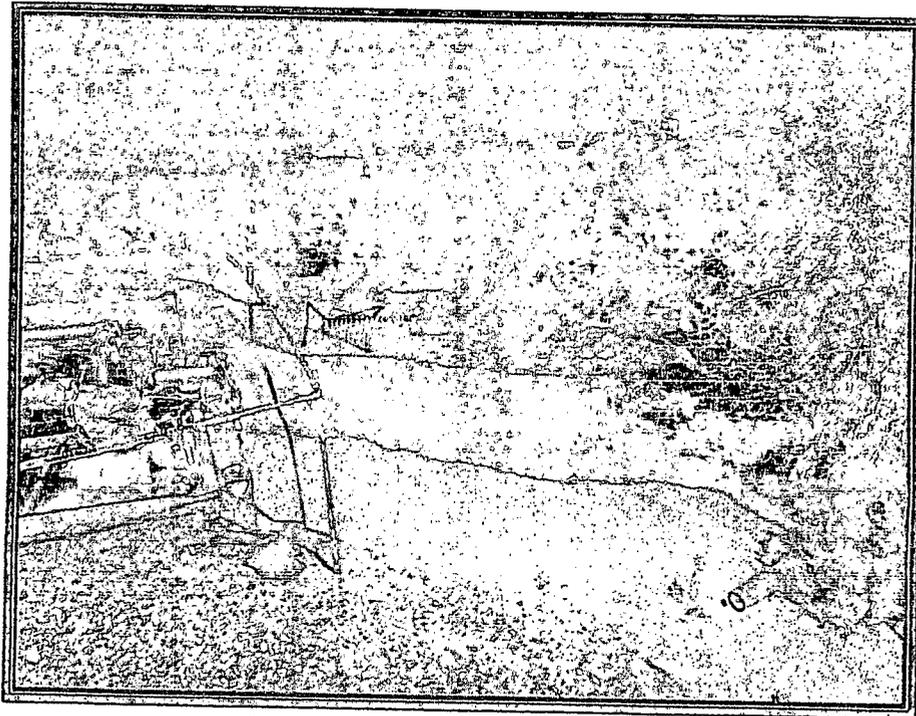


**Picture 4: Release Source (View 4)**

**SITE PHOTOGRAPHY  
ENTERPRISE  
SPILL CLEANUP REPORT  
CEDAR HILL COMPRESSOR STATION  
PROJECT NUMBER 97057-0562  
MAY 2013**



**Picture 5: Release Path (View 1)**

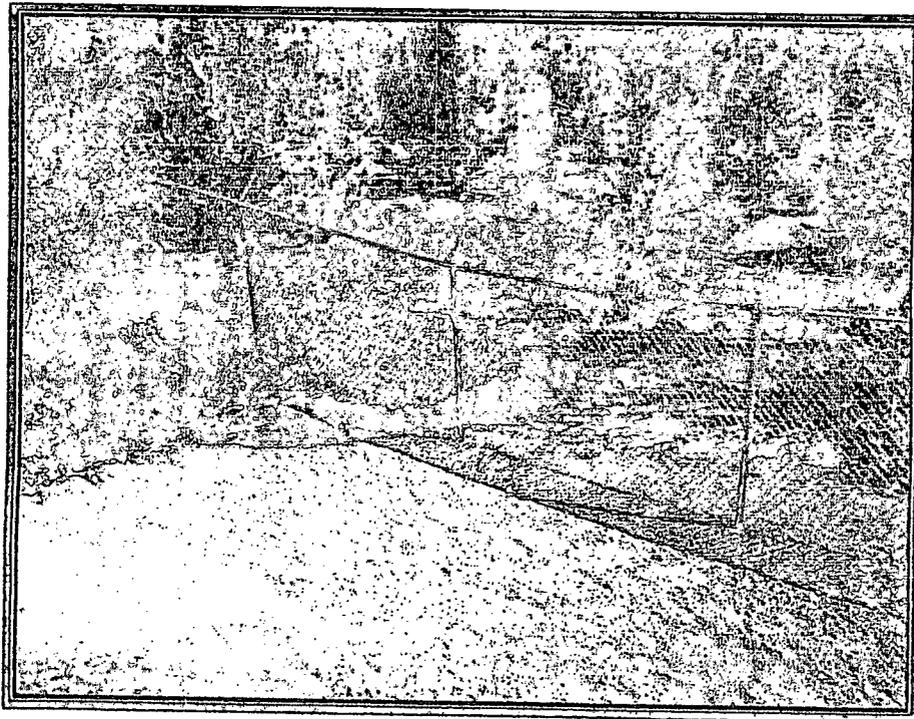


**Picture 6: Release Path (View 2)**

**SITE PHOTOGRAPHY**  
**ENTERPRISE**  
**SPILL CLEANUP REPORT**  
**CEDAR HILL COMPRESSOR STATION**  
**PROJECT NUMBER 97057-0562**  
**MAY 2013**

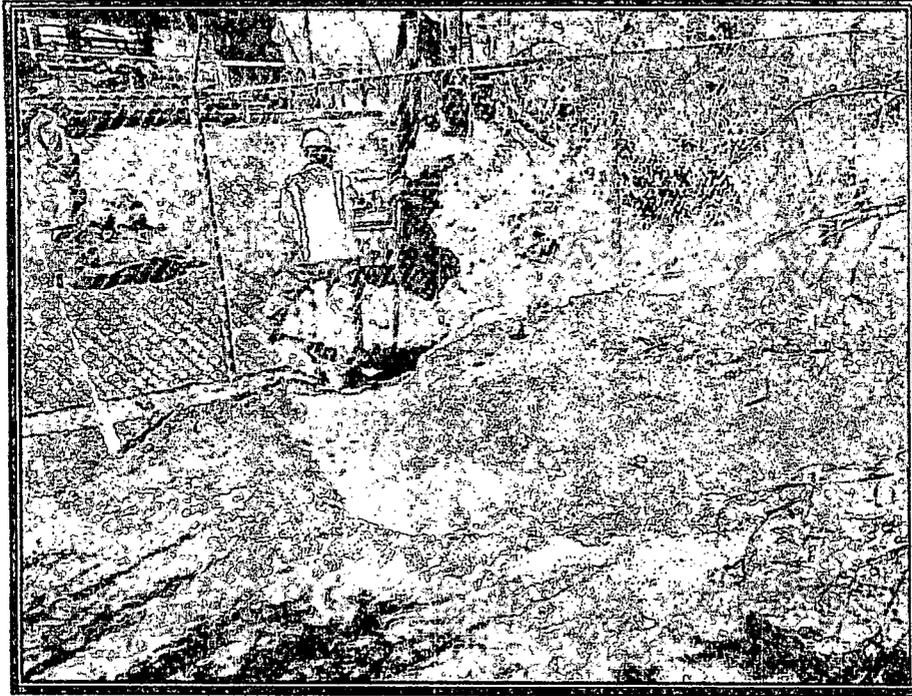


**Picture 7: Release Path (View 3)**

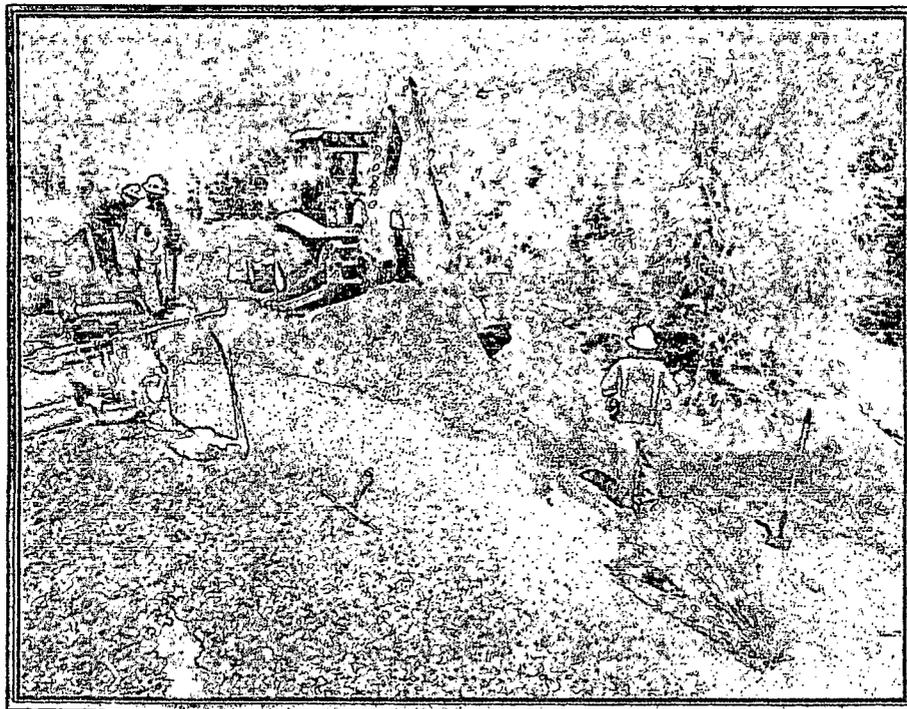


**Picture 8: Release Path (View 4)**

**SITE PHOTOGRAPHY  
ENTERPRISE  
SPILL CLEANUP REPORT  
CEDAR HILL COMPRESSOR STATION  
PROJECT NUMBER 97057-0562  
MAY 2013**

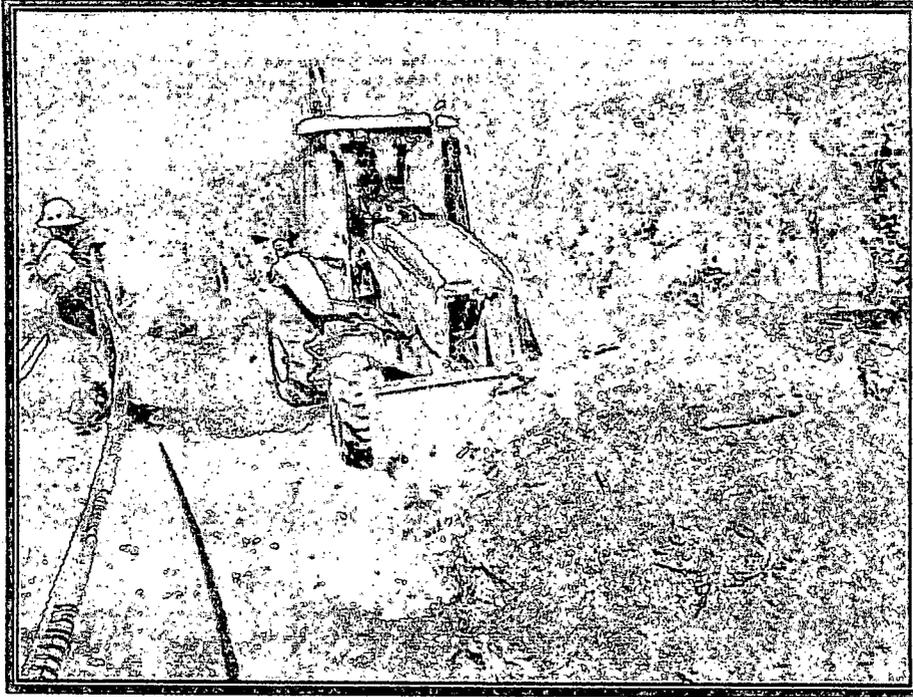


**Picture 9: Cleanup Activities (View 1)**

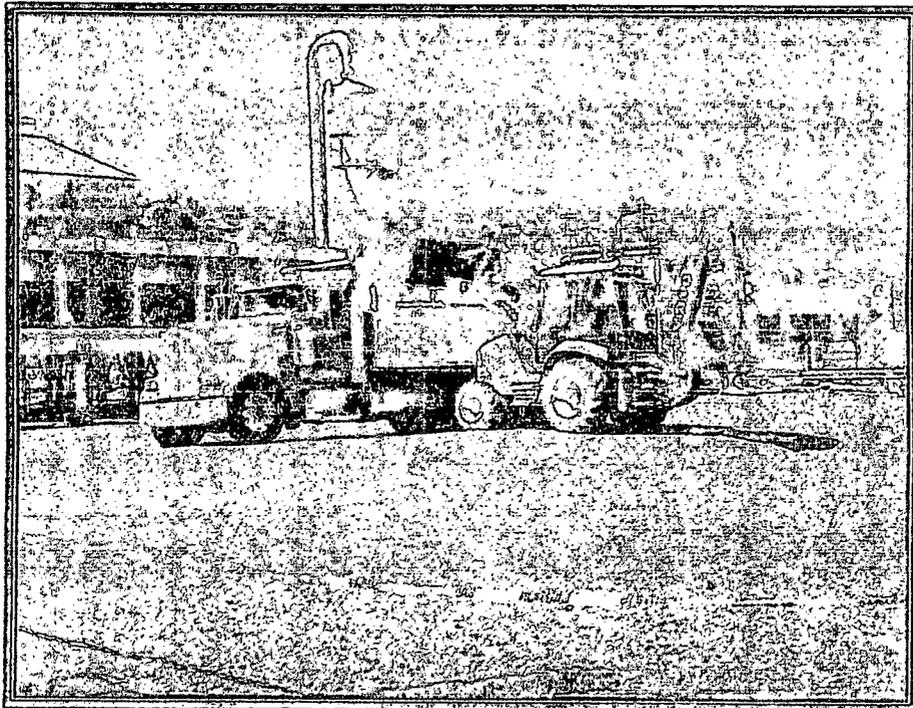


**Picture 10: Cleanup Activities (View 2)**

**SITE PHOTOGRAPHY  
ENTERPRISE  
SPILL CLEANUP REPORT  
CEDAR HILL COMPRESSOR STATION  
PROJECT NUMBER 97057-0562  
MAY 2013**

