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
220 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

nAB1527437[illegible]
fAB1500451245

Release Notification and Corrective Action

34951 OPERATOR ☒ Initial Report ☐ Final Report

Name of Company Southern Union Gas Services	Contact Rose Slade
Address 801 S. Loop 464 Monahans, Texas 79756	Telephone No. 432-940-5147
Facility Name Tunstil #1286	Facility Type Natural Gas Pipeline

Surface Owner Bureau of Land Management	Mineral Owner	API No 30-025-28822

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
L	24	26S	30E					Eddy

32.148888 103.9585

Latitude 32 degrees 01.476' Longitude 103 degrees 50.429'

NATURE OF RELEASE

Type of Release Natural Gas, Crude Oil and Produced Water	Volume of Release Unknown	Volume Recovered None
Source of Release 6-Inch Steel Pipeline (Low Pressure)	Date and Hour of Occurrence Unknown	Date and Hour of Discovery February 22, 2011 – 1322 hours
Was Immediate Notice Given? ☐ Yes ☐ No ☐ Not Required	If YES, To Whom? Jim Amos (BLM Carlsbad Field Office)	
By Whom? Curt Stanley	Date and Hour March 11, 2011 – 0830 hours	
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.*
Failure of a segment of the six (6) low pressure steel pipeline resulted in the release of an unknown volume of a mixture of natural gas, crude oil and produced water. Following the discovery of the release the pipeline was fitted with a temporary pipeline clamp to mitigate the release.

Describe Area Affected and Cleanup Action Taken.*
An area of range land measuring approximately 5,560 square feet was affected by the release. The release will be remediated 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:	OIL CONSERVATION DIVISION
Printed Name:	Approved by District Supervisor:
Title:	Approval Date: 10/6/15 Expiration Date: N.A
E-mail Address:	Conditions of Approval: — Attached ☐
Date: Phone:	

* Attach Additional Sheets If Necessary

2RP-3307

Basin Environmental Service Technologies, LLC

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

Effective Solutions

REMEDIATION SUMMARY &

RISK-BASED SITE CLOSURE REQUEST

SOUTHERN UNION GAS SERVICES
TUNSTIL #1286
Eddy County, New Mexico
Unit Letter "L" (NW/SW), Section 24, Township 26 South, Range 30 East
Latitude 32° 01.476' North, Longitude 103° 50.429' West
NMOCD Reference #2RP-_____

Prepared For:

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

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

July 2012

Joel W. Lowry
Project Manager

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FIGURES

TABLES

APPENDICES

1.0 INTRODUCTION & BACKGROUND INFORMATION

Basin Environmental Service Technologies, LLC (Basin), on behalf of Southern Union Gas Services (Southern Union), has prepared this *Remediation Summary & Risk-Based Site Closure Request* for the release site known as Tunstil #1286. The legal description of the release site is Unit Letter "L" (NW/SW), Section 24, Township 26 South, Range 30 East, in Eddy County, New Mexico. The geographic coordinates of the release site are 32° 01.476' North latitude and 103° 50.429' West longitude. The property affected by the release is owned by The United States Department of the Interior - Bureau of Land Management (BLM). Please reference Figure 1 for a "Site Location Map".

On February 22, 2011, Southern Union discovered a release had occurred on the Tunstil #1286 pipeline. Failure of a section of the 6-inch (6") low-pressure steel pipeline resulted in the release of an unknown volume of natural gas, crude oil, and produced water mixture. 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.

On March 11, 2011, the release was reported to the New Mexico Oil Conservation Division (NMOCD) Artesia District Office. The "Release Notification and Corrective Action" (Form C-141) indicated the release affected approximately five thousand, five hundred sixty square feet (5,560 ft^2) of rangeland. General photographs of the release site are provided as Appendix A. The Form C-141 is provided as Appendix E.

On March 11, 2011, a Southern Union representative met with a representative from the BLM Carlsbad Field Office regarding the Tunstil #1286 release site. The BLM representative requested that a "Major Undesirable Event" (Form MUE) be prepared and submitted to the BLM. The MUE indicated the release affected approximately nine hundred linear feet (900') of an ephemeral wash located southwest of the release site. The BLM requested that the impacted area at the release point be excavated and remediated to NMOCD standards and the affected ephemeral wash be remediated utilizing a freshwater "washing" technique designed to limit the disturbance of existing natural rangeland. The Form MUE is provided in Appendix B.

On June 20, 2011, an archaeological survey was conducted by Boone Archaeological Services of Carlsbad, New Mexico. The report indicated that an existing archaeological site (LA 108946) was located approximately sixty-five feet (65') west of the impacted ephemeral wash. The site was flagged and a "no impact zone" was established to ensure that remediation activities did not disturb any cultural resources. A copy of the Archaeological Survey (NMCRIS Investigation Abstract Form) 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 information was unavailable for Section 24, Township 26 South, Range 30 East. A depth to groundwater reference map utilized by the NMOCD indicates groundwater should be encountered at approximately two hundred feet (200') below ground surface (bgs). Based on the NMOCD ranking system, zero (0) 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 Tunstil #1286 release site has an initial ranking score of zero (0) points. The soil remediation levels for a site with a ranking score of zero (0) points are as follows:

- Benzene – 10 mg/Kg (ppm)
- BTEX – 50 mg/Kg (ppm)
- TPH – 5,000 mg/Kg (ppm)

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

3.0 SUMMARY OF SOIL REMEDIATION ACTIVITIES

On June 14, 2011, four (4) soil samples (Draw #1, Draw #2, Draw #3 and Draw #4) were collected from the ephemeral wash located southwest of the release point. Soil samples were submitted to Xenco Laboratories, Inc., in Odessa, Texas, for analysis of chloride and total petroleum hydrocarbons (TPH) concentrations in accordance with EPA Methods 300.1 and SW 846-8015M, respectively. Laboratory analytical results indicate chloride concentrations ranged from 1,100 mg/Kg for soil sample Draw #4 to 8,450 mg/Kg for soil sample Draw #1. Laboratory analytical results indicated TPH concentrations ranged from 771 mg/Kg for soil sample Draw #4 to 3,960 mg/Kg for soil sample Draw #2. Table 1 summarizes the "Concentrations of Benzene, BTEX, TPH & Chloride in Soil". Soil sample locations are depicted on Figure 2 "Site & Sample Location Map (Main Excavation)" and Figure 3 "Site & Sample Location Map (Ephemeral Wash)". Laboratory analytical reports are provided as Appendix D.

On June 22, 2011, six (6) soil samples (North Release Point @ 2', North Release Point @ 6', South Release Point @ 2', South Release Point @ 6', South Flow Path @ 2' and South Flow Path @ 6') were collected at the site to investigate the vertical and horizontal extent of impacted soil. Collected soil samples were submitted to the laboratory for analysis of TPH and chloride concentrations. Laboratory analytical results indicated TPH concentrations ranged from less than the appropriate laboratory method detection limit (MDL) for soil samples North Release Point @ 2' and South Flow Path @ 2' to 30.9 mg/Kg for soil sample South Release Point @ 2'. Laboratory analytical results indicated chloride concentrations ranged from 2,460 mg/Kg for soil sample North Release Point @ 6' to 4,270mg/Kg for soil sample South Release Point @ 2'.

On June 23, 2011, remediation of the ephemeral wash commenced at the location. This was achieved by releasing fresh water into the wash at a rate sufficient to transport impacted medium without disrupting the natural hydraulic characteristics of the wash. A lined temporary catchment was installed down-gradient beyond the impacted section of the wash to collect the water and contaminant solution. A two inch (2") sump pump located within the lined temporary catchment transferred the impacted solution into a vacuum truck located on the caliche road. The solution was disposed of at an NMOCD approved disposal.

On July 12, 2011, four (4) soil samples (Draw 1A, Draw 2A, Draw 3A and Draw 4A) were collected from the ephemeral wash and submitted to the laboratory for analysis of chloride concentrations. Laboratory analytical results indicated chloride concentrations ranged from 886 mg/Kg for soil sample Draw 3A to 2,260 mg/Kg for soil sample Draw 4A.

On October 3, 2011, four (4) soil samples (Draw 1B, Draw 2B, Draw 3B and Draw 4B) were collected from the ephemeral wash and submitted to the laboratory for analysis of BTEX constituents in accordance with EPA Method SW 846-8021b, TPH and chloride concentrations. Laboratory analytical results indicated BTEX constituent concentrations were less than the appropriate laboratory MDL for each constituent in each of the submitted soil samples. Laboratory analytical results indicated TPH concentrations ranged from 71.8 mg/Kg for soil sample Draw 1B to 983 mg/Kg for soil sample Draw 2B. Laboratory analytical results indicated chloride concentrations ranged from 41.6 mg/Kg for soil sample Draw 4B to 126 mg/Kg for soil sample Draw 2B. Benzene, BTEX, TPH and chloride concentrations were below the NMOCD regulatory remediation action levels established for this site.

On November 2, 2011, a delineation trench was advanced to investigate the vertical extent of soil impact at the release site. During the advancement of the trench, six (6) soil samples (11/2 Trench @ Surface, 11/2 Trench @ 5', 11/2 Trench @ 10', 11/2 Trench @ 12', 11/2 Trench @ 13', and 11/2 Trench @ 14') were collected and submitted to the laboratory for analysis of concentrations of BTEX constituents, TPH and chloride. Laboratory analytical results indicated BTEX constituent concentrations were less than the appropriate laboratory MDL for each constituent in each of the submitted soil samples. Laboratory analytical results indicated TPH concentrations ranged from less than the appropriate laboratory MDL for soil samples 11/2 Trench @ 5', 11/2 Trench @ 10', 11/2 Trench @ 12', 11/2 Trench @ 13', and 11/2 Trench @ 14' to 851 mg/Kg for soil sample 11/2 Trench @ Surface. Laboratory analytical results indicated chloride concentrations ranged from 219 mg/Kg for soil sample 11/2 Trench @ 14' to 16,000 mg/Kg for soil sample 11/2 Trench @ Surface.

On April 9, 2012, Basin began excavation activities at the release site. A photo-ionization detector (PID) and chloride field test kits were used to field-screen the horizontal extent of impacted soil and to guide the excavation. The excavation floor was advanced and leveled at approximately three feet (3') bgs, pending the installation of an NMOCD-approved twenty (20) mil polyurethane liner. The excavation sidewalls were advanced until laboratory analytical results from confirmation soil samples indicated benzene, BTEX, TPH and/or chloride concentrations were below the NMOCD regulatory remediation action levels established for this site. Excavated material was stockpiled on-site, pending final disposition.

On April 11, 2011, three (3) confirmation soil samples (W Wall #1 @ 3', W Wall #2 @ 3' and N Wall @ 3') were collected from the excavation sidewalls and submitted to the laboratory for analysis of BTEX constituent, TPH and chloride concentrations. Laboratory analytical results indicated BTEX constituent concentrations were less than the appropriate laboratory MDL for each constituent in each of the submitted soil samples. Laboratory analytical results indicated TPH concentrations ranged from 20.7 mg/Kg for soil sample N Wall @ 3' to 40.4 mg/Kg for soil sample W Wall #2 @ 3'. Laboratory analytical results indicated chloride concentrations ranged from 111 mg/Kg for soil sample N Wall #2 @ 3' to 284 mg/Kg for soil sample W Wall #1 @ 3'. Benzene, BTEX, TPH and chloride concentrations were below the NMOCD regulatory standards remediation action levels for this site.

On April 17, 2011, a delineation trench was advanced to further investigate the vertical extend of soil impact at the release site. During the advancement of the trench, three (3) soil samples (Trench @

10', Trench @ 14' and Trench @ 17') were collected and submitted to the laboratory for analysis of BTEX constituent, TPH and chloride concentrations. Laboratory analytical results indicated BTEX constituent concentrations were less than the appropriate laboratory MDL for each constituent in each of the submitted soil samples. Laboratory analytical results indicated TPH concentrations ranged from less than the appropriate laboratory MDL for soil samples Trench @ 14' and Trench @ 17' to 69.2 mg/Kg for soil sample Trench @ 10'. Laboratory analytical results indicated chloride concentrations ranged from 135 mg/Kg for soil sample Trench @ 14' to 1,380 mg/Kg for soil sample Trench @ 10'.

On April 17, 2011, three (3) confirmation soil samples (E Wall #1 @ 3', E Wall #2 @ 3' and E Wall #3 @ 3') were collected from the excavation sidewalls and submitted to the laboratory for analysis of BTEX constituent, TPH and chloride concentrations. Laboratory analytical results indicated BTEX constituent concentrations were less than the appropriate laboratory MDL for each constituent in each of the submitted soil samples. Laboratory analytical results indicated TPH concentrations were less than the appropriate laboratory MDL for each of the submitted soil samples. Laboratory analytical results indicated chloride concentrations ranged from 87.3 mg/Kg for soil sample E Wall #3 @ 3' to 934 mg/Kg for soil sample E Wall #1 @ 3'. Benzene, BTEX, TPH and chloride concentrations were below the NMOCD regulatory remediation action levels established for this site.

On April 17, 2011, two (2) soil samples (East Side of Road #1 @ 3' and East Side of Road #2 @ 3') were collected from the east side of the oilfield access road and submitted to the laboratory for analysis of BTEX constituent, TPH and chloride concentrations. Laboratory analytical results indicated BTEX constituent concentrations were less than the appropriate laboratory MDL for each constituent in each of the submitted soil samples. Laboratory analytical results indicated TPH concentrations were less than the appropriate laboratory MDL for each of the submitted soil samples. Laboratory analytical results indicated chloride concentrations ranged from 6.10 mg/Kg for soil sample East Side of Road #1 @ 3' to 7.26 mg/Kg for soil sample East Side of Road #2 @ 3'.

Between April 20 and April 23, 2012, approximately three hundred eighty cubic yards (380 cy^3) of impacted material was transported to Lea Land, LLC (NMOCD Permit #WM-01-035), for disposal. The final dimensions of the excavation prior to backfilling were approximately one hundred feet (100') in length, ranged in width from approximately fifteen feet (15') to approximately thirty feet (30'), and approximately three feet (3') in depth.

On April 20, 2012, a twenty (20) mil polyurethane liner was installed on the floor of the excavation at approximately three feet (3') bgs. Approximately one foot (1') of non-impacted pad sand was installed both above and below the liner to protect the liner from damage during installation and backfilling activities. Upon receiving laboratory analytical results from confirmation soil samples, the excavation was backfilled with locally purchased, non-impacted material. Backfill was compacted in eighteen inch (18") lifts and contoured to fit the surrounding topography. The site will be reseeded with a BLM approved seed mixture prior to the close of the 2012 calendar year.

4.0 QA/QC PROCEDURES

4.1 Soil Sampling

Soil Samples were delivered to Xenco Laboratories, Inc., in Odessa, Texas, for analysis of BTEX constituent, TPH, and/or chloride concentrations using the methods described below. Soil samples were analyzed for BTEX constituent, 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 analytical reports or are on file at the laboratory.

5.0 SOIL CLOSURE REQUEST

Remediation activities conducted at the Tunstil #1286 release site met the objectives set forth by the NMOCD and BLM Carlsbad Field Office. Soil samples collected from the excavation were analyzed by an NMOCD-approved laboratory, and concentrations of BTEX, TPH, and chloride were below the applicable regulatory remediation action levels established for the site. Based on these analytical results, Basin recommends Southern Union provide the NMOCD Artesia District Office and the BLM Carlsbad Field Office a copy of this *Remediation Summary & Risk-Based Soil Closure Request* and request the NMOCD grant closure to the Tunstil #1286 release site.

6.0 LIMITATIONS

Basin Environmental Service Technologies, LLC, has prepared this *Remediation Summary & Risk-Based 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:

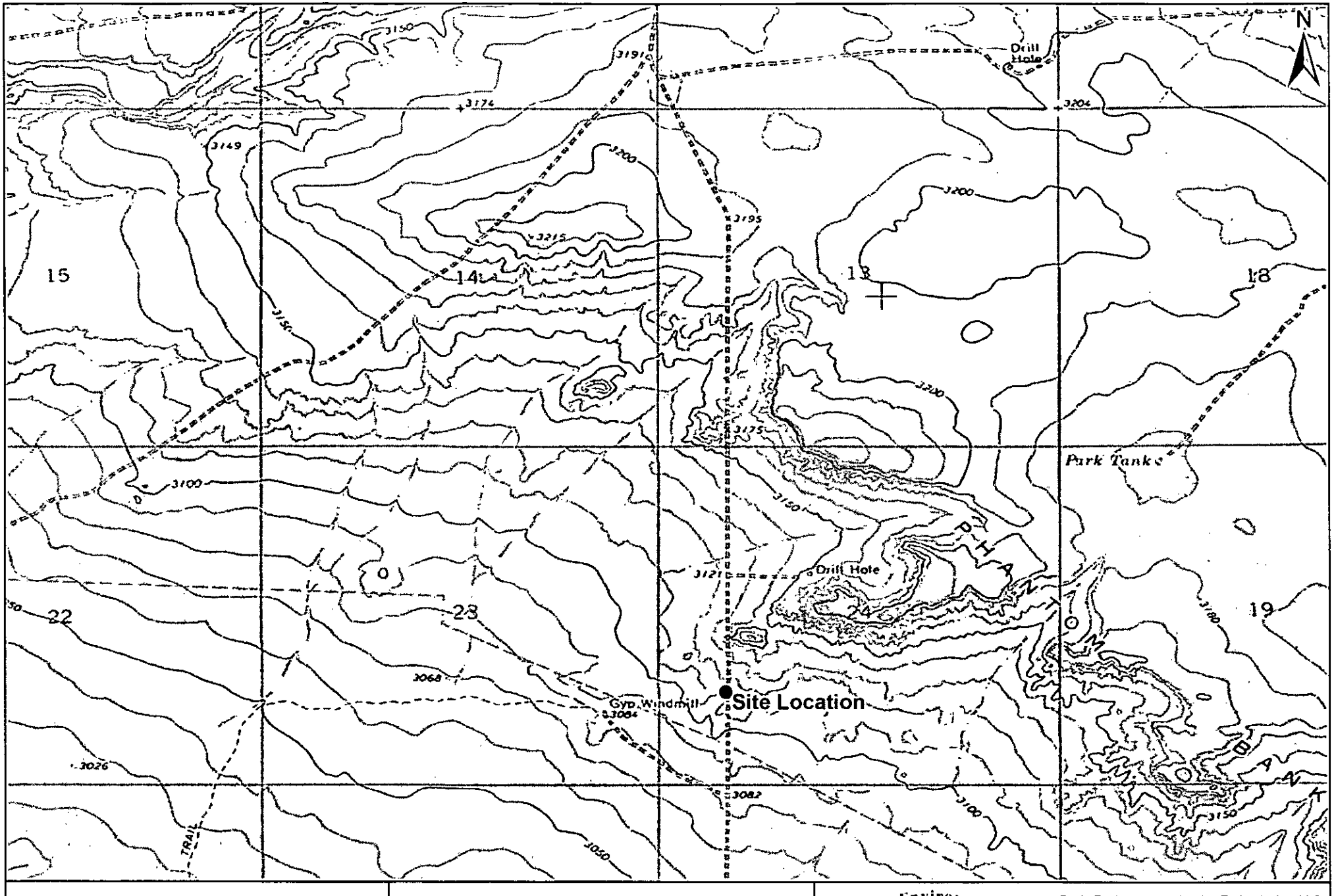
Copy 1: Mike Bratcher
New Mexico Energy, Minerals and Natural Resources Department
Oil Conservation Division (District 2)
1301 E. Grand Avenue
Artesia, NM 88240

Copy 2: James Amos
Bureau of Land Management
602 E. Greene Street
Carlsbad, NM 88220

Copy 3: Rose Slade & Curt Stanley
Southern Union Gas Services
801 S. Loop 464
Monahans, Texas 79756
rose.slade@sug.com
curt.stanley@sug.com

Copy 4: Basin Environmental Service Technologies, LLC
P.O. Box 301
Lovington, New Mexico 88260

FIGURES



1,000500 0 1,000 2,000

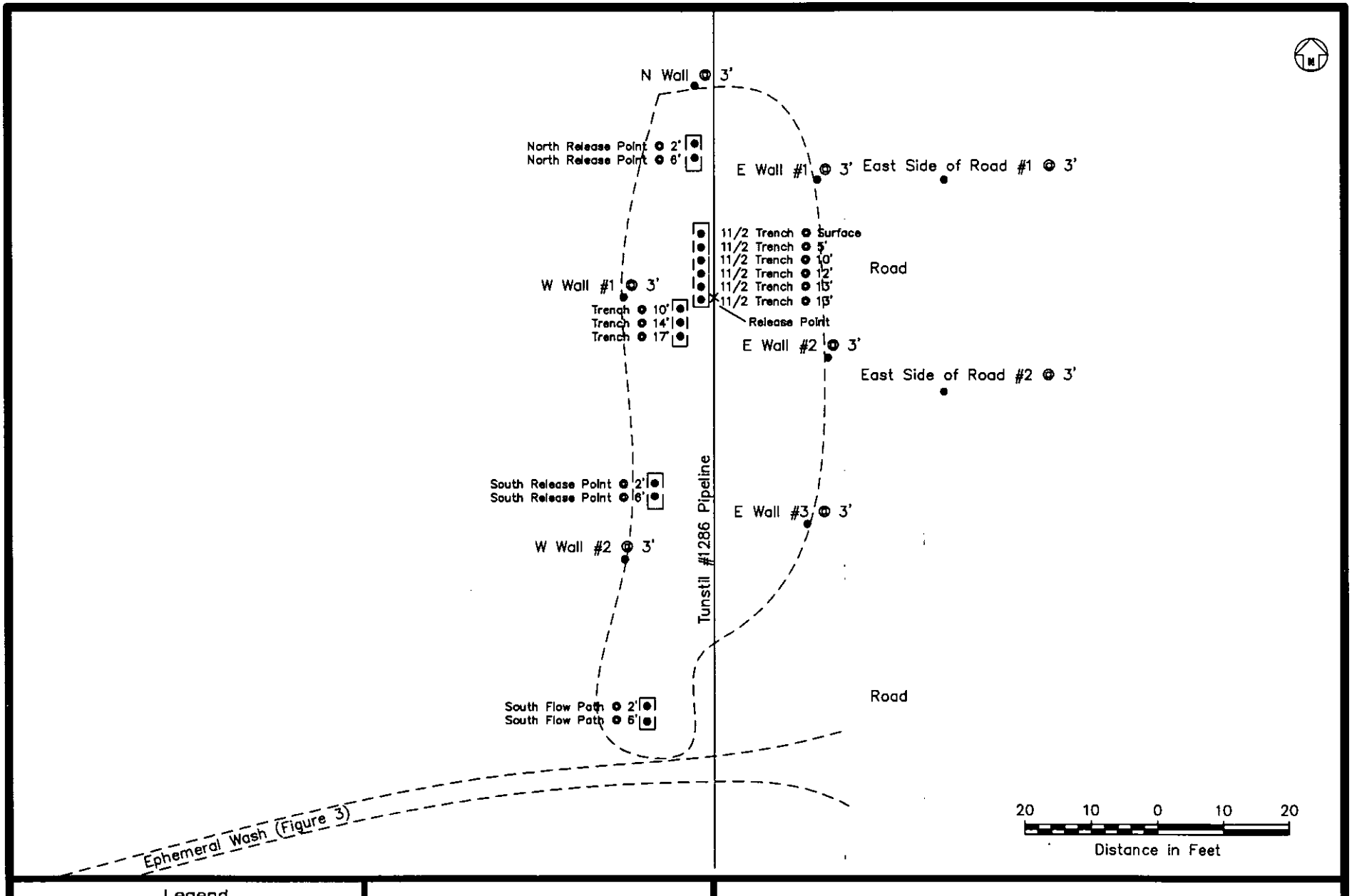
Distance in Feet

Figure 1
Site Location Map
Southern Union Gas Services
Tunstil #1286
Eddy County, New Mexico

