

3R-1011

**Release Report/ General
Correspondence**

Enterprise SJ

Date: Oct-Dec 2014

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

NOV 24 2014

Form C-141
Revised August 8, 2011

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

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

Release Notification and Corrective Action

OPERATOR

☐ Initial Report ☒ Final Report

Name of Company: Enterprise Field Services LLC	Contact: Thomas Long
Address: 614 Reilly Ave, Farmington, NM 87401	Telephone No. 505-599-2286
Facility Name: Katherine Pierce #1/Katy #1	Facility Type: Natural Gas Gathering Line

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

LOCATION OF RELEASE

Unit Letter B	Section 26	Township 30N	Range 12W	Feet from the 799	North Line	Feet from the 1499	East Line	County San Juan
------------------	---------------	-----------------	--------------	-------------------------	---------------	--------------------------	--------------	--------------------

Latitude 36.788510 Longitude -108.064109

NATURE OF RELEASE

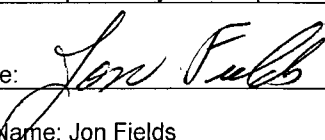
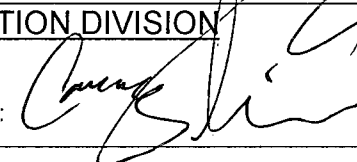
Type of Release: Natural Gas and Natural Gas Liquids	Volume of Release: 90.785 MCF	Volume Recovered: None
Source of Release: Internal corrosion	Date and Hour of Occurrence: 6/23/2014 @ 9:50 a.m.	Date and Hour of Discovery: 6/23/2014 @ 10:30 a.m.
Was Immediate Notice Given? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom? Courtesy Notification - Cory Smith - NMOCD	
By Whom? Thomas Long	Date and Hour 6/25/2014 @ 8:26 a.m.	
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 personnel responded to a line leak on the Katherine Pierce # 1/Katy # 1 well tie, a Class 1 Non-jurisdictional pipeline. Enterprise personnel verified the leak, the pipeline was blown down and lock out and tagged out. Repairs and remediation were completed on July 2, 2014. The final excavation dimensions measured approximately seventeen (17) feet long by eight (8) feet wide by nine (9) feet deep. Approximately fifty (50) cubic yards of hydrocarbon impacted soil was excavated and transported to an approved NMOCD land farm facility.

Describe Area Affected and Cleanup Action Taken.* Enterprise personnel responded to a line leak on the Katherine Pierce # 1/Katy # 1 well tie, a Class 1 Non-jurisdictional pipeline. Enterprise personnel verified the leak, the pipeline was blown down and lock out and tagged out. Repairs and remediation were completed on July 2, 2014. The final excavation dimensions measured approximately seventeen (17) feet long by eight (8) feet wide by nine (9) feet deep. Approximately fifty (50) cubic yards of hydrocarbon impacted soil was excavated and transported to an approved NMOCD land farm facility. A third party environmental corrective action report is included with this "Final" C-141.

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: 	OIL CONSERVATION DIVISION	
Printed Name: Jon Fields	Approved by Environmental Specialist: 	
Title: Director, Environmental	Approval Date: 12/29/14	Expiration Date:
E-mail Address: jefields@eprod.com	Conditions of Approval:	Attached <input type="checkbox"/>
Date: 11-20-2014	Phone: (713)381-6684	

* Attach Additional Sheets If Necessary

#NCS 143 6332943

47

Enterprise Products
Katherine Pierce #1 Well Tie Pipeline Release
Latitude North 36.78854°, Longitude West -108.06425°
Unit B Section 26 T30N R12W
San Juan County, New Mexico
July 16, 2014



OIL CONS. DIV DIST. 3

NOV 24 2014

Submitted To:

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

Submitted By:

Souder, Miller & Associates
401 West Broadway
Farmington, NM 87401
(505) 325-7535



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1.0 Executive Summary

On July 1 and 2, 2014, Souder, Miller & Associates (SMA) responded to a hydrocarbon release associated with the Katherine Pierce #1 well tie pipeline release. The table below summarizes information about the release and remediation activities.

TABLE 1: RELEASE INFORMATION				
Name	Katherine Pierce #1 Well Tie Pipeline Release			
Location	Latitude/Longitude		Section, Township, Range	
	36.78854°	-108.06425°	Unit B (NW ¼ /NE ¼) Section 26	T30N, R12W
Date Reported	June 23, 2014			
Reported by	Tom Long			
Land Owner	Private			
Reported To	New Mexico Oil Conservation Division (NMOCD)			
Diameter of Pipeline	4 inch			
Source of Release	Internal Corrosion			
Release Contents	Natural Gas/Condensate			
Release Volume: Natural Gas	Unknown			
Release Volume: Liquids/Condensate	Unknown			
Nearest Waterway	Lower Animas Irrigation Ditch			
Depth to Groundwater	Between 50 and 99 feet			
Nearest Domestic Water Source	Less than 1,000 feet			
NMOCD Ranking	40			
SMA Response Dates	July 1-2, 2014			
Subcontractors	West States Energy (WSEC)			
Disposal Facility	Industrial Ecosystem Inc. (IEI)			
Yd ³ Contaminated Soil Excavated and Disposed	50			

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 Katherine

Pierce #1 well tie pipeline release. The release was due to internal corrosion of the 4-inch, underground well tie pipeline. An unknown amount of natural gas and liquids/condensate was released. The release was reported on June 23, 2014 and was located in (NW ¼ /NE ¼) Unit B, Section 26, Township 30 North, Range 12 West, 36.78854°, -108.06425°, 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 500 feet south of an irrigation ditch fed by the Lower Animas Irrigation Ditch system on privately owned land located approximately 5,650 feet above sea level. After evaluation of the site using aerial photography and topographic maps, depth to groundwater is estimated to be between 50 and 99 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. Two recorded wells were located within 1,000 feet of the release site and more than twenty wells were located within a 1 mile radius of the site. The closest well to the site is located approximately 880 feet southwest of the site with a depth to water measurement of 80 feet bgs.

The physical location of this release is within the jurisdiction of NMOCD. 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, ethylbenzene, 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 1, 2014 SMA visited the release site to delineate the release area through field screening using a calibrated photoionization detector (PID). This site visit occurred during the excavation of subsurface pipeline for repair performed by West States Energy Contractors (WSEC). WSEC used a rubber tired backhoe to excavate and export hydrocarbon impacted soils. During the excavation event, soil samples were collected for field screening to determine the extent of the release and to further guide the excavation. On July 1, 2014, laboratory samples were collected from the base of the excavation at 7 feet bgs and submitted for rush (24 hour) analysis.

On July 2, 2014, SMA provided further oversight and guidance of excavation activities for remediation purposes. The excavation was advanced to a depth of 9 feet bgs and closure samples were collected for laboratory analysis from the base and four cardinal direction sidewalls. The final excavation measured approximately 17 feet long by 8 feet wide with

maximum excavation depth of approximately 9 feet below ground surface. Table 3 summarizes the field screening results. Field notes are included in Appendix A.

Field screening of the excavated material determined that a portion of the soils removed were not suitable for use as backfill material. Approximately 50 cubic yards of impacted soil were transported for disposal to Industrial Ecosystems Inc., located near Bloomfield, NM. A completed certificate of waste is included in Appendix C.

All laboratory soil samples were field screened with a calibrated PID. Samples exceeding field screening criteria were 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 both Envirotech Laboratory located near Bloomfield, NM for rush analysis, and to Hall Environmental Analysis Laboratory of Albuquerque, New Mexico for final analysis. Figure 3 illustrates the extent of the excavation and laboratory results.

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 40: 10 ppm benzene, 50 ppm total BTEX, and 100 ppm TPH. Laboratory analytical results were above the NMOCD Guidelines for benzene, total BTEX, and TPH (GRO/DRO) for the sample collected on July 1, 2014 from the western base of the excavation at approximately 7 feet bgs (115/76.8: GRO/DRO and 3.55: BTEX). Laboratory analytical results were also above the NMOCD Guidelines for DRO for the sample collected from the north wall of the excavation at 0-9 feet bgs on July 2, 2014 (DRO: 240). All other parameters and additional samples were below practical laboratory detection limits. The impacted soil was hauled off site for disposal. Soil contaminant concentrations are illustrated in Figure 3. A summary of laboratory analysis is included in Table 4. Laboratory report is included in Appendix D.

SMA believes that there is no immediate threat to groundwater or surface water given the concentration of DRO in an isolated section of the excavation, the elevation of the site and lack of immediate proximity to surface water courses. Soil samples from the base of the excavation at a depth of nine feet bgs were below laboratory detection limits and two orders of magnitude less than the samples collected from seven feet bgs. Further, the longer chain DRO compounds are less likely to migrate in the subsurface than volatile organics, which are below laboratory detection levels. SMA recommends future delineation and sampling for the DRO contaminants.

6.0 Closure and Limitations

The scope of our services consisted of the performance of a preliminary spill assessment, regulatory liaison, contractor 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 Steve Moskal or Reid Allan at 505-325-7535.

Submitted by:

Reviewed by:

SOUDER, MILLER & ASSOCIATES

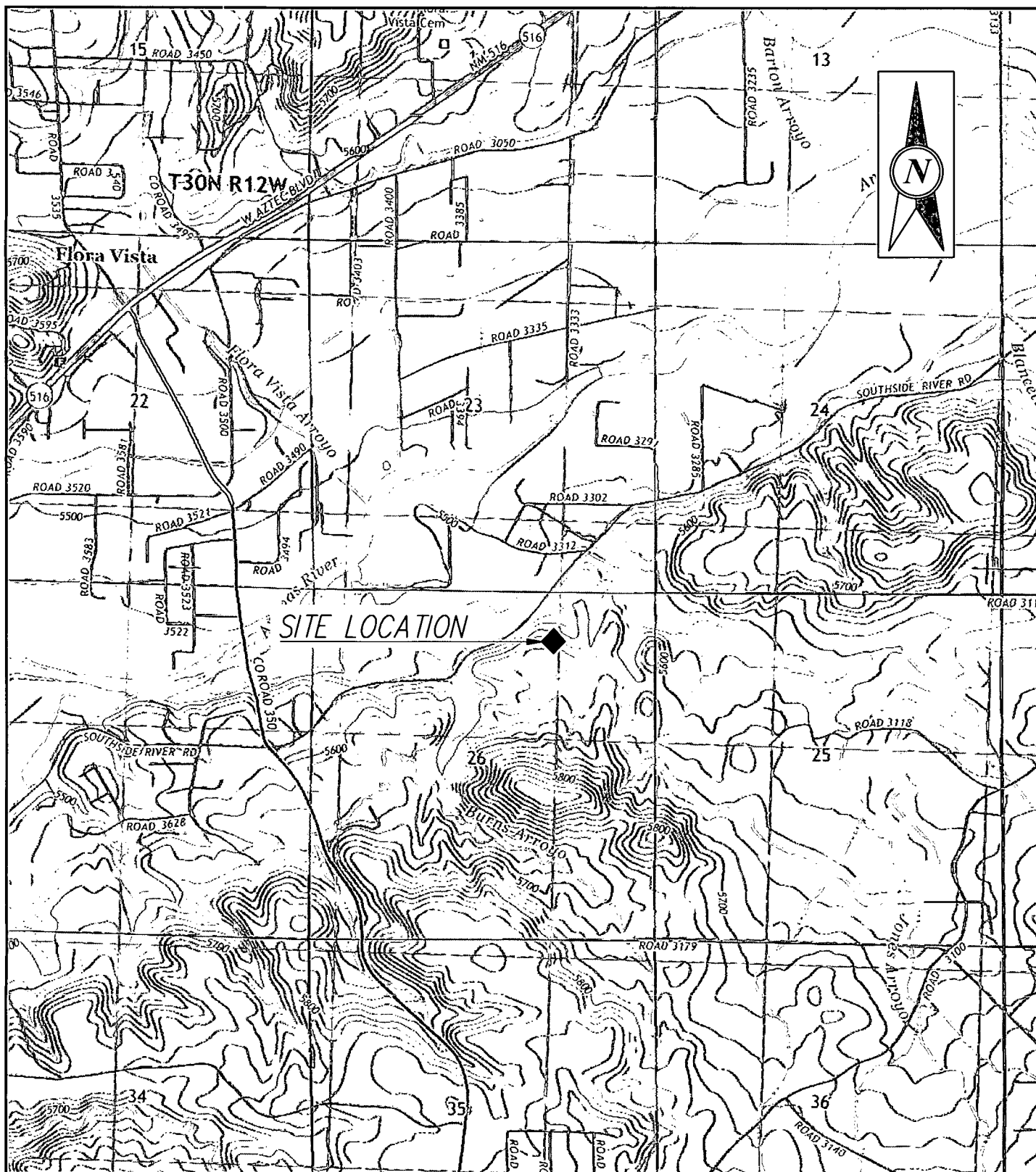


Steve Moskal
Project Scientist



Reid S. Allan, PG
Principal Scientist

FIGURES



SCALE



SOUDER, MILLER & ASSOCIATES

401 W. BROADWAY
FARMINGTON, NM 87401

Phone (505) 325-7335 Toll-Free (800) 519-0098 Fax (505) 325-0045
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ENTERPRISE

FARMINGTON, NEW MEXICO

Designed SM	Drawn DJB	Checked RSA
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Date: 7/2/2014

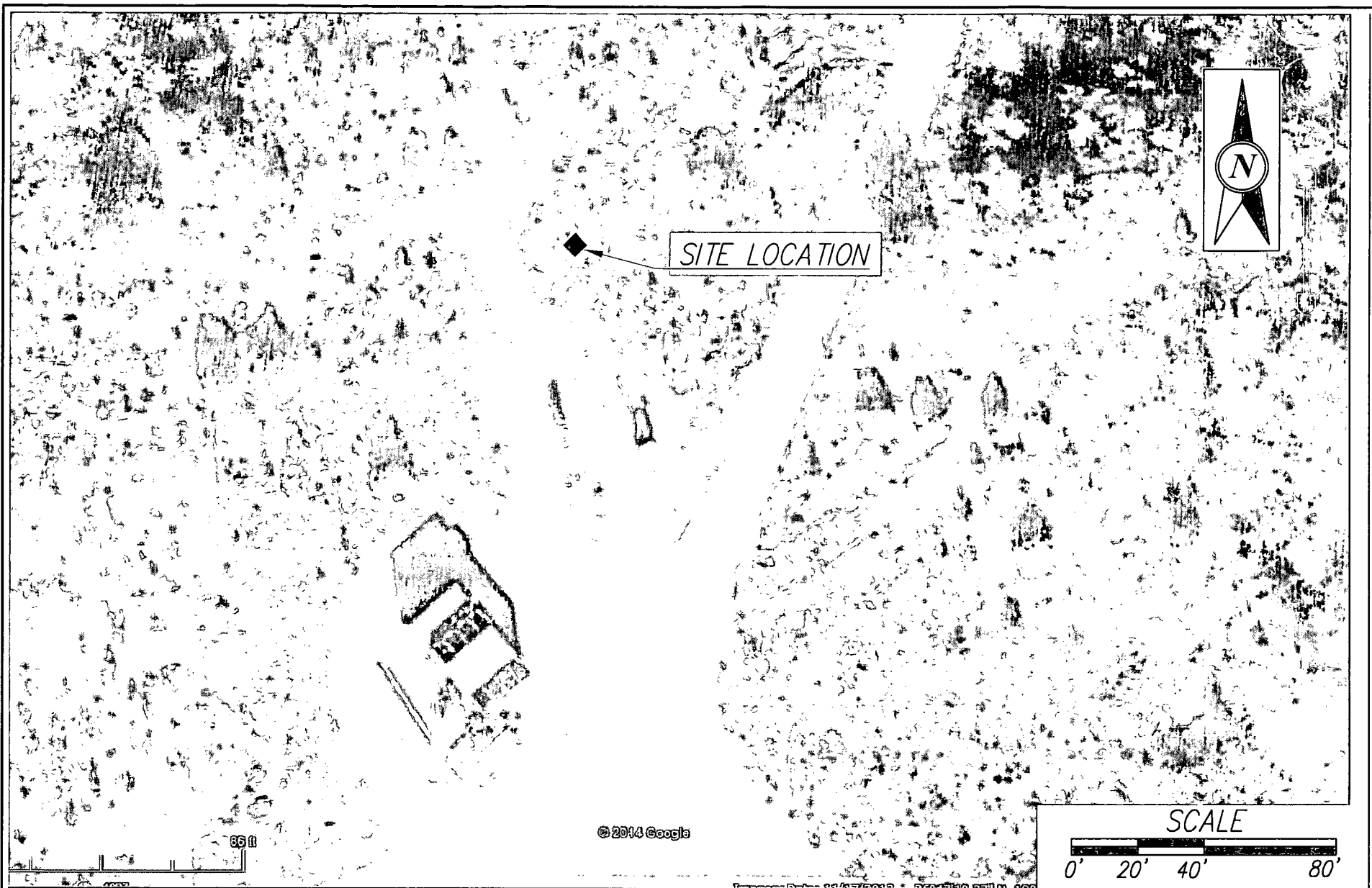
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Vert: N/A


Project No: 5122855

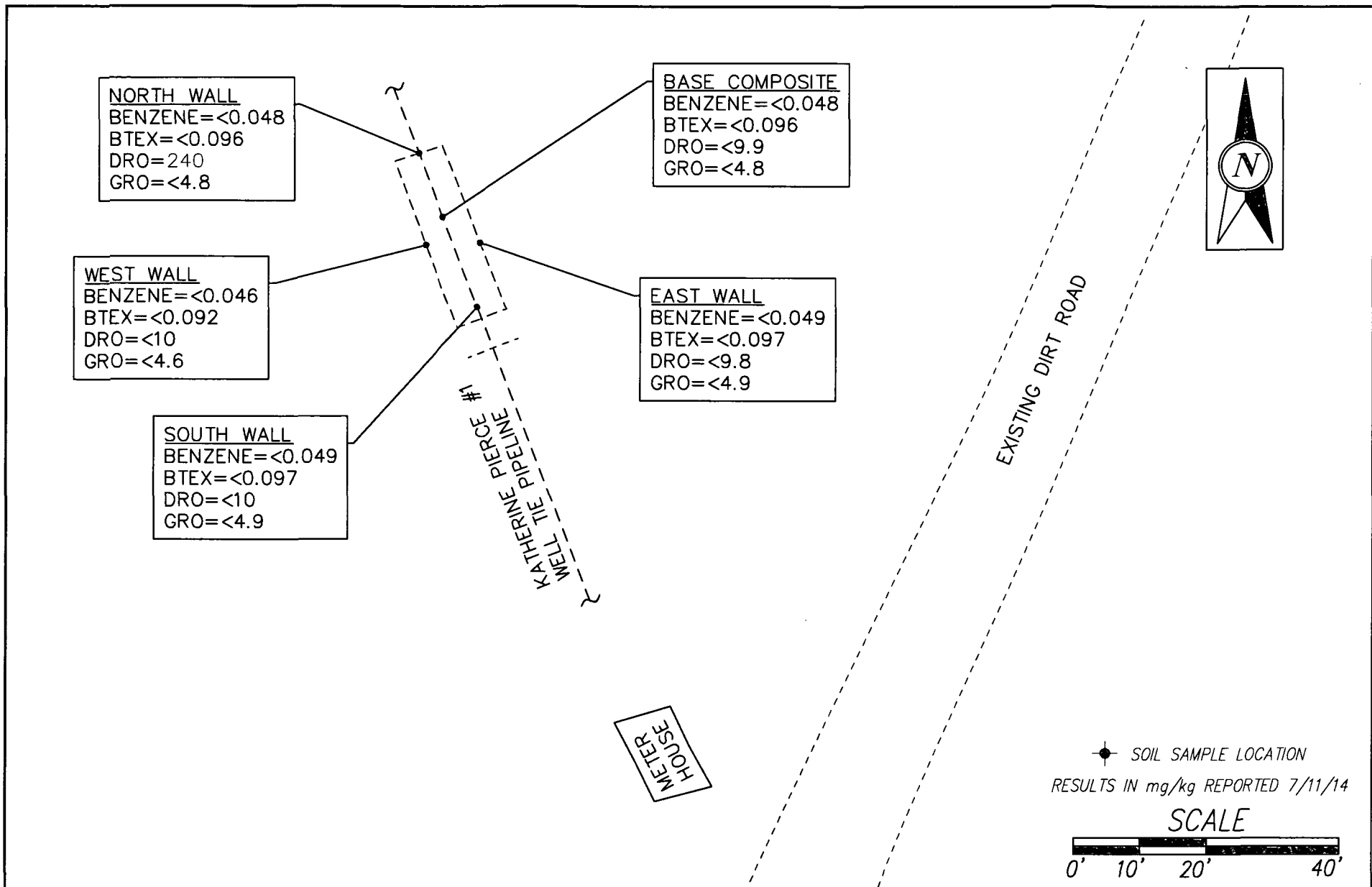
Sheet: 1

VICINITY MAP
KATHERINE PIERCE #1
SECTION 26, T30N, R12W

SAN JUAN COUNTY, NEW MEXICO



 <p>Engineering Environmental Surveying</p>	<p>SOUDER, MILLER & ASSOCIATES 401 W. BROADWAY FARMINGTON, NM 87401</p> <p>Phone (505) 325-7535 Toll-Free (800) 519-0098 Fax (505) 325-0045 www.soudermiller.com</p> <p>Serving the Southwest & Rocky Mountains Albuquerque, Farmington, Las Cruces, Roswell, Santa Fe, NM • El Paso, TX Cortez • Grand Junction • Montrose, CO • Safford, AZ • Moab, UT</p>	ENTERPRISE	FARMINGTON, NEW MEXICO	Designed SM	Drawn DJB	Checked RSA
		<p>SITE LOCATION MAP KATHERINE PIERCE #1 SECTION 26, T30N, R12W</p>		Date: 7/2/2014		
				Scale: Horiz: 1"=40' Vert: N/A		
				Project No: 5122855		
		SA JUAN COUNTY, NEW MEXICO		Sheet: 2		



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ENTERPRISE

FARMINGTON, NEW MEXICO

SOIL CONTAMINANT CONCENTRATION MAP
 KATHERINE PIERCE #1
 SECTION 26, T30N, R12W

SA JUAN COUNTY, NEW MEXICO

Designed SM	Drawn DJB	Checked RSA
Date:	7/2/2014	
Scale:	Horiz: 1"=20'	Vert: N/A
Project No:	5122855	
Sheet:	3	

TABLES

Enterprise Products
Table 2: Site Ranking

Katherine Pierce #1
Pipeline Release
7/11/2014

Depth to Groundwater	NMOCD Numeric Rank for this Site	Source for Ranking	Notes
< 50 BGS = 20	10	Petroleum Recovery Research Center Maps; Field Verified	It is anticipated that ground water is 80 feet below ground surface.
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	Petroleum Recovery Research Center Maps; Field Verified	<500 Feet to nearby irrigation ditch
200' - 1000' = 10			
>1000' = 0			
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' from a private domestic water source? YES OR NO to BOTH. YES = 20, NO = 0	20	<500 Feet to Nearby Irrigation Ditch	According to the NMOSE database, 2 wells are located within 1000 of the release site.
Total Site Ranking	40		
Soil Remediation Standards	0 to 9	10 to 19	>19
Benzene	10 PPM	10 PPM	10 PPM
BTEX	50 PPM	50 PPM	50 PPM
TPH	5000 PPM	1000 PPM	100 PPM



SMA Project # BG

Enterprise Products
Table 3: Summary of Excavation Field Screening Results

Katherine Pierce #1
Pipeline Release
7/11/2014

FIELD SCREENING RESULTS SUMMARY					
Date	Time	Field Screening Reference	Sample Depth (Feet BGS)	PID Reading (ppm)	Lab Sample Collected Y/N
7/1/2014	10:00	SC-1 Base	4.5	1.5	Y
7/1/2014	10:01	SC-2 W. Wall	0-5	5.7	N
7/1/2014	10:02	SC-3 N. Wall	0-5	5.4	N
7/1/2014	10:03	SC-4 E. Wall	0-5	2.7	N
7/1/2014	10:04	SC-5 S. Wall	0-5	7.2	N
7/1/2014	10:30	SC-6 Base Below RP	4.5	242.7	N
7/1/2014	10:37	SC-7 W. Base of S. Excavation	6	8.5	N
7/1/2014	10:38	SC-8 E. Base of S. Excavation	6	1.3	N
7/1/2014	11:22	SC-9 W Base @ RP	7	395.1	Y
7/2/2014	9:00	SC-10 N. Wall, N. Excavation	7	1.2	N
7/2/2014	9:05	SC-11 E. Wall of N. Excavation	7	1.3	N
7/2/2014	9:10	SC-12 W. Wall of N. Excavation	7	3	N
7/2/2014	9:25	SC-13 Base @ RP, E. of Pipeline	9	13.8	N
7/2/2014	9:40	SC-14 E. Wall, N. Excavation	0-9	10.1	Y
7/2/2014	10:00	SC-15 Base of N. Excavation	9	3.2	Y
7/2/2014	10:15	SC-16 Wall of N. Excavation	0-9	8.9	Y
7/2/2014	10:10	SC-17 N. Wall, N. Excavation	5-9	51.3	Y
7/2/2014	10:15	SC-18 S. Wall	5-9	3.6	Y



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

Katherine Pierce #1
Pipeline Release
7/11/2014

Date	Time	Sample ID	Sample Depth (Feet BGS)	Method 8015 GRO	Method 8015 DRO	Method 8021 Benzene	Method 8021 BTEX
NMOCD Guidelines		NMOCD Site Ranking: 30		100 ppm		10 ppm	50 ppm
7/1/2014	10:00	SC-1 Base	4.5	<4.99	<29.9	<0.05	<0.05
7/1/2014	11:22	SC-9 W Base @ RP	7	115	76.8	<0.05	3.55
7/2/2014	9:40	E Wall	0-9	<4.9	<9.8	<0.049	<0.097
7/2/2014	10:05	W. Wall	0-9	<4.6	<10	<0.046	<0.092
7/2/2014	10:10	Base Composite	9	<4.8	<9.9	<0.048	<0.096
7/2/2014	10:10	North Wall	0-9	<4.8	240	<0.048	<0.096
7/2/2014	10:15	S Wall	5-9	<4.9	<10	<0.049	<0.097



APPENDIX A
FIELD NOTES

Release Information

Name	Kathrine Pierce #1 / Katy #1
Location	Latitude/Longitude
	36.78854° -108.06425°
	Section, Township, Range
	NW/NE Sec. 26, T30N, R12W
Reported To	Tom Long
Area Supervisor	Miles Moore
Diameter of Pipeline	4"
Source of Release	Internal Corrosion
Release Contents	Nat. Gas / Condensate
Release Volume	unknown
Subcontractor	WSEC
Disposal Facility	IEI
Yd ³ Contam. Soil	
PO/WO/AFE	

Notes:

onsite @ 9:40 Steve Moskal + Alicia Patterson

#Tailgate Safety Meeting @ 9:45
- LOTO

Black Staining below RP

Calibrated PID w/ Isobutylene

Saw Black Staining and thought it was location of RP.
Dug an additional 12' and found RP

Installed clamp on pipeline @ RP @ 11:20

7/2 onsite @ 9:40

Check in w/ Simon of EPLD

Field Screen Walls + Base

offsite @ 10:45

Field Screening

Location Name				Date	
Katherine Pierce #1				7/1/14	
Location Name	Description	Depth (Feet BGS)	Time Collected	Time Screened	PID Reading (ppm)
SC-1	Base (Below Release Point) RP	4.5	1000	1011	1.5
SC-2	W wall	0-5'	1001	1012	5.7
SC-3	N wall	0-5'	1002	1013	5.4
SC-4	E wall	0-5'	1003	1014	2.7
SC-5	S. wall	0-5'	1004	1015	7.2
SC-6	Below RP (actual)	4.5'	1030	1040	242.7
SC-7	W Base of RP + S. Exc.	6.0'	1037	1046	8.5
SC-8	E Base of RP + S. Exc.	6.0'	1038	1047	1.3
SC-9	W Base of RP	7.0'	1122	1128	395.1
SC-10	N wall	7.0	0900	0902	1.2
SC-11	East wall	7.0	0905	0904	1.3
SC-12	West wall	7.0	0910	0912	3.0
SC-13	Base @ RP: E pipe	9.0	0925	0930	13.8

7/2/14

Field Screening

Location Name
Katherine Pierce

Date
7/2/14

Location Name

No.	Description	Amount	Date
1
2
3
4
5
6
7
8
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Depth (Feet
BGS)

Time Collected

Time
Screened

PID Reading
(ppm)

Sc-14

E Wall

12-9

0940

950

10.1

Sc-15

W Base

9

1000

1021

3.2

SC-16

w wall

6-9

1085

1027

8.9

SC-17

N wall

6-9

1010

1023

513

52-18

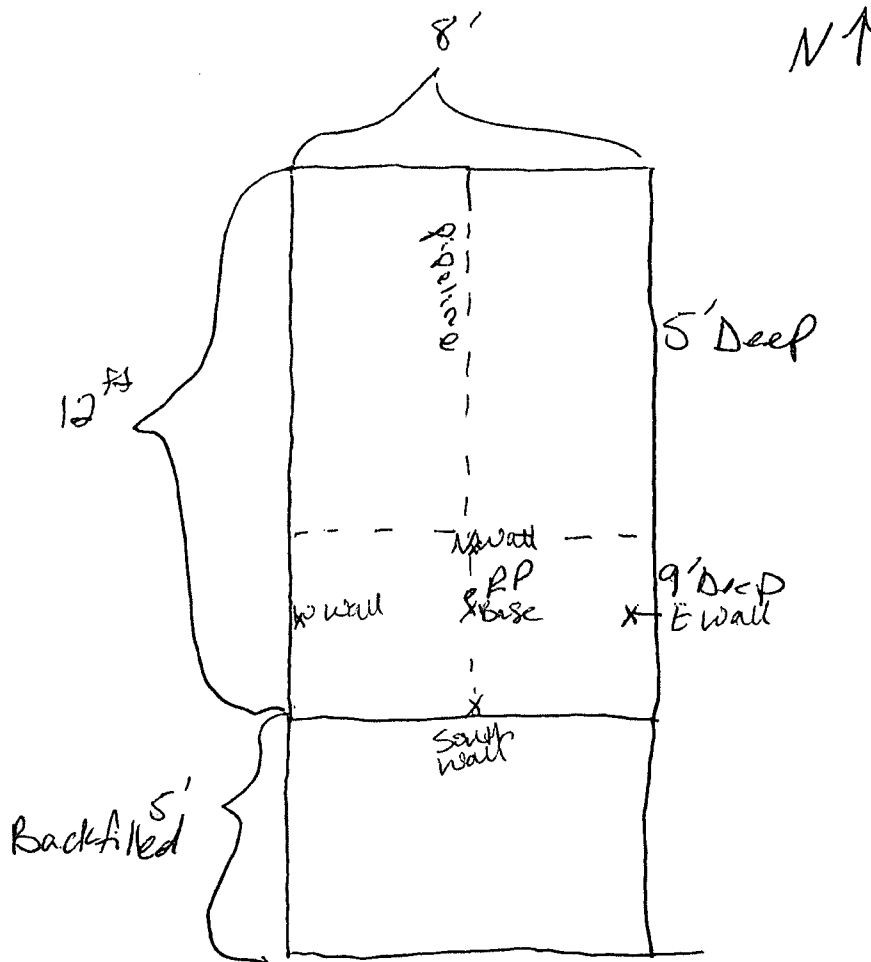
S wall

5-9

6015

1024

36



APPENDIX B
SITE PHOTOGRAPHY

Site Photographs
Enterprise Products Katherine Pierce #1 Well Tie Release

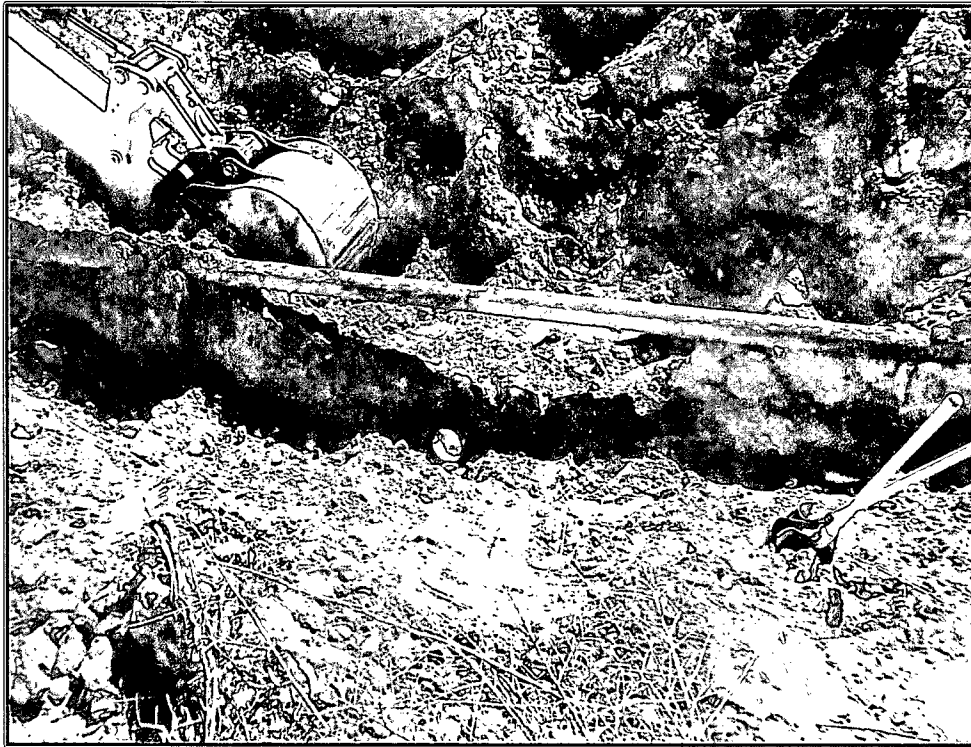


Photo 1: Excavation below the Katherine Pierce #1 well tie pipeline; note the staining of the soils.

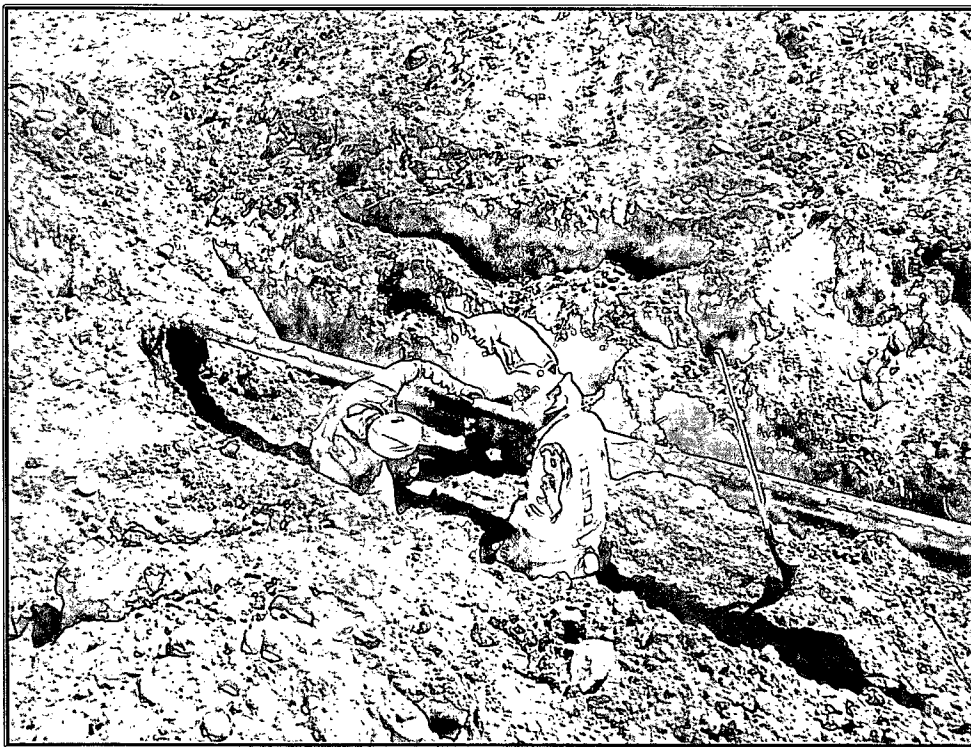


Photo 2: Inspection and repair activities of the Katherine Pierce #1 well tie pipeline.

Site Photographs
Enterprise Products Katherine Pierce #1 Well Tie Release



Photo 3: The actual location of the release point being determined by the pipeline contractor.

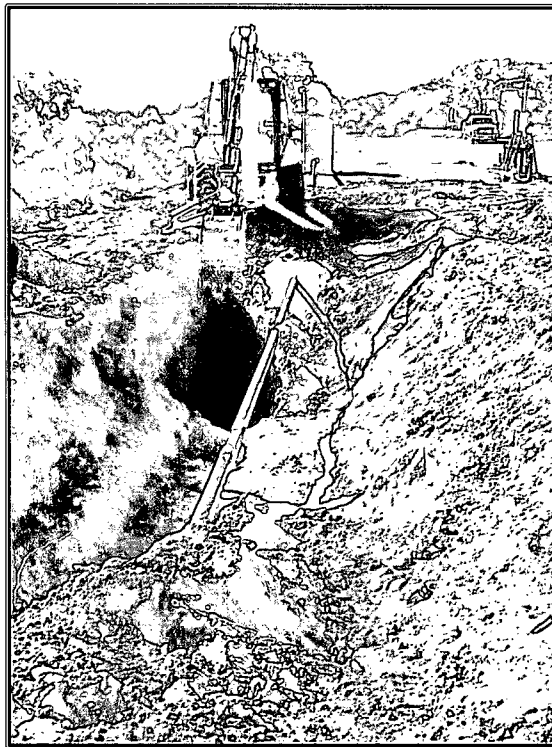


Photo 4: The final excavation of the well tie release after pipeline repair was complete.

APPENDIX C

SOIL DISPOSAL DOCUMENTATION

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
220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Mineral
Oil Cons
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-138
Revised August 1, 2011
Facility Operator
sign and make this
vision inspection.

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

- Generator Name and Address:**
Enterprise Field Services, LLC, 614 Reilly Avenue, Farmington, NM 87401
- Originating Site:**
Katherine Pierce #1 and Katy #1 Well Tie
- Location of Material (Street Address, City, State or ULSTR):**
Unit Letter B, Section 26, T30N, R12W; 36.788510, -108.064109
- Source and Description of Waste:** Hydrocarbon impacted soils associated with a release from a natural gas well tie.
- Estimated Volume** 10 ^{yd} bbls **Known Volume** (to be entered by the operator at the end of the haul) 50 ^{yd} bbls

5. GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS

I, Thomas Long ^{Thomas Long} representative or authorized agent for Enterprise Field Services, LLC do hereby
PRINT & SIGN NAME COMPANY NAME
certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988
regulatory determination, the above described waste is: (Check the appropriate classification)

☒ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. **Operator Use Only: Waste Acceptance Frequency** ☐ Monthly ☐ Weekly ☐ Per Load

☐ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items)

☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☐ Process Knowledge ☐ Other (Provide description in Box 4)

GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS

I, Thomas Long ⁷⁻¹⁻¹⁴, representative for Enterprise Field Services, LLC authorize IEI, Inc. to
Generator Signature
complete the required testing/sign the Generator Waste Testing Certification.

I, [Signature], representative for IEI, Inc. do hereby certify that
representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples
have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results
of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of
19.15.36 NMAC.

6. Transporter: West States Energy Contractor

OCD Permitted Surface Waste Management Facility

Name and Facility Permit #: JFJ Landfarm/Industrial Ecosystems, Inc. * Permit #: NM 01-0010B

Address of Facility: #49 CR 2150 Aztec, New Mexico

Method of Treatment and/or Disposal:

Treating Plant ☒ Landfarm ☐ Landfill ☐ Other

Waste Acceptance Status:

☒ APPROVED

☐ DENIED (Must Be Maintained As Permanent Record)

PRINT NAME: L. Machado

TITLE: Admin. Specialist DATE: 7/2/14

SIGNATURE: [Signature]
Surface Waste Management Facility Authorized Agent

TELEPHONE NO.: 505-630-1782

CL-120
Ph-8

7-1-14

APPENDIX D

LABORATORY ANALYTICAL REPORTS



Analytical Report

Report Summary

Client: Souder Miller & Associates

Chain Of Custody Number: 17182

Samples Received: 7/1/2014 12:21:00PM

Job Number: 03117-0014

Work Order: P407012

Project Name/Location: Katherine Pierce #1

Entire Report Reviewed By:

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

Date: 7/2/14

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.



Souder Miller & Associates
2101 San Juan Blvd.
Farmington NM, 87401

Project Name: Katherine Pierce #1
Project Number: 03117-0014
Project Manager: Steven Moskal

Reported:
02-Jul-14 13:08

Analytical Report for Samples

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SC-1S Base @4.5'	P407012-01A	Soil	07/01/14	07/01/14	Glass Jar, 4 oz.
SC-9N Base @ RP @ 7'	P407012-02A	Soil	07/01/14	07/01/14	Glass Jar, 4 oz.

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Souder Miller & Associates
2101 San Juan Blvd.
Farmington NM, 87401

Project Name: Katherine Pierce #1
Project Number: 03117-0014
Project Manager: Steven Moskal

Reported:
02-Jul-14 13:08

SC-1S Base @4.5'
P407012-01 (Solid)

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Volatile Organics by EPA 8021										
Benzene	ND	0.05	mg/kg	1		1427009	07/01/14	07/02/14	EPA 8021B	
Toluene	ND	0.05	mg/kg	1		1427009	07/01/14	07/02/14	EPA 8021B	
Ethylbenzene	ND	0.05	mg/kg	1		1427009	07/01/14	07/02/14	EPA 8021B	
p,m-Xylene	ND	0.05	mg/kg	1		1427009	07/01/14	07/02/14	EPA 8021B	
o-Xylene	ND	0.05	mg/kg	1		1427009	07/01/14	07/02/14	EPA 8021B	
Total Xylenes	ND	0.05	mg/kg	1		1427009	07/01/14	07/02/14	EPA 8021B	
Total BTEX	ND	0.05	mg/kg	1		1427009	07/01/14	07/02/14	EPA 8021B	
Surrogate: Bromochlorobenzene		95.4 %		80-120		1427009	07/01/14	07/02/14	EPA 8021B	
Surrogate: 1,3-Dichlorobenzene		94.9 %		80-120		1427009	07/01/14	07/02/14	EPA 8021B	
Nonhalogenated Organics by 8015										
Gasoline Range Organics (C6-C10)	ND	4.99	mg/kg	1		1427009	07/01/14	07/02/14	EPA 8015D	
Diesel Range Organics (C10-C28)	ND	29.9	mg/kg	1		1427010	07/01/14	07/02/14	EPA 8015D	

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Souder Miller & Associates
2101 San Juan Blvd.
Farmington NM, 87401

Project Name: Katherine Pierce #1
Project Number: 03117-0014
Project Manager: Steven Moskal

Reported:
02-Jul-14 13:08

SC-9N Base @ RP @ 7'
P407012-02 (Solid)

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Volatile Organics by EPA 8021										
Benzene	ND	0.05	mg/kg	1		1427009	07/01/14	07/02/14	EPA 8021B	
Toluene	0.99	0.05	mg/kg	1		1427009	07/01/14	07/02/14	EPA 8021B	
Ethylbenzene	ND	0.05	mg/kg	1		1427009	07/01/14	07/02/14	EPA 8021B	
p,m-Xylene	2.49	0.05	mg/kg	1		1427009	07/01/14	07/02/14	EPA 8021B	
o-Xylene	0.07	0.05	mg/kg	1		1427009	07/01/14	07/02/14	EPA 8021B	
Total Xylenes	2.56	0.05	mg/kg	1		1427009	07/01/14	07/02/14	EPA 8021B	
Total BTEX	3.55	0.05	mg/kg	1		1427009	07/01/14	07/02/14	EPA 8021B	
Surrogate: Bromochlorobenzene		104 %		80-120		1427009	07/01/14	07/02/14	EPA 8021B	
Surrogate: 1,3-Dichlorobenzene		97.8 %		80-120		1427009	07/01/14	07/02/14	EPA 8021B	
Nonhalogenated Organics by 8015										
Gasoline Range Organics (C6-C10)	115	4.98	mg/kg	1		1427009	07/01/14	07/02/14	EPA 8015D	
Diesel Range Organics (C10-C28)	76.8	30.0	mg/kg	1		1427010	07/01/14	07/02/14	EPA 8015D	

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Souder Miller & Associates 2101 San Juan Blvd. Farmington NM, 87401	Project Name: Katherine Pierce #1 Project Number: 03117-0014 Project Manager: Steven Moskal	Reported: 02-Jul-14 13:08
---	---	------------------------------

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 1427009 - Purge and Trap EPA 5030A

Blank (1427009-BLK1)			Prepared: 01-Jul-14 Analyzed: 02-Jul-14							
Benzene	ND	0.05	mg/kg							
Toluene	ND	0.05	"							
Ethylbenzene	ND	0.05	"							
p,m-Xylene	ND	0.05	"							
o-Xylene	ND	0.05	"							
Total Xylenes	ND	0.05	"							
Total BTEX	ND	0.05	"							
Surrogate: 1,3-Dichlorobenzene	44.1		ug/L	50.0		88.1	80-120			
Surrogate: Bromochlorobenzene	46.0		"	50.0		92.0	80-120			

Duplicate (1427009-DUP1)			Source: P407012-01		Prepared: 01-Jul-14 Analyzed: 02-Jul-14					
Benzene	ND	0.05	mg/kg		ND				30	
Toluene	ND	0.05	"		ND				30	
Ethylbenzene	ND	0.05	"		ND				30	
p,m-Xylene	ND	0.05	"		ND				30	
o-Xylene	ND	0.05	"		ND				30	
Surrogate: 1,3-Dichlorobenzene	42.8		ug/L	50.0		85.6	80-120			
Surrogate: Bromochlorobenzene	44.9		"	50.0		89.8	80-120			

Matrix Spike (1427009-MS1)			Source: P407012-01		Prepared: 01-Jul-14 Analyzed: 02-Jul-14					
Benzene	38.2		ug/L	50.0	ND	76.3	39-150			
Toluene	39.2		"	50.0	ND	78.4	46-148			
Ethylbenzene	40.0		"	50.0	ND	80.1	32-160			
p,m-Xylene	78.6		"	100	ND	78.6	46-148			
o-Xylene	39.8		"	50.0	ND	79.6	46-148			
Surrogate: 1,3-Dichlorobenzene	42.0		"	50.0		84.1	80-120			
Surrogate: Bromochlorobenzene	43.9		"	50.0		87.7	80-120			

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Souder Miller & Associates
2101 San Juan Blvd.
Farmington NM, 87401

Project Name: Katherine Pierce #1
Project Number: 03117-0014
Project Manager: Steven Moskal

Reported:
02-Jul-14 13:08

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 1427009 - Purge and Trap EPA 5030A

Blank (1427009-BLK1)

Prepared: 01-Jul-14 Analyzed: 02-Jul-14

Gasoline Range Organics (C6-C10) ND 4.99 mg/kg

Duplicate (1427009-DUP1)

Source: P407012-01

Prepared: 01-Jul-14 Analyzed: 02-Jul-14

Gasoline Range Organics (C6-C10) ND 5.00 mg/kg ND 30

Matrix Spike (1427009-MS1)

Source: P407012-01

Prepared: 01-Jul-14 Analyzed: 02-Jul-14

Gasoline Range Organics (C6-C10) 0.42 mg/L 0.450 ND 92.7 75-125

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Souder Miller & Associates
2101 San Juan Blvd.
Farmington NM, 87401

Project Name: Katherine Pierce #1
Project Number: 03117-0014
Project Manager: Steven Moskal

Reported:
02-Jul-14 13:08

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
---------	--------	--------------------	-------	----------------	------------------	------	----------------	-----	--------------	-------

Batch 1427010 - DRO Extraction EPA 3550C

Blank (1427010-BLK1)

Prepared: 01-Jul-14 Analyzed: 02-Jul-14

Diesel Range Organics (C10-C28) ND 29.9 mg/kg

Duplicate (1427010-DUP1)

Source: P407012-01

Prepared: 01-Jul-14 Analyzed: 02-Jul-14

Diesel Range Organics (C10-C28) 58.3 29.9 mg/kg ND 30 D1

Matrix Spike (1427010-MS1)

Source: P407012-01

Prepared: 01-Jul-14 Analyzed: 02-Jul-14

Diesel Range Organics (C10-C28) 276 31.6 mg/kg 263 ND 105 75-125

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Souder Miller & Associates
2101 San Juan Blvd.
Farmington NM, 87401

Project Name: Katherine Pierce #1
Project Number: 03117-0014
Project Manager: Steven Moskal

Reported:
02-Jul-14 13:08

Notes and Definitions

D1 Duplicates or Matrix Spike Duplicates Relative Percent Difference exceeds control 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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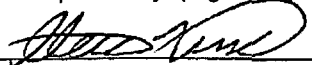
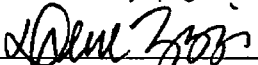

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CHAIN OF CUSTODY RECORD

17182

Client: Souder Miller & Assoc.		Project Name / Location: Katherine Pierce #1			ANALYSIS / PARAMETERS																
Email results to: steven.moskal@soudermiller.com alicia.patterson@soudermiller.com		Sampler Name: Steve Moskal			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.: Alicia 505 255 9812 505-320-0626		Client No.: 5122855 03117-0014																			
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 ₃	HCl															
SC-1A Base @ 4.5'	7/1/14	1000	P407012-01	1 x 4oz.				X	X											-	✓
SC-9 N Base @ RP @ 1'	↓	1122	P407012-02	↓				X	X											-	✓
Relinquished by: (Signature) 					Date 7/1/14	Time 1215	Received by: (Signature) 										Date 7/1/14	Time 1221			
Relinquished by: (Signature)							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"/>																					
<input type="checkbox"/> Sample(s) dropped off after hours to secure drop off area. <div style="display: flex; justify-content: space-between; align-items: center;"> <div style="font-size: 2em; font-weight: bold;">RUSH</div> <div style="text-align: right;"> <div style="font-size: 1.5em; font-weight: bold;">21.3</div> <div style="font-size: 1.5em; font-weight: bold;">29.9</div> </div> </div>																					



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

July 10, 2014

Steve Moskal

Souder, Miller and Associates

401 W. Broadway

Farmington, NM 87401

TEL: (505) 325-5667

FAX (505) 327-1496

RE: Katherine Pierce #1

OrderNo.: 1407304

Dear Steve Moskal:

Hall Environmental Analysis Laboratory received 5 sample(s) on 7/7/2014 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. 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,

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Analytical Report

Lab Order 1407304

Date Reported: 7/10/2014

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Souder, Miller and Associates**Client Sample ID:** West Wall 0-9**Project:** Katherine Pierce #1**Collection Date:** 7/2/2014 10:05:00 AM**Lab ID:** 1407304-001**Matrix:** SOIL**Received Date:** 7/7/2014 12:42:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: BCN
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	7/9/2014 12:32:25 PM	14101
Surr: DNOP	58.3	57.9-140		%REC	1	7/9/2014 12:32:25 PM	14101
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	7/9/2014 12:33:23 PM	14109
Surr: BFB	89.2	80-120		%REC	1	7/9/2014 12:33:23 PM	14109
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.046		mg/Kg	1	7/9/2014 12:33:23 PM	14109
Toluene	ND	0.046		mg/Kg	1	7/9/2014 12:33:23 PM	14109
Ethylbenzene	ND	0.046		mg/Kg	1	7/9/2014 12:33:23 PM	14109
Xylenes, Total	ND	0.092		mg/Kg	1	7/9/2014 12:33:23 PM	14109
Surr: 4-Bromofluorobenzene	97.2	80-120		%REC	1	7/9/2014 12:33:23 PM	14109

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

Analytical ReportLab Order **1407304**Date Reported: **7/10/2014****Hall Environmental Analysis Laboratory, Inc.****CLIENT:** Souder, Miller and Associates**Client Sample ID:** Base Composite**Project:** Katherine Pierce #1**Collection Date:** 7/2/2014 10:00:00 AM**Lab ID:** 1407304-002**Matrix:** SOIL**Received Date:** 7/7/2014 12:42:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: BCN
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	7/9/2014 1:03:48 PM	14101
Surr: DNOP	60.8	57.9-140		%REC	1	7/9/2014 1:03:48 PM	14101
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	7/9/2014 1:59:38 PM	14109
Surr: BFB	88.9	80-120		%REC	1	7/9/2014 1:59:38 PM	14109
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.048		mg/Kg	1	7/9/2014 1:59:38 PM	14109
Toluene	ND	0.048		mg/Kg	1	7/9/2014 1:59:38 PM	14109
Ethylbenzene	ND	0.048		mg/Kg	1	7/9/2014 1:59:38 PM	14109
Xylenes, Total	ND	0.096		mg/Kg	1	7/9/2014 1:59:38 PM	14109
Surr: 4-Bromofluorobenzene	95.8	80-120		%REC	1	7/9/2014 1:59:38 PM	14109

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

Analytical Report

Lab Order 1407304

Date Reported: 7/10/2014

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Souder, Miller and Associates**Client Sample ID:** North Wall**Project:** Katherine Pierce #1**Collection Date:** 7/2/2014 10:10:00 AM**Lab ID:** 1407304-003**Matrix:** SOIL**Received Date:** 7/7/2014 12:42:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: BCN
Diesel Range Organics (DRO)	240	9.8		mg/Kg	1	7/9/2014 10:24:16 PM	14101
Surr: DNOP	89.6	57.9-140		%REC	1	7/9/2014 10:24:16 PM	14101
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	7/9/2014 3:25:47 PM	14109
Surr: BFB	98.8	80-120		%REC	1	7/9/2014 3:25:47 PM	14109
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.048		mg/Kg	1	7/9/2014 3:25:47 PM	14109
Toluene	ND	0.048		mg/Kg	1	7/9/2014 3:25:47 PM	14109
Ethylbenzene	ND	0.048		mg/Kg	1	7/9/2014 3:25:47 PM	14109
Xylenes, Total	ND	0.096		mg/Kg	1	7/9/2014 3:25:47 PM	14109
Surr: 4-Bromofluorobenzene	99.5	80-120		%REC	1	7/9/2014 3:25:47 PM	14109

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

Analytical Report

Lab Order 1407304

Date Reported: 7/10/2014

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Souder, Miller and Associates**Client Sample ID:** South Wall 5-9**Project:** Katherine Pierce #1**Collection Date:** 7/2/2014 10:15:00 AM**Lab ID:** 1407304-004**Matrix:** SOIL**Received Date:** 7/7/2014 12:42:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: BCN
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	7/9/2014 10:55:07 PM	14101
Surr: DNOP	75.2	57.9-140		%REC	1	7/9/2014 10:55:07 PM	14101
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/9/2014 3:54:27 PM	14109
Surr: BFB	90.8	80-120		%REC	1	7/9/2014 3:54:27 PM	14109
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.049		mg/Kg	1	7/9/2014 3:54:27 PM	14109
Toluene	ND	0.049		mg/Kg	1	7/9/2014 3:54:27 PM	14109
Ethylbenzene	ND	0.049		mg/Kg	1	7/9/2014 3:54:27 PM	14109
Xylenes, Total	ND	0.097		mg/Kg	1	7/9/2014 3:54:27 PM	14109
Surr: 4-Bromofluorobenzene	97.7	80-120		%REC	1	7/9/2014 3:54:27 PM	14109

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

Analytical Report

Lab Order 1407304

Date Reported: 7/10/2014

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates

Client Sample ID: East Wall 0-9

Project: Katherine Pierce #1

Collection Date: 7/2/2014 9:40:00 AM

Lab ID: 1407304-005

Matrix: SOIL

Received Date: 7/7/2014 12:42:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: BCN
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	7/9/2014 11:25:54 PM	14101
Surr: DNOP	74.1	57.9-140		%REC	1	7/9/2014 11:25:54 PM	14101
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/9/2014 4:23:07 PM	14109
Surr: BFB	89.8	80-120		%REC	1	7/9/2014 4:23:07 PM	14109
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.049		mg/Kg	1	7/9/2014 4:23:07 PM	14109
Toluene	ND	0.049		mg/Kg	1	7/9/2014 4:23:07 PM	14109
Ethylbenzene	ND	0.049		mg/Kg	1	7/9/2014 4:23:07 PM	14109
Xylenes, Total	ND	0.097		mg/Kg	1	7/9/2014 4:23:07 PM	14109
Surr: 4-Bromofluorobenzene	96.9	80-120		%REC	1	7/9/2014 4:23:07 PM	14109

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.
	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#: 1407304

10-Jul-14

Client: Souder, Miller and Associates

Project: Katherine Pierce #1

Sample ID	LCS-14101		SampType:	LCS		TestCode:	EPA Method 8015D: Diesel Range Organics				
Client ID:	LCSS		Batch ID:	14101		RunNo:	19731				
Prep Date:	7/8/2014		Analysis Date:	7/8/2014		SeqNo:	573226		Units: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Diesel Range Organics (DRO)	48	10	50.00	0	96.8	68.6	130				
Surr: DNOP	4.0		5.000		80.6	57.9	140				

Sample ID	MB-14101	SampType:	MBLK		TestCode:	EPA Method 8015D: Diesel Range Organics				
Client ID:	PBS	Batch ID:	14101		RunNo:	19731				
Prep Date:	7/8/2014	Analysis Date:	7/8/2014		SeqNo:	573302	Units:	mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Surr: DNOP	8.3		10.00		83.2	57.9	140			

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. |
| 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#: 1407304

10-Jul-14

Client: Souder, Miller and Associates

Project: Katherine Pierce #1

Sample ID	MB-14109	SampType: MBLK			TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	PBS	Batch ID: 14109			RunNo: 19783					
Prep Date:	7/8/2014	Analysis Date: 7/9/2014			SeqNo: 574661		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	890		1000		89.1	80	120			

Sample ID	LCS-14109	SampType: LCS			TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	LCSS	Batch ID: 14109			RunNo: 19783					
Prep Date:	7/8/2014	Analysis Date: 7/9/2014			SeqNo: 574662		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	25.00	0	101	71.7	134			
Surr: BFB	960		1000		95.6	80	120			

Sample ID	1407304-002AMS	SampType: MS			TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	Base Composite	Batch ID: 14109			RunNo: 19783					
Prep Date:	7/8/2014	Analysis Date: 7/9/2014			SeqNo: 574665		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	28	4.8	23.92	0	118	71.8	132			
Surr: BFB	950		956.9		99.6	80	120			

Sample ID	1407304-002AMSD	SampType: MSD			TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	Base Composite	Batch ID: 14109			RunNo: 19783					
Prep Date:	7/8/2014	Analysis Date: 7/9/2014			SeqNo: 574666		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	28	4.8	23.90	0	117	71.8	132	0.943	20	
Surr: BFB	960		956.0		100	80	120	0	0	

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. |
| 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#: 1407304

10-Jul-14

Client: Souder, Miller and Associates

Project: Katherine Pierce #1

Sample ID	MB-14109		SampType:	MBLK		TestCode:	EPA Method 8021B: Volatiles			
Client ID:	PBS		Batch ID:	14109		RunNo:	19783			
Prep Date:	7/8/2014		Analysis Date:	7/9/2014		SeqNo:	574674		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	0.97		1.000		97.4	80	120			

Sample ID	LCS-14109		SampType:	LCS		TestCode:	EPA Method 8021B: Volatiles			
Client ID:	LCSS		Batch ID:	14109		RunNo:	19783			
Prep Date:	7/8/2014		Analysis Date:	7/9/2014		SeqNo:	574675		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	101	80	120			
Toluene	0.97	0.050	1.000	0	97.0	80	120			
Ethylbenzene	0.98	0.050	1.000	0	98.5	80	120			
Xylenes, Total	3.0	0.10	3.000	0	98.6	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		102	80	120			

Sample ID	1407304-001AMSD		SampType:	MSD		TestCode:	EPA Method 8021B: Volatiles			
Client ID:	West Wall 0-9		Batch ID:	14109		RunNo:	19783			
Prep Date:	7/8/2014		Analysis Date:	7/9/2014		SeqNo:	574678		Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.046	0.9225	0	124	77.4	142	2.59	20	
Toluene	1.1	0.046	0.9225	0	121	77	132	4.00	20	
Ethylbenzene	1.2	0.046	0.9225	0	127	77.6	134	1.87	20	
Xylenes, Total	3.5	0.092	2.768	0	128	77.4	132	2.39	20	
Surr: 4-Bromofluorobenzene	0.94		0.9225		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.
- RL Reporting Detection Limit



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

Sample Log-In Check List

Client Name: SMA-FARM

Work Order Number: 1407304

RcptNo: 1

Received by/date:	AG	07/07/14	
Logged By:	Celina Sessa	7/7/2014 12:42:00 PM	Celina Sessa
Completed By:	Celina Sessa	7/8/2014 8:21:37 AM	Celina Sessa
Reviewed By:	mg	07/08/14	

Chain of Custody

- | | | | |
|--|---|-----------------------------|---|
| 1. Custody seals intact on sample bottles? | Yes <input type="checkbox"/> | No <input type="checkbox"/> | Not Present <input checked="" type="checkbox"/> |
| 2. Is Chain of Custody complete? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | Not Present <input type="checkbox"/> |
| 3. How was the sample delivered? | FedEx | | |

Log In

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

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 <input type="checkbox"/> | No <input type="checkbox"/> | NA <input checked="" type="checkbox"/> |
|---|------------------------------|-----------------------------|--|

Person Notified:	_____	Date	_____
By Whom:	_____	Via:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:	_____		
Client Instructions:	_____		

17. Additional remarks:

18. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	25.7	Good	Not Present			

Client: Snyder, Miller + Associates

Mailing Address: 401 W Broadway
Farmington, Nm 87401
Phone # (505) 325-7535

email or Fax#: alicia.patterson@SoudersMiller.com

QA/QC Package:

☒ Standard. ☐ Level 4 (Full Validation)

Accreditation

☐ NELAP ☐ Other

☐ EDD (Type)

Turn-Around Time:

☒ Standard ☐ Rush

Project Name:

Project Name: Katherine Pierce #1

Project #:

5122755

Project Manager:

Stone Moskiat

Sampler: ADP

On Ice: ☒ Yes ☐ No

Sample Temperature = 25

[illegible]

Date:	Time:	Relinquished by:
7/12	12:15	<i>Hein Patten</i>

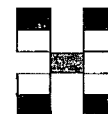
Date:	Time:	Relinquished by:
-------	-------	------------------

Received by: [Signature] Date 07/07/14 Time 12:00

Received by: _____ Date _____ Time _____

Remarks: Copy: Steven.moskal@soudermiller.com

Bill to Enterprise - Attn: Thomas Long



HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

	X	BTEX + MTBE + TMB's (8021)
		BTEX + MTBE + TPH (Gas only)
	X	TPH 8015B(GRO / DRO / HFO)
		TPH (Method 418.1)
		EDB (Method 504.1)
		PAH's (8310 or 8270 SIMS)
		RCRA 8 Metals
		Anions ($F, Cl, NO_3, NO_2, PO_4, SO_4$)
		8081 Pesticides / 8082 PCB's
		8260B (VOA)
		8270 (Semi-VOA)
		Air Bubbles (Y or N)

36.863670 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

NOV 17 2014

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 LLC	Contact: Thomas Long
Address: 614 Reilly Ave, Farmington, NM 87401	Telephone No. 505-599-2286
Facility Name: Lateral O-17 Pipeline	Facility Type: Natural Gas Gathering Line
Surface Owner: BLM	Mineral Owner: BLM
API No.	

LOCATION OF RELEASE

Unit Letter O	Section 26	Township 31N	Range 8W	Feet from the 760	North/South Line South	Feet from the 1543	East/West Line East	County San Juan
------------------	---------------	-----------------	-------------	-------------------------	------------------------------	--------------------------	---------------------------	--------------------

Latitude 36.863539 Longitude -107.641100

NATURE OF RELEASE

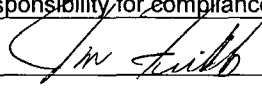
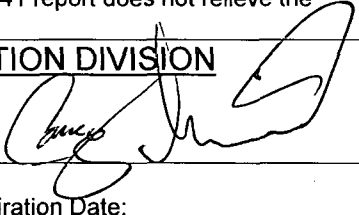
Type of Release: Natural Gas and Natural Gas Liquids	Volume of Release 203 MCF	Volume Recovered: None
Source of Release: Internal Corrosion	Date and Hour of Occurrence: 10/10/2014 @ 2:13 p.m.	Date and Hour of Discovery: 10/10/2014 3:00 p.m.
Was Immediate Notice Given? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom? Courtesy notification NMOCD - Cory Smith; BLM - Shari Ketchum on October 16, 2014.	
By Whom?	Date and Hour October 16, 2014 at 1:07 p.m.	
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: On October 10, 2014, a pipeline leak was discovered on the Lateral O-17 ROW. The Enterprise technician initiated notification procedures. The pipeline was isolated, blown down, depressurized, locked out and tagged out. An area of fluid staining of approximately 25 feet long by 3 feet wide was observed on the ground surface. Repairs and remediation were completed on October 24, 2014. Stockpiled soils were physically separated and soil samples for laboratory analysis were collected. All laboratory results indicated that hydrocarbon contaminants were below laboratory detection limits. The stockpiled soil was used to backfill the excavation after the repairs were complete.

Describe Area Affected and Cleanup Action Taken On October 10, 2014, a pipeline leak was discovered on the Lateral O-17 ROW. The Enterprise technician initiated notification procedures. The pipeline was isolated, blown down, depressurized, locked out and tagged out. An area of fluid staining of approximately 25 feet long by 3 feet wide was observed on the ground surface. Repairs and remediation were completed on October 24, 2014. Stockpiled soil was physically separated and soil samples for laboratory analysis were collected. All laboratory results indicated that hydrocarbon contaminants were below laboratory detection limits. The stockpiled soil was used to backfill the excavation after the repairs were complete. A third party corrective action report is included with this "Final" C-141.

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.

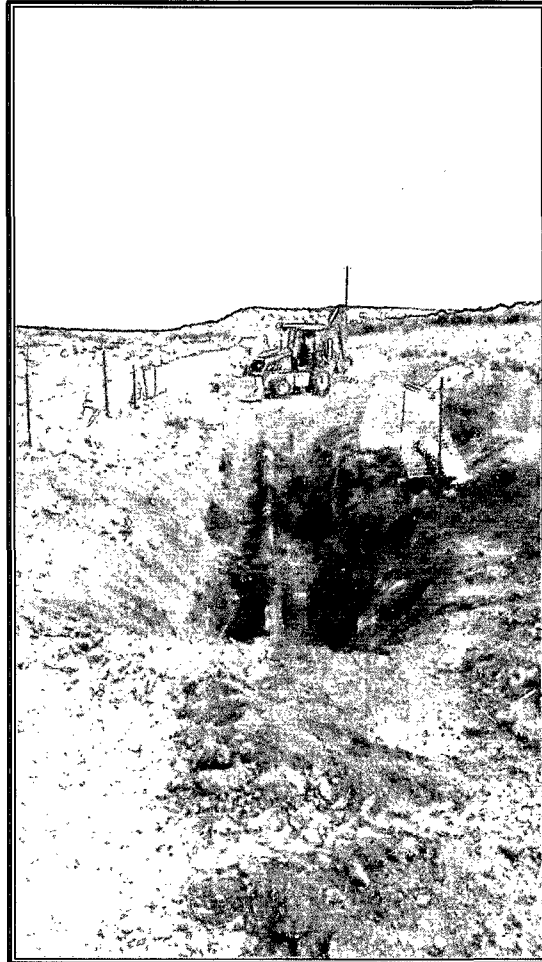
Signature: 	OIL CONSERVATION DIVISION	
Printed Name: Jon Fields	Approved by Environmental Specialist: 	
Title: Director, Environmental	Approval Date: 12/29/14	Expiration Date:
E-mail Address: jefields@eprod.com	Conditions of Approval:	Attached <input type="checkbox"/>
Date: 11/14/2014	Phone: (713)381-6684	

* Attach Additional Sheets If Necessary

#NCS 143 634 1744

42

**Enterprise Products
Lateral O-17 Pipeline Release
Latitude North 36.863539°, Longitude West -107.641100°
SW/SE (Unit O) Section 26, T31N R8W
San Juan County, New Mexico
November 4, 2014**



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

Submitted By:
Souder, Miller & Associates
401 West Broadway
Farmington, NM 87401
(505)325-7535



Table of Contents

1.0	Executive Summary	1
2.0	Introduction.....	1
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4.0	Summary of Field Activities	2
5.0	Conclusions and Recommendations.....	2
6.0	Closure and Limitations.....	3

Figures:

Figure 1: Vicinity Map

Figure 2: Site Map

Figure 3: Soil Contaminant Concentration Map

Tables:

Table 1: Release Information

Table 2: Site Ranking

Table 3: Summary of Laboratory Analysis

Appendices:

Appendix A: Photographic Documentation

Appendix B: Laboratory Analytical Reports

1.0 Executive Summary

On October 21, 22 and 24, 2014, Souder, Miller & Associates (SMA) responded to oversee the excavation of the hydrocarbon release associated with the Lateral O-17 pipeline. The release was initially reported on October 9, 2014 and is a result of internal and external corrosion of the six inch natural gas pipeline. The table below summarizes information about the pipeline remediation activities.

TABLE 1: RELEASE INFORMATION					
Name	Lateral O-17 Pipeline Release				
Location	Latitude/Longitude		Section, Township, Range		
	36.863539	-107.641100°	Unit 0	Section 26	T 31N, R 8W
Date Reported	October 9, 2014				
Reported to	Tom Long				
Land Owner	Bureau of Land Management (BLM)				
Reported To	NM Oil Conservation Division (NMOCD) and BLM				
Diameter of Pipeline	6 inches				
Source of Release	Internal/External Corrosion				
Release Contents	Natural Gas Liquids/Condensate				
Release Volume	Unknown				
Nearest Waterway	Located about 650 feet to the N of a tributary to Simon Canyon				
Depth to Groundwater	Estimated to be greater than 100 feet				
Nearest Domestic Water Source	Greater than 1,000 feet				
NMOCD Ranking	10				
SMA Response Dates	10/21, 10/22, 10/24/2014				
Subcontractors	Energy Maintenance Services (EMS)				
Disposal Facility	No disposed soil				
Yd ³ Contaminated Soil Excavated and Disposed	No offsite soil disposal				

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 O-17 pipeline release site. The site is located in the SW ¼ SE ¼ (Unit O) Section 26, T31N, R8W, 36.863539°, -107.641100°, San Juan County, New Mexico, on land owned by the Bureau of Land Management (BLM). Figure 1 illustrates the location of the site.