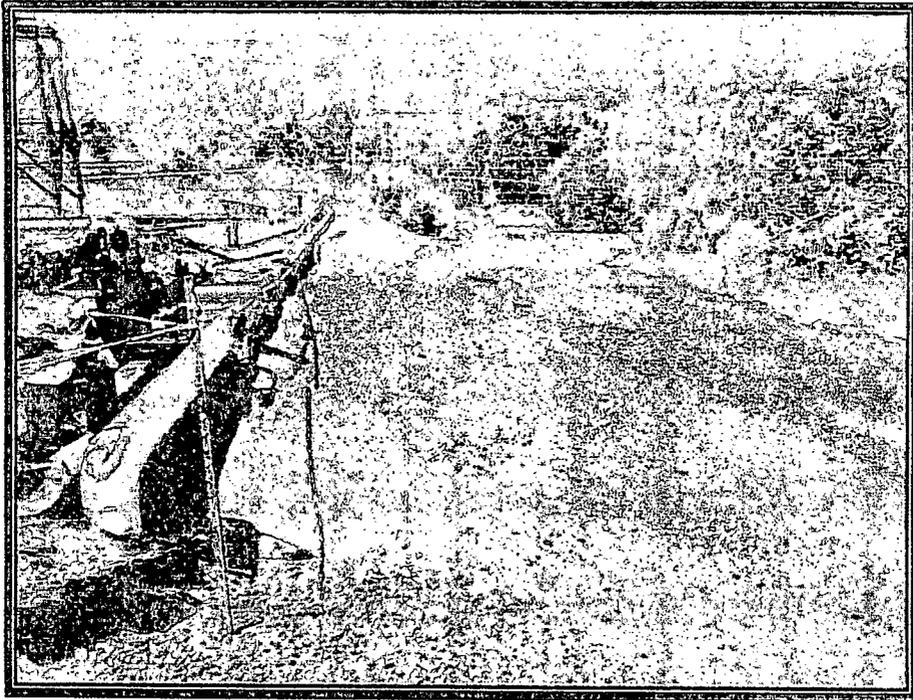


**Picture 11: Cleanup Activities (View 3)**

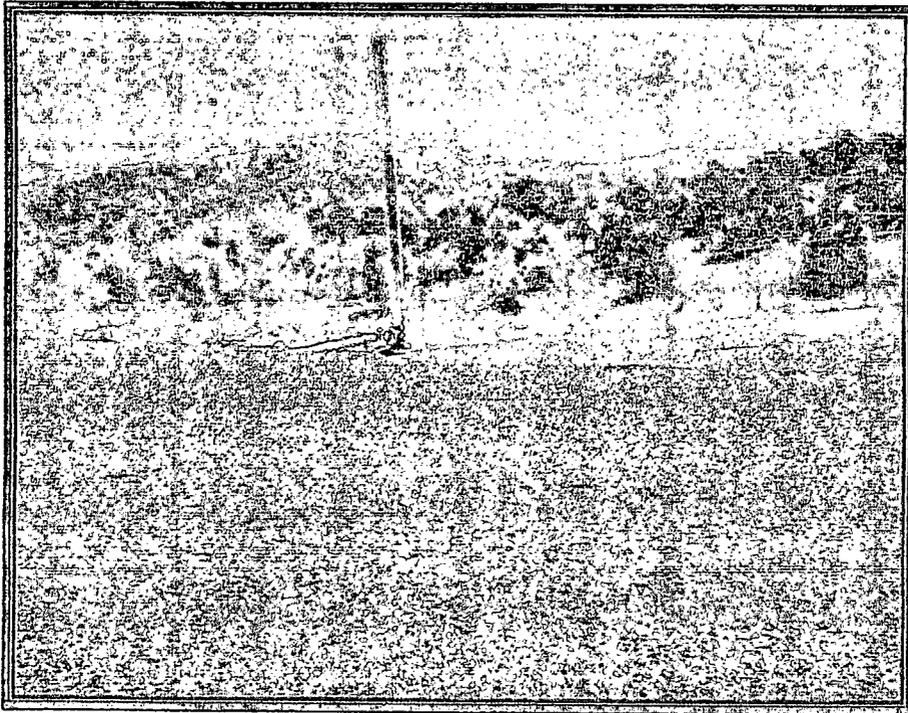


**Picture 12: Cleanup Activities (View 4)**

**SITE PHOTOGRAPHY  
ENTERPRISE  
SPILL CLEANUP REPORT  
CEDAR HILL COMPRESSOR STATION  
PROJECT NUMBER 97057-0562  
MAY 2013**



**Picture 13: Post Re-contouring (View 1)**



**Picture 14: Post Re-contouring (View 2)**

**APPENDIX C**

**Bills of Lading**



UC 0894

NON-HAZARDOUS MANIFEST

GENERATOR

Generator Enterprise Products
Address 614 Reilly Avenue
Farmington N.M. 87401
Phone 599-2286

EPA I.D. #
Shipping Location Cedar Hill Compressor Sta.
Address Sec 29, Twp 32 N, Rm 2, 10 W Sun Juan CO
Phone 599-2286

Table with 6 columns: Description of Waste Materials, Industrial Waste Code #, Profile Number, Total Quantity, Unit of Measure, Container Type. Row 1: Glycol injected Sol, 8000236, 10yd, Drum 14

I hereby certify that the above-described materials are not hazardous wastes as defined by 40 CFR, Part 261 or any applicable state law or regulation, have been fully and accurately described, classified and packaged, and are in proper condition for transportation according to applicable law and regulations.

Aaron Dancy
Generator Authorized Agent Name (Print)

Signature

5-22-13
Delivery Date

TRANSPORTER

Transporter Name Envirotech
Address 5296 U.S. Hwy 64
Farmington, New Mexico 87401

Driver Name (Print) Kerry Peine
Truck Number 658
Truck Type Kenworth W900L

I hereby acknowledge receipt of the above-described materials for transport from the generator shipping location listed above.

I hereby acknowledge that the above-described materials were received from generator shipping location and were transported without incident to the destination listed below.

Signature Shipment Date 5-22-13

Signature Delivery Date 5-22-13

DESTINATION

Mailing Address
Site Name Bonded Landfill
Address P.O. Box 215
Bloomfield, NM 87413

Physical Address
Site Name Bonded Landfill
Address CR 318 • Bondad, CO 81301
Phone Number 1-970-247-8285

I hereby acknowledge receipt of the above-described materials.

Paul Hicks
Name of Authorized Agent (Print)

Signature Receipt Date 5/22/13



UC 0894

NON-HAZARDOUS MANIFEST

GENERATOR

Generator Enterprise Products  
Address 614 Reilly Avenue  
Farmington, NM. 87401  
Phone 505-599-2286

EPA  
I.D. # \_\_\_\_\_  
Shipping Location Cedar Hill Compressor S4-  
Address Sec 29, TWP 32N, R16E, 10W, San Juan Co  
Phone 505-599-2286

Description of Waste Materials	Industrial Waste Code #	Profile Number	Total Quantity	Unit of Measure	Container Type
<u>Glycol Impacted Soil</u>		<u>B000236</u>	<u>8 Yd</u>		

I hereby certify that the above-described materials are not hazardous wastes as defined by 40 CFR, Part 261 or any applicable state law or regulation, have been fully and accurately described, classified and packaged, and are in proper condition for transportation according to applicable law and regulations.

Aaron Daisley  
Generator Authorized Agent Name (Print)

[Signature]  
Signature

Delivery Date

TRANSPORTER

Transporter Name Envirotech  
5796 U.S Hwy 64  
Address Farmington, New Mexico 87401

Driver Name (Print) Kory Peine  
Truck Number 658  
Truck Type Kenworth W900L

I hereby acknowledge receipt of the above-described materials for transport from the generator shipping location listed above.

I hereby acknowledge that the above-described materials were received from generator shipping location and were transported without incident to the destination listed below.

[Signature]  
Driver Signature

5-22-13  
Shipment Date

[Signature]  
Driver Signature

5-22-13  
Delivery Date

DESTINATION

Mailing Address  
Site Name Bonded Landfill  
Address P.O. Box 215  
Bloomfield, NM 87413

Physical Address  
Site Name Bonded Landfill  
Address CR 318 • Bondad, CO 81301  
Phone Number 1-970-247-8295

I hereby acknowledge receipt of the above-described materials.

Paula Hicks Gate Attnd  
Name of Authorized Agent (Print)

[Signature]  
Signature

5/22/13  
Receipt Date

White - Original

Canary - Disposal Retain

Pink - Transporter Retain

Goldenrod - Generator Retain



UC 0894

NON-HAZARDOUS MANIFEST

GENERATOR

Generator Enterprise Products
Address 614 Reilly Avenue
Farmington NM 87401
Phone 505-599-2286

EPA I.D. #
Shipping Location Cedar Hill Compressor St.
Address Sec 29, Twp 32N, Rng 10W San Juan
Phone 505-599-2286

Table with 6 columns: Description of Waste Materials, Industrial Waste Code #, Profile Number, Total Quantity, Unit of Measure, Container Type. Row 1: Glycol Impacted soil, 107 21773, B000236, 10 yd.

I hereby certify that the above-described materials are not hazardous wastes as defined by 40 CFR, Part 261 or any applicable state law or regulation, have been fully and accurately described, classified and packaged, and are in proper condition for transportation according to applicable law and regulations.

Generator Authorized Agent Name (Print) Aaron Daisey

Signature [Handwritten Signature]

Delivery Date

TRANSPORTER

Transporter Name Envirotech
Address 5796 U.S. HWY 64
Farmington, N.M. 87401

Driver Name (Print) Kory Poine
Truck Number 658
Truck Type Kenworth W900L

I hereby acknowledge receipt of the above-described materials for transport from the generator shipping location listed above.

I hereby acknowledge that the above-described materials were received from generator shipping location and were transported without incident to the destination listed below.

Driver Signature [Handwritten Signature] Shipment Date 5-22-13

Driver Signature [Handwritten Signature] Delivery Date 5-22-13

DESTINATION

Mailing Address
Site Name Bonded Landfill
Address P.O. Box 216
Bloomfield, NM 87413

Physical Address
Site Name Bonded Landfill
Address CR 316 • Bonded, CO 81301
Phone Number 1-870-247-8285

I hereby acknowledge receipt of the above-described materials.

Name of Authorized Agent (Print) Paula Hicks Date 5/22/13

Signature [Handwritten Signature] Receipt Date 5/22/13

White - Original

Canary - Disposer Retain

Pink - Transporter Retain

Goldenrod - Generator Retain



UC 0894

NON-HAZARDOUS MANIFEST

GENERATOR

Generator Enterprise Products
Address 614 Reilly Avenue
Farmington, N.M. 87401
Phone 505-599-2286

EPA I.D. #
Shipping Location Cedar Hill Compressor St.
Address Sec 29, Twp P32N, Rng 10W, San Jua County
Phone 505-599-2286

Table with 6 columns: Description of Waste Materials, Industrial Waste Code #, Profile Number, Total Quantity, Unit of Measure, Container Type. Row 1: Glycol impacted soil, [blank], B000236, 5 YD, [blank], [blank]

I hereby certify that the above-described materials are not hazardous wastes as defined by 40 CFR, Part 261 or any applicable state law or regulation, have been fully and accurately described, classified and packaged, and are in proper condition for transportation according to applicable law and regulations.

ARON DALBY
Generator Authorized Agent Name (Print)

[Signature]
Signature

Delivery Date

TRANSPORTER

Transporter Name Envirotech
Address 5796 U.S. Hwy 64
Farmington, New Mexico 87401

Driver Name (Print) Kory Peine
Truck Number 658
Truck Type Kenworth w900L

hereby acknowledge receipt of the above-described materials for transport from the generator shipping location listed above.

