AE Order Number Banner

Report Description

This report shows an AE Order Number in Barcode format for purposes of scanning. The Barcode format is Code 39.

App Number: pCOH0808737406

1RP - 1826

SOUTHERN UNION GAS COMPANY

2/12/2016

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

Form C-141
Revised October 10, 2003

Submit 2 Copies to appropriate District Office in accordance with Rule 116 on back side of form

Release Notification and Corrective Action

OPERATOR

Initial Report ☒ Final Report

Name of Company	Southern Union Gas Services, Ltd.	Contact	Rose Slade
Address	801 S. Loop 464, Monahans, TX, 79756	Telephone No.	432-940-5147
Facility Name: Trunk "O" #5 (RP-1826)		Facility Type	Natural Gas Gathering

Surface Owner Southern Union Gas Services	Mineral Owner: Federal	Lease No.

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
D	31	23S	37E					Lea

Latitude N32 15.410 Longitude W103 11.734

NATURE OF RELEASE

Type of Release Natural Gas and Crude Oil	Volume of Release 15 bbls crude oil 50,000 MCF Gas	Volume Recovered 0 Bbls
Source of Release 16" Natural Gas Pipeline	Date and Hour of Occurrence not known	Date and Hour of Discovery 3/19/08 Time: 3:00 p.m.
Was Immediate Notice Given? ☐ Yes ☐ No ☒ Not Required	If YES, To Whom?	
By Whom?	Date and Hour:	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

HOBBS OCD
DEC 12 2012
RECEIVED

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken:
A 16" Natural Gas gathering line operating at approximately 30 p.s.i. developed a leak. The section of line was blocked in and blown down. This section was blocked and isolated from the system approximately 500 ft west of the site.

Describe Area Affected and Cleanup Action Taken. An area measuring approximately 1000 sq. ft. was affected by the release and the backhoe activity. Final remediation will follow the NMOCD recommended guidelines for leaks and spills.

On or around March 25, 2008, remediation activities were conducted at the Trunk "O" #5 Release Site by an environmental contractor that is no longer affiliated with the site. On November 9, 2012, the site was revisited in an effort to determine if soil exhibiting benzene, BTEX, TPH and chloride concentrations above NMOCD regulatory standards remained in-situ and collect confirmation soil samples. Laboratory analytical reports from the confirmation soil samples suggested previous remediation activities met the requirements of the NMOCD.

Please see the attached Basin Environmental Services Technologies *Remediation Summary and Site Closure Request* for details of remedial activities and the site investigation.

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: Rose L. Slade

OIL CONSERVATION DIVISION

Approved by District Supervisor: Geoffrey Leking

Environmental Specialist

Printed Name: Rose L. Slade

Title: EHS Compliance Specialist

Approval Date: 12/12/12 Expiration Date: —

E-mail Address: rose.slade@sug.com

Conditions of Approval: —

Date: Phone: 432-940-5147(cell)

IRP-1826

District I
1625 N. French Dr., Hobbs, NM 88240
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1301 W. Grand Avenue, Artesia, NM 88210
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Release Notification and Corrective Action

OPERATOR

Initial Report ☒ Final Report

Name of Company	Southern Union Gas Services, Ltd.	Contact	Rose Slade
Address	801 S. Loop 464, Monahans, TX, 79756	Telephone No.	432-940-5147
Facility Name: Trunk "O" #5 (RP-1826)		Facility Type	Natural Gas Gathering

Surface Owner Southern Union Gas Services	Mineral Owner: Federal	Lease No.

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
D	31	23S	37E					Lea

Latitude N32 15.410 Longitude W103 11.734

NATURE OF RELEASE

Type of Release Natural Gas and Crude Oil	Volume of Release 15 bbls crude oil 50,000 MCF Gas	Volume Recovered 0 Bbls
Source of Release 16" Natural Gas Pipeline	Date and Hour of Occurrence not known	Date and Hour of Discovery 3/19/08 Time: 3:00 p.m.
Was Immediate Notice Given? ☐ Yes ☐ No ☒ Not Required	If YES, To Whom?	
By Whom?	Date and Hour:	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

HOBBS OCD
DEC 12 2012
RECEIVED

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Signature: Rose L. Slade	OIL CONSERVATION DIVISION	
Printed Name: Rose L. Slade	Approved by District Supervisor: Geoffrey Leking Environmental Specialist	
Title: EHS Compliance Specialist	Approval Date: 12/12/12	Expiration Date: —
E-mail Address: rose.slade@sug.com	Conditions of Approval: —	IRP-1826
Date: Phone: 432-940-5147(cell)		

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Form C-141
Revised October 10, 2003

Submit 2 Copies to appropriate District Office in accordance with Rule 116 on back side of form

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company	Southern Union Gas Services, Ltd.	Contact	Tony Savoie
Address	P.O. Box 1226 Jal, N.M. 88252	Telephone No.	575-395-2116
Facility Name	Lea County Field Dept.	Facility Type	Natural Gas Gathering

Surface Owner: Southern Union Gas Services	Mineral Owner: Federal	Lease No.

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
D	31	23S	37E					Lea

Latitude N32 15.410 Longitude W103 11.734

WTR 100'

NATURE OF RELEASE

Type of Release : Natural Gas and Crude Oil	Volume of Release: 15 bbls crude oil 50,000 MCF Gas	Volume Recovered 0 Bbls
Source of Release : 16" Natural Gas Pipeline	Date and Hour of Occurrence not known	Date and Hour of Discovery 3/19/08 Time: 3:00 p.m.
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By Whom?	Date and Hour:	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

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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: Tony Savoie	OIL CONSERVATION DIVISION
Printed Name: John A. Savoie	Approved by District Supervisor: Johnson ENVIRONMENTAL ENGINEER
Title: Remediation Supervisor	Approval Date: 3.26.08 Expiration Date: 5.26.08
E-mail Address: tony.savoie@sug.com	Conditions of Approval: Attached ☐
Date: 3/25/08 Phone: 575-395-2116	SUBMIT C-141 FINAL W/ DOCUMENTATION BY REFER TO 1RP 1826 ON FINAL PAPER WORK 1RP # 1826

* Attach Additional Sheets If Necessary

fCOHO808737072

Basin Environmental Service Technologies, LLC

3100 Plains Highway
P. O. Box 301
Lovington, New Mexico 88260
jwlowry@basinenv.com
Office: (575) 396-2378 Fax: (575) 396-1429

Effective Solutions

REMEDIATION SUMMARY &

SITE CLOSURE REQUEST

SOUTHERN UNION GAS SERVICES
TRUNK "O" #5
HISTORICAL RELEASE SITE
Lea County, New Mexico
Unit Letter "D" (NW/NW), Section 31, Township 23 South, Range 37 East
Latitude 32° 15.410' North, Longitude 103° 11.734' West
NMOCD Reference # 1RP-1826

Prepared For:

Southern Union Gas Services
801 S. Loop 464
Monahans, TX 79756

Prepared By:
Basin Environmental Service Technologies, LLC
3100 Plains Highway
Lovington, New Mexico 88260

December 2012

Joel W. Lowry
Project Manager

TABLE OF CONTENTS

FIGURES

TABLES

APPENDICES

1.0 INTRODUCTION & BACKGROUND INFORMATION

Basin Environmental Service Technologies, LLC (Basin), on behalf of Southern Union Gas Services (Southern Union), has prepared this *Remediation Summary & Site Closure Request* for the Trunk "O" #5 Historical Release Site (1RP-1826). The legal description of the release site is Unit Letter "D" (NW/NW), Section 31, Township 23 South, Range 37 East, in Lea County, New Mexico. The geographic coordinates of the release site are 32° 15.410' North latitude and 103° 11.734' West longitude. The property affected by the release is owned by Southern Union Gas Services. Please reference Figure 1 for a "Site Location Map".