3.0 Site Ranking and Land Jurisdiction

The release site is located about 650 feet to the north of a tributary to Simon Canyon, in an area owned by the BLM with an elevation of approximately 6,334 feet above sea level. After evaluation of the site using aerial photography and topographic maps, depth to groundwater is

estimated to be greater than 100 feet below ground surface (bgs). Figure 1 depicts the site vicinity and Figure 2 depicts the site location.

SMA searched the New Mexico State Engineer's Office online water well database for water wells in the vicinity of the release. No wells were located within 1,000 feet or 1 mile radius of the site. The physical location of this release is within the jurisdiction of the NMOCD.

This release location has been assigned a NMOCD ranking of 10 which requires a soil remediation standard of 10 parts per million (ppm) benzene, 50 ppm combined benzene, toluene, ethyl-benzene, and total xylenes (BTEX), and 1000 ppm total petroleum hydrocarbons (TPH). Table 2 illustrates site ranking rationale.

4.0 Summary of Field Activities

On October 21, 22 and 24, 2014, SMA responded to a hydrocarbon release associated with the Lateral O-17 pipeline. Under the supervision and direction of SMA, EMS excavated soil for repair activities. SMA guided the excavation activities by collecting soil samples for field screening with a calibrated photo-ionization detector (PID). SMA field-screened the excavated soil, stockpiles, and the walls and base of the excavation to determine the extent of the release using a calibrated photoionization detector (PID). Field screening indicated that the extent of the hydrocarbon release had been removed. On October 24, Enterprise Products scheduled closure sample collection with the BLM and the NMOCD. Neither party was on site to witness sample collection. SMA collected 15 samples from the excavation and stockpiled soils (SC-6 through SC-20). Laboratory results confirmed contamination concentrations below NMOCD guidelines in the base and walls. Samples collected from the stockpiled soils also determined contamination below NMOCD guidelines and the stockpiles were used to backfill the excavation.

The pipeline trends generally east-west in the area of the release and the excavation was elongated in that direction. EMS excavated enough material to replace an entire 44 foot length of 6-inch pipeline. The final excavation measured approximately 71 feet long by 11 feet wide by 6 feet deep, covering an area of approximately 781 square feet. The entire excavation was left open until the lab results confirmed the final extents of the excavation were below NMOCD standards. Laboratory analysis confirmed the stockpiles were below NMOCD standards and therefore no soil was transported off site for disposal.

Samples were submitted for confirmation laboratory analysis per United States Environmental Protection Agency Methods: 8021 for benzene, toluene, ethylbenzene, and xylenes (BTEX) and 8015 for diesel and gasoline range organics (DRO/GRO). All samples were analyzed by Hall Environmental Analytical Laboratory in Albuquerque, New Mexico. Figure 3 illustrates the extent of the excavation, composite soil sample locations, and laboratory results.

5.0 Conclusions and Recommendations

NMOCD Guidelines for Remediation of Leaks, Spills, and Releases have established the following action levels for contaminants of concern with a site ranking of 10: 10 ppm (mg/kg) benzene, 50 ppm total BTEX, and 1,000 ppm TPH.

Laboratory analytical results for all samples collected were below NMOCD Guidelines for benzene (10 ppm), BTEX (50 ppm) and combined GRO/DRO (1,000 ppm). Small amounts of

TPH were detected in two of the wall samples (11 ppm GRO in SC-9 N East Wall and 12 ppm in SC-13 W Wall), but remained below standards. All other analytes in all other samples were below laboratory detection limits.

Soil contaminant concentrations are illustrated in Figure 3. A summary of laboratory analysis is included in Table 3. Laboratory reports are included in Appendix B

SMA recommends no further action at the Lateral O-17 pipeline release location.

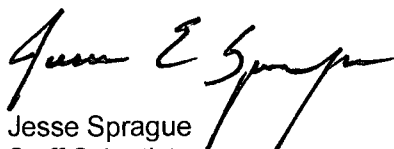
6.0 Closure and Limitations

The scope of our services consisted of the performance of a preliminary spill assessment, verification of release 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 Steve Moskal or Reid Allen at 505-325-7535.

Submitted by:

SOUDER, MILLER & ASSOCIATES



Jesse Sprague
Staff Scientist

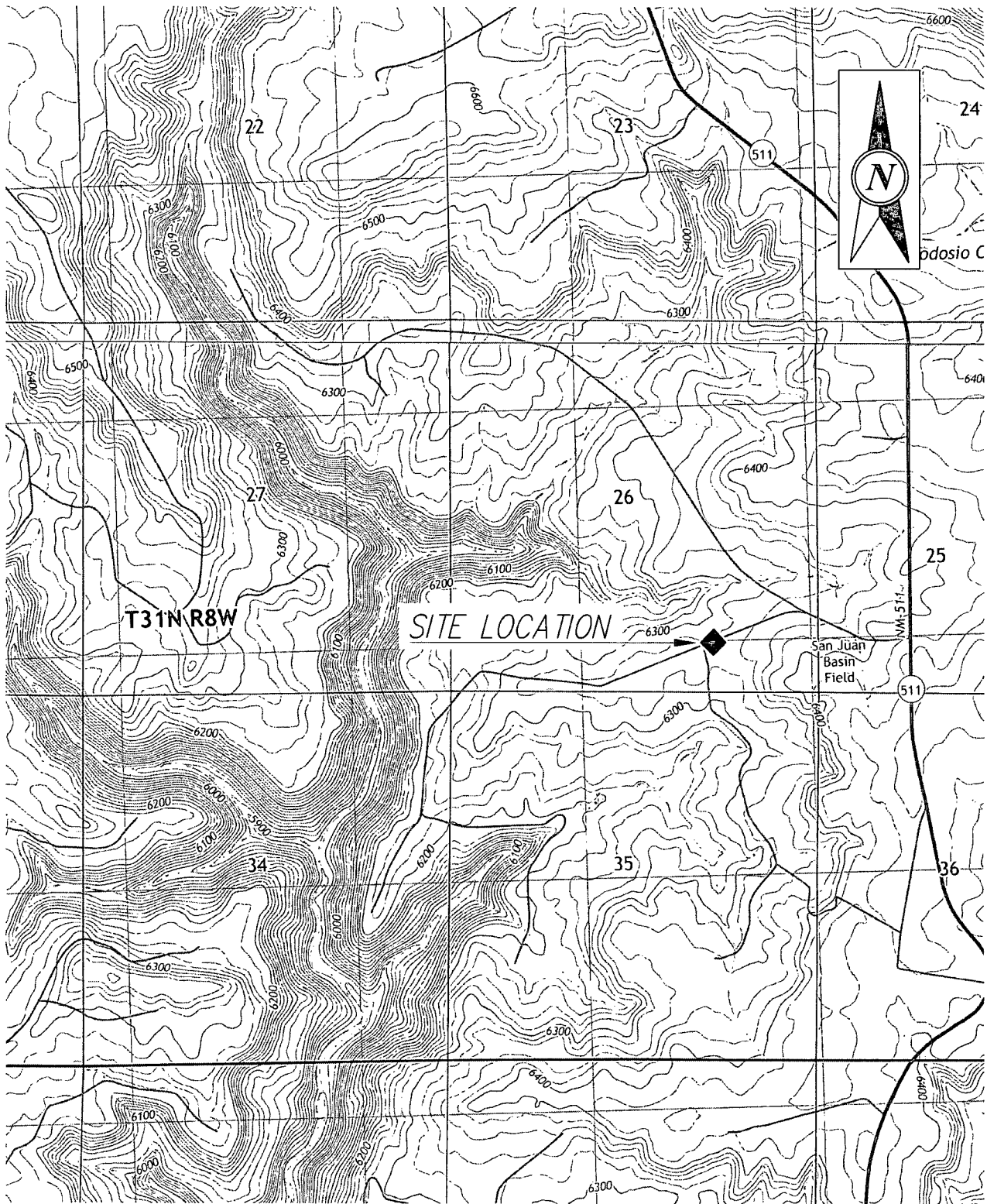
Reviewed by:



Steve Moskal
Project Scientist


Figures

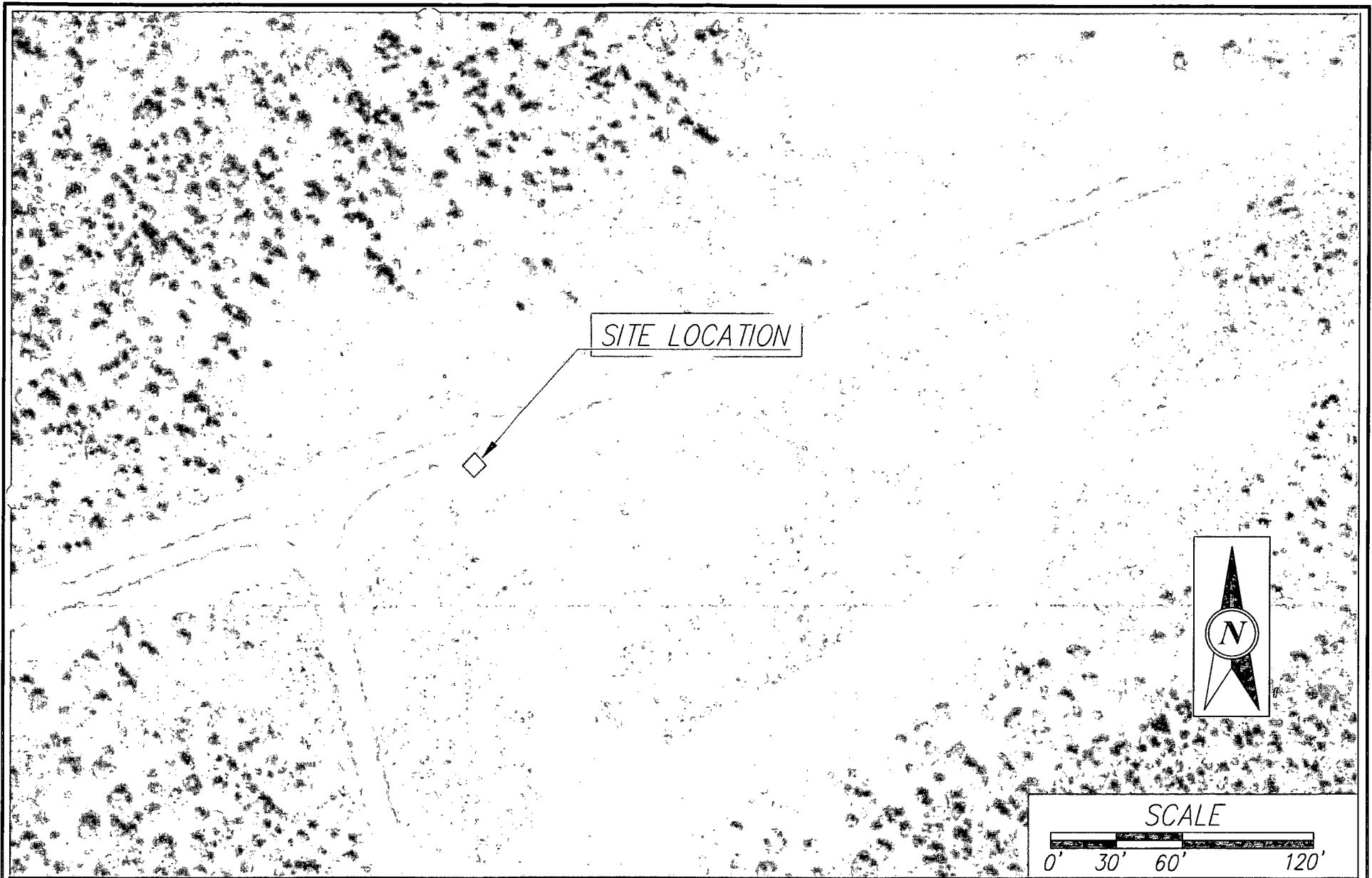




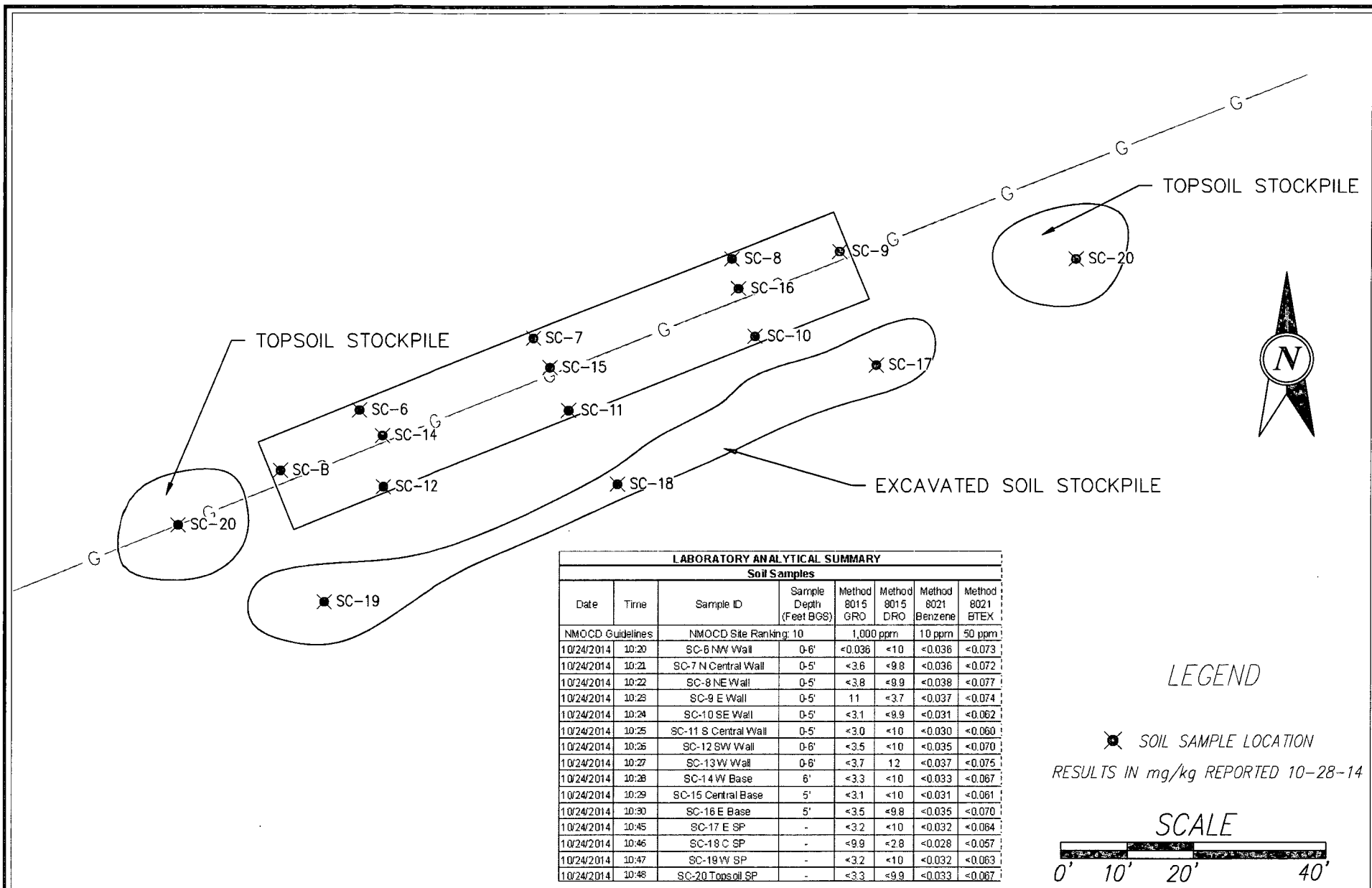
SCALE



 <p>ASMA Engineering Environmental Surveying</p>	<p>SOUDER, MILLER & ASSOCIATES 401 West Broadway Avenue Farmington, NM 87401-5907 Phone (505) 325-7535 Toll-Free (800) 519-0098 Fax (505) 326-0045 www.soudermiller.com</p>	<p>ENTERPRISE FARMINGTON, NEW MEXICO</p>	<p>Designed SM Drawn GJF Checked SC</p>
	<p>Serving the Southwest & Rocky Mountains Albuquerque, Carlsbad, Farmington, Las Cruces, Roswell, Santa Fe, NM - El Paso, TX Cortez - Grand Junction - Montrose, CO - Safford, AZ - Moab, UT</p>	<p>VICINITY MAP LATERAL O-17 SECTION 26, T31N, R8W</p>	<p>Date: 11/4/2014</p>
	<p>SAN JUAN COUNTY</p>	<p>Scale: Horiz: 1" = 2000' Vert: NA</p>	
	<p>Project No: 5122855</p>		
	<p>Sheet: 1</p>		



	<p>Engineering Environmental Surveying</p>	SOUDER, MILLER & ASSOCIATES 401 West Broadway Avenue Farmington, NM 87401-5907 Phone (505) 325-7535 Toll-Free (800) 519-0098 Fax (505) 326-0045 www.soudermiller.com Serving the Southwest & Rocky Mountains Albuquerque, Farmington, Las Cruces, Roswell, Santa Fe, NM • El Paso, TX Cortez • Grand Junction • Montrose, CO • Sedona, AZ • Moab, UT	ENTERPRISE SAN JUAN COUNTY, NEW MEXICO	FARMINGTON, NEW MEXICO SITE LOCATION MAP LATERAL O-17 SECTION 26, T31N, R8W	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>Designed SM</td> <td>Drawn DJB</td> <td>Checked SC</td> </tr> <tr> <td colspan="3">Date: 11/4/14</td> </tr> <tr> <td colspan="3">Scale: Horiz: 1"=60' Vert: N/A</td> </tr> <tr> <td colspan="3">Project No: 5122855</td> </tr> <tr> <td colspan="3">Sheet: 2</td> </tr> </table>	Designed SM	Drawn DJB	Checked SC	Date: 11/4/14			Scale: Horiz: 1"=60' Vert: N/A			Project No: 5122855			Sheet: 2		
		Designed SM	Drawn DJB	Checked SC																
		Date: 11/4/14																		
		Scale: Horiz: 1"=60' Vert: N/A																		
		Project No: 5122855																		
Sheet: 2																				



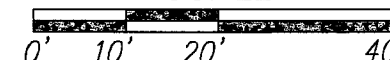
LABORATORY ANALYTICAL SUMMARY							
Soil Samples							
Date	Time	Sample ID	Sample Depth (Feet BGS)	Method 8015 GRO	Method 8015 DRO	Method 8021 Benzene	Method 8021 BTEX
NMOCD Guidelines			NMOCD Site Ranking: 10	1,000 ppm	10 ppm	50 ppm	
10/24/2014	10:20	SC-6 NW Wall	0-6'	<0.036	<10	<0.036	<0.073
10/24/2014	10:21	SC-7 N Central Wall	0-5'	<3.6	<9.8	<0.036	<0.072
10/24/2014	10:22	SC-8 NE Wall	0-5'	<3.8	<9.9	<0.038	<0.077
10/24/2014	10:23	SC-9 E Wall	0-5'	11	<3.7	<0.037	<0.074
10/24/2014	10:24	SC-10 SE Wall	0-5'	<3.1	<9.9	<0.031	<0.062
10/24/2014	10:25	SC-11 S Central Wall	0-5'	<3.0	<10	<0.030	<0.060
10/24/2014	10:26	SC-12 SW Wall	0-6'	<3.5	<10	<0.035	<0.070
10/24/2014	10:27	SC-13 W Wall	0-6'	<3.7	12	<0.037	<0.075
10/24/2014	10:28	SC-14 W Base	6'	<3.3	<10	<0.033	<0.067
10/24/2014	10:29	SC-15 Central Base	5'	<3.1	<10	<0.031	<0.061
10/24/2014	10:30	SC-16 E Base	5'	<3.5	<9.8	<0.035	<0.070
10/24/2014	10:45	SC-17 E SP	-	<3.2	<10	<0.032	<0.064
10/24/2014	10:46	SC-18 C SP	-	<9.9	<2.8	<0.028	<0.057
10/24/2014	10:47	SC-19 W SP	-	<3.2	<10	<0.032	<0.063
10/24/2014	10:48	SC-20 Topsoil SP	-	<3.3	<9.9	<0.033	<0.067

LEGEND

SOIL SAMPLE LOCATION

RESULTS IN mg/kg REPORTED 10-28-14

SCALE



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ENTERPRISE

FARMINGTON, NEW MEXICO

SOIL CONTAMINANT CONCENTRATION MAP
LATERAL O-17
SECTION 26, T31N, R8W

SAN JUAN COUNTY, NEW MEXICO

Designed SM	Drawn DJB	Checked SC
Date: 11/4/2014		
Scale: Horiz: 1"=20'		
Vert: N/A		
Project No: 5122855		
Sheet: 3		

Tables

Enterprise Products
Table 2: Site Ranking Criteria

Lateral O-17
Pipeline Release
11/4/2014

Depth to Groundwater	NMOCD Numeric Rank for this Site	Source for Ranking	Notes
< 50 BGS = 20		Topographic Maps and Field Verification	Groundwater estimated to be greater than 100 feet below the Lateral O-17 site.
50' to 99' = 10			
>100' = 0	0		
Ranking Criteria for Horizontal Distance to Nearest Surface Water	NMOCD Numeric Rank for this Site	Source for Ranking	Notes
< 200' = 20		Topographic Maps and Field Verification	650 feet to the north of a tributary to Simon Canyon
200'-1000' = 10	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?	0	NM State Engineer Water Well Database	No recorded water wells located within 1,000 feet and six well within a 1 mile radius.
<200' for a private domestic water source? YES OR NO			
to BOTH. YES = 20, NO = 0			
Total Site Ranking	10		
Soil Remedation Standards	0 to 9	10 to 19	>19
Benzene	10 PPM	10 PPM	10 PPM
BTEX	50 PPM	50 PPM	50 PPM
TPH	5000 PPM	1000 PPM	100 PPM



Enterprise Products
Table 3: Laboratory Results Summary
(mg/kg)

Lateral O-17
Pipeline Release
11/4/2014

LABORATORY ANALYTICAL SUMMARY							
Soil Samples							
Date	Time	Sample ID	Sample Depth (Feet BGS)	Method 8015 GRO	Method 8015 DRO	Method 8021 Benzene	Method 8021 BTEX
NMOCD Guidelines		NMOCD Site Ranking: 10		1,000 ppm		10 ppm	50 ppm
10/24/2014	10:20	SC-6 NW Wall	0-6'	<0.036	<10	<0.036	<0.073
10/24/2014	10:21	SC-7 N Central Wall	0-5'	<3.6	<9.8	<0.036	<0.072
10/24/2014	10:22	SC-8 NE Wall	0-5'	<3.8	<9.9	<0.038	<0.077
10/24/2014	10:23	SC-9 E Wall	0-5'	11	<3.7	<0.037	<0.074
10/24/2014	10:24	SC-10 SE Wall	0-5'	<3.1	<9.9	<0.031	<0.062
10/24/2014	10:25	SC-11 S Central Wall	0-5'	<3.0	<10	<0.030	<0.060
10/24/2014	10:26	SC-12 SW Wall	0-6'	<3.5	<10	<0.035	<0.070
10/24/2014	10:27	SC-13 W Wall	0-6'	<3.7	12	<0.037	<0.075
10/24/2014	10:28	SC-14 W Base	6'	<3.3	<10	<0.033	<0.067
10/24/2014	10:29	SC-15 Central Base	5'	<3.1	<10	<0.031	<0.061
10/24/2014	10:30	SC-16 E Base	5'	<3.5	<9.8	<0.035	<0.070
10/24/2014	10:45	SC-17 E SP	-	<3.2	<10	<0.032	<0.064
10/24/2014	10:46	SC-18 C SP	-	<9.9	<2.8	<0.028	<0.057
10/24/2014	10:47	SC-19 W SP	-	<3.2	<10	<0.032	<0.063
10/24/2014	10:48	SC-20 Topsoil SP	-	<3.3	<9.9	<0.033	<0.067



Appendix A

Photographic Documentation

Site Photographs
Enterprise Products Lateral O-17 Pipeline Release

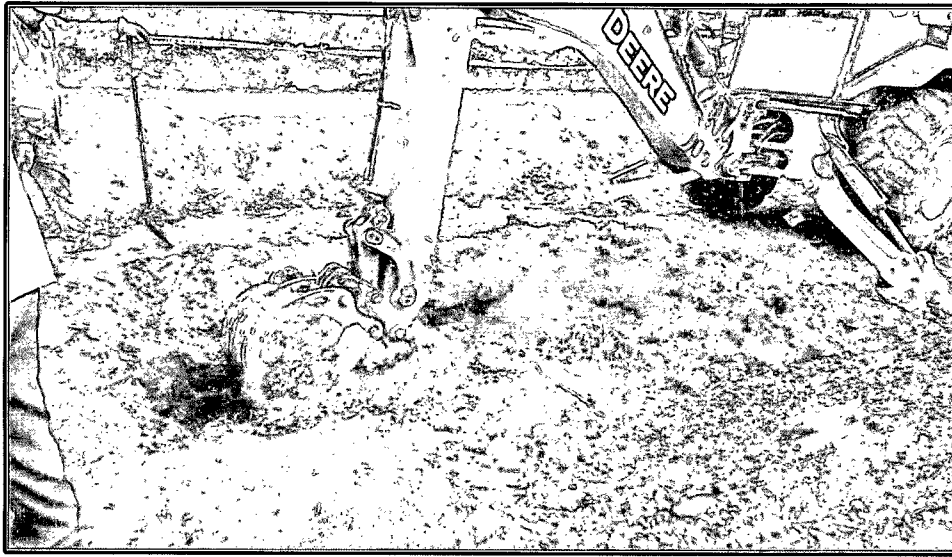


Photo 1: Beginning of excavation at the Lateral O-17 pipeline release.

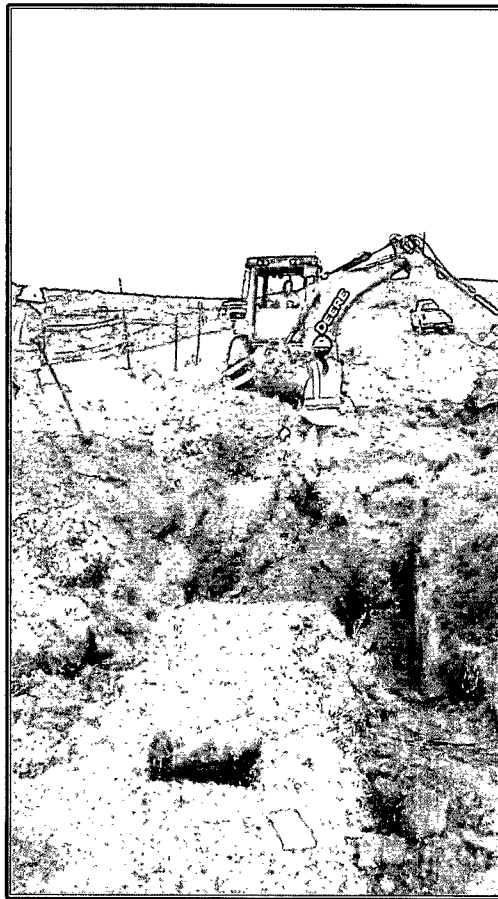


Photo 2: Exposing pipe nearing the release point at the Lateral O-17 release. Pothole visible in foreground.

Site Photographs
Enterprise Products Lateral O-17 Pipeline Release

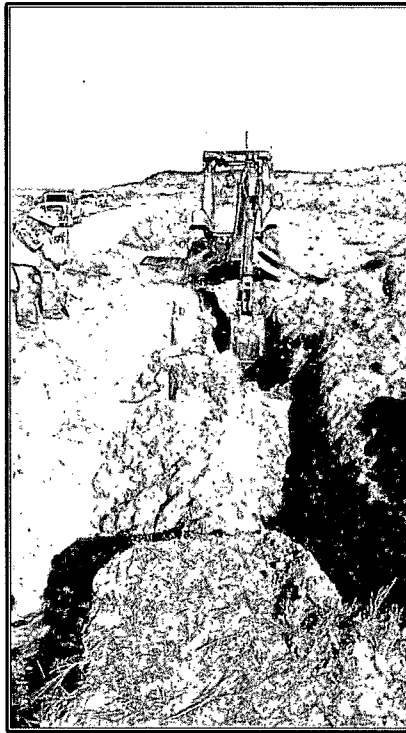


Photo 3: View of rubber tired backhoe equipped with rock teeth used during the excavation.

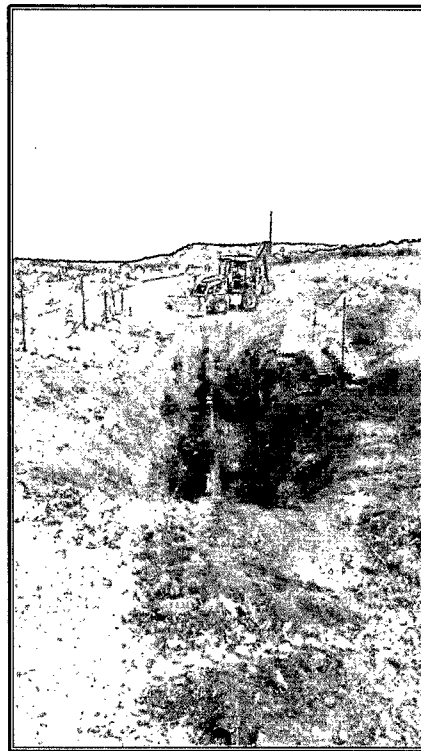


Photo 4: View of Lateral O-17 pipeline excavation at its fullest extent.

Site Photographs
Enterprise Products Lateral O-17 Pipeline Release

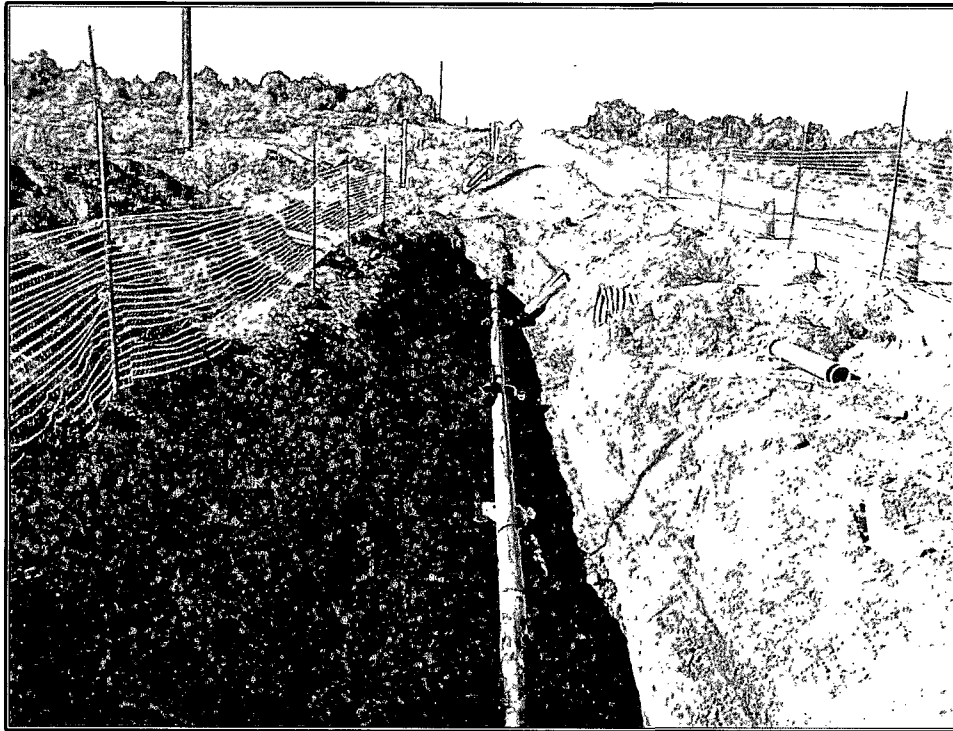


Photo 5: View of repairs completed, new segment in place.

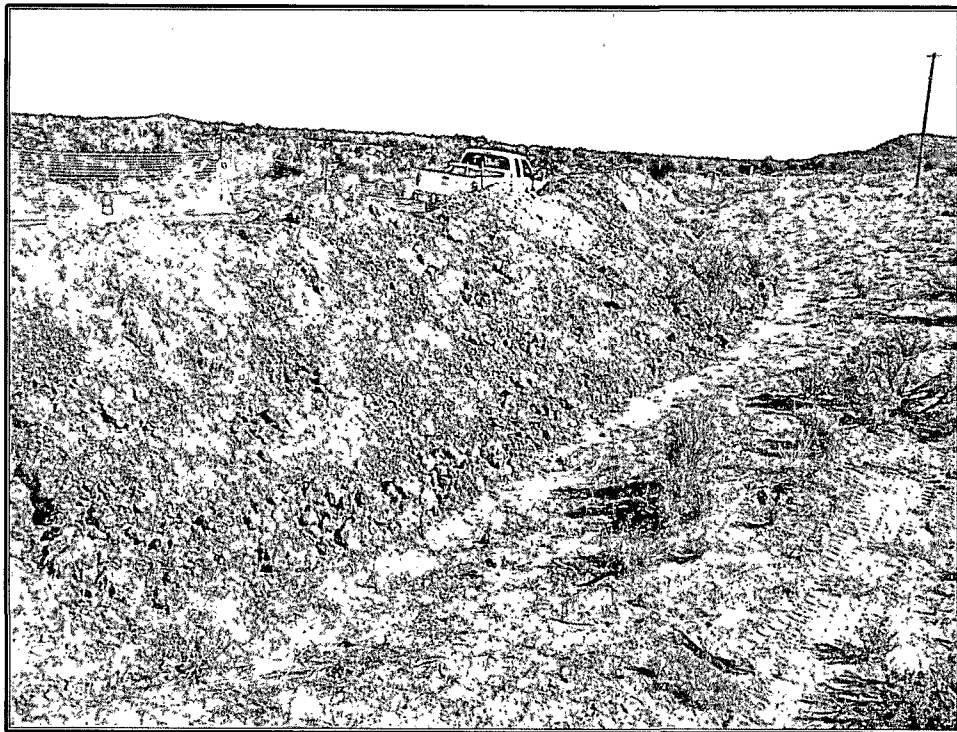
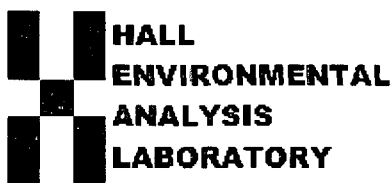


Photo 6: View of stockpiled soil, purple paint marks segments between sample locations.

Appendix B

Laboratory Analytical Reports



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

October 28, 2014

Steve Moskal
Souder, Miller and Associates
401 W. Broadway
Farmington, NM 87401
TEL: (505) 325-5667
FAX (505) 327-1496

RE: Lateral 0-17

OrderNo.: 1410B91

Dear Steve Moskal:

Hall Environmental Analysis Laboratory received 15 sample(s) on 10/25/2014 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. 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,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report

Lab Order 1410B91

Date Reported: 10/28/2014

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Souder, Miller and Associates**Client Sample ID:** SC-6 NW Wall @0-6'**Project:** Lateral 0-17**Collection Date:** 10/24/2014 10:20:00 AM**Lab ID:** 1410B91-001**Matrix:** MEOH (SOIL)**Received Date:** 10/25/2014 9:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	10/27/2014 10:33:43 AM	16092
Surr: DNOP	79.6	63.5-128		%REC	1	10/27/2014 10:33:43 AM	16092
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	3.6		mg/Kg	1	10/25/2014 2:44:24 PM	R22140
Surr: BFB	91.5	80-120		%REC	1	10/25/2014 2:44:24 PM	R22140
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.036		mg/Kg	1	10/25/2014 2:44:24 PM	R22140
Toluene	ND	0.036		mg/Kg	1	10/25/2014 2:44:24 PM	R22140
Ethylbenzene	ND	0.036		mg/Kg	1	10/25/2014 2:44:24 PM	R22140
Xylenes, Total	ND	0.073		mg/Kg	1	10/25/2014 2:44:24 PM	R22140
Surr: 4-Bromofluorobenzene	96.5	80-120		%REC	1	10/25/2014 2:44:24 PM	R22140

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	Page 1 of 18
	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.	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1410B91

Date Reported: 10/28/2014

CLIENT: Souder, Miller and Associates

Client Sample ID: SC-7 N Central Wall @ 0-5'

Project: Lateral 0-17

Collection Date: 10/24/2014 10:21:00 AM

Lab ID: 1410B91-002

Matrix: MEOH (SOIL)

Received Date: 10/25/2014 9:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	10/27/2014 11:04:04 AM	16092
Surr: DNOP	66.9	63.5-128		%REC	1	10/27/2014 11:04:04 AM	16092
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	3.6		mg/Kg	1	10/25/2014 4:10:16 PM	R22140
Surr: BFB	93.4	80-120		%REC	1	10/25/2014 4:10:16 PM	R22140
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.036		mg/Kg	1	10/25/2014 4:10:16 PM	R22140
Toluene	ND	0.036		mg/Kg	1	10/25/2014 4:10:16 PM	R22140
Ethylbenzene	ND	0.036		mg/Kg	1	10/25/2014 4:10:16 PM	R22140
Xylenes, Total	ND	0.072		mg/Kg	1	10/25/2014 4:10:16 PM	R22140
Surr: 4-Bromofluorobenzene	98.2	80-120		%REC	1	10/25/2014 4:10:16 PM	R22140

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	Page 2 of 18
	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.	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Analytical ReportLab Order **1410B91**Date Reported: **10/28/2014****Hall Environmental Analysis Laboratory, Inc.****CLIENT:** Souder, Miller and Associates**Client Sample ID:** SC-8 NE Wall @ 0-5'**Project:** Lateral 0-17**Collection Date:** 10/24/2014 10:22:00 AM**Lab ID:** 1410B91-003**Matrix:** MEOH (SOIL)**Received Date:** 10/25/2014 9:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	10/27/2014 12:36:13 PM	16092
Surr: DNOP	71.3	63.5-128		%REC	1	10/27/2014 12:36:13 PM	16092
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	3.8		mg/Kg	1	10/25/2014 5:36:10 PM	R22140
Surr: BFB	93.5	80-120		%REC	1	10/25/2014 5:36:10 PM	R22140
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.038		mg/Kg	1	10/25/2014 5:36:10 PM	R22140
Toluene	ND	0.038		mg/Kg	1	10/25/2014 5:36:10 PM	R22140
Ethylbenzene	ND	0.038		mg/Kg	1	10/25/2014 5:36:10 PM	R22140
Xylenes, Total	ND	0.077		mg/Kg	1	10/25/2014 5:36:10 PM	R22140
Surr: 4-Bromofluorobenzene	97.9	80-120		%REC	1	10/25/2014 5:36:10 PM	R22140

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

Analytical Report

Lab Order 1410B91

Date Reported: 10/28/2014

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Souder, Miller and Associates**Client Sample ID:** SC-9 E Wall @ 0-5'**Project:** Lateral 0-17**Collection Date:** 10/24/2014 10:23:00 AM**Lab ID:** 1410B91-004**Matrix:** MEOH (SOIL)**Received Date:** 10/25/2014 9:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	11	10		mg/Kg	1	10/27/2014 1:10:32 PM	16092
Surr: DNOP	75.0	63.5-128		%REC	1	10/27/2014 1:10:32 PM	16092
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	3.7		mg/Kg	1	10/25/2014 6:04:46 PM	R22140
Surr: BFB	94.5	80-120		%REC	1	10/25/2014 6:04:46 PM	R22140
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.037		mg/Kg	1	10/25/2014 6:04:46 PM	R22140
Toluene	ND	0.037		mg/Kg	1	10/25/2014 6:04:46 PM	R22140
Ethylbenzene	ND	0.037		mg/Kg	1	10/25/2014 6:04:46 PM	R22140
Xylenes, Total	ND	0.074		mg/Kg	1	10/25/2014 6:04:46 PM	R22140
Surr: 4-Bromofluorobenzene	98.0	80-120		%REC	1	10/25/2014 6:04:46 PM	R22140

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	Page 4 of 18
	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.	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Analytical Report

Lab Order 1410B91

Date Reported: 10/28/2014

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Souder, Miller and Associates**Client Sample ID:** SC-10 SE Wall @ 0-5'**Project:** Lateral 0-17**Collection Date:** 10/24/2014 10:24:00 AM**Lab ID:** 1410B91-005**Matrix:** MEOH (SOIL)**Received Date:** 10/25/2014 9:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: BCN
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	10/27/2014 1:29:25 PM	16092
Surr: DNOP	85.2	63.5-128		%REC	1	10/27/2014 1:29:25 PM	16092
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	3.1		mg/Kg	1	10/25/2014 6:33:21 PM	R22140
Surr: BFB	95.3	80-120		%REC	1	10/25/2014 6:33:21 PM	R22140
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.031		mg/Kg	1	10/25/2014 6:33:21 PM	R22140
Toluene	ND	0.031		mg/Kg	1	10/25/2014 6:33:21 PM	R22140
Ethylbenzene	ND	0.031		mg/Kg	1	10/25/2014 6:33:21 PM	R22140
Xylenes, Total	ND	0.062		mg/Kg	1	10/25/2014 6:33:21 PM	R22140
Surr: 4-Bromofluorobenzene	97.4	80-120		%REC	1	10/25/2014 6:33:21 PM	R22140

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

Analytical Report

Lab Order 1410B91

Date Reported: 10/28/2014

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Souder, Miller and Associates**Client Sample ID:** SC-11 S Central Wall @ 0-5'**Project:** Lateral 0-17**Collection Date:** 10/24/2014 10:25:00 AM**Lab ID:** 1410B91-006**Matrix:** MEOH (SOIL)**Received Date:** 10/25/2014 9:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: BCN
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	10/27/2014 1:51:14 PM	16092
Surr: DNOP	87.7	63.5-128		%REC	1	10/27/2014 1:51:14 PM	16092
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	3.0		mg/Kg	1	10/25/2014 7:01:57 PM	R22140
Surr: BFB	93.8	80-120		%REC	1	10/25/2014 7:01:57 PM	R22140
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.030		mg/Kg	1	10/25/2014 7:01:57 PM	R22140
Toluene	ND	0.030		mg/Kg	1	10/25/2014 7:01:57 PM	R22140
Ethylbenzene	ND	0.030		mg/Kg	1	10/25/2014 7:01:57 PM	R22140
Xylenes, Total	ND	0.060		mg/Kg	1	10/25/2014 7:01:57 PM	R22140
Surr: 4-Bromofluorobenzene	97.0	80-120		%REC	1	10/25/2014 7:01:57 PM	R22140

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	Page 6 of 18
	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.	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Analytical Report

Lab Order 1410B91

Date Reported: 10/28/2014

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Souder, Miller and Associates**Client Sample ID:** SC-12 SW Wall @0-6'**Project:** Lateral 0-17**Collection Date:** 10/24/2014 10:26:00 AM**Lab ID:** 1410B91-007**Matrix:** MEOH (SOIL)**Received Date:** 10/25/2014 9:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	10/27/2014 1:41:23 PM	16092
Surr: DNOP	73.8	63.5-128		%REC	1	10/27/2014 1:41:23 PM	16092
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	3.5		mg/Kg	1	10/25/2014 7:30:34 PM	R22140
Surr: BFB	95.3	80-120		%REC	1	10/25/2014 7:30:34 PM	R22140
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.035		mg/Kg	1	10/25/2014 7:30:34 PM	R22140
Toluene	ND	0.035		mg/Kg	1	10/25/2014 7:30:34 PM	R22140
Ethylbenzene	ND	0.035		mg/Kg	1	10/25/2014 7:30:34 PM	R22140
Xylenes, Total	ND	0.070		mg/Kg	1	10/25/2014 7:30:34 PM	R22140
Surr: 4-Bromofluorobenzene	98.2	80-120		%REC	1	10/25/2014 7:30:34 PM	R22140

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1410B91

Date Reported: 10/28/2014

CLIENT: Souder, Miller and Associates

Client Sample ID: SC-13 W Wall @ 0-6'

Project: Lateral 0-17

Collection Date: 10/24/2014 10:27:00 AM

Lab ID: 1410B91-008

Matrix: MEOH (SOIL)

Received Date: 10/25/2014 9:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	12	9.9		mg/Kg	1	10/27/2014 2:12:15 PM	16092
Surr: DNOP	71.4	63.5-128		%REC	1	10/27/2014 2:12:15 PM	16092
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	3.7		mg/Kg	1	10/25/2014 7:59:10 PM	R22140
Surr: BFB	95.5	80-120		%REC	1	10/25/2014 7:59:10 PM	R22140
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.037		mg/Kg	1	10/25/2014 7:59:10 PM	R22140
Toluene	ND	0.037		mg/Kg	1	10/25/2014 7:59:10 PM	R22140
Ethylbenzene	ND	0.037		mg/Kg	1	10/25/2014 7:59:10 PM	R22140
Xylenes, Total	ND	0.075		mg/Kg	1	10/25/2014 7:59:10 PM	R22140
Surr: 4-Bromofluorobenzene	98.1	80-120		%REC	1	10/25/2014 7:59:10 PM	R22140

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	Page 8 of 18
	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.	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Analytical Report

Lab Order 1410B91

Date Reported: 10/28/2014

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Souder, Miller and Associates**Client Sample ID:** SC-14 W Base @ 6'**Project:** Lateral 0-17**Collection Date:** 10/24/2014 10:28:00 AM**Lab ID:** 1410B91-009**Matrix:** MEOH (SOIL)**Received Date:** 10/25/2014 9:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: BCN
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	10/27/2014 10:50:47 AM	16092
Surr: DNOP	94.7	63.5-128		%REC	1	10/27/2014 10:50:47 AM	16092
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	3.3		mg/Kg	1	10/25/2014 8:27:49 PM	R22140
Surr: BFB	95.9	80-120		%REC	1	10/25/2014 8:27:49 PM	R22140
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.033		mg/Kg	1	10/25/2014 8:27:49 PM	R22140
Toluene	ND	0.033		mg/Kg	1	10/25/2014 8:27:49 PM	R22140
Ethylbenzene	ND	0.033		mg/Kg	1	10/25/2014 8:27:49 PM	R22140
Xylenes, Total	ND	0.067		mg/Kg	1	10/25/2014 8:27:49 PM	R22140
Surr: 4-Bromofluorobenzene	98.3	80-120		%REC	1	10/25/2014 8:27:49 PM	R22140

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

Analytical Report

Lab Order 1410B91

Date Reported: 10/28/2014

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Souder, Miller and Associates**Client Sample ID:** SC-15 Central Base @ 5'**Project:** Lateral 0-17**Collection Date:** 10/24/2014 10:29:00 AM**Lab ID:** 1410B91-010**Matrix:** MEOH (SOIL)**Received Date:** 10/25/2014 9:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: BCN
Diesel Range Organics (DRO)	11	10		mg/Kg	1	10/27/2014 11:12:24 AM	16092
Surr: DNOP	100	63.5-128		%REC	1	10/27/2014 11:12:24 AM	16092
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	3.1		mg/Kg	1	10/25/2014 8:56:32 PM	R22140
Surr: BFB	95.9	80-120		%REC	1	10/25/2014 8:56:32 PM	R22140
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.031		mg/Kg	1	10/25/2014 8:56:32 PM	R22140
Toluene	ND	0.031		mg/Kg	1	10/25/2014 8:56:32 PM	R22140
Ethylbenzene	ND	0.031		mg/Kg	1	10/25/2014 8:56:32 PM	R22140
Xylenes, Total	ND	0.061		mg/Kg	1	10/25/2014 8:56:32 PM	R22140
Surr: 4-Bromofluorobenzene	97.5	80-120		%REC	1	10/25/2014 8:56:32 PM	R22140

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

Analytical Report

Lab Order 1410B91

Date Reported: 10/28/2014

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Souder, Miller and Associates**Client Sample ID:** SC-16 E. Base @ 5'**Project:** Lateral 0-17**Collection Date:** 10/24/2014 10:30:00 AM**Lab ID:** 1410B91-011**Matrix:** MEOH (SOIL)**Received Date:** 10/25/2014 9:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: BCN
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	10/27/2014 11:34:17 AM	16092
Surr: DNOP	79.3	63.5-128		%REC	1	10/27/2014 11:34:17 AM	16092
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	3.5		mg/Kg	1	10/26/2014 1:11:11 AM	R22140
Surr: BFB	97.3	80-120		%REC	1	10/26/2014 1:11:11 AM	R22140
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.035		mg/Kg	1	10/26/2014 1:11:11 AM	R22140
Toluene	ND	0.035		mg/Kg	1	10/26/2014 1:11:11 AM	R22140
Ethylbenzene	ND	0.035		mg/Kg	1	10/26/2014 1:11:11 AM	R22140
Xylenes, Total	ND	0.070		mg/Kg	1	10/26/2014 1:11:11 AM	R22140
Surr: 4-Bromofluorobenzene	101	80-120		%REC	1	10/26/2014 1:11:11 AM	R22140

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

Analytical Report

Lab Order 1410B91

Date Reported: 10/28/2014

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Souder, Miller and Associates**Client Sample ID:** SC-17 E Stock Pile**Project:** Lateral 0-17**Collection Date:** 10/24/2014 10:45:00 AM**Lab ID:** 1410B91-012**Matrix:** MEOH (SOIL)**Received Date:** 10/25/2014 9:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: BCN
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	10/27/2014 11:56:00 AM	16092
Surr: DNOP	92.1	63.5-128		%REC	1	10/27/2014 11:56:00 AM	16092
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	3.2		mg/Kg	1	10/26/2014 1:39:49 AM	R22140
Surr: BFB	97.8	80-120		%REC	1	10/26/2014 1:39:49 AM	R22140
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.032		mg/Kg	1	10/26/2014 1:39:49 AM	R22140
Toluene	ND	0.032		mg/Kg	1	10/26/2014 1:39:49 AM	R22140
Ethylbenzene	ND	0.032		mg/Kg	1	10/26/2014 1:39:49 AM	R22140
Xylenes, Total	ND	0.064		mg/Kg	1	10/26/2014 1:39:49 AM	R22140
Surr: 4-Bromofluorobenzene	101	80-120		%REC	1	10/26/2014 1:39:49 AM	R22140

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

Analytical Report

Lab Order 1410B91

Date Reported: 10/28/2014

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Souder, Miller and Associates**Client Sample ID:** SC-18 C Stock Pile**Project:** Lateral 0-17**Collection Date:** 10/24/2014 10:46:00 AM**Lab ID:** 1410B91-013**Matrix:** MEOH (SOIL)**Received Date:** 10/25/2014 9:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: BCN
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	10/27/2014 12:17:42 PM	16092
Surr: DNOP	90.8	63.5-128		%REC	1	10/27/2014 12:17:42 PM	16092
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	2.8		mg/Kg	1	10/26/2014 2:08:25 AM	R22140
Surr: BFB	97.9	80-120		%REC	1	10/26/2014 2:08:25 AM	R22140
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.028		mg/Kg	1	10/26/2014 2:08:25 AM	R22140
Toluene	ND	0.028		mg/Kg	1	10/26/2014 2:08:25 AM	R22140
Ethylbenzene	ND	0.028		mg/Kg	1	10/26/2014 2:08:25 AM	R22140
Xylenes, Total	ND	0.057		mg/Kg	1	10/26/2014 2:08:25 AM	R22140
Surr: 4-Bromofluorobenzene	102	80-120		%REC	1	10/26/2014 2:08:25 AM	R22140

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	Page 13 of 18
	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.	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Analytical Report

Lab Order 1410B91

Date Reported: 10/28/2014

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Souder, Miller and Associates**Client Sample ID:** SC-19 W Stock Pile**Project:** Lateral 0-17**Collection Date:** 10/24/2014 10:47:00 AM**Lab ID:** 1410B91-014**Matrix:** MEOH (SOIL)**Received Date:** 10/25/2014 9:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: BCN
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	10/27/2014 12:45:51 PM	16092
Surr: DNOP	101	63.5-128		%REC	1	10/27/2014 12:45:51 PM	16092
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	3.2		mg/Kg	1	10/26/2014 2:37:01 AM	R22140
Surr: BFB	98.0	80-120		%REC	1	10/26/2014 2:37:01 AM	R22140
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.032		mg/Kg	1	10/26/2014 2:37:01 AM	R22140
Toluene	ND	0.032		mg/Kg	1	10/26/2014 2:37:01 AM	R22140
Ethylbenzene	ND	0.032		mg/Kg	1	10/26/2014 2:37:01 AM	R22140
Xylenes, Total	ND	0.063		mg/Kg	1	10/26/2014 2:37:01 AM	R22140
Surr: 4-Bromofluorobenzene	102	80-120		%REC	1	10/26/2014 2:37:01 AM	R22140

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	Page 14 of 18
	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.	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Analytical ReportLab Order **1410B91**

Date Reported: 10/28/2014

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Souder, Miller and Associates**Client Sample ID:** SC-20 Top Soil Stock Pile**Project:** Lateral 0-17**Collection Date:** 10/24/2014 10:48:00 AM**Lab ID:** 1410B91-015**Matrix:** MEOH (SOIL)**Received Date:** 10/25/2014 9:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: BCN
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	10/27/2014 1:07:41 PM	16092
Surr: DNOP	82.2	63.5-128		%REC	1	10/27/2014 1:07:41 PM	16092
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	3.3		mg/Kg	1	10/26/2014 3:05:37 AM	R22140
Surr: BFB	97.5	80-120		%REC	1	10/26/2014 3:05:37 AM	R22140
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.033		mg/Kg	1	10/26/2014 3:05:37 AM	R22140
Toluene	ND	0.033		mg/Kg	1	10/26/2014 3:05:37 AM	R22140
Ethylbenzene	ND	0.033		mg/Kg	1	10/26/2014 3:05:37 AM	R22140
Xylenes, Total	ND	0.067		mg/Kg	1	10/26/2014 3:05:37 AM	R22140
Surr: 4-Bromofluorobenzene	101	80-120		%REC	1	10/26/2014 3:05:37 AM	R22140

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	Page 15 of 18
	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.	
	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#: 1410B91

28-Oct-14

Client: Souder, Miller and Associates

Project: Lateral 0-17

Sample ID	MB-16092	SampType:	MBLK	TestCode:	EPA Method 8015D: Diesel Range Organics					
Client ID:	PBS	Batch ID:	16092	RunNo:	22156					
Prep Date:	10/27/2014	Analysis Date:	10/27/2014	SeqNo:	652397	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Surr: DNOP	9.2		10.00		92.2	63.5	128			

Sample ID	LCS-16092	SampType:	LCS	TestCode:	EPA Method 8015D: Diesel Range Organics					
Client ID:	LCSS	Batch ID:	16092	RunNo:	22156					
Prep Date:	10/27/2014	Analysis Date:	10/27/2014	SeqNo:	652398	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	50	10	50.00	0	99.6	68.6	130			
Surr: DNOP	4.8		5.000		95.9	63.5	128			

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.
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1410B91

28-Oct-14

Client: Souder, Miller and Associates

Project: Lateral 0-17

Sample ID	5ML RB	SampType:	MBLK	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	PBS	Batch ID:	R22140	RunNo:	22140					
Prep Date:		Analysis Date:	10/25/2014	SeqNo:	651557	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	920		1000		92.1	80	120			

Sample ID	2.5UG GRO LCS	SampType:	LCS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	LCSS	Batch ID:	R22140	RunNo:	22140					
Prep Date:		Analysis Date:	10/25/2014	SeqNo:	651558	Units:	mg/Kg			
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	65.8	139			
Surr: BFB	1000		1000		100	80	120			

Sample ID	1410B91-001AMS	SampType:	MS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	SC-6 NW Wall @0-6'	Batch ID:	R22140	RunNo:	22140					
Prep Date:		Analysis Date:	10/25/2014	SeqNo:	651576	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	18	3.6	18.20	0	98.1	71.8	132			
Surr: BFB	730		727.8		99.7	80	120			

Sample ID	1410B91-001AMSD	SampType:	MSD	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	SC-6 NW Wall @0-6'	Batch ID:	R22140	RunNo:	22140					
Prep Date:		Analysis Date:	10/25/2014	SeqNo:	651577	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	18	3.6	18.20	0	100	71.8	132	2.18	20	
Surr: BFB	740		727.8		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.
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1410B91

28-Oct-14

Client: Souder, Miller and Associates

Project: Lateral 0-17

Sample ID	5ML RB	SampType:	MBLK	TestCode:	EPA Method 8021B: Volatiles
Client ID:	PBS	Batch ID:	R22140	RunNo:	22140
Prep Date:		Analysis Date:	10/25/2014	SeqNo:	651586
				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	0.95		1.000		95.5	80	120			

Sample ID	100NG BTEX LCS	SampType:	LCS	TestCode:	EPA Method 8021B: Volatiles
Client ID:	LCSS	Batch ID:	R22140	RunNo:	22140
Prep Date:		Analysis Date:	10/25/2014	SeqNo:	651587
				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	101	80	120			
Toluene	1.0	0.050	1.000	0	102	80	120			
Ethylbenzene	1.0	0.050	1.000	0	104	80	120			
Xylenes, Total	3.1	0.10	3.000	0	102	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		103	80	120			

Sample ID	1410B91-002AMS	SampType:	MS	TestCode:	EPA Method 8021B: Volatiles
Client ID:	SC-7 N Central Wall	Batch ID:	R22140	RunNo:	22140
Prep Date:		Analysis Date:	10/25/2014	SeqNo:	651590
				Units:	mg/Kg

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.47	0.036	0.7231	0	64.8	77.4	142			S
Toluene	0.48	0.036	0.7231	0.01760	63.4	77	132			S
Ethylbenzene	0.47	0.036	0.7231	0.009234	64.4	77.6	134			S
Xylenes, Total	1.4	0.072	2.169	0.03082	64.6	77.4	132			S
Surr: 4-Bromofluorobenzene	0.73		0.7231		102	80	120			

Sample ID	1410B91-002AMSD	SampType:	MSD	TestCode:	EPA Method 8021B: Volatiles
Client ID:	SC-7 N Central Wall	Batch ID:	R22140	RunNo:	22140
Prep Date:		Analysis Date:	10/25/2014	SeqNo:	651591
				Units:	mg/Kg

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.54	0.036	0.7231	0	74.2	77.4	142	13.5	20	S
Toluene	0.54	0.036	0.7231	0.01760	72.4	77	132	12.8	20	S
Ethylbenzene	0.55	0.036	0.7231	0.009234	74.8	77.6	134	14.7	20	S
Xylenes, Total	1.6	0.072	2.169	0.03082	74.6	77.4	132	14.0	20	S
Surr: 4-Bromofluorobenzene	0.74		0.7231		103	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.
- RL Reporting Detection Limit



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: SMA-FARM

Work Order Number: 1410B91

RcptNo: 1

Received by/date:

Logged By: Ashley Gallegos

10/25/2014 9:45:00 AM

Completed By: Ashley Gallegos

10/25/2014 10:08:47 AM

Reviewed By:

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 $>0^{\circ}\text{C}$ 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 $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	5.1	Good	Yes			

Chain-of-Custody Record

Client: SMA

Mailing Address: 401 W. Broadway

Farmington, NM 87401

Phone #: 505-325-7535

email or Fax#: Steven.Moskal@SauderMiller

QA/QC Package:

☒ Standard ☐ Level 4 (Full Validation)

Accreditation

☐ NELAP ☐ Other _____

☐ EDD (Type) _____

Turn-Around Time:

☐ Standard ☒ Rush Same day

Project Name:

Lateral O-17

Project #:

5122855

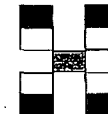
Project Manager:

Steve Moskal

Sampler: " "

On Ice: ☒ Yes ☐ No

Sample Temperature: 5.1



**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 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 ₃ , NO ₂ , PO ₄ , SO ₄)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Air Bubbles (Y or N)
10/24	1020	Soil	SC-6 NW Wall @ 0.6'		MEOH	-001	X		X									
	1021		SC-7 N Central Wall @ 0.5'			-002												
	1022		SC-8 NE Wall @ 0.5'			-003												
	1023		SC-9 E Wall @ 0.5'			-004												
	1024		SC-10 SE Wall @ 0.5'			-005												
	1025		SC-11 S Central Wall @ 0.5'			-006												
	1026		SC-12 SW Wall @ 0.10'			-007												
	1027		SC-13 W. Wall @ 0.6'			-008												
	1028		SC-14 W. Base @ 1.0'			-009												
	1029		SC-15 Central base @ 0.5'			-010												
	1030		SC-16 E. Base @ 0.5'			-011												
	1045		SC-17 E. Stockpile			-012												

Date: 10/24/14 Time: 1515 Relinquished by: [Signature]

Date: 10/24/14 Time: 1710 Received by: Christine Walker

Date: 10/24/14 Time: 1810 Relinquished by: Christine Walker

Date: 10/25/2014 Time: 0945 Received by: [Signature]

Remarks: Invoice to Enterprise Products

Chain-of-Custody Record		Turn-Around Time:	
Client: SMA		<input type="checkbox"/> Standard <input checked="" type="checkbox"/> Rush <u>Same day</u>	
Mailing Address: 401 W. Broadway		Project Name: Lateral 0-17	
Farmington NM 87401		Project #: 5122855	
Phone #: 505-325-7338		Project Manager: Steve Moskal	
email or Fax#: <u>Steve Moskal @ SouthernMillerCo</u>			
QA/QC Package:			
<input checked="" type="checkbox"/> Standard <input type="checkbox"/> Level 4 (Full Validation)			
Accreditation		Sampler: " "	
<input type="checkbox"/> NELAP <input type="checkbox"/> Other _____		On Ice: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
<input type="checkbox"/> EDD (Type) _____		Sample Temperature: 5.1	

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

[illegible]

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

NOV 17 2014

Form C-141
Revised August 8, 2011

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

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

Release Notification and Corrective Action

OPERATOR

☐ Initial Report ☒ Final Report

Name of Company: Enterprise Field Services LLC	Contact: Thomas Long
Address: 614 Reilly Ave, Farmington, NM 87401	Telephone No. 505-599-2286
Facility Name: Lateral 2A-2	Facility Type: Natural Gas Gathering Line
Surface Owner: BLM	Mineral Owner: BLM
API No.	

LOCATION OF RELEASE

Unit Letter I	Section 25	Township 27N	Range 10W	Feet from the 1420	North/ <u>South</u> Line	Feet from the 120	<u>East</u> West Line	County San Juan
------------------	---------------	-----------------	--------------	--------------------------	-----------------------------	-------------------------	--------------------------	--------------------

Latitude 36.557404 Longitude -107.892363

NATURE OF RELEASE

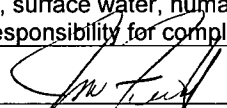
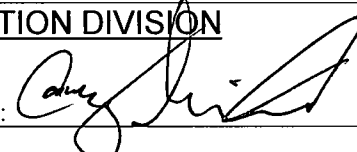
Type of Release: Natural Gas and Natural Gas Liquids	Volume of Release 34.92 MCF	Volume Recovered: None
Source of Release: Internal Corrosion	Date and Hour of Occurrence: 8/28/2014 @ 8:30 a.m.	Date and Hour of Discovery: 8/28/2014 @ 9:30 a.m.
Was Immediate Notice Given? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom? Courtesy notification to NMOCD – Cory Smith; BLM – Shari Ketchum	
By Whom? Thomas Long	Date and Hour September 3, 2014 at 3:46 p.m.	
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: On August 28, 2014 a pipeline leak was discovered while performing a pipeline patrol on the Lateral 2A-2 pipeline ROW. The Enterprise technician initiated notification procedures. The pipeline was isolated, blown down, depressurized, locked out and tagged out. Remediation and repairs were completed on September 5, 2014. The final excavation dimensions measured approximately thirty (30) feet long by eleven (11) feet ranging from eight (8) to nine (9) feet deep. Approximately 110 cubic yards of hydrocarbon impacted soil was excavated and transported to a NMOCD approved land farm facility.

Describe Area Affected and Cleanup Action Taken: On August 28, 2014 a pipeline leak was discovered while performing a pipeline patrol on the Lateral 2A-2 pipeline ROW. The Enterprise technician initiated notification procedures. The pipeline was isolated, blown down, depressurized, locked out and tagged out. Remediation and repairs were completed on September 5, 2014. The final excavation dimensions measured approximately thirty (30) feet long by eleven (11) feet ranging from eight (8) to nine (9) feet deep. Approximately 110 cubic yards of hydrocarbon impacted soil was excavated and transported to a NMOCD approved land farm facility. A third party corrective action report is included with this "final" C-141.

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: 	OIL CONSERVATION DIVISION	
Printed Name: Jon Fields	Approved by Environmental Specialist: 	
Title: Director, Environmental	Approval Date: <u>12/29/14</u>	Expiration Date:
E-mail Address: jefields@eprod.com	Conditions of Approval:	
Date: <u>11/14/2014</u> Phone: (713)381-6684	Attached <input type="checkbox"/>	

* Attach Additional Sheets If Necessary

#PCS 143 6342 223

(34)



CORRECTIVE ACTION REPORT

Property:

**Lateral 2A-2 Pipeline Release
SE 1/4, S21 T27N R10W
San Juan County, New Mexico**

November 3, 2014
Apex Project No. 7030414G032

Prepared for:

**Enterprise Field Services LLC
614 Reilly Avenue
Farmington, NM 87401
Attn: Mr. Thomas Long**

Prepared by:

Heather M. Woods, P.G.
Senior Project Manager

Elizabeth Scaggs, P.G.
Senior Program Manager

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LIST OF APPENDICES

Appendix A:	Figure 1 – Topographic Map Figure 2 – Site Vicinity Map Figure 3 – Site Map with Sample Locations
Appendix B:	Executed C-138 Solid Waste Acceptance Forms
Appendix C:	Photographic Documentation
Appendix D:	Tables
Appendix E:	Laboratory Analytical Reports & Chain of Custody Documentation

CORRECTIVE ACTION REPORT

Lateral 2A-2 Pipeline Release

SE 1/4, S21 T27N R10W
San Juan County, New Mexico

Apex Project No. 7030414G032

1.0 INTRODUCTION

1.1 Site Description & Background

The Lateral 2A-2 Pipeline Release Site is located within the Enterprise Field Services LLC (Enterprise) pipeline right-of-way (ROW) in the southeast (SE) ¼ of Section 21 in Township 27 North and Range 10 West in rural San Juan County, New Mexico (36.55734N, 107.89231W), referred to hereinafter as the "Site" or "subject Site". The Site is located adjacent to an unpaved road, on public land managed by the United States Bureau of Land Management (BLM). The Site is surrounded by native vegetation rangeland periodically interrupted with oil and gas production and gathering facilities, including the Enterprise natural gas gathering pipeline which traverses the area from approximately southwest to northeast.

On September 3, 2014, Enterprise shut in the Lateral 2A-2 pipeline and initiated excavation activities at the Site in an effort to locate and repair a subsurface leak. The leak was subsequently identified and repaired. An unknown quantity of dry natural gas and pipeline liquids were released from the pipeline as a result of internal corrosion. The leak was identified by a release of natural gas at the ground surface.

A topographic map depicting the location of the Site is included as Figure 1, and a Site Vicinity Map is included as Figure 2 in Appendix A.

1.2 Project Objective

The primary objective of the corrective actions was to reduce the concentration of constituents of concern (COCs) in the on-Site soils to below the New Mexico Energy, Minerals, and Natural Resources Department (EMNRD), Oil Conservation Division (OCD) *Remediation Action Levels* using the New Mexico EMNRD OCD's *Guidelines for Remediation of Leaks, Spills and Releases* as guidance.

2.0 SITE RANKING

In accordance with the New Mexico ENMRD OCD's *Guidelines for Remediation of Leaks, Spills and Releases*, Apex TITAN, Inc. (Apex) utilized the general site characteristics obtained during the completion of corrective action activities and information available from the Office of the New Mexico Office of the State Engineer to determine the appropriate "ranking" for the Site. The ranking criteria and associated scoring are provided in the following table:

Ranking Criteria			Ranking Score
Depth to Groundwater	<50 feet	20	0
	50 to 99 feet	10	
	>100 feet	0	
Wellhead Protection Area • <1,000 feet from a water source, or; <200 feet from private domestic water source.	Yes	20	0
	No	0	
Distance to Surface Water Body	<200 feet	20	20
	200 to 1,000 feet	10	
	>1,000 feet	0	
Total Ranking Score			20

Based on Apex's evaluation of the scoring criteria, the Site would have a maximum Total Ranking Score of "20". This ranking is based on the following:

- Depth to groundwater is estimated to be greater than 100 feet below ground surface based on a cathodic protection deepwell groundbed report for the Johnson #2 well site located approximately 990 feet to the west of the Site. The cathodic report indicates that groundwater was observed in the borehole at a depth of approximately 120 feet below ground surface (bgs). The elevation of the Johnson #2 well site is approximately 20 feet lower in elevation than the Site, resulting in an approximate depth to groundwater at the Site of 140 feet bgs. No nearby water wells were identified on the Office of the State Engineer (OSE) website database.
- No water source wells (municipal/community wells) were identified within 1,000 feet of the Site. No private domestic water sources were identified within 200 feet of the Site.
- The Site is approximately 75 feet west of an ephemeral wash which ultimately drains to the East Fork of Kutz Canyon. Based on this proximity, a ranking for distance to surface water was assigned at "20".

3.0 RESPONSE ACTIONS

3.1 Soil Excavation Activities

On September 3, 2014, Enterprise shut in the Lateral 2A-2 pipeline and initiated excavation activities at the Site in an effort to locate and repair a subsurface leak. The leak was subsequently identified and repaired. An unknown quantity of dry natural gas and pipeline liquids were released from the pipeline as a result of internal corrosion. The leak was identified by a release of natural gas at the ground surface. During the corrective action activities, Oil Field Trash (OFT) Construction provided heavy equipment and labor support, and Heather Woods, an Apex environmental professional, provided environmental support.

