PLWJ1019733289

2586

2010-055

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

RECEIVED
APR 18 2011
HOBBSOCD

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	Curt Stanley
Address	P.O. Box 1226 Jal, New Mexico 88252	Telephone No.	575-390-7595
Facility Name	Line 2B Release	Facility Type	Natural Gas Pipeline

Surface Owner Woolworth Estate	Mineral Owner	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
"O"	31	24S	37E					Lea

Latitude N 32 degrees 01.212' **Longitude** W 103 degrees 11.978'

NATURE OF RELEASE

Type of Release Crude Oil and Produced Water	Volume of Release 8 BBLS	Volume Recovered 5 BBLS
Source of Release 6-Inch Steel Pipeline	Date and Hour of Occurrence July 14, 2010, 1100 hrs	Date and Hour of Discovery July 14, 2010, 1100 hrs
Was Immediate Notice Given? ☒ Yes ☐ No ☒ Not Required	If YES, To Whom? Larry Johnson, NMOCD Hobbs District Office	
By Whom? Curt Stanley	Date and Hour July 15, 2010, 0920 hrs	
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.*
During pipeline change-out activities, crude oil and produced water were released into a pipeline trench. A vacuum truck recovered free fluids and an onsite backhoe was used to immediately excavate the saturated soil, stockpiling the impacted soil adjacent to the pipeline trench.

Describe Area Affected and Cleanup Action Taken.*
A pipeline trench measuring approximately 60 linear feet was affected by the release. During initial response activities saturated soil was excavated and the area of impact was delineated. The release site was excavated and approximately 408 cubic yards of impacted soil was transported to Sundance for disposal. Soil samples were collected from the sidewalls and floor of the excavation and analyzed by the laboratory. Based on the analytical results and with NMOCD approval, the excavation was backfilled with locally purchased non-impacted soil.

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: Curt D. Stanley	OIL CONSERVATION DIVISION	
Printed Name: Curt D. Stanley	Approved by ~~District Supervisor~~ ENV ENGINEER: Geoffrey Leking	
Title: EHS Compliance Specialist	Approval Date: 04/15/11	Expiration Date: —
E-mail Address: curt.stanley@sug.com	Conditions of Approval:	Attached ☐ IRP-10-7-2586
Date: April 15, 2011 Phone: 575-390-7595		

* Attach Additional Sheets If Necessary

DEC 22 2015

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 2B (2010-055)
Lea County, New Mexico
Unit Letter "O" (SW/SE), Section 31, Township 24 South, Range 37 East
Latitude 32° 10.212' North, Longitude 103° 11.978' West
NMOCD Reference # 1RP-2586

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

1.0 INTRODUCTION

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 2B. The legal description of the release site is Unit Letter "O" (SW/SE), Section 31, Township 24 South, Range 37 East, in Lea County, New Mexico. The geographic coordinates of the release site are 32° 10.212' North latitude and 103° 11.978' West longitude. The property affected by the release is owned by the Woolworth Trust. A "Site Location Map" is provided as Figure 1.

On July 14, 2010, a release occurred during the replacement of a section of Southern Union's six (6)-inch "Line 2B" steel pipeline. The release was reported to the New Mexico Oil Conservation Division (NMOCD) Hobbs District Office on July 15, 2010. The "Release Notification and Corrective Action" (Form C-141) indicated approximately eight (8) barrels of crude oil and produced water was released, affecting a pipeline trench measuring approximately sixty (60) linear feet in length. During initial response activities, a vacuum truck was utilized to recover approximately six (6) barrels of free fluids, the area of impact was delineated, and the release site was excavated. General photographs of the site are provided as Appendix B. The "Release Notification and Corrective Action" (Form C-141) is provided as Appendix C.

On August 8, 2010, a previous consultant collected six (6) soil samples (Floor East; Floor West; West, West Wall; West, East Wall; West, North Wall; and West, South Wall) from the floor and sidewalls of the excavation. The soil samples were 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 Floor East; Floor West; and West, South Wall to 86.56 mg/Kg for soil sample West, West Wall. TPH concentrations ranged from 136 mg/Kg for soil sample Floor East to 22,690 for soil sample West, West Wall. Chloride concentrations ranged less than the laboratory MDL for soil samples Floor East; West, West Wall; and West, South Wall to 161 mg/Kg for soil sample Floor West. Table 1 summarizes the "Concentrations of Benzene, BTEX, TPH & Chlorides in Soil". Laboratory analytical reports are provided as Appendix A.

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 31, Township 24 South, Range 37 East. A depth to groundwater reference map utilized by the 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 2B 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 14, 2010, remediation activities began at the site. Impacted soil from the initial response activities was stockpiled on-site pending final disposition. 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: "East" and "West".

On December 16 through 21, 2010, excavation of hydrocarbon-impacted soil commenced at the site. Approximately two hundred and forty (240) cubic yards (cy) of impacted soil was excavated from the "West" excavation and transported to Sundance Services, Inc. ("Sundance", NMOCD Permit # NM-01003), for disposal. Approximately fifty-six (56) cy of stockpiled material was transported to Sundance from the "East" excavation.

On December 21, 2010, seven (7) soil samples (East Floor, East Wall, Middle Floor, South Wall, North Wall, West Floor, and West 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 and BTEX concentrations were less than the appropriate laboratory (MDL) for all soil samples submitted. TPH concentrations ranged from less than the laboratory MDL for soil samples East Wall, Middle Floor, South Wall, North Wall, West Floor, and West Wall to 20.4 mg/Kg for soil sample East Floor. Chloride concentrations ranged from 9.55 mg/Kg for soil sample West Floor to 58.3 mg/Kg for soil sample East Floor. A "Site & Sample Location Map" is provided as Figure 2.

On December 21, 2010, Southern Union requested and received NMOCD approval to leave soil represented by soil sample Floor East in place.

On December 23, 2010, through January 3, 2011, approximately four hundred and eight (408) cy of stockpiled material was transported from the West excavation to Sundance for disposal.

Based on laboratory analytical results, and with NMOCD approval, on January 3 and 4, 2011, the excavation was backfilled in eighteen (18)-inch lifts, compacted, and contoured to fit the surrounding topography. Prior to backfilling, the final dimensions of the East excavation were approximately forty (40) feet in length, approximately eight (8) feet in width, and approximately six (6) feet in depth. The West excavation measured approximately thirty-four (34) feet in length, approximately thirty-six (36) feet in width, and ranging in depth from approximately eight (8) feet to approximately fifteen (15) 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 floors and sidewalls of the Line 2B "East" and "West" excavations were analyzed by an NMOCD approved laboratory, and concentrations of Benzene, BTEX, TPH, and chloride were less than the remediation action levels established for the site. 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 2B 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