I hereby acknowledge that the above-described materials were received from generator shipping location and were transported without incident to the destination listed below.

[Signature] 5-23-13
Driver Signature Shipment Date

[Signature] 5-23-13
Driver Signature Delivery Date

DESTINATION

Mailing Address
Site Name Bonded Landfill
Address P.O. Box 215
Bloomfield, NM 87413

Physical Address
Site Name Bonded Landfill
Address CR 318 • Bondad, CO 81301
Phone Number 1-870-247-8295

hereby acknowledge receipt of the above-described materials.

Paula Hicks
Name of Authorized Agent (Print)

[Signature] 5/23/13
Signature Receipt Date

White - Original

Canary - Disposer Retain

Pink - Transporter Retain

Goldenrod - Generator Retain

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
811 S. First St., Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources  
Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-141  
Revised August 8, 2011

Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

**Release Notification and Corrective Action**

**OPERATOR**

Initial Report  Final Report

Name of Company Enterprise Field Services	Contact: Aaron Dailey
Address 614 Reilly Ave., Farmington, NM 87401	Telephone No. 505-599-2286
Facility Name Lateral 6B-10 Condensate Tank	Facility Type: Natural gas gathering line drip tank

Surface Owner: BLM	Mineral Owner BLM	API No.
--------------------	-------------------	---------

**LOCATION OF RELEASE**

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
G	24	28N	12W					San Juan

Latitude N 36.65077 Longitude W 108.06145

**NATURE OF RELEASE**

Type of Release: Natural Gas Condensate, Produced Water	Volume of Release Unknown	Volume Recovered: 290 yards contaminated soil removed from location
Source of Release: Pipeline Condensate Drip Tank	Date and Hour of Occurrence: Unknown	Date and Hour of Discovery: On 5/3/2013 @ 14:00 hours hole was discovered in bottom of tank
Was Immediate Notice Given? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom?	
By Whom? Aaron Dailey	Date and Hour	PCUD AUG 26 '13
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse. OIL CONS. DIV. DIST. 3	

If a Watercourse was Impacted, Describe Fully.\*

Describe Cause of Problem and Remedial Action Taken.\* During a routine drip tank visual inspection an Enterprise technician noticed a small oil stain at the base of the tank near the man way access. Believing that the tank was leaking around the gasket of the man way, he had the tank pulled to remove all of the liquid in preparation to replace the gasket. After having the tank pulled they noticed the bottom of the tank had a hole in it. Tank was rendered out of service at that time.

Describe Area Affected and Cleanup Action Taken.\* Confirmation sampling was conducted on soil; preliminary soil auger sampling showed impacts to 12 feet. Dig and haul excavation of contamination was completed on June 3, 2013. Please refer to the attached third party corrective action report for details of this cleanup.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: 	<b>OIL CONSERVATION DIVISION</b>	
Printed Name: Matt Marra	Approved by Environmental Specialist: 	
Title: Sr. Director, Environmental	Approval Date: 8/28/2013	Expiration Date:
E-mail Address: memarra@eprod.com	Conditions of Approval:	Attached <input type="checkbox"/>
Date: 8-20-2013 Phone: 713-381-6684		

\* Attach Additional Sheets If Necessary

NJK1324032776



Animas Environmental Services, LLC

www.animasenvironmental.com

624 E. Comanche  
Farmington, NM 87401  
505-564-2281

Durango, Colorado  
970-403-3084

July 19, 2013

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

Via electronic mail to: [amdailey@eprod.com](mailto:amdailey@eprod.com)

**RE: Initial Release Assessment and Final Excavation Report  
Lateral 6B-10 Condensate Drip Tank Release  
SW¼ NE¼, Section 24, T28N, R12W  
San Juan County, New Mexico**

RCVD AUG 26 '13  
OIL CONS. DIV.  
DIST. 3

Dear Mr. Dailey:

On May 8 and June 3, 2013, Animas Environmental Services, LLC (AES) completed an assessment associated with a release of an unknown volume of produced water and natural gas condensate from the Enterprise Field Services, LLC (Enterprise) Lateral 6B-10 condensate drip tank. The release, which is located approximately 3.5 miles southwest of Bloomfield, San Juan County, New Mexico, resulted from a corrosion hole in the bottom of the condensate tank.

---

## 1.0 Site Information

### 1.1 Location

Location - SW¼ NE¼, Section 24, T28N, R12W, San Juan County, New Mexico

Latitude/Longitude - N36.65084 and W108.06148, respectively

Surface Owner – Bureau of Land Management (BLM)

Figure 1. Topographic Site Location Map

Figure 2. Aerial Site Map

### 1.2 NMOCD Ranking

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

- **Depth to Groundwater:** Based on a cathodic protection report for the Gallegos Canyon Unit #424E well, located approximately 2,700 feet to the southwest of

- the release location, depth to groundwater is greater than 100 feet below ground surface (bgs). (0 points)
- **Wellhead Protection Area:** The release location is not within a wellhead protection area. (0 points)
  - **Distance to Surface Water Body:** Two tributary ephemeral washes are located approximately 35 feet to the east and 65 feet to the northwest of the release location and drain to the wash in Horn Canyon. (20 points)

### 1.3 Assessment and Mitigation

On May 8, 2013, Heather Woods and Jesse Christopherson of AES completed the initial release assessment field work. The assessment included the collection of 26 soil samples from seven borings (SB-1 through SB-7) in the release area. Soil boring SB-1 was terminated at approximately 12 feet bgs, and soil borings SB-2 through SB-7 were terminated at approximately 4 feet bgs. Sample locations are included on Figure 3.

On June 3, 2013, AES returned to the location to collect confirmation soil samples from the excavation. Field screening activities included the collection of seven confirmation soil samples (SC-1 through SC-7) from the walls and base of the excavation. The area of final excavation was approximately 20 feet by 36 feet by 9 to 12 feet in depth. Sample locations and final excavation extents are shown on Figure 4.

---

## 2.0 Soil Sampling

A total of 26 soil samples were collected from 7 soil borings (SB-1 through SB-7), and 7 composite samples (SC-1 through SC-7) were collected during the assessments. All soil samples were field screened for volatile organic compounds (VOCs) and selected samples were also analyzed for total petroleum hydrocarbons (TPH). Two samples (SB-1 and SB-3) collected during the initial assessment and two samples (SC-1 and SC-5) from the final excavation were submitted for confirmation laboratory analysis.

### 2.1 Field Screening

#### 2.1.1 Volatile Organic Compounds

Field screening for VOC vapors was conducted with a photo-ionization detector (PID) organic vapor meter (OVM). Before beginning field screening, the PID-OVM was first calibrated with 100 parts per million (ppm) isobutylene gas.

#### 2.1.2 Total Petroleum Hydrocarbons

Field TPH samples were analyzed per USEPA Method 418.1 using a Buck Scientific Model HC-404 Total Hydrocarbon Analyzer Infrared Spectrometer (Buck). A 3-point calibration was completed prior to conducting soil analyses. Field analytical protocol followed

*AES's Standard Operating Procedure: Field Analysis Total Petroleum Hydrocarbons per EPA Method 418.1.*

## **2.2 Laboratory Analyses**

Soil samples collected for laboratory analysis were placed into new, clean, laboratory-supplied containers, which were then labeled, placed on ice, and logged onto a sample chain of custody record. Samples were maintained on ice until delivery to the analytical laboratory, Hall Environmental Analysis Laboratory (Hall), in Albuquerque, New Mexico. Soil samples were laboratory analyzed for:

- Benzene, toluene, ethylbenzene, and xylene (BTEX) per U.S. Environmental Protection Agency (USEPA) Method 8021B.

Samples SB-1, SB-3, and SC-1 were also laboratory analyzed for:

- Total petroleum hydrocarbons (TPH) for gasoline range organics (GRO) and diesel range organics (DRO) per USEPA Method 8015D.

## **2.3 Field Screening and Laboratory Analytical Results**

On May 8, 2013, initial assessment field screening results for VOCs via OVM showed concentrations ranging from 1.2 ppm in SB-7 to 4,045 ppm in SB-3. Field TPH concentrations ranged from less than 20 mg/kg in SB-2 to greater than 10,000 mg/kg in SB-1.

On June 3, 2013, final excavation field screening results for VOCs via OVM showed concentrations ranging from 1.3 ppm in SC-7 to 603 ppm in SC-5. Field TPH concentrations ranged from 52.8 mg/kg in SC-3 to 103 mg/kg in SC-1. Results are included below in Table 1 and on Figures 3 and 4. The AES Field Screening Reports are attached.

**Table 1. Field Screening VOCs and TPH Results**  
 Lateral 6B-10 Condensate Drip Tank Release Assessment and Final Excavation  
 May and June 2013

<i>Sample ID</i>	<i>Date Sampled</i>	<i>Sample Depth (ft bgs)</i>	<i>VOCs via OVM (ppm)</i>	<i>Field TPH (mg/kg)</i>
		<i>NMOCD Action Level*</i>	100	100
		Surface	<b>2,378</b>	<b>&gt;10,000</b>
		1	<b>1,520</b>	NA
		2	<b>765</b>	NA
		4	309	NA
SB-1	5/8/13	6	<b>2,498</b>	NA
		8	<b>358</b>	<b>195</b>
		10	<b>2,640</b>	NA
		12	<b>2,009</b>	<b>&gt;2,500</b>
		Surface	17.1	NA
SB-2	5/8/13	2	<b>120</b>	<20.0
		4	13.9	NA
		Surface	<b>4,045</b>	<b>&gt;2,500</b>
SB-3	5/8/13	2	<b>3,556</b>	NA
		4	<b>351</b>	<b>161</b>
		Surface	15.3	NA
SB-4	5/8/13	2	13.1	NA
		4	12.4	NA
		Surface	6.9	NA
SB-5	5/8/13	2	7.5	NA
		4	7.3	NA
		Surface	4.3	NA
SB-6	5/8/13	2	3.4	NA
		4	4.8	NA
		Surface	1.2	NA
SB-7	5/8/13	2	2.2	NA
		4	1.3	NA

<b>Sample ID</b>	<b>Date Sampled</b>	<b>Sample Depth (ft bgs)</b>	<b>VOCs via OVM (ppm)</b>	<b>Field TPH (mg/kg)</b>
		<i>NMOCD Action Level*</i>	100	100
SC-1	6/3/13	9	107	103
SC-2	6/3/13	3 to 9	13.4	84.9
SC-3	6/3/13	3 to 9	65.6	52.8
SC-4	6/3/13	12	8.6	59.0
SC-5	6/3/13	9	603	82.5
SC-6	6/3/13	3 to 12	33.3	72.6
SC-7	6/3/13	3 to 12	1.3	88.6

NA – not analyzed

\*Action level determined by the NMOCD ranking score per *NMOCD Guidelines for Leaks, Spills, and Releases* (August 1993)

Laboratory analytical results for SB-1, SB-3, SC-1, and SC-5 were used to confirm field screening results during the initial assessment and excavation activities. In all four samples, benzene and total BTEX concentrations were reported below laboratory detection limits, except for SB-1 with a total BTEX concentration of 12.8 mg/kg. TPH concentrations as GRO/DRO were reported in SB-1 (530 mg/kg), SB-3 (34 mg/kg), and below the laboratory detection limit of 15 mg/kg in SC-1. Results are presented in Table 2 and on Figures 3 and 4. Laboratory analytical reports are attached.

Table 2. Laboratory Analytical Results – Benzene, Total BTEX, and TPH  
 Lateral 6B-10 Condensate Drip Tank Release Assessment and Final Excavation  
 May and June, 2013

<b>Sample ID</b>	<b>Date Sampled</b>	<b>Sample Depth (ft bgs)</b>	<b>Benzene (mg/kg)</b>	<b>Total BTEX (mg/kg)</b>	<b>GRO (mg/kg)</b>	<b>DRO (mg/kg)</b>
		<i>NMOCD Action Level*</i>	10	50	100	
SB-1	5/8/13	12	<0.25	12.8	210	320
SB-3	5/8/13	4	<0.049	<0.244	5.0	29
SC-1	6/3/13	9	<0.050	<0.25	<5.0	<10
SC-5	6/3/13	9	<0.050	<0.25	NA	NA

NA – not analyzed

\*Action level determined by the NMOCD ranking score per *NMOCD Guidelines for Leaks, Spills, and Releases* (August 1993)

### 3.0 Conclusions and Recommendations

On May 8, 2013, AES conducted an initial assessment of produced water and condensate contaminated soils associated with a release at the Lateral 6B-10 condensate drip tank location. Action levels for releases are determined by the NMOCD ranking score per *NMOCD Guidelines for Leaks, Spills, and Releases* (August 1993), and the site was assigned a rank of 20. Field screening results above the NMOCD action level of 100 ppm VOCs were reported in SB-1 through SB-3, with the highest VOC concentration reported in SB-3 (4,045 ppm). Field screening results also showed TPH concentrations above the NMOCD action level of 100 mg/kg in SB-1 through SB-3. The highest field TPH concentration was reported in SB-1 with greater than 10,000 mg/kg. Laboratory analytical results from May 8, 2013, reported benzene and total BTEX concentrations in SB-1 and SB-3 below applicable NMOCD action levels. Laboratory analytical results for TPH as GRO/DRO were also reported below the applicable NMOCD action level of 100 mg/kg in SB-3, but exceeded 100 mg/kg in SB-1 (530 mg/kg).

