

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

JAN 11 2016 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 2C-55	Facility Type: Natural Gas Gather Pipeline
Surface Owner: BLM	Mineral Owner: BLM
API No.	

LOCATION OF RELEASE

Unit Letter O	Section 19	Township 25N	Range 7W	Feet from the 1236	North/South Line	Feet from the 1874	East/West Line	County Rio Arriba
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Latitude 36.38203 Longitude 107.61250

NATURE OF RELEASE

Type of Release: Natural Gas and Condensate	Volume of Release: 25 MCF Gas; 5-10 BBLs Liquids	Volume Recovered: None
Source of Release: Internal Corrosion	Date and Hour of Occurrence: 10/13/2015 @ 4:30 p.m.	Date and Hour of Discovery: 10/13/2015 @ 5:00 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 Cory Smith – NMOCD; Katherina Diemer - BLM	
By Whom? Thomas Long	Date and Hour 10/14/2015 @ 8:41 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 13, 2015, Enterprise technicians discovered a natural gas leak in the Lateral 2C-55 right of way during the remediation of a previous release. The pipeline was isolated, depressurized, locked out and tagged out. Repairs and remediation were completed on November 9, 2015.

Describe Area Affected and Cleanup Action Taken: The contaminant mass was removed by mechanical excavation. The final excavation measured approximately 60 feet long by 45 feet wide and approximately 10 feet deep. Approximately 562 cubic yards of hydrocarbon impacted soil were excavated and transported to a New Mexico Oil Conservation 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 E. Fields	Approved by Environmental Specialist:	
Title: Director, Environmental	Approval Date: 1/13/2016	Expiration Date:
E-mail Address: jefields@eprod.com	Conditions of Approval:	Attached <input type="checkbox"/>
Date: 1-6-2016	Phone: (713)381-6684	

* Attach Additional Sheets If Necessary

NMF 1601334408

40

Enterprise Products
Lateral 2C-55 October 13, 2015 Pipeline Release
Latitude 36.38203°, Longitude -107.61250°
Unit Letter O Section 19 T25N R7W
Rio Arriba County, New Mexico
November 25, 2015

OIL CONS. DIV DIST. 3

JAN 11 2016



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

Figures:

- Figure 1: Vicinity Map
- Figure 2: Site Location 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: Site Photography
- Appendix B: Soil Disposal Documentation
- Appendix C: Laboratory Analytical Reports

1.0 Executive Summary

From October 13, 2015 to November 9, 2015 Souder, Miller & Associates (SMA) oversaw remedial activities in response to a secondary hydrocarbon release associated with the Lateral 2C-55 pipeline. The table below summarizes information about the release and remediation activities.

TABLE 1: RELEASE INFORMATION				
Name	Lateral 2C-55 October 13, 2015 Pipeline Release			
Location	Latitude/Longitude		Section, Township, Range	
		36.38203	-107.61250	(SW $\frac{1}{4}$ /SE $\frac{1}{4}$) Unit O Section 19
Date Reported	October 13, 2015			
	Thomas Long			
Land Owner	Bureau of Land Management (BLM)			
Reported To	New Mexico Oil Conservation Division (NMOCD) and BLM			
Diameter of Pipeline	8 inches			
Source of Release	Internal pipe corrosion			
Release Contents	Natural Gas/Condensate			
Release Volume: Natural Gas	Unknown			
Release Volume: Liquids/Condensate	Unknown			
Nearest Waterway	Unnamed tributary of the Palluche Wash			
Depth to Groundwater	Less than 50 feet			
Nearest Domestic Water Source	Greater than 1,000 feet			
NMOCD Ranking	40			
SMA Response Dates	October 13 through November 6, 2015			
Subcontractors	Halo Services, Inc.			
Disposal Facility	Envirotech Landfarm			
Yd ³ Contaminated Soil Excavated and Disposed	562 Yd ³			

2.0 Introduction

An initial release of an unknown amount of natural gas and liquids/condensate was reported on February 12, 2014. On October 13, 2015, during remedial activities of the February 12, 2014 release, a second release was discovered. The second release is located in (SW $\frac{1}{4}$ SE $\frac{1}{4}$) Unit O, Section 19, Township 25 North, Range 7 West, 36.38203, -107.61250, Rio Arriba County, New Mexico. On behalf of Enterprise Products Operating, LLC. (Enterprise), SMA has prepared this report that describes remediation of

the second hydrocarbon release associated with the Lateral 2C-55 8-inch pipeline release. Figure 1, Vicinity Map, illustrates the location of the release.

3.0 Site Ranking and Land Jurisdiction

The release site is located in an unnamed tributary of Palluche Wash on land owned by BLM with an elevation of approximately 6,539 feet above sea level. After evaluation of the site using aerial photography and topographic maps, depth to groundwater is estimated to be less than 50 feet below ground surface (bgs).

SMA searched the New Mexico State Engineer's Office online water well data base for water wells in the vicinity of the release. No recorded wells were located within 1,000 feet of the site. One well was located within a 1 mile radius of the site. There is no anticipated impact to this well.

The physical location of this release is within the jurisdiction of BLM and 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, 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 October 13, 2015, during remedial activities associated with the February 12, 2015 Lateral 2C-55 release, a second release was discovered about 90 feet east of the 2014 release location. Changes in soil type from imported backfill to native gray soils indicated the newly discovered release was located just beyond the extent of the 2014 excavation. The newly discovered release was separated into a new project and excavated material was disposed of under a new NMOCD Form C-138. Impacted soils determined to be related to the new release but excavated and disposed of under the previous C-138, prior to the discovery of the second release are also included in the total volume of soil stated in this report.

A clamp was installed over the point of release #2. Pipeline repairs and remedial activities took place between October 15 and November 6, 2015. SMA guided the excavation activities by collecting composite soil samples for field screening with a calibrated photo-ionization detector (PID). When field screening suggested the extents of the excavation had been advanced beyond the contamination, SMA collected ten samples from the excavation for lab analysis. Samples are 5-point composites collected with the track-mounted excavator.

