PLWJ1036438884
2676

RECEIVED
JAN 03 2011
HOBBSOCD

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	Contact	Rose Slade
Address	P.O. Box 1226 Jal, New Mexico 88252	Telephone No.	432-940-5147
Facility Name	MB-4 9-10	Facility Type	Natural Gas Pipeline

Surface Owner Johnny Owens Sr.		Lease No. 30-025-38822

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
P	15	25S	37E					Lea

Latitude 32 degrees 07.412' North Longitude 103 degrees 08.706 West

NATURE OF RELEASE

Type of Release Natural Gas, Crude Oil and Produced Water	Volume of Release 6 BBLS	Volume Recovered None
Source of Release Natural Gas Pipeline	Date and Hour of Occurrence Unknown	Date and Hour of Discovery August 29, 2010, 1830 hrs
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.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*
A 16-inch low pressure natural gas pipeline developed a leak due to internal corrosion of the pipeline, resulting in a release of natural gas, crude oil and produced water. During initial response activities the pipeline was fitted with a temporary pipeline clamp to mitigate the release. Following initial response activities, the affected pipeline segment was replaced.

Describe Area Affected and Cleanup Action Taken.*
The affected area is approximately 500 square feet and is located in a low lying pasture. The release will be remediated according to NMOCD regulatory guidelines.

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 Slade	OIL CONSERVATION DIVISION
Printed Name: Rose L. Slade	Approved by District Supervisor: Johnson ENVIRONMENTAL ENGINEER
Title: EHS Compliance Specialist	Approval Date: 12-30-10 Expiration Date: —
E-mail Address: rose.slade@sug.com	Conditions of Approval: — Attached ☐ IRP# 12-10-2676
Date: 6/8/2010 Phone: 432-940-5147	

* Attach Additional Sheets If Necessary

nLWJ1036438085
pLWJ1036438884

Basin Environmental Service Technologies, LLC

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

Effective Solutions

REMEDIATION SUMMARY

AND

SITE CLOSURE REQUEST

SOUTHERN UNION GAS SERVICES
Line MB-4 (2010-050)
Lea County, New Mexico
Unit Letter "P" (SESE), Section 15, Township 25 South, Range 37 East
Latitude 32° 07.412' North, Longitude 103° 08.706' West

Prepared For:

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

Prepared By:
Basin Environmental Service Technologies, LLC

March 2011

Ben J. Arguijo
Project Manager

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FIGURES

TABLES

APPENDICES

1.0 INTRODUCTION AND BACKGROUND INFORMATION

Basin Environmental Service Technologies, LLC (Basin), on behalf of Southern Union Gas Services (Southern Union), has prepared this "Remediation Summary and Site Closure Request" for the release site known as Line MB-4. The legal description of the release site is Unit Letter "P" (SESE), Section 15, Township 25 South, Range 37 East, in Lea County, New Mexico. The geographic coordinates of the release site are 32° 07.412' North latitude and 103° 08.706' West longitude. The property affected by the release is owned by Mr. Johnny Owens, Sr. A "Site Location Map" is provided as Figure 1.

On August 29, 2010, Southern Union discovered a release from a sixteen (16)-inch, low pressure, steel natural gas pipeline. Approximately six (6) barrels of a mixture of natural gas, crude oil, and produced water was released from the pipeline, resulting in an affected area of approximately five hundred (500) square feet. The release was attributed to internal corrosion of the pipeline. During initial response activities, the pipeline was fitted with a temporary pipeline clamp to mitigate the release. Following initial response activities, the affected pipeline segment was replaced. General photographs of the site are provided as Appendix B. The "Release Notification and Corrective Action" (Form C-141) is provided as Appendix C.

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 depth to groundwater information was unavailable for Section 15, Township 25 South, Range 37 East. A depth to groundwater reference map utilized by the New Mexico Oil Conservation Division (NMOCD) indicates groundwater should be encountered at approximately fifty (50) feet below ground surface (bgs). Based on the NMOCD ranking system, twenty (20) 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 1,000 feet 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 1,000 feet 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 Line MB-4 release site has a ranking score of twenty (20). The soil remediation levels for a site with a ranking score of twenty (20) points are as follows:

- Benzene – 10 mg/kg (ppm)
- BTEX – 50 mg/kg (ppm)
- TPH – 100 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 December 9, 2010, following initial response activities, excavation of impacted soil began at the site. Hach Quantab Chloride Low Range (30-600 mg/Kg) Titrators were used to field-screen the horizontal and vertical extent of impacted soil and to guide the excavation. The excavation was divided into two sections: the "South Ditch" and the "West Ditch". Approximately twenty-four (24) cubic yards (cy) of

heavily impacted soil was excavated and transported to Sundance Services, Inc. ("Sundance", NMOCD Permit # NM-01003), for disposal.

From December 10 through December 13, 2010, approximately one hundred and forty-four (144) cy of impacted soil was excavated and transported to Sundance for disposal.

On December 14, 2010, approximately thirty-three (33) cy of impacted soil was excavated and transported to Sundance for disposal. In addition, eleven (11) soil samples (S Ditch E Wall #1, S Ditch E Wall #2, S Ditch Floor #1, S Ditch Floor #2, S Ditch W Wall #1, S Ditch W Wall #2, S Pooling Area, W Ditch N Floor, W Ditch N Wall, W Ditch S Floor, and W Ditch S Wall) were collected from the floor and sidewalls of the excavation and submitted to Xenco Laboratories (Odessa, TX) for analysis of benzene, toluene, ethyl-benzene, and xylenes (BTEX), total petroleum hydrocarbon (TPH), and/or chloride concentrations using EPA Method SW-846 8021b, EPA Method SW-846 8015M, and EPA Method 300.1, respectively.

Laboratory analytical results indicated benzene concentrations were less than the laboratory method detection limit (MDL) for all soil samples submitted. BTEX concentrations ranged from less than the laboratory MDL for soil samples S Ditch Floor #1, S Ditch Floor #2, S Ditch W Wall #1, and W Ditch N Floor to 0.013 mg/Kg for soil sample W Ditch S Floor. TPH concentrations ranged from less than the laboratory MDL for soil samples S Ditch E Wall #1, S Ditch E Wall #2, S Ditch Floor #1, S Ditch Floor #2, S Ditch W Wall #1, S Ditch W Wall #2, S Pooling Area, W Ditch N Wall, W Ditch S Floor, and W Ditch S Wall to 31.9 mg/Kg for soil sample W Ditch N Floor. Chloride concentrations ranged from 4.84 mg/Kg for soil sample S Ditch E Wall #2 to 275 mg/Kg for soil sample W Ditch S Floor. Table 1 summarizes the "Concentrations of Benzene, BTEX, TPH & Chlorides in Soil". A "Site & Sample Location Map" is provided as Figure 2. Laboratory analytical reports are provided as Appendix A.

On January 3, 2011, an NMOCD representative approved Southern Union's request to allow soil represented by soil sample "W Ditch S Floor" to remain in place.

Based on the laboratory analytical results, on January 5, 2011, the excavation was backfilled in eighteen (18)-inch lifts, compacted, and contoured to fit the surrounding topography. Prior to backfilling, final dimensions of the South Ditch were approximately seventy-two (72) feet in length, approximately twelve (12) feet in width, and approximately two (2) feet in depth. The West Ditch measured approximately twelve (12) feet in length, approximately forty-eight (48) feet in width, and ranging in depth from approximately three (3) feet to twelve (12) feet.