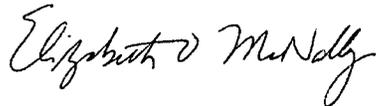
On June 3, 2013, final clearance of the excavation area was completed. Field screening results of the excavation extents showed that VOC concentrations were below the NMOCD action level for the final four walls and base of the excavation, except for SC-1 (south base) with 107 ppm and SC-5 (west half of north base) with 603 ppm. Field TPH concentrations below the NMOCD action level of 100 mg/kg were also reported for the final four walls and base of the excavation, except for in SC-1 (south base) with 103 mg/kg. Laboratory analytical results from June 3, 2013, reported benzene and total BTEX concentrations in SC-1 and SC-5 below NMOCD action levels. Laboratory analytical results for TPH as GRO/DRO were also reported below the applicable NMOCD action level of 100 mg/kg in SC-1.

Based on the excavation of contaminated soils, field screening, and laboratory analytical results for VOCs, TPH, benzene, and total BTEX, no further work is recommended. If you have any questions about this report or site conditions, please do not hesitate to contact me or Ross Kennemer at (505) 564-2281.

Sincerely,



Heather M. Woods  
Staff Geologist



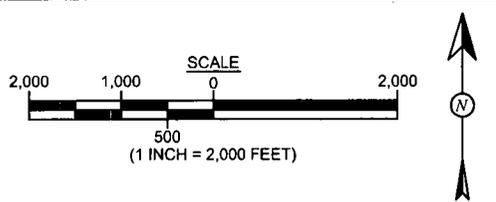
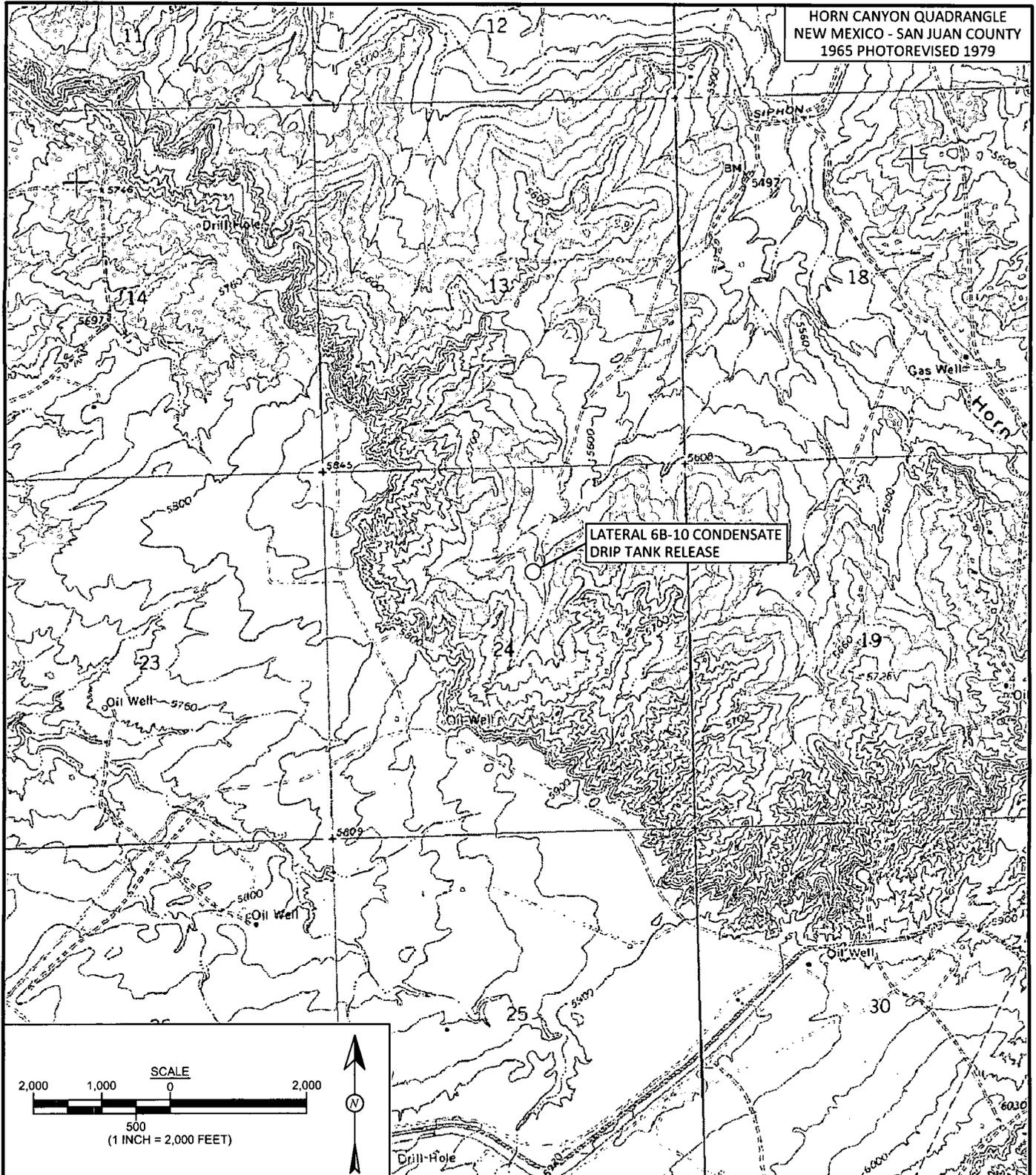
Elizabeth McNally, P.E.

**Attachments:**

- Figure 1. Topographic Site Location Map
- Figure 2. Aerial Site Map
- Figure 3. Release Assessment Sample Locations and Results, May 2013
- Figure 4. Final Excavation Sample Locations and Results, June 2013
- AES Field Screening Reports 050813 and 060313
- Laboratory Analytical Reports 1305366 and 1306076

R:\Animas 2000\Dropbox\2013 Projects\Enterprise\Tank 6B-10\Lateral 6B-10 Condensate Drip Tank  
Initial Release Assessment and Final Excavation Report 071913.docx

HORN CANYON QUADRANGLE  
 NEW MEXICO - SAN JUAN COUNTY  
 1965 PHOTOREVISED 1979

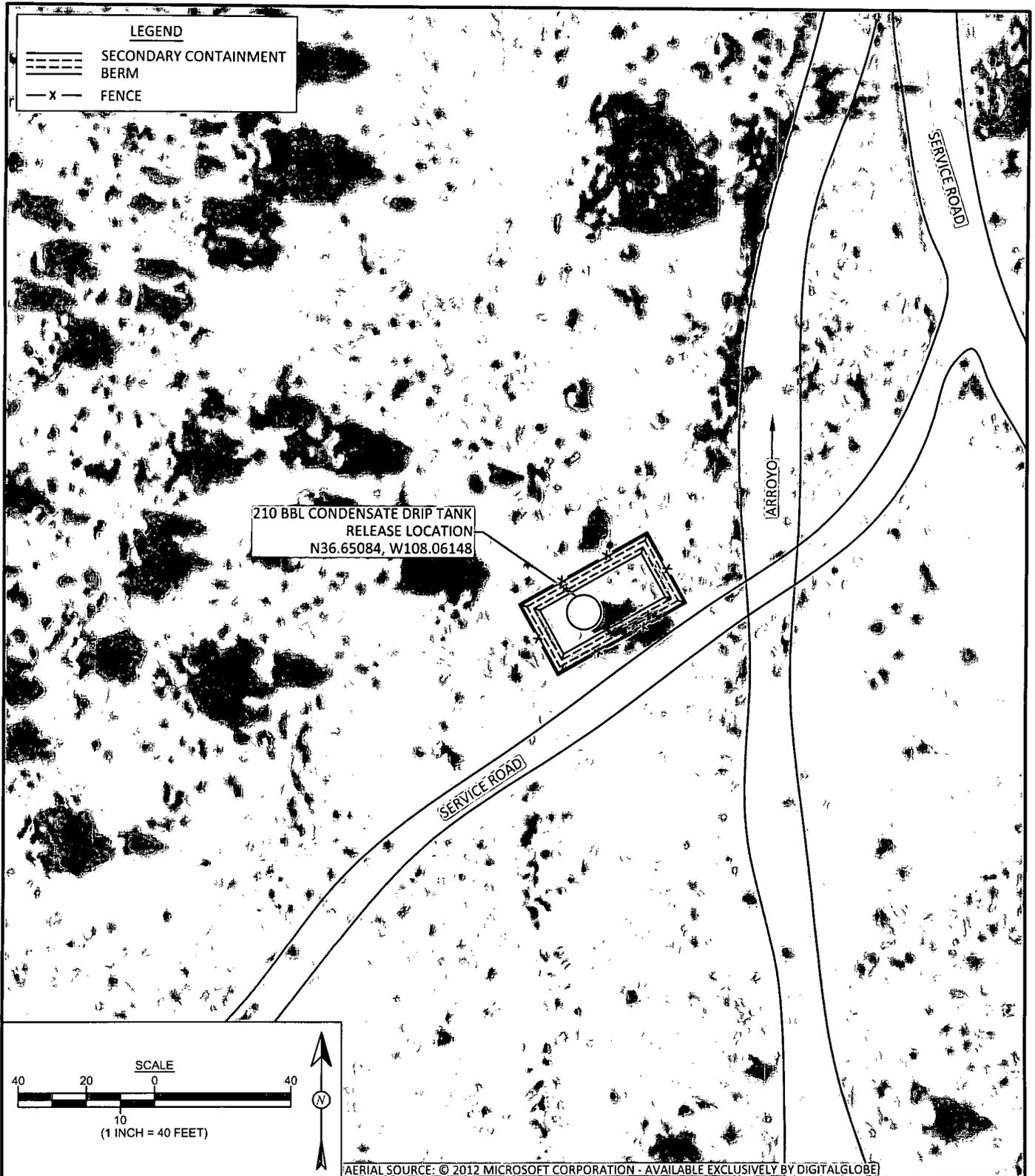


Animas Environmental Services, LLC

<b>DRAWN BY:</b> C. Lameman	<b>DATE DRAWN:</b> May 9, 2013
<b>REVISIONS BY:</b> C. Lameman	<b>DATE REVISED:</b> May 9, 2013
<b>CHECKED BY:</b> T. Ross	<b>DATE CHECKED:</b> May 9, 2013
<b>APPROVED BY:</b> E. McNally	<b>DATE APPROVED:</b> May 9, 2013

**FIGURE 1**

**TOPOGRAPHIC SITE LOCATION MAP**  
 ENTERPRISE FIELD SERVICES, LLC  
 LATERAL 6B-10 CONDENSATE DRIP TANK  
 MAY 2013 RELEASE  
 SW¼ NE¼, SECTION 24, T28N R12W  
 SAN JUAN COUNTY, NEW MEXICO  
 N36.65084, W108.06148



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<b>REVISIONS BY:</b> C. Lameman	<b>DATE REVISED:</b> May 9, 2013
<b>CHECKED BY:</b> T. Ross	<b>DATE CHECKED:</b> May 9, 2013
<b>APPROVED BY:</b> E. McNally	<b>DATE APPROVED:</b> May 9, 2013

**FIGURE 2**

**AERIAL SITE MAP**  
ENTERPRISE FIELD SERVICES, LLC  
LATERAL 6B-10 CONDENSATE DRIP TANK  
MAY 2013 RELEASE  
SW¼ NE¼, SECTION 24, T28N R12W  
SAN JUAN COUNTY, NEW MEXICO  
N36.65084, W108.06148

**FIGURE 3**

**INITIAL ASSESSMENT SAMPLE LOCATIONS AND RESULTS MAY 2013**  
 ENTERPRISE FIELD SERVICES, LLC  
 LATERAL 6B-10 CONDENSATE DRIP TANK  
 MAY 2013 RELEASE  
 SW¼ NE¼, SECTION 24, T28N R12W  
 SAN JUAN COUNTY, NEW MEXICO  
 N36.65084, W108.06148