The final excavation measured approximately 60 feet long by 45 feet wide with a depth of 10 feet, covering an area of approximately 2700 square feet. A detailed excavation map is enclosed as Figure 3. In total, approximately 562 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.

A total of ten 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 release point, the extent of the excavation, laboratory 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 40: 10 ppm (mg/kg) benzene, 50 ppm total BTEX, and 100 ppm TPH.

Laboratory analytical results for all final samples collected were below NMOCD Guidelines for benzene (10 ppm), BTEX (50 ppm) and combined GRO/DRO (100 ppm).

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 October 13, 2015 Lateral 2C-55 pipeline release location.

6.0 Closure and Limitations

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

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

Submitted by:



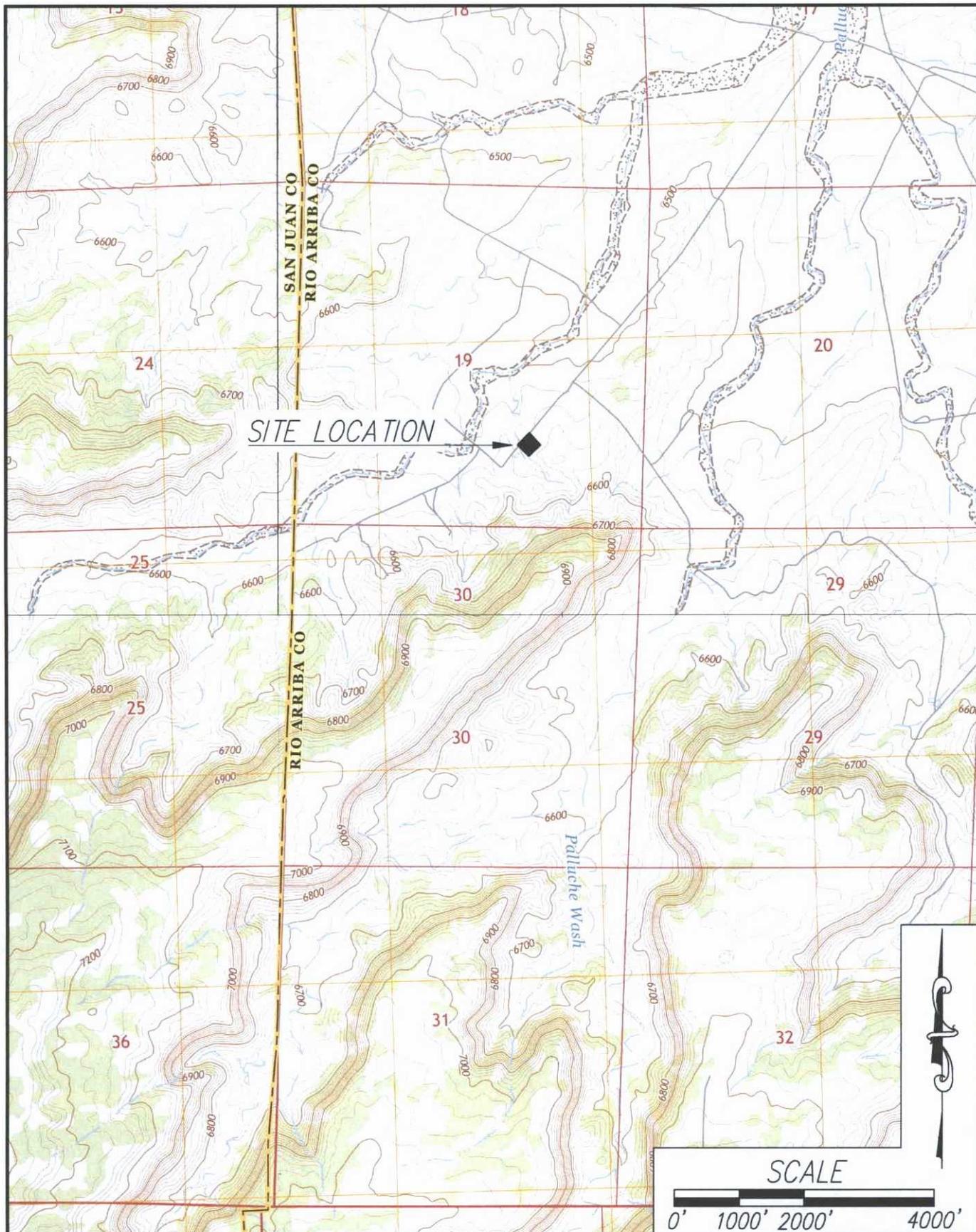
Jesse Sprague
Staff Scientist

Reviewed by:



Reid S. Allan, PG
Principal Scientist

Figures



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

ENTERPRISE FARMINGTON, NEW MEXICO

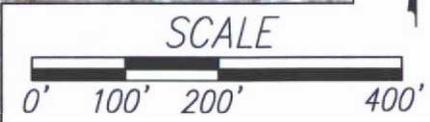
VICINITY MAP
 OCTOBER 13, 2015
 LATERAL 2C-55
 SECTION 19, T25N, R7W
 RIO ARRIBA COUNTY

Designed	Drawn	Checked
JES	GJF	RSA
Date: December 2015		
Scale: Horiz: 1" = 2000'		
Vert: NA		
Project No: 5123699		