4.0 QA/QC PROCEDURES

4.1 Soil Sampling

Soil Samples were delivered to Xenco Laboratories, Inc., of Odessa, Texas, for BTEX, TPH, and/or chloride analyses using the methods described below. Soil samples were analyzed for BTEX, TPH, and/or chloride concentrations within fourteen (14) days following the collection date.
The soil samples were analyzed as follows:

- 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 300.1

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

Soil samples collected from the floor and sidewalls of the Line MB-4 excavation were analyzed by an NMOCD approved laboratory, and concentrations of benzene, BTEX, TPH, and chloride were less than the remediation action levels established or approved for the site by the NMOCD. Based on these analytical results, Basin recommends Southern Union provide the NMOCD Hobbs District Office a copy of this "Remediation Summary and Site Closure Request" and request the NMOCD grant site closure to the Line MB-4 release site.

6.0 LIMITATIONS

Basin Environmental Service Technologies, LLC, has prepared this "Remediation Summary and 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.

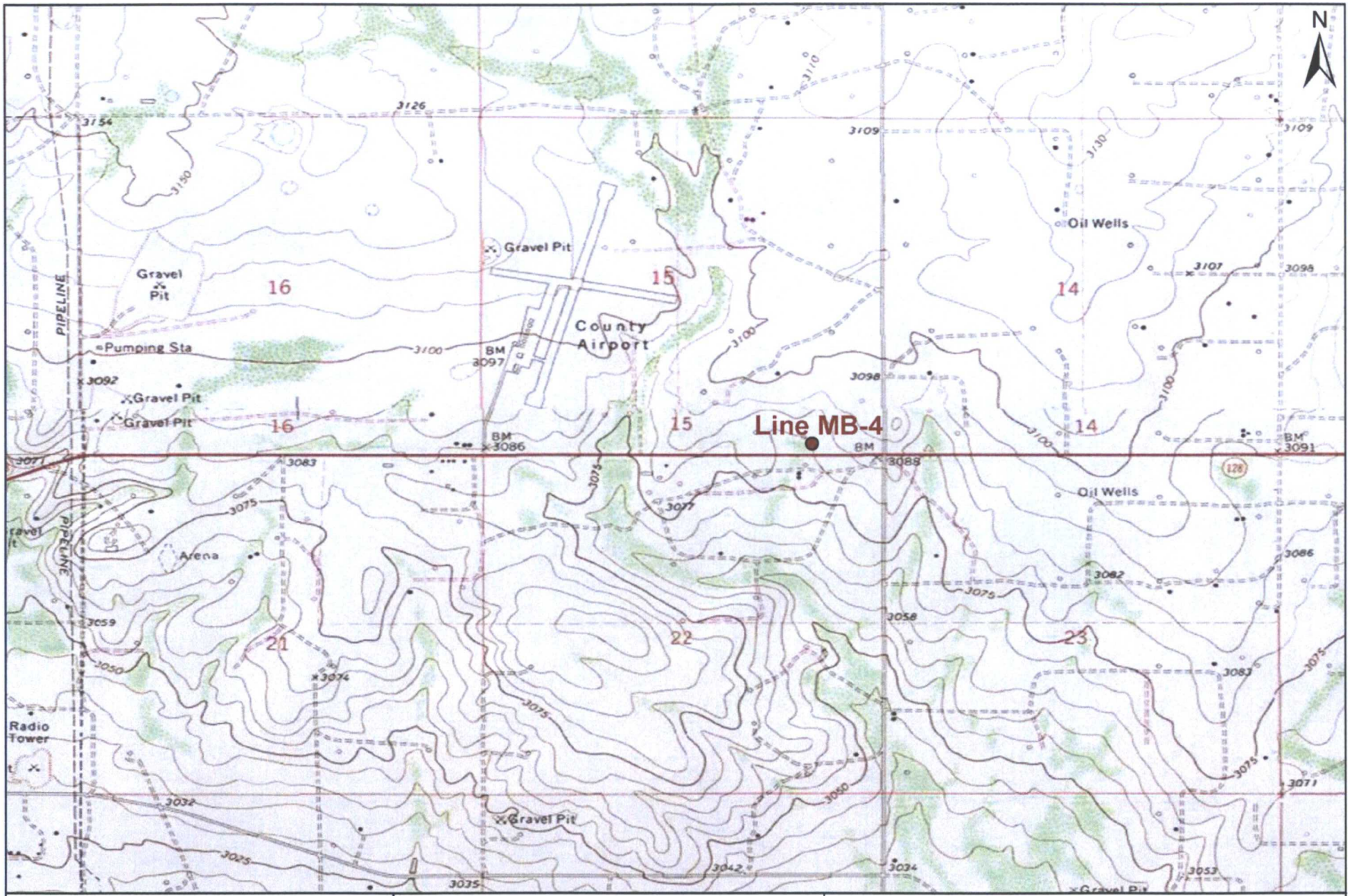
This report has been prepared for the benefit of Southern Union Gas Services. The information contained in this report, including all exhibits and attachments, may not be used by any other party without the express consent of Basin Environmental Service Technologies, LLC, and/or Southern Union Gas Services.

7.0 DISTRIBUTION:

Copy 1: Geoffrey Leking
New Mexico Energy, Minerals and Natural Resources Department
Oil Conservation Division (District 1)
1625 French Drive
Hobbs, New Mexico 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
bjarguijo@basinenv.com



