



AE Order Number Banner

Report Description

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App Number: pJXK1604730468

1RP - 2722

SOUTHERN UNION GAS SERVICES LTD

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

RECEIVED

Form C-141
Revised October 10, 2003

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

HOBBS OCD

Release Notification and Corrective Action

OPERATOR

☐ Initial Report ☒ Final Report

Name of Company	Southern Union Gas Services	Contact	Rose Slade
Address	801 South Loop 464, Monahans, TX 79756	Telephone No.	432-940-5147
Facility Name	Trunk "M" (King Road)	Facility Type	Natural Gas Pipeline
Surface Owner	State of New Mexico (Corrected)	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
H	25	22S	36E					Lea

Latitude 32 degrees 21.776' Longitude 103 degrees 12.611'

NATURE OF RELEASE

Type of Release	Natural Gas, Crude Oil and Produced Water	Volume of Release	30 BBLS	Volume Recovered	4 BBLS
Source of Release	20-Inch Steel Pipeline (Low Pressure)	Date and Hour of Occurrence	June 27, 2011 - Unknown	Date and Hour of Discovery	June 27, 2011 - 2020 hrs
Was Immediate Notice Given?	☒ Yes ☐ No ☐ Not Required	If YES, To Whom?	Geoffrey Leking - NMOCD Hobbs District Office		
By Whom?	Rose L. Slade	Date and Hour	June 28, 2011 - 1143 hours (MDT)		
Was a Watercourse Reached?	☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.			

If a Watercourse was Impacted, Describe Fully.*

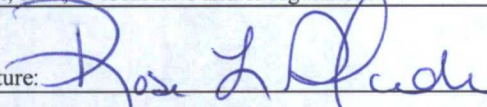
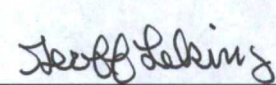
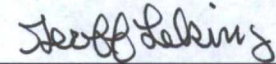
Describe Cause of Problem and Remedial Action Taken.*

Failure of a segment of the twenty (20) inch low-pressure steel pipeline resulted in the release of approximately thirty (30) barrels of a mixture of crude oil and produced water. The cause of the failure was attributed to internal corrosion. An unknown volume of natural gas was released to the atmosphere. Following discovery of the release, a temporary pipeline clamp was employed to mitigate the release. A vacuum truck was able to recover approximately four (4) barrels of the released mixture.

Describe Area Affected and Cleanup Action Taken.*

An area along the pipeline ROW measuring approximately 1,450 feet in length and one (1) to ten (10) feet in width was affected by the release. The affected area was limited to the pipeline ROW two-track road. Please reference "Remediation Summary and Site Closure Request" dated October 2011 for remediation details. Approximately 2,226 cubic yards of impacted soil was transported to Sundance Services, Inc. in Eunice, New Mexico and backfill material was purchased from the grazing lessee.

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: Rose L. Slade	ENV SPECIALIST: 	
Title: EHS Compliance Specialist	Approved by District Supervisor: 	Approval Date: 12/14/11
E-mail Address: rose.slade@sug.com	Expiration Date: —	Conditions of Approval: —
Date: December 12, 2011	Phone: 432-940-5147	Attached ☐ IRP-6-11-2722

* Attach Additional Sheets If Necessary

Basin Environmental Service Technologies, LLC

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



REMEDIATION SUMMARY & SITE CLOSURE REQUEST

**SOUTHERN UNION GAS SERVICES
TRUNK "M" (KING ROAD)
Lea County, New Mexico
Unit Letter "H" (SE/NE), Section 25, Township 22 South, Range 36 East
Latitude 32° 21.776' North, Longitude 103° 12.611' West**

Prepared For:

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

Prepared By:

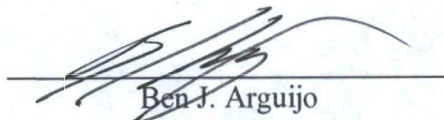
Basin Environmental Service Technologies, LLC
3100 Plains Highway
Lovington, New Mexico 88260

October 2011

HOBBS OCD

DEC 13 2011

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Ben J. Arguijo
Project Manager

1.0 INTRODUCTION & BACKGROUND INFORMATION

Basin Environmental Service Technologies, LLC (Basin), on behalf of Southern Union Gas Services (Southern Union), has prepared this *Remediation Summary & Site Closure Request* for the release site known as Trunk "M" (King Road). The legal description of the release site is Unit Letter "H" (SE/NE), Section 25, Township 22 South, Range 36 East, in Lea County, New Mexico. The geographic coordinates of the release site are 32° 21.776' North latitude and 103° 12.611' West longitude. The property affected by the release is owned by the State of New Mexico and administered by the New Mexico State Land Office (NMSLO). The NMSLO Right of Entry permit number is ROE-2062 (Remediation). A "Site Location Map" is provided as Figure 1.

On June 27, 2011, Southern Union discovered a release had occurred on the Trunk "M" pipeline. The release was reported to the New Mexico Oil Conservation Division (NMOCD) Hobbs District Office on June 28, 2011. The "Release Notification and Corrective Action" (Form C-141) indicated failure of a segment of the twenty-inch (20") low-pressure Trunk "M" steel pipeline resulted in the release of approximately thirty barrels (30 bbls) of a mixture of crude oil and produced water. An unknown volume of natural gas was also released to the atmosphere. The cause of the failure was attributed to internal corrosion. Following discovery of the release, a temporary pipeline clamp was employed to mitigate the release. A vacuum truck was utilized to recover approximately four barrels (4 bbls) of the released mixture. Hydrocarbon saturated soil was excavated from the affected area and transported to Sundance Services, Inc. (NMOCD Permit # NM-01003), for disposal.

The release affected an area of land along the Southern Union right-of-way measuring approximately one thousand, four hundred and fifty feet (1,450') in length and one foot (1') to ten feet (10') in width. The affected area was limited to the pipeline right-of-way two-track road.

General photographs of the release site are provided as Appendix A. The Form C-141 is provided as Appendix D.

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 25, Township 22 South, Range 36 East. A depth-to-groundwater reference map utilized by the NMOCD indicates groundwater should be encountered at approximately one hundred and fifteen feet (115') 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 Trunk "M" (King Road) 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 28, 2011, following initial response activities, excavation of impacted soil commenced at the site. Hach Quantab Chloride Low Range (30-600 mg/Kg) Titrators were used to field-screen the horizontal and vertical extent of impacted soil and to guide the excavation. As a safety and environmental precaution, Southern Union requested and received NMOCD approval to leave in-place soil beneath the pipeline to support the pipeline during remediation activities.

From June 28 through July 26, 2011, approximately two thousand two hundred and twenty-six (2,226) cubic yards (cy) of impacted soil was excavated and transported to Sundance Services, Inc., for disposal. Soil disposal manifests are provided as Appendix C.

On July 14, 2011, nineteen (19) soil samples (Samples #1 through #19) were collected from the floor and sidewalls of the excavation. Samples were collected at seventy-five foot (75') horizontal intervals, beginning with Sample #1 in the northwest wall of the excavation and ending with Sample #19 in the west wall, approximately one hundred and fifty feet (150') south-southwest of the release point. The soil samples were submitted to Xenco Laboratories, Inc., in Odessa, Texas, for analysis of benzene, ethylbenzene, toluene, and xylene (BTEX), total petroleum hydrocarbons (TPH), and/or chloride concentrations using EPA Methods SW 846-8021b, SW 846-8015M, and 300.1, respectively. Table 1 summarizes the "Concentrations of Benzene, BTEX, TPH & Chlorides in Soil". Soil sample locations are depicted in Figure 2, "Site & Sample Location Map". Laboratory analytical reports are provided as Appendix B.

Laboratory analytical results indicated benzene concentrations were less than the appropriate laboratory method detection limit (MDL) in all soil samples submitted. BTEX concentrations ranged from less than the laboratory MDL in soil samples Sample #1 and Sample #11 through #14 to 0.0030 mg/Kg in soil sample Sample #2. TPH concentrations ranged from less than the laboratory MDL in soil samples Sample #3 through #11 and Samples #13 through #19 to 76.7 mg/Kg in soil sample Sample #1. Chloride concentrations ranged from 12.0 mg/Kg in soil sample Sample #3 to 1,300 mg/Kg in soil sample Sample #13. Review of laboratory analytical results indicated TPH, benzene, and BTEX concentrations were less than NMOCD regulatory standards in all submitted soil samples.

On July 19, 2011, eighteen (18) soil samples (Samples #20 through #37) were collected from the floor and sidewalls of the excavation. Samples were collected at seventy-five foot (75') horizontal intervals, beginning with Sample #20 in the west wall of the excavation, approximately one hundred and fifty feet (150') to the south-southwest of the release point, and ending with Sample #37 in the west wall, approximately four hundred and fifty feet (450') south-southwest of the release point. The soil samples were submitted to the laboratory for analysis of TPH and chloride concentrations. Laboratory analytical results indicated TPH concentrations were less than the appropriate laboratory MDL in all soil samples submitted. Chloride concentrations ranged from 5.01 mg/Kg in soil sample Sample #37 to 622 mg/Kg in soil sample Sample #20. Review of laboratory analytical results indicated TPH concentrations were less than NMOCD regulatory standards in all submitted soil samples.

On July 24, 2011, twenty-five (25) soil samples (Samples #38 through #62) were collected from the floor and sidewalls of the excavation. Samples were collected at seventy-five foot (75') horizontal intervals, beginning with Sample #38 in the west wall of the excavation, approximately five hundred and twenty-five feet (525') to the south-southwest of the release point, and ending with Sample #62 in the south wall, approximately one thousand, one hundred and twenty-five feet (1,125') south-southeast of the release

point. The 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 MDL in soil samples Sample #38 through #57 and Sample #62 to 19.7 mg/Kg in soil samples Sample #60 and #61. Chloride concentrations ranged from 6.67 mg/Kg in soil samples Sample #60 and #61 to 1,090 m/Kg in soil sample Sample #50. Review of laboratory analytical results indicated TPH concentrations were less than NMOCD regulatory standards in all submitted soil samples.

Per NMOCD request, on August 4, 2011, five (5) additional samples (Sample #11A, Sample #20A, Sample #50A, Sample #51A, and Sample #56A) were collected in the areas represented by soil samples Sample #11, #20, #50, #51, and #56. The soil samples were submitted to the laboratory for analysis of chloride concentrations. Laboratory analytical results indicated chloride concentrations ranged from 7.62 mg/Kg in soil sample Sample #51A to 244 mg/Kg in soil sample Sample #56A. Review of laboratory analytical results indicated chloride concentrations were less than NMOCD regulatory standards in all submitted soil samples.

On August 5, 2011, based on laboratory analytical results, Southern Union requested and received NMOCD approval to backfill the excavation with locally purchased, non-impacted soil.

From August 5 through August 11, 2011, the excavation was backfilled in eighteen inch (18") lifts, compacted, and contoured to fit the surrounding topography. Prior to backfilling, final dimensions of the excavation were approximately one thousand, four hundred and twenty-five feet (1,425') in length, approximately six feet (6') to ten feet (10') in width, and ranging in depth from approximately four feet (4') to twelve feet (12') bgs.

The release site will be seeded with an NMSLO-approved seed mixture during the 2012 and 2013 calendar years.

4.0 QA/QC PROCEDURES

4.1 Soil Sampling

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

The soil samples were analyzed as follows:

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

4.2 Decontamination of Equipment

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

4.3 Laboratory Protocol

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

5.0 SITE CLOSURE REQUEST

Soil samples collected from the floor and sidewalls of the Trunk "M" (King Road) excavation were analyzed by an NMOCD-approved laboratory, and concentrations of benzene, BTEX, TPH, and chlorides were less than the remediation action levels established for the site. Based on these laboratory analytical results, Basin recommends Southern Union provide the NMOCD Hobbs District Office and the NMSLO a copy of this *Remediation Summary & Site Closure Request* and request the NMOCD grant site closure to the Trunk "M" (King Road) release site.

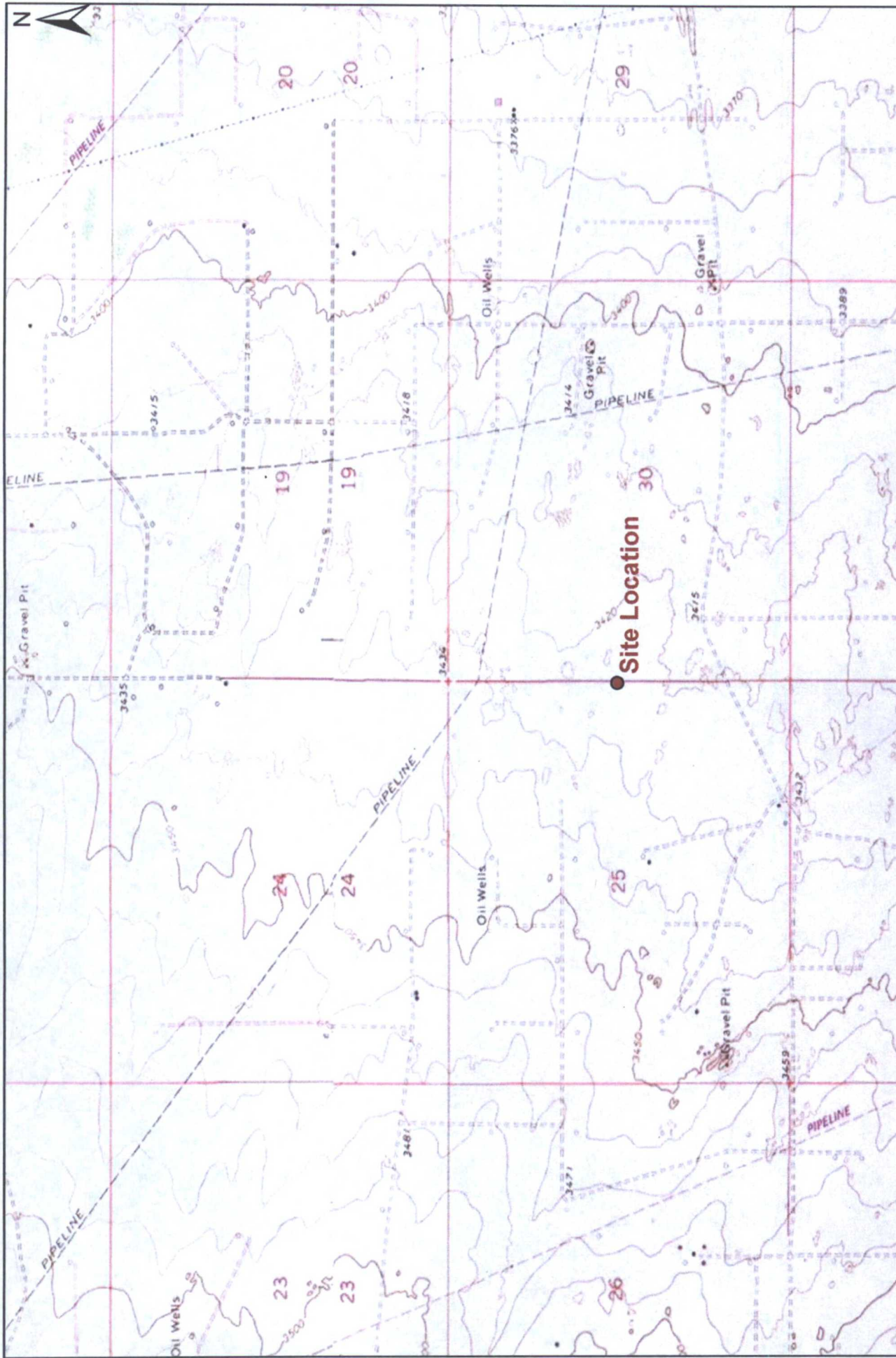
6.0 LIMITATIONS

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

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

7.0 DISTRIBUTION:

- Copy 1: Geoffrey Leking
New Mexico Energy, Minerals and Natural Resources Department
Oil Conservation Division (District 1)
1625 French Drive
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GeoffreyR.Leking@state.nm.us
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Hobbs, NM 88240
mharrison@slo.state.nm.us
- Copy 3: Rose Slade and Curt Stanley
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rose.slade@sug.com
curt.stanley@sug.com
- Copy 4: Basin Environmental Service Technologies, LLC
P.O. Box 301
Lovington, New Mexico 88260



Basin Environmental Service Technologies, LLC 3100 Plains Hwy. Lovington, NM 88260	Drawn By: BJA October 24, 2011 Checked By: BRB Scale: 1" = 2000'
	Figure 1 Site Location Map Southern Union Gas Services Trunk "M" (King Road) Lea County, New Mexico NMOCD Ref #: 1RP-06-11-2722
1,000 500 0 1,000 2,000 Distance in Feet	