Figure 1

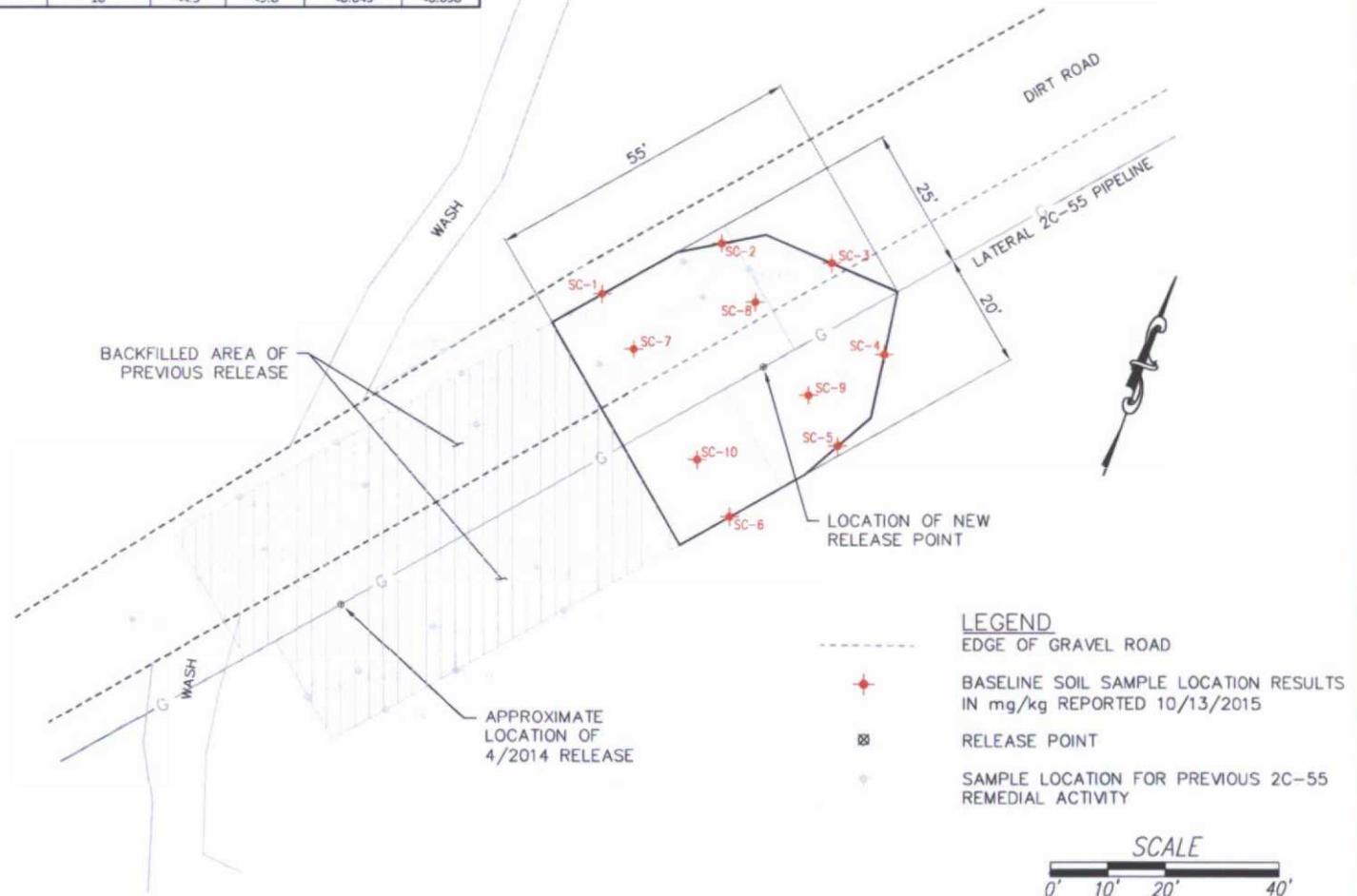


SITE LOCATION



 <p>SOUDER, MILLER & ASSOCIATES 401 W. BROADWAY FARMINGTON, NM 87401 Phone (505) 325-7535 Toll-Free (800) 519-0098 Fax (505) 325-0045 www.soudermiller.com Serving the Southwest & Rocky Mountains Albuquerque, Farmington, Las Cruces, Roswell, Santa Fe, NM - El Paso, TX Cortez - Grand Junction - Montrose, CO - Safford, AZ - Moab, UT</p>	ENTERPRISE	FARMINGTON, NEW MEXICO	Designed JES	Drawn GJF	Checked RSA
				Date: November 2015	
				Scale: Horiz: 1"=200' Vert: N/A	
				Project No: 5123699	
			SITE LOCATION MAP OCTOBER 13, 2015 LATERAL 2C-55 SECTION 19, T25N, R7W		
	RIO ARRIBA COUNTY, NEW MEXICO		Figure 2		

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		50 ppm
11/9/2015	11:00AM	SC-1 NW Wall	0-10'	<3.7	<9.4	<0.037	<0.074
11/9/2015	11:03AM	SC-2 N Wall	0-10'	<3.8	<9.6	<0.038	<0.075
11/9/2015	11:06AM	SC-3 NE Wall	0-10'	32.0	<9.7	<0.039	<0.079
11/9/2015	11:09AM	SC-4 SE Wall	0-10'	35.0	<9.7	<0.083	<0.17
11/9/2015	11:12AM	SC-5 S Wall	0-10'	5.7	<9.6	<0.034	<0.069
11/9/2015	11:15AM	SC-6 SW Wall	0-10'	5.8	<9.7	<0.035	<0.069
11/9/2015	11:18AM	SC-7 NW Base	10'	<4.0	<9.9	<0.040	<0.079
11/9/2015	11:21AM	SC-8 NE Base	10'	<5.7	<9.5	<0.057	<0.11
11/9/2015	11:24AM	SC-9 SE Base	10'	<6.2	<9.8	<0.062	<0.12
11/9/2015	11:27AM	SC-10 SW Base	10'	<4.9	<9.8	<0.049	<0.098



NOTE:
ALL MATERIAL BELOW PIPELINE
REMOVED THROUGH ENTIRE
EXTENT OF BOTH EXCAVATIONS

Req. #	Date	Description

ENTERPRISE FARMINGTON, NEW MEXICO
SOIL SAMPLE LOCATION MAP
OCTOBER 13, 2015
LATERAL 2C-55
SECTION 19, T29N, R7W

Souder, Miller & Associates
401 West Broadway Avenue
Farmington, NM 87401-5907
Phone (505) 325-7515 Toll-Free (800) 519-6998 Fax (505) 325-0645
www.soudermiller.com
Serving the Southwest & Rocky Mountains