Basin Environmental Service Technologies
Effective Solutions

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

Drawn By: BJA	Checked By: BRB
May 30, 2012	Scale: 1" = 2000'



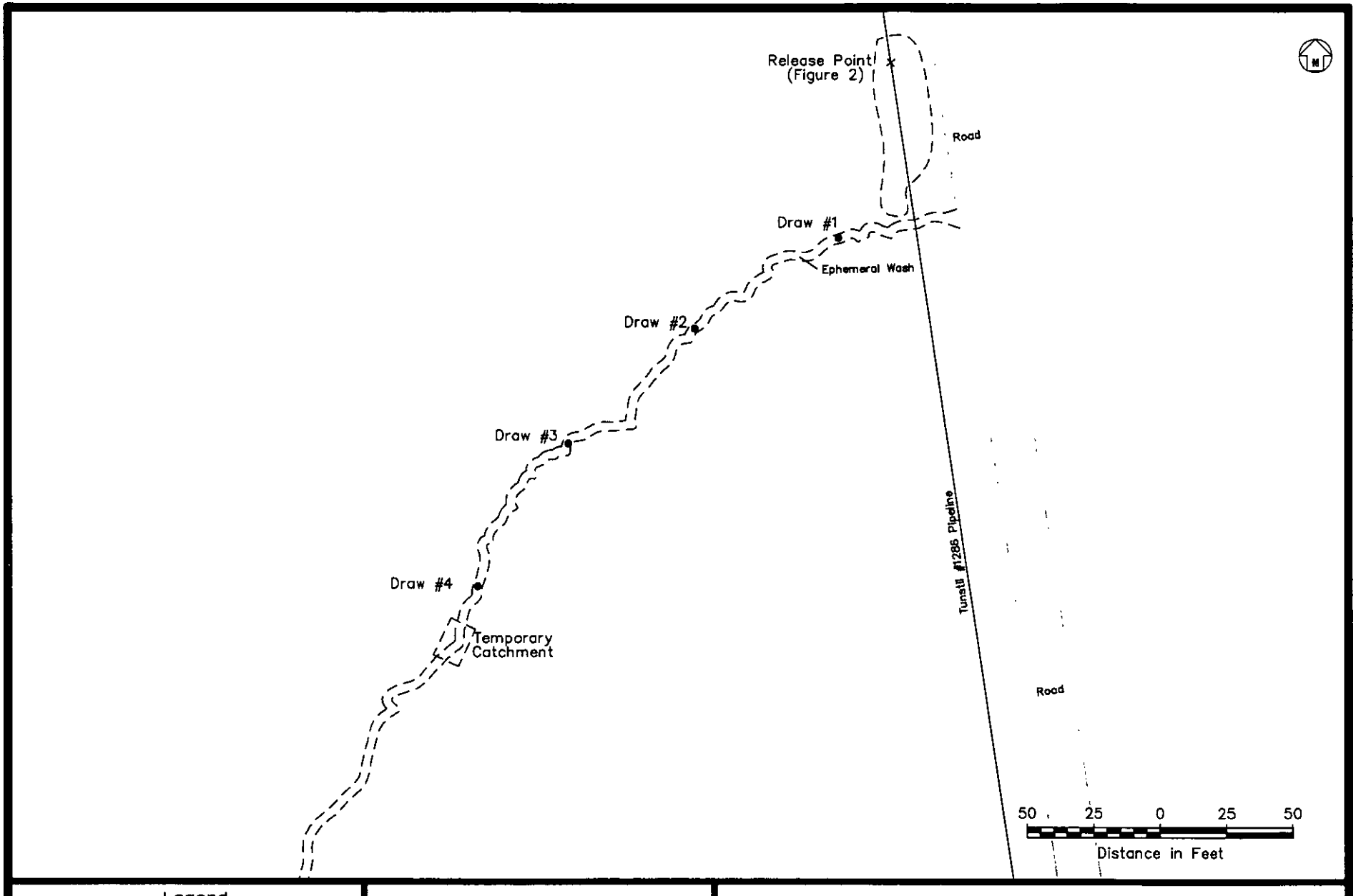
Legend

- Sample Location
- Excavation Extent
- Delineation Trench
- Road
- Pipeline
- Wash

Figure 2
Site & Sample Location Map
Southern Union Gas Services
Tunstil #1286 (Main Excavation)
NMOCD Ref #2RP_____
Eddy County, New Mexico

Basin Environmental Services

Prep By: JWL	Checked By: BJA
May 17, 2012	Scale 1"=20'



Legend

- Sample Location
- Excavation Extents
- Catchment
- Road
- Pipeline
- Wash

Figure 3
Site & Sample Location Map
Southern Union Gas Services
Tunstil #1286 (Ephemeral Wash)
NMOCD Ref #2RP_____
Eddy County, New Mexico

Basin Environmental Services

Prep By: JWL	Checked By: BJA
May 17, 2012	Scale 1"=50'

TABLES

TABLE 1

CONCENTRATIONS OF BENZENE, BTEX, TPH & CHLORIDE IN SOIL

SOUTHERN UNION GAS SERVICES
TUNSTIL #1286
EDDY COUNTY, NEW MEXICO
NMOCD REFERENCE NO: 2RP #_____

SAMPLE LOCATION	SAMPLE DEPTH (BGS)	SAMPLE DATE	SOIL STATUS	METHOD: EPA SW 846-8021B, 5030						METHOD: 8015M			TOTAL TPH	E 300
				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)
Draw #1	N/A	6/14/2011	Washed	-	-	-	-	-	-	<15.0	2,300	21.5	2,320	8,450
Draw #2	N/A	6/14/2011	Washed	-	-	-	-	-	-	111	3,820	26.4	3,960	1,990
Draw #3	N/A	6/14/2011	Washed	-	-	-	-	-	-	<15.2	1,520	37.1	1,560	5,330
Draw #4	N/A	6/14/2011	Washed	-	-	-	-	-	-	<15.0	732	39.3	771	1,100
North Release Point @ 2	2'	6/22/2011	In-Situ	-	-	-	-	-	-	<16.0	<16.0	<16.0	<16.0	3,740
North Release Point @ 6	6'	6/22/2011	In-Situ	-	-	-	-	-	-	-	-	-	-	2,460
South Release Point @ 2	2'	6/22/2011	In-Situ	-	-	-	-	-	-	<16.2	30.9	<16.2	30.9	4,270
South Release Point @ 6	6'	6/22/2011	In-Situ	-	-	-	-	-	-	-	-	-	-	3,280
South Flow Path @ 2'	2'	6/22/2011	In-Situ	-	-	-	-	-	-	<15.9	<15.9	<15.9	<15.9	3,480
South Flow Path @ 6'	6'	6/22/2011	In-Situ	-	-	-	-	-	-	-	-	-	-	2,650
Draw 1A	N/A	7/12/2011	In-Situ	-	-	-	-	-	-	-	-	-	-	944
Draw 2A	N/A	7/12/2011	In-Situ	-	-	-	-	-	-	-	-	-	-	1,040
Draw 3A	N/A	7/12/2011	In-Situ	-	-	-	-	-	-	-	-	-	-	886
Draw 4A	N/A	7/12/2011	In-Situ	-	-	-	-	-	-	-	-	-	-	2,260
Draw 1	N/A	10/3/2011	In-Situ	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<15.2	75.8	17.5	93.3	133
Draw 2	N/A	10/3/2011	In-Situ	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<15.0	15.1	<15.0	15.1	6.78
Draw 1B	N/A	10/3/2011	In-Situ	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<15.1	56.1	15.7	71.8	115
Draw 2B	N/A	10/3/2011	In-Situ	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<15.0	945	38.2	983	126
Draw 3B	N/A	10/3/2011	In-Situ	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<15.1	516	28.6	545	68.1
Draw 4B	N/A	10/3/2011	In-Situ	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<15.2	212	28.2	240	41.6
11/2 Trench @ Surface	Surface	11/2/2011	In-Situ	<0.0010	<0.0021	<0.0010	<0.0021	<0.0021	<0.0021	17.0	814	19.9	851	16,000
11/2 Trench @ 5'	5'	11/2/2011	In-Situ	<0.0011	<0.0021	<0.0011	<0.0021	<0.0021	<0.0021	<15.6	<15.6	<15.6	<15.6	1,430
11/2 Trench @ 10'	10'	11/2/2011	In-Situ	<0.0010	<0.0021	<0.0010	<0.0021	<0.0021	<0.0021	<15.5	<15.5	<15.5	<15.5	355
11/2 Trench @ 12'	12'	11/2/2011	In-Situ	<0.0011	<0.0022	<0.0011	<0.0022	<0.0022	<0.0022	<16.7	<16.7	<16.7	<16.7	1,060
11/2 Trench @ 13'	13'	11/2/2011	In-Situ	<0.0011	<0.0022	<0.0011	<0.0022	<0.0022	<0.0022	<16.7	<16.7	<16.7	<16.7	511
11/2 Trench @ 14'	14'	11/2/2011	In-Situ	<0.0011	<0.0021	<0.0011	<0.0021	<0.0021	<0.0021	<15.7	<15.7	<15.7	<15.7	219
W Wall #1 @ 3'	3'	4/11/2012	In-Situ	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<15.3	23.4	<15.3	23.4	284
W Wall #2 @ 3'	3'	4/11/2012	In-Situ	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<15.2	24.5	15.9	40.4	111
N Wall @ 3'	3'	4/11/2012	In-Situ	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<15.2	20.7	<15.2	20.7	225
Trench @ 10'	10'	4/17/2012	In-Situ	<0.0011	<0.0021	<0.0011	<0.0021	<0.0021	<0.0021	17.9	51.3	<15.9	69.2	1,380
Trench @ 14'	14'	4/17/2012	In-Situ	<0.0011	<0.0021	<0.0011	<0.0021	<0.0021	<0.0021	<15.5	<15.5	<15.5	<15.5	135
Trench @ 17'	17'	4/17/2012	In-Situ	<0.0011	<0.0022	<0.0011	<0.0022	<0.0022	<0.0022	<16.6	<16.6	<16.6	<16.6	144
E Wall #1 @ 3'	3'	4/17/2012	In-Situ	<0.0010	<0.0021	0.00120	0.00637	0.00173	0.00930	<15.6	<15.6	<15.6	<15.6	934
E Wall #2 @ 3'	3'	4/17/2012	In-Situ	<0.0011	<0.0021	<0.0011	<0.0021	<0.0021	<0.0021	<15.8	<15.8	<15.8	<15.8	699
E Wall #3 @ 3'	3'	4/17/2012	In-Situ	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<15.3	<15.3	<15.3	<15.3	87.3
East Side of Road #1 @ 3	3'	4/17/2012	In-Situ	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<15.3	<15.3	<15.3	<15.3	6.10
East Side of Road #2 @ 3	3'	4/17/2012	In-Situ	<0.0010	<0.0021	<0.0010	<0.0021	<0.0010	<0.0021	<15.4	<15.4	<15.4	<15.4	7.26
NMOCD Standard				10					50				5,000	

APPENDICES

Appendix A

General Site Photographs

Figure 1. Photograph of surface staining from the initial release at the Tunstil #1286 Release Site (Looking East)

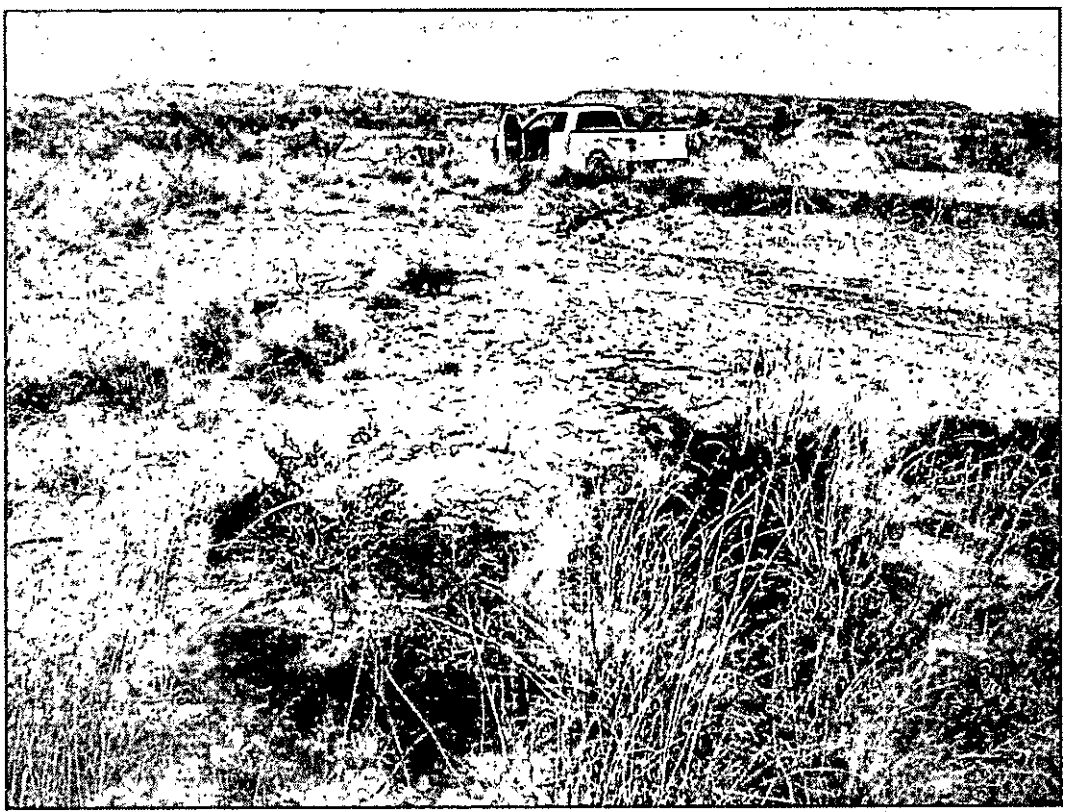


Figure 2. Photograph of surface staining from the initial release at the Tunstil #1286 Release Site (Looking Northeast)

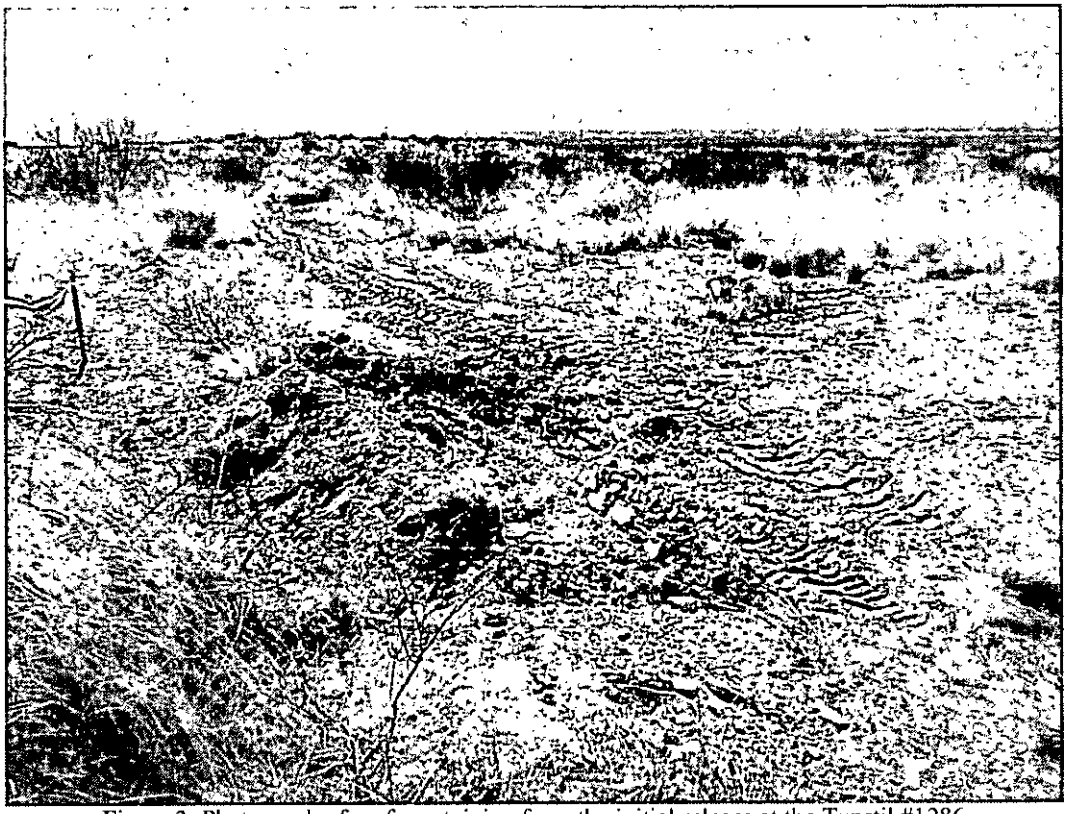


Figure 3. Photograph of surface staining from the initial release at the Tunstil #1286 Release Site (Looking South)

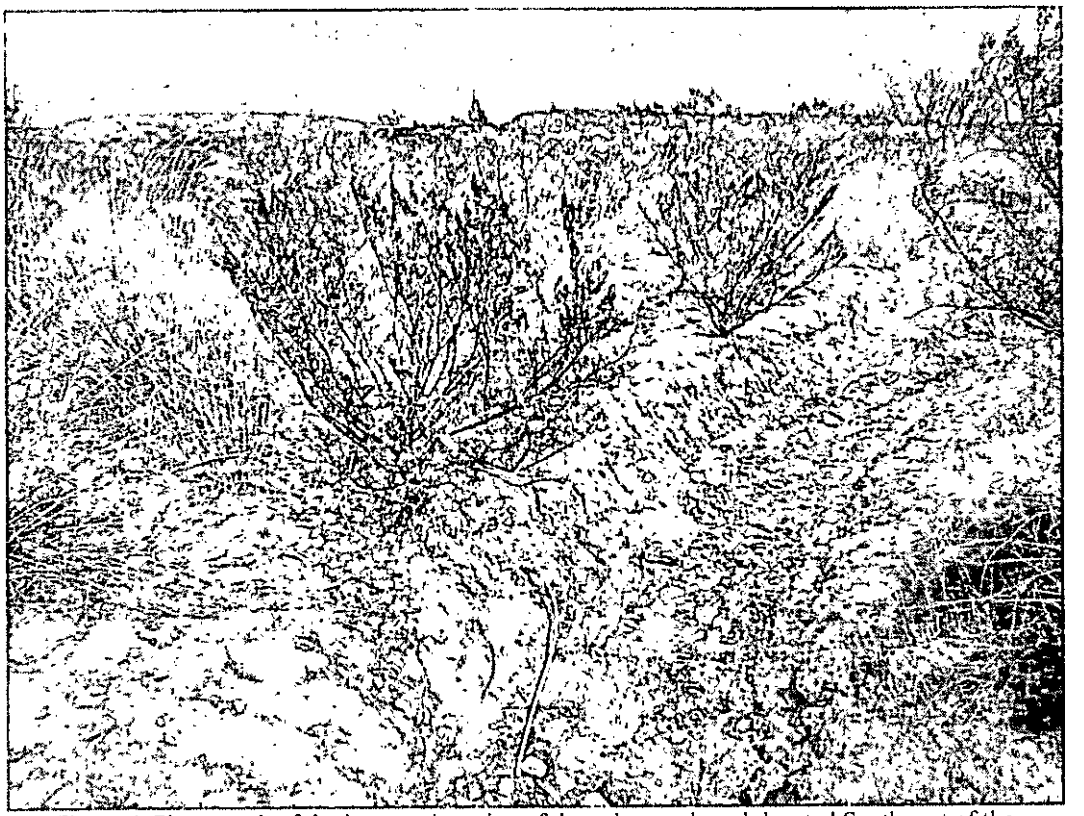


Figure 4. Photograph of the impacted portion of the ephemeral wash located Southwest of the Tunstil #1286 Release Site (Looking South)

