



## REMEDIATION SUMMARY & SOIL CLOSURE REQUEST

Property:

**REGENCY FIELD SERVICES LLC.  
L-5 TO MF  
Historical Release Site  
Lea County, New Mexico  
Unit Letter "O", Section 15, Township 21 South, Range 37 East  
Latitude 32.472081, Longitude -103.151236  
NMOCD Reference # 1RP-2185**

October 2014  
Apex Project No. 7030714G023

Prepared for:

**Regency Field Services LLC**  
301 Commerce Street, Suite 700  
Fort Worth, TX 76109  
Attn: **Ms. Crystal Callaway, BSN, RN, CHMM**

Prepared by:

A handwritten signature in blue ink, appearing to read 'Thomas K. Franklin'.

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Thomas Franklin  
Project Manager

A handwritten signature in blue ink, appearing to read 'Tim Reed'.

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Tim Reed  
Senior Technical Review



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Initial and Final C-141



## **CLOSURE REQUEST**

### **REGENCY FIELD SERVICES LLC.**

#### **L-5 TO MF**

#### **Historical Release Site**

#### **Lea County, New Mexico**

**Unit Letter "O", Section 15, Township 21 South, Range 37 East**

**Latitude 32.472081, Longitude -103.151236**

**NMOCD Reference # 1RP-2185**

**Apex Project No. 7030714G023**

## **1.0 INTRODUCTION**

### **1.1 Site Description & Background**

Apex TITAN, Inc. (Apex) has prepared this Closure Request for the Regency Field Services, LLC (Regency) L-5 Pipeline as the result of a crude oil release (referred to hereinafter as the "Site" or "subject Site"). Remedial actions were reportedly conducted in accordance with New Mexico Energy, Minerals, and Natural Resources Department (EMNRD), Oil Conservation Division (NMOCD) rules (*NMAC 19.15.29 Release Notification*) and the NMOCD *Guidelines for Remediation of Leaks, Spills and Releases* as guidance.

The L-5 to MF is located off County Road (CR) 38, also referred to as Jones City Road, north of Eunice, New Mexico (GPS 32.472081, -103.151236). On January 7, 2009, a leak of greater than fifty (>50) million cubic feet (Mcf) of natural gas and greater than five (>5) barrels of oil was discovered. According to documentation, the release was reported by the operator at the time, Southern Union Gas, to the New Mexico Oil Conservation Division (NMOCD) on March 3, 2009. The NMOCD C-141 form indicated the release affected approximately one thousand, three hundred and forty square feet (1,340 ft<sup>2</sup>). Regency Field Services, LLC. has subsequently acquired this pipeline.

The previous remedial activities were reportedly conducted by an unknown environmental consultant and by Basin Environmental Service Technologies, LLC. (Basin). This Closure Request is solely based upon the interpretation of the data provided.

### **1.2 Project Objective**

The objective of the Closure Report is to present documentation of the activities that were performed to date and to request closure of the site.

### **1.3 Standard of Care**

Apex's services will be performed in accordance with standards customarily provided by a firm rendering the same or similar services in the area during the same time period.

Apex makes no warranties, express or implied, as to the services performed hereunder. Additionally, Apex does not warrant the work of third parties supplying information used in the report (e.g. laboratories, regulatory agencies, or other third parties). This scope of services will be performed in accordance with the scope of work agreed with the client.

#### 1.4 Reliance

This report has been prepared for the exclusive use of Regency, and any authorization for use or reliance by any other party (except a governmental entity having jurisdiction over the Site) is prohibited without the express written authorization of Regency and Apex. Any unauthorized distribution or reuse is at the client's sole risk. Notwithstanding the foregoing, reliance by authorized parties will be subject to the terms, conditions and limitations stated in the proposal, the report, and Apex's Agreement. The limitation of liability defined in the agreement is the aggregate limit of Apex's liability to the client.

#### 2.0 SITE RANKING & PROPOSED REMEDIAL ACTION GOALS

The Site is subject to regulatory oversight by the NMOCD. To address activities related to releases, the NMOCD utilizes the *Guidelines for Remediation of Leaks, Spills and Releases* as guidance, in addition to the NMOCD rules, specifically NMAC 19.15.29 *Release Notification*. These documents establish investigation and abatement action requirements for sites subject to reporting and/or corrective action.