Design	Drawn	Checked
JES	DJB	MJA

Date: December 2015
Scale: Horizontal: 1" = 20'
Vertical: Not to Scale
Project No: 5123699
Figure 3

Tables

Enterprise Products
Table 2: Site Ranking

Lateral 2C-55
October 13, 2015
Pipeline Release
November 25, 2015

Depth to Groundwater	NMOCD Numeric Rank for this Site	Source for Ranking	Notes
< 50 BGS = 20	20	Verified using Google Earth and TOPO maps: Field Verified	Groundwater is assumed to be less than 50 feet below the 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	20	Verified using Google Earth and TOPO maps: Field Verified	Release is located in an unnamed tributary of the Palluche Wash
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	0	New Mexico State Engineer's Office online water well data base	No recorded water wells located within 1,000 feet. One well located within a 1 mile radius
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



Enterprise Products
 Table 3: Summary of Laboratory Analysis
 Results in mg/Kg

Lateracl 2C-55
 October 13, 2015
 Pipeline Release
 November 25, 2015

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
11/9/2015	11:00AM	SC-1 NW Wall	0-10'	<3.7	<9.4	<0.037	<0.074
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11/9/2015	11:09AM	SC-4 SE Wall	0-10'	35.0	<9.7	<0.083	<0.17
11/9/2015	11:12AM	SC-5 S Wall	0-10'	5.7	<9.6	<0.034	<0.069
11/9/2015	11:15AM	SC-6 SW Wall	0-10'	5.8	<9.7	<0.035	<0.069
11/9/2015	11:18AM	SC-7 NW Base	10'	<4.0	<9.9	<0.040	<0.079
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11/9/2015	11:24AM	SC-9 SE Base	10'	<6.2	<9.8	<0.062	<0.12
11/9/2015	11:27AM	SC-10 SW Base	10'	<4.9	<9.8	<0.049	<0.098



APPENDIX A

SITE PHOTOGRAPHY

Site Photographs
Enterprise Products Lateral 2C-55 October 13, 2015 Pipeline Release



Photo 1: Enterprise personnel verify the October, 2015 release during the excavation of material associated with the February, 2014 release.



Photo 2: After the verification of the second release, samples were collected from the extents of the existing excavation. The second release and related remaining work was assigned to a new project.

Site Photographs
Enterprise Products Lateral 2C-55 October 13, 2015 Pipeline Release



Photo 3: Excavating beyond the newly discovered release.



Photo 4: A temporary clamp was installed to prevent further contamination and to allow the requisite pre-repair activities to take place.

Site Photographs
Enterprise Products Lateral 2C-55 October 13, 2015 Pipeline Release



Photo 5: Backfill of the previous excavation extents while excavation on the new release continued was cleared with the NMOCD.

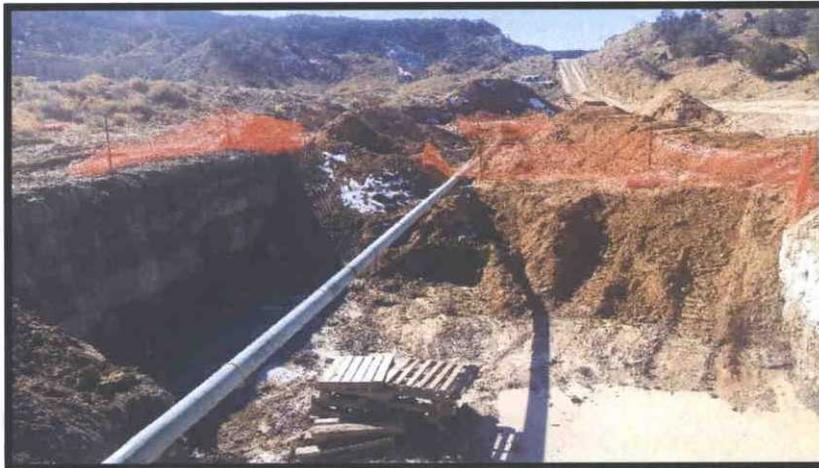


Photo 6: After repairs were completed over 150 of new pipe was installed. All material below the pipeline was removed during repair activities.

Site Photographs
Enterprise Products Lateral 2C-55 October 13, 2015 Pipeline Release



Photo 7: Excavation of the remaining contaminated soils after repair activities concluded.



Photo 8: The October, 2015 2C-55 excavation nearing the final extents, just prior to sampling. Note dirty (gray) stockpile and clean imported (red and tan) backfill stockpiles in background.

APPENDIX B

SOIL DISPOSAL DOCUMENTATION

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, 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

97057-0746

Form C-138
Revised 08/01/11

*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 Ave, Farmington NM 87401

2. **Originating Site:** Lateral 2C-55 Natural Gas Gathering Line

3. **Location of Material (Street Address, City, State or ULSTR):**
Unit Letter O Section 19 T25N R7W, GPS 36.381886, -107.61265 Rio Arriba County, NM

4. **Source and Description of Waste:**
Source: Natural Gas Pipeline Release
Description: Exempt petroleum affected soil from clean-up efforts at pipeline release.
Estimated Volume 50 (yd³) bbls Known Volume (to be entered by the operator at the end of the haul) 1826 (yd³) bbls

Oct 2015

5. **GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS**

I, Thomas Long, representative or authorized agent for Enterprise Field Services, LLC do hereby
Generator Signature
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, 9-21-15, representative for Enterprise Field Services, LLC authorize ENVIROTECH to complete
Generator Signature
the required testing/sign the Generator Waste Testing Certification.

I, P. H. H., representative for Envirotech Inc. do hereby certify that
Representative/Agent Signature
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.