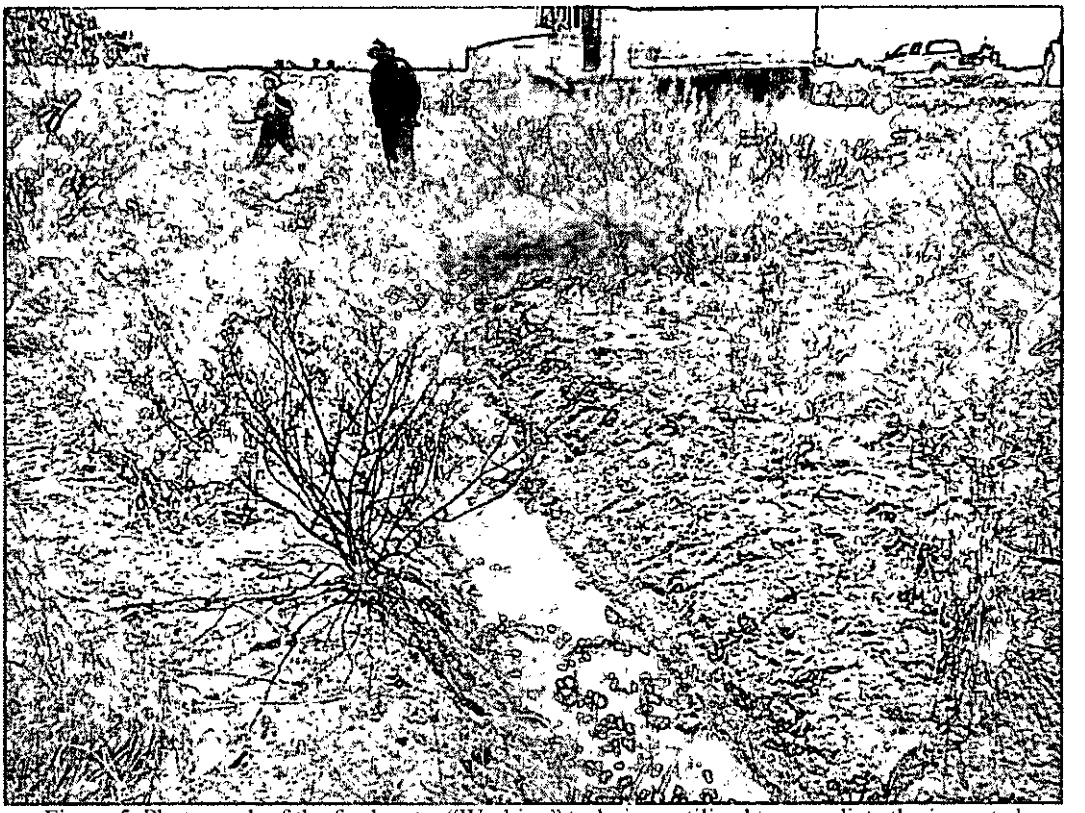


Figure 5. Photograph of the freshwater "Washing" technique utilized to remediate the impacted portion of the ephemeral wash at the Tunstil #1286 Release Site (Looking Northeast)

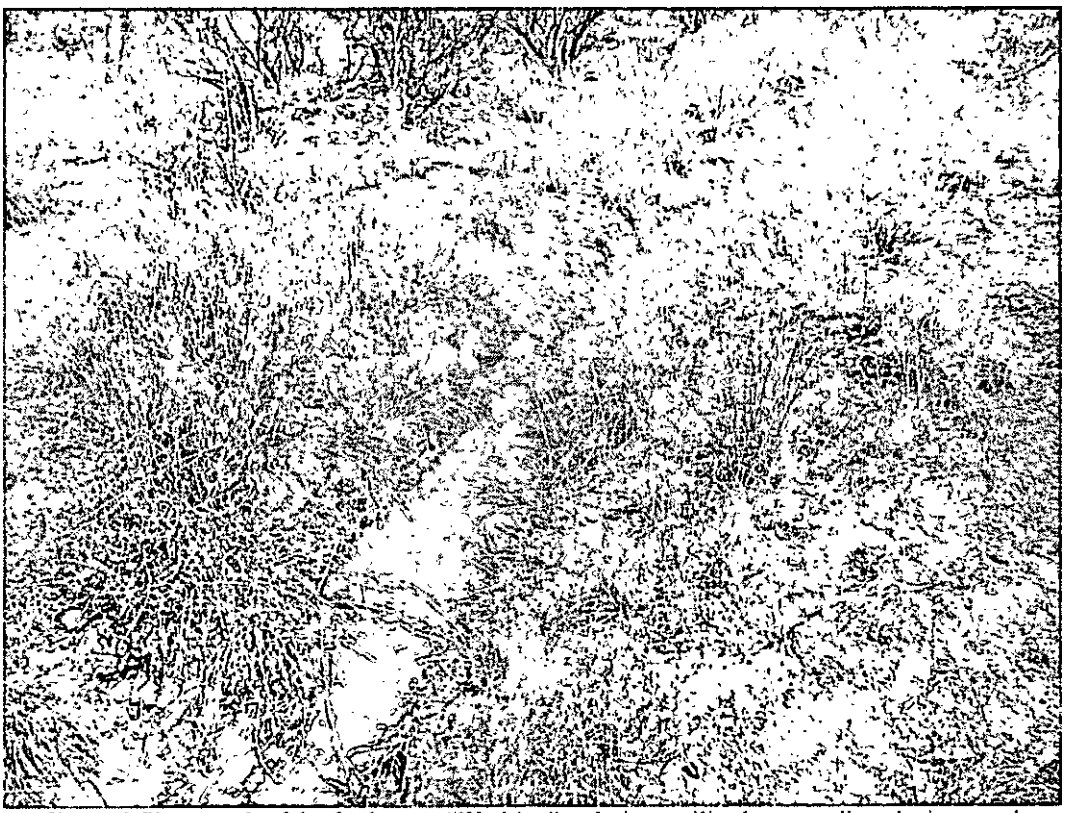


Figure 6. Photograph of the freshwater "Washing" technique utilized to remediate the impacted portion of the ephemeral wash at the Tunstil #1286 Release Site (Looking North)

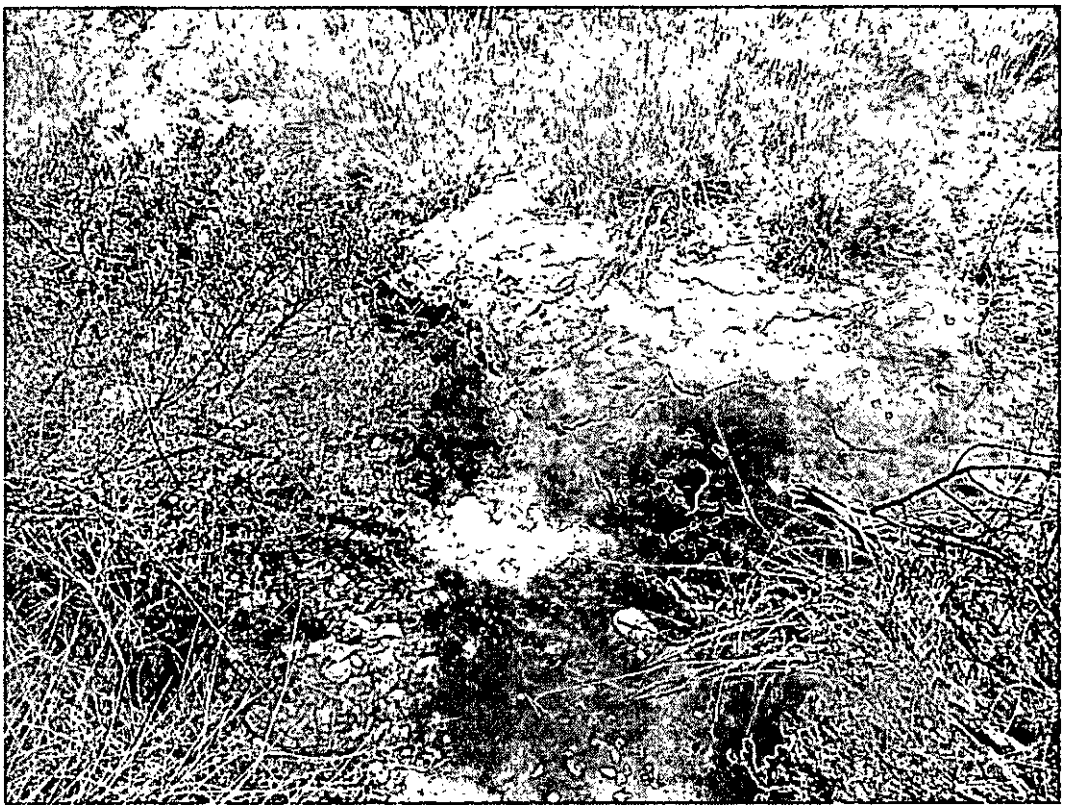


Figure 7. Photograph of the freshwater "Washing" technique utilized to remediate the ephemeral wash at the Tunstil #1286 Release Site (Looking West)

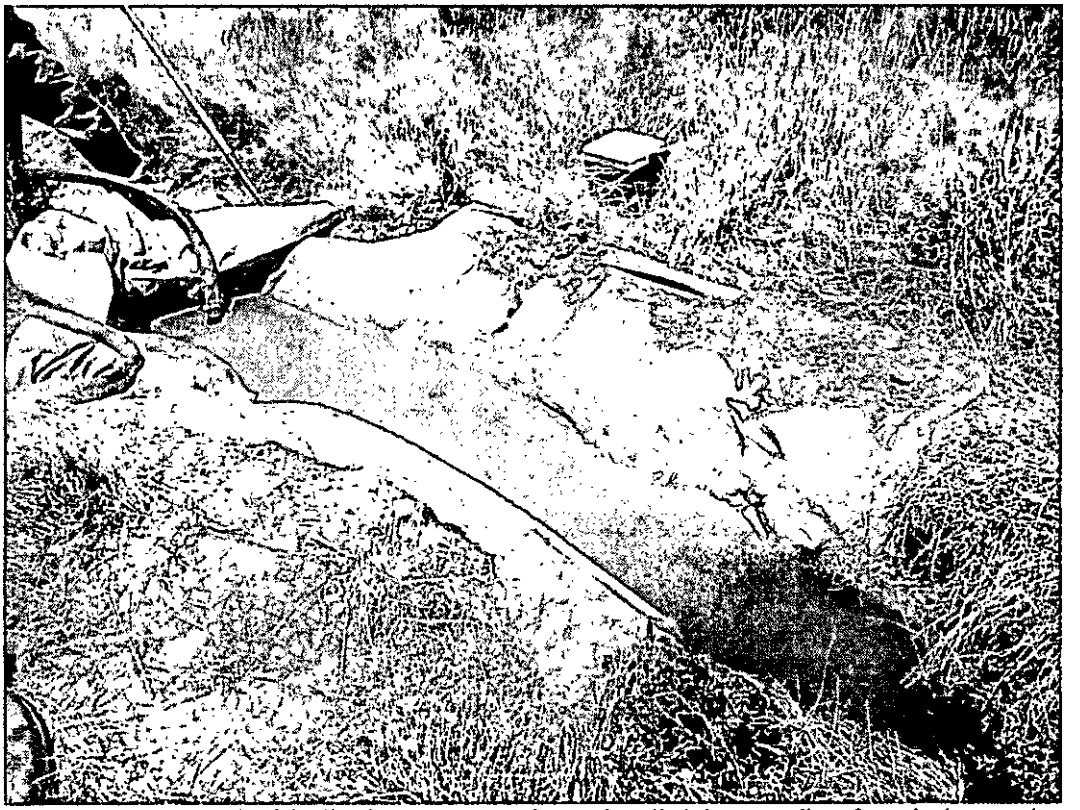


Figure 8. Photograph of the lined temporary catchment installed down gradient from the impacted portion of the ephemeral wash at the Tunstil #1286 Release Site (Looking South)

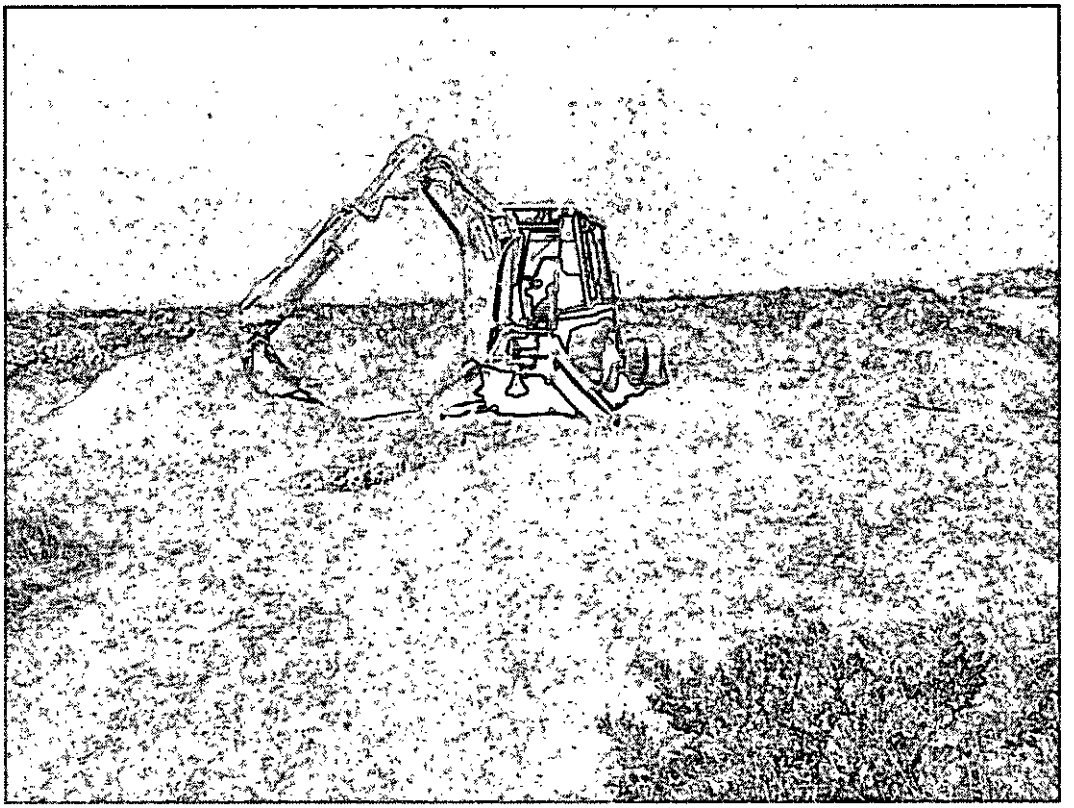


Figure 9. Photograph of delineation activities at the Tunstil #1286 Release Site (Looking North)

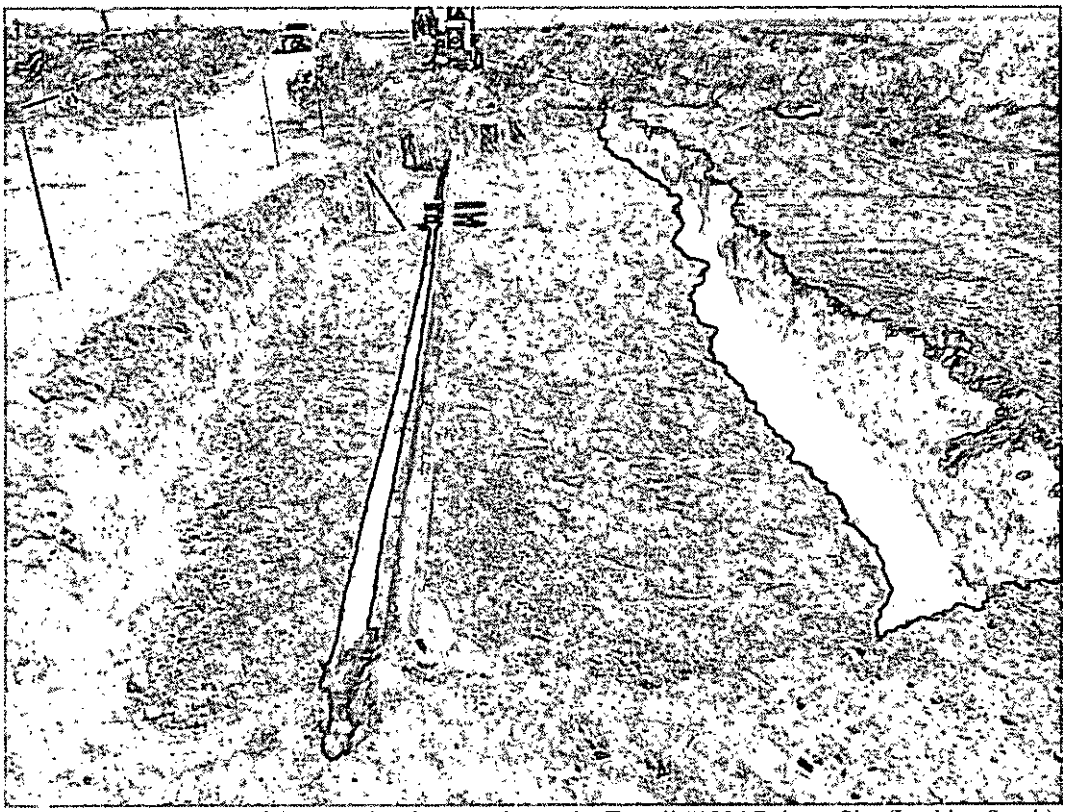


Figure 10. Photograph of the completed excavation at the Tunstil #1286 Release Site (Looking South)

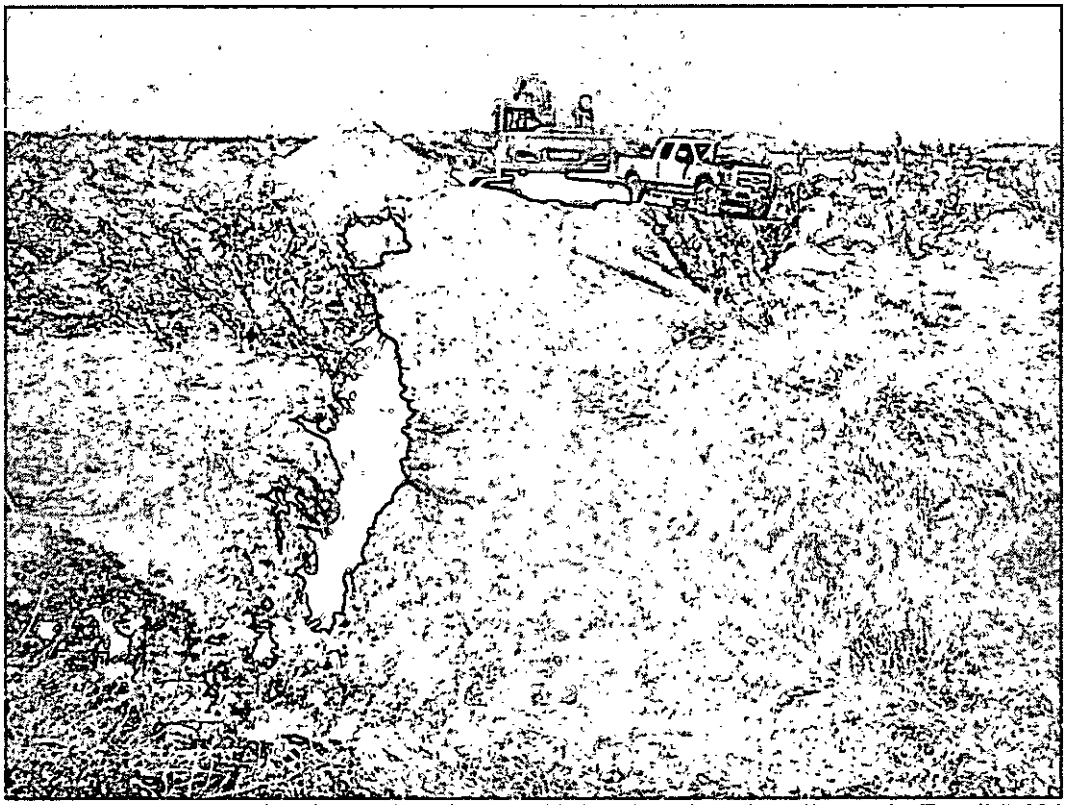


Figure 11. Photograph of the installation of pad sand below the polyurethane liner at the Tunstil #1286 Release Site (Looking Northeast)

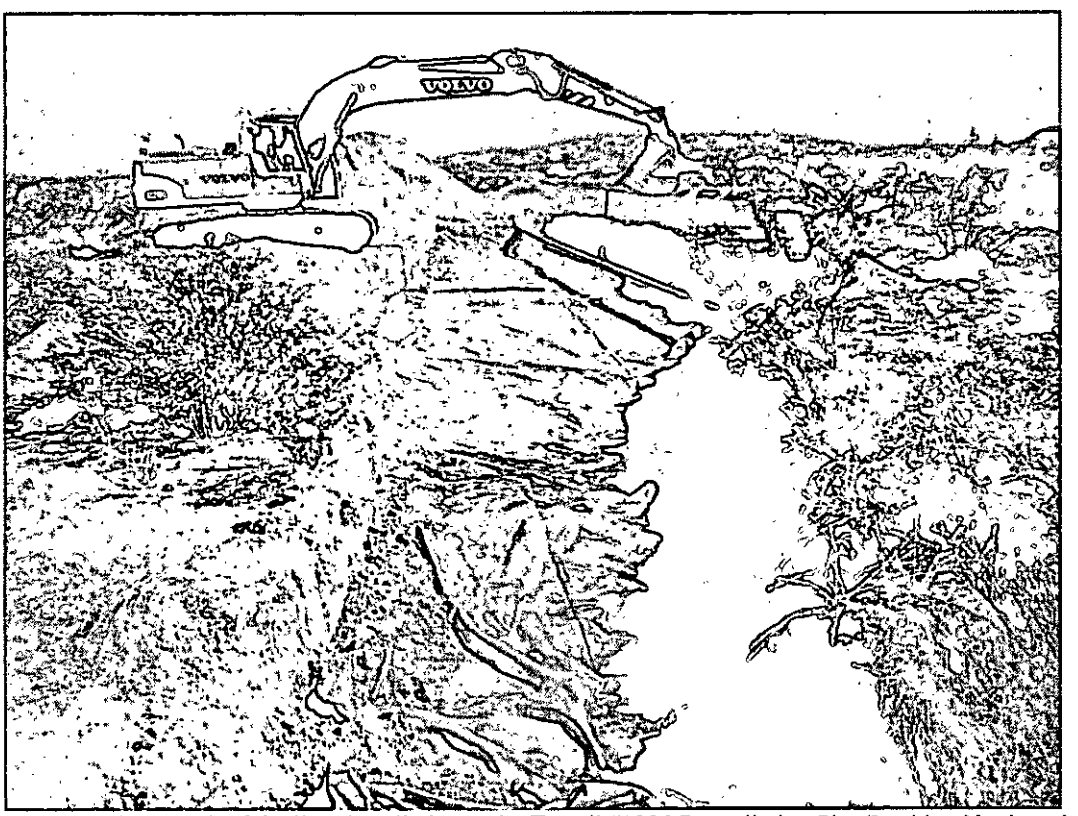


Figure 12. Photograph of the liner installation at the Tunstil #1286 Remediation Site (Looking Northeast)