In accordance with the NMOCD's *Guidelines for Remediation of Leaks, Spills and Releases*, Apex utilized the general site characteristics to determine the appropriate "ranking" for the Site. The ranking criteria and associated scoring are provided in the table below:

Ranking Criteria			Ranking Score
Depth to Groundwater	<50 feet	20	20
	50 to 99 feet	10	
	>100 feet	0	
Wellhead Protection Area, <1,000 feet from a water source, or; <200 feet from private domestic water source.	Yes	20	0
	No	0	
Distance to Surface Water Body	<200 feet	20	0
	200 to 1,000 feet	10	
	>1,000 feet	0	
Total Ranking Score			20

Based on Apex's evaluation of the scoring criteria, the Site would have a Total Ranking Score of 20. This ranking is based on the following:

- The depth to the initial groundwater-bearing zone is <50 feet at the Site.

- The impacted area is greater than 200 feet from a private domestic water source.
- Distance to the nearest surface water body is greater than 1,000 ft.

Based on a Total Ranking Score of 20, cleanup goals for soils remaining in place include: 10 milligrams per kilogram (mg/Kg) for benzene, 50 mg/Kg for total benzene, toluene, ethylbenzene and xylene (BTEX), 100 mg/Kg for Total Petroleum Hydrocarbons (TPH).

### **3.0 INITIAL RESPONSE, EXCAVATION & TREATMENT ACTIVITIES**

#### **3.1 Initial Response**

According to the initial C-141, Southern Union Gas responded to the leaking pipeline. The leak area was excavated and three (3) clamps were installed on the pipeline, no free standing fluids were discovered at that time. There were two areas of impact noted, one area measured approximately ten (10) feet by eighteen (18) feet and the second area measured approximately forty (40) feet by twenty (20) feet. The impacted soils were identified through surface staining in an area approximately one thousand, three hundred and forty square feet (1,340 ft<sup>2</sup>) as shown on Figure 3, Appendix A. The supplied figure was created by Basin Environmental Services.

#### **3.2 Excavation**

Reportedly, in 2009, approximately 2,904 cubic yards (yd<sup>3</sup>) of impacted soil was excavated from the release site by Basin and transported to the Southern Union Landfarm (Permit # NM-02-0019) for treatment. Copies of the Basin prepared Manifests are included in Appendix D. The final dimensions of the excavation were approximately 120 feet in width, 80 feet in length and 26 feet in depth near the center. Further excavation was determined to be unsafe and impracticable given the risks associated with the depth of the excavation and the proximity of the floor of the excavation to groundwater.

#### **3.3 Excavation Confirmation Soil Sampling Program**

Based on the information provided, confirmation soil samples of the excavation were collected by Basin and analyzed for BTEX and TPH. The only exceedance of the NMOCD *Guidelines for Remediation of Leaks, Spills and Releases* (Section VI A. Contaminated Soils, a) were two (2) TPH results of 158 milligrams per kilogram (mg/Kg) and 1,230 mg/kg, in unknown locations.

#### **3.4 Groundwater Investigation and Sampling Program**

Subsequently, Basin supervised the installation of one monitor well (MW-1) in February, 2013, reportedly in an effort to gain closure on the soil portion of the release site. During the installation of the monitor well, soil samples were collected for BTEX, TPH and chloride. Chloride concentrations above 250 mg/kg were documented at five (5) and ten (10) feet below ground surface (bgs) at 392 mg/kg and 500 mg/kg, respectively, but declined to <250 mg/Kg with depth.

On February 28, 2013, May 9, 2013, September 3, 2013, January 9, 2014 and February 28, 2014, the monitor well was sampled and groundwater samples were submitted to

Xenco Laboratories, Inc., of Odessa, Texas, for analysis of BTEX, total dissolved solids (TDS) and chloride concentrations. Laboratory analytical results indicated BTEX concentrations were less than the laboratory method detection limit (MDL) for each of the submitted groundwater samples, with the exception of benzene at 0.0258 mg/L for the January 9, 2014 sampling event. All of the other sampling events including the February 28, 2014, sampling did not show benzene concentrations above the laboratory MDL. Chloride concentrations ranged from 102 mg/L for the sample collected in February 2013, to 123 mg/L for the sample collected in May 2013.

Currently, there is one (1) groundwater monitoring well (MW-1) on-Site.

#### **CHEMICALS OF CONCERN (COCS)**

Groundwater samples collected from the monitoring well have historically been analyzed for chloride and BTEX by EPA Methods E300 and SW846-8021B, respectively. To date no phase-separated hydrocarbons (PSH) have been identified in the monitoring well and none of the results have shown chloride impact to groundwater. With the exception of one sampling event on January 9, 2014, no BTEX concentrations have exceeded the New Mexico Water Quality Control Commission (WQCC) standards. The WQCC standard for BTEX and chloride is benzene at 0.01 mg/L, toluene at 0.75 mg/L, ethylbenzene at 0.75 mg/L, total xylenes at 0.62 mg/L and chloride at 250 mg/L, respectively. Copies of tables provided by Basin, inclusive of the previously reported sampling is included in Appendix B.