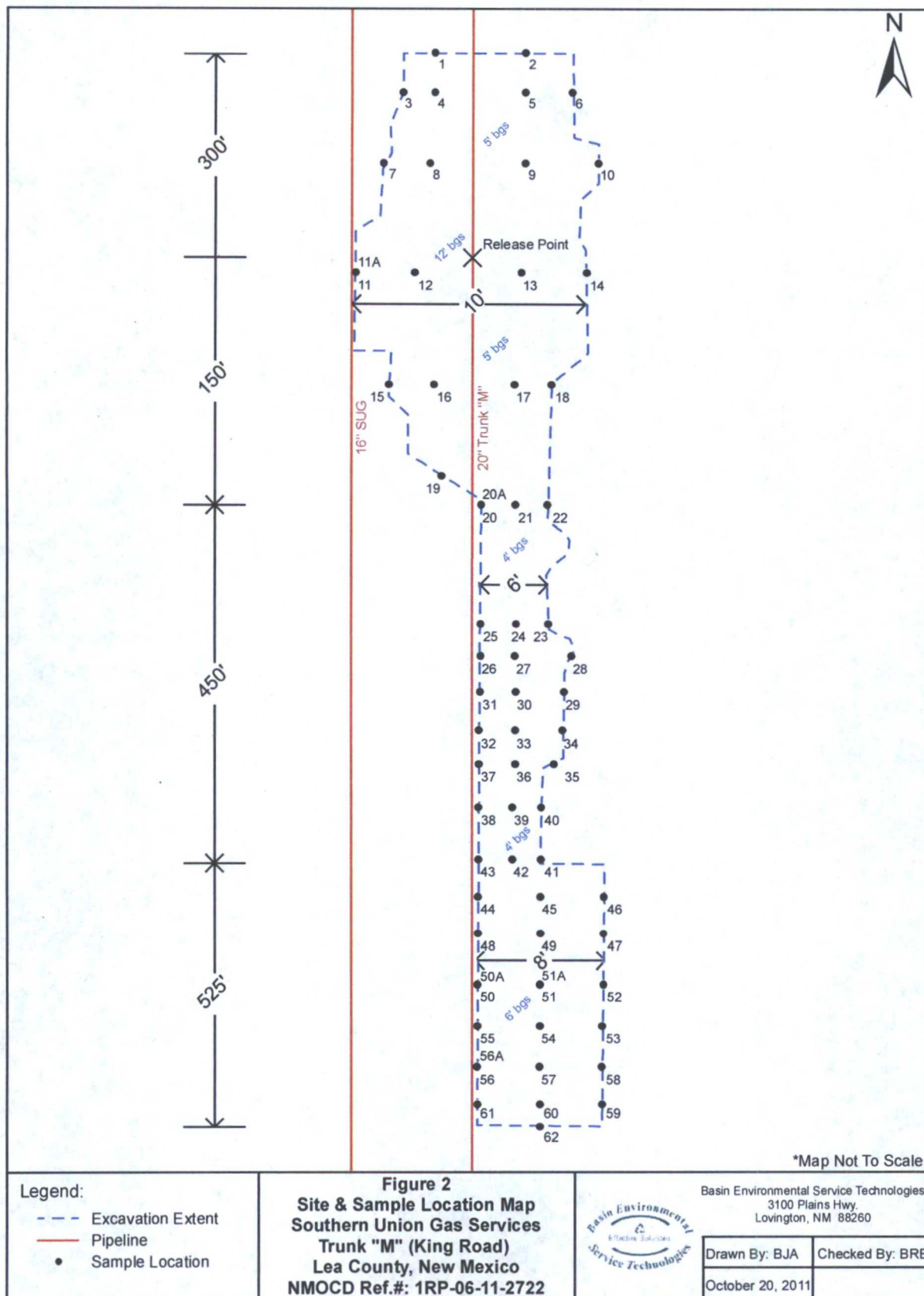


TABLE 1

CONCENTRATIONS OF BENZENE, BTX, TPH & CHLORIDES IN SOIL

SOUTHERN UNION GAS SERVICES
TRUNK "M" (KING ROAD)
LEA COUNTY, NEW MEXICO
NMOC REFERENCE NO: 1RP-06-11-2722

SAMPLE LOCATION	SAMPLE DEPTH (BGS)	SAMPLE DATE	SOIL STATUS	METHOD: EPA SW 846-8021B, 5030						METHOD: 8015M					TOTAL	
				BENZENE (mg/Kg)	TOLUENE (mg/Kg)	ETHYL-BENZENE (mg/Kg)	M.P.-XYLENES (mg/Kg)	XYLENES (mg/Kg)	O-XYLENE (mg/Kg)	TOTAL BTEX (mg/Kg)	GR0 C6-C12 (mg/Kg)	DRO C12-C28 (mg/Kg)	ORO C28-C35 (mg/Kg)	TPH C6-C35 (mg/Kg)	E 300 CHLORIDE (mg/Kg)	
Sample #1	3.5'	7/14/2011	In-Situ	<0.0011	<0.0021	<0.0011	<0.0021	<0.0011	<0.0011	<16.0	76.7	<16.0	76.7	13.3		
Sample #2	3.5'	7/14/2011	In-Situ	<0.0011	<0.0021	0.0030	<0.0021	<0.0011	<0.0011	<15.8	20.2	<15.8	20.2	27.9		
Sample #3	3.5'	7/14/2011	In-Situ	-	-	-	-	-	-	<16.0	<16.0	<16.0	<16.0	12.0		
Sample #4	5'	7/14/2011	In-Situ	-	-	-	-	-	-	<16.1	<16.1	<16.1	<16.1	12.9		
Sample #5	5'	7/14/2011	In-Situ	-	-	-	-	-	-	<16.2	<16.2	<16.2	<16.2	15.1		
Sample #6	3.5'	7/14/2011	In-Situ	-	-	-	-	-	-	<16.7	<16.7	<16.7	<16.7	17.1		
Sample #7	3.5'	7/14/2011	In-Situ	-	-	-	-	-	-	<15.5	<15.5	<15.5	<15.5	11.9		
Sample #8	5'	7/14/2011	In-Situ	-	-	-	-	-	-	<15.5	<15.5	<15.5	<15.5	53.9		
Sample #9	5'	7/14/2011	In-Situ	-	-	-	-	-	-	<15.7	<15.7	<15.7	<15.7	32.1		
Sample #10	3.5'	7/14/2011	In-Situ	-	-	-	-	-	-	<15.4	<15.4	<15.4	<15.4	25.9		
Sample #11	3.5'	7/14/2011	In-Situ	<0.0011	<0.0023	<0.0011	<0.0023	<0.0011	<0.0011	<16.9	<16.9	<16.9	<16.9	1030		
Sample #12	12'	7/14/2011	In-Situ	<0.0011	<0.0023	<0.0011	<0.0023	<0.0011	<0.0011	<17.1	<17.1	30.7	30.7	501		
Sample #13	12'	7/14/2011	In-Situ	<0.0011	<0.0022	<0.0011	<0.0022	<0.0011	<0.0011	<16.5	<16.5	<16.5	<16.5	1300		
Sample #14	3.5'	7/14/2011	In-Situ	<0.0011	<0.0022	<0.0011	<0.0022	<0.0011	<0.0011	<16.3	<16.3	<16.3	<16.3	80.3		
Sample #15	3.5'	7/14/2011	In-Situ	-	-	-	-	-	-	<16.3	<16.3	<16.3	<16.3	261		
Sample #16	5'	7/14/2011	In-Situ	-	-	-	-	-	-	<16.4	<16.4	<16.4	<16.4	235		
Sample #17	5'	7/14/2011	In-Situ	-	-	-	-	-	-	<16.3	<16.3	<16.3	<16.3	202		
Sample #18	3.5'	7/14/2011	In-Situ	-	-	-	-	-	-	<15.9	<15.9	<15.9	<15.9	13.3		
Sample #19	3.5'	7/14/2011	In-Situ	-	-	-	-	-	-	<16.8	<16.8	<16.8	<16.8	858		
Sample #20	5'	7/19/2011	In-Situ	-	-	-	-	-	-	<16.3	<16.3	<16.3	<16.3	622		
Sample #21	5'	7/19/2011	In-Situ	-	-	-	-	-	-	<15.9	<15.9	<15.9	<15.9	12.1		
Sample #22	3.5'	7/19/2011	In-Situ	-	-	-	-	-	-	<16.0	<16.0	<16.0	<16.0	12.7		
Sample #23	2.5'	7/19/2011	In-Situ	-	-	-	-	-	-	<15.9	<15.9	<15.9	<15.9	12.6		
Sample #24	4'	7/19/2011	In-Situ	-	-	-	-	-	-	<15.7	<15.7	<15.7	<15.7	15.6		
Sample #25	2.5'	7/19/2011	In-Situ	-	-	-	-	-	-	<15.7	<15.7	<15.7	<15.7	10.4		
Sample #26	2.5'	7/19/2011	In-Situ	-	-	-	-	-	-	<15.2	<15.2	<15.2	<15.2	10.8		
Sample #27	4'	7/19/2011	In-Situ	-	-	-	-	-	-	<16.0	<16.0	<16.0	<16.0	15.0		
Sample #28	2.5'	7/19/2011	In-Situ	-	-	-	-	-	-	<16.0	<16.0	<16.0	<16.0	20.9		
Sample #29	2.5'	7/19/2011	In-Situ	-	-	-	-	-	-	<15.8	<15.8	<15.8	<15.8	458		
Sample #30	4'	7/19/2011	In-Situ	-	-	-	-	-	-	<16.5	<16.5	<16.5	<16.5	15.0		
Sample #31	2.5'	7/19/2011	In-Situ	-	-	-	-	-	-	<15.4	<15.4	<15.4	<15.4	6.79		
Sample #32	2.5'	7/19/2011	In-Situ	-	-	-	-	-	-	<15.5	<15.5	<15.5	<15.5	5.80		
Sample #33	4'	7/19/2011	In-Situ	-	-	-	-	-	-	<16.1	<16.1	<16.1	<16.1	6.31		
Sample #34	2.5'	7/19/2011	In-Situ	-	-	-	-	-	-	<16.2	<16.2	<16.2	<16.2	6.47		
Sample #35	2.5'	7/19/2011	In-Situ	-	-	-	-	-	-	<15.7	<15.7	<15.7	<15.7	49.2		
Sample #36	4'	7/19/2011	In-Situ	-	-	-	-	-	-	<15.6	<15.6	<15.6	<15.6	46.5		
Sample #37	2.5'	7/19/2011	In-Situ	-	-	-	-	-	-	<15.4	<15.4	<15.4	<15.4	5.01		

TABLE 1

CONCENTRATIONS OF BENZENE, BTX, TPH & CHLORIDES IN SOIL
SOUTHERN UNION GAS SERVICES
TRUNK "M" (KING ROAD)
LEA COUNTY, NEW MEXICO
NMOCD REFERENCE NO: 1RP-06-11-2722

SAMPLE LOCATION	SAMPLE DEPTH (BGS)	SAMPLE DATE	SOIL STATUS	METHOD: EPA SW 846-8021B, 5030						METHOD: 8015M				TOTAL	
				BENZENE (mg/Kg)	TOLUENE (mg/Kg)	ETHYL-BENZENE (mg/Kg)	M.P. - XYLENES (mg/Kg)	O-XYLENE (mg/Kg)	TOTAL BTX (mg/Kg)	GRO C ₆ -C ₁₂ (mg/Kg)	DRO C ₁₂ -C ₂₈ (mg/Kg)	ORO C ₂₈ -C ₃₅ (mg/Kg)	TPH C ₆ -C ₃₅ (mg/Kg)	E 300 CHLORIDE (mg/Kg)	
Sample #38	2.5'	7/25/2011	In-Situ	-	-	-	-	-	-	-	<15.0	<15.0	<15.0	<15.0	13.8
Sample #39	4'	7/25/2011	In-Situ	-	-	-	-	-	-	-	<15.0	<15.0	<15.0	<15.0	9.35
Sample #40	2.5'	7/25/2011	In-Situ	-	-	-	-	-	-	-	<15.0	<15.0	<15.0	<15.0	7.58
Sample #41	2.5'	7/25/2011	In-Situ	-	-	-	-	-	-	-	<15.0	<15.0	<15.0	<15.0	7.99
Sample #42	4'	7/25/2011	In-Situ	-	-	-	-	-	-	-	<15.3	<15.3	<15.3	<15.3	9.43
Sample #43	2.5'	7/25/2011	In-Situ	-	-	-	-	-	-	-	<15.5	<15.5	<15.5	<15.5	13.2
Sample #44	4.5'	7/25/2011	In-Situ	-	-	-	-	-	-	-	<15.5	<15.5	<15.5	<15.5	7.42
Sample #45	6'	7/25/2011	In-Situ	-	-	-	-	-	-	-	<15.6	<15.6	<15.6	<15.6	33.8
Sample #46	4.5'	7/25/2011	In-Situ	-	-	-	-	-	-	-	<15.4	<15.4	<15.4	<15.4	7.81
Sample #47	4.5'	7/25/2011	In-Situ	-	-	-	-	-	-	-	<15.7	<15.7	<15.7	<15.7	60.2
Sample #48	6'	7/25/2011	In-Situ	-	-	-	-	-	-	-	<15.6	<15.6	<15.6	<15.6	30.3
Sample #49	4.5'	7/25/2011	In-Situ	-	-	-	-	-	-	-	<15.3	<15.3	<15.3	<15.3	73.3
Sample #50	4.5'	7/25/2011	In-Situ	-	-	-	-	-	-	-	<16.2	<16.2	<16.2	<16.2	1,090
Sample #51	6'	7/25/2011	In-Situ	-	-	-	-	-	-	-	<16.0	<16.0	<16.0	<16.0	707
Sample #52	4.5'	7/25/2011	In-Situ	-	-	-	-	-	-	-	<16.2	<16.2	<16.2	<16.2	7.82
Sample #53	4.5'	7/25/2011	In-Situ	-	-	-	-	-	-	-	<15.4	<15.4	<15.4	<15.4	7.97
Sample #54	6'	7/25/2011	In-Situ	-	-	-	-	-	-	-	<15.7	<15.7	<15.7	<15.7	8.11
Sample #55	4.5'	7/25/2011	In-Situ	-	-	-	-	-	-	-	<15.4	<15.4	<15.4	<15.4	7.00
Sample #56	4.5'	7/25/2011	In-Situ	-	-	-	-	-	-	-	<15.8	<15.8	<15.8	<15.8	612
Sample #57	6'	7/25/2011	In-Situ	-	-	-	-	-	-	-	<15.8	<15.8	<15.8	<15.8	13.6
Sample #58	4.5'	7/25/2011	In-Situ	-	-	-	-	-	-	-	<15.6	18.1	<15.6	18.1	627
Sample #59	4.5'	7/25/2011	In-Situ	-	-	-	-	-	-	-	<15.6	18.7	<15.6	18.7	651
Sample #60	6'	7/25/2011	In-Situ	-	-	-	-	-	-	-	<15.3	19.7	<15.3	19.7	6.67
Sample #61	4.5'	7/25/2011	In-Situ	-	-	-	-	-	-	-	<15.4	19.7	<15.4	19.7	6.67
Sample #62	4.5'	7/25/2011	In-Situ	-	-	-	-	-	-	-	<15.3	<15.3	<15.3	<15.3	6.70
Sample #11A	4'	8/4/2011	In-Situ	-	-	-	-	-	-	-	-	-	-	-	8.79
Sample #20A	6.5'	8/4/2011	In-Situ	-	-	-	-	-	-	-	-	-	-	-	7.80
Sample #50A	5'	8/4/2011	In-Situ	-	-	-	-	-	-	-	-	-	-	-	101
Sample #51A	6.5'	8/4/2011	In-Situ	-	-	-	-	-	-	-	-	-	-	-	7.62
Sample #56A	5'	8/4/2011	In-Situ	-	-	-	-	-	-	-	-	-	-	-	244
NMOCD Criteria				10						50				5,000	

- = Not analyzed.