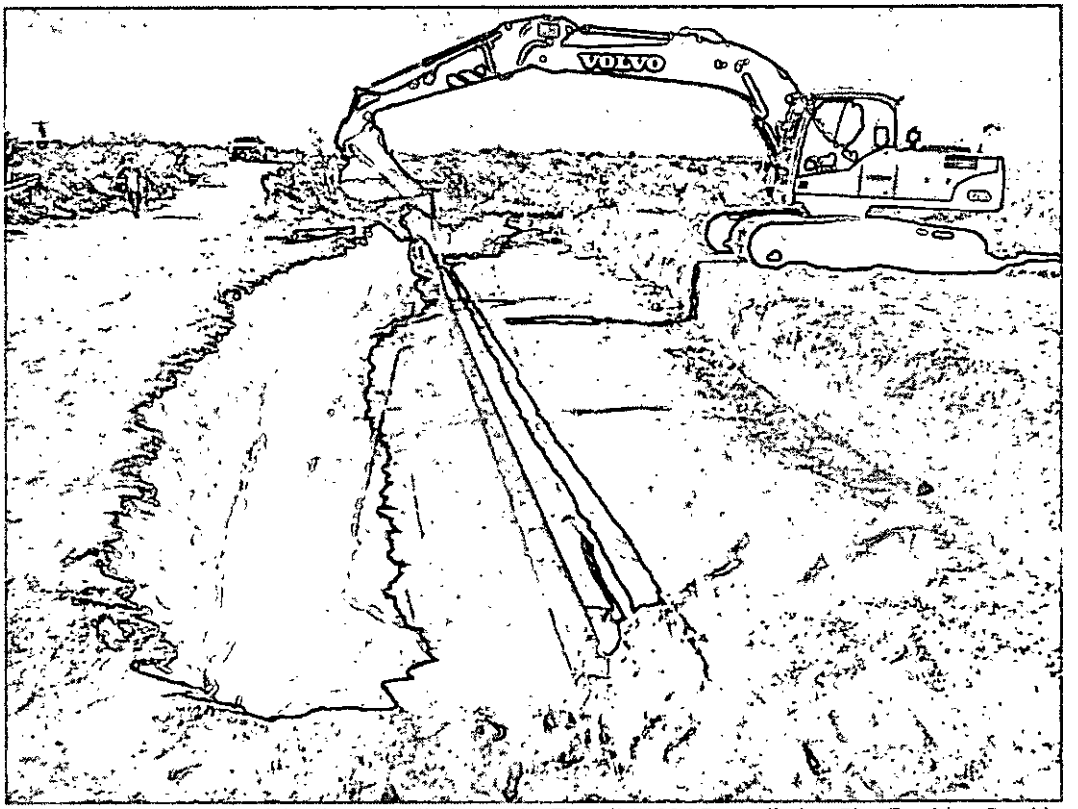


Figure 13. Photograph of the liner installation at the Tunstil #1286 Remediation Site (Looking South)

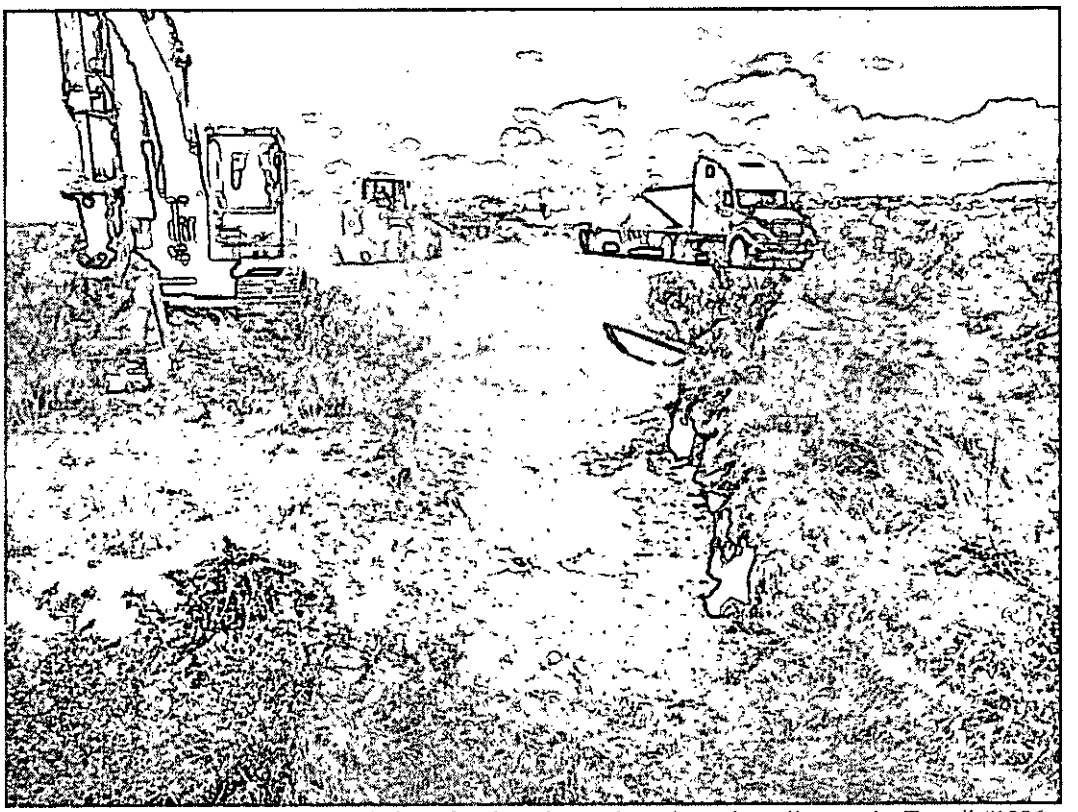


Figure 14 Photograph of the installation of pad sand atop the polyurethane liner at the Tunstil #1286 Remediation Site (Looking Northeast)

Figure 15. Photograph of backfilling activities at the Tunstil #1286 Remediation Site (Looking North)

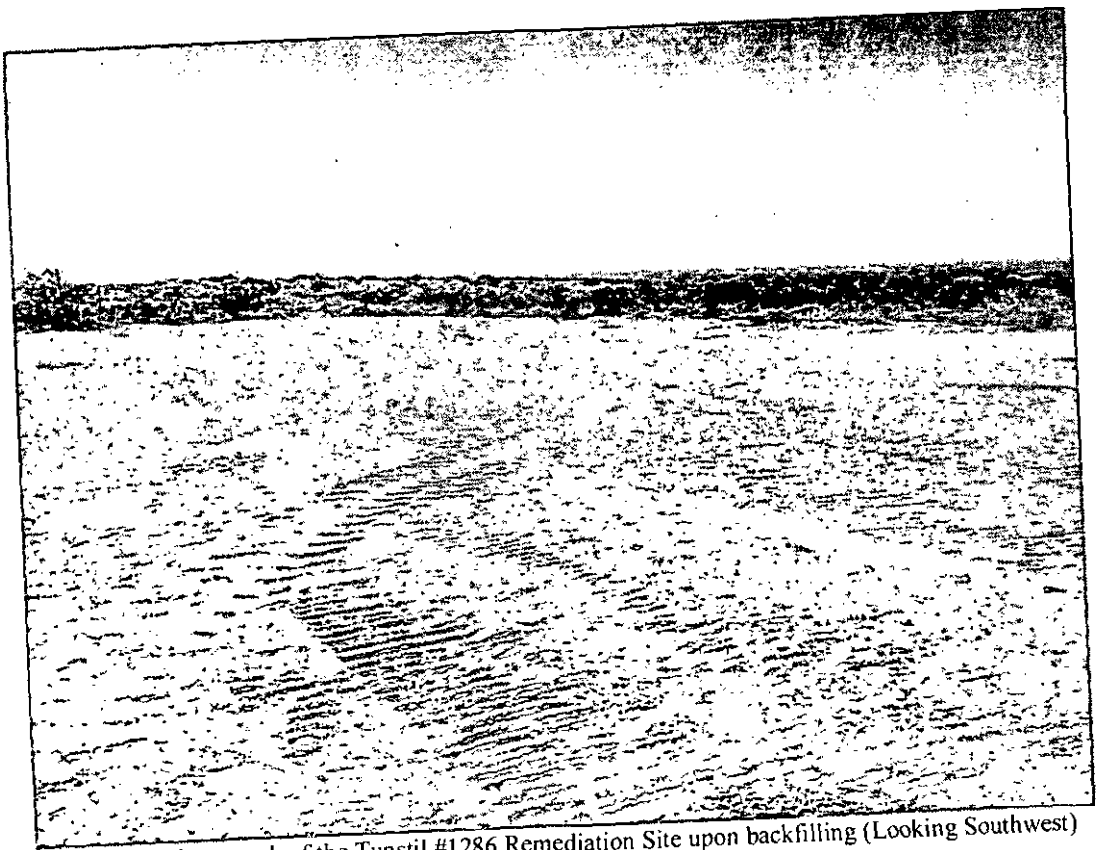


Figure 16. Photograph of the Tunstil #1286 Remediation Site upon backfilling (Looking Southwest)

Appendix B

Major Undesirable Event

(BLM Form MUE)

BUREAU OF LAND MANAGEMENT
WO MAJOR UNDESIRABLE EVENT (MUE) REPORTING FORMAT

BLM Office Reporting: BLM - CARLSBAD NM FIELD OFFICE				
BLM Employee: Jim Amos				
Company Official Reporting to BLM: CURT STANLEY				
Operator: SOUTHERN UNION GAS SERVICES				
Date/Time of Occurrence: 2/22/11 - 1322hrs	Date/Time BLM Notified: 3/11/11 - 830hrs.			
Field/Unit Name: KURK EDDY CO, NM	Lease Number: N/A			
State: NM | County: EDDY	Twn: 26S | Rng: 30E | Sec: 24 | Qtr: NW¼/SW¼			
Surface Ownership: (circle one)	Federal	Indian	State	FEE
Type of Event: (circle one)	Oil Spill	Oil/Water Spill	Gas Venting	Toxic Fluid Spill
	Saltwater Spill	Other Spill (Specify)	Blowout	Fire
	Injury	Fatality	Property Damage	Explosion

Nature and Cause of Event:
Pipeline failure due to internal Corrosion caused Crude Oil + produced water to flow into an ephermal wash.

Environmental Impact: EPHERMAL WASH WAS impacted. Grasses do not currently exhibit stress or die off.

Time Required to Control Event (Hours):	—
Volumes Discharged or Consumed:	4 barrels+, exact volume unknown
Volumes Recovered:	None

Action Taken to Control Event: Pipeline was clamped and subquently replaced

Resultant Damage: Approximately 900 linear feet of wash was impacted.

Clean-Up Procedures: RELEASE Point will be excavated, attected wash will be washed with freshwater.

Cause/Extent of Personal Injury: N/A.

Agency Notification List: (Federal/State/Local):	Agency Name	Contact Name	Date/Time
	BLM	Jim Amos	3/11/11 - 830hrs.

Remarks:

Attachment 2

Appendix C

Archaeological Survey

(NMCRIS Investigation Abstract Form)

NMCRIS INVESTIGATION ABSTRACT FORM (NIAF)

1. NMCRIS Activity No.:	2a. Lead Agency:	2b. Other Agency(ies):	3. Lead Agency Report No.:
121046	US Bureau of Land Management Carlsbad Field Office		

4. Title of Report:

Class III archaeological survey required for Southern Union Gas Services

5. Type of Report

Negative

✓ *Positive*

Author(s)

Jowanna Westfall

6. Investigation Type

Research Design ✓ Archaeological Survey/Inventory Architectural Survey/Inventory Test Excavation Excavation

Collections/Non-Field Study Compliance Decision Based on Previous Inventory Overview/Lit Review Monitoring

Ethnographic Study Site/Property Specific Visit Historic Structures Report Other

7. Description of Undertaking (what does the project entail?): A class III archaeological survey was requested by Southern Union Gas Services because of a hydrocarbon and produced water leak from a pipeline. The hazardous material release is located in Sec. 24 T 26S R 30E alongside a caliche capped road and runs south down a small arroyo 420'. A pedestrian survey was conducted along the flagged spill area using 15 meter interval transects within 100' corridors on both sides. Within the 100' corridor an existing archaeological site was encountered, LA 108946 and LA 131223 (in-eligible). LA 108946 is located west of the Southern Union Gas spill approx. 65' from the surveyed arroyo containing the spill. A site update was conducted according to BLM guidelines for LA 108946 and LA 131223 (in-eligible).

In order to avoid LA 108946 it is required that the spill clean-up activity take place from the south side of the arroyo. A flagged area was placed (6/21/2011) on the north side of the survey area. The north side of the arroyo past the flagging is considered a "no impact zone". Access is recommended from the south side of the survey line. A monitor is not recommended as long as activities adhere to the fore mentioned recommendations. Any changes in methods for this clean-up that will require impacting the recommended "no impact zone" on the north side of the survey (past blue flagging) will be damaging the southeast portion of LA 108946. If these precautions cannot be met, it is recommended that there be an archaeological monitor and a re-evaluation of access. **A monitor is not recommended as long as activities adhere to the fore mentioned recommendations.** Any changes in methods for this clean-up that will require impacting the recommended "no impact zone" are prohibited and in such cases will require an archaeological monitor and a re-evaluation of access.

Additional Archaeological Sites present within a 1 mile radius include: LA 108937, LA 122408, LA 114192 and LA 114192 These sites will not be impacted by clean-up activity.

8. Dates of Investigation: from: 20-Jun-2011 to: 20-Jun-2011 **9. Report Date:** 20-Jun-2011

10. Performing Agency/Consultant: Boone Arch Svcs of NM

Principal Investigator: Rebecca L. Hill

Field Supervisor: Jowanna Westfall

Field Personnel Names: Jowanna Westfall

11. Performing Agency/Consultant Report No.: BASNM 06-11-21

12. Applicable Cultural Resource Permit No(s): NM11-157-M
190-2920-09M

13. Client/Customer (project proponent):

Southern Union Gas Services

Contact: Curt Stanley

Address: Phone: 575-390-7595

14. Client/Customer Project No.:

15. Land Ownership Status (must be indicated on project map):

Land Owner (By Agency)	Acres Surveyed	Acres in APE
US Bureau of Land Management Carlsbad Field Office	0.96	0.30
TOTALS	0.96	0.30

16. Records Search(es):

Date(s) of HPD/ARMS File Review: 6/15/2011	Name of Reviewer(s): Jowanna Westfall	
Date(s) of Other Agency File Review: 6/15/2011	Name of Reviewer(s): Jowanna Westfall	Agency: BLM-CFO

17. Survey Data:

a. Source Graphics [ ] NAD 27 [x] NAD 83 Note: NAD 83 is the NMCRIS standard.

✓ USGS 7.5' (1:24,000) topo map Other topo map, Scale:

✓ GPS Unit Accuracy <1.0m ✓ 1-10m 10-100m >100m Aerial Photo(s)

Other Source Graphic(s):

b. USGS 7.5' Topographic Map Name USGS Quad Code

Phantom Banks, NM	32103-A7

c. County(ies): Eddy

d. Nearest City or Town: Orla, TX

e. Legal Description:

Township (N/S)	Range (E/W)	Section
26S	30E	24

Projected legal description? [x] Yes [ ] No [ ] Unplatted

f. Other Description (e.g. well pad footages, mile markers, plats, land grant name, etc.):

18. Survey Field Methods:

Intensity: ✓ 100% coverage <100% coverage

block survey units ✓ linear survey units (l x w):

Configuration:

other survey units (specify):

Scope: ✓ non-selective (all sites/properties recorded) selective/thematic (selected sites/properties recorded)

Coverage Method: systematic pedestrian coverage

other method (describe):

Survey Interval (m): 15 **Crew Size:** 1 **Fieldwork Dates:** from: 20-Jun-2011 to: 20-Jun-2011

Survey Person Hours: 1.00 **Recording Person Hours:** 3.00 **Total Hours:** 4.00

Additional Narrative:
Strict access has been given for the Southern Union Gas spill clean-up because of LA 108946. A monitor will be required if recommendations cannot be met.

[ ] Continuation

19. Environmental Setting (NRCS soil designation; vegetative community; elevation; etc.):

NRCS soil designation : Potter-Simona Complex (PS) 5-25% slopes. Environment consists of mesquite, grease wood and heavy desert grasses and forbes. The project area is situated in a lower area surrounded by slightly rolling hills, the survey area is located along a small drainage. Elevation in this area is approx. 3000'.

[ ] Continuation

20.a. Percent Ground Visibility: **b. Condition of Survey Area (grazed, bladed, undistributed, etc.):**

79%-99%

[ ] Continuation

21. CULTURAL RESOURCE FINDINGS ✓ **Yes, see next report section** **No, discuss why:**

[ ] Continuation

22. Attachments (check all appropriate boxes):

[x] USGS 7.5 Topographic Map with sites, isolates, and survey area clearly drawn (required)

[x] Copy of NMCRIS Map Check (required)

[ ] LA Site Forms - new sites (with sketch map & topographic map) if applicable

[x] LA Site Forms (update) - previously recorded & un-relocated sites (first 2 pages minimum)

[ ] Historic Cultural Property Inventory Forms, if applicable

[ ] List and Description of Isolates, if applicable

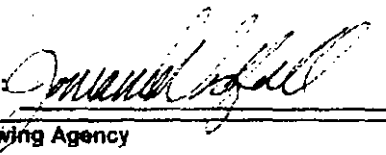
[ ] List and Description of Collections, if applicable

23. Other Attachments:

[ ] Photographs and Log

24. I certify the information provided above is correct and accurate and meets all applicable agency standards.

Principal Investigator/Qualified Supervisor: **Printed Name:** Rebecca L. Hill

Signature:  **Date:** 6/21/11 **Title:** Field Supervisor

25. Reviewing Agency	26. SHPO
Reviewer's Name/Date:	Reviewer's Name/Date:
Accepted [ ] Rejected [ ]	HPD Log #:
	Date sent to ARMS:

CULTURAL RESOURCE FINDINGS

[fill in appropriate section(s)]

SURVEY RESULTS:

Archaeological Sites discovered and registered: 0

Archaeological Sites discovered and NOT registered: 0

Previously recorded archaeological sites revisited (site update form required): 1

Previously recorded archaeological sites not relocated (site update form required): 0

TOTAL ARCHAEOLOGICAL SITES (visited & recorded): 1

Total isolates recorded: 0 **Non-selective isolate recording?**

HCPI properties discovered and registered: 0

HCPI properties discovered and NOT registered: 0

Previously recorded HCPI properties revisited: 0

Previously recorded HCPI properties not relocated: 0

TOTAL HCPI PROPERTIES (visited & recorded, including acequias): 0

MANAGEMENT SUMMARY:

A class III archaeological survey was requested by Southern Union Gas Services because of a hydrocarbon and produced water leak from a pipeline. The hazardous material release is located in Sec. 24 T 26S R 30E alongside a caliche capped road and runs south down a small arroyo 420'. A pedestrian survey was conducted along the flagged spill area using 15 meter interval transects within 100' corridors on both sides.

Archaeological resources are present within the project area...
In order to avoid LA 108946 it is required that the spill clean-up activity take place from the south side of the arroyo. A flagged area was placed (6/21/2011) on the north side of the survey area. The north side of the arroyo past the flagging is considered a "no impact zone". Access is recommended from the south side of the survey line. A monitor is not recommended as long as activities adhere to the fore mentioned recommendations. Any changes in methods for this clean-up that will require impacting the recommended "no impact zone" on the north side of the survey (past blue flagging) will be damaging the southeast portion of LA 108946. If these precautions cannot be met, it is recommended that there be an archaeological monitor and a re-evaluation of access.

IF REPORT IS NEGATIVE, YOU ARE DONE AT THIS POINT.

SURVEY LA/HCPI NUMBER LOG

Sites/Properties Discovered:

LA/HCPI No.	Field/Agency No.	Eligible? (Y/N/U, applicable criteria)

Previously recorded revisited sites/HCPI properties:

LA/HCPI No.	*Field/Agency No.*	Eligible? (Y/N/U, applicable criteria)
LA 108946		Yes D
LA 131223		No

MONITORING LA NUMBER LOG (site form required)

Sites Discovered (site form required):

LA No. **Field/Agency No.**

Previously recorded sites (site update form required):

LA No. **Field/Agency No.**

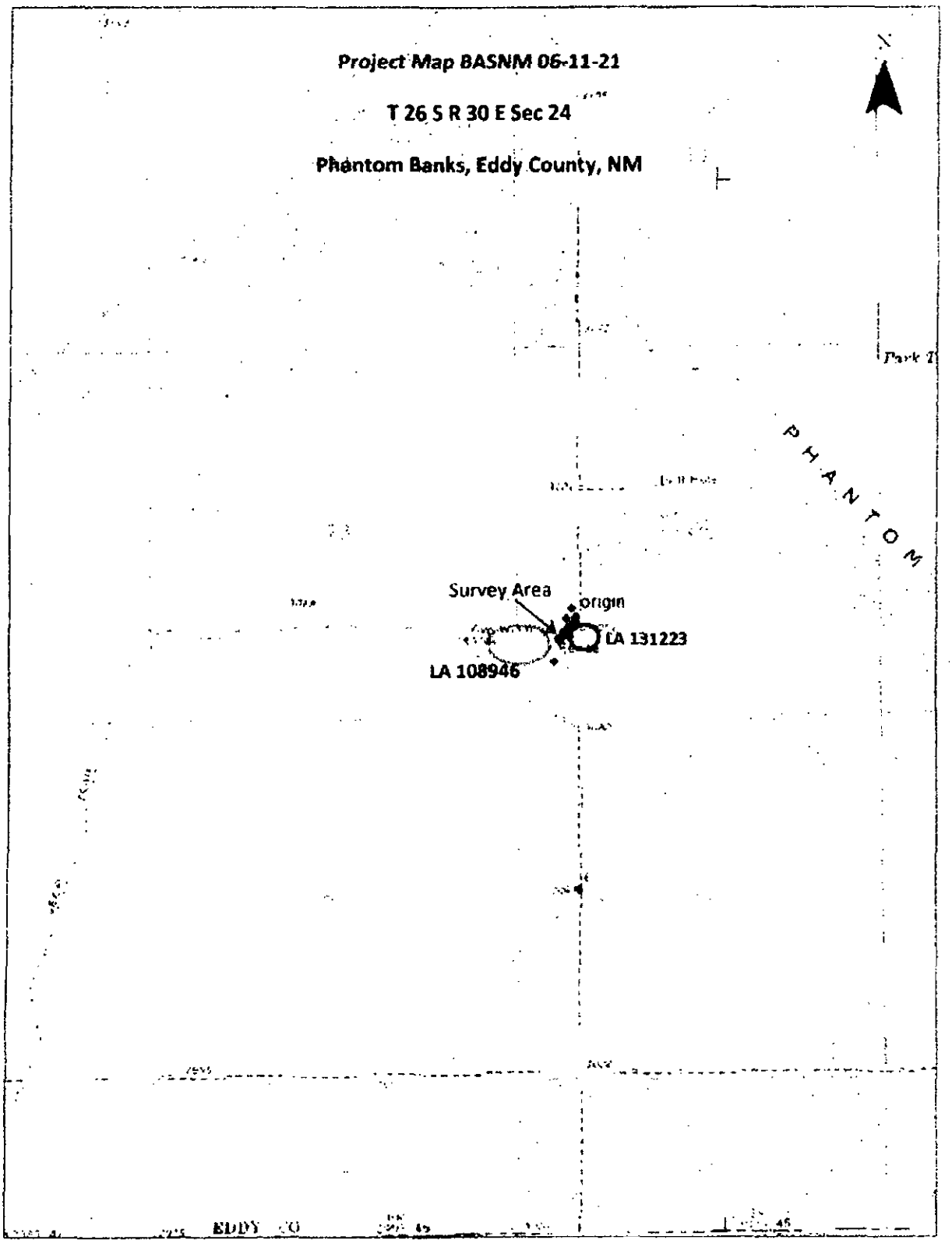
Areas outside known nearby site boundaries monitored? **[ ] Yes** **[x] No, Explain why:**

In "a good faith effort"-area of impact concern has been flagged and deemed as inaccessible for project activities past flagging.

