

# *Basin Environmental Service Technologies, LLC*

3100 Plains Highway  
P. O. Box 301  
Lovington, New Mexico 88260

**jwlowry@basinenv.com**

Office: (575) 396-2378

Fax: (575) 396-1429



## **REMEDIATION SUMMARY & SITE CLOSURE REQUEST**

**REGENCY FIELD SERVICES**

**TRUNK "O" #2 (1RP-1508)**

**HISTORICAL RELEASE SITE**

**Lea County, New Mexico**

**Unit Letter "M" (SW/SW), Section 22, Township 22 South, Range 36 East**

**Latitude 32° 22.298' North, Longitude 103° 15.558' West**

**NMOCD Reference # 1RP-1508**

Prepared For:

Regency Field Services, LLC

801 S. Loop 464

Monahans, TX 79756

Prepared By:

Basin Environmental Service Technologies, LLC

3100 Plains Highway

Lovington, New Mexico 88260

**September 2013**

---

Joel W. Lowry  
Project Manager

## TABLE OF CONTENTS

1.0 INTRODUCTION.....	1
2.0 NMOC SITE CLASSIFICATION.....	1
3.0 SUMMARY OF SOIL REMEDIATION ACTIVITIES.....	2
4.0 QA/QC PROCEDURES.....	3
4.1 Soil Sampling.....	3
4.2 Decontamination of Equipment.....	3
4.3 Laboratory Protocol.....	3
5.0 SITE CLOSURE REQUEST.....	4
6.0 LIMITATIONS.....	4
7.0 DISTRIBUTION.....	5

## FIGURES

Figure 1 – Site Location Map

Figure 2 – Site & Sample Location Map

## TABLES

Table 1 – Concentrations of Benzene, BTEX, TPH & Chloride in Soil

## APPENDICES

Appendix A – Photographs

Appendix B – Soil Boring Logs

Appendix C – Laboratory Analytical Reports

Appendix D – Release Notification and Corrective Action (Form C-141)

## **1.0 INTRODUCTION & BACKGROUND INFORMATION**

Basin Environmental Service Technologies, LLC (Basin), on behalf of Regency Field Services (Regency), has prepared this *Remediation Summary & Site Closure Request* for the Trunk “O” #2 Historical Release Site (1RP-1508). The legal description of the release site is Unit Letter “M” (SW/SW), Section 22, Township 22 South, Range 36 East, in Lea County, New Mexico. The geographic coordinates of the release site are 32° 22.298' North latitude and 103° 15.558' West longitude. The property affected by the release is owned by the Dasco Land and Cattle Company. Please reference Figure 1 for a "Site Location Map".

On July 21, 2007, Regency discovered a release had occurred on the Trunk “O” Pipeline. The “Release Notification and Corrective Action Form” (Form C-141) indicated failure of a section of thirty-inch (30”) low-pressure pipeline resulted in the release of approximately seventy-five barrels (75 bbls) of a mixture of crude oil, produced water and natural gas. In addition, two thousand, one hundred and sixty (2,160) Mcf of natural gas were lost during the release. During initial response activities, approximately fifty barrels (50 bbls) of fluid was recovered, and heavily saturated soil was pushed up toward the point of release. The release was attributed to excess fluid being delivered by a producer, causing the line to pressure up and fail. The New Mexico Oil Conservation Division (NMOCD) Hobbs District Office was notified of the release immediately. The Form C-141 indicated the release affected approximately three thousand, one hundred and fifty square feet (3,150 ft<sup>2</sup>) of pasture land and one thousand, eight hundred square feet (1,800 ft<sup>2</sup>) of caliche lease road. General photographs of the release site are provided as Appendix A. The Form C-141 is provided as Appendix D.

Previous remediation activities were conducted at the Trunk “O” #2 Release Site by an environmental contractor that is no longer affiliated with the site. The nature and extent of the aforementioned activities remains unclear, as environmental reports and work records are not readily available.

On June 22, 2012, at the request of Regency, Basin assumed remediation responsibilities at the Trunk “O” #2 Historical Release Site.

## **2.0 NMOCD SITE CLASSIFICATION**

A search of the New Mexico Water Rights Reporting System (NMWRRS) database maintained by the New Mexico Office of the State Engineer (NMOSE) indicated reliable information was unavailable for Section 22, Township 22 South, Range 36 East. A depth to groundwater reference map utilized by the NMOCD indicates groundwater should be encountered at approximately three hundred and fifty feet (350') 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 one thousand feet (1,000') of the release. Based on the NMOCD ranking system, zero (0) points will be assigned to the site as a result of this criterion.

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

NMOCD guidelines indicate the Trunk “O” #2 Historical 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)
- Benzene, toluene, ethylbenzene and xylene (BTEX) – 50 mg/Kg (ppm)
- Total petroleum hydrocarbons (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**

Between August 1, 2007, and February 20, 2008, remediation activities were conducted at the Trunk “O” #2 Release Site by an environmental contractor that is no longer affiliated with the site. Work records indicate approximately two hundred and seventy-six cubic yards (276 yd<sup>3</sup>) soil was transported to the Southern Union Landfarm (NMOCD Permit # NM-02-0019) during this time.

On October 31, 2012, Basin responded to the Trunk “O” #2 Historical Release Site. During the initial investigation, no surface impact was visible, and revegetation was noted. Nine (9) test trenches (TT-1-9) were advanced within the inferred margins of the release area in an effort to determine if soil containing concentrations of BTEX, TPH and/or chloride remained in-situ. During the advancement of the test trenches, soil samples were collected at approximate three-foot (3') intervals and field-screened for concentrations of total petroleum hydrocarbons (TPH) and chloride. Soil sample locations are depicted in Figure 2, “Site & Sample Location Map”.

Collected soil samples (TT-1 @ Surface, TT-1 @ 6', TT-2 @ Surface, TT-2 @ 8', TT-3 @ Surface, TT-3 @ 7', TT-4 @ Surface, TT-4 @ 6', TT-5 @ Surface, TT-5 @ 6', TT-6 @ Surface, TT-6 @ 6', TT-7 @ Surface, TT-7 @ 6', TT-8 @ Surface, TT-8 @ 6', TT-9 @ Surface, TT-9 @ 6', and TT-9 @ 7') were submitted to Xenco Laboratories, Inc., of Odessa, Texas, for determination of TPH and chloride concentrations in accordance with EPA Methods 8015M and 300/300.1, respectively. Laboratory analytical results indicated TPH concentrations were less than the appropriate laboratory method detection limit (MDL) for each of the submitted soil samples. Chloride concentrations ranged from less than the appropriate laboratory MDL for soil samples TT-4 @ Surface, TT-5 @ Surface, TT-6 @ Surface, TT-7 @ Surface and TT-8 @ Surface to 634 ppm for soil sample TT-2 @ 8'. Each of the submitted soil samples exhibited TPH and chloride concentrations below NMOCD regulatory remediation action levels; further delineation would be required in the areas represented by test trenches TT-2 and TT-3. Table 1 summarizes the “Concentrations of Benzene, BTEX, TPH & Chloride in Soil”. Laboratory analytical reports are provided as Appendix C.

On August 29, 2013, two (2) soil bores (SB-1 and SB-2) were advanced in the areas represented by test trenches TT-2 and TT-3. Soil bore SB-1 was advanced to approximately twenty-five feet (25') bgs, approximately five feet (5') east of test trench TT-2. During the advancement of the soil bore, five (5) soil samples (SB-1 @ 5', SB-1 @ 10', SB-1 @ 15', SB-1 @ 20' and SB-1 @

25') were collected and submitted to the laboratory for analysis of TPH and chloride concentrations. Laboratory analytical results indicated THP concentrations were less than the appropriate laboratory MDL for each of the submitted soil samples. Analytical results indicated chloride concentrations ranged from 616 ppm for soil sample SB-1 @ 15' to 102 ppm for soil sample SB-1 @ 25'. Soil sample SB-1 @ 25' was also analyzed for concentrations of BTEX, which were determined to be less than the laboratory MDL. Based on laboratory analytical results from soil samples collected from soil bore SB-1, it was determined that the vertical extent of soil impact did not extend beyond twenty feet (20') bgs. Soil boring logs are provided as Appendix B.

Soil bore SB-2 was advanced to approximately twenty feet (20') bgs, approximately thirty feet (30') north of test trench TT-2. During the advancement of the soil bore, four (4) soil samples (SB-2 @ 5', SB-2 @ 10', SB-2 @ 15' and SB-2 @ 20') were collected and submitted to the laboratory for analysis of TPH and chloride concentrations. Laboratory analytical results indicated THP concentrations were less than the appropriate laboratory MDL for each of the submitted soil samples. Analytical results indicated chloride concentrations ranged from 78.2 ppm for soil SB-2 @ 10' to 8.25 ppm for soil sample SB-2 @ 5'. Soil sample SB-2 @ 20' was also analyzed for concentrations of BTEX, which were determined to be less than the laboratory MDL.

#### **4.0 QA/QC PROCEDURES**

##### **4.1 Soil Sampling**

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

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

##### **4.2 Decontamination of Equipment**

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

##### **4.3 Laboratory Protocol**

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

## **5.0 SITE CLOSURE REQUEST**

Laboratory analytical results from confirmation soil samples collected from the on-site test trenches and soil bores suggested previous remediation activities met the objectives of the NMOCD's *Guidelines for the Remediation of Leaks, Spills and Releases*. Based on these laboratory analytical results, Basin recommends Regency provide the NMOCD Hobbs District Office a copy of this *Remediation Summary & Site Closure Request* and request the NMOCD grant site closure to the Trunk "O" #2 Historical Release Site.

## **6.0 LIMITATIONS**

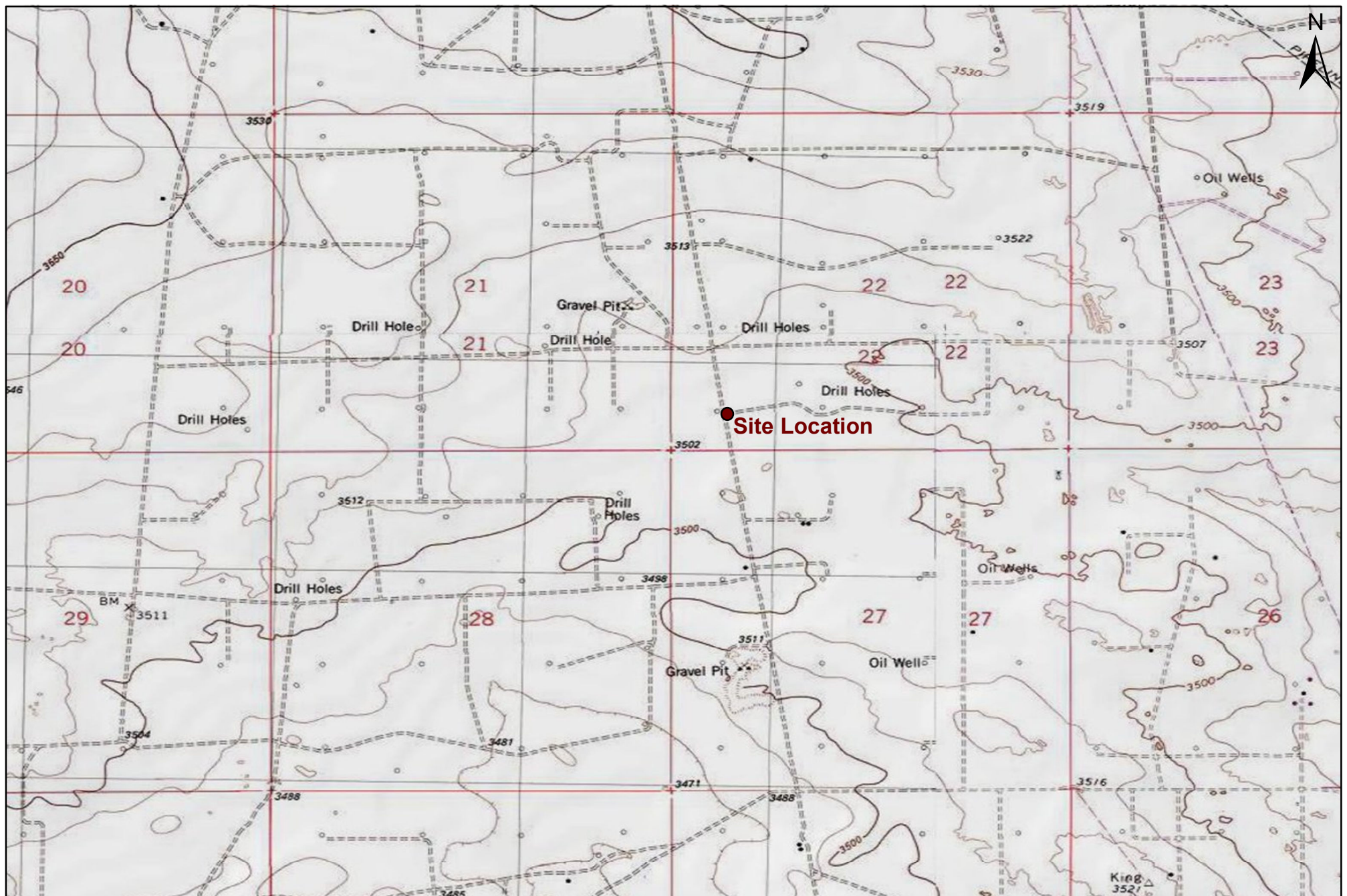
Basin Environmental Service Technologies, LLC, has prepared this *Remediation Summary & Site Closure Request* to the best of its ability. No other warranty, expressed or implied, is made or intended. Basin has examined and relied upon documents referenced in the report and on oral statements made by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

This report has been prepared for the benefit of Regency Field 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 Regency Field Services.