On March 19, 2008, Southern Union discovered a release had occurred on the Trunk "O" Pipeline. The "Release Notification and Corrective Action Form" (Form C-141) indicated failure of a section of sixteen-inch (16") low-pressure natural gas pipeline resulted in the release of approximately fifteen barrels (15 bbls) of crude oil and fifty thousand (50,000) Mcf of natural gas. The release was reported to the New Mexico Oil Conservation Division (NMOCD) Hobbs District Office on March 26, 2008. The Form C-141 indicated the release and initial response activities affected approximately one thousand, square feet (1,000 ft^2) of pasture land. General photographs of the release site are provided as Appendix A. The Form C-141 is provided as Appendix C.

Previous remediation activities were conducted at the Trunk "O" #5 Release Site by an environmental contractor that is no longer affiliated with the site. The nature and extent of the aforementioned activities remains unclear, as environmental reports and work records are not readily available.

On June 22, 2012, at the request of Southern Union, Basin assumed remediation responsibilities at the Trunk "O" #5 Historical Release Site.

2.0 NMOCD SITE CLASSIFICATION

A search of the New Mexico Water Rights Reporting System (NMWRRS) database maintained by the New Mexico Office of the State Engineer (NMOSE) indicated information was unavailable for Unit Letter D, Section 31, Township 23 South, Range 34 East. An NMOCD representative indicated groundwater should be encountered at approximately one hundred feet (100') below ground surface (bgs) on the initial Form C-141. Based on the NMOCD ranking system and the presence of elevated chlorides at six feet (6') bgs, ten (10) points will be assigned to the site as a result of this criterion.

A search of the NMWRRS database indicated there are no water wells within one thousand feet (1,000') of the release. Based on the NMOCD ranking system, zero (0) points will be assigned to the site as a result of this criterion.

There are no surface water bodies within one thousand feet (1,000') of the release. Based on the NMOCD ranking system, zero (0) points will be assigned to the site as a result of this criterion.

NMOCD guidelines indicate the Trunk "O" #5 Historical Release Site has an initial ranking score of zero (0) points. The soil remediation levels for a site with a ranking score of ten (10) points are as follows:

- Benzene – 10 mg/Kg (ppm)
- Benzene, toluene, ethylbenzene and xylene (BTEX) – 50 mg/Kg (ppm)
- Total petroleum hydrocarbons (TPH) – 1,000 mg/Kg (ppm)

The New Mexico Administrative Code (NMAC) does not currently specify a remediation level for chloride concentrations in soil. Chloride remediation levels are set by the NMOCD on a site-specific basis.

3.0 SUMMARY OF SOIL REMEDIATION ACTIVITIES

On November 7, 2012, Basin responded to the Trunk "O" #5 Historical Release Site. An initial investigation indicated previous remediation activities had been conducted at the release site.

On November 9, 2012, excavation activities began at the historical release site. The excavation floor and sidewalls were advanced until it appeared native soil had been reached. Excavated material was stockpiled on-site, pending final disposition.

On November 13, 2012, seven (7) confirmation soil samples (South Wall @ 6', West Wall @ 2.5' North Wall @ 3', East Wall @ 2.5', South Floor @ 9', West Floor @ 3' and East Floor @ 3') were collected and submitted to Xenco Laboratories, of Odessa, Texas, for determination of TPH and chloride concentrations in accordance with EPA Methods SW 846-8015M and 300.1, respectively. Laboratory analytical results indicated TPH concentrations were less than the appropriate laboratory method detection limit (MDL) for each of the samples submitted with the exception of soil sample East Wall @ 2.5', which had a TPH concentration of 317 mg/Kg. Analytical results indicated chloride concentrations ranged from 6.63 mg/Kg for soil sample West Wall @ 2.5' to 287 mg/Kg for soil sample South Wall @ 6'. Based on laboratory analytical results, further delineation would be required in the area represented by soil sample South Wall @ 6'.

Soil samples East Wall @ 2.5' and South Floor @ 9' were also analyzed for BTEX constituent concentrations in accordance with EPA Methods SW 846-8021B. Analytical results indicated the concentration of benzene was less than the appropriate laboratory MDL for each of the soil sample submitted. BTEX concentrations ranged from less than the laboratory MDL for soil sample East Wall @ 2.5' to 0.02618 mg/Kg for soil sample South Floor @ 9'. Table 1 summarizes the "Concentrations of Benzene, BTEX, TPH & Chloride in Soil". Soil sample locations are depicted in Figure 2, "Site & Sample Location Map". Laboratory analytical reports are provided as Appendix B.

One (1) five-point composite soil sample (Stockpile) was collected from the stockpiled material and submitted to the laboratory for analysis of BTEX, TPH and chloride concentrations. Laboratory analytical results indicated soil sample stockpile had a BTEX concentration of 0.0325 mg/Kg, a TPH concentration of 30.9 mg/Kg and a chloride concentration of 129 mg/Kg. Based on these laboratory analytical results, it was determined that the stockpiled material was suitable for use as backfill.

On November 19, 2012, a delineation trench was advanced in the area represented by soil sample South Wall @ 6'. One (1) soil sample (South Wall #2) was collected and submitted to the laboratory for analysis of chloride concentrations. Laboratory analytical results indicated the chloride concentration of soil sample South Wall #2 was 13.3 mg/Kg. Based on laboratory analytical results, it was determined horizontal delineation had been achieved in the area defined by soil sample South Wall @ 6'.

On November 28, 2012, upon receiving approval from the NMOCD, the excavation was backfilled with the on-site material. Prior to backfilling, the final dimensions of the excavation were approximately forty feet (40') in length, thirty feet (30') in width and three feet (3') to nine feet (9') in depth. Excavation backfill was compacted in lifts and contoured to match the surrounding topography. The site will be reseeded in accordance with the landowner's requests.

4.0 QA/QC PROCEDURES

4.1 Soil Sampling

Soil samples were delivered to Xenco Laboratories, of Odessa, Texas, for BTEX, TPH, and/or chloride analyses using the methods described below:

- BTEX concentrations in accordance with EPA Method SW-846 8021b
- TPH concentrations in accordance with modified EPA Method SW-846 8015M
- Chloride concentrations in accordance with EPA Method 300/300.1

4.2 Decontamination of Equipment

Cleaning of the sampling equipment was the responsibility of the environmental technician. Prior to use, and between each sample, the sampling equipment was cleaned with Liqui-Nox® detergent and rinsed with distilled water.

4.3 Laboratory Protocol

The laboratory was responsible for proper QA/QC procedures after signing the chain-of-custody form(s). These procedures were either transmitted with the laboratory reports or are on file at the laboratory.

5.0 SITE CLOSURE REQUEST

Confirmation soil samples collected from floor and sidewalls of the Trunk "O" #5 excavation were analyzed by and NMOCD-approved laboratory. Laboratory analytical results indicated benzene, BTEX, TPH and chloride concentrations were less than NMOCD regulatory remediation action levels in each of the submitted soil samples. Based on these laboratory analytical results, Basin recommends Southern Union provide the NMOCD Hobbs District Office a copy of this *Remediation Summary & Site Closure Request* and request the NMOCD grant site closure to the Trunk "O" #5 Historical Release Site.

6.0 LIMITATIONS

Basin Environmental Service Technologies, LLC, has prepared this *Remediation Summary & Site Closure Request* to the best of its ability. No other warranty, expressed or implied, is made or intended. Basin has examined and relied upon documents referenced in the report and on oral statements made by certain individuals. Basin has not conducted an independent examination of the facts contained in referenced materials and statements. Basin has presumed the genuineness of these documents and statements and that the information provided therein is true and accurate. Basin has prepared this report in a professional manner, using the degree of skill and care exercised by similar environmental consultants. Basin notes that the facts and conditions referenced in this report may change over time, and the conclusions and recommendations set forth herein are applicable only to the facts and conditions as described at the time of this report.

This report has been prepared for the benefit of Southern Union Gas Services. The information contained in this report, including all exhibits and attachments, may not be used by any other party without the express consent of Basin Environmental Service Technologies, LLC, and/or Southern Union Gas Services.