#### **4.0 LABORATORY ANALYTICAL METHODS**

The samples were analyzed for TPH GRO/DRO utilizing EPA method SW-846 8015, BTEX using EPA method SW-846 8021B and chlorides utilizing EPA method SW-846 300.1. Copies of the laboratory analysis provided by Basin are provided in Appendix C.

#### **5.0 SITE RESTORATION / CLOSURE REQUEST**

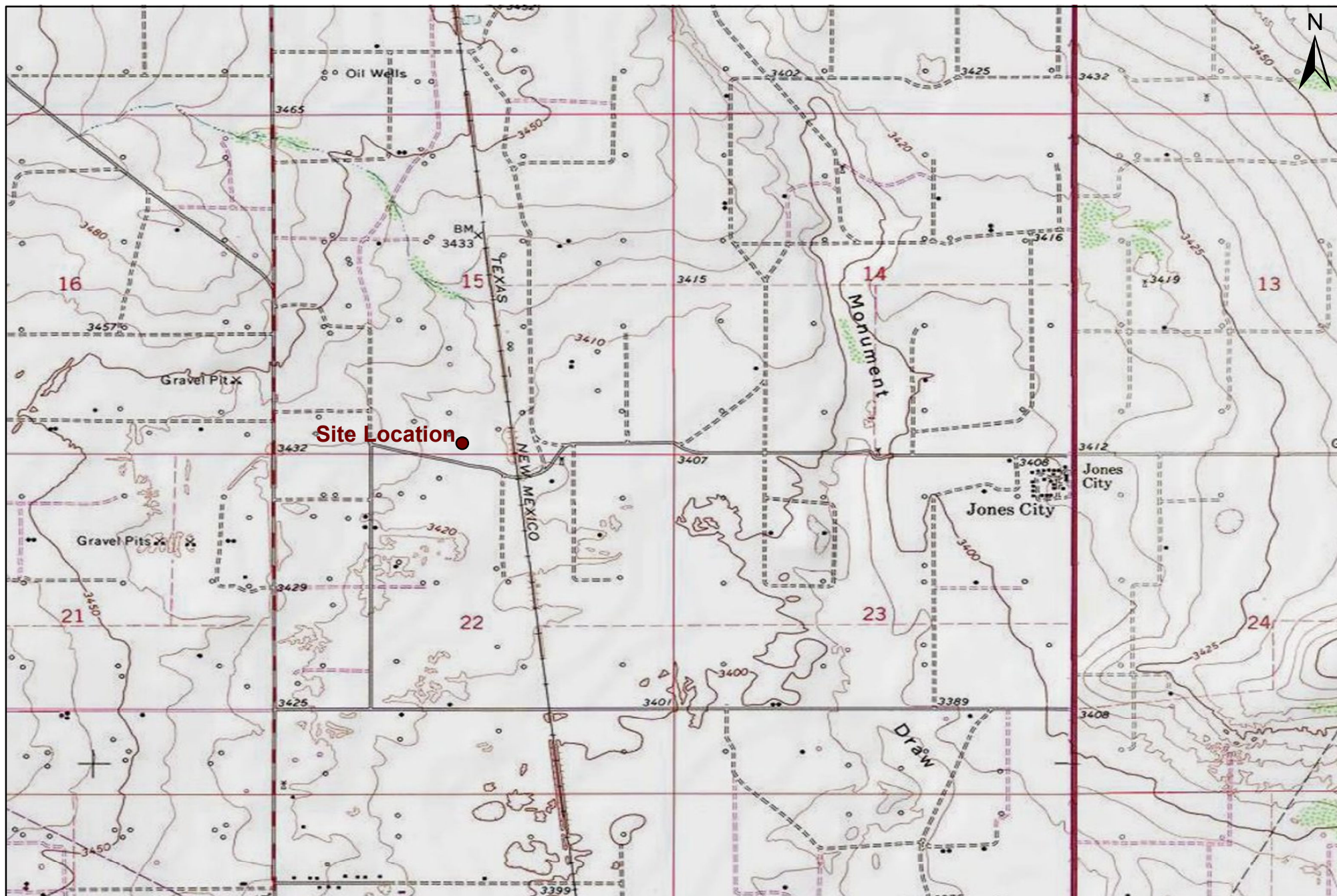
Based upon the data provided, the site was subsequently backfilled and restored. MW-1 was installed to confirm that there was not a chloride or BTEX impact to the groundwater at this site. Laboratory analytical results for five (5) sampling events confirmed that there was not a chloride impact to groundwater. The laboratory analytical results indicated that BTEX concentrations were less than the laboratory MDL for each of the submitted groundwater samples, with the exception of benzene at 0.0258 mg/L for the January 9, 2014 sampling event. Based upon the data presented and the work performed at this site, Regency respectfully requests closure of this site. Upon approval from the NMOCD, the monitor well will be properly plugged by a licensed water well driller. Copies of the Initial and Final C-141 are provided in Appendix E.