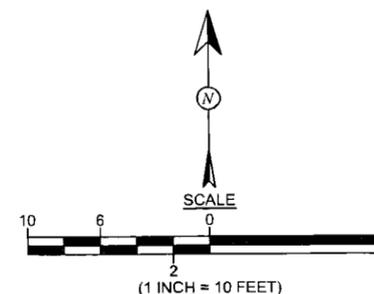


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<b>REVISIONS BY:</b> C. Lameman	<b>DATE REVISED:</b> May 9, 2013
<b>CHECKED BY:</b> T. Ross	<b>DATE CHECKED:</b> May 9, 2013
<b>APPROVED BY:</b> E. McNally	<b>DATE APPROVED:</b> May 9, 2013

**LEGEND**

- SAMPLE LOCATIONS
- ==== SECONDARY CONTAINMENT BERM
- x- FENCE
- P- BURIED PIPELINE (APPROXIMATE)

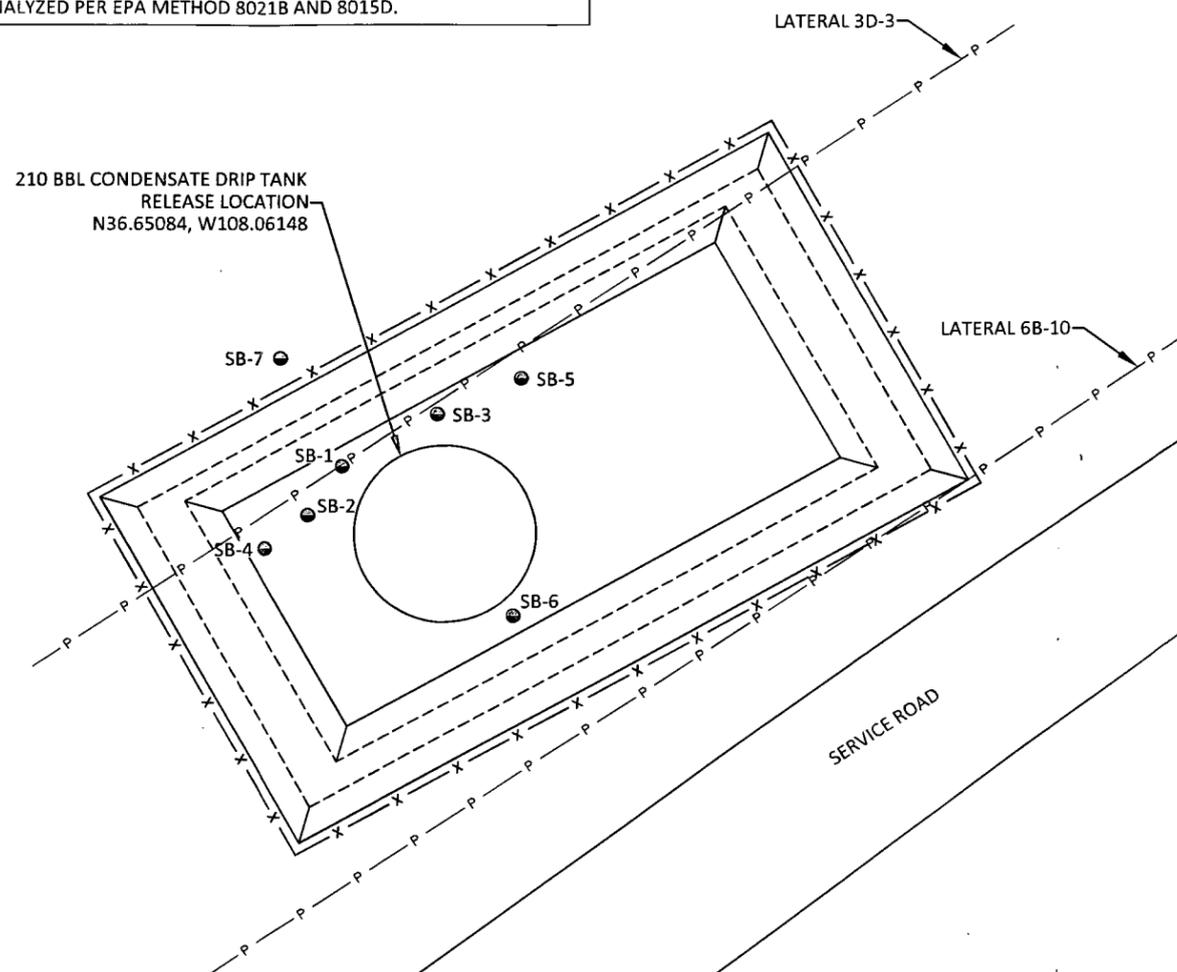


Laboratory Analytical Results						
Sample ID	Date	Depth (ft)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH - GRO (mg/kg)	TPH - DRO (mg/kg)
<b>NMOC ACTION LEVEL</b>			<b>10</b>	<b>50</b>	<b>100</b>	
SB-1	5/8/13	12	<0.25	12.8	210	320
SB-3	5/8/13	4	<0.049	<0.244	5.0	29

ALL SAMPLES WERE ANALYZED PER EPA METHOD 8021B AND 8015D.

Field Screening Results				
Sample ID	Date	Depth (ft)	OVM-PID (ppm)	TPH (mg/kg)
<b>NMOC ACTION LEVEL</b>			<b>100</b>	<b>100</b>
SB-1	5/8/13	Surface	2,378	>10,000
		1	1,520	NA
		2	765	NA
		4	309	NA
		6	2,498	NA
		8	358	195
		10	2,640	NA
SB-2	5/8/13	Surface	17.1	NA
		2	120	<20.0
		4	13.9	NA
SB-3	5/8/13	Surface	4,045	>2,500
		2	3,556	NA
		4	351	161
SB-4	5/8/13	Surface	15.3	NA
		2	13.1	NA
		4	12.4	NA
SB-5	5/8/13	Surface	6.9	NA
		2	7.5	NA
		4	7.3	NA
SB-6	5/8/13	Surface	4.3	NA
		2	3.4	NA
		4	4.8	NA
SB-7	5/8/13	Surface	1.2	NA
		2	2.2	NA
		4	1.3	NA

NA - NOT ANALYZED

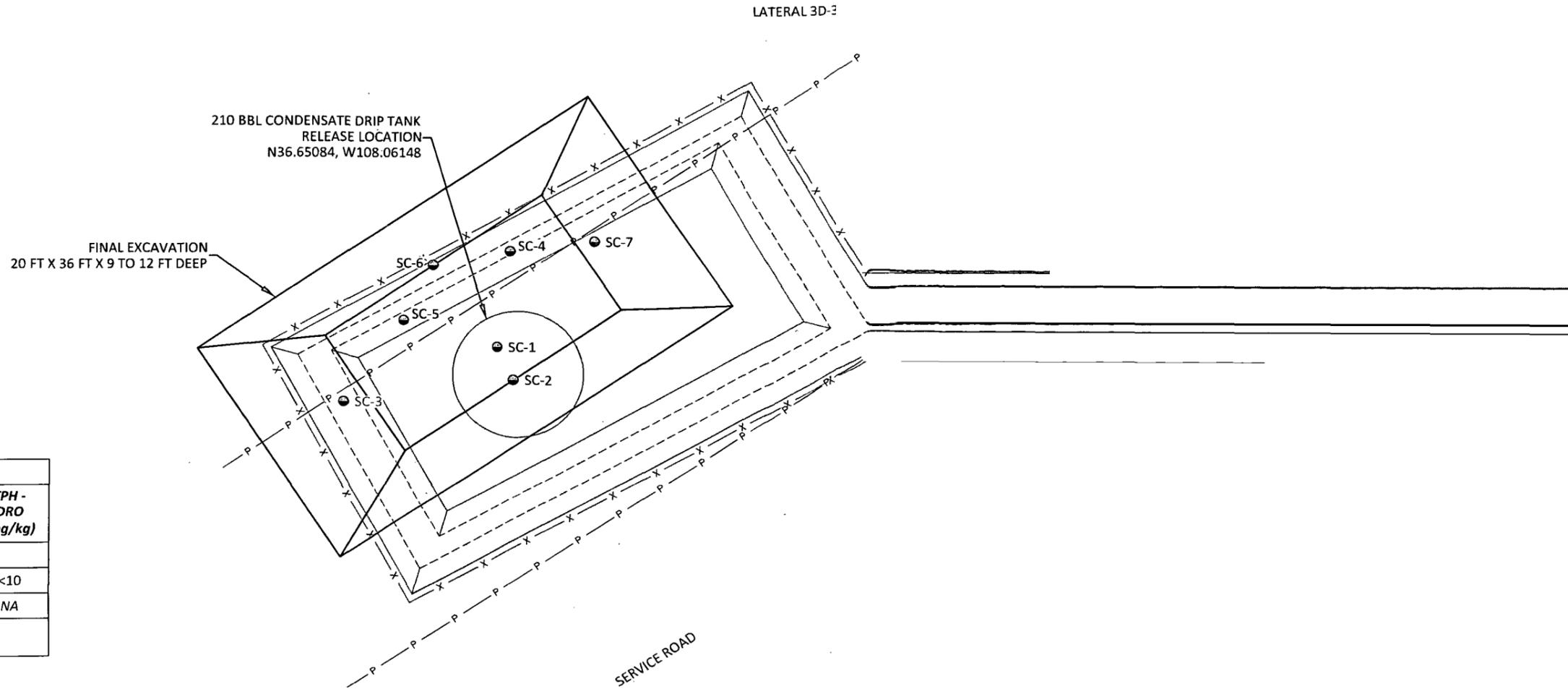


Field Screening Results				
Sample ID	Date	Depth (ft)	OVM-PID (ppm)	TPH (mg/kg)
<b>NMOC ACTION LEVEL</b>			<b>100</b>	<b>100</b>
SC-1	6/3/13	9	107	103
SC-2	6/3/13	3 to 9	13.4	84.9
SC-3	6/3/13	3 to 9	65.6	52.8
SC-4	6/3/13	12	8.6	59.0
SC-5	6/3/13	9	603	82.5
SC-6	6/3/13	3 to 12	33.3	72.6
SC-7	6/3/13	3 to 12	1.3	88.6

ALL SAMPLES WERE COMPOSITE SAMPLES.

Laboratory Analytical Results						
Sample ID	Date	Depth (ft)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH - GRO (mg/kg)	TPH - DRO (mg/kg)
<b>NMOC ACTION LEVEL</b>			<b>10</b>	<b>50</b>	<b>100</b>	
SC-1	6/3/13	9	<0.050	<0.25	<5.0	<10
SC-5	6/3/13	9	<0.050	<0.25	NA	NA

ALL SAMPLES WERE ANALYZED PER EPA METHOD 8021B AND 8015D.  
NA - NOT ANALYZED



**FIGURE 4**

**FINAL EXCAVATION SAMPLE LOCATIONS AND RESULTS**  
**MAY 2013**  
 ENTERPRISE FIELD SERVICES, LLC  
 LATERAL 6B-10 CONDENSATE DRIP TANK  
 MAY 2013 RELEASE  
 SW¼ NE¼, SECTION 24, T28N R12W  
 SAN JUAN COUNTY, NEW MEXICO  
 N36.65084, W108.06148



Animas Environmental Services, LLC

<b>DRAWN BY:</b> C. Lameman	<b>DATE DRAWN:</b> May 9, 2013
<b>REVISIONS BY:</b> C. Lameman	<b>DATE REVISED:</b> May 9, 2013
<b>CHECKED BY:</b> T. Ross	<b>DATE CHECKED:</b> May 9, 2013
<b>APPROVED BY:</b> E. McNally	<b>DATE APPROVED:</b> May 9, 2013