## **7.0 DISTRIBUTION**

- Copy 1: Geoffrey Leking  
New Mexico Energy, Minerals and Natural Resources Department  
Oil Conservation Division (District 1)  
1625 French Drive  
Hobbs, NM 88240  
GeoffreyR.Leking@state.nm.us
- Copy 2: Phillip Little  
Regency Field Services  
801 S. Loop 464  
Monahans, Texas 79756  
phillip.little@sug.com
- Copy 3: Basin Environmental Service Technologies, LLC  
P.O. Box 301  
Lovington, New Mexico 88260





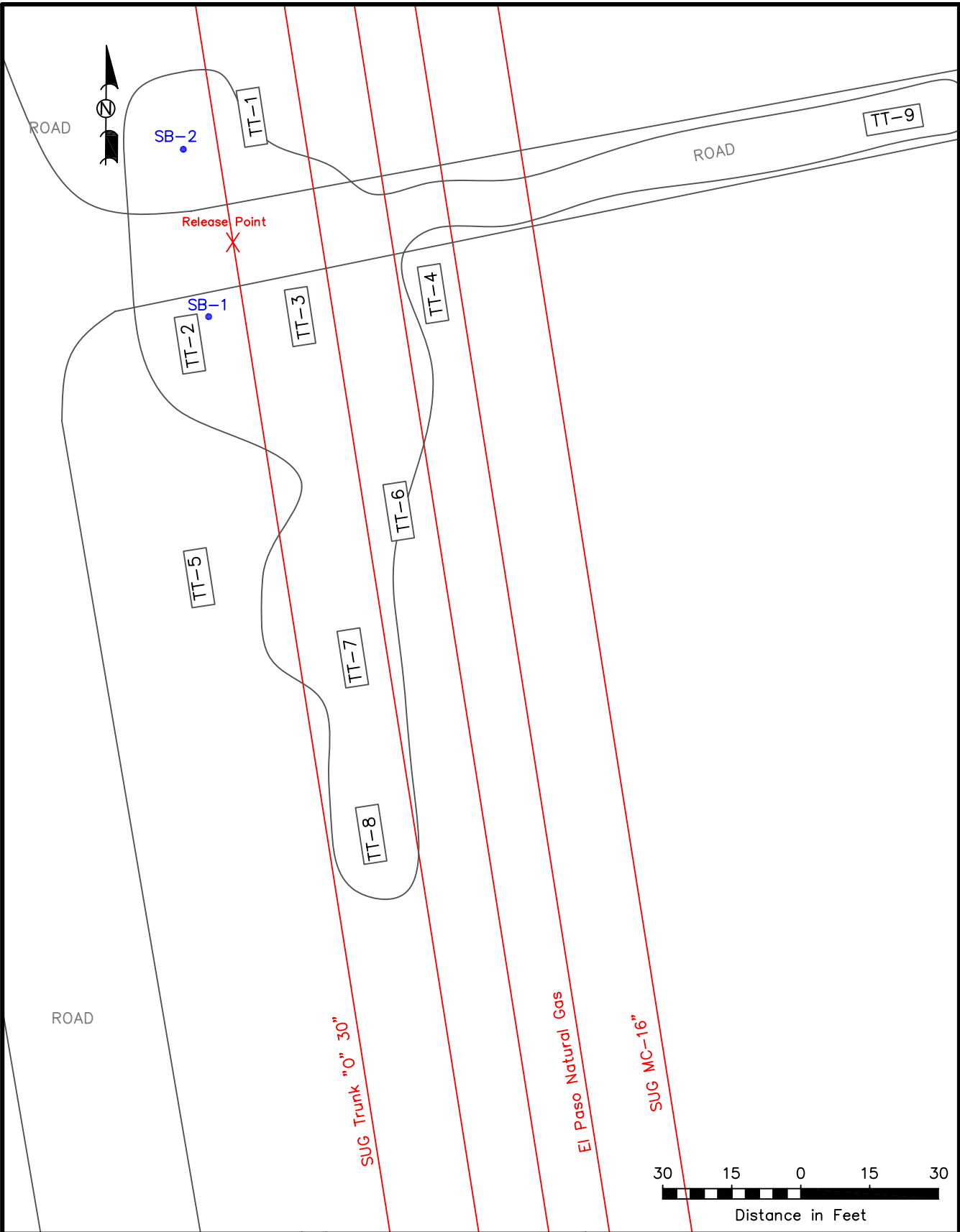
**Figure 1**  
**Site Location Map**  
**Southern Union Gas Services**  
**Trunk "O" #2**  
**Lea County, New Mexico**  
**NMOCD Reference #: 1RP-1508**



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

Drawn By: BJA	Checked By: JWL
November 5, 2012	Scale: 1" = 2000'





**LEGEND:**

- Inferred Flowpath
- Pipeline
- Road
- Sample Location
- Proposed Boring

Figure 2

Site & Sample Location Map  
Southern Union Gas Services  
Trunk "O" #2 (1RP-1508)  
Lea County, NM

Basin Environmental Services

Scale: 1" = 30'	Drawn By: JWL	Prepared By: BRB
November 2, 2012		

TABLE 1

## CONCENTRATIONS OF BENZENE, BTEX, TPH &amp; CHLORIDE IN SOIL

## SOUTHERN UNION GAS SERVICES

TRUNK "O" #2

HISTORICAL RELEASE SITE

LEA COUNTY, NEW MEXICO

NMOCD REF# 1RP-1508

SAMPLE LOCATION	SAMPLE DEPTH (BGS)	SAMPLE DATE	SOIL STATUS	METHOD: EPA SW 846-8021B, 5030					METHOD: 8015M			TOTAL TPH C <sub>6</sub> -C <sub>28</sub> (mg/Kg)	EPA: 300 CHLORIDE (mg/Kg)
				BENZENE (mg/Kg)	TOLUENE (mg/Kg)	ETHYL- BENZENE (mg/Kg)	TOTAL XYLENES (mg/Kg)	TOTAL BTEX (mg/Kg)	GRO C <sub>6</sub> -C <sub>12</sub> (mg/Kg)	DRO C <sub>12</sub> -C <sub>28</sub> (mg/Kg)	ORO C <sub>28</sub> -C <sub>35</sub> (mg/Kg)		
TT-1 @ Surface	Surface	10/31/2012	In-Situ	-	-	-	-	-	<17.6	<17.6	<17.6	<17.6	2.58
TT-1 @ 6'	6'	10/31/2012	In-Situ	-	-	-	-	-	<15.6	<15.6	<15.6	<15.6	4.35
TT-2 @ Surface	Surface	10/31/2012	In-Situ	-	-	-	-	-	<16.2	<16.2	<16.2	<16.2	434
TT-2 @ 8'	8'	10/31/2012	In-Situ	-	-	-	-	-	<17.1	<17.1	<17.1	<17.1	634
TT-3 @ Surface	Surface	10/31/2012	In-Situ	-	-	-	-	-	<16.6	<16.6	<16.6	<16.6	75.3
TT-3 @ 7'	7'	10/31/2012	In-Situ	-	-	-	-	-	<18.1	<18.1	<18.1	<18.1	283
TT-4 @ Surface	Surface	10/31/2012	In-Situ	-	-	-	-	-	<16.1	<16.1	<16.1	<16.1	<1.08
TT-4 @ 6'	6'	10/31/2012	In-Situ	-	-	-	-	-	<15.9	<15.9	<15.9	<15.9	55.2
TT-5 @ Surface	Surface	10/31/2012	In-Situ	-	-	-	-	-	<16.3	<16.3	<16.3	<16.3	<1.09
TT-5 @ 6'	6'	10/31/2012	In-Situ	-	-	-	-	-	<17.1	<17.1	<17.1	<17.1	2.57
TT-6 @ Surface	Surface	10/31/2012	In-Situ	-	-	-	-	-	<16.5	<16.5	<16.5	<16.5	<1.10
TT-6 @ 6'	6'	10/31/2012	In-Situ	-	-	-	-	-	<16.1	<16.1	<16.1	<16.1	1.74
TT-7 @ Surface	Surface	10/31/2012	In-Situ	-	-	-	-	-	<17.5	<17.5	<17.5	<17.5	<1.17
TT-7 @ 6'	6'	10/31/2012	In-Situ	-	-	-	-	-	<16.6	<16.6	<16.6	<16.6	3.57
TT-8 @ Surface	Surface	10/31/2012	In-Situ	-	-	-	-	-	<15.3	<15.3	<15.3	<15.3	<1.02
TT-8 @ 6'	6'	10/31/2012	In-Situ	-	-	-	-	-	<18.3	<18.3	<18.3	<18.3	5.77
TT-9 @ Surface	Surface	10/31/2012	In-Situ	-	-	-	-	-	<15.3	<15.3	<15.3	<15.3	1.05
TT-9 @ 6'	6'	10/31/2012	In-Situ	-	-	-	-	-	-	-	-	-	303
TT-9 @ 7'	7'	10/31/2012	In-Situ	-	-	-	-	-	<16.0	<16.0	<16.0	<16.0	80.1
SB-1 @ 5'	5'	8/29/2013	In-Situ	-	-	-	-	-	<15.7	<15.7	<15.7	<15.7	240
SB-1 @ 10'	10'	8/29/2013	In-Situ	-	-	-	-	-	<16.4	<16.4	<16.4	<16.4	548
SB-1 @ 15'	15'	8/29/2013	In-Situ	-	-	-	-	-	<16.8	<16.8	<16.8	<16.8	616
SB-1 @ 20'	20'	8/29/2013	In-Situ	-	-	-	-	-	<16.4	<16.4	<16.4	<16.4	192
SB-1 @ 25'	25'	8/29/2013	In-Situ	<0.00107	<0.00107	<0.00107	<0.00215	<0.00215	<16.3	<16.3	<16.3	<16.3	102
SB-2 @ 5'	5'	8/29/2013	In-Situ	-	-	-	-	-	<16.9	<16.9	<16.9	<16.9	8.25
SB-2 @ 10'	10'	8/29/2013	In-Situ	-	-	-	-	-	<18.5	<18.5	<18.5	<18.5	78.2
SB-2 @ 15'	15'	8/29/2013	In-Situ	-	-	-	-	-	<16.3	<16.3	<16.3	<16.3	27.3
SB-2 @ 20'	20'	8/29/2013	In-Situ	<0.00113	<0.00113	<0.00113	<0.00225	<0.00225	<17.1	<17.1	<17.1	<17.1	36.0
NMOCD Standard				10				50				5,000	1,000

- = Not analyzed.



Recent photograph of the affected road at the Trunk "O" #2 Historical Release Site.



Photograph of the affected pasture area at the Trunk "O" #2 Historical Release Site.





Photograph of the advancement of test trenches at the Trunk "O" #2 Historical Release Site.



Photograph of the advancement of soil bores at the Trunk "O" #2 Historical Release Site.