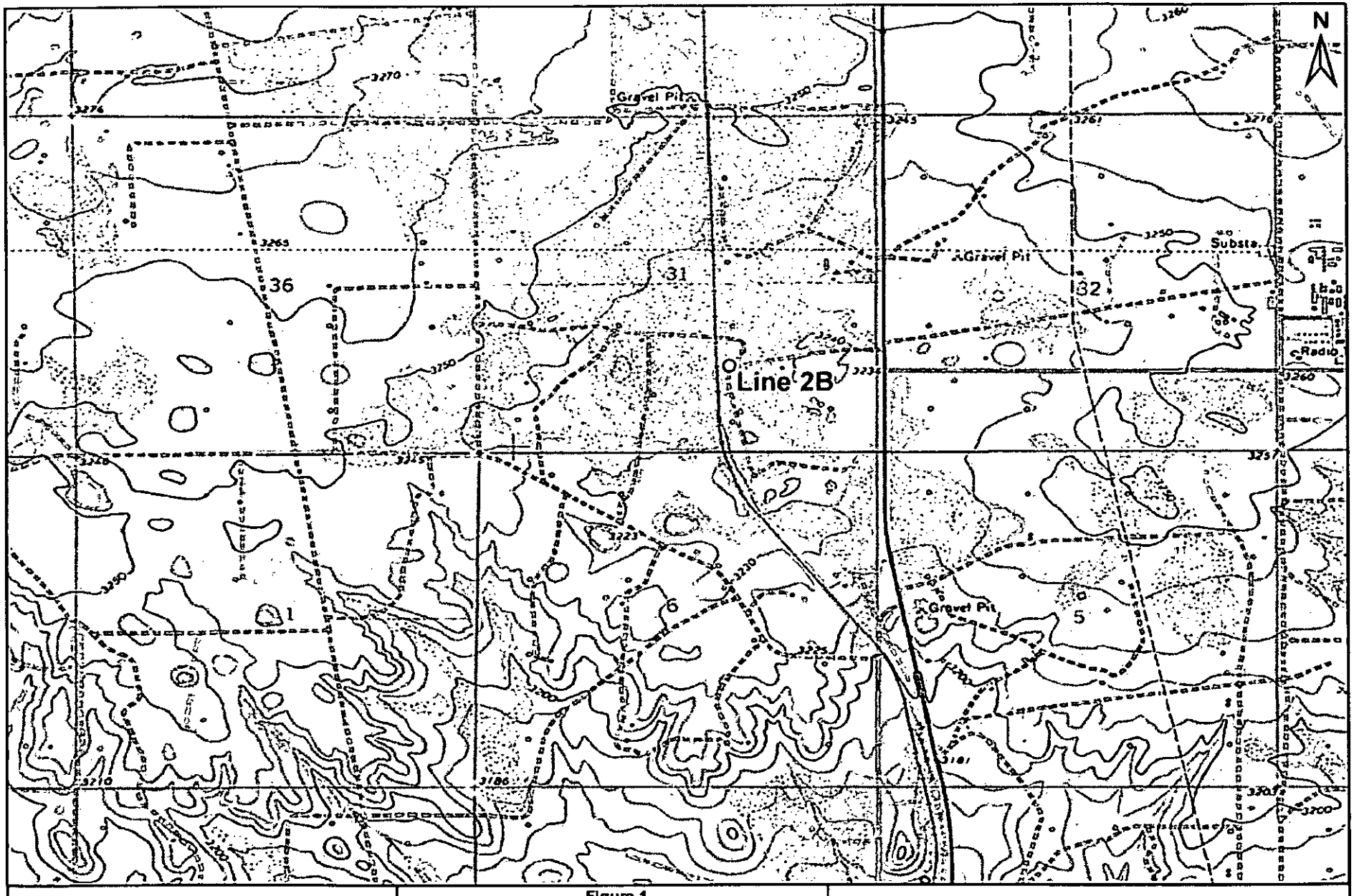
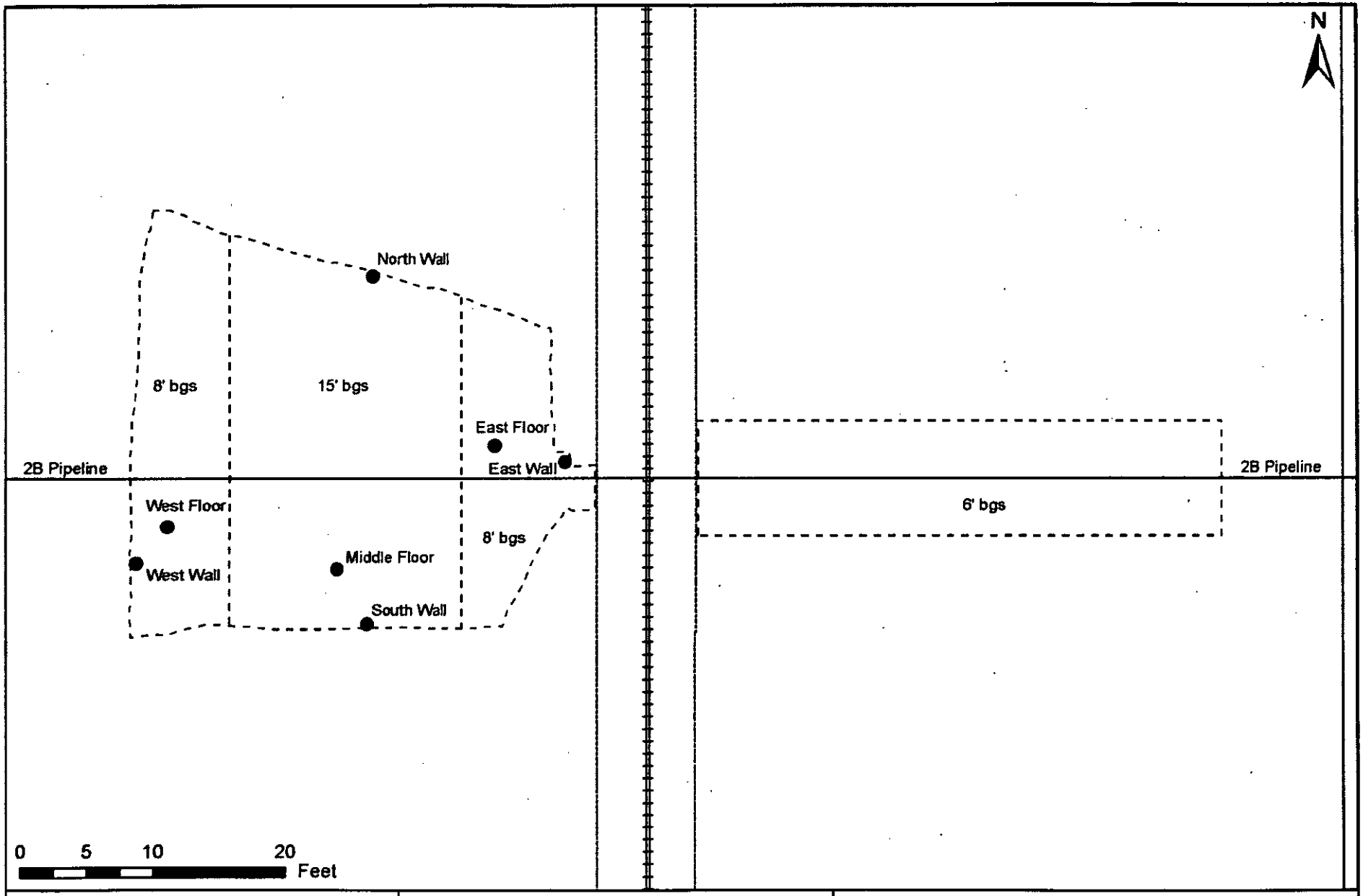


Figure 1
Site Location Map
Southern Union Gas Services
Line 2B
Lea County, New Mexico
1RP-2586

Basin Environmental Service Technologies, LLC

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



Legend:

- Excavation Extent
- Railroad
- Pipeline
- Road
- Fence
- Sample Location

Figure 2
Site & Sample Location Map
Southern Union Gas Services
Line 2B
Lea County, New Mexico
1RP-2586

Basin Environmental Service Technologies, LLC

Drawn By: BJA	Checked By: BRB
January 13, 2010	Scale: 1" = 10'

TABLE 1

CONCENTRATIONS OF BENZENE, BTEX, TPH & CHLORIDES IN SOIL

SOUTHERN UNION GAS SERVICES
LINE 2B
LEA COUNTY, NEW MEXICO
PROJECT #: 2010-055
NMOCD REFERENCE NO: 1RP-2586

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)
Floor East	6'	8/4/2010	In-Situ	<0.0011	<0.0021	<0.0011	<0.0021	<0.0011	<0.0021	<15.6	136	<15.6	136	<4.37
Floor West	6'	8/4/2010	Excavated	<0.0011	<0.0021	<0.0011	<0.0021	<0.0011	<0.0021	<15.6	998	<15.6	998	181
West, West Wall	6'	8/4/2010	Excavated	<1.072	7.721	16.58	48.05	14.21	86.56	8,090	14,600	<800	22,690	<4.5
West, East Wall	6'	8/4/2010	In-Situ	<0.0052	<0.0103	0.0114	0.0334	0.0212	0.0660	62.2	123	<15.4	185	13.4
West, North Wall	6'	8/4/2010	Excavated	<0.0010	0.0028	0.0016	0.0039	0.0015	0.0098	<155	1,230	<155	1,230	35.0
West, South Wall	6'	8/4/2010	Excavated	<0.0010	<0.0021	<0.0010	<0.0021	<0.0010	<0.0021	<154	2,070	<154	2,070	<8.63
East Floor	8'	12/21/10	In-Situ	<0.0011	<0.0022	<0.0011	<0.0022	<0.0011	<0.0022	<16.3	20.4	<16.3	20.4	58.3
East Wall	8'	12/21/10	In-Situ	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<15.3	<15.3	<15.3	<15.3	11.1
Middle Floor	15'	12/21/10	In-Situ	<0.0011	<0.0021	<0.0011	<0.0021	<0.0011	<0.0021	<15.6	<15.6	<15.6	<15.6	11.3
South Wall	15'	12/21/10	In-Situ	<0.0010	<0.0021	<0.0010	<0.0021	<0.0010	<0.0021	<15.4	<15.4	<15.4	<15.4	10.1
North Wall	15'	12/21/10	In-Situ	<0.0011	<0.0021	<0.0011	<0.0021	<0.0011	<0.0021	<16.0	<16.0	<16.0	<16.0	24.8
West Floor	8'	12/21/10	In-Situ	<0.0011	<0.0021	<0.0011	<0.0021	<0.0011	<0.0021	<16.3	<16.3	<16.3	<16.3	9.55
West Wall	8'	12/21/10	In-Situ	<0.0011	<0.0021	<0.0011	<0.0021	<0.0011	<0.0021	<16.1	<16.1	<16.1	<16.1	10.2

Analytical Report 384421

for

Eco-Logical Environmental

Project Manager: Scott Springer

Line 2B

18-AUG-10

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: FL00449):
Florida(E86240),South Carolina(96031001), Louisiana(04154), Georgia(917)
North Carolina(444), Texas(T104704468-TX), Illinois(002295), Florida(E86349)

XENCO Laboratories

18-AUG-10

Project Manager: **Scott Springer**
Eco-Logical Environmental
2200 Market Street
Midland, TX 79703

Reference: XENCO Report No: **384421**
Line 2B
Project Address:

Scott Springer:

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 384421. 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. 384421 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 384421

Eco-Logical Environmental, Midland, TX

Line 2B

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
Floor East	S	Aug-04-10 00:00	6 ft	384421-001
Floor West	S	Aug-04-10 00:00	6 ft	384421-002
West, West Wall	S	Aug-04-10 00:00	6 ft	384421-003
West, East Wall	S	Aug-04-10 00:00	6 ft	384421-004
West, North Wall	S	Aug-04-10 00:00	6 ft	384421-005
West, South Wall	S	Aug-04-10 00:00	6 ft	384421-006

CASE NARRATIVE

XENCO Laboratories

Client Name: Eco-Logical Environmental
Project Name: Line 2B

Project ID:
Work Order Number: 384421

Report Date: 18-AUG-10
Date Received: 08/05/2010

Sample receipt non conformances and Comments:
None

Sample receipt Non Conformances and Comments per Sample:

None

Analytical Non Conformances and Comments:

Batch: LBA-817728 Percent Moisture
None

Batch: LBA-817881 TPH By SW8015 Mod
None

Batch: LBA-818183 Anions by E300
None

Batch: LBA-818482 BTEX by EPA 8021B
None

Batch: LBA-818700 BTEX by EPA 8021B
SW8021BM

Batch 818700, 1,4-Difluorobenzene recovered below QC limits . Matrix interferences is suspected; data confirmed by re-analysis
Samples affected are: 384421-003.
4-Bromofluorobenzene recovered above QC limits . Matrix interferences is suspected; data confirmed by re-analysis
Samples affected are: 384421-004,384421-003.