TESTING & EXCAVATION LA NUMBER LOG (site form required)

Tested LA number(s)

Excavated LA number(s)


Project Map BASNM 06-11-21
T 26 S R 30 E Sec 24
Phantom Banks, Eddy County, NM
N
PHANTOM
Survey Area
origin
LA 131223
LA 108946
EDDY CO
0 300 600 1,200 Meters
State
In-eligible Arch Site
Eligible Arch Site

Appendix D

Laboratory Analytical Reports

Analytical Report 419997

for

Southern Union Gas Services- Monahans

Project Manager: Rose Slade

Tunstil #1286

20-JUN-11

Collected By: Client

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)

XENCO Laboratories

20-JUN-11

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

Reference: XENCO Report No: **419997**
Tunstil #1286
Project Address: SE of Loving, 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 419997. 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. 419997 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 419997

Southern Union Gas Services- Monahans, Monahans, TX

Tunstil #1286

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
Draw #1	S	Jun-14-11 10:00		419997-001
Draw #2	S	Jun-14-11 10:05		419997-002
Draw #3	S	Jun-14-11 10:10		419997-003
Draw #4	S	Jun-14-11 10:15		419997-004

CASE NARRATIVE

Client Name: Southern Union Gas Services- Monahans
Project Name: Tunstil #1286

Project ID:
Work Order Number: 419997

Report Date: 20-JUN-11
Date Received: 06/15/2011

Sample receipt non conformances and comments:
None

Sample receipt non conformances and comments per sample:

None
Analytical non nonformances and comments:

Batch: LBA-860225 TPH By SW8015 Mod
SW8015MOD_NM

Batch 860225, 1-Chlorooctane recovered above QC limits . Matrix interferences is suspected; data not confirmed by re-analysis
Samples affected are: 419993-001 D,419997-001,419997-002.
o-Terphenyl recovered above QC limits Data not confirmed by re-analysis. Samples affected are: 605233-1-BLK,419993-001 D,419997-004,419997-003.

RPD is outside QC limist in the range C28-C35 between the sample and sample duplicate.
Samples affected are: 419997-001, -002, -003, -004

Certificate of Analysis Summary 419997

Southern Union Gas Services- Monahans, Monahans, TX

Project Name: Tunstil #1286

Project Id:
Contact: Rose Slade
Project Location: SE of Loving, NM

Date Received in Lab: Wed Jun-15-11 02:44 pm
Report Date: 20-JUN-11
Project Manager: Brent Barron, II

Analysis Requested											
	Lab Id:	419997-001		419997-002		419997-003		419997-004			
	Field Id:	Draw #1		Draw #2		Draw #3		Draw #4			
	Depth:										
	Matrix:	SOIL		SOIL		SOIL		SOIL			
	Sampled:	Jun-14-11 10:00		Jun-14-11 10:05		Jun-14-11 10:10		Jun-14-11 10:15			
Anions by E300	*Extracted:*										
	Analyzed:	Jun-15-11 15:50		Jun-15-11 15:50		Jun-15-11 15:50		Jun-15-11 15:50			
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL		
Chloride		8450	422	1990	42.4	5330	169	1100	16.8		
Percent Moisture	*Extracted:*										
	Analyzed:	Jun-15-11 17:00		Jun-15-11 17:00		Jun-15-11 17:00		Jun-15-11 17:00			
	Units/RL:	%	RL	%	RL	%	RL	%	RL		
Percent Moisture		ND	1.00	ND	1.00	ND	1.00	ND	1.00		
TPH By SW8015 Mod	*Extracted:*	Jun-15-11 15:45		Jun-15-11 15:45		Jun-15-11 15:45		Jun-15-11 15:45			
	Analyzed:	Jun-15-11 21:54		Jun-15-11 22:22		Jun-15-11 22:51		Jun-15-11 23:19			
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL		
C6-C12 Gasoline Range Hydrocarbons		ND	15.0	111	15.2	ND	15.2	ND	15.0		
C12-C28 Diesel Range Hydrocarbons		2300	15.0	3820	15.2	1520	15.2	732	15.0		
C28-C35 Oil Range Hydrocarbons		21.5	15.0	26.4	15.2	37.1	15.2	39.3	15.0		
Total TPH		2320	15.0	3960	15.2	1560	15.2	771	15.0		

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 affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.

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

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

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

F RPD exceeded lab control limits.

J The target analyte was positively identified below the 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

LOD Limit of Detection

LOQ Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

+ Outside XENCO's scope of NELAC Accreditation.

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: Tunstil #1286

Work Orders : 419997,

Project ID:

Lab Batch #: 860225 **Sample:** 605233-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 06/15/11 20:28

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	126	100	126	70-135	
o-Terphenyl	65.1	50.2	130	70-135	

Lab Batch #: 860225 **Sample:** 605233-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 06/15/11 20:57

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	118	99.9	118	70-135	
o-Terphenyl	60.9	50.0	122	70-135	

Lab Batch #: 860225 **Sample:** 605233-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 06/15/11 21:25

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	130	99.7	130	70-135	
o-Terphenyl	73.2	49.9	147	70-135	*

Lab Batch #: 860225 **Sample:** 419997-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 06/15/11 21:54

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	136	99.6	137	70-135	*
o-Terphenyl	37.9	49.8	76	70-135	

Lab Batch #: 860225 **Sample:** 419997-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 06/15/11 22:22

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	146	100	146	70-135	*
o-Terphenyl	36.2	50.1	72	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: Tunstil #1286

Work Orders : 419997,

Project ID:

Lab Batch #: 860225 **Sample:** 419997-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 06/15/11 22:51

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	118	101	117	70-135	
o-Terphenyl	68.6	50.3	136	70-135	*

Lab Batch #: 860225 **Sample:** 419997-004 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 06/15/11 23:19

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	134	99.6	135	70-135	
o-Terphenyl	77.3	49.8	155	70-135	*

Lab Batch #: 860225 **Sample:** 419993-001 D / MD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 06/16/11 04:05

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	161	100	161	70-135	*
o-Terphenyl	73.4	50.1	147	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: Tunstil #1286

Work Order #: 419997 **Project ID:**

Analyst: LATCOR **Date Prepared:** 06/15/2011 **Date Analyzed:** 06/15/2011

Lab Batch ID: 860610 **Sample:** 860610-1-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	<0.420	10.0	9.14	91	10.0	9.00	90	2	75-125	20	

Analyst: BEV **Date Prepared:** 06/15/2011 **Date Analyzed:** 06/15/2011

Lab Batch ID: 860225 **Sample:** 605233-1-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	<15.0	1000	743	74	999	712	71	4	70-135	35	
C12-C28 Diesel Range Hydrocarbons	<15.0	1000	833	83	999	737	74	12	70-135	35	

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

XENCO Laboratories

Form 3 - MS Recoveries

Project Name: Tunstil #1286

Work Order #: 419997

Lab Batch #: 860610 **Project ID:**

Date Analyzed: 06/15/2011 **Date Prepared:** 06/15/2011 **Analyst:** LATCOR

QC- Sample ID: 419997-001 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	8450	10000	19400	110	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

Sample Duplicate Recovery

Project Name: Tunstil #1286

Work Order #: 419997

Lab Batch #: 860610 **Project ID:**
Date Analyzed: 06/15/2011 15:50 **Date Prepared:** 06/15/2011 **Analyst:** LATCOR
QC- Sample ID: 419997-001 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	8450	8250	2	20	

Lab Batch #: 860189
Date Analyzed: 06/15/2011 17:00 **Date Prepared:** 06/15/2011 **Analyst:** LATCOR
QC- Sample ID: 419926-001 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	8.31	8.43	1	20	

Lab Batch #: 860225
Date Analyzed: 06/16/2011 04:05 **Date Prepared:** 06/15/2011 **Analyst:** BEV
QC- Sample ID: 419993-001 D **Batch #:** 1 **Matrix:** Soil
Reporting Units: mg/kg

TPH By SW8015 Mod Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY				
	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
C6-C12 Gasoline Range Hydrocarbons	3620	3960	9	35	
C12-C28 Diesel Range Hydrocarbons	8970	9300	4	35	
C28-C35 Oil Range Hydrocarbons	230	153	40	35	F

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

The Environmental Lab of Texas

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: 201 S. LOOP 464
City/State/Zip: MONAHANS TX 79756
Telephone No: 432-940-5147 Fax No:
Sampler Signature:
e-mail:

Project Name: TUNSTIL #1286
Project #:
Project Loc: SEC 1 = LOVING, NM
PO #:
Report Format: ☑ Standard ☐ TRRP ☐ NPDES

(lab use only)
ORDER #: 419997

Analyze For:

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Preservation & # of Containers: Field Filtered	Total # 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	TCLP: TPH: 418.1 (8015M)	TOTAL: 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.	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
001	DRAW #1			6/14	1000	—	1	X								DW	X											X		X
002	DRAW #2				1005																									
003	DRAW #3				1010																									
004	DRAW #4				1015																									

Special Instructions: HOLD FOR BTEX

Relinquished by:	Date	Time	Received by:	Date	Time
	6/15/11	1444			
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT: Lisa Murdock	6/15/11	14:44

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
Temperature Upon Receipt: 4.0 C/C 2.1 °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: 6-15-11 14:44
Lab ID # : 419997
Initials: LM

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	2.1 °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 421101

for

Southern Union Gas Services- Monahans

Project Manager: Rose Slade

Tunstil #1286

28-JUN-11

Collected By: Client

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 (AZ0765), Arkansas (08-039-0), Connecticut (PH-0102), Florida (E871002)
Illinois (002082), Indiana (C-TX-02), Iowa (392), Kansas (E-10380), Kentucky (45), Louisiana (03054)
New Hampshire (297408), New Jersey (TX007), New York (11763), Oklahoma (9218), Pennsylvania (68-03610)
Rhode Island (LAO00312), USDA (S-44102)

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)

28-JUN-11

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

Reference: XENCO Report No: **421101**
Tunstil #1286
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 421101. 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. 421101 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 421101

Southern Union Gas Services- Monahans, Monahans, TX

Tunstil #1286

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
South Release Point @2'	S	Jun-22-11 12:45	2 ft	421101-001
South Release Point @6	S	Jun-22-11 13:15	6 ft	421101-002
South Flow Path @2'	S	Jun-22-11 13:45	2 ft	421101-003
South Flow Path @6'	S	Jun-22-11 14:15	6 ft	421101-004
North Release Point @2'	S	Jun-22-11 14:45	2 ft	421101-005
North Release Point @6'	S	Jun-22-11 15:15	6 ft	421101-006

CASE NARRATIVE

Client Name: Southern Union Gas Services- Monahans
Project Name: Tunstil #1286

Project ID:
Work Order Number: 421101

Report Date: 28-JUN-11
Date Received: 06/24/2011

Sample receipt non conformances and comments:
None

Sample receipt non conformances and comments per sample:

None

Certificate of Analysis Summary 421101

Southern Union Gas Services- Monahans, Monahans, TX

Project Name: Tunstil #1286

Project Id:
Contact: Rose Slade
Project Location: Lea County, NM

Date Received in Lab: Fri Jun-24-11 02:14 pm
Report Date: 28-JUN-11
Project Manager: Brent Barron, II

Analysis Requested	*Lab Id:*	421101-001		421101-002		421101-003		421101-004		421101-005		421101-006	
	Field Id:	South Release Point @2'		South Release Point @6		South Flow Path @2'		South Flow Path @6'		North Release Point @2'		North Release Point @6'	
	Depth:	2 ft		6 ft		2 ft		6 ft		2 ft		6 ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Jun-22-11 12:45		Jun-22-11 13:15		Jun-22-11 13:45		Jun-22-11 14:15		Jun-22-11 14:45		Jun-22-11 15:15	
Anions by E300	*Extracted:*												
	Analyzed:	Jun-27-11 17:26		Jun-27-11 17:26		Jun-27-11 17:26		Jun-27-11 17:26		Jun-27-11 17:26		Jun-27-11 17:26	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		4270	43.1	3280	21.2	3480	21.2	2650	21.2	3740	42.6	2460	21.1
Percent Moisture	*Extracted:*												
	Analyzed:	** ** ** **		** ** ** **		** ** ** **		** ** ** **		** ** ** **		** ** ** **	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		7.26	1.00	5.66	1.00	5.60	1.00	5.75	1.00	6.08	1.00	5.09	1.00
TPH By SW8015 Mod	*Extracted:*	Jun-24-11 15:30				Jun-24-11 15:30				Jun-24-11 15:30			
	Analyzed:	Jun-25-11 19:48				Jun-25-11 20:17				Jun-25-11 20:46			
	Units/RL:	mg/kg	RL			mg/kg	RL			mg/kg	RL		
C6-C12 Gasoline Range Hydrocarbons		ND	16.2			ND	15.9			ND	16.0		
C12-C28 Diesel Range Hydrocarbons		30.9	16.2			ND	15.9			ND	16.0		
C28-C35 Oil Range Hydrocarbons		ND	16.2			ND	15.9			ND	16.0		
Total TPH		30.9	16.2			ND	15.9			ND	16.0		

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 affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.

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

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

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

F RPD exceeded lab control limits.

J The target analyte was positively identified below the 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

LOD Limit of Detection

LOQ Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

+ Outside XENCO's scope of NELAC Accreditation.

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: Tunstil #1286

Work Orders : 421101,

Project ID:

Lab Batch #: 861541 **Sample:** 606008-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 06/25/11 12:23

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	124	100	124	70-135	
o-Terphenyl	62.2	50.1	124	70-135	

Lab Batch #: 861541 **Sample:** 606008-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 06/25/11 12:53

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	128	100	128	70-135	
o-Terphenyl	58.7	50.2	117	70-135	

Lab Batch #: 861541 **Sample:** 606008-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 06/25/11 13:23

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	117	101	116	70-135	
o-Terphenyl	63.0	50.3	125	70-135	

Lab Batch #: 861541 **Sample:** 421101-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 06/25/11 19:48

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	116	100	116	70-135	
o-Terphenyl	62.4	50.1	125	70-135	

Lab Batch #: 861541 **Sample:** 421101-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 06/25/11 20:17

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	111	100	111	70-135	
o-Terphenyl	58.9	50.0	118	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: Tunstil #1286

Work Orders : 421101,

Project ID:

Lab Batch #: 861541 **Sample:** 421101-005 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 06/25/11 20:46

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	114	99.9	114	70-135	
o-Terphenyl	62.6	50.0	125	70-135	

Lab Batch #: 861541 **Sample:** 421099-004 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 06/25/11 21:43

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	121	99.8	121	70-135	
o-Terphenyl	59.8	49.9	120	70-135	

Lab Batch #: 861541 **Sample:** 421099-004 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 06/25/11 22:12

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	122	100	122	70-135	
o-Terphenyl	61.2	50.2	122	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: Tunstil #1286

Work Order #: 421101 **Project ID:**

Analyst: BRB **Date Prepared:** 06/27/2011 **Date Analyzed:** 06/27/2011

Lab Batch ID: 861710 **Sample:** 861710-1-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	<0.840	20.0	20.4	102	20.0	20.5	103	0	75-125	20	

Analyst: BEV **Date Prepared:** 06/24/2011 **Date Analyzed:** 06/25/2011

Lab Batch ID: 861541 **Sample:** 606008-1-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	<15.0	1000	1020	102	1000	935	94	9	70-135	35	
C12-C28 Diesel Range Hydrocarbons	<15.0	1000	1030	103	1000	971	97	6	70-135	35	

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

XENCO Laboratories

Form 3 - MS Recoveries

Project Name: Tunstil #1286

Work Order #: 421101

Lab Batch #: 861710 **Project ID:**

Date Analyzed: 06/27/2011 **Date Prepared:** 06/27/2011 **Analyst:** BRB

QC- Sample ID: 421096-001 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	10200	11800	22700	106	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: Tunstil #1286

Work Order # : 421101 **Project ID:**

Lab Batch ID: 861541 **QC- Sample ID:** 421099-004 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 06/25/2011 **Date Prepared:** 06/24/2011 **Analyst:** BEV

Reporting Units: mg/kg

	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
TPH By SW8015 Mod **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	<15.4	1030	956	93	1030	969	94	1	70-135	35	
C12-C28 Diesel Range Hydrocarbons	32.6	1030	970	91	1030	998	94	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: Tunstil #1286

Work Order #: 421101

Lab Batch #: 861710 **Project ID:**

Date Analyzed: 06/27/2011 17:26 **Date Prepared:** 06/27/2011 **Analyst:** BRB

QC- Sample ID: 421096-001 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	10200	10200	0	20	

Lab Batch #: 861551

Date Analyzed: 06/24/2011 13:50 **Date Prepared:** 06/24/2011 **Analyst:** WRU

QC- Sample ID: 421098-001 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	7.88	8.41	7	20	

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

Xenco Laboratories

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765

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

Project Manager: Ben J. Arguijo

Company Name: Basin Environmental Service Technologies, LLC

Company Address: P.O. Box 301

City/State/Zip: Lovington, NM 88260

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

Sampler Signature:

e-mail: pm@basinenv.com

Project Name: Tunstil #1286

Project #:

Project Loc: Lea County, NM

PO #:

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

(lab use only)

ORDER #: 421101

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) 8015B	TPH: TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	TOTAL: BTEX 8021B/5030 or BTEX 8260 X	RCI	N.O.R.M.	CHLORIDES 300			RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT 4 DAY
001	South Release Point @ 2'			6/22/2011	1245		1	X								SOIL	X											X				X
002	South Release Point @ 6'			6/22/2011	1315		1	X								SOIL												X				X
003	South Flow Path @ 2'			6/22/2011	1345		1	X								SOIL	X											X				X
004	South Flow Path @ 6'			6/22/2011	1415		1	X								SOIL												X				X
005	North Release Point @ 2'			6/22/2011	1445		1	X								SOIL	X											X				X
006	North Release Point @ 6'			6/22/2011	1515		1	X								SOIL												X				X

Special Instructions: Bill To Southern Union

	Date	Time		Date	Time
Relinquished by:	6/22/11	1730	Received by:	6-22-11	1730
Relinquished by:	6-24-11	9:54	Received by:	6/24/11	0954
Relinquished by:	6/24/11	1412	Received by ELOT:	6-24-11	14:12

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 NA

Custody seals on cooler(s) (Y) N

Sample Hand Delivered by Sampler/Client Rep. ? N

by Courier? UPS DHL FedEx Lone Star

4 oz ice

Temperature Upon Receipt 3.1 °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

Date/Time: 6-24-11 14:12

Lab ID # : 421101

Initials: LM

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 422800

for

Southern Union Gas Services- Monahans

Project Manager: Rose Slade

Tunstil # 1286

14-JUL-11

Collected By: Client

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 (AZ0765), Arkansas (08-039-0), Connecticut (PH-0102), Florida (E871002)
Illinois (002082), Indiana (C-TX-02), Iowa (392), Kansas (E-10380), Kentucky (45), Louisiana (03054)
New Hampshire (297408), New Jersey (TX007), New York (11763), Oklahoma (9218), Pennsylvania (68-03610)
Rhode Island (LAO00312), USDA (S-44102)

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)
Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)
Xenco Tucson (EPA Lab code:AZ000989): Arizona (AZ0758)

XENCO Laboratories

14-JUL-11

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

Reference: XENCO Report No: **422800**
Tunstil # 1286
Project Address: Eddy 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 422800. 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. 422800 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 422800

Southern Union Gas Services- Monahans, Monahans, TX

Tunstil # 1286

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
Draw 1 A	S	Jul-12-11 13:30		422800-001
Draw 2 A	S	Jul-12-11 13:35		422800-002
Draw 3 A	S	Jul-12-11 13:40		422800-003
Draw 4 A	S	Jul-12-11 13:45		422800-004

CASE NARRATIVE

Client Name: Southern Union Gas Services- Monahans
Project Name: Tunstil # 1286

Project ID:
Work Order Number: 422800

Report Date: 14-JUL-11
Date Received: 07/12/2011

Sample receipt non conformances and comments:
None

Sample receipt non conformances and comments per sample:

None

Certificate of Analysis Summary 422800

Southern Union Gas Services- Monahans, Monahans, TX

Project Name: Tunstil # 1286

Project Id:

Contact: Rose Slade

Project Location: Eddy County, NM

Date Received in Lab: Tue Jul-12-11 04:37 pm

Report Date: 14-JUL-11

Project Manager: Brent Barron, II

Analysis Requested											
	Lab Id:	422800-001		422800-002		422800-003		422800-004			
	Field Id:	Draw 1 A		Draw 2 A		Draw 3 A		Draw 4 A			
	Depth:										
	Matrix:	SOIL		SOIL		SOIL		SOIL			
	Sampled:	Jul-12-11 13:30		Jul-12-11 13:35		Jul-12-11 13:40		Jul-12-11 13:45			
Anions by E300	*Extracted:*										
	Analyzed:	Jul-13-11 14:09		Jul-13-11 14:09		Jul-13-11 14:09		Jul-13-11 14:09			
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL		
Chloride		944	42.0	1040	42.3	886	21.1	2260	42.1		
Percent Moisture	*Extracted:*										
	Analyzed:	Jul-13-11 11:05		Jul-13-11 11:05		Jul-13-11 11:05		Jul-13-11 11:05			
	Units/RL:	%	RL	%	RL	%	RL	%	RL		
Percent Moisture		ND	1.00	ND	1.00	ND	1.00	ND	1.00		

XENCO Laboratories

Flagging Criteria

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

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

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

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

F RPD exceeded lab control limits.

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

U Analyte was not detected.

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

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

K Sample analyzed outside of recommended hold time.

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

BRL Below Reporting Limit.

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

+ Outside XENCO's scope of NELAC Accreditation.