# **Analytical Report 451911**

**for**

## **Southern Union Gas Services- Monahans**

**Project Manager: Joel Lowry**

**Trunk "O" #2**

**(RP-1508)**

**13-NOV-12**

Collected By: Client



**12600 West I-20 East Odessa, Texas 79765**

Xenco-Houston (EPA Lab code: TX00122):

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

Xenco-Atlanta (EPA Lab Code: GA00046):

Florida (E87429), North Carolina (483), South Carolina (98015), Kentucky (85), DoD ( L10-135)  
Louisiana (04176), USDA (P330-07-00105)

Xenco-Tampa Mobile (EPA Lab code: FL01212): Florida (E84900)

Xenco-Lakeland: Florida (E84098)

Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-TX)

Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295-TX)

Xenco Phoenix (EPA Lab Code: AZ00901): Arizona(AZ0757)

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

Xenco Tucson (EPA Lab code:AZ000989): Arizona (AZ0758)



13-NOV-12

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

Reference: XENCO Report No: **451911**  
**Trunk "O" #2**  
Project Address: Lea County, NM

**Joel Lowry:**

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number 451911. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

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

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 451911 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

---

**Nicholas Straccione**

Project Manager

***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 - Odessa - San Antonio - Tampa - Lakeland - Atlanta - Phoenix - Oklahoma - Latin America

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

Trunk "O" #2

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
TT-1 @ Surface	S	10-31-12 09:00		451911-001
TT-1 @ 6'	S	10-31-12 09:15	- 6 ft	451911-002
TT-2 @ Surface	S	10-31-12 09:45		451911-003
TT-2 @ 8'	S	10-31-12 10:10	- 8 ft	451911-004
TT-3 @ Surface	S	10-31-12 10:20		451911-005
TT-3 @ 7'	S	10-31-12 11:00	- 7 ft	451911-006
TT-4 @ Surface	S	10-31-12 11:20		451911-007
TT-4 @ 6'	S	10-31-12 11:55	- 6 ft	451911-008
TT-5 @ Surface	S	10-31-12 12:30		451911-009
TT-5 @ 6'	S	10-31-12 12:50	- 6 ft	451911-010
TT-6 @ Surface	S	10-31-12 13:00	ft	451911-011
TT-6 @ 6'	S	10-31-12 13:25	- 6 ft	451911-012
TT-7 @ Surface	S	10-31-12 13:45	ft	451911-013
TT-7 @ 6'	S	10-31-12 13:30	- 6 ft	451911-014
TT-8 @ Surface	S	10-31-12 14:25	ft	451911-015
TT-8 @ 6'	S	10-31-12 14:45	- 6 ft	451911-016
TT-9 @ Surface	S	10-31-12 15:00	ft	451911-017
TT-9 @ 6'	S	10-31-12 15:20	- 6 ft	451911-018
TT-9 @ 7'	S	10-31-12 15:30	- 7 ft	451911-019





## CASE NARRATIVE

*Client Name: Southern Union Gas Services- Monahans*

*Project Name: Trunk "O" #2*



*Project ID: (RP-1508)*

*Work Order Number: 451911*

*Report Date: 13-NOV-12*

*Date Received: 11/05/2012*

---

***Sample receipt non conformances and comments:***

*None*

---

***Sample receipt non conformances and comments per sample:***

*None*

# Certificate of Analysis Summary 451911

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



**Project Id:** (RP-1508)

**Contact:** Joel Lowry

**Project Name:** Trunk "O" #2

**Date Received in Lab:** Mon Nov-05-12 09:42 am

**Report Date:** 13-NOV-12

**Project Location:** Lea County,NM

**Project Manager:** Nicholas Straccione

<i>Analysis Requested</i>	<i>Lab Id:</i>	451911-001	451911-002	451911-003	451911-004	451911-005	451911-006
	<i>Field Id:</i>	TT-1 @ Surface	TT-1 @ 6'	TT-2 @ Surface	TT-2 @ 8'	TT-3 @ Surface	TT-3 @ 7'
	<i>Depth:</i>		6 ft		8 ft		7 ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	Oct-31-12 09:00	Oct-31-12 09:15	Oct-31-12 09:45	Oct-31-12 10:10	Oct-31-12 10:20	Oct-31-12 11:00
<b>Inorganic Anions by EPA 300/300.1 SUB: TX104704215</b>	<i>Extracted:</i>	Nov-10-12 11:49	Nov-10-12 12:21	Nov-10-12 12:37	Nov-10-12 12:53	Nov-10-12 13:09	Nov-10-12 13:26
	<i>Analyzed:</i>	Nov-10-12 11:49	Nov-10-12 12:21	Nov-10-12 12:37	Nov-10-12 12:53	Nov-10-12 13:09	Nov-10-12 13:26
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		2.58 1.18	4.35 1.04	434 1.09	634 1.15	75.3 1.11	283 1.21
<b>Percent Moisture</b>	<i>Extracted:</i>						
	<i>Analyzed:</i>	Nov-06-12 11:58	Nov-06-12 11:58	Nov-06-12 11:58	Nov-06-12 11:58	Nov-06-12 11:58	Nov-06-12 11:58
	<i>Units/RL:</i>	% RL	% RL	% RL	% RL	% RL	% RL
Percent Moisture		15.3 1.00	4.08 1.00	7.87 1.00	12.8 1.00	9.90 1.00	17.5 1.00
<b>TPH By SW8015 Mod</b>	<i>Extracted:</i>	Nov-10-12 10:00	Nov-10-12 10:00	Nov-12-12 07:45	Nov-12-12 07:45	Nov-12-12 07:45	Nov-12-12 07:45
	<i>Analyzed:</i>	Nov-10-12 23:09	Nov-10-12 23:38	Nov-12-12 11:03	Nov-12-12 11:35	Nov-12-12 12:04	Nov-12-12 12:32
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
C6-C12 Gasoline Range Hydrocarbons		ND 17.6	ND 15.6	ND 16.2	ND 17.1	ND 16.6	ND 18.1
C12-C28 Diesel Range Hydrocarbons		ND 17.6	ND 15.6	ND 16.2	ND 17.1	ND 16.6	ND 18.1
C28-C35 Oil Range Hydrocarbons		ND 17.6	ND 15.6	ND 16.2	ND 17.1	ND 16.6	ND 18.1
Total TPH		ND 17.6	ND 15.6	ND 16.2	ND 17.1	ND 16.6	ND 18.1

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



Nicholas Straccione  
Project Manager

# Certificate of Analysis Summary 451911

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



**Project Name: Trunk "O" #2**

**Project Id:** (RP-1508)

**Contact:** Joel Lowry

**Project Location:** Lea County,NM

**Date Received in Lab:** Mon Nov-05-12 09:42 am

**Report Date:** 13-NOV-12

**Project Manager:** Nicholas Straccione

<i>Analysis Requested</i>	<i>Lab Id:</i>	451911-007	451911-008	451911-009	451911-010	451911-011	451911-012
	<i>Field Id:</i>	TT-4 @ Surface	TT-4 @ 6'	TT-5 @ Surface	TT-5 @ 6'	TT-6 @ Surface	TT-6 @ 6'
	<i>Depth:</i>		6 ft		6 ft		6 ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	Oct-31-12 11:20	Oct-31-12 11:55	Oct-31-12 12:30	Oct-31-12 12:50	Oct-31-12 13:00	Oct-31-12 13:25
<b>Inorganic Anions by EPA 300/300.1 SUB: TX104704215</b>	<i>Extracted:</i>	Nov-10-12 14:14	Nov-10-12 14:30	Nov-10-12 14:46	Nov-10-12 15:02	Nov-10-12 15:18	Nov-10-12 15:34
	<i>Analyzed:</i>	Nov-10-12 14:14	Nov-10-12 14:30	Nov-10-12 14:46	Nov-10-12 15:02	Nov-10-12 15:18	Nov-10-12 15:34
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		ND 1.08	55.2 1.06	ND 1.09	2.57 1.14	ND 1.10	1.74 1.08
<b>Percent Moisture</b>	<i>Extracted:</i>						
	<i>Analyzed:</i>	Nov-06-12 11:58	Nov-06-12 11:58	Nov-06-12 11:58	Nov-06-12 11:58	Nov-06-12 11:58	Nov-06-12 11:58
	<i>Units/RL:</i>	% RL	% RL	% RL	% RL	% RL	% RL
Percent Moisture		7.14 1.00	5.40 1.00	7.96 1.00	12.4 1.00	9.03 1.00	7.41 1.00
<b>TPH By SW8015 Mod</b>	<i>Extracted:</i>	Nov-12-12 07:45	Nov-12-12 07:45	Nov-12-12 07:45	Nov-12-12 07:45	Nov-12-12 07:45	Nov-12-12 07:45
	<i>Analyzed:</i>	Nov-12-12 12:59	Nov-12-12 13:27	Nov-12-12 13:54	Nov-12-12 14:21	Nov-12-12 14:49	Nov-12-12 15:17
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
C6-C12 Gasoline Range Hydrocarbons		ND 16.1	ND 15.9	ND 16.3	ND 17.1	ND 16.5	ND 16.1
C12-C28 Diesel Range Hydrocarbons		ND 16.1	ND 15.9	ND 16.3	ND 17.1	ND 16.5	ND 16.1
C28-C35 Oil Range Hydrocarbons		ND 16.1	ND 15.9	ND 16.3	ND 17.1	ND 16.5	ND 16.1
Total TPH		ND 16.1	ND 15.9	ND 16.3	ND 17.1	ND 16.5	ND 16.1

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



Nicholas Straccione  
Project Manager

# Certificate of Analysis Summary 451911

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



**Project Name: Trunk "O" #2**

**Project Id:** (RP-1508)

**Contact:** Joel Lowry

**Project Location:** Lea County,NM

**Date Received in Lab:** Mon Nov-05-12 09:42 am

**Report Date:** 13-NOV-12

**Project Manager:** Nicholas Straccione

<i>Analysis Requested</i>	<i>Lab Id:</i>	451911-013	451911-014	451911-015	451911-016	451911-017	451911-018
	<i>Field Id:</i>	TT-7 @ Surface	TT-7 @ 6'	TT-8 @ Surface	TT-8 @ 6'	TT-9 @ Surface	TT-9 @ 6'
	<i>Depth:</i>		6 ft		6 ft		6 ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	Oct-31-12 13:45	Oct-31-12 13:30	Oct-31-12 14:25	Oct-31-12 14:45	Oct-31-12 15:00	Oct-31-12 15:20
<b>Inorganic Anions by EPA 300/300.1 SUB: TX104704215</b>	<i>Extracted:</i>	Nov-10-12 15:50	Nov-10-12 16:06	Nov-10-12 16:23	Nov-10-12 16:39	Nov-10-12 17:27	Nov-10-12 17:43
	<i>Analyzed:</i>	Nov-10-12 15:50	Nov-10-12 16:06	Nov-10-12 16:23	Nov-10-12 16:39	Nov-10-12 17:27	Nov-10-12 17:43
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		ND 1.17	3.57 1.11	ND 1.02	5.77 1.22	1.05 1.02	303 1.06
<b>Percent Moisture</b>	<i>Extracted:</i>						
	<i>Analyzed:</i>	Nov-06-12 11:58	Nov-06-12 11:58	Nov-06-12 11:58	Nov-06-12 11:58	Nov-06-12 11:58	Nov-06-12 11:58
	<i>Units/RL:</i>	% RL	% RL	% RL	% RL	% RL	% RL
Percent Moisture		14.8 1.00	9.74 1.00	2.09 1.00	18.1 1.00	2.06 1.00	5.62 1.00
<b>TPH By SW8015 Mod</b>	<i>Extracted:</i>	Nov-12-12 07:45	Nov-12-12 07:45	Nov-12-12 07:45	Nov-12-12 07:45	Nov-12-12 07:45	
	<i>Analyzed:</i>	Nov-12-12 16:15	Nov-12-12 16:47	Nov-12-12 17:20	Nov-12-12 17:52	Nov-12-12 18:23	
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	
C6-C12 Gasoline Range Hydrocarbons		ND 17.5	ND 16.6	ND 15.3	ND 18.3	ND 15.3	
C12-C28 Diesel Range Hydrocarbons		ND 17.5	ND 16.6	ND 15.3	ND 18.3	ND 15.3	
C28-C35 Oil Range Hydrocarbons		ND 17.5	ND 16.6	ND 15.3	ND 18.3	ND 15.3	
Total TPH		ND 17.5	ND 16.6	ND 15.3	ND 18.3	ND 15.3	

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



Nicholas Straccione  
Project Manager

# Certificate of Analysis Summary 451911

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



**Project Name: Trunk "O" #2**

**Project Id:** (RP-1508)

**Contact:** Joel Lowry

**Project Location:** Lea County,NM

**Date Received in Lab:** Mon Nov-05-12 09:42 am

**Report Date:** 13-NOV-12

**Project Manager:** Nicholas Straccione

<b>Analysis Requested</b>	<b>Lab Id:</b> 451911-019 <b>Field Id:</b> TT-9 @ 7' <b>Depth:</b> 7 ft <b>Matrix:</b> SOIL <b>Sampled:</b> Oct-31-12 15:30					
<b>Inorganic Anions by EPA 300/300.1 SUB: TX104704215</b>	<b>Extracted:</b> Nov-10-12 17:59 <b>Analyzed:</b> Nov-10-12 17:59 <b>Units/RL:</b> mg/kg RL					
Chloride	80.1 1.07					
<b>Percent Moisture</b>	<b>Extracted:</b> <b>Analyzed:</b> Nov-06-12 11:58 <b>Units/RL:</b> % RL					
Percent Moisture	6.36 1.00					
<b>TPH By SW8015 Mod</b>	<b>Extracted:</b> Nov-12-12 07:45 <b>Analyzed:</b> Nov-12-12 18:54 <b>Units/RL:</b> mg/kg RL					
C6-C12 Gasoline Range Hydrocarbons	ND 16.0					
C12-C28 Diesel Range Hydrocarbons	ND 16.0					
C28-C35 Oil Range Hydrocarbons	ND 16.0					
Total TPH	ND 16.0					

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



Nicholas Straccione  
Project 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.

\* Surrogate recovered outside laboratory control limit.