Batch: LBA-819177 SVOA STAR List by SW-846 8270C
SW8270C

Batch 819177, 2,4,6-Tribromophenol, 2-Fluorophenol recovered below QC limits . Matrix interferences is suspected; data confirmed by re-analysis
Samples affected are: 384421-003.
Nitrobenzene-d5 recovered above QC limits . Matrix interferences is suspected; data confirmed by re-analysis
Samples affected are: 384421-003.

Dilution run due to failing internal standard responses at lower dilutions

Certificate of Analysis Summary 384421

Eco-Logical Environmental, Midland, TX

Project Name: Line 2B

Project Id:

Contact: Scott Springer

Project Location:

Date Received in Lab: Thu Aug-05-10 11:25 am

Report Date: 18-AUG-10

Project Manager: Brent Barron, II

Analysis Requested													
	Lab Id:	384421-001		384421-002		384421-003		384421-004		384421-005		384421-006	
	Field Id:	Floor East		Floor West		West, West Wall		West, East Wall		West, North Wall		West, South Wall	
	Depth:	6- ft		6- ft		6- ft		6- ft		6- ft		6- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Aug-04-10 00:00		Aug-04-10 00:00		Aug-04-10 00:00		Aug-04-10 00:00		Aug-04-10 00:00		Aug-04-10 00:00	
Anions by E300	*Extracted:*												
	Analyzed:	Aug-09-10 17:57		Aug-09-10 17:57		Aug-09-10 17:57		Aug-09-10 17:57		Aug-09-10 17:57		Aug-09-10 17:57	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		ND	4.37	161	8.96	ND	4.50	13.4	4.33	35.0	17.4	ND	8.63
BTEX by EPA 8021B	*Extracted:*	Aug-10-10 08:00		Aug-10-10 08:00		Aug-12-10 14:30		Aug-12-10 14:30		Aug-10-10 08:00		Aug-10-10 08:00	
	Analyzed:	Aug-10-10 12:30		Aug-10-10 14:02		Aug-12-10 23:08		Aug-12-10 21:11		Aug-10-10 14:49		Aug-10-10 15:12	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		ND	0.0010	ND	0.0011	ND	1.072	ND	0.0052	ND	0.0010	ND	0.0010
Toluene		ND	0.0021	ND	0.0021	7.721	2.145	ND	0.0103	0.0028	0.0021	ND	0.0021
Ethylbenzene		ND	0.0010	ND	0.0011	16.58	1.072	0.0114	0.0052	0.0016	0.0010	ND	0.0010
m,p-Xylenes		ND	0.0021	ND	0.0021	48.05	2.145	0.0334	0.0103	0.0039	0.0021	ND	0.0021
o-Xylene		ND	0.0010	ND	0.0011	14.21	1.072	0.0212	0.0052	0.0015	0.0010	ND	0.0010
Total Xylenes		ND	0.0010	ND	0.0011	62.26	1.072	0.0546	0.0052	0.0054	0.0010	ND	0.0010
Total BTEX		ND	0.0010	ND	0.0011	86.56	1.072	0.0660	0.0052	0.0098	0.0010	ND	0.0010

Brent Barron, II
Odessa Laboratory Manager

Final 1.000

Certificate of Analysis Summary 384421

Eco-Logical Environmental, Midland, TX

Project Name: Line 2B

Project Id:

Contact: Scott Springer

Project Location:

Date Received in Lab: Thu Aug-05-10 11:25 am

Report Date: 18-AUG-10

Project Manager: Brent Barron, II

Analysis Requested	Lab Id:	384421-001	384421-002	384421-003	384421-004	384421-005	384421-006
	Field Id:	Floor East	Floor West	West, West Wall	West, East Wall	West, North Wall	West, South Wall
	Depth:	6- ft	6- ft	6- ft	6- ft	6- ft	6- ft
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Sampled:	Aug-04-10 00:00	Aug-04-10 00:00	Aug-04-10 00:00	Aug-04-10 00:00	Aug-04-10 00:00	Aug-04-10 00:00
SVOA PAHs List by EPA 8270C SUB: T104704215-TX	Extracted:			Aug-13-10 12:50			
	Analyzed:			Aug-17-10 13:47			
	Units/RL:			mg/kg RL			
Acenaphthene				ND 8.92			
Acenaphthylene				ND 8.92			
Anthracene				ND 8.92			
Benzo(a)anthracene				ND 8.92			
Benzo(a)pyrene				ND 8.92			
Benzo(b)fluoranthene				ND 8.92			
Benzo(g,h,i)perylene				ND 8.92			
Benzo(k)fluoranthene				ND 8.92			
Chrysene				ND 8.92			
Dibenz(a,h)Anthracene				ND 8.92			
Fluoranthene				ND 8.92			
Fluorene				ND 8.92			
Indeno(1,2,3-c,d)Pyrene				ND 8.92			
2-Methylnaphthalene				ND 8.92			
1-Methylnaphthalene				ND 8.92			
Naphthalene				ND 8.92			
Phenanthrene				ND 8.92			
Pyrene				ND 8.92			

Brent Barron, II
Odessa Laboratory Manager

Final 1.000

Certificate of Analysis Summary 384421

Eco-Logical Environmental, Midland, TX

Project Name: Line 2B

Project Id:

Contact: Scott Springer

Project Location:

Date Received in Lab: Thu Aug-05-10 11:25 am

Report Date: 18-AUG-10

Project Manager: Brent Barron, II

Analysis Requested	*Lab Id:*	384421-001		384421-002		384421-003		384421-004		384421-005		384421-006	
	Field Id:	Floor East		Floor West		West, West Wall		West, East Wall		West, North Wall		West, South Wall	
	Depth:	6- ft		6- ft		6- ft		6- ft		6- ft		6- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Aug-04-10 00:00		Aug-04-10 00:00		Aug-04-10 00:00		Aug-04-10 00:00		Aug-04-10 00:00		Aug-04-10 00:00	
TPH By SW8015 Mod	*Extracted:*	Aug-06-10 09:30		Aug-06-10 09:30		Aug-06-10 09:30		Aug-06-10 09:30		Aug-06-10 09:30		Aug-06-10 09:30	
	Analyzed:	Aug-06-10 14:01		Aug-06-10 14:21		Aug-06-10 14:42		Aug-06-10 15:02		Aug-06-10 15:22		Aug-06-10 15:43	
	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	15.6	ND	79.6	8090	800	62.2	15.4	ND	155	ND	154
C12-C28 Diesel Range Hydrocarbons		136	15.6	998	79.6	14600	800	123	15.4	1230	155	2070	154
C28-C35 Oil Range Hydrocarbons		ND	15.6	ND	79.6	ND	800	ND	15.4	ND	155	ND	154
Total TPH		136	15.6	998	79.6	22690	800	185	15.4	1230	155	2070	154

Brent Barron, II
Odessa Laboratory Manager

Final 1.000

Certificate of Analysis Summary 384421

Eco-Logical Environmental, Midland, TX

Project Name: Line 2B

Project Id:

Contact: Scott Springer

Project Location:

Date Received in Lab: Thu Aug-05-10 11:25 am

Report Date: 18-AUG-10

Project Manager: Brent Barron, II

Analysis Requested													
	Lab Id:	384421-001		384421-002		384421-003		384421-004		384421-005		384421-006	
	Field Id:	Floor East		Floor West		West, West Wall		West, East Wall		West, North Wall		West, South Wall	
	Depth:	6- ft		6- ft		6- ft		6- ft		6- ft		6- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Aug-04-10 00:00		Aug-04-10 00:00		Aug-04-10 00:00		Aug-04-10 00:00		Aug-04-10 00:00		Aug-04-10 00:00	
Percent Moisture	*Extracted:*												
	Analyzed:	Aug-06-10 08:37		Aug-06-10 08:37		Aug-06-10 08:37		Aug-06-10 08:37		Aug-06-10 08:37		Aug-06-10 08:37	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		3.92	1.00	6.25	1.00	6.75	1.00	3.09	1.00	3.57	1.00	2.61	1.00

Brent Barron, II
Odessa Laboratory Manager

Final 1.000

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 2B

Work Orders : 384421,

Project ID:

Lab Batch #: 818482 **Sample:** 570380-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 08/10/10 09:37

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0313	0.0300	104	80-120	
4-Bromofluorobenzene	0.0343	0.0300	114	80-120	

Lab Batch #: 818482 **Sample:** 570380-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 08/10/10 10:00

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0307	0.0300	102	80-120	
4-Bromofluorobenzene	0.0341	0.0300	114	80-120	

Lab Batch #: 818482 **Sample:** 570380-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 08/10/10 11:34

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0248	0.0300	83	80-120	
4-Bromofluorobenzene	0.0296	0.0300	99	80-120	

Lab Batch #: 818482 **Sample:** 384421-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 08/10/10 12:30

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0257	0.0300	86	80-120	
4-Bromofluorobenzene	0.0318	0.0300	106	80-120	

Lab Batch #: 818482 **Sample:** 384421-001 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 08/10/10 12:53

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	0.0308	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

Form 2 - Surrogate Recoveries

Project Name: Line 2B

Work Orders : 384421,

Project ID:

Lab Batch #: 818482 **Sample:** 384421-001 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 08/10/10 13:16

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	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	0.0311	0.0300	104	80-120	

Lab Batch #: 818482 **Sample:** 384421-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 08/10/10 14:02

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	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	0.0285	0.0300	95	80-120	

Lab Batch #: 818482 **Sample:** 384421-005 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 08/10/10 14:49

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0276	0.0300	92	80-120	
4-Bromofluorobenzene	0.0246	0.0300	82	80-120	