7.0 DISTRIBUTION

Copy 1: Geoffrey Leking
New Mexico Energy, Minerals and Natural Resources Department
Oil Conservation Division (District 1)
1625 French Drive
Hobbs, NM 88240
GeoffreyR.Leking@state.nm.us

Copy 2: Rose Slade
Southern Union Gas Services
801 S. Loop 464
Monahans, Texas 79756
rose.slade@sug.com

Copy 3: Basin Environmental Service Technologies, LLC
P.O. Box 301
Lovington, New Mexico 88260

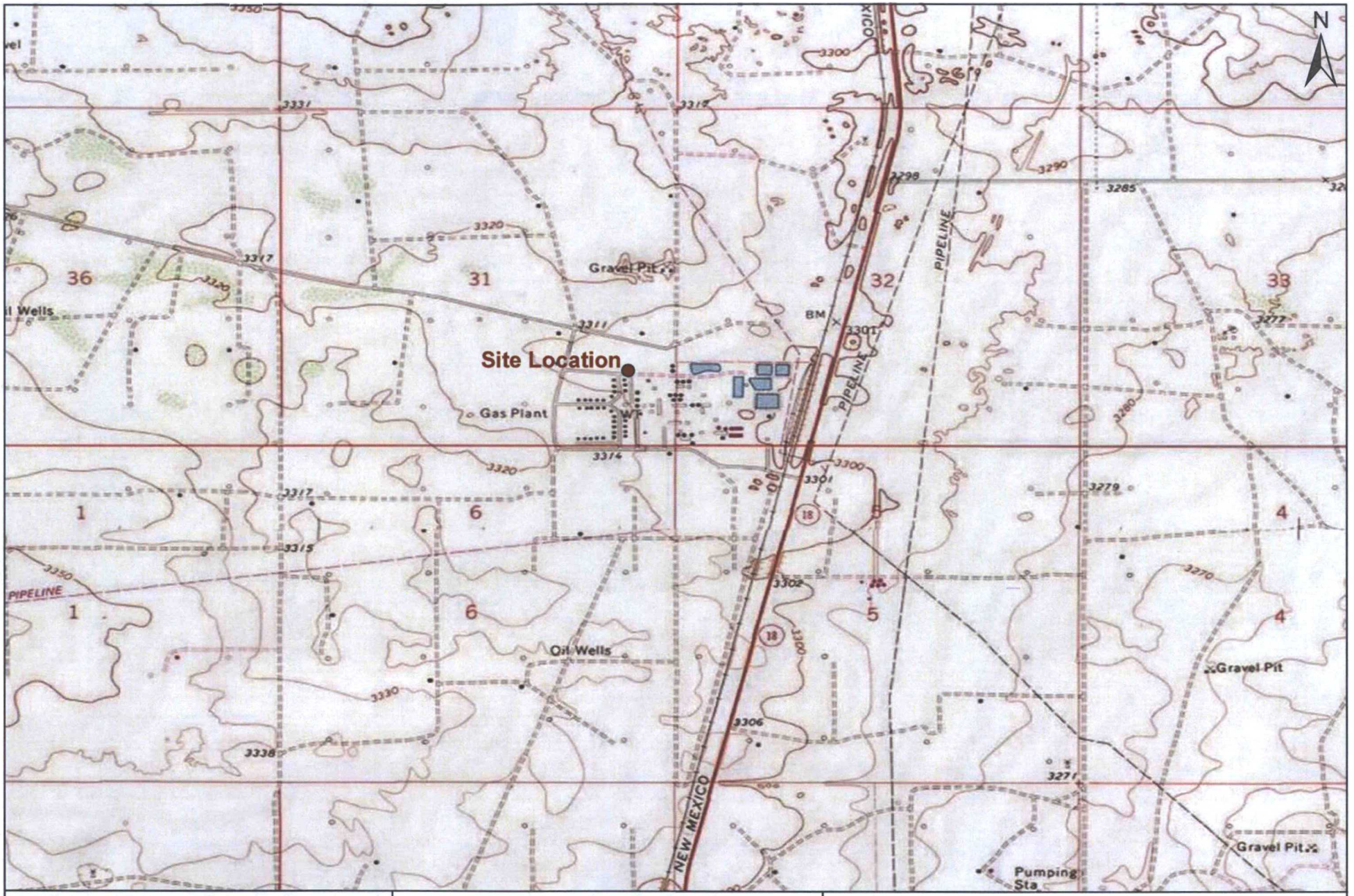
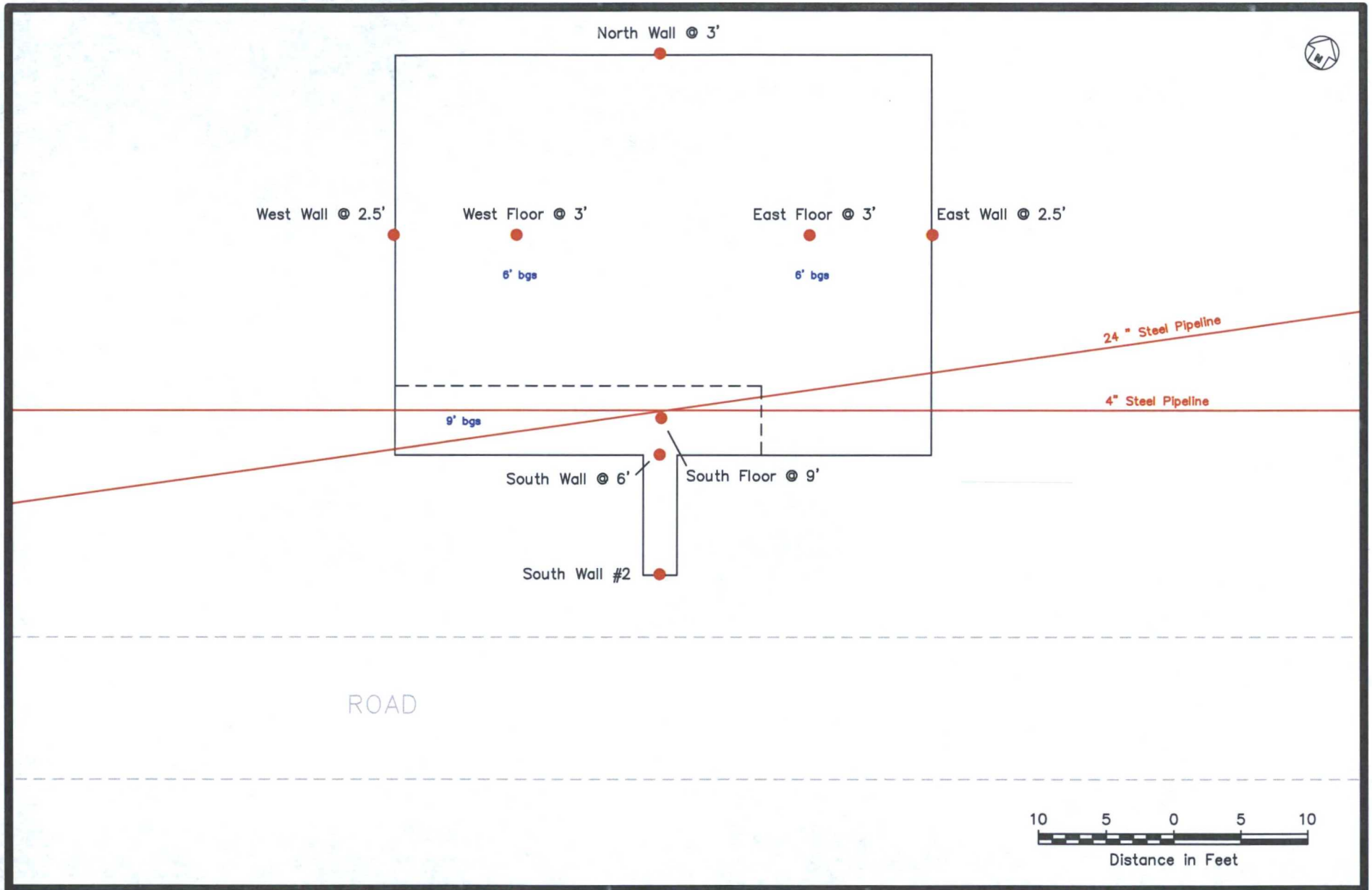