Subsequent to the completion of pipeline repairs, the hydrocarbon affected soils were excavated from the Site, resulting in an initial excavation of approximately 21.5 feet long by 11 feet wide, with a total depth ranging from approximately 8 to 9 feet bgs. Confirmation samples C-1 through C-5 were collected from the floor and sidewalls of the excavation to evaluate soils remaining in place. Analytical results indicated that the southwest wall (C-3) exhibited evidence of hydrocarbon impact. The site was over-excavated on September 9, 2014, to remove material from the southwest wall, increasing the total length of the final excavation to approximately 30 feet. Confirmation sample C-6 subsequently indicated that the southwest wall no longer exhibited evidence of hydrocarbon impact.

The lithology encountered during the completion of corrective action activities consisted primarily of unconsolidated silty and clayey sands, underlain by sandstone.

A total of approximately 110 cubic yards of hydrocarbon affected soils were transported to the Envirotech Landfarm in Hilltop, New Mexico for disposal/remediation. The executed C-138 form, which includes soils from a neighboring release concurrently transported from the area, is provided in Appendix B. The excavation was backfilled with clean imported fill and contoured to surrounding grade.

Figure 3 is a site map that indicates the approximate location of the excavated area in relation to pertinent land features (Appendix A). Photographic documentation of the field activities is included in Appendix C.

3.2 Soil Sampling Program

Apex screened head-space samples of Site soils with a photoionization detector (PID) fitted with a 10.6 eV lamp to aid in determining the excavation limits.

Apex's soil sampling program included the collection of six (6) final confirmation samples (C-1 through C-6), from the resulting excavation for laboratory analysis. Figure 3 depicts the approximate location of the excavated area and shows the final confirmation sample locations in relation to the final excavation dimensions (Appendix A).

The confirmation soil samples were collected and placed in laboratory prepared glassware, labeled/sealed using the laboratory supplied labels, and placed on ice in a cooler, which was secured with a custody seal. The sample cooler and completed chain-of-custody form were relinquished to Hall Environmental Analysis Laboratory in Albuquerque, New Mexico, for rush analysis.

3.3 Laboratory Analytical Methods

The confirmation soil samples were analyzed for benzene, toluene, ethylbenzene, and total xylenes (BTEX) utilizing EPA SW-846 Method #8021, and total petroleum hydrocarbons (TPH) gasoline range organics (GRO) and diesel range organics (DRO) utilizing EPA SW-846 Method #8015.

Laboratory results are summarized in Table 1, included in Appendix D. The executed chain-of-custody form and laboratory data sheets are provided in Appendix E.

4.0 DATA EVALUATION

The Site is subject to regulatory oversight by the New Mexico EMNRD OCD. To address activities related to condensate releases, the New Mexico EMNRD OCD utilizes the *Guidelines for Remediation of Leaks, Spills and Releases* as guidance, in addition to the OCD rules, specifically New Mexico Administrative Code 19.15.29 *Remediation Plan*. These guidance documents establish investigation and abatement action requirements for sites subject to reporting and/or corrective action.

4.1 Confirmation Soil Samples

Apex compared the BTEX and TPH concentrations or reporting limits associated with the final confirmation samples (C-1 through C-6) collected from the excavated area to the OCD

Remediation Action Levels (RALs) for sites having a total ranking score of "20". Soils associated with sample C-3 were removed by excavation and are not included in the following discussion.

- The laboratory analyses of confirmation samples collected from soils remaining in place do not indicate benzene concentrations above the laboratory reporting limits, which are below the *OCD Remediation Action Level*.
- The laboratory analyses of the confirmation samples collected from soils remaining in place indicate total BTEX concentrations ranging from below the laboratory reporting limits to 0.063 mg/kg, which are below the *OCD Remediation Action Levels*.
- The laboratory analyses of the confirmation samples collected from soils remaining in place do not indicate combined TPH GRO/DRO concentrations above the laboratory reporting limits, which are below the *OCD Remediation Action Levels* for a Site ranking of "20".

Confirmation sample results are provided in Table 1 in Appendix D.

5.0 FINDINGS AND RECOMMENDATIONS

The Lateral 2A-2 Pipeline Release Site is located within the Enterprise pipeline ROW in the SE ¼ of Section 21 in Township 27 North and Range 10 West in rural San Juan County, New Mexico (36.55734N, 107.89231W). The Site is located adjacent to an unpaved road, on public land managed by the BLM. The Site is surrounded by native vegetation rangeland periodically interrupted with oil and gas production and gathering facilities, including the Enterprise natural gas gathering pipeline which traverses the area from approximately southwest to northeast.

On September 3, 2014, Enterprise shut in the Lateral 2A-2 pipeline and initiated excavation activities at the Site in an effort to locate and repair a subsurface leak. The leak was subsequently identified and repaired. An unknown quantity of dry natural gas and pipeline liquids were released from the pipeline as a result of internal corrosion. The leak was identified by a release of natural gas at the ground surface.

- The primary objective of the corrective actions was to reduce the concentration of COCs in the on-Site soils to below the New Mexico EMNRD OCD RALs using the New Mexico EMNRD OCD's *Guidelines for Remediation of Leaks, Spills and Releases* as guidance.
- The lithology encountered during the completion of corrective action activities consisted primarily of unconsolidated silty and clayey sands, underlain by sandstone.
- The surface expression of the final excavation measured approximately 30 feet long by 11 feet wide, with a total depth of ranging from approximately 8 to 9 feet bgs.
- Prior to backfilling, final confirmation samples were collected from the resulting excavation for laboratory analyses. Based on analytical results, soils remaining in place do not exhibit COC concentrations above the *OCD Remediation Action Levels* for a Site ranking of "20".
- A total of approximately 110 cubic yards of hydrocarbon affected soils were transported to the Envirotech Landfarm in Hilltop, New Mexico for disposal/remediation. The excavation was backfilled with clean imported fill and contoured to surrounding grade.

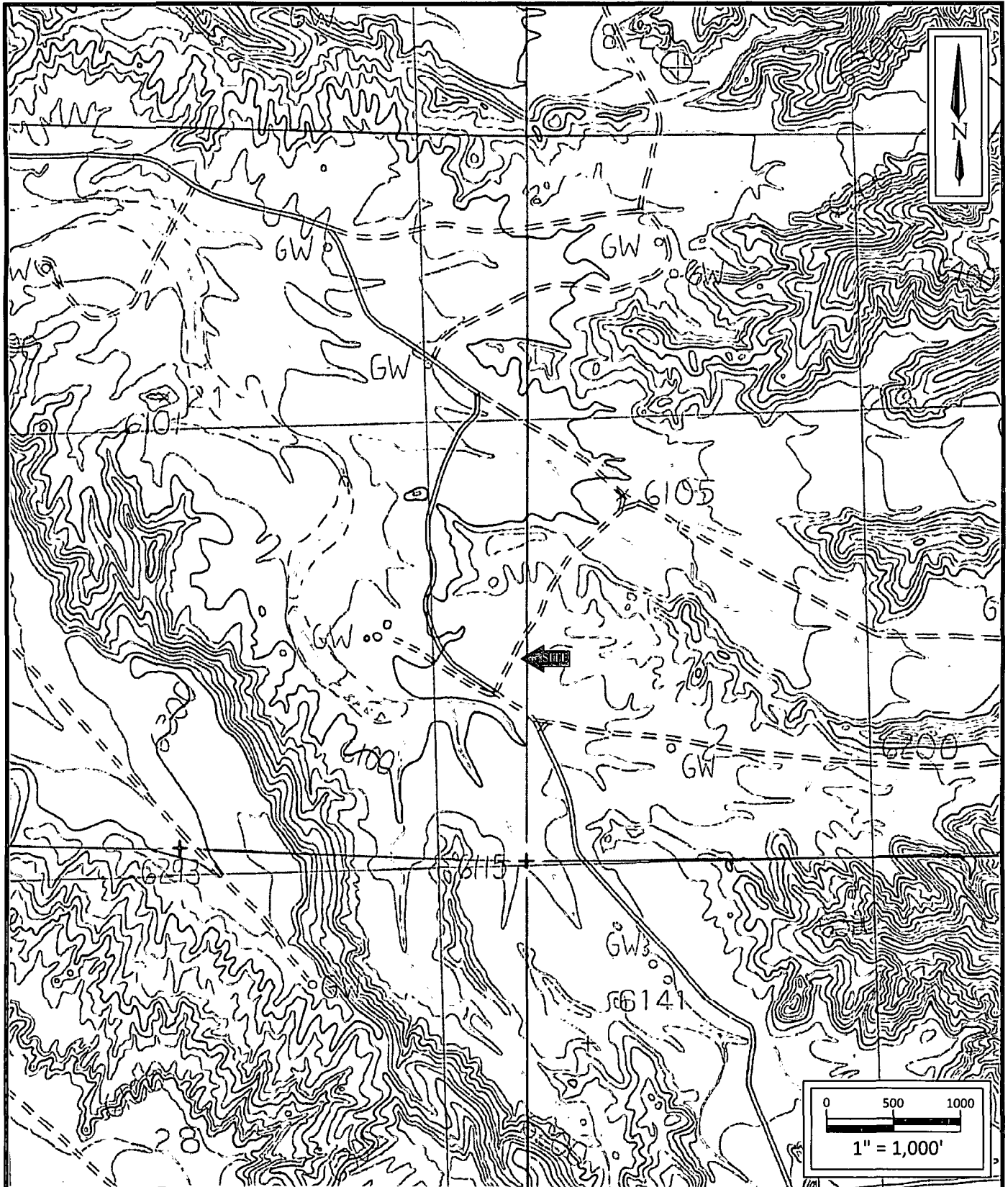
Based on field observations and laboratory analytical results, no additional investigation or corrective action appears warranted at this time.

6.0 STANDARD OF CARE, LIMITATIONS, AND RELIANCE

Apex's services were performed in accordance with standards customarily provided by a firm rendering the same or similar services in the area during the same time period. Apex makes no warranties, expressed or implied, as to the services performed hereunder. Additionally, Apex does not warrant the work of third parties supplying information used in the report (e.g. laboratories, regulatory agencies, or other third parties). This scope of services was performed in accordance with the scope of work agreed with the client.

Findings, conclusions and recommendations resulting from these services are based upon information derived from the on-Site activities and other services performed under this scope of work and it should be noted that this information is subject to change over time. Certain indicators of the presence of hazardous substances, petroleum products, or other constituents may have been latent, inaccessible, unobservable, or not present during these services, and Apex cannot represent that the Site contains no hazardous substances, toxic materials, petroleum products, or other latent conditions beyond those identified during this scope of services. Environmental conditions at other areas or portions of the Site may vary from those encountered at actual sample locations. Apex's findings and recommendations are based solely upon data available to Apex at the time of these services.

This report has been prepared for the exclusive use of Enterprise, and any authorization for use or reliance by any other party (except a governmental entity having jurisdiction over the Site) is prohibited without the expressed written authorization of Enterprise and Apex. Any unauthorized distribution or reuse is at the client's sole risk. Notwithstanding the foregoing, reliance by authorized parties will be subject to the terms, conditions and limitations stated in the proposal, the report, and Apex's Agreement. The limitation of liability defined in the agreement is the aggregate limit of Apex's liability to the client.



Lateral 2A-2 Pipeline Release

SE $\frac{1}{4}$ S21 T27N R10W
 Rural San Juan County, NM
 36.55734N, 107.89231W

Project No. 7030414G032



Apex TITAN, Inc.

606 S. Rio Grande, Suite A
 Aztec, New Mexico 87410
 Phone: (505) 334-5200
www.apexcos.com
 A Subsidiary of Apex Companies, LLC

FIGURE 1 Topographic Map

East Fork Kutz Canyon, NM Quadrangle
 1985



Lateral 2A-2 Pipeline Release

SE $\frac{1}{4}$ S21 T27N R10W
Rural San Juan County, NM
36.55734N, 107.89231W

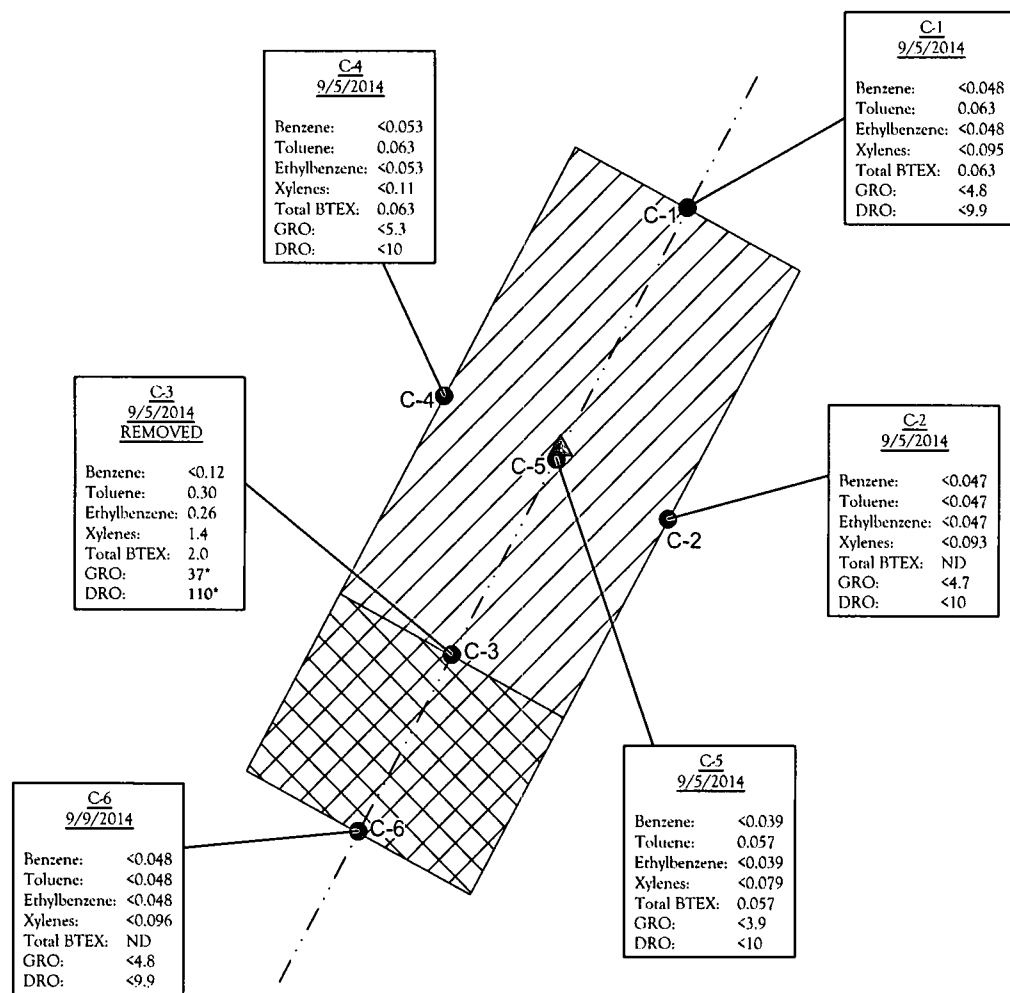
Project No. 7030414G032



Apex TITAN, Inc.

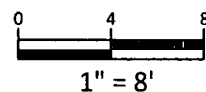
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FIGURE 2
Site Vicinity Map
2013 Aerial Photograph



LEGEND:

- PIPELINE
- SAMPLE LOCATION
- ▲ RELEASE POINT
- ▨ EXTENT OF EXCAVATION
- ▩ AREA OVER-EXCAVATED



Lateral 2A-2 Pipeline Release

SE $\frac{1}{4}$ S21 T27N R10W
Rural San Juan County, NM
36.55734N, 107.89231W

Project No. 7030414G032



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FIGURE 3
Site Map with
Sample Locations

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-138
Revised August 1, 2011
97057-0656
*Surface Waste Management Facility Operator
and Generator shall maintain and make this
documentation available for Division inspection.

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. **Generator Name and Address:**
Enterprise Field Services, LLC, 614 Reilly Avenue, Farmington, NM 87401
2. **Originating Site:**
Lateral 2A-2 Pipeline *Sep. 2014*
3. **Location of Material (Street Address, City, State or ULSTR):**
Unit I Letter D, Section 22, T27N, R10W; 36.557404, -107.892363
4. **Source and Description of Waste:** Hydrocarbon impacted soils associated with a release from a natural gas pipeline
5. **Estimated Volume** 50 *(yd³)* bbls **Known Volume (to be entered by the operator at the end of the haul)** 110 *(yd³)* bbls

5. GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS

I, Thomas Long *Thomas Long* representative or authorized agent for Enterprise Field Services, LLC do hereby
PRINT & SIGN NAME COMPANY NAME
certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988
regulatory determination, the above described waste is: (Check the appropriate classification)

☒ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. Operator Use Only: Waste Acceptance Frequency ☐ Monthly ☐ Weekly ☐ Per Load

☐ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items)

☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☐ Process Knowledge ☐ Other (Provide description in Box 4)

GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS

I, Thomas Long *Thomas Long* representative for Enterprise Field Services, LLC authorize Envirotech, Inc. to
Generator Signature
complete the required testing/sign the Generator Waste Testing Certification.

I, Kendra Running *Kendra Running* representative for Envirotech, Inc. do hereby certify that
representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples
have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results
of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of
19.15.36 NMAC.

6. **Transporter:** West States Energy Contractors (WSEC) *La Plata, Rosenbaum*

OCD Permitted Surface Waste Management Facility

Name and Facility Permit #: Envirotech, Inc. Soil Remediation Facility * Permit #: NM 01-0011
Address of Facility: Hilltop, NM

Method of Treatment and/or Disposal:

☐ Evaporation ☐ Injection ☐ Treating Plant ☒ Landfarm ☐ Landfill ☐ Other

Waste Acceptance Status:

☒ APPROVED

☐ DENIED (Must Be Maintained As Permanent Record)

PRINT NAME: Kendra Running

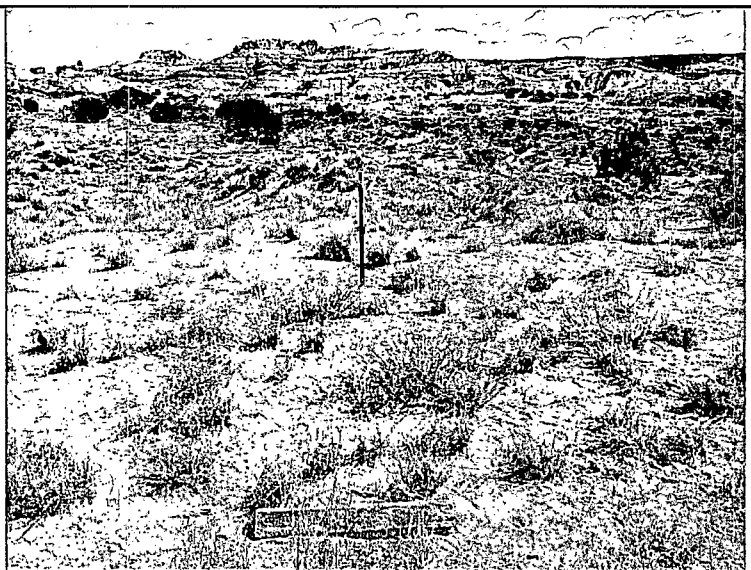
TITLE: Waste Coordinator DATE: 9/5/14

SIGNATURE: Kendra Running
Surface Waste Management Facility Authorized Agent

TELEPHONE NO.: 505-632-0615

Photograph 1

View of site prior to excavation activities, facing southeast.



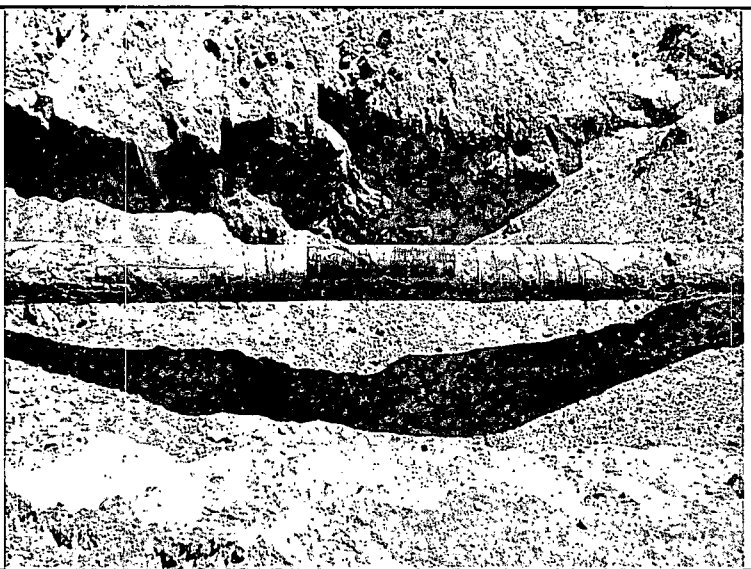
Photograph 2

View of the repair excavation during corrective action activities, facing southeast.



Photograph 3

View of the release point and initial excavation during corrective action activities, facing southeast.



Photograph 4

View of over-excavation activities at the southwest wall subsequent to backfilling of initial excavation, facing northwest.

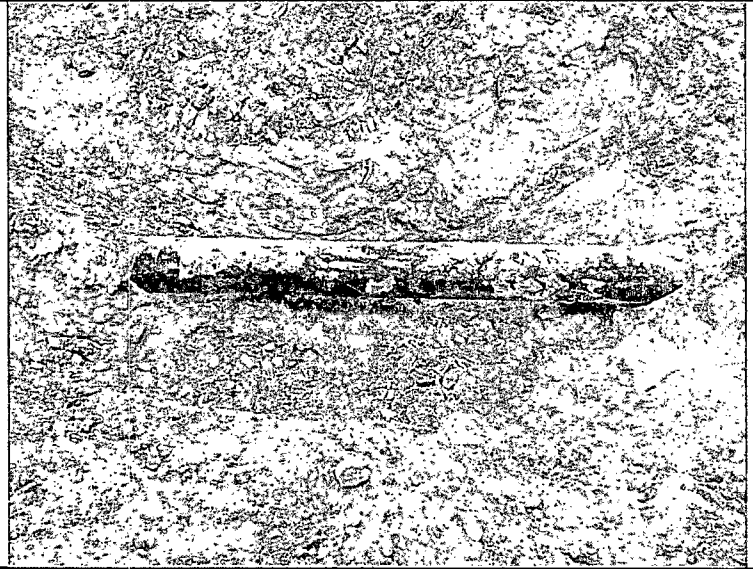




TABLE 1
Lateral 2A-2 Pipeline Release
SOIL ANALYTICAL SUMMARY

Sample I.D.	Date	Sample Depth (feet)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)
New Mexico Entergy, Mineral & Natural Resources Department, Oil Conservation Division, Remediation Action Level			10	NE	NE	NE	50	100	
Sample Removed by Excavation									
C-3	9/5/2014	6 to 8	<0.12	0.30	0.26	1.4	2.0	37	110
Final Confirmation Samples									
C-1	9/5/2014	6 to 8	<0.048	0.063	<0.048	<0.095	0.063	<4.8	<9.9
C-2	9/5/2014	6 to 8	<0.047	<0.047	<0.047	<0.093	ND	<4.7	<10
C-4	9/5/2014	6 to 8	<0.053	0.063	<0.053	<0.11	0.063	<5.3	<10
C-5	9/5/2014	8 to 9	<0.039	0.057	<0.039	<0.079	0.057	<3.9	<10
C-6	9/9/2014	6 to 8	<0.048	<0.048	<0.048	<0.096	ND	<4.8	<9.9

Note: Concentrations in **bold** and yellow exceed the applicable OCD Remediation Action Level

NE = Not Established

ND = Not Detected above Laboratory Reporting Limits



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

September 08, 2014

Heather Woods
Enterprise Field Services
614 Reilly Ave.
Farmington, NM 87401
TEL: (505) 599-2141
FAX

RE: Lateral 2A-2

OrderNo.: 1409277

Dear Heather Woods:

Hall Environmental Analysis Laboratory received 5 sample(s) on 9/6/2014 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. 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', with a stylized flourish at the end.

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report

Lab Order 1409277

Date Reported: 9/8/2014

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Enterprise Field Services

Client Sample ID: C-1

Project: Lateral 2A-2

Collection Date: 9/5/2014 12:25:00 PM

Lab ID: 1409277-001

Matrix: MEOH (SOIL)

Received Date: 9/6/2014 6:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: BCN
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	9/7/2014 1:45:35 AM	15157
Surr: DNOP	89.3	57.9-140		%REC	1	9/7/2014 1:45:35 AM	15157
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	9/7/2014 10:55:48 PM	R21046
Surr: BFB	90.6	80-120		%REC	1	9/7/2014 10:55:48 PM	R21046
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.048		mg/Kg	1	9/7/2014 10:55:48 PM	R21046
Toluene	0.063	0.048		mg/Kg	1	9/7/2014 10:55:48 PM	R21046
Ethylbenzene	ND	0.048		mg/Kg	1	9/7/2014 10:55:48 PM	R21046
Xylenes, Total	ND	0.095		mg/Kg	1	9/7/2014 10:55:48 PM	R21046
Surr: 4-Bromofluorobenzene	98.2	80-120		%REC	1	9/7/2014 10:55:48 PM	R21046

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

Analytical Report

Lab Order 1409277

Date Reported: 9/8/2014

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Enterprise Field Services

Client Sample ID: C-2

Project: Lateral 2A-2

Collection Date: 9/5/2014 12:30:00 PM

Lab ID: 1409277-002

Matrix: MEOH (SOIL)

Received Date: 9/6/2014 6:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: BCN
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	9/7/2014 2:07:01 AM	15157
Surr: DNOP	89.8	57.9-140		%REC	1	9/7/2014 2:07:01 AM	15157
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	9/7/2014 11:24:25 PM	R21046
Surr: BFB	91.3	80-120		%REC	1	9/7/2014 11:24:25 PM	R21046
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.047		mg/Kg	1	9/7/2014 11:24:25 PM	R21046
Toluene	ND	0.047		mg/Kg	1	9/7/2014 11:24:25 PM	R21046
Ethylbenzene	ND	0.047		mg/Kg	1	9/7/2014 11:24:25 PM	R21046
Xylenes, Total	ND	0.093		mg/Kg	1	9/7/2014 11:24:25 PM	R21046
Surr: 4-Bromofluorobenzene	97.6	80-120		%REC	1	9/7/2014 11:24:25 PM	R21046

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

Analytical Report

Lab Order 1409277

Date Reported: 9/8/2014

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Enterprise Field Services**Client Sample ID:** C-3**Project:** Lateral 2A-2**Collection Date:** 9/5/2014 12:35:00 PM**Lab ID:** 1409277-003**Matrix:** MEOH (SOIL)**Received Date:** 9/6/2014 6:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: BCN
Diesel Range Organics (DRO)	110	10		mg/Kg	1	9/7/2014 2:28:17 AM	15157
Surr: DNOP	94.5	57.9-140		%REC	1	9/7/2014 2:28:17 AM	15157
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	37	24		mg/Kg	5	9/7/2014 6:24:46 PM	R21049
Surr: BFB	109	80-120		%REC	5	9/7/2014 6:24:46 PM	R21049
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.12		mg/Kg	5	9/7/2014 6:24:46 PM	R21049
Toluene	0.30	0.24		mg/Kg	5	9/7/2014 6:24:46 PM	R21049
Ethylbenzene	0.26	0.24		mg/Kg	5	9/7/2014 6:24:46 PM	R21049
Xylenes, Total	1.4	0.47		mg/Kg	5	9/7/2014 6:24:46 PM	R21049
Surr: 4-Bromofluorobenzene	94.4	80-120		%REC	5	9/7/2014 6:24:46 PM	R21049

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	Page 3 of 9
	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.	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Analytical Report

Lab Order 1409277

Date Reported: 9/8/2014

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Enterprise Field Services**Client Sample ID:** C-4**Project:** Lateral 2A-2**Collection Date:** 9/5/2014 12:40:00 PM**Lab ID:** 1409277-004**Matrix:** MEOH (SOIL)**Received Date:** 9/6/2014 6:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: BCN
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	9/8/2014 10:11:28 AM	15157
Surr: DNOP	88.2	57.9-140		%REC	1	9/8/2014 10:11:28 AM	15157
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.3		mg/Kg	1	9/7/2014 6:54:59 PM	R21049
Surr: BFB	92.8	80-120		%REC	1	9/7/2014 6:54:59 PM	R21049
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.053		mg/Kg	1	9/7/2014 6:54:59 PM	R21049
Toluene	0.063	0.053		mg/Kg	1	9/7/2014 6:54:59 PM	R21049
Ethylbenzene	ND	0.053		mg/Kg	1	9/7/2014 6:54:59 PM	R21049
Xylenes, Total	ND	0.11		mg/Kg	1	9/7/2014 6:54:59 PM	R21049
Surr: 4-Bromofluorobenzene	109	80-120		%REC	1	9/7/2014 6:54:59 PM	R21049

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

Analytical Report

Lab Order 1409277

Date Reported: 9/8/2014

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Enterprise Field Services**Client Sample ID:** C-5**Project:** Lateral 2A-2**Collection Date:** 9/5/2014 12:45:00 PM**Lab ID:** 1409277-005**Matrix:** MEOH (SOIL)**Received Date:** 9/6/2014 6:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: BCN
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	9/7/2014 3:10:59 AM	15157
Surr: DNOP	92.6	57.9-140		%REC	1	9/7/2014 3:10:59 AM	15157
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	3.9		mg/Kg	1	9/7/2014 7:25:10 PM	R21049
Surr: BFB	99.6	80-120		%REC	1	9/7/2014 7:25:10 PM	R21049
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.039		mg/Kg	1	9/7/2014 7:25:10 PM	R21049
Toluene	0.057	0.039		mg/Kg	1	9/7/2014 7:25:10 PM	R21049
Ethylbenzene	ND	0.039		mg/Kg	1	9/7/2014 7:25:10 PM	R21049
Xylenes, Total	ND	0.078		mg/Kg	1	9/7/2014 7:25:10 PM	R21049
Surr: 4-Bromofluorobenzene	118	80-120		%REC	1	9/7/2014 7:25:10 PM	R21049

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	Page 5 of 9
	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.	
	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#: 1409277

08-Sep-14

Client: Enterprise Field Services

Project: Lateral 2A-2

Sample ID	MB-15139		SampType:	MBLK		TestCode:	EPA Method 8015D: Diesel Range Organics				
Client ID:	PBS		Batch ID:	15139		RunNo:	21040				
Prep Date:	9/5/2014		Analysis Date:	9/6/2014		SeqNo:	612324		Units: %REC		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Surr: DNOP	8.1		10.00		81.1	57.9	140				

Sample ID	LCS-15139		SampType: LCS		TestCode: EPA Method 8015D: Diesel Range Organics					
Client ID:	LCSS		Batch ID: 15139		RunNo: 21040					
Prep Date:	9/5/2014		Analysis Date: 9/6/2014		SeqNo: 612325		Units: %REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.1		5.000		81.1	57.9	140			

Sample ID	MB-15157		SampType:	MBLK		TestCode:	EPA Method 8015D: Diesel Range Organics				
Client ID:	PBS		Batch ID:	15157		RunNo:	21040				
Prep Date:	9/6/2014		Analysis Date:	9/6/2014		SeqNo:	612637		Units: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Diesel Range Organics (DRO)	ND	10									
Surr: DNOP	8.8		10.00		88.3	57.9	140				

Sample ID	LCS-15157			SampType:	LCS			TestCode:	EPA Method 8015D: Diesel Range Organics		
Client ID:	LCSS			Batch ID:	15157			RunNo:	21040		
Prep Date:	9/6/2014			Analysis Date:	9/6/2014			SeqNo:	612639		
								Units:	mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Diesel Range Organics (DRO)	49	10	50.00	0	98.3	68.6	130				
Surr: DNOP	4.1		5.000		81.7	57.9	140				

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. |
| 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#: 1409277

08-Sep-14

Client: Enterprise Field Services

Project: Lateral 2A-2

Sample ID	MB-15146 MK		SampType:	MBLK		TestCode:	EPA Method 8015D: Gasoline Range				
Client ID:	PBS		Batch ID:	R21046		RunNo:	21046				
Prep Date:			Analysis Date:	9/7/2014		SeqNo:	612473		Units: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Gasoline Range Organics (GRO)	ND	5.0									
Surr: BFB	900		1000		90.4	80	120				

Sample ID	LCS-15146 MK		SampType:	LCS		TestCode:	EPA Method 8015D: Gasoline Range				
Client ID:	LCSS		Batch ID:	R21046		RunNo:	21046				
Prep Date:			Analysis Date:	9/7/2014		SeqNo:	612477		Units: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Gasoline Range Organics (GRO)	24	5.0	25.00	0	94.8	65.8	139				
Surr: BFB	990		1000		98.7	80	120				

Sample ID	MB-15128 MK		SampType:	MBLK		TestCode:	EPA Method 8015D: Gasoline Range				
Client ID:	PBS		Batch ID:	R21049		RunNo:	21049				
Prep Date:			Analysis Date:	9/7/2014		SeqNo:	612585		Units: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Gasoline Range Organics (GRO)	ND	5.0									
Surr: BFB	1000		1000		101	80	120				

Sample ID	LCS-15128 MK		SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	LCSS		Batch ID: R21049		RunNo: 21049					
Prep Date:			Analysis Date: 9/7/2014		SeqNo: 612587		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	25.00	0	99.7	65.8	139			
Surr: BFB	950		1000		95.1	80	120			

Sample ID	LCSD-15128 MK		SampType:	LCSD		TestCode:	EPA Method 8015D: Gasoline Range				
Client ID:	LCSS02		Batch ID:	R21049		RunNo:	21049				
Prep Date:			Analysis Date:	9/7/2014		SeqNo:	612589		Units: %REC		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Surr: BFB	1100							0	0		

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. |
| 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#: 1409277

08-Sep-14

Client: Enterprise Field Services

Project: Lateral 2A-2

Sample ID	MB-15146 MK		SampType:	MBLK		TestCode:	EPA Method 8021B: Volatiles				
Client ID:	PBS		Batch ID:	R21046		RunNo:	21046				
Prep Date:			Analysis Date:	9/7/2014		SeqNo:	612505		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		100	80	120				

Sample ID	LCS-15146 MK		SampType: LCS		TestCode: EPA Method 8021B: Volatiles					
Client ID:	LCSS		Batch ID: R21046		RunNo: 21046					
Prep Date:			Analysis Date: 9/7/2014		SeqNo: 612506		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.93	0.050	1.000	0	93.0	80	120			
Toluene	0.93	0.050	1.000	0	93.2	80	120			
Ethylbenzene	0.96	0.050	1.000	0	95.8	80	120			
Xylenes, Total	2.9	0.10	3.000	0	96.3	80	120			
Surr: 4-Bromofluorobenzene	1.1		1.000		106	80	120			

Sample ID	MB-15128 MK		SampType: MBLK		TestCode: EPA Method 8021B: Volatiles					
Client ID:	PBS		Batch ID: R21049		RunNo: 21049					
Prep Date:			Analysis Date: 9/7/2014		SeqNo: 612641		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	1.2		1.000		120	80	120			

Sample ID	LCS-15128 MK		SampType: LCS		TestCode: EPA Method 8021B: Volatiles					
Client ID:	LCSS		Batch ID: R21049		RunNo: 21049					
Prep Date:			Analysis Date: 9/7/2014		SeqNo: 612642		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.90	0.050	1.000	0	89.9	80	120			
Toluene	0.90	0.050	1.000	0	90.4	80	120			
Ethylbenzene	0.93	0.050	1.000	0	93.2	80	120			
Xylenes, Total	2.9	0.10	3.000	0	98.0	80	120			
Surr: 4-Bromofluorobenzene	0.90		1.000		89.6	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. |
| 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#: 1409277

08-Sep-14

Client: Enterprise Field Services

Project: Lateral 2A-2

Sample ID	LCSD-15128 MK		SampType:	LCSD		TestCode:	EPA Method 8021B: Volatiles			
Client ID:	LCSS02		Batch ID:	R21049		RunNo:	21049			
Prep Date:			Analysis Date:	9/7/2014		SeqNo:	612643		Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.90	0.050	1.000	0	89.9	80	120	0.0223	20	
Toluene	0.90	0.050	1.000	0	90.0	80	120	0.543	20	
Ethylbenzene	0.94	0.050	1.000	0	93.7	80	120	0.460	20	
Xylenes, Total	2.9	0.10	3.000	0	98.0	80	120	0.0204	20	
Surr: 4-Bromofluorobenzene	1.2		1.000		120	80	120	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.
RL Reporting Detection Limit



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

Sample Log-In Check List

Client Name: Enterprise

Work Order Number: 1409277

RcptNo: 1

Received by/date:	<i>[Signature]</i>	<i>09/06/14</i>
Logged By:	Lindsay Mangin	9/6/2014 6:45:00 AM
Completed By:	Lindsay Mangin	9/6/2014 7:16:30 AM
Reviewed By:		

Chain of Custody

- | | | | |
|--|---|-----------------------------|---|
| 1. Custody seals intact on sample bottles? | Yes <input type="checkbox"/> | No <input type="checkbox"/> | Not Present <input checked="" type="checkbox"/> |
| 2. Is Chain of Custody complete? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | Not Present <input type="checkbox"/> |
| 3. How was the sample delivered? | Courier | | |

Log In

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

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:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> 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	1.6	Good	Yes			

Chain-of-Custody Record

Client: Enterprise Field Services LLC

Mailing Address: 614 Reilly Avenue

Farmington, NM 87401

Phone #: (505) 716-2787

email or Fax#:

QA/QC Package:

☒ Standard

☐ Level 4 (Full Validation)

Accreditation

☐ NELAP

☐ Other

☐ EDD (Type)

Turn-Around Time:

☐ Standard

☒ Rush Same Day

Project Name:

Lateral 2A-2

Project #:

Project Manager:

Heather Woods

Sampler: H. Woods

On Site: ☒ Yes ☐ No

Sample Temperature: 17.6



**HALL ENVIRONMENTAL
ANALYSIS LABORATORY**

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

Container
Type and #

Preservative
Type

HEAL No

MeOH Kit
1-4 oz Glass

MeOH / -

-001

MeOH Kit
1-4 oz Glass

MeOH / -

-002

MeOH Kit
1-4 oz Glass

MeOH / -

-003

MeOH Kit
1-4 oz Glass

MeOH / -

-004

MeOH Kit
1-4 oz Glass

MeOH / -

-005

BTEX + MTBE + TPH (8021)

BTEX + MTBE + TPH (Gas only)

TPH 8015B (GRO / DRO / 8021)

TPH (Method 418.1)

EDB (Method 504.1)

PAH's (8310 or 8270 SIMS)

RCRA 8 Metals

Anions (F, Cl, NO₃, NO₂, PO₄, SO₄)

8081 Pesticides / 8082 PCB's

8260B (VOA)

8270 (Semi-VOA)

Air Bubbles (Y or N)

Received by:

Date Time

Christa White

9/5/14 1620

Received by:

Date Time

Christa White

09/06/14 0645

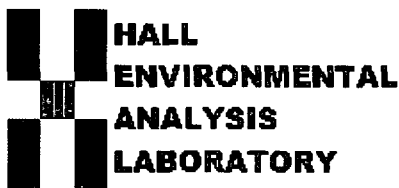
Remarks: Direct Bill to Enterprise Field Services

Attn: Tom Long

WO 829496

Paykey RB21200

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*

September 11, 2014

Heather Woods

APEX TITAN

606 S. Rio Grande Unit A

Aztec, NM 87410

TEL: (903) 821-5603

FAX

RE: Enterprise Lateral 2A-2

OrderNo.: 1409425

Dear Heather Woods:

Hall Environmental Analysis Laboratory received 1 sample(s) on 9/10/2014 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. 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 qualifers 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".

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Analytical Report

Lab Order 1409425

Date Reported: 9/11/2014

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** APEX TITAN**Client Sample ID:** C-6**Project:** Enterprise Lateral 2A-2**Collection Date:** 9/9/2014 1:00:00 PM**Lab ID:** 1409425-001**Matrix:** SOIL**Received Date:** 9/10/2014 6:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: BCN
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	9/10/2014 10:13:53 AM	15213
Surr: DNOP	81.9	57.9-140		%REC	1	9/10/2014 10:13:53 AM	15213
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	9/10/2014 10:38:34 AM	R21126
Surr: BFB	90.4	80-120		%REC	1	9/10/2014 10:38:34 AM	R21126
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.048		mg/Kg	1	9/10/2014 10:38:34 AM	R21126
Toluene	ND	0.048		mg/Kg	1	9/10/2014 10:38:34 AM	R21126
Ethylbenzene	ND	0.048		mg/Kg	1	9/10/2014 10:38:34 AM	R21126
Xylenes, Total	ND	0.096		mg/Kg	1	9/10/2014 10:38:34 AM	R21126
Surr: 4-Bromofluorobenzene	97.3	80-120		%REC	1	9/10/2014 10:38:34 AM	R21126

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.
	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#: 1409425

11-Sep-14

Client: APEX TITAN

Project: Enterprise Lateral 2A-2

Sample ID	MB-15213	SampType:	MBLK	TestCode:	EPA Method 8015D: Diesel Range Organics					
Client ID:	PBS	Batch ID:	15213	RunNo:	21109					
Prep Date:	9/10/2014	Analysis Date:	9/10/2014	SeqNo:	614747	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Surr: DNOP	7.3		10.00		73.5	57.9	140			

Sample ID	LCS-15213	SampType:	LCS	TestCode:	EPA Method 8015D: Diesel Range Organics					
Client ID:	LCSS	Batch ID:	15213	RunNo:	21109					
Prep Date:	9/10/2014	Analysis Date:	9/10/2014	SeqNo:	614748	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	49	10	50.00	0	97.4	68.6	130			
Surr: DNOP	3.9		5.000		78.0	57.9	140			

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. |
| 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#: 1409425

11-Sep-14

Client: APEX TITAN

Project: Enterprise Lateral 2A-2

Sample ID	MB-15192 MK	SampType:	MBLK	TestCode:	EPA Method 8015D: Gasoline Range						
Client ID:	PBS	Batch ID:	R21126	RunNo:	21126						
Prep Date:		Analysis Date:	9/10/2014	SeqNo:	615283	Units:	mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Gasoline Range Organics (GRO)	ND	5.0									
Surr: BFB	890		1000		89.2	80	120				

Sample ID	LCS-15192 MK	SampType:	LCS	TestCode:	EPA Method 8015D: Gasoline Range						
Client ID:	LCSS	Batch ID:	R21126	RunNo:	21126						
Prep Date:		Analysis Date:	9/10/2014	SeqNo:	615284	Units:	mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Gasoline Range Organics (GRO)	28	5.0	25.00	0	113	65.8	139				
Surr: BFB	970		1000		97.3	80	120				

Sample ID	MB-15192	SampType:	MBLK	TestCode:	EPA Method 8015D: Gasoline Range						
Client ID:	PBS	Batch ID:	15192	RunNo:	21126						
Prep Date:	9/9/2014	Analysis Date:	9/10/2014	SeqNo:	615294	Units:	%REC				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Surr: BFB	890		1000		89.2	80	120				

Sample ID	LCS-15192	SampType:	LCS	TestCode:	EPA Method 8015D: Gasoline Range						
Client ID:	LCSS	Batch ID:	15192	RunNo:	21126						
Prep Date:	9/9/2014	Analysis Date:	9/10/2014	SeqNo:	615295	Units:	%REC				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Surr: BFB	970		1000		97.3	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. |
| 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#: 1409425

11-Sep-14

Client: APEX TITAN
Project: Enterprise Lateral 2A-2

Sample ID	MB-15192 MK		SampType:	MBLK		TestCode:	EPA Method 8021B: Volatiles			
Client ID:	PBS		Batch ID:	R21126		RunNo:	21126			
Prep Date:			Analysis Date:	9/10/2014		SeqNo:	615338		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	0.97		1.000		97.1	80	120			

Sample ID	LCS-15192 MK		SampType:	LCS		TestCode:	EPA Method 8021B: Volatiles			
Client ID:	LCSS		Batch ID:	R21126		RunNo:	21126			
Prep Date:			Analysis Date:	9/10/2014		SeqNo:	615339		Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.95	0.050	1.000	0	94.8	80	120			
Toluene	0.96	0.050	1.000	0	96.1	80	120			
Ethylbenzene	0.99	0.050	1.000	0	99.0	80	120			
Xylenes, Total	2.9	0.10	3.000	0	98.2	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		102	80	120			

Sample ID	MB-15192		SampType:	MBLK		TestCode:	EPA Method 8021B: Volatiles			
Client ID:	PBS		Batch ID:	15192		RunNo:	21126			
Prep Date:	9/9/2014		Analysis Date:	9/10/2014		SeqNo:	615349		Units: %REC	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.97		1.000		97.1	80	120			

Sample ID	LCS-15192		SampType:	LCS		TestCode:	EPA Method 8021B: Volatiles			
Client ID:	LCSS		Batch ID:	15192		RunNo:	21126			
Prep Date:	9/9/2014		Analysis Date:	9/10/2014		SeqNo:	615350		Units: %REC	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.0		1.000		102	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. |
| R RPD outside accepted recovery limits | RL Reporting Detection Limit |
| S Spike Recovery outside accepted recovery limits | |



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

Sample Log-In Check List

Client Name: APEX AZTEC

Work Order Number: 1409425

RcptNo: 1

Received by/date: LM 09/10/14

Logged By: Anne Thorne 9/10/2014 6:30:00 AM

Completed By: Anne Thorne 9/10/2014

Reviewed By: A 09/10/14

Anne Thorne

Anne Thorne

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 $>0^{\circ}\text{C}$ 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:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> 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			

[illegible]

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 LLC	Contact: Thomas Long
Address: 614 Reilly Ave, Farmington, NM 87401	Telephone No. 505-599-2286
Facility Name: Lateral 3B-3	Facility Type: Natural Gas Gathering Line

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

LOCATION OF RELEASE

Unit Letter D	Section 35	Township 30N	Range 11W	Feet from the 1269	North South Line	Feet from the 437	East West Line	County San Juan
------------------	---------------	-----------------	--------------	--------------------------	---------------------	-------------------------	-------------------	--------------------

Latitude 36.772307

Longitude -107.967842

OIL CONS. DIV DIST. 3

NATURE OF RELEASE

DEC 08 2014

Type of Release: Natural Gas and Natural Gas Liquids	Volume of Release 39.87 MCF	Volume Recovered: None
Source of Release: Internal Corrosion	Date and Hour of Occurrence: 8/17/2014 @ 12:30 p.m.	Date and Hour of Discovery: 8/17/2014 @ 2:00 p.m.
Was Immediate Notice Given? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom? Courtesy notification to NMOCD - Cory Smith and BLM- Shari Ketchum	
By Whom?	Date and Hour 8/21/2014 at 7:42 a.m.	
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: A third party reported a possible line leak along the Lateral 3B-3 pipeline. Technicians were dispatched to and confirmed the leak. The pipeline was isolated, blown down, locked out and tagged out. Remediation was completed on August 27, 2014. The final excavation dimensions measured approximately one-hundred-five (105) feet long by fourteen (14) feet wide ranging from five (5) to six (6) feet deep. Approximately 330 cubic yards of hydrocarbon impacted soil was excavated and transported to an NMOCD approved land farm facility.

Describe Area Affected and Cleanup Action Taken: A third party reported a possible line leak along the Lateral 3B-3 pipeline. Technicians were dispatched to and confirmed the leak. The pipeline was isolated, blown down, locked out and tagged out. Remediation was completed on August 27, 2014. The final excavation dimensions measured approximately one-hundred-five (105) feet long by fourteen (14) feet wide ranging from five (5) to six (6) feet deep. Approximately 330 cubic yards of hydrocarbon impacted soil was excavated and transported to an NMOCD approved land farm facility. A third party corrective action report is included with this "Final" C-141.

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>	OIL CONSERVATION DIVISION	
Printed Name: Jon Fields	Approved by Environmental Specialist: <i>[Signature]</i>	
Title: Director, Environmental	Approval Date:	Expiration Date:
E-mail Address: jefields@eprod.com	Conditions of Approval:	
Date: 11-5-2014	Phone: (713)381-6684	Attached <input type="checkbox"/>

* Attach Additional Sheets If Necessary

#105 1436357386

43



OIL CONS. DIV DIST. 3

DEC 08 2014

CORRECTIVE ACTION REPORT

Property:

**Lateral 3B-3 Pipeline Release
NW 1/4, S35 T30N R11W
San Juan County, New Mexico**

October 21, 2014
Apex Project No. 7030414G030

Prepared for:

**Enterprise Field Services LLC
614 Reilly Avenue
Farmington, NM 87401
Attn: Mr. Thomas Long**

Prepared by:

A handwritten signature in cursive script that reads 'Heather M. Woods'.

Heather M. Woods, P.G.
Senior Project Manager

A handwritten signature in cursive script that reads 'Elizabeth Scaggs'.

Elizabeth Scaggs, P.G.
Senior Program Manager

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1.2 Project Objective	1
2.0 SITE RANKING	1
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4.1 Confirmation Soil Samples	3
5.0 FINDINGS AND RECOMMENDATIONS	4
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LIST OF APPENDICES

Appendix A:	Figure 1 – Topographic Map Figure 2 – Site Vicinity Map Figure 3 – Site Map with Sample Locations
Appendix B:	Executed C-138 Solid Waste Acceptance Forms
Appendix C:	Photographic Documentation
Appendix D:	Tables
Appendix E:	Laboratory Analytical Reports & Chain of Custody Documentation

CORRECTIVE ACTION REPORT

Lateral 3B-3 Pipeline Release

NW 1/4, S35 T30N R11W
San Juan County, New Mexico

Apex Project No. 7030414G030

1.0 INTRODUCTION

1.1 Site Description & Background

The Lateral 3B-3 Pipeline Release Site is located within the Enterprise Field Services LLC (Enterprise) pipeline right-of-way (ROW) in the northwest (NW) ¼ of Section 35 in Township 30 North and Range 11 West in rural San Juan County, New Mexico (36.77231N, 107.96784W), referred to hereinafter as the "Site" or "subject Site". The Site is located adjacent to an unpaved road, on public land managed by the United States Bureau of Land Management (BLM). The Site is surrounded by native vegetation rangeland periodically interrupted with oil and gas production and gathering facilities, including the Enterprise natural gas gathering pipeline which traverses the area from approximately northwest to southeast.

On August 26, 2014, Enterprise shut in the Lateral 3B-3 pipeline and initiated excavation activities at the Site in an effort to locate and repair a subsurface leak. The leak was subsequently identified and repaired. An unknown quantity of dry natural gas and pipeline liquids were released from the pipeline as a result of internal corrosion. The leak was identified by a release of natural gas and minor liquids at the ground surface.

A topographic map depicting the location of the Site is included as Figure 1, and a Site Vicinity Map is included as Figure 2 in Appendix A.

1.2 Project Objective

The primary objective of the corrective actions was to reduce the concentration of constituents of concern (COCs) in the on-Site soils to below the New Mexico Energy, Minerals, and Natural Resources Department (EMNRD), Oil Conservation Division (OCD) *Remediation Action Levels* using the New Mexico EMNRD OCD's *Guidelines for Remediation of Leaks, Spills and Releases* as guidance.

2.0 SITE RANKING

In accordance with the New Mexico ENMRD OCD's *Guidelines for Remediation of Leaks, Spills and Releases*, Apex TITAN, Inc. (Apex) utilized the general site characteristics obtained during the completion of corrective action activities and information available from the Office of the New Mexico Office of the State Engineer to determine the appropriate "ranking" for the Site. The ranking criteria and associated scoring are provided in the following table:

Ranking Criteria			Ranking Score
Depth to Groundwater	<50 feet	20	0
	50 to 99 feet	10	
	>100 feet	0	
Wellhead Protection Area • <1,000 feet from a water source, or; <200 feet from private domestic water source.	Yes	20	0
	No	0	
Distance to Surface Water Body	<200 feet	20	10
	200 to 1,000 feet	10	
	>1,000 feet	0	
Total Ranking Score			10

Based on Apex's evaluation of the scoring criteria, the Site would have a maximum Total Ranking Score of "10". This ranking is based on the following:

- Depth to groundwater is anticipated to be greater than 240 feet below ground surface based on a cathodic protection deepwell groundbed report for the Murphy D #100 located approximately 3,300 feet to the northwest of the Site. The cathodic report indicates that no groundwater was observed in the borehole with a total depth of 300 feet bgs. The elevation of the Murphy D #100 location is approximately 60 feet lower in elevation than the Site. No nearby water wells were identified on the Office of the State Engineer (OSE) website database.
- No water source wells (municipal/community wells) were identified within 1,000 feet of the Site. No private domestic water sources were identified within 200 feet of the Site.
- The Site is approximately 400 feet southwest of an ephemeral tributary to Bloomfield Canyon and approximately 550 feet east of an ephemeral tributary to the West Fork of Bloomfield Canyon. Based on this proximity, a ranking for distance to surface water was assigned at "10".

3.0 RESPONSE ACTIONS

3.1 Soil Excavation Activities

On August 26, 2014, Enterprise shut in the Lateral 3B-3 pipeline and initiated excavation activities at the Site in an effort to locate and repair a subsurface leak. The leak was subsequently identified and repaired. An unknown quantity of dry natural gas and pipeline liquids were released from the pipeline as a result of internal corrosion. The leak was identified by a release of natural gas and minor liquids at the ground surface. During the corrective action activities, West States Energy Contractors provided heavy equipment and labor support, and Heather Woods and Kyle Summers, Apex environmental professionals, provided environmental support.

The surface expression of the excavation measured approximately 105 feet long by 14 feet wide, with a total depth ranging from approximately 5 to 6 feet bgs.

The lithology encountered during the completion of corrective action activities consisted primarily of unconsolidated silty and clayey sands, underlain by sandstone.

A total of approximately 330 cubic yards of hydrocarbon affected soils were transported to the Envirotech Landfarm in Hilltop, New Mexico for disposal/remediation. The executed C-138 form is provided in Appendix B. The excavation was backfilled with clean imported fill and contoured to surrounding grade.

Figure 3 is a site map that indicates the approximate location of the excavated area in relation to pertinent land features (Appendix A). Photographic documentation of the field activities is included in Appendix C.

3.2 Soil Sampling Program

Apex screened head-space samples of Site soils with a photoionization detector (PID) fitted with a 10.6 eV lamp to aid in determining the excavation limits.

Apex's soil sampling program included the collection of fifteen (15) final confirmation samples (S-1 through S-15), from the resulting excavation for laboratory analysis. Figure 3 depicts the approximate location of the excavated area and shows the final confirmation sample locations in relation to the final excavation dimensions (Appendix A).

The confirmation soil samples were collected and placed in laboratory prepared glassware, labeled/sealed using the laboratory supplied labels, and placed on ice in a cooler, which was secured with a custody seal. The sample cooler and completed chain-of-custody form were relinquished to Envirotech Analytical Laboratory in Bloomfield, New Mexico, for rush analysis.

3.3 Laboratory Analytical Methods

The confirmation soil samples were analyzed for benzene, toluene, ethylbenzene, and total xylenes (BTEX) utilizing EPA SW-846 Method #8021, and total petroleum hydrocarbons (TPH) gasoline range organics (GRO) and diesel range organics (DRO) utilizing EPA SW-846 Method #8015.

Laboratory results are summarized in Table 1, included in Appendix D. The executed chain-of-custody form and laboratory data sheets are provided in Appendix E.

4.0 DATA EVALUATION

The Site is subject to regulatory oversight by the New Mexico EMNRD OCD. To address activities related to condensate releases, the New Mexico EMNRD OCD utilizes the *Guidelines for Remediation of Leaks, Spills and Releases* as guidance, in addition to the OCD rules, specifically New Mexico Administrative Code 19.15.29 *Remediation Plan*. These guidance documents establish investigation and abatement action requirements for sites subject to reporting and/or corrective action.

4.1 Confirmation Soil Samples

Apex compared the BTEX and TPH concentrations or reporting limits associated with the final confirmation samples (S-1 through S-15) collected from the excavated area to the OCD *Remediation Action Levels* (RALs) for sites having a total ranking score of "10".

- The laboratory analyses of confirmation samples collected from soils remaining in place do not indicate benzene concentrations above the laboratory reporting limits, which are below the OCD *Remediation Action Level*.
- The laboratory analyses of the confirmation samples collected from soils remaining in place do not indicate total BTEX concentrations above the laboratory reporting limits, which are below the OCD *Remediation Action Level*.

- The laboratory analyses of the confirmation samples collected from soils remaining in place indicate combined TPH GRO/DRO concentrations below the laboratory reporting limits, which are below the *OCD Remediation Action Level* for a Site ranking of "10".

Confirmation sample results are provided in Table 1 in Appendix C.

5.0 FINDINGS AND RECOMMENDATIONS

The Lateral 3B-3 Pipeline Release Site is located within the Enterprise pipeline ROW in the NW ¼ of Section 35 in Township 30 North and Range 11 West in rural San Juan County, New Mexico, (36.75912N, 107.77916W). The Site is located adjacent to an unpaved road, on public land managed by the BLM. The Site is surrounded by native vegetation rangeland periodically interrupted with oil and gas production and gathering facilities, including the Enterprise natural gas gathering pipeline which traverses the area from approximately northwest to southeast.

On August 26, 2014, Enterprise shut in the Lateral 3B-3 pipeline and initiated excavation activities at the Site in an effort to locate and repair a subsurface leak. The leak was subsequently identified and repaired. An unknown quantity of dry natural gas and pipeline liquids were released from the pipeline as a result of internal corrosion. The leak was identified by a release of natural gas and minor liquids at the ground surface.

- The primary objective of the corrective actions was to reduce the concentration of COCs in the on-Site soils to below the New Mexico EMNRD *OCD RALs* using the New Mexico EMNRD *OCD's Guidelines for Remediation of Leaks, Spills and Releases* as guidance.
- The lithology encountered during the completion of corrective action activities consisted primarily of unconsolidated silty and clayey sands, underlain by sandstone.
- The surface expression of the excavation measured approximately 105 feet long by 14 feet wide, with a total depth of ranging from approximately 5 to 6 feet bgs.
- Prior to backfilling, fifteen (15) final confirmation samples were collected from the resulting excavation for laboratory analyses. Based on analytical results, soils remaining in place do not exhibit COC concentrations above the *OCD Remediation Action Levels* for a Site ranking of "10".
- A total of approximately 330 cubic yards of hydrocarbon affected soils were transported to the Envirotech Landfarm in Hilltop, New Mexico for disposal/remediation. The excavation was backfilled with clean imported fill and contoured to surrounding grade.

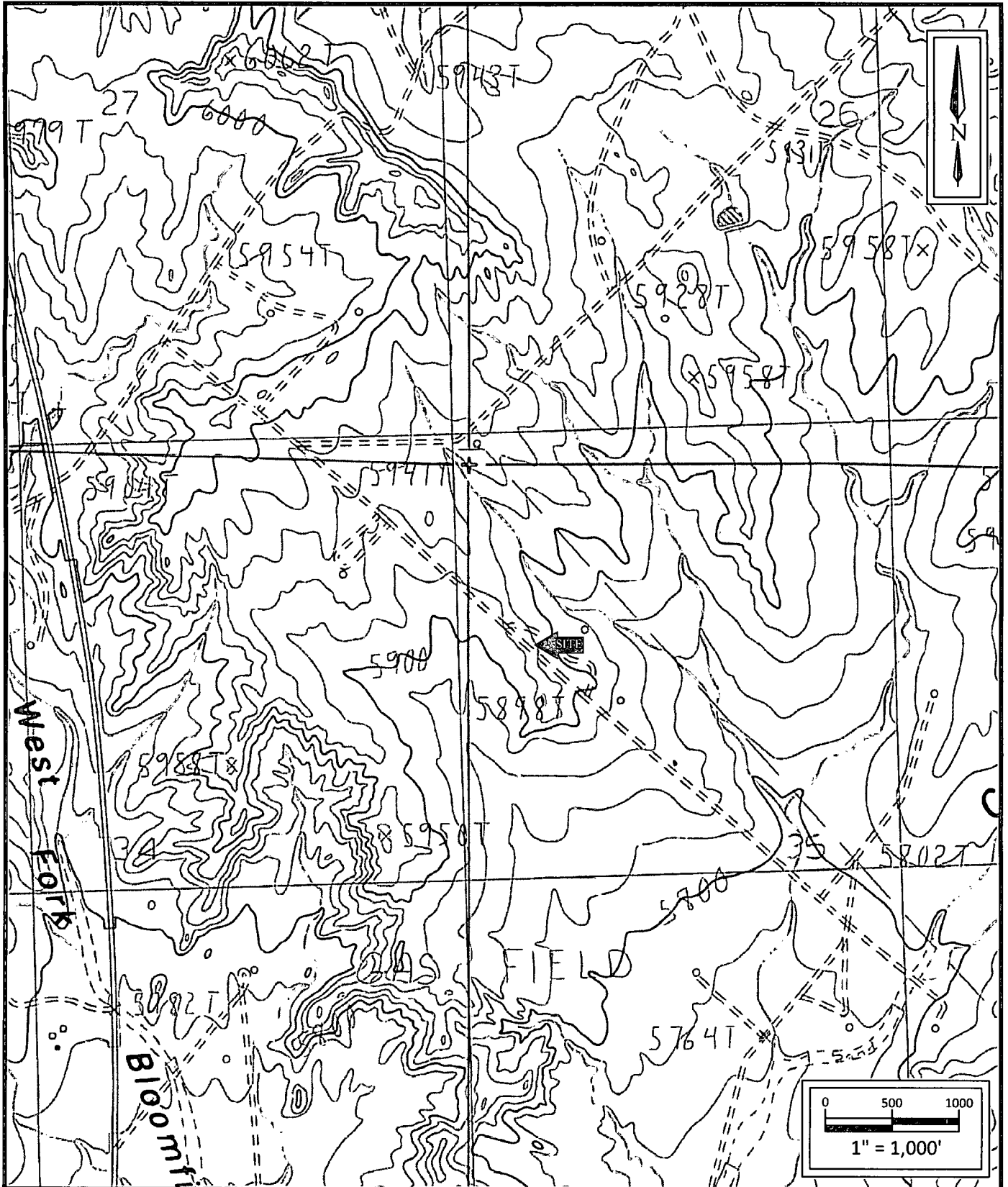
Based on field observations and laboratory analytical results, no additional investigation or corrective action appears warranted at this time.

6.0 STANDARD OF CARE, LIMITATIONS, AND RELIANCE

Apex's services were performed in accordance with standards customarily provided by a firm rendering the same or similar services in the area during the same time period. Apex makes no warranties, expressed or implied, as to the services performed hereunder. Additionally, Apex does not warrant the work of third parties supplying information used in the report (e.g. laboratories, regulatory agencies, or other third parties). This scope of services was performed in accordance with the scope of work agreed with the client.

Findings, conclusions and recommendations resulting from these services are based upon information derived from the on-Site activities and other services performed under this scope of work and it should be noted that this information is subject to change over time. Certain indicators of the presence of hazardous substances, petroleum products, or other constituents may have been latent, inaccessible, unobservable, or not present during these services, and Apex cannot represent that the Site contains no hazardous substances, toxic materials, petroleum products, or other latent conditions beyond those identified during this scope of services. Environmental conditions at other areas or portions of the Site may vary from those encountered at actual sample locations. Apex's findings and recommendations are based solely upon data available to Apex at the time of these services.

This report has been prepared for the exclusive use of Enterprise, and any authorization for use or reliance by any other party (except a governmental entity having jurisdiction over the Site) is prohibited without the expressed written authorization of Enterprise and Apex. Any unauthorized distribution or reuse is at the client's sole risk. Notwithstanding the foregoing, reliance by authorized parties will be subject to the terms, conditions and limitations stated in the proposal, the report, and Apex's Agreement. The limitation of liability defined in the agreement is the aggregate limit of Apex's liability to the client.



Lateral 3B-3 Pipeline Release

NW¼ S35 T30N R11W
 Rural San Juan County, NM
 36.77231N, 107.96784W

Project No. 7030414G030



Apex TITAN, Inc.

606 S. Rio Grande, Suite A
 Aztec, New Mexico 87410
 Phone: (505) 334-5200
www.apexcos.com

A Subsidiary of Apex Companies, LLC

FIGURE 1
Topographic Map
 Aztec, NM Quadrangle
 1985



Lateral 3B-3 Pipeline Release

NW $\frac{1}{4}$ S35 T30N R11W
 Rural San Juan County, NM
 36.77231N, 107.96784W

Project No. 7030414G030



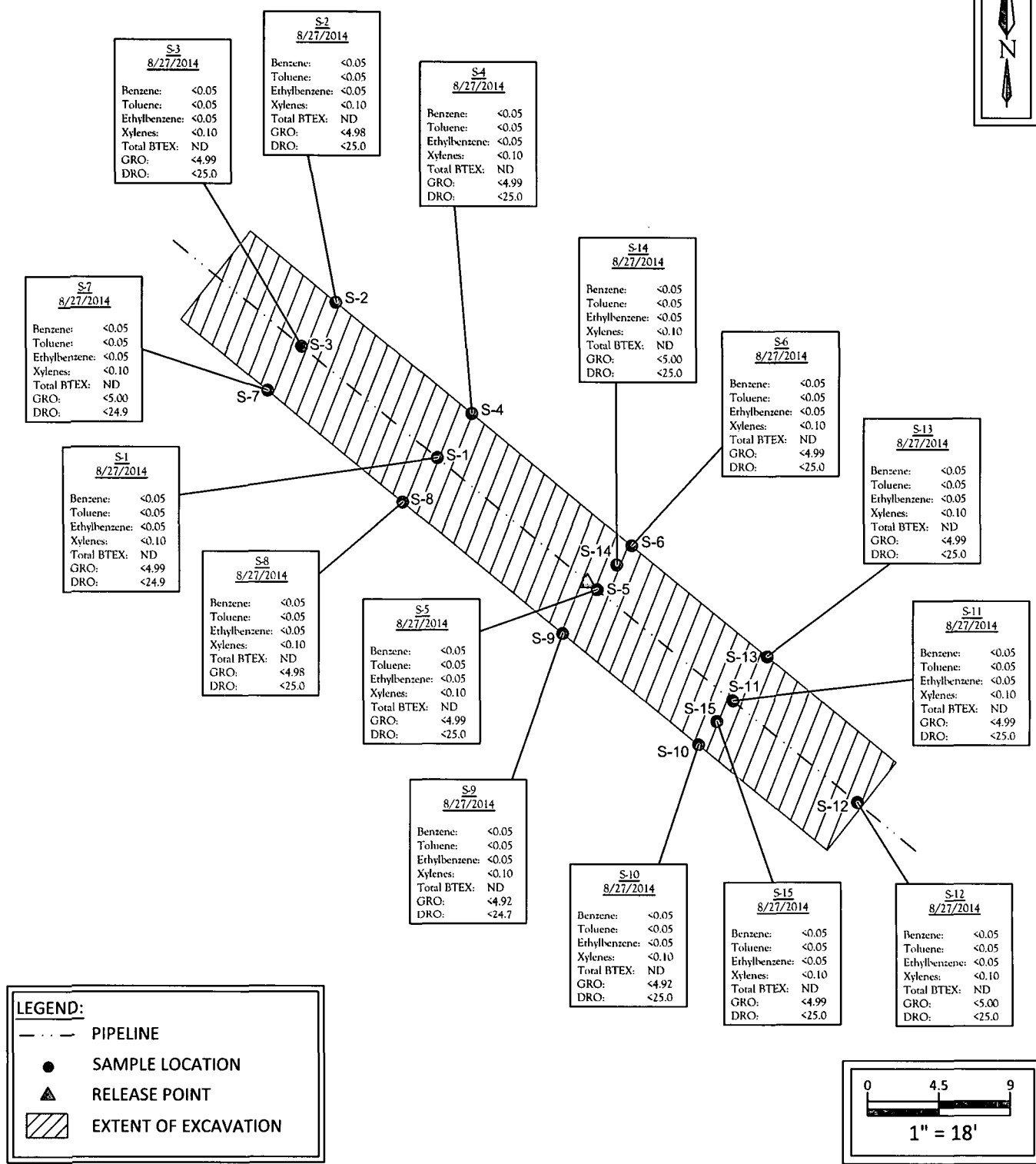
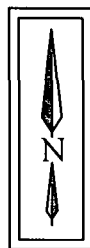
Apex TITAN, Inc.

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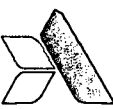
A Subsidiary of Apex Companies, LLC

FIGURE 2
Site Vicinity Map
 2013 Aerial Photograph



Lateral 3B-3 Pipeline Release
NW $\frac{1}{4}$ S35 T30N R11W
Rural San Juan County, NM
36.77231N, 107.96784W

Project No. 7030414G030



Apex TITAN, Inc.
606 S. Rio Grande, Suite A
Aztec, New Mexico 87410
Phone: (505) 334-5200
www.apexcos.com
A Subsidiary of Apex Companies, LLC

FIGURE 3
Site Map with
Sample Locations

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-138
Revised August 1, 2011

*Surface Waste Management Facility Operator
and Generator shall maintain and make this
documentation available for Division inspection.

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. **Generator Name and Address:**
Enterprise Field Services, LLC, 614 Reilly Avenue, Farmington, NM 87401

2. **Originating Site:**
Lateral 3B-3 Pipeline

3. **Location of Material (Street Address, City, State or ULSTR):**
Unit Letter D, Section 35, T30N, R11W; 36.772307, -107.967842 8/27/14 - 170 cys

4. **Source and Description of Waste:** Hydrocarbon impacted soils associated with a release from a natural gas pipeline

5. **Estimated Volume** 50 yd³ bbls **Known Volume** (to be entered by the operator at the end of the haul) 100 yd³ / bbls

5. GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS

I, Thomas Long *Thomas Long* representative or authorized agent for Enterprise Field Services, LLC do hereby
PRINT & SIGN NAME COMPANY NAME
certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988
regulatory determination, the above described waste is: (Check the appropriate classification)

☒ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. Operator Use Only: Waste Acceptance Frequency ☐ Monthly ☐ Weekly ☐ Per Load

☐ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazard characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous (check the appropriate items)

☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☐ Process Knowledge ☐ Other (Provide description in Box)

GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS

I, Thomas Long *Thomas Long* 8-21-14, representative for Enterprise Field Services, LLC authorize IEI, Inc. to
Generator Signature
complete the required testing/sign the Generator Waste Testing Certification.

I, K. Delph *K. Delph*, representative for IEI, Inc. do hereby certify that
representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the results have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The following documentation is attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.36 NMAC.