Trunk "M" (King Road) - Release Site



Trunk "M" (King Road) - Release Site



Trunk "M" (King Road) - Release Site (Initial Response)



Trunk "M" (King Road) - Excavation



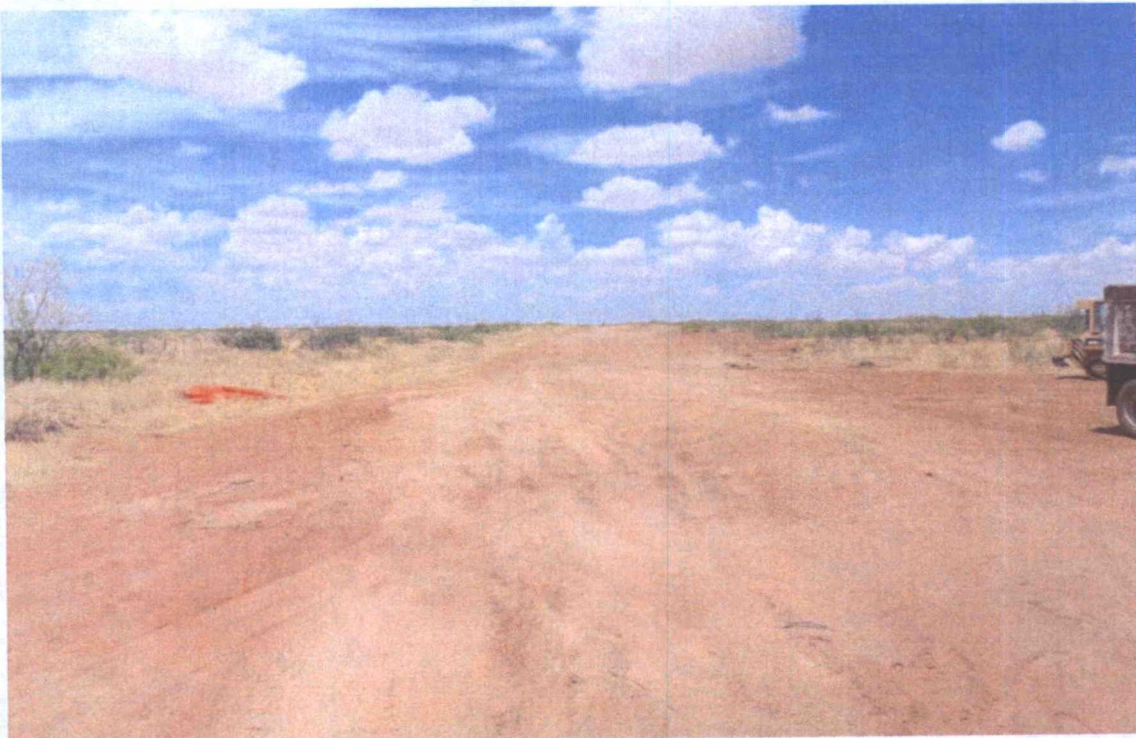
Trunk "M" (King Road) - Excavation



Trunk "M" (King Road) - Excavation



Trunk "M" (King Road) - Excavation



Trunk "M" (King Road) - Excavation (Following Backfill)

Analytical Report 423201
for
Southern Union Gas Services- Monahans

Project Manager: Rose Slade

Trunk M King Road 6-27-11

Southern Union Gas

26-JUL-11

Collected By: Client



Celebrating 20 Years of commitment to excellence in Environmental Testing Services



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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)



26-JUL-11

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

Reference: XENCO Report No: **423201**
Trunk M King Road 6-27-11
Project Address: Eunice, 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 423201. 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. 423201 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

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Sample Cross Reference 423201**Southern Union Gas Services- Monahans, Monahans, TX**

Trunk M King Road 6-27-11

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
Sample # 1	S	07-14-11 10:00		423201-001
Sample # 2	S	07-14-11 10:05		423201-002
Sample # 3	S	07-14-11 10:10		423201-003
Sample # 4	S	07-14-11 10:15		423201-004
Sample # 5	S	07-14-11 10:20		423201-005
Sample # 6	S	07-14-11 10:25		423201-006
Sample # 7	S	07-14-11 10:30		423201-007
Sample # 8	S	07-14-11 10:35		423201-008
Sample # 9	S	07-14-11 10:40		423201-009
Sample # 10	S	07-14-11 10:45		423201-010
Sample # 11	S	07-14-11 10:50		423201-011
Sample # 12	S	07-14-11 10:55		423201-012
Sample # 13	S	07-14-11 11:00		423201-013
Sample # 14	S	07-14-11 11:05		423201-014
Sample # 15	S	07-14-11 11:10		423201-015
Sample # 16	S	07-14-11 11:15		423201-016
Sample # 17	S	07-14-11 11:20		423201-017
Sample # 18	S	07-14-11 11:25		423201-018
Sample # 19	S	07-14-11 11:30		423201-019



CASE NARRATIVE

Client Name: Southern Union Gas Services- Monahans

Project Name: Trunk M King Road 6-27-11



Project ID: Southern Union Gas

Work Order Number: 423201

Report Date: 26-JUL-11

Date Received: 07/15/2011

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non nonformances and comments:

Batch: LBA-864376 Anions by E300

RPD recovered outside QC limits between the sample and sample duplicate for Chloride.

Certificate of Analysis Summary 423201

Southern Union Gas Services- Monahans, Monahans, TX



Project Id: Southern Union Gas

Contact: Rose Slade

Project Location: Eunice, NM

Project Name: Trunk M King Road 6-27-11

Date Received in Lab: Fri Jul-15-11 08:15 am

Report Date: 26-JUL-11

Project Manager: Brent Barron, II

Analysis Requested	Lab Id:	423201-001	423201-002	423201-003	423201-004	423201-005	423201-006
	Field Id:	Sample # 1	Sample # 2	Sample # 3	Sample # 4	Sample # 5	Sample # 6
	Depth:						
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Sampled:	Jul-14-11 10:00	Jul-14-11 10:05	Jul-14-11 10:10	Jul-14-11 10:15	Jul-14-11 10:20	Jul-14-11 10:25
	Extracted:	Jul-18-11 10:30	Jul-18-11 10:30	Jul-18-11 10:30	Jul-18-11 10:30	Jul-18-11 10:30	Jul-18-11 10:30
	Analyzed:	Jul-19-11 12:10	Jul-19-11 12:10	Jul-19-11 12:10	Jul-19-11 12:10	Jul-19-11 12:10	Jul-19-11 12:10
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
		13.3 8.96	27.9 8.85	12.0 8.98	12.9 9.05	15.1 9.14	17.1 9.38
Chloride							

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Brent Barron, II
Odessa Laboratory Manager



Certificate of Analysis Summary 423201

Southern Union Gas Services- Monahans, Monahans, TX



Project Id: Southern Union Gas

Contact: Rose Slade

Project Location: Eunice, NM

Project Name: Trunk M King Road 6-27-11

Date Received in Lab: Fri Jul-15-11 08:15 am

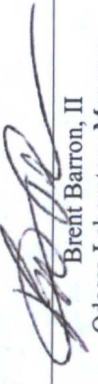
Report Date: 26-JUL-11

Project Manager: Brent Barron, II

Analysis Requested	Lab Id:	423201-001	423201-002	423201-003	423201-004	423201-005	423201-006
	Field Id:	Sample # 1	Sample # 2	Sample # 3	Sample # 4	Sample # 5	Sample # 6
	Depth:						
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Sampled:	Jul-14-11 10:00	Jul-14-11 10:05	Jul-14-11 10:10	Jul-14-11 10:15	Jul-14-11 10:20	Jul-14-11 10:25
BTX by EPA 8021B	Extracted:	Jul-22-11 09:02	Jul-22-11 09:02				
	Analyzed:	Jul-22-11 14:53	Jul-22-11 15:16				
	Units/RL:	mg/kg RL	mg/kg RL				
	Benzene	ND 0.00106	ND 0.00105				
	Toluene	ND 0.00213	ND 0.00211				
	Ethylbenzene	ND 0.00106	0.00300 0.00105				
	m,p-Xylenes	ND 0.00213	ND 0.00211				
	o-Xylene	ND 0.00106	ND 0.00105				
	Total Xylenes	ND 0.00106	ND 0.00105				
	Total BTX	ND 0.00106	0.00300 0.00105				

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Certificate of Analysis Summary 423201

Southern Union Gas Services- Monahans, Monahans, TX



Project Id: Southern Union Gas
Contact: Rose Slade
Project Location: Eunice, NM

Project Name: Trunk M King Road 6-27-11

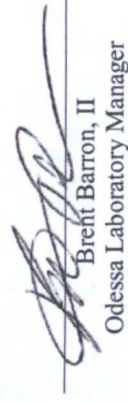
Date Received in Lab: Fri Jul-15-11 08:15 am
Report Date: 26-JUL-11

Project Manager: Brent Barron, II

Analysis Requested	Lab Id:	423201-001	423201-002	423201-003	423201-004	423201-005	423201-006
	Field Id:	Sample # 1	Sample # 2	Sample # 3	Sample # 4	Sample # 5	Sample # 6
	Depth:						
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Sampled:	Jul-14-11 10:00	Jul-14-11 10:05	Jul-14-11 10:10	Jul-14-11 10:15	Jul-14-11 10:20	Jul-14-11 10:25
Percent Moisture	Extracted:						
	Analyzed:	Jul-15-11 08:20	Jul-15-11 08:20	Jul-15-11 08:20	Jul-15-11 08:20	Jul-15-11 08:20	Jul-15-11 08:20
	Units/RL:	%	%	%	%	%	%
Percent Moisture		6.26	5.12	6.45	7.15	8.07	10.4
		1.00	1.00	1.00	1.00	1.00	1.00
TPH By SW8015 Mod	Extracted:						
	Analyzed:	Jul-15-11 11:00	Jul-15-11 11:00	Jul-15-11 11:00	Jul-15-11 11:00	Jul-15-11 11:00	Jul-15-11 11:00
	Units/RL:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
C6-C12 Gasoline Range Hydrocarbons		ND	ND	ND	ND	ND	ND
C12-C28 Diesel Range Hydrocarbons		76.7	20.2	ND	ND	ND	ND
C28-C35 Oil Range Hydrocarbons		ND	ND	ND	ND	ND	ND
Total TPH		76.7	20.2	ND	ND	ND	ND
		16.0	15.8	16.0	16.1	16.2	16.7
		16.0	15.8	16.0	16.1	16.2	16.7
		16.0	15.8	16.0	16.1	16.2	16.7

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 Brent Barron, II
 Odessa Laboratory Manager

Certificate of Analysis Summary 423201

Southern Union Gas Services- Monahans, Monahans, TX

Project Name: Trunk M King Road 6-27-11

Project Id: Southern Union Gas

Contact: Rose Slade

Project Location: Eunice, NM

Date Received in Lab: Fri Jul-15-11 08:15 am

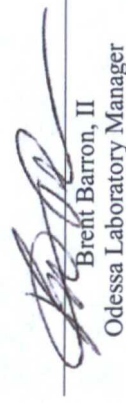
Report Date: 26-JUL-11

Project Manager: Brent Barron, II

Analysis Requested	Lab Id:	423201-007	423201-008	423201-009	423201-010	423201-011	423201-012
	Field Id:						
Anions by E300	Depth:						
	Matrix:						
	Sampled:	Jul-14-11 10:30	Jul-14-11 10:35	Jul-14-11 10:40	Jul-14-11 10:45	Jul-14-11 10:50	Jul-14-11 10:55
	Extracted:	Jul-18-11 10:30	Jul-18-11 10:30	Jul-18-11 10:30	Jul-20-11 00:45	Jul-20-11 00:45	Jul-20-11 00:45
	Analyzed:	Jul-19-11 12:10	Jul-19-11 12:10	Jul-19-11 12:10	Jul-20-11 00:45	Jul-20-11 00:45	Jul-20-11 00:45
	Units/RL:	mg/kg RL 119 8.69	mg/kg RL 53.9 8.66	mg/kg RL 321 8.83	mg/kg RL 25.9 8.60	mg/kg RL 1030 9.45	mg/kg RL 501 9.57
Chloride							

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Brent Barron, II
Odessa Laboratory Manager



Certificate of Analysis Summary 423201

Southern Union Gas Services- Monahans, Monahans, TX



Project Id: Southern Union Gas
Contact: Rose Slade
Project Location: Eunice, NM

Project Name: Trunk M King Road 6-27-11

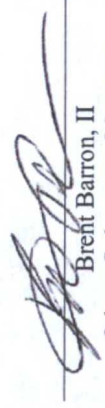
Date Received in Lab: Fri Jul-15-11 08:15 am
Report Date: 26-JUL-11

Project Manager: Brent Barron, II

Analysis Requested	Lab Id:	423201-007	423201-008	423201-009	423201-010	423201-011	423201-012
	Field Id:						
	Depth:						
	Matrix:						
	Sampled:	SOIL Jul-14-11 10:30	SOIL Jul-14-11 10:35	SOIL Jul-14-11 10:40	SOIL Jul-14-11 10:45	SOIL Jul-14-11 10:50	SOIL Jul-14-11 10:55
BTX by EPA 8021B	Extracted:						
	Analyzed:						
	Units/RL:						
Benzene						ND 0.00113	ND 0.00113
Toluene						ND 0.00226	ND 0.00227
Ethylbenzene						ND 0.00113	ND 0.00113
m_p-Xylenes						ND 0.00226	ND 0.00227
o-Xylene						ND 0.00113	ND 0.00113
Total Xylenes						ND 0.00113	ND 0.00113
Total BTX						ND 0.00113	ND 0.00113

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Brent Barron, II
Odessa Laboratory Manager

Certificate of Analysis Summary 423201

Southern Union Gas Services- Monahans, Monahans, TX



Project Name: Trunk M King Road 6-27-11

Project Id: Southern Union Gas

Contact: Rose Slade

Project Location: Eunice, NM

Date Received in Lab: Fri Jul-15-11 08:15 am

Report Date: 26-JUL-11

Project Manager: Brent Barron, II

Analysis Requested	Lab Id:	423201-007	423201-008	423201-009	423201-010	423201-011	423201-012
	Field Id:	Sample # 7	Sample # 8	Sample # 9	Sample # 10	Sample # 11	Sample # 12
	Depth:						
	Matrix:						
	Sampled:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
		Jul-14-11 10:30	Jul-14-11 10:35	Jul-14-11 10:40	Jul-14-11 10:45	Jul-14-11 10:50	Jul-14-11 10:55
Percent Moisture	Extracted:						
	Analyzed:	Jul-15-11 08:20	Jul-15-11 08:20	Jul-15-11 08:20	Jul-15-11 08:20	Jul-15-11 08:20	Jul-15-11 08:20
	Units/RL:	%	%	%	%	%	%
		3.36	3.03	4.92	2.37	11.1	12.2
		1.00	1.00	1.00	1.00	1.00	1.00
TPH By SW8015 Mod	Extracted:						
	Analyzed:	Jul-15-11 11:00	Jul-15-11 11:00	Jul-15-11 11:00	Jul-15-11 11:00	Jul-15-11 11:00	Jul-15-11 11:00
	Units/RL:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
		ND	ND	ND	ND	ND	ND
		15.5	15.5	15.7	15.4	16.9	17.1
C6-C12 Gasoline Range Hydrocarbons							
C12-C28 Diesel Range Hydrocarbons							
C28-C35 Oil Range Hydrocarbons							
		ND	ND	ND	ND	ND	ND
		15.5	15.5	15.7	15.4	16.9	17.1
Total TPH							
		ND	ND	ND	ND	ND	ND
		15.5	15.5	15.7	15.4	16.9	17.1

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Brent Barron, II
Odessa Laboratory Manager

Certificate of Analysis Summary 423201

Southern Union Gas Services- Monahans, Monahans, TX



Project Id: Southern Union Gas

Contact: Rose Slade

Project Location: Eunice, NM

Project Name: Trunk M King Road 6-27-11

Date Received in Lab: Fri Jul-15-11 08:15 am

Report Date: 26-JUL-11

Project Manager: Brent Barron, II

Analysis Requested	Lab Id:	423201-013	423201-014	423201-015	423201-016	423201-017	423201-018
	Field Id:	Sample # 13	Sample # 14	Sample # 15	Sample # 16	Sample # 17	Sample # 18
	Depth:						
	Matrix:						
	Sampled:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
		Jul-14-11 11:00	Jul-14-11 11:05	Jul-14-11 11:10	Jul-14-11 11:15	Jul-14-11 11:20	Jul-14-11 11:25
Anions by E300	Extracted:						
	Analyzed:	Jul-20-11 00:45	Jul-20-11 00:45	Jul-20-11 00:45	Jul-20-11 00:45	Jul-20-11 00:45	Jul-20-11 00:45
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
		1300 23.2	80.3 9.15	261 9.15	235 9.18	202 9.12	13.3 8.91
Chloride							

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Brent Barron, II
Odessa Laboratory Manager



Certificate of Analysis Summary 423201

Southern Union Gas Services- Monahans, Monahans, TX



Project Name: Trunk M King Road 6-27-11

Project Id: Southern Union Gas

Contact: Rose Slade

Project Location: Eunice, NM

Date Received in Lab: Fri Jul-15-11 08:15 am

Report Date: 26-JUL-11

Project Manager: Brent Barron, II

<i>Analysis Requested</i>		Lab Id:	423201-013	423201-014	423201-015	423201-016	423201-017	423201-018
		Field Id:	Sample # 13	Sample # 14	Sample # 15	Sample # 16	Sample # 17	Sample # 18
		Depth:						
		Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
		Sampled:	Jul-14-11 11:00	Jul-14-11 11:05	Jul-14-11 11:10	Jul-14-11 11:15	Jul-14-11 11:20	Jul-14-11 11:25
BTEX by EPA 8021B		Extracted:	Jul-22-11 09:02	Jul-22-11 09:02				
		Analyzed:	Jul-22-11 16:01	Jul-22-11 16:24				
		Units/RL:	mg/kg RL	mg/kg RL				
Benzene			ND 0.00110	ND 0.00109				
Toluene			ND 0.00220	ND 0.00218				
Ethylbenzene			ND 0.00110	ND 0.00109				
m_p-Xylenes			ND 0.00220	ND 0.00218				
o-Xylene			ND 0.00110	ND 0.00109				
Total Xylenes			ND 0.00110	ND 0.00109				
Total BTEX			ND 0.00110	ND 0.00109				

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Brent Barron, II
Odessa Laboratory Manager

Certificate of Analysis Summary 423201

Southern Union Gas Services- Monahans, Monahans, TX



Project Id: Southern Union Gas
Contact: Rose Slade
Project Location: Eunice, NM

Project Name: Trunk M King Road 6-27-11

Date Received in Lab: Fri Jul-15-11 08:15 am

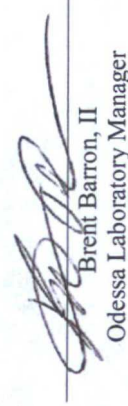
Report Date: 26-JUL-11

Project Manager: Brent Barron, II

Analysis Requested	Lab Id:	423201-013	423201-014	423201-015	423201-016	423201-017	423201-018
	Field Id:	Sample # 13	Sample # 14	Sample # 15	Sample # 16	Sample # 17	Sample # 18
	Depth:						
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Sampled:	Jul-14-11 11:00	Jul-14-11 11:05	Jul-14-11 11:10	Jul-14-11 11:15	Jul-14-11 11:20	Jul-14-11 11:25
Percent Moisture	Extracted:						
	Analyzed:	Jul-15-11 08:20	Jul-15-11 08:20	Jul-15-11 08:20	Jul-15-11 08:20	Jul-15-11 08:20	Jul-15-11 08:20
	Units/RL:	%	RL	%	RL	%	RL
Percent Moisture		9.30	8.20	8.22	8.46	7.91	5.75
		1.00	1.00	1.00	1.00	1.00	1.00
TPH By SW8015 Mod	Extracted:						
	Analyzed:	Jul-15-11 11:00	Jul-15-11 11:00	Jul-15-11 11:00	Jul-15-11 11:00	Jul-15-11 11:00	Jul-15-11 11:00
	Units/RL:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
C6-C12 Gasoline Range Hydrocarbons		ND	ND	ND	ND	ND	ND
C12-C28 Diesel Range Hydrocarbons		ND	ND	ND	ND	ND	ND
C28-C35 Oil Range Hydrocarbons		ND	ND	ND	ND	ND	ND
Total TPH		ND	ND	ND	ND	ND	ND