Figure 1
Site Location Map
Southern Union Gas Services
Trunk "O" #5
Lea County, New Mexico
NMOCD Reference #: 1RP-1826

Basin Environmental Service Technologies
Effective Solutions

Basin Environmental Service Technologies, LLC
3100 Plains Hwy.
Lovington, NM 88260

Drawn By: BJA	Checked By: JWL
December 3, 2012	Scale: 1" = 2000'



Legend

- Sample Location
- Excavation Extent
- 6' bgs Grade
- Road
- Pipeline

Figure 2
Site & Sample Location Map
Southern Union Gas Services
Trunk "O" #5
NMOCD Ref RP-1826
Lea County, New Mexico

Basin Environmental Services

Prep By: JWL	Checked By: BJA
November 27, 2012	Scale 1"=10'

TABLE 1

CONCENTRATIONS OF BENZENE, BTEX, TPH & CHLORIDE IN SOIL

SOUTHERN UNION GAS SERVICES
TRUNK "O" #5
HISTORICAL RELEASE SITE
LEA COUNTY, NEW MEXICO
NMOCD REF# 1RP-1826

SAMPLE LOCATION	SAMPLE DEPTH (BGS)	SAMPLE DATE	SOIL STATUS	METHOD: EPA SW 846-8021B, 5030					METHOD: 8015M			TOTAL TPH C_6-C_{35} (mg/Kg)	METHOD: E300.0
				BENZENE (mg/Kg)	TOLUENE (mg/Kg)	ETHYL-BENZENE (mg/Kg)	TOTAL XYLENES (mg/Kg)	TOTAL BTEX (mg/Kg)	GRO C_6-C_{12} (mg/Kg)	DRO C_{12}-C_{28} (mg/Kg)	ORO C_{28}-C_{35} (mg/Kg)		CHLORIDE (mg/Kg)
South Wall @ 6'	6'	11/13/2012	In-Situ	-	-	-	-	-	<18.7	<18.7	<18.7	<18.7	287
West Wall @ 2.5'	2.5'	11/13/2012	In-Situ	-	-	-	-	-	<17.8	<17.8	<17.8	<17.8	6.63
North Wall @ 3'	3'	11/13/2012	In-Situ	-	-	-	-	-	<18.0	<18.0	<18.0	<18.0	8.50
East Wall @ 2.5'	2.5'	11/13/2012	In-Situ	<0.00105	<0.00210	<0.00105	<0.00210	<0.00210	18.0	279	20.2	317	238
South Floor @ 9'	9'	11/13/2012	In-Situ	<0.00109	<0.00218	0.00448	0.0217	0.02618	<16.2	<16.2	<16.2	<16.2	14.7
West Floor @ 3'	3'	11/13/2012	In-Situ	-	-	-	-	-	<16.3	<16.3	<16.3	<16.3	16.8
East Floor @ 3'	3'	11/13/2012	In-Situ	-	-	-	-	-	<17.3	<17.3	<17.3	<17.3	142
Stockpile	N/A	11/13/2012	Stockpiled	<0.00124	0.0325	<0.00124	<0.00248	0.0325	<18.6	30.9	<18.6	30.9	129
South Wall #2	6'	11/23/2012	In-Situ	-	-	-	-	-	-	-	-	-	13.3
NMOCD Standard				**10**				**50**				**1,000**	**500**

- = Not analyzed.

Photograph of the initial release at the Trunk "O"#5 Historical Release Site.

Photograph of previous excavation activities at the Trunk "O"#5 Historical Release Site.

Photograph of recent excavation activities at the Trunk "O"#5 Historical Release Site.

Photograph of recent excavation activities at the Trunk "O"#5 Historical Release Site.

Photograph of recent excavation activities at the Trunk "O"#5 Historical Release Site.

Photograph of recent excavation activities at the Trunk "O"#5 Historical Release Site.

Photograph of the backfilled excavation at the Trunk "O"#5 Historical Release Site.

Photograph of the backfilled excavation at the Trunk "O"#5 Historical Release Site.

Analytical Report 452569

for

Southern Union Gas Services- Monahans

Project Manager: Joel Lowry

Trunk "O" #5 (RP-1826)

20-NOV-12

Collected By: Client

12600 West I-20 East Odessa, Texas 79765

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215-10-6-TX), Arizona (AZ0765), Arkansas (08-039-0), Connecticut (PH-0102), Florida (E871002)
Illinois (002082), Indiana (C-TX-02), Iowa (392), Kansas (E-10380), Kentucky (45), Louisiana (03054)
New Hampshire (297408), New Jersey (TX007), New York (11763), Oklahoma (9218), Pennsylvania (68-03610)
Rhode Island (LAO00312), USDA (S-44102), DoD (L11-54)

Xenco-Atlanta (EPA Lab Code: GA00046):
Florida (E87429), North Carolina (483), South Carolina (98015), Kentucky (85), DoD (L10-135)
Louisiana (04176), USDA (P330-07-00105)

Xenco-Tampa Mobile (EPA Lab code: FL01212): Florida (E84900)
Xenco-Lakeland: Florida (E84098)
Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-TX)
Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295-TX)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona(AZ0757)
Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)
Xenco Tucson (EPA Lab code:AZ000989): Arizona (AZ0758)

XENCO Laboratories

20-NOV-12

Project Manager: **Joel Lowry**
Southern Union Gas Services- Monahans
801 South Loop 464
Monahans, TX 79756

Reference: XENCO Report No: **452569**
Trunk "O" #5 (RP-1826)
Project Address: Lea County, NM

Joel Lowry:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number 452569. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 452569 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Nicholas Straccione
Project Manager

Sample Cross Reference 452569

Southern Union Gas Services- Monahans, Monahans, TX

Trunk "O" #5 (RP-1826)

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
South Wall @ 6'	S	11-13-12 13:25		452569-001
West Wall @ 2.5'	S	11-13-12 13:30		452569-002
North Wall @ 3'	S	11-13-12 13:35		452569-003
East Wall @ 2.5'	S	11-13-12 13:41		452569-004
South Floor @ 9'	S	11-13-12 13:45		452569-005
West Floor @ 3'	S	11-13-12 13:48		452569-006
East Floor @ 3'	S	11-13-12 13:52		452569-007
Stockpile	S	11-13-12 14:25		452569-008

CASE NARRATIVE

XENCO Laboratories

Client Name: Southern Union Gas Services- Monahans
Project Name: Trunk "O" #5 (RP-1826)

Project ID:
Work Order Number: 452569

Report Date: 20-NOV-12
Date Received: 11/15/2012

Sample receipt non conformances and comments:
None

Sample receipt non conformances and comments per sample:

None

Certificate of Analysis Summary 452569

Southern Union Gas Services- Monahans, Monahans, TX

Project Name: Trunk "O" #5 (RP-1826)

Project Id:
Contact: Joel Lowry
Project Location: Lea County, NM

Date Received in Lab: Thu Nov-15-12 10:56 am
Report Date: 20-NOV-12
Project Manager: Nicholas Straccione