6. **Transporter: West States Energy Contractors (WSEC)**

MOSSE Excavations

OCD Permitted Surface Waste Management Facility

Name and Facility Permit #: JFJ Landfarm/Industrial Ecosystems, Inc. * Permit #: NM 01-0010B

Address of Facility: #49 CR 2150 Aztec, New Mexico

Method of Treatment and/or Disposal:

Treating Plant ☒ Landfarm ☐ Landfill ☐ Other

Waste Acceptance Status:

☒ APPROVED

☐ DENIED (Must Be Maintained As Permanent Record)

PRINT NAME: L. Machado

TITLE: Admin. Specialist DATE: 8/26/14

SIGNATURE: [Signature]
Surface Waste Management Facility Authorized Agent

TELEPHONE NO.: 505-632-1782

8-22-14

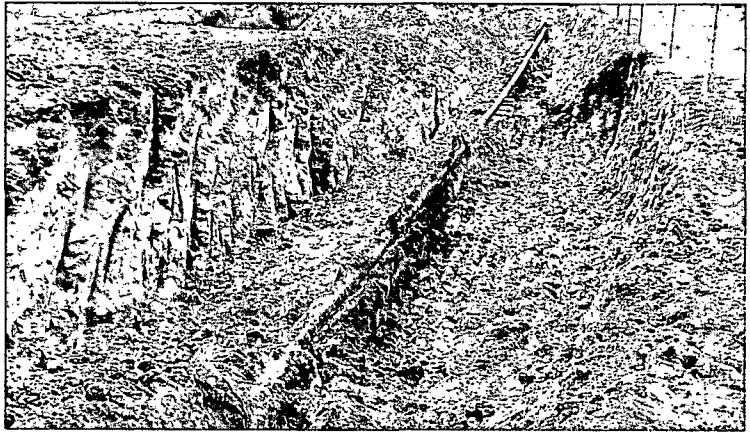
Photograph 1

View of site prior to excavation activities, facing northeast.



Photograph 2

View of the final excavation at the completion of corrective action activities, facing southeast.



Photograph 3

View of the final excavation at the completion of corrective action activities, facing northwest.





TABLE 1
Lateral 3B-3 Pipeline Release
SOIL ANALYTICAL SUMMARY

Sample I.D.	Date	Sample Depth (feet)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg).	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)
New Mexico Entergy, Mineral & Natural Resources Department, Oil Conservation Division, Remediation Action Level			10	NE	NE	NE	50	1,000	
Final Confirmation Samples									
S-1	8/27/2014	4	<0.05	<0.05	<0.05	<0.10	ND	<4.99	<24.9
S-2	8/27/2014	2 to 4	<0.05	<0.05	<0.05	<0.10	ND	<4.98	<25.0
S-3	8/27/2014	4	<0.05	<0.05	<0.05	<0.10	ND	<4.99	<25.0
S-4	8/27/2014	2 to 4	<0.05	<0.05	<0.05	<0.10	ND	<4.99	<25.0
S-5	8/27/2014	4	<0.05	<0.05	<0.05	<0.10	ND	<4.99	<25.0
S-6	8/27/2014	3 to 6	<0.05	<0.05	<0.05	<0.10	ND	<4.99	<25.0
S-7	8/27/2014	2 to 4	<0.05	<0.05	<0.05	<0.10	ND	<5.00	<24.9
S-8	8/27/2014	2 to 4	<0.05	<0.05	<0.05	<0.10	ND	<4.98	<25.0
S-9	8/27/2014	3 to 6	<0.05	<0.05	<0.05	<0.10	ND	<4.92	<24.7
S-10	8/27/2014	3 to 6	<0.05	<0.05	<0.05	<0.10	ND	<4.92	<25.0
S-11	8/27/2014	6	<0.05	<0.05	<0.05	<0.10	ND	<4.99	<25.0
S-12	8/27/2014	3 to 6	<0.05	<0.05	<0.05	<0.10	ND	<5.00	<25.0
S-13	8/27/2014	3 to 6	<0.05	<0.05	<0.05	<0.10	ND	<4.99	<25.0
S-14	8/27/2014	6	<0.05	<0.05	<0.05	<0.10	ND	<5.00	<25.0
S-15	8/27/2014	6	<0.05	<0.05	<0.05	<0.10	ND	<4.99	<25.0

Note: Concentrations in **bold** and yellow exceed the applicable OCD Remediation Action Level

NE = Not Established

ND = Not Detected above Laboratory Reporting Limits



Analytical Report

Report Summary

Client: Enterprise Products
Chain Of Custody Number: 17370
Samples Received: 8/27/2014 11:21:00AM
Job Number: 97057-0352
Work Order: P408113
Project Name/Location: Lateral 3B-3

Entire Report Reviewed By:

A handwritten signature in black ink, appearing to read 'Tim Cain', written over a horizontal line.

Date: 8/29/14

Tim Cain, Laboratory Manager

Supplement to analytical report generated on: 8/29/14 11:11 am

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.



Enterprise Products
614 Reilly Ave
Farmington NM, 87401

Project Name: Lateral 3B-3
Project Number: 97057-0352
Project Manager: Kyle Summers-Apex TITAN

Reported:
29-Aug-14 11:41

Analytical Report for Samples

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
S-1	P408113-01A	Soil	08/27/14	08/27/14	Glass Jar, 4 oz.
S-2	P408113-02A	Soil	08/27/14	08/27/14	Glass Jar, 4 oz.
S-3	P408113-03A	Soil	08/27/14	08/27/14	Glass Jar, 4 oz.
S-4	P408113-04A	Soil	08/27/14	08/27/14	Glass Jar, 4 oz.
S-5	P408113-05A	Soil	08/27/14	08/27/14	Glass Jar, 4 oz.
S-6	P408113-06A	Soil	08/27/14	08/27/14	Glass Jar, 4 oz.
S-7	P408113-07A	Soil	08/27/14	08/27/14	Glass Jar, 4 oz.
S-8	P408113-08A	Soil	08/27/14	08/27/14	Glass Jar, 4 oz.
S-9	P408113-09A	Soil	08/27/14	08/27/14	Glass Jar, 4 oz.
S-10	P408113-10A	Soil	08/27/14	08/27/14	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

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

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

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

envirotech-inc.com
laboratory@envirotech-inc.com



Enterprise Products	Project Name:	Lateral 3B-3	Reported: 29-Aug-14 11:41
614 Reilly Ave	Project Number:	97057-0352	
Farmington NM, 87401	Project Manager:	Kyle Summers-Apex TITAN	

S-1

P408113-01 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.05	mg/kg	1	1435022	08/27/14	08/28/14	EPA 8021B	
Toluene	ND	0.05	mg/kg	1	1435022	08/27/14	08/28/14	EPA 8021B	
Ethylbenzene	ND	0.05	mg/kg	1	1435022	08/27/14	08/28/14	EPA 8021B	
p,m-Xylene	ND	0.10	mg/kg	1	1435022	08/27/14	08/28/14	EPA 8021B	
o-Xylene	ND	0.05	mg/kg	1	1435022	08/27/14	08/28/14	EPA 8021B	
Total Xylenes	ND	0.05	mg/kg	1	1435022	08/27/14	08/28/14	EPA 8021B	
Total BTEX	ND	0.05	mg/kg	1	1435022	08/27/14	08/28/14	EPA 8021B	
Surrogate: Bromochlorobenzene		106 %	50-150		1435022	08/27/14	08/28/14	EPA 8021B	
Surrogate: 1,3-Dichlorobenzene		104 %	50-150		1435022	08/27/14	08/28/14	EPA 8021B	
Nonhalogenated Organics by 8015									
Gasoline Range Organics (C6-C10)	ND	4.99	mg/kg	1	1435022	08/27/14	08/28/14	EPA 8015D	
Diesel Range Organics (C10-C28)	ND	24.9	mg/kg	1	1435021	08/27/14	08/27/14	EPA 8015D	
Surrogate: Benzo[a]pyrene		79.9 %	50-200		1435021	08/27/14	08/27/14	EPA 8015D	

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Enterprise Products	Project Name:	Lateral 3B-3	Reported: 29-Aug-14 11:41
614 Reilly Ave	Project Number:	97057-0352	
Farmington NM, 87401	Project Manager:	Kyle Summers-Apex TITAN	

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P408113-02 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.05	mg/kg	1	1435022	08/27/14	08/28/14	EPA 8021B	
Toluene	ND	0.05	mg/kg	1	1435022	08/27/14	08/28/14	EPA 8021B	
Ethylbenzene	ND	0.05	mg/kg	1	1435022	08/27/14	08/28/14	EPA 8021B	
p,m-Xylene	ND	0.10	mg/kg	1	1435022	08/27/14	08/28/14	EPA 8021B	
o-Xylene	ND	0.05	mg/kg	1	1435022	08/27/14	08/28/14	EPA 8021B	
Total Xylenes	ND	0.05	mg/kg	1	1435022	08/27/14	08/28/14	EPA 8021B	
Total BTEX	ND	0.05	mg/kg	1	1435022	08/27/14	08/28/14	EPA 8021B	
Surrogate: 1,3-Dichlorobenzene		101 %	50-150		1435022	08/27/14	08/28/14	EPA 8021B	
Surrogate: Bromochlorobenzene		103 %	50-150		1435022	08/27/14	08/28/14	EPA 8021B	
Nonhalogenated Organics by 8015									
Gasoline Range Organics (C6-C10)	ND	4.98	mg/kg	1	1435022	08/27/14	08/28/14	EPA 8015D	
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	1435021	08/27/14	08/27/14	EPA 8015D	
Surrogate: Benzo[a]pyrene		84.5 %	50-200		1435021	08/27/14	08/27/14	EPA 8015D	

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Enterprise Products 614 Reilly Ave Farmington NM, 87401	Project Name: Lateral 3B-3 Project Number: 97057-0352 Project Manager: Kyle Summers-Apex TITAN	Reported: 29-Aug-14 11:41
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P408113-03 (Solid)

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Volatile Organics by EPA 8021										
Benzene	ND	0.05	mg/kg	1		1435022	08/27/14	08/28/14	EPA 8021B	
Toluene	ND	0.05	mg/kg	1		1435022	08/27/14	08/28/14	EPA 8021B	
Ethylbenzene	ND	0.05	mg/kg	1		1435022	08/27/14	08/28/14	EPA 8021B	
p,m-Xylene	ND	0.10	mg/kg	1		1435022	08/27/14	08/28/14	EPA 8021B	
o-Xylene	ND	0.05	mg/kg	1		1435022	08/27/14	08/28/14	EPA 8021B	
Total Xylenes	ND	0.05	mg/kg	1		1435022	08/27/14	08/28/14	EPA 8021B	
Total BTEX	ND	0.05	mg/kg	1		1435022	08/27/14	08/28/14	EPA 8021B	
Surrogate: Bromochlorobenzene		105 %		50-150		1435022	08/27/14	08/28/14	EPA 8021B	
Surrogate: 1,3-Dichlorobenzene		102 %		50-150		1435022	08/27/14	08/28/14	EPA 8021B	
Nonhalogenated Organics by 8015										
Gasoline Range Organics (C6-C10)	ND	4.99	mg/kg	1		1435022	08/27/14	08/28/14	EPA 8015D	
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1		1435021	08/27/14	08/27/14	EPA 8015D	
Surrogate: Benzo[a]pyrene		101 %		50-200		1435021	08/27/14	08/27/14	EPA 8015D	

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Enterprise Products	Project Name:	Lateral 3B-3	Reported: 29-Aug-14 11:41
614 Reilly Ave	Project Number:	97057-0352	
Farmington NM, 87401	Project Manager:	Kyle Summers-Apex TITAN	

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P408113-04 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.05	mg/kg	1	1435022	08/27/14	08/28/14	EPA 8021B	
Toluene	ND	0.05	mg/kg	1	1435022	08/27/14	08/28/14	EPA 8021B	
Ethylbenzene	ND	0.05	mg/kg	1	1435022	08/27/14	08/28/14	EPA 8021B	
p,m-Xylene	ND	0.10	mg/kg	1	1435022	08/27/14	08/28/14	EPA 8021B	
o-Xylene	ND	0.05	mg/kg	1	1435022	08/27/14	08/28/14	EPA 8021B	
Total Xylenes	ND	0.05	mg/kg	1	1435022	08/27/14	08/28/14	EPA 8021B	
Total BTEX	ND	0.05	mg/kg	1	1435022	08/27/14	08/28/14	EPA 8021B	
Surrogate: Bromochlorobenzene		102 %	50-150		1435022	08/27/14	08/28/14	EPA 8021B	
Surrogate: 1,3-Dichlorobenzene		99.4 %	50-150		1435022	08/27/14	08/28/14	EPA 8021B	
Nonhalogenated Organics by 8015									
Gasoline Range Organics (C6-C10)	ND	4.99	mg/kg	1	1435022	08/27/14	08/28/14	EPA 8015D	
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	1435021	08/27/14	08/27/14	EPA 8015D	
Surrogate: Benzo[a]pyrene		82.6 %	50-200		1435021	08/27/14	08/27/14	EPA 8015D	

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Enterprise Products	Project Name:	Lateral 3B-3	Reported: 29-Aug-14 11:41
614 Reilly Ave	Project Number:	97057-0352	
Farmington NM, 87401	Project Manager:	Kyle Summers-Apex TITAN	

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P408113-05 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.05	mg/kg	1	1435022	08/27/14	08/28/14	EPA 8021B	
Toluene	ND	0.05	mg/kg	1	1435022	08/27/14	08/28/14	EPA 8021B	
Ethylbenzene	ND	0.05	mg/kg	1	1435022	08/27/14	08/28/14	EPA 8021B	
p,m-Xylene	ND	0.10	mg/kg	1	1435022	08/27/14	08/28/14	EPA 8021B	
o-Xylene	ND	0.05	mg/kg	1	1435022	08/27/14	08/28/14	EPA 8021B	
Total Xylenes	ND	0.05	mg/kg	1	1435022	08/27/14	08/28/14	EPA 8021B	
Total BTEX	ND	0.05	mg/kg	1	1435022	08/27/14	08/28/14	EPA 8021B	
Surrogate: 1,3-Dichlorobenzene		99.9 %	50-150		1435022	08/27/14	08/28/14	EPA 8021B	
Surrogate: Bromochlorobenzene		104 %	50-150		1435022	08/27/14	08/28/14	EPA 8021B	
Nonhalogenated Organics by 8015									
Gasoline Range Organics (C6-C10)	ND	4.99	mg/kg	1	1435022	08/27/14	08/28/14	EPA 8015D	
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	1435021	08/27/14	08/27/14	EPA 8015D	
Surrogate: Benzo[a]pyrene		79.0 %	50-200		1435021	08/27/14	08/27/14	EPA 8015D	

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Enterprise Products 614 Reilly Ave Farmington NM, 87401	Project Name: Lateral 3B-3 Project Number: 97057-0352 Project Manager: Kyle Summers-Apex TITAN	Reported: 29-Aug-14 11:41
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P408113-06 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.05	mg/kg	1	1435022	08/27/14	08/28/14	EPA 8021B	
Toluene	ND	0.05	mg/kg	1	1435022	08/27/14	08/28/14	EPA 8021B	
Ethylbenzene	ND	0.05	mg/kg	1	1435022	08/27/14	08/28/14	EPA 8021B	
p,m-Xylene	ND	0.10	mg/kg	1	1435022	08/27/14	08/28/14	EPA 8021B	
o-Xylene	ND	0.05	mg/kg	1	1435022	08/27/14	08/28/14	EPA 8021B	
Total Xylenes	ND	0.05	mg/kg	1	1435022	08/27/14	08/28/14	EPA 8021B	
Total BTEX	ND	0.05	mg/kg	1	1435022	08/27/14	08/28/14	EPA 8021B	
Surrogate: Bromochlorobenzene		104 %	50-150		1435022	08/27/14	08/28/14	EPA 8021B	
Surrogate: 1,3-Dichlorobenzene		102 %	50-150		1435022	08/27/14	08/28/14	EPA 8021B	
Nonhalogenated Organics by 8015									
Gasoline Range Organics (C6-C10)	ND	4.99	mg/kg	1	1435022	08/27/14	08/28/14	EPA 8015D	
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	1435021	08/27/14	08/27/14	EPA 8015D	
Surrogate: Benzo[a]pyrene		85.6 %	50-200		1435021	08/27/14	08/27/14	EPA 8015D	

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Enterprise Products	Project Name:	Lateral 3B-3	Reported: 29-Aug-14 11:41
614 Reilly Ave	Project Number:	97057-0352	
Farmington NM, 87401	Project Manager:	Kyle Summers-Apex TITAN	

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P408113-07 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.05	mg/kg	1	1435022	08/27/14	08/28/14	EPA 8021B	
Toluene	ND	0.05	mg/kg	1	1435022	08/27/14	08/28/14	EPA 8021B	
Ethylbenzene	ND	0.05	mg/kg	1	1435022	08/27/14	08/28/14	EPA 8021B	
p,m-Xylene	ND	0.10	mg/kg	1	1435022	08/27/14	08/28/14	EPA 8021B	
o-Xylene	ND	0.05	mg/kg	1	1435022	08/27/14	08/28/14	EPA 8021B	
Total Xylenes	ND	0.05	mg/kg	1	1435022	08/27/14	08/28/14	EPA 8021B	
Total BTEX	ND	0.05	mg/kg	1	1435022	08/27/14	08/28/14	EPA 8021B	
Surrogate: 1,3-Dichlorobenzene		101 %	50-150		1435022	08/27/14	08/28/14	EPA 8021B	
Surrogate: Bromochlorobenzene		104 %	50-150		1435022	08/27/14	08/28/14	EPA 8021B	
Nonhalogenated Organics by 8015									
Gasoline Range Organics (C6-C10)	ND	5.00	mg/kg	1	1435022	08/27/14	08/28/14	EPA 8015D	
Diesel Range Organics (C10-C28)	ND	24.9	mg/kg	1	1435021	08/27/14	08/27/14	EPA 8015D	
Surrogate: Benzo[a]pyrene		99.5 %	50-200		1435021	08/27/14	08/27/14	EPA 8015D	

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Enterprise Products
614 Reilly Ave
Farmington NM, 87401

Project Name: Lateral 3B-3
Project Number: 97057-0352
Project Manager: Kyle Summers-Apex TITAN

Reported:
29-Aug-14 11:41

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P408113-08 (Solid)

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Volatile Organics by EPA 8021									
Benzene	ND	0.05	mg/kg	1	1435022	08/27/14	08/27/14	EPA 8021B	
Toluene	ND	0.05	mg/kg	1	1435022	08/27/14	08/27/14	EPA 8021B	
Ethylbenzene	ND	0.05	mg/kg	1	1435022	08/27/14	08/27/14	EPA 8021B	
p,m-Xylene	ND	0.10	mg/kg	1	1435022	08/27/14	08/27/14	EPA 8021B	
o-Xylene	ND	0.05	mg/kg	1	1435022	08/27/14	08/27/14	EPA 8021B	
Total Xylenes	ND	0.05	mg/kg	1	1435022	08/27/14	08/27/14	EPA 8021B	
Total BTEX	ND	0.05	mg/kg	1	1435022	08/27/14	08/27/14	EPA 8021B	
Surrogate: Bromochlorobenzene		97.2 %		50-150	1435022	08/27/14	08/27/14	EPA 8021B	
Surrogate: 1,3-Dichlorobenzene		94.8 %		50-150	1435022	08/27/14	08/27/14	EPA 8021B	
Nonhalogenated Organics by 8015									
Gasoline Range Organics (C6-C10)	ND	4.98	mg/kg	1	1435022	08/27/14	08/27/14	EPA 8015D	
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	1435021	08/27/14	08/27/14	EPA 8015D	
Surrogate: Benzo[a]pyrene		84.2 %		50-200	1435021	08/27/14	08/27/14	EPA 8015D	

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614 Reilly Ave
Farmington NM, 87401

Project Name: Lateral 3B-3
Project Number: 97057-0352
Project Manager: Kyle Summers-Apex TITAN

Reported:
29-Aug-14 11:41

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P408113-09 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.05	mg/kg	1	1435022	08/27/14	08/27/14	EPA 8021B	
Toluene	ND	0.05	mg/kg	1	1435022	08/27/14	08/27/14	EPA 8021B	
Ethylbenzene	ND	0.05	mg/kg	1	1435022	08/27/14	08/27/14	EPA 8021B	
p,m-Xylene	ND	0.10	mg/kg	1	1435022	08/27/14	08/27/14	EPA 8021B	
o-Xylene	ND	0.05	mg/kg	1	1435022	08/27/14	08/27/14	EPA 8021B	
Total Xylenes	ND	0.05	mg/kg	1	1435022	08/27/14	08/27/14	EPA 8021B	
Total BTEX	ND	0.05	mg/kg	1	1435022	08/27/14	08/27/14	EPA 8021B	
Surrogate: 1,3-Dichlorobenzene		98.5 %	50-150		1435022	08/27/14	08/27/14	EPA 8021B	
Surrogate: Bromochlorobenzene		101 %	50-150		1435022	08/27/14	08/27/14	EPA 8021B	
Nonhalogenated Organics by 8015									
Gasoline Range Organics (C6-C10)	ND	4.92	mg/kg	1	1435022	08/27/14	08/27/14	EPA 8015D	
Diesel Range Organics (C10-C28)	ND	24.7	mg/kg	1	1435021	08/27/14	08/27/14	EPA 8015D	
Surrogate: Benzo[a]pyrene		167 %	50-200		1435021	08/27/14	08/27/14	EPA 8015D	

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Enterprise Products
614 Reilly Ave
Farmington NM, 87401

Project Name: Lateral 3B-3
Project Number: 97057-0352
Project Manager: Kyle Summers-Apex TITAN

Reported:
29-Aug-14 11:41

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P408113-10 (Solid)

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Volatile Organics by EPA 8021										
Benzene	ND	0.05	mg/kg	1		1435022	08/27/14	08/27/14	EPA 8021B	
Toluene	ND	0.05	mg/kg	1		1435022	08/27/14	08/27/14	EPA 8021B	
Ethylbenzene	ND	0.05	mg/kg	1		1435022	08/27/14	08/27/14	EPA 8021B	
p,m-Xylene	ND	0.10	mg/kg	1		1435022	08/27/14	08/27/14	EPA 8021B	
o-Xylene	ND	0.05	mg/kg	1		1435022	08/27/14	08/27/14	EPA 8021B	
Total Xylenes	ND	0.05	mg/kg	1		1435022	08/27/14	08/27/14	EPA 8021B	
Total BTEX	ND	0.05	mg/kg	1		1435022	08/27/14	08/27/14	EPA 8021B	
Surrogate: Bromochlorobenzene		101 %		50-150		1435022	08/27/14	08/27/14	EPA 8021B	
Surrogate: 1,3-Dichlorobenzene		98.0 %		50-150		1435022	08/27/14	08/27/14	EPA 8021B	
Nonhalogenated Organics by 8015										
Gasoline Range Organics (C6-C10)	ND	4.92	mg/kg	1		1435022	08/27/14	08/27/14	EPA 8015D	
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1		1435021	08/27/14	08/28/14	EPA 8015D	
Surrogate: Benzo[a]pyrene		198 %		50-200		1435021	08/27/14	08/28/14	EPA 8015D	

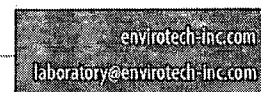
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Enterprise Products
614 Reilly Ave
Farmington NM, 87401

Project Name: Lateral 3B-3
Project Number: 97057-0352
Project Manager: Kyle Summers-Apex TITAN

Reported:
29-Aug-14 11:41

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 1435022 - Purge and Trap EPA 5030A

Blank (1435022-BLK1)

Prepared: 27-Aug-14 Analyzed: 28-Aug-14

Benzene	ND	0.001	mg/kg							
Toluene	ND	0.001	"							
Ethylbenzene	ND	0.001	"							
p,m-Xylene	ND	0.002	"							
o-Xylene	ND	0.001	"							
Total Xylenes	ND	0.001	"							
Total BTEX	ND	0.001	"							
Surrogate: 1,3-Dichlorobenzene	0.0448		"	0.0499		89.9	50-150			
Surrogate: Bromochlorobenzene	0.0459		"	0.0499		92.0	50-150			

Duplicate (1435022-DUP1)

Source: P408113-01

Prepared: 27-Aug-14 Analyzed: 28-Aug-14

Benzene	ND	0.05	mg/kg		ND				30	
Toluene	ND	0.05	"		ND				30	
Ethylbenzene	ND	0.05	"		ND				30	
p,m-Xylene	ND	0.10	"		ND				30	
o-Xylene	ND	0.05	"		ND				30	
Surrogate: 1,3-Dichlorobenzene	0.0456		"	0.0498		91.4	50-150			
Surrogate: Bromochlorobenzene	0.0454		"	0.0498		91.1	50-150			

Matrix Spike (1435022-MS1)

Source: P408113-01

Prepared: 27-Aug-14 Analyzed: 28-Aug-14

Benzene	38.7		ug/L	50.0	ND	77.5	39-150			
Toluene	38.8		"	50.0	ND	77.7	46-148			
Ethylbenzene	38.6		"	50.0	ND	77.2	32-160			
p,m-Xylene	80.0		"	100	ND	80.0	46-148			
o-Xylene	38.9		"	50.0	ND	77.7	46-148			
Surrogate: 1,3-Dichlorobenzene	0.0385		mg/kg	0.0499		77.2	50-150			
Surrogate: Bromochlorobenzene	0.0392		"	0.0499		78.7	50-150			

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Enterprise Products
614 Reilly Ave
Farmington NM, 87401

Project Name: Lateral 3B-3
Project Number: 97057-0352
Project Manager: Kyle Summers-Apex TITAN

Reported:
29-Aug-14 11:41

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
Batch 1435021 - DRO Extraction EPA 3550M										
Blank (1435021-BLK1)				Prepared & Analyzed: 27-Aug-14						
Diesel Range Organics (C10-C28)	ND	24.9	mg/kg							
Surrogate: Benzo[a]pyrene	16.4		"	20.0		82.3	50-200			
Matrix Spike (1435021-MS1)				Source: P408113-01 Prepared & Analyzed: 27-Aug-14						
Diesel Range Organics (C10-C28)	571	25.0	mg/kg	499	ND	114	38-132			
Surrogate: Benzo[a]pyrene	19.4		"	20.0		97.4	50-200			
Matrix Spike Dup (1435021-MSD1)				Source: P408113-01 Prepared & Analyzed: 27-Aug-14						
Diesel Range Organics (C10-C28)	495	24.9	mg/kg	499	ND	99.3	38-132	14.1	20	
Surrogate: Benzo[a]pyrene	16.2		"	20.0		81.4	50-200			

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laboratory@envirotech-inc.com



Enterprise Products
614 Reilly Ave
Farmington NM, 87401

Project Name: Lateral 3B-3
Project Number: 97057-0352
Project Manager: Kyle Summers-Apex TITAN

Reported:
29-Aug-14 11:41

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
Batch 1435022 - Purge and Trap EPA 5030A										
Blank (1435022-BLK1)					Prepared: 27-Aug-14 Analyzed: 28-Aug-14					
Gasoline Range Organics (C6-C10)	ND	0.10	mg/kg							
Duplicate (1435022-DUP1)					Source: P408113-01 Prepared: 27-Aug-14 Analyzed: 28-Aug-14					
Gasoline Range Organics (C6-C10)	ND	4.98	mg/kg		ND				30	
Matrix Spike (1435022-MS1)					Source: P408113-01 Prepared: 27-Aug-14 Analyzed: 28-Aug-14					
Gasoline Range Organics (C6-C10)	0.34		mg/L	0.450	ND	75.1	75-125			

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Enterprise Products
614 Reilly Ave
Farmington NM, 87401

Project Name: Lateral 3B-3
Project Number: 97057-0352
Project Manager: Kyle Summers-Apex TITAN

Reported:
29-Aug-14 11:41

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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CHAIN OF CUSTODY RECORD

17370

Client: Enterprise Field Services LLC			Project Name / Location: Lateral 3B-3			ANALYSIS / PARAMETERS															
Email results to: hwoods@apexcos.com tjlang@eprod.com			Sampler Name: H. Woods / K. Summers			Gp/ Pb	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.: (505) 716-2787			Client No.: 97057-0352																		
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 ₃	HCl	Cold														
S-1	8/27/14	0740	P408/113-01	1-4oz Glass			X	X	X											X	X
S-2	8/27/14	0745	-02	1-4oz Glass			X	X	X												
S-3	8/27/14	0750	-03	1-4oz Glass			X	X	X												
S-4	8/27/14	0755	-04	1-4oz Glass			X	X	X												
S-5	8/27/14	0800	-05	1-4oz Glass			X	X	X												
S-6	8/27/14	0805	-06	1-4oz Glass			X	X	X												
S-7	8/27/14	0810	-07	1-4oz Glass			X	X	X												
S-8	8/27/14	0815	-08	1-4oz Glass			X	X	X												
S-9	8/27/14	0820	-09	1-4oz Glass			X	X	X												
S-10	8/27/14	0825	-10	1-4oz Glass			X	X	X											X	
Relinquished by: (Signature) <i>Heather M. Woods</i>				Date 8/27/14	Time 1121	Received by: (Signature) <i>[Signature]</i>				Date 8/27/14				Time 1121							
Relinquished by: (Signature)						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"/>																					
<input type="checkbox"/> Sample(s) dropped off after hours to secure drop off area. RUSH 8/28 AM Page 1 of 2				<div style="display: flex; align-items: center;"> <div> envirotech Analytical Laboratory </div> <div style="margin-left: 20px;"> Bill to Enterprise Field Services Attn: Tom Long Wd# 816183 Paykey RB21200 </div> <div style="border: 1px solid black; border-radius: 50%; padding: 5px; margin-left: 20px;"> 10.4 </div> </div> <p style="font-size: small; margin-top: 5px;">5795 US Highway 64 • Farmington, NM 87401 • 505-632-0615 • Three Springs • 65 Mercado Street, Suite 115, Durango, CO 81301 • laboratory@envirotech-inc.com</p>																	



Analytical Report

Report Summary

Client: Enterprise Products

Chain Of Custody Number: 17371

Samples Received: 8/27/2014 11:21:00AM

Job Number: 97057-0352

Work Order: P408112

Project Name/Location: Lateral 3B-3

Entire Report Reviewed By:

A handwritten signature in black ink, appearing to read 'Tim Cain', is written over a horizontal line.

Date: 8/29/14

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.



Enterprise Products
614 Reilly Ave
Farmington NM, 87401

Project Name: Lateral 3B-3
Project Number: 97057-0352
Project Manager: Kyle Summers-Apex TITAN

Reported:
29-Aug-14 11:05

Analytical Report for Samples

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
S-11	P408112-01A	Soil	08/27/14	08/27/14	Glass Jar, 4 oz.
S-12	P408112-02A	Soil	08/27/14	08/27/14	Glass Jar, 4 oz.
S-13	P408112-03A	Soil	08/27/14	08/27/14	Glass Jar, 4 oz.
S-14	P408112-04A	Soil	08/27/14	08/27/14	Glass Jar, 4 oz.
S-15	P408112-05A	Soil	08/27/14	08/27/14	Glass Jar, 4 oz.

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Enterprise Products
614 Reilly Ave
Farmington NM, 87401

Project Name: Lateral 3B-3
Project Number: 97057-0352
Project Manager: Kyle Summers-Apex TITAN

Reported:
29-Aug-14 11:05

S-11
P408112-01 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.05	mg/kg	1	1435015	08/27/14	08/27/14	EPA 8021B	
Toluene	ND	0.05	mg/kg	1	1435015	08/27/14	08/27/14	EPA 8021B	
Ethylbenzene	ND	0.05	mg/kg	1	1435015	08/27/14	08/27/14	EPA 8021B	
p,m-Xylene	ND	0.10	mg/kg	1	1435015	08/27/14	08/27/14	EPA 8021B	
o-Xylene	ND	0.05	mg/kg	1	1435015	08/27/14	08/27/14	EPA 8021B	
Total Xylenes	ND	0.05	mg/kg	1	1435015	08/27/14	08/27/14	EPA 8021B	
Total BTEX	ND	0.05	mg/kg	1	1435015	08/27/14	08/27/14	EPA 8021B	
Surrogate: Bromochlorobenzene		95.0 %		50-150	1435015	08/27/14	08/27/14	EPA 8021B	
Surrogate: 1,3-Dichlorobenzene		94.0 %		50-150	1435015	08/27/14	08/27/14	EPA 8021B	
Nonhalogenated Organics by 8015									
Gasoline Range Organics (C6-C10)	ND	4.99	mg/kg	1	1435015	08/27/14	08/27/14	EPA 8015D	
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	1435014	08/27/14	08/27/14	EPA 8015D	
Surrogate: Benzo[a]pyrene		92.5 %		50-200	1435014	08/27/14	08/27/14	EPA 8015D	

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Enterprise Products
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Project Name: Lateral 3B-3
Project Number: 97057-0352
Project Manager: Kyle Summers-Apex TITAN

Reported:
29-Aug-14 11:05

S-12

P408112-02 (Solid)

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Volatile Organics by EPA 8021										
Benzene	ND	0.05	mg/kg	1		1435015	08/27/14	08/27/14	EPA 8021B	
Toluene	ND	0.05	mg/kg	1		1435015	08/27/14	08/27/14	EPA 8021B	
Ethylbenzene	ND	0.05	mg/kg	1		1435015	08/27/14	08/27/14	EPA 8021B	
p,m-Xylene	ND	0.10	mg/kg	1		1435015	08/27/14	08/27/14	EPA 8021B	
o-Xylene	ND	0.05	mg/kg	1		1435015	08/27/14	08/27/14	EPA 8021B	
Total Xylenes	ND	0.05	mg/kg	1		1435015	08/27/14	08/27/14	EPA 8021B	
Total BTEX	ND	0.05	mg/kg	1		1435015	08/27/14	08/27/14	EPA 8021B	
Surrogate: 1,3-Dichlorobenzene		80.6 %		50-150		1435015	08/27/14	08/27/14	EPA 8021B	
Surrogate: Bromochlorobenzene		83.9 %		50-150		1435015	08/27/14	08/27/14	EPA 8021B	
Nonhalogenated Organics by 8015										
Gasoline Range Organics (C6-C10)	ND	5.00	mg/kg	1		1435015	08/27/14	08/27/14	EPA 8015D	
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1		1435014	08/27/14	08/27/14	EPA 8015D	
Surrogate: Benzo[a]pyrene		91.0 %		50-200		1435014	08/27/14	08/27/14	EPA 8015D	

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Enterprise Products
614 Reilly Ave
Farmington NM, 87401

Project Name: Lateral 3B-3
Project Number: 97057-0352
Project Manager: Kyle Summers-Apex TITAN

Reported:
29-Aug-14 11:05

S-13

P408112-03 (Solid)

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Volatile Organics by EPA 8021										
Benzene	ND	0.05	mg/kg	1		1435015	08/27/14	08/27/14	EPA 8021B	
Toluene	ND	0.05	mg/kg	1		1435015	08/27/14	08/27/14	EPA 8021B	
Ethylbenzene	ND	0.05	mg/kg	1		1435015	08/27/14	08/27/14	EPA 8021B	
p,m-Xylene	ND	0.10	mg/kg	1		1435015	08/27/14	08/27/14	EPA 8021B	
o-Xylene	ND	0.05	mg/kg	1		1435015	08/27/14	08/27/14	EPA 8021B	
Total Xylenes	ND	0.05	mg/kg	1		1435015	08/27/14	08/27/14	EPA 8021B	
Total BTEX	ND	0.05	mg/kg	1		1435015	08/27/14	08/27/14	EPA 8021B	
Surrogate: Bromochlorobenzene		99.8 %		50-150		1435015	08/27/14	08/27/14	EPA 8021B	
Surrogate: 1,3-Dichlorobenzene		98.4 %		50-150		1435015	08/27/14	08/27/14	EPA 8021B	
Nonhalogenated Organics by 8015										
Gasoline Range Organics (C6-C10)	ND	4.99	mg/kg	1		1435015	08/27/14	08/27/14	EPA 8015D	
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1		1435014	08/27/14	08/27/14	EPA 8015D	
Surrogate: Benzo[a]pyrene		98.5 %		50-200		1435014	08/27/14	08/27/14	EPA 8015D	

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Enterprise Products
614 Reilly Ave
Farmington NM, 87401

Project Name: Lateral 3B-3
Project Number: 97057-0352
Project Manager: Kyle Summers-Apex TITAN

Reported:
29-Aug-14 11:05

S-14

P408112-04 (Solid)

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Volatile Organics by EPA 8021										
Benzene	ND	0.05	mg/kg	1		1435015	08/27/14	08/27/14	EPA 8021B	
Toluene	ND	0.05	mg/kg	1		1435015	08/27/14	08/27/14	EPA 8021B	
Ethylbenzene	ND	0.05	mg/kg	1		1435015	08/27/14	08/27/14	EPA 8021B	
p,m-Xylene	ND	0.10	mg/kg	1		1435015	08/27/14	08/27/14	EPA 8021B	
o-Xylene	ND	0.05	mg/kg	1		1435015	08/27/14	08/27/14	EPA 8021B	
Total Xylenes	ND	0.05	mg/kg	1		1435015	08/27/14	08/27/14	EPA 8021B	
Total BTEX	ND	0.05	mg/kg	1		1435015	08/27/14	08/27/14	EPA 8021B	
Surrogate: 1,3-Dichlorobenzene		98.3 %		50-150		1435015	08/27/14	08/27/14	EPA 8021B	
Surrogate: Bromochlorobenzene		101 %		50-150		1435015	08/27/14	08/27/14	EPA 8021B	
Nonhalogenated Organics by 8015										
Gasoline Range Organics (C6-C10)	ND	5.00	mg/kg	1		1435015	08/27/14	08/27/14	EPA 8015D	
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1		1435014	08/27/14	08/27/14	EPA 8015D	
Surrogate: Benzo[a]pyrene		84.3 %		50-200		1435014	08/27/14	08/27/14	EPA 8015D	

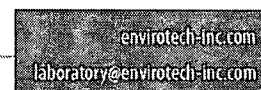
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Enterprise Products
614 Reilly Ave
Farmington NM, 87401

Project Name: Lateral 3B-3
Project Number: 97057-0352
Project Manager: Kyle Summers-Apex TITAN

Reported:
29-Aug-14 11:05

S-15

P408112-05 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.05	mg/kg	1	1435015	08/27/14	08/27/14	EPA 8021B	
Toluene	ND	0.05	mg/kg	1	1435015	08/27/14	08/27/14	EPA 8021B	
Ethylbenzene	ND	0.05	mg/kg	1	1435015	08/27/14	08/27/14	EPA 8021B	
p,m-Xylene	ND	0.10	mg/kg	1	1435015	08/27/14	08/27/14	EPA 8021B	
o-Xylene	ND	0.05	mg/kg	1	1435015	08/27/14	08/27/14	EPA 8021B	
Total Xylenes	ND	0.05	mg/kg	1	1435015	08/27/14	08/27/14	EPA 8021B	
Total BTEX	ND	0.05	mg/kg	1	1435015	08/27/14	08/27/14	EPA 8021B	
Surrogate: 1,3-Dichlorobenzene		97.7 %		50-150	1435015	08/27/14	08/27/14	EPA 8021B	
Surrogate: Bromochlorobenzene		99.6 %		50-150	1435015	08/27/14	08/27/14	EPA 8021B	
Nonhalogenated Organics by 8015									
Gasoline Range Organics (C6-C10)	ND	4.99	mg/kg	1	1435015	08/27/14	08/27/14	EPA 8015D	
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	1435014	08/27/14	08/27/14	EPA 8015D	
Surrogate: Benzo[a]pyrene		89.6 %		50-200	1435014	08/27/14	08/27/14	EPA 8015D	

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Enterprise Products
614 Reilly Ave
Farmington NM, 87401

Project Name: Lateral 3B-3
Project Number: 97057-0352
Project Manager: Kyle Summers-Apex TITAN

Reported:
29-Aug-14 11:05

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 1435015 - Purge and Trap EPA 5030A

Blank (1435015-BLK1)

Prepared: 26-Aug-14 Analyzed: 27-Aug-14

Benzene	ND	0.05	mg/kg							
Toluene	ND	0.05	"							
Ethylbenzene	ND	0.05	"							
p,m-Xylene	ND	0.10	"							
o-Xylene	ND	0.05	"							
Total Xylenes	ND	0.05	"							
Total BTEX	ND	0.05	"							
Surrogate: 1,3-Dichlorobenzene	0.0468		"	0.0500		93.6	50-150			
Surrogate: Bromochlorobenzene	0.0485		"	0.0500		97.0	50-150			

Duplicate (1435015-DUP1)

Source: P408107-01

Prepared: 26-Aug-14 Analyzed: 27-Aug-14

Benzene	ND	0.05	mg/kg		ND				30	
Toluene	ND	0.05	"		ND				30	
Ethylbenzene	ND	0.05	"		ND				30	
p,m-Xylene	ND	0.10	"		ND				30	
o-Xylene	ND	0.05	"		ND				30	
Surrogate: 1,3-Dichlorobenzene	0.0506		"	0.0499		101	50-150			
Surrogate: Bromochlorobenzene	0.0520		"	0.0499		104	50-150			

Matrix Spike (1435015-MS1)

Source: P408107-01

Prepared: 26-Aug-14 Analyzed: 27-Aug-14

Benzene	49.7		ug/L	50.0	ND	99.5	39-150			
Toluene	51.6		"	50.0	ND	103	46-148			
Ethylbenzene	51.4		"	50.0	ND	103	32-160			
p,m-Xylene	103		"	100	ND	103	46-148			
o-Xylene	51.9		"	50.0	ND	104	46-148			
Surrogate: 1,3-Dichlorobenzene	0.0510		mg/kg	0.0499		102	50-150			
Surrogate: Bromochlorobenzene	0.0525		"	0.0499		105	50-150			

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Enterprise Products 614 Reilly Ave Farmington NM, 87401	Project Name: Lateral 3B-3 Project Number: 97057-0352 Project Manager: Kyle Summers-Apex TITAN	Reported: 29-Aug-14 11:05
---	--	------------------------------

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
Batch 1435014 - DRO Extraction EPA 3550M										
Blank (1435014-BLK1)				Prepared: 26-Aug-14 Analyzed: 27-Aug-14						
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg							
Surrogate: Benzo[a]pyrene	16.9		"	20.0		84.5	50-200			
LCS (1435014-BS1)				Prepared: 26-Aug-14 Analyzed: 27-Aug-14						
Diesel Range Organics (C10-C28)	474	24.9	mg/kg	499		95.1	38-132			
Surrogate: Benzo[a]pyrene	18.5		"	20.0		92.5	50-200			
Matrix Spike (1435014-MS1)				Source: P408107-01		Prepared: 26-Aug-14 Analyzed: 27-Aug-14				
Diesel Range Organics (C10-C28)	506	25.0	mg/kg	499	25.7	96.2	38-132			
Surrogate: Benzo[a]pyrene	17.7		"	20.0		88.7	50-200			
Matrix Spike Dup (1435014-MSD1)				Source: P408107-01		Prepared: 26-Aug-14 Analyzed: 27-Aug-14				
Diesel Range Organics (C10-C28)	568	25.0	mg/kg	500	25.7	109	38-132	11.6	20	
Surrogate: Benzo[a]pyrene	19.1		"	20.0		95.4	50-200			

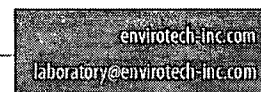
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Ph (505) 632-0615 Fx (505) 632-1865

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





Enterprise Products
614 Reilly Ave
Farmington NM, 87401

Project Name: Lateral 3B-3
Project Number: 97057-0352
Project Manager: Kyle Summers-Apex TITAN

Reported:
29-Aug-14 11:05

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
---------	--------	--------------------	-------	----------------	------------------	------	----------------	-----	--------------	-------

Batch 1435015 - Purge and Trap EPA 5030A

Blank (1435015-BLK1)

Prepared: 26-Aug-14 Analyzed: 27-Aug-14

Gasoline Range Organics (C6-C10) ND 5.00 mg/kg

Duplicate (1435015-DUP1)

Source: P408107-01

Prepared: 26-Aug-14 Analyzed: 27-Aug-14

Gasoline Range Organics (C6-C10) ND 4.99 mg/kg ND 30

Matrix Spike (1435015-MS1)

Source: P408107-01

Prepared: 26-Aug-14 Analyzed: 27-Aug-14

Gasoline Range Organics (C6-C10) 0.48 mg/L 0.450 ND 107 75-125

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envirotech-inc.com
laboratory@envirotech-inc.com



Enterprise Products
614 Reilly Ave
Farmington NM, 87401

Project Name: Lateral 3B-3
Project Number: 97057-0352
Project Manager: Kyle Summers-Apex TITAN

Reported:
29-Aug-14 11:05

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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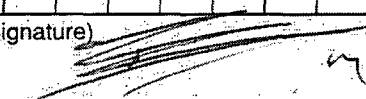

Ph (505) 632-0615 Fx (505) 632-1865

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

envirotech-inc.com
laboratory@envirotech-inc.com

CHAIN OF CUSTODY RECORD

17371

Client: Enterprise Field Services LLC			Project Name / Location: Lateral 3B-3			ANALYSIS / PARAMETERS																
Email results to: hwoods@apexcos.com tjlong@eprod.com			Sampler Name: H. Woods / K. Summers			<div style="display: flex; justify-content: space-between;"> <div> Grav/Duo 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 </div> <div> Sample Cool Sample Intact </div> </div>																
Client Phone No.: (505) 716-2787			Client No.: 97057-0352																			
Sample No./ Identification	Sample Date	Sample Time	Lab No.	No./Volume of Containers	Preservative			TPH	BTEX	VOC	RCRA 8 Metals	Cation / Anion	RCI	TCLP with H/P	CO Table 910-1	TPH (418.1)	CHLORIDE			Sample Cool	Sample Intact	
					HNO ₃	HCl	Cold															
S-11	8/27/14	0830	P418/112-01	1-4oz Glass			X	X	X												X	X
S-12	8/27/14	0835	-02	1-4oz Glass			X	X	X													
S-13	8/27/14	0840	-03	1-4oz Glass			X	X	X													
S-14	8/27/14	0850	-04	1-4oz Glass			X	X	X													
S-15	8/27/14	0900	-05	1-4oz Glass			X	X	X													
<div style="display: flex; justify-content: space-between;"> <div> Relinquished by: (Signature) Heather M. Woods </div> <div> Date 8/27/14 </div> <div> Time 11/21 </div> <div> Received by: (Signature)  </div> <div> Date 8/27/14 </div> <div> Time 11/21 </div> </div>																						
Relinquished by: (Signature)					Received by: (Signature)																	
Sample Matrix																						
Soil <input type="checkbox"/> Solid <input type="checkbox"/> Sludge <input type="checkbox"/> Aqueous <input type="checkbox"/> Other <input type="checkbox"/>																						
<input type="checkbox"/> Sample(s) dropped off after hours to secure drop off area. RUSH 8128 AM Page 2 of 2					 envirotech Analytical Laboratory					Bill to Enterprise Field Services Attn: Tom Long WO# 816193 Paying RB 21200 9.6 8.6 9.4												

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

NOV 17 2014

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 LLC	Contact: Thomas Long
Address: 614 Reilly Ave, Farmington, NM 87401	Telephone No. 505-599-2286
Facility Name: Lateral C-27 Release Site	Facility Type: Natural Gas Gathering Line
Surface Owner: State	Mineral Owner: State
API No.	

LOCATION OF RELEASE

Unit Letter F	Section 2	Township 26N	Range 9W	Feet from the 2353	North South Line	Feet from the 1693	East West Line	County San Juan
------------------	--------------	-----------------	-------------	--------------------------	---------------------	--------------------------	-------------------	--------------------

Latitude 36.517785 Longitude -107.761700

NATURE OF RELEASE

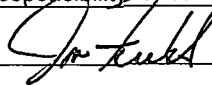
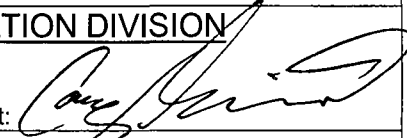
Type of Release: Natural Gas and Natural Gas Liquids	Volume of Release Unknown	Volume Recovered: Unknown
Source of Release: Internal Corrosion	Date and Hour of Occurrence: 10/29/2014 @ 1:00 p.m.	Date and Hour of Discovery: 10/29/2014 @ 3:00 p.m.
Was Immediate Notice Given? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Courtesy to NMOCD - Cory Smith	
By Whom? Thomas Long	Date and Hour 11/4/2014 @ 2:26 p.m.	
Was a Watercourse Reached? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If YES, Volume Impacting the Watercourse Unknown volume of natural gas and natural gas liquids	

If a Watercourse was Impacted, Describe Fully.* The release site is located in a small ephemeral wash. No fluids were observed at the ground surface.

Describe Cause of Problem and Remedial Action: On October 29, 2014, A third party reported a possible pipeline leak on the Lateral C-27. Technicians were dispatched and confirmed the leak. The line was isolated and de-pressurized and lock out tag out was applied. Repairs and remediation are in progress. A third party environmental contractor will oversee excavation activities and collect closure samples during repair activities.

Describe Area Affected and Cleanup Action: On October 29, 2014, A third party reported a possible pipeline leak on the Lateral C-27. Technicians were dispatched and confirmed the leak. The line was isolated and de-pressurized and lock out tag out was applied. Repairs and remediation are in progress. A third party environmental contractor will oversee excavation activities and collect closure samples during repair activities. A "final" c-141 will be submitted upon receipt of the third party environmental contractor corrective action 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: 	OIL CONSERVATION DIVISION	
Printed Name: Jon Fields	Approved by Environmental Specialist: 	
Title: Director, Environmental	Approval Date: 11/5/15	Expiration Date:
E-mail Address: jefields@eprod.com	Conditions of Approval:	Attached <input type="checkbox"/>
Date: 11/7/2014	Phone: (713)381-6684	

* Attach Additional Sheets If Necessary

#NCS 1500530451

①

Hobbs, NM 88240

State of New Mexico
Energy Minerals and Natural
Resources

NOV 17 2014

Form C-141
Revised August 8, 2011

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

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 Ave, Farmington, NM 87401	Telephone No. 505-599-2286
Facility Name: Lateral 14A Pipeline	Facility Type: Natural Gas Gathering Line
Surface Owner: BLM	Mineral Owner: BLM
API No.	

LOCATION OF RELEASE

Unit Letter L	Section 34	Township 32 N	Range 9 W	Feet from the 1311	North/ South Line	Feet from the 1998	East/ West Line	County San Juan
-------------------------	----------------------	-------------------------	---------------------	---------------------------------	-----------------------------	---------------------------------	---------------------------	---------------------------

Latitude **36.937596** Longitude **-107.769285**

NATURE OF RELEASE

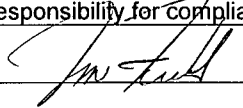
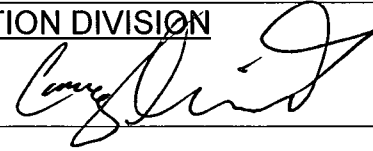
Type of Release: Natural Gas and Natural Gas Liquids	Volume of Release 39.78	Volume Recovered: None
Source of Release: Internal Corrosion	Date and Hour of Occurrence: 10/10/2014 @ 9:30 a.m.	Date and Hour of Discovery: 10/10/2014 10:30 a.m.
Was Immediate Notice Given? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom? NMOCD – Cory Smith; BLM – Shari Ketchum on October 18, 2014.	
By Whom?	Date and Hour October 18, 2014 at 11:33 a.m.	
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: On October 10, 2014, a pipeline leak was discovered on the Lateral 14A ROW. The Enterprise technician initiated notification procedures. The pipeline was isolated, blown down, depressurized, locked out and tagged out. No visible impacts were observed on the ground surface. Repairs and remediation were completed on October 21, 2014. The final excavation dimensions measured approximately forty-six (46) feet long by fourteen (14) feet wide by seven (7) feet deep. Approximately 108 cubic yards of hydrocarbon impacted soil was excavated and transported to a NMOCD approved land farm facility.

Describe Area Affected and Cleanup Action Taken On October 10, 2014, a pipeline leak was discovered on the Lateral 14A ROW. The Enterprise technician initiated notification procedures. The pipeline was isolated, blown down, depressurized, locked out and tagged out. No visible impacts were observed on the ground surface. Repairs and remediation were completed on October 21, 2014. The final excavation dimensions measured approximately forty-six (46) feet long by fourteen (14) feet wide by seven (7) feet deep. Approximately 108 cubic yards of hydrocarbon impacted soil was excavated and transported to a NMOCD approved land farm facility. A third party corrective action report is included with this "Final" C-141.

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.

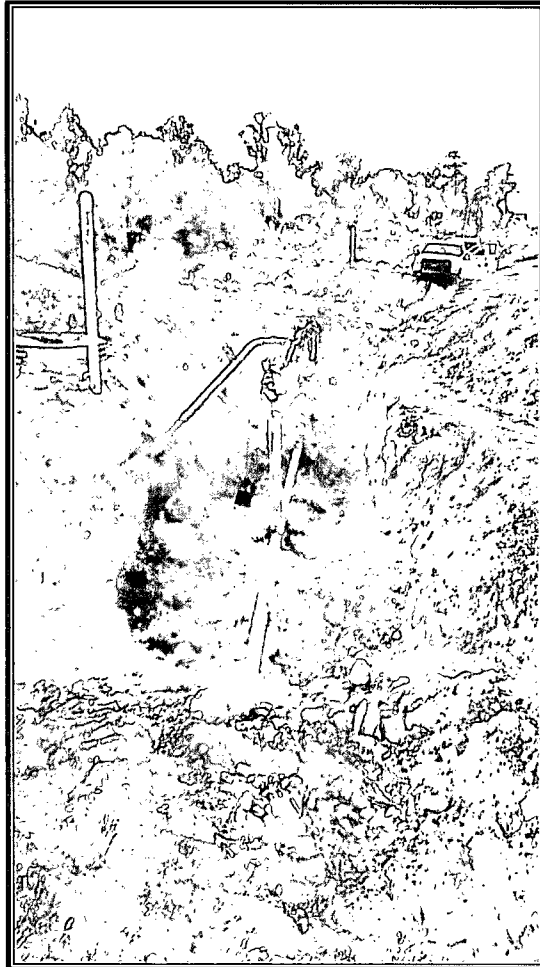
Signature: 	OIL CONSERVATION DIVISION	
Printed Name: Jon Fields	Approved by Environmental Specialist: 	
Title: Director, Environmental	Approval Date: 1/5/15	Expiration Date:
E-mail Address: jefields@eprod.com	Conditions of Approval:	Attached <input type="checkbox"/>
Date: 10/14/2014	Phone: (713)381-6684	

* Attach Additional Sheets If Necessary

#NCS 150 05 31351

(34)

Enterprise Products
Lateral L-14A Pipeline Release
Latitude North 36.937596°, Longitude West -107.769285°
NW/SW (Unit L) Section 34, T32N R9W
San Juan County, New Mexico
November 4, 2014



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

Submitted By:
Souder, Miller & Associates
401 West Broadway
Farmington, NM 87401
(505)325-7535



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2.0	Introduction.....	1
3.0	Site Ranking and Land Jurisdiction	1
4.0	Summary of Field Activities	2
5.0	Conclusions and Recommendations.....	3
6.0	Closure and Limitations.....	3

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Figure 1: Vicinity Map

Figure 2: Site Map

Figure 3: Soil Contaminant Concentration Map

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Table 1: Release Information

Table 2: Site Ranking

Table 3: Summary of Laboratory Analysis

Appendices:

Appendix A: Photographic Documentation

Appendix B: Soil Disposal Documentation

Appendix C: Laboratory Analytical Reports

1.0 Executive Summary

On October 18, 20 and 21, 2014, Souder, Miller & Associates (SMA) responded to oversee the excavation of the hydrocarbon release associated with the Lateral L-14A pipeline. The release was initially reported on October 10, 2014 and is a result of internal and external corrosion of the four inch natural gas pipeline. The table below summarizes information about the pipeline remediation activities.

TABLE 1: RELEASE INFORMATION					
Name	Lateral L-14A Pipeline Release				
Location	Latitude/Longitude		Section, Township, Range		
	36.937596	-107.769285°	Unit L	Section 34	T 32N, R 9W
Date Reported	October 10, 2014				
Reported to	Tom Long				
Land Owner	Bureau of Land Management (BLM)				
Reported To	NM Oil Conservation Division (NMOCD) and BLM				
Diameter of Pipeline	4 inches				
Source of Release	Internal/External Corrosion				
Release Contents	Natural Gas Liquids/Condensate				
Release Volume	Unknown				
Nearest Waterway	Located approximately 950 feet to the NE of a tributary to Pine Canyon				
Depth to Groundwater	Assumed to be greater than 100 feet				
Nearest Domestic Water Source	Greater than 1,000 feet				
NMOCD Ranking	10				
SMA Response Dates	10/18, 20, 21				
Subcontractors	West States Energy Contractors (WSEC)				
Disposal Facility	Envirotech Landfarm				
Yd ³ Contaminated Soil Excavated and Disposed	108 (<i>Reported on Completed Form C-138</i>)				

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 L-14A pipeline release site. The site is located in the NW ¼ SW ¼ Section 34, T32N, R9W, 36.937596°, -107.769285°, San Juan County, New Mexico, on land owned by the Bureau of Land Management (BLM). Figure 1 illustrates the location of the site.

3.0 Site Ranking and Land Jurisdiction

The release site is located about 950 feet to the northeast of a tributary to Pine Canyon, in an area owned by the BLM with an elevation of approximately 6,609 feet above sea level. After evaluation of the site using aerial photography and topographic maps, depth to groundwater is

estimated to be greater than 100 feet below ground surface (bgs). Figure 1 depicts the site vicinity and Figure 2 depicts the site location.

SMA searched the New Mexico State Engineer's Office online water well database for water wells in the vicinity of the release. No wells were located within 1,000 feet or 1 mile radius of the site. The physical location of this release is within the jurisdiction of the NMOCD.

This release location has been assigned a NMOCD ranking of 10 which requires a soil remediation standard of 10 parts per million (ppm) benzene, 50 ppm combined benzene, toluene, ethyl-benzene, and total xylenes (BTEX), and 1000 ppm total petroleum hydrocarbons (TPH). Table 2 illustrates site ranking rationale.

4.0 Summary of Field Activities

On October, 18, 20 and 21, 2014, SMA responded to a hydrocarbon release associated with the Lateral L-14A pipeline. West States Energy Contractors (WSEC) had begun excavation activities prior to SMA's arrival. Under the supervision and direction of SMA, WSEC excavated soil for repair activities. SMA field-screened the excavated soil, stockpiles, and the walls and base of the excavation to determine the extent of the release using a calibrated photoionization detector (PID). Field screening indicated that the extent of the hydrocarbon release had been removed. Closure sampling was scheduled with the BLM and NMOCD on October 21, 2014, neither party was present. SMA collected 8 samples from the excavation (SC-1 through SC-8). Laboratory results from the October 21, 2014 activities determined contamination below NMOCD guidelines in the base and walls. A water line owned by Conoco Phillips crosses the 4" Enterprise pipeline about 3 feet south of the release point. Because the water line was exposed during the excavation, a representative from Conoco Phillips was on site.

The pipeline trends generally north-south in the area of the release and the excavation was elongated in that direction. After high initial PID readings on Saturday, October 19, an EPCO representative decided to leave the pit open over the weekend to see if it would air out. On Monday (October 20), WSEC continued the excavation until field screening indicated the extent of the hydrocarbon contamination had been excavated. By Tuesday (October 21) morning, the final extents had aired out yielding much lower PID results, and closure samples were collected. The final excavation measured approximately 46 feet long by 14 feet wide by 7 feet deep, covering an area of approximately 644 square feet. The entire excavation was left open until the lab results confirmed the final extents of the excavation where below NMOCD standards. In total, approximately 108 cubic yards of soil was removed from the site and replaced with clean backfill material. The contaminated soil was transported to Envirotech Landfarm near Bloomfield, NM. Soil disposal documentation is included in Appendix B.

Soil samples were initially field screened with a PID equipped with a 10.6 electron volt bulb. Samples were submitted for confirmation laboratory analysis for United States Environmental Protection Agency Methods 8021 for benzene, toluene, ethylbenzene, and xylenes (BTEX) and 8015 for diesel and gasoline range organics (DRO/GRO). All samples were analyzed by Hall Environmental Analytical Laboratory in Albuquerque, New Mexico. Figure 3 illustrates the extent of the excavation and composite soil sample locations and laboratory results.

5.0 Conclusions and Recommendations

NMOCD Guidelines for Remediation of Leaks, Spills, and Releases have established the following action levels for contaminants of concern with a site ranking of 10: 10 ppm (mg/kg) benzene, 50 ppm total BTEX, and 1000 ppm TPH.

Laboratory analytical results for all samples collected were at/or below NMOCD remediation soil standards of 10 parts per million (ppm) benzene, 50 ppm combined benzene, toluene, ethylbenzene, and total xylenes (BTEX), and 1000 ppm total petroleum hydrocarbons, based on the site ranking. Soil contaminant concentrations are illustrated in Figure 3. A summary of laboratory analysis is included in Table 3. Laboratory reports are included in Appendix C

SMA recommends no further action at the Lateral L-14A pipeline release location.

6.0 Closure and Limitations

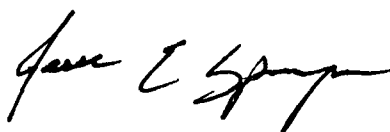
The scope of our services consisted of the performance of a preliminary spill assessment, verification of release stabilization, regulatory liaison, oversight and control of remediation operations, disposal arrangements and documentation, project management, and preparation of this summary report. All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

If there are any questions regarding this report, please contact either Steve Moskal or Reid Allen at 505-325-7535.

Submitted by:

Reviewed by:

SOUDER, MILLER & ASSOCIATES



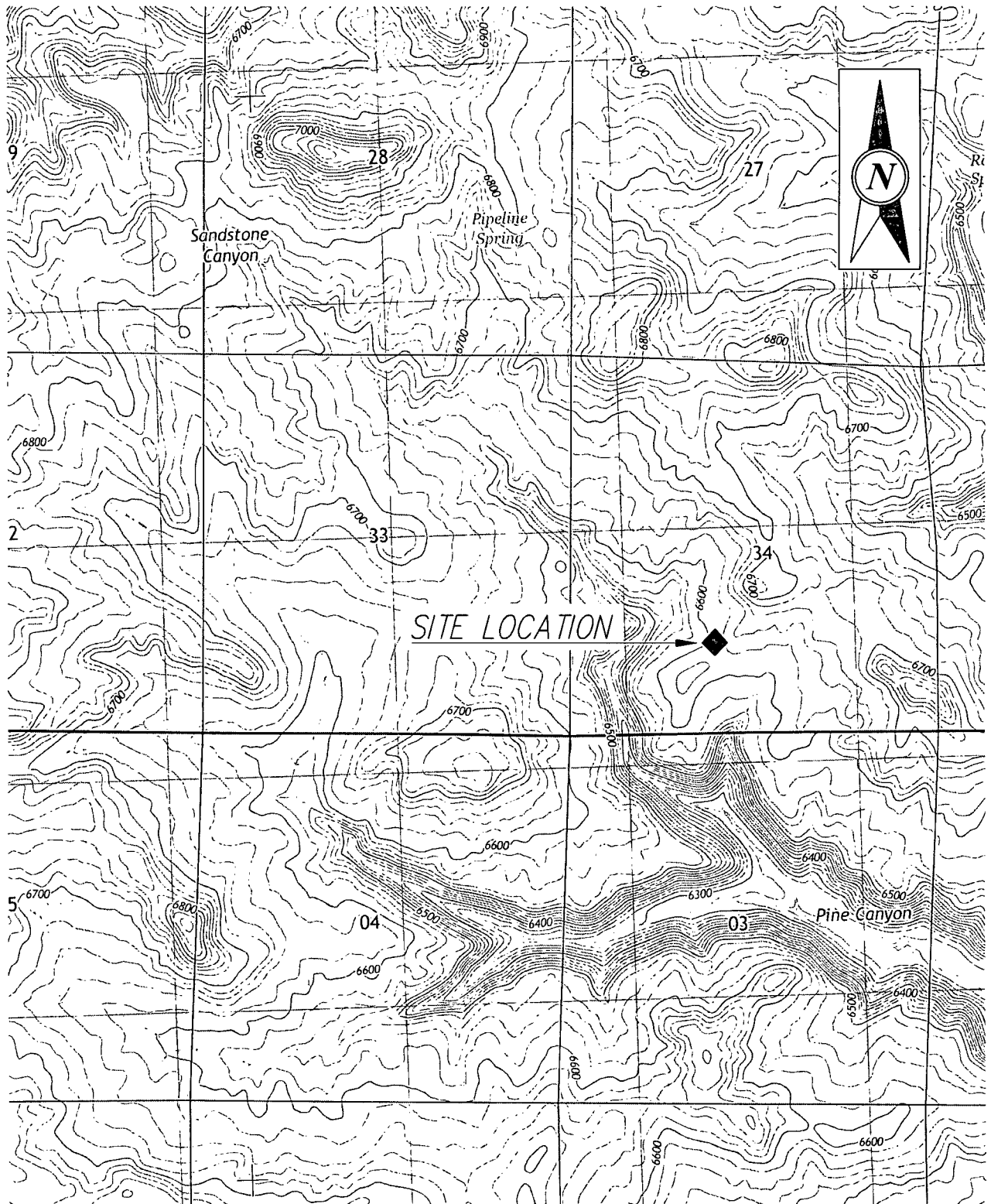
Jesse Sprague
Staff Scientist




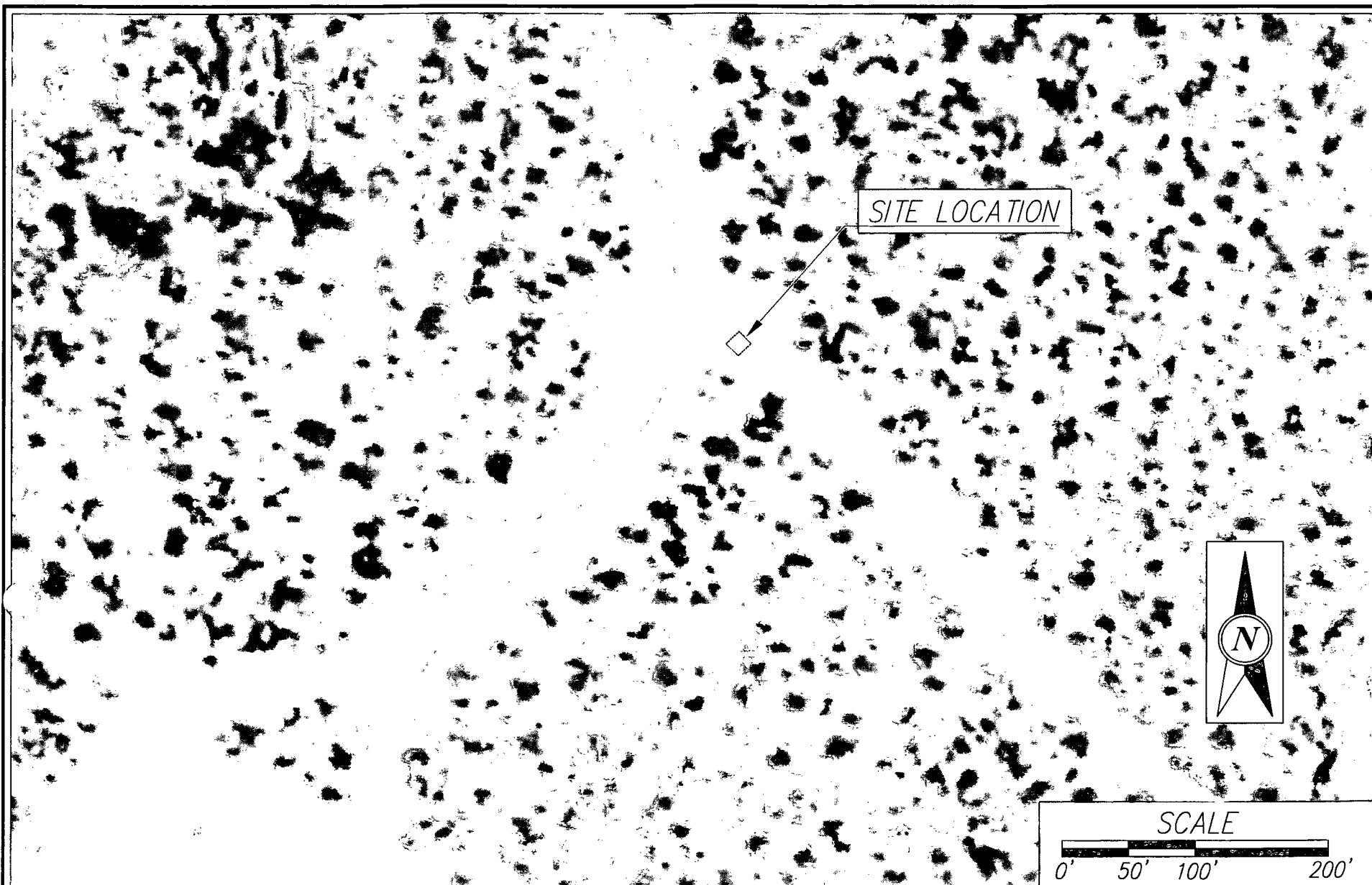
Steve Moskal
Project Scientist

Figures

Figure 1: A line graph showing the relationship between the number of hours spent studying and the score on a test. The x-axis represents hours (0 to 10) and the y-axis represents score (0 to 100). The data points are (0, 0), (2, 20), (4, 40), (6, 60), (8, 80), and (10, 100). The line is a straight line passing through the origin.