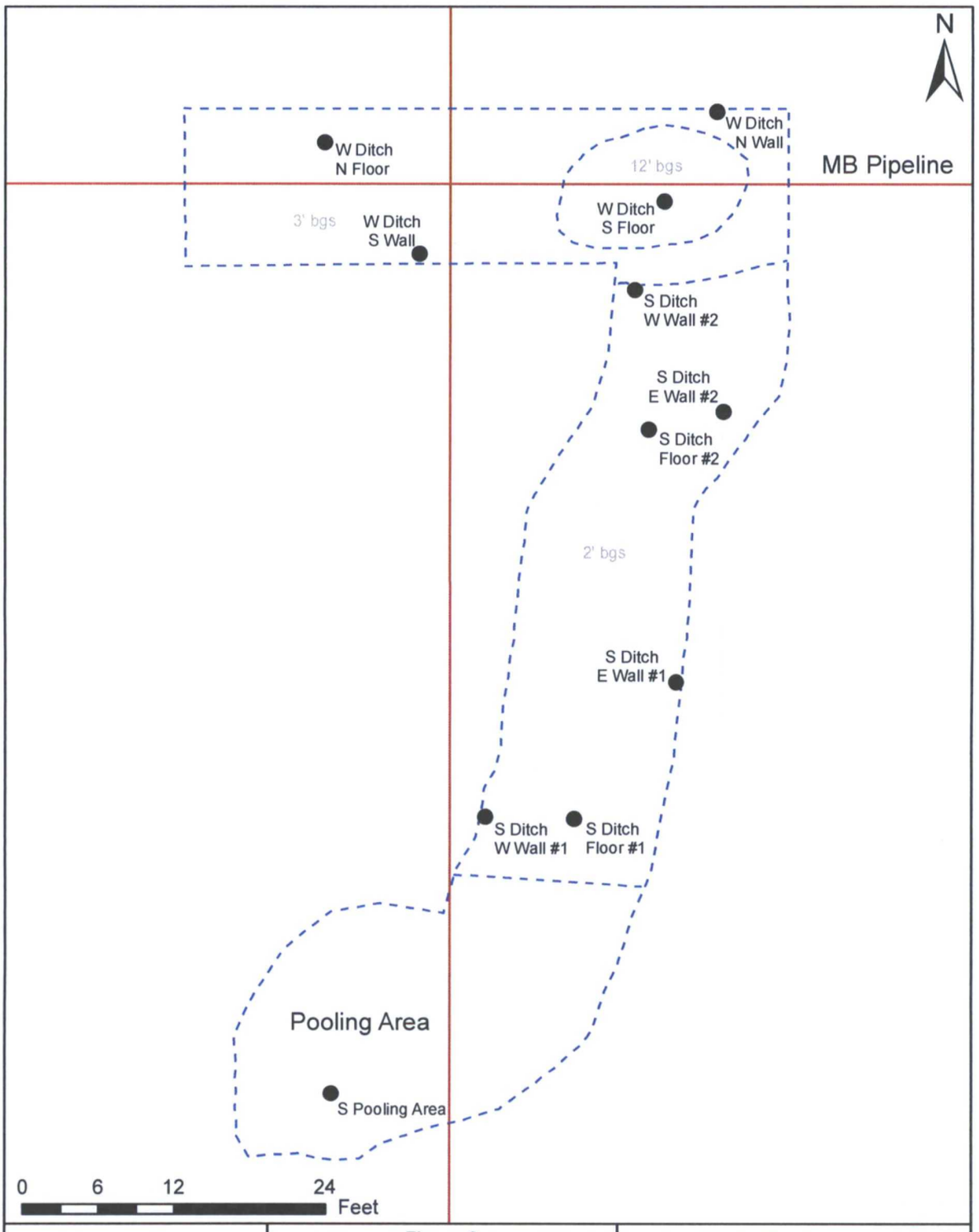
1,000500 0 1,000 2,000

Distance in Feet

Figure 1
Site Location Map
Southern Union Gas Services
Line MB-4
Lea County, New Mexico

Basin Environmental Service Technologies, LLC

Drawn By: BJA	Checked By: BRB
December 30, 2010	Scale: 1" = 2000'



Legend:

- Excavation Extent
- Pipeline
- Sample Location

Figure 2
Site & Sample Location Map
Southern Union Gas Services
Line MB-4
Lea County, New Mexico

Basin Environmental Service Technologies, LLC

Drawn By: BJA	Checked By: BRB
December 29, 2010	Scale: 1" = 12'

TABLE 1

CONCENTRATIONS OF BENZENE, BTEX, TPH & CHLORIDES IN SOIL

SOUTHERN UNION GAS SERVICES
LINE MB-4
LEA COUNTY, NEW MEXICO
PROJECT #: 2010-050

SAMPLE LOCATION	SAMPLE DEPTH (BGS)	SAMPLE DATE	SOIL STATUS	METHOD: EPA SW-846 8021B						METHOD: EPA SW-846 8015M			TOTAL TPH	E 300.1
				BENZENE (mg/Kg)	TOLUENE (mg/Kg)	ETHYL-BENZENE (mg/Kg)	M.P. - XYLENES (mg/Kg)	O-XYLENE (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)	C_6-C_{35} (mg/Kg)	CHLORIDE (mg/Kg)
S Ditch E Wall #1	2'	12/14/10	In-Situ	-	-	-	-	-	-	<16.0	<16.0	<16.0	<16.0	19.6
S Ditch E Wall #2	2'	12/14/10	In-Situ	-	-	-	-	-	-	<15.6	<15.6	<15.6	<15.6	4.84
S Ditch Floor #1	2'	12/14/10	In-Situ	<0.0010	<0.0021	<0.0010	<0.0021	<0.0010	<0.0021	<15.8	<15.8	<15.8	<15.8	128
S Ditch Floor #2	2'	12/14/10	In-Situ	<0.0011	<0.0022	<0.0011	<0.0022	<0.0011	<0.0022	<16.2	<16.2	<16.2	<16.2	105
S Ditch W Wall #1	2'	12/14/10	In-Situ	<0.0010	<0.0021	<0.0010	<0.0021	<0.0010	<0.0021	<15.5	<15.5	<15.5	<15.5	34.0
S Ditch W Wall #2	2'	12/14/10	In-Situ	-	-	-	-	-	-	<15.7	<15.7	<15.7	<15.7	7.72
S Pooling Area	2'	12/14/10	In-Situ	-	-	-	-	-	-	<15.3	<15.3	<15.3	<15.3	11.6
W Ditch N Floor	3'	12/14/10	In-Situ	<0.0010	<0.0021	<0.0010	<0.0021	<0.0010	<0.0021	<15.5	31.9	<15.5	31.9	35.7
W Ditch N Wall	3'	12/14/10	In-Situ	-	-	-	-	-	-	<15.6	<15.6	<15.6	<15.6	9.5
W Ditch S Floor	12'	12/14/10	In-Situ	<0.0011	<0.0022	0.0012	0.0079	0.0039	0.013	<16.1	<16.1	<16.1	<16.1	275
W Ditch S Wall	3'	12/14/10	In-Situ	-	-	-	-	-	-	<15.4	<15.4	<15.4	<15.4	69.8

Analytical Report 400675

for

Southern Union Gas Services- Monahans

Project Manager: Rose Slade

Line MB4

2010-050

06-JAN-11

Celebrating 20 Years of commitment to excellence in Environmental Testing Services

12600 West I-20 East Odessa, Texas 79765

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215-10-6-TX), Arizona (AZ0738), 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)

Xenco-Atlanta (EPA Lab Code: GA00046):
Florida (E87429), North Carolina (483), South Carolina (98015), Utah (AALI1), West Virginia (362), Kentucky (85)
Louisiana (04176), USDA (P330-07-00105)

Xenco-Miami (EPA Lab code: FL01152): Florida (E86678), Maryland (330)
Xenco-Tampa Mobile (EPA Lab code: FL01212): Florida (E84900)
Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-TX)
Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295-TX)
Xenco-Corpus Christi (EPA Lab code: TX02613): Texas (T104704370)
Xenco-Boca Raton (EPA Lab Code: FL01273):
Florida(E86240),South Carolina(96031001), Louisiana(04154), Georgia(917)
North Carolina(444), Texas(T104704468-TX), Illinois(002295), Florida(E86349)

Xenco Phoenix (EPA Lab Code: AZ00901):
Arizona(AZ0757), Texas(104704435-10-2), Nevada(NAC-445A), DoD(65816)
Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)
Xenco Tucson (EPA Lab code:AZ000989): Arizona (AZ0758)

06-JAN-11

Project Manager: **Rose Slade**
Southern Union Gas Services- Monahans
1507 W. 15th Street
Monahans, TX 79756

Reference: XENCO Report No: **400675**
Line MB4
Project Address: Lea County, NM

Rose Slade:

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 400675. 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. Estimation of data uncertainty for this report is found in the quality control section of this report unless otherwise noted. 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. 400675 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,

Brent Barron, II
Odessa Laboratory Manager

Sample Cross Reference 400675

Southern Union Gas Services- Monahans, Monahans, TX

Line MB4

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
S Pooling Area	S	Dec-14-10 08:00		400675-001
S Ditch Floor #1	S	Dec-14-10 08:05		400675-002
S Ditch Floor #2	S	Dec-14-10 08:10		400675-003
S Ditch W Wall #1	S	Dec-14-10 08:15		400675-004
S Ditch W Wall #2	S	Dec-14-10 08:20		400675-005
S Ditch E Wall #1	S	Dec-14-10 08:25		400675-006
S Ditch E Wall #2	S	Dec-14-10 08:30		400675-007

CASE NARRATIVE

Client Name: Southern Union Gas Services- Monahans
Project Name: Line MB4

Project ID:	*2010-050*	*Report Date:*	*06-JAN-11*
Work Order Number:	*400675*	*Date Received:*	*12/15/2010*

Sample receipt non conformances and Comments:

None

Sample receipt Non Conformances and Comments per Sample:

None

Analytical Non Conformances and Comments:

Batch: LBA-837331 BTEX by EPA 8021B
SW8021BM

Batch 837331, 1,4-Difluorobenzene recovered below QC limits . Matrix interferences is suspected; data not confirmed by re-analysis
Samples affected are: 400675-002.
4-Bromofluorobenzene recovered above QC limits QC Data not confirmed by re-analysis.
Samples affected are: 592046-1-BKS.

SW8021BM

Batch 837331, Ethylbenzene, m_p-Xylenes recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate. Benzene, Toluene recovered below QC limits in the Matrix Spike Duplicate.
Samples affected are: 400675-002, -003, -004.
The Laboratory Control Sample for Toluene, Benzene, Ethylbenzene, m_p-Xylenes is within laboratory Control Limits

Certificate of Analysis Summary 400675

Southern Union Gas Services- Monahans, Monahans, TX

Project Name: Line MB4

Project Id: 2010-050
Contact: Rose Slade
Project Location: Lea County, NM

Date Received in Lab: Wed Dec-15-10 11:05 am
Report Date: 06-JAN-11
Project Manager: Brent Barron, II

Analysis Requested													
	Lab Id:	400675-001		400675-002		400675-003		400675-004		400675-005		400675-006	
	Field Id:	S Pooling Area		S Ditch Floor #1		S Ditch Floor #2		S Ditch W Wall #1		S Ditch W Wall #2		S Ditch E Wall #1	
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Dec-14-10 08:00		Dec-14-10 08:05		Dec-14-10 08:10		Dec-14-10 08:15		Dec-14-10 08:20		Dec-14-10 08:25	
Anions by E300	*Extracted:*												
	Analyzed:	Dec-15-10 14:05		Dec-15-10 14:05		Dec-15-10 14:05		Dec-15-10 14:05		Dec-15-10 14:05		Dec-15-10 14:05	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		11.6	4.20	128	4.20	105	4.20	34.0	4.20	7.72	4.20	19.6	4.20
BTEX by EPA 8021B	*Extracted:*			Dec-22-10 13:49		Dec-22-10 13:49		Dec-22-10 13:49					
	Analyzed:			Dec-22-10 16:44		Dec-22-10 17:05		Dec-22-10 17:26					
	Units/RL:			mg/kg	RL	mg/kg	RL	mg/kg	RL				
Benzene				ND	0.0010	ND	0.0011	ND	0.0010				
Toluene				ND	0.0021	ND	0.0022	ND	0.0021				
Ethylbenzene				ND	0.0010	ND	0.0011	ND	0.0010				
m_p-Xylenes				ND	0.0021	ND	0.0022	ND	0.0021				
o-Xylene				ND	0.0010	ND	0.0011	ND	0.0010				
Total Xylenes				ND	0.0010	ND	0.0011	ND	0.0010				
Total BTEX				ND	0.0010	ND	0.0011	ND	0.0010				
Percent Moisture	*Extracted:*												
	Analyzed:	Dec-16-10 08:30		Dec-16-10 08:30		Dec-16-10 08:30		Dec-16-10 08:30		Dec-16-10 08:30		Dec-16-10 08:30	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		2.49	1.00	4.96	1.00	7.45	1.00	2.78	1.00	4.22	1.00	5.87	1.00
TPH By SW8015 Mod	*Extracted:*	Dec-15-10 13:10		Dec-15-10 13:10		Dec-15-10 13:10		Dec-15-10 13:10		Dec-15-10 13:10		Dec-15-10 13:10	
	Analyzed:	Dec-15-10 15:45		Dec-15-10 16:03		Dec-15-10 16:22		Dec-15-10 16:42		Dec-15-10 17:00		Dec-15-10 17:19	
	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	15.3	ND	15.8	ND	16.2	ND	15.5	ND	15.7	ND	16.0
C12-C28 Diesel Range Hydrocarbons		ND	15.3	ND	15.8	ND	16.2	ND	15.5	ND	15.7	ND	16.0
C28-C35 Oil Range Hydrocarbons		ND	15.3	ND	15.8	ND	16.2	ND	15.5	ND	15.7	ND	16.0
Total TPH		ND	15.3	ND	15.8	ND	16.2	ND	15.5	ND	15.7	ND	16.0

Brent Barron, II
Odessa Laboratory Manager

Certificate of Analysis Summary 400675

Southern Union Gas Services- Monahans, Monahans, TX

Project Name: Line MB4

Project Id: 2010-050
Contact: Rose Slade
Project Location: Lea County, NM

Date Received in Lab: Wed Dec-15-10 11:05 am
Report Date: 06-JAN-11
Project Manager: Brent Barron, II

Analysis Requested							
	Lab Id:	400675-007					
	Field Id:	S Ditch E Wall #2					
	Depth:						
	Matrix:	SOIL					
	Sampled:	Dec-14-10 08:30					
Anions by E300	***Extracted:***						
	Analyzed:	Dec-15-10 14:05					
	Units/RL:	mg/kg	RL				
Chloride		4.84	4.20				
Percent Moisture	***Extracted:***						
	Analyzed:	Dec-16-10 08:30					
	Units/RL:	%	RL				
Percent Moisture		4.28	1.00				
TPH By SW8015 Mod	***Extracted:***	Dec-15-10 13:10					
	Analyzed:	Dec-15-10 17:38					
	Units/RL:	mg/kg	RL				
C6-C12 Gasoline Range Hydrocarbons		ND	15.6				
C12-C28 Diesel Range Hydrocarbons		ND	15.6				
C28-C35 Oil Range Hydrocarbons		ND	15.6				
Total TPH		ND	15.6				

Brent Barron, II
Odessa Laboratory 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 effect the recovery of the spike concentration. This condition could also effect 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 MQL and above the SQL.

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.

BRL Below Reporting Limit.

RL Reporting Limit

MDL Method Detection Limit

PQL Practical Quantitation Limit

* Outside XENCO's scope of NELAC Accreditation.