Analysis Requested													
	Lab Id:	452569-001		452569-002		452569-003		452569-004		452569-005		452569-006	
	Field Id:	South Wall @ 6'		West Wall @ 2.5'		North Wall @ 3'		East Wall @ 2.5'		South Floor @ 9'		West Floor @ 3'	
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Nov-13-12 13:25		Nov-13-12 13:30		Nov-13-12 13:35		Nov-13-12 13:41		Nov-13-12 13:45		Nov-13-12 13:48	
BTEX by EPA 8021B	***Extracted:***							Nov-20-12 08:30		Nov-15-12 11:00			
	Analyzed:							Nov-20-12 11:10		Nov-15-12 13:24			
	Units/RL:							mg/kg	RL	mg/kg	RL		
Benzene								ND	0.00105	ND	0.00109		
Toluene								ND	0.00210	ND	0.00218		
Ethylbenzene								ND	0.00105	0.00449	0.00109		
m_p-Xylenes								ND	0.00210	0.0130	0.00218		
o-Xylene								ND	0.00105	0.00874	0.00109		
Total Xylenes								ND	0.00105	0.0217	0.00109		
Total BTEX								ND	0.00105	0.0262	0.00109		
Inorganic Anions by EPA 300/300.1 SUB: TX104704215	***Extracted:***	Nov-16-12 10:14		Nov-16-12 10:14		Nov-16-12 10:14		Nov-16-12 10:14		Nov-16-12 10:14		Nov-16-12 10:14	
	Analyzed:	Nov-16-12 11:39		Nov-16-12 11:56		Nov-16-12 12:14		Nov-16-12 12:31		Nov-16-12 13:05		Nov-16-12 13:22	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		287	2.62	6.63	2.35	8.50	2.48	238	20.0	14.7	2.23	16.8	2.42
Percent Moisture	***Extracted:***												
	Analyzed:	Nov-15-12 14:40		Nov-15-12 14:40		Nov-15-12 14:40		Nov-15-12 14:40		Nov-15-12 14:40		Nov-15-12 14:40	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		19.6	1.00	16.0	1.00	16.8	1.00	4.57	1.00	7.89	1.00	8.17	1.00
TPH By SW8015 Mod	***Extracted:***	Nov-15-12 11:15		Nov-15-12 11:15		Nov-15-12 11:15		Nov-15-12 11:15		Nov-15-12 11:15		Nov-15-12 11:15	
	Analyzed:	Nov-16-12 02:57		Nov-16-12 04:33		Nov-16-12 05:05		Nov-16-12 05:37		Nov-16-12 06:08		Nov-16-12 06:40	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
C6-C12 Gasoline Range Hydrocarbons		ND	18.7	ND	17.8	ND	18.0	18.0	15.7	ND	16.2	ND	16.3
C12-C28 Diesel Range Hydrocarbons		ND	18.7	ND	17.8	ND	18.0	279	15.7	ND	16.2	ND	16.3
C28-C35 Oil Range Hydrocarbons		ND	18.7	ND	17.8	ND	18.0	20.2	15.7	ND	16.2	ND	16.3
Total TPH		ND	18.7	ND	17.8	ND	18.0	317	15.7	ND	16.2	ND	16.3

Nicholas Straccione
Project Manager

Certificate of Analysis Summary 452569

Southern Union Gas Services- Monahans, Monahans, TX

Project Name: Trunk "O" #5 (RP-1826)

Project Id:
Contact: Joel Lowry
Project Location: Lea County, NM

Date Received in Lab: Thu Nov-15-12 10:56 am
Report Date: 20-NOV-12
Project Manager: Nicholas Straccione

Analysis Requested								
	Lab Id:	452569-007		452569-008				
	Field Id:	East Floor @ 3'		Stockpile				
	Depth:							
	Matrix:	SOIL		SOIL				
	Sampled:	Nov-13-12 13:52		Nov-13-12 14:25				
BTEX by EPA 8021B	*Extracted:*			Nov-20-12 08:30				
	Analyzed:			Nov-20-12 11:43				
	Units/RL:			mg/kg	RL			
Benzene				ND	0.00124			
Toluene				0.00325	0.00248			
Ethylbenzene				ND	0.00124			
m_p-Xylenes				ND	0.00248			
o-Xylene				ND	0.00124			
Total Xylenes				ND	0.00124			
Total BTEX				0.00325	0.00124			
Inorganic Anions by EPA 300/300.1 SUB: TX104704215	*Extracted:*	Nov-16-12 10:14		Nov-16-12 10:14				
	Analyzed:	Nov-16-12 13:39		Nov-16-12 13:56				
	Units/RL:	mg/kg	RL	mg/kg	RL			
Chloride		142	2.40	129	27.6			
Percent Moisture	*Extracted:*							
	Analyzed:	Nov-15-12 14:40		Nov-15-12 14:40				
	Units/RL:	%	RL	%	RL			
Percent Moisture		13.2	1.00	19.8	1.00			
TPH By SW8015 Mod	*Extracted:*	Nov-15-12 11:15		Nov-15-12 11:15				
	Analyzed:	Nov-16-12 07:11		Nov-16-12 07:42				
	Units/RL:	mg/kg	RL	mg/kg	RL			
C6-C12 Gasoline Range Hydrocarbons		ND	17.3	ND	18.6			
C12-C28 Diesel Range Hydrocarbons		ND	17.3	30.9	18.6			
C28-C35 Oil Range Hydrocarbons		ND	17.3	ND	18.6			
Total TPH		ND	17.3	30.9	18.6			

Nicholas Straccione
Project Manager

XENCO Laboratories

Flagging Criteria

X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.

B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.

D The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.

E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.

F RPD exceeded lab control limits.

J The target analyte was positively identified below the quantiation limit and above the detection limit.

U Analyte was not detected.

L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.

H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.

K Sample analyzed outside of recommended hold time.

JN A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

* Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

MDL Method Detection Limit **SDL** Sample Detection Limit **LOD** Limit of Detection

PQL Practical Quantitation Limit **MQL** Method Quantitation Limit **LOQ** Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

+ NELAC certification not offered for this compound.

* (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: Trunk "O" #5 (RP-1826)

Work Orders : 452569,

Project ID:

Lab Batch #: 900976 **Sample:** 452569-005 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/15/12 13:24

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0263	0.0300	88	80-120	
4-Bromofluorobenzene	0.0310	0.0300	103	80-120	

Lab Batch #: 901052 **Sample:** 452569-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/16/12 02:57

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	91.4	100	91	70-135	
o-Terphenyl	45.2	50.0	90	70-135	

Lab Batch #: 901052 **Sample:** 452569-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/16/12 04:33

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	89.5	99.9	90	70-135	
o-Terphenyl	45.0	50.0	90	70-135	

Lab Batch #: 901052 **Sample:** 452569-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/16/12 05:05

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	89.8	99.8	90	70-135	
o-Terphenyl	45.2	49.9	91	70-135	

Lab Batch #: 901052 **Sample:** 452569-004 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/16/12 05:37

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	88.9	99.8	89	70-135	
o-Terphenyl	44.9	49.9	90	70-135	

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: Trunk "O" #5 (RP-1826)

Work Orders : 452569,

Project ID:

Lab Batch #: 901052 **Sample:** 452569-005 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/16/12 06:08

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	89.2	99.7	89	70-135	
o-Terphenyl	44.2	49.9	89	70-135	

Lab Batch #: 901052 **Sample:** 452569-006 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/16/12 06:40

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	93.4	100	93	70-135	
o-Terphenyl	47.0	50.0	94	70-135	

Lab Batch #: 901052 **Sample:** 452569-007 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/16/12 07:11

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	89.9	100	90	70-135	
o-Terphenyl	45.0	50.0	90	70-135	

Lab Batch #: 901052 **Sample:** 452569-008 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/16/12 07:42

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	87.0	99.6	87	70-135	
o-Terphenyl	44.1	49.8	89	70-135	

Lab Batch #: 901301 **Sample:** 452569-004 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/20/12 11:10

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0297	0.0300	99	80-120	
4-Bromofluorobenzene	0.0253	0.0300	84	80-120	

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: Trunk "O" #5 (RP-1826)

Work Orders : 452569,

Project ID:

Lab Batch #: 901301 **Sample:** 452569-008 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/20/12 11:43

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0251	0.0300	84	80-120	
4-Bromofluorobenzene	0.0271	0.0300	90	80-120	

Lab Batch #: 900976 **Sample:** 630013-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 11/15/12 09:33