**BRL** Below Reporting Limit.

**RL** Reporting Limit

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

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

**DL** Method Detection Limit

**NC** Non-Calculable

+ NELAC certification not offered for this compound.

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

***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 - Atlanta - Midland/Odessa - Tampa/Lakeland - Phoenix - Latin America

4143 Greenbriar Dr, Stafford, TX 77477  
 9701 Harry Hines Blvd, Dallas, TX 75220  
 5332 Blackberry Drive, San Antonio TX 78238  
 2505 North Falkenburg Rd, Tampa, FL 33619  
 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
(432) 563-1800	(432) 563-1713
(770) 449-8800	(770) 449-5477
(602) 437-0330	

## Form 2 - Surrogate Recoveries

Project Name: Trunk "O" #2

Work Orders : 451911,

Project ID: (RP-1508)

Lab Batch #: 900607

Sample: 451911-001 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg Date Analyzed: 11/10/12 23:09		SURROGATE RECOVERY STUDY			
TPH By SW8015 Mod		Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R
Analytes					
1-Chlorooctane		111	99.7	111	70-135
o-Terphenyl		53.5	49.9	107	70-135

Lab Batch #: 900607

Sample: 451911-002 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg Date Analyzed: 11/10/12 23:38		SURROGATE RECOVERY STUDY			
TPH By SW8015 Mod		Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R
Analytes					
1-Chlorooctane		110	99.8	110	70-135
o-Terphenyl		52.4	49.9	105	70-135

Lab Batch #: 900705

Sample: 451911-003 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg Date Analyzed: 11/12/12 11:03		SURROGATE RECOVERY STUDY			
TPH By SW8015 Mod		Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R
Analytes					
1-Chlorooctane		82.7	99.7	83	70-135
o-Terphenyl		41.4	49.9	83	70-135

Lab Batch #: 900705

Sample: 451911-004 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg Date Analyzed: 11/12/12 11:35		SURROGATE RECOVERY STUDY			
TPH By SW8015 Mod		Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R
Analytes					
1-Chlorooctane		85.8	99.5	86	70-135
o-Terphenyl		43.1	49.8	87	70-135

Lab Batch #: 900705

Sample: 451911-005 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg Date Analyzed: 11/12/12 12:04		SURROGATE RECOVERY STUDY			
TPH By SW8015 Mod		Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R
Analytes					
1-Chlorooctane		85.0	99.6	85	70-135
o-Terphenyl		42.8	49.8	86	70-135

\* Surrogate outside of Laboratory QC limits

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

\*\*\* Poor recoveries due to dilution

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

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



## Form 2 - Surrogate Recoveries

Project Name: Trunk "O" #2

Work Orders : 451911,

Project ID: (RP-1508)

Lab Batch #: 900705

Sample: 451911-006 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg Date Analyzed: 11/12/12 12:32		SURROGATE RECOVERY STUDY			
TPH By SW8015 Mod		Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R
Analytes					
1-Chlorooctane		89.9	99.6	90	70-135
o-Terphenyl		45.5	49.8	91	70-135

Lab Batch #: 900705

Sample: 451911-007 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg Date Analyzed: 11/12/12 12:59		SURROGATE RECOVERY STUDY			
TPH By SW8015 Mod		Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R
Analytes					
1-Chlorooctane		85.6	99.9	86	70-135
o-Terphenyl		43.6	50.0	87	70-135

Lab Batch #: 900705

Sample: 451911-008 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg Date Analyzed: 11/12/12 13:27		SURROGATE RECOVERY STUDY			
TPH By SW8015 Mod		Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R
Analytes					
1-Chlorooctane		88.1	100	88	70-135
o-Terphenyl		44.5	50.0	89	70-135

Lab Batch #: 900705

Sample: 451911-009 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg Date Analyzed: 11/12/12 13:54		SURROGATE RECOVERY STUDY			
TPH By SW8015 Mod		Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R
Analytes					
1-Chlorooctane		86.8	99.8	87	70-135
o-Terphenyl		44.0	49.9	88	70-135

Lab Batch #: 900705

Sample: 451911-010 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg Date Analyzed: 11/12/12 14:21		SURROGATE RECOVERY STUDY			
TPH By SW8015 Mod		Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R
Analytes					
1-Chlorooctane		86.5	100	87	70-135
o-Terphenyl		43.7	50.1	87	70-135

\* Surrogate outside of Laboratory QC limits

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

\*\*\* Poor recoveries due to dilution

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

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

## Form 2 - Surrogate Recoveries

Project Name: Trunk "O" #2

Work Orders : 451911,

Project ID: (RP-1508)

Lab Batch #: 900705

Sample: 451911-011 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 11/12/12 14:49

### SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	86.4	99.8	87	70-135	
o-Terphenyl	44.1	49.9	88	70-135	

Lab Batch #: 900705

Sample: 451911-012 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 11/12/12 15:17

### SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	86.4	99.6	87	70-135	
o-Terphenyl	43.7	49.8	88	70-135	

Lab Batch #: 900705

Sample: 451911-013 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 11/12/12 16:15

### SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	83.6	99.6	84	70-135	
o-Terphenyl	42.9	49.8	86	70-135	

Lab Batch #: 900705

Sample: 451911-014 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 11/12/12 16:47

### SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	84.8	99.8	85	70-135	
o-Terphenyl	42.4	49.9	85	70-135	

Lab Batch #: 900705

Sample: 451911-015 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 11/12/12 17:20

### SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	90.7	100	91	70-135	
o-Terphenyl	44.1	50.0	88	70-135	

\* Surrogate outside of Laboratory QC limits

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

\*\*\* Poor recoveries due to dilution

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

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

## Form 2 - Surrogate Recoveries

Project Name: Trunk "O" #2

Work Orders : 451911,

Project ID: (RP-1508)

Lab Batch #: 900705

Sample: 451911-016 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg Date Analyzed: 11/12/12 17:52		SURROGATE RECOVERY STUDY			
TPH By SW8015 Mod		Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R
Analytes					
1-Chlorooctane		84.4	100	84	70-135
o-Terphenyl		42.4	50.1	85	70-135

Lab Batch #: 900705

Sample: 451911-017 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg Date Analyzed: 11/12/12 18:23		SURROGATE RECOVERY STUDY			
TPH By SW8015 Mod		Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R
Analytes					
1-Chlorooctane		83.4	99.9	83	70-135
o-Terphenyl		41.7	50.0	83	70-135

Lab Batch #: 900705

Sample: 451911-019 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg Date Analyzed: 11/12/12 18:54		SURROGATE RECOVERY STUDY			
TPH By SW8015 Mod		Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R
Analytes					
1-Chlorooctane		84.7	100	85	70-135
o-Terphenyl		42.1	50.1	84	70-135

Lab Batch #: 900607

Sample: 629774-1-BLK / BLK

Batch: 1 Matrix: Solid

Units: mg/kg Date Analyzed: 11/10/12 12:53		SURROGATE RECOVERY STUDY			
TPH By SW8015 Mod		Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R
Analytes					
1-Chlorooctane		109	99.9	109	70-135
o-Terphenyl		53.7	50.0	107	70-135

Lab Batch #: 900705

Sample: 629844-1-BLK / BLK

Batch: 1 Matrix: Solid

Units: mg/kg Date Analyzed: 11/12/12 10:31		SURROGATE RECOVERY STUDY			
TPH By SW8015 Mod		Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R
Analytes					
1-Chlorooctane		83.0	100	83	70-135
o-Terphenyl		41.8	50.1	83	70-135

\* Surrogate outside of Laboratory QC limits

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

\*\*\* Poor recoveries due to dilution

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

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

## Form 2 - Surrogate Recoveries

Project Name: Trunk "O" #2

Work Orders : 451911,

Project ID: (RP-1508)

Lab Batch #: 900607

Sample: 629774-1-BKS / BKS

Batch: 1 Matrix: Solid

Units: mg/kg Date Analyzed: 11/10/12 11:57		SURROGATE RECOVERY STUDY			
TPH By SW8015 Mod		Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R
Analytes					
1-Chlorooctane		106	100	106	70-135
o-Terphenyl		62.9	50.0	126	70-135

Lab Batch #: 900705

Sample: 629844-1-BKS / BKS

Batch: 1 Matrix: Solid

Units: mg/kg Date Analyzed: 11/12/12 09:31		SURROGATE RECOVERY STUDY			
TPH By SW8015 Mod		Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R
Analytes					
1-Chlorooctane		100	99.9	100	70-135
o-Terphenyl		54.9	50.0	110	70-135

Lab Batch #: 900607

Sample: 629774-1-BSD / BSD

Batch: 1 Matrix: Solid

Units: mg/kg Date Analyzed: 11/10/12 12:25		SURROGATE RECOVERY STUDY			
TPH By SW8015 Mod		Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R
Analytes					
1-Chlorooctane		114	99.8	114	70-135
o-Terphenyl		59.9	49.9	120	70-135

Lab Batch #: 900705

Sample: 629844-1-BSD / BSD

Batch: 1 Matrix: Solid

Units: mg/kg Date Analyzed: 11/12/12 10:00		SURROGATE RECOVERY STUDY			
TPH By SW8015 Mod		Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R
Analytes					
1-Chlorooctane		97.3	99.9	97	70-135
o-Terphenyl		52.5	50.0	105	70-135

Lab Batch #: 900607

Sample: 451788-001 S / MS

Batch: 1 Matrix: Soil

Units: mg/kg Date Analyzed: 11/11/12 00:10		SURROGATE RECOVERY STUDY			
TPH By SW8015 Mod		Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R
Analytes					
1-Chlorooctane		113	100	113	70-135
o-Terphenyl		60.9	50.0	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 "O" #2

Work Orders : 451911,

Project ID: (RP-1508)

Lab Batch #: 900705

Sample: 451911-003 S / MS

Batch: 1 Matrix: Soil

Units: mg/kg Date Analyzed: 11/12/12 21:21		SURROGATE RECOVERY STUDY			
TPH By SW8015 Mod		Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R
Analytes					
1-Chlorooctane		90.9	100	91	70-135
o-Terphenyl		51.6	50.1	103	70-135

Lab Batch #: 900607

Sample: 451788-001 SD / MSD

Batch: 1 Matrix: Soil

Units: mg/kg Date Analyzed: 11/11/12 00:43		SURROGATE RECOVERY STUDY			
TPH By SW8015 Mod		Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R
Analytes					
1-Chlorooctane		110	99.7	110	70-135
o-Terphenyl		58.5	49.9	117	70-135

Lab Batch #: 900705

Sample: 451911-003 SD / MSD

Batch: 1 Matrix: Soil

Units: mg/kg Date Analyzed: 11/12/12 21:50		SURROGATE RECOVERY STUDY			
TPH By SW8015 Mod		Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R
Analytes					
1-Chlorooctane		89.7	100	90	70-135
o-Terphenyl		50.7	50.1	101	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 "O" #2**

**Work Order #: 451911**

**Analyst: TTE**

**Date Prepared: 11/10/2012**

**Project ID: (RP-1508)**

**Date Analyzed: 11/10/2012**

**Lab Batch ID: 900610**

**Sample: 629780-1-BKS**

**Batch #: 1**

**Matrix: Solid**

**Units: mg/kg**

## BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1	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	<1.00	100	100	100	100	101	101	1	80-120	20	

**Analyst: KEB**

**Date Prepared: 11/10/2012**

**Date Analyzed: 11/10/2012**

**Lab Batch ID: 900607**

**Sample: 629774-1-BKS**

**Batch #: 1**

**Matrix: Solid**

**Units: mg/kg**

## BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

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	993	99	998	1070	107	7	70-135	35	
C12-C28 Diesel Range Hydrocarbons	<15.0	1000	988	99	998	1080	108	9	70-135	35	

**Analyst: KEB**

**Date Prepared: 11/12/2012**

**Date Analyzed: 11/12/2012**

**Lab Batch ID: 900705**

**Sample: 629844-1-BKS**

**Batch #: 1**

**Matrix: Solid**

**Units: mg/kg**

## BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

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	999	948	95	999	915	92	4	70-135	35	
C12-C28 Diesel Range Hydrocarbons	<15.0	999	946	95	999	912	91	4	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 "O" #2

Work Order #: 451911

Lab Batch #: 900610

Date Analyzed: 11/10/2012

QC- Sample ID: 451807-001 S

Reporting Units: mg/kg

Project ID: (RP-1508)

Analyst: TTE

Date Prepared: 11/10/2012

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	<1.01	101	106	105	80-120	

Lab Batch #: 900610

Date Analyzed: 11/10/2012

QC- Sample ID: 451911-001 S

Reporting Units: mg/kg

Date Prepared: 11/10/2012

Analyst: TTE

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	2.58	118	122	101	80-120	

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 "O" #2**

**Work Order # :** 451911

**Project ID:** (RP-1508)

**Lab Batch ID:** 900607

**QC- Sample ID:** 451788-001 S

**Batch #:** 1 **Matrix:** Soil

**Date Analyzed:** 11/11/2012

**Date Prepared:** 11/10/2012

**Analyst:** KEB

**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	<17.1	1140	1170	103	1140	1120	98	4	70-135	35	
C12-C28 Diesel Range Hydrocarbons	<17.1	1140	1200	105	1140	1160	102	3	70-135	35	