Form 2 - Surrogate Recoveries

Project Name: Line MB4

Work Orders : 400675, **Project ID:** 2010-050

Lab Batch #: 837331 **Sample:** 592046-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 12/22/10 14:24

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0342	0.0300	114	80-120	
4-Bromofluorobenzene	0.0364	0.0300	121	80-120	*

Lab Batch #: 837331 **Sample:** 592046-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 12/22/10 14:45

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0319	0.0300	106	80-120	
4-Bromofluorobenzene	0.0308	0.0300	103	80-120	

Lab Batch #: 837331 **Sample:** 592046-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 12/22/10 15:28

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0249	0.0300	83	80-120	
4-Bromofluorobenzene	0.0297	0.0300	99	80-120	

Lab Batch #: 837331 **Sample:** 400675-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 12/22/10 16:44

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0233	0.0300	78	80-120	*
4-Bromofluorobenzene	0.0309	0.0300	103	80-120	

Lab Batch #: 837331 **Sample:** 400675-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 12/22/10 17:05

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0250	0.0300	83	80-120	
4-Bromofluorobenzene	0.0299	0.0300	100	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.

Form 2 - Surrogate Recoveries

Project Name: Line MB4

Work Orders : 400675,

Project ID: 2010-050

Lab Batch #: 837331 **Sample:** 400675-004 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 12/22/10 17:26

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0304	0.0300	101	80-120	
4-Bromofluorobenzene	0.0347	0.0300	116	80-120	

Lab Batch #: 837331 **Sample:** 400678-002 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 12/23/10 09:50

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0320	0.0300	107	80-120	
4-Bromofluorobenzene	0.0334	0.0300	111	80-120	

Lab Batch #: 837331 **Sample:** 400678-002 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 12/23/10 10:11

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0335	0.0300	112	80-120	
4-Bromofluorobenzene	0.0296	0.0300	99	80-120	

Lab Batch #: 836178 **Sample:** 591413-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 12/15/10 14:48

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	72.2	99.5	73	70-135	
o-Terphenyl	49.2	49.8	99	70-135	

Lab Batch #: 836178 **Sample:** 591413-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 12/15/10 15:07

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	76.6	100	77	70-135	
o-Terphenyl	38.9	50.2	77	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: Line MB4

Work Orders : 400675,

Project ID: 2010-050

Lab Batch #: 836178 **Sample:** 591413-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 12/15/10 15:25

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	74.8	100	75	70-135	
o-Terphenyl	38.9	50.0	78	70-135	

Lab Batch #: 836178 **Sample:** 400675-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 12/15/10 15:45

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	72.3	99.6	73	70-135	
o-Terphenyl	36.7	49.8	74	70-135	

Lab Batch #: 836178 **Sample:** 400675-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 12/15/10 16:03

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	75.2	100	75	70-135	
o-Terphenyl	38.2	50.2	76	70-135	

Lab Batch #: 836178 **Sample:** 400675-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 12/15/10 16:22

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	72.0	99.7	72	70-135	
o-Terphenyl	37.1	49.9	74	70-135	

Lab Batch #: 836178 **Sample:** 400675-004 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 12/15/10 16:42

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	74.6	100	75	70-135	
o-Terphenyl	38.5	50.2	77	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: Line MB4

Work Orders : 400675,

Project ID: 2010-050

Lab Batch #: 836178 **Sample:** 400675-005 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 12/15/10 17:00

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	75.3	100	75	70-135	
o-Terphenyl	37.8	50.1	75	70-135	

Lab Batch #: 836178 **Sample:** 400675-006 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 12/15/10 17:19

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	72.7	100	73	70-135	
o-Terphenyl	37.2	50.2	74	70-135	

Lab Batch #: 836178 **Sample:** 400675-007 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 12/15/10 17:38

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	71.0	99.5	71	70-135	
o-Terphenyl	36.1	49.8	72	70-135	

Lab Batch #: 836178 **Sample:** 400678-004 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 12/16/10 12:14

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	74.9	99.8	75	70-135	
o-Terphenyl	38.9	49.9	78	70-135	

Lab Batch #: 836178 **Sample:** 400678-004 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 12/16/10 12:32

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	72.2	99.5	73	70-135	
o-Terphenyl	39.2	49.8	79	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

BS / BSD Recoveries

Project Name: Line MB4

Work Order #: 400675 **Project ID:** 2010-050

Analyst: ASA **Date Prepared:** 12/22/2010 **Date Analyzed:** 12/22/2010

Lab Batch ID: 837331 **Sample:** 592046-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BTEX by EPA 8021B	BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY										
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	ND	0.1000	0.1024	102	0.1	0.0865	87	17	70-130	35	
Toluene	ND	0.1000	0.1100	110	0.1	0.0936	94	16	70-130	35	
Ethylbenzene	ND	0.1000	0.1123	112	0.1	0.0946	95	17	71-129	35	
m_p-Xylenes	ND	0.2000	0.2258	113	0.2	0.1910	96	17	70-135	35	
o-Xylene	ND	0.1000	0.1229	123	0.1	0.1024	102	18	71-133	35	

Analyst: LATCOR **Date Prepared:** 12/15/2010 **Date Analyzed:** 12/15/2010

Lab Batch ID: 836094 **Sample:** 836094-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

Anions by E300	BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY										
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	ND	10.0	8.76	88	10	8.88	89	1	75-125	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

BS / BSD Recoveries

Project Name: Line MB4

Work Order #: 400675
Analyst: BEV
Lab Batch ID: 836178
Sample: 591413-1-BKS
Units: mg/kg

Date Prepared: 12/15/2010
Batch #: 1

Project ID: 2010-050
Date Analyzed: 12/15/2010
Matrix: Solid

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	<50.0	995	977	98	1000	1030	103	5	70-135	35	
C12-C28 Diesel Range Hydrocarbons	<50.0	995	881	89	1000	1020	102	15	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

Form 3 - MS Recoveries

Project Name: Line MB4

Work Order #: 400675
Lab Batch #: 836094
Project ID: 2010-050
Date Analyzed: 12/15/2010
Date Prepared: 12/15/2010
Analyst: LATCOR
QC- Sample ID: 400673-002 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	230	200	398	84	75-125	

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: Line MB4

Work Order # : 400675 **Project ID:** 2010-050

Lab Batch ID: 837331 **QC- Sample ID:** 400678-002 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 12/23/2010 **Date Prepared:** 12/22/2010 **Analyst:** ASA

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	ND	0.1032	0.0720	70	0.1036	0.0718	69	0	70-130	35	X
Toluene	ND	0.1032	0.0734	71	0.1036	0.0719	69	2	70-130	35	X
Ethylbenzene	ND	0.1032	0.0567	55	0.1036	0.0577	56	2	71-129	35	X
m_p-Xylenes	ND	0.2064	0.1418	69	0.2073	0.1431	69	1	70-135	35	X
o-Xylene	ND	0.1032	0.0756	73	0.1036	0.0771	74	2	71-133	35	

Lab Batch ID: 836178 **QC- Sample ID:** 400678-004 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 12/16/2010 **Date Prepared:** 12/15/2010 **Analyst:** BEV

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	<16.1	1080	1100	102	1070	1070	100	3	70-135	35	
C12-C28 Diesel Range Hydrocarbons	<16.1	1080	855	79	1070	819	77	4	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