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Brent Barron, II
Odessa Laboratory Manager



Certificate of Analysis Summary 423201

Southern Union Gas Services- Monahans, Monahans, TX



Project Name: Trunk M King Road 6-27-11

Project Id: Southern Union Gas

Contact: Rose Slade

Project Location: Eunice, NM

Date Received in Lab: Fri Jul-15-11 08:15 am

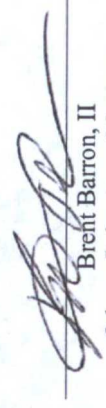
Report Date: 26-JUL-11

Project Manager: Brent Barron, II

Analysis Requested	Lab Id:	423201-019				
	Field Id:	Sample # 19				
	Depth:					
Anions by E300	Matrix:	SOIL				
	Sampled:	Jul-14-11 11:30				
	Extracted:					
Chloride	Analyzed:	Jul-20-11 00:45				
	Units/RL:	mg/kg RL				
		858 9.42				

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Brent Barron, II
Odessa Laboratory Manager



Certificate of Analysis Summary 423201

Southern Union Gas Services- Monahans, Monahans, TX



Project Name: Trunk M King Road 6-27-11

Project Id: Southern Union Gas

Contact: Rose Slade

Project Location: Eunice, NM

Date Received in Lab: Fri Jul-15-11 08:15 am

Report Date: 26-JUL-11

Project Manager: Brent Barron, II

Analysis Requested		Lab Id:	423201-019				
		Field Id:	Sample # 19				
		Depth:					
		Matrix:	SOIL				
		Sampled:	Jul-14-11 11:30				
Percent Moisture	Extracted:						
	Analyzed:		Jul-15-11 12:40				
	Units/RL:		% RL				
			10.8 1.00				
TPH By SW8015 Mod		Extracted:	Jul-15-11 11:00				
		Analyzed:	Jul-16-11 00:50				
		Units/RL:	mg/kg RL				
C6-C12 Gasoline Range Hydrocarbons			ND 16.8				
C12-C28 Diesel Range Hydrocarbons			ND 16.8				
C28-C35 Oil Range Hydrocarbons			ND 16.8				
Total TPH			ND 16.8				

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Odessa Laboratory Manager

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 quantitation 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 **MLQ** Method Quantitation Limit **LOQ** Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

+ Outside XENCO's scope of NELAC Accreditation.

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(305) 823-8500	(305) 823-8555
(432) 563-1800	(432) 563-1713
(770) 449-8800	(770) 449-5477
(602) 437-0330	

Form 2 - Surrogate Recoveries

Project Name: Trunk M King Road 6-27-11

Work Orders : 423201,

Project ID: Southern Union Gas

Lab Batch #: 864022

Sample: 423201-001 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 07/15/11 15:32

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	99.9	99.7	100	70-135	
o-Terphenyl	54.3	49.9	109	70-135	

Lab Batch #: 864022

Sample: 423201-002 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 07/15/11 16:02

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	101	100	101	70-135	
o-Terphenyl	55.7	50.0	111	70-135	

Lab Batch #: 864022

Sample: 423201-003 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 07/15/11 16:31

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	102	100	102	70-135	
o-Terphenyl	55.4	50.0	111	70-135	

Lab Batch #: 864022

Sample: 423201-004 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 07/15/11 17:01

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	97.2	99.8	97	70-135	
o-Terphenyl	52.2	49.9	105	70-135	

Lab Batch #: 864022

Sample: 423201-005 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 07/15/11 17:31

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	102	99.5	103	70-135	
o-Terphenyl	54.5	49.8	109	70-135	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = $100 * A / B$

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

Form 2 - Surrogate Recoveries

Project Name: Trunk M King Road 6-27-11

Work Orders : 423201,

Project ID: Southern Union Gas

Lab Batch #: 864022

Sample: 423201-006 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 07/15/11 18:01

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	105	100	105	70-135	
o-Terphenyl	56.5	50.0	113	70-135	

Lab Batch #: 864022

Sample: 423201-007 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 07/15/11 18:30

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	115	99.9	115	70-135	
o-Terphenyl	61.6	50.0	123	70-135	

Lab Batch #: 864022

Sample: 423201-008 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 07/15/11 19:00

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	106	100	106	70-135	
o-Terphenyl	56.9	50.2	113	70-135	

Lab Batch #: 864022

Sample: 423201-009 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 07/15/11 19:29

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	106	99.7	106	70-135	
o-Terphenyl	56.5	49.9	113	70-135	

Lab Batch #: 864022

Sample: 423201-010 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 07/15/11 20:28

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	105	101	104	70-135	
o-Terphenyl	55.7	50.3	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.

Form 2 - Surrogate Recoveries

Project Name: Trunk M King Road 6-27-11

Work Orders : 423201,

Project ID: Southern Union Gas

Lab Batch #: 864022

Sample: 423201-011 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 07/15/11 20:57

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	106	100	106	70-135	
o-Terphenyl	57.6	50.1	115	70-135	

Lab Batch #: 864022

Sample: 423201-012 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 07/15/11 21:26

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	104	100	104	70-135	
o-Terphenyl	56.9	50.1	114	70-135	

Lab Batch #: 864022

Sample: 423201-013 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 07/15/11 21:55

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	105	99.7	105	70-135	
o-Terphenyl	57.1	49.9	114	70-135	

Lab Batch #: 864022

Sample: 423201-014 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 07/15/11 22:24

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	104	100	104	70-135	
o-Terphenyl	56.2	50.0	112	70-135	

Lab Batch #: 864022

Sample: 423201-015 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 07/15/11 22:53

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	107	99.8	107	70-135	
o-Terphenyl	57.5	49.9	115	70-135	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = $100 * A / B$

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

Form 2 - Surrogate Recoveries

Project Name: Trunk M King Road 6-27-11

Work Orders : 423201,

Project ID: Southern Union Gas

Lab Batch #: 864022

Sample: 423201-016 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 07/15/11 23:23

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	98.1	99.8	98	70-135	
o-Terphenyl	54.5	49.9	109	70-135	

Lab Batch #: 864022

Sample: 423201-017 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 07/15/11 23:52

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	99.6	99.8	100	70-135	
o-Terphenyl	55.0	49.9	110	70-135	

Lab Batch #: 864022

Sample: 423201-018 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 07/16/11 00:21

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	96.8	100	97	70-135	
o-Terphenyl	54.1	50.0	108	70-135	

Lab Batch #: 864022

Sample: 423201-019 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 07/16/11 00:50

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	95.6	99.8	96	70-135	
o-Terphenyl	51.0	49.9	102	70-135	

Lab Batch #: 865128

Sample: 423201-001 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 07/22/11 14:53

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B 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	0.0280	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.

Form 2 - Surrogate Recoveries

Project Name: Trunk M King Road 6-27-11

Work Orders : 423201,

Project ID: Southern Union Gas

Lab Batch #: 865128

Sample: 423201-002 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 07/22/11 15:16

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	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	0.0296	0.0300	99	80-120	

Lab Batch #: 865128

Sample: 423201-012 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 07/22/11 15:39

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	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	0.0279	0.0300	93	80-120	

Lab Batch #: 865128

Sample: 423201-013 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 07/22/11 16:01

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	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	0.0321	0.0300	107	80-120	

Lab Batch #: 865128

Sample: 423201-014 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 07/22/11 16:24

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0277	0.0300	92	80-120	
4-Bromofluorobenzene	0.0287	0.0300	96	80-120	

Lab Batch #: 865293

Sample: 423201-011 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 07/25/11 16:44

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0299	0.0300	100	80-120	
4-Bromofluorobenzene	0.0321	0.0300	107	80-120	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

Form 2 - Surrogate Recoveries

Project Name: Trunk M King Road 6-27-11

Work Orders : 423201,

Project ID: Southern Union Gas

Lab Batch #: 864022

Sample: 607991-1-BLK / BLK

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 07/15/11 14:33

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	98.2	100	98	70-135	
o-Terphenyl	52.4	50.1	105	70-135	

Lab Batch #: 865128

Sample: 608656-1-BLK / BLK

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 07/22/11 12:58

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	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	0.0260	0.0300	87	80-120	

Lab Batch #: 865293

Sample: 608750-1-BLK / BLK

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 07/25/11 13:45

SURROGATE RECOVERY STUDY

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

Lab Batch #: 864022

Sample: 607991-1-BKS / BKS

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 07/15/11 13:33

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	116	100	116	70-135	
o-Terphenyl	52.6	50.1	105	70-135	

Lab Batch #: 865128

Sample: 608656-1-BKS / BKS

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 07/22/11 11:27

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0298	0.0300	99	80-120	
4-Bromofluorobenzene	0.0305	0.0300	102	80-120	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = $100 * A / B$

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

Form 2 - Surrogate Recoveries

Project Name: Trunk M King Road 6-27-11

Work Orders : 423201,

Project ID: Southern Union Gas

Lab Batch #: 865293

Sample: 608750-1-BKS / BKS

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 07/25/11 15:03

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B		Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes						
1,4-Difluorobenzene		0.0293	0.0300	98	80-120	
4-Bromofluorobenzene		0.0327	0.0300	109	80-120	

Lab Batch #: 864022

Sample: 607991-1-BSD / BSD

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 07/15/11 14:03

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod		Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes						
1-Chlorooctane		96.8	99.9	97	70-135	
o-Terphenyl		49.7	50.0	99	70-135	

Lab Batch #: 865128

Sample: 608656-1-BSD / BSD

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 07/22/11 11:50

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B		Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes						
1,4-Difluorobenzene		0.0306	0.0300	102	80-120	
4-Bromofluorobenzene		0.0301	0.0300	100	80-120	

Lab Batch #: 865293

Sample: 608750-1-BSD / BSD

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 07/25/11 12:37

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B		Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes						
1,4-Difluorobenzene		0.0305	0.0300	102	80-120	
4-Bromofluorobenzene		0.0319	0.0300	106	80-120	

Lab Batch #: 864022

Sample: 423201-019 S / MS

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 07/16/11 01:18

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod		Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes						
1-Chlorooctane		114	99.9	114	70-135	
o-Terphenyl		52.6	50.0	105	70-135	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = $100 * A / B$

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

Form 2 - Surrogate Recoveries

Project Name: Trunk M King Road 6-27-11

Work Orders : 423201,

Project ID: Southern Union Gas

Lab Batch #: 865128

Sample: 423850-001 S / MS

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 07/22/11 17:10

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0279	0.0300	93	80-120	
4-Bromofluorobenzene	0.0324	0.0300	108	80-120	

Lab Batch #: 865293

Sample: 424110-001 S / MS

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 07/25/11 20:08

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0305	0.0300	102	80-120	
4-Bromofluorobenzene	0.0334	0.0300	111	80-120	

Lab Batch #: 864022

Sample: 423201-019 SD / MSD

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 07/16/11 01:47

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	115	99.9	115	70-135	
o-Terphenyl	52.2	50.0	104	70-135	

Lab Batch #: 865128

Sample: 423850-001 SD / MSD

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 07/22/11 17:32

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0295	0.0300	98	80-120	
4-Bromofluorobenzene	0.0324	0.0300	108	80-120	

Lab Batch #: 865293

Sample: 424110-001 SD / MSD

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 07/25/11 20:31

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0293	0.0300	98	80-120	
4-Bromofluorobenzene	0.0319	0.0300	106	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.

Project Name: Trunk M King Road 6-27-11

Work Order #: 423201

Analyst: ASA

Lab Batch ID: 865128

Sample: 608656-1-BKS

Units: mg/kg

Date Prepared: 07/22/2011

Batch #: 1

Project ID: Southern Union Gas

Date Analyzed: 07/22/2011

Matrix: Solid

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY											
Units: mg/kg											
Analytes	BTEx by EPA 8021B										
	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
	<0.00100	0.100	0.102	102	0.100	0.100	100	2	70-130	35	
	<0.00200	0.100	0.0963	96	0.100	0.0936	94	3	70-130	35	
	<0.00100	0.100	0.105	105	0.100	0.105	105	0	71-129	35	
	<0.00200	0.200	0.202	101	0.200	0.200	100	1	70-135	35	
	<0.00100	0.100	0.100	100	0.100	0.100	100	0	71-133	35	
Benzene											
Toluene											
Ethylbenzene											
m_p-Xylenes											
o-Xylene											

Date Prepared: 07/25/2011

Batch #: 1

Date Analyzed: 07/25/2011

Matrix: Solid

Sample: 608750-1-BKS

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY												
Units: mg/kg												
Analytes	BTEx by EPA 8021B											
	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	0.109	109	0.100	0.109	109	0	70-130	35	
	Toluene	<0.00200	0.100	0.103	103	0.100	0.101	101	2	70-130	35	
	Ethylbenzene	<0.00100	0.100	0.114	114	0.100	0.112	112	2	71-129	35	
	m,p-Xylenes	<0.00200	0.200	0.221	111	0.200	0.216	108	2	70-135	35	
	o-Xylene	<0.00100	0.100	0.107	107	0.100	0.107	107	0	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

Project Name: Trunk M King Road 6-27-11

Work Order #: 423201

Analyst: BRB

Lab Batch ID: 864376

Sample: 608194-1-BKS

Units: mg/kg

Date Prepared: 07/18/2011

Batch #: 1

Project ID: Southern Union Gas

Date Analyzed: 07/19/2011

Matrix: Solid

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY													
Units: mg/kg	Anions by E300	Analytes	Blank Sample Result	Spike Added	Blank Spike Result	Blank Spike %R	Spike Added	Blank Spike Duplicate Result	Blk. Spk Dup. %R	RPD %	Control Limits %R	Control Limits %RPD	Flag
			[A]	[B]	[C]	[D]	[E]	[F]	[G]				
		Chloride	<0.840	20.0	21.0	105	20.0	21.4	107	2	75-125	20	

Date Prepared: 07/20/2011

Batch #: 1

Date Analyzed: 07/20/2011

Matrix: Solid

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY													
Units: mg/kg	Anions by E300	Analytes	Blank Sample Result	Spike Added	Blank Spike Result	Blank Spike %R	Spike Added	Blank Spike Duplicate Result	Blk. Spk Dup. %R	RPD %	Control Limits %R	Control Limits %RPD	Flag
			[A]	[B]	[C]	[D]	[E]	[F]	[G]				
		Chloride	<0.840	20.0	21.2	106	20.0	19.4	97	9	75-125	20	

Date Prepared: 07/15/2011

Batch #: 1

Date Analyzed: 07/15/2011

Matrix: Solid

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY											
Units: mg/kg											
Analytes	TPH By SW8015 Mod										
	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	839	84	999	825	83	2	70-135	35	
C12-C28 Diesel Range Hydrocarbons	<15.0	1000	885	89	999	858	86	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



Form 3 - MS Recoveries



Project Name: Trunk M King Road 6-27-11

Work Order #: 423201

Lab Batch #: 864376

Date Analyzed: 07/19/2011

QC- Sample ID: 423201-001 S

Reporting Units: mg/kg

Date Prepared: 07/18/2011

Batch #: 1

Project ID: Southern Union Gas

Analyst: BRB

Matrix: Soil

MATRIX / MATRIX SPIKE RECOVERY STUDY						
Inorganic Anions by EPA 300	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Analytes						
Chloride	13.3	213	213	94	75-125	

Lab Batch #: 864508

Date Analyzed: 07/20/2011

QC- Sample ID: 423201-010 S

Reporting Units: mg/kg

Date Prepared: 07/20/2011

Batch #: 1

Analyst: BRB

Matrix: Soil

MATRIX / MATRIX SPIKE RECOVERY STUDY						
Inorganic Anions by EPA 300	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Analytes						
Chloride	25.9	205	223	96	75-125	

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

BRL - Below Reporting Limit

Work Order #: 423201

Lab Batch ID: 865128

Date Analyzed: 07/22/2011

Reporting Units: mg/kg

Project ID: Southern Union Gas

QC- Sample ID: 423850-001 S Batch #: 1 Matrix: Soil

Date Prepared: 07/22/2011 Analyst: ASA

Reporting Units: mg/kg											
MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY											
BTEX by EPA 8021B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
	Benzene	<0.00101	0.101	0.0892	88	0.101	0.0842	83	6	70-130	35
	Toluene	<0.00202	0.101	0.0822	81	0.101	0.0785	78	5	70-130	35
	Ethylbenzene	<0.00101	0.101	0.0931	92	0.101	0.0883	87	5	71-129	35
	m_p-Xylenes	<0.00202	0.202	0.175	87	0.201	0.167	83	5	70-135	35
	o-Xylene	<0.00101	0.101	0.0884	88	0.101	0.0814	81	8	71-133	35