**Lab Batch ID:** 900705

**QC- Sample ID:** 451911-003 S

**Batch #:** 1 **Matrix:** Soil

**Date Analyzed:** 11/12/2012

**Date Prepared:** 11/12/2012

**Analyst:** KEB

**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	<16.3	1090	1070	98	1090	1060	97	1	70-135	35	
C12-C28 Diesel Range Hydrocarbons	<16.3	1090	1080	99	1090	1070	98	1	70-135	35	

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

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

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not

ApplicableN = See Narrative, EQL = Estimated Quantitation Limit

**Project Name: Trunk "O" #2**

**Work Order #:** 451911

**Lab Batch #:** 900229

**Project ID:** (RP-1508)

**Date Analyzed:** 11/06/2012 11:58

**Date Prepared:** 11/06/2012

**Analyst:** RKO

**QC- Sample ID:** 451911-001 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	15.3	15.3	0	20	

**Lab Batch #:** 900229

**Date Analyzed:** 11/06/2012 11:58

**Date Prepared:** 11/06/2012

**Analyst:** RKO

**QC- Sample ID:** 451911-011 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	9.03	9.84	9	20	

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

# Xenco Laboratories

## CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East  
Odessa, Texas 79765

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

Project Manager: Joel Lowry

Project Name: Trunk "O" #2

Company Name: Basin Environmental Service Technologies, LLC

Project #: (RP-1508)

Company Address: P.O. Box 301

Project Loc: Lea County, NM

City/State/Zip: Lovington, NM 88260

PO #: Bill Southern Union Gas

Telephone No: (575)396-2378

Fax No: (575) 396-1429

Report Format: ☒ Standard ☐ TRRP ☐ NPDES

Sampler Signature: Joel Lowry

e-mail: pm@basinenv.com; Rose.Stade@SUG.com

(lab use only)  
ORDER #: 451911

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers										Matrix		Analyze For:										RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT 4 DAY
								Ice	HNO <sub>3</sub>	HCl	H <sub>2</sub> SO <sub>4</sub>	NaOH	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	None	Other (Specify)	DW = Drinking Water SL = Sludge	GW = Groundwater S = Soil/soil	NP = Non-Potable Specify Other	TCLP:	TOTAL:											
01	TT-1 @ Surface		0	10/31/2012	0900		1	X								Soil	X														X
02	TT-1 @ 6'		6'	10/31/2012	0915		1	X								Soil	X														X
03	TT-2 @ Surface		0	10/31/2012	945		1	X								Soil	X														X
04	TT-2 @ 8'		8'	10/31/2012	1010		1	X								Soil	X														X
05	TT-3 @ Surface		0	10/31/2012	1020		1	X								Soil	X														X
06	TT-3 @ 7'		7'	10/31/2012	1100		1	X								Soil	X														X
07	TT-4 @ Surface		0	10/31/2012	1120		1	X								Soil	X														X
08	TT-4 @ 6'		6'	10/31/2012	1155		1	X								Soil	X														X
09	TT-5 @ Surface		0	10/31/2012	1230		1	X								Soil	X														X
10	TT-5 @ 6'		6'	10/31/2012	1250		1	X								Soil	X														X

Special Instructions: 5

### Laboratory Comments:

Sample Containers Intact?	Y	N		
VOCs Free of Headspace?	Y	N		
Labels on container(s)	Y	N		
Custody seals on container(s)	Y	N		
Custody seals on cooler(s)	Y	N		
Sample Hand Delivered	Y	N		
by Sampler/Client Rep. ?	Y	N		
by Courier?	UPS	DHL	FedEx	Lone Star
Temperature Upon Receipt:	10 °C			

Relinquished by: <u>Joel Lowry</u>	Date: <u>11/2/12</u>	Time: <u>06:45</u>	Received by: <u>Steve Butler</u>	Date: <u>11/2/12</u>	Time: <u>06:45</u>
Relinquished by: <u>Joel Lowry</u>	Date: <u>11/2/12</u>	Time: <u>14:05</u>	Received by: <u>Steve Butler</u>	Date: <u>11/2/12</u>	Time: <u>14:05</u>
Relinquished by: <u>Joel Lowry</u>	Date: <u>11/2/12</u>	Time: <u>14:05</u>	Received by ELOT: <u>Shane Smith</u>	Date: <u>11/2/12</u>	Time: <u>9:42</u>

# Xenco Laboratories

## CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East  
Odessa, Texas 79765

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

Project Manager: Joel Lowry

Project Name: Trunk "O" #2

Company Name: Basin Environmental Service Technologies, LLC

Project #: (RP-1508)

Company Address: P.O. Box 301

Project Loc: Lea County, NM

City/State/Zip: Lovington, NM 88260

PO #: Bill Southern Union Gas

Telephone No: (575)396-2378

Fax No: (575) 396-1429

Report Format: ☒ Standard ☐ TRRP ☐ NPDES

Sampler Signature: Troy Nahn

e-mail: pm@basinenv.com; Rose.Slade@SUG.com

(lab use only)  
ORDER #: 451911

(lab use only)		Analyze For:																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
ORDER #:	451911																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers										Matrix										Analyze For:										RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT 4 DAY																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
								Ice	HNO <sub>3</sub>	HCl	H <sub>2</sub> SO <sub>4</sub>	NaOH	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	None	Other (Specify)	DW = Drinking Water SL = Sludge	GW = Groundwater S = Soil/Sediment	NP = Non-Portable Specify Other	TPH: 418.1	8015M	8015B	TPH: TX 1005	TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO <sub>4</sub> , Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8260	CHLORIDES																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
11	TT-6 @ Surface		0	10/31/2012	1300		1	X																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													

### Special Instructions:

Relinquished by: <u>Troy Nahn</u>	Date: <u>11/2/12</u>	Time: <u>06:45</u>	Received by: <u>Mike Perry</u>	Date: <u>11/2/12</u>	Time: <u>06:45</u>
Relinquished by: <u>Mike Perry</u>	Date: <u>11/2/12</u>	Time: <u>14:08</u>	Received by: <u>Steve Butth</u>	Date: <u>11/2/12</u>	Time: <u>1405</u>
Relinquished by: <u>Shane Smith</u>	Date: <u>11/5/12</u>	Time: <u>9:42</u>	Received by: <u>Shane Smith</u>	Date: <u>11/5/12</u>	Time: <u>9:42</u>

### Laboratory Comments:

Sample Containers Intact?	Y	N		
VOCs Free of Headspace?	Y	N		
Labels on container(s)	Y	N		
Custody seals on container(s)	Y	N		
Custody seals on cooler(s)	Y	N		
Sample Hand Delivered	Y	N		
by Sampler/Client Rep. ?	Y	N		
by Courier?	UPS	DHL	FedEx	Lone Star
Temperature Upon Receipt:	10.0	°C		



## Prelogin/Nonconformance Report- Sample Log-In

**Client:** Southern Union Gas Services- Monahan

**Date/ Time Received:** 11/05/2012 09:42:45 AM

**Work Order #:** 451911

**Acceptable Temperature Range:** 0 - 6 degC

**Air and Metal samples Acceptable Range:** Ambient

**Temperature Measuring device used :**

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	9.7
#2 *Shipping container in good condition?	Yes
#3 *Samples received on ice?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	Yes
#5 Custody Seals intact on sample bottles?	Yes
#6 *Custody Seals Signed and dated?	Yes
#7 *Chain of Custody present?	Yes
#8 Sample instructions complete on Chain of Custody?	Yes
#9 Any missing/extra samples?	No
#10 Chain of Custody signed when relinquished/ received?	Yes
#11 Chain of Custody agrees with sample label(s)?	Yes
#12 Container label(s) legible and intact?	Yes
#13 Sample matrix/ properties agree with Chain of Custody?	Yes
#14 Samples in proper container/ bottle?	Yes
#15 Samples properly preserved?	Yes
#16 Sample container(s) intact?	Yes
#17 Sufficient sample amount for indicated test(s)?	Yes
#18 All samples received within hold time?	Yes
#19 Subcontract of sample(s)?	Yes
#20 VOC samples have zero headspace (less than 1/4 inch bubble)?	Yes
#21 <2 for all samples preserved with HNO3,HCL, H2SO4?	Yes
#22 >10 for all samples preserved with NaAsO2+NaOH, ZnAc+NaOH?	Yes

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

Analyst:	PH Device/Lot#:
----------	-----------------

\_\_\_\_\_  
**Checklist completed by:**

Date: \_\_\_\_\_

\_\_\_\_\_  
**Checklist reviewed by:**

Date: \_\_\_\_\_

# Analytical Report 469601

for  
**Regency Gas**

**Project Manager: Joel Lowry**

**Trunk O #2 Historical**

**11-SEP-13**

Collected By: Client



**12600 West I-20 East Odessa, Texas 79765**

Xenco-Houston (EPA Lab code: TX00122):

Texas (T104704215-13-14-TX), Arizona (AZ0765), Arkansas (08-039-0), Connecticut (PH-0102), Florida (E871002)  
Illinois (002082), Indiana (C-TX-02), Iowa (392), Kansas (E-10380), Kentucky (45), Louisiana (03054)  
New Hampshire (297408), New Jersey (TX007), New York (11763), Oklahoma (9218), Pennsylvania (68-03610)  
Rhode Island (LAO00312), USDA (S-44102), DoD (L11-54)

Xenco-Atlanta (EPA Lab Code: GA00046):

Florida (E87429), North Carolina (483), South Carolina (98015), Kentucky (85), DoD ( L10-135)  
Louisiana (04176), USDA (P330-07-00105)

Xenco-Tampa Mobile (EPA Lab code: FL01212): Florida (E84900)

Xenco-Lakeland: Florida (E84098)

Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-TX)

Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295-TX)

Xenco Phoenix (EPA Lab Code: AZ00901): Arizona(AZ0757)

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

Xenco Tucson (EPA Lab code:AZ000989): Arizona (AZ0758)

11-SEP-13

Project Manager: **Joel Lowry**

**Regency Gas**

801 South Loop 464

Monahans, TX 79756

Reference: XENCO Report No(s): **469601**

**Trunk O #2 Historical**

Project Address: New Mexico

**Joel Lowry:**

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 469601. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

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

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 469601 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,



---

**Kelsey Brooks**

Project 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 - Odessa - San Antonio - Tampa - Lakeland - Atlanta - Phoenix - Oklahoma - Latin America



## Regency Gas, Monahans, TX

Trunk O #2 Historical

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SB-1 @ 5'	S	08-29-13 13:00	- 5 ft	469601-001
SB-1 @ 10'	S	08-29-13 13:05	- 10 ft	469601-002
SB-1 @ 15'	S	08-29-13 13:10	- 15 ft	469601-003
SB-1 @ 20'	S	08-29-13 13:15	- 20 ft	469601-004
SB-1 @ 25'	S	08-29-13 13:20	- 25 ft	469601-005
SB-2 @ 5'	S	08-29-13 13:40	- 5 ft	469601-006
SB-2 @ 10'	S	08-29-13 13:45	- 10 ft	469601-007
SB-2 @ 15'	S	08-29-13 13:50	- 15 ft	469601-008
SB-2 @ 20'	S	08-29-13 13:55	- 20 ft	469601-009



## CASE NARRATIVE



**Client Name:** *Regency Gas*  
**Project Name:** *Trunk O #2 Historical*

Project ID:  
Work Order Number(s): 469601

Report Date: 11-SEP-13  
Date Received: 08/31/2013

---

### **Sample receipt non conformances and comments:**

---

### **Sample receipt non conformances and comments per sample:**

None

### **Analytical non conformances and comments:**

Batch: LBA-922209 BTEX by SW 8260B  
SW8260BTX

Batch 922209, Toluene, m,p-Xylenes recovered above QC limits in the Matrix Spike.

Samples affected are: 469601-009, -005.