Sample Duplicate Recovery

Project Name: Line MB4

Work Order #: 400675

Lab Batch #: 836094 **Project ID:** 2010-050

Date Analyzed: 12/15/2010 14:05 **Date Prepared:** 12/15/2010 **Analyst:** LATCOR

QC- Sample ID: 400673-002 D **Batch #:** 1 **Matrix:** Soil

Reporting Units: mg/kg

Anions by E300 Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY				
	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Chloride	230	224	3	20	

Lab Batch #: 836104

Date Analyzed: 12/16/2010 08:30 **Date Prepared:** 12/16/2010 **Analyst:** JLG

QC- Sample ID: 400673-001 D **Batch #:** 1 **Matrix:** Soil

Reporting Units: %

Percent Moisture Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY				
	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Percent Moisture	2.97	3.25	9	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: Rose Slade
Company Name: Southern Union Gas Services
Company Address: 1507 W. 15th Street
City/State/Zip: Monahans, TX 79756
Telephone No: (432)943-1116 Fax No: (432)943-1101
Sampler Signature: Troy Hahn e-mail: pm@basinenv.com

Project Name: Line MB4
Project #: 2010-050
Project Loc: Lea County, NM
PO #: 91896
Report Format: [X] Standard [ ] TRRP [ ] NPDES

(lab use only)
ORDER #: 400675

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/Solid NP=Non-Potable Specify Other	Analyze For: TCLP: TPH: 418.1 / 8015M	TOTAL: TPH: 8015B 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	RCI	N.O.R.M.	CHLORIDES			RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT 4 DAY
	S Pooling Area			12/14/10	0800		1	X								SOIL	X											X				X
	S Ditch Floor #1			12/14/10	0805		1	X								SOIL	X											X				X
	S Ditch Floor #2			12/14/10	0810		1	X								SOIL	X											X				X
	S Ditch W Wall #1			12/14/10	0815		1	X								SOIL	X											X				X
	S Ditch W Wall #2			12/14/10	0820		1	X								SOIL	X											X				X
	S Ditch E Wall #1			12/14/10	0825		1	X								SOIL	X											X				X
	S Ditch E Wall #2			12/14/10	0830		1	X								SOIL	X											X				X

Special Instructions: Run TPH, hold for BTEX.

Relinquished by:	Date	Time	Received by:	Date	Time
Troy Hahn	12/14/2010	1715		12/14/2010	1715
	12/15/2010	0805			
			Received by ELOT: Lisa Murdock	12-15-10	11:05

Laboratory Comments:

Sample Containers Intact?	Y N
VOCs Free of Headspace?	Y N NA
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	4oz glass
Temperature Upon Receipt:	1.6 °C

Final 1.002

XENCO Laboratories

XENCO Laboratories
Atlanta, Boca Raton, Corpus Christi, Dallas
Houston, Miami, Odessa, Philadelphia
Phoenix, San Antonio, Tampa

Document Title: Sample Receipt Checklist
Document No.: SYS-SRC
Revision/Date: No. 01, 5/27/2010
Effective Date: 6/1/2010 Page 1 of 1

Prelogin / Nonconformance Report - Sample Log-In

Client: Southern Union Gas Services
Date/Time: 12-15-10 11:05
Lab ID #: 400675
Initials: KM

Sample Receipt Checklist

1. Samples on ice?	Blue	(Water)	No	
2. Shipping container in good condition?	(Yes)	No	None	
3. Custody seals intact on shipping container (cooler) and bottles?	(Yes)	No	N/A	
4. Chain of Custody present?	(Yes)	No		
5. Sample instructions complete on chain of custody?	(Yes)	No		
6. Any missing / extra samples?	Yes	(No)		
7. Chain of custody signed when relinquished / received?	(Yes)	No		
8. Chain of custody agrees with sample label(s)?	(Yes)	No		
9. Container labels legible and intact?	(Yes)	No		
10. Sample matrix / properties agree with chain of custody?	(Yes)	No		
11. Samples in proper container / bottle?	(Yes)	No		
12. Samples properly preserved?	(Yes)	No	N/A	
13. Sample container intact?	(Yes)	No		
14. Sufficient sample amount for indicated test(s)?	(Yes)	No		
15. All samples received within sufficient hold time?	(Yes)	No		
16. Subcontract of sample(s)?	Yes	(No)	N/A	
17. VOC sample have zero head space?	Yes	No	(N/A)	

18. Cooler 1 No.		Cooler 2 No.		Cooler 3 No.		Cooler 4 No.		Cooler 5 No.	
lbs	1.6 °C	lbs	°C	lbs	°C	lbs	°C	lbs	°C

Nonconformance Documentation

Contact:_____ Contacted by:_____ Date/Time:_____

Regarding: _____

Corrective Action Taken: _____

Check all that apply:
- ☐ Cooling process has begun shortly after sampling event and out of temperature condition acceptable by NELAC 5.5.8.3.1.a.1.
- ☐ Initial and Backup Temperature confirm out of temperature conditions
- ☐ Client understands and would like to proceed with analysis

Analytical Report 400678

for

Southern Union Gas Services- Monahans

Project Manager: Rose Slade

Line MB4

2010-050

23-DEC-10

Celebrating 20 Years of commitment to excellence in Environmental Testing Services

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23-DEC-10

Project Manager: **Rose Slade**
Southern Union Gas Services- Monahans
1507 W. 15th Street
Monahans, TX 79756

Reference: XENCO Report No: **400678**
Line MB4
Project Address: Lea County, NM

Rose Slade:

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 400678. 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. Estimation of data uncertainty for this report is found in the quality control section of this report unless otherwise noted. 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. 400678 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,

Brent Barron, II
Odessa Laboratory Manager

Sample Cross Reference 400678

Southern Union Gas Services- Monahans, Monahans, TX

Line MB4

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
W Ditch N Wall	S	Dec-14-10 08:35		400678-001
W Ditch N Floor	S	Dec-14-10 08:40		400678-002
W Ditch S Wall	S	Dec-14-10 08:45		400678-003
W Ditch S Floor	S	Dec-14-10 08:50		400678-004

CASE NARRATIVE

Client Name: Southern Union Gas Services- Monahans
Project Name: Line MB4

Project ID:	*2010-050*	*Report Date:*	*23-DEC-10*
Work Order Number:	*400678*	*Date Received:*	*12/15/2010*

Sample receipt non conformances and Comments:

None

Sample receipt Non Conformances and Comments per Sample:

None

Analytical Non Conformances and Comments:

Batch: LBA-837331 BTEX by EPA 8021B
SW8021BM

Batch 837331, 4-Bromofluorobenzene recovered above QC limits QC Data not confirmed by re-analysis. Samples affected are: 592046-1-BKS.