Lab Batch ID: 865293

Date Analyzed: 07/25/2011

Reporting Units: mg/kg

QC- Sample ID: 424110-001 S Batch #: 1 Matrix: Soil

Date Prepared: 07/25/2011 Analyst: ASA

Reporting Units: mg/kg											
MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY											
BTEX by EPA 8021B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
	Benzene	<0.00101	0.101	0.0869	86	0.101	0.0862	85	1	70-130	35
	Toluene	<0.00202	0.101	0.0799	79	0.101	0.0792	78	1	70-130	35
	Ethylbenzene	<0.00101	0.101	0.0861	85	0.101	0.0836	83	3	71-129	35
	m_p-Xylenes	<0.00202	0.202	0.164	81	0.201	0.159	79	3	70-135	35
	o-Xylene	<0.00101	0.101	0.0797	79	0.101	0.0786	78	1	71-133	35

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

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

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

Form 3 - MS / MSD Recoveries

Project Name: Trunk M King Road 6-27-11

Work Order #: 423201

Lab Batch ID: 864022

Date Analyzed: 07/16/2011

Reporting Units: mg/kg

Project ID: Southern Union Gas

Batch #: 1 Matrix: Soil

Analyst: BEV

QC- Sample ID: 423201-019 S

Date Prepared: 07/15/2011

Reporting Units: mg/kg		MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
TPH By SW8015 Mod		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
Analytes												
C6-C12 Gasoline Range Hydrocarbons		<16.8	1120	940	84	1120	946	84	1	70-135	35	
C12-C28 Diesel Range Hydrocarbons		<16.8	1120	950	85	1120	851	76	11	70-135	35	

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

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

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

Project Name: Trunk M King Road 6-27-11

Work Order #: 423201

Lab Batch #: 864376

Date Analyzed: 07/19/2011 12:10

Date Prepared: 07/18/2011

Project ID: Southern Union Gas

Analyst: BRB

QC- Sample ID: 423201-001 D

Batch #: 1

Matrix: Soil

Reporting Units: mg/kg

SAMPLE / SAMPLE DUPLICATE RECOVERY					
Anions by E300	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Analyte					
Chloride	13.3	18.7	34	20	F

Lab Batch #: 864508

Date Analyzed: 07/20/2011 00:45

Date Prepared: 07/20/2011

Analyst: BRB

QC- Sample ID: 423201-010 D

Batch #: 1

Matrix: Soil

Reporting Units: mg/kg

SAMPLE / SAMPLE DUPLICATE RECOVERY					
Anions by E300	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Analyte					
Chloride	25.9	26.9	4	20	

Lab Batch #: 864030

Date Analyzed: 07/15/2011 08:20

Date Prepared: 07/15/2011

Analyst: WRU

QC- Sample ID: 423158-001 D

Batch #: 1

Matrix: Soil

Reporting Units: %

SAMPLE / SAMPLE DUPLICATE RECOVERY					
Percent Moisture	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Analyte					
Percent Moisture	8.11	7.35	10	20	

Lab Batch #: 864031

Date Analyzed: 07/15/2011 12:40

Date Prepared: 07/15/2011

Analyst: WRU

QC- Sample ID: 423201-019 D

Batch #: 1

Matrix: Soil

Reporting Units: %

SAMPLE / SAMPLE DUPLICATE RECOVERY					
Percent Moisture	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Analyte					
Percent Moisture	10.8	11.5	6	20	

Spike Relative Difference RPD $200 * |(B-A)/(B+A)|$

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

BRL - Below Reporting Limit

**XENCO Laboratories**

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: Basin Env.
Date/Time: 7-15-11 8:15
Lab ID #: 423201
Initials: AM

Sample Receipt Checklist

1. Samples on ice?	Blue	<u>Water</u>	No	
2. Shipping container in good condition?	<u>Yes</u>	No	None	
3. Custody seals intact on shipping container (cooler) and bottles?	<u>Yes</u>	No	N/A	
4. Chain of Custody present?	<u>Yes</u>	No		
5. Sample instructions complete on chain of custody?	<u>Yes</u>	No		
6. Any missing / extra samples?	Yes	<u>No</u>		
7. Chain of custody signed when relinquished / received?	<u>Yes</u>	No		
8. Chain of custody agrees with sample label(s)?	<u>Yes</u>	No		
9. Container labels legible and intact?	<u>Yes</u>	No		
10. Sample matrix / properties agree with chain of custody?	<u>Yes</u>	No		
11. Samples in proper container / bottle?	<u>Yes</u>	No		
12. Samples properly preserved?	<u>Yes</u>	No	N/A	
13. Sample container intact?	<u>Yes</u>	No		
14. Sufficient sample amount for indicated test(s)?	<u>Yes</u>	No		
15. All samples received within sufficient hold time?	<u>Yes</u>	No		
16. Subcontract of sample(s)?	Yes	<u>No</u>	N/A	
17. VOC sample have zero head space?	Yes	No	<u>N/A</u>	
18. Cooler 1 No.	Cooler 2 No.	Cooler 3 No.	Cooler 4 No.	Cooler 5 No.
lbs <u>31</u> °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 423624
for
Southern Union Gas Services- Monahans

Project Manager: Rose Slade

Trunk M King Road 6-27-11

Southern Union Gas

26-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)



26-JUL-11

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

Reference: XENCO Report No: **423624**
Trunk M King Road 6-27-11
Project Address: Eunice, 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 423624. 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. 423624 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

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**Southern Union Gas Services- Monahans, Monahans, TX**

Trunk M King Road 6-27-11

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
Sample #20	S	07-19-11 10:00		423624-001
Sample #21	S	07-19-11 10:05		423624-002
Sample #22	S	07-19-11 10:10		423624-003
Sample #23	S	07-19-11 10:15		423624-004
Sample #24	S	07-19-11 10:20		423624-005
Sample #25	S	07-19-11 10:25		423624-006
Sample #26	S	07-19-11 10:30		423624-007
Sample #27	S	07-19-11 10:35		423624-008
Sample #28	S	07-19-11 10:40		423624-009
Sample #29	S	07-19-11 10:45		423624-010
Sample #30	S	07-19-11 10:50		423624-011
Sample #31	S	07-19-11 10:55		423624-012
Sample #32	S	07-19-11 11:00		423624-013
Sample #33	S	07-19-11 11:05		423624-014
Sample #34	S	07-19-11 11:10		423624-015
Sample #35	S	07-19-11 11:15		423624-016
Sample #36	S	07-19-11 11:20		423624-017
Sample #37	S	07-19-11 11:25		423624-018



CASE NARRATIVE

Client Name: Southern Union Gas Services- Monahans

Project Name: Trunk M King Road 6-27-11



Project ID: Southern Union Gas
Work Order Number: 423624

Report Date: 26-JUL-11
Date Received: 07/19/2011

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non nonformances and comments:

Batch: LBA-864671 TPH By SW8015 Mod
SW8015MOD_NM

Batch 864671, o-Terphenyl recovered above QC limits . Matrix interferences is suspected; data not confirmed by re-analysis

Samples affected are: 423624-001,423624-018,423624-003,423624-004,423624-005,423624-006,423624-007,423624-008,423624-009,423624-010,423624-011,423624-012,423624-013,423624-014,423624-015,423624-016,423624-017,423624-002.



Certificate of Analysis Summary 423624

Southern Union Gas Services- Monahans, Monahans, TX



Project Id: Southern Union Gas
Contact: Rose Slade
Project Location: Eunice, NM

Project Name: Trunk M King Road 6-27-11

Date Received in Lab: Tue Jul-19-11 04:15 pm
Report Date: 26-JUL-11

Project Manager: Brent Barron, II

Analysis Requested	Lab Id:	423624-001	423624-002	423624-003	423624-004	423624-005	423624-006
	Field Id:						
	Depth:						
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
Anions by E300	Sample #20	Sample #21	Sample #22	Sample #23	Sample #24	Sample #25	
	Jul-19-11 10:00	Jul-19-11 10:05	Jul-19-11 10:10	Jul-19-11 10:15	Jul-19-11 10:20	Jul-19-11 10:25	
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	
	RL	RL	RL	RL	RL	RL	
Percent Moisture	Extracted:	622	12.1	12.7	12.6	15.6	10.4
	Analyzed:	Jul-21-11 17:02	Jul-21-11 17:02	Jul-21-11 17:02	Jul-21-11 17:02	Jul-21-11 17:02	Jul-21-11 17:02
	Units/RL:	RL	RL	RL	RL	RL	RL
		622	8.87	8.95	8.92	8.80	8.84
TPH By SW8015 Mod	Extracted:	Jul-20-11 09:30	Jul-20-11 09:30	Jul-20-11 09:30	Jul-20-11 09:30	Jul-20-11 09:30	Jul-20-11 09:30
	Analyzed:	7.74	5.35	6.12	5.78	4.58	4.95
	Units/RL:	RL	RL	RL	RL	RL	RL
		7.74	1.00	1.00	1.00	1.00	1.00
C6-C12 Gasoline Range Hydrocarbons	Extracted:	Jul-20-11 11:00	Jul-20-11 11:00	Jul-20-11 11:00	Jul-20-11 11:00	Jul-20-11 11:00	Jul-20-11 11:00
	Analyzed:	Jul-20-11 18:55	Jul-20-11 19:25	Jul-20-11 19:54	Jul-20-11 20:23	Jul-20-11 20:53	Jul-20-11 21:21
	Units/RL:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
		ND	ND	ND	ND	ND	ND
C12-C28 Diesel Range Hydrocarbons	Extracted:	ND	ND	ND	ND	ND	ND
	Analyzed:	ND	ND	ND	ND	ND	ND
	Units/RL:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
		ND	ND	ND	ND	ND	ND
C28-C35 Oil Range Hydrocarbons	Extracted:	ND	ND	ND	ND	ND	ND
	Analyzed:	ND	ND	ND	ND	ND	ND
	Units/RL:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
		ND	ND	ND	ND	ND	ND
Total TPH	Extracted:	ND	ND	ND	ND	ND	ND
	Analyzed:	ND	ND	ND	ND	ND	ND
	Units/RL:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
		ND	ND	ND	ND	ND	ND

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

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Brent Barron, II
Odessa Laboratory Manager



Certificate of Analysis Summary 423624

Southern Union Gas Services- Monahans, Monahans, TX

Project Name: Trunk M King Road 6-27-11



Project Id: Southern Union Gas
Contact: Rose Slade
Project Location: Eunice, NM

Date Received in Lab: Tue Jul-19-11 04:15 pm
Report Date: 26-JUL-11

Project Manager: Brent Barron, II

Analysis Requested	Lab Id:	Field Id:	Depth:	Matrix:	Sampled:	423624-007	423624-008	423624-009	423624-010	423624-011	423624-012
	Sample #26	Sample #27	Sample #28	Sample #29	Sample #30	Sample #31	Sample #32	Sample #33	Sample #34	Sample #35	Sample #36
Anions by E300	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Jul-19-11 10:30	Jul-19-11 10:35	Jul-19-11 10:40	Jul-19-11 10:45	Jul-19-11 10:50	Jul-19-11 10:55	Jul-20-11 09:30	Jul-20-11 09:30	Jul-20-11 09:30	Jul-20-11 09:30	Jul-20-11 09:30
Percent Moisture	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
	10.8	15.0	20.9	458	15.0	6.79	4.53	9.23	9.00	2.62	1.00
TPH By SW8015 Mod	RL	RL	RL	RL	RL	RL	RL	RL	RL	RL	RL
	8.57	8.99	8.99	8.82	9.23	4.31	4.31	4.31	4.31	4.31	4.31
C6-C12 Gasoline Range Hydrocarbons	%	%	%	%	%	%	%	%	%	%	%
	2.03	6.58	6.59	4.77	9.00	2.62	1.00	1.00	1.00	1.00	1.00
C12-C28 Diesel Range Hydrocarbons	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
C28-C35 Oil Range Hydrocarbons	RL	RL	RL	RL	RL	RL	RL	RL	RL	RL	RL
	15.2	16.0	16.0	15.8	16.5	15.4	15.4	16.5	16.5	15.4	15.4
Total TPH	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

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Brent Barron, II
Odessa Laboratory Manager



Certificate of Analysis Summary 423624

Southern Union Gas Services- Monahans, Monahans, TX

Project Name: Trunk M King Road 6-27-11



Project Id: Southern Union Gas
Contact: Rose Slade
Project Location: Eunice, NM

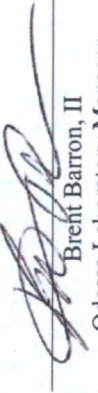
Date Received in Lab: Tue Jul-19-11 04:15 pm
Report Date: 26-JUL-11

Project Manager: Brent Barron, II

Analysis Requested	Lab Id:	423624-013	423624-014	423624-015	423624-016	423624-017	423624-018
	Field Id:	Sample #32	Sample #33	Sample #34	Sample #35	Sample #36	Sample #37
	Depth:						
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Sampled:	Jul-19-11 11:00	Jul-19-11 11:05	Jul-19-11 11:10	Jul-19-11 11:15	Jul-19-11 11:20	Jul-19-11 11:25
Anions by E300	Extracted:						
	Analyzed:	Jul-22-11 03:33	Jul-22-11 03:33	Jul-22-11 03:33	Jul-22-11 03:33	Jul-22-11 03:33	Jul-22-11 03:33
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		5.80	6.31	6.47	49.2	46.5	5.01
		4.36	4.50	4.53	4.39	4.38	4.30
Percent Moisture	Extracted:						
	Analyzed:	Jul-20-11 09:30	Jul-20-11 09:30	Jul-20-11 09:30	Jul-20-11 09:30	Jul-20-11 09:30	Jul-20-11 09:30
	Units/RL:	% RL	% RL	% RL	% RL	% RL	% RL
Percent Moisture		3.72	6.57	7.21	4.25	4.17	2.41
		1.00	1.00	1.00	1.00	1.00	1.00
TPH By SW8015 Mod	Extracted:						
	Analyzed:	Jul-20-11 11:00	Jul-20-11 11:00	Jul-20-11 11:00	Jul-20-11 11:00	Jul-20-11 11:00	Jul-20-11 11:00
	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	ND	ND	ND	ND	ND
C12-C28 Diesel Range Hydrocarbons		ND	ND	ND	ND	ND	ND
C28-C35 Oil Range Hydrocarbons		ND	ND	ND	ND	ND	ND
Total TPH		ND	ND	ND	ND	ND	ND

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Odessa Laboratory Manager

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 quantitation 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.

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(602) 437-0330	

Form 2 - Surrogate Recoveries

Project Name: Trunk M King Road 6-27-11

Work Orders : 423624,

Project ID: Southern Union Gas

Lab Batch #: 864671

Sample: 423624-001 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 07/20/11 18:55

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	122	100	122	70-135	
o-Terphenyl	68.4	50.1	137	70-135	*

Lab Batch #: 864671

Sample: 423624-002 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 07/20/11 19:25

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	128	100	128	70-135	
o-Terphenyl	71.4	50.2	142	70-135	*

Lab Batch #: 864671

Sample: 423624-003 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 07/20/11 19:54

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	126	99.9	126	70-135	
o-Terphenyl	70.0	50.0	140	70-135	*

Lab Batch #: 864671

Sample: 423624-004 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 07/20/11 20:23

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	133	99.6	134	70-135	
o-Terphenyl	73.0	49.8	147	70-135	*

Lab Batch #: 864671

Sample: 423624-005 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 07/20/11 20:53

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	131	100	131	70-135	
o-Terphenyl	73.5	50.0	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.

Form 2 - Surrogate Recoveries

Project Name: Trunk M King Road 6-27-11

Work Orders : 423624,

Project ID: Southern Union Gas

Lab Batch #: 864671

Sample: 423624-006 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 07/20/11 21:21

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	133	99.7	133	70-135	
o-Terphenyl	75.7	49.9	152	70-135	*

Lab Batch #: 864671

Sample: 423624-007 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 07/20/11 21:50

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	126	99.5	127	70-135	
o-Terphenyl	70.1	49.8	141	70-135	*

Lab Batch #: 864671

Sample: 423624-008 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 07/20/11 22:19

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	126	99.6	127	70-135	
o-Terphenyl	72.5	49.8	146	70-135	*

Lab Batch #: 864671

Sample: 423624-009 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 07/20/11 22:48

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	130	99.9	130	70-135	
o-Terphenyl	74.6	50.0	149	70-135	*

Lab Batch #: 864671

Sample: 423624-010 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 07/20/11 23:47

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	129	100	129	70-135	
o-Terphenyl	74.6	50.0	149	70-135	*

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = $100 * A / B$

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

Form 2 - Surrogate Recoveries

Project Name: Trunk M King Road 6-27-11

Work Orders : 423624,

Project ID: Southern Union Gas

Lab Batch #: 864671

Sample: 423624-011 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 07/21/11 00:17

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	127	100	127	70-135	
o-Terphenyl	74.5	50.2	148	70-135	*

Lab Batch #: 864671

Sample: 423624-012 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 07/21/11 00:46

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	128	99.9	128	70-135	
o-Terphenyl	72.0	50.0	144	70-135	*

Lab Batch #: 864671

Sample: 423624-013 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 07/21/11 01:16

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	128	99.8	128	70-135	
o-Terphenyl	72.3	49.9	145	70-135	*

Lab Batch #: 864671

Sample: 423624-014 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 07/21/11 01:45

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	133	100	133	70-135	
o-Terphenyl	77.1	50.0	154	70-135	*

Lab Batch #: 864671

Sample: 423624-015 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 07/21/11 02:14

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	130	100	130	70-135	
o-Terphenyl	75.4	50.0	151	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] = $100 \times A / B$

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

Form 2 - Surrogate Recoveries

Project Name: Trunk M King Road 6-27-11

Work Orders : 423624,

Project ID: Southern Union Gas

Lab Batch #: 864671

Sample: 423624-016 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 07/21/11 02:43

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	133	100	133	70-135	
o-Terphenyl	76.7	50.0	153	70-135	*

Lab Batch #: 864671

Sample: 423624-017 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 07/21/11 03:12

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	127	99.9	127	70-135	
o-Terphenyl	73.0	50.0	146	70-135	*

Lab Batch #: 864671

Sample: 423624-018 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 07/21/11 03:42

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	128	100	128	70-135	
o-Terphenyl	69.9	50.0	140	70-135	*

Lab Batch #: 864671

Sample: 608381-1-BLK / BLK

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 07/20/11 17:56

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	115	100	115	70-135	
o-Terphenyl	64.4	50.0	129	70-135	

Lab Batch #: 864671

Sample: 608381-1-BKS / BKS

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 07/20/11 16:56

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	114	99.7	114	70-135	
o-Terphenyl	59.5	49.9	119	70-135	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

Form 2 - Surrogate Recoveries

Project Name: Trunk M King Road 6-27-11

Work Orders : 423624,

Project ID: Southern Union Gas

Lab Batch #: 864671

Sample: 608381-1-BSD / BSD

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 07/20/11 17:26

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	113	100	113	70-135	
o-Terphenyl	58.6	50.2	117	70-135	

Lab Batch #: 864671

Sample: 423624-018 S / MS

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 07/21/11 04:11

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	124	99.6	124	70-135	
o-Terphenyl	67.0	49.8	135	70-135	

Lab Batch #: 864671

Sample: 423624-018 SD / MSD

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 07/21/11 04:40

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	123	99.6	123	70-135	
o-Terphenyl	67.4	49.8	135	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.