The Laboratory Control Sample for Toluene, m,p-Xylenes is within laboratory Control Limits

# Certificate of Analysis Summary 469601

Regency Gas, Monahans, TX

Project Name: Trunk O #2 Historical



Project Id:

Contact: Joel Lowry

Project Location: New Mexico

Date Received in Lab: Sat Aug-31-13 12:00 am

Report Date: 11-SEP-13

Project Manager: Kelsey Brooks

<i>Analysis Requested</i>	<i>Lab Id:</i>	469601-001	469601-002	469601-003	469601-004	469601-005	469601-006
	<i>Field Id:</i>	SB-1 @ 5'	SB-1 @ 10'	SB-1 @ 15'	SB-1 @ 20'	SB-1 @ 25'	SB-2 @ 5'
	<i>Depth:</i>	5 ft	10 ft	15 ft	20 ft	25 ft	5 ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	Aug-29-13 13:00	Aug-29-13 13:05	Aug-29-13 13:10	Aug-29-13 13:15	Aug-29-13 13:20	Aug-29-13 13:40
<b>BTEX by SW 8260B SUB: TX104704215</b>	<i>Extracted:</i>					Sep-06-13 11:30	
	<i>Analyzed:</i>					Sep-06-13 12:13	
	<i>Units/RL:</i>					mg/kg RL	
Benzene						ND 0.00107	
Toluene						ND 0.00107	
Ethylbenzene						ND 0.00107	
m,p-Xylenes						ND 0.00215	
o-Xylene						ND 0.00107	
Total Xylenes						ND 0.00107	
Total BTEX						ND 0.00107	
<b>Inorganic Anions by EPA 300/300.1</b>	<i>Extracted:</i>	Sep-09-13 10:00	Sep-09-13 10:00	Sep-09-13 10:00	Sep-09-13 10:00	Sep-05-13 09:00	Sep-09-13 10:00
	<i>Analyzed:</i>	Sep-09-13 18:26	Sep-09-13 19:11	Sep-09-13 19:34	Sep-09-13 19:57	Sep-05-13 13:31	Sep-09-13 20:19
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		240 21.0	548 21.9	616 22.4	192 11.0	102 10.9	8.25 2.26
<b>Percent Moisture</b>	<i>Extracted:</i>						
	<i>Analyzed:</i>	Sep-04-13 12:45	Sep-04-13 12:45	Sep-04-13 12:45	Sep-04-13 12:45	Sep-03-13 16:50	Sep-04-13 12:45
	<i>Units/RL:</i>	% RL	% RL	% RL	% RL	% RL	% RL
Percent Moisture		4.77 1.00	8.60 1.00	10.6 1.00	9.09 1.00	7.84 1.00	11.5 1.00
<b>TPH By SW8015 Mod</b>	<i>Extracted:</i>	Sep-09-13 16:00	Sep-09-13 16:00	Sep-09-13 16:00	Sep-09-13 16:00	Sep-03-13 17:00	Sep-09-13 16:00
	<i>Analyzed:</i>	Sep-10-13 01:36	Sep-10-13 02:47	Sep-10-13 03:10	Sep-10-13 03:33	Sep-05-13 02:32	Sep-10-13 03:58
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
C6-C12 Gasoline Range Hydrocarbons		ND 15.7	ND 16.4	ND 16.8	ND 16.4	ND 16.3	ND 16.9
C12-C28 Diesel Range Hydrocarbons		ND 15.7	ND 16.4	ND 16.8	ND 16.4	ND 16.3	ND 16.9
C28-C35 Oil Range Hydrocarbons		ND 15.7	ND 16.4	ND 16.8	ND 16.4	ND 16.3	ND 16.9
Total TPH		ND 15.7	ND 16.4	ND 16.8	ND 16.4	ND 16.3	ND 16.9

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



Kelsey Brooks  
Project Manager

# Certificate of Analysis Summary 469601

Regency Gas, Monahans, TX

Project Name: Trunk O #2 Historical



Project Id:

Contact: Joel Lowry

Project Location: New Mexico

Date Received in Lab: Sat Aug-31-13 12:00 am

Report Date: 11-SEP-13

Project Manager: Kelsey Brooks

<b>Analysis Requested</b>	<b>Lab Id:</b>	469601-007	469601-008	469601-009			
	<b>Field Id:</b>	SB-2 @ 10'	SB-2 @ 15'	SB-2 @ 20'			
	<b>Depth:</b>	10 ft	15 ft	20 ft			
	<b>Matrix:</b>	SOIL	SOIL	SOIL			
	<b>Sampled:</b>	Aug-29-13 13:45	Aug-29-13 13:50	Aug-29-13 13:55			
<b>BTEX by SW 8260B SUB: TX104704215</b>	<b>Extracted:</b>			Sep-06-13 11:32			
	<b>Analyzed:</b>			Sep-06-13 12:39			
	<b>Units/RL:</b>			mg/kg RL			
Benzene				ND 0.00113			
Toluene				ND 0.00113			
Ethylbenzene				ND 0.00113			
m,p-Xylenes				ND 0.00225			
o-Xylene				ND 0.00113			
Total Xylenes				ND 0.00113			
Total BTEX				ND 0.00113			
<b>Inorganic Anions by EPA 300/300.1</b>	<b>Extracted:</b>	Sep-09-13 10:00	Sep-09-13 10:00	Sep-05-13 09:00			
	<b>Analyzed:</b>	Sep-10-13 09:40	Sep-10-13 10:49	Sep-05-13 13:54			
	<b>Units/RL:</b>	mg/kg RL	mg/kg RL	mg/kg RL			
Chloride		78.2 12.4	27.3 2.18	36.0 2.27			
<b>Percent Moisture</b>	<b>Extracted:</b>						
	<b>Analyzed:</b>	Sep-04-13 12:45	Sep-04-13 12:45	Sep-03-13 16:50			
	<b>Units/RL:</b>	% RL	% RL	% RL			
Percent Moisture		19.4 1.00	8.15 1.00	11.9 1.00			
<b>TPH By SW8015 Mod</b>	<b>Extracted:</b>	Sep-09-13 16:00	Sep-09-13 16:00	Sep-03-13 17:00			
	<b>Analyzed:</b>	Sep-10-13 04:22	Sep-10-13 04:45	Sep-05-13 03:47			
	<b>Units/RL:</b>	mg/kg RL	mg/kg RL	mg/kg RL			
C6-C12 Gasoline Range Hydrocarbons		ND 18.5	ND 16.3	ND 17.1			
C12-C28 Diesel Range Hydrocarbons		ND 18.5	ND 16.3	ND 17.1			
C28-C35 Oil Range Hydrocarbons		ND 18.5	ND 16.3	ND 17.1			
Total TPH		ND 18.5	ND 16.3	ND 17.1			

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



Kelsey Brooks  
Project Manager

## Regency Gas, Monahans, TX

### Trunk O #2 Historical

Sample Id: **SB-1 @ 5'**

Matrix: Soil

Date Received: 08.31.13 00.00

Lab Sample Id: 469601-001

Date Collected: 08.29.13 13.00

Sample Depth: 5 ft

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: AMB

% Moisture: 4.77

Analyst: AMB

Date Prep: 09.09.13 10.00

Basis: Dry Weight

Seq Number: 922472

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	240	21.0	mg/kg	09.09.13 18.26		10

Analytical Method: TPH By SW8015 Mod

Prep Method: TX1005P

Tech: ARM

% Moisture: 4.77

Analyst: ARM

Date Prep: 09.09.13 16.00

Basis: Dry Weight

Seq Number: 922433

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	15.7	mg/kg	09.10.13 01.36	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	15.7	mg/kg	09.10.13 01.36	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	15.7	mg/kg	09.10.13 01.36	U	1
Total TPH	PHC635	ND	15.7	mg/kg	09.10.13 01.36	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	89	%	70-135	09.10.13 01.36	
o-Terphenyl	84-15-1	92	%	70-135	09.10.13 01.36	

## Regency Gas, Monahans, TX

### Trunk O #2 Historical

Sample Id: <b>SB-1 @ 10'</b>	Matrix: Soil	Date Received: 08.31.13 00.00
Lab Sample Id: 469601-002	Date Collected: 08.29.13 13.05	Sample Depth: 10 ft
Analytical Method: Inorganic Anions by EPA 300/300.1		Prep Method: E300P
Tech: AMB		% Moisture: 8.6
Analyst: AMB	Date Prep: 09.09.13 10.00	Basis: Dry Weight
Seq Number: 922472		

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	548	21.9	mg/kg	09.09.13 19.11		10

Analytical Method: TPH By SW8015 Mod	Prep Method: TX1005P
Tech: ARM	% Moisture: 8.6
Analyst: ARM	Basis: Dry Weight
Seq Number: 922433	

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	16.4	mg/kg	09.10.13 02.47	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	16.4	mg/kg	09.10.13 02.47	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	16.4	mg/kg	09.10.13 02.47	U	1
Total TPH	PHC635	ND	16.4	mg/kg	09.10.13 02.47	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	87	%	70-135	09.10.13 02.47	
o-Terphenyl	84-15-1	90	%	70-135	09.10.13 02.47	

## Regency Gas, Monahans, TX

### Trunk O #2 Historical

Sample Id: **SB-1 @ 15'** Matrix: Soil Date Received: 08.31.13 00.00  
 Lab Sample Id: 469601-003 Date Collected: 08.29.13 13.10 Sample Depth: 15 ft  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: AMB % Moisture: 10.63  
 Analyst: AMB Date Prep: 09.09.13 10.00 Basis: Dry Weight  
 Seq Number: 922472

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	616	22.4	mg/kg	09.09.13 19.34		10

Analytical Method: TPH By SW8015 Mod Prep Method: TX1005P  
 Tech: ARM % Moisture: 10.63  
 Analyst: ARM Date Prep: 09.09.13 16.00 Basis: Dry Weight  
 Seq Number: 922433

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	16.8	mg/kg	09.10.13 03.10	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	16.8	mg/kg	09.10.13 03.10	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	16.8	mg/kg	09.10.13 03.10	U	1
Total TPH	PHC635	ND	16.8	mg/kg	09.10.13 03.10	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	89	%	70-135	09.10.13 03.10	
o-Terphenyl	84-15-1	89	%	70-135	09.10.13 03.10	



## Regency Gas, Monahans, TX

### Trunk O #2 Historical

Sample Id: <b>SB-1 @ 20'</b>	Matrix: Soil	Date Received: 08.31.13 00.00
Lab Sample Id: 469601-004	Date Collected: 08.29.13 13.15	Sample Depth: 20 ft
Analytical Method: Inorganic Anions by EPA 300/300.1		Prep Method: E300P
Tech: AMB		% Moisture: 9.09
Analyst: AMB	Date Prep: 09.09.13 10.00	Basis: Dry Weight
Seq Number: 922472		

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	192	11.0	mg/kg	09.09.13 19.57		5

Analytical Method: TPH By SW8015 Mod	Prep Method: TX1005P
Tech: ARM	% Moisture: 9.09
Analyst: ARM	Date Prep: 09.09.13 16.00
Seq Number: 922433	Basis: Dry Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	16.4	mg/kg	09.10.13 03.33	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	16.4	mg/kg	09.10.13 03.33	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	16.4	mg/kg	09.10.13 03.33	U	1
Total TPH	PHC635	ND	16.4	mg/kg	09.10.13 03.33	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	86	%	70-135	09.10.13 03.33	
o-Terphenyl	84-15-1	89	%	70-135	09.10.13 03.33	

## Regency Gas, Monahans, TX

### Trunk O #2 Historical

Sample Id: **SB-1 @ 25'**

Matrix: Soil

Date Received: 08.31.13 00.00

Lab Sample Id: 469601-005

Date Collected: 08.29.13 13.20

Sample Depth: 25 ft

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: JUM

% Moisture: 7.84

Analyst: JUM

Date Prep: 09.05.13 09.00

Basis: Dry Weight

Seq Number: 922216

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	102	10.9	mg/kg	09.05.13 13.31		5

Analytical Method: TPH By SW8015 Mod

Prep Method: TX1005P

Tech: ARM

% Moisture: 7.84

Analyst: ARM

Date Prep: 09.03.13 17.00

Basis: Dry Weight

Seq Number: 922075

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	16.3	mg/kg	09.05.13 02.32	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	16.3	mg/kg	09.05.13 02.32	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	16.3	mg/kg	09.05.13 02.32	U	1
Total TPH	PHC635	ND	16.3	mg/kg	09.05.13 02.32	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	107	%	70-135	09.05.13 02.32	
o-Terphenyl	84-15-1	88	%	70-135	09.05.13 02.32	

## Regency Gas, Monahans, TX

### Trunk O #2 Historical

Sample Id: **SB-1 @ 25'**

Matrix: Soil

Date Received: 08.31.13 00.00

Lab Sample Id: 469601-005

Date Collected: 08.29.13 13.20

Sample Depth: 25 ft

Analytical Method: BTEX by SW 8260B

Prep Method: SW5030B

Tech: SAD

% Moisture: 7.84

Analyst: SAD

Date Prep: 09.06.13 11.30

Basis: Dry Weight

Seq Number: 922209

SUB: TX104704215

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	ND	0.00107	mg/kg	09.06.13 12.13	U	1
Toluene	108-88-3	ND	0.00107	mg/kg	09.06.13 12.13	U	1
Ethylbenzene	100-41-4	ND	0.00107	mg/kg	09.06.13 12.13	U	1
m,p-Xylenes	179601-23-1	ND	0.00215	mg/kg	09.06.13 12.13	U	1
o-Xylene	95-47-6	ND	0.00107	mg/kg	09.06.13 12.13	U	1
Total Xylenes	1330-20-7	ND	0.00107	mg/kg	09.06.13 12.13	U	1
Total BTEX		ND	0.00107	mg/kg	09.06.13 12.13	U	1
<b>Surrogate</b>							
	<b>Cas Number</b>	<b>% Recovery</b>	<b>Units</b>	<b>Limits</b>	<b>Analysis Date</b>	<b>Flag</b>	
Dibromofluoromethane	1868-53-7	98	%	74-126	09.06.13 12.13		
1,2-Dichloroethane-D4	17060-07-0	95	%	80-120	09.06.13 12.13		
Toluene-D8	2037-26-5	99	%	73-132	09.06.13 12.13		
4-Bromofluorobenzene	460-00-4	102	%	58-152	09.06.13 12.13		