SW8021BM

Batch 837331, Ethylbenzene, m_p-Xylenes recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate. Benzene, Toluene recovered below QC limits in the Matrix Spike Duplicate.
Samples affected are: 400678-004, -002.
The Laboratory Control Sample for Toluene, Benzene, Ethylbenzene, m_p-Xylenes is within laboratory Control Limits

Certificate of Analysis Summary 400678

Southern Union Gas Services- Monahans, Monahans, TX

Project Name: Line MB4

Project Id: 2010-050
Contact: Rose Slade
Project Location: Lea County, NM

Date Received in Lab: Wed Dec-15-10 11:05 am
Report Date: 23-DEC-10
Project Manager: Brent Barron, II

Analysis Requested													
	Lab Id:	400678-001		400678-002		400678-003		400678-004					
	Field Id:	W Ditch N Wall		W Ditch N Floor		W Ditch S Wall		W Ditch S Floor					
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL					
	Sampled:	Dec-14-10 08:35		Dec-14-10 08:40		Dec-14-10 08:45		Dec-14-10 08:50					
Anions by E300	*Extracted:*												
	Analyzed:	Dec-15-10 14:05		Dec-15-10 14:05		Dec-15-10 14:05		Dec-15-10 14:05					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Chloride		9.50	4.20	35.7	4.20	69.8	8.40	275	8.40				
BTEX by EPA 8021B	*Extracted:*			Dec-22-10 13:49				Dec-22-10 13:49					
	Analyzed:			Dec-23-10 08:25				Dec-23-10 08:46					
	Units/RL:			mg/kg	RL			mg/kg	RL				
Benzene				ND	0.0010			ND	0.0011				
Toluene				ND	0.0021			ND	0.0022				
Ethylbenzene				ND	0.0010			0.0012	0.0011				
m_p-Xylenes				ND	0.0021			0.0079	0.0022				
o-Xylene				ND	0.0010			0.0039	0.0011				
Total Xylenes				ND	0.0010			0.0118	0.0011				
Total BTEX				ND	0.0010			0.0130	0.0011				
Percent Moisture	*Extracted:*												
	Analyzed:	Dec-16-10 08:30		Dec-16-10 08:30		Dec-16-10 08:30		Dec-16-10 08:30					
	Units/RL:	%	RL	%	RL	%	RL	%	RL				
Percent Moisture		3.50	1.00	3.51	1.00	3.30	1.00	7.30	1.00				
TPH By SW8015 Mod	*Extracted:*	Dec-15-10 13:10		Dec-15-10 13:10		Dec-15-10 13:10		Dec-15-10 13:10					
	Analyzed:	Dec-15-10 17:57		Dec-16-10 08:10		Dec-16-10 08:29		Dec-16-10 09:07					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
C6-C12 Gasoline Range Hydrocarbons		ND	15.6	ND	15.5	ND	15.4	ND	16.1				
C12-C28 Diesel Range Hydrocarbons		ND	15.6	31.9	15.5	ND	15.4	ND	16.1				
C28-C35 Oil Range Hydrocarbons		ND	15.6	ND	15.5	ND	15.4	ND	16.1				
Total TPH		ND	15.6	31.9	15.5	ND	15.4	ND	16.1				

Brent Barron, II
Odessa Laboratory 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 effect the recovery of the spike concentration. This condition could also effect 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 MQL and above the SQL.

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.

BRL Below Reporting Limit.

RL Reporting Limit

MDL Method Detection Limit

PQL Practical Quantitation Limit

* Outside XENCO's scope of NELAC Accreditation.

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: Line MB4

Work Orders : 400678,

Project ID: 2010-050

Lab Batch #: 837331 **Sample:** 592046-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 12/22/10 14:24

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0342	0.0300	114	80-120	
4-Bromofluorobenzene	0.0364	0.0300	121	80-120	*

Lab Batch #: 837331 **Sample:** 592046-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 12/22/10 14:45

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0319	0.0300	106	80-120	
4-Bromofluorobenzene	0.0308	0.0300	103	80-120	

Lab Batch #: 837331 **Sample:** 592046-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 12/22/10 15:28

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0249	0.0300	83	80-120	
4-Bromofluorobenzene	0.0297	0.0300	99	80-120	

Lab Batch #: 837331 **Sample:** 400678-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 12/23/10 08:25

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0281	0.0300	94	80-120	
4-Bromofluorobenzene	0.0357	0.0300	119	80-120	

Lab Batch #: 837331 **Sample:** 400678-004 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 12/23/10 08:46

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0261	0.0300	87	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: Line MB4

Work Orders : 400678,

Project ID: 2010-050

Lab Batch #: 837331 **Sample:** 400678-002 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 12/23/10 09:50

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0320	0.0300	107	80-120	
4-Bromofluorobenzene	0.0334	0.0300	111	80-120	

Lab Batch #: 837331 **Sample:** 400678-002 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 12/23/10 10:11

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0335	0.0300	112	80-120	
4-Bromofluorobenzene	0.0296	0.0300	99	80-120	

Lab Batch #: 836178 **Sample:** 591413-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 12/15/10 14:48

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	72.2	99.5	73	70-135	
o-Terphenyl	49.2	49.8	99	70-135	

Lab Batch #: 836178 **Sample:** 591413-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 12/15/10 15:07

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	76.6	100	77	70-135	
o-Terphenyl	38.9	50.2	77	70-135	

Lab Batch #: 836178 **Sample:** 591413-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 12/15/10 15:25

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	74.8	100	75	70-135	
o-Terphenyl	38.9	50.0	78	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: Line MB4

Work Orders : 400678,

Project ID: 2010-050

Lab Batch #: 836178 **Sample:** 400678-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 12/15/10 17:57

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	73.1	101	72	70-135	
o-Terphenyl	37.0	50.3	74	70-135	

Lab Batch #: 836178 **Sample:** 400678-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 12/16/10 08:10

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	71.3	99.5	72	70-135	
o-Terphenyl	36.3	49.8	73	70-135	

Lab Batch #: 836178 **Sample:** 400678-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 12/16/10 08:29

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	72.7	99.5	73	70-135	
o-Terphenyl	35.5	49.8	71	70-135	

Lab Batch #: 836178 **Sample:** 400678-004 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 12/16/10 09:07

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	74.9	99.8	75	70-135	
o-Terphenyl	38.5	49.9	77	70-135	

Lab Batch #: 836178 **Sample:** 400678-004 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 12/16/10 12:14

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	74.9	99.8	75	70-135	
o-Terphenyl	38.9	49.9	78	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: Line MB4

Work Orders : 400678,

Project ID: 2010-050

Lab Batch #: 836178 **Sample:** 400678-004 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 12/16/10 12:32

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	72.2	99.5	73	70-135	
o-Terphenyl	39.2	49.8	79	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

BS / BSD Recoveries

Project Name: Line MB4

Work Order #: 400678 **Project ID:** 2010-050

Analyst: ASA **Date Prepared:** 12/22/2010 **Date Analyzed:** 12/22/2010

Lab Batch ID: 837331 **Sample:** 592046-1-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	ND	0.1000	0.1024	102	0.1	0.0865	87	17	70-130	35	
Toluene	ND	0.1000	0.1100	110	0.1	0.0936	94	16	70-130	35	
Ethylbenzene	ND	0.1000	0.1123	112	0.1	0.0946	95	17	71-129	35	
m_p-Xylenes	ND	0.2000	0.2258	113	0.2	0.1910	96	17	70-135	35	
o-Xylene	ND	0.1000	0.1229	123	0.1	0.1024	102	18	71-133	35	

Analyst: LATCOR **Date Prepared:** 12/15/2010 **Date Analyzed:** 12/15/2010

Lab Batch ID: 836094 **Sample:** 836094-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Anions by E300 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	ND	10.0	8.76	88	10	8.88	89	1	75-125	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