 Engineering Environmental Surveying	SOUDER, MILLER & ASSOCIATES 401 West Broadway Avenue Farmington, NM 87401-5907 Phone (505) 325-7535 Toll-Free (800) 519-0098 Fax (505) 326-0045 www.soudermiller.com Serving the Southwest & Rocky Mountains Albuquerque, Carlsbad, Farmington, Las Cruces, Roswell, Santa Fe, NM • El Paso, TX Cortez • Grand Junction • Montrose, CO • Safford, AZ • Moab, UT	ENTERPRISE		FARMINGTON, NEW MEXICO		Designed SM	Drawn GJF	Checked SC		
		VICINITY MAP LATERAL L-14A SECTION 34, T32N, R9W SAN JUAN COUNTY						Date: 10/27/2014		
								Scale: Horiz: 1" = 2000' Vert: NA		
								Project No: 5122855		
						Sheet: 1				



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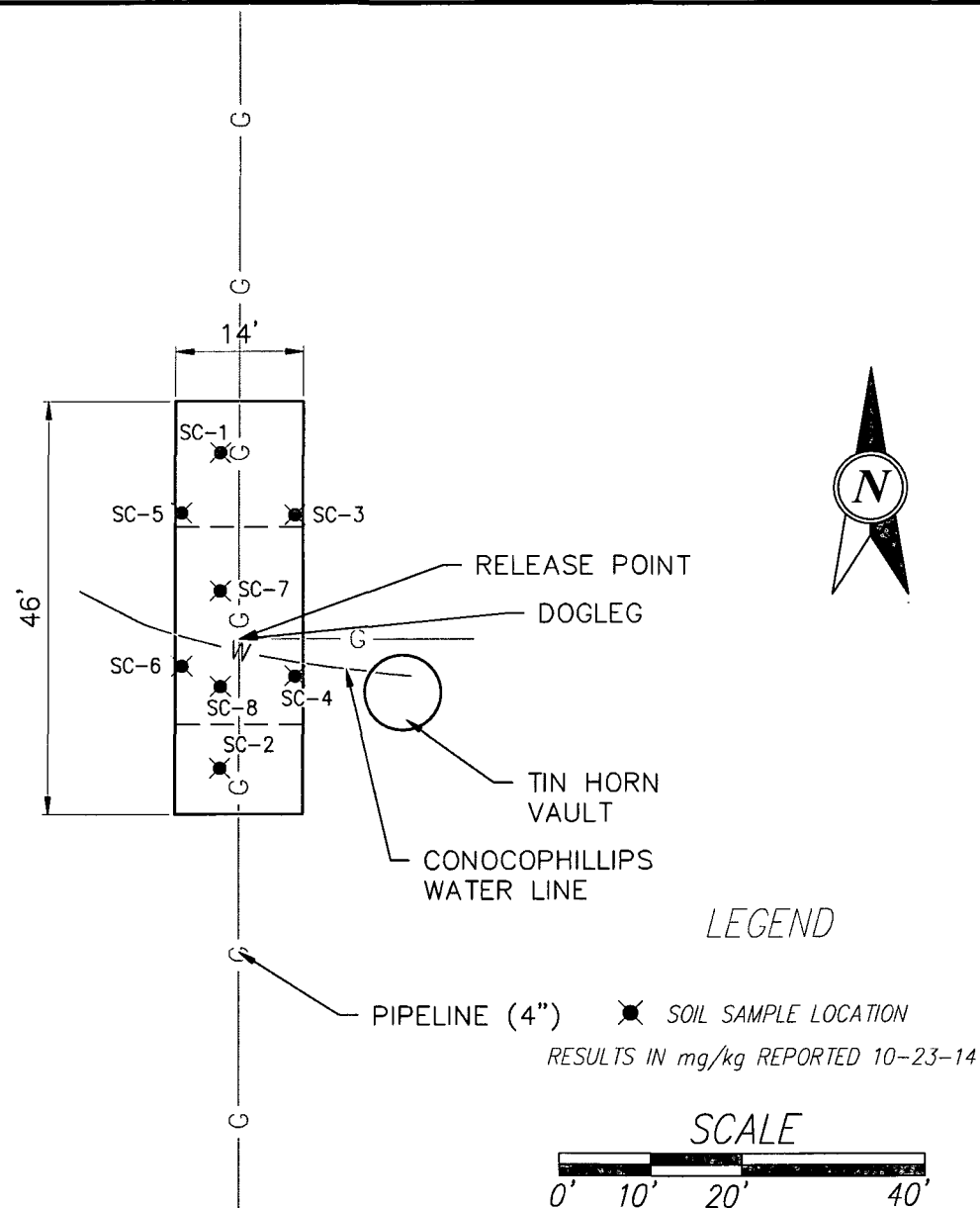
FARMINGTON, NEW MEXICO

**SITE LOCATION MAP
 LATERAL L-14A
 SECTION 34, T32N, R9W**

SAN JUAN COUNTY, NEW MEXICO

Designed SM	Drawn GJF	Checked SC
Date:	10/31/14	
Scale:	Horiz:	1"=80'
	Vert:	N/A
Project No: 5122855		
Sheet: 2		

LABORATORY ANALYTICAL SUMMARY							
Soil Samples							
Date	Time	Sample ID	Sample Depth (Feet BGS)	Method 8015 GRO	Method 8015 DRO	Method 8021 Benzene	Method 8021 BTEX
NMOCD Guidelines		NMOCD Site Ranking: 10		1,000 ppm		10 ppm	50 ppm
10/21/2014	11:03	SC-1 N Wall	0-7'	48	36	<0.040	0.79
10/21/2014	11:06	SC-2 S Wall	0-7'	6.5	10	<0.040	<0.080
10/21/2014	11:09	SC-3 NE Wall	0-7'	<5.3	77	<0.053	<0.11
10/21/2014	11:12	SC-4 SE Wall	0-7'	<4.7	<10	<0.047	0.307
10/21/2014	11:15	SC-5 NW Wall	0-7'	11	31	<0.042	0.32
10/21/2014	11:18	SC-6 SW Wall	0-7'	<4.6	<10	<0.046	<0.092
10/21/2014	11:21	SC-7 N Base	7'	58	150	<0.040	1.087
10/21/2014	11:24	SC-8 S Base	7.5'	71	34	0.050	2.63



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ENTERPRISE

FARMINGTON, NEW MEXICO

SOIL CONTAMINANT CONCENTRATION MAP
LATERAL L-14A
SECTION 34, T32N, R9W

SAN JUAN COUNTY, NEW MEXICO

Designed SM	Drawn DJB	Checked SC
Date: 10/31/14		
Scale: Horiz: 1"=20'		
Vert: N/A		
Project No: 5122855		
Sheet: 3		

Tables

Enterprise Products
Table 2: Site Ranking Criteria

Lateral L-14A
Pipeline Release
11/4/2014

Depth to Groundwater	NMOCD Numeric Rank for this Site	Source for Ranking	Notes
< 50 BGS = 20		Topographic Maps and Field Verification	Groundwater estimated to be approximately 100 feet below the Lateral L-14 site.
50' to 99' = 10			
>100' = 0	0		
Ranking Criteria for Horizontal Distance to Nearest Surface Water	NMOCD Numeric Rank for this Site	Source for Ranking	Notes
< 200' = 20		Topographic Maps and Field Verification	Release location to be field verified. (~950 to surface water pathway)
200'-1000' = 10	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 recorded water wells located within 1,000 feet or within a 1 mile radius
Total Site Ranking	10		
Soil Remedation Standards	0 to 9	10 to 19	>19
Benzene	10 PPM	10 PPM	10 PPM
BTEX	50 PPM	50 PPM	50 PPM
TPH	5000 PPM	1000 PPM	100 PPM



LABORATORY ANALYTICAL SUMMARY							
Soil Samples							
Date	Time	Sample ID	Sample Depth (Feet BGS)	Method 8015 GRO	Method 8015 DRO	Method 8021 Benzene	Method 8021 BTEX
NMOCD Guidelines		NMOCD Site Ranking: 10		1,000 ppm		10 ppm	50 ppm
10/21/2014	11:03	SC-1 N Wall	0-7'	48	36	<0.040	0.79
10/21/2014	11:06	SC-2 S Wall	0-7'	6.5	10	<0.040	<0.080
10/21/2014	11:09	SC-3 NE Wall	0-7'	<5.3	77	<0.053	<0.11
10/21/2014	11:12	SC-4 SE Wall	0-7'	<4.7	<10	<0.047	0.307
10/21/2014	11:15	SC-5 NW Wall	0-7'	11	31	<0.042	0.32
10/21/2014	11:18	SC-6 SW Wall	0-7'	<4.6	<10	<0.046	<0.092
10/21/2014	11:21	SC-7 N Base	7'	58	150	<0.040	1.087
10/21/2014	11:24	SC-8 S Base	7.5'	71	34	0.050	2.63



Appendix A

Photographic Documentation

Site Photographs
Enterprise Products Lateral L-14A Pipeline Release



Photo 1: Beginning of excavation at the Lateral L-14A pipeline release at a depth of approximately 4' bgs. Strong odor present

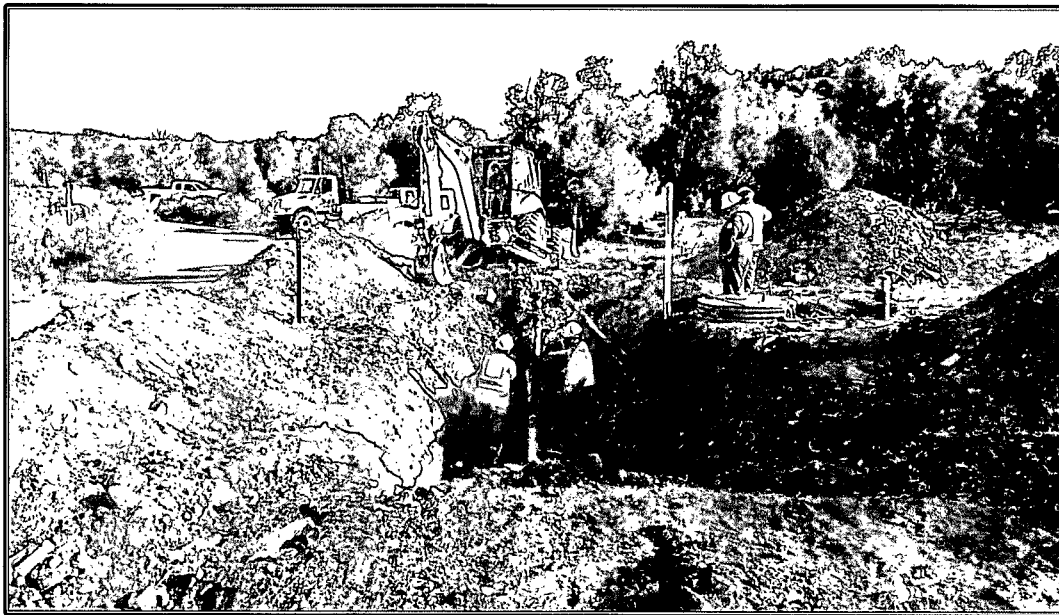


Photo 2: Monitoring air quality in excavation, Benzene levels stayed below PELs.

Site Photographs
Enterprise Products Lateral L-14A Pipeline Release

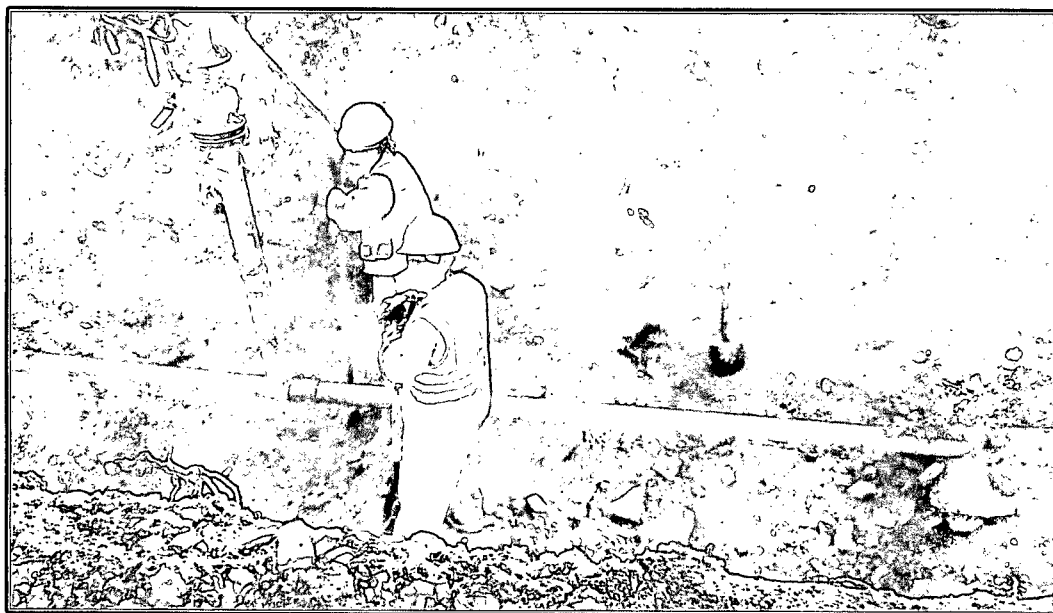


Photo 3: View of Conoco Phillips water line crossing under the pipeline.



Photo 4: Close up of waterline, exposed in center of photograph.

Site Photographs
Enterprise Products Lateral L-14A Pipeline Release

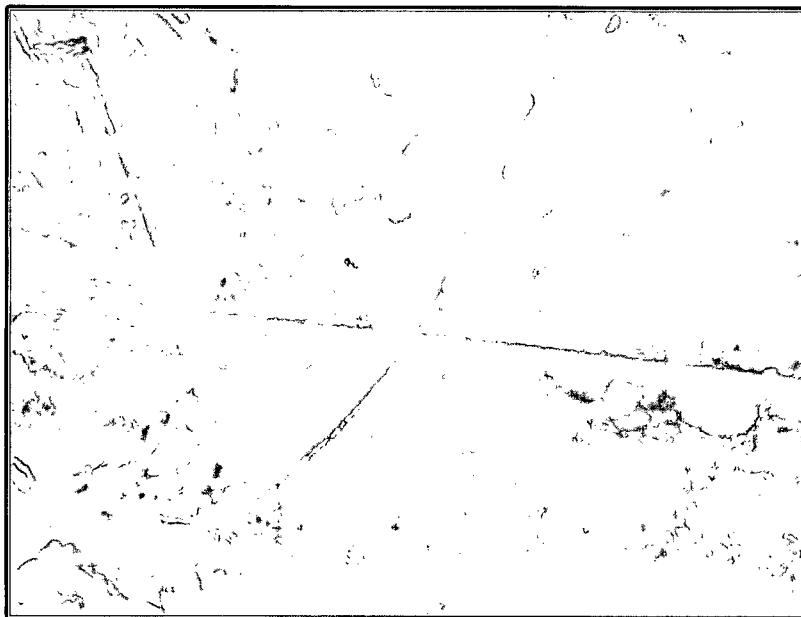


Photo 5: Fully exposed Water Line, repairs completed.



Photo 6: backfill complete.

Appendix B

Soil Disposal Documentation

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 97257-0666
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-138
Revised August 1, 2011

*Surface Waste Management Facility Operator
and Generator shall maintain and make this
documentation available for Division inspection.

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. Generator Name and Address: Enterprise Field Services, LLC, 614 Reilly Avenue, Farmington, NM 87401	Oct. 2014
2. Originating Site: Lateral 14A Pipeline	
3. Location of Material (Street Address, City, State or ULSTR): Unit Letter N, Section 34, T32N, R9W; 36.93632, -107.77001	
4. Source and Description of Waste: Hydrocarbon impacted soils associated with a release from a natural gas pipeline	
5. Estimated Volume 100 yd ³ bbls Known Volume (to be entered by the operator at the end of the haul) 108 yd ³ bbls	
5. GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS	
I, <u>Thomas Long</u> representative or authorized agent for <u>Enterprise Field Services, LLC</u> do hereby PRINT & SIGN NAME COMPANY NAME certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (Check the appropriate classification) <input checked="" type="checkbox"/> RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non- exempt waste. <u>Operator Use Only: Waste Acceptance Frequency</u> <input type="checkbox"/> Monthly <input type="checkbox"/> Weekly <input type="checkbox"/> Per Load <input type="checkbox"/> RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items) <input type="checkbox"/> MSDS Information <input type="checkbox"/> RCRA Hazardous Waste Analysis <input type="checkbox"/> Process Knowledge <input type="checkbox"/> Other (Provide description in Box 4)	
GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS	
I, <u>Thomas Long</u> 10-20-14, representative for <u>Enterprise Field Services, LLC</u> authorize Envirotech, Inc. to Generator Signature complete the required testing/sign the Generator Waste Testing Certification.	
I, <u>Kendra Running</u> representative for <u>Envirotech, Inc.</u> do hereby certify that representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.36 NMAC.	
6. Transporter: West State Entergy Contractors <u>Paul + Sons, Moss, Foutz</u>	

OCD Permitted Surface Waste Management Facility

Name and Facility Permit #: Envirotech, Inc. Soil Remediation Facility * Permit #: NM 01-0011

Address of Facility: Hilltop, NM

Method of Treatment and/or Disposal:

☐ Evaporation ☐ Injection ☐ Treating Plant ☒ Landfarm ☐ Landfill ☐ Other

Waste Acceptance Status:

☒ APPROVED

☐ DENIED (Must Be Maintained As Permanent Record)

PRINT NAME: Kendra Running

TITLE: Waste Coordinator DATE: 10/21/14

SIGNATURE: Kendra Running
Surface Waste Management Facility Authorized Agent

TELEPHONE NO.: 505-632-0615

Appendix C

Laboratory Analytical Reports



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

October 23, 2014

Steve Moskal
Souder, Miller and Associates
401 W. Broadway
Farmington, NM 87401
TEL: (505) 325-5667
FAX (505) 327-1496

RE: Lateral L-14A

OrderNo.: 1410A15

Dear Steve Moskal:

Hall Environmental Analysis Laboratory received 8 sample(s) on 10/22/2014 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. 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.

Analytical Report

Lab Order 1410A15

Date Reported: 10/23/2014

CLIENT: Souder, Miller and Associates

Client Sample ID: SC-1 N Wall

Project: Lateral L-14A

Collection Date: 10/21/2014 11:03:00 AM

Lab ID: 1410A15-001

Matrix: MEOH (SOIL)

Received Date: 10/22/2014 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: BCN
Diesel Range Organics (DRO)	36	9.9		mg/Kg	1	10/22/2014 2:34:46 PM	16022
Surr: DNOP	75.5	63.5-128		%REC	1	10/22/2014 2:34:46 PM	16022
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	48	4.0		mg/Kg	1	10/22/2014 11:05:58 AM R22074	
Surr: BFB	279	80-120	S	%REC	1	10/22/2014 11:05:58 AM R22074	
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.040		mg/Kg	1	10/22/2014 11:05:58 AM R22074	
Toluene	0.060	0.040		mg/Kg	1	10/22/2014 11:05:58 AM R22074	
Ethylbenzene	0.10	0.040		mg/Kg	1	10/22/2014 11:05:58 AM R22074	
Xylenes, Total	0.63	0.081		mg/Kg	1	10/22/2014 11:05:58 AM R22074	
Surr: 4-Bromofluorobenzene	132	80-120	S	%REC	1	10/22/2014 11:05:58 AM R22074	

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1410A15

Date Reported: 10/23/2014

CLIENT: Souder, Miller and Associates

Client Sample ID: SC-2 S Wall

Project: Lateral L-14A

Collection Date: 10/21/2014 11:06:00 AM

Lab ID: 1410A15-002

Matrix: MEOH (SOIL)

Received Date: 10/22/2014 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: BCN
Diesel Range Organics (DRO)	10	10		mg/Kg	1	10/22/2014 1:07:15 PM	16022
Surr: DNOP	79.0	63.5-128		%REC	1	10/22/2014 1:07:15 PM	16022
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	6.5	4.0		mg/Kg	1	10/22/2014 11:33:18 AM	R22074
Surr: BFB	137	80-120	S	%REC	1	10/22/2014 11:33:18 AM	R22074
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.040		mg/Kg	1	10/22/2014 11:33:18 AM	R22074
Toluene	ND	0.040		mg/Kg	1	10/22/2014 11:33:18 AM	R22074
Ethylbenzene	ND	0.040		mg/Kg	1	10/22/2014 11:33:18 AM	R22074
Xylenes, Total	ND	0.080		mg/Kg	1	10/22/2014 11:33:18 AM	R22074
Surr: 4-Bromofluorobenzene	132	80-120	S	%REC	1	10/22/2014 11:33:18 AM	R22074

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

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.
- RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1410A15

Date Reported: 10/23/2014

CLIENT: Souder, Miller and Associates

Client Sample ID: SC-3 NE Wall

Project: Lateral L-14A

Collection Date: 10/21/2014 11:09:00 AM

Lab ID: 1410A15-003

Matrix: MEOH (SOIL)

Received Date: 10/22/2014 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: BCN
Diesel Range Organics (DRO)	77	10		mg/Kg	1	10/22/2014 1:50:46 PM	16022
Surr: DNOP	73.4	63.5-128		%REC	1	10/22/2014 1:50:46 PM	16022
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.3		mg/Kg	1	10/22/2014 12:00:36 PM R22074	
Surr: BFB	114	80-120		%REC	1	10/22/2014 12:00:36 PM R22074	
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.053		mg/Kg	1	10/22/2014 12:00:36 PM R22074	
Toluene	ND	0.053		mg/Kg	1	10/22/2014 12:00:36 PM R22074	
Ethylbenzene	ND	0.053		mg/Kg	1	10/22/2014 12:00:36 PM R22074	
Xylenes, Total	ND	0.11		mg/Kg	1	10/22/2014 12:00:36 PM R22074	
Surr: 4-Bromofluorobenzene	122	80-120	S	%REC	1	10/22/2014 12:00:36 PM R22074	

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1410A15

Date Reported: 10/23/2014

CLIENT: Souder, Miller and Associates

Client Sample ID: SC-4 SE Wall

Project: Lateral L-14A

Collection Date: 10/21/2014 11:12:00 AM

Lab ID: 1410A15-004

Matrix: MEOH (SOIL)

Received Date: 10/22/2014 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: BCN
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	10/22/2014 2:12:50 PM	16022
Surr: DNOP	74.7	63.5-128		%REC	1	10/22/2014 2:12:50 PM	16022
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	10/22/2014 12:27:53 PM	R22074
Surr: BFB	113	80-120		%REC	1	10/22/2014 12:27:53 PM	R22074
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.047		mg/Kg	1	10/22/2014 12:27:53 PM	R22074
Toluene	0.067	0.047		mg/Kg	1	10/22/2014 12:27:53 PM	R22074
Ethylbenzene	ND	0.047		mg/Kg	1	10/22/2014 12:27:53 PM	R22074
Xylenes, Total	0.24	0.095		mg/Kg	1	10/22/2014 12:27:53 PM	R22074
Surr: 4-Bromofluorobenzene	126	80-120	S	%REC	1	10/22/2014 12:27:53 PM	R22074

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

Analytical Report

Lab Order 1410A15

Date Reported: 10/23/2014

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Souder, Miller and Associates**Client Sample ID:** SC-5 NW Wall**Project:** Lateral L-14A**Collection Date:** 10/21/2014 11:15:00 AM**Lab ID:** 1410A15-005**Matrix:** MEOH (SOIL)**Received Date:** 10/22/2014 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: BCN
Diesel Range Organics (DRO)	31	9.9		mg/Kg	1	10/22/2014 1:08:40 PM	16022
Surr: DNOP	81.2	63.5-128		%REC	1	10/22/2014 1:08:40 PM	16022
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	11	4.2		mg/Kg	1	10/22/2014 12:55:22 PM	R22074
Surr: BFB	155	80-120	S	%REC	1	10/22/2014 12:55:22 PM	R22074
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.042		mg/Kg	1	10/22/2014 12:55:22 PM	R22074
Toluene	0.062	0.042		mg/Kg	1	10/22/2014 12:55:22 PM	R22074
Ethylbenzene	0.048	0.042		mg/Kg	1	10/22/2014 12:55:22 PM	R22074
Xylenes, Total	0.21	0.084		mg/Kg	1	10/22/2014 12:55:22 PM	R22074
Surr: 4-Bromofluorobenzene	131	80-120	S	%REC	1	10/22/2014 12:55:22 PM	R22074

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

Analytical Report

Lab Order 1410A15

Date Reported: 10/23/2014

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Souder, Miller and Associates**Client Sample ID:** SC-6 SW Wall**Project:** Lateral L-14A**Collection Date:** 10/21/2014 11:18:00 AM**Lab ID:** 1410A15-006**Matrix:** MEOH (SOIL)**Received Date:** 10/22/2014 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: BCN
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	10/22/2014 1:39:51 PM	16022
Surr: DNOP	89.4	63.5-128		%REC	1	10/22/2014 1:39:51 PM	16022
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	10/22/2014 1:22:39 PM	R22074
Surr: BFB	105	80-120		%REC	1	10/22/2014 1:22:39 PM	R22074
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.046		mg/Kg	1	10/22/2014 1:22:39 PM	R22074
Toluene	ND	0.046		mg/Kg	1	10/22/2014 1:22:39 PM	R22074
Ethylbenzene	ND	0.046		mg/Kg	1	10/22/2014 1:22:39 PM	R22074
Xylenes, Total	ND	0.092		mg/Kg	1	10/22/2014 1:22:39 PM	R22074
Surr: 4-Bromofluorobenzene	120	80-120	S	%REC	1	10/22/2014 1:22:39 PM	R22074

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

Analytical Report

Lab Order 1410A15

Date Reported: 10/23/2014

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Souder, Miller and Associates**Client Sample ID:** SC-7 N Base**Project:** Lateral L-14A**Collection Date:** 10/21/2014 11:21:00 AM**Lab ID:** 1410A15-007**Matrix:** MEOH (SOIL)**Received Date:** 10/22/2014 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: BCN
Diesel Range Organics (DRO)	150	9.8		mg/Kg	1	10/22/2014 2:10:51 PM	16022
Surr: DNOP	95.2	63.5-128		%REC	1	10/22/2014 2:10:51 PM	16022
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	58	4.0		mg/Kg	1	10/22/2014 1:49:55 PM	R22074
Surr: BFB	331	80-120	S	%REC	1	10/22/2014 1:49:55 PM	R22074
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.040		mg/Kg	1	10/22/2014 1:49:55 PM	R22074
Toluene	0.077	0.040		mg/Kg	1	10/22/2014 1:49:55 PM	R22074
Ethylbenzene	0.13	0.040		mg/Kg	1	10/22/2014 1:49:55 PM	R22074
Xylenes, Total	0.88	0.080		mg/Kg	1	10/22/2014 1:49:55 PM	R22074
Surr: 4-Bromofluorobenzene	149	80-120	S	%REC	1	10/22/2014 1:49:55 PM	R22074

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

Analytical Report

Lab Order 1410A15

Date Reported: 10/23/2014

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Souder, Miller and Associates**Client Sample ID:** SC-8 S Base**Project:** Lateral L-14A**Collection Date:** 10/21/2014 11:24:00 AM**Lab ID:** 1410A15-008**Matrix:** MEOH (SOIL)**Received Date:** 10/22/2014 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: BCN
Diesel Range Organics (DRO)	34	10		mg/Kg	1	10/22/2014 2:42:18 PM	16022
Surr: DNOP	93.8	63.5-128		%REC	1	10/22/2014 2:42:18 PM	16022
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	71	3.9		mg/Kg	1	10/22/2014 2:17:10 PM	R22074
Surr: BFB	352	80-120	S	%REC	1	10/22/2014 2:17:10 PM	R22074
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	0.050	0.039		mg/Kg	1	10/22/2014 2:17:10 PM	R22074
Toluene	0.40	0.039		mg/Kg	1	10/22/2014 2:17:10 PM	R22074
Ethylbenzene	0.18	0.039		mg/Kg	1	10/22/2014 2:17:10 PM	R22074
Xylenes, Total	2.0	0.078		mg/Kg	1	10/22/2014 2:17:10 PM	R22074
Surr: 4-Bromofluorobenzene	161	80-120	S	%REC	1	10/22/2014 2:17:10 PM	R22074

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.
	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#: 1410A15

23-Oct-14

Client: Souder, Miller and Associates

Project: Lateral L-14A

Sample ID	MB-16022	SampType:	MBLK	TestCode:	EPA Method 8015D: Diesel Range Organics					
Client ID:	PBS	Batch ID:	16022	RunNo:	22059					
Prep Date:	10/22/2014	Analysis Date:	10/22/2014	SeqNo:	648870	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Surr: DNOP	9.3		10.00		92.9	63.5	128			

Sample ID	LCS-16022	SampType:	LCS	TestCode:	EPA Method 8015D: Diesel Range Organics					
Client ID:	LCSS	Batch ID:	16022	RunNo:	22059					
Prep Date:	10/22/2014	Analysis Date:	10/22/2014	SeqNo:	648872	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	47	10	50.00	0	93.9	68.6	130			
Surr: DNOP	4.8		5.000		96.8	63.5	128			

Sample ID	1410A15-001AMS	SampType:	MS	TestCode:	EPA Method 8015D: Diesel Range Organics					
Client ID:	SC-1 N Wall	Batch ID:	16022	RunNo:	22059					
Prep Date:	10/22/2014	Analysis Date:	10/22/2014	SeqNo:	649314	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	69	9.9	49.26	36.04	67.0	40.1	152			
Surr: DNOP	3.1		4.926		63.7	63.5	128			

Sample ID	1410A15-001AMSD	SampType:	MSD	TestCode:	EPA Method 8015D: Diesel Range Organics					
Client ID:	SC-1 N Wall	Batch ID:	16022	RunNo:	22059					
Prep Date:	10/22/2014	Analysis Date:	10/22/2014	SeqNo:	649315	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	74	10	50.35	36.04	75.8	40.1	152	7.25	32.1	
Surr: DNOP	3.6		5.035		71.4	63.5	128	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.
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1410A15

23-Oct-14

Client: Souder, Miller and Associates

Project: Lateral L-14A

Sample ID	5ML RB	SampType:	MBLK	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	PBS	Batch ID:	R22074	RunNo:	22074					
Prep Date:		Analysis Date:	10/22/2014	SeqNo:	649664	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	960		1000		96.1	80	120			

Sample ID	2.5UG GRO LCS	SampType:	LCS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	LCSS	Batch ID:	R22074	RunNo:	22074					
Prep Date:		Analysis Date:	10/22/2014	SeqNo:	649665	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	25.00	0	99.0	65.8	139			
Surr: BFB	1000		1000		103	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
- 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.
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1410A15

23-Oct-14

Client: Souder, Miller and Associates

Project: Lateral L-14A

Sample ID	5ML RB	SampType:	MBLK	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	PBS	Batch ID:	R22074	RunNo:	22074					
Prep Date:		Analysis Date:	10/22/2014	SeqNo:	649672	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		101	80	120			

Sample ID	100NG BTEX LCS	SampType:	LCS	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	LCSS	Batch ID:	R22074	RunNo:	22074					
Prep Date:		Analysis Date:	10/22/2014	SeqNo:	649673	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.97	0.050	1.000	0	97.2	80	120			
Toluene	0.97	0.050	1.000	0	96.8	80	120			
Ethylbenzene	0.97	0.050	1.000	0	96.8	80	120			
Xylenes, Total	3.1	0.10	3.000	0	103	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		103	80	120			

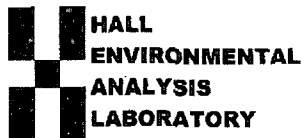
Sample ID	1410A15-001AMS	SampType:	MS	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	SC-1 N Wall	Batch ID:	R22074	RunNo:	22074					
Prep Date:		Analysis Date:	10/22/2014	SeqNo:	649676	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.81	0.040	0.8091	0	99.9	77.4	142			
Toluene	0.86	0.040	0.8091	0.05987	98.5	77	132			
Ethylbenzene	0.88	0.040	0.8091	0.1019	96.1	77.6	134			
Xylenes, Total	3.1	0.081	2.427	0.6284	103	77.4	132			
Surr: 4-Bromofluorobenzene	0.97		0.8091		120	80	120			S

Sample ID	1410A15-001AMSD	SampType:	MSD	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	SC-1 N Wall	Batch ID:	R22074	RunNo:	22074					
Prep Date:		Analysis Date:	10/22/2014	SeqNo:	649677	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.83	0.040	0.8091	0	102	77.4	142	2.56	20	
Toluene	0.90	0.040	0.8091	0.05987	104	77	132	5.40	20	
Ethylbenzene	0.97	0.040	0.8091	0.1019	108	77.6	134	10.2	20	
Xylenes, Total	3.5	0.081	2.427	0.6284	119	77.4	132	11.6	20	
Surr: 4-Bromofluorobenzene	1.3		0.8091		155	80	120	0	0	S

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.
- RL Reporting Detection Limit



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

Sample Log-In Check List

Client Name: SMA-FARM

Work Order Number: 1410A15

RcptNo: 1

Received by/date:

Logged By:

Ashley Gallegos

10/22/2014 8:00:00 AM

Completed By:

Ashley Gallegos

10/22/2014 8:31:03 AM

Reviewed By:

mg

10/22/14

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 $>0^{\circ}\text{C}$ 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	1.0	Good	Yes			

Chain-of-Custody Record

Client: SMA

Mailing Address: 401 Broadway

Farmington, NM, 87401

Phone #: 505 325 7535

email or Fax#: Steve.Moskal@SoudersMiller.com

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)

Accreditation

☐ NELAP ☐ Other _____

☐ EDD (Type) _____

Turn-Around Time:

☐ Standard ☒ Rush Same Day

Project Name:

Lateral L-14A

Project #:

5122855 B67

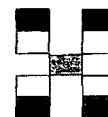
Project Manager:

Steve Moskal

Sampler: Jesse Sprague

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	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO/DRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F, Cl, NO ₃ , NO ₂ , PO ₄ , SO ₄)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Air Bubbles (Y or N)
10/21/14	1103	soil	SC-1 N wall	1. 4oz	-	-001	X	X									
	1106		SC-2 S wall			-002	X	X									
	1109		SC-3 NE wall			-003	X	X									
	1112		SC-4 SE wall			-004	X	X									
	1115		SC-5 NW wall			-005	X	X									
	1118		SC-6 SW wall			-006	X	X									
	1121		SC-7 N Base			-007	X	X									
	1124		SC-8 S Base			-008	X	X									

Date: 10/21/14 Time: 1801 Relinquished by: [Signature]

Date: 10/21/14 Time: 1801 Received by: Christine Wheeler

Date: 10/21/14 Time: 1820 Relinquished by: [Signature]

Date: 10/22/14 Time: 0800 Received by: [Signature]

Remarks: Invoice: Enterprise

Please copy Alicia. patterson@SoudersMiller.com

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

NM OIL CONSERVATION

ARTESIA DISTRICT

Form C-141
Revised August 8, 2011

NOV 24 2014
Submit Copy to appropriate District Office
in accordance with 19.15.29 NMAC.

RECEIVED

Release Notification and Corrective Action

OPERATOR

☐ Initial Report ☒ Final Report

Name of Company: Enterprise Field Services LLC	Contact: Thomas Long
Address: 614 Reilly Ave, Farmington, NM 87401	Telephone No. 505-599-2286
Facility Name: Lateral 2A-3 Pipeline	Facility Type: Natural Gas Gathering Line

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

LOCATION OF RELEASE

Unit Letter M	Section 27	Township 27N	Range 10W	Feet from the 375	North/ <u>South</u> Line	Feet from the 312	East/ <u>West</u> Line	County San Juan
------------------	---------------	-----------------	--------------	-------------------------	-----------------------------	-------------------------	---------------------------	--------------------

OIL CONS. DIV DIST. 3

Latitude 36.554534 Longitude -107.890875

NATURE OF RELEASE

DEC 08 2014

Type of Release: Natural Gas and Natural Gas Liquids	Volume of Release 34.92	Volume Recovered: None
Source of Release: Internal Corrosion	Date and Hour of Occurrence: 8/28/2014 @ 7:00 a.m.	Date and Hour of Discovery: 8/28/2014 @ 7:45 a.m.
Was Immediate Notice Given? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom? Courtesy notification to NMOCD - Cory Smith; BLM - Shari Ketchum	
By Whom?	Date and Hour	
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: On August 28, 2014 a pipeline leak was discovered while performing a pipeline patrol on the Lateral 2A-3 pipeline ROW. The Enterprise technician initiated notification procedures. The pipeline was isolated, blown down, depressurized, locked out and tagged out. Repairs and remediation were completed on September 8, 2014. Three release locations were identified, repaired and remediated. Approximately two-hundred-thirty (230) cubic yards of hydrocarbon impacted soil was excavated and transported to an NMOCD approved land farm facility.

Describe Area Affected and Cleanup Action Taken: On August 28, 2014 a pipeline leak was discovered while performing a pipeline patrol on the Lateral 2A-3 pipeline ROW. The Enterprise technician initiated notification procedures. The pipeline was isolated, blown down, depressurized, locked out and tagged out. Repairs and remediation were completed on September 8, 2014. Three release locations were identified, repaired and remediated. Approximately two-hundred-thirty (230) cubic yards of hydrocarbon impacted soil was excavated and transported to an NMOCD approved land farm facility. A third party corrective action report is included with this "Final" C-141.

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>	OIL CONSERVATION DIVISION	
Printed Name: Jon Fields	Approved by Environmental Specialist: <i>[Signature]</i>	
Title: Director, Environmental	Approval Date: 11/5/15	Expiration Date:
E-mail Address: jefields@eprod.com	Conditions of Approval:	Attached <input type="checkbox"/>
Date: 11-20-2014 Phone: (713)381-6684		

* Attach Additional Sheets If Necessary

#NCS 15005 41899

52



CORRECTIVE ACTION REPORT

OIL CONS. DIV DIST. 3
DEC 08 2014

Property:

**Lateral 2A-3 Pipeline Releases
SW 1/4, S22 T27N R10W
San Juan County, New Mexico**

November 7, 2014
Apex Project No. 7030414G033

Prepared for:

**Enterprise Field Services LLC
614 Reilly Avenue
Farmington, NM 87401
Attn: Mr. Thomas Long**

Prepared by:

A handwritten signature in cursive script that reads 'Heather M. Woods'.

Heather M. Woods, P.G.
Senior Project Manager

A handwritten signature in cursive script that reads 'Elizabeth Scaggs'.

Elizabeth Scaggs, P.G.
Senior Program Manager

TABLE OF CONTENTS

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1.1 Site Description & Background	1
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LIST OF APPENDICES

Appendix A:	Figure 1 – Topographic Map
	Figure 2 – Site Vicinity Map
	Figure 3A – North Excavation Site Map with Sample Locations
	Figure 3B – Middle Excavation Site Map with Sample Locations
	Figure 3C – South Excavation Site Map with Sample Locations
Appendix B:	Executed C-138 Solid Waste Acceptance Forms
Appendix C:	Photographic Documentation
Appendix D:	Tables
Appendix E:	Laboratory Analytical Reports & Chain of Custody Documentation

CORRECTIVE ACTION REPORT

Lateral 2A-3 Pipeline Release

SW 1/4, S22 T27N R10W
San Juan County, New Mexico

Apex Project No. 7030414G033

1.0 INTRODUCTION

1.1 Site Description & Background

The Lateral 2A-3 Pipeline Release Site is located within the Enterprise Field Services LLC (Enterprise) pipeline right-of-way (ROW) in the southwest (SW) ¼ of Section 22 in Township 27 North and Range 10 West in rural San Juan County, New Mexico (North Excavation 36.55462N, 107.89087W; Middle Excavation 36.55437N, 107.89080W; South Excavation 36.55367N, 107.89062W), referred to hereinafter as the "Site" or "subject Site". The Site is located adjacent to an unpaved road, on public land managed by the United States Bureau of Land Management (BLM). The Site is surrounded by native vegetation rangeland periodically interrupted with oil and gas production and gathering facilities, including the Enterprise natural gas gathering pipeline which traverses the area from approximately north to south.

On September 3, 2014, Enterprise shut in the Lateral 2A-3 pipeline and initiated excavation activities at the Site in an effort to locate and repair three subsurface leaks. The leaks were subsequently identified and repaired. An unknown quantity of dry natural gas and pipeline liquids were released from the pipeline as a result of internal corrosion at each release location. The leaks were identified by releases of natural gas and/or minor staining at the ground surface.

A topographic map depicting the location of the Site is included as Figure 1, and a Site Vicinity Map is included as Figure 2 in Appendix A.

1.2 Project Objective

The primary objective of the corrective actions was to reduce the concentration of constituents of concern (COCs) in the on-Site soils to below the New Mexico Energy, Minerals, and Natural Resources Department (EMNRD), Oil Conservation Division (OCD) *Remediation Action Levels* using the New Mexico EMNRD OCD's *Guidelines for Remediation of Leaks, Spills and Releases* as guidance.

2.0 SITE RANKING

In accordance with the New Mexico EMNRD OCD's *Guidelines for Remediation of Leaks, Spills and Releases*, Apex TITAN, Inc. (Apex) utilized the general site characteristics obtained during the completion of corrective action activities and information available from the Office of the New Mexico Office of the State Engineer (OSE) to determine the appropriate "ranking" for the Site. The ranking criteria and associated scoring are provided in the following table:

Ranking Criteria			Ranking Score
Depth to Groundwater	<50 feet	20	0
	50 to 99 feet	10	
	>100 feet	0	
Wellhead Protection Area • <1,000 feet from a water source, or, <200 feet from private domestic water source.	Yes	20	0
	No	0	
Distance to Surface Water Body	<200 feet	20	20
	200 to 1,000 feet	10	
	>1,000 feet	0	
Total Ranking Score			20

Based on Apex's evaluation of the scoring criteria, the Site would have a maximum Total Ranking Score of "20". This ranking is based on the following:

- Depth to groundwater is estimated to be greater than 100 feet below grade surface (bgs) based on two cathodic protection deepwell groundbed reports. The Gordon #5 wells site is located approximately 700 feet to the northeast of the Site and similar in elevation. The cathodic report indicates that groundwater was observed in the borehole at a depth of approximately 115 feet bgs. The Johnson #2 well site is located approximately 1,800 feet to the northwest of the Site. The cathodic report indicates that groundwater was observed in the borehole at a depth of approximately 120 feet bgs. The elevation of the Johnson #2 well site is approximately 30 feet lower in elevation than the Site, resulting in an approximate depth to groundwater at the Site of 150 feet bgs by correlation. No nearby water wells were identified on the OSE website database.
- No water source wells (municipal/community wells) were identified within 1,000 feet of the Site. No private domestic water sources were identified within 200 feet of the Site.
- The three release points are located in or within 100 feet of small ephemeral washes which ultimately drain to the wash of the East Fork of Kutz Canyon. Based on this proximity, a ranking for distance to surface water was assigned at "20".

3.0 RESPONSE ACTIONS

3.1 Soil Excavation Activities

On September 3, 2014, Enterprise shut in the Lateral 2A-3 pipeline and initiated excavation activities at the Site in an effort to locate and repair three subsurface leaks. The leaks were subsequently identified and repaired. An unknown quantity of dry natural gas and pipeline liquids were released from the pipeline as a result of internal corrosion at each release location. The leaks were identified by releases of natural gas and/or minor staining at the ground surface. During the corrective action activities, West States Energy Contractors provided heavy equipment and labor support, and Heather Woods, an Apex environmental professional, provided environmental support.

The surface expression of the North Excavation measured approximately 26 feet long by 13 feet wide and 6 feet bgs in depth; the Middle Excavation measured approximately 16 feet long by 9 feet wide and 7 feet bgs in depth; and the South Excavation measured approximately 22 feet long by 18 feet wide and 4 feet bgs in depth. The lithology encountered during the completion of corrective action activities consisted primarily of unconsolidated silty and clayey sands, underlain by sandstone.

A total of approximately 230 cubic yards of hydrocarbon affected soils were transported to the Envirotech Landfarm near Hilltop, New Mexico for disposal/remediation. The executed C-138 form is provided in Appendix B. The excavations were backfilled with clean imported fill and contoured to surrounding grade.

Figures 3A, 3B, and 3C are site maps indicating the approximate locations of the excavated areas in relation to pertinent land features (Appendix A). Photographic documentation of the field activities is included in Appendix C.

3.2 Soil Sampling Program

Apex screened head-space samples of Site soils with a photoionization detector (PID) fitted with a 10.6 electron volt (eV) lamp to aid in determining the excavation limits.

Apex's soil sampling program included the collection of six (6) final confirmation samples (C-1 North through C-6 North) from the North Excavation, five (5) final confirmation samples (C-1 Mid through C-5 Mid) from the Middle Excavation, and five (5) final confirmation samples (C-1 South through C-5 South) from the South Excavation for laboratory analysis. Figures 3A, 3B, and 3C show the final confirmation sample locations in relation to the final excavation dimensions (Appendix A).

The confirmation soil samples were collected and placed in laboratory prepared glassware, labeled/sealed using the laboratory supplied labels, and placed on ice in a cooler, which was secured with a custody seal. The sample cooler and completed chain-of-custody form were relinquished to Hall Environmental Analysis Laboratory in Albuquerque, New Mexico, for rush analysis.

3.3 Laboratory Analytical Methods

The confirmation soil samples were analyzed for benzene, toluene, ethylbenzene, and total xylenes (BTEX) utilizing EPA SW-846 Method #8021, and total petroleum hydrocarbons (TPH) gasoline range organics (GRO) and diesel range organics (DRO) utilizing EPA SW-846 Method #8015.

Laboratory results are summarized in Table 1, included in Appendix D. The executed chain-of-custody forms and laboratory data sheets are provided in Appendix E.

4.0 DATA EVALUATION

The Site is subject to regulatory oversight by the New Mexico EMNRD OCD. To address activities related to condensate releases, the New Mexico EMNRD OCD utilizes the *Guidelines for Remediation of Leaks, Spills and Releases* as guidance, in addition to the OCD rules, specifically New Mexico Administrative Code 19.15.29 *Remediation Plan*. These guidance documents establish investigation and abatement action requirements for sites subject to reporting and/or corrective action.

4.1 Confirmation Soil Samples

Apex compared the BTEX and TPH concentrations or reporting limits associated with the final confirmation samples (C-1 North through C-6 North, C-1 Middle through C-5 Middle, and C-1 South through C-5 South) collected from the excavated areas to the OCD *Remediation Action Levels* (RALs) for sites having a total ranking score of "20".

- The laboratory analyses of confirmation samples collected from soils remaining in place do not indicate benzene concentrations above the laboratory reporting limits, which are below the *OCD Remediation Action Level*.
- The laboratory analyses of the confirmation samples collected from soils remaining in place indicate total BTEX concentrations ranging from below the laboratory reporting limits to 0.067 mg/kg, which are below the *OCD Remediation Action Levels*.
- The laboratory analyses of the confirmation samples collected from soils remaining in place indicate combined TPH GRO/DRO concentrations ranging from below the laboratory reporting limits to 42 mg/kg, which are below the *OCD Remediation Action Levels* for a Site ranking of "20".

Confirmation sample results are provided in Table 1 in Appendix D.

5.0 FINDINGS AND RECOMMENDATIONS

The Lateral 2A-3 Pipeline Release Site is located within the Enterprise pipeline ROW in the SW¼ of Section 22 in Township 27 North and Range 10 West in rural San Juan County, New Mexico (North Excavation 36.55462N, 107.89087W; Middle Excavation 36.55437N, 107.89080W; South Excavation 36.55367N, 107.89062W). The Site is located adjacent to an unpaved road, on public land managed by the BLM. The Site is surrounded by native vegetation rangeland periodically interrupted with oil and gas production and gathering facilities, including the Enterprise natural gas gathering pipeline which traverses the area from approximately north to south.

On September 3, 2014, Enterprise shut in the Lateral 2A-3 pipeline and initiated excavation activities at the Site in an effort to locate and repair three subsurface leaks. The leaks were subsequently identified and repaired. An unknown quantity of dry natural gas and pipeline liquids were released from the pipeline as a result of internal corrosion at each release location. The leaks were identified by releases of natural gas and/or minor staining at the ground surface.

- The primary objective of the corrective actions was to reduce the concentration of COCs in the on-Site soils to below the New Mexico EMNRD OCD RALs using the New Mexico EMNRD OCD's *Guidelines for Remediation of Leaks, Spills and Releases* as guidance.
- The lithology encountered during the completion of corrective action activities consisted primarily of unconsolidated silty and clayey sands, underlain by sandstone.
- The surface expression of North Excavation measured approximately 26 feet long by 13 feet wide and 6 feet bgs in depth; the Middle Excavation measured approximately 16 feet long by 9 feet wide and 7 feet bgs in depth; and the South Excavation measured approximately 22 feet long by 18 feet wide and 4 feet bgs in depth.
- Prior to backfilling, final confirmation samples were collected from the resulting excavations for laboratory analyses. Based on analytical results, soils remaining in place do not exhibit COC concentrations above the *OCD Remediation Action Levels* for a Site ranking of "20".
- A total of approximately 230 cubic yards of hydrocarbon affected soils were transported to the Envirotech Landfarm near Hilltop, New Mexico for disposal/remediation. The excavations were backfilled with clean imported fill and contoured to surrounding grade.

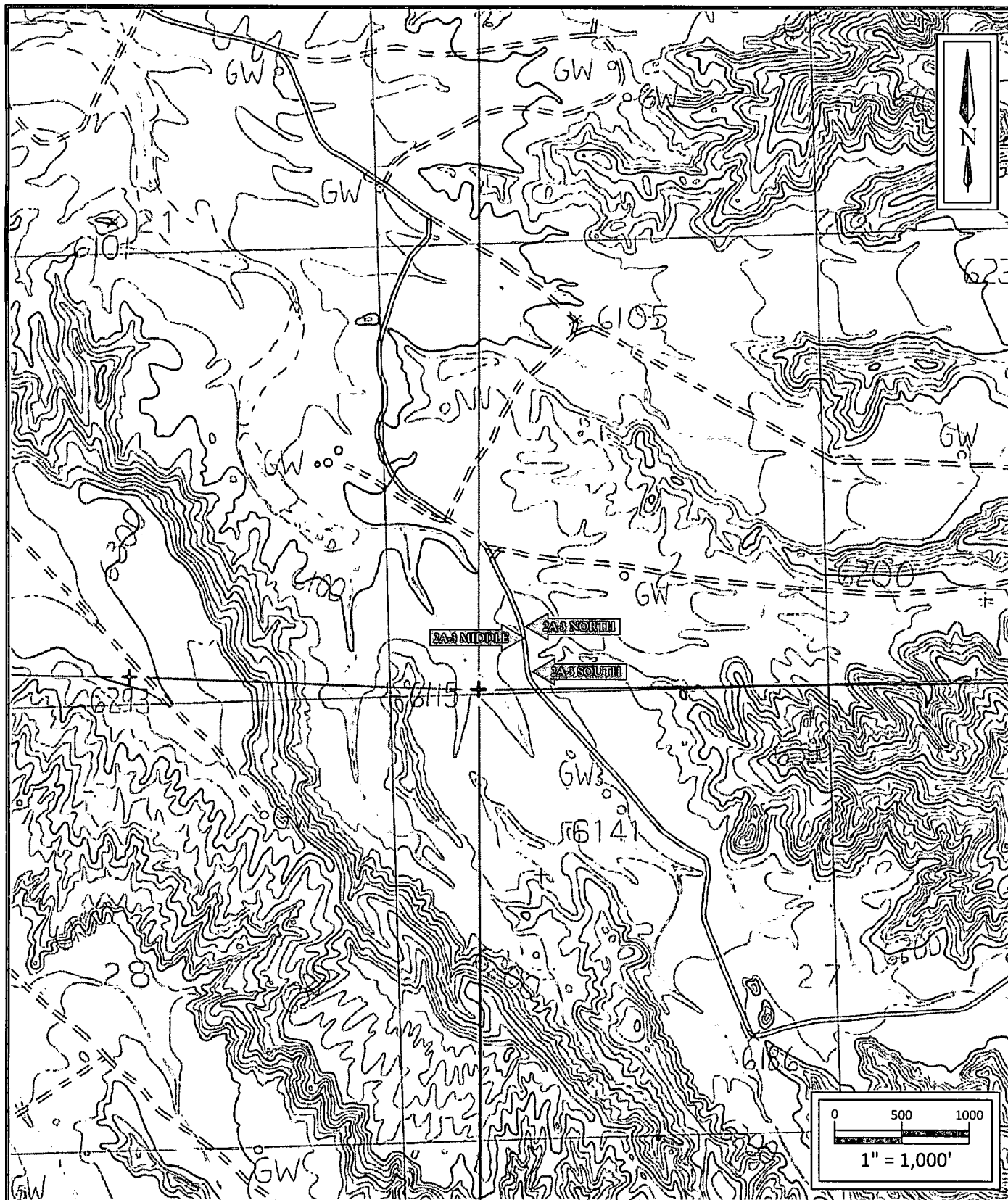
Based on field observations and laboratory analytical results, no additional investigation or corrective action appears warranted at this time.

6.0 STANDARD OF CARE, LIMITATIONS, AND RELIANCE

Apex's services were performed in accordance with standards customarily provided by a firm rendering the same or similar services in the area during the same time period. Apex makes no warranties, expressed or implied, as to the services performed hereunder. Additionally, Apex does not warrant the work of third parties supplying information used in the report (e.g. laboratories, regulatory agencies, or other third parties). This scope of services was performed in accordance with the scope of work agreed with the client.

Findings, conclusions and recommendations resulting from these services are based upon information derived from the on-Site activities and other services performed under this scope of work and it should be noted that this information is subject to change over time. Certain indicators of the presence of hazardous substances, petroleum products, or other constituents may have been latent, inaccessible, unobservable, or not present during these services, and Apex cannot represent that the Site contains no hazardous substances, toxic materials, petroleum products, or other latent conditions beyond those identified during this scope of services. Environmental conditions at other areas or portions of the Site may vary from those encountered at actual sample locations. Apex's findings and recommendations are based solely upon data available to Apex at the time of these services.

This report has been prepared for the exclusive use of Enterprise, and any authorization for use or reliance by any other party (except a governmental entity having jurisdiction over the Site) is prohibited without the expressed written authorization of Enterprise and Apex. Any unauthorized distribution or reuse is at the client's sole risk. Notwithstanding the foregoing, reliance by authorized parties will be subject to the terms, conditions and limitations stated in the proposal, the report, and Apex's Agreement. The limitation of liability defined in the agreement is the aggregate limit of Apex's liability to the client.



Lateral 2A-3 Pipeline Releases

SW $\frac{1}{4}$ S22 T27N R10W
 Rural San Juan County, NM
 36.55462N, 107.89087W
 36.55437N, 107.89080W
 36.55367N, 107.89062W
 Project No. 7030414G033



Apex TITAN, Inc.

606 S. Rio Grande, Suite A
 Aztec, New Mexico 87410
 Phone: (505) 334-5200
www.apexcos.com
 A Subsidiary of Apex Companies, LLC

FIGURE 1 Topographic Map

East Fork Kutz Canyon, NM Quadrangle
 1985



Lateral 2A-3 Pipeline Releases

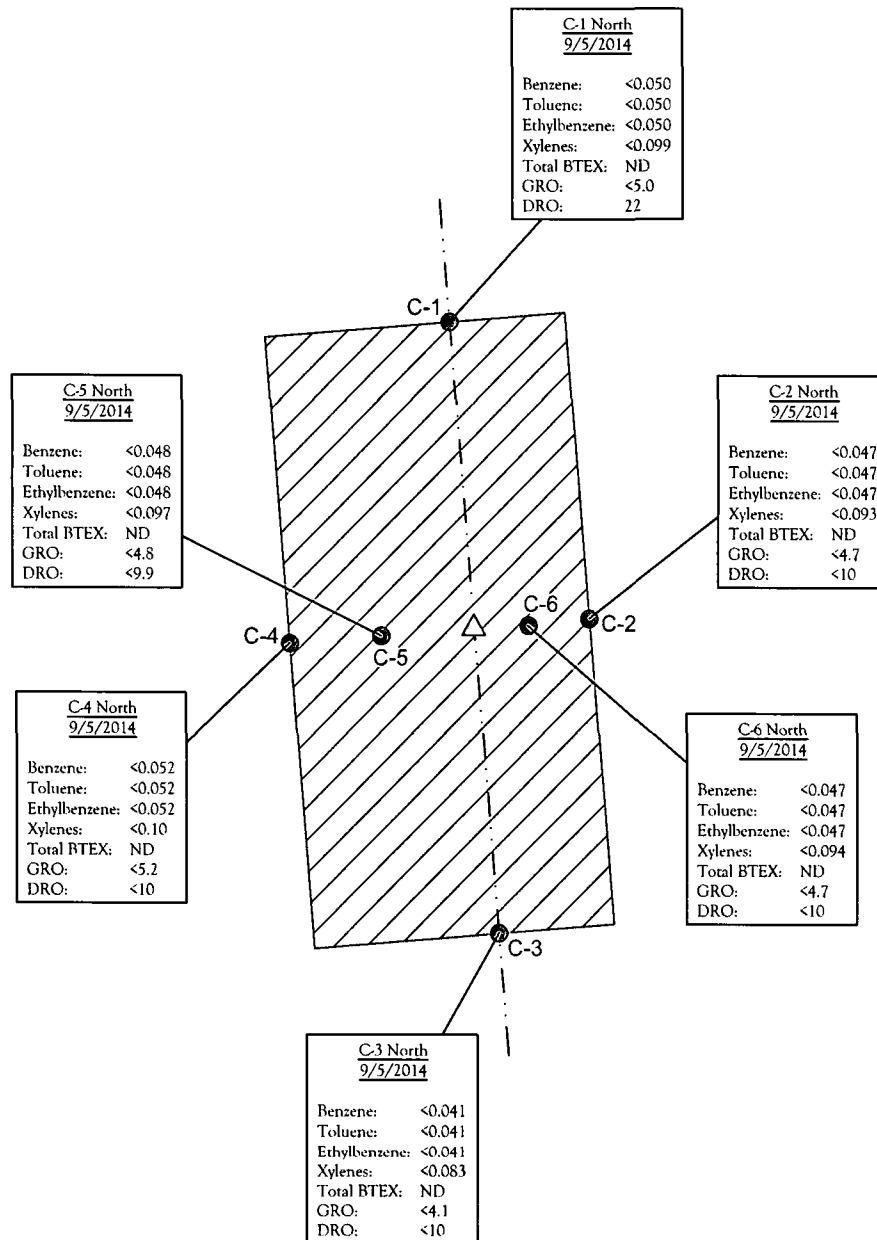
SW $\frac{1}{4}$ S22 T27N R10W
 Rural San Juan County, NM
 36.55462N, 107.89087W
 36.55437N, 107.89080W
 36.55367N, 107.89062W
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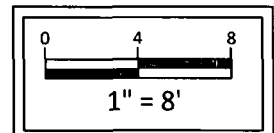
FIGURE 2
Site Vicinity Map
 2013 Aerial Photograph



LEGEND:

- PIPELINE
- SAMPLE LOCATION
- △ RELEASE POINT
- ▨ EXTENT OF EXCAVATION

NOTE: ALL VALUES ARE REPORTED IN mg/kg



Lateral 2A-3 Pipeline Releases

SW $\frac{1}{4}$ S22 T27N R10W
Rural San Juan County, NM
36.55462N, 107.89087W

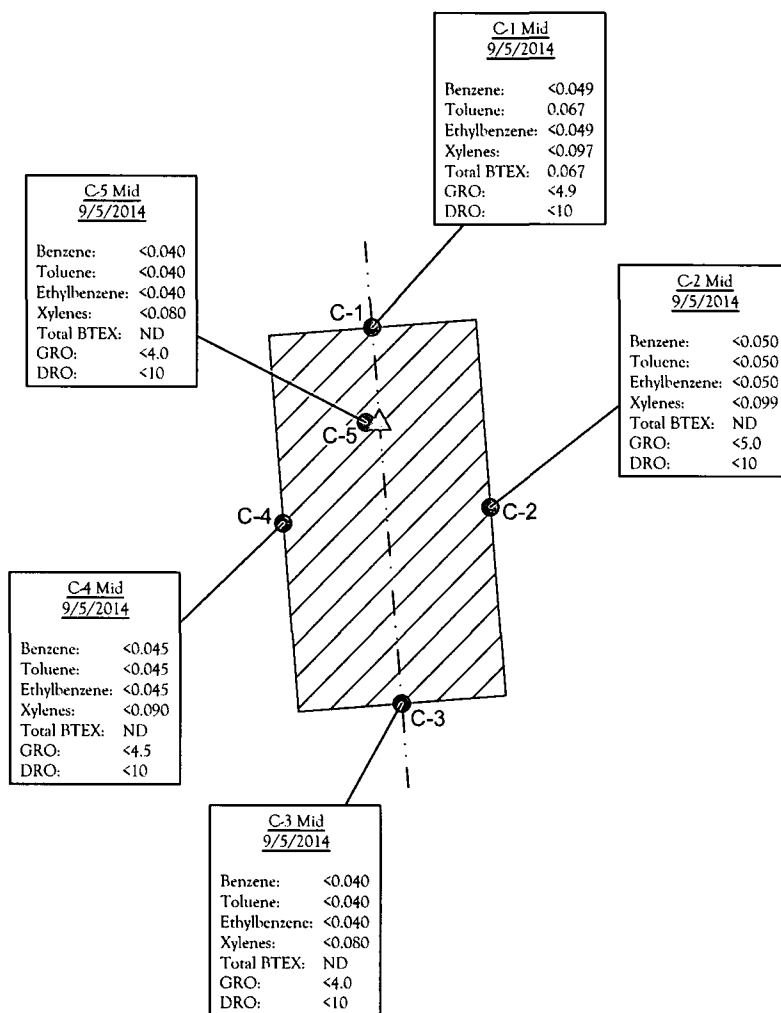
Project No. 7030414G033



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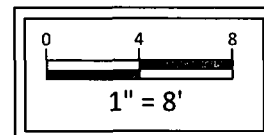
FIGURE 3A
North Excavation Site Map
with Sample Locations



LEGEND:

- PIPELINE
- SAMPLE LOCATION
- △ RELEASE POINT
- ▨ EXTENT OF EXCAVATION

NOTE: ALL VALUES ARE REPORTED IN mg/kg



Lateral 2A-3 Pipeline Releases

SW $\frac{1}{4}$ S22 T27N R10W
Rural San Juan County, NM
36.55437N, 107.89080W

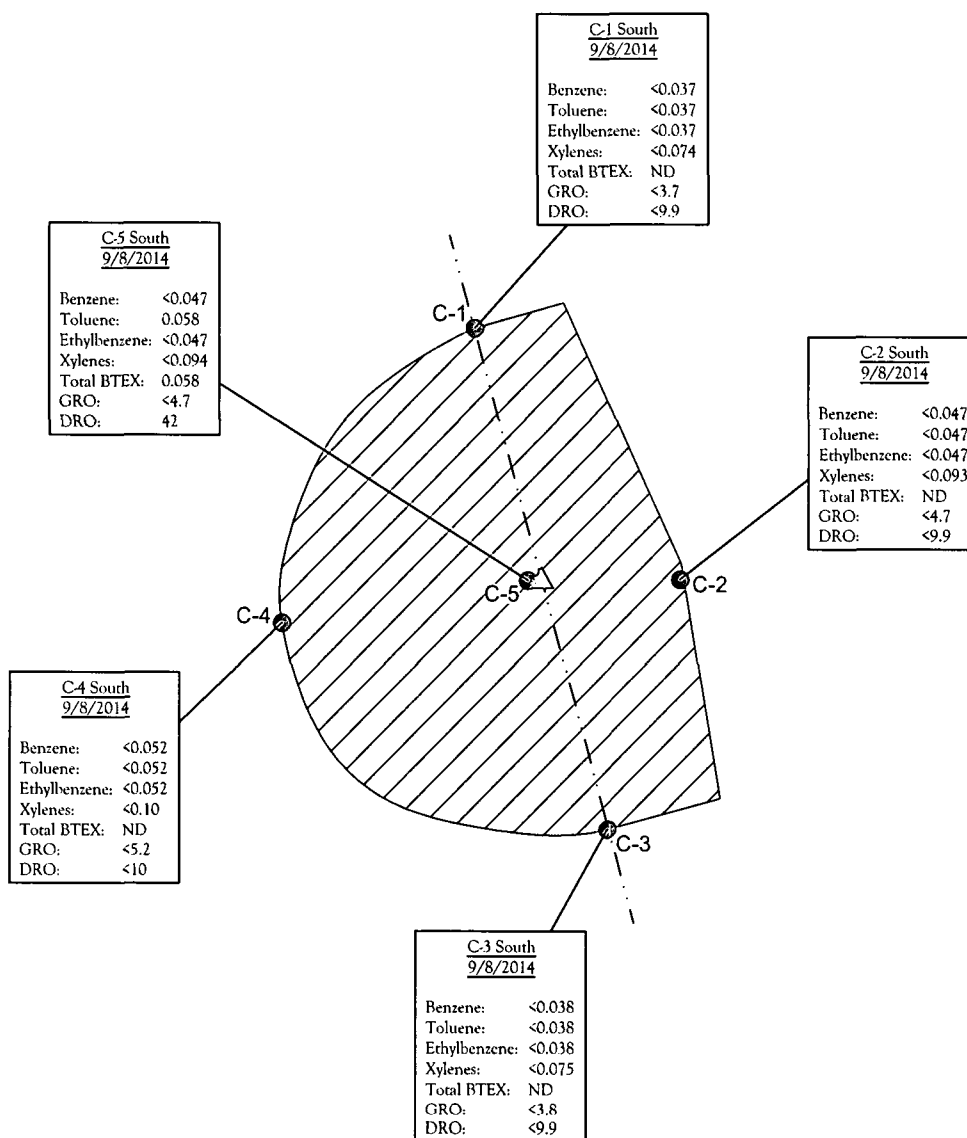
Project No. 7030414G033



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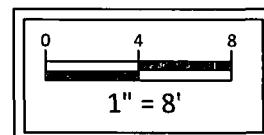
FIGURE 3B
Middle Excavation Site Map
with Sample Locations



LEGEND:

- PIPELINE
- SAMPLE LOCATION
- △ RELEASE POINT
- ▨ EXTENT OF EXCAVATION

NOTE: ALL VALUES ARE REPORTED IN mg/kg



Lateral 2A-3 Pipeline Releases

SW $\frac{1}{4}$ S22 T27N R10W
Rural San Juan County, NM
36.55367N, 107.89062W

Project No. 7030414G033



Apex TITAN, Inc.

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FIGURE 3C
South Excavation Site Map
with Sample Locations

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-138
Revised August 1, 2011
*Surface Waste Management Facility Operator
and Generator shall maintain and make this
documentation available for Division inspection.

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. Generator Name and Address:
Enterprise Field Services, LLC, 614 Reilly Avenue, Farmington, NM 87401
2. Originating Site:
Lateral 2A-3 Pipeline *Sep. 2014*
3. Location of Material (Street Address, City, State or ULSTR):
Unit Letter M, Section 27, T27N, R10W; 36.554534, -107.890875
4. Source and Description of Waste: Hydrocarbon impacted soils associated with a release from a natural gas pipeline
5. Estimated Volume 50 yd³ bbls Known Volume (to be entered by the operator at the end of the haul) 230 yd³ bbls

5. GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS

- I, Thomas Long *Thomas Long* representative or authorized agent for Enterprise Field Services, LLC do hereby
PRINT & SIGN NAME COMPANY NAME
certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988
regulatory determination, the above described waste is: (Check the appropriate classification)
- ☒ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. Operator Use Only: Waste Acceptance Frequency ☐ Monthly ☐ Weekly ☐ Per Load
- ☐ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items)
- ☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☐ Process Knowledge ☐ Other (Provide description in Box 4)

GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS

I, 9-4-14 *Thomas Long*, representative for Enterprise Field Services, LLC authorize Envirotech, Inc. to
Generator Signature
complete the required testing/sign the Generator Waste Testing Certification.

I, Kendra Runnung, representative for Envirotech, Inc. do hereby certify that
representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples
have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results
of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of
19.15.36 NMAC.

6. Transporter: ~~West States Energy Contractors (WSEC)~~ La Plata Construction, Rosenbaum Construction

OCD Permitted Surface Waste Management Facility

Name and Facility Permit #: Envirotech, Inc. Soil Remediation Facility * Permit #: NM 01-0011
Address of Facility: Hilltop, NM

Method of Treatment and/or Disposal:

☐ Evaporation ☐ Injection ☐ Treating Plant ☒ Landfarm ☐ Landfill ☐ Other

Waste Acceptance Status:

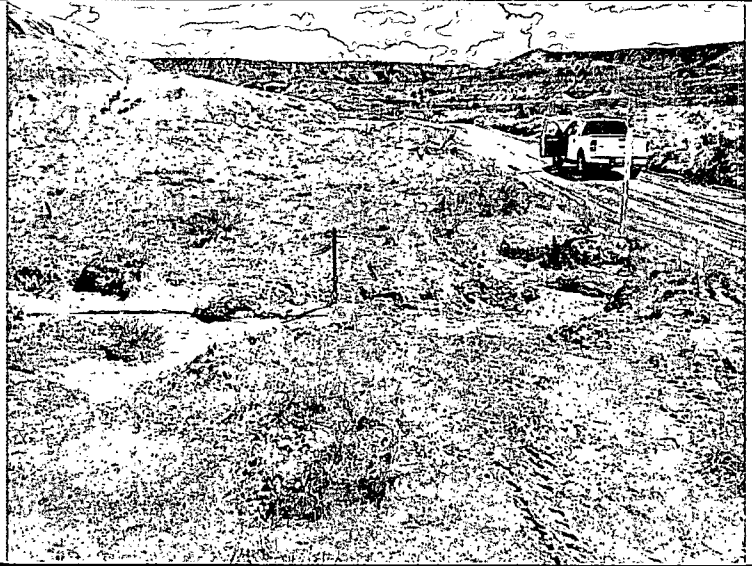
☒ APPROVED

☐ DENIED (Must Be Maintained As Permanent Record)

PRINT NAME: Kendra Runnung TITLE: Waste Coordinator DATE: 9/8/14
SIGNATURE: Kendra Runnung TELEPHONE NO.: 505-632-0615
Surface Waste Management Facility Authorized Agent

Photograph 1

View of Site prior to excavation activities (North release location in foreground, Middle release location in background), facing south.



Photograph 2

View of the South release location prior to excavation activities.