**LEGEND**

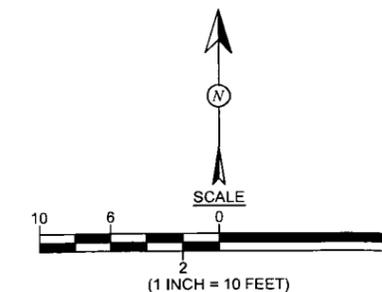
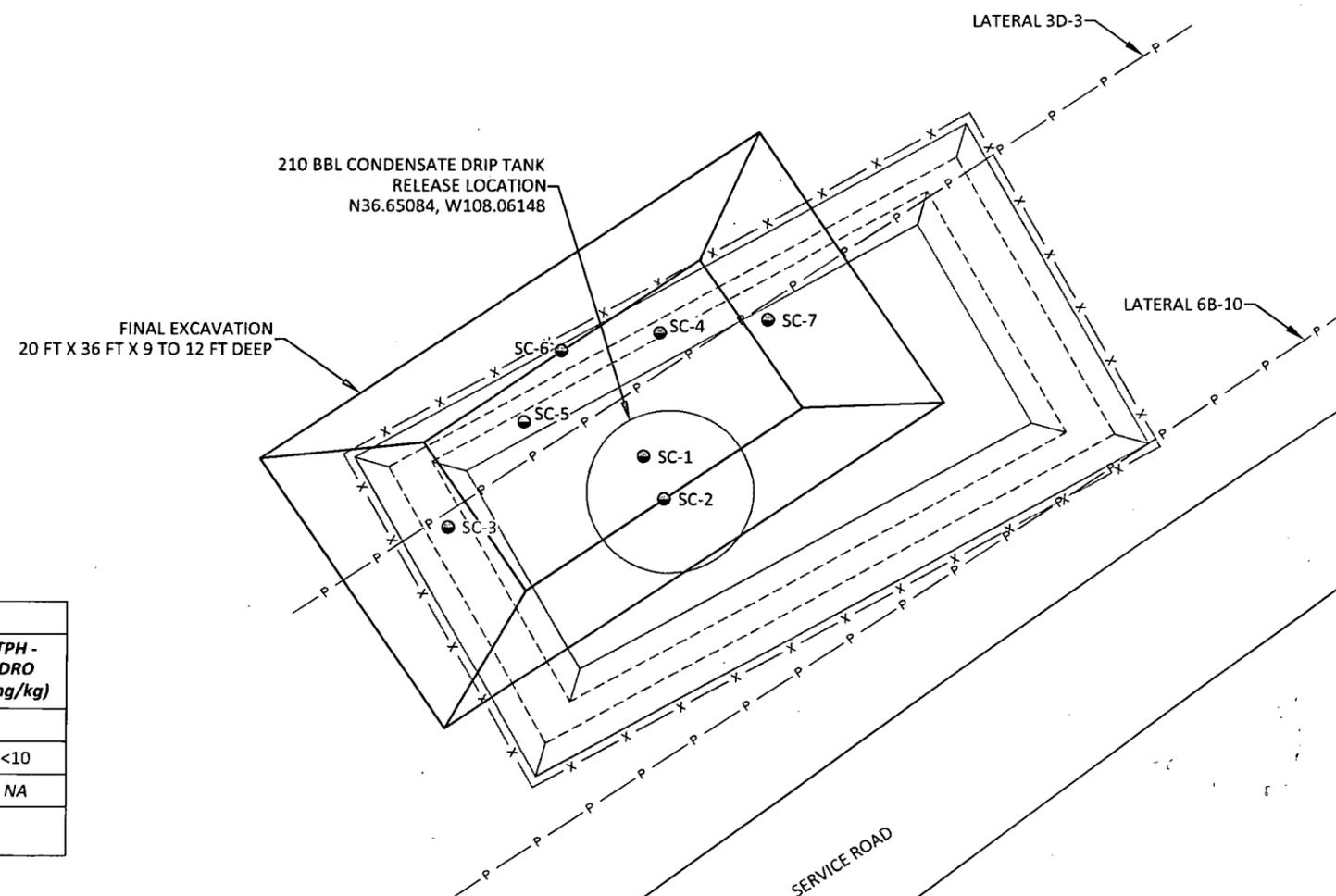
- SAMPLE LOCATIONS
- ══ SECONDARY CONTAINMENT BERM
- x- FENCE
- P- BURIED PIPELINE (APPROXIMATE)

Field Screening Results				
Sample ID	Date	Depth (ft)	OVM-PID (ppm)	TPH (mg/kg)
<b>NMOCD ACTION LEVEL</b>			<b>100</b>	<b>100</b>
SC-1	6/3/13	9	107	103
SC-2	6/3/13	3 to 9	13.4	84.9
SC-3	6/3/13	3 to 9	65.6	52.8
SC-4	6/3/13	12	8.6	59.0
SC-5	6/3/13	9	603	82.5
SC-6	6/3/13	3 to 12	33.3	72.6
SC-7	6/3/13	3 to 12	1.3	88.6

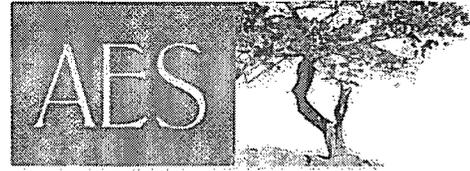
ALL SAMPLES WERE COMPOSITE SAMPLES.

Laboratory Analytical Results						
Sample ID	Date	Depth (ft)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH - GRO (mg/kg)	TPH - DRO (mg/kg)
<b>NMOCD ACTION LEVEL</b>			<b>10</b>	<b>50</b>	<b>100</b>	
SC-1	6/3/13	9	<0.050	<0.25	<5.0	<10
SC-5	6/3/13	9	<0.050	<0.25	NA	NA

ALL SAMPLES WERE ANALYZED PER EPA METHOD 8021B AND 8015D.  
 NA - NOT ANALYZED



# AES Field Screening Report



Animas Environmental Services, LLC

[www.animasenvironmental.com](http://www.animasenvironmental.com)

624 E. Comanche  
Farmington, NM 87401  
505-564-2281

Durango, Colorado  
970-403-3084

Client: Enterprise Field Services

Project Location: Lateral 6B-10 Condensate Drip Tank Release

Date: 5/8/2013

Matrix: Soil

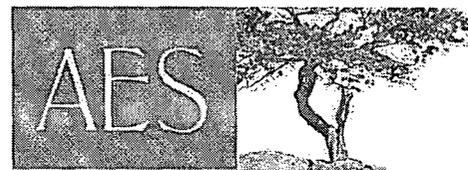
Sample ID	Collection Date	Time of Sample Collection	OVM (ppm)	Field TPH Analysis Time	Field TPH* (mg/kg)	TPH PQL (mg/kg)	DF	TPH Analysts Initials
SB-1 @ Surface	5/8/2013	14:12	2,378	18:51	>10,000	100	1	HMW
SB-1 @ 1'	5/8/2013	14:14	1,520	<i>Not Analyzed for TPH.</i>				
SB-1 @ 2'	5/8/2013	14:16	765	<i>Not Analyzed for TPH.</i>				
SB-1 @ 4'	5/8/2013	14:19	309	<i>Not Analyzed for TPH.</i>				
SB-1 @ 6'	5/8/2013	14:45	2,498	<i>Not Analyzed for TPH.</i>				
SB-1 @ 8'	5/8/2013	14:51	358	18:59	195	20.0	1	HMW
SB-1 @ 10'	5/8/2013	15:15	2,640	<i>Not Analyzed for TPH.</i>				
SB-1 @ 12'	5/8/2013	15:35	2,009	19:00	>2,500	20.0	1	HMW
SB-2 @ Surface	5/8/2013	14:22	17.1	<i>Not Analyzed for TPH.</i>				
SB-2 @ 2'	5/8/2013	14:25	120	18:49	<20.0	20.0	1	HMW
SB-2 @ 4'	5/8/2013	14:29	13.9	<i>Not Analyzed for TPH.</i>				
SB-3 @ Surface	5/8/2013	14:31	4,045	18:54	>2,500	20.0	1	HMW
SB-3 @ 2'	5/8/2013	14:33	3,556	<i>Not Analyzed for TPH.</i>				
SB-3 @ 4'	5/8/2013	14:36	351	18:56	161	20.0	1	HMW

Sample ID	Collection Date	Time of Sample Collection	OVM (ppm)	Field TPH Analysis Time	Field TPH* (mg/kg)	TPH PQL (mg/kg)	DF	TPH Analysts Initials
SB-4 @ Surface	5/8/2013	15:02	15.3					
SB-4 @ 2'	5/8/2013	15:04	13.1					
SB-4 @ 4'	5/8/2013	15:07	12.4					
SB-5 @ Surface	5/8/2013	15:19	6.9					
SB-5 @ 2'	5/8/2013	15:22	7.5					
SB-5 @ 4'	5/8/2013	15:26	7.3					
SB-6 @ Surface	5/8/2013	15:39	4.3					
SB-6 @ 2'	5/8/2013	15:41	3.4					
SB-6 @ 4'	5/8/2013	15:44	4.8					
SB-7 @ Surface	5/8/2013	15:50	1.2					
SB-7 @ 2'	5/8/2013	15:53	2.2					
SB-7 @ 4'	5/8/2013	15:57	1.3					

PQL Practical Quantitation Limit  
 ND Not Detected at the Reporting Limit  
 NA Not Analyzed  
 DF Dilution Factor  
 \*Field TPH concentrations recorded may be below PQL.

Analyst: *Heather M. Woods*

# AES Field Screening Report



Animas Environmental Services, LLC

www.animasenvironmental.com

624 E. Comanche  
Farmington, NM 87401  
505-664-2281

Durango, Colorado  
970-403-3084

Client: Enterprise Field Services

Project Location: Lateral 6B-10 Condensate Drip Tank Release

Date: 6/3/2013

Matrix: Soil

Sample ID	Collection Date	Time of Sample Collection	Sample Depth (ft)	OVM (ppm)	Field TPH Analysis Time	Field TPH* (mg/kg)	TPH PQL (mg/kg)	DF	TPH Analysts Initials
SC-1	6/3/2013	14:18	9	107	17:24	103	20.0	1	HMW
SC-2	6/3/2013	14:20	3 to 9	13.4	12:27	84.9	20.0	1	HMW
SC-3	6/3/2013	14:22	3 to 9	65.6	17:29	52.8	20.0	1	HMW
SC-4	6/3/2013	15:20	12	8.6	17:31	59.0	20.0	1	HMW
SC-5	6/3/2013	15:22	9	603	17:33	82.5	20.0	1	HMW
SC-6	6/3/2013	15:24	3 to 12	33.3	17:35	72.6	20.0	1	HMW
SC-7	6/3/2013	15:26	3 to 12	1.3	17:37	88.6	20.0	1	HMW

PQL Practical Quantitation Limit  
 ND Not Detected at the Reporting Limit  
 NA Not Analyzed  
 DF Dilution Factor

\*Field TPH concentrations recorded may be below PQL.

Analyst: *Heather M. Woods*





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)

May 16, 2013

Ross Kennemer

Animas Environmental Services

624 East Comanche

Farmington, NM 87401

TEL: (505) 486-1776

FAX (505) 324-2022

RE: Enterprise Tank 6B-10

OrderNo.: 1305366

Dear Ross Kennemer:

Hall Environmental Analysis Laboratory received 2 sample(s) on 5/9/2013 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to [www.hallenvironmental.com](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

**Hall Environmental Analysis Laboratory, Inc.**

**CLIENT:** Animas Environmental Services

**Client Sample ID:** SB-3@4'

**Project:** Enterprise Tank 6B-10

**Collection Date:** 5/8/2013 2:36:00 PM

**Lab ID:** 1305366-001

**Matrix:** SOIL

**Received Date:** 5/9/2013 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015D: DIESEL RANGE ORGANICS</b>							Analyst: <b>JME</b>
Diesel Range Organics (DRO)	29	10		mg/Kg	1	5/13/2013 8:01:16 PM	7387
Surr: DNOP	122	63-147		%REC	1	5/13/2013 8:01:16 PM	7387
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	5.0	4.9		mg/Kg	1	5/11/2013 9:15:41 AM	7366
Surr: BFB	140	80-120	S	%REC	1	5/11/2013 9:15:41 AM	7366
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.049		mg/Kg	1	5/11/2013 9:15:41 AM	7366
Toluene	ND	0.049		mg/Kg	1	5/11/2013 9:15:41 AM	7366
Ethylbenzene	ND	0.049		mg/Kg	1	5/11/2013 9:15:41 AM	7366
Xylenes, Total	ND	0.097		mg/Kg	1	5/11/2013 9:15:41 AM	7366
Surr: 4-Bromofluorobenzene	99.6	80-120		%REC	1	5/11/2013 9:15:41 AM	7366

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

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services

Client Sample ID: SB-1@12'

Project: Enterprise Tank 6B-10

Collection Date: 5/8/2013 3:35:00 PM

Lab ID: 1305366-002

Matrix: SOIL

Received Date: 5/9/2013 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015D: DIESEL RANGE ORGANICS</b>							Analyst: <b>JME</b>
Diesel Range Organics (DRO)	320	10		mg/Kg	1	5/13/2013 8:28:53 PM	7387
Surr: DNOP	121	63-147		%REC	1	5/13/2013 8:28:53 PM	7387
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	210	25		mg/Kg	5	5/11/2013 9:45:41 AM	7366
Surr: BFB	336	80-120	S	%REC	5	5/11/2013 9:45:41 AM	7366
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.25		mg/Kg	5	5/11/2013 9:45:41 AM	7366
Toluene	2.2	0.25		mg/Kg	5	5/11/2013 9:45:41 AM	7366
Ethylbenzene	1.0	0.25		mg/Kg	5	5/11/2013 9:45:41 AM	7366
Xylenes, Total	9.6	0.49		mg/Kg	5	5/11/2013 9:45:41 AM	7366
Surr: 4-Bromofluorobenzene	115	80-120		%REC	5	5/11/2013 9:45:41 AM	7366