5. **Transporter** 3E Energy, Rosenbaum, Swazee, Fbarra, Labato, M&I, Rich, GBL, Flying M
OCD Permitted Surface Waste Management Facility Ternco, DJ, envirotech, HBL, BET

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: Eric Liese TITLE: Landfarm Administrator DATE: 9-30-15
SIGNATURE: [Signature] TELEPHONE NO.: 505-632-0615
Surface Waste Management Facility Authorized Agent

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, 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

97057-0746

Form C-138
Revised 08/01/11

*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 Ave, Farmington NM 87401	Nov. 2015
2. Originating Site: Lateral 2C-55 Natural Gas Gathering Line	
3. Location of Material (Street Address, City, State or ULSTR): Unit Letter O Section 19 T25N R7W, GPS 36.381886, -107.61265 Rio Arriba County, NM	
4. Source and Description of Waste: Source: Natural Gas Pipeline Release Description: Exempt petroleum affected soil from clean-up efforts at pipeline release. Estimated Volume <u>50</u> yd ³ bbls Known Volume (to be entered by the operator at the end of the haul) <u>140</u> 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 Generator Signature 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 checked="" 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 checked="" 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> , representative for <u>Enterprise Field Services, LLC</u> authorize ENVIROTECH to complete Generator Signature the required testing/sign the Generator Waste Testing Certification. I, <u>[Signature]</u> , representative for <u>Enterprise Inc.</u> do hereby certify that Representative/Agent Signature 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.	

5. Transporter: Enviro, OTE, BET, Lobato, Ibarra, M&I, D.J. Services, Envirotech, Riel
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: Eric Lipesc TITLE: Landfarm Administrator DATE: 11/3/15
SIGNATURE: [Signature] TELEPHONE NO.: 505-632-0615
Surface Waste Management Facility Authorized Agent

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 11, 2015

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

RE: 2C-55 #2

OrderNo.: 1511368

Dear Reid Allan:

Hall Environmental Analysis Laboratory received 10 sample(s) on 11/10/2015 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 white background.

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report

Lab Order 1511368

Date Reported: 11/11/2015

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates

Client Sample ID: SC-1 NW Wall

Project: 2C-55 #2

Collection Date: 11/9/2015 11:00:00 AM

Lab ID: 1511368-001

Matrix: SOIL

Received Date: 11/10/2015 6:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: KJH
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	11/10/2015 1:10:51 PM	22265
Surr: DNOP	69.2	70-130	S	%REC	1	11/10/2015 1:10:51 PM	22265
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	3.7		mg/Kg	1	11/10/2015 10:36:10 AM	R30136
Surr: BFB	96.0	75.4-113		%REC	1	11/10/2015 10:36:10 AM	R30136
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.037		mg/Kg	1	11/10/2015 10:36:10 AM	A30136
Toluene	ND	0.037		mg/Kg	1	11/10/2015 10:36:10 AM	A30136
Ethylbenzene	ND	0.037		mg/Kg	1	11/10/2015 10:36:10 AM	A30136
Xylenes, Total	ND	0.074		mg/Kg	1	11/10/2015 10:36:10 AM	A30136
Surr: 4-Bromofluorobenzene	112	80-120		%REC	1	11/10/2015 10:36:10 AM	A30136

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
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	

Analytical Report

Lab Order 1511368

Date Reported: 11/11/2015

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates

Client Sample ID: SC-2 N Wall

Project: 2C-55 #2

Collection Date: 11/9/2015 11:03:00 AM

Lab ID: 1511368-002

Matrix: SOIL

Received Date: 11/10/2015 6:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: KJH
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	11/10/2015 9:58:25 AM	22265
Surr: DNOP	82.0	70-130		%REC	1	11/10/2015 9:58:25 AM	22265
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	3.8		mg/Kg	1	11/10/2015 10:59:32 AM	R30136
Surr: BFB	93.2	75.4-113		%REC	1	11/10/2015 10:59:32 AM	R30136
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.038		mg/Kg	1	11/10/2015 10:59:32 AM	A30136
Toluene	ND	0.038		mg/Kg	1	11/10/2015 10:59:32 AM	A30136
Ethylbenzene	ND	0.038		mg/Kg	1	11/10/2015 10:59:32 AM	A30136
Xylenes, Total	ND	0.075		mg/Kg	1	11/10/2015 10:59:32 AM	A30136
Surr: 4-Bromofluorobenzene	108	80-120		%REC	1	11/10/2015 10:59:32 AM	A30136

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
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates

Client Sample ID: SC-3 NE Wall

Project: 2C-55 #2

Collection Date: 11/9/2015 11:06:00 AM

Lab ID: 1511368-003

Matrix: SOIL

Received Date: 11/10/2015 6:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: KJH
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	11/10/2015 10:20:17 AM	22265
Surr: DNOP	88.2	70-130		%REC	1	11/10/2015 10:20:17 AM	22265
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	32	3.9		mg/Kg	1	11/10/2015 11:22:47 AM	R30136
Surr: BFB	139	75.4-113	S	%REC	1	11/10/2015 11:22:47 AM	R30136
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.039		mg/Kg	1	11/10/2015 11:22:47 AM	A30136
Toluene	ND	0.039		mg/Kg	1	11/10/2015 11:22:47 AM	A30136
Ethylbenzene	ND	0.039		mg/Kg	1	11/10/2015 11:22:47 AM	A30136
Xylenes, Total	ND	0.079		mg/Kg	1	11/10/2015 11:22:47 AM	A30136
Surr: 4-Bromofluorobenzene	116	80-120		%REC	1	11/10/2015 11:22:47 AM	A30136

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
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	

Analytical Report

Lab Order 1511368

Date Reported: 11/11/2015

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates

Client Sample ID: SC-4 SE Wall

Project: 2C-55 #2

Collection Date: 11/9/2015 11:09:00 AM

Lab ID: 1511368-004

Matrix: SOIL

Received Date: 11/10/2015 6:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: KJH
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	11/10/2015 10:41:29 AM	22265
Surr: DNOP	87.6	70-130		%REC	1	11/10/2015 10:41:29 AM	22265
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	35	8.3		mg/Kg	2	11/10/2015 11:46:06 AM	R30136
Surr: BFB	133	75.4-113	S	%REC	2	11/10/2015 11:46:06 AM	R30136
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.083		mg/Kg	2	11/10/2015 11:46:06 AM	A30136
Toluene	ND	0.083		mg/Kg	2	11/10/2015 11:46:06 AM	A30136
Ethylbenzene	ND	0.083		mg/Kg	2	11/10/2015 11:46:06 AM	A30136
Xylenes, Total	ND	0.17		mg/Kg	2	11/10/2015 11:46:06 AM	A30136
Surr: 4-Bromofluorobenzene	115	80-120		%REC	2	11/10/2015 11:46:06 AM	A30136