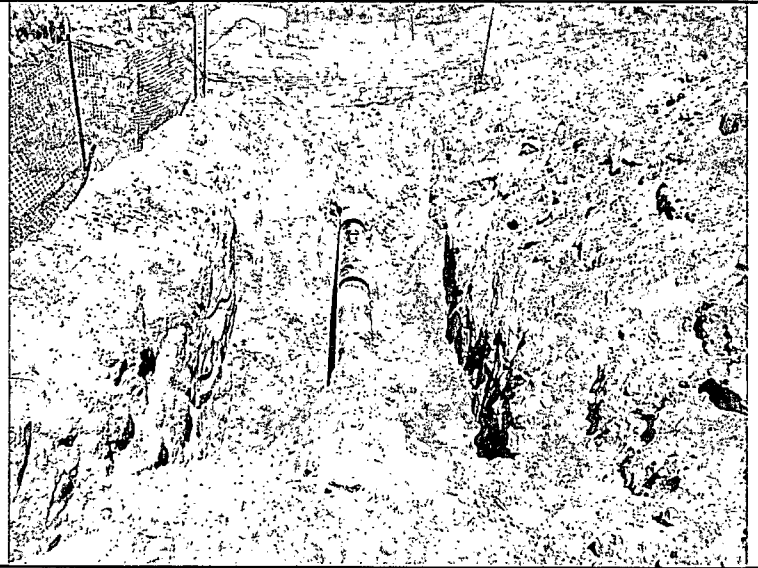
Photograph 3

View of the final North Excavation, facing north.



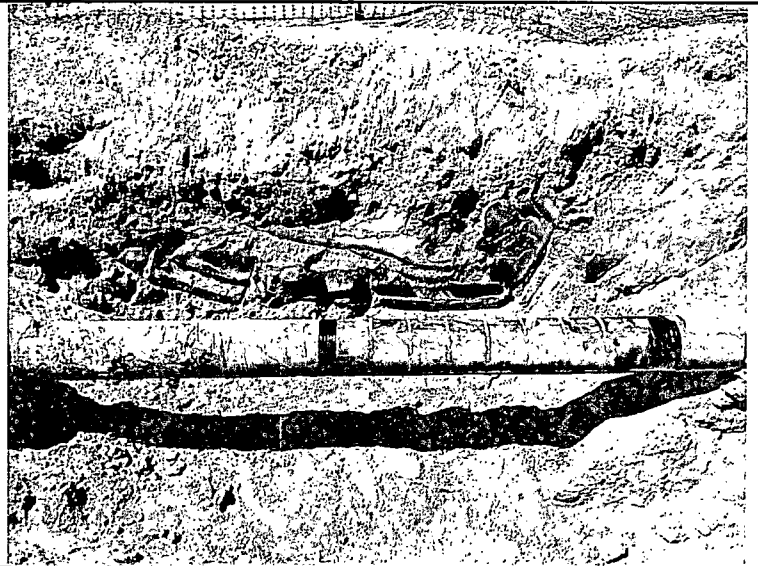
Photograph 4

View of the final Middle Excavation, facing north.



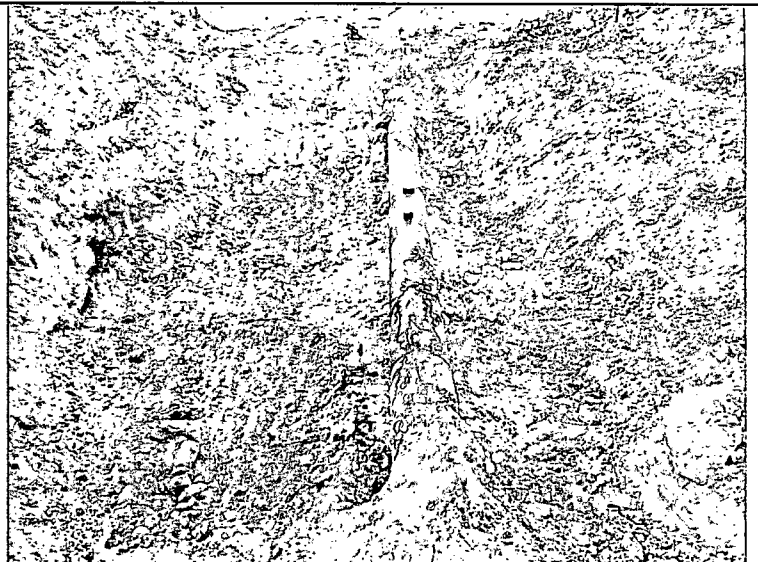
Photograph 5

View of final Middle Excavation over-excavation, facing west.



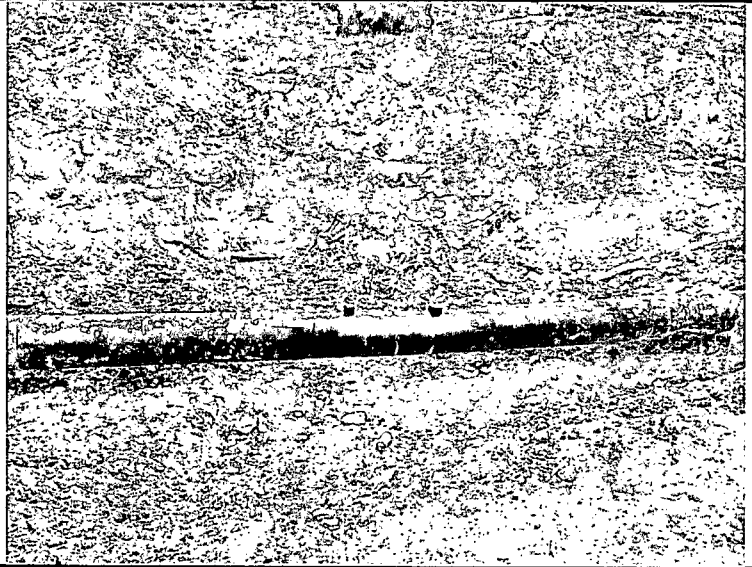
Photograph 6

View of final South Excavation, facing north.



Photograph 7

View of final South Excavation, facing west.



Photograph 8

View of Site during backfilling activities, facing south.

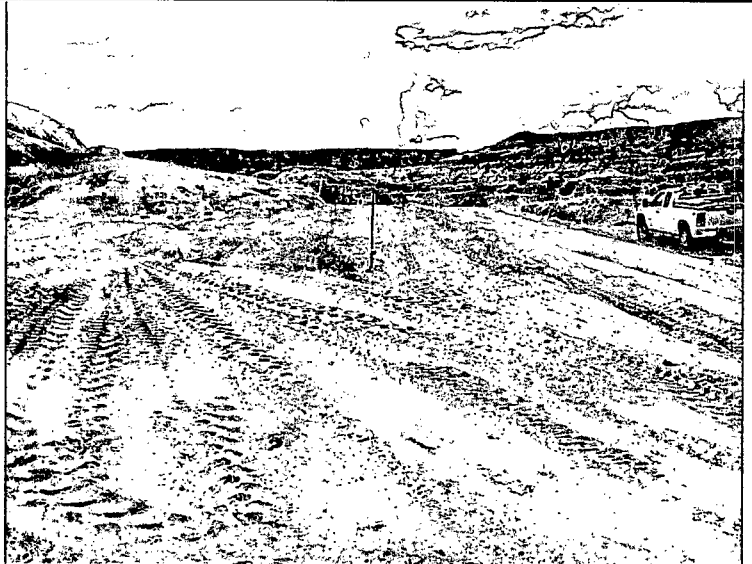




TABLE 1
Lateral 2A-3 Pipeline Releases
SOIL ANALYTICAL SUMMARY

Sample I.D.	Date	Sample Depth (feet)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)
New Mexico Entergy, Mineral & Natural Resources Department, Oil Conservation Division, Remediation Action Level			10	NE	NE	NE	50	100	
Final Confirmation Samples - North Excavation									
C-1 North	9/5/2014	4 to 6	<0.050	<0.050	<0.050	<0.099	ND	<5.0	22
C-2 North	9/5/2014	4 to 6	<0.047	<0.047	<0.047	<0.093	ND	<4.7	<10
C-3 North	9/5/2014	4 to 6	<0.041	<0.041	<0.041	<0.083	ND	<4.1	<10
C-4 North	9/5/2014	4 to 6	<0.052	<0.052	<0.052	<0.10	ND	<5.2	<10
C-5 North	9/5/2014	6	<0.048	<0.048	<0.048	<0.097	ND	<4.8	<9.9
C-6 North	9/5/2014	6	<0.047	<0.047	<0.047	<0.094	ND	<4.7	<10
Final Confirmation Samples - Middle Excavation									
C-1 Mid	9/5/2014	4 to 7	<0.049	0.067	<0.049	<0.097	0.067	<4.9	<10
C-2 Mid	9/5/2014	4 to 7	<0.050	<0.050	<0.050	<0.099	ND	<5.0	<10
C-3 Mid	9/5/2014	4 to 7	<0.040	<0.040	<0.040	<0.080	ND	<4.0	<10
C-4 Mid	9/5/2014	4 to 7	<0.045	<0.045	<0.045	<0.090	ND	<4.5	<10
C-5 Mid	9/5/2014	7	<0.040	<0.040	<0.040	<0.080	ND	<4.0	<10
Final Confirmation Samples - South Excavation									
C-1 South	9/8/2014	2 to 4	<0.037	<0.037	<0.037	<0.074	ND	<3.7	<9.9
C-2 South	9/8/2014	2 to 4	<0.047	<0.047	<0.047	<0.093	ND	<4.7	<9.9
C-3 South	9/8/2014	2 to 4	<0.038	<0.038	<0.038	<0.075	ND	<3.8	<9.9
C-4 South	9/8/2014	2 to 4	<0.052	<0.052	<0.052	<0.10	ND	<5.2	<10
C-5 South	9/8/2014	4	<0.047	0.058	<0.047	<0.094	0.058	<4.7	42

Note: Concentrations in bold and yellow exceed the applicable OCD Remediation Action Level

NE = Not Established

ND = Not Detected above Laboratory Reporting Limits



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

October 03, 2014

Heather Woods
Enterprise Field Services
614 Reilly Ave.
Farmington, NM 87401
TEL: (505) 599-2141
FAX

RE: Lateral 2A-3 North

OrderNo.: 1409278

Dear Heather Woods:

Hall Environmental Analysis Laboratory received 6 sample(s) on 9/6/2014 for the analyses presented in the following report.

This report is a revised report and it replaces the original report issued September 08, 2014.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. All samples are reported as received unless otherwise indicated.

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", with a stylized flourish at the end.

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Enterprise Field Services

Client Sample ID: C-1 North

Project: Lateral 2A-3 North

Collection Date: 9/5/2014 11:12:00 AM

Lab ID: 1409278-001

Matrix: MEOH (SOIL)

Received Date: 9/6/2014 6:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: BCN
Diesel Range Organics (DRO)	22	10		mg/Kg	1	9/7/2014 3:32:24 AM	15157
Surr: DNOP	97.8	57.9-140		%REC	1	9/7/2014 3:32:24 AM	15157
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	9/7/2014 7:55:24 PM	R21049
Surr: BFB	105	80-120		%REC	1	9/7/2014 7:55:24 PM	R21049
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.050		mg/Kg	1	9/7/2014 7:55:24 PM	R21049
Toluene	ND	0.050		mg/Kg	1	9/7/2014 7:55:24 PM	R21049
Ethylbenzene	ND	0.050		mg/Kg	1	9/7/2014 7:55:24 PM	R21049
Xylenes, Total	ND	0.099		mg/Kg	1	9/7/2014 7:55:24 PM	R21049
Surr: 4-Bromofluorobenzene	123	80-120	S	%REC	1	9/7/2014 7:55:24 PM	R21049

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	Page 1 of 9
	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.	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1409278

Date Reported: 10/3/2014

CLIENT: Enterprise Field Services

Client Sample ID: C-2 North

Project: Lateral 2A-3 North

Collection Date: 9/5/2014 11:17:00 AM

Lab ID: 1409278-002

Matrix: MEOH (SOIL)

Received Date: 9/6/2014 6:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: BCN
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	9/8/2014 11:21:32 AM	15157
Surr: DNOP	89.1	57.9-140		%REC	1	9/8/2014 11:21:32 AM	15157
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	9/7/2014 8:25:37 PM	R21049
Surr: BFB	88.5	80-120		%REC	1	9/7/2014 8:25:37 PM	R21049
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.047		mg/Kg	1	9/7/2014 8:25:37 PM	R21049
Toluene	ND	0.047		mg/Kg	1	9/7/2014 8:25:37 PM	R21049
Ethylbenzene	ND	0.047		mg/Kg	1	9/7/2014 8:25:37 PM	R21049
Xylenes, Total	ND	0.093		mg/Kg	1	9/7/2014 8:25:37 PM	R21049
Surr: 4-Bromofluorobenzene	102	80-120		%REC	1	9/7/2014 8:25:37 PM	R21049

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1409278

Date Reported: 10/3/2014

CLIENT: Enterprise Field Services

Client Sample ID: C-3 North

Project: Lateral 2A-3 North

Collection Date: 9/5/2014 11:21:00 AM

Lab ID: 1409278-003

Matrix: MEOH (SOIL)

Received Date: 9/6/2014 6:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: BCN
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	9/8/2014 11:43:04 AM	15157
Surr: DNOP	82.9	57.9-140		%REC	1	9/8/2014 11:43:04 AM	15157
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.1		mg/Kg	1	9/7/2014 9:25:47 PM	R21049
Surr: BFB	102	80-120		%REC	1	9/7/2014 9:25:47 PM	R21049
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.041		mg/Kg	1	9/7/2014 9:25:47 PM	R21049
Toluene	ND	0.041		mg/Kg	1	9/7/2014 9:25:47 PM	R21049
Ethylbenzene	ND	0.041		mg/Kg	1	9/7/2014 9:25:47 PM	R21049
Xylenes, Total	ND	0.083		mg/Kg	1	9/7/2014 9:25:47 PM	R21049
Surr: 4-Bromofluorobenzene	120	80-120		%REC	1	9/7/2014 9:25:47 PM	R21049

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1409278

Date Reported: 10/3/2014

CLIENT: Enterprise Field Services

Client Sample ID: C-4 North

Project: Lateral 2A-3 North

Collection Date: 9/5/2014 11:26:00 AM

Lab ID: 1409278-004

Matrix: MEOH (SOIL)

Received Date: 9/6/2014 6:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: BCN
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	9/8/2014 12:04:51 PM	15157
Surr: DNOP	80.2	57.9-140		%REC	1	9/8/2014 12:04:51 PM	15157
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.2		mg/Kg	1	9/7/2014 9:55:38 PM	R21049
Surr: BFB	89.9	80-120		%REC	1	9/7/2014 9:55:38 PM	R21049
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.052		mg/Kg	1	9/7/2014 9:55:38 PM	R21049
Toluene	ND	0.052		mg/Kg	1	9/7/2014 9:55:38 PM	R21049
Ethylbenzene	ND	0.052		mg/Kg	1	9/7/2014 9:55:38 PM	R21049
Xylenes, Total	ND	0.10		mg/Kg	1	9/7/2014 9:55:38 PM	R21049
Surr: 4-Bromofluorobenzene	105	80-120		%REC	1	9/7/2014 9:55:38 PM	R21049

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1409278

Date Reported: 10/3/2014

CLIENT: Enterprise Field Services

Client Sample ID: C-5 North

Project: Lateral 2A-3 North

Collection Date: 9/5/2014 11:30:00 AM

Lab ID: 1409278-005

Matrix: MEOH (SOIL)

Received Date: 9/6/2014 6:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: BCN
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	9/7/2014 4:57:51 AM	15157
Surr: DNOP	85.7	57.9-140		%REC	1	9/7/2014 4:57:51 AM	15157
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	9/7/2014 10:25:55 PM	R21049
Surr: BFB	97.2	80-120		%REC	1	9/7/2014 10:25:55 PM	R21049
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.048		mg/Kg	1	9/7/2014 10:25:55 PM	R21049
Toluene	ND	0.048		mg/Kg	1	9/7/2014 10:25:55 PM	R21049
Ethylbenzene	ND	0.048		mg/Kg	1	9/7/2014 10:25:55 PM	R21049
Xylenes, Total	ND	0.097		mg/Kg	1	9/7/2014 10:25:55 PM	R21049
Surr: 4-Bromofluorobenzene	114	80-120		%REC	1	9/7/2014 10:25:55 PM	R21049

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Enterprise Field Services

Client Sample ID: C-6 North

Project: Lateral 2A-3 North

Collection Date: 9/5/2014 11:34:00 AM

Lab ID: 1409278-006

Matrix: MEOH (SOIL)

Received Date: 9/6/2014 6:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: BCN
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	9/7/2014 5:19:04 AM	15157
Surr: DNOP	86.2	57.9-140		%REC	1	9/7/2014 5:19:04 AM	15157
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	9/7/2014 10:56:06 PM	R21049
Surr: BFB	89.0	80-120		%REC	1	9/7/2014 10:56:06 PM	R21049
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.047		mg/Kg	1	9/7/2014 10:56:06 PM	R21049
Toluene	ND	0.047		mg/Kg	1	9/7/2014 10:56:06 PM	R21049
Ethylbenzene	ND	0.047		mg/Kg	1	9/7/2014 10:56:06 PM	R21049
Xylenes, Total	ND	0.094		mg/Kg	1	9/7/2014 10:56:06 PM	R21049
Surr: 4-Bromofluorobenzene	103	80-120		%REC	1	9/7/2014 10:56:06 PM	R21049

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.
	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#: 1409278

03-Oct-14

Client: Enterprise Field Services

Project: Lateral 2A-3 North

Sample ID	MB-15157	SampType	MBLK	TestCode	EPA Method 8015D: Diesel Range Organics					
Client ID	PBS	Batch ID	15157	RunNo	21040					
Prep Date	9/6/2014	Analysis Date	9/6/2014	SeqNo	612637	Units	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Surr: DNOP	8.8		10.00		88.3	57.9	140			

Sample ID	LCS-15157	SampType	LCS	TestCode	EPA Method 8015D: Diesel Range Organics					
Client ID	LCSS	Batch ID	15157	RunNo	21040					
Prep Date	9/6/2014	Analysis Date	9/6/2014	SeqNo	612639	Units	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	49	10	50.00	0	98.3	68.6	130			
Surr: DNOP	4.1		5.000		81.7	57.9	140			

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. |
| 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#: 1409278

03-Oct-14

Client: Enterprise Field Services

Project: Lateral 2A-3 North

Sample ID	MB-15128 MK	SampType:	MBLK	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	PBS	Batch ID:	R21049	RunNo:	21049					
Prep Date:		Analysis Date:	9/7/2014	SeqNo:	612585	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	1000		1000		101	80	120			

Sample ID	LCS-15128 MK	SampType:	LCS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	LCSS	Batch ID:	R21049	RunNo:	21049					
Prep Date:		Analysis Date:	9/7/2014	SeqNo:	612587	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	25.00	0	99.7	65.8	139			
Surr: BFB	950		1000		95.1	80	120			

Sample ID	LCSD-15128 MK	SampType:	LCSD	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	LCSS02	Batch ID:	R21049	RunNo:	21049					
Prep Date:		Analysis Date:	9/7/2014	SeqNo:	612589	Units:	%REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1100							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.
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1409278

03-Oct-14

Client: Enterprise Field Services

Project: Lateral 2A-3 North

Sample ID	MB-15128 MK		SampType: MBLK		TestCode: EPA Method 8021B: Volatiles					
Client ID:	PBS		Batch ID: R21049		RunNo: 21049					
Prep Date:			Analysis Date: 9/7/2014		SeqNo: 612641		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	1.2		1.000		120	80	120			

Sample ID	LCS-15128 MK		SampType: LCS		TestCode: EPA Method 8021B: Volatiles					
Client ID:	LCSS		Batch ID: R21049		RunNo: 21049					
Prep Date:			Analysis Date: 9/7/2014		SeqNo: 612642		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.90	0.050	1.000	0	89.9	80	120			
Toluene	0.90	0.050	1.000	0	90.4	80	120			
Ethylbenzene	0.93	0.050	1.000	0	93.2	80	120			
Xylenes, Total	2.9	0.10	3.000	0	98.0	80	120			
Surr: 4-Bromofluorobenzene	0.90		1.000		89.6	80	120			

Sample ID	LCSD-15128 MK		SampType: LCSD		TestCode: EPA Method 8021B: Volatiles					
Client ID:	LCSS02		Batch ID: R21049		RunNo: 21049					
Prep Date:			Analysis Date: 9/7/2014		SeqNo: 612643		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.90	0.050	1.000	0	89.9	80	120	0.0223	20	
Toluene	0.90	0.050	1.000	0	90.0	80	120	0.543	20	
Ethylbenzene	0.94	0.050	1.000	0	93.7	80	120	0.460	20	
Xylenes, Total	2.9	0.10	3.000	0	98.0	80	120	0.0204	20	
Surr: 4-Bromofluorobenzene	1.2		1.000		120	80	120	0		

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



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

Sample Log-In Check List

Client Name: Enterprise

Work Order Number: 1409278

RcptNo: 1

Received by/date:

Logged By: Lindsay Mangin

9/6/2014 6:45:00 AM

Completed By: Lindsay Mangin

9/6/2014 7:20:14 AM

Reviewed By:

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 $>0^{\circ}\text{C}$ 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:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:			
Client Instructions:			

17. Additional remarks:

18. Cooler Information

Cooler No.	Temp. $^{\circ}\text{C}$	Condition	Seal Intact	Seal No.	Seal Date	Signed By
1	1.6	Good	Yes			

Client: Enterprise Field Services

Mailing Address: 614 Reilly Avenue
Farmington, NM 87401

Phone #: (505) 716-2787

email or Fax#:

QA/QC Package:

☒ Standard ☐ Level 4 (Full Validation)

Accreditation

☐ NELAP ☐ Other _____

☐ EDD (Type) _____

☐ Standard ☒ Rush Same Day

Lateral 2A-3 North

Project #:

Project Manager:

Heather Woods

Sampler: *H. Woods*

On Ice: ☒ Yes ☐ No

Sample Temperature: 116

[illegible]

Date:	Time:	Relinquished by:
9/5/14	11:20	Heather M. Woods

Received by: Christine Walde Date: 9/5/14 Time: 1620

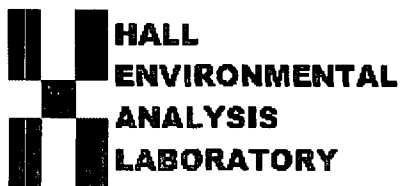
Date:	Time:	Relinquished by:
9/5/14	1830	Shirley White

Received by:	Date	Time
<i>[Signature]</i>	09/06/14	11:45

Remarks: Direct Bill to Enterprise Field Services
Attn: Tom Long

WD 829499
Paykey RB21200

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*

October 03, 2014

Heather Woods
Enterprise Field Services
614 Reilly Ave.
Farmington, NM 87401
TEL: (505) 599-2141
FAX

RE: Lateral 2A-3 Mid

OrderNo.: 1409276

Dear Heather Woods:

Hall Environmental Analysis Laboratory received 5 sample(s) on 9/6/2014 for the analyses presented in the following report.

This report is a revised report and it replaces the original report issued September 08, 2014.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. All samples are reported as received unless otherwise indicated.

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

Sincerely,

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

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1409276

Date Reported: 10/3/2014

CLIENT: Enterprise Field Services

Client Sample ID: C-1 Mid

Project: Lateral 2A-3 Mid

Collection Date: 9/5/2014 11:43:00 AM

Lab ID: 1409276-001

Matrix: MEOH (SOIL)

Received Date: 9/6/2014 6:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: BCN
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	9/6/2014 11:15:41 PM	15157
Surr: DNOP	92.9	57.9-140		%REC	1	9/6/2014 11:15:41 PM	15157
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	9/7/2014 8:32:34 PM	R21046
Surr: BFB	93.4	80-120		%REC	1	9/7/2014 8:32:34 PM	R21046
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.049		mg/Kg	1	9/7/2014 8:32:34 PM	R21046
Toluene	0.067	0.049		mg/Kg	1	9/7/2014 8:32:34 PM	R21046
Ethylbenzene	ND	0.049		mg/Kg	1	9/7/2014 8:32:34 PM	R21046
Xylenes, Total	ND	0.097		mg/Kg	1	9/7/2014 8:32:34 PM	R21046
Surr: 4-Bromofluorobenzene	103	80-120		%REC	1	9/7/2014 8:32:34 PM	R21046

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	Page 1 of 8
	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.	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Enterprise Field Services

Client Sample ID: C-2 Mid

Project: Lateral 2A-3 Mid

Collection Date: 9/5/2014 11:47:00 AM

Lab ID: 1409276-002

Matrix: MEOH (SOIL)

Received Date: 9/6/2014 6:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: BCN
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	9/7/2014 12:19:46 AM	15157
Surr: DNOP	88.0	57.9-140		%REC	1	9/7/2014 12:19:46 AM	15157
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	9/7/2014 9:01:13 PM	R21046
Surr: BFB	92.0	80-120		%REC	1	9/7/2014 9:01:13 PM	R21046
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.050		mg/Kg	1	9/7/2014 9:01:13 PM	R21046
Toluene	ND	0.050		mg/Kg	1	9/7/2014 9:01:13 PM	R21046
Ethylbenzene	ND	0.050		mg/Kg	1	9/7/2014 9:01:13 PM	R21046
Xylenes, Total	ND	0.099		mg/Kg	1	9/7/2014 9:01:13 PM	R21046
Surr: 4-Bromofluorobenzene	99.8	80-120		%REC	1	9/7/2014 9:01:13 PM	R21046

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	Page 2 of 8
	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.	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1409276

Date Reported: 10/3/2014

CLIENT: Enterprise Field Services

Client Sample ID: C-3 Mid

Project: Lateral 2A-3 Mid

Collection Date: 9/5/2014 11:51:00 AM

Lab ID: 1409276-003

Matrix: MEOH (SOIL)

Received Date: 9/6/2014 6:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: BCN
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	9/7/2014 12:41:12 AM	15157
Surr: DNOP	91.5	57.9-140		%REC	1	9/7/2014 12:41:12 AM	15157
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.0		mg/Kg	1	9/7/2014 9:29:46 PM	R21046
Surr: BFB	91.5	80-120		%REC	1	9/7/2014 9:29:46 PM	R21046
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.040		mg/Kg	1	9/7/2014 9:29:46 PM	R21046
Toluene	ND	0.040		mg/Kg	1	9/7/2014 9:29:46 PM	R21046
Ethylbenzene	ND	0.040		mg/Kg	1	9/7/2014 9:29:46 PM	R21046
Xylenes, Total	ND	0.080		mg/Kg	1	9/7/2014 9:29:46 PM	R21046
Surr: 4-Bromofluorobenzene	99.3	80-120		%REC	1	9/7/2014 9:29:46 PM	R21046

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

Analytical Report

Lab Order 1409276

Date Reported: 10/3/2014

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Enterprise Field Services**Client Sample ID:** C-4 Mid**Project:** Lateral 2A-3 Mid**Collection Date:** 9/5/2014 11:56:00 AM**Lab ID:** 1409276-004**Matrix:** MEOH (SOIL)**Received Date:** 9/6/2014 6:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: BCN
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	9/7/2014 1:02:53 AM	15157
Surr: DNOP	89.4	57.9-140		%REC	1	9/7/2014 1:02:53 AM	15157
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.5		mg/Kg	1	9/7/2014 9:58:29 PM	R21046
Surr: BFB	90.6	80-120		%REC	1	9/7/2014 9:58:29 PM	R21046
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.045		mg/Kg	1	9/7/2014 9:58:29 PM	R21046
Toluene	ND	0.045		mg/Kg	1	9/7/2014 9:58:29 PM	R21046
Ethylbenzene	ND	0.045		mg/Kg	1	9/7/2014 9:58:29 PM	R21046
Xylenes, Total	ND	0.090		mg/Kg	1	9/7/2014 9:58:29 PM	R21046
Surr: 4-Bromofluorobenzene	97.4	80-120		%REC	1	9/7/2014 9:58:29 PM	R21046

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

Analytical Report

Lab Order 1409276

Date Reported: 10/3/2014

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Enterprise Field Services**Client Sample ID:** C-5 Mid**Project:** Lateral 2A-3 Mid**Collection Date:** 9/5/2014 12:00:00 PM**Lab ID:** 1409276-005**Matrix:** MEOH (SOIL)**Received Date:** 9/6/2014 6:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: BCN
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	9/7/2014 1:24:18 AM	15157
Surr: DNOP	90.7	57.9-140		%REC	1	9/7/2014 1:24:18 AM	15157
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.0		mg/Kg	1	9/7/2014 10:27:12 PM	R21046
Surr: BFB	91.9	80-120		%REC	1	9/7/2014 10:27:12 PM	R21046
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.040		mg/Kg	1	9/7/2014 10:27:12 PM	R21046
Toluene	ND	0.040		mg/Kg	1	9/7/2014 10:27:12 PM	R21046
Ethylbenzene	ND	0.040		mg/Kg	1	9/7/2014 10:27:12 PM	R21046
Xylenes, Total	ND	0.080		mg/Kg	1	9/7/2014 10:27:12 PM	R21046
Surr: 4-Bromofluorobenzene	98.0	80-120		%REC	1	9/7/2014 10:27:12 PM	R21046

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.
	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#: 1409276

03-Oct-14

Client: Enterprise Field Services

Project: Lateral 2A-3 Mid

Sample ID	MB-15157		SampType: MBLK		TestCode: EPA Method 8015D: Diesel Range Organics					
Client ID:	PBS		Batch ID: 15157		RunNo: 21040					
Prep Date:	9/6/2014		Analysis Date: 9/6/2014		SeqNo: 612637		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Surr: DNOP	8.8		10.00		88.3	57.9	140			

Sample ID	LCS-15157		SampType: LCS		TestCode: EPA Method 8015D: Diesel Range Organics					
Client ID:	LCSS		Batch ID: 15157		RunNo: 21040					
Prep Date:	9/6/2014		Analysis Date: 9/6/2014		SeqNo: 612639		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	49	10	50.00	0	98.3	68.6	130			
Surr: DNOP	4.1		5.000		81.7	57.9	140			

Sample ID	1409276-001AMS		SampType:	MS		TestCode:	EPA Method 8015D: Diesel Range Organics				
Client ID:	C-1 Mid		Batch ID:	15157		RunNo:	21040				
Prep Date:	9/6/2014		Analysis Date:	9/6/2014		SeqNo:	612700		Units: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Diesel Range Organics (DRO)	49	10	50.05	0	97.3	40.1	152				
Surr: DNOP	4.2		5.005		83.4	57.9	140				

Sample ID	1409276-001AMSD		SampType:	MSD		TestCode:	EPA Method 8015D: Diesel Range Organics				
Client ID:	C-1 Mid		Batch ID:	15157		RunNo:	21040				
Prep Date:	9/6/2014		Analysis Date:	9/6/2014		SeqNo:	612703		Units: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Diesel Range Organics (DRO)	51	10	50.20	0	101	40.1	152	3.62	32.1		
Surr: DNOP	4.2		5.020		84.4	57.9	140	0	0		

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. |
| 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#: 1409276

03-Oct-14

Client: Enterprise Field Services

Project: Lateral 2A-3 Mid

Sample ID	MB-15146 MK		SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	PBS		Batch ID: R21046		RunNo: 21046					
Prep Date:			Analysis Date: 9/7/2014		SeqNo: 612473		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	900		1000		90.4	80	120			

Sample ID	LCS-15146 MK		SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	LCSS		Batch ID: R21046		RunNo: 21046					
Prep Date:			Analysis Date: 9/7/2014		SeqNo: 612477		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	94.8	65.8	139			
Surr: BFB	990		1000		98.7	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. |
| 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#: 1409276

03-Oct-14

Client: Enterprise Field Services

Project: Lateral 2A-3 Mid

Sample ID	MB-15146 MK		SampType:	MBLK		TestCode:	EPA Method 8021B: Volatiles			
Client ID:	PBS		Batch ID:	R21046		RunNo:	21046			
Prep Date:			Analysis Date:	9/7/2014		SeqNo:	612505		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		100	80	120			

Sample ID	LCS-15146 MK		SampType:	LCS		TestCode:	EPA Method 8021B: Volatiles			
Client ID:	LCSS		Batch ID:	R21046		RunNo:	21046			
Prep Date:			Analysis Date:	9/7/2014		SeqNo:	612506		Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.93	0.050	1.000	0	93.0	80	120			
Toluene	0.93	0.050	1.000	0	93.2	80	120			
Ethylbenzene	0.96	0.050	1.000	0	95.8	80	120			
Xylenes, Total	2.9	0.10	3.000	0	96.3	80	120			
Surr: 4-Bromofluorobenzene	1.1		1.000		106	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
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.
RL Reporting Detection Limit



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

Sample Log-In Check List

Client Name: Enterprise

Work Order Number: 1409276

RcptNo: 1

Received by/date:

Logged By: Lindsay Mangin

9/8/2014 6:45:00 AM

Completed By: Lindsay Mangin

9/8/2014 7:10:34 AM

Reviewed By:

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 $>0^{\circ}\text{C}$ 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. $^{\circ}\text{C}$	Condition	Seal Intact	Seal No.	Seal Date	Signed By
1	1.6	Good	Yes			

Chain-of-Custody Record		Turn-Around Time:	
Client: <u>Enterprise Field Services</u>		<input type="checkbox"/> Standard <input checked="" type="checkbox"/> Rush <u>Same Day</u>	
Mailing Address: <u>614 Reilly Avenue</u>		Project Name: <u>Lateral 2A-3 Mid</u>	
<u>Farmington, NM 87401</u>		Project #:	
Phone #: <u>(505) 716-2787</u>		Project Manager:	
email or Fax#:		<u>Heather Woods</u>	
QA/QC Package:		Sampler: <u>H. Woods</u>	
<input checked="" type="checkbox"/> Standard <input type="checkbox"/> Level 4 (Full Validation)		On Ice: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Accreditation		Sample Temperature: <u>7.6</u>	
<input type="checkbox"/> NELAP <input type="checkbox"/> Other _____			
<input type="checkbox"/> EDD (Type) _____			

☐ Standard ☒ Rush Same Day

Lateral 2A-3 Mid

Project #:

Project Manager:

Sampler: H. Woods

On Ice ☒ Yes ☐ No

Sample Temperature: 116

[illegible]

Date:	Time:	Relinquished by:	Received by:	Date	Time
9/5/14	1620	Heather M. Woods	Cristine Waite	9/5/14	1620
Date:	Time:	Relinquished by:	Received by:	Date	Time
9/5/14	1830	Cristine Waite	[Signature]	9/6/14	0645

Remarks: Direct Bill to Enterprise Field Services
Attn: Tom Long

WD 829499
Raykey RB21200



HALL ENVIRONMENTAL ANALYSIS LABORATORY

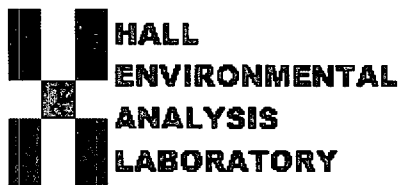
www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

[illegible]



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

October 03, 2014

Heather Woods
Enterprise Field Services
614 Reilly Ave.
Farmington, NM 87401
TEL: (505) 599-2141
FAX

RE: Enterprise Lateral 2A-3 South

OrderNo.: 1409340

Dear Heather Woods:

Hall Environmental Analysis Laboratory received 5 sample(s) on 9/9/2014 for the analyses presented in the following report.

This report is a revised report and it replaces the original report issued September 10, 2014.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. All samples are reported as received unless otherwise indicated.

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

Sincerely,

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

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical ReportLab Order **1409340**Date Reported: **10/3/2014****Hall Environmental Analysis Laboratory, Inc.****CLIENT:** Enterprise Field Services**Client Sample ID:** C-1 South**Project:** Enterprise Lateral 2A-3 South**Collection Date:** 9/8/2014 2:15:00 PM**Lab ID:** 1409340-001**Matrix:** MEOH (SOIL)**Received Date:** 9/9/2014 7:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: BCN
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	9/9/2014 11:03:35 AM	15188
Surr: DNOP	122	57.9-140		%REC	1	9/9/2014 11:03:35 AM	15188
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	3.7		mg/Kg	1	9/9/2014 10:34:58 AM	R21095
Surr: BFB	89.2	80-120		%REC	1	9/9/2014 10:34:58 AM	R21095
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.037		mg/Kg	1	9/9/2014 10:34:58 AM	R21095
Toluene	ND	0.037		mg/Kg	1	9/9/2014 10:34:58 AM	R21095
Ethylbenzene	ND	0.037		mg/Kg	1	9/9/2014 10:34:58 AM	R21095
Xylenes, Total	ND	0.074		mg/Kg	1	9/9/2014 10:34:58 AM	R21095
Surr: 4-Bromofluorobenzene	96.9	80-120		%REC	1	9/9/2014 10:34:58 AM	R21095

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1409340

Date Reported: 10/3/2014

CLIENT: Enterprise Field Services

Client Sample ID: C-2 South

Project: Enterprise Lateral 2A-3 South

Collection Date: 9/8/2014 11:45:00 AM

Lab ID: 1409340-002

Matrix: MEOH (SOIL)

Received Date: 9/9/2014 7:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: BCN
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	9/9/2014 11:25:04 AM	15188
Surr: DNOP	116	57.9-140		%REC	1	9/9/2014 11:25:04 AM	15188
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	9/9/2014 11:03:37 AM	R21095
Surr: BFB	90.5	80-120		%REC	1	9/9/2014 11:03:37 AM	R21095
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.047		mg/Kg	1	9/9/2014 11:03:37 AM	R21095
Toluene	ND	0.047		mg/Kg	1	9/9/2014 11:03:37 AM	R21095
Ethylbenzene	ND	0.047		mg/Kg	1	9/9/2014 11:03:37 AM	R21095
Xylenes, Total	ND	0.093		mg/Kg	1	9/9/2014 11:03:37 AM	R21095
Surr: 4-Bromofluorobenzene	98.5	80-120		%REC	1	9/9/2014 11:03:37 AM	R21095

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

Analytical Report

Lab Order 1409340

Date Reported: 10/3/2014

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Enterprise Field Services**Client Sample ID:** C-3 South**Project:** Enterprise Lateral 2A-3 South**Collection Date:** 9/8/2014 2:35:00 PM**Lab ID:** 1409340-003**Matrix:** MEOH (SOIL)**Received Date:** 9/9/2014 7:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: BCN
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	9/9/2014 11:46:26 AM	15188
Surr: DNOP	126	57.9-140		%REC	1	9/9/2014 11:46:26 AM	15188
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	3.8		mg/Kg	1	9/9/2014 11:32:17 AM	R21095
Surr: BFB	92.1	80-120		%REC	1	9/9/2014 11:32:17 AM	R21095
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.038		mg/Kg	1	9/9/2014 11:32:17 AM	R21095
Toluene	ND	0.038		mg/Kg	1	9/9/2014 11:32:17 AM	R21095
Ethylbenzene	ND	0.038		mg/Kg	1	9/9/2014 11:32:17 AM	R21095
Xylenes, Total	ND	0.075		mg/Kg	1	9/9/2014 11:32:17 AM	R21095
Surr: 4-Bromofluorobenzene	99.7	80-120		%REC	1	9/9/2014 11:32:17 AM	R21095

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

Analytical Report

Lab Order 1409340

Date Reported: 10/3/2014

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Enterprise Field Services**Client Sample ID:** C-4 South**Project:** Enterprise Lateral 2A-3 South**Collection Date:** 9/8/2014 3:30:00 PM**Lab ID:** 1409340-004**Matrix:** MEOH (SOIL)**Received Date:** 9/9/2014 7:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: BCN
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	9/9/2014 12:07:51 PM	15188
Surr: DNOP	127	57.9-140		%REC	1	9/9/2014 12:07:51 PM	15188
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.2		mg/Kg	1	9/9/2014 12:00:54 PM	R21095
Surr: BFB	91.6	80-120		%REC	1	9/9/2014 12:00:54 PM	R21095
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.052		mg/Kg	1	9/9/2014 12:00:54 PM	R21095
Toluene	ND	0.052		mg/Kg	1	9/9/2014 12:00:54 PM	R21095
Ethylbenzene	ND	0.052		mg/Kg	1	9/9/2014 12:00:54 PM	R21095
Xylenes, Total	ND	0.10		mg/Kg	1	9/9/2014 12:00:54 PM	R21095
Surr: 4-Bromofluorobenzene	97.8	80-120		%REC	1	9/9/2014 12:00:54 PM	R21095

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1409340

Date Reported: 10/3/2014

CLIENT: Enterprise Field Services

Client Sample ID: C-5 South

Project: Enterprise Lateral 2A-3 South

Collection Date: 9/8/2014 11:40:00 AM

Lab ID: 1409340-005

Matrix: MEOH (SOIL)

Received Date: 9/9/2014 7:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: BCN
Diesel Range Organics (DRO)	42	10		mg/Kg	1	9/9/2014 12:29:14 PM	15188
Surr: DNOP	128	57.9-140		%REC	1	9/9/2014 12:29:14 PM	15188
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	9/9/2014 12:29:30 PM	R21095
Surr: BFB	92.5	80-120		%REC	1	9/9/2014 12:29:30 PM	R21095
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.047		mg/Kg	1	9/9/2014 12:29:30 PM	R21095
Toluene	0.058	0.047		mg/Kg	1	9/9/2014 12:29:30 PM	R21095
Ethylbenzene	ND	0.047		mg/Kg	1	9/9/2014 12:29:30 PM	R21095
Xylenes, Total	ND	0.094		mg/Kg	1	9/9/2014 12:29:30 PM	R21095
Surr: 4-Bromofluorobenzene	99.4	80-120		%REC	1	9/9/2014 12:29:30 PM	R21095

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.
	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#: 1409340

03-Oct-14

Client: Enterprise Field Services

Project: Enterprise Lateral 2A-3 South

Sample ID	MB-15188	SampType:	MBLK	TestCode:	EPA Method 8015D: Diesel Range Organics					
Client ID:	PBS	Batch ID:	15188	RunNo:	21055					
Prep Date:	9/9/2014	Analysis Date:	9/9/2014	SeqNo:	613919	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Surr: DNOP	8.6		10.00		86.3	57.9	140			

Sample ID	LCS-15188		SampType:	LCS		TestCode:	EPA Method 8015D: Diesel Range Organics				
Client ID:	LCSS		Batch ID:	15188		RunNo:	21055				
Prep Date:	9/9/2014		Analysis Date:	9/9/2014		SeqNo:	613920		Units:	mg/Kg	
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	68.6	130				
Surr: DNOP	3.9		5.000		78.7	57.9	140				

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.
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1409340

03-Oct-14

Client: Enterprise Field Services
Project: Enterprise Lateral 2A-3 South

Sample ID	5ML RB	SampType:	MBLK	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	PBS	Batch ID:	R21095	RunNo:	21095					
Prep Date:		Analysis Date:	9/9/2014	SeqNo:	614202	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	900		1000		89.8	80	120			

Sample ID	2.5UG GRO LCS	SampType:	LCS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	LCSS	Batch ID:	R21095	RunNo:	21095					
Prep Date:		Analysis Date:	9/9/2014	SeqNo:	614205	Units:	mg/Kg			
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	65.8	139			
Surr: BFB	990		1000		99.4	80	120			

Sample ID	1409340-002AMS	SampType:	MS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	C-2 South	Batch ID:	R21095	RunNo:	21095					
Prep Date:		Analysis Date:	9/9/2014	SeqNo:	614207	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	4.7	23.28	0	97.8	71.8	132			
Surr: BFB	920		931.1		98.5	80	120			

Sample ID	1409340-002AMSD	SampType:	MSD	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	C-2 South	Batch ID:	R21095	RunNo:	21095					
Prep Date:		Analysis Date:	9/9/2014	SeqNo:	614208	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	4.7	23.28	0	106	71.8	132	7.70	20	
Surr: BFB	940		931.1		101	80	120	0	0	

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. |
| 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#: 1409340

03-Oct-14

Client: Enterprise Field Services
Project: Enterprise Lateral 2A-3 South

Sample ID	5ML RB	SampType:	MBLK	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	PBS	Batch ID:	R21095	RunNo:	21095					
Prep Date:		Analysis Date:	9/9/2014	SeqNo:	614223	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	0.97		1.000		97.0	80	120			

Sample ID	100NG BTEX LCS	SampType:	LCS	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	LCSS	Batch ID:	R21095	RunNo:	21095					
Prep Date:		Analysis Date:	9/9/2014	SeqNo:	614224	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	100	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		103	80	120			

Sample ID	1409340-001AMS	SampType:	MS	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	C-1 South	Batch ID:	R21095	RunNo:	21095					
Prep Date:		Analysis Date:	9/9/2014	SeqNo:	614225	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.64	0.037	0.7353	0	86.6	77.4	142			
Toluene	0.63	0.037	0.7353	0.006809	85.4	77	132			
Ethylbenzene	0.66	0.037	0.7353	0	89.2	77.6	134			
Xylenes, Total	2.0	0.074	2.206	0.009956	88.9	77.4	132			
Surr: 4-Bromofluorobenzene	0.77		0.7353		104	80	120			

Sample ID	1409340-001AMSD	SampType:	MSD	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	C-1 South	Batch ID:	R21095	RunNo:	21095					
Prep Date:		Analysis Date:	9/9/2014	SeqNo:	614226	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.64	0.037	0.7353	0	87.5	77.4	142	0.932	20	
Toluene	0.64	0.037	0.7353	0.006809	86.0	77	132	0.648	20	
Ethylbenzene	0.66	0.037	0.7353	0	90.3	77.6	134	1.16	20	
Xylenes, Total	2.0	0.074	2.206	0.009956	89.9	77.4	132	1.05	20	
Surr: 4-Bromofluorobenzene	0.77		0.7353		104	80	120	0	0	

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

Sample Log-In Check List

Client Name: Enterprise

Work Order Number: 1409340

RcptNo: 1

Received by/date:	<i>[Signature]</i> 09/09/14
Logged By:	Lindsay Mangin 9/9/2014 7:00:00 AM <i>[Signature]</i>
Completed By:	Lindsay Mangin 9/9/2014 7:19:28 AM <i>[Signature]</i>
Reviewed By:	<i>[Signature]</i> 9/9/14

Chain of Custody

- Custody seals intact on sample bottles? Yes ☐ No ☐ Not Present ☒
- Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
- How was the sample delivered? Courier

Log In

- Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
- Were all samples received at a temperature of >0° C to 6.0°C Yes ☒ No ☐ NA ☐
- Sample(s) in proper container(s)? Yes ☒ No ☐
- Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
- Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
- Was preservative added to bottles? Yes ☐ No ☒ NA ☐
- VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☒
- Were any sample containers received broken? Yes ☐ No ☒
- Does paperwork match bottle labels? Yes ☒ No ☐
(Note discrepancies on chain of custody)
- Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
- Is it clear what analyses were requested? Yes ☒ No ☐
- 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)

- Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified:	<input type="text"/>	Date:	<input type="text"/>
By Whom:	<input type="text"/>	Via:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:	<input type="text"/>		
Client Instructions:	<input type="text"/>		

17. Additional remarks:

18. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.8	Good	Yes			

|Turn-Around Time:

☐ Standard ☒ Rush Same Day

Project Name:

Enterprise Lateral 2A-3 South

Project #:

Project Manager:

Heather Woods

Sampler: H. Woods

On Ice: ☒ Yes ☐ No

Sample Temperature: 41 °K

Mailing Address: 614 Reilly Avenue

Farminaton, NM 87401

Phone #: (505) 716-2787

email or Fax#:

QA/QC Package:

☒ Standard ☐ Level 4 (Full Validation)

Accreditation

☐ NELAP ☐ Other


☐ EDD (Type)[illegible]

Date:	Time:	Relinquished by:
8/14	1807	Heath M. Woods
Date:	Time:	Relinquished by:

Received by:	Date	Time
Christine Wachs	9/8/14	1807
Received by:	Date	Time

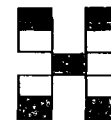
Date:	Time:	Relinquished by:
1/8/14	1830	Christ Woods

necessary, samples submitted to Hall Environmental

Received by:	Date	Time
	09/19/14	0700

Remarks: Direct Bill to Enterprise Field Services
Attn: Tom Long

WO 029499
Paykey RB21200



HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

[illegible]

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 **NM OIL CONSERVATION**
Energy Minerals and Natural Resources
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

ARTESIA DISTRICT

NOV 10 2014

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

Form C-141
Revised August 8, 2011

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company: Enterprise Field Services LLC	Contact: Thomas Long
Address: 614 Reilly Ave, Farmington, NM 87401	Telephone No. 505-599-2286
Facility Name: Trunk K #7 Release Site	Facility Type: Natural Gas Gathering Line

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

LOCATION OF RELEASE

Unit Letter G	Section 26	Township 27N	Range 8W	Feet from the 1754	<u>North</u> South Line	Feet from the 881	<u>East</u> West Line	County San Juan
-------------------------	----------------------	------------------------	--------------------	---------------------------------	----------------------------	--------------------------------	--------------------------	---------------------------

OIL CONS. DIV DIST. 3

Latitude **36.54687** Longitude **-107.646825**

NATURE OF RELEASE

DEC 08 2014

Type of Release: Natural Gas and Natural Gas Liquids	Volume of Release: Unknown	Volume Recovered: Unknown
Source of Release: Internal Corrosion	Date and Hour of Occurrence: 10/28/2014 @ 3:30 p.m.	Date and Hour of Discovery: 10/28/2014 @ 10:00 p.m.
Was Immediate Notice Given? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom? NMOCD - Cory Smith, BLM - Shari Ketchum	
By Whom? Thomas Long	Date and Hour 10/29/2014 @ 10:13 a.m.	
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: On October 28, 2014, a third party reported a leak on the Trunk K pipeline right of way. Technicians were dispatched to the location and the leak was confirmed. The line was isolated and de-pressurized and lock out tag out was applied. Repairs and remediation are in progress. A third party environmental contractor will oversee excavation activities and collect closure samples during repair activities.

Describe Area Affected and Cleanup Action: On October 28, 2014, a third party reported a leak on the Trunk K pipeline right of way. Technicians were dispatched to the location and the leak was confirmed. The line was isolated and de-pressurized and lock out tag out was applied. Repairs and remediation are in progress. A third party environmental contractor will oversee excavation activities and collect closure samples during repair activities. A "final" c-141 will be submitted upon receipt of the third party environmental contractor corrective action 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>	OIL CONSERVATION DIVISION	
Printed Name: Jon Fields	Approved by Environmental Specialist: <i>[Signature]</i>	
Title: Director, Environmental	Approval Date: 1/5/15	Expiration Date: [Signature]
E-mail Address: jefields@eprod.com	Conditions of Approval:	Attached <input type="checkbox"/>
Date: 11-5-2014 Phone: (713)381-6684		

* Attach Additional Sheets If Necessary

#NLS 15005 49752

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

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

OIL CONS. DIV DIST. 3

DEC 15 2014

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 LLC	Contact: Thomas Long
Address: 614 Reilly Ave, Farmington, NM 87401	Telephone No. 505-599-2286
Facility Name: Chaco Produced Water Tanks	Facility Type: Natural Gas Processing Facility
Surface Owner: Navajo Tribal	Mineral Owner: Navajo Tribal
API No.	

LOCATION OF RELEASE

Unit Letter N	Section 16	Township 26N	Range 12W	Feet from the 1548	North/South Line	Feet from the 2553	East/West Line	County San Juan
------------------	---------------	-----------------	--------------	--------------------------	---------------------	--------------------------	-------------------	--------------------

Latitude 36.485274 Longitude -108.117159

NATURE OF RELEASE

Type of Release: Produced Water	Volume of Release 110 BBLS	Volume Recovered: 110 BBLS
Source of Release: Tank Overflow	Date and Hour of Occurrence: 12/5/2014 @ 8:00 a.m.	Date and Hour of Discovery: 12/5/2014 @ 8:00 a.m.
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? NMOCD - Cory Smith	
By Whom? Thomas Long	Date and Hour 12/5/2014 @ 11:07 a.m.	
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: On December 5, 2014, at approximately 8:00 a.m., an employee found that two of the four produced water tanks were overflowing into the lined tank containment area. Atmospheric monitoring was conducted and vacuum trucks were dispatched to remove the water from the containment area and tanks. Approximately 110 barrels of produced water was removed from the containment area. After the water was removed the liner was inspected. No breaches in the liner were observed.

Describe Area Affected and Cleanup Action: On December 5, 2014, at approximately 8:00 a.m., an employee found that two of the four produced water tanks were overflowing into the lined tank containment area. Atmospheric monitoring was conducted and vacuum trucks were dispatched to remove the water from the containment area and tanks. Approximately 110 barrels of produced water was removed from the containment area. After the water was removed the liner was inspected. No breaches in the liner were observed.

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:

Printed Name: Jon E. Fields

Title: Director, Field Environmental

E-mail Address: jefields@eprod.com

Date: 12-9-2014

Phone: (713)381-6684

OIL CONSERVATION DIVISION

Approved by Environmental Specialist:

Approval Date: 1/12/15

Expiration Date:

Conditions of Approval:

Attached ☐

* Attach Additional Sheets If Necessary

#ACS 1501231748

①

District I
1625 N. French Dr., Hobbs, NM 88240
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1000 Rio Brazos Road, Aztec, NM 87410
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State of New Mexico
Energy Minerals and Natural
Resources

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

OIL CONS. DIV DIST. 3

DEC 18 2014

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 LLC	Contact: Thomas Long
Address: 614 Reilly Ave, Farmington, NM 87401	Telephone No. 505-599-2286
Facility Name: Lateral C-27 Release Site	Facility Type: Natural Gas Gathering Line

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

LOCATION OF RELEASE

Unit Letter F	Section 2	Township 26N	Range 9W	Feet from the 2353	North South Line	Feet from the 1693	East West Line	County San Juan
------------------	--------------	-----------------	-------------	--------------------------	---------------------	--------------------------	-------------------	--------------------

Latitude 36.517785 Longitude -107.761700

NATURE OF RELEASE

Type of Release: Natural Gas and Natural Gas Liquids	Volume of Release 6.15 MCF	Volume Recovered: None
Source of Release: Internal Corrosion	Date and Hour of Occurrence: 10/29/2014 @ 1:00 p.m.	Date and Hour of Discovery: 10/29/2014 @ 3:00 p.m.
Was Immediate Notice Given? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? NMOCD - Cory Smith	
By Whom? Thomas Long	Date and Hour 11/4/2014 @ 2:26 p.m.	
Was a Watercourse Reached? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If YES, Volume Impacting the Watercourse Unknown volume of natural gas and natural gas liquids	

If a Watercourse was Impacted, Describe Fully.* The release site is located in a small ephemeral wash. No fluids were observed at the ground surface.

Describe Cause of Problem and Remedial Action: On October 29, 2014, a third party reported a possible pipeline leak on the Lateral C-27 pipeline. Technicians were dispatched and confirmed the leak. The line was isolated, de-pressurized and lock out tag out was applied. Repairs and remediation were completed on November 7, 2014. The final excavation dimensions measured approximately thirty-nine (39) feet long ranging from seven (7) to ten (10) feet wide ranging from five (5) to seven (7) feet deep. Approximately 12 cubic yards of hydrocarbon impacted soil was excavated and transported to a NMOCD approved land farm facility.

Describe Area Affected and Cleanup Action: On October 29, 2014, a third party reported a possible pipeline leak on the Lateral C-27 pipeline. Technicians were dispatched and confirmed the leak. The line was isolated, de-pressurized and lock out tag out was applied. Repairs and remediation are in progress. Repairs and remediation were completed on November 7, 2014. The final excavation dimensions measured approximately thirty-nine (39) feet long ranging from seven (7) to ten (10) feet wide ranging from five (5) to seven (7) feet deep. Approximately 12 cubic yards of hydrocarbon impacted soil was excavated and transported to a NMOCD approved land farm facility. A third party corrective action report is included with this "Final" C-141.

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.

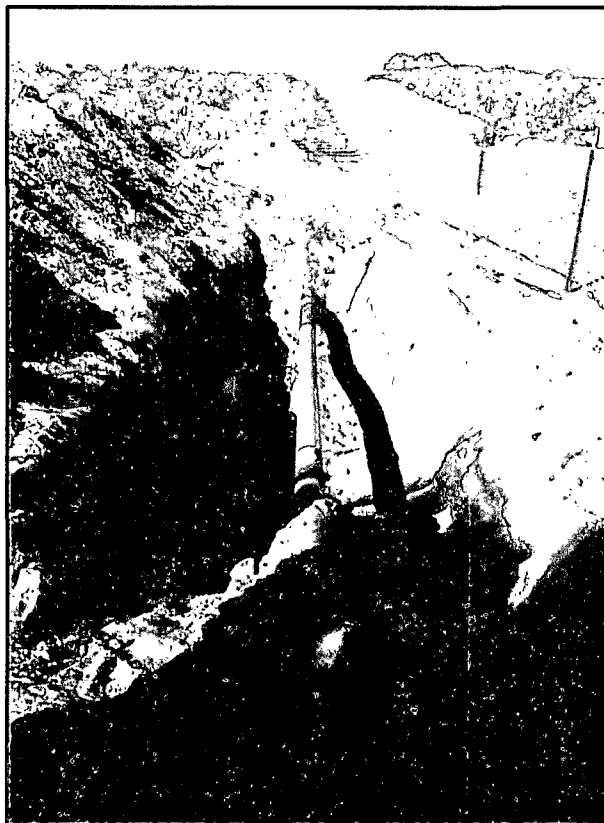
Signature: <i>Jon Fields</i>	OIL CONSERVATION DIVISION	
Printed Name: Jon Fields	Approved by Environmental Specialist: <i>[Signature]</i>	
Title: Director, Environmental	Approval Date: 1/13/15	Expiration Date:
E-mail Address: jefields@eprod.com	Conditions of Approval:	Attached <input type="checkbox"/>
Date: 12-15-2014	Phone: (713)381-6684	

* Attach Additional Sheets If Necessary

#NCS 15 013B 5999

(37)

**Enterprise Products
Lateral C-27 Pipeline Release
Latitude North 36.517785°, Longitude West -107.761700°
SE/NW (Unit F) Section 2, T26N R9W
San Juan County, New Mexico
November 20, 2014**



OIL CONS. DIV DIST. 3

DEC 18 2014

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

Submitted By:
Souder, Miller & Associates
401 West Broadway
Farmington, NM 87401
(505)325-7535



Table of Contents

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4.0	Summary of Field Activities	2
5.0	Conclusions and Recommendations.....	2
6.0	Closure and Limitations.....	3

Figures:

Figure 1: Vicinity Map

Figure 2: Site Map

Figure 3: Soil Contaminant Concentration Map

Tables:

Table 1: Release Information

Table 2: Site Ranking

Table 3: Summary of Laboratory Analysis

Appendices:

Appendix A: Photographic Documentation

Appendix B: Soil Disposal Documentation

Appendix C: Laboratory Analytical Reports

1.0 Executive Summary

On November 4, 5, and 7, 2014, Souder, Miller & Associates (SMA) responded to oversee the excavation of the hydrocarbon release associated with the Lateral C-27 pipeline. The release was initially reported on October 30, 2014 and is a result of internal and external corrosion of the eight inch natural gas pipeline. The table below summarizes information about the pipeline remediation activities.

TABLE 1: RELEASE INFORMATION					
Name	Lateral C-27 Pipeline Release				
Location	Latitude/Longitude		Section, Township, Range		
	36.517785	-107.761700°	Unit F	Section 2	T 26N, R 9W
Date Reported	October 30, 2014				
Reported to	Tom Long				
Land Owner	State of New Mexico				
Reported To	NM Oil Conservation Division (NMOCD)				
Diameter of Pipeline	8 inches				
Source of Release	Internal/External Corrosion				
Release Contents	Natural Gas Liquids/Condensate				
Release Volume	Unknown				
Nearest Waterway	Located in an unnamed tributary of the Reed Canyon Wash				
Depth to Groundwater	Estimated to be less than 50 feet				
Nearest Domestic Water Source	Greater than 1,000 feet				
NMOCD Ranking	40				
SMA Response Dates	11/4, 11/5, 11/7/2014				
Subcontractors	Energy Maintenance Services (EMS)				
Disposal Facility	Envirotech				
Yd ³ Contaminated Soil Excavated and Disposed	12 (Reported on Completed C-138)				

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 C-27 pipeline release site. The site is located in the SE ¼ NW ¼ (Unit F) Section 2, T26N, R9W, 36.517785°, -107.761700°, San Juan County, New Mexico, on land owned by the State of New Mexico. Figure 1 illustrates the location of the site.

3.0 Site Ranking and Land Jurisdiction

The release site is in an unnamed tributary of the Reed Canyon Wash, in an area owned by the State of New Mexico with an elevation of approximately 6,311 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). Figure 1 depicts the site vicinity and Figure 2 depicts the site location.

SMA searched the New Mexico State Engineer's Office online water well database for water wells in the vicinity of the release. No wells were located within 1,000 feet but, 2 wells were located within a mile radius of the site. The physical location of this release is within the jurisdiction of the NMOCD.

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 combined 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 November 4, 5, and 7, 2014, SMA responded to a hydrocarbon release associated with the Lateral C-27 pipeline. Under the supervision and direction of SMA, EMS excavated soil for repair activities. SMA guided the excavation activities by collecting soil samples for field screening with a calibrated photo-ionization detector (PID). Two release points were found, located approximately 11 feet apart in the center of the final excavation.

The final excavation measured approximately 39 feet long by 7 to 10 feet wide with depths of 5 to 7 feet, covering an area of approximately 348 square feet. Field screening indicated that soils from the east end of the excavation were not suitable as backfill material. In total approximately 12 cubic yards of contaminated soil was removed and replaced with clean backfill material. The contaminated soil was transported to Envirotech Landfarm, near Bloomfield, NM. Soil disposal documentation is included in Appendix B.

Soil samples were submitted for confirmation laboratory analysis per United States Environmental Protection Agency Methods: 8021 for benzene, toluene, ethylbenzene, and xylenes (BTEX) and 8015 for diesel and gasoline range organics (DRO/GRO). All samples were analyzed by Hall Environmental Analytical Laboratory in Albuquerque, New Mexico. Figure 3 illustrates the extent of the excavation, composite soil sample locations, and laboratory results.

5.0 Conclusions and Recommendations

NMOCD Guidelines for Remediation of Leaks, Spills, and Releases have established the following action levels for contaminants of concern with a site ranking of 10: 10 ppm (mg/kg) benzene, 50 ppm total BTEX, and 100 ppm TPH.

Laboratory analytical results for all samples collected were below NMOCD Guidelines for benzene (10 ppm), BTEX (50 ppm) and combined GRO/DRO (100 ppm). TPH was detected in the east wall sample, but the concentration was below standard at 32 ppm GRO. All other analytes in all other samples were below laboratory detection limits.

Soil contaminant concentrations are illustrated in Figure 3. A summary of laboratory analysis is included in Table 3. Laboratory reports are included in Appendix C.

SMA recommends no further action at the Lateral C-27 pipeline release location.

6.0 Closure and Limitations

The scope of our services consisted of the performance of a preliminary spill assessment, verification of release 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 Steve Moskal or Reid Allan at 505-325-7535.

Submitted by:

SOUDER, MILLER & ASSOCIATES

Reviewed by:

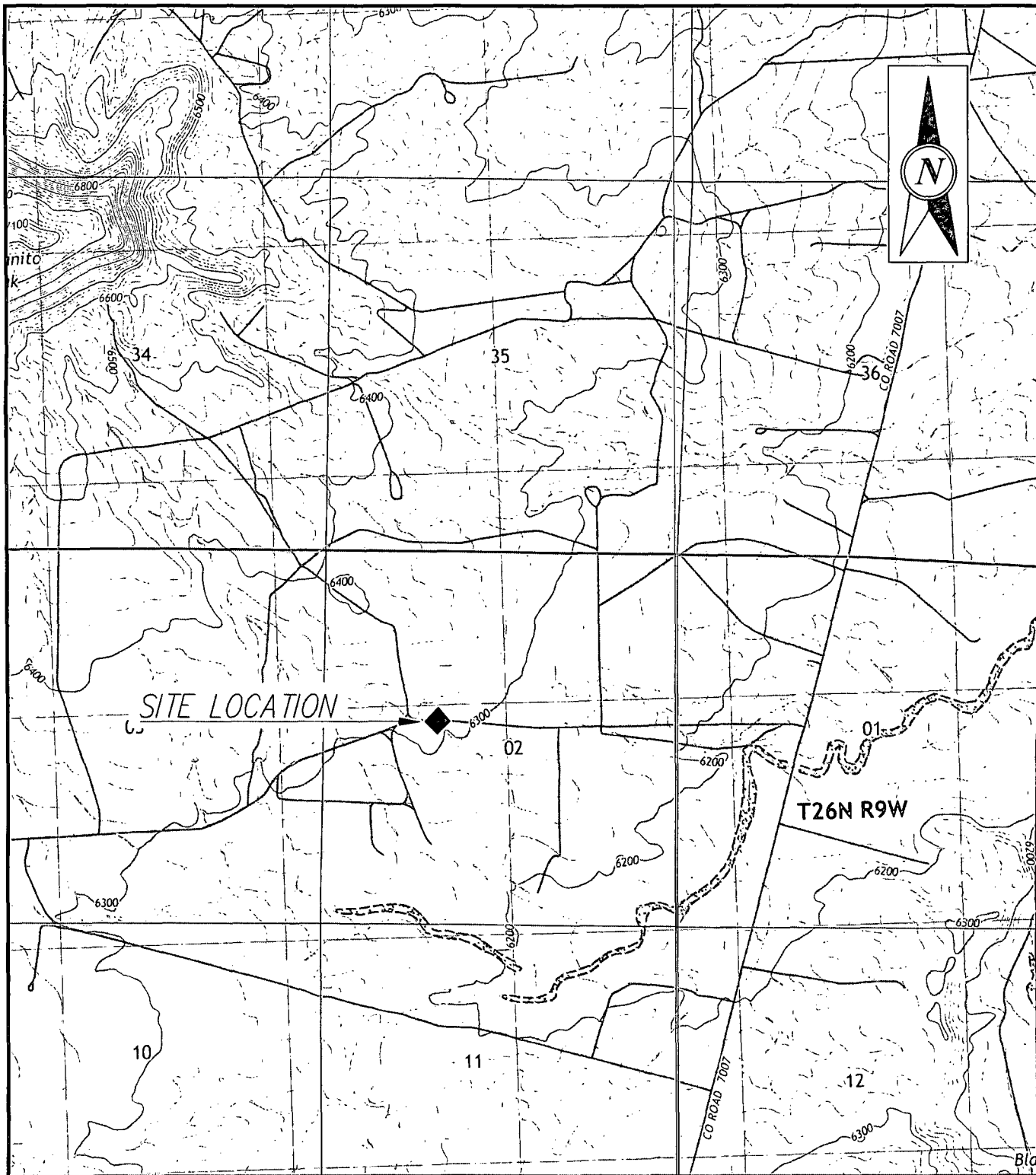


Alicia Patterson
Staff Scientist



Reid Allan, P.G.
Vice President/Principal Scientist

Figures



SCALE

0' 1000' 2000' 4000'



SOUDER, MILLER & ASSOCIATES
 401 W. BROADWAY
 FARMINGTON, NM 87401-5917
 Phone (505) 325-7996 • Fax (505) 325-7997 • Email info@smill.com • Website www.soudermiller.com
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ENTERPRISE

FARMINGTON, NEW MEXICO

Designed JS	Drawn G.J.F	Checked RSA
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Date: 11/10/14

Scale: Horiz: 1"=2000'
 Vert: N/A

Project No: 5122855

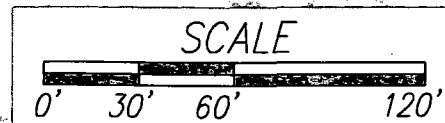
Sheet: 1

VICINITY MAP
LATERAL C-27
SECTION 2, T26N, R9W

SAN JUAN COUNTY, NEW MEXICO



SITE LOCATION



SOUDER, MILLER & ASSOCIATES
 401 W. BROADWAY
 FARMINGTON, NM 87401
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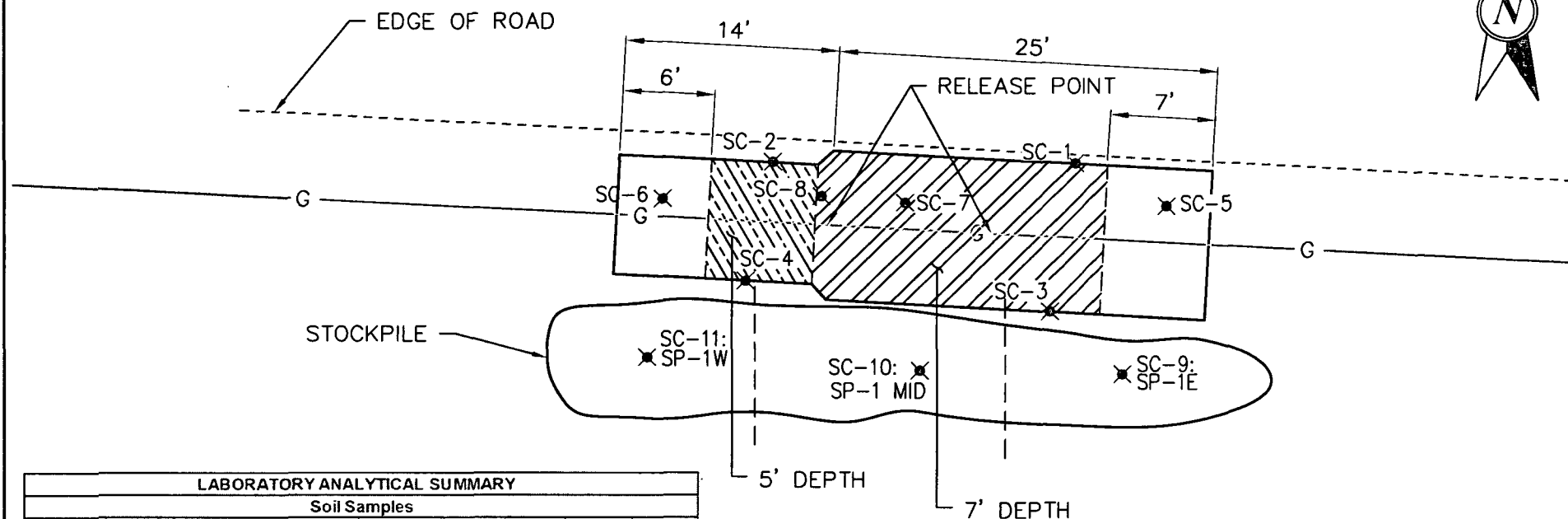
ENTERPRISE

FARMINGTON, NEW MEXICO

SITE LOCATION MAP
 LATERAL C-27
 SECTION 2, T26N, R9W

SAN JUAN COUNTY, NEW MEXICO

Designed JS	Drawn GJF	Checked RSA
Date: 11/10/14		
Scale: Horiz: 1"=60' Vert: N/A		
Project No: 5122855		
Sheet: 2		

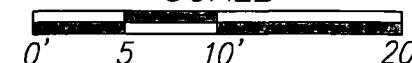


LABORATORY ANALYTICAL SUMMARY							
Soil Samples							
Date	Time	Sample ID	Sample Depth (Feet BGS)	Method 8015 GRO	Method 8015 DRO	Method 8021 Benzene	Method 8021 BTEX
NMOCD Guidelines		NMOCD Site Ranking: 40		100 ppm		10 ppm	50 ppm
11/7/2014	1:25	SC-1 NE	0-7	<4.3	<10	<0.043	<0.086
11/7/2014	1:28	SC-2 NW	0-5	<4.8	<10	<0.048	<0.096
11/7/2014	1:01	SC-3 SE	0-7	<4.2	<9.9	<0.042	<0.084
11/7/2014	1:35	SC-4 SW	0-5	<4.4	<9.8	<0.044	<0.088
11/7/2014	1:37	SC-5 E Wall	0-7	<4.1	32	<0.041	<0.081
11/7/2014	1:39	SC-6 W Wall	0-5	<4.1	<10	<0.041	<0.082
11/7/2014	1:41	SC-7 E Base	7	<4.2	<10	<0.042	<0.084
11/7/2014	1:43	SC-8 W Base	5	<4.2	<9.9	<0.042	<0.084
11/7/2014	1:45	SC-9 SP-1E	NA	<4.0	<9.9	<0.040	<0.081
11/7/2014	1:46	SC-10 SP-1 Mid	NA	<4.1	<10	<0.041	<0.082
11/7/2014	1:47	SC-11 SP-1 W	NA	<4.0	<10	<0.040	<0.081

LEGEND

✕ SOIL SAMPLE LOCATION
RESULTS IN mg/kg REPORTED 11/12/14

SCALE



SOUDER, MILLER & ASSOCIATES
401 W. BROADWAY
FARMINGTON, NM 87401

Phone (505) 325-7535 Toll-Free (800) 519-0098 Fax (505) 325-0045
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ENTERPRISE

FARMINGTON, NEW MEXICO

SOIL CONTAMINANT CONCENTRATION MAP LATERAL C-27 SECTION 2, T26N, R9W

SAN JUAN COUNTY, NEW MEXICO

Designed JS Drawn GJF Checked RSA

Date: 11/10/14

Scale: Horiz: 1"=10'

Vert: N/A

Project No: 5122855

Sheet: 3

Tables

Enterprise Products
Table 2: Site Ranking Criteria

Lateral C-27
Pipeline Release
11/20/2014

Depth to Groundwater	NMOCD Numeric Rank for this Site	Source for Ranking	Notes
< 50 BGS = 20		Topographic Maps and Field Verification	Groundwater estimated to be less than 50 feet below ground surface.
50' to 99' = 10			
>100' = 0	0		
Ranking Criteria for Horizontal Distance to Nearest Surface Water	NMOCD Numeric Rank for this Site	Source for Ranking	Notes
< 200' = 20	20	Topographic Maps and Field Verification	Located in an unnamed tributary of Reed Canyon 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	No recorded water wells located within 1,000 feet and two wells within a 1 mile radius.
Total Site Ranking	40		
Soil Remedation Standards	0 to 9	10 to 19	>19
Benzene	10 PPM	10 PPM	10 PPM
BTEX	50 PPM	50 PPM	50 PPM
TPH	5000 PPM	1000 PPM	100 PPM



Enterprise Products
Table 3: Laboratory Results Summary
(mg/kg)

Lateral C-27
Pipeline Release
11/20/2014

LABORATORY ANALYTICAL SUMMARY							
Soil Samples							
Date	Time	Sample ID	Sample Depth (Feet BGS)	Method 8015 GRO	Method 8015 DRO	Method 8021 Benzene	Method 8021 BTEX
NMOCD Guidelines		NMOCD Site Ranking: 40		100 ppm		10 ppm	50 ppm
11/7/2014	1:25	SC-1 NE	0-7	<4.3	<10	<0.043	<0.086
11/7/2014	1:28	SC-2 NW	0-5	<4.8	<10	<0.048	<0.096
11/7/2014	1:01	SC-3 SE	0-7	<4.2	<9.9	<0.042	<0.084
11/7/2014	1:35	SC-4 SW	0-5	<4.4	<9.8	<0.044	<0.088
11/7/2014	1:37	SC-5 E Wall	0-7	<4.1	32	<0.041	<0.081
11/7/2014	1:39	SC-6 W Wall	0-5	<4.1	<10	<0.041	<0.082
11/7/2014	1:41	SC-7 E Base	7	<4.2	<10	<0.042	<0.084
11/7/2014	1:43	SC-8 W Base	5	<4.2	<9.9	<0.042	<0.084
11/7/2014	1:45	SC-9 SP-1E	NA	<4.0	<9.9	<0.040	<0.081
11/7/2014	1:46	SC-10 SP-1 Mid	NA	<4.1	<10	<0.041	<0.082
11/7/2014	1:47	SC-11 SP-1 W	NA	<4.0	<10	<0.040	<0.081



Appendix A

Photographic Documentation

Site Photographs
Enterprise Products Lateral C-27 Pipeline Release



Photo 1: Lateral C-27 pipeline prior to repairs.