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

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

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1305366

16-May-13

**Client:** Animas Environmental Services

**Project:** Enterprise Tank 6B-10

Sample ID	<b>MB-7387</b>	SampType:	<b>MBLK</b>	TestCode:	<b>EPA Method 8015D: Diesel Range Organics</b>					
Client ID:	<b>PBS</b>	Batch ID:	<b>7387</b>	RunNo:	<b>10540</b>					
Prep Date:	<b>5/10/2013</b>	Analysis Date:	<b>5/10/2013</b>	SeqNo:	<b>298020</b>	Units:	<b>mg/Kg</b>			
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	63	147			

Sample ID	<b>LCS-7387</b>	SampType:	<b>LCS</b>	TestCode:	<b>EPA Method 8015D: Diesel Range Organics</b>					
Client ID:	<b>LCSS</b>	Batch ID:	<b>7387</b>	RunNo:	<b>10540</b>					
Prep Date:	<b>5/10/2013</b>	Analysis Date:	<b>5/10/2013</b>	SeqNo:	<b>298022</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	49	10	50.00	0	97.1	47.4	122			
Surr: DNOP	5.5		5.000		111	63	147			

**Qualifiers:**

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

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1305366  
16-May-13

**Client:** Animas Environmental Services  
**Project:** Enterprise Tank 6B-10

Sample ID <b>MB-7366</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>PBS</b>	Batch ID: <b>7366</b>		RunNo: <b>10548</b>							
Prep Date: <b>5/9/2013</b>	Analysis Date: <b>5/10/2013</b>		SeqNo: <b>298421</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	890		1000		89.2	80	120			

Sample ID <b>LCS-7366</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>7366</b>		RunNo: <b>10548</b>							
Prep Date: <b>5/9/2013</b>	Analysis Date: <b>5/10/2013</b>		SeqNo: <b>298422</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	91.0	62.6	136			
Surr: BFB	960		1000		96.2	80	120			

Sample ID <b>MB-7389</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>PBS</b>	Batch ID: <b>7389</b>		RunNo: <b>10583</b>							
Prep Date: <b>5/10/2013</b>	Analysis Date: <b>5/14/2013</b>		SeqNo: <b>299261</b>		Units: <b>%REC</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	930		1000		92.9	80	120			

Sample ID <b>LCS-7389</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>7389</b>		RunNo: <b>10583</b>							
Prep Date: <b>5/10/2013</b>	Analysis Date: <b>5/13/2013</b>		SeqNo: <b>299262</b>		Units: <b>%REC</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	990		1000		98.7	80	120			

**Qualifiers:**

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

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1305366

16-May-13

Client: Animas Environmental Services

Project: Enterprise Tank 6B-10

Sample ID	<b>MB-7366</b>	SampType:	<b>MBLK</b>	TestCode:	<b>EPA Method 8021B: Volatiles</b>					
Client ID:	<b>PBS</b>	Batch ID:	<b>7366</b>	RunNo:	<b>10548</b>					
Prep Date:	<b>5/9/2013</b>	Analysis Date:	<b>5/10/2013</b>	SeqNo:	<b>298461</b>	Units:	<b>mg/Kg</b>			
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	0.97		1.000		97.2	80	120			

Sample ID	<b>LCS-7366</b>	SampType:	<b>LCS</b>	TestCode:	<b>EPA Method 8021B: Volatiles</b>					
Client ID:	<b>LCSS</b>	Batch ID:	<b>7366</b>	RunNo:	<b>10548</b>					
Prep Date:	<b>5/9/2013</b>	Analysis Date:	<b>5/10/2013</b>	SeqNo:	<b>298462</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.050	1.000	0	100	80	120			
Toluene	0.99	0.050	1.000	0	99.5	80	120			
Ethylbenzene	0.97	0.050	1.000	0	97.1	80	120			
Xylenes, Total	3.0	0.10	3.000	0	101	80	120			
Surr: 4-Bromofluorobenzene	1.1		1.000		107	80	120			

Sample ID	<b>MB-7389</b>	SampType:	<b>MBLK</b>	TestCode:	<b>EPA Method 8021B: Volatiles</b>					
Client ID:	<b>PBS</b>	Batch ID:	<b>7389</b>	RunNo:	<b>10583</b>					
Prep Date:	<b>5/10/2013</b>	Analysis Date:	<b>5/14/2013</b>	SeqNo:	<b>299280</b>	Units:	<b>%REC</b>			
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	<b>LCS-7389</b>	SampType:	<b>LCS</b>	TestCode:	<b>EPA Method 8021B: Volatiles</b>					
Client ID:	<b>LCSS</b>	Batch ID:	<b>7389</b>	RunNo:	<b>10583</b>					
Prep Date:	<b>5/10/2013</b>	Analysis Date:	<b>5/13/2013</b>	SeqNo:	<b>299281</b>	Units:	<b>%REC</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.1		1.000		105	80	120			

### Qualifiers:

- \* Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- 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: 1305366

RcptNo: 1

Received by/date: *[Signature]*  
 Logged By: Lindsay Mangin  
 Completed By: Lindsay Mangin  
 Reviewed By: *IO*

*05/09/13*  
 5/9/2013 10:00:00 AM  
 5/9/2013 11:24:29 AM  
*05/09/2013*

*[Signature]*  
*[Signature]*

**Chain of Custody**

- 1. Custody seals intact on sample bottles? Yes  No  Not Present
- 2. Is Chain of Custody complete? Yes  No  Not Present
- 3. How was the sample delivered? Courier

**Log In**

- 4. Was an attempt made to cool the samples? Yes  No  NA
  - 5. Were all samples received at a temperature of >0° C to 6.0°C Yes  No  NA
  - 6. Sample(s) in proper container(s)? Yes  No
  - 7. Sufficient sample volume for indicated test(s)? Yes  No
  - 8. Are samples (except VOA and ONG) properly preserved? Yes  No
  - 9. Was preservative added to bottles? Yes  No  NA
  - 10. VOA vials have zero headspace? Yes  No  No VOA Vials
  - 11. Were any sample containers received broken? Yes  No
  - 12. Does paperwork match bottle labels?  
(Note discrepancies on chain of custody) Yes  No
  - 13. Are matrices correctly identified on Chain of Custody? Yes  No
  - 14. Is it clear what analyses were requested? Yes  No
  - 15. Were all holding times able to be met?  
(If no, notify customer for authorization.) Yes  No
- # of preserved bottles checked for pH:   
 (<2 or >12 unless noted)   
 Adjusted?   
 Checked by:

**Special Handling (if applicable)**

- 16. Was client notified of all discrepancies with this order? Yes  No  NA

Person Notified: \_\_\_\_\_ Date: \_\_\_\_\_  
 By Whom: \_\_\_\_\_ Via:  eMail  Phone  Fax  In Person  
 Regarding: \_\_\_\_\_  
 Client Instructions: \_\_\_\_\_

17. Additional remarks:

**18. Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.4	Good	Yes			





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)

June 06, 2013

Ross Kennemer  
Animas Environmental Services  
624 East Comanche  
Farmington, NM 87401  
TEL: (505) 486-1776  
FAX (505) 324-2022

RE: Enterprise Tank 6B-10

OrderNo.: 1306076

Dear Ross Kennemer:

Hall Environmental Analysis Laboratory received 2 sample(s) on 6/4/2013 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to [www.hallenvironmental.com](http://www.hallenvironmental.com) or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

Sincerely,

A handwritten signature in black ink, appearing to read 'Andy Freeman', is written over a white background.

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services

Client Sample ID: SC-1

Project: Enterprise Tank 6B-10

Collection Date: 6/3/2013 2:18:00 PM

Lab ID: 1306076-001

Matrix: MEOH (SOIL)

Received Date: 6/4/2013 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015D: DIESEL RANGE ORGANICS</b>							Analyst: <b>GSA</b>
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	6/4/2013 12:44:23 PM	7743
Surr: DNOP	105	63-147		%REC	1	6/4/2013 12:44:23 PM	7743
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	6/4/2013 12:38:15 PM	R11057
Surr: BFB	99.8	80-120		%REC	1	6/4/2013 12:38:15 PM	R11057
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.050		mg/Kg	1	6/4/2013 12:38:15 PM	R11057
Toluene	ND	0.050		mg/Kg	1	6/4/2013 12:38:15 PM	R11057
Ethylbenzene	ND	0.050		mg/Kg	1	6/4/2013 12:38:15 PM	R11057
Xylenes, Total	ND	0.10		mg/Kg	1	6/4/2013 12:38:15 PM	R11057
Surr: 4-Bromofluorobenzene	98.5	80-120		%REC	1	6/4/2013 12:38:15 PM	R11057

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

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

Analytical Report

Lab Order 1306076

Date Reported: 6/6/2013

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services

Client Sample ID: SC-5

Project: Enterprise Tank 6B-10

Collection Date: 6/3/2013 3:22:00 PM

Lab ID: 1306076-002

Matrix: MEOH (SOIL)

Received Date: 6/4/2013 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: NSB
Benzene	ND	0.050		mg/Kg	1	6/4/2013 1:06:54 PM	R11057
Toluene	ND	0.050		mg/Kg	1	6/4/2013 1:06:54 PM	R11057
Ethylbenzene	ND	0.050		mg/Kg	1	6/4/2013 1:06:54 PM	R11057
Xylenes, Total	ND	0.10		mg/Kg	1	6/4/2013 1:06:54 PM	R11057
Surr: 4-Bromofluorobenzene	100	80-120		%REC	1	6/4/2013 1:06:54 PM	R11057

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

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

# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1306076

06-Jun-13

Client: Animas Environmental Services

Project: Enterprise Tank 6B-10

Sample ID <b>MB-7743</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015D: Diesel Range Organics</b>								
Client ID: <b>PBS</b>	Batch ID: <b>7743</b>	RunNo: <b>11054</b>								
Prep Date: <b>6/4/2013</b>	Analysis Date: <b>6/4/2013</b>	SeqNo: <b>312839</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Surr: DNOP	9.9		10.00		99.1	63	147			

Sample ID <b>LCS-7743</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015D: Diesel Range Organics</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>7743</b>	RunNo: <b>11054</b>								
Prep Date: <b>6/4/2013</b>	Analysis Date: <b>6/4/2013</b>	SeqNo: <b>312840</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	49	10	50.00	0	98.9	77.1	128			
Surr: DNOP	5.0		5.000		99.3	63	147			

## Qualifiers:

- \* Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1306076

06-Jun-13

**Client:** Animas Environmental Services

**Project:** Enterprise Tank 6B-10

Sample ID <b>MB-7716</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>PBS</b>	Batch ID: <b>R11057</b>		RunNo: <b>11057</b>							
Prep Date: <b>6/3/2013</b>	Analysis Date: <b>6/4/2013</b>		SeqNo: <b>313364</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	940		1000		94.3	80	120			

Sample ID <b>LCS-7716</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>R11057</b>		RunNo: <b>11057</b>							
Prep Date: <b>6/3/2013</b>	Analysis Date: <b>6/4/2013</b>		SeqNo: <b>313365</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	27	5.0	25.00	0	107	62.6	136			
Surr: BFB	1000		1000		104	80	120			

Sample ID <b>MB-7716</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>PBS</b>	Batch ID: <b>7716</b>		RunNo: <b>11057</b>							
Prep Date: <b>6/3/2013</b>	Analysis Date: <b>6/4/2013</b>		SeqNo: <b>313385</b>		Units: <b>%REC</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	940		1000		94.3	80	120			

Sample ID <b>LCS-7716</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>7716</b>		RunNo: <b>11057</b>							
Prep Date: <b>6/3/2013</b>	Analysis Date: <b>6/4/2013</b>		SeqNo: <b>313386</b>		Units: <b>%REC</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1000		1000		104	80	120			

**Qualifiers:**

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

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1306076  
06-Jun-13

**Client:** Animas Environmental Services  
**Project:** Enterprise Tank 6B-10

Sample ID	<b>MB-7716</b>	SampType:	<b>MBLK</b>	TestCode:	<b>EPA Method 8021B: Volatiles</b>					
Client ID:	<b>PBS</b>	Batch ID:	<b>R11057</b>	RunNo:	<b>11057</b>					
Prep Date:	<b>6/3/2013</b>	Analysis Date:	<b>6/4/2013</b>	SeqNo:	<b>313400</b>	Units:	<b>mg/Kg</b>			
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		99.9	80	120			

Sample ID	<b>LCS-7716</b>	SampType:	<b>LCS</b>	TestCode:	<b>EPA Method 8021B: Volatiles</b>					
Client ID:	<b>LCSS</b>	Batch ID:	<b>R11057</b>	RunNo:	<b>11057</b>					
Prep Date:	<b>6/3/2013</b>	Analysis Date:	<b>6/4/2013</b>	SeqNo:	<b>313401</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.050	1.000	0	104	80	120			
Toluene	1.0	0.050	1.000	0	104	80	120			
Ethylbenzene	1.0	0.050	1.000	0	104	80	120			
Xylenes, Total	3.1	0.10	3.000	0	104	80	120			
Surr: 4-Bromofluorobenzene	1.1		1.000		107	80	120			