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
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates

Client Sample ID: SC-5 S Wall

Project: 2C-55 #2

Collection Date: 11/9/2015 11:12:00 AM

Lab ID: 1511368-005

Matrix: SOIL

Received Date: 11/10/2015 6:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: KJH
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	11/10/2015 11:02:47 AM	22265
Surr: DNOP	89.5	70-130		%REC	1	11/10/2015 11:02:47 AM	22265
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	5.7	3.4		mg/Kg	1	11/10/2015 7:55:58 PM	R30136
Surr: BFB	113	75.4-113	S	%REC	1	11/10/2015 7:55:58 PM	R30136
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.034		mg/Kg	1	11/10/2015 7:55:58 PM	A30136
Toluene	ND	0.034		mg/Kg	1	11/10/2015 7:55:58 PM	A30136
Ethylbenzene	ND	0.034		mg/Kg	1	11/10/2015 7:55:58 PM	A30136
Xylenes, Total	ND	0.069		mg/Kg	1	11/10/2015 7:55:58 PM	A30136
Surr: 4-Bromofluorobenzene	115	80-120		%REC	1	11/10/2015 7:55:58 PM	A30136

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
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	

Analytical Report

Lab Order 1511368

Date Reported: 11/11/2015

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates

Client Sample ID: SC-6 SW Wall

Project: 2C-55 #2

Collection Date: 11/9/2015 11:15:00 AM

Lab ID: 1511368-006

Matrix: SOIL

Received Date: 11/10/2015 6:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							
Analyst: KJH							
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	11/10/2015 11:24:03 AM	22265
Surr: DNOP	91.3	70-130		%REC	1	11/10/2015 11:24:03 AM	22265
EPA METHOD 8015D: GASOLINE RANGE							
Analyst: NSB							
Gasoline Range Organics (GRO)	5.8	3.5		mg/Kg	1	11/10/2015 8:19:20 PM	R30136
Surr: BFB	112	75.4-113		%REC	1	11/10/2015 8:19:20 PM	R30136
EPA METHOD 8021B: VOLATILES							
Analyst: NSB							
Benzene	ND	0.035		mg/Kg	1	11/10/2015 8:19:20 PM	A30136
Toluene	ND	0.035		mg/Kg	1	11/10/2015 8:19:20 PM	A30136
Ethylbenzene	ND	0.035		mg/Kg	1	11/10/2015 8:19:20 PM	A30136
Xylenes, Total	ND	0.069		mg/Kg	1	11/10/2015 8:19:20 PM	A30136
Surr: 4-Bromofluorobenzene	114	80-120		%REC	1	11/10/2015 8:19:20 PM	A30136

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
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1511368

Date Reported: 11/11/2015

CLIENT: Souder, Miller and Associates

Client Sample ID: SC-7 NW Base

Project: 2C-55 #2

Collection Date: 11/9/2015 11:18:00 AM

Lab ID: 1511368-007

Matrix: SOIL

Received Date: 11/10/2015 6:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: KJH
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	11/10/2015 11:45:25 AM	22265
Surr: DNOP	91.6	70-130		%REC	1	11/10/2015 11:45:25 AM	22265
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.0		mg/Kg	1	11/10/2015 12:09:21 PM	R30136
Surr: BFB	87.2	75.4-113		%REC	1	11/10/2015 12:09:21 PM	R30136
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.040		mg/Kg	1	11/10/2015 12:09:21 PM	A30136
Toluene	ND	0.040		mg/Kg	1	11/10/2015 12:09:21 PM	A30136
Ethylbenzene	ND	0.040		mg/Kg	1	11/10/2015 12:09:21 PM	A30136
Xylenes, Total	ND	0.079		mg/Kg	1	11/10/2015 12:09:21 PM	A30136
Surr: 4-Bromofluorobenzene	108	80-120		%REC	1	11/10/2015 12:09:21 PM	A30136

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
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates

Client Sample ID: SC-8 NE Base

Project: 2C-55 #2

Collection Date: 11/9/2015 11:21:00 AM

Lab ID: 1511368-008

Matrix: SOIL

Received Date: 11/10/2015 6:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: KJH
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	11/10/2015 12:06:38 PM	22265
Surr: DNOP	86.2	70-130		%REC	1	11/10/2015 12:06:38 PM	22265
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.7		mg/Kg	1	11/10/2015 12:32:33 PM	R30136
Surr: BFB	87.2	75.4-113		%REC	1	11/10/2015 12:32:33 PM	R30136
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.057		mg/Kg	1	11/10/2015 12:32:33 PM	A30136
Toluene	ND	0.057		mg/Kg	1	11/10/2015 12:32:33 PM	A30136
Ethylbenzene	ND	0.057		mg/Kg	1	11/10/2015 12:32:33 PM	A30136
Xylenes, Total	ND	0.11		mg/Kg	1	11/10/2015 12:32:33 PM	A30136
Surr: 4-Bromofluorobenzene	109	80-120		%REC	1	11/10/2015 12:32:33 PM	A30136

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
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	

Analytical Report

Lab Order 1511368

Date Reported: 11/11/2015

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates

Client Sample ID: SC-9 SE Base

Project: 2C-55 #2

Collection Date: 11/9/2015 11:24:00 AM

Lab ID: 1511368-009

Matrix: SOIL

Received Date: 11/10/2015 6:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: KJH
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	11/10/2015 12:28:04 PM	22265
Surr: DNOP	88.8	70-130		%REC	1	11/10/2015 12:28:04 PM	22265
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	6.2		mg/Kg	1	11/10/2015 12:55:48 PM	R30136
Surr: BFB	86.4	75.4-113		%REC	1	11/10/2015 12:55:48 PM	R30136
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.062		mg/Kg	1	11/10/2015 12:55:48 PM	A30136
Toluene	ND	0.062		mg/Kg	1	11/10/2015 12:55:48 PM	A30136
Ethylbenzene	ND	0.062		mg/Kg	1	11/10/2015 12:55:48 PM	A30136
Xylenes, Total	ND	0.12		mg/Kg	1	11/10/2015 12:55:48 PM	A30136
Surr: 4-Bromofluorobenzene	108	80-120		%REC	1	11/10/2015 12:55:48 PM	A30136