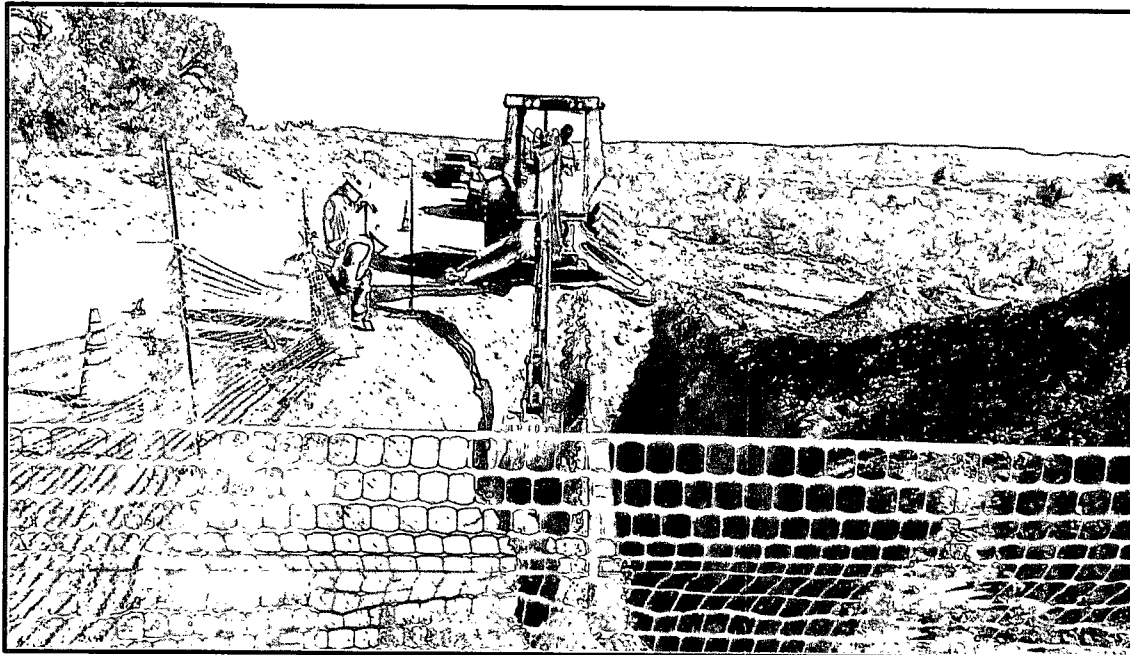


Photo 2: Lateral C-27 pipeline after repairs.

Site Photographs
Enterprise Products Lateral C-27 Pipeline Release

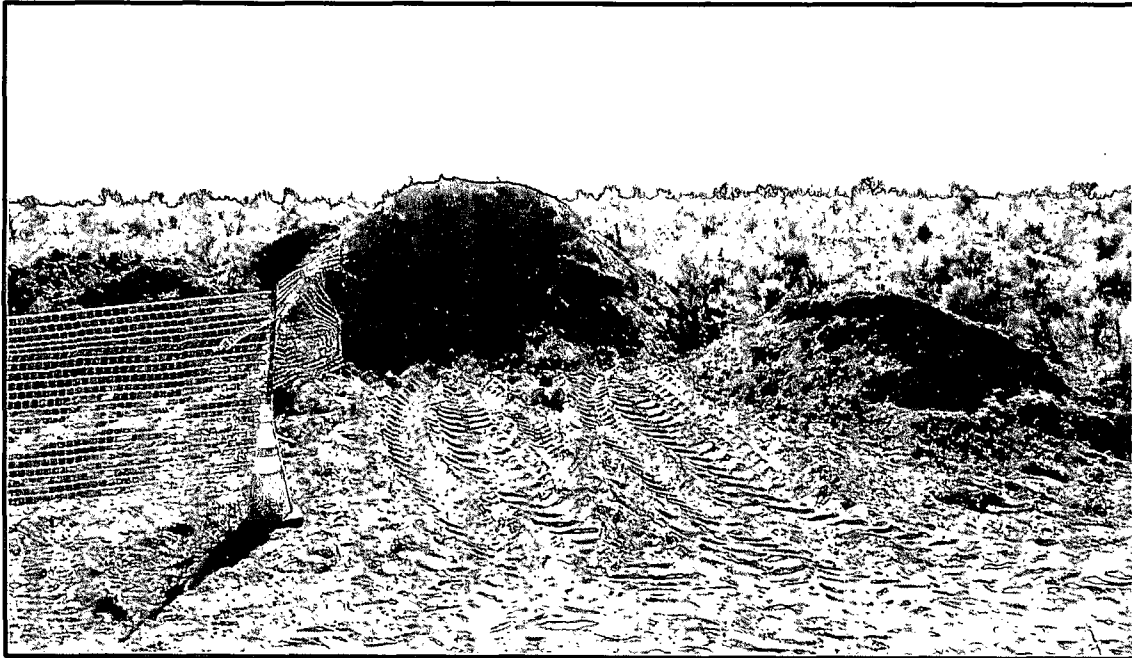


Photo 3: View of stockpiled soil at the Lateral C-27 pipeline release site.

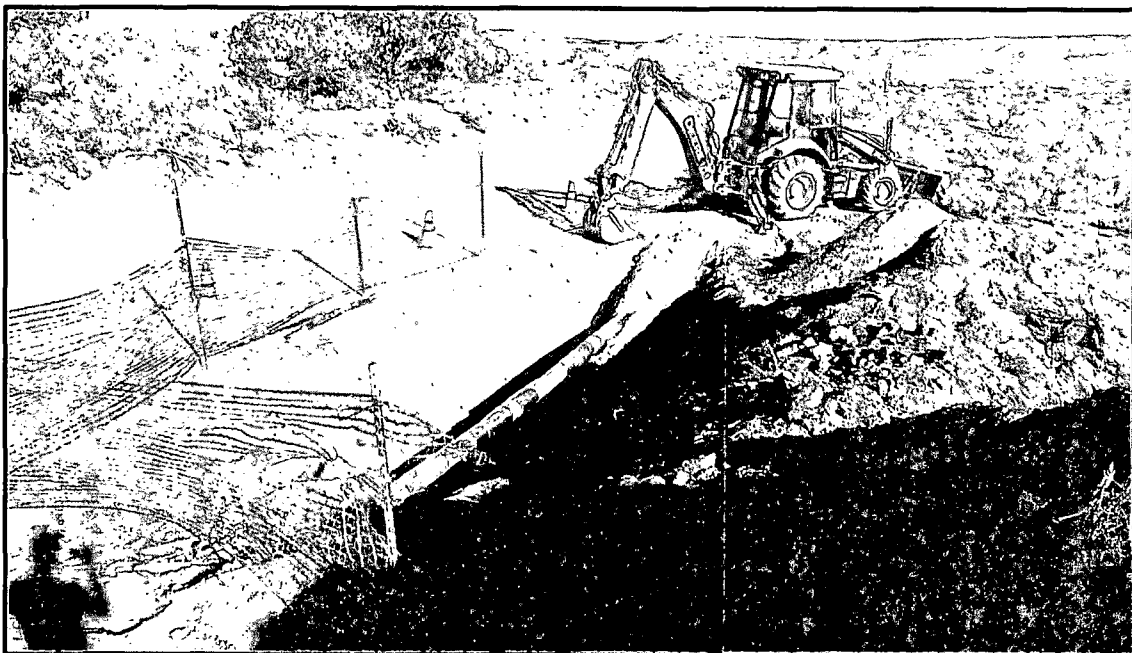


Photo 4: View of Lateral C-27 pipeline excavation at its fullest extent.

Appendix B

Soil Disposal Documentation

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-138
Revised August 1, 2011
97057-0674
*Surface Waste Management Facility Operator
and Generator shall maintain and make this
documentation available for Division inspection.

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. Generator Name and Address: Enterprise Field Services, LLC, 614 Reilly Avenue, Farmington, NM 87401	Nov. 2014
2. Originating Site: Lateral C-27 Pipeline	
3. Location of Material (Street Address, City, State or ULSTR): Unit Letter F, Section 2, T26N, R9W; 36.517785, -107.761700	
4. Source and Description of Waste: Hydrocarbon impacted soils associated with a release from a natural gas pipeline.	
5. Estimated Volume 20 yd ³ bbls Known Volume (to be entered by the operator at the end of the haul) 12 yd ³ bbls	

5. GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS

I, Thomas Long *Thomas Long* representative or authorized agent for Enterprise Field Services, LLC do hereby
PRINT & SIGN NAME COMPANY NAME
certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988
regulatory determination, the above described waste is: (Check the appropriate classification)

☒ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. Operator Use Only: Waste Acceptance Frequency ☐ Monthly ☐ Weekly ☐ Per Load

☐ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items)

☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☐ Process Knowledge ☐ Other (Provide description in Box 4)

GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS

I, Thomas Long *Thomas Long*, representative for Enterprise Field Services, LLC authorize Envirotech, Inc. to
Generator Signature
complete the required testing/sign the Generator Waste Testing Certification.

I, Mary CA *Mary CA*, representative for Envirotech, Inc. do hereby certify that
representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples
have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results
of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of
19.15.36 NMAC.

6. Transporter: ~~West State Energy Contractors~~ EMS

OCD Permitted Surface Waste Management Facility

Name and Facility Permit #: Envirotech, Inc. Soil Remediation Facility * Permit #: NM 01-0011
Address of Facility: Hilltop, NM

Method of Treatment and/or Disposal:

☐ Evaporation ☐ Injection ☐ Treating Plant ☒ Landfarm ☐ Landfill ☐ Other

Waste Acceptance Status:

☒ APPROVED

☐ DENIED (Must Be Maintained As Permanent Record)

PRINT NAME: Greg Crabtree

TITLE: Environmental Manager

DATE: 11/11/14

SIGNATURE: Mary CA
Surface Waste Management Facility Authorized Agent

TELEPHONE NO.: 505-632-0615

Appendix C

Laboratory Analytical Reports



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

November 12, 2014

Steve Moskal
Souder, Miller and Associates
401 W. Broadway
Farmington, NM 87401
TEL: (505) 325-5667
FAX

RE: C-27

OrderNo.: 1411328

Dear Steve Moskal:

Hall Environmental Analysis Laboratory received 11 sample(s) on 11/8/2014 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. 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 qualifers 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

Analytical Report

Lab Order 1411328

Date Reported: 11/12/2014

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Souder, Miller and Associates**Client Sample ID:** SC-1 NE**Project:** C-27**Collection Date:** 11/7/2014 1:25:00 PM**Lab ID:** 1411328-001**Matrix:** SOIL**Received Date:** 11/8/2014 10:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	11/10/2014 10:28:59 AM	16305
Surr: DNOP	98.5	63.5-128		%REC	1	11/10/2014 10:28:59 AM	16305
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.3		mg/Kg	1	11/10/2014 10:25:23 AM	R22438
Surr: BFB	92.0	80-120		%REC	1	11/10/2014 10:25:23 AM	R22438
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.043		mg/Kg	1	11/10/2014 10:25:23 AM	R22438
Toluene	ND	0.043		mg/Kg	1	11/10/2014 10:25:23 AM	R22438
Ethylbenzene	ND	0.043		mg/Kg	1	11/10/2014 10:25:23 AM	R22438
Xylenes, Total	ND	0.086		mg/Kg	1	11/10/2014 10:25:23 AM	R22438
Surr: 4-Bromofluorobenzene	97.5	80-120		%REC	1	11/10/2014 10:25:23 AM	R22438

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

Analytical Report

Lab Order 1411328

Date Reported: 11/12/2014

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Souder, Miller and Associates**Client Sample ID:** SC-2 NW**Project:** C-27**Collection Date:** 11/7/2014 1:28:00 PM**Lab ID:** 1411328-002**Matrix:** SOIL**Received Date:** 11/8/2014 10:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	11/10/2014 10:59:21 AM	16305
Surr: DNOP	101	63.5-128		%REC	1	11/10/2014 10:59:21 AM	16305
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	11/10/2014 10:54:01 AM	R22438
Surr: BFB	91.8	80-120		%REC	1	11/10/2014 10:54:01 AM	R22438
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.048		mg/Kg	1	11/10/2014 10:54:01 AM	R22438
Toluene	ND	0.048		mg/Kg	1	11/10/2014 10:54:01 AM	R22438
Ethylbenzene	ND	0.048		mg/Kg	1	11/10/2014 10:54:01 AM	R22438
Xylenes, Total	ND	0.096		mg/Kg	1	11/10/2014 10:54:01 AM	R22438
Surr: 4-Bromofluorobenzene	96.3	80-120		%REC	1	11/10/2014 10:54:01 AM	R22438

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

Analytical Report

Lab Order 1411328

Date Reported: 11/12/2014

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Souder, Miller and Associates**Client Sample ID:** SC-3 SE**Project:** C-27**Collection Date:** 11/7/2014 1:01:00 PM**Lab ID:** 1411328-003**Matrix:** SOIL**Received Date:** 11/8/2014 10:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	11/10/2014 11:29:53 AM	16305
Surr: DNOP	95.4	63.5-128		%REC	1	11/10/2014 11:29:53 AM	16305
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.2		mg/Kg	1	11/10/2014 11:22:41 AM	R22438
Surr: BFB	94.9	80-120		%REC	1	11/10/2014 11:22:41 AM	R22438
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.042		mg/Kg	1	11/10/2014 11:22:41 AM	R22438
Toluene	ND	0.042		mg/Kg	1	11/10/2014 11:22:41 AM	R22438
Ethylbenzene	ND	0.042		mg/Kg	1	11/10/2014 11:22:41 AM	R22438
Xylenes, Total	ND	0.084		mg/Kg	1	11/10/2014 11:22:41 AM	R22438
Surr: 4-Bromofluorobenzene	99.6	80-120		%REC	1	11/10/2014 11:22:41 AM	R22438

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

Analytical Report

Lab Order 1411328

Date Reported: 11/12/2014

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates

Client Sample ID: SC-4 SW

Project: C-27

Collection Date: 11/7/2014 1:35:00 PM

Lab ID: 1411328-004

Matrix: SOIL

Received Date: 11/8/2014 10:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	11/10/2014 12:00:40 PM	16305
Surr: DNOP	97.9	63.5-128		%REC	1	11/10/2014 12:00:40 PM	16305
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.4		mg/Kg	1	11/10/2014 11:51:19 AM	R22438
Surr: BFB	93.2	80-120		%REC	1	11/10/2014 11:51:19 AM	R22438
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.044		mg/Kg	1	11/10/2014 11:51:19 AM	R22438
Toluene	ND	0.044		mg/Kg	1	11/10/2014 11:51:19 AM	R22438
Ethylbenzene	ND	0.044		mg/Kg	1	11/10/2014 11:51:19 AM	R22438
Xylenes, Total	ND	0.088		mg/Kg	1	11/10/2014 11:51:19 AM	R22438
Surr: 4-Bromofluorobenzene	97.3	80-120		%REC	1	11/10/2014 11:51:19 AM	R22438

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1411328

Date Reported: 11/12/2014

CLIENT: Souder, Miller and Associates

Client Sample ID: SC-5 E Wall

Project: C-27

Collection Date: 11/7/2014 1:37:00 PM

Lab ID: 1411328-005

Matrix: SOIL

Received Date: 11/8/2014 10:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	32	9.9		mg/Kg	1	11/10/2014 9:53:24 AM	16305
Surr: DNOP	89.6	63.5-128		%REC	1	11/10/2014 9:53:24 AM	16305
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.1		mg/Kg	1	11/10/2014 12:20:01 PM	R22438
Surr: BFB	91.8	80-120		%REC	1	11/10/2014 12:20:01 PM	R22438
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.041		mg/Kg	1	11/10/2014 12:20:01 PM	R22438
Toluene	ND	0.041		mg/Kg	1	11/10/2014 12:20:01 PM	R22438
Ethylbenzene	ND	0.041		mg/Kg	1	11/10/2014 12:20:01 PM	R22438
Xylenes, Total	ND	0.081		mg/Kg	1	11/10/2014 12:20:01 PM	R22438
Surr: 4-Bromofluorobenzene	95.8	80-120		%REC	1	11/10/2014 12:20:01 PM	R22438

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	Page 5 of 15
	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.	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Analytical Report

Lab Order 1411328

Date Reported: 11/12/2014

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Souder, Miller and Associates**Client Sample ID:** SC-6 W Wall**Project:** C-27**Collection Date:** 11/7/2014 1:39:00 PM**Lab ID:** 1411328-006**Matrix:** SOIL**Received Date:** 11/8/2014 10:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	11/10/2014 12:31:16 PM	16305
Surr: DNOP	96.9	63.5-128		%REC	1	11/10/2014 12:31:16 PM	16305
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.1		mg/Kg	1	11/10/2014 12:48:43 PM	R22438
Surr: BFB	93.1	80-120		%REC	1	11/10/2014 12:48:43 PM	R22438
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.041		mg/Kg	1	11/10/2014 12:48:43 PM	R22438
Toluene	ND	0.041		mg/Kg	1	11/10/2014 12:48:43 PM	R22438
Ethylbenzene	ND	0.041		mg/Kg	1	11/10/2014 12:48:43 PM	R22438
Xylenes, Total	ND	0.082		mg/Kg	1	11/10/2014 12:48:43 PM	R22438
Surr: 4-Bromofluorobenzene	96.6	80-120		%REC	1	11/10/2014 12:48:43 PM	R22438

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

Analytical Report

Lab Order 1411328

Date Reported: 11/12/2014

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Souder, Miller and Associates**Client Sample ID:** SC-7 E Base**Project:** C-27**Collection Date:** 11/7/2014 1:41:00 PM**Lab ID:** 1411328-007**Matrix:** SOIL**Received Date:** 11/8/2014 10:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	11/10/2014 1:03:03 PM	16305
Surr: DNOP	101	63.5-128		%REC	1	11/10/2014 1:03:03 PM	16305
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.2		mg/Kg	1	11/10/2014 1:17:24 PM	R22438
Surr: BFB	93.2	80-120		%REC	1	11/10/2014 1:17:24 PM	R22438
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.042		mg/Kg	1	11/10/2014 1:17:24 PM	R22438
Toluene	ND	0.042		mg/Kg	1	11/10/2014 1:17:24 PM	R22438
Ethylbenzene	ND	0.042		mg/Kg	1	11/10/2014 1:17:24 PM	R22438
Xylenes, Total	ND	0.084		mg/Kg	1	11/10/2014 1:17:24 PM	R22438
Surr: 4-Bromofluorobenzene	97.1	80-120		%REC	1	11/10/2014 1:17:24 PM	R22438

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1411328

Date Reported: 11/12/2014

CLIENT: Souder, Miller and Associates

Client Sample ID: SC-8 W Base

Project: C-27

Collection Date: 11/7/2014 1:43:00 PM

Lab ID: 1411328-008

Matrix: SOIL

Received Date: 11/8/2014 10:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	11/10/2014 10:36:39 AM	16305
Surr: DNOP	85.5	63.5-128		%REC	1	11/10/2014 10:36:39 AM	16305
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.2		mg/Kg	1	11/10/2014 1:46:04 PM	R22438
Surr: BFB	93.6	80-120		%REC	1	11/10/2014 1:46:04 PM	R22438
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.042		mg/Kg	1	11/10/2014 1:46:04 PM	R22438
Toluene	ND	0.042		mg/Kg	1	11/10/2014 1:46:04 PM	R22438
Ethylbenzene	ND	0.042		mg/Kg	1	11/10/2014 1:46:04 PM	R22438
Xylenes, Total	ND	0.084		mg/Kg	1	11/10/2014 1:46:04 PM	R22438
Surr: 4-Bromofluorobenzene	96.6	80-120		%REC	1	11/10/2014 1:46:04 PM	R22438

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

Hall Environmental Analysis Laboratory, Inc.**Analytical Report**

Lab Order 1411328

Date Reported: 11/12/2014

CLIENT: Souder, Miller and Associates**Client Sample ID:** SC-9 SP-1E**Project:** C-27**Collection Date:** 11/7/2014 1:45:00 PM**Lab ID:** 1411328-009**Matrix:** SOIL**Received Date:** 11/8/2014 10:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	11/10/2014 11:20:07 AM	16305
Surr: DNOP	85.1	63.5-128		%REC	1	11/10/2014 11:20:07 AM	16305
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.0		mg/Kg	1	11/10/2014 2:14:45 PM	R22438
Surr: BFB	92.4	80-120		%REC	1	11/10/2014 2:14:45 PM	R22438
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.040		mg/Kg	1	11/10/2014 2:14:45 PM	R22438
Toluene	ND	0.040		mg/Kg	1	11/10/2014 2:14:45 PM	R22438
Ethylbenzene	ND	0.040		mg/Kg	1	11/10/2014 2:14:45 PM	R22438
Xylenes, Total	ND	0.081		mg/Kg	1	11/10/2014 2:14:45 PM	R22438
Surr: 4-Bromofluorobenzene	96.1	80-120		%REC	1	11/10/2014 2:14:45 PM	R22438

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

Analytical ReportLab Order **1411328**Date Reported: **11/12/2014****Hall Environmental Analysis Laboratory, Inc.****CLIENT:** Souder, Miller and Associates**Client Sample ID:** SC-10 SP-1 Mid**Project:** C-27**Collection Date:** 11/7/2014 1:46:00 PM**Lab ID:** 1411328-010**Matrix:** SOIL**Received Date:** 11/8/2014 10:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	11/10/2014 11:41:39 AM	16305
Surr: DNOP	90.5	63.5-128		%REC	1	11/10/2014 11:41:39 AM	16305
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.1		mg/Kg	1	11/10/2014 10:42:52 AM	R22439
Surr: BFB	96.7	80-120		%REC	1	11/10/2014 10:42:52 AM	R22439
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.041		mg/Kg	1	11/10/2014 10:42:52 AM	R22439
Toluene	ND	0.041		mg/Kg	1	11/10/2014 10:42:52 AM	R22439
Ethylbenzene	ND	0.041		mg/Kg	1	11/10/2014 10:42:52 AM	R22439
Xylenes, Total	ND	0.082		mg/Kg	1	11/10/2014 10:42:52 AM	R22439
Surr: 4-Bromofluorobenzene	122	80-120	S	%REC	1	11/10/2014 10:42:52 AM	R22439

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

Analytical Report

Lab Order 1411328

Date Reported: 11/12/2014

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Souder, Miller and Associates**Client Sample ID:** SC-11 SP-1 W**Project:** C-27**Collection Date:** 11/7/2014 1:47:00 PM**Lab ID:** 1411328-011**Matrix:** SOIL**Received Date:** 11/8/2014 10:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	11/10/2014 12:03:34 PM	16305
Surr: DNOP	91.6	63.5-128		%REC	1	11/10/2014 12:03:34 PM	16305
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.0		mg/Kg	1	11/10/2014 11:10:21 AM	R22439
Surr: BFB	97.0	80-120		%REC	1	11/10/2014 11:10:21 AM	R22439
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.040		mg/Kg	1	11/10/2014 11:10:21 AM	R22439
Toluene	ND	0.040		mg/Kg	1	11/10/2014 11:10:21 AM	R22439
Ethylbenzene	ND	0.040		mg/Kg	1	11/10/2014 11:10:21 AM	R22439
Xylenes, Total	ND	0.081		mg/Kg	1	11/10/2014 11:10:21 AM	R22439
Surr: 4-Bromofluorobenzene	123	80-120	S	%REC	1	11/10/2014 11:10:21 AM	R22439

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.
	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#: 1411328

12-Nov-14

Client: Souder, Miller and Associates

Project: C-27

Sample ID	MB-16305		SampType:	MBLK		TestCode:	EPA Method 8015D: Diesel Range Organics				
Client ID:	PBS		Batch ID:	16305		RunNo:	22412				
Prep Date:	11/10/2014		Analysis Date:	11/10/2014		SeqNo:	660791		Units: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Diesel Range Organics (DRO)	ND	10									
Surr: DNOP	7.8		10.00		77.7	63.5	128				

Sample ID	LCS-16305		SampType: LCS		TestCode: EPA Method 8015D: Diesel Range Organics					
Client ID:	LCSS		Batch ID: 16305		RunNo: 22412					
Prep Date:	11/10/2014		Analysis Date: 11/10/2014		SeqNo: 660792		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	47	10	50.00	0	93.8	68.6	130			
Surr: DNOP	3.6		5.000		71.4	63.5	128			

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. |
| 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#: 1411328

12-Nov-14

Client: Souder, Miller and Associates

Project: C-27

Sample ID	MB-16298 MK		SampType:	MBLK		TestCode:	EPA Method 8015D: Gasoline Range				
Client ID:	PBS		Batch ID:	R22438		RunNo:	22438				
Prep Date:			Analysis Date:	11/10/2014		SeqNo:	661481		Units: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Gasoline Range Organics (GRO)	ND	5.0									
Surr: BFB	920		1000		92.3	80	120				

Sample ID	LCS-16298 MK		SampType:	LCS		TestCode:	EPA Method 8015D: Gasoline Range				
Client ID:	LCSS		Batch ID:	R22438		RunNo:	22438				
Prep Date:			Analysis Date:	11/10/2014		SeqNo:	661482		Units: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Gasoline Range Organics (GRO)	29	5.0	25.00	0	114	65.8	139				
Surr: BFB	1000		1000		101	80	120				

Sample ID	1411328-001AMS		SampType:	MS		TestCode:	EPA Method 8015D: Gasoline Range				
Client ID:	SC-1 NE		Batch ID:	R22438		RunNo:	22438				
Prep Date:			Analysis Date:	11/10/2014		SeqNo:	661504		Units: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Gasoline Range Organics (GRO)	25	4.3	21.41	0	115	71.8	132				
Surr: BFB	870		856.2		101	80	120				

Sample ID	1411328-001AMSD			SampType:	MSD		TestCode:	EPA Method 8015D: Gasoline Range			
Client ID:	SC-1 NE			Batch ID:	R22438		RunNo:	22438			
Prep Date:				Analysis Date:	11/10/2014		SeqNo:	661506		Units:	mg/Kg
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Gasoline Range Organics (GRO)	24	4.3	21.41	0	114	71.8	132	0.981	20		
Surr: BFB	870		856.2		102	80	120	0	0		

Sample ID	5ML RB		SampType:	MBLK		TestCode:	EPA Method 8015D: Gasoline Range				
Client ID:	PBS		Batch ID:	R22439		RunNo:	22439				
Prep Date:			Analysis Date:	11/10/2014		SeqNo:	661771		Units: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Gasoline Range Organics (GRO)	ND	5.0									
Surr: BFB	880		1000		88.4	80	120				

Sample ID	2.5UG GRO LCS		SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	LCSS		Batch ID: R22439		RunNo: 22439					
Prep Date:			Analysis Date: 11/10/2014		SeqNo: 661772		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

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. |
| 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#: 1411328

12-Nov-14

Client: Souder, Miller and Associates

Project: C-27

Sample ID	2.5UG GRO LCS	SampType:	LCS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	LCSS	Batch ID:	R22439	RunNo:	22439					
Prep Date:		Analysis Date:	11/10/2014	SeqNo:	661772	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	95.4	65.8	139			
Surr: BFB	940		1000		94.1	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. |
| 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#: 1411328

12-Nov-14

Client: Souder, Miller and Associates

Project: C-27

Sample ID	MB-16298 MK	SampType:	MBLK		TestCode:	EPA Method 8021B: Volatiles				
Client ID:	PBS	Batch ID:	R22438		RunNo:	22438				
Prep Date:		Analysis Date:	11/10/2014		SeqNo:	661523	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	0.98		1.000		97.8	80	120			

Sample ID	LCS-16298 MK		SampType: LCS		TestCode: EPA Method 8021B: Volatiles					
Client ID:	LCSS		Batch ID: R22438		RunNo: 22438					
Prep Date:			Analysis Date: 11/10/2014		SeqNo: 661524		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.98	0.050	1.000	0	97.8	80	120			
Toluene	0.98	0.050	1.000	0	97.6	80	120			
Ethylbenzene	0.99	0.050	1.000	0	98.9	80	120			
Xylenes, Total	3.0	0.10	3.000	0	98.5	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		104	80	120			

Sample ID	5ML RB	SampType:	MBLK		TestCode:	EPA Method 8021B: Volatiles				
Client ID:	PBS	Batch ID:	R22439		RunNo:	22439				
Prep Date:		Analysis Date:	11/10/2014		SeqNo:	661844		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	1.1		1.000		107	80	120			

Sample ID	100NG BTEX LCS		SampType: LCS		TestCode: EPA Method 8021B: Volatiles					
Client ID:	LCSS		Batch ID: R22439		RunNo: 22439					
Prep Date:			Analysis Date: 11/10/2014		SeqNo: 661845		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.050	1.000	0	106	80	120			
Toluene	1.1	0.050	1.000	0	108	80	120			
Ethylbenzene	1.1	0.050	1.000	0	111	80	120			
Xylenes, Total	3.4	0.10	3.000	0	112	80	120			
Surr: 4-Bromofluorobenzene	1.1		1.000		109	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
- 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.
- RL Reporting Detection Limit



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

Sample Log-In Check List

Client Name: SMA-FARM

Work Order Number: 1411328

RcptNo: 1

Received by/date:	AF	11/08/14
Logged By:	Anne Thorne	11/8/2014 10:20:00 AM
Completed By:	Anne Thorne	11/10/2014
Reviewed By:	AS / [Signature]	11/10/14

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 $>0^{\circ}\text{C}$ 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:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> 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	3.1	Good	Yes			

Chain-of-Custody Record

Client: SM A

Mailing Address: 401 W. Broadway

Farmington, NM 87401

Phone #: 505 325 7535

email or Fax#: stuart.moskale@soudernmills.com

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)

Accreditation

☐ NELAP ☐ Other _____

☐ EDD (Type) _____

Turn-Around Time:

☐ Standard ☒ Rush Same Day

Project Name:

C-27

Project #:

5122855 BG

Project Manager:

Steve Moskal

Sampler: J. Sprague

On Ice: ☒ Yes ☐ No

Sample Temperature: 3.1°C



**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 + THPs (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO DRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F, Cl, NO ₃ , NO ₂ , PO ₄ , SO ₄)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Air Bubbles (Y or N)
11/7/14	1325	Soil	SC-1 NB	1402	-	-001	X	X	X									
	1328		SC-2 NW			-002	X	X	X									
	1331		SC-3 SE			-003	X	X	X									
	1335		SC-4 SW			-004	X	X	X									
	1337		SC-5 E wall			-005	X	X	X									
	1339		SC-6 W wall			-006	X	X	X									
	1341		SC-7 E Base			-007	X	X	X									
	1343		SC-8 W Base			-008	X	X	X									
	1345		SC-9 SP-1E			-009	X	X	X									
	1346		SC-10 SP-1 Mid			-010	X	X	X									
	1347		SC-11 SP-1 W			-011	X	X	X									

Date: 11/7/14 Time: 1659 Relinquished by: J-E S

Received by: Christi Waite Date: 11/7/14 Time: 1659

Remarks: Invoice Enterprise

Date: 11/7/14 Time: 1740 Relinquished by: Christi Waite

Received by: Candy Date: 11/8/14 Time: 10:20

pls copy

Alicia.patterson@soudernmills.com

Jesse Sprague@soudernmills.com

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

OIL CONS. DIV DIST. 3

Form C-141
DEC 22 2014 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 LLC	Contact: Thomas Long
Address: 614 Reilly Ave. Farmington, New Mexico 87401	Telephone No. 505-599-2286
Facility Name: Lateral 6B-10 Pipeline	Facility Type: Natural Gas Pipeline

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

LOCATION OF RELEASE

Unit Letter P/B	Section 13/24	Township 28N	Range 12W	Feet from the 454 (S) /468 (N)	North/South Line	Feet from the 1562/934	East West Line	County San Juan
Latitude 36.65657				Longitude -108.057310				
Latitude 36.653590				Longitude -108.059270				

NATURE OF RELEASE

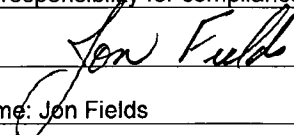
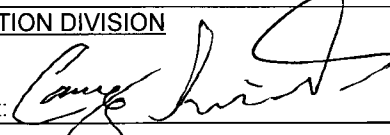
Type of Release: Natural Gas and Natural Gas Liquids	Volume of Release: Unknown	Volume Recovered: None
Source of Release: Internal Corrosion of the pipeline	Date and Hour of Occurrence: 8/13/2013 3:00 p.m.	Date and Hour of Discovery: 8/13/2013 @ 3:00 p.m.
Was Immediate Notice Given? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
Was a Watercourse Reached? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If YES, Volume Impacting the Watercourse	

If a Watercourse was Impacted, Describe Fully. * The southern release was located within a tributary of Horn Canyon Wash. No impacts at the ground surface were observed.

Describe Cause of Problem and Remedial Action: On August 13, 2013, two leaks were discovered on the Lateral 6B-10 pipeline. Initial remediation and repairs activities were completed on 9/9/2013. Approximately 244 cubic yards of hydrocarbon impacted soil was excavated and transported to a NMOCD landfarm facility. According to initial corrective action report and laboratory analysis, contaminants of concern exceeded the NMOCD remediation standard within the subsurface. At the request of NMOCD, additional delineation activities were initiated on November 11, 2014. Five (5) soil borings were installed to fourteen (14) feet below ground surface. Field headspace screening was conducted at one (1) foot internals and four (4) soil samples were collected for laboratory analysis. All field work was witnessed by NMOCD Field Inspector Johnathan Kelly. All soil sample results indicate contaminants of concern are below the NMOCD remediation standard.

Describe Area Affected and Cleanup Action: On August 13, 2013, two leaks were discovered on the Lateral 6B-10 pipeline. Initial remediation and repairs activities were completed on 9/9/2013. Approximately 244 cubic yards of hydrocarbon impacted soil was excavated and transported to a NMOCD landfarm facility. According to initial corrective action report and laboratory analysis, contaminants of concern exceeded the NMOCD remediation standard within the subsurface. At the request of NMOCD, additional delineation activities were initiated on November 11, 2014. Five (5) soil borings were installed to fourteen (14) feet below ground surface. Field headspace screening was conducted at one (1) foot internals and four (4) soil samples were collected for laboratory analysis. All field work was witnessed by NMOCD Field Inspector Johnathan Kelly. All soil sample results indicate contaminants of concern are below the NMOCD remediation standard. A third party corrective action report is included with this Final C-141.

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: 	OIL CONSERVATION DIVISION	
Printed Name: Jon Fields	Approved by Environmental Specialist: 	
Title: Director, Environmental	Approval Date: 1/13/15	Expiration Date:
E-mail Address: jefields@eprod.com	Conditions of Approval:	Attached <input type="checkbox"/>
Date: 12-16-2014	Phone: (713)381-6684	

* Attach Additional Sheets If Necessary

#NCS 1501336993

64

Enterprise Products
Lateral 6B-10 Pipeline Release
Northern: Latitude North 36.65657°, Longitude West -108.057310°
Southern: Latitude North 36.653590°, Longitude West -108.059270°
Northern: SE/SE (Unit P) Section 13, T 28N, R 12W
Southern: NW/NE (Unit B) Section 24, T28N R12W
San Juan County, New Mexico
December 4, 2014

OIL CONS. DIV DIST. 3

DEC 22 2014



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

Submitted By:
Souder, Miller & Associates
401 West Broadway
Farmington, NM 87401
(505)325-7535



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2.0	Introduction.....	1
3.0	Site Ranking and Land Jurisdiction	2
4.0	Summary of Field Activities	2
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Figure 1: Vicinity Map

Figure 2: Site Map Northern Release

Figure 3: Site Map Southern Release

Figure 4: Excavation and Soil Contaminant Concentration Map Northern Release

Figure 5: Excavation and Soil Contaminant Concentration Map Southern Release

Figure 6: Soil Boring Location Map Southern Release

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Table 1: Release Information

Table 2: Site Ranking

Table 3: Summary of Field Screening Results Northern Release

Table 4: Summary of Field Screening Results Southern Release

Table 5: Summary of Laboratory Analysis Northern Release

Table 6: Summary of Laboratory Analysis Southern Release

Appendices:

Appendix A: Photographic Documentation

Appendix B: Soil Disposal Documentation

Appendix C: Laboratory Analytical Reports

1.0 Executive Summary

From August 16, 2013 to September 9, 2013, Souder, Miller & Associates (SMA) responded to oversee the excavation of the hydrocarbon release associated with the Lateral 6B-10 pipeline release. SMA returned to the site on November 11, 2014 to further delineate the southern excavated area and collected additional laboratory samples. The table below summarizes information about the pipeline remediation activities.

TABLE 1: RELEASE INFORMATION					
Name	Lateral C-27 Pipeline Release				
South Location	Latitude/Longitude		Section, Township, Range		
	36.653590°	-108.059270°	Unit B	Section 24	T 28N, R 12W
North Location	36.65657°	-108.05731°	Unit P	Section 13	T 28N, R 12W
Date Reported	August 15, 2013				
Reported to	Aaron Dailey				
Land Owner	Bureau of Land Management (BLM)				
Reported To	NM Oil Conservation Division (NMOCD) 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 Horn Canyon Wash				
Depth to Groundwater	Estimated to be less than 50 feet				
Nearest Domestic Water Source	Greater than 200 feet				
NMOCD Ranking	40				
SMA Response Dates	8/16/13, 8/19/13, 8/27/13, 8/28/13, 8/30/13, 9/3/13 and 9/9/13; 11/11/2014				
Subcontractors	West States Energy Contractors (WSEC)				
Disposal Facility	Envirotech Landfarm				
Yd ³ Contaminated Soil Excavated and Disposed	244				

2.0 Introduction

On behalf of Enterprise Products Operating, LLC. (Enterprise), SMA has prepared this report that describes remediation of two hydrocarbon releases associated with the Lateral 6B-10 pipeline. The southern site is located in NW/NE (Unit B) Section 24, T28N, R12W, 36.653590°, -108.059270°. The northern site is located in SE/SE (Unit P) of Section 13, T 28N, R 12W, 36.65657, -108.057310°, San Juan County, New Mexico, on land owned by the BLM. Figure 1 illustrates the location of the sites.

3.0 Site Ranking and Land Jurisdiction

The release sites are located in a tributary of Horn Canyon Wash on land owned by BLM with an elevation of approximately 5,600 feet above sea level. After evaluation of the sites 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 13, 18, 19 or 24. The physical location of this release is within the jurisdiction of BLM and NMOCD. Site Maps for the northern and southern releases are included as Figures 2 and 3, respectively.

These release locations have 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 August 16, 2013, SMA mobilized to the northern release site to delineate the release using a hand auger to advance soil borings and collect soil samples. A total of nine soil borings were advanced ranging from five to nine feet below ground surface (bgs). Soil samples were collected at one foot intervals for field screening with a calibrated photo ionization detector (PID).

On August 19, 2013, SMA mobilized to the southern release site to delineate the release using a hand auger to advance soil borings and collect soil samples. A total of eight soil borings were advanced ranging from three to five feet bgs. Auger holes did not stay open due to the loose sands and gravels. Hence, soil samples from depths more than five feet bgs could not be obtained. Soil samples were collected at one foot intervals for field screening with a calibrated PID.

A summary of the delineation activities, including diagrams illustrating the locations of soil borings, field sample results, proposed excavation areas and estimated volumes was supplied to field personnel to guide remediation activities for both release sites. Figures 4 and 5 are the diagrams for each release site.

From August 27, 2013 to September 9, 2013, under the supervision of SMA, WSEC excavated the hydrocarbon impacted soils associated with the two release sites. SMA personnel guided the excavation activities by collecting soil samples for field screening with a calibrated PID. After field screening results indicated that the hydrocarbon impacted soil had been removed, SMA collected five composite soil samples from the northern excavation and seven composite soil samples from the southern excavation 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 4 and Figure 5 illustrates the extent of each excavation and composite soil sample locations and laboratory results.

The final excavation dimensions for the northern release site were 32 feet long by 13 feet wide by 7 feet deep. The final excavation dimensions for the southern release site were 43 feet long by 27 feet wide by 12 to 18 feet deep. A combined total of approximately 244 cubic yards of hydrocarbon contaminated soil were excavated from both excavations and transported by WSEC to Envirotech Land Farm near Bloomfield, New Mexico for proper disposal. Soil disposal documentation is included in Appendix C. The excavation was backfilled based on field screening results for SC-4 (101 ppm) and SC-5 (69 ppm) indicating contaminant of concentrations at or below the NMOCD field screening closure levels. PID results for the northern and southern excavations are included in Tables 3 and 4, respectively.

However, based on NMOCD Guidelines for Remediation of Leaks, Spills, and Releases action levels for contaminants of concern with a site ranking of 40 are 10 ppm benzene, 50 ppm total BTEX, and 100 ppm TPH. Laboratory sample results for the samples collected from the final excavation were all below laboratory detection limits with the exceptions of SC-5 (Base @ 200 ppm DRO) from the northern excavation and SC-4 (South Wall @ 820 ppm DRO) from the southern excavation. SC-5 of the northern excavation does not impose an immediate threat to groundwater of the environment and is not of high concern.

NMOCD requested additional field work to be performed in the vicinity of SC-4 of the southern excavation. On November 11, 2014, SMA, along with Jonathan Kelly of the NMOCD, revisited the site in order to further delineate the location of SC-4, the south wall of the southern excavation. Using the GPS coordinates of the release point, SMA measured approximately 15 feet south/southeast and advanced a soil boring using a hand auger. SMA collected soil samples at 1 foot vertical intervals from approximately five feet bgs to a maximum of 14 feet bgs. SMA then stepped out approximately 5 feet to the south/southeast, along the pipeline, to complete a row of five soil borings with maximum distance of 35 feet from the original release point GPS location. This row of soil borings differentiated clean backfill material from the native, sandy and gravel, indicating that the borings straddled the boundary of the excavation. Using a calibrated PID and visual observation, none of the soil borings indicated the presence of contamination. Soil borings with any indication of contamination were sampled and submitted for laboratory analysis. Additionally, one area south of the last soil boring was observed to have dark colored soil on the surface. SMA collected a sample from the dark colored area and determined it to be dark colored sandstone. Further, field screening did not indicate contamination of the sandstone. For conformation, a sample was collected for laboratory conformation and labeled SC-1. PID results are included in Table 4. Soil contaminant concentrations and soil boring locations are illustrated in Figure 6.

5.0 Conclusions and Recommendations

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 from the original excavation, except SC-5 (Base @ 200 ppm DRO) from the northern excavation and SC-4 (South Wall @ 820 ppm DRO) from the southern excavation, were below laboratory detection limits. Soil borings submitted for laboratory analysis were all below laboratory detection limits.

According to communication with Enterprise, NMOCD has determined that SC-5, the base of the northern excavation, is of little concern as a significant threat to groundwater or the environment.

Given the 820 ppm DRO concentration of SC-4, SMA suspects the original soil sample collected from the location may have been influenced by contaminated overburden that was likely hauled offsite for disposal.

Soil contaminant concentrations are illustrated in Figure 4 and Figure 5. A summary of laboratory analysis is included in Tables 5 and Table 6. 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, verification of release 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 Steve Moskal or Reid Allan at 505-325-7535.

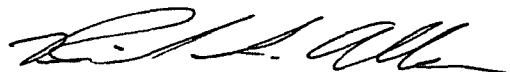
Submitted by:

Reviewed by:

SOUDER, MILLER & ASSOCIATES

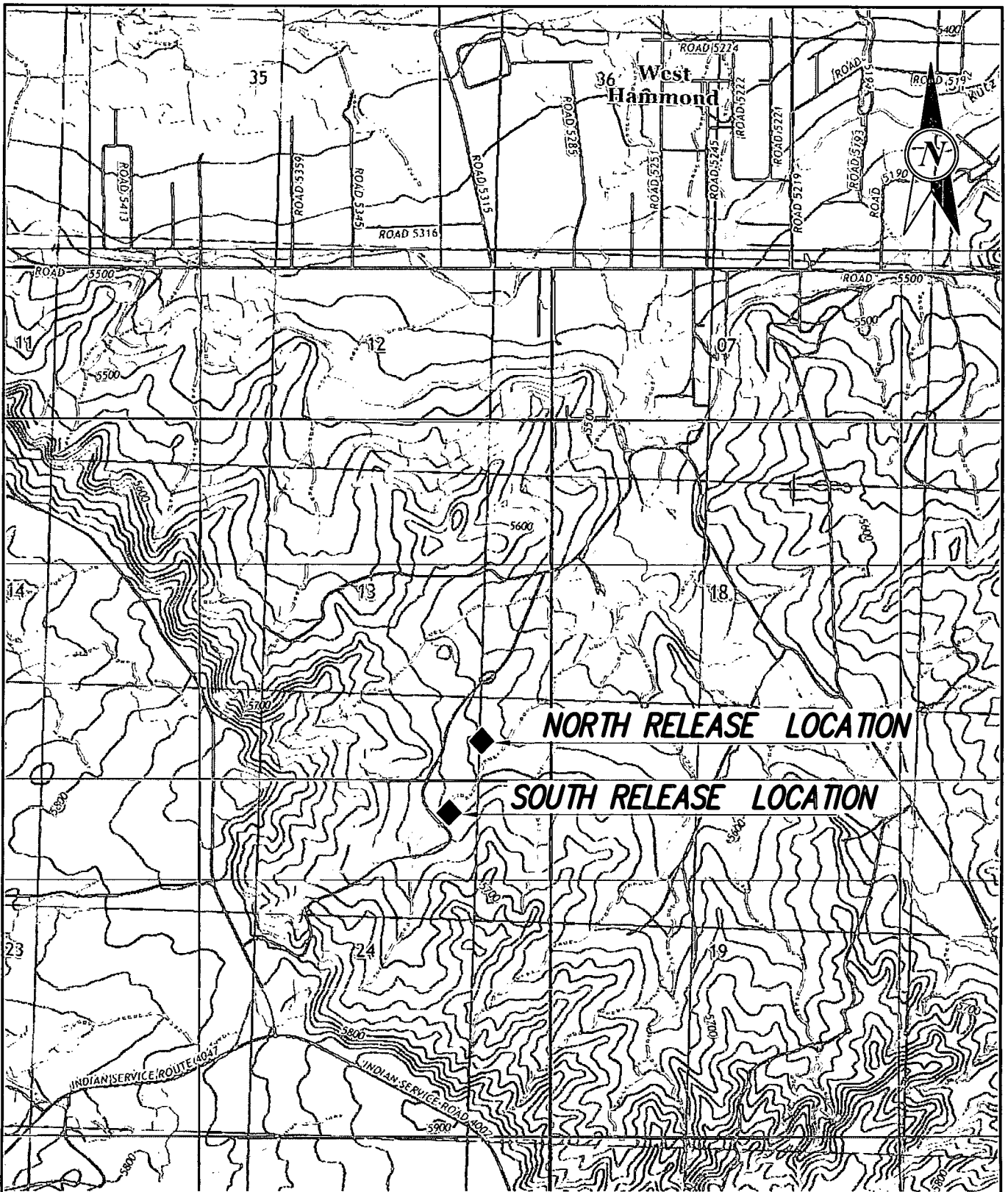


Steve Moskal
Project Scientist



Reid Allan, P.G.
Vice President/Principal Scientist

Figures



NORTH RELEASE LOCATION

SOUTH RELEASE LOCATION

SCALE

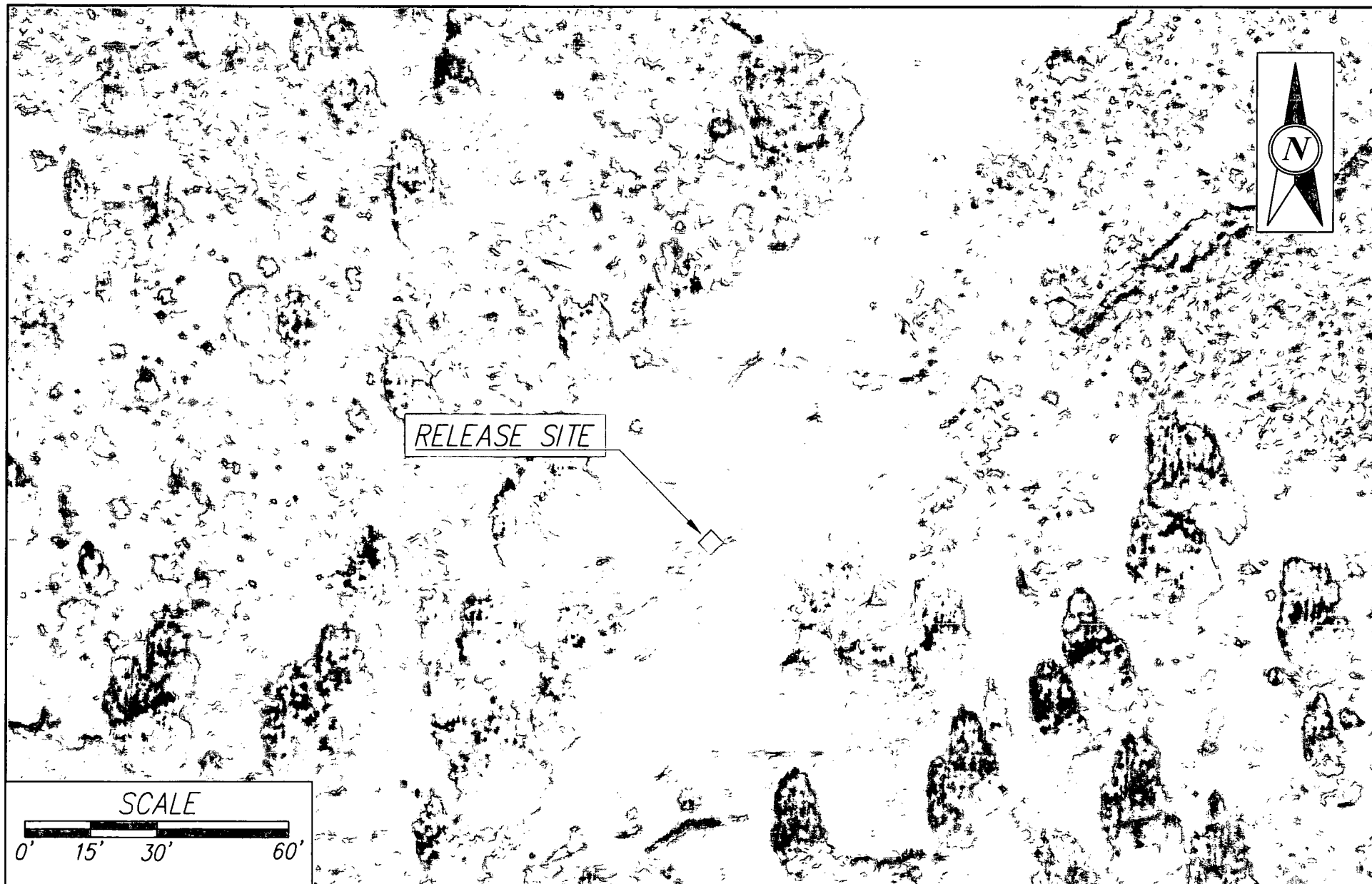



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ENTERPRISE FARMINGTON, NEW MEXICO
VICINITY MAP
LATERAL 6B-10 RELEASE LOCATIONS
SE/SE OF SECTION 13, T28N, R12W
NW/NE OF SECTION 24, T28N, R12W
 SAN JUAN COUNTY, NEW MEXICO


Designed SM	Drawn GJF	Checked RSA
Date: NOVEMBER, 2014		
Scale: Horiz: 1" = 2000'		
Vert: NA		
Project No: 5122855		
Sheet: 1		

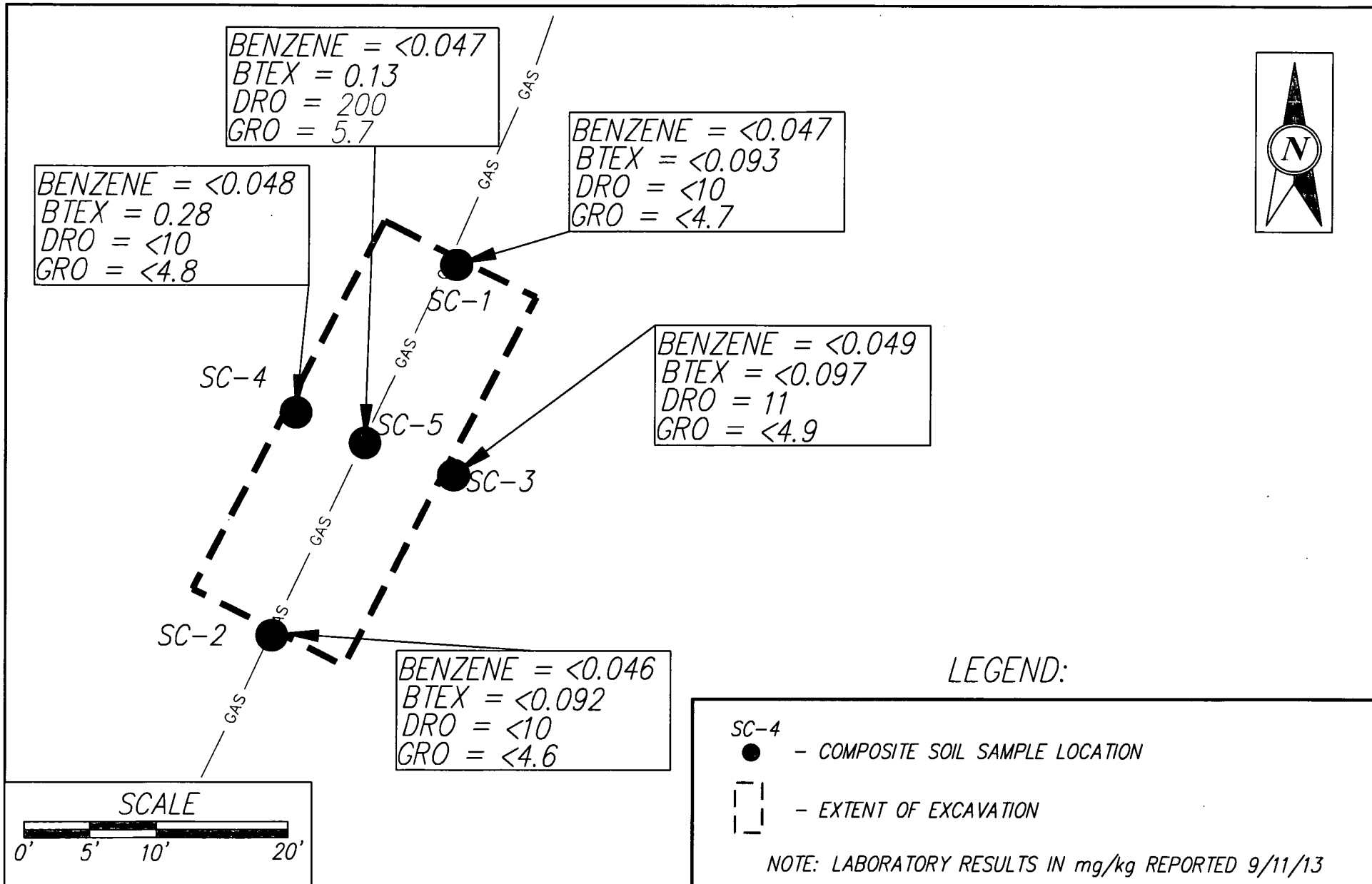
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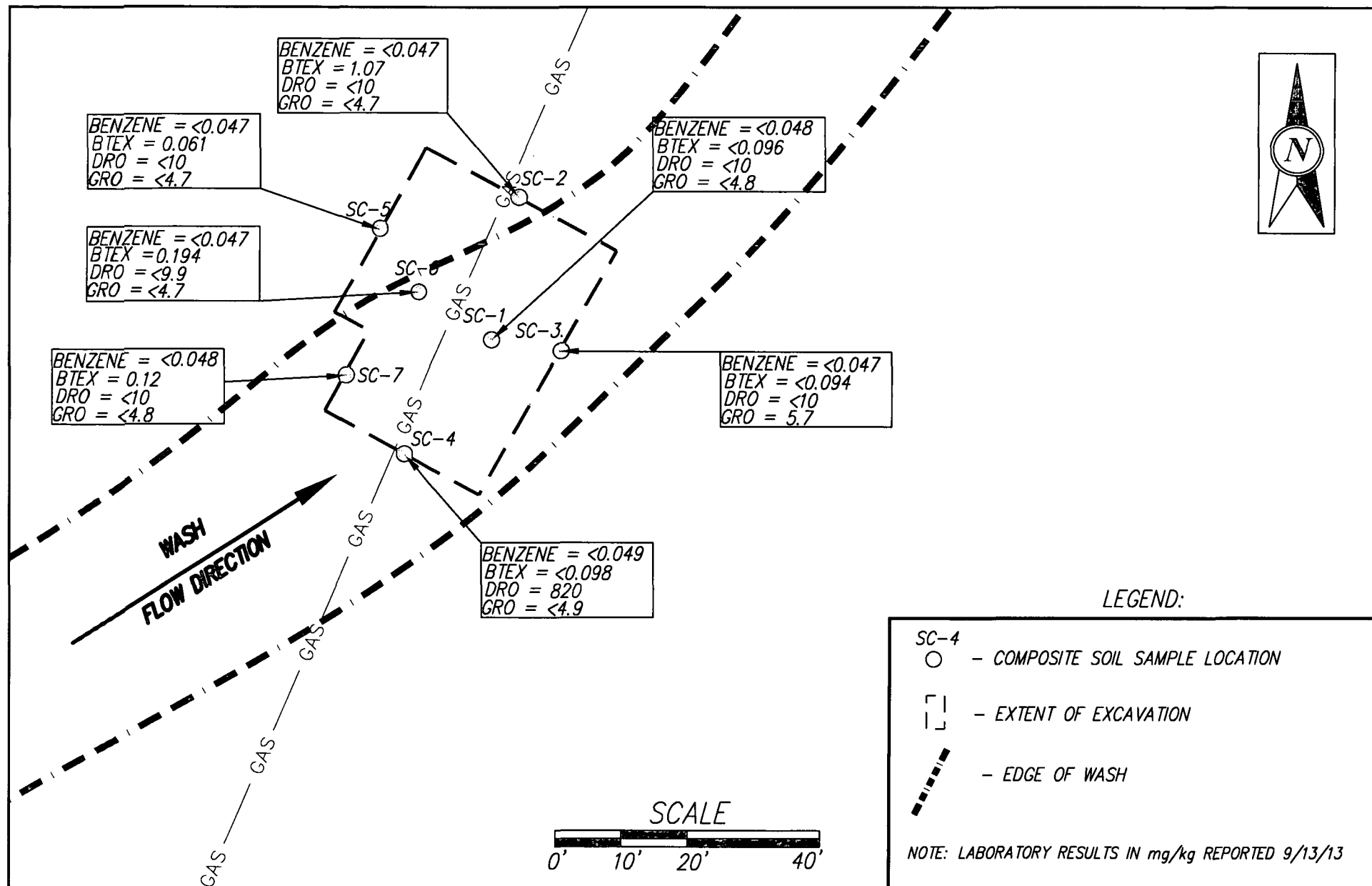
	SOUDER, MILLER & ASSOCIATES 401 West Broadway Avenue Farmington, NM 87401-5907 Phone (505) 325-7535 Toll-Free (800) 519-0098 Fax (505) 326-0045 www.soudermiller.com Serving the Southwest & Rocky Mountains Albuquerque, Farmington, Las Cruces, Roswell, Santa Fe, NM • El Paso, TX Corral • Grand Junction • Montrose, CO • Safford, AZ • Moab, UT	ENTERPRISE FARMINGTON, NEW MEXICO SITE LOCATION MAP LATERAL 6B-10 NORTHERN RELEASE SE/SE OF SECTION 24, T28N, R12W SAN JUAN COUNTY, NEW MEXICO	<table border="1"> <tr> <td>Designed SM</td> <td>Drawn DJB</td> <td>Checked RSA</td> </tr> <tr> <td colspan="3">Date: NOVEMBER, 2014</td> </tr> <tr> <td colspan="3">Scale: Horiz: 1"=30' Vert: N/A</td> </tr> <tr> <td colspan="3">Project No: 5122855</td> </tr> <tr> <td colspan="3">Sheet: 2</td> </tr> </table>	Designed SM	Drawn DJB	Checked RSA	Date: NOVEMBER, 2014			Scale: Horiz: 1"=30' Vert: N/A			Project No: 5122855			Sheet: 2		
	Designed SM	Drawn DJB	Checked RSA															
	Date: NOVEMBER, 2014																	
	Scale: Horiz: 1"=30' Vert: N/A																	
	Project No: 5122855																	
Sheet: 2																		




 <p>Engineering Environmental Surveying</p>	<p>SOUDER, MILLER & ASSOCIATES 401 West Broadway Avenue Farmington, NM 87401-5907</p> <p>Phone: (505) 325-7535 Toll-Free (800) 519-4098 Fax: (505) 326-0045 www.soudermiller.com</p> <p>Serving the Southwest & Rocky Mountains Albuquerque, Farmington, Las Cruces, Roswell, Santa Fe, NM • El Paso, TX Cortez • Grand Junction • Montrose, CO • Safford, AZ • Moab, UT</p>	ENTERPRISE		FARMINGTON, NEW MEXICO		Designed SM	Drawn DJB	Checked RSA		
		<p align="center">SITE LOCATION MAP LATERAL 6B-10 SOUTHERN RELEASE NW/NE OF SECTION 24, T28N, R12W</p>						Date: NOVEMBER, 2014		
								Scale: Horiz: 1"=50' Vert: N/A		
								Project No: 5122855		
								Sheet: 3		



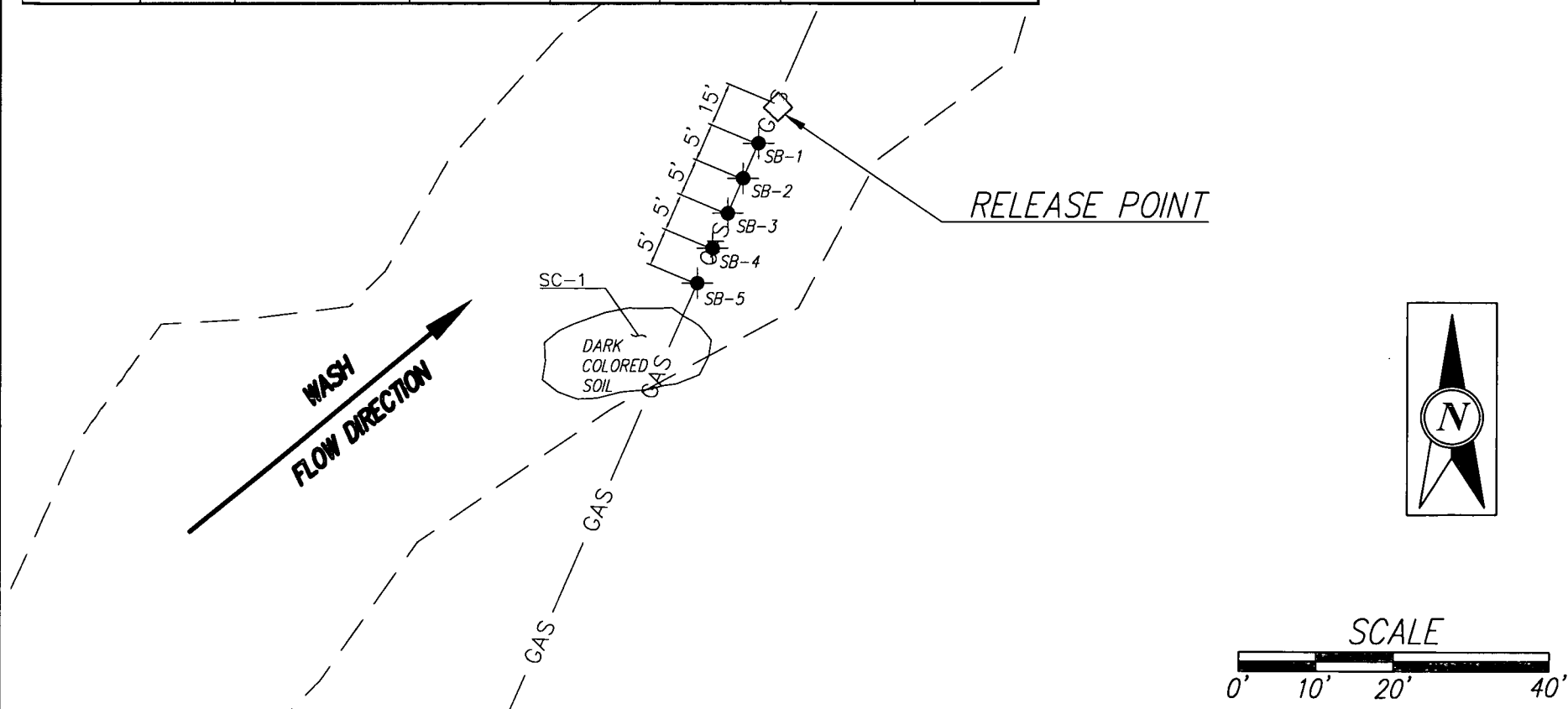
 <p>SOUDER, MILLER & ASSOCIATES 401 West Broadway Avenue Farmington, NM 87401-5907 Phone (505) 325-7535 Toll-Free (800) 519-0698 Fax (505) 326-0645 www.soudermiller.com Serving the Southwest & Rocky Mountains Albuquerque, Farmington, Las Cruces, Roswell, Santa Fe, NM • Ft. Paso, TX Corral • Grand Junction • Montrose, CO • Salt Lake City, UT • Moab, UT</p>	ENTERPRISE		FARMINGTON, NEW MEXICO		Designed SM	Drawn DJB	Checked RSA	
	EXCAVATION AND SOIL CONTAMINANT CONCENTRATION MAP					Date: NOVEMBER, 2014		
	LATERAL 6B-10 NORTHERN RELEASE					Scale: Horiz: 1"=10' Vert: N/A		
	SE/SE OF SECTION 24, T28N, R12W					Project No: 5122855		
	SAN JUAN COUNTY, NEW MEXICO					Sheet: 4		