Lab Batch #: 818482 **Sample:** 384421-006 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 08/10/10 15:12

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0242	0.0300	81	80-120	
4-Bromofluorobenzene	0.0253	0.0300	84	80-120	

Lab Batch #: 818700 **Sample:** 570518-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 08/12/10 14:42

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	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	0.0314	0.0300	105	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 2B

Work Orders : 384421,

Project ID:

Lab Batch #: 818700 **Sample:** 570518-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 08/12/10 15:06

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	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	0.0300	0.0300	100	80-120	

Lab Batch #: 818700 **Sample:** 570518-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

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

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	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	0.0309	0.0300	103	80-120	

Lab Batch #: 818700 **Sample:** 384421-004 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 08/12/10 21:11

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0252	0.0300	84	80-120	
4-Bromofluorobenzene	0.0408	0.0300	136	80-120	**

Lab Batch #: 818700 **Sample:** 384421-003 / SMP **Batch:** 1 **Matrix:** Soil

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

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0202	0.0300	67	80-120	**
4-Bromofluorobenzene	0.0447	0.0300	149	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 2B

Work Orders : 384421,

Project ID:

Lab Batch #: 819177 **Sample:** 570635-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 08/17/10 11:49

SVOA PAHs List by EPA 8270C Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
2-Fluorobiphenyl	1.53	1.67	92	30-115	
2-Fluorophenol	1.68	1.67	101	25-121	
Nitrobenzene-d5	1.63	1.67	98	23-120	
Phenol-d6	1.44	1.67	86	24-113	
Terphenyl-D14	1.66	1.67	99	18-137	
2,4,6-Tribromophenol	1.63	1.67	98	19-122	

Lab Batch #: 819177 **Sample:** 570635-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 08/17/10 12:12

SVOA PAHs List by EPA 8270C Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
2-Fluorobiphenyl	1.13	1.66	68	30-115	
2-Fluorophenol	1.24	1.66	75	25-121	
Nitrobenzene-d5	1.18	1.66	71	23-120	
Phenol-d6	1.07	1.66	64	24-113	
Terphenyl-D14	1.14	1.66	69	18-137	
2,4,6-Tribromophenol	1.33	1.66	80	19-122	

Lab Batch #: 819177 **Sample:** 570635-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 08/17/10 12:36

SVOA PAHs List by EPA 8270C Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
2-Fluorobiphenyl	1.38	1.66	83	30-115	
2-Fluorophenol	1.51	1.66	91	25-121	
Nitrobenzene-d5	1.46	1.66	88	23-120	
Phenol-d6	1.32	1.66	80	24-113	
Terphenyl-D14	1.40	1.66	84	18-137	
2,4,6-Tribromophenol	1.67	1.66	101	19-122	

* 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 2B

Work Orders : 384421,

Project ID:

Lab Batch #: 819177 **Sample:** 384421-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 08/17/10 13:47

SVOA PAHs List by EPA 8270C Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
2-Fluorobiphenyl	0.649	1.66	39	30-115	
2-Fluorophenol	ND	1.66	0	25-121	***
Nitrobenzene-d5	2.60	1.66	157	23-120	***
Phenol-d6	0.649	1.66	39	24-113	
Terphenyl-D14	0.566	1.66	34	18-137	
2,4,6-Tribromophenol	ND	1.66	0	19-122	***

Lab Batch #: 817881 **Sample:** 570022-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 08/06/10 12:01

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	117	99.7	117	70-135	
o-Terphenyl	52.7	49.9	106	70-135	

Lab Batch #: 817881 **Sample:** 570022-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 08/06/10 12:20

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	123	100	123	70-135	
o-Terphenyl	58.4	50.2	116	70-135	

Lab Batch #: 817881 **Sample:** 570022-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 08/06/10 12:40

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	110	99.7	110	70-135	
o-Terphenyl	58.2	49.9	117	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 2B

Work Orders : 384421,

Project ID:

Lab Batch #: 817881 **Sample:** 384421-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 08/06/10 14:01

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	116	99.9	116	70-135	
o-Terphenyl	60.7	50.0	121	70-135	

Lab Batch #: 817881 **Sample:** 384421-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 08/06/10 14:21

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	97.7	99.5	98	70-135	
o-Terphenyl	58.1	49.8	117	70-135	

Lab Batch #: 817881 **Sample:** 384421-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 08/06/10 14:42

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	74.1	99.5	74	70-135	
o-Terphenyl	40.3	49.8	81	70-135	

Lab Batch #: 817881 **Sample:** 384421-004 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 08/06/10 15:02

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	106	99.5	107	70-135	
o-Terphenyl	53.3	49.8	107	70-135	

Lab Batch #: 817881 **Sample:** 384421-005 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 08/06/10 15:22

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	106	99.5	107	70-135	
o-Terphenyl	60.1	49.8	121	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 2B

Work Orders : 384421,

Project ID:

Lab Batch #: 817881 **Sample:** 384421-006 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 08/06/10 15:43

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	101	99.9	101	70-135	
o-Terphenyl	56.1	50.0	112	70-135	

Lab Batch #: 817881 **Sample:** 384446-001 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 08/06/10 19:42

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	120	100	120	70-135	
o-Terphenyl	61.6	50.2	123	70-135	

Lab Batch #: 817881 **Sample:** 384446-001 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 08/06/10 20:02

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	114	99.6	114	70-135	
o-Terphenyl	58.0	49.8	116	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.

BS / BSD Recoveries

Project Name: Line 2B

Work Order #: 384421 **Project ID:**

Analyst: ASA **Date Prepared:** 08/10/2010 **Date Analyzed:** 08/10/2010

Lab Batch ID: 818482 **Sample:** 570380-1-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	0.0917	92	0.1	0.0955	96	4	70-130	35	
Toluene	ND	0.1000	0.0871	87	0.1	0.0905	91	4	70-130	35	
Ethylbenzene	ND	0.1000	0.0938	94	0.1	0.0972	97	4	71-129	35	
m,p-Xylenes	ND	0.2000	0.1884	94	0.2	0.1950	98	3	70-135	35	
o-Xylene	ND	0.1000	0.0924	92	0.1	0.0962	96	4	71-133	35	

Analyst: ASA **Date Prepared:** 08/12/2010 **Date Analyzed:** 08/12/2010

Lab Batch ID: 818700 **Sample:** 570518-1-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	0.0950	95	0.1	0.1115	112	16	70-130	35	
Toluene	ND	0.1000	0.0898	90	0.1	0.1059	106	16	70-130	35	
Ethylbenzene	ND	0.1000	0.0956	96	0.1	0.1119	112	16	71-129	35	
m,p-Xylenes	ND	0.2000	0.1925	96	0.2	0.2249	112	16	70-135	35	
o-Xylene	ND	0.1000	0.0971	97	0.1	0.1117	112	14	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: Line 2B

Work Order #: 384421 **Project ID:**

Analyst: LATCOR **Date Prepared:** 08/09/2010 **Date Analyzed:** 08/09/2010

Lab Batch ID: 818183 **Sample:** 818183-1-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	8.98	90	10	9.01	90	0	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 2B

Work Order #: 384421 **Project ID:**

Analyst: DAE **Date Prepared:** 08/13/2010 **Date Analyzed:** 08/17/2010

Lab Batch ID: 819177 **Sample:** 570635-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

SVOA PAHs List by EPA 8270C 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
Acenaphthene	ND	1.66	1.31	79	1.66	1.60	96	20	48-118	25	
Acenaphthylene	ND	1.66	1.32	80	1.66	1.61	97	20	44-118	25	
Anthracene	ND	1.66	1.35	81	1.66	1.71	103	24	53-119	25	
Benzo(a)anthracene	ND	1.66	1.36	82	1.66	1.69	102	22	53-124	25	
Benzo(a)pyrene	ND	1.66	1.50	90	1.66	1.88	113	22	54-128	25	
Benzo(b)fluoranthene	ND	1.66	1.65	99	1.66	2.03	122	21	45-141	25	
Benzo(g,h,i)perylene	ND	1.66	1.46	88	1.66	1.87	113	25	48-132	25	
Benzo(k)fluoranthene	ND	1.66	1.24	75	1.66	1.58	95	24	51-123	25	
Chrysene	ND	1.66	1.32	80	1.66	1.62	98	20	57-117	25	
Dibenz(a,h)Anthracene	ND	1.66	1.56	94	1.66	1.96	118	23	52-134	25	
Fluoranthene	ND	1.66	1.39	84	1.66	1.73	104	22	52-126	25	
Fluorene	ND	1.66	1.34	81	1.66	1.64	99	20	48-121	25	
Indeno(1,2,3-c,d)Pyrene	ND	1.66	1.54	93	1.66	1.95	117	23	49-133	25	
2-Methylnaphthalene	ND	1.66	1.17	70	1.66	1.45	87	21	25-175	25	
1-Methylnaphthalene	ND	1.66	1.28	77	1.66	1.58	95	21	25-175	25	
Naphthalene	ND	1.66	1.27	77	1.66	1.56	94	20	46-114	25	
Phenanthrene	ND	1.66	1.34	81	1.66	1.67	101	22	57-115	25	
Pyrene	ND	1.66	1.16	70	1.66	1.45	87	22	53-122	25	

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 2B

Work Order #: 384421 **Project ID:**

Analyst: BEV **Date Prepared:** 08/06/2010 **Date Analyzed:** 08/06/2010

Lab Batch ID: 817881 **Sample:** 570022-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

TPH By SW8015 Mod	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
C6-C12 Gasoline Range Hydrocarbons	ND	997	1250	125	1000	1150	115	8	70-135	35	
C12-C28 Diesel Range Hydrocarbons	ND	997	1040	104	1000	964	96	8	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