Project Name: Trunk M King Road 6-27-11

Work Order #: 423624

Analyst: BRB

Lab Batch ID: 865110

Sample: 865110-1-BKS

Date Prepared: 07/21/2011

Batch #: 1

Project ID: Southern Union Gas

Date Analyzed: 07/21/2011

Matrix: Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY											
Anions by E300	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
Analytes											
Chloride	<0.840	20.0	21.4	107	20.0	21.0	105	2	75-125	20	

Analyst: BRB

Lab Batch ID: 865135

Sample: 865135-1-BKS

Date Prepared: 07/22/2011

Batch #: 1

Date Analyzed: 07/22/2011

Matrix: Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY											
Anions by E300	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
Analytes											
	Chloride	<4.20	100	102	102	100	101	1	75-125	20	

Analyst: BEV

Lab Batch ID: 864671

Sample: 608381-1-BKS

Date Prepared: 07/20/2011

Batch #: 1

Date Analyzed: 07/20/2011

Matrix: Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY											
Units: mg/kg											
TPH By SW8015 Mod	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
Analytes	C6-C12 Gasoline Range Hydrocarbons	<15.0	997	848	85	1000	827	83	3	70-135	35
	C12-C28 Diesel Range Hydrocarbons	<15.0	997	857	86	1000	862	86	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



Form 3 - MS Recoveries



Project Name: Trunk M King Road 6-27-11

Work Order #: 423624

Lab Batch #: 865110

Date Analyzed: 07/21/2011

QC- Sample ID: 423344-001 S

Reporting Units: mg/kg

Date Prepared: 07/21/2011

Batch #: 1

Project ID: Southern Union Gas

Analyst: BRB

Matrix: Soil

MATRIX / MATRIX SPIKE RECOVERY STUDY						
Inorganic Anions by EPA 300	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Analytes						
Chloride	108	219	338	105	75-125	

Lab Batch #: 865135

Date Analyzed: 07/22/2011

QC- Sample ID: 423624-012 S

Reporting Units: mg/kg

Date Prepared: 07/22/2011

Batch #: 1

Analyst: BRB

Matrix: Soil

MATRIX / MATRIX SPIKE RECOVERY STUDY						
Inorganic Anions by EPA 300	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Analytes						
Chloride	6.79	103	101	91	75-125	

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

BRL - Below Reporting Limit



Form 3 - MS / MSD Recoveries

Project Name: Trunk M King Road 6-27-11

Work Order #: 423624

Lab Batch ID: 864671

Date Analyzed: 07/21/2011

Reporting Units: mg/kg

Project ID: Southern Union Gas

QC- Sample ID: 423624-018 S

Date Prepared: 07/20/2011

Batch #: 1

Analyst: BEV

Matrix: Soil

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY											
Reporting Units: mg/kg	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
TPH By SW/8015 Mod											
Analytes											
C6-C12 Gasoline Range Hydrocarbons	<15.3	1020	852	84	1020	847	83	1	70-135	35	
C12-C28 Diesel Range Hydrocarbons	<15.3	1020	777	76	1020	795	78	2	70-135	35	

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

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable
N = See Narrative, EQ1 = Estimated Quantitation Limit

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

Project Name: Trunk M King Road 6-27-11

Work Order #: 423624

Lab Batch #: 865110

Date Analyzed: 07/21/2011 17:02

Date Prepared: 07/21/2011

Project ID: Southern Union Gas

Analyst: BRB

QC- Sample ID: 423344-001 D

Batch #: 1

Matrix: Soil

Reporting Units: mg/kg

SAMPLE / SAMPLE DUPLICATE RECOVERY					
Anions by E300	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Analyte					
Chloride	108	109	1	20	

Lab Batch #: 865135

Date Analyzed: 07/22/2011 03:33

Date Prepared: 07/22/2011

Analyst: BRB

QC- Sample ID: 423624-012 D

Batch #: 1

Matrix: Soil

Reporting Units: mg/kg

SAMPLE / SAMPLE DUPLICATE RECOVERY					
Anions by E300	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Analyte					
Chloride	6.79	7.80	14	20	

Lab Batch #: 864662

Date Analyzed: 07/20/2011 09:30

Date Prepared: 07/20/2011

Analyst: BRB

QC- Sample ID: 423624-001 D

Batch #: 1

Matrix: Soil

Reporting Units: %

SAMPLE / SAMPLE DUPLICATE RECOVERY					
Percent Moisture	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Analyte					
Percent Moisture	7.74	7.85	1	20	

Spike Relative Difference RPD $200 * |(B-A)/(B+A)|$

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

BRL - Below Reporting Limit

Xenco Laboratories

Page 1 of 2

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765

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

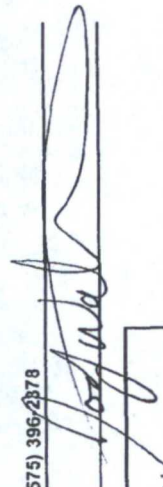
Project Manager: Ben J. Arguilo

Company Name: Basin Environmental Service Technologies, LLC

Company Address: P.O. Box 301

City/State/Zip: Lovington, NM 88260

Telephone No: (575) 396-2378

Sampler Signature: 

Fax No: (575) 396-1429

e-mail: pm@basinenrv.com

Jose.Slade@Sug.com
Curt.Stanley@Sug.com

Project Name: Trunk M King Road 6:27-11

Project #: Southern Union Gas

Project Loc: Eunice, N.M.

PO #:

Report Format: ☒ Standard ☐ TRRP ☐ NPDES

ORDER #: 423624

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Matrix	Preservation & # of Containers	Other (Specify)	DW=Drinking Water SL=Storage GW=Groundwater S=Soil/Solid	NP=Non-Portable Specy Other	TPH: 418.1 8015B	TPH: TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR/ESP/CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8260	RCI	NORM	CHLORIDES	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT 4 DAY
001	Sample #20			7-19-11	10:00		1	Soil					X	X										X	X	X
002	Sample #21			7-19-11	10:05		1	Soil					X	X										X	X	X
003	Sample #22			7-19-11	10:10		1	Soil					X	X										X	X	X
004	Sample #23			7-19-11	10:15		1	Soil					X	X										X	X	X
005	Sample #24			7-19-11	10:20		1	Soil					X	X										X	X	X
006	Sample #25			7-19-11	10:25		1	Soil					X	X										X	X	X
007	Sample #26			7-19-11	10:30		1	Soil					X	X										X	X	X
008	Sample #27			7-19-11	10:35		1	Soil					X	X										X	X	X
009	Sample #28			7-19-11	10:40		1	Soil					X	X										X	X	X
010	Sample #29			7-19-11	10:45		1	Soil					X	X										X	X	X

Special Instructions:

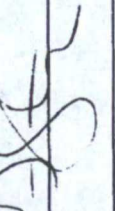
Hold for BTEX

Relinquished by: 

Date: 7-19-11 Time: 1:16

Relinquished by: 

Date: 7-19-11 Time: 1:15

Relinquished by: 

Date: 7-19-11 Time: 1:15

Laboratory Comments:

Sample Containers Intact?

VOCs Free of Headspace? N/A

Labels on container(s)

Custody seals on container(s)

Sample Hand Delivered

by Sample/Client Rep ?

UPS DHL FedEx Lone Star

Temperature Upon Receipt: 1.1 °C

12600 West I-20 East
Odessa, Texas 79765

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

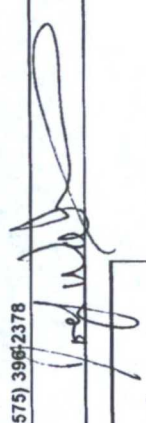
Project Manager: Ben J. Arguilo

Company Name: Basin Environmental Service Technologies, LLC

Company Address: P.O. Box 301

City/State/Zip: Lovington, NM 88260

Telephone No: (575) 396-2378

Sampler Signature: 

Fax No: (575) 396-1429

e-mail: pm@basinenrv.com

rose-slade@sug.com
Curt. Stanley @ Sug.com

Project Name: Frank M King Road 6:27-11

Project #: Southern Union Gas

Project Loc: ~~Enrvice~~ NM

PO #:

Report Format: ☒ Standard ☐ TRRP ☐ NPDES

(lab use only)

ORDER #: 103624

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Ice	HNO ₃	HCl	H ₂ SO ₄	NaOH	Na ₂ S ₂ O ₃	None	Other (Specify)	DW=Drinking Water SL=Sludge GW = Groundwater S=Soil/Solid NP=Non-Portable Specify Other	TPH: 418.1 <u>8015M</u>	TPH: TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO ₄ , Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8260	RCI	NORM	CHLORIDES	Standard TAT 4 DAY	RUSH TAT (Pre-Schedule) 24	
011	Sample #30			7-19-11	10:50		1	X								Soil		X										X	X		
012	Sample #31			7-19-11	10:55		1	X								Soil		X											X	X	
013	Sample #32			7-19-11	11:00		1	X								Soil		X											X	X	
014	Sample #33			7-19-11	11:05		1	X								Soil		X											X	X	
015	Sample #34			7-19-11	11:10		1	X								Soil		X											X	X	
016	Sample #35			7-19-11	11:15		1	X								Soil		X											X	X	
017	Sample #136			7-19-11	11:20		1	X								Soil		X											X	X	
018	Sample #37			7-19-11	11:25		1	X								Soil		X											X	X	
019																															
020																															

Special Instructions:

Hold for BTEX

Relinquished by:

Date: 7-19-11

Time: 1:16

Received by:

Date: 7/19/11

Time: 1:16

Relinquished by:

Date: 7/19/11

Time: 16:15

Received by:

Date: 7/19/11

Time: 11:15

Relinquished by:

Date: 7/19/11

Time: 16:15

Received by: J. Hernandez

Date: 7/19/11

Time: 11:15

Laboratory Comments:

Sample Containers Intact?

VOCs Free of Headspace? N/A

Labels on container(s)

Custody seals on container(s)

Custody seals on cooler(s)

Sample Hand Delivered

by Sampler/Client Rep.?

UPS DHL FedEx Lone Star

Temperature Upon Receipt: 1.1 °C



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

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

Prelogin / Nonconformance Report - Sample Log-In

Client: Southern Union Gas Services
Date/Time: 7/19/11 16:15
Lab ID #: 423624
Initials: TH

Sample Receipt Checklist

1. Samples on ice?	Blue	<u>Water</u>	No	
2. Shipping container in good condition?	<u>Yes</u>	No	None	
3. Custody seals intact on shipping container (cooler) and <u>bottles</u> ?	<u>Yes</u>	No	N/A	
4. Chain of Custody present?	<u>Yes</u>	No		
5. Sample instructions complete on chain of custody?	<u>Yes</u>	No		
6. Any missing / extra samples?	Yes	<u>No</u>		
7. Chain of custody signed when relinquished / received?	<u>Yes</u>	No		
8. Chain of custody agrees with sample label(s)?	<u>Yes</u>	No		
9. Container labels legible and intact?	<u>Yes</u>	No		
10. Sample matrix / properties agree with chain of custody?	<u>Yes</u>	No		
11. Samples in proper container / bottle?	<u>Yes</u>	No		
12. Samples properly preserved?	<u>Yes</u>	No	N/A	
13. Sample container intact?	<u>Yes</u>	No		
14. Sufficient sample amount for indicated test(s)?	<u>Yes</u>	No		
15. All samples received within sufficient hold time?	<u>Yes</u>	No		
16. Subcontract of sample(s)?	Yes	No	<u>N/A</u>	
17. VOC sample have zero head space?	Yes	No	<u>N/A</u>	
18. Cooler 1 No.	Cooler 2 No.	Cooler 3 No.	Cooler 4 No.	Cooler 5 No.
lbs <u>1.1</u> °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 424157
for
Southern Union Gas Services- Monahans

Project Manager: Rose Slade

Trunk M King Road 6-27-11

27-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)



27-JUL-11

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

Reference: XENCO Report No: **424157**
Trunk M King Road 6-27-11
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 424157. 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. 424157 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

*Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.
Certified and approved by numerous States and Agencies.
A Small Business and Minority Status Company that delivers SERVICE and QUALITY
Houston - Dallas - San Antonio - Austin - Tampa - Miami - Atlanta - Corpus Christi - Latin America*

Sample Cross Reference 424157**Southern Union Gas Services- Monahans, Monahans, TX**

Trunk M King Road 6-27-11

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
Sample # 38	S	07-25-11 10:00		424157-001
Sample # 39	S	07-25-11 10:05		424157-002
Sample # 40	S	07-25-11 10:10		424157-003
Sample # 41	S	07-25-11 10:15		424157-004
Sample # 42	S	07-25-11 10:20		424157-005
Sample # 43	S	07-25-11 10:25		424157-006
Sample # 44	S	07-25-11 10:30		424157-007
Sample # 45	S	07-25-11 10:35		424157-008
Sample # 46	S	07-25-11 10:40		424157-009
Sample # 47	S	07-25-11 10:45		424157-010
Sample # 48	S	07-25-11 10:50		424157-011
Sample # 49	S	07-25-11 10:55		424157-012
Sample # 50	S	07-25-11 11:00		424157-013
Sample # 51	S	07-25-11 11:05		424157-014
Sample # 52	S	07-25-11 11:10		424157-015
Sample # 53	S	07-25-11 11:15		424157-016
Sample # 54	S	07-25-11 11:20		424157-017
Sample # 55	S	07-25-11 11:25		424157-018
Sample # 56	S	07-25-11 11:35		424157-019
Sample # 57	S	07-25-11 11:30		424157-020
Sample # 58	S	07-25-11 11:40		424157-021
Sample # 59	S	07-25-11 11:45		424157-022
Sample # 60	S	07-25-11 11:50		424157-023
Sample # 61	S	07-25-11 11:55		424157-024
Sample # 62	S	07-25-11 12:00		424157-025



CASE NARRATIVE

Client Name: Southern Union Gas Services- Monahans

Project Name: Trunk M King Road 6-27-11



Project ID:

Work Order Number: 424157

Report Date: 27-JUL-11

Date Received: 07/25/2011

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non nonformances and comments:

Batch: LBA-865450 TPH By SW8015 Mod

SW8015MOD_NM

Batch 865450, o-Terphenyl recovered above QC limits . Matrix interferences is suspected; data not confirmed by re-analysis

Samples affected are: 424157-001.