BS / BSD Recoveries

Project Name: Tunstil # 1286

Work Order #: 422800 **Project ID:**

Analyst: BRB **Date Prepared:** 07/13/2011 **Date Analyzed:** 07/13/2011

Lab Batch ID: 863786 **Sample:** 863786-1-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	<0.840	20.0	20.5	103	20.0	20.4	102	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

Version: 1.%

Final 1.000

Form 3 - MS Recoveries

Project Name: Tunstil # 1286

Work Order #: 422800

Lab Batch #: 863786 **Project ID:**

Date Analyzed: 07/13/2011 **Date Prepared:** 07/13/2011 **Analyst:** BRB

QC- Sample ID: 422512-001 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	23.6	218	225	92	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

Version: 1.%

Sample Duplicate Recovery

Project Name: Tunstil # 1286

Work Order #: 422800

Lab Batch #: 863786 **Project ID:**

Date Analyzed: 07/13/2011 14:09 **Date Prepared:** 07/13/2011 **Analyst:** BRB

QC- Sample ID: 422512-001 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	23.6	20.8	13	20	

Lab Batch #: 863745

Date Analyzed: 07/13/2011 11:05 **Date Prepared:** 07/13/2011 **Analyst:** WRU

QC- Sample ID: 422841-001 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	14.0	14.1	1	20	

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

Version: 1.%

Final 1.000

Xenco Laboratories

The Environmental Lab of Texas

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: 801 S. LOOP 464
City/State/Zip: MONAHANS, TX 79756
Telephone No: 432-940-5147 Fax No:
Sampler Signature:
e-mail: rose.slade@sug.com

Project Name: JUSTIN #1264
Project #:
Project Loc: EDDY Co NM
PO #:
Report Format: [X] Standard [ ] TRRP [ ] NPDES

(lab use only)
ORDER #: 422800

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers: Ice	HNO3	HCl	H2SO4	NaOH	Na2S2O3	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge	GW=Groundwater S=Soil/Solid	NP=Non-Potable Specify Other	Analyze For: 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.	Chloride 300	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
01	DRAW 1A			7/12	1330		1							X		SOIL															X		X
02	DRAW 2A				1335																												
03	DRAW 3A				1340																												
04	DRAW 4A				1345																												

Special Instructions:

Relinquished by:	Date	Time	Received by:	Date	Time
	7/12/11	1637			
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT: Andrea Adams	7.12.11	16:37

Laboratory Comments:
Sample Containers Intact? Y N
VOCs Free of Headspace? Y N
Labels on container(s) Y N
Custody seals on container(s) Y N
Custody seals on cooler(s) Y N
Sample Hand Delivered by Sampler/Client Rep. ? Y N
by Courier? UPS DHL FedEx Lone Star
4oz glass
Temperature Upon Receipt: 28.1 °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: SUGS

Date/Time: 7.12.11 16:37

Lab ID # : 422800

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	28.1 °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 428845

for

Southern Union Gas Services- Monahans

Project Manager: Rose Slade

Tunstil # 1286

17-OCT-11

Collected By: Client

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 (AZ0765), Arkansas (08-039-0), Connecticut (PH-0102), Florida (E871002)
Illinois (002082), Indiana (C-TX-02), Iowa (392), Kansas (E-10380), Kentucky (45), Louisiana (03054)
New Hampshire (297408), New Jersey (TX007), New York (11763), Oklahoma (9218), Pennsylvania (68-03610)
Rhode Island (LAO00312), USDA (S-44102)

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 Phoenix (EPA Lab Code: AZ00901): Arizona(AZ0757)
Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)
Xenco Tucson (EPA Lab code:AZ000989): Arizona (AZ0758)

17-OCT-11

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

Reference: XENCO Report No: **428845**
Tunstil # 1286
Project Address: Eddy County, New Mexico

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 428845. 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. 428845 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 428845

Southern Union Gas Services- Monahans, Monahans, TX

Tunstil # 1286

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
Draw 1 B	S	10-03-11 10:00		428845-001
Draw 2 B	S	10-03-11 10:05		428845-002
Draw 3 B	S	10-03-11 10:10		428845-003
Draw 4 B	S	10-03-11 10:15		428845-004

CASE NARRATIVE

Client Name: Southern Union Gas Services- Monahans
Project Name: Tunstil # 1286

Project ID:
Work Order Number: 428845

Report Date: 17-OCT-11
Date Received: 10/04/2011

Sample receipt non conformances and comments:
None

Sample receipt non conformances and comments per sample:

None

Analytical non nonformances and comments:

Batch: LBA-872379 TPH By SW8015 Mod
SW8015MOD_NM

Batch 872379, 1-Chlorooctane recovered below QC limits . Matrix interferences is suspected; data confirmed by re-analysis
Samples affected are: 428845-003.

SW8015MOD_NM

Batch 872379, C6-C12 Gasoline Range Hydrocarbons recovered below QC limits in the Matrix Spike. C12-C28 Diesel Range Hydrocarbons recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate.
Samples affected are: 428845-003, -002, -001, -004.
The Laboratory Control Sample for C12-C28 Diesel Range Hydrocarbons, C6-C12 Gasoline Range Hydrocarbons is within laboratory Control Limits

Certificate of Analysis Summary 428845

Southern Union Gas Services- Monahans, Monahans, TX

Project Name: Tunstil # 1286

Project Id:

Contact: Rose Slade

Project Location: Eddy County, New Mexico

Date Received in Lab: Tue Oct-04-11 08:22 am

Report Date: 17-OCT-11

Project Manager: Brent Barron II

Analysis Requested											
	Lab Id:	428845-001		428845-002		428845-003		428845-004			
	Field Id:	Draw 1 B		Draw 2 B		Draw 3 B		Draw 4 B			
	Depth:										
	Matrix:	SOIL		SOIL		SOIL		SOIL			
	Sampled:	Oct-03-11 10:00		Oct-03-11 10:05		Oct-03-11 10:10		Oct-03-11 10:15			
Anions by E300	*Extracted:*										
	Analyzed:	Oct-05-11 16:14		Oct-05-11 16:14		Oct-05-11 16:14		Oct-05-11 16:14			
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL		
Chloride		115	4.25	126	8.46	68.1	4.23	41.6	4.26		
BTEX by EPA 8021B	*Extracted:*	Oct-05-11 15:25		Oct-05-11 15:25		Oct-05-11 15:25		Oct-05-11 15:25			
	Analyzed:	Oct-05-11 18:18		Oct-05-11 18:41		Oct-05-11 19:04		Oct-05-11 20:59			
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL		
Benzene		ND	0.00102	ND	0.00101	ND	0.00100	ND	0.00100		
Toluene		ND	0.00203	ND	0.00203	ND	0.00201	ND	0.00201		
Ethylbenzene		ND	0.00102	ND	0.00101	ND	0.00100	ND	0.00100		
m_p-Xylenes		ND	0.00203	ND	0.00203	ND	0.00201	ND	0.00201		
o-Xylene		ND	0.00102	ND	0.00101	ND	0.00100	ND	0.00100		
Total Xylenes		ND	0.00102	ND	0.00101	ND	0.00100	ND	0.00100		
Total BTEX		ND	0.00102	ND	0.00101	ND	0.00100	ND	0.00100		
Percent Moisture	*Extracted:*										
	Analyzed:	Oct-04-11 12:30		Oct-04-11 12:30		Oct-04-11 12:30		Oct-04-11 12:30			
	Units/RL:	%	RL	%	RL	%	RL	%	RL		
Percent Moisture		1.29	1.00	ND	1.00	ND	1.00	1.38	1.00		
TPH By SW8015 Mod	*Extracted:*	Oct-13-11 16:40		Oct-13-11 16:40		Oct-13-11 16:40		Oct-13-11 16:40			
	Analyzed:	Oct-14-11 19:16		Oct-14-11 19:40		Oct-14-11 20:04		Oct-14-11 20:29			
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL		
C6-C12 Gasoline Range Hydrocarbons		ND	15.1	ND	15.0	ND	15.1	ND	15.2		
C12-C28 Diesel Range Hydrocarbons		56.1	15.1	945	15.0	516	15.1	212	15.2		
C28-C35 Oil Range Hydrocarbons		15.7	15.1	38.2	15.0	28.6	15.1	28.2	15.2		
Total TPH		71.8	15.1	983	15.0	545	15.1	240	15.2		

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 affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.

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

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

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

F RPD exceeded lab control limits.

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

U Analyte was not detected.

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

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

K Sample analyzed outside of recommended hold time.

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

BRL Below Reporting Limit.

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

+ Outside XENCO's scope of NELAC Accreditation.

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: Tunstil # 1286

Work Orders : 428845,

Project ID:

Lab Batch #: 871731 **Sample:** 428845-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/05/11 18:18

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0262	0.0300	87	80-120	
4-Bromofluorobenzene	0.0284	0.0300	95	80-120	

Lab Batch #: 871731 **Sample:** 428845-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/05/11 18:41

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0271	0.0300	90	80-120	
4-Bromofluorobenzene	0.0285	0.0300	95	80-120	

Lab Batch #: 871731 **Sample:** 428845-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/05/11 19:04

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0262	0.0300	87	80-120	
4-Bromofluorobenzene	0.0264	0.0300	88	80-120	

Lab Batch #: 871731 **Sample:** 428845-004 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/05/11 20:59

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0267	0.0300	89	80-120	
4-Bromofluorobenzene	0.0288	0.0300	96	80-120	

Lab Batch #: 872379 **Sample:** 428845-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/14/11 19:16

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	79.2	99.6	80	70-135	
o-Terphenyl	49.3	49.8	99	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: Tunstil # 1286

Work Orders : 428845,

Project ID:

Lab Batch #: 872379 **Sample:** 428845-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/14/11 19:40

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	99.5	77	70-135	
o-Terphenyl	45.7	49.8	92	70-135	

Lab Batch #: 872379 **Sample:** 428845-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/14/11 20:04

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	65.8	100	66	70-135	**
o-Terphenyl	39.5	50.1	79	70-135	

Lab Batch #: 872379 **Sample:** 428845-004 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/14/11 20:29

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	73.7	99.9	74	70-135	
o-Terphenyl	45.4	50.0	91	70-135	

Lab Batch #: 871731 **Sample:** 612312-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 10/05/11 13:51

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0289	0.0300	96	80-120	
4-Bromofluorobenzene	0.0272	0.0300	91	80-120	

Lab Batch #: 872379 **Sample:** 612728-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 10/14/11 04:56

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	82.9	99.7	83	70-135	
o-Terphenyl	54.8	49.9	110	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: Tunstil # 1286

Work Orders : 428845,

Project ID:

Lab Batch #: 871731 **Sample:** 612312-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 10/05/11 12:19

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0283	0.0300	94	80-120	
4-Bromofluorobenzene	0.0290	0.0300	97	80-120	

Lab Batch #: 872379 **Sample:** 612728-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 10/14/11 04:03

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	85.8	100	86	70-135	
o-Terphenyl	44.7	50.2	89	70-135	

Lab Batch #: 871731 **Sample:** 612312-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 10/05/11 12:42

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0275	0.0300	92	80-120	
4-Bromofluorobenzene	0.0287	0.0300	96	80-120	

Lab Batch #: 872379 **Sample:** 612728-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 10/14/11 04:30

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	105	99.6	105	70-135	
o-Terphenyl	59.0	49.8	118	70-135	

Lab Batch #: 871731 **Sample:** 428841-001 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/05/11 19:27

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0272	0.0300	91	80-120	
4-Bromofluorobenzene	0.0293	0.0300	98	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: Tunstil # 1286

Work Orders : 428845,

Project ID:

Lab Batch #: 872379 **Sample:** 428873-001 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/14/11 21:20

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	90.3	100	90	70-135	
o-Terphenyl	41.8	50.2	83	70-135	

Lab Batch #: 871731 **Sample:** 428841-001 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/05/11 19:50

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0277	0.0300	92	80-120	
4-Bromofluorobenzene	0.0307	0.0300	102	80-120	

Lab Batch #: 872379 **Sample:** 428873-001 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/14/11 21:44

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	109	99.5	110	70-135	
o-Terphenyl	55.3	49.8	111	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: Tunstil # 1286

Work Order #: 428845 **Project ID:**

Analyst: ASA **Date Prepared:** 10/05/2011 **Date Analyzed:** 10/05/2011

Lab Batch ID: 871731 **Sample:** 612312-1-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	<0.00100	0.100	0.102	102	0.100	0.0992	99	3	70-130	35	
Toluene	<0.00200	0.100	0.104	104	0.100	0.102	102	2	70-130	35	
Ethylbenzene	<0.00100	0.100	0.110	110	0.100	0.107	107	3	71-129	35	
m_p-Xylenes	<0.00200	0.200	0.223	112	0.200	0.216	108	3	70-135	35	
o-Xylene	<0.00100	0.100	0.109	109	0.100	0.106	106	3	71-133	35	

Analyst: BRB **Date Prepared:** 10/05/2011 **Date Analyzed:** 10/05/2011

Lab Batch ID: 871709 **Sample:** 871709-1-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	<0.840	20.0	23.2	116	20.0	20.6	103	12	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: Tunstil # 1286

Work Order #: 428845 **Project ID:**

Analyst: BBH **Date Prepared:** 10/13/2011 **Date Analyzed:** 10/14/2011

Lab Batch ID: 872379 **Sample:** 612728-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

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
	BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY										
C6-C12 Gasoline Range Hydrocarbons	<15.1	1000	763	76	996	883	89	15	70-135	35	
C12-C28 Diesel Range Hydrocarbons	<15.1	1000	920	92	996	1130	113	20	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: Tunstil # 1286

Work Order #: 428845

Lab Batch #: 871709

Project ID:

Date Analyzed: 10/05/2011

Date Prepared: 10/05/2011

Analyst: BRB

QC- Sample ID: 428925-001 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	24.6	100	128	103	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: Tunstil # 1286

Work Order # : 428845 **Project ID:**

Lab Batch ID: 871731 **QC- Sample ID:** 428841-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 10/05/2011 **Date Prepared:** 10/05/2011 **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	<0.00108	0.108	0.0884	82	0.108	0.0920	85	4	70-130	35	
Toluene	<0.00216	0.108	0.0917	85	0.108	0.0936	87	2	70-130	35	
Ethylbenzene	<0.00108	0.108	0.0974	90	0.108	0.0988	91	1	71-129	35	
m_p-Xylenes	<0.00216	0.216	0.196	91	0.215	0.200	93	2	70-135	35	
o-Xylene	<0.00108	0.108	0.0969	90	0.108	0.0976	90	1	71-133	35	

Lab Batch ID: 872379 **QC- Sample ID:** 428873-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 10/14/2011 **Date Prepared:** 10/13/2011 **Analyst:** BBH

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	316	1030	982	65	1030	1130	79	14	70-135	35	X
C12-C28 Diesel Range Hydrocarbons	4460	1030	4140	0	1030	4790	32	15	70-135	35	X

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: Tunstil # 1286

Work Order #: 428845

Lab Batch #: 871709 **Project ID:**

Date Analyzed: 10/05/2011 16:14 **Date Prepared:** 10/05/2011 **Analyst:** BRB

QC- Sample ID: 428845-004 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	41.6	43.9	5	20	

Lab Batch #: 871709

Date Analyzed: 10/05/2011 16:14 **Date Prepared:** 10/05/2011 **Analyst:** BRB

QC- Sample ID: 428925-001 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	24.6	25.5	4	20	

Lab Batch #: 871639

Date Analyzed: 10/04/2011 12:30 **Date Prepared:** 10/04/2011 **Analyst:** BRB

QC- Sample ID: 428841-001 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	7.32	7.00	4	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 Laboratories 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

Company Name: Southern Union Gas Services

Company Address: 801 Loop 464

City/State/Zip: Monahans, Texas 79756

Telephone No: 432-940-5147 Fax No:

Sampler Signature:

e-mail: rose.slade@sug.com

Project Name: Tunstil #1286

Project #:

Project Loc: Eddy County, New Mexico

PO #:

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

(lab use only)

ORDER #: 428845

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers: Ice	HNO3	HCl	H2SO4	NaOH	Na2S2O3	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge GW=Groundwater S=Soil/Solid NP=Non-Potable Specify Other	Analyze For: TCLP: 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	TOTAL: BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M.	Chloride	HOLD	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
01	Draw 1B			10/3/2011	1000		1	X								Soil	X								X			X			X
02	Draw 2B			10/3/2011	1005		1	X								Soil	X								X			X			X
03	Draw 3B			10/3/2011	1010		1	X								Soil	X								X			X			X
04	Draw 4B			10/3/2011	1015		1	X								Soil	X								X			X			X

Special Instructions:

Relinquished by:	Date	Time	Received by:	Date	Time
	10/4/11	0822			
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT:	Date	Time
				10/4/11	0822

Laboratory Comments:

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

Temperature Upon Receipt: 0.5 °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: S.U.G.S.
Date/Time: 10.4.11 08:22
Lab ID # : 428845
Initials: BB / AC

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 0.5 °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 430803

for

Southern Union Gas Services- Monahans

Project Manager: Rose Slade

Tunstil # 1286

08-NOV-11

Collected By: Client

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 (AZ0765), Arkansas (08-039-0), Connecticut (PH-0102), Florida (E871002)
Illinois (002082), Indiana (C-TX-02), Iowa (392), Kansas (E-10380), Kentucky (45), Louisiana (03054)
New Hampshire (297408), New Jersey (TX007), New York (11763), Oklahoma (9218), Pennsylvania (68-03610)
Rhode Island (LAO00312), USDA (S-44102)

Xenco-Atlanta (EPA Lab Code: GA00046):
Florida (E87429), North Carolina (483), South Carolina (98015), Utah (AALII), 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 Phoenix (EPA Lab Code: AZ00901): Arizona(AZ0757)
Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)
Xenco Tucson (EPA Lab code:AZ000989): Arizona (AZ0758)

08-NOV-11

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

Reference: XENCO Report No: **430803**
Tunstil # 1286
Project Address: Eddy County, New Mexico

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 430803. 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. 430803 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 430803

Southern Union Gas Services- Monahans, Monahans, TX

Tunstil # 1286

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
11/2 Trench @ Surface	S	11-02-11 11:30		430803-001
11/2 Trench @ 5'	S	11-02-11 12:00		430803-002
11/2 Trench @ 10'	S	11-02-11 12:30		430803-003
11/2 Trench @ 12'	S	11-02-11 13:00		430803-004
11/2 Trench @ 13'	S	11-02-11 13:15		430803-005
11/2 Trench @ 14'	S	11-02-11 14:00		430803-006

CASE NARRATIVE

XENCO Laboratories

Client Name: Southern Union Gas Services- Monahans
Project Name: Tunstil # 1286

Project ID:
Work Order Number: 430803

Report Date: 08-NOV-11
Date Received: 11/03/2011

Sample receipt non conformances and comments:
None

Sample receipt non conformances and comments per sample:

None
Analytical non nonformances and comments:

Batch: LBA-874014 BTEX by EPA 8021B
SW8021BM

Batch 874014, Ethylbenzene, m_p-Xylenes, o-Xylene 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: 430803-005, -004, -003, -006, -001, -002.
The Laboratory Control Sample for Toluene, Benzene, Ethylbenzene, m_p-Xylenes , o-Xylene is within laboratory Control Limits

Batch: LBA-874134 TPH By SW8015 Mod
SW8015MOD_NM

Batch 874134, C6-C12 Gasoline Range Hydrocarbons recovered below QC limits in the Matrix Spike. C12-C28 Diesel Range Hydrocarbons recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate.
Samples affected are: 430803-005, -004, -003, -006, -001, -002.
The Laboratory Control Sample for C12-C28 Diesel Range Hydrocarbons, C6-C12 Gasoline Range Hydrocarbons is within laboratory Control Limits

SW8015MOD_NM

Batch 874134, o-Terphenyl recovered below QC limits Data not confirmed by re-analysis.
Samples affected are: 613742-1-BSD,430803-002.

Certificate of Analysis Summary 430803

Southern Union Gas Services- Monahans, Monahans, TX

Project Name: Tunstil # 1286

Project Id:

Contact: Rose Slade

Project Location: Eddy County, New Mexico

Date Received in Lab: Thu Nov-03-11 08:30 am

Report Date: 08-NOV-11

Project Manager: Brent Barron II

Analysis Requested													
	Lab Id:	430803-001		430803-002		430803-003		430803-004		430803-005		430803-006	
	Field Id:	11/2 Trench @ Surface		11/2 Trench @ 5'		11/2 Trench @ 10'		11/2 Trench @ 12'		11/2 Trench @ 13'		11/2 Trench @ 14'	
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Nov-02-11 11:30		Nov-02-11 12:00		Nov-02-11 12:30		Nov-02-11 13:00		Nov-02-11 13:15		Nov-02-11 14:00	
Anions by E300	*Extracted:*												
	Analyzed:	Nov-07-11 12:16		Nov-07-11 12:16		Nov-07-11 12:16		Nov-07-11 12:16		Nov-07-11 12:16		Nov-07-11 12:16	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		16000	176	1430	17.6	355	8.72	1060	18.7	511	9.33	219	8.83
BTEX by EPA 8021B	*Extracted:*	Nov-03-11 14:00		Nov-03-11 14:00		Nov-03-11 14:00		Nov-03-11 14:00		Nov-03-11 14:00		Nov-03-11 14:00	
	Analyzed:	Nov-03-11 17:58		Nov-03-11 18:21		Nov-03-11 18:44		Nov-03-11 19:07		Nov-03-11 19:30		Nov-03-11 19:53	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		ND	0.00104	ND	0.00105	ND	0.00103	ND	0.00110	ND	0.00110	ND	0.00105
Toluene		ND	0.00208	ND	0.00209	ND	0.00207	ND	0.00220	ND	0.00220	ND	0.00209
Ethylbenzene		ND	0.00104	ND	0.00105	ND	0.00103	ND	0.00110	ND	0.00110	ND	0.00105
m_p-Xylenes		ND	0.00208	ND	0.00209	ND	0.00207	ND	0.00220	ND	0.00220	ND	0.00209
o-Xylene		ND	0.00104	ND	0.00105	ND	0.00103	ND	0.00110	ND	0.00110	ND	0.00105
Total Xylenes		ND	0.00104	ND	0.00105	ND	0.00103	ND	0.00110	ND	0.00110	ND	0.00105
Total BTEX		ND	0.00104	ND	0.00105	ND	0.00103	ND	0.00110	ND	0.00110	ND	0.00105
Percent Moisture	*Extracted:*												
	Analyzed:	Nov-03-11 12:30		Nov-03-11 12:30		Nov-03-11 12:30		Nov-03-11 12:30		Nov-03-11 12:30		Nov-03-11 12:30	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		4.76	1.00	4.44	1.00	3.63	1.00	9.96	1.00	9.95	1.00	4.83	1.00
TPH By SW8015 Mod	*Extracted:*	Nov-04-11 14:35		Nov-04-11 14:35		Nov-04-11 14:35		Nov-04-11 14:35		Nov-04-11 14:35		Nov-04-11 14:35	
	Analyzed:	Nov-04-11 22:06		Nov-04-11 22:43		Nov-04-11 23:20		Nov-04-11 23:56		Nov-05-11 00:31		Nov-05-11 01:06	
	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		17.0	15.7	ND	15.6	ND	15.5	ND	16.7	ND	16.7	ND	15.7
C12-C28 Diesel Range Hydrocarbons		814	15.7	ND	15.6	ND	15.5	ND	16.7	ND	16.7	ND	15.7
C28-C35 Oil Range Hydrocarbons		19.9	15.7	ND	15.6	ND	15.5	ND	16.7	ND	16.7	ND	15.7
Total TPH		851	15.7	ND	15.6	ND	15.5	ND	16.7	ND	16.7	ND	15.7

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 affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.