Final 1.000

XENCO Laboratories

Form 3 - MS Recoveries

Project Name: Line 2B

Work Order #: 384421
Lab Batch #: 818183
Project ID:
Date Analyzed: 08/09/2010
Date Prepared: 08/09/2010
Analyst: LATCOR
QC- Sample ID: 384419-001 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	9.37	102	108	97	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 2B

Work Order # : 384421 **Project ID:**

Lab Batch ID: 818482 **QC- Sample ID:** 384421-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 08/10/2010 **Date Prepared:** 08/10/2010 **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	0.1030	0.0901	87	0.1051	0.0870	83	4	70-130	35	
Toluene	ND	0.1030	0.0822	80	0.1051	0.0797	76	3	70-130	35	
Ethylbenzene	ND	0.1030	0.0821	80	0.1051	0.0799	76	3	71-129	35	
m,p-Xylenes	ND	0.2061	0.1633	79	0.2103	0.1588	76	3	70-135	35	
o-Xylene	ND	0.1030	0.0835	81	0.1051	0.0812	77	3	71-133	35	

Lab Batch ID: 817881 **QC- Sample ID:** 384446-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 08/06/2010 **Date Prepared:** 08/06/2010 **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	ND	1140	1210	106	1130	1150	102	5	70-135	35	
C12-C28 Diesel Range Hydrocarbons	ND	1140	1010	89	1130	1040	92	3	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

Final 1.000

Sample Duplicate Recovery

Project Name: Line 2B

Work Order #: 384421

Lab Batch #: 818183 **Project ID:**

Date Analyzed: 08/09/2010 **Date Prepared:** 08/09/2010 **Analyst:** LATCOR

QC- Sample ID: 384419-001 D **Batch #:** 1 **Matrix:** Soil

Reporting Units: mg/kg

Anions by E300	SAMPLE / SAMPLE DUPLICATE RECOVERY				
Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Chloride	9.37	9.02	4	20	

Lab Batch #: 817728

Date Analyzed: 08/06/2010 **Date Prepared:** 08/06/2010 **Analyst:** JLG

QC- Sample ID: 384419-001 D **Batch #:** 1 **Matrix:** Soil

Reporting Units: %

Percent Moisture	SAMPLE / SAMPLE DUPLICATE RECOVERY				
Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Percent Moisture	2.01	1.96	3	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

☐ 4143 Greenbriar Drive, Stafford, Tx 77477 281-240-4200
☐ 5332 Blackberry Drive, San Antonio, Tx 78238 210-509-3334
☐ 9701 Harry Hines Blvd., Dallas, Tx 75220 214-902-0300
☐ 12600 West I-20 East, Odessa, Tx 79765 432-563-1800
☐ 842 Cantwell, Corpus Christi, Tx 78408 361-884-0371

ANALYSIS REQUEST & CHAIN OF CUSTODY RECORD

Serial #: 250337 Page of

Lab Only: 384421

Company-City: Eco-logical Env. Services	Phone: 432-520-7535
Proj Name-Location: LINE 2B	☐ Previously done at XENCO
Project ID:	
Proj State: (TX) AL, FL, GA, LA, MS, NC, NJ, PA, SC, TN, UT Other	Proj. Manager (PM): Scott Springer
e-Mail Results to PM and: Scott@eco-logical.com	Fax No:
Invoice to: ☐ Accounting ☐ Inc. Invoice with Final Report ☐ Invoice must have a P.O Bill to: SUG	
Quote/Pricing:	P.O No: ☐ Call for P.O.
Reg Programs: UST DRY-CLEAN Land-Fill Waste-Disp NPDES DW TRRP	
QAPP Per-Contract CLP AFCEE NAVY DOE DOD USACE OTHER:	
Special DLs (GW DW QAPP MDLs RLs See Lab PM Included Call PM)	
Sampler Name: Scott Springer Signature: Scott Springer	

TAT: ASAP 5h 12h 24h 48h 3d 5d 7d 10d 21d Standard TAT is project specific.
It is typically 5-7 Working Days for level II and 10+ Working days for level III and IV data.

	Sample ID	Sampling Date	Time	Depth ft/in	Matrix	Composite	Grab	# Containers	Container Size	Container Type	Preservatives
1	FLOOR EAST	8/4/10		6	S	X	X	1	4	C	C
2	FLOOR WEST			8							
3	WEST, WEST WALL			5							
4	WEST, EAST WALL			5							
5	WEST, NORTH WALL			7							
6	WEST, SOUTH WALL			7							
7											
8											
9											
10											

VOCs: Full-List (BTEX MTBE EtOH Oxyg VOHs VOAs) X
VOCs PP TCL DW Appdx-1 Appdx-2 CALL Other:
PAHs
TX-1005 (DRO GRO) MA EPH MA VPH X
SVOCs: Full-List DW BN&AE TCL PP Appdx-2 CALL
OC Pesticides PCBs Herbicides OP Pesticides
Metals: RCRA-8 RCRA-4 Pb 13PP 23TAL Appdx 1 Appdx 2
SPLP - TCLP (Metals VOCs SVOCs Pest. Herb. PCBs)
EDB / DBCP
X Chlorides

HOLD PAH ON HIGHEST TPH

TAT ASAP 5h 12h 24h 48h 3d (5d) 7d 10d 21d
Addn: PAH above mg/L W, mg/Kg S Highest Hit
Hold Samples (Surcharges will apply and are pre-approved)

Remarks
Sample Clean-ups are pre-approved as needed

Addn: Date Rcv by: From:

Relinquished by (Initials and Sign)	Date & Time	Relinquished to (Initials and Sign)	Date & Time
1) Scott Pyer SS	8-6-10 9:35	2)	
3)		4) Joshua Lam	8-5-10 9:35
5)			

Total Containers per COC: Cooler Temp: -3.

otherwise agreed on writing. Reports are the Intellectual Property of XENCO - until paid. Samples will be held 30 days after final report is e-mailed unless thereby requested. Rush Charges and Collection Fees are pre-approved if needed.

Preservatives: Various (V), HCl pH<2 (H), H2SO4 pH<2 (S), HNO3 pH<2 (N), Asbc Acid&NaOH (A), ZnAc&NaOH (Z), (Cool,<4C) (C), None (NA), See Label (L), Other (O) w/labels no seals

Cont. Size: 4oz (4), 8oz (8), 32oz (32), 40ml VOA (40), 1L (1), 500ml (5), Tedlar Bag (B), Various (V), Other _____ Cont. Type: Glass Amb (A), Glass Clear (C), Plastic (P), Various (V)

Matrix: Air (A), Product (P), Solid(S), Water (W), Liquid (L)

Committed to Excellence in Service and Quality www.xenco.com

Notice: Signature of this document and relinquishment of these samples constitutes a valid purchase order from client company to Xenco Laboratories and its affiliates, subcontractors and assigns under Xenco's standard terms and conditions of service unless previously negotiated under a fully executed client contract.

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: 8/1/2010 Page 1 of 1

Prelogin / Nonconformance Report - Sample Log-In

Client: Eco-logical

Date/Time: 8.5.10 9:35

Lab ID # : 384421

Initials: AL

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	-3.1 °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 401423

for

Southern Union Gas Services- Monahans

Project Manager: Rose Slade

Line 2 B (West Side)

2010-055

27-DEC-10

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), California(06244CA), 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)

27-DEC-10

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

Reference: XENCO Report No: **401423**
Line 2 B (West Side)
Project Address: Jal, 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 401423. 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. 401423 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

XENCO Laboratories

Sample Cross Reference 401423

Southern Union Gas Services- Monahans, Monahans, TX

Line 2 B (West Side)

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
East Floor	S	Dec-21-10 11:10		401423-001
East Wall	S	Dec-21-10 11:15		401423-002
Middle Floor	S	Dec-21-10 11:20		401423-003
South Wall	S	Dec-21-10 11:25		401423-004
North Wall	S	Dec-21-10 11:30		401423-005
West Floor	S	Dec-21-10 11:35		401423-006
West Wall	S	Dec-21-10 11:40		401423-007

CASE NARRATIVE

Client Name: Southern Union Gas Services- Monahans
Project Name: Line 2 B (West Side)

Project ID:	*2010-055*	*Report Date:*	*27-DEC-10*
Work Order Number:	*401423*	*Date Received:*	*12/21/2010*

Sample receipt non conformances and Comments:

None

Sample receipt Non Conformances and Comments per Sample:

None

Analytical Non Conformances and Comments:

Batch: LBA-837528 BTEX by EPA 8021B
SW8021BM

Batch 837528, Benzene, Ethylbenzene, Toluene, m_p-Xylenes, o-Xylene recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate.
Samples affected are: 401423-005, -002, -006, -007, -001, -004, -003.
The Laboratory Control Sample for Toluene, Benzene, Ethylbenzene, m_p-Xylenes , o-Xylene is within laboratory Control Limits

Certificate of Analysis Summary 401423

Southern Union Gas Services- Monahans, Monahans, TX

Project Name: Line 2 B (West Side)

Project Id: 2010-055
Contact: Rose Slade
Project Location: Jal, NM

Date Received in Lab: Tue Dec-21-10 04:40 pm
Report Date: 27-DEC-10
Project Manager: Brent Barron, II