## Regency Gas, Monahans, TX

### Trunk O #2 Historical

Sample Id: **SB-2 @ 5'** Matrix: Soil Date Received: 08.31.13 00.00  
 Lab Sample Id: 469601-006 Date Collected: 08.29.13 13.40 Sample Depth: 5 ft  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: AMB % Moisture: 11.45  
 Analyst: AMB Date Prep: 09.09.13 10.00 Basis: Dry Weight  
 Seq Number: 922472

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	8.25	2.26	mg/kg	09.09.13 20.19		1

Analytical Method: TPH By SW8015 Mod Prep Method: TX1005P  
 Tech: ARM % Moisture: 11.45  
 Analyst: ARM Date Prep: 09.09.13 16.00 Basis: Dry Weight  
 Seq Number: 922433

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	16.9	mg/kg	09.10.13 03.58	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	16.9	mg/kg	09.10.13 03.58	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	16.9	mg/kg	09.10.13 03.58	U	1
Total TPH	PHC635	ND	16.9	mg/kg	09.10.13 03.58	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	94	%	70-135	09.10.13 03.58	
o-Terphenyl	84-15-1	100	%	70-135	09.10.13 03.58	

## Regency Gas, Monahans, TX

### Trunk O #2 Historical

Sample Id: <b>SB-2 @ 10'</b>	Matrix: Soil	Date Received: 08.31.13 00.00
Lab Sample Id: 469601-007	Date Collected: 08.29.13 13.45	Sample Depth: 10 ft
Analytical Method: Inorganic Anions by EPA 300/300.1		Prep Method: E300P
Tech: AMB		% Moisture: 19.4
Analyst: AMB	Date Prep: 09.09.13 10.00	Basis: Dry Weight
Seq Number: 922472		

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	78.2	12.4	mg/kg	09.10.13 09.40		5

Analytical Method: TPH By SW8015 Mod	Prep Method: TX1005P
Tech: ARM	% Moisture: 19.4
Analyst: ARM	Date Prep: 09.09.13 16.00
Seq Number: 922433	Basis: Dry Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	18.5	mg/kg	09.10.13 04.22	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	18.5	mg/kg	09.10.13 04.22	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	18.5	mg/kg	09.10.13 04.22	U	1
Total TPH	PHC635	ND	18.5	mg/kg	09.10.13 04.22	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	93	%	70-135	09.10.13 04.22	
o-Terphenyl	84-15-1	104	%	70-135	09.10.13 04.22	

## Regency Gas, Monahans, TX

### Trunk O #2 Historical

Sample Id: **SB-2 @ 15'** Matrix: Soil Date Received: 08.31.13 00.00  
 Lab Sample Id: 469601-008 Date Collected: 08.29.13 13.50 Sample Depth: 15 ft  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: AMB % Moisture: 8.15  
 Analyst: AMB Date Prep: 09.09.13 10.00 Basis: Dry Weight  
 Seq Number: 922472

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	27.3	2.18	mg/kg	09.10.13 10.49		1

Analytical Method: TPH By SW8015 Mod Prep Method: TX1005P  
 Tech: ARM % Moisture: 8.15  
 Analyst: ARM Date Prep: 09.09.13 16.00 Basis: Dry Weight  
 Seq Number: 922433

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	16.3	mg/kg	09.10.13 04.45	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	16.3	mg/kg	09.10.13 04.45	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	16.3	mg/kg	09.10.13 04.45	U	1
Total TPH	PHC635	ND	16.3	mg/kg	09.10.13 04.45	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	82	%	70-135	09.10.13 04.45	
o-Terphenyl	84-15-1	86	%	70-135	09.10.13 04.45	

## Regency Gas, Monahans, TX

### Trunk O #2 Historical

Sample Id: **SB-2 @ 20'**

Matrix: Soil

Date Received: 08.31.13 00.00

Lab Sample Id: 469601-009

Date Collected: 08.29.13 13.55

Sample Depth: 20 ft

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: JUM

% Moisture: 11.94

Analyst: JUM

Date Prep: 09.05.13 09.00

Basis: Dry Weight

Seq Number: 922216

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	36.0	2.27	mg/kg	09.05.13 13.54		1

Analytical Method: TPH By SW8015 Mod

Prep Method: TX1005P

Tech: ARM

% Moisture: 11.94

Analyst: ARM

Date Prep: 09.03.13 17.00

Basis: Dry Weight

Seq Number: 922075

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
C6-C12 Gasoline Range Hydrocarbons	PHC612	ND	17.1	mg/kg	09.05.13 03.47	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	ND	17.1	mg/kg	09.05.13 03.47	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	ND	17.1	mg/kg	09.05.13 03.47	U	1
Total TPH	PHC635	ND	17.1	mg/kg	09.05.13 03.47	U	1
<b>Surrogate</b>	<b>Cas Number</b>	<b>% Recovery</b>	<b>Units</b>	<b>Limits</b>	<b>Analysis Date</b>	<b>Flag</b>	
1-Chlorooctane	111-85-3	101	%	70-135	09.05.13 03.47		
o-Terphenyl	84-15-1	81	%	70-135	09.05.13 03.47		



## Regency Gas, Monahans, TX

### Trunk O #2 Historical

Sample Id: **SB-2 @ 20'**

Matrix: Soil

Date Received: 08.31.13 00.00

Lab Sample Id: 469601-009

Date Collected: 08.29.13 13.55

Sample Depth: 20 ft

Analytical Method: BTEX by SW 8260B

Prep Method: SW5030B

Tech: SAD

% Moisture: 11.94

Analyst: SAD

Date Prep: 09.06.13 11.32

Basis: Dry Weight

Seq Number: 922209

SUB: TX104704215

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	ND	0.00113	mg/kg	09.06.13 12.39	U	1
Toluene	108-88-3	ND	0.00113	mg/kg	09.06.13 12.39	U	1
Ethylbenzene	100-41-4	ND	0.00113	mg/kg	09.06.13 12.39	U	1
m,p-Xylenes	179601-23-1	ND	0.00225	mg/kg	09.06.13 12.39	U	1
o-Xylene	95-47-6	ND	0.00113	mg/kg	09.06.13 12.39	U	1
Total Xylenes	1330-20-7	ND	0.00113	mg/kg	09.06.13 12.39	U	1
Total BTEX		ND	0.00113	mg/kg	09.06.13 12.39	U	1
<b>Surrogate</b>	<b>Cas Number</b>	<b>% Recovery</b>	<b>Units</b>	<b>Limits</b>	<b>Analysis Date</b>	<b>Flag</b>	
Dibromofluoromethane	1868-53-7	98	%	74-126	09.06.13 12.39		
1,2-Dichloroethane-D4	17060-07-0	91	%	80-120	09.06.13 12.39		
Toluene-D8	2037-26-5	100	%	73-132	09.06.13 12.39		
4-Bromofluorobenzene	460-00-4	99	%	58-152	09.06.13 12.39		

- 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.

\*\* Surrogate recovered outside laboratory control limit.

**BRL** Below Reporting Limit.

**RL** Reporting Limit

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

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

**DL** Method Detection Limit

**NC** Non-Calculable

+ NELAC certification not offered for this compound.

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

***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 - Atlanta - Midland/Odessa - Tampa/Lakeland - Phoenix - Latin America

4143 Greenbriar Dr, Stafford, TX 77477  
 9701 Harry Hines Blvd, Dallas, TX 75220  
 5332 Blackberry Drive, San Antonio TX 78238  
 2505 North Falkenburg Rd, Tampa, FL 33619  
 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
(432) 563-1800	(432) 563-1713
(770) 449-8800	(770) 449-5477
(602) 437-0330	



## Regency Gas

### Trunk O #2 Historical

**Analytical Method:** Inorganic Anions by EPA 300/300.1

Seq Number: 922216

Matrix: Solid

Prep Method: E300P

Date Prep: 09.05.13

MB Sample Id: 643513-1-BLK

LCS Sample Id: 643513-1-BKS

LCSD Sample Id: 643513-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<2.00	50.0	43.0	86	52.5	105	80-120	20	20	mg/kg	09.05.13 12:46	

**Analytical Method:** Inorganic Anions by EPA 300/300.1

Seq Number: 922472

Matrix: Solid

Prep Method: E300P

Date Prep: 09.09.13

MB Sample Id: 643692-1-BLK

LCS Sample Id: 643692-1-BKS

LCSD Sample Id: 643692-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<2.00	50.0	47.3	95	49.4	99	80-120	4	20	mg/kg	09.09.13 16:32	

**Analytical Method:** Inorganic Anions by EPA 300/300.1

Seq Number: 922216

Matrix: Soil

Prep Method: E300P

Date Prep: 09.05.13

Parent Sample Id: 469602-009

MS Sample Id: 469602-009 S

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	Limits	Units	Analysis Date	Flag
Chloride	4.56	51.4	56.5	101	80-120	mg/kg	09.05.13 15:02	

**Analytical Method:** Inorganic Anions by EPA 300/300.1

Seq Number: 922472

Matrix: Soil

Prep Method: E300P

Date Prep: 09.09.13

Parent Sample Id: 469601-001

MS Sample Id: 469601-001 S

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	Limits	Units	Analysis Date	Flag
Chloride	240	525	841	114	80-120	mg/kg	09.09.13 18:49	

**Analytical Method:** Percent Moisture

Seq Number: 921948

Matrix: Solid

MB Sample Id: 921948-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Percent Moisture	ND	%	09.03.13 16:50	

**Analytical Method:** Percent Moisture

Seq Number: 922047

Matrix: Solid

MB Sample Id: 922047-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Percent Moisture	ND	%	09.04.13 12:45	



## Regency Gas

### Trunk O #2 Historical

**Analytical Method: Percent Moisture**

Seq Number: 921948

Matrix: Soil

Parent Sample Id: 469601-005

MD Sample Id: 469601-005 D

Parameter	Parent Result	MD Result	%RPD	RPD Limit	Units	Analysis Date	Flag
Percent Moisture	7.84	7.58	3	20	%	09.03.13 16:50	

**Analytical Method: Percent Moisture**

Seq Number: 922047

Matrix: Soil

Parent Sample Id: 469601-001

MD Sample Id: 469601-001 D

Parameter	Parent Result	MD Result	%RPD	RPD Limit	Units	Analysis Date	Flag
Percent Moisture	4.77	4.09	15	20	%	09.04.13 12:45	

**Analytical Method: TPH By SW8015 Mod**

Seq Number: 922075

Matrix: Solid

MB Sample Id: 643336-1-BLK

LCS Sample Id: 643336-1-BKS

Prep Method: TX1005P

Date Prep: 09.03.13

LCSD Sample Id: 643336-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
C6-C12 Gasoline Range Hydrocarbons	<15.0	1000	930	93	935	94	70-135	1	35	mg/kg	09.05.13 01:21	
C12-C28 Diesel Range Hydrocarbons	<15.0	1000	878	88	875	88	70-135	0	35	mg/kg	09.05.13 01:21	
Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date			
1-Chlorooctane	109		81		85		70-135	%	09.05.13 01:21			
o-Terphenyl	93		101		95		70-135	%	09.05.13 01:21			

**Analytical Method: TPH By SW8015 Mod**

Seq Number: 922433

Matrix: Solid

MB Sample Id: 643654-1-BLK

LCS Sample Id: 643654-1-BKS

Prep Method: TX1005P

Date Prep: 09.09.13

LCSD Sample Id: 643654-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
C6-C12 Gasoline Range Hydrocarbons	<15.0	1000	1070	107	1030	103	70-135	4	35	mg/kg	09.09.13 23:14	
C12-C28 Diesel Range Hydrocarbons	<15.0	1000	965	97	877	88	70-135	10	35	mg/kg	09.09.13 23:14	
Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date	Flag		
1-Chlorooctane	89		116		114		70-135	%	09.09.13 23:14			
o-Terphenyl	93		130		112		70-135	%	09.09.13 23:14			



## Regency Gas

### Trunk O #2 Historical

**Analytical Method:** TPH By SW8015 Mod

Seq Number: 922075

Parent Sample Id: 469601-005

Matrix: Soil

MS Sample Id: 469601-005 S

Prep Method: TX1005P

Date Prep: 09.03.13

MSD Sample Id: 469601-005 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
C6-C12 Gasoline Range Hydrocarbons	<16.3	1090	984	90	1010	93	70-135	3	35	mg/kg	09.05.13 02:58	
C12-C28 Diesel Range Hydrocarbons	<16.3	1090	833	76	861	79	70-135	3	35	mg/kg	09.05.13 02:58	