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

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

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

F RPD exceeded lab control limits.

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

U Analyte was not detected.

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

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

K Sample analyzed outside of recommended hold time.

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

* Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

+ Outside XENCO's scope of NELAC Accreditation. ^ NELAC or State program does not offer Accreditation at this time.

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: Tunstil # 1286

Work Orders : 430803,

Project ID:

Lab Batch #: 874014 **Sample:** 430803-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/03/11 17:58

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	0.0272	0.0300	91	80-120	

Lab Batch #: 874014 **Sample:** 430803-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/03/11 18:21

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0273	0.0300	91	80-120	
4-Bromofluorobenzene	0.0274	0.0300	91	80-120	

Lab Batch #: 874014 **Sample:** 430803-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/03/11 18:44

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0271	0.0300	90	80-120	
4-Bromofluorobenzene	0.0267	0.0300	89	80-120	

Lab Batch #: 874014 **Sample:** 430803-004 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/03/11 19:07

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0268	0.0300	89	80-120	
4-Bromofluorobenzene	0.0276	0.0300	92	80-120	

Lab Batch #: 874014 **Sample:** 430803-005 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/03/11 19:30

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	0.0272	0.0300	91	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: Tunstil # 1286

Work Orders : 430803,

Project ID:

Lab Batch #: 874014 **Sample:** 430803-006 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/03/11 19:53

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0278	0.0300	93	80-120	
4-Bromofluorobenzene	0.0284	0.0300	95	80-120	

Lab Batch #: 874134 **Sample:** 430803-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/04/11 22:06

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	83.4	99.8	84	70-135	
o-Terphenyl	42.9	49.9	86	70-135	

Lab Batch #: 874134 **Sample:** 430803-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/04/11 22:43

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	70.8	99.5	71	70-135	
o-Terphenyl	34.6	49.8	69	70-135	*

Lab Batch #: 874134 **Sample:** 430803-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/04/11 23:20

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	72.4	99.9	72	70-135	
o-Terphenyl	36.1	50.0	72	70-135	

Lab Batch #: 874134 **Sample:** 430803-004 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/04/11 23:56

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	76.2	100	76	70-135	
o-Terphenyl	37.8	50.0	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

Form 2 - Surrogate Recoveries

Project Name: Tunstil # 1286

Work Orders : 430803,

Project ID:

Lab Batch #: 874134 **Sample:** 430803-005 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/05/11 00:31

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	85.3	100	85	70-135	
o-Terphenyl	41.7	50.0	83	70-135	

Lab Batch #: 874134 **Sample:** 430803-006 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/05/11 01:06

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	78.5	99.6	79	70-135	
o-Terphenyl	37.7	49.8	76	70-135	

Lab Batch #: 874014 **Sample:** 613677-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 11/03/11 17:35

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0272	0.0300	91	80-120	
4-Bromofluorobenzene	0.0272	0.0300	91	80-120	

Lab Batch #: 874134 **Sample:** 613742-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 11/04/11 19:05

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	105	100	105	70-135	
o-Terphenyl	53.2	50.0	106	70-135	

Lab Batch #: 874014 **Sample:** 613677-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 11/03/11 16:05

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0286	0.0300	95	80-120	
4-Bromofluorobenzene	0.0280	0.0300	93	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: Tunstil # 1286

Work Orders : 430803,

Project ID:

Lab Batch #: 874134 **Sample:** 613742-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 11/04/11 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	108	100	108	70-135	
o-Terphenyl	44.7	50.0	89	70-135	

Lab Batch #: 874014 **Sample:** 613677-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 11/03/11 16:27

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	0.0275	0.0300	92	80-120	

Lab Batch #: 874134 **Sample:** 613742-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 11/04/11 18:29

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	93.0	100	93	70-135	
o-Terphenyl	30.5	50.0	61	70-135	*

Lab Batch #: 874014 **Sample:** 430803-001 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/03/11 21:23

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0283	0.0300	94	80-120	
4-Bromofluorobenzene	0.0283	0.0300	94	80-120	

Lab Batch #: 874134 **Sample:** 430803-001 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/05/11 09:02

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	87.8	99.5	88	70-135	
o-Terphenyl	38.1	49.8	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: Tunstil # 1286

Work Orders : 430803,

Project ID:

Lab Batch #: 874014 **Sample:** 430803-001 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/03/11 21:46

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0277	0.0300	92	80-120	
4-Bromofluorobenzene	0.0282	0.0300	94	80-120	

Lab Batch #: 874134 **Sample:** 430803-001 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/05/11 09:37

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	98.9	99.8	99	70-135	
o-Terphenyl	42.6	49.9	85	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: Tunstil # 1286

Work Order #: 430803 **Project ID:**

Analyst: ASA **Date Prepared:** 11/03/2011 **Date Analyzed:** 11/03/2011

Lab Batch ID: 874014 **Sample:** 613677-1-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	<0.00100	0.100	0.104	104	0.100	0.104	104	0	70-130	35	
Toluene	<0.00200	0.100	0.107	107	0.100	0.107	107	0	70-130	35	
Ethylbenzene	<0.00100	0.100	0.111	111	0.100	0.111	111	0	71-129	35	
m_p-Xylenes	<0.00200	0.200	0.221	111	0.200	0.222	111	0	70-135	35	
o-Xylene	<0.00100	0.100	0.110	110	0.100	0.112	112	2	71-133	35	

Analyst: BRB **Date Prepared:** 11/07/2011 **Date Analyzed:** 11/07/2011

Lab Batch ID: 874166 **Sample:** 874166-1-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	<0.840	20.0	23.4	117	20.0	23.1	116	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: Tunstil # 1286

Work Order #: 430803 **Project ID:**

Analyst: ASA **Date Prepared:** 11/04/2011 **Date Analyzed:** 11/04/2011

Lab Batch ID: 874134 **Sample:** 613742-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

TPH By SW8015 Mod Analytes	BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY										
	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C12 Gasoline Range Hydrocarbons	<15.0	1000	831	83	1000	885	89	6	70-135	35	
C12-C28 Diesel Range Hydrocarbons	<15.0	1000	940	94	1000	911	91	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

XENCO Laboratories

Form 3 - MS Recoveries

Project Name: Tunstil # 1286

Work Order #: 430803

Lab Batch #: 874166 **Project ID:**

Date Analyzed: 11/07/2011 **Date Prepared:** 11/07/2011 **Analyst:** BRB

QC- Sample ID: 430881-014 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	1660	530	2240	109	75-125	

Lab Batch #: 874166

Date Analyzed: 11/07/2011 **Date Prepared:** 11/07/2011 **Analyst:** BRB

QC- Sample ID: 430927-005 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	<4.52	108	126	117	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: Tunstil # 1286

Work Order # : 430803 **Project ID:**

Lab Batch ID: 874014 **QC- Sample ID:** 430803-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 11/03/2011 **Date Prepared:** 11/03/2011 **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	<0.00105	0.105	0.0829	79	0.104	0.0712	68	15	70-130	35	X
Toluene	<0.00210	0.105	0.0750	71	0.104	0.0654	63	14	70-130	35	X
Ethylbenzene	<0.00105	0.105	0.0621	59	0.104	0.0526	51	17	71-129	35	X
m_p-Xylenes	<0.00210	0.210	0.116	55	0.208	0.0983	47	17	70-135	35	X
o-Xylene	<0.00105	0.105	0.0572	54	0.104	0.0494	48	15	71-133	35	X

Lab Batch ID: 874134 **QC- Sample ID:** 430803-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 11/05/2011 **Date Prepared:** 11/04/2011 **Analyst:** ASA

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	17.0	1040	732	69	1050	847	79	15	70-135	35	X
C12-C28 Diesel Range Hydrocarbons	814	1040	1360	53	1050	1500	65	10	70-135	35	X

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

XENCO Laboratories

Sample Duplicate Recovery

Project Name: Tunstil # 1286

Work Order #: 430803

Lab Batch #: 874166 **Project ID:**

Date Analyzed: 11/07/2011 12:16 **Date Prepared:** 11/07/2011 **Analyst:** BRB

QC- Sample ID: 430927-005 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	<4.52	<4.52	0	20	U

Lab Batch #: 873968

Date Analyzed: 11/03/2011 12:30 **Date Prepared:** 11/03/2011 **Analyst:** BRB

QC- Sample ID: 430803-001 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	4.76	5.62	17	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 Laboratories 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

Company Name: Southern Union Gas Services

Company Address: 801 Loop 464

City/State/Zip: Monahans, Texas 79756

Telephone No: 432-940-5147 Fax No:

Sampler Signature: Bobby Braswell

Project Name: Tunstil #1286

Project #:

Project Loc: Eddy County, New Mexico

PO #:

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

e-mail: rose.slade@sug.com

(lab use only)

ORDER #: 430803

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	TPH: TX 1005	TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	TOTAL: BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M.	Chloride	HOLD	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
01	11/2 Trench @ Surface			11/2/2011	1130		1	X								Soil	X									X			X			X
02	11/2 Trench @ 5'			11/2/2011	1200		1	X								Soil	X									X			X			X
03	11/2 Trench @ 10'			11/2/2011	1230		1	X								Soil	X									X			X			X
04	11/2 Trench @ 12'			11/2/2011	1300		1	X								Soil	X									X			X			X
05	11/2 Trench @ 13'			11/2/2011	1315		1	X								Soil	X									X			X			X
06	11/2 Trench @ 14'			11/2/2011	1400		1	X								Soil	X									X			X			X

Special Instructions:

Relinquished by:	Date	Time	Received by:	Date	Time
	11/3/11	0830			
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT: J. Hernandez	11/3/11	08:30

Laboratory Comments:

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

by Sampler/Client Rep. ?

by Courier? UPS DHL FedEx Lone Star

4 0 2 C.g.

Temperature Upon Receipt: 0 °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: SLIGS
Date/Time: 11/3/11 8:30
Lab ID #: 430803
Initials: H

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	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

Analytical Report 440865

for

Southern Union Gas Services- Monahans

Project Manager: Rose Slade

Tunstil # 1286

27-APR-12

Collected By: Client

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 (AZ0765), Arkansas (08-039-0), Connecticut (PH-0102), Florida (E871002)
Illinois (002082), Indiana (C-TX-02), Iowa (392), Kansas (E-10380), Kentucky (45), Louisiana (03054)
New Hampshire (297408), New Jersey (TX007), New York (11763), Oklahoma (9218), Pennsylvania (68-03610)
Rhode Island (LAO00312), USDA (S-44102)

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

27-APR-12

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

Reference: XENCO Report No: **440865**
Tunstil # 1286
Project Address: Eddy County, New Mexico

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 440865. 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. 440865 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Nicholas Straccione
Project Manager

XENCO Laboratories

Sample Cross Reference 440865

Southern Union Gas Services- Monahans, Monahans, TX

Tunstil # 1286

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
W Wall @ # 1 @ 3' bgs	S	04-11-12 12:25		440865-001
W Wall @ # 2 @ 3' bgs	S	04-11-12 14:15		440865-002
N Wall @ 3' bgs	S	04-11-12 14:45		440865-003
E Wall # 2 @ 3' bgs	S	04-17-12 10:15		440865-004
Trench @ 10' bgs	S	04-17-12 10:30		440865-005
Trench @ 14' bgs	S	04-17-12 10:45		440865-006
Trench @ 17' bgs	S	04-17-12 11:00		440865-007
E Wall # 1 @ 3' bgs	S	04-17-12 13:20		440865-008
East Side of Road # 2 @ 3' bgs	S	04-17-12 14:00		440865-009
East Side of Road # 1 @ 3' bgs	S	04-17-12 14:15		440865-010
E Wall #3 @ 3' bgs	S	04-17-12 14:15		440865-011

Project ID:
Work Order Number: 440865

Report Date: 27-APR-12
Date Received: 04/18/2012

Sample receipt non conformances and comments:
None

Sample receipt non conformances and comments per sample:

None

Analytical non nonformances and comments:

Batch: LBA-886316 TPH By SW8015 Mod
SW8015MOD_NM

Batch 886316, o-Terphenyl recovered below QC limits Data confirmed by re-analysis. Samples affected are: 620868-1-BKS,620868-1-BLK,620868-1-BSD,440865-002 S,440865-002 SD,440865-002,440865-001.

Batch: LBA-886412 BTEX by EPA 8021B
SW8021BM

Batch 886412, Benzene, Ethylbenzene, Toluene, m_p-Xylenes recovered below QC limits in the Matrix Spike.
Samples affected are: 440865-002, -010, -004, -007, -011, -008, -001, -009, -003, -006.
The Laboratory Control Sample for Toluene, Benzene, Ethylbenzene, m_p-Xylenes is within laboratory Control Limits

SW8021BM

Batch 886412, 4-Bromofluorobenzene recovered below QC limits . Matrix interferences is suspected; data not confirmed by re-analysis
Samples affected are: 440865-004,440865-001.

Batch: LBA-886660 BTEX by EPA 8021B
SW8021BM

Batch 886660, Ethylbenzene, m_p-Xylenes, o-Xylene recovered below QC limits in the Matrix Spike Duplicate.
Samples affected are: 440865-005.
The Laboratory Control Sample for Ethylbenzene, m_p-Xylenes , o-Xylene is within laboratory Control Limits

Certificate of Analysis Summary 440865

Southern Union Gas Services- Monahans, Monahans, TX

Project Name: Tunstil # 1286

Project Id:

Contact: Rose Slade

Project Location: Eddy County, New Mexico

Date Received in Lab: Wed Apr-18-12 08:11 am

Report Date: 27-APR-12

Project Manager: Nicholas Straccione

Analysis Requested	*Lab Id:*	440865-001		440865-002		440865-003		440865-004		440865-005		440865-006	
	Field Id:	W Wall @ # 1 @ 3' bgs		W Wall @ # 2 @ 3' bgs		N Wall @ 3' bgs		E Wall # 2 @ 3' bgs		Trench @ 10' bgs		Trench @ 14' bgs	
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Apr-11-12 12:25		Apr-11-12 14:15		Apr-11-12 14:45		Apr-17-12 10:15		Apr-17-12 10:30		Apr-17-12 10:45	
Anions by E300	*Extracted:*												
	Analyzed:	Apr-18-12 19:57		Apr-18-12 19:57		Apr-18-12 19:57		Apr-18-12 19:57		Apr-18-12 19:57		Apr-18-12 19:57	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		284	8.60	111	4.28	225	8.55	699	17.8	1380	22.4	135	4.33
BTEX by EPA 8021B	*Extracted:*	Apr-23-12 10:00		Apr-23-12 10:00		Apr-23-12 10:00		Apr-23-12 10:00		Apr-26-12 16:00		Apr-23-12 10:00	
	Analyzed:	Apr-23-12 14:37		Apr-23-12 14:59		Apr-23-12 15:22		Apr-23-12 15:44		Apr-27-12 08:08		Apr-23-12 16:06	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		ND	0.00102	ND	0.00102	ND	0.00102	ND	0.00106	ND	0.00107	ND	0.00103
Toluene		ND	0.00204	ND	0.00204	ND	0.00203	ND	0.00211	ND	0.00213	ND	0.00206
Ethylbenzene		ND	0.00102	ND	0.00102	ND	0.00102	ND	0.00106	ND	0.00107	ND	0.00103
m_p-Xylenes		ND	0.00204	ND	0.00204	ND	0.00203	ND	0.00211	ND	0.00213	ND	0.00206
o-Xylene		ND	0.00102	ND	0.00102	ND	0.00102	ND	0.00106	ND	0.00107	ND	0.00103
Total Xylenes		ND	0.00102	ND	0.00102	ND	0.00102	ND	0.00106	ND	0.00107	ND	0.00103
Total BTEX		ND	0.00102	ND	0.00102	ND	0.00102	ND	0.00106	ND	0.00107	ND	0.00103
Percent Moisture	*Extracted:*												
	Analyzed:	Apr-18-12 17:00		Apr-18-12 17:00		Apr-18-12 17:00		Apr-18-12 17:00		Apr-18-12 17:00		Apr-18-12 17:00	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		2.38	1.00	1.98	1.00	1.78	1.00	5.37	1.00	6.30	1.00	3.08	1.00
TPH By SW8015 Mod	*Extracted:*	Apr-19-12 15:15		Apr-19-12 15:15		Apr-20-12 13:00		Apr-20-12 13:00		Apr-20-12 13:00		Apr-20-12 13:00	
	Analyzed:	Apr-20-12 08:23		Apr-20-12 08:55		Apr-21-12 03:59		Apr-21-12 04:25		Apr-21-12 04:52		Apr-21-12 05:18	
	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	15.2	ND	15.2	ND	15.8	17.9	15.9	ND	15.5
C12-C28 Diesel Range Hydrocarbons		23.4	15.3	24.5	15.2	20.7	15.2	ND	15.8	51.3	15.9	ND	15.5
C28-C35 Oil Range Hydrocarbons		ND	15.3	15.9	15.2	ND	15.2	ND	15.8	ND	15.9	ND	15.5
Total TPH		23.4	15.3	40.4	15.2	20.7	15.2	ND	15.8	69.2	15.9	ND	15.5

Nicholas Straccione
Project Manager

Certificate of Analysis Summary 440865

Southern Union Gas Services- Monahans, Monahans, TX

Project Name: Tunstil # 1286

Project Id:

Contact: Rose Slade

Project Location: Eddy County, New Mexico

Date Received in Lab: Wed Apr-18-12 08:11 am

Report Date: 27-APR-12

Project Manager: Nicholas Straccione

Analysis Requested											
	Lab Id:	440865-007		440865-008		440865-009		440865-010		440865-011	
	Field Id:	Trench @ 17' bgs		E Wall # 1 @ 3' bgs		East Side of Road # 2 @ 3' b		East Side of Road # 1 @ 3' b		E Wall #3 @ 3' bgs	
	Depth:										
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Apr-17-12 11:00		Apr-17-12 13:20		Apr-17-12 14:00		Apr-17-12 14:15		Apr-17-12 14:15	
Anions by E300	*Extracted:*										
	Analyzed:	Apr-18-12 19:57		Apr-18-12 19:57		Apr-18-12 19:57		Apr-18-12 19:57		Apr-18-12 19:57	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		144	9.32	934	8.76	7.26	4.34	6.10	4.29	87.3	4.29
BTEX by EPA 8021B	*Extracted:*	Apr-23-12 10:00		Apr-23-12 10:00		Apr-23-12 10:00		Apr-23-12 10:00		Apr-23-12 10:00	
	Analyzed:	Apr-23-12 17:58		Apr-23-12 20:12		Apr-23-12 18:21		Apr-23-12 18:43		Apr-23-12 19:05	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		ND	0.00111	ND	0.00104	ND	0.00103	ND	0.00102	ND	0.00102
Toluene		ND	0.00221	ND	0.00208	ND	0.00207	ND	0.00204	ND	0.00204
Ethylbenzene		ND	0.00111	0.00120	0.00104	ND	0.00103	ND	0.00102	ND	0.00102
m_p-Xylenes		ND	0.00221	0.00637	0.00208	ND	0.00207	ND	0.00204	ND	0.00204
o-Xylene		ND	0.00111	0.00173	0.00104	ND	0.00103	ND	0.00102	ND	0.00102
Total Xylenes		ND	0.00111	0.00810	0.00104	ND	0.00103	ND	0.00102	ND	0.00102
Total BTEX		ND	0.00111	0.00930	0.00104	ND	0.00103	ND	0.00102	ND	0.00102
Percent Moisture	*Extracted:*										
	Analyzed:	Apr-18-12 17:00		Apr-18-12 17:00		Apr-18-12 17:00		Apr-18-12 17:00		Apr-18-12 17:00	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		9.88	1.00	4.07	1.00	3.16	1.00	2.07	1.00	2.02	1.00
TPH By SW8015 Mod	*Extracted:*	Apr-20-12 13:00		Apr-20-12 13:00		Apr-20-12 13:00		Apr-20-12 13:00		Apr-20-12 13:00	
	Analyzed:	Apr-21-12 05:44		Apr-21-12 06:10		Apr-21-12 06:37		Apr-21-12 07:03		Apr-21-12 07:29	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
C6-C12 Gasoline Range Hydrocarbons		ND	16.6	ND	15.6	ND	15.4	ND	15.3	ND	15.3
C12-C28 Diesel Range Hydrocarbons		ND	16.6	ND	15.6	ND	15.4	ND	15.3	ND	15.3
C28-C35 Oil Range Hydrocarbons		ND	16.6	ND	15.6	ND	15.4	ND	15.3	ND	15.3
Total TPH		ND	16.6	ND	15.6	ND	15.4	ND	15.3	ND	15.3

Nicholas Straccione
Project Manager

XENCO Laboratories

Flagging Criteria

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

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

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

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

F RPD exceeded lab control limits.

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

U Analyte was not detected.

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

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

K Sample analyzed outside of recommended hold time.

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

* Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

+ NELAC certification not offered for this compound.