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
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	

Analytical Report

Lab Order 1511368

Date Reported: 11/11/2015

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates

Client Sample ID: SC-10 SW Base

Project: 2C-55 #2

Collection Date: 11/9/2015 11:27:00 AM

Lab ID: 1511368-010

Matrix: SOIL

Received Date: 11/10/2015 6:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: KJH
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	11/10/2015 12:49:26 PM	22265
Surr: DNOP	87.5	70-130		%REC	1	11/10/2015 12:49:26 PM	22265
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	11/10/2015 1:19:06 PM	R30136
Surr: BFB	86.3	75.4-113		%REC	1	11/10/2015 1:19:06 PM	R30136
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.049		mg/Kg	1	11/10/2015 1:19:06 PM	A30136
Toluene	ND	0.049		mg/Kg	1	11/10/2015 1:19:06 PM	A30136
Ethylbenzene	ND	0.049		mg/Kg	1	11/10/2015 1:19:06 PM	A30136
Xylenes, Total	ND	0.098		mg/Kg	1	11/10/2015 1:19:06 PM	A30136
Surr: 4-Bromofluorobenzene	107	80-120		%REC	1	11/10/2015 1:19:06 PM	A30136

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
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1511368

11-Nov-15

Client: Souder, Miller and Associates

Project: 2C-55 #2

Sample ID	MB-22265	SampType:	MBLK	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	PBS	Batch ID:	22265	RunNo:	30123					
Prep Date:	11/10/2015	Analysis Date:	11/10/2015	SeqNo:	917659	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		83.3	70	130			

Sample ID	LCS-22265	SampType:	LCS	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	LCSS	Batch ID:	22265	RunNo:	30123					
Prep Date:	11/10/2015	Analysis Date:	11/10/2015	SeqNo:	917660	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	44	10	50.00	0	87.1	57.4	139			
Surr: DNOP	3.9		5.000		78.7	70	130			

Sample ID	MB-22220	SampType:	MBLK	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	PBS	Batch ID:	22220	RunNo:	30124					
Prep Date:	11/6/2015	Analysis Date:	11/10/2015	SeqNo:	917919	Units:	%REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	12		10.00		117	70	130			

Sample ID	LCS-22220	SampType:	LCS	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	LCSS	Batch ID:	22220	RunNo:	30124					
Prep Date:	11/6/2015	Analysis Date:	11/10/2015	SeqNo:	917920	Units:	%REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	7.4		5.000		147	70	130			S

Sample ID	1511368-001AMS	SampType:	MS	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	SC-1 NW Wall	Batch ID:	22265	RunNo:	30123					
Prep Date:	11/10/2015	Analysis Date:	11/10/2015	SeqNo:	918730	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	43	9.7	48.26	0	88.8	31.2	162			
Surr: DNOP	2.5		4.826		52.1	70	130			S

Sample ID	1511368-001AMSD	SampType:	MSD	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	SC-1 NW Wall	Batch ID:	22265	RunNo:	30123					
Prep Date:	11/10/2015	Analysis Date:	11/10/2015	SeqNo:	918731	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	38	10	50.40	0	74.5	31.2	162	13.2	31.7	
Surr: DNOP	2.4		5.040		47.8	70	130	0	0	S

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1511368

11-Nov-15

Client: Souder, Miller and Associates

Project: 2C-55 #2

Sample ID	5ML RB		SampType:	MBLK		TestCode:	EPA Method 8015D: Gasoline Range				
Client ID:	PBS		Batch ID:	R30136		RunNo:	30136				
Prep Date:			Analysis Date:	11/10/2015		SeqNo:	918410		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	870		1000		87.3	75.4	113				

Sample ID	2.5UG GRO LCS		SampType:	LCS		TestCode:	EPA Method 8015D: Gasoline Range				
Client ID:	LCSS		Batch ID:	R30136		RunNo:	30136				
Prep Date:			Analysis Date:	11/10/2015		SeqNo:	918411		Units: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Gasoline Range Organics (GRO)	23	5.0	25.00	0	92.0	79.6	122				
Surr: BFB	930		1000		92.8	75.4	113				

Sample ID	1511368-001AMS		SampType:	MS		TestCode:	EPA Method 8015D: Gasoline Range				
Client ID:	SC-1 NW Wall		Batch ID:	R30136		RunNo:	30136				
Prep Date:			Analysis Date:	11/10/2015		SeqNo:	918412		Units: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Gasoline Range Organics (GRO)	16	3.7	18.38	2.419	72.3	62.5	151				
Surr: BFB	750		735.3		102	75.4	113				

Sample ID	1511368-001AMSD		SampType:	MSD		TestCode:	EPA Method 8015D: Gasoline Range				
Client ID:	SC-1 NW Wall		Batch ID:	R30136		RunNo:	30136				
Prep Date:			Analysis Date:	11/10/2015		SeqNo:	918413		Units: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Gasoline Range Organics (GRO)	21	3.7	18.38	2.419	100	62.5	151	28.0	22.1	R	
Surr: BFB	760		735.3		103	75.4	113	0	0		

Sample ID	MB-22241		SampType:	MBLK		TestCode:	EPA Method 8015D: Gasoline Range				
Client ID:	PBS		Batch ID:	22241		RunNo:	30136				
Prep Date:	11/9/2015		Analysis Date:	11/10/2015		SeqNo:	918420		Units: %REC		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Surr: BFB	860		1000		85.6	75.4	113				