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0258	0.0300	86	80-120	
4-Bromofluorobenzene	0.0242	0.0300	81	80-120	

Lab Batch #: 901052 **Sample:** 630055-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 11/16/12 02:25

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	93.1	99.8	93	70-135	
o-Terphenyl	46.7	49.9	94	70-135	

Lab Batch #: 901301 **Sample:** 630198-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 11/20/12 10:36

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0259	0.0300	86	80-120	
4-Bromofluorobenzene	0.0280	0.0300	93	80-120	

Lab Batch #: 900976 **Sample:** 630013-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 11/15/12 09:01

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0298	0.0300	99	80-120	
4-Bromofluorobenzene	0.0339	0.0300	113	80-120	

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: Trunk "O" #5 (RP-1826)

Work Orders : 452569,

Project ID:

Lab Batch #: 901052 **Sample:** 630055-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 11/16/12 01:21

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	92.0	100	92	70-135	
o-Terphenyl	48.7	50.1	97	70-135	

Lab Batch #: 901301 **Sample:** 630198-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 11/20/12 09:13

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0268	0.0300	89	80-120	
4-Bromofluorobenzene	0.0297	0.0300	99	80-120	

Lab Batch #: 900976 **Sample:** 630013-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 11/15/12 09:17

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0332	0.0300	111	80-120	
4-Bromofluorobenzene	0.0315	0.0300	105	80-120	

Lab Batch #: 901052 **Sample:** 630055-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 11/16/12 01:53

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	90.2	99.9	90	70-135	
o-Terphenyl	49.9	50.0	100	70-135	

Lab Batch #: 901301 **Sample:** 630198-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 11/20/12 09:30

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0301	0.0300	100	80-120	
4-Bromofluorobenzene	0.0335	0.0300	112	80-120	

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: Trunk "O" #5 (RP-1826)

Work Orders : 452569,

Project ID:

Lab Batch #: 900976 **Sample:** 451912-011 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/15/12 12:34

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0318	0.0300	106	80-120	
4-Bromofluorobenzene	0.0336	0.0300	112	80-120	

Lab Batch #: 901052 **Sample:** 452569-001 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/16/12 03:29

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	95.8	99.8	96	70-135	
o-Terphenyl	50.7	49.9	102	70-135	

Lab Batch #: 901301 **Sample:** 452203-011 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/20/12 10:20

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0295	0.0300	98	80-120	
4-Bromofluorobenzene	0.0269	0.0300	90	80-120	

Lab Batch #: 900976 **Sample:** 451912-011 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/15/12 12:51

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0311	0.0300	104	80-120	
4-Bromofluorobenzene	0.0333	0.0300	111	80-120	

Lab Batch #: 901052 **Sample:** 452569-001 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/16/12 04:01

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	87.6	99.8	88	70-135	
o-Terphenyl	53.8	49.9	108	70-135	

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: Trunk "O" #5 (RP-1826)

Work Orders : 452569,

Project ID:

Lab Batch #: 901301 **Sample:** 452203-011 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/20/12 11:26

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0343	0.0300	114	80-120	
4-Bromofluorobenzene	0.0308	0.0300	103	80-120	

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

XENCO Laboratories

BS / BSD Recoveries

Project Name: Trunk "O" #5 (RP-1826)

Work Order #: 452569 **Project ID:**

Analyst: KEB **Date Prepared:** 11/15/2012 **Date Analyzed:** 11/15/2012

Lab Batch ID: 900976 **Sample:** 630013-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00100	0.100	0.105	105	0.100	0.106	106	1	70-130	35	
Toluene	<0.00200	0.100	0.110	110	0.100	0.113	113	3	70-130	35	
Ethylbenzene	<0.00100	0.100	0.106	106	0.100	0.110	110	4	71-129	35	
m_p-Xylenes	<0.00200	0.200	0.224	112	0.200	0.234	117	4	70-135	35	
o-Xylene	<0.00100	0.100	0.108	108	0.100	0.114	114	5	71-133	35	

Analyst: KEB **Date Prepared:** 11/20/2012 **Date Analyzed:** 11/20/2012

Lab Batch ID: 901301 **Sample:** 630198-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00100	0.100	0.0861	86	0.100	0.101	101	16	70-130	35	
Toluene	<0.00200	0.100	0.0891	89	0.100	0.102	102	14	70-130	35	
Ethylbenzene	<0.00100	0.100	0.0822	82	0.100	0.0990	99	19	71-129	35	
m_p-Xylenes	<0.00200	0.200	0.175	88	0.200	0.210	105	18	70-135	35	
o-Xylene	<0.00100	0.100	0.0849	85	0.100	0.104	104	20	71-133	35	

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes

XENCO Laboratories

BS / BSD Recoveries

Project Name: Trunk "O" #5 (RP-1826)

Work Order #: 452569 **Project ID:**

Analyst: TTE **Date Prepared:** 11/16/2012 **Date Analyzed:** 11/16/2012

Lab Batch ID: 901103 **Sample:** 630090-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1 Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	<2.00	200	187	94	200	188	94	1	80-120	20	

Analyst: KEB **Date Prepared:** 11/15/2012 **Date Analyzed:** 11/16/2012

Lab Batch ID: 901052 **Sample:** 630055-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C12 Gasoline Range Hydrocarbons	<15.0	1000	924	92	999	952	95	3	70-135	35	
C12-C28 Diesel Range Hydrocarbons	<15.0	1000	920	92	999	940	94	2	70-135	35	

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes

XENCO Laboratories

Form 3 - MS Recoveries

Project Name: Trunk "O" #5 (RP-1826)

Work Order #: 452569
Lab Batch #: 901103
Project ID:
Date Analyzed: 11/16/2012
Date Prepared: 11/16/2012
Analyst: TTE
QC- Sample ID: 452569-004 S
Batch #: 1
Matrix: Soil
Reporting Units: mg/kg

Inorganic Anions by EPA 300	MATRIX / MATRIX SPIKE RECOVERY STUDY					
Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	238	2000	2120	94	80-120	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B
Relative Percent Difference [E] = 200*(C-A)/(C+B)
All Results are based on MDL and Validated for QC Purposes

BRL - Below Reporting Limit

Form 3 - MS / MSD Recoveries

Project Name: Trunk "O" #5 (RP-1826)

Work Order # : 452569 **Project ID:**

Lab Batch ID: 900976 **QC- Sample ID:** 451912-011 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 11/15/2012 **Date Prepared:** 11/15/2012 **Analyst:** KEB

Reporting Units: mg/kg

BTEX by EPA 8021B Analytes	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00105	0.105	0.105	100	0.106	0.100	94	5	70-130	35	
Toluene	<0.00210	0.105	0.108	103	0.106	0.109	103	1	70-130	35	
Ethylbenzene	<0.00105	0.105	0.105	100	0.106	0.101	95	4	71-129	35	
m_p-Xylenes	<0.00210	0.210	0.225	107	0.212	0.216	102	4	70-135	35	
o-Xylene	<0.00105	0.105	0.112	107	0.106	0.106	100	6	71-133	35	

Lab Batch ID: 901301 **QC- Sample ID:** 452203-011 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 11/20/2012 **Date Prepared:** 11/20/2012 **Analyst:** KEB

Reporting Units: mg/kg

BTEX by EPA 8021B Analytes	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00105	0.105	0.0944	90	0.106	0.114	108	19	70-130	35	
Toluene	<0.00211	0.105	0.0988	94	0.106	0.117	110	17	70-130	35	
Ethylbenzene	<0.00105	0.105	0.0951	91	0.106	0.111	105	15	71-129	35	
m_p-Xylenes	<0.00211	0.211	0.199	94	0.212	0.231	109	15	70-135	35	
o-Xylene	<0.00105	0.105	0.0966	92	0.106	0.115	108	17	71-133	35	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B
Relative Percent Difference RPD = 200*|(C-F)/(C+F)|

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not ApplicableN = See Narrative, EQL = Estimated Quantitation Limit