 <p>Engineering Environmental Surveying</p>	<p>SOUDER, MILLER & ASSOCIATES 401 West Broadway Avenue Farmington, NM 87401-5907</p> <p>Phone (505) 325-7535 Toll-Free (800) 519-0098 Fax (505) 326-0045 www.soudermiller.com</p> <p>Serving the Southwest & Rocky Mountains Albuquerque, Farmington, Las Cruces, Roswell, Santa Fe, NM • El Paso, TX Cortez • Grand Junction • Montrose, CO • Safford, AZ • Moab, UT</p>	ENTERPRISE		FARMINGTON, NEW MEXICO		Designed SM	Drawn DJB	Checked RSA		
		<p>EXCAVATION AND SOIL CONTAMINANT CONCENTRATION MAP LATERAL 6B-10 SOUTHERN RELEASE NW/NE OF SECTION 24, T28N, R12W</p>						Date: NOVEMBER, 2014		
								Scale: Horiz: 1"=20' Vert: N/A		
		<p>SAN JUAN COUNTY, NEW MEXICO</p>						Project No: 5122855		
								Sheet: 5		

LABORATORY ANALYTICAL SUMMARY

Date	Time	Sample ID	Sample Depth (Feet BGS)	Method 8015 GRO	Method 8015 DRO	Method 8021 Benzene	Method 8021 BTEX
NMOCD Soil Remediation Standards				100		10	50
11/14/2014	1:15	SB-4	4	<4.8	<9.9	<0.048	<0.096
11/14/2014	2:46	SB-4	13.5	<4.7	<10	<0.047	<0.094
11/14/2014	3:05	SB-2	13	<4.9	<10	<0.049	<0.097
11/14/2014	3:08	SB-1	12	<4.8	<9.9	<0.048	<0.096
11/14/2014	3:10	SC-1	0	<4.7	<10	<0.047	<0.096



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ENTERPRISE

FARMINGTON, NEW MEXICO

SOIL BORING CONTAMINANT CONCENTRATION MAP
LATERAL 6B-10 SOUTHERN RELEASE
NW/NE OF SECTION 24, T28N, R12W

SAN JUAN COUNTY, NEW MEXICO

Designed SM	Drawn DJB	Checked RSA
Date: NOVEMBER, 2014		
Scale: Horiz: 1"=20'		
Vert: N/A		
Project No: 5122855		
Sheet: 6		

Tables

Depth to Groundwater	NMOCD Numeric Rank for this Site	Source for Ranking	Notes
< 50 BGS = 20	20	USGS Topo Maps; Google Earth	Release location in within a 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 location in within a 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	No Wells in Sections 24, 13, 18 or 19
Total Site Ranking	40		
Soil Remedation Standards	0 to 9	10 to 19	>19
Benzene	10 PPM	10 PPM	10 PPM
BTEX	50 PPM	50 PPM	50 PPM
TPH	5000 PPM	1000 PPM	100 PPM



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

Lateral 6B-10 Northern Pipeline Release
12/4/2014

Date	Time	Field Screening Reference	Sample Depth (Feet BGS)	PID Results	Comments
8/16/2013	15:17	SB-1	2	1847.0	
8/16/2013	15:18	SB-1	3	736.0	
8/16/2013	15:19	SB-1	4	547.0	
8/16/2013	15:20	SB-1	5	516.0	
8/16/2013	15:22	SB-2	2	87.0	
8/16/2013	15:23	SB-2	3	47.0	
8/16/2013	15:24	SB-2	4	41.0	
8/16/2013	15:25	SB-2	5	50.0	
8/16/2013	15:29	SB-3	2	92.0	Heavy Staining
8/16/2013	15:30	SB-3	3	80.0	Heavy Staining
8/16/2013	15:31	SB-3	4	44.0	Heavy Staining
8/16/2013	15:32	SB-3	5	74.0	Heavy Staining
8/16/2013	15:36	SB-4	2	87.0	Heavy Staining
8/16/2013	15:37	SB-4	3	116.0	Heavy Staining
8/16/2013	15:38	SB-4	4	181.0	Heavy Staining
8/16/2013	15:39	SB-4	5	56.0	Heavy Staining
8/16/2013	15:43	SB-5	2	143.0	Heavy Staining
8/16/2013	15:44	SB-5	3	92.0	Heavy Staining
8/16/2013	15:46	SB-5	4	49.0	Heavy Staining
8/16/2013	15:47	SB-5	5	39.0	Heavy Staining
8/16/2013	16:40	SB-5	6	29.0	Heavy Staining
8/16/2013	16:41	SB-5	7	28.0	Heavy Staining
8/16/2013	16:42	SB-5	8	52.0	Heavy Staining
8/16/2013	16:43	SB-5	9	35.0	Heavy Staining
8/16/2013	15:54	SB-6	2	89.0	Heavy Staining
8/16/2013	15:55	SB-6	3	88.0	Heavy Staining
8/16/2013	15:56	SB-6	4	49.0	Heavy Staining
8/16/2013	15:57	SB-6	5	23.0	Heavy Staining
8/16/2013	16:03	SB-7	2	74.0	Heavy Staining
8/16/2013	16:04	SB-7	3	61.0	Heavy Staining
8/16/2013	16:05	SB-7	4	28.0	Heavy Staining
8/16/2013	16:07	SB-7	5	20.0	Heavy Staining
8/16/2013	16:11	SB-8	2	63.0	Heavy Staining
8/16/2013	16:12	SB-8	3	52.0	Heavy Staining
8/16/2013	16:13	SB-8	4	41.0	Heavy Staining
8/16/2013	16:14	SB-8	5	42.0	Heavy Staining
8/16/2013	16:23	SB-9	2	53.0	Heavy Staining
8/16/2013	16:27	SB-9	3	28.0	Heavy Staining
8/16/2013	16:28	SB-9	4	24.0	Heavy Staining
8/16/2013	16:29	SB-9	5	43.0	Heavy Staining
8/27/2013	11:25	S-1 (North Wall)	2 to 5	123.0	
8/27/2013	11:27	S-2 (South Wall)	2 to 5	1126.0	
8/27/2013	11:29	S-3 (East Wall)	2 to 5	985.0	
8/27/2013	11:31	S-4 (West Wall)	2 to 5	1293.0	
8/27/2013	11:33	S-5 (Base)	5	882.0	
8/28/2013	13:35	S-1 (North Wall)	2 to 6	95.0	
8/28/2013	13:37	S-2 (South Wall)	2 to 6	436.0	
8/28/2013	13:39	S-3 (East Wall)	2 to 6	537.0	
8/28/2013	13:41	S-4 (West Wall)	2 to 6	387.0	
8/28/2013	13:43	S-5 (Base)	6	684.0	
9/3/2013	10:27	SC-1 (North Wall)	1 to 7	3.8	Lab Sample Collected
9/3/2013	10:29	SC-2 (South Wall)	1 to 7	12.9	Lab Sample Collected
9/3/2013	10:30	SC-3 (East Wall)	1 to 7	104.0	Lab Sample Collected
9/3/2013	10:31	SC-4 (West Wall)	1 to 7	107.0	Lab Sample Collected
9/3/2013	10:33	SC-5 (Base)	1 to 7	101*	Lab Sample Collected

* Denotes Lab Sample that Exceeds TPH remediation standards



Enterprise Products
Table 4: Summary of Field Screening Results
(PPM)

Lateral 6B-10 Southern
Pipeline Release
12/4/2014

Date	Time	Field Screening Reference	Sample Depth (Feet BGS)	PID Results	Comments
8/19/2013	9:55	SB-1	1	123.0	Heavy Staining
8/19/2013	9:56	SB-1	2	1718.0	Heavy Staining
8/19/2013	9:57	SB-1	3	4337.0	Heavy Staining - Auger Refusal
8/19/2013	10:04	SB-2	1	1399.0	Heavy Staining
8/19/2013	10:05	SB-2	2	954.0	Heavy Staining
8/19/2013	10:06	SB-2	3	982.0	Heavy Staining - Auger Refusal
8/19/2013	10:14	SB-3	1	1907.0	Heavy Staining
8/19/2013	10:15	SB-3	2	1301.0	Heavy Staining
8/19/2013	10:16	SB-3	3	1267.0	Heavy Staining
8/19/2013	10:16	SB-3	4	758.0	Heavy Staining
8/19/2013	10:17	SB-3	5	537.0	Heavy Staining
8/19/2013	10:28	SB-4	1	899.0	Heavy Staining
8/19/2013	10:29	SB-4	2	543.0	Heavy Staining
8/19/2013	10:30	SB-4	3	285.0	Heavy Staining
8/19/2013	10:47	SB-4	4	125.0	Heavy Staining
8/19/2013	NA	SB-5	1	NA	
8/19/2013	10:55	SB-5	2	467.0	Heavy Staining - Auger Refusal
8/19/2013	11:07	SB-6	1	252.0	
8/19/2013	11:08	SB-6	2	32.0	
8/19/2013	11:09	SB-6	3	17.6	
8/19/2013	11:10	SB-6	4	23.2	
8/19/2013	11:27	SB-7	1	6.6	
8/19/2013	11:28	SB-7	2	2.6	
8/19/2013	11:29	SB-7	3	8.8	
8/19/2013	11:30	SB-7	4	14.3	
8/19/2013	11:31	SB-7	5	17.6	
8/19/2013	11:33	SB-8	1	39.2	Heavy Staining
8/19/2013	11:34	SB-8	2	132.0	Heavy Staining
8/19/2013	11:35	SB-8	3	83.2	Heavy Staining
8/19/2013	11:36	SB-8	4	64.2	Heavy Staining Auger Refusal
8/27/2013	10:37	S-1 (North Wall)	2 to 6	3840.0	
8/27/2013	10:39	S-2 (West Wall)	2 to 6	409.0	North Side of Excavation
8/27/2013	10:41	S-3 (West Wall)	2 to 6	681.0	South Side of Excavation
8/27/2013	10:43	S-4 (South Wall)	2 to 6	705.0	
8/27/2013	10:45	S-5 (East Wall)	2 to 6	964.0	North Side of Excavation
8/27/2013	10:47	S-6 (East Wall)	2 to 6	914.0	South Side of Excavation
8/27/2013	10:49	S-7 (Base)	6	3849.0	North Side of Excavation
8/27/2013	10:51	S-8 (Base)	6	>10,000	South Side of Excavation

Enterprise Products
Table 4: Summary of Field Screening Results
(PPM)

Lateral 6B-10 Southern
Pipeline Release
12/4/2014

8/28/2013	13:35	S-1 (North Wall)	2 to 6	95.0	
8/28/2013	13:37	S-2 (South Wall)	2 to 6	436.0	
8/28/2013	13:39	S-3 (East Wall)	2 to 6	537.0	
8/28/2013	13:41	S-4 (West Wall)	2 to 6	387.0	
8/28/2013	13:43	S-5 (Base)	6	684.0	
8/30/2013	13:45	S-1 (North Wall)	2 to 6	413.0	
8/30/2013	13:47	S-2 (South Wall)	2 to 6	12.0	
8/30/2013	13:46	S-3 (East Wall)	2 to 6	53.0	
8/30/2013	13:48	S-4 (West Wall)	2 to 6	548.0	
8/30/2013	13:50	S-5 (Base)	6	667.0	
9/3/2013	11:19	S-1 (South Wall)	2 to 9	51.0	
9/3/2013	11:21	S-2 (East Wall)	2 to 9	63.0	North Side of Excavation
9/3/2013	11:23	S-3 (East Wall)	2 to 9	41.0	South Side of Excavation
9/3/2013	11:25	S-4 (West Wall)	2 to 9	3223.0	South Side of Excavation
9/3/2013	11:31	S-5 (West Wall)	2 to 9	2664.0	North Side of Excavation
9/3/2013	11:33	S-6 (North Wall)	2 to 9	146.0	
9/3/2013	11:35	S-7 (Base)	10	4032.0	North Side of Excavation
9/3/2013	11:37	S-8 (Base)	10	153.0	South Side of Excavation
9/3/2013	12:13	S-9 (Base)	11	1323.0	North Side of Excavation
9/3/2013	12:14	S-10 N. W. Wall	2 to 10	3823.0	
9/9/2013	11:00	SC-1 (East Base)	12	3.0	Lab Sample Collected
9/9/2013	11:03	SC-2 (North Wall)	0 to 12	6.0	Lab Sample Collected
9/9/2013	11:08	SC-3 (East Wall)	0 to 12	9.0	Lab Sample Collected
9/9/2013	11:12	SC-4 (South Wall)	0 to 12	69*	Lab Sample Collected
9/9/2013	11:20	SC-5 (West Wall)	0 to 12	123.0	Lab Sample Collected
9/9/2013	11:33	SC-6 (West Base)	18	114.0	Lab Sample Collected
9/9/2013	11:35	SC-7 (S.W. Wall)	0 to 18	79.0	Lab Sample Collected
11/14/2014	15:15	SB-4 30' from GPS Point	4	0.5	Lab Sample Collected
11/14/2014	15:16	SB-4 30' from GPS Point	14	0.5	Lab Sample Collected
11/14/2014	15:17	SB-2 20' from GPS Point	13	0.5	Lab Sample Collected
11/14/2014	15:18	SB-1 15' S of GPS Point	12	0.9	Lab Sample Collected
11/14/2014	15:19	SC-1 Surface E. of GPS Point	0	0.5	Lab Sample Collected

* Denotes Lab Sample that Exceeds TPH remediation standards

Northern Release Site

LABORATORY ANALYTICAL RESULTS							
Date	Time	Sample ID	Sample Depth (Feet BGS)	Method 8015 GRO	Method 8015 DRO	Method 8021 Benzene	Method 8021 BTEX
9/3/2013	10:27	SC-1 N. Wall	1 to 7	<4.7	<10	<0.047	<0.093
9/3/2013	10:29	SC-2 S. Wall	1 to 7	<4.6	<10	<0.046	<0.092
9/3/2013	10:30	SC-3 E. Wall	1 to 7	<4.9	11	<0.049	<0.097
9/3/2013	10:31	SC-4 W. Wall	1 to 7	<4.8	<9.9	<0.048	0.28
9/3/2013	10:33	SC-5 Base	7	5.7	200	<0.047	0.13



Southern Release Site

LABORATORY ANALYTICAL RESULTS							
Date	Time	Sample ID	Sample Depth (Feet BGS)	Method 8015 GRO	Method 8015 DRO	Method 8021 Benzene	Method 8021 BTEX
9/9/2013	11:00	SC-1 (East Base)	12	<4.8	<10	<0.048	<0.096
9/9/2013	11:03	SC-2 (North Wall)	0 to 12	<4.7	<10	<0.047	1.07
9/9/2013	11:08	SC-3 (East Wall)	0 to 12	5.7	<10	<0.047	<0.094
9/9/2013	11:12	SC-4 (South Wall)	0 to 12	<4.9	820	<0.049	<0.098
9/9/2013	11:20	SC-5 (West Wall)	0 to 12	<4.7	<10	<0.047	0.061
9/9/2013	11:33	SC-6 (West Base)	18	<4.7	<9.9	<0.047	0.194
9/9/2013	11:35	SC-7 (S.W. Wall)	0 to 12	<4.8	<10	<0.048	0.12
11/14/2014	1:15	SB-4	4	<4.8	<9.9	<0.048	<0.096
11/14/2014	2:46	SB-4	13.5	<4.7	<10	<0.047	<0.094
11/14/2014	3:05	SB-2	13	<4.9	<10	<0.049	<0.097
11/14/2014	3:08	SB-1	12	<4.8	<9.9	<0.048	<0.096
11/14/2014	3:10	SC-1	0	<4.7	<10	<0.047	<0.096



Appendix A

Photographic Documentation

Site Photographs
Enterprise Products 6B-10 Pipeline Release



Photo 1: View of the pipeline and excavation for the northern release.

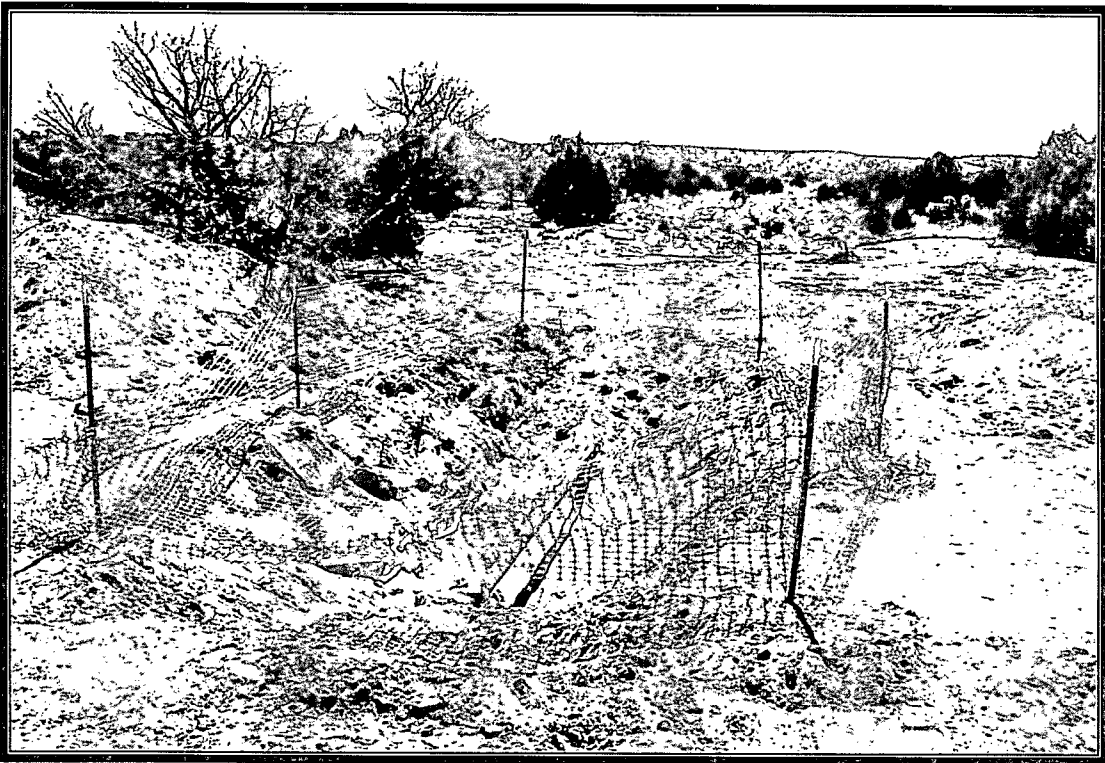


Photo 2: View of the excavation for the northern release.

Site Photographs
Enterprise Products 6B-10 Pipeline Release

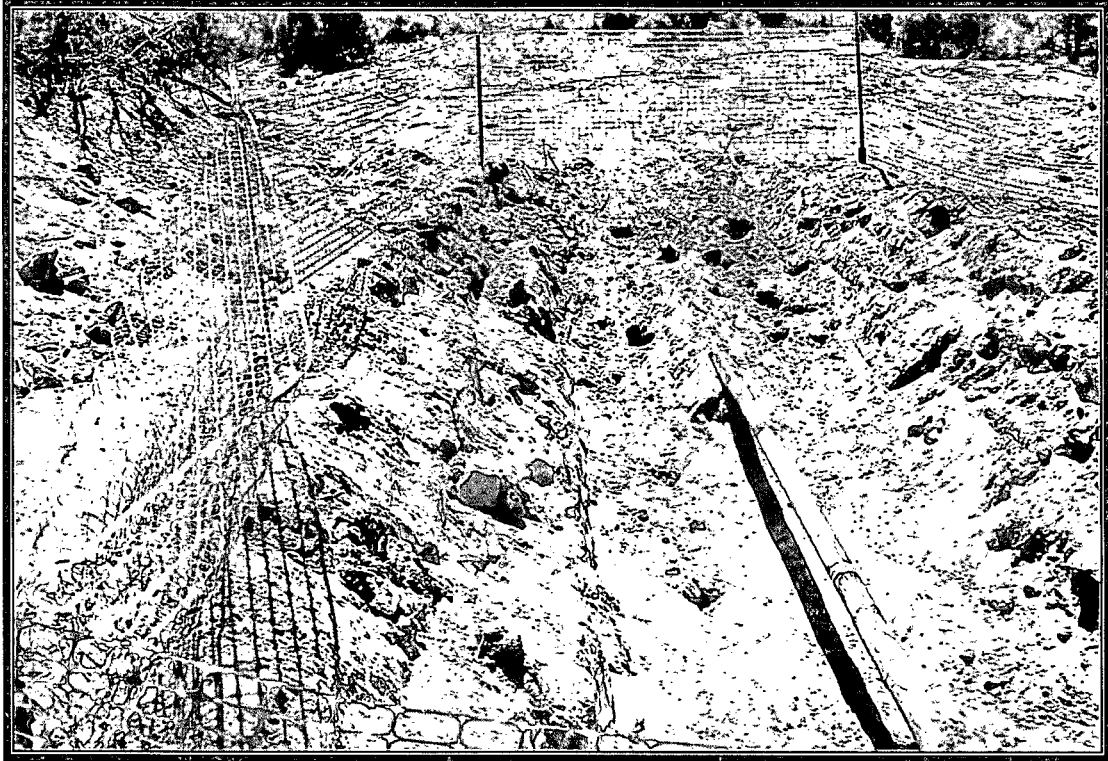


Photo 3: View of the excavation for the northern release.

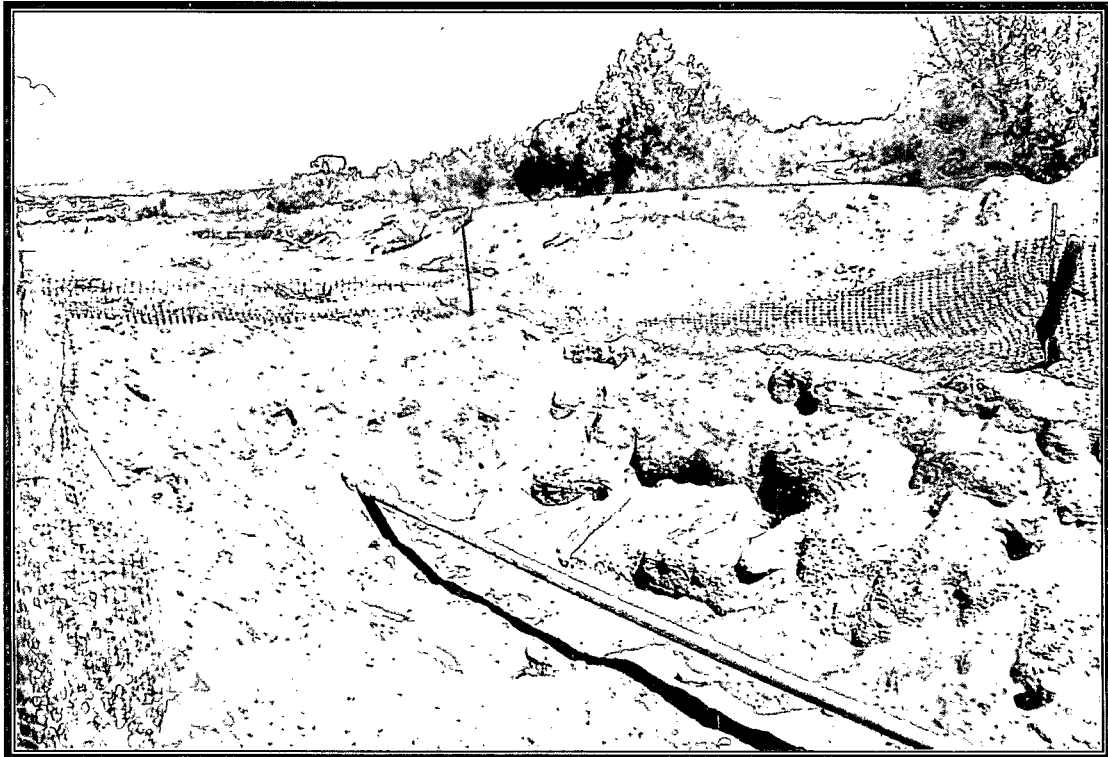


Photo 4: View of the excavation for the southern release.

Site Photographs
Enterprise Products 6B-10 Pipeline Release

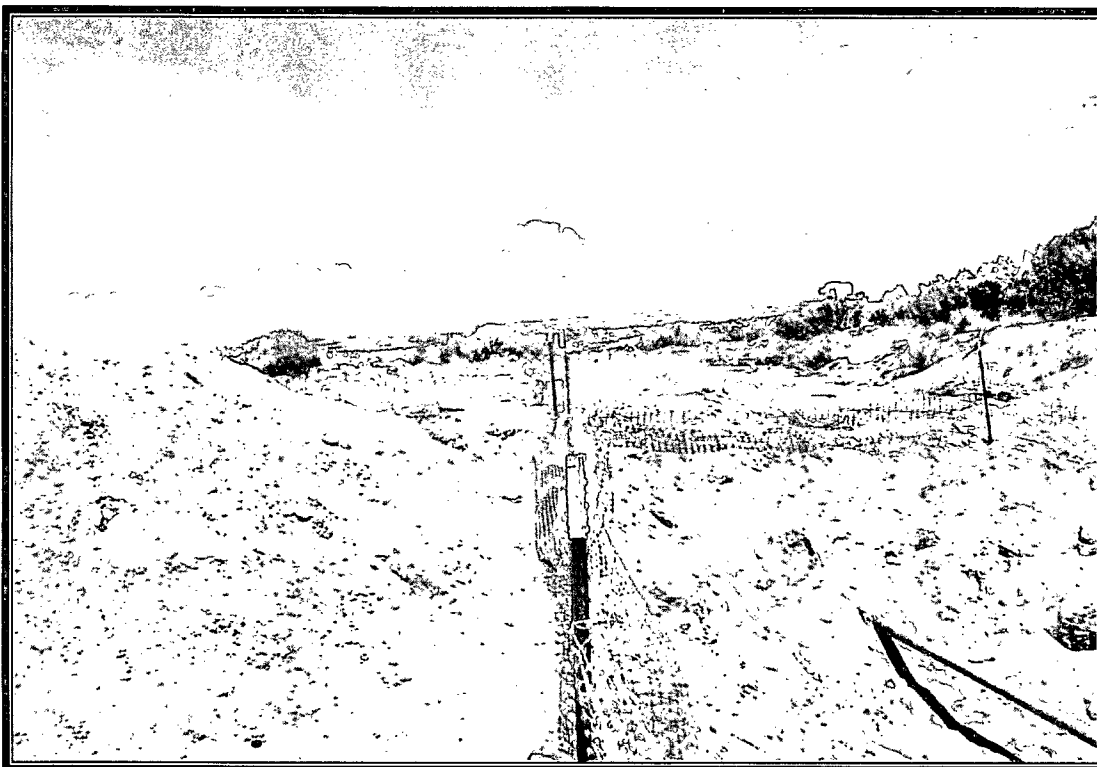


Photo 5: View of the excavation for the northern release.

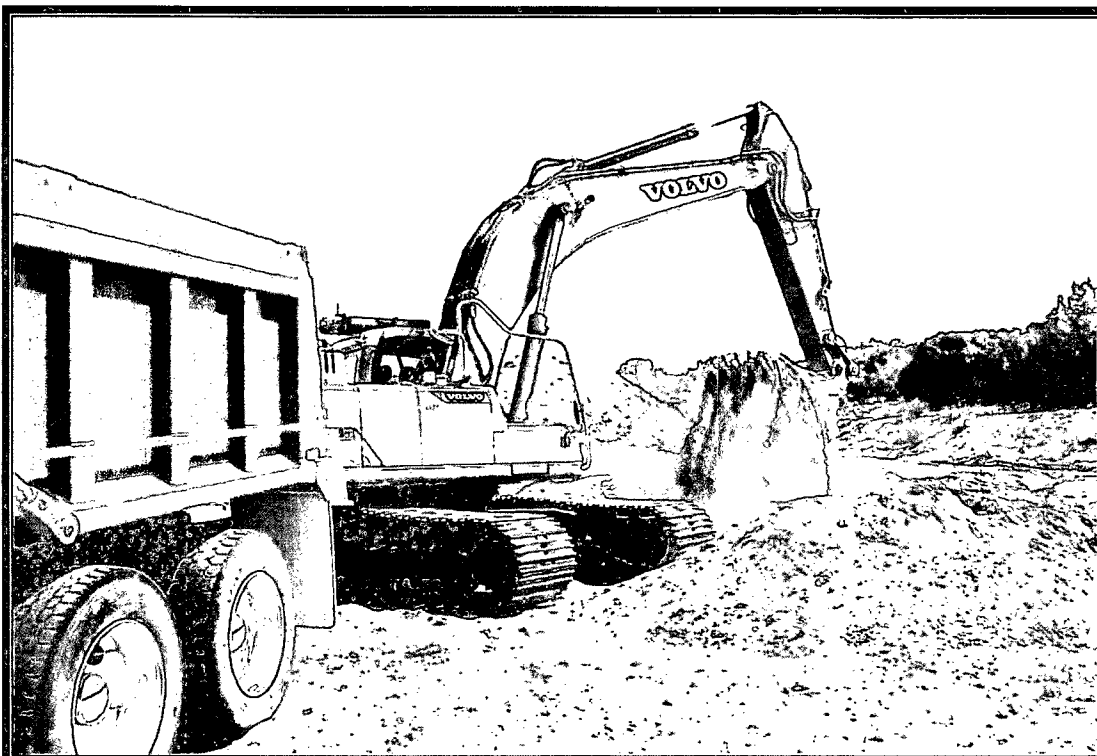


Photo 6: View of the excavation and loading of hydrocarbon impacted soils at the southern release.

Appendix B

Soil Disposal Documentation



MANIFEST # 44621
DATE 9-9-13 JOB # 97057-0585

DATE 9-9-13 JOB # 97057-0585

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.

Signatures required prior to distribution of the legal document.



Bill of Lading

MANIFEST # 44619

DATE 9-9-13 JOB # 97057-0585

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 Lateral CB-10 Pipeline	LF II	Cont Soil	C-24	12	—	MOSS Excavation	47	910	Lee Moss
2	Gallegos 203	" "	"	C-24	12	—	MOSS	17	915	Lee Moss
3	" "	" "	"	C-24	12	—	MOSS	47	1100	Lee Moss
4	" "	" "	"	C-24	10	—	MOSS	15	1105	Walt BME
5	" "	" "	"	C-24	12	—	MOSS	17	1115	Lee Moss
6	" "	" "	"	C-24	12	—	MOSS	47	1210	Lee Moss
7	" "	" "	"	C-24	10	—	MOSS	15	1230	Walt BME
8	" "	" "	"	C-24	12	—	MOSS	17	1245	Lee Moss
9	" "	" "	"	C-24	12	—	MOSS	47	1325	Lee Moss
10	" "	" "	"	C-24	10	—	MOSS	15	1345	Walt BME
11	" "	" "	"	C-24	12	—	MOSS	17	1405	Lee Moss
12	" "	" "	"	C-24	12	—	MOSS	15	1445	Walt BME
RESULTS:		LANDFARM EMPLOYEE:	<div style="text-align: right;">138 Brow</div>			NOTES:				
L292	CHLORIDE TEST									
	PAINT FILTER TEST	4	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 Lee Moss

SIGNATURE *Les Mas*

COMPANY CONTACT Gary MacIsaac

PHONE 215-2744

DATE 9-9-17

Signatures required prior to distribution of the legal document.



Bill of Lading

MANIFEST # 44583DATE 9-3-13 JOB # 97057-0585

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	ENTERPH. SC Cont 6B 10 PIPELINE "Gallies 203"	LFTI	cont SOIL	BB-3	12	-	MOSS	47	9:30	Lee Moss
2	" " " " " "	" " " " " "	" " " " " "	BB-3	12	-	MOSS	47	1100	Lee Moss
3	" " " " " "	" " " " " "	" " " " " "	BB-3	12	-	MOSS	47	1234	Lee Moss
4	" " " " " "	" " " " " "	" " " " " "	BB-3	12	-	MOSS	47	1406	Lee Moss
5	" " " " " "	" " " " " "	" " " " " "	BB-3	12	-	MOSS	47	15:20	Lee Moss
6	" " " " " "	" " " " " "	" " " " " "	BB-3	12	-	MOSS	47	16:50	Lee Moss
					72					
RESULTS:										
4292	CHLORIDE TEST	2	LANDFARM EMPLOYEE: <u>Dave L</u> <u>Bow</u>			NOTES:				
	PAINT FILTER TEST	2	Certification of above receipt & placement							

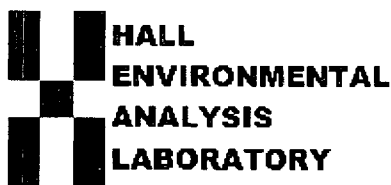
By signing as the driver/transporter, I certify the material hauled from the above location has not been added to or tampered with. I certify the material is from the above mentioned Generator/Point of Origin and that no additional material has been added or mixed into the load.

TRANSPORTER CO. Moss Excavation NAME Lee Moss SIGNATURE Lee Moss RDC
COMPANY CONTACT Buck PHONE 215-9934 DATE 9-3-13

Signatures required prior to distribution of the legal document.

Appendix C

Laboratory Analytical Reports



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

September 11, 2013

Thomas Long
Souder, Miller and Associates
2101 San Juan Boulevard
Farmington, NM 87401
TEL: (505) 325-7535
FAX (505) 327-1496

RE: Lateral 6B-10 North Release

OrderNo.: 1309128

Dear Thomas Long:

Hall Environmental Analysis Laboratory received 5 sample(s) on 9/4/2013 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 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,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1309128

Date Reported: 9/11/2013

CLIENT: Souder, Miller and Associates

Client Sample ID: SC-1

Project: Lateral 6B-10 North Release

Collection Date: 9/3/2013 10:27:00 AM

Lab ID: 1309128-001

Matrix: SOIL

Received Date: 9/4/2013 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	9/6/2013 11:07:22 AM	9188
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	9/6/2013 11:07:22 AM	9188
Surr: DNOP	93.0	63-147		%REC	1	9/6/2013 11:07:22 AM	9188
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	9/6/2013 7:04:59 PM	9190
Surr: BFB	97.9	80-120		%REC	1	9/6/2013 7:04:59 PM	9190
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.047		mg/Kg	1	9/6/2013 7:04:59 PM	9190
Toluene	ND	0.047		mg/Kg	1	9/6/2013 7:04:59 PM	9190
Ethylbenzene	ND	0.047		mg/Kg	1	9/6/2013 7:04:59 PM	9190
Xylenes, Total	ND	0.093		mg/Kg	1	9/6/2013 7:04:59 PM	9190
Surr: 4-Bromofluorobenzene	108	80-120		%REC	1	9/6/2013 7:04:59 PM	9190

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		

Hall Environmental Analysis Laboratory, Inc.**Analytical Report**

Lab Order 1309128

Date Reported: 9/11/2013

CLIENT: Souder, Miller and Associates**Client Sample ID:** SC-2**Project:** Lateral 6B-10 North Release**Collection Date:** 9/3/2013 10:29:00 AM**Lab ID:** 1309128-002**Matrix:** SOIL**Received Date:** 9/4/2013 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	9/6/2013 11:38:28 AM	9188
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	9/6/2013 11:38:28 AM	9188
Surr: DNOP	94.3	63-147		%REC	1	9/6/2013 11:38:28 AM	9188
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	9/6/2013 10:25:22 PM	9190
Surr: BFB	93.0	80-120		%REC	1	9/6/2013 10:25:22 PM	9190
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.046		mg/Kg	1	9/6/2013 10:25:22 PM	9190
Toluene	ND	0.046		mg/Kg	1	9/6/2013 10:25:22 PM	9190
Ethylbenzene	ND	0.046		mg/Kg	1	9/6/2013 10:25:22 PM	9190
Xylenes, Total	ND	0.092		mg/Kg	1	9/6/2013 10:25:22 PM	9190
Surr: 4-Bromofluorobenzene	101	80-120		%REC	1	9/6/2013 10:25:22 PM	9190

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		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1309128

Date Reported: 9/11/2013

CLIENT: Souder, Miller and Associates

Client Sample ID: SC-3

Project: Lateral 6B-10 North Release

Collection Date: 9/3/2013 10:30:00 AM

Lab ID: 1309128-003

Matrix: SOIL

Received Date: 9/4/2013 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	11	10		mg/Kg	1	9/6/2013 12:09:33 PM	9188
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	9/6/2013 12:09:33 PM	9188
Surr: DNOP	90.2	63-147		%REC	1	9/6/2013 12:09:33 PM	9188
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	9/6/2013 10:53:59 PM	9190
Surr: BFB	115	80-120		%REC	1	9/6/2013 10:53:59 PM	9190
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.049		mg/Kg	1	9/6/2013 10:53:59 PM	9190
Toluene	ND	0.049		mg/Kg	1	9/6/2013 10:53:59 PM	9190
Ethylbenzene	ND	0.049		mg/Kg	1	9/6/2013 10:53:59 PM	9190
Xylenes, Total	ND	0.097		mg/Kg	1	9/6/2013 10:53:59 PM	9190
Surr: 4-Bromofluorobenzene	105	80-120		%REC	1	9/6/2013 10:53:59 PM	9190

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1309128

Date Reported: 9/11/2013

CLIENT: Souder, Miller and Associates

Client Sample ID: SC-4

Project: Lateral 6B-10 North Release

Collection Date: 9/3/2013 10:31:00 AM

Lab ID: 1309128-004

Matrix: SOIL

Received Date: 9/4/2013 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	9/6/2013 12:40:38 PM	9188
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	9/6/2013 12:40:38 PM	9188
Surr: DNOP	86.0	63-147		%REC	1	9/6/2013 12:40:38 PM	9188
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	9/6/2013 11:51:04 PM	9190
Surr: BFB	115	80-120		%REC	1	9/6/2013 11:51:04 PM	9190
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.048		mg/Kg	1	9/6/2013 11:51:04 PM	9190
Toluene	ND	0.048		mg/Kg	1	9/6/2013 11:51:04 PM	9190
Ethylbenzene	ND	0.048		mg/Kg	1	9/6/2013 11:51:04 PM	9190
Xylenes, Total	0.28	0.096		mg/Kg	1	9/6/2013 11:51:04 PM	9190
Surr: 4-Bromofluorobenzene	108	80-120		%REC	1	9/6/2013 11:51:04 PM	9190

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		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order 1309128
Date Reported: 9/11/2013

CLIENT: Souder, Miller and Associates

Client Sample ID: SC-5

Project: Lateral 6B-10 North Release

Collection Date: 9/3/2013 10:33:00 AM

Lab ID: 1309128-005

Matrix: SOIL

Received Date: 9/4/2013 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	200	9.9		mg/Kg	1	9/6/2013 1:11:34 PM	9188
Motor Oil Range Organics (MRO)	330	50		mg/Kg	1	9/6/2013 1:11:34 PM	9188
Surr: DNOP	97.2	63-147		%REC	1	9/6/2013 1:11:34 PM	9188
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	5.7	4.7		mg/Kg	1	9/7/2013 12:19:41 AM	9190
Surr: BFB	131	80-120	S	%REC	1	9/7/2013 12:19:41 AM	9190
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.047		mg/Kg	1	9/7/2013 12:19:41 AM	9190
Toluene	ND	0.047		mg/Kg	1	9/7/2013 12:19:41 AM	9190
Ethylbenzene	ND	0.047		mg/Kg	1	9/7/2013 12:19:41 AM	9190
Xylenes, Total	0.13	0.094		mg/Kg	1	9/7/2013 12:19:41 AM	9190
Surr: 4-Bromofluorobenzene	107	80-120		%REC	1	9/7/2013 12:19:41 AM	9190

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#: 1309128

11-Sep-13

Client: Souder, Miller and Associates

Project: Lateral 6B-10 North Release

Sample ID	MB-9188	SampType:	MBLK	TestCode:	EPA Method 8015D: Diesel Range Organics					
Client ID:	PBS	Batch ID:	9188	RunNo:	13093					
Prep Date:	9/5/2013	Analysis Date:	9/5/2013	SeqNo:	373977	Units:	mg/Kg			
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	8.6		10.00		85.6	63	147			

Sample ID	LCS-9188	SampType:	LCS	TestCode:	EPA Method 8015D: Diesel Range Organics					
Client ID:	LCSS	Batch ID:	9188	RunNo:	13132					
Prep Date:	9/5/2013	Analysis Date:	9/6/2013	SeqNo:	374988	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	61	10	50.00	0	122	77.1	128			
Surr: DNOP	4.8		5.000		95.7	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 |
| 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#: 1309128

11-Sep-13

Client: Souder, Miller and Associates

Project: Lateral 6B-10 North Release

Sample ID	MB-9190	SampType:	MBLK		TestCode:	EPA Method 8015D: Gasoline Range				
Client ID:	PBS	Batch ID:	9190		RunNo:	13161				
Prep Date:	9/5/2013	Analysis Date:	9/6/2013		SeqNo:	375487		Units:	mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	940		1000		94.0	80	120			

Sample ID	LCS-9190	SampType:	LCS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	LCSS	Batch ID:	9190	RunNo:	13161					
Prep Date:	9/5/2013	Analysis Date:	9/6/2013	SeqNo:	375488	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	25.00	0	101	74.5	126			
Surr: BFB	1000		1000		104	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
- 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#: 1309128

11-Sep-13

Client: Souder, Miller and Associates

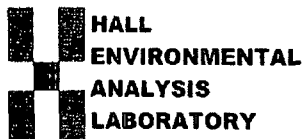
Project: Lateral 6B-10 North Release

Sample ID	MB-9190		SampType:	MBLK		TestCode:	EPA Method 8021B: Volatiles			
Client ID:	PBS		Batch ID:	9190		RunNo:	13161			
Prep Date:	9/5/2013		Analysis Date:	9/6/2013		SeqNo:	375522		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	1.1		1.000		107	80	120			

Sample ID	LCS-9190		SampType:	LCS		TestCode:	EPA Method 8021B: Volatiles			
Client ID:	LCSS		Batch ID:	9190		RunNo:	13161			
Prep Date:	9/5/2013		Analysis Date:	9/6/2013		SeqNo:	375523		Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.050	1.000	0	106	80	120			
Toluene	1.0	0.050	1.000	0	105	80	120			
Ethylbenzene	1.0	0.050	1.000	0	104	80	120			
Xylenes, Total	3.2	0.10	3.000	0	105	80	120			
Surr: 4-Bromofluorobenzene	1.1		1.000		113	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 | |



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

Sample Log-In Check List

Client Name: SMA-FARM

Work Order Number: 1309128

RcptNo: 1

Received by/date:

AG

09/04/13

Logged By: Lindsay Mangin

9/4/2013 10:00:00 AM

Lindsay Mangin

Completed By: Lindsay Mangin

9/5/2013 9:10:21 AM

Lindsay Mangin

Reviewed By:

[Signature]

09/05/13

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 $>0^{\circ}\text{C}$ 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 ☐ # 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?
(If no, notify customer for authorization.) Yes ☒ No ☐ 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 $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.8	Good	Yes			

Chain-of-Custody Record		Turn-Around Time:
Client: SMA	<input checked="" type="checkbox"/> Standard <input type="checkbox"/> Rush	Project Name: Lateral 6B-10 North Release
Mailing Address: 2101 San Juan Blvd. Farmington, NM 87401	Project #: S122164	
Phone #: 505.325.7535	Project Manager: Thomas Long	Sampler: Thomas Long On/ice: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Sample Temperature: 2.8
email or Fax#: tom.long@souderniller.com		
QA/QC Package: <input checked="" type="checkbox"/> Standard <input type="checkbox"/> Level 4 (Full Validation)		
Accreditation <input type="checkbox"/> NELAP <input type="checkbox"/> Other		
<input type="checkbox"/> EDD (Type)		

☒ **Standard** ☐ **Rush**

Project #: 5122164

Project Manager: *Thomas Long*

Sampler: Thomas Long

On Ice: ☒ Yes ☐ No

Sample Temperature: 20



www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request


[illegible]

Date:	Time:	Relinquished by:
9-3-13	1700	<i>[Signature]</i>
Date:	Time:	Relinquished by:

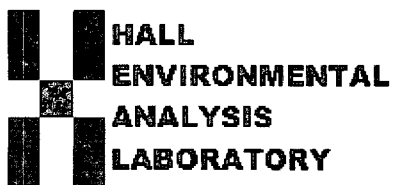
Received by:	Date	Time
Christ Walle	9/3/13	1700

Remarks:	Bill To Enterprise
----------	--------------------

Date:	Time:	Relinquished by:
4/3/13	1721	Christine Waeten

Received by:  Date 09/04/13 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

September 13, 2013

Tom Long

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

RE: Enterprise Lateral 6B-10

OrderNo.: 1309326

Dear Tom Long:

Hall Environmental Analysis Laboratory received 7 sample(s) on 9/10/2013 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 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.

Analytical Report

Lab Order 1309326

Date Reported: 9/13/2013

CLIENT: Souder, Miller and Associates

Client Sample ID: SC-1

Project: Enterprise Lateral 6B-10

Collection Date: 9/9/2013 11:00:00 AM

Lab ID: 1309326-001

Matrix: SOIL

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

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	9/13/2013 11:42:51 AM	9273
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	9/13/2013 11:42:51 AM	9273
Surr: DNOP	111	63-147		%REC	1	9/13/2013 11:42:51 AM	9273
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	9/11/2013 4:27:50 PM	9242
Surr: BFB	98.2	80-120		%REC	1	9/11/2013 4:27:50 PM	9242
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.048		mg/Kg	1	9/11/2013 4:27:50 PM	9242
Toluene	ND	0.048		mg/Kg	1	9/11/2013 4:27:50 PM	9242
Ethylbenzene	ND	0.048		mg/Kg	1	9/11/2013 4:27:50 PM	9242
Xylenes, Total	ND	0.096		mg/Kg	1	9/11/2013 4:27:50 PM	9242
Surr: 4-Bromofluorobenzene	109	80-120		%REC	1	9/11/2013 4:27:50 PM	9242

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		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1309326

Date Reported: 9/13/2013

CLIENT: Souder, Miller and Associates

Client Sample ID: SC-2

Project: Enterprise Lateral 6B-10

Collection Date: 9/9/2013 11:03:00 AM

Lab ID: 1309326-002

Matrix: SOIL

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

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	9/13/2013 12:04:44 PM	9273
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	9/13/2013 12:04:44 PM	9273
Surr: DNOP	89.8	63-147		%REC	1	9/13/2013 12:04:44 PM	9273
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	9/11/2013 4:56:26 PM	9242
Surr: BFB	113	80-120		%REC	1	9/11/2013 4:56:26 PM	9242
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.047		mg/Kg	1	9/11/2013 4:56:26 PM	9242
Toluene	0.29	0.047		mg/Kg	1	9/11/2013 4:56:26 PM	9242
Ethylbenzene	0.10	0.047		mg/Kg	1	9/11/2013 4:56:26 PM	9242
Xylenes, Total	0.68	0.094		mg/Kg	1	9/11/2013 4:56:26 PM	9242
Surr: 4-Bromofluorobenzene	113	80-120		%REC	1	9/11/2013 4:56:26 PM	9242

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		

Hall Environmental Analysis Laboratory, Inc.**Analytical Report**

Lab Order 1309326

Date Reported: 9/13/2013

CLIENT: Souder, Miller and Associates**Client Sample ID:** SC-3**Project:** Enterprise Lateral 6B-10**Collection Date:** 9/9/2013 11:08:00 AM**Lab ID:** 1309326-003**Matrix:** SOIL**Received Date:** 9/10/2013 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	9/13/2013 12:26:50 PM	9273
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	9/13/2013 12:26:50 PM	9273
Surr: DNOP	95.6	63-147		%REC	1	9/13/2013 12:26:50 PM	9273
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	5.7	4.7		mg/Kg	1	9/11/2013 5:25:10 PM	9242
Surr: BFB	125	80-120	S	%REC	1	9/11/2013 5:25:10 PM	9242
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.047		mg/Kg	1	9/11/2013 5:25:10 PM	9242
Toluene	ND	0.047		mg/Kg	1	9/11/2013 5:25:10 PM	9242
Ethylbenzene	ND	0.047		mg/Kg	1	9/11/2013 5:25:10 PM	9242
Xylenes, Total	ND	0.094		mg/Kg	1	9/11/2013 5:25:10 PM	9242
Surr: 4-Bromofluorobenzene	114	80-120		%REC	1	9/11/2013 5:25:10 PM	9242

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		

Hall Environmental Analysis Laboratory, Inc.**Analytical Report**

Lab Order 1309326

Date Reported: 9/13/2013

CLIENT: Souder, Miller and Associates**Client Sample ID:** SC-4**Project:** Enterprise Lateral 6B-10**Collection Date:** 9/9/2013 11:12:00 AM**Lab ID:** 1309326-004**Matrix:** SOIL**Received Date:** 9/10/2013 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	820	10		mg/Kg	1	9/13/2013 12:48:50 PM	9273
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	9/13/2013 12:48:50 PM	9273
Surr: DNOP	82.7	63-147		%REC	1	9/13/2013 12:48:50 PM	9273
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	9/11/2013 5:53:54 PM	9242
Surr: BFB	117	80-120		%REC	1	9/11/2013 5:53:54 PM	9242
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.049		mg/Kg	1	9/11/2013 5:53:54 PM	9242
Toluene	ND	0.049		mg/Kg	1	9/11/2013 5:53:54 PM	9242
Ethylbenzene	ND	0.049		mg/Kg	1	9/11/2013 5:53:54 PM	9242
Xylenes, Total	ND	0.098		mg/Kg	1	9/11/2013 5:53:54 PM	9242
Surr: 4-Bromofluorobenzene	110	80-120		%REC	1	9/11/2013 5:53:54 PM	9242

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		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1309326

Date Reported: 9/13/2013

CLIENT: Souder, Miller and Associates

Client Sample ID: SC-5

Project: Enterprise Lateral 6B-10

Collection Date: 9/9/2013 11:20:00 AM

Lab ID: 1309326-005

Matrix: SOIL

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

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	9/13/2013 1:10:57 PM	9273
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	9/13/2013 1:10:57 PM	9273
Surr: DNOP	65.6	63-147		%REC	1	9/13/2013 1:10:57 PM	9273
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	9/11/2013 6:22:33 PM	9242
Surr: BFB	101	80-120		%REC	1	9/11/2013 6:22:33 PM	9242
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.047		mg/Kg	1	9/11/2013 6:22:33 PM	9242
Toluene	0.061	0.047		mg/Kg	1	9/11/2013 6:22:33 PM	9242
Ethylbenzene	ND	0.047		mg/Kg	1	9/11/2013 6:22:33 PM	9242
Xylenes, Total	ND	0.094		mg/Kg	1	9/11/2013 6:22:33 PM	9242
Surr: 4-Bromofluorobenzene	110	80-120		%REC	1	9/11/2013 6:22:33 PM	9242

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates

Client Sample ID: SC-6

Project: Enterprise Lateral 6B-10

Collection Date: 9/9/2013 11:33:00 AM

Lab ID: 1309326-006

Matrix: SOIL

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

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	9/13/2013 1:32:50 PM	9273
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	9/13/2013 1:32:50 PM	9273
Surr: DNOP	94.8	63-147		%REC	1	9/13/2013 1:32:50 PM	9273
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	9/11/2013 6:51:12 PM	9242
Surr: BFB	99.4	80-120		%REC	1	9/11/2013 6:51:12 PM	9242
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.047		mg/Kg	1	9/11/2013 6:51:12 PM	9242
Toluene	0.084	0.047		mg/Kg	1	9/11/2013 6:51:12 PM	9242
Ethylbenzene	ND	0.047		mg/Kg	1	9/11/2013 6:51:12 PM	9242
Xylenes, Total	0.11	0.094		mg/Kg	1	9/11/2013 6:51:12 PM	9242
Surr: 4-Bromofluorobenzene	106	80-120		%REC	1	9/11/2013 6:51:12 PM	9242

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 1309326

Date Reported: 9/13/2013

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Souder, Miller and Associates**Client Sample ID:** SC-7**Project:** Enterprise Lateral 6B-10**Collection Date:** 9/9/2013 11:35:00 AM**Lab ID:** 1309326-007**Matrix:** SOIL**Received Date:** 9/10/2013 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	9/13/2013 1:55:01 PM	9273
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	9/13/2013 1:55:01 PM	9273
Surr: DNOP	76.6	63-147		%REC	1	9/13/2013 1:55:01 PM	9273
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	9/12/2013 3:13:48 PM	9242
Surr: BFB	106	80-120		%REC	1	9/12/2013 3:13:48 PM	9242
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.048		mg/Kg	1	9/12/2013 3:13:48 PM	9242
Toluene	0.12	0.048		mg/Kg	1	9/12/2013 3:13:48 PM	9242
Ethylbenzene	ND	0.048		mg/Kg	1	9/12/2013 3:13:48 PM	9242
Xylenes, Total	ND	0.096		mg/Kg	1	9/12/2013 3:13:48 PM	9242
Surr: 4-Bromofluorobenzene	109	80-120		%REC	1	9/12/2013 3:13:48 PM	9242

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#: 1309326

13-Sep-13

Client: Souder, Miller and Associates

Project: Enterprise Lateral 6B-10

Sample ID	MB-9242		SampType:	MBLK		TestCode:	EPA Method 8015D: Gasoline Range				
Client ID:	PBS		Batch ID:	9242		RunNo:	13292				
Prep Date:	9/10/2013		Analysis Date:	9/11/2013		SeqNo:	378524		Units: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Gasoline Range Organics (GRO)	ND	5.0									
Surr: BFB	920		1000		92.1	80	120				

Sample ID	LCS-9242		SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	LCSS		Batch ID: 9242		RunNo: 13292					
Prep Date:	9/10/2013		Analysis Date: 9/11/2013		SeqNo: 378525		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	95.1	74.5	126			
Surr: BFB	990		1000		99.1	80	120			

Sample ID	MB-9268 MK		SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	PBS		Batch ID: R13320		RunNo: 13320					
Prep Date:			Analysis Date: 9/12/2013		SeqNo: 379411		Units: %REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	950		1000		95.4	80	120			

Sample ID	LCS-9268 MK		SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	LCSS		Batch ID: R13320		RunNo: 13320					
Prep Date:			Analysis Date: 9/12/2013		SeqNo: 379412		Units: %REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1100		1000		110	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 | |

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1309326

13-Sep-13

Client: Souder, Miller and Associates

Project: Enterprise Lateral 6B-10

Sample ID	MB-9242		SampType:	MBLK		TestCode:	EPA Method 8021B: Volatiles			
Client ID:	PBS		Batch ID:	9242		RunNo:	13292			
Prep Date:	9/10/2013		Analysis Date:	9/11/2013		SeqNo:	378545		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-9242		SampType:	LCS		TestCode:	EPA Method 8021B: Volatiles			
Client ID:	LCSS		Batch ID:	9242		RunNo:	13292			
Prep Date:	9/10/2013		Analysis Date:	9/11/2013		SeqNo:	378546		Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.98	0.050	1.000	0	97.7	80	120			
Toluene	0.99	0.050	1.000	0	98.7	80	120			
Ethylbenzene	0.99	0.050	1.000	0	99.1	80	120			
Xylenes, Total	3.0	0.10	3.000	0	98.7	80	120			
Surr: 4-Bromofluorobenzene	1.1		1.000		110	80	120			

Sample ID	MB-9268 MK		SampType:	MBLK		TestCode:	EPA Method 8021B: Volatiles			
Client ID:	PBS		Batch ID:	R13320		RunNo:	13320			
Prep Date:			Analysis Date:	9/12/2013		SeqNo:	379491		Units: %REC	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.1		1.000		107	80	120			

Sample ID	LCS-9268 MK		SampType:	LCS		TestCode:	EPA Method 8021B: Volatiles			
Client ID:	LCSS		Batch ID:	R13320		RunNo:	13320			
Prep Date:			Analysis Date:	9/12/2013		SeqNo:	379492		Units: %REC	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.1		1.000		114	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 | |



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

Sample Log-In Check List

Client Name: SMA-FARM

Work Order Number: 1309326

RcptNo: 1

Received by/date:

Logged By: Lindsay Mangin

9/10/2013 10:00:00 AM

Completed By: Lindsay Mangin

9/10/2013 10:48:38 AM

Reviewed By:

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 $>0^{\circ}\text{C}$ 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 ☐ # 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?
(If no, notify customer for authorization.) Yes ☒ No ☐ 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

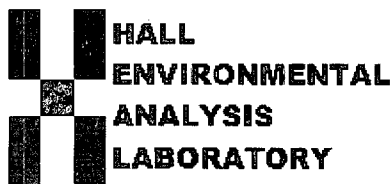
Regarding:

Client Instructions:

17. Additional remarks:

18. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.0	Good	Yes			



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

November 19, 2014

Steve Moskal
Souder, Miller and Associates
401 W. Broadway
Farmington, NM 87401
TEL: (505) 325-5667
FAX

RE: Lateral 6B-10

OrderNo.: 1411595

Dear Steve Moskal:

Hall Environmental Analysis Laboratory received 5 sample(s) on 11/15/2014 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. 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 qualifers 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,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report

Lab Order 1411595

Date Reported: 11/19/2014

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Souder, Miller and Associates .**Client Sample ID:** SB-4 @ 4'**Project:** Lateral 6B-10**Collection Date:** 11/14/2014 1:15:00 PM**Lab ID:** 1411595-001**Matrix:** SOIL**Received Date:** 11/15/2014 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	11/19/2014 2:40:35 AM	16408
Surr: DNOP	98.2	63.5-128		%REC	1	11/19/2014 2:40:35 AM	16408
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	11/18/2014 2:13:29 PM	16419
Surr: BFB	91.2	80-120		%REC	1	11/18/2014 2:13:29 PM	16419
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.048		mg/Kg	1	11/18/2014 2:13:29 PM	16419
Toluene	ND	0.048		mg/Kg	1	11/18/2014 2:13:29 PM	16419
Ethylbenzene	ND	0.048		mg/Kg	1	11/18/2014 2:13:29 PM	16419
Xylenes, Total	ND	0.096		mg/Kg	1	11/18/2014 2:13:29 PM	16419
Surr: 4-Bromofluorobenzene	100	80-120		%REC	1	11/18/2014 2:13:29 PM	16419

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1411595

Date Reported: 11/19/2014

CLIENT: Souder, Miller and Associates

Client Sample ID: SB-4 @ 13.5'

Project: Lateral 6B-10

Collection Date: 11/14/2014 2:46:00 PM

Lab ID: 1411595-002

Matrix: SOIL

Received Date: 11/15/2014 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	11/19/2014 3:10:29 AM	16408
Surr: DNOP	94.9	63.5-128		%REC	1	11/19/2014 3:10:29 AM	16408
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	11/18/2014 3:39:19 PM	16419
Surr: BFB	90.4	80-120		%REC	1	11/18/2014 3:39:19 PM	16419
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.047		mg/Kg	1	11/18/2014 3:39:19 PM	16419
Toluene	ND	0.047		mg/Kg	1	11/18/2014 3:39:19 PM	16419
Ethylbenzene	ND	0.047		mg/Kg	1	11/18/2014 3:39:19 PM	16419
Xylenes, Total	ND	0.094		mg/Kg	1	11/18/2014 3:39:19 PM	16419
Surr: 4-Bromofluorobenzene	99.6	80-120		%REC	1	11/18/2014 3:39:19 PM	16419

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	Page 2 of 8
	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.	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1411595

Date Reported: 11/19/2014

CLIENT: Souder, Miller and Associates

Client Sample ID: SB-2 @ 13'

Project: Lateral 6B-10

Collection Date: 11/14/2014 3:05:00 PM

Lab ID: 1411595-003

Matrix: SOIL

Received Date: 11/15/2014 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	11/19/2014 3:40:00 AM	16408
Surr: DNOP	89.8	63.5-128		%REC	1	11/19/2014 3:40:00 AM	16408
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	11/18/2014 5:05:20 PM	16419
Surr: BFB	90.4	80-120		%REC	1	11/18/2014 5:05:20 PM	16419
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.049		mg/Kg	1	11/18/2014 5:05:20 PM	16419
Toluene	ND	0.049		mg/Kg	1	11/18/2014 5:05:20 PM	16419
Ethylbenzene	ND	0.049		mg/Kg	1	11/18/2014 5:05:20 PM	16419
Xylenes, Total	ND	0.097		mg/Kg	1	11/18/2014 5:05:20 PM	16419
Surr: 4-Bromofluorobenzene	99.3	80-120		%REC	1	11/18/2014 5:05:20 PM	16419

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1411595

Date Reported: 11/19/2014

CLIENT: Souder, Miller and Associates

Client Sample ID: SB-1 @ 12'

Project: Lateral 6B-10

Collection Date: 11/14/2014 3:08:00 PM

Lab ID: 1411595-004

Matrix: SOIL

Received Date: 11/15/2014 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	11/19/2014 4:09:27 AM	16408
Surr: DNOP	102	63.5-128		%REC	1	11/19/2014 4:09:27 AM	16408
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	11/18/2014 5:33:57 PM	16419
Surr: BFB	91.1	80-120		%REC	1	11/18/2014 5:33:57 PM	16419
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.048		mg/Kg	1	11/18/2014 5:33:57 PM	16419
Toluene	ND	0.048		mg/Kg	1	11/18/2014 5:33:57 PM	16419
Ethylbenzene	ND	0.048		mg/Kg	1	11/18/2014 5:33:57 PM	16419
Xylenes, Total	ND	0.096		mg/Kg	1	11/18/2014 5:33:57 PM	16419
Surr: 4-Bromofluorobenzene	98.0	80-120		%REC	1	11/18/2014 5:33:57 PM	16419

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	Page 4 of 8
	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.	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Analytical Report

Lab Order 1411595

Date Reported: 11/19/2014

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Souder, Miller and Associates**Client Sample ID:** SC-1 Surface**Project:** Lateral 6B-10**Collection Date:** 11/14/2014 3:10:00 PM**Lab ID:** 1411595-005**Matrix:** SOIL**Received Date:** 11/15/2014 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	11/19/2014 4:39:09 AM	16408
Surr: DNOP	101	63.5-128		%REC	1	11/19/2014 4:39:09 AM	16408
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	11/18/2014 7:56:59 PM	16419
Surr: BFB	88.7	80-120		%REC	1	11/18/2014 7:56:59 PM	16419
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.047		mg/Kg	1	11/18/2014 7:56:59 PM	16419
Toluene	ND	0.047		mg/Kg	1	11/18/2014 7:56:59 PM	16419
Ethylbenzene	ND	0.047		mg/Kg	1	11/18/2014 7:56:59 PM	16419
Xylenes, Total	ND	0.095		mg/Kg	1	11/18/2014 7:56:59 PM	16419
Surr: 4-Bromofluorobenzene	97.0	80-120		%REC	1	11/18/2014 7:56:59 PM	16419

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.
	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#: 1411595

19-Nov-14

Client: Souder, Miller and Associates

Project: Lateral 6B-10

Sample ID	MB-16408		SampType:	MBLK		TestCode:	EPA Method 8015D: Diesel Range Organics				
Client ID:	PBS		Batch ID:	16408		RunNo:	22596				
Prep Date:	11/17/2014		Analysis Date:	11/17/2014		SeqNo:	666118		Units: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Diesel Range Organics (DRO)	ND	10									
Surr: DNOP	9.7		10.00		96.7	63.5	128				

Sample ID	LCS-16408		SampType: LCS		TestCode: EPA Method 8015D: Diesel Range Organics					
Client ID:	LCSS		Batch ID: 16408		RunNo: 22596					
Prep Date:	11/17/2014		Analysis Date: 11/17/2014		SeqNo: 666119		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	56	10	50.00	0	112	68.6	130			
Surr: DNOP	4.6		5.000		92.7	63.5	128			

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. |
| 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#: 1411595

19-Nov-14

Client: Souder, Miller and Associates

Project: Lateral 6B-10

Sample ID	MB-16419		SampType:	MBLK		TestCode:	EPA Method 8015D: Gasoline Range				
Client ID:	PBS		Batch ID:	16419		RunNo:	22604				
Prep Date:	11/17/2014		Analysis Date:	11/18/2014		SeqNo:	667008		Units: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Gasoline Range Organics (GRO)	ND	5.0									
Surr: BFB	910		1000		90.8	80	120				

Sample ID	LCS-16419		SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	LCSS		Batch ID: 16419		RunNo: 22604					
Prep Date:	11/17/2014		Analysis Date: 11/18/2014		SeqNo: 667009		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	95.9	65.8	139			
Surr: BFB	970		1000		97.5	80	120			

Sample ID	1411595-002AMS		SampType: MS		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	SB-4 @ 13.5'		Batch ID: 16419		RunNo: 22604					
Prep Date:	11/17/2014		Analysis Date: 11/18/2014		SeqNo: 667016		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	4.7	23.43	0	106	71.8	132			
Surr: BFB	950		937.2		101	80	120			

Sample ID	1411595-002AMSD		SampType: MSD		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	SB-4 @ 13.5'		Batch ID: 16419		RunNo: 22604					
Prep Date:	11/17/2014		Analysis Date: 11/18/2014		SeqNo: 667017		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	4.7	23.43	0	106	71.8	132	0.0755	20	
Surr: BFB	940		937.2		100	80	120	0	0	

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. |
| 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#: 1411595

19-Nov-14

Client: Souder, Miller and Associates

Project: Lateral 6B-10

Sample ID	MB-16419	SampType:	MBLK		TestCode:	EPA Method 8021B: Volatiles					
Client ID:	PBS	Batch ID:	16419		RunNo:	22604					
Prep Date:	11/17/2014	Analysis Date:	11/18/2014		SeqNo:	667037		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		101	80	120				

Sample ID	LCS-16419		SampType: LCS		TestCode: EPA Method 8021B: Volatiles					
Client ID:	LCSS		Batch ID: 16419		RunNo: 22604					
Prep Date:	11/17/2014		Analysis Date: 11/18/2014		SeqNo: 667038		Units: mg/Kg			
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	102	80	120			
Ethylbenzene	1.1	0.050	1.000	0	106	80	120			
Xylenes, Total	3.1	0.10	3.000	0	105	80	120			
Surr: 4-Bromofluorobenzene	1.1		1.000		108	80	120			

Sample ID	1411595-001AMS		SampType: MS		TestCode: EPA Method 8021B: Volatiles					
Client ID:	SB-4 @ 4'		Batch ID: 16419		RunNo: 22604					
Prep Date:	11/17/2014		Analysis Date: 11/18/2014		SeqNo: 667044		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.94	0.048	0.9551	0	98.6	77.4	142			
Toluene	0.92	0.048	0.9551	0.008994	95.8	77	132			
Ethylbenzene	0.96	0.048	0.9551	0	100	77.6	134			
Xylenes, Total	2.9	0.096	2.865	0	101	77.4	132			
Surr: 4-Bromofluorobenzene	1.0		0.9551		105	80	120			

Sample ID	1411595-001AMSD		SampType: MSD		TestCode: EPA Method 8021B: Volatiles					
Client ID:	SB-4 @ 4'		Batch ID: 16419		RunNo: 22604					
Prep Date:	11/17/2014		Analysis Date: 11/18/2014		SeqNo: 667045		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.93	0.048	0.9551	0	97.1	77.4	142	1.55	20	
Toluene	0.93	0.048	0.9551	0.008994	96.1	77	132	0.268	20	
Ethylbenzene	0.98	0.048	0.9551	0	103	77.6	134	2.89	20	
Xylenes, Total	2.9	0.096	2.865	0	101	77.4	132	0.866	20	
Surr: 4-Bromofluorobenzene	1.0		0.9551		105	80	120	0	0	

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



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

Sample Log-In Check List

Client Name: SMA-FARM

Work Order Number: 1411595

RcptNo: 1

Received by/date:	AF	11/15/12
Logged By:	Lindsay Mangin	11/15/2014 10:00:00 AM
Completed By:	Lindsay Mangin	11/17/2014 9:29:53 AM
Reviewed By:	CS	11/17/14

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 $>0^{\circ}\text{C}$ 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:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> 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	4.5	Good	Yes			

<h1>Chain-of-Custody Record</h1>		Turn-Around Time:	
Client: <u>SMA</u>		<input checked="" type="checkbox"/> Standard <input type="checkbox"/> Rush	
Mailing Address: <u>401 W Broadway</u> <u>Farmington, NM 87401</u>		Project Name: <u>Labral GB10</u>	
Phone #: <u>505 325 7535</u>		Project #: <u>5122855 BLG9</u>	
email or Fax#: <u>stern.moskal@sandmiller.com</u>		Project Manager: <u>Steve Moskal</u>	
QA/QC Package: <input type="checkbox"/> Standard <input type="checkbox"/> Level 4 (Full Validation)		Sampler: <u>J. Sprague</u>	
Accreditation <input type="checkbox"/> NELAP <input type="checkbox"/> Other _____		On Ice: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
<input type="checkbox"/> EDD (Type) _____		Sample Temperature: <u>4.5</u>	

☒ **Standard** ☐ **Rush**

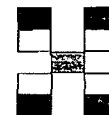
Latval GB-10

5122855 B69

Steve Moskal

On Ice: ☒ Yes ☐ No

Sample Temperature: 4.5



www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

[illegible]

Date:	Time:	Relinquished by:	Received by:	Date	Time
11/14/14	1630	Gen E Spyr	Christina White	11/14/14	1648
Date:	Time:	Relinquished by:	Received by:	Date	Time
11/14/14	1728	Christina White	[Signature]	11/15/14	10:00

Remarks: Invoice: Enterprise
Please copy Jesse. Sprague@sachs.miller
Alicia. Patterson@sachs.miller.com

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.