Certificate of Analysis Summary 424157

Southern Union Gas Services- Monahans, Monahans, TX

Project Name: Trunk M King Road 6-27-11



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

Date Received in Lab: Mon Jul-25-11 04:30 pm
Report Date: 27-JUL-11

Project Manager: Brent Barron, II

<i>Analysis Requested</i>		Lab Id:	424157-001	424157-002	424157-003	424157-004	424157-005	424157-006
		Field Id:	Sample # 38	Sample # 39	Sample # 40	Sample # 41	Sample # 42	Sample # 43
		Depth:						
		Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
		Sampled:	Jul-25-11 10:00	Jul-25-11 10:05	Jul-25-11 10:10	Jul-25-11 10:15	Jul-25-11 10:20	Jul-25-11 10:25
Anions by E300		Extracted:						
		Analyzed:	Jul-26-11 15:39	Jul-26-11 15:39	Jul-26-11 15:39	Jul-26-11 15:39	Jul-26-11 15:39	Jul-26-11 15:39
		Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride			13.8 4.39	9.35 4.39	7.58 4.56	7.99 4.34	9.43 4.31	13.2 4.35
Percent Moisture		Extracted:						
		Analyzed:	Jul-26-11 17:00	Jul-26-11 17:00	Jul-26-11 17:00	Jul-26-11 17:00	Jul-26-11 12:20	Jul-26-11 12:20
		Units/RL:	% RL	% RL	% RL	% RL	% RL	% RL
Percent Moisture			4.35 1.00	4.42 1.00	7.88 1.00	3.28 1.00	2.66 1.00	3.38 1.00
TPH By SW8015 Mod		Extracted:						
		Analyzed:	Jul-26-11 11:30	Jul-26-11 11:30	Jul-26-11 11:30	Jul-26-11 11:30	Jul-26-11 11:30	Jul-26-11 11:30
		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 15.0	ND 15.0	ND 15.0	ND 15.0	ND 15.3	ND 15.5
C12-C28 Diesel Range Hydrocarbons			ND 15.0	ND 15.0	ND 15.0	ND 15.0	ND 15.3	ND 15.5
C28-C35 Oil Range Hydrocarbons			ND 15.0	ND 15.0	ND 15.0	ND 15.0	ND 15.3	ND 15.5
Total TPH			ND 15.0	ND 15.0	ND 15.0	ND 15.0	ND 15.3	ND 15.5

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 Brent Barron, II
 Odessa Laboratory Manager



Certificate of Analysis Summary 424157
Southern Union Gas Services- Monahans, Monahans, TX
Project Name: Trunk M King Road 6-27-11



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

Date Received in Lab: Mon Jul-25-11 04:30 pm
Report Date: 27-JUL-11

Project Manager: Brent Barron, II

Analysis Requested	Lab Id:	424157-007	424157-008	424157-009	424157-010	424157-011	424157-012
	Field Id: Depth: Matrix: Sampled:	SOIL Jul-25-11 10:30	SOIL Jul-25-11 10:35	SOIL Jul-25-11 10:40	SOIL Jul-25-11 10:45	SOIL Jul-25-11 10:50	SOIL Jul-25-11 10:55
Anions by E300	Extracted:						
	Analyzed:	Jul-26-11 15:39	Jul-26-11 15:39	Jul-26-11 15:39	Jul-26-11 15:39	Jul-26-11 15:39	Jul-26-11 15:39
Chloride	Units/RL:	7.42 4.36	33.8 4.36	7.81 4.32	60.2 4.37	30.3 4.36	73.3 4.29
Percent Moisture	Extracted:						
	Analyzed:	Jul-26-11 12:20	Jul-26-11 12:20	Jul-26-11 12:20	Jul-26-11 12:20	Jul-26-11 12:20	Jul-26-11 12:20
TPH By SW8015 Mod	Units/RL:	3.64 1.00	3.66 1.00	2.73 1.00	3.91 1.00	3.70 1.00	2.13 1.00
C6-C12 Gasoline Range Hydrocarbons	Extracted:	Jul-26-11 11:30	Jul-26-11 11:30	Jul-26-11 11:30	Jul-26-11 11:30	Jul-26-11 11:30	Jul-26-11 11:30
	Analyzed:	Jul-26-11 18:37	Jul-26-11 19:07	Jul-26-11 19:36	Jul-26-11 20:05	Jul-26-11 21:03	Jul-26-11 21:32
C12-C28 Diesel Range Hydrocarbons	Units/RL:	ND 15.5	ND 15.6	ND 15.4	ND 15.7	ND 15.6	ND 15.3
C28-C35 Oil Range Hydrocarbons	Extracted:	ND 15.5	ND 15.6	ND 15.4	ND 15.7	ND 15.6	ND 15.3
	Analyzed:	ND 15.5	ND 15.6	ND 15.4	ND 15.7	ND 15.6	ND 15.3
Total TPH	Units/RL:	ND 15.5	ND 15.6	ND 15.4	ND 15.7	ND 15.6	ND 15.3

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Brent Barron, II

Odessa Laboratory Manager



Certificate of Analysis Summary 424157

Southern Union Gas Services- Monahans, Monahans, TX



Project Name: Trunk M King Road 6-27-11

Project Id:

Contact: Rose Slade

Project Location: Lea County, NM

Date Received in Lab: Mon Jul-25-11 04:30 pm

Report Date: 27-JUL-11

Project Manager: Brent Barron, II

Analysis Requested		Lab Id:	424157-013	424157-014	424157-015	424157-016	424157-017	424157-018
Field Id:			Sample # 50	Sample # 51	Sample # 52	Sample # 53	Sample # 54	Sample # 55
Depth:								
Matrix:			SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
Sampled:			Jul-25-11 11:00	Jul-25-11 11:05	Jul-25-11 11:10	Jul-25-11 11:15	Jul-25-11 11:20	Jul-25-11 11:25
Extracted:								
Anions by E300								
Analyzed:			Jul-26-11 15:39	Jul-26-11 15:39	Jul-26-11 15:39	Jul-26-11 15:39	Jul-26-11 15:39	Jul-26-11 15:39
Units/RL:			mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride			1090 18.1	707 8.92	7.82 4.53	7.97 4.31	8.11 4.41	7.00 4.30
Percent Moisture								
Extracted:								
Analyzed:			Jul-26-11 12:20	Jul-26-11 12:20	Jul-26-11 12:20	Jul-26-11 12:20	Jul-26-11 12:20	Jul-26-11 12:20
Units/RL:			% RL	% RL	% RL	% RL	% RL	% RL
Percent Moisture			6.93 1.00	5.87 1.00	7.21 1.00	2.58 1.00	4.73 1.00	2.42 1.00
TPH By SW8015 Mod								
Extracted:			Jul-26-11 11:30	Jul-26-11 11:30	Jul-26-11 11:30	Jul-26-11 11:30	Jul-26-11 11:30	Jul-26-11 11:30
Analyzed:			Jul-26-11 22:01	Jul-26-11 22:31	Jul-26-11 23:01	Jul-26-11 23:31	Jul-27-11 00:01	Jul-27-11 00:30
Units/RL:			mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
C6-C12 Gasoline Range Hydrocarbons			ND 16.2	ND 16.0	ND 16.2	ND 15.4	ND 15.7	ND 15.4
C12-C28 Diesel Range Hydrocarbons			ND 16.2	ND 16.0	ND 16.2	ND 15.4	ND 15.7	ND 15.4
C28-C35 Oil Range Hydrocarbons			ND 16.2	ND 16.0	ND 16.2	ND 15.4	ND 15.7	ND 15.4
Total TPH			ND 16.2	ND 16.0	ND 16.2	ND 15.4	ND 15.7	ND 15.4

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Brent Barron, II
Odessa Laboratory Manager



Certificate of Analysis Summary 424157

Southern Union Gas Services- Monahans, Monahans, TX



Project Name: Trunk M King Road 6-27-11

Project Id:

Contact: Rose Slade

Project Location: Lea County, NM

Date Received in Lab: Mon Jul-25-11 04:30 pm

Report Date: 27-JUL-11

Project Manager: Brent Barron, II

<i>Analysis Requested</i>		Lab Id:	424157-019	424157-020	424157-021	424157-022	424157-023	424157-024
		Field Id:	Sample # 56	Sample # 57	Sample # 58	Sample # 59	Sample # 60	Sample # 61
		Depth:						
		Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
		Sampled:	Jul-25-11 11:35	Jul-25-11 11:30	Jul-25-11 11:40	Jul-25-11 11:45	Jul-25-11 11:50	Jul-25-11 11:55
Anions by E300		Extracted:						
		Analyzed:	Jul-27-11 14:39	Jul-27-11 14:39	Jul-27-11 14:39	Jul-27-11 14:39	Jul-27-11 14:39	Jul-27-11 14:39
		Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
			612 17.7	13.6 8.82	627 8.71	651 8.74	6.67 4.29	6.67 4.30
Percent Moisture		Extracted:						
		Analyzed:	Jul-26-11 12:20	Jul-26-11 12:40	Jul-26-11 12:40	Jul-26-11 12:40	Jul-26-11 12:40	Jul-26-11 12:40
		Units/RL:	% RL	% RL	% RL	% RL	% RL	% RL
			4.92 1.00	4.74 1.00	3.57 1.00	3.84 1.00	2.01 1.00	2.35 1.00
TPH By SW8015 Mod		Extracted:						
		Analyzed:	Jul-26-11 11:30	Jul-26-11 11:30	Jul-26-11 09:45	Jul-26-11 09:45	Jul-26-11 09:45	Jul-26-11 09:45
		Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
			ND 15.8	ND 15.8	ND 15.6	ND 15.6	ND 15.3	ND 15.4
C6-C12 Gasoline Range Hydrocarbons			ND 15.8	ND 15.8	18.1 15.6	18.7 15.6	19.7 15.3	19.7 15.4
C12-C28 Diesel Range Hydrocarbons			ND 15.8	ND 15.8	ND 15.6	ND 15.6	ND 15.3	ND 15.4
C28-C35 Oil Range Hydrocarbons			ND 15.8	ND 15.8	18.1 15.6	18.7 15.6	19.7 15.3	19.7 15.4
Total TPH								

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Brent Barron, II
Odessa Laboratory Manager



Certificate of Analysis Summary 424157

Southern Union Gas Services- Monahans, Monahans, TX



Project Name: Trunk M King Road 6-27-11

Project Id:

Contact: Rose Slade

Project Location: Lea County, NM

Date Received in Lab: Mon Jul-25-11 04:30 pm

Report Date: 27-JUL-11

Project Manager: Brent Barron, II

Analysis Requested	Lab Id:	424157-025			
	Field Id:	Sample # 62			
	Depth:				
	Matrix:	SOIL			
	Sampled:	Jul-25-11 12:00			
Anions by E300	Extracted:				
	Analyzed:	Jul-27-11 14:39			
	Units/RL:	mg/kg RL			
Chloride		6.70	4.28		
Percent Moisture	Extracted:				
	Analyzed:	Jul-26-11 12:41			
	Units/RL:	% RL			
Percent Moisture		1.85	1.00		
TPH By SW8015 Mod	Extracted:	Jul-26-11 09:45			
	Analyzed:	Jul-26-11 21:19			
	Units/RL:	mg/kg RL			
C6-C12 Gasoline Range Hydrocarbons		ND	15.3		
C12-C28 Diesel Range Hydrocarbons		ND	15.3		
C28-C35 Oil Range Hydrocarbons		ND	15.3		
Total TPH		ND	15.3		

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Brent Barron, II
Odessa Laboratory Manager

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 quantitation 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 **SQL** Method Quantitation Limit **LOQ** Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

+ Outside XENCO's scope of NELAC Accreditation.

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(305) 823-8500	(305) 823-8555
(432) 563-1800	(432) 563-1713
(770) 449-8800	(770) 449-5477
(602) 437-0330	

Form 2 - Surrogate Recoveries

Project Name: Trunk M King Road 6-27-11

Work Orders : 424157,

Project ID:

Lab Batch #: 865450

Sample: 424157-001 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 07/26/11 15:39

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	133	100	133	70-135	
o-Terphenyl	73.2	50.0	146	70-135	*

Lab Batch #: 865450

Sample: 424157-002 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 07/26/11 16:09

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	109	99.7	109	70-135	
o-Terphenyl	60.5	49.9	121	70-135	

Lab Batch #: 865450

Sample: 424157-003 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 07/26/11 16:38

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	111	100	111	70-135	
o-Terphenyl	60.5	50.1	121	70-135	

Lab Batch #: 865450

Sample: 424157-004 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 07/26/11 17:08

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	107	100	107	70-135	
o-Terphenyl	56.8	50.0	114	70-135	

Lab Batch #: 865450

Sample: 424157-005 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 07/26/11 17:38

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	107	99.5	108	70-135	
o-Terphenyl	58.0	49.8	116	70-135	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = $100 * A / B$

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

Form 2 - Surrogate Recoveries

Project Name: Trunk M King Road 6-27-11

Work Orders : 424157,

Project ID:

Lab Batch #: 865450

Sample: 424157-006 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 07/26/11 18:08

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	112	100	112	70-135	
o-Terphenyl	59.6	50.1	119	70-135	

Lab Batch #: 865450

Sample: 424157-007 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 07/26/11 18:37

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	110	99.8	110	70-135	
o-Terphenyl	59.1	49.9	118	70-135	

Lab Batch #: 865450

Sample: 424157-008 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 07/26/11 19:07

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	117	101	116	70-135	
o-Terphenyl	63.4	50.3	126	70-135	

Lab Batch #: 865404

Sample: 424157-021 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 07/26/11 19:28

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	109	100	109	70-135	
o-Terphenyl	53.1	50.0	106	70-135	

Lab Batch #: 865450

Sample: 424157-009 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 07/26/11 19:36

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	116	99.6	116	70-135	
o-Terphenyl	62.5	49.8	126	70-135	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = $100 * A / B$

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

Form 2 - Surrogate Recoveries

Project Name: Trunk M King Road 6-27-11

Work Orders : 424157,

Project ID:

Lab Batch #: 865404

Sample: 424157-022 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 07/26/11 19:56

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	110	100	110	70-135	
o-Terphenyl	54.1	50.0	108	70-135	

Lab Batch #: 865450

Sample: 424157-010 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 07/26/11 20:05

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	112	100	112	70-135	
o-Terphenyl	61.2	50.2	122	70-135	

Lab Batch #: 865404

Sample: 424157-023 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 07/26/11 20:23

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	109	100	109	70-135	
o-Terphenyl	52.4	50.0	105	70-135	

Lab Batch #: 865404

Sample: 424157-024 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 07/26/11 20:50

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	106	100	106	70-135	
o-Terphenyl	51.2	50.0	102	70-135	

Lab Batch #: 865450

Sample: 424157-011 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 07/26/11 21:03

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	112	100	112	70-135	
o-Terphenyl	60.4	50.2	120	70-135	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = $100 * A / B$

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

Form 2 - Surrogate Recoveries

Project Name: Trunk M King Road 6-27-11

Work Orders : 424157,

Project ID:

Lab Batch #: 865404

Sample: 424157-025 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 07/26/11 21:19

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	103	100	103	70-135	
o-Terphenyl	50.1	50.0	100	70-135	

Lab Batch #: 865450

Sample: 424157-012 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 07/26/11 21:32

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	114	100	114	70-135	
o-Terphenyl	60.8	50.0	122	70-135	

Lab Batch #: 865450

Sample: 424157-013 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 07/26/11 22:01

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	113	100	113	70-135	
o-Terphenyl	62.4	50.2	124	70-135	

Lab Batch #: 865450

Sample: 424157-014 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 07/26/11 22:31

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	108	101	107	70-135	
o-Terphenyl	60.1	50.3	119	70-135	

Lab Batch #: 865450

Sample: 424157-015 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 07/26/11 23:01

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	108	100	108	70-135	
o-Terphenyl	57.8	50.2	115	70-135	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = $100 * A / B$

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

Form 2 - Surrogate Recoveries

Project Name: Trunk M King Road 6-27-11

Work Orders : 424157,

Project ID:

Lab Batch #: 865450

Sample: 424157-016 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 07/26/11 23:31

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	106	99.8	106	70-135	
o-Terphenyl	57.4	49.9	115	70-135	

Lab Batch #: 865450

Sample: 424157-017 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 07/27/11 00:01

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	113	99.7	113	70-135	
o-Terphenyl	60.2	49.9	121	70-135	

Lab Batch #: 865450

Sample: 424157-018 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 07/27/11 00:30

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	105	100	105	70-135	
o-Terphenyl	55.7	50.1	111	70-135	

Lab Batch #: 865450

Sample: 424157-019 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 07/27/11 00:59

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	111	100	111	70-135	
o-Terphenyl	61.1	50.1	122	70-135	

Lab Batch #: 865450

Sample: 424157-020 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 07/27/11 01:28

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	112	100	112	70-135	
o-Terphenyl	61.3	50.1	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.

Form 2 - Surrogate Recoveries

Project Name: Trunk M King Road 6-27-11

Work Orders : 424157,

Project ID:

Lab Batch #: 865404

Sample: 608798-1-BLK / BLK

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 07/26/11 12:53

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	98.8	100	99	70-135	
o-Terphenyl	47.8	50.0	96	70-135	

Lab Batch #: 865450

Sample: 608836-1-BLK / BLK

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 07/26/11 15:08

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	103	99.7	103	70-135	
o-Terphenyl	57.5	49.9	115	70-135	

Lab Batch #: 865404

Sample: 608798-1-BKS / BKS

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 07/26/11 11:57

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	98.5	100	99	70-135	
o-Terphenyl	44.9	50.0	90	70-135	

Lab Batch #: 865450

Sample: 608836-1-BKS / BKS

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 07/26/11 14:08

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	116	101	115	70-135	
o-Terphenyl	53.6	50.3	107	70-135	

Lab Batch #: 865404

Sample: 608798-1-BSD / BSD

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 07/26/11 12:25

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	105	100	105	70-135	
o-Terphenyl	48.3	50.0	97	70-135	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = $100 * A / B$

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

Form 2 - Surrogate Recoveries

Project Name: Trunk M King Road 6-27-11

Work Orders : 424157,

Project ID:

Lab Batch #: 865450

Sample: 608836-1-BSD / BSD

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 07/26/11 14:38

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	113	100	113	70-135	
o-Terphenyl	52.6	50.2	105	70-135	

Lab Batch #: 865404

Sample: 424176-004 S / MS

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 07/26/11 22:40

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	114	100	114	70-135	
o-Terphenyl	49.0	50.0	98	70-135	

Lab Batch #: 865450

Sample: 424157-020 S / MS

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 07/27/11 01:57

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	118	99.7	118	70-135	
o-Terphenyl	52.7	49.9	106	70-135	

Lab Batch #: 865404

Sample: 424176-004 SD / MSD

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 07/26/11 23:08

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	113	100	113	70-135	
o-Terphenyl	49.3	50.0	99	70-135	

Lab Batch #: 865450

Sample: 424157-020 SD / MSD

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 07/27/11 02:26

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	117	99.7	117	70-135	
o-Terphenyl	52.9	49.9	106	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.