XENCO Laboratories

Form 3 - MS / MSD Recoveries

Project Name: Trunk "O" #5 (RP-1826)

Work Order # : 452569 **Project ID:**

Lab Batch ID: 901052 **QC- Sample ID:** 452569-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 11/16/2012 **Date Prepared:** 11/15/2012 **Analyst:** KEB

Reporting Units: mg/kg

TPH By SW8015 Mod Analytes	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C12 Gasoline Range Hydrocarbons	<18.6	1240	1200	97	1240	1140	92	5	70-135	35	
C12-C28 Diesel Range Hydrocarbons	<18.6	1240	1200	97	1240	1120	90	7	70-135	35	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B
Relative Percent Difference RPD = 200*|(C-F)/(C+F)|

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not ApplicableN = See Narrative, EQL = Estimated Quantitation Limit

XENCO Laboratories

Sample Duplicate Recovery

Project Name: Trunk "O" #5 (RP-1826)

Work Order #: 452569

Lab Batch #: 901027 **Project ID:**

Date Analyzed: 11/15/2012 14:40 **Date Prepared:** 11/15/2012 **Analyst:** WRU

QC- Sample ID: 452569-001 D **Batch #:** 1 **Matrix:** Soil

Reporting Units: %

	SAMPLE / SAMPLE DUPLICATE RECOVERY				
Percent Moisture **Analyte**	**Parent Sample Result [A]**	**Sample Duplicate Result [B]**	**RPD**	**Control Limits %RPD**	**Flag**
Percent Moisture	19.6	20.8	6	20	

Spike Relative Difference RPD 200 * | (B-A)/(B+A) |
All Results are based on MDL and validated for QC purposes.

BRL - Below Reporting Limit

Xenco Laboratories

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765

Phone: 432-563-1800
Fax: 432-563-1713

Project Manager: Ben J. Arguijo

Company Name: Basin Environmental Service Technologies, LLC

Company Address: P.O. Box 301

City/State/Zip: Lovington, NM 88260

Telephone No: (575)396-2378 Fax No: (575) 396-1429

Sampler Signature: Joel Jowers

e-mail: pm@basinenv.com, rose.slade@sug.com, cydni.inskeep@sug.com

Project Name: Trunk "O" #5 (RP-1826)

Project #:

Project Loc: Lea County, NM

PO #: Bill Southern Union Gas Services

Report Format: [X] Standard [ ] TRRP [ ] NPDES

(lab use only) ORDER #: 452569

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers: Ice	HNO3	HCl	H2SO4	NaOH	Na2S2O3	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge GW=Groundwater S=Soil/Soil NP=Non-Potable Specify Other	Analyze For: TPH: 418.1 8015M 8015B	TPH: TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8260 (TCLP: / TOTAL: X)	RCI	N.O.R.M.	CHLORIDES	Total Dissolved Solids		RUSH TAT (Pre-Schedule) (24, 48, 72 hrs)	Standard TAT 4 DAY
01	South Wall @ 6'			11/13/2012	1325		1	X								Soil	X											X			X	
02	West Wall @ 2.5'			11/13/2012	1330		1	X								Soil	X											X			X	
03	North Wall @ 3'			11/13/2012	1335		1	X								Soil	X											X			X	
04	East Wall @ 2.5'			11/13/2012	1341		1	X								Soil	X											X			X	
05	South Floor @ 9'			11/13/2012	1345		1	X								Soil	X								X			X			X	
06	West Floor @ 3'			11/13/2012	1348		1	X								Soil	X											X			X	
07	East Floor @ 3'			11/13/2012	1352		1	X								Soil	X											X			X	
08	Stockpile			11/13/2012	1425		1	X								Soil	X											X			X	

Special Instructions:

Call when TPH analysis is complete to consider running an additional sample for BTEX

Relinquished by:	Date	Time	Received by:	Date	Time
Joel Jowers	11/14/12	2:30	Jamie K Aug	11/14/12	2:30
Jamie K Aug	11/14/12	3:30	Kristen Battle	11/14/12	3:30 pm
Relinquished by:	Date	Time	Received by ELOT:	Date	Time
			Maurel Smith	11/15/12	10:50 Am

Laboratory Comments:

Sample Containers Intact?	Y	N
VOCs Free of Headspace?	Y	N
Labels on container(s)	Y	N
Custody seals on container(s)	Y	N
Custody seals on cooler(s)	Y	N
Sample Hand Delivered by Sampler/Client Rep. ?	Y	N
by Courier? UPS DHL FedEx Lone Star		
Temperature Upon Receipt:	6.5 °C	

Final 1.000

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: Southern Union Gas Services- Monahan

Date/ Time Received: 11/15/2012 10:56:00 AM

Work Order #: 452569

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used :

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	1.5
#2 *Shipping container in good condition?	Yes
#3 *Samples received on ice?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	Yes
#5 Custody Seals intact on sample bottles?	Yes
#6 *Custody Seals Signed and dated?	Yes
#7 *Chain of Custody present?	Yes
#8 Sample instructions complete on Chain of Custody?	Yes
#9 Any missing/extra samples?	No
#10 Chain of Custody signed when relinquished/ received?	Yes
#11 Chain of Custody agrees with sample label(s)?	Yes
#12 Container label(s) legible and intact?	Yes
#13 Sample matrix/ properties agree with Chain of Custody?	Yes
#14 Samples in proper container/ bottle?	Yes
#15 Samples properly preserved?	Yes
#16 Sample container(s) intact?	Yes
#17 Sufficient sample amount for indicated test(s)?	Yes
#18 All samples received within hold time?	Yes
#19 Subcontract of sample(s)?	Yes
#20 VOC samples have zero headspace (less than 1/4 inch bubble)?	Yes
#21 <2 for all samples preserved with HNO3,HCL, H2SO4?	Yes
#22 >10 for all samples preserved with NaAsO2+NaOH, ZnAc+NaOH?	Yes

*** Must be completed for after-hours delivery of samples prior to placing in the refrigerator**

Analyst:	PH Device/Lot#:

Checklist completed by: _____ Date: _____

Checklist reviewed by: _____ Date: _____

Analytical Report 452904

for

Southern Union Gas Services- Monahans

Project Manager: Joel Lowry

Trunk "O" 30" #5 (RP-1826)

RP-1826

26-NOV-12

Collected By: Client

12600 West I-20 East Odessa, Texas 79765

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215-10-6-TX), Arizona (AZ0765), Arkansas (08-039-0), Connecticut (PH-0102), Florida (E871002)
Illinois (002082), Indiana (C-TX-02), Iowa (392), Kansas (E-10380), Kentucky (45), Louisiana (03054)
New Hampshire (297408), New Jersey (TX007), New York (11763), Oklahoma (9218), Pennsylvania (68-03610)
Rhode Island (LAO00312), USDA (S-44102), DoD (L11-54)

Xenco-Atlanta (EPA Lab Code: GA00046):
Florida (E87429), North Carolina (483), South Carolina (98015), Kentucky (85), DoD (L10-135)
Louisiana (04176), USDA (P330-07-00105)

Xenco-Tampa Mobile (EPA Lab code: FL01212): Florida (E84900)
Xenco-Lakeland: Florida (E84098)
Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-TX)
Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295-TX)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona(AZ0757)
Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)
Xenco Tucson (EPA Lab code:AZ000989): Arizona (AZ0758)

XENCO Laboratories

26-NOV-12

Project Manager: **Joel Lowry**
Southern Union Gas Services- Monahans
801 South Loop 464
Monahans, TX 79756

Reference: XENCO Report No: **452904**
Trunk "O" 30" #5 (RP-1826)
Project Address: Lea County, NM

Joel Lowry:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number 452904. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 452904 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Nicholas Straccione
Project Manager

Sample Cross Reference 452904

Southern Union Gas Services- Monahans, Monahans, TX

Trunk "O" 30" #5 (RP-1826)

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
South Wall #2	S	11-19-12 11:55		452904-001