BS / BSD Recoveries

Project Name: Line MB4

Work Order #: 400678 **Project ID:** 2010-050

Analyst: BEV **Date Prepared:** 12/15/2010 **Date Analyzed:** 12/15/2010

Lab Batch ID: 836178 **Sample:** 591413-1-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	<50.0	995	977	98	1000	1030	103	5	70-135	35	
C12-C28 Diesel Range Hydrocarbons	<50.0	995	881	89	1000	1020	102	15	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

Form 3 - MS Recoveries

Project Name: Line MB4

Work Order #: 400678
Lab Batch #: 836094
Project ID: 2010-050
Date Analyzed: 12/15/2010
Date Prepared: 12/15/2010
Analyst: LATCOR
QC- Sample ID: 400673-002 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	230	200	398	84	75-125	

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: Line MB4

Work Order # : 400678 **Project ID:** 2010-050

Lab Batch ID: 837331 **QC- Sample ID:** 400678-002 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 12/23/2010 **Date Prepared:** 12/22/2010 **Analyst:** ASA

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	ND	0.1032	0.0720	70	0.1036	0.0718	69	0	70-130	35	X
Toluene	ND	0.1032	0.0734	71	0.1036	0.0719	69	2	70-130	35	X
Ethylbenzene	ND	0.1032	0.0567	55	0.1036	0.0577	56	2	71-129	35	X
m_p-Xylenes	ND	0.2064	0.1418	69	0.2073	0.1431	69	1	70-135	35	X
o-Xylene	ND	0.1032	0.0756	73	0.1036	0.0771	74	2	71-133	35	

Lab Batch ID: 836178 **QC- Sample ID:** 400678-004 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 12/16/2010 **Date Prepared:** 12/15/2010 **Analyst:** BEV

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	<16.1	1080	1100	102	1070	1070	100	3	70-135	35	
C12-C28 Diesel Range Hydrocarbons	<16.1	1080	855	79	1070	819	77	4	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

Sample Duplicate Recovery

Project Name: Line MB4

Work Order #: 400678

Lab Batch #: 836094 **Project ID:** 2010-050

Date Analyzed: 12/15/2010 14:05 **Date Prepared:** 12/15/2010 **Analyst:** LATCOR

QC- Sample ID: 400673-002 D **Batch #:** 1 **Matrix:** Soil

Reporting Units: mg/kg

Anions by E300 Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY				
	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Chloride	230	224	3	20	

Lab Batch #: 836104

Date Analyzed: 12/16/2010 08:30 **Date Prepared:** 12/16/2010 **Analyst:** JLG

QC- Sample ID: 400673-001 D **Batch #:** 1 **Matrix:** Soil

Reporting Units: %

Percent Moisture Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY				
	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Percent Moisture	2.97	3.25	9	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: Rose Slade
Company Name: Southern Union Gas Services
Company Address: 1507 W. 15th Street
City/State/Zip: Monahans, TX 79756
Telephone No: (432)943-1116 Fax No: (432)943-1101
Sampler Signature: Troy Hahn e-mail: pm@basinenv.com

Project Name: Line MB4
Project #: 2010-050
Project Loc: Lea County, NM
PO #: 91896
Report Format: [X] Standard [ ] TRRP [ ] NPDES

(lab use only)
ORDER #: 400678

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/Solid NP=Non-Potable Specify Other	Analyze For: TCLP: TOTAL: TPH: 418.1 8015M	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	RCI	N.O.R.M.	CHLORIDES			RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT 4 DAY
	W Ditch N Wall			12/14/10	0835		1	X								SOIL	X								X							X
	W Ditch N Floor			12/14/10	0840		1	X								SOIL	X								X							X
	W Ditch S Wall			12/14/10	0845		1	X								SOIL	X								X							X
	W Ditch S Floor			12/14/10	0850		1	X								SOIL	X								X							X

Special Instructions: Run TPH, hold for BTEX.

Relinquished by:	Date	Time	Received by:	Date	Time
Troy Hahn	12/14/2010	1715		12/14/2010	1715
	12/15/2010	1005 (MST)			
			Received by ELOT: Lisa Murdock	12-15-10	11:05

Laboratory Comments:

Sample Containers Intact?	Y	N
VOCs Free of Headspace?	Y	NA
Labels on container(s)	Y	N
Custody seals on container(s)	Y	N
Custody seals on cooler(s)	Y	N
Sample Hand Delivered	Y	N

by Sampler/Client Rep. ? by Courier? UPS DHL FedEx Lone Star

4oz glass

Temperature Upon Receipt: 1.6 °C

XENCO Laboratories

XENCO Laboratories
Atlanta, Boca Raton, Corpus Christi, Dallas
Houston, Miami, Odessa, Philadelphia
Phoenix, San Antonio, Tampa

Document Title: Sample Receipt Checklist
Document No.: SYS-SRC
Revision/Date: No. 01, 5/27/2010
Effective Date: 6/1/2010 Page 1 of 1

Prelogin / Nonconformance Report - Sample Log-In

Client: Southern Union Gas Services
Date/Time: 12-15-10 11:05
Lab ID #: 400678
Initials: KM

Sample Receipt Checklist

1. Samples on ice?	Blue	(Water)	No	
2. Shipping container in good condition?	(Yes)	No	None	
3. Custody seals intact on shipping container (cooler) and bottles?	(Yes)	No	N/A	
4. Chain of Custody present?	(Yes)	No		
5. Sample instructions complete on chain of custody?	(Yes)	No		
6. Any missing / extra samples?	Yes	(No)		
7. Chain of custody signed when relinquished / received?	(Yes)	No		
8. Chain of custody agrees with sample label(s)?	(Yes)	No		
9. Container labels legible and intact?	(Yes)	No		
10. Sample matrix / properties agree with chain of custody?	(Yes)	No		
11. Samples in proper container / bottle?	(Yes)	No		
12. Samples properly preserved?	(Yes)	No	N/A	
13. Sample container intact?	(Yes)	No		
14. Sufficient sample amount for indicated test(s)?	(Yes)	No		
15. All samples received within sufficient hold time?	(Yes)	No		
16. Subcontract of sample(s)?	Yes	(No)	N/A	
17. VOC sample have zero head space?	Yes	No	(N/A)	

18. Cooler 1 No.		Cooler 2 No.		Cooler 3 No.		Cooler 4 No.		Cooler 5 No.	
lbs	1.6 °C	lbs	°C	lbs	°C	lbs	°C	lbs	°C

Nonconformance Documentation

Contact:_____ Contacted by:_____ Date/Time:_____

Regarding: _____

Corrective Action Taken: _____

Check all that apply:
- ☐ Cooling process has begun shortly after sampling event and out of temperature condition acceptable by NELAC 5.5.8.3.1.a.1.
- ☐ Initial and Backup Temperature confirm out of temperature conditions
- ☐ Client understands and would like to proceed with analysis

Line MB-4 Release Site

Line MB-4 Release Site - South Ditch
(looking North; sample locations flagged)

Line MB-4 Release Site - West Ditch
(looking East; sample locations flagged)

Line MB-4 Release Site (following backfilling)