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

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: Tunstil # 1286

Work Orders : 440865,

Project ID:

Lab Batch #: 886316 **Sample:** 440865-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/20/12 08:23

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	76.8	99.5	77	70-135	
o-Terphenyl	34.1	49.8	68	70-135	*

Lab Batch #: 886316 **Sample:** 440865-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/20/12 08:55

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	71.6	99.5	72	70-135	
o-Terphenyl	30.2	49.8	61	70-135	*

Lab Batch #: 886408 **Sample:** 440865-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/21/12 03:59

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	89.5	99.7	90	70-135	
o-Terphenyl	47.5	49.9	95	70-135	

Lab Batch #: 886408 **Sample:** 440865-004 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/21/12 04:25

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	86.2	99.7	86	70-135	
o-Terphenyl	45.6	49.9	91	70-135	

Lab Batch #: 886408 **Sample:** 440865-005 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/21/12 04:52

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	93.1	99.5	94	70-135	
o-Terphenyl	49.6	49.8	100	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: Tunstil # 1286

Work Orders : 440865,

Project ID:

Lab Batch #: 886408 **Sample:** 440865-006 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/21/12 05:18

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	87.4	100	87	70-135	
o-Terphenyl	46.0	50.1	92	70-135	

Lab Batch #: 886408 **Sample:** 440865-007 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/21/12 05:44

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	92.1	99.5	93	70-135	
o-Terphenyl	49.2	49.8	99	70-135	

Lab Batch #: 886408 **Sample:** 440865-008 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/21/12 06:10

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	91.8	99.6	92	70-135	
o-Terphenyl	48.7	49.8	98	70-135	

Lab Batch #: 886408 **Sample:** 440865-009 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/21/12 06:37

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	96.8	99.6	97	70-135	
o-Terphenyl	51.0	49.8	102	70-135	

Lab Batch #: 886408 **Sample:** 440865-010 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/21/12 07:03

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	87.1	99.8	87	70-135	
o-Terphenyl	46.2	49.9	93	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: Tunstil # 1286

Work Orders : 440865,

Project ID:

Lab Batch #: 886408 **Sample:** 440865-011 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/21/12 07:29

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	92.2	99.8	92	70-135	
o-Terphenyl	48.3	49.9	97	70-135	

Lab Batch #: 886412 **Sample:** 440865-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/23/12 14:37

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0262	0.0300	87	80-120	
4-Bromofluorobenzene	0.0226	0.0300	75	80-120	*

Lab Batch #: 886412 **Sample:** 440865-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/23/12 14:59

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0251	0.0300	84	80-120	
4-Bromofluorobenzene	0.0243	0.0300	81	80-120	

Lab Batch #: 886412 **Sample:** 440865-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/23/12 15:22

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0264	0.0300	88	80-120	
4-Bromofluorobenzene	0.0245	0.0300	82	80-120	

Lab Batch #: 886412 **Sample:** 440865-004 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/23/12 15:44

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0260	0.0300	87	80-120	
4-Bromofluorobenzene	0.0228	0.0300	76	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: Tunstil # 1286

Work Orders : 440865,

Project ID:

Lab Batch #: 886412 **Sample:** 440865-006 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/23/12 16:06

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0259	0.0300	86	80-120	
4-Bromofluorobenzene	0.0245	0.0300	82	80-120	

Lab Batch #: 886412 **Sample:** 440865-007 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/23/12 17:58

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	0.0243	0.0300	81	80-120	

Lab Batch #: 886412 **Sample:** 440865-009 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/23/12 18:21

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0273	0.0300	91	80-120	
4-Bromofluorobenzene	0.0262	0.0300	87	80-120	

Lab Batch #: 886412 **Sample:** 440865-010 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/23/12 18:43

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0258	0.0300	86	80-120	
4-Bromofluorobenzene	0.0255	0.0300	85	80-120	

Lab Batch #: 886412. **Sample:** 440865-011 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/23/12 19:05

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0272	0.0300	91	80-120	
4-Bromofluorobenzene	0.0269	0.0300	90	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: Tunstil # 1286

Work Orders : 440865,

Project ID:

Lab Batch #: 886412 **Sample:** 440865-008 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/23/12 20:12

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0256	0.0300	85	80-120	
4-Bromofluorobenzene	0.0343	0.0300	114	80-120	

Lab Batch #: 886660 **Sample:** 440865-005 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/27/12 08:08

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0245	0.0300	82	80-120	
4-Bromofluorobenzene	0.0247	0.0300	82	80-120	

Lab Batch #: 886316 **Sample:** 620868-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 04/19/12 21:16

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	74.0	100	74	70-135	
o-Terphenyl	33.0	50.0	66	70-135	*

Lab Batch #: 886408 **Sample:** 620921-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 04/21/12 03:33

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	89.8	100	90	70-135	
o-Terphenyl	48.6	50.0	97	70-135	

Lab Batch #: 886412 **Sample:** 620913-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 04/23/12 11:37

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0263	0.0300	88	80-120	
4-Bromofluorobenzene	0.0254	0.0300	85	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: Tunstil # 1286

Work Orders : 440865,

Project ID:

Lab Batch #: 886660 **Sample:** 621084-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 04/27/12 05:10

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0254	0.0300	85	80-120	
4-Bromofluorobenzene	0.0244	0.0300	81	80-120	

Lab Batch #: 886316 **Sample:** 620868-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 04/19/12 20:11

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	78.7	100	79	70-135	
o-Terphenyl	27.9	50.0	56	70-135	*

Lab Batch #: 886408 **Sample:** 620921-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 04/21/12 02:41

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	112	100	112	70-135	
o-Terphenyl	52.7	50.0	105	70-135	

Lab Batch #: 886412 **Sample:** 620913-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 04/23/12 10:30

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0286	0.0300	95	80-120	
4-Bromofluorobenzene	0.0294	0.0300	98	80-120	

Lab Batch #: 886660 **Sample:** 621084-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 04/27/12 03:41

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0285	0.0300	95	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.

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: Tunstil # 1286

Work Orders : 440865,

Project ID:

Lab Batch #: 886316 **Sample:** 620868-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 04/19/12 20:41

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	87.3	100	87	70-135	
o-Terphenyl	29.9	50.0	60	70-135	*

Lab Batch #: 886408 **Sample:** 620921-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 04/21/12 03:07

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	111	100	111	70-135	
o-Terphenyl	52.2	50.0	104	70-135	

Lab Batch #: 886412 **Sample:** 620913-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 04/23/12 10:52

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0287	0.0300	96	80-120	
4-Bromofluorobenzene	0.0300	0.0300	100	80-120	

Lab Batch #: 886660 **Sample:** 621084-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 04/27/12 04:03

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

Lab Batch #: 886316 **Sample:** 440865-002 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/20/12 09:26

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	97.8	99.8	98	70-135	
o-Terphenyl	33.4	49.9	67	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: Tunstil # 1286

Work Orders : 440865,

Project ID:

Lab Batch #: 886408 **Sample:** 440865-003 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/21/12 13:24

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	94.4	99.8	95	70-135	
o-Terphenyl	49.0	49.9	98	70-135	

Lab Batch #: 886412 **Sample:** 440865-002 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/23/12 16:29

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0286	0.0300	95	80-120	
4-Bromofluorobenzene	0.0316	0.0300	105	80-120	

Lab Batch #: 886660 **Sample:** 441113-023 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/27/12 08:30

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0282	0.0300	94	80-120	
4-Bromofluorobenzene	0.0267	0.0300	89	80-120	

Lab Batch #: 886316 **Sample:** 440865-002 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/20/12 09:56

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	100	99.6	100	70-135	
o-Terphenyl	34.0	49.8	68	70-135	*

Lab Batch #: 886408 **Sample:** 440865-003 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/21/12 13:49

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	93.2	100	93	70-135	
o-Terphenyl	49.0	50.2	98	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: Tunstil # 1286

Work Orders : 440865,

Project ID:

Lab Batch #: 886412 **Sample:** 440865-002 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/23/12 16:51

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0270	0.0300	90	80-120	
4-Bromofluorobenzene	0.0275	0.0300	92	80-120	

Lab Batch #: 886660 **Sample:** 441113-023 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/27/12 08:53

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0271	0.0300	90	80-120	
4-Bromofluorobenzene	0.0254	0.0300	85	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.

BS / BSD Recoveries

Project Name: Tunstil # 1286

Work Order #: 440865 **Project ID:**

Analyst: SMG **Date Prepared:** 04/23/2012 **Date Analyzed:** 04/23/2012

Lab Batch ID: 886412 **Sample:** 620913-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00100	0.100	0.0877	88	0.100	0.0865	87	1	70-130	35	
Toluene	<0.00200	0.100	0.0875	88	0.100	0.0872	87	0	70-130	35	
Ethylbenzene	<0.00100	0.100	0.0855	86	0.100	0.0859	86	0	71-129	35	
m_p-Xylenes	<0.00200	0.200	0.175	88	0.200	0.176	88	1	70-135	35	
o-Xylene	<0.00100	0.100	0.0901	90	0.100	0.0913	91	1	71-133	35	

Analyst: SMG **Date Prepared:** 04/26/2012 **Date Analyzed:** 04/27/2012

Lab Batch ID: 886660 **Sample:** 621084-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00100	0.100	0.103	103	0.100	0.0988	99	4	70-130	35	
Toluene	<0.00200	0.100	0.105	105	0.100	0.0995	100	5	70-130	35	
Ethylbenzene	<0.00100	0.100	0.104	104	0.100	0.0990	99	5	71-129	35	
m_p-Xylenes	<0.00200	0.200	0.214	107	0.200	0.205	103	4	70-135	35	
o-Xylene	<0.00100	0.100	0.105	105	0.100	0.100	100	5	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: Tunstil # 1286

Work Order #: 440865 **Project ID:**

Analyst: BRB **Date Prepared:** 04/18/2012 **Date Analyzed:** 04/18/2012

Lab Batch ID: 886096 **Sample:** 886096-1-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	<0.840	20.0	21.4	107	20.0	20.9	105	2	75-125	20	

Analyst: NIS **Date Prepared:** 04/19/2012 **Date Analyzed:** 04/19/2012

Lab Batch ID: 886316 **Sample:** 620868-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C12 Gasoline Range Hydrocarbons	<15.0	1000	775	78	1000	782	78	1	70-135	35	
C12-C28 Diesel Range Hydrocarbons	<15.0	1000	860	86	1000	901	90	5	70-135	35	

Analyst: NIS **Date Prepared:** 04/20/2012 **Date Analyzed:** 04/21/2012

Lab Batch ID: 886408 **Sample:** 620921-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C12 Gasoline Range Hydrocarbons	<15.0	1000	802	80	1000	802	80	0	70-135	35	
C12-C28 Diesel Range Hydrocarbons	<15.0	1000	869	87	1000	879	88	1	70-135	35	

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

XENCO Laboratories

Form 3 - MS Recoveries

Project Name: Tunstil # 1286

Work Order #: 440865

Lab Batch #: 886096 **Project ID:**

Date Analyzed: 04/18/2012 **Date Prepared:** 04/18/2012 **Analyst:** BRB

QC- Sample ID: 440787-001 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	43.4	105	147	99	75-125	

Lab Batch #: 886096

Date Analyzed: 04/18/2012 **Date Prepared:** 04/18/2012 **Analyst:** BRB

QC- Sample ID: 440865-003 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	225	204	457	114	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: Tunstil # 1286

Work Order # : 440865 **Project ID:**

Lab Batch ID: 886412 **QC- Sample ID:** 440865-002 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 04/23/2012 **Date Prepared:** 04/23/2012 **Analyst:** SMG

Reporting Units: mg/kg

BTEX by EPA 8021B Analytes	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00101	0.101	0.0690	68	0.102	0.0763	75	10	70-130	35	X
Toluene	<0.00203	0.101	0.0699	69	0.102	0.0764	75	9	70-130	35	X
Ethylbenzene	<0.00101	0.101	0.0680	67	0.102	0.0747	73	9	71-129	35	X
m_p-Xylenes	<0.00203	0.203	0.137	67	0.204	0.150	74	9	70-135	35	X
o-Xylene	<0.00101	0.101	0.0725	72	0.102	0.0753	74	4	71-133	35	

Lab Batch ID: 886660 **QC- Sample ID:** 441113-023 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 04/27/2012 **Date Prepared:** 04/26/2012 **Analyst:** SMG

Reporting Units: mg/kg

BTEX by EPA 8021B Analytes	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00100	0.100	0.0843	84	0.0999	0.0772	77	9	70-130	35	
Toluene	<0.00201	0.100	0.0831	83	0.0999	0.0757	76	9	70-130	35	
Ethylbenzene	<0.00100	0.100	0.0749	75	0.0999	0.0661	66	12	71-129	35	X
m_p-Xylenes	<0.00201	0.201	0.151	75	0.200	0.135	68	11	70-135	35	X
o-Xylene	<0.00100	0.100	0.0760	76	0.0999	0.0693	69	9	71-133	35	X

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

Form 3 - MS / MSD Recoveries

Project Name: Tunstil # 1286

Work Order # : 440865 **Project ID:**

Lab Batch ID: 886316 **QC- Sample ID:** 440865-002 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 04/20/2012 **Date Prepared:** 04/19/2012 **Analyst:** NIS

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	<15.3	1020	817	80	1020	830	81	2	70-135	35	
C12-C28 Diesel Range Hydrocarbons	24.5	1020	975	93	1020	1000	96	3	70-135	35	

Lab Batch ID: 886408 **QC- Sample ID:** 440865-003 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 04/21/2012 **Date Prepared:** 04/20/2012 **Analyst:** NIS

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	<15.2	1020	734	72	1020	729	71	1	70-135	35	
C12-C28 Diesel Range Hydrocarbons	20.7	1020	806	77	1020	810	77	0	70-135	35	

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

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

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

XENCO Laboratories

Sample Duplicate Recovery

Project Name: Tunstil # 1286

Work Order #: 440865

Lab Batch #: 886096 **Project ID:**

Date Analyzed: 04/18/2012 19:57 **Date Prepared:** 04/18/2012 **Analyst:** BRB

QC- Sample ID: 440787-001 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	43.4	42.7	2	20	

Lab Batch #: 886126

Date Analyzed: 04/18/2012 17:00 **Date Prepared:** 04/18/2012 **Analyst:** BRB

QC- Sample ID: 440865-001 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	2.38	2.43	2	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 Laboratories Company

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765

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

Page 1 of 2

Project Manager: Rose Slade

Company Name: Southern Union Gas Services

Company Address: 801 Loop 464

City/State/Zip: Monahans, Texas 79756

Telephone No: 432-940-5147 Fax No:

Sampler Signature: [signature] [signature] E-mail: rose.slade@sug.com

Project Name: Tunstil #1286

Project #:

Project Loc: Eddy County, New Mexico

PO #:

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

(lab use only)

ORDER #: 440865

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: 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.	Chloride	HOLD	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
	TCLP:																													
	TOTAL:																							X						
01	W Wall @ #1 @ 3' bgs			4/11/2012	12:25		1	X								Soil	X								X			X		X	X
02	W Wall @ #2 @ 3' bgs			4/11/2012	2:15		1	X								Soil	X								X			X		X	X
03	N Wall @ 3' bgs			4/11/2012	2:45		1	X								Soil	X								X			X		X	X
04	E Wall #2 @ 3' bgs			4/17/2012	10:15		1	X								Soil	X								X			X		X	X
05	Trench @ 10' bgs			4/17/2012	10:30		1	X								Soil	X								X			X		X	X
06	Trench @ 14' bgs			4/17/2012	10:45		1	X								Soil	X								X			X		X	X
07	Trench @ 17' bgs			4/17/2012	11:00		1	X								Soil	X								X			X		X	X
08	E Wall #1 @ 3' bgs			4/17/2012	1:20		1	X								Soil	X								X			X		X	X
09	East Side of Road #2 @ 3' bgs			4/17/2012	2:00		1	X								Soil	X								X			X		X	X
10	East Side of Road #1 @ 3' bgs			4/17/2012	2:15		1	X								Soil	X								X			X		X	X

Special Instructions:

Please Send Copy of Lab Report to Basin Environmental *Chloride 24 hrs RUSH

Relinquished by:	Date	Time	Received by:	Date	Time
[signature]	4/18/12	0811	[signature]	4/18/12	8:11
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT:	Date	Time

Laboratory Comments:

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

Temperature Upon Receipt: 3.0 °C

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Final 1.000

Environmental Lab of Texas

A Xenco Laboratories Company

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765

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

Page 2 of 2

Project Manager: Rose Slade

Project Name: Tunstil #1286

Company Name: Southern Union Gas Services

Project #:

Company Address: 801 Loop 464

Project Loc: Eddy County, New Mexico

City/State/Zip: Monahans, Texas 79756

PO #:

Telephone No: 432-940-5147 Fax No:

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

Sampler Signature: Bobby Buttrell e-mail: rose.slade@sug.com

(lab use only)
ORDER #: 440865

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers: Ice	HNO3	HCl	H2SO4	NaOH	Na2S2O3	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge GW = Groundwater S=Soil/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.	Chloride 300.0	HOLD	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
11	E Wall #3 @ 3' bgs			4/17/2012	2:15		1	X								Soil	X									X			X		X	X

Special Instructions:

Please Send Copy of Lab Report to Basin Environmental

Relinquished by:	Date	Time	Received by:	Date	Time
	4/18/12	0811		4/18/12	8:11
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT:	Date	Time

Laboratory Comments:

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

Temperature Upon Receipt: 3.0 °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: SWGS

Date/Time: 4.18.12 8:11

Lab ID # : 440865

Initials: SG / 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 AE	
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	3.0 °C	lbs	°C	lbs	°C	lbs	°C	lbs	°C

Nonconformance Documentation

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

Regarding: _____

_____

Corrective Action Taken:_____

_____

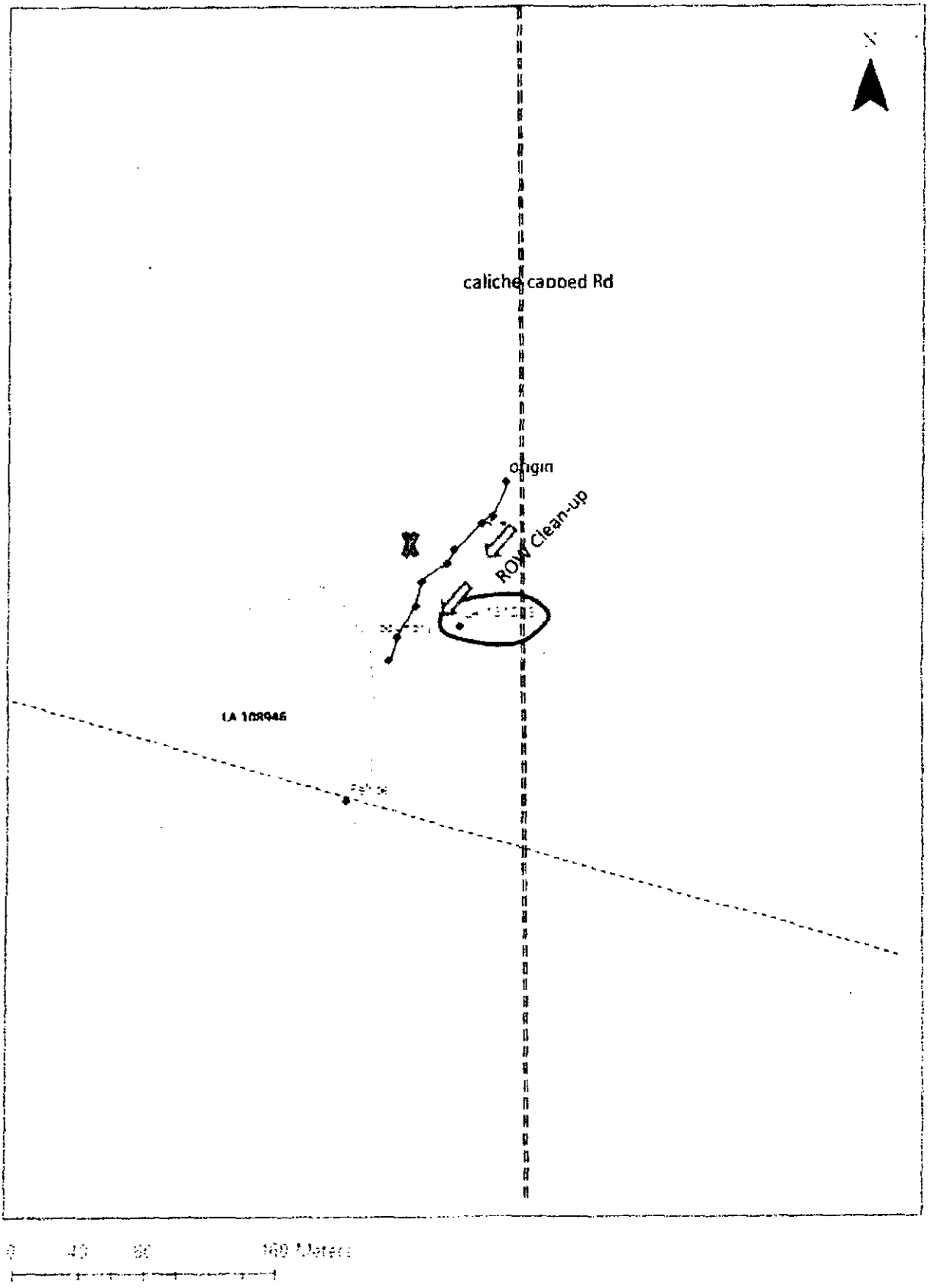
_____

_____

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


caliche capped Rd
origin
ROW Clean-up
LA 108946
0
40
80
160 Meters

Appendix E

Release Notification and Corrective Action

(Form C-141)

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
220 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: 801 S. Loop 464 Monahans, Texas 79756	Telephone No.: 432-940-5147
Facility Name: Tunstil #1286	Facility Type: Natural Gas Pipeline

Surface Owner: Bureau of Land Management	Mineral Owner:	API No.: 30-025-28822

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
L	24	26S	30E					Eddy

Latitude 32 degrees 01.476' **Longitude** 103 degrees 50.429'

NATURE OF RELEASE

Type of Release: Natural Gas, Crude Oil and Produced Water	Volume of Release: Unknown	Volume Recovered: None
Source of Release: 6-Inch Steel Pipeline (Low Pressure)	Date and Hour of Occurrence: Unknown	Date and Hour of Discovery: February 22, 2011 – 1322 hours
Was Immediate Notice Given? ☐ Yes ☐ No ☐ Not Required	If YES, To Whom? Jim Amos (BLM Carlsbad Field Office)	
By Whom? Curt Stanley	Date and Hour: March 11, 2011 – 0830 hours	
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.*
Failure of a segment of the six (6) low pressure steel pipeline resulted in the release of an unknown volume of a mixture of natural gas, crude oil and produced water. Following the discovery of the release the pipeline was fitted with a temporary pipeline clamp to mitigate the release.

Describe Area Affected and Cleanup Action Taken.*
An area of range land measuring approximately 5,560 square feet was affected by the release. The release will be remediated 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:	OIL CONSERVATION DIVISION
Printed Name:	Approved by District Supervisor:
Title:	Approval Date: / Expiration Date:
E-mail Address:	Conditions of Approval: / Attached ☐
Date: / Phone:	

* Attach Additional Sheets If Necessary