Sample ID	LCS-22241		SampType:	LCS		TestCode:	EPA Method 8015D: Gasoline Range				
Client ID:	LCSS		Batch ID:	22241		RunNo:	30136				
Prep Date:	11/9/2015		Analysis Date:	11/10/2015		SeqNo:	918421		Units: %REC		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Surr: BFB	930		1000		92.7	75.4	113				

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1511368

11-Nov-15

Client: Souder, Miller and Associates
Project: 2C-55 #2

Sample ID	5ML RB		SampType:	MBLK		TestCode:	EPA Method 8021B: Volatiles				
Client ID:	PBS		Batch ID:	A30136		RunNo:	30136				
Prep Date:			Analysis Date:	11/10/2015		SeqNo:	918492		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		108	80	120				

Sample ID	100NG BTEX LCS		SampType:	LCS		TestCode:	EPA Method 8021B: Volatiles				
Client ID:	LCSS		Batch ID:	A30136		RunNo:	30136				
Prep Date:			Analysis Date:	11/10/2015		SeqNo:	918493		Units: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene	0.99	0.050	1.000	0	98.8	80	120				
Toluene	1.0	0.050	1.000	0	100	80	120				
Ethylbenzene	1.0	0.050	1.000	0	101	80	120				
Xylenes, Total	3.1	0.10	3.000	0	104	80	120				
Surr: 4-Bromofluorobenzene	1.2		1.000		117	80	120				

Sample ID	1511368-002AMS		SampType:	MS		TestCode:	EPA Method 8021B: Volatiles				
Client ID:	SC-2 N Wall		Batch ID:	A30136		RunNo:	30136				
Prep Date:			Analysis Date:	11/10/2015		SeqNo:	918494		Units: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene	0.79	0.038	0.7530	0.008464	104	69.6	136				
Toluene	0.77	0.038	0.7530	0.01504	99.8	76.2	134				
Ethylbenzene	0.77	0.038	0.7530	0.01560	101	75.8	137				
Xylenes, Total	2.3	0.075	2.259	0.03238	100	78.9	133				
Surr: 4-Bromofluorobenzene	0.88		0.7530		117	80	120				

Sample ID	1511368-002AMSD		SampType:	MSD		TestCode:	EPA Method 8021B: Volatiles				
Client ID:	SC-2 N Wall		Batch ID:	A30136		RunNo:	30136				
Prep Date:			Analysis Date:	11/10/2015		SeqNo:	918495		Units: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene	0.77	0.038	0.7530	0.008464	101	69.6	136	2.84	20		
Toluene	0.76	0.038	0.7530	0.01504	98.5	76.2	134	1.32	20		
Ethylbenzene	0.77	0.038	0.7530	0.01560	101	75.8	137	0.272	20		
Xylenes, Total	2.3	0.075	2.259	0.03238	101	78.9	133	0.721	20		
Surr: 4-Bromofluorobenzene	0.88		0.7530		117	80	120	0	0		

Qualifiers:

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- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
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- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: 1511368
 11-Nov-15

Client: Souder, Miller and Associates
Project: 2C-55 #2

Sample ID MB-22241	SampType: MBLK		TestCode: EPA Method 8021B: Volatiles							
Client ID: PBS	Batch ID: 22241		RunNo: 30136							
Prep Date: 11/9/2015	Analysis Date: 11/10/2015		SeqNo: 918501		Units: %REC					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.1		1.000		109	80	120			

Sample ID LCS-22241	SampType: LCS		TestCode: EPA Method 8021B: Volatiles							
Client ID: LCSS	Batch ID: 22241		RunNo: 30136							
Prep Date: 11/9/2015	Analysis Date: 11/10/2015		SeqNo: 918502		Units: %REC					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.2		1.000		115	80	120			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit

Sample Log-In Check List

Client Name: SMA-FARM

Work Order Number: 1511368

RcptNo: 1

Received by/date: AA 11/10/15

Logged By: **Anne Thorne** 11/10/2015 6:50:00 AM *Anne Thorne*

Completed By: **Anne Thorne** 11/10/2015 *Anne Thorne*

Reviewed By: *JTB* 11/10/15

Chain of Custody

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

Log In

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

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

Special Handling (if applicable)

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

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

17. Additional remarks:

18. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.3	Good	Yes			

Chain-of-Custody Record

Client: SMA

Mailing Address: 401 Broadway
Farmington, NM 87401

Phone #: 505 325 7535

Email or Fax#: Jesse Sprague @ Souders Miller

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

Accreditation
 NELAP Other _____

EDD (Type) _____

Turn-Around Time:
 Standard Rush Same day

Project Name:
2C-55 # 2

Project #:

Project Manager:
Reid Allan

Sampler: J. Sprague

On Ice: Yes No

Sample Temperature: 1.3



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.	MTBE + MTBE (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO) (MTBE)	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)
9/15	1100	Soil	SC-1 NW wall	14oz Mack Kit	MCOH	701	X	X	X									
	1103		SC-2 N wall			702	X	X										
	1106		SC-3 NE wall			703	X	X										
	1109		SC-4 SE wall			704	X	X										
	1112		SC-5 S wall			705	X	X										
	1115		SC-6 SW wall			706	X	X										
	1118		SC-7 NW Base			707	X	X										
	1121		SC-8 NE Base			708	X	X										
	1124		SC-9 SE Base			709	X	X										
	1127		SC-10 SW Base			710	X	X										

Date: 9/15 Time: 1725 Relinquished by: [Signature]

Date: 9/15 Time: 1812 Relinquished by: [Signature]

Received by: [Signature] Date: 9/15 Time: 1725

Received by: [Signature] Date: 11/16/15 Time: 0650

Remarks: Invoice Enterprise

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

1	80578.4945	186287.281	0 PROP COR
2	80578.8828	186425.8505	0 PROP COR
3	80239.6599	186424.042	0 PROP COR
4	80240.1875	186310.6732	0 PROP COR
5	80365.1856	186311.3641	0 PROP COR
6	80473.6845	186287.279	0 PROP COR