CASE NARRATIVE

Client Name: Southern Union Gas Services- Monahans
Project Name: Trunk "O" 30" #5 (RP-1826)

Project ID:	*RP-1826*	*Report Date:*	*26-NOV-12*
Work Order Number:	*452904*	*Date Received:*	*11/21/2012*

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Certificate of Analysis Summary 452904

Southern Union Gas Services- Monahans, Monahans, TX

Project Name: Trunk "O" 30" #5 (RP-1826)

Project Id: RP-1826
Contact: Joel Lowry
Project Location: Lea County, NM

Date Received in Lab: Wed Nov-21-12 12:53 pm
Report Date: 26-NOV-12
Project Manager: Nicholas Straccione

Analysis Requested							
	Lab Id:	452904-001					
	Field Id:	South Wall #2					
	Depth:						
	Matrix:	SOIL					
	Sampled:	Nov-19-12 11:55					
Inorganic Anions by EPA 300/300.1 SUB: TX104704215	***Extracted:***	Nov-23-12 19:29					
	Analyzed:	Nov-23-12 19:29					
	Units/RL:	mg/kg	RL				
Chloride		13.3	1.36				
Percent Moisture	***Extracted:***						
	Analyzed:	Nov-21-12 13:49					
	Units/RL:	%	RL				
Percent Moisture		21.2	1.00				

Nicholas Straccione
Project Manager

XENCO Laboratories

Flagging Criteria

X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.

B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.

D The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.

E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.

F RPD exceeded lab control limits.

J The target analyte was positively identified below the quantiation limit and above the detection limit.

U Analyte was not detected.

L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.

H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.

K Sample analyzed outside of recommended hold time.

JN A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

* Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

MDL Method Detection Limit **SDL** Sample Detection Limit **LOD** Limit of Detection

PQL Practical Quantitation Limit **MQL** Method Quantitation Limit **LOQ** Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

\+ NELAC certification not offered for this compound.

* (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

XENCO Laboratories

BS / BSD Recoveries

Project Name: Trunk "O" 30" #5 (RP-1826)

Work Order #: 452904
Analyst: JOL
Lab Batch ID: 901508
Sample: 630351-1-BKS
Units: mg/kg

Date Prepared: 11/23/2012
Batch #: 1

Project ID: RP-1826
Date Analyzed: 11/23/2012
Matrix: Solid

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1 Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	<1.00	100	105	105	100	105	105	0	80-120	20	

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes

XENCO Laboratories

Form 3 - MS Recoveries

Project Name: Trunk "O" 30" #5 (RP-1826)

Work Order #: 452904

Lab Batch #: 901508 **Project ID:** RP-1826

Date Analyzed: 11/23/2012 **Date Prepared:** 11/23/2012 **Analyst:** JOL

QC- Sample ID: 452891-001 S **Batch #:** 1 **Matrix:** Soil

Reporting Units: mg/kg

Inorganic Anions by EPA 300	MATRIX / MATRIX SPIKE RECOVERY STUDY					
Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	8940	12400	21900	105	80-120	

Lab Batch #: 901508

Date Analyzed: 11/23/2012 **Date Prepared:** 11/23/2012 **Analyst:** JOL

QC- Sample ID: 452891-002 S **Batch #:** 1 **Matrix:** Soil

Reporting Units: mg/kg

Inorganic Anions by EPA 300	MATRIX / MATRIX SPIKE RECOVERY STUDY					
Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	10800	11300	22500	104	80-120	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B
Relative Percent Difference [E] = 200*(C-A)/(C+B)
All Results are based on MDL and Validated for QC Purposes

BRL - Below Reporting Limit

XENCO Laboratories

Sample Duplicate Recovery

Project Name: Trunk "O" 30" #5 (RP-1826)

Work Order #: 452904

Lab Batch #: 901385 **Project ID:** RP-1826

Date Analyzed: 11/21/2012 12:30 **Date Prepared:** 11/21/2012 **Analyst:** WRU

QC- Sample ID: 452891-001 D **Batch #:** 1 **Matrix:** Soil

Reporting Units: %

	SAMPLE / SAMPLE DUPLICATE RECOVERY				
Percent Moisture **Analyte**	**Parent Sample Result [A]**	**Sample Duplicate Result [B]**	**RPD**	**Control Limits %RPD**	**Flag**
Percent Moisture	19.2	19.3	1	20	

Spike Relative Difference RPD 200 * | (B-A)/(B+A) |
All Results are based on MDL and validated for QC purposes.

BRL - Below Reporting Limit

Xenco Laboratories

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765
Phone: 432-563-1800
Fax: 432-563-1713

Project Manager: Joel Lowry
Company Name: Basin Environmental Service Technologies, LLC
Company Address: P.O. Box 301
City/State/Zip: Lovington, NM 88260
Telephone No: (575)396-2378
Fax No: (575) 396-1429
Sampler Signature: Joel Lowry
e-mail: pm@basinenv.com, rose.slade@sug.com, cydni.inskeep@sug.com

Project Name: Trunk "O" #5 (RP-1826)
Project #: RP-1826
Project Loc: Lea County, NM
PO #: Bill Southern Union Gas Services
Report Format: [X] Standard [ ] TRRP [ ] NPDES

(lab use only) ORDER #: 452904

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total #. of Containers	Preservation & # of Containers: Ice	HNO_3	HCl	H_2SO_4	NaOH	$Na_2S_2O_3$	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge GW=Groundwater S=Soil/Sol NP=Non-Potable Specify Oth	Analyze For: TCLP: TPH: 418.1 8015M 8015B	TPH: TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	TOTAL: BTEX 8021B/5030 or BTEX 8260 X	RCI	N.O.R.M.	CHLORIDES	Total Dissolved Solids		RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT 4 DAY
	South Wall #2			11/19/2012	1155		1	X								Soil												X				X	X

Special Instructions:

Relinquished by:	Date	Time	Received by:	Date	Time
Joel Lowry	11/19/12	06:45		11/19/12	06:45
	11/20/12	13:30		11/20/12	130
			Received by ELOT:	11/21/12	12:53

Laboratory Comments:

Sample Containers Intact? (Y) N
VOCs Free of Headspace? (Y) N
Labels on container(s) (Y) N
Custody seals on container(s) Y (N)
Custody seals on cooler(s) (Y) N
Sample Hand Delivered by Sampler/Client Rep. ? (Y) N
by Courier? UPS DHL (FedEx) Lone Star
Temperature Upon Receipt: 1.5 °C

Final 1.000

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: Southern Union Gas Services- Monahan

Date/ Time Received: 11/21/2012 12:53:00 PM

Work Order #: 452904

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used :

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	0
#2 *Shipping container in good condition?	Yes
#3 *Samples received on ice?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	Yes
#5 Custody Seals intact on sample bottles?	Yes
#6 *Custody Seals Signed and dated?	Yes
#7 *Chain of Custody present?	Yes
#8 Sample instructions complete on Chain of Custody?	Yes
#9 Any missing/extra samples?	No
#10 Chain of Custody signed when relinquished/ received?	Yes
#11 Chain of Custody agrees with sample label(s)?	Yes
#12 Container label(s) legible and intact?	Yes
#13 Sample matrix/ properties agree with Chain of Custody?	Yes
#14 Samples in proper container/ bottle?	Yes
#15 Samples properly preserved?	Yes
#16 Sample container(s) intact?	Yes
#17 Sufficient sample amount for indicated test(s)?	Yes
#18 All samples received within hold time?	Yes
#19 Subcontract of sample(s)?	Yes
#20 VOC samples have zero headspace (less than 1/4 inch bubble)?	Yes
#21 <2 for all samples preserved with HNO3,HCL, H2SO4?	Yes
#22 >10 for all samples preserved with NaAsO2+NaOH, ZnAc+NaOH?	Yes

*** Must be completed for after-hours delivery of samples prior to placing in the refrigerator**

Analyst:	PH Device/Lot#:

Checklist completed by: _____ Date: _____

Checklist reviewed by: _____ Date: _____