Project Name: Trunk M King Road 6-27-11

Work Order #: 424157

Analyst: BRB

Lab Batch ID: 865391

Sample: 865391-1-BKS

Batch #: 1

Date Prepared: 07/26/2011

Project ID:

Date Analyzed: 07/26/2011

Matrix: Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY											
Units: mg/kg											
Anions by E300	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
Analytes											
Chloride	<0.840	20.0	21.8	109	20.0	21.3	107	2	75-125	20	

Analyst: BRB

Lab Batch ID: 865468

Sample: 865468-1-BKS

Batch #: 1

Date Prepared: 07/27/2011

Date Analyzed: 07/27/2011

Matrix: Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY											
Units: mg/kg											
Anions by E300	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
Analytes											
Chloride	<0.840	20.0	19.8	99	20.0	21.2	106	7	75-125	20	

Analyst: BEV

Lab Batch ID: 865404

Sample: 608798-1-BKS

Batch #: 1

Date Prepared: 07/26/2011

Date Analyzed: 07/26/2011

Matrix: Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY											
Units: mg/kg											
TPH By SW8015 Mod	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
	Analytes										
	C6-C12 Gasoline Range Hydrocarbons	<15.0	1000	962	96	1000	1020	102	6	70-135	35
C12-C28 Diesel Range Hydrocarbons	<15.0	1000	860	86	1000	931	93	8	70-135	35	

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

Project Name: Trunk M King Road 6-27-11

Work Order #: 424157

Analyst: BEV

Lab Batch ID: 865450

Sample: 608836-1-BKS

Units: mg/kg

Date Prepared: 07/26/2011

Batch #: 1

Project ID:

Date Analyzed: 07/26/2011

Matrix: Solid

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY													
Units: mg/kg	TPH By SW8015 Mod	Analytes	Blank	Spike	Blank	Spike	Blank	Blank	Blk. Spk	RPD	Control	Control	Flag
			Sample Result	Added	Spike	Spike	Spike	Dup.	%	Limits	Limits		
			[A]	[B]	Result	%R	Added	%R	%	%R	%R		
					[C]	[D]	[E]	[F]	[G]				

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: Trunk M King Road 6-27-11

Work Order #: 424157

Lab Batch #: 865391

Date Analyzed: 07/26/2011

QC- Sample ID: 424224-001 S

Reporting Units: mg/kg

Project ID:

Analyst: BRB

Date Prepared: 07/26/2011

Batch #: 1

Matrix: Soil

MATRIX / MATRIX SPIKE RECOVERY STUDY						
Inorganic Anions by EPA 300	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Analytes						
Chloride	137	209	342	98	75-125	

Lab Batch #: 865468

Date Analyzed: 07/27/2011

QC- Sample ID: 424157-020 S

Reporting Units: mg/kg

Date Prepared: 07/27/2011

Analyst: BRB

Batch #: 1

Matrix: Soil

MATRIX / MATRIX SPIKE RECOVERY STUDY						
Inorganic Anions by EPA 300	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Analytes						
Chloride	13.6	210	214	95	75-125	

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

BRL - Below Reporting Limit

Form 3 - MS / MSD Recoveries

Project Name: Trunk M King Road 6-27-11

Work Order #: 424157

Lab Batch ID: 865404

Date Analyzed: 07/26/2011

Reporting Units: mg/kg

Project ID:

QC- Sample ID: 424176-004 S Batch #: 1 Matrix: Soil

Date Prepared: 07/26/2011 Analyst: BEV

Reporting Units: mg/kg												
MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY												
TPH By SW8015 Mod		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
Analytes												
C6-C12 Gasoline Range Hydrocarbons		<15.4	1030	998	97	1030	1020	99	2	70-135	35	
C12-C28 Diesel Range Hydrocarbons		16.5	1030	918	88	1030	932	89	2	70-135	35	

Lab Batch ID: 865450

Date Analyzed: 07/27/2011

Reporting Units: mg/kg

QC- Sample ID: 424157-020 S Batch #: 1 Matrix: Soil

Date Prepared: 07/26/2011 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	<15.7	1050	898	86	1050	907	86	1	70-135	35		
C12-C28 Diesel Range Hydrocarbons	<15.7	1050	911	87	1050	811	77	12	70-135	35		

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

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

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable
N = See Narrative, EQ1 = Estimated Quantitation Limit

Project Name: Trunk M King Road 6-27-11

Work Order #: 424157

Lab Batch #: 865391

Date Analyzed: 07/26/2011 15:39

QC- Sample ID: 424224-001 D

Reporting Units: mg/kg

Project ID:

Analyst: BRB

Matrix: Soil

Date Prepared: 07/26/2011

Batch #: 1

SAMPLE / SAMPLE DUPLICATE RECOVERY

Anions by E300	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Analyte					
Chloride	137	137	0	20	

Lab Batch #: 865468

Date Analyzed: 07/27/2011 14:39

QC- Sample ID: 424157-020 D

Reporting Units: mg/kg

Date Prepared: 07/27/2011

Batch #: 1

Analyst: BRB

Matrix: Soil

SAMPLE / SAMPLE DUPLICATE RECOVERY

Anions by E300	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Analyte					
Chloride	13.6	14.4	6	20	

Lab Batch #: 865396

Date Analyzed: 07/26/2011 17:00

QC- Sample ID: 424177-001 D

Reporting Units: %

Date Prepared: 07/26/2011

Batch #: 1

Analyst: WRU

Matrix: Soil

SAMPLE / SAMPLE DUPLICATE RECOVERY

Percent Moisture	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Analyte					
Percent Moisture	6.09	6.08	0	20	

Lab Batch #: 865428

Date Analyzed: 07/26/2011 12:20

QC- Sample ID: 424157-005 D

Reporting Units: %

Date Prepared: 07/26/2011

Batch #: 1

Analyst: WRU

Matrix: Soil

SAMPLE / SAMPLE DUPLICATE RECOVERY

Percent Moisture	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Analyte					
Percent Moisture	2.66	2.68	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

Project Name: Trunk M King Road 6-27-11

Work Order #: 424157

Lab Batch #: 865432

Date Analyzed: 07/26/2011 12:41

Date Prepared: 07/26/2011

Project ID:

Analyst: WRU

QC- Sample ID: 424157-025 D

Batch #: 1

Matrix: Soil

Reporting Units: %

SAMPLE / SAMPLE DUPLICATE RECOVERY

Percent Moisture	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Analyte					
Percent Moisture	1.85	1.83	1	20	

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

Xenco Laboratories

Page 3 of 3

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST
12600 West I-20 East
Odessa, Texas 79765

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
Sampler Signature: *Arguijo*

Project Name: Southern Union Gas *Trunk M King Road*
Project #: *6-27-11*
Project Loc: Lea County, NM
Report Format: ☒ Standard ☐ TRRP ☐ NPDES
PO #: *8015B*
Fax No: (575) 396-1429
e-mail: pm@basinenv.com
Rose Slade @ Sus.com
Curt Stanley @ Sus.com

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Matrix	Preservation & # of Containers	Other (Specify)	DW - Drinking Water SL - Sludge	NP - Non-Potable Specify Other	TPH: 418.1 8015B	TPH: TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M.	CHLORIDES	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT 4 DAY
021	Sample # 58			7-25-11	10:40		1	Soil																		
022	Sample # 59			7-25-11	11:45		1	Soil																		
023	Sample # 60			7-25-11	11:50		1	Soil																		
024	Sample # 61			7-25-11	11:55		1	Soil																		
025	Sample # 62			7-25-11	12:00		1	Soil																		

Special Instructions: *Hold for BTEX*

Relinquished by:	Date	Time	Received by:	Date	Time
<i>Arguijo</i>	7-25-11	1:33	<i>Stanley</i>	7-25-11	1:33
<i>Stanley</i>	7-25-11	16:30	<i>Stanley</i>	7-25-11	16:30
<i>Stanley</i>			<i>Stanley</i>	7-25-11	16:30

Laboratory Comments:
Sample Containers Intact? ☒
VOCs Free of Headspace? ☒
Labels on container(s) ☒
Custody seals on container(s) ☒
Custody seals on cooler(s) ☒
Sample Hand Delivered ☒
by Sampler/Client Rep. ? ☒
by Courier? ☒ UPS ☒ DHL
Temperature Upon Receipt: *4.6 °C*

**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: 7-25-11 16:30
Lab ID #: 424157
Initials: RM

Sample Receipt Checklist

1. Samples on ice?	Blue	<u>Water</u>	No	
2. Shipping container in good condition?	<u>Yes</u>	No	None	
3. Custody seals intact on shipping container (cooler) and bottles?	Yes	No	<u>N/A</u>	
4. Chain of Custody present?	<u>Yes</u>	No		
5. Sample instructions complete on chain of custody?	<u>Yes</u>	No		
6. Any missing / extra samples?	Yes	<u>No</u>		
7. Chain of custody signed when relinquished / received?	<u>Yes</u>	No		
8. Chain of custody agrees with sample label(s)?	<u>Yes</u>	No		
9. Container labels legible and intact?	<u>Yes</u>	No		
10. Sample matrix / properties agree with chain of custody?	<u>Yes</u>	No		
11. Samples in proper container / bottle?	<u>Yes</u>	No		
12. Samples properly preserved?	<u>Yes</u>	No	N/A	
13. Sample container intact?	<u>Yes</u>	No		
14. Sufficient sample amount for indicated test(s)?	<u>Yes</u>	No		
15. All samples received within sufficient hold time?	<u>Yes</u>	No		
16. Subcontract of sample(s)?	Yes	<u>No</u>	N/A	
17. VOC sample have zero head space?	Yes	No	<u>N/A</u>	
18. Cooler 1 No.	Cooler 2 No.	Cooler 3 No.	Cooler 4 No.	Cooler 5 No.
lbs <u>4.6</u> °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 425131
for
Southern Union Gas Services- Monahans

Project Manager: Rose Slade

Trunk "M" King Road

Southern Union Gas

05-AUG-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)

05-AUG-11

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

Reference: XENCO Report No: **425131**
Trunk "M" King Road
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 425131. 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. 425131 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

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Sample Cross Reference 425131



Southern Union Gas Services- Monahans, Monahans, TX

Trunk "M" King Road

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
Sample #11A	S	08-04-11 10:10		425131-001
Sample #20A	S	08-04-11 10:30		425131-002
Sample #50A	S	08-04-11 11:00		425131-003
Sample #51A	S	08-04-11 11:15		425131-004
Sample #56A	S	08-04-11 11:30		425131-005



CASE NARRATIVE

Client Name: Southern Union Gas Services- Monahans

Project Name: Trunk "M" King Road



Project ID: Southern Union Gas

Work Order Number: 425131

Report Date: 05-AUG-11

Date Received: 08/04/2011

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None



Certificate of Analysis Summary 425131

Southern Union Gas Services- Monahans, Monahans, TX



Project Id: Southern Union Gas
Contact: Rose Slade
Project Location: Lea County, NM

Project Name: Trunk "M" King Road

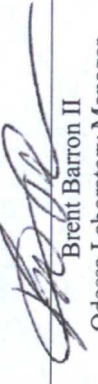
Date Received in Lab: Thu Aug-04-11 03:53 pm
Report Date: 05-AUG-11

Project Manager: Brent Barron II

Analysis Requested	Lab Id:	425131-001	425131-002	425131-003	425131-004	425131-005
	Field Id:	Sample #11A	Sample #20A	Sample #50A	Sample #51A	Sample #56A
	Depth:					
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL
	Sampled:	Aug-04-11 10:10	Aug-04-11 10:30	Aug-04-11 11:00	Aug-04-11 11:15	Aug-04-11 11:30
Anions by E300	Extracted:					
	Analyzed:	Aug-04-11 16:21	Aug-04-11 16:21	Aug-04-11 16:21	Aug-04-11 16:21	Aug-04-11 16:21
	Units/RL:	mg/kg RL 8.79 4.45	mg/kg RL 7.80 4.52	mg/kg RL 101 4.50	mg/kg RL 7.62 4.52	mg/kg RL 244 4.44
Percent Moisture	Extracted:					
	Analyzed:	Aug-04-11 16:05	Aug-04-11 16:05	Aug-04-11 16:05	Aug-04-11 16:05	Aug-04-11 16:05
	Units/RL:	% RL 5.72 1.00	% RL 7.00 1.00	% RL 6.76 1.00	% RL 7.11 1.00	% RL 5.35 1.00
Chloride						
Percent Moisture						

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

Houston - Dallas - San Antonio - Atlanta - Tampa - Boca Raton - Latin America - Odessa - Corpus Christi


Brent Barron II
Odessa Laboratory Manager

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 quantitation 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.

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 5332 Blackberry Drive, San Antonio TX 78238
 2505 North Falkenburg Rd, Tampa, FL 33619
 5757 NW 158th St, Miami Lakes, FL 33014
 12600 West I-20 East, Odessa, TX 79765
 6017 Financial Drive, Norcross, GA 30071
 3725 E. Atlanta Ave, Phoenix, AZ 85040

Phone	Fax
(281) 240-4200	(281) 240-4280
(214) 902 0300	(214) 351-9139
(210) 509-3334	(210) 509-3335
(813) 620-2000	(813) 620-2033
(305) 823-8500	(305) 823-8555
(432) 563-1800	(432) 563-1713
(770) 449-8800	(770) 449-5477
(602) 437-0330	

Project Name: Trunk "M" King Road

Work Order #: 425131

Analyst: BRB

Lab Batch ID: 866421

Sample: 866421-1-BKS

Units: mg/kg

Date Prepared: 08/04/2011

Batch #: 1

Project ID: Southern Union Gas

Date Analyzed: 08/04/2011

Matrix: Solid

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY												
Anions by E300		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
Analytes												
Chloride		<0.840	20.0	21.8	109	20.0	22.0	110	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



Form 3 - MS Recoveries



Project Name: Trunk "M" King Road

Work Order #: 425131

Lab Batch #: 866421

Date Analyzed: 08/04/2011

QC- Sample ID: 425048-001 S

Reporting Units: mg/kg

Date Prepared: 08/04/2011

Batch #: 1

Project ID: Southern Union Gas

Analyst: BRB

Matrix: Soil

MATRIX / MATRIX SPIKE RECOVERY STUDY						
Inorganic Anions by EPA 300	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Analytes						
Chloride	417	201	625	103	75-125	

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

BRL - Below Reporting Limit

Project Name: Trunk "M" King Road

Work Order #: 425131

Lab Batch #: 866421

Date Analyzed: 08/04/2011 16:21

Date Prepared: 08/04/2011

Project ID: Southern Union Gas

Analyst: BRB

QC- Sample ID: 425048-001 D

Batch #: 1

Matrix: Soil

Reporting Units: mg/kg

SAMPLE / SAMPLE DUPLICATE RECOVERY

Anions by E300	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Analyte					
Chloride	417	418	0	20	

Lab Batch #: 866401

Date Analyzed: 08/04/2011 10:47

Date Prepared: 08/04/2011

Analyst: BRB

QC- Sample ID: 425037-001 D

Batch #: 1

Matrix: Soil

Reporting Units: %

SAMPLE / SAMPLE DUPLICATE RECOVERY

Percent Moisture	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Analyte					
Percent Moisture	<1.00	<1.00	0	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

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765

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

Project Name: Trunk "M" King Road

Project #: SOUTHERN UNIONS

Project Loc: Lea County, NM

PO#

Report Format: ☒ Standard

e-mail: pm@basinenv.com

rose.slade@srg.com
cort.stanley@srg.com

(lab use only)

ORDER #: 425131

[illegible]

Special Instructions:

Please e-mail a copy of the analytical results to Rose Slade (Rose.Slade@SUG.com) and Curt Stanley (Curt.Stanley@SUG.com).

Relinquished by:

Date	Time
------	------

Received by:  /

Refinishing Ave.

Date	Time
------	------

Received by: _____

Relinquished by:

Date	Time
------	------

Received by ELOT; .

Laboratory Comments:

Sample Containers Intact?

Sample Containers intact!
VOCs Free of Headspace?

Labels on container(s)

Custody seals on container(s)

Custody seals on cooler(s)

Sample Hand Delivered

by Sampler/Client Rep.?

by Courier? UPS, DHL

402 alc

Temperature Upon Receipt:

9

**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: 8-4-11 15:53
Lab ID #: 425131
Initials: SL

Sample Receipt Checklist

1. Samples on ice?	Blue	<u>Water</u>	No	
2. Shipping container in good condition?	<u>Yes</u>	No	None	
3. Custody seals intact on shipping container (cooler) and bottles?	Yes	No	<u>N/A</u>	
4. Chain of Custody present?	<u>Yes</u>	No		
5. Sample instructions complete on chain of custody?	<u>Yes</u>	No		
6. Any missing / extra samples?	Yes	<u>No</u>		
7. Chain of custody signed when relinquished / received?	<u>Yes</u>	No		
8. Chain of custody agrees with sample label(s)?	<u>Yes</u>	No		
9. Container labels legible and intact?	<u>Yes</u>	No		
10. Sample matrix / properties agree with chain of custody?	<u>Yes</u>	No		
11. Samples in proper container / bottle?	<u>Yes</u>	No		
12. Samples properly preserved?	<u>Yes</u>	No	N/A	
13. Sample container intact?	<u>Yes</u>	No		
14. Sufficient sample amount for indicated test(s)?	<u>Yes</u>	No		
15. All samples received within sufficient hold time?	<u>Yes</u>	No		
16. Subcontract of sample(s)?	Yes	<u>No</u>	N/A	
17. VOC sample have zero head space?	Yes	No	<u>N/A</u>	
18. Cooler 1 No.	Cooler 2 No.	Cooler 3 No.	Cooler 4 No.	Cooler 5 No.
lbs <u>Amb</u> °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 5.6.8.3.1.a.1.
☐ Initial and Backup Temperature confirm out of temperature conditions
☐ Client understands and would like to proceed with analysis