Analysis Requested		Lab Id:	401423-001		401423-002		401423-003		401423-004		401423-005		401423-006	
		Field Id:	East Floor		East Wall		Middle Floor		South Wall		North Wall		West Floor	
		Depth:												
		Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
		Sampled:	Dec-21-10 11:10		Dec-21-10 11:15		Dec-21-10 11:20		Dec-21-10 11:25		Dec-21-10 11:30		Dec-21-10 11:35	
Anions by E300		Extracted:												
		Analyzed:	Dec-22-10 09:07		Dec-22-10 09:07		Dec-22-10 09:07		Dec-22-10 09:07		Dec-22-10 09:07		Dec-22-10 09:07	
		Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride			58.3	4.55	11.1	4.29	11.3	4.38	10.1	4.33	24.6	4.47	9.55	4.55
BTEX by EPA 8021B		Extracted:	Dec-22-10 14:15		Dec-22-10 14:15		Dec-22-10 14:15		Dec-22-10 14:15		Dec-22-10 14:15		Dec-22-10 14:15	
		Analyzed:	Dec-23-10 17:00		Dec-23-10 17:23		Dec-23-10 17:46		Dec-23-10 18:09		Dec-23-10 18:33		Dec-23-10 18:56	
		Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene			ND	0.0011	ND	0.0010	ND	0.0011	ND	0.0010	ND	0.0011	ND	0.0011
Toluene			ND	0.0022	ND	0.0020	ND	0.0021	ND	0.0021	ND	0.0021	ND	0.0022
Ethylbenzene			ND	0.0011	ND	0.0010	ND	0.0011	ND	0.0010	ND	0.0011	ND	0.0011
m_p-Xylenes			ND	0.0022	ND	0.0020	ND	0.0021	ND	0.0021	ND	0.0021	ND	0.0022
o-Xylene			ND	0.0011	ND	0.0010	ND	0.0011	ND	0.0010	ND	0.0011	ND	0.0011
Total Xylenes			ND	0.0011	ND	0.0010	ND	0.0011	ND	0.0010	ND	0.0011	ND	0.0011
Total BTEX			ND	0.0011	ND	0.0010	ND	0.0011	ND	0.0010	ND	0.0011	ND	0.0011
Percent Moisture		Extracted:												
		Analyzed:	Dec-22-10 17:00		Dec-22-10 17:00		Dec-22-10 17:00		Dec-22-10 17:00		Dec-22-10 17:00		Dec-22-10 17:00	
		Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture			7.73	1.00	2.19	1.00	4.01	1.00	2.98	1.00	6.14	1.00	7.78	1.00
TPH By SW8015 Mod		Extracted:	Dec-22-10 08:45		Dec-22-10 08:45		Dec-22-10 08:45		Dec-22-10 08:45		Dec-22-10 08:45		Dec-22-10 08:45	
		Analyzed:	Dec-22-10 11:44		Dec-22-10 12:03		Dec-22-10 12:21		Dec-22-10 12:40		Dec-22-10 13:00		Dec-22-10 13:19	
		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	16.3	ND	15.3	ND	15.6	ND	15.4	ND	16.0	ND	16.3
C12-C28 Diesel Range Hydrocarbons			*20.4*	*16.3*	*ND*	*15.3*	*ND*	*15.6*	*ND*	*15.4*	*ND*	*16.0*	*ND*	*16.3*
C28-C35 Oil Range Hydrocarbons			ND	16.3	ND	15.3	ND	15.6	ND	15.4	ND	16.0	ND	16.3
Total TPH			20.4	16.3	ND	15.3	ND	15.6	ND	15.4	ND	16.0	ND	16.3

Brent Barron, II
Odessa Laboratory Manager

Final 1.000

Certificate of Analysis Summary 401423

Southern Union Gas Services- Monahans, Monahans, TX

Project Name: Line 2 B (West Side)

Project Id: 2010-055
Contact: Rose Slade
Project Location: Jal, NM

Date Received in Lab: Tue Dec-21-10 04:40 pm
Report Date: 27-DEC-10
Project Manager: Brent Barron, II

Analysis Requested							
	Lab Id:	401423-007					
	Field Id:	West Wall					
	Depth:						
	Matrix:	SOIL					
	Sampled:	Dec-21-10 11:40					
Anions by E300	*Extracted:*						
	Analyzed:	Dec-22-10 09:07					
	Units/RL:	mg/kg	RL				
Chloride		10.2	4.54				
BTEX by EPA 8021B	*Extracted:*	Dec-22-10 14:15					
	Analyzed:	Dec-23-10 19:20					
	Units/RL:	mg/kg	RL				
Benzene		ND	0.0011				
Toluene		ND	0.0021				
Ethylbenzene		ND	0.0011				
m_p-Xylenes		ND	0.0021				
o-Xylene		ND	0.0011				
Total Xylenes		ND	0.0011				
Total BTEX		ND	0.0011				
Percent Moisture	*Extracted:*						
	Analyzed:	Dec-22-10 17:00					
	Units/RL:	%	RL				
Percent Moisture		7.39	1.00				
TPH By SW8015 Mod	*Extracted:*	Dec-22-10 08:45					
	Analyzed:	Dec-22-10 13:38					
	Units/RL:	mg/kg	RL				
C6-C12 Gasoline Range Hydrocarbons		ND	16.1				
C12-C28 Diesel Range Hydrocarbons		ND	16.1				
C28-C35 Oil Range Hydrocarbons		ND	16.1				
Total TPH		ND	16.1				

Brent Barron, II
Odessa Laboratory Manager

Final 1.000

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 2 B (West Side)

Work Orders : 401423, **Project ID:** 2010-055

Lab Batch #: 837528 **Sample:** 592143-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 12/23/10 15:26

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0298	0.0300	99	80-120	
4-Bromofluorobenzene	0.0294	0.0300	98	80-120	

Lab Batch #: 837528 **Sample:** 592143-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 12/23/10 15:49

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	0.0300	0.0300	100	80-120	

Lab Batch #: 837528 **Sample:** 592143-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 12/23/10 16:36

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0277	0.0300	92	80-120	
4-Bromofluorobenzene	0.0294	0.0300	98	80-120	

Lab Batch #: 837528 **Sample:** 401423-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 12/23/10 17:00

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0277	0.0300	92	80-120	
4-Bromofluorobenzene	0.0292	0.0300	97	80-120	

Lab Batch #: 837528 **Sample:** 401423-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 12/23/10 17:23

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0280	0.0300	93	80-120	
4-Bromofluorobenzene	0.0287	0.0300	96	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 2 B (West Side)

Work Orders : 401423,

Project ID: 2010-055

Lab Batch #: 837528 **Sample:** 401423-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 12/23/10 17:46

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0279	0.0300	93	80-120	
4-Bromofluorobenzene	0.0298	0.0300	99	80-120	

Lab Batch #: 837528 **Sample:** 401423-004 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 12/23/10 18:09

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0277	0.0300	92	80-120	
4-Bromofluorobenzene	0.0301	0.0300	100	80-120	

Lab Batch #: 837528 **Sample:** 401423-005 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 12/23/10 18:33

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	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	0.0305	0.0300	102	80-120	

Lab Batch #: 837528 **Sample:** 401423-006 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 12/23/10 18:56

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0284	0.0300	95	80-120	
4-Bromofluorobenzene	0.0310	0.0300	103	80-120	

Lab Batch #: 837528 **Sample:** 401423-007 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 12/23/10 19:20

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0280	0.0300	93	80-120	
4-Bromofluorobenzene	0.0306	0.0300	102	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 2 B (West Side)

Work Orders : 401423, **Project ID:** 2010-055

Lab Batch #: 837528 **Sample:** 401423-001 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 12/23/10 20:53

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0296	0.0300	99	80-120	
4-Bromofluorobenzene	0.0316	0.0300	105	80-120	

Lab Batch #: 837528 **Sample:** 401423-001 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 12/23/10 21:17

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0300	0.0300	100	80-120	
4-Bromofluorobenzene	0.0313	0.0300	104	80-120	

Lab Batch #: 837235 **Sample:** 591978-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 12/22/10 10:48

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	72.9	100	73	70-135	
o-Terphenyl	35.8	50.2	71	70-135	

Lab Batch #: 837235 **Sample:** 591978-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 12/22/10 11:07

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	99.7	73	70-135	
o-Terphenyl	36.4	49.9	73	70-135	

Lab Batch #: 837235 **Sample:** 591978-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 12/22/10 11:25

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	77.1	100	77	70-135	
o-Terphenyl	40.8	50.0	82	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 2 B (West Side)

Work Orders : 401423, **Project ID:** 2010-055

Lab Batch #: 837235 **Sample:** 401423-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 12/22/10 11:44

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	78.9	100	79	70-135	
o-Terphenyl	41.8	50.0	84	70-135	

Lab Batch #: 837235 **Sample:** 401423-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 12/22/10 12:03

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	77.6	99.7	78	70-135	
o-Terphenyl	39.7	49.9	80	70-135	

Lab Batch #: 837235 **Sample:** 401423-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 12/22/10 12:21

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	80.7	99.7	81	70-135	
o-Terphenyl	42.0	49.9	84	70-135	

Lab Batch #: 837235 **Sample:** 401423-004 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 12/22/10 12:40

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	99.8	75	70-135	
o-Terphenyl	38.8	49.9	78	70-135	

Lab Batch #: 837235 **Sample:** 401423-005 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 12/22/10 13:00

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	76.1	99.9	76	70-135	
o-Terphenyl	39.9	50.0	80	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.