**Surrogate**

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	98		107		70-135	%	09.05.13 02:58
o-Terphenyl	85		90		70-135	%	09.05.13 02:58

**Analytical Method:** TPH By SW8015 Mod

Seq Number: 922433

Parent Sample Id: 469601-001

Matrix: Soil

MS Sample Id: 469601-001 S

Prep Method: TX1005P

Date Prep: 09.09.13

MSD Sample Id: 469601-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
C6-C12 Gasoline Range Hydrocarbons	<15.7	1050	1080	103	1100	105	70-135	2	35	mg/kg	09.10.13 02:00	
C12-C28 Diesel Range Hydrocarbons	<15.7	1050	1090	104	996	95	70-135	9	35	mg/kg	09.10.13 02:00	

**Surrogate**

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	112		119		70-135	%	09.10.13 02:00
o-Terphenyl	122		120		70-135	%	09.10.13 02:00

**Analytical Method:** BTEX by SW 8260B

Seq Number: 922209

MB Sample Id: 643510-1-BLK

Matrix: Solid

LCS Sample Id: 643510-1-BKS

Prep Method: SW5030B

Date Prep: 09.06.13

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	Limits	Units	Analysis Date	Flag
Benzene	<0.00100	0.100	0.0991	99	62-132	mg/kg	09.06.13 10:31	
Toluene	<0.00100	0.100	0.0932	93	66-124	mg/kg	09.06.13 10:31	
Ethylbenzene	<0.00100	0.100	0.106	106	71-134	mg/kg	09.06.13 10:31	
m,p-Xylenes	<0.00200	0.200	0.208	104	69-128	mg/kg	09.06.13 10:31	
o-Xylene	<0.00100	0.100	0.0981	98	72-131	mg/kg	09.06.13 10:31	

**Surrogate**

	MB %Rec	MB Flag	LCS %Rec	LCS Flag	Limits	Units	Analysis Date
Dibromofluoromethane	95		98		74-126	%	09.06.13 10:31
1,2-Dichloroethane-D4	98		102		80-120	%	09.06.13 10:31
Toluene-D8	101		98		73-132	%	09.06.13 10:31
4-Bromofluorobenzene	100		100		58-152	%	09.06.13 10:31



**Regency Gas**  
Trunk O #2 Historical

Analytical Method: BTEX by SW 8260B

Seq Number: 922209

Parent Sample Id: 469829-001

Matrix: Soil

MS Sample Id: 469829-001 S

Prep Method: SW5030B

Date Prep: 09.06.13

MSD Sample Id: 469829-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	86.3	525	637	105	629	103	62-132	1	25	mg/kg	09.06.13 16:25	
Toluene	2760	525	3780	194	3260	95	66-124	15	25	mg/kg	09.06.13 16:25	X
Ethylbenzene	138	525	769	120	732	113	71-134	5	25	mg/kg	09.06.13 16:25	
m,p-Xylenes	1640	1050	3070	136	2720	103	69-128	12	25	mg/kg	09.06.13 16:25	X
o-Xylene	240	525	846	115	821	111	72-131	3	25	mg/kg	09.06.13 16:25	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
Dibromofluoromethane	96		96		74-126	%	09.06.13 16:25
1,2-Dichloroethane-D4	89		87		80-120	%	09.06.13 16:25
Toluene-D8	104		103		73-132	%	09.06.13 16:25
4-Bromofluorobenzene	101		99		58-152	%	09.06.13 16:25



# Xenco Laboratories

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

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

469601

Project Manager: Joel Lowry

Project Name: Trunk "O" #2 Historical

Company Name: Basin Environmental Service Technologies, LLC

Project #:

Company Address: P.O. Box 301

Project Loc: Lea County, NM

City/State/Zip: Lovington, NM 88260

PO #:

Telephone No: (575) 396-2378

Fax No: (575) 396-1429

Report Format: ☒ Standard

☐ TRRP

☐ NPDES

Sampler Signature: Joel Lowry

e-mail: pm@basineny.com

(lab use only)

ORDER #:

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total #. of Containers	Ice	HNO <sub>3</sub>	HCl	H <sub>2</sub> SO <sub>4</sub>	NaOH	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	None	Other (Specify)	Matrix	TPH: 418.1 8015M 8015B	TPH: TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO <sub>4</sub> , 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	HOLD	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT 4 DAY
1	SB-1 @ 5'			8/29/2013	1300		1	X								Soil	X														X
2	SB-1 @ 10'			8/29/2013	1305		1	X								Soil	X														X
3	SB-1 @ 15'			8/29/2013	1310		1	X								Soil	X														X
4	SB-1 @ 20'			8/29/2013	1315		1	X								Soil	X														X
5	SB-1 @ 25'			8/29/2013	1320		1	X								Soil	X														X
6	SB-2 @ 5'			8/29/2013	1340		1	X								Soil	X														X
7	SB-2 @ 10'			8/29/2013	1345		1	X								Soil	X														X
8	SB-2 @ 15'			8/29/2013	1350		1	X								Soil	X														X
9	SB-2 @ 20'			8/29/2013	1355		1	X								Soil	X														X

Special Instructions:

Reinquired by: R. Johnson, L. Little, J. C. Insular

Date	Time	Received by:	Date	Time
8/29/13	4:00	<u>Joel Lowry</u>	8/30/13	4:50
8/30/13	4:50	<u>Joel Lowry</u>	8/30/13	4:50

Date	Time	Received by:	Date	Time
8/30/13	4:50	<u>Joel Lowry</u>	8/30/13	4:50
8/30/13	4:50	<u>Joel Lowry</u>	8/30/13	4:50

Laboratory Comments:

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

Temperature Upon Receipt: 8.10 °C





# XENCO Laboratories

## Prelogin/Nonconformance Report- Sample Log-In



Client: Regency Gas

Date/ Time Received: 08/31/2013 12:00:00 AM

Work Order #: 469601

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used :

### Sample Receipt Checklist

### Comments

#1 *Temperature of cooler(s)?	8.6
#2 *Shipping container in good condition?	Yes
#3 *Samples received on ice?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	Yes
#5 Custody Seals intact on sample bottles?	Yes
#6 *Custody Seals Signed and dated?	Yes
#7 *Chain of Custody present?	Yes
#8 Sample instructions complete on Chain of Custody?	Yes
#9 Any missing/extra samples?	No
#10 Chain of Custody signed when relinquished/ received?	Yes
#11 Chain of Custody agrees with sample label(s)?	Yes
#12 Container label(s) legible and intact?	Yes
#13 Sample matrix/ properties agree with Chain of Custody?	Yes
#14 Samples in proper container/ bottle?	Yes
#15 Samples properly preserved?	Yes
#16 Sample container(s) intact?	Yes
#17 Sufficient sample amount for indicated test(s)?	Yes
#18 All samples received within hold time?	Yes
#19 Subcontract of sample(s)?	No
#20 VOC samples have zero headspace (less than 1/4 inch bubble)?	N/A
#21 <2 for all samples preserved with HNO3,HCL, H2SO4?	N/A
#22 >10 for all samples preserved with NaAsO2+NaOH, ZnAc+NaOH?	N/A

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

Analyst:

PH Device/Lot#:

Checklist completed by:

*Candace James*

Candace James

Date: 09/03/2013

Checklist reviewed by:

*Kelsey Brooks*

Kelsey Brooks

Date: 09/03/2013

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

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

Form C-141  
Revised October 10, 2003

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

Trunk "O" #2

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company	Southern Union Gas Services, Ltd.	Contact	Tony Savoie
Address	P.O. Box 1226 Jal, N.M. 88252	Telephone No.	505-395-2116
Facility Name	Lea County Field Dept.	Facility Type	Natural Gas Gathering

Surface Owner: DASCO Land and Cattle Co.	Mineral Owner: Federal	Lease No.
--	------------------------	-----------

LOCATION OF RELEASE

Unit Letter M	Section 22	Township 22S	Range 36E	Feet from the	North/South Line	Feet from the	East/West Line	County Lea
------------------	---------------	-----------------	--------------	---------------	------------------	---------------	----------------	---------------

Latitude N32 22.298 Longitude W103 15.558

NATURE OF RELEASE

Type of Release : Crude Oil, Produced water, and Natural Gas	Volume of Release: 75 Bbls Fluid and 2160 MCF Nat. Gas	Volume Recovered 50 Bbls crude Oil and produced water
Source of Release : 30" Natural Gas Pipeline	Date and Hour of Occurrence not known	Date and Hour of Discovery 7/21/07 Time: 7:00 p.m.
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? NMOCD on call representative	
By Whom? Tony Savoie	Date and Hour: 7/21/07 7:15 p.m.	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

\*If a Watercourse was Impacted, Describe Fully.\*

Describe Cause of Problem and Remedial Action Taken.\*

A 30" Natural Gas gathering line developed a leak due to excess fluid delivered by a producer caused the line to pressure up and leak fluid and natural gas. Crews began shutting the line in at 7:45 pm, vacuum trucks were dispatched to the leak sites to start picking up fluid. A total of 50 bls of fluid was recovered before the leak was temporarily repaired with a 30" leak repair clamp.

Describe Area Affected and Cleanup Action Taken. Approximately 3150 Square feet of pasture land and approximately 1800 square feet of caliche lease road was impacted by the release. Most of the heavily saturated soil was pushed up by a backhoe toward the point of release. The final remediation will follow the NMOCD guidelines for the remediation of leaks and spills.

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.

OIL CONSERVATION DIVISION

Signature: Tony Savoie

Printed Name: Tony Savoie John A. Savoie

Title: Remediation Supervisor

E-mail Address: tony.savoie@sug.com

Date: 7/31/07 Phone: 505-395-2116

Approved by District Supervisor:

Approval Date: 8-7-07

Expiration Date: 10-2-07

Conditions of Approval:

Attached ☒

SUBMIT FINAL C-141 w/

Supporting Documentation

Attach Additional Sheets If Necessary

RPT# 1508

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
811 S. First St., 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

Form C-141  
Revised August 8, 2011

Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Submit 1 Copy to appropriate District Office in  
accordance with 19.15.29 NMAC.

### Release Notification and Corrective Action

#### OPERATOR

☐ Initial Report ☒ Final Report

Name of Company Southern Union Gas Services	Contact Crystal Callaway
Address 801 South Loop 464, Monahans, TX, 79756	Telephone No. 817-302-9407
Facility Name: Trunk "O" #2 (RP-1508)	Facility Type Natural Gas Gathering

Surface Owner: DASCO Land and Cattle Co	Mineral Owner Federal	API No.
---	-----------------------	---------

#### LOCATION OF RELEASE

Unit Letter M	Section 22	Township 22S	Range 36E	Feet from the	North/South Line	Feet from the	East/West Line	County Lea County
------------------	---------------	-----------------	--------------	---------------	------------------	---------------	----------------	----------------------

Latitude 32 22.298 Longitude -103 15.558

#### NATURE OF RELEASE

Type of Release: Crude Oil, Produced water, and Natural Gas	Volume of Release: 75 bbls Fluid and 2160 Mcf Nat. Gas	Volume Recovered: 50 bbls crude oil and produced water
Source of Release: 30" Natural Gas Pipeline	Date and Hour of Occurrence: Not known	Date and Hour of Discovery: 7/21/07 Time: 7:00 p.m.
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? NMOCD on call representative	
By Whom? Tony Savoie	Date and Hour 7/21/07 7:15 p.m.	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.\*

#### Describe Cause of Problem and Remedial Action Taken


A 30" Natural Gas gathering line developed a leak due to excess fluid delivered by a producer caused the line to pressure up and leak fluid and natural gas. Crews began shutting the line in at 7:45 pm, vacuum trucks were dispatched to the leak sites to start picking up fluid. A total of 50 bbls of fluid was recovered before the leak was temporarily repaired with a 30" leak repair clamp.

Describe Area Affected and Cleanup Action Taken.\* Approximately 3150 sq. ft. of pasture land and approximately 1,800 sq. ft. of caliche lease road was impacted by the release. Most of the heavily saturated soil was pushed up by a backhoe toward the point of release. The final remediation will follow the NMOCD Guidelines for the Remediation of Spills, Leaks and Releases.

**Between August 1, 2007, and February 20, 2008, remediation activities were conducted at the Trunk "O" #2 Release Site by an environmental contractor that is no longer affiliated with the site. On October 31, the site was revisited in an effort to determine if soil containing concentrations of BTEX, TPH and chloride remained in-situ and collect confirmation soil samples.**

**Please see the attached Basin Environmental Services Technologies Remediation Summary and Site Closure Request for details of remedial activities and laboratory analytical results from confirmation soil sampling.**

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: 		<u>OIL CONSERVATION DIVISION</u>	
Printed Name: Crystal Callaway		Approved by Environmental Specialist:	
Title: Senior Environmental Remediation Specialist		Approval Date:	Expiration Date:
E-mail Address: Senior Environmental Remediation Specialist		Conditions of Approval:	
Date: 11/14/2014		Attached <input type="checkbox"/>	
Phone: (817) 302-9407			