Sample ID	<b>MB-7716</b>	SampType:	<b>MBLK</b>	TestCode:	<b>EPA Method 8021B: Volatiles</b>					
Client ID:	<b>PBS</b>	Batch ID:	<b>7716</b>	RunNo:	<b>11057</b>					
Prep Date:	<b>6/3/2013</b>	Analysis Date:	<b>6/4/2013</b>	SeqNo:	<b>313419</b>	Units:	<b>%REC</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.0		1.000		99.9	80	120			

Sample ID	<b>LCS-7716</b>	SampType:	<b>LCS</b>	TestCode:	<b>EPA Method 8021B: Volatiles</b>					
Client ID:	<b>LCSS</b>	Batch ID:	<b>7716</b>	RunNo:	<b>11057</b>					
Prep Date:	<b>6/3/2013</b>	Analysis Date:	<b>6/4/2013</b>	SeqNo:	<b>313420</b>	Units:	<b>%REC</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.1		1.000		107	80	120			

**Qualifiers:**

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

**Sample Log-In Check List**

Client Name: Animas Environmental

Work Order Number: 1306076

RcptNo: 1

Received by/date: AG 06/04/13

Logged By: **Michelle Garcia** 6/4/2013 10:00:00 AM *Michelle Garcia*

Completed By: **Michelle Garcia** 6/4/2013 10:33:17 AM *Michelle Garcia*

Reviewed By: IO 06/04/13

**Chain of Custody**

- 1. Custody seals intact on sample bottles? Yes  No  Not Present
- 2. Is Chain of Custody complete? Yes  No  Not Present
- 3. How was the sample delivered? Courier

**Log In**

- 4. Was an attempt made to cool the samples? Yes  No  NA
- 5. Were all samples received at a temperature of >0° C to 6.0°C Yes  No  NA
- 6. Sample(s) in proper container(s)? Yes  No
- 7. Sufficient sample volume for indicated test(s)? Yes  No
- 8. Are samples (except VOA and ONG) properly preserved? Yes  No
- 9. Was preservative added to bottles? Yes  No  NA
- 10. VOA vials have zero headspace? Yes  No  No VOA Vials
- 11. Were any sample containers received broken? Yes  No
- 12. Does paperwork match bottle labels? Yes  No   
(Note discrepancies on chain of custody)
- 13. Are matrices correctly identified on Chain of Custody? Yes  No
- 14. Is it clear what analyses were requested? Yes  No
- 15. Were all holding times able to be met? Yes  No   
(If no, notify customer for authorization.)

# of preserved bottles checked for pH: \_\_\_\_\_  
 (<2 or >12 unless noted)  
 Adjusted? \_\_\_\_\_  
 Checked by: \_\_\_\_\_

**Special Handling (if applicable)**

- 16. Was client notified of all discrepancies with this order? Yes  No  NA

Person Notified: \_\_\_\_\_ Date: \_\_\_\_\_  
 By Whom: \_\_\_\_\_ Via:  eMail  Phone  Fax  In Person  
 Regarding: \_\_\_\_\_  
 Client Instructions: \_\_\_\_\_

17. Additional remarks:

**18. Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.1	Good	Yes			

# Chain-of-Custody Record

Client: Animas Environmental Services

Mailing Address: 624 E. Comanche  
Farmington, NM 87401

Phone #:

email or Fax#:

QA/QC Package:

Standard  Level 4 (Full Validation)

Accreditation

NELAP  Other \_\_\_\_\_

EDD (Type) \_\_\_\_\_

Turn-Around Time:

Standard  Rush same day 06/04/13

Project Name: Per Heather Woods  
Enterprise Tank 6B-10

Project #:

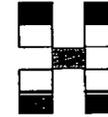
Project Manager:

R. Kenner

Sampler: H. Woods

Office:  Yes  No

Sample Temperature: \_\_\_\_\_



## HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

### Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.	BTEX + MIBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	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 Rubbles (Y or N)
6/3/13	1418	Soil	SC-1	MeOH Kit 1-402	MeOH / -	130624	X	X										
6/3/13	1522	Soil	SC-5	MeOH Kit 1-402	MeOH / -	-002	X											

Date: 6/3/13 Time: 1733 Relinquished by: Heather M. Woods Received by: Christa Weeks Date: 6/3/13 Time: 1733

Date: 6/3/13 Time: 1754 Relinquished by: Christa Weeks Received by: [Signature] Date: 06/04/13 Time: 1000

Remarks: Per Heather Woods

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
811 S. First St., Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources  
Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-141  
Revised August 8, 2011

Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

**Release Notification and Corrective Action**

**OPERATOR**

Initial Report  Final Report

Name of Company Enterprise Field Services	Contact: Aaron Dailey
Address 614 Reilly Ave., Farmington, NM 87401	Telephone No. 505-599-2286
Facility Name Lateral 10D-2 Gathering Line	Facility Type: Natural gas gathering line

Surface Owner: <u>Naidio</u> <u>JK 9/11/2013</u>	Mineral Owner	API No.
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**LOCATION OF RELEASE**

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
J	17	26N	11W					San Juan

Latitude\_N 36.48801 \_ Longitude\_W 108.02705 (Decimal Degrees) \_\_

**NATURE OF RELEASE**

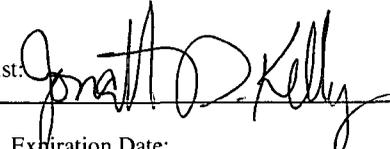
Type of Release: Natural Gas Pipeline Release (Gas, liquid)	Volume of Release Unknown	Volume Recovered: TBD (Dig and Haul Scheduled)
Source of Release: Corrosion hole	Date and Hour of Occurrence: Unknown	Date and Hour of Discovery: 7/24/2013 @ 07:00 hours
Was Immediate Notice Given? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom? <b>OIL CONS. DIV DIST. 3</b>	
By Whom?	Date and Hour <b>AUG 12 2013</b>	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.\*

Describe Cause of Problem and Remedial Action Taken.\* A possible line leak was identified during a routine line patrol. Leak was verified upon excavation. Pipeline was isolated, LOTO applied, and repairs were made. An additional leak was discovered in the excavation by a third party environmental contractor providing environmental assessment support to Enterprise Field Services. Additional repairs were made on July 28, 2013, which were successful repairs.

Describe Area Affected and Cleanup Action Taken.\* Approximately 175 cubic yards of contaminated soil was removed from the pipe leak location. Based on third party environmental contractor field screening, an estimated +/- 100 yards additional of contaminated soil will have to be excavated and hauled to an OCD permitted landfarm facility to achieve closure standards. A "final" c-141 report and a third party corrective action report will be submitted to applicable agencies once closure activities have been completed.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: 	<b>OIL CONSERVATION DIVISION</b>	
Printed Name: Matt Marra	Approved by Environmental Specialist: 	
Title: Sr. Director, Environmental	Approval Date: 9/18/2013	Expiration Date:
E-mail Address: memarra@eprod.com	Conditions of Approval:	Attached <input type="checkbox"/>
Date: 8-5-2013 Phone: 713-381-6684		

\* Attach Additional Sheets If Necessary

NJK1326153908

18

District I  
1625 N. French Dr., Hobbs, NM 88240  
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811 S. First St., Artesia, NM 88210  
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Energy Minerals and Natural Resources  
Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-141  
Revised August 8, 2011

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**Release Notification and Corrective Action**

**OPERATOR**

Initial Report

Final Report

Name of Company	Enterprise Field Services, LLC	Contact	Aaron Dailey
Address	614 Reilly Avenue, Farmington NM 87401	Telephone No.	(505)599-2286
Facility Name	Lateral C-11 Gathering line	Facility Type	Natural Gas Gathering Pipeline
Surface Owner	Navajo Allotment	Mineral Owner	Navajo
		API No.	

**LOCATION OF RELEASE**

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
K	11	27N	9W					San Juan

Latitude\_N36.589118\_\_ Longitude\_W107.761424 (Decimal Degrees)\_\_\_

RCVD AUG 1 '13  
OIL CONS. DIV.  
DIST. 3

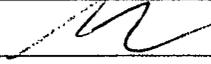
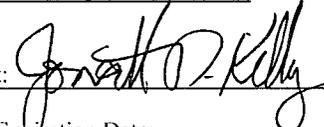
**NATURE OF RELEASE**

Type of Release	Natural Gas	Volume of Release	Unknown	Volume Recovered	50 yards petroleum impacted soil removed from location
Source of Release	Natural gas gathering pipeline	Date and Hour of Occurrence	Unknown	Date and Hour of Discovery	7/22/2013 @ 13:40 hours
Was Immediate Notice Given?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom? Steve Austin (NNEPA)—Courtesy Notification, left message			
By Whom?	Aaron Dailey	Date and Hour	7/23/2013 @ 08:30 hours		
Was a Watercourse Reached?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.			

If a Watercourse was Impacted, Describe Fully.\*  
Describe Cause of Problem and Remedial Action Taken.\* Suspected pipe leak was excavated after line was isolated. Leak location was verified and repairs were made to multiple corrosion holes on the pipeline section.

Describe Area Affected and Cleanup Action Taken. A third party environmental contractor was dispatched to obtain soil samples from the spoil pile and walls of the excavation. Fifty cubic yards of contaminated soil was removed from the spoil pile that was excavated from the leak location. Further assessment is being conducted in order to determine impacts at the location in accordance with jurisdictional agency regulations and applicable guidance. A third party corrective action report summarizing these activities will be submitted with a "final" c-141 report.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature:				<b>OIL CONSERVATION DIVISION</b>	
Printed Name: Matt Marra				Approved by Environmental Specialist:	
Title: Senior Director, Environmental	Approval Date:	9/24/2013	Expiration Date:		
E-mail Address: memarra@eprod.com	Conditions of Approval:			Attached <input type="checkbox"/>	
Date: 7-26-2013	Phone: (713)381-6684				

\* Attach Additional Sheets If Necessary

nJK 13 26732294

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District I  
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Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

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accordance with 19.15.29 NMAC.

**Release Notification and Corrective Action**

**OPERATOR**

Initial Report  Final Report

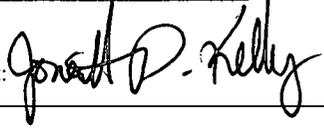
Name of Company Enterprise Field Services	Contact: Aaron Dailey
Address 614 Reilly Ave., Farmington, NM 87401	Telephone No. 505-599-2286
Facility Name Lateral 2A-3 Gathering Line	Facility Type: Natural gas gathering line
Surface Owner: BLM	Mineral Owner BLM
API No.	

**LOCATION OF RELEASE**

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
D	27	27N	10W					San Juan

Latitude\_N 36.55191 \_ Longitude\_W 107.88884 (Decimal Degrees) \_\_

**NATURE OF RELEASE**

Type of Release: Natural Gas Pipeline Release	Volume of Release Unknown	Volume Recovered: TBD (Dig and Haul Scheduled)
Source of Release: Corrosion hole	Date and Hour of Occurrence: Unknown	Date and Hour of Discovery: 7.11.2013 @ 15:00 hours
Was Immediate Notice Given? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom?	
By Whom?	Date and Hour	RCVD JUL 29 '13
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse. OIL CONS. DIV. DIST. 3	
If a Watercourse was Impacted, Describe Fully.*		
Describe Cause of Problem and Remedial Action Taken.* Enterprise gas control was notified of a possible line leak from a third party. Enterprise Operations responded to the reported location and verified the leak, isolated the pipeline, and coordinated for repairs. Contractor and Enterprise Operations/Environmental worked to mitigate the release location by removing the stained soil on the surface of the pipe release location until permanent repairs could be made.		
Describe Area Affected and Cleanup Action Taken.* Enterprise Environmental was dispatched to the location to verify that water/condensate mix released from the pipe leak was mitigated prior to equipment arrival. A third party environmental contractor was dispatched to the leak location upon the repairs and provided cleanup guidance. Approximately 70 cubic yards of contaminated soil was hauled to an OCD permitted land farm facility. A "final" c-141 report and a third party corrective action report will be submitted to applicable agencies once closure activities have been completed.		
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.		
Signature: 	<b>OIL CONSERVATION DIVISION</b>	
Printed Name: Matt Marra	Approved by Environmental Specialist: 	
Title: Sr. Director, Environmental	Approval Date: 7/24/2013	Expiration Date:
E-mail Address: memarra@eprod.com	Conditions of Approval:	Attached <input type="checkbox"/>
Date: 7-24-13	Phone: 713-381-6684	

\* Attach Additional Sheets If Necessary

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