Final 1.000

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: Line 2 B (West Side)

Work Orders : 401423,

Project ID: 2010-055

Lab Batch #: 837235 **Sample:** 401423-006 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 12/22/10 13:19

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	78.6	100	79	70-135	
o-Terphenyl	41.4	50.1	83	70-135	

Lab Batch #: 837235 **Sample:** 401423-007 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 12/22/10 13:38

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	77.7	99.7	78	70-135	
o-Terphenyl	40.8	49.9	82	70-135	

Lab Batch #: 837235 **Sample:** 401423-007 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 12/22/10 15:50

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	79.1	99.6	79	70-135	
o-Terphenyl	40.7	49.8	82	70-135	

Lab Batch #: 837235 **Sample:** 401423-007 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 12/22/10 16:09

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	77.1	99.7	77	70-135	
o-Terphenyl	37.8	49.9	76	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 2 B (West Side)

Work Order #: 401423 **Project ID:** 2010-055

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

Lab Batch ID: 837528 **Sample:** 592143-1-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	0.0905	91	0.1	0.0922	92	2	70-130	35	
Toluene	ND	0.1000	0.0868	87	0.1	0.0883	88	2	70-130	35	
Ethylbenzene	ND	0.1000	0.0854	85	0.1	0.0867	87	2	71-129	35	
m_p-Xylenes	ND	0.2000	0.1780	89	0.2	0.1801	90	1	70-135	35	
o-Xylene	ND	0.1000	0.0874	87	0.1	0.0885	89	1	71-133	35	

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

Lab Batch ID: 837118 **Sample:** 837118-1-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	8.89	89	10	8.65	87	3	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 2 B (West Side)

Work Order #: 401423 **Project ID:** 2010-055

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

Lab Batch ID: 837235 **Sample:** 591978-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

TPH By SW8015 Mod	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
C6-C12 Gasoline Range Hydrocarbons	ND	1000	922	92	997	929	93	1	70-135	35	
C12-C28 Diesel Range Hydrocarbons	ND	1000	912	91	997	884	89	3	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

Final 1.000

XENCO Laboratories

Form 3 - MS Recoveries

Project Name: Line 2 B (West Side)

Work Order #: 401423
Lab Batch #: 837118
Project ID: 2010-055
Date Analyzed: 12/22/2010
Date Prepared: 12/22/2010
Analyst: LATCOR
QC- Sample ID: 401423-001 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	58.3	108	149	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

XENCO Laboratories

Form 3 - MS / MSD Recoveries

Project Name: Line 2 B (West Side)

Work Order # : 401423 **Project ID:** 2010-055

Lab Batch ID: 837528 **QC- Sample ID:** 401423-001 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	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
Analytes	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	0.1077	0.0702	65	0.1082	0.0711	66	1	70-130	35	X
Toluene	ND	0.1077	0.0667	62	0.1082	0.0677	63	1	70-130	35	X
Ethylbenzene	ND	0.1077	0.0653	61	0.1082	0.0660	61	1	71-129	35	X
m_p-Xylenes	ND	0.2155	0.1139	53	0.2163	0.1252	58	9	70-135	35	X
o-Xylene	ND	0.1077	0.0661	61	0.1082	0.0668	62	1	71-133	35	X

Lab Batch ID: 837235 **QC- Sample ID:** 401423-007 S **Batch #:** 1 **Matrix:** Soil

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

Reporting Units: mg/kg

TPH By SW8015 Mod	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
Analytes	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	ND	1080	1070	99	1080	1050	97	2	70-135	35	
C12-C28 Diesel Range Hydrocarbons	ND	1080	820	76	1080	806	75	2	70-135	35	

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

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

Final 1.000

XENCO Laboratories

Sample Duplicate Recovery

Project Name: Line 2 B (West Side)

Work Order #: 401423

Lab Batch #: 837118 **Project ID:** 2010-055

Date Analyzed: 12/22/2010 09:07 **Date Prepared:** 12/22/2010 **Analyst:** LATCOR

QC- Sample ID: 401423-001 D **Batch #:** 1 **Matrix:** Soil

Reporting Units: mg/kg

Anions by E300	SAMPLE / SAMPLE DUPLICATE RECOVERY				
Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Chloride	58.3	59.2	2	20	

Lab Batch #: 837238

Date Analyzed: 12/22/2010 17:00 **Date Prepared:** 12/22/2010 **Analyst:** WRU

QC- Sample ID: 401423-001 D **Batch #:** 1 **Matrix:** Soil

Reporting Units: %

Percent Moisture	SAMPLE / SAMPLE DUPLICATE RECOVERY				
Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Percent Moisture	7.73	7.99	3	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

Environmental Lab of Texas

a XENCO Labratories Company

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 PAGE 1 OF 1

Project Name: Line 2B (West Side)

Company Name: Southern Union Gas

Project #: 210-055

Company Address:

Project Loc: Jal, N.M.

City/State/Zip:

PO #:

Telephone No: Fax No:

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

Sampler Signature: Troy Nahm e-mail:

(lab use only)
ORDER #: 401423

Analyze For:

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	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 DTEX 8260	RCI	N.O.R.M.	CHLORIDES		RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT (3 DAY)
																	TCLP:								TOTAL:			X				
01	East Floor			12/21/10	1110		1	✓								SO;1	✓								✓			✓			✓
02	East Wall				1115		1	✓									✓								✓			✓			✓
03	Middle Floor				1120		1	✓									✓								✓			✓			✓
04	South Wall				1125		1	✓									✓								✓			✓			✓
05	North Wall				1130		1	✓									✓								✓			✓			✓
06	West Floor				1135		1	✓									✓								✓			✓			✓
07	West Wall				1140		1	✓									✓								✓			✓			✓

Special Instructions:

Relinquished by:	Date	Time	Received by:	Date	Time
Troy Nahm	12/21/10	1305		12/21/10	1305
Relinquished by:	Date	Time	Received by:	Date	Time
	12/21/10	1640			
Relinquished by:	Date	Time	Received by ELOT:	Date	Time
			Andrea Flores	12-21-10	16:40

Laboratory Comments:
Sample Containers Intact? N
VOCs Free of Headspace? N
Labels on container(s) N
Custody seals on container(s) N
Custody seals on cooler(s) N
Sample Hand Delivered N
by Sampler/Client Rep. ?
by Courier? UPS DHL FedEx Lone Star
407 9455
Temperature Upon Receipt: 5.6 °C

Final 1.000

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
Date/Time: 12.21.10 16:40
Lab ID #: 401423
Initials: AE

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	5.0 °C	lbs	°C	lbs	°C	lbs	°C	lbs	°C

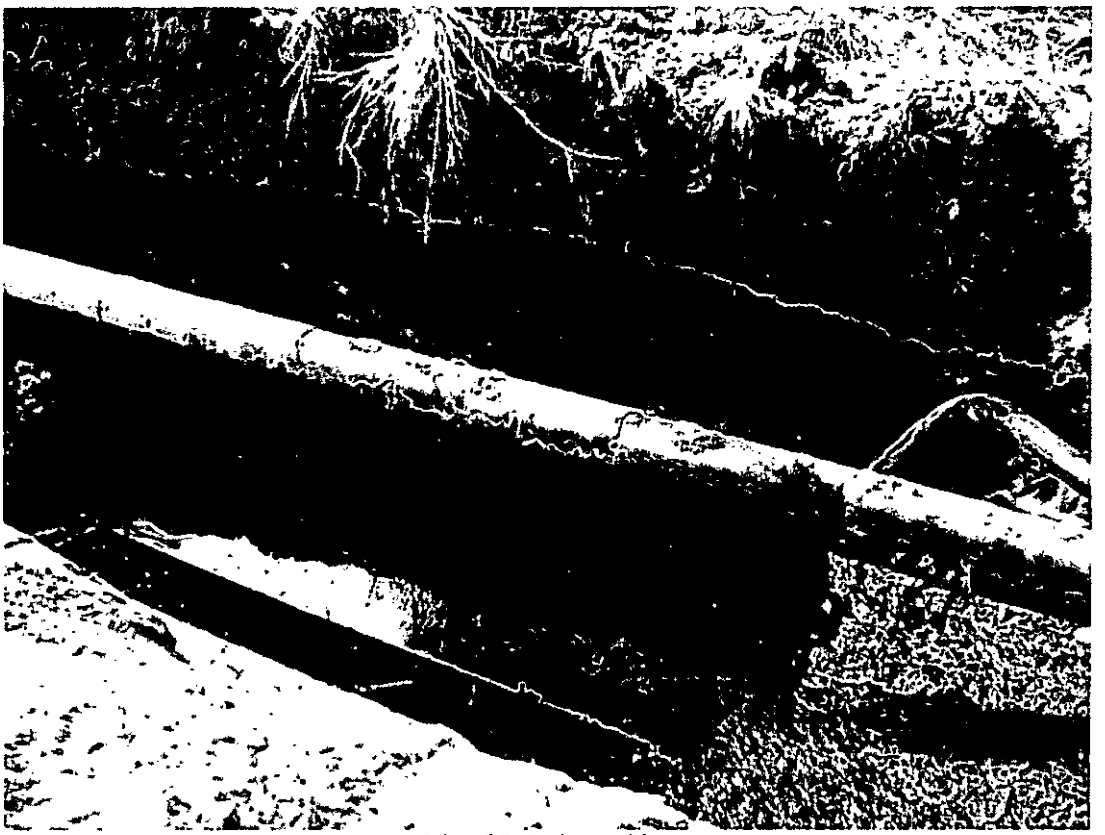
Nonconformance Documentation

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

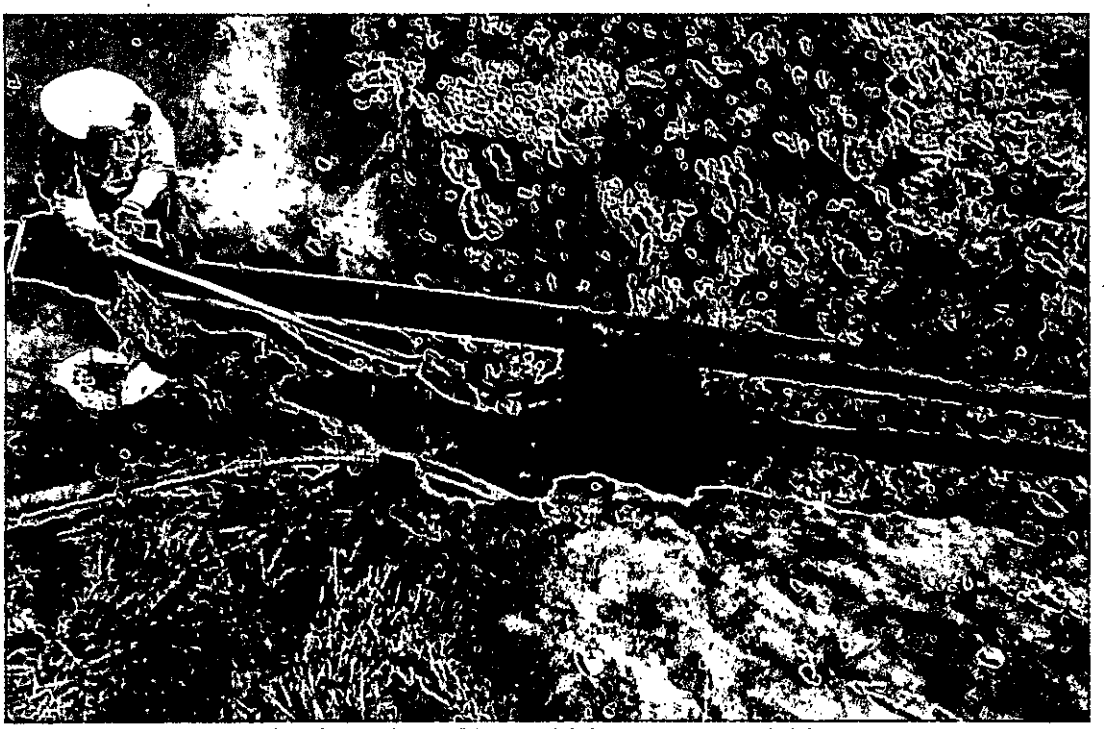
Regarding: _____

Corrective Action Taken: _____

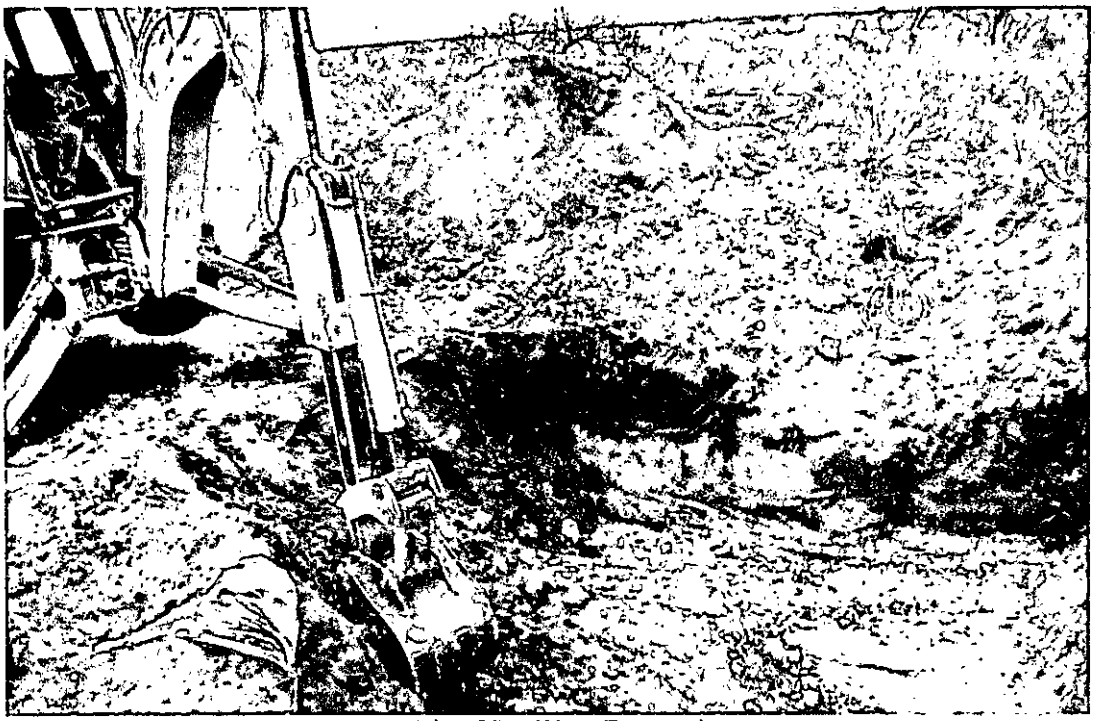
Check all that apply:
- ☐ Cooling process has begun shortly after sampling event and out of temperature condition acceptable by NELAC 5.5.8.3.1.a.1.
- ☐ Initial and Backup Temperature confirm out of temperature conditions
- ☐ Client understands and would like to proceed with analysis



Line 2B Release Site

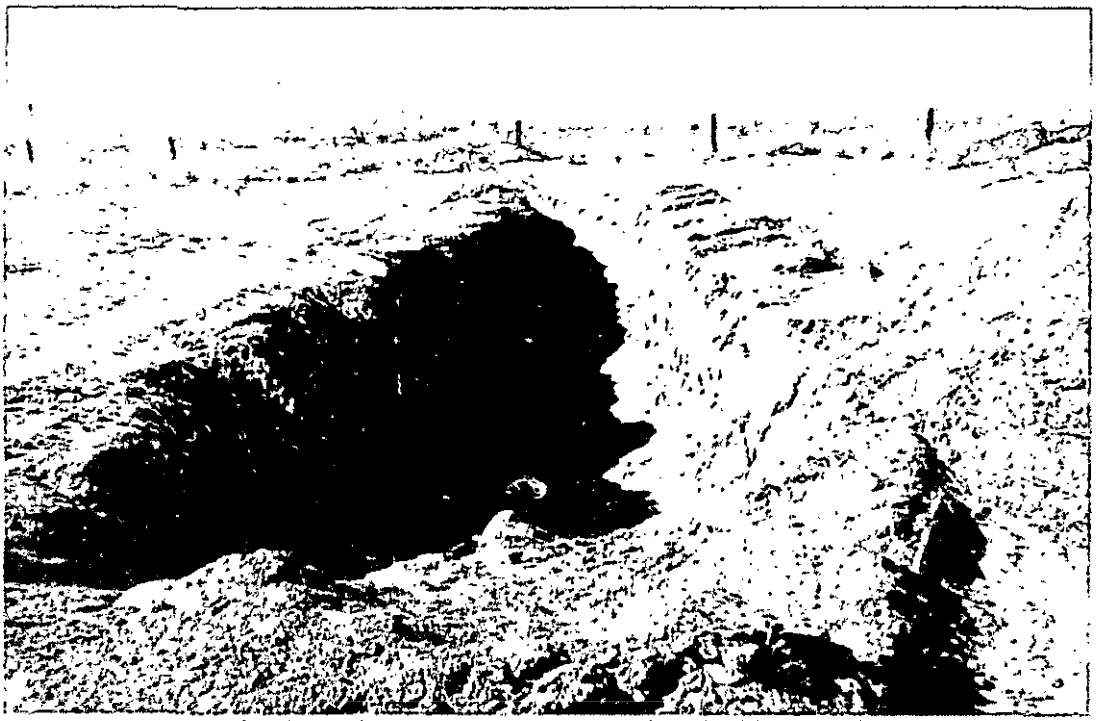


Line 2B Release Site - Initial Response Activities

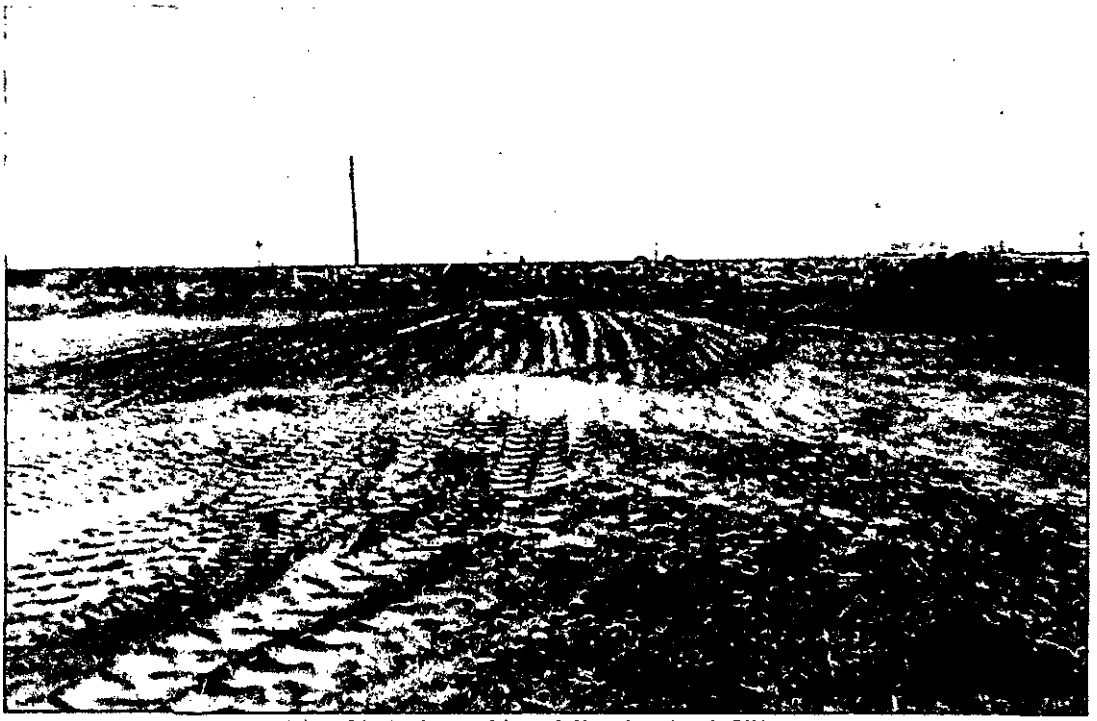


Line 2B - West Excavation

Line 2B - West Excavation (looking North-northeast)



Line 2B Release Site - East Excavation (looking West)



Line 2B Release Site (following backfilling)