## APPENDIX A

### Figures

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1,000 500 0 1,000 2,000  
 Distance in Feet

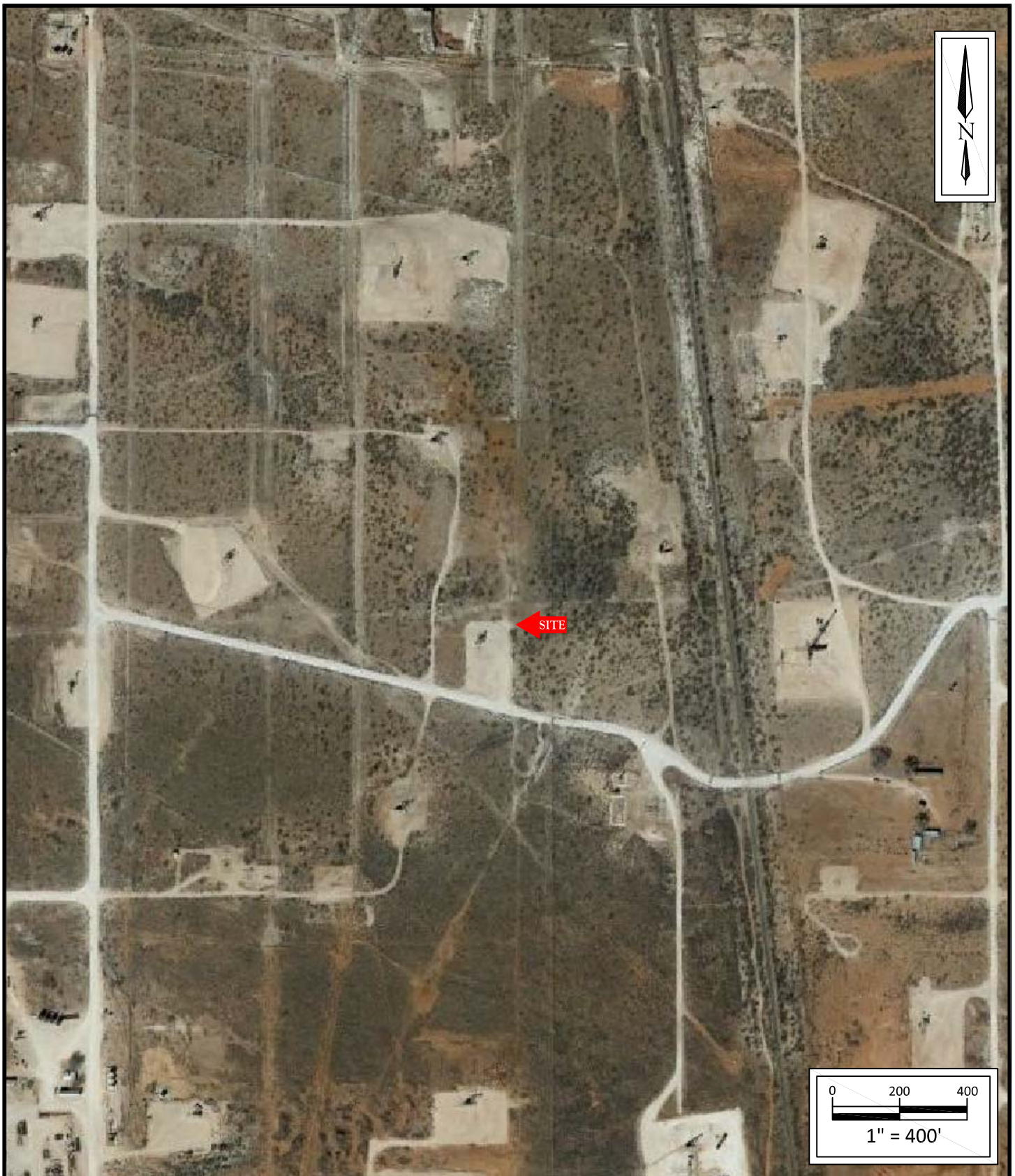
**Figure 1**  
**Site Location Map**  
 Southern Union Gas Services  
 L-5 to MF Historical  
 Lea County, New Mexico  
 NMOCD Reference #: 1RP-2184



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

Drawn By: BJA	Checked By: JWL
October 16, 2012	Scale: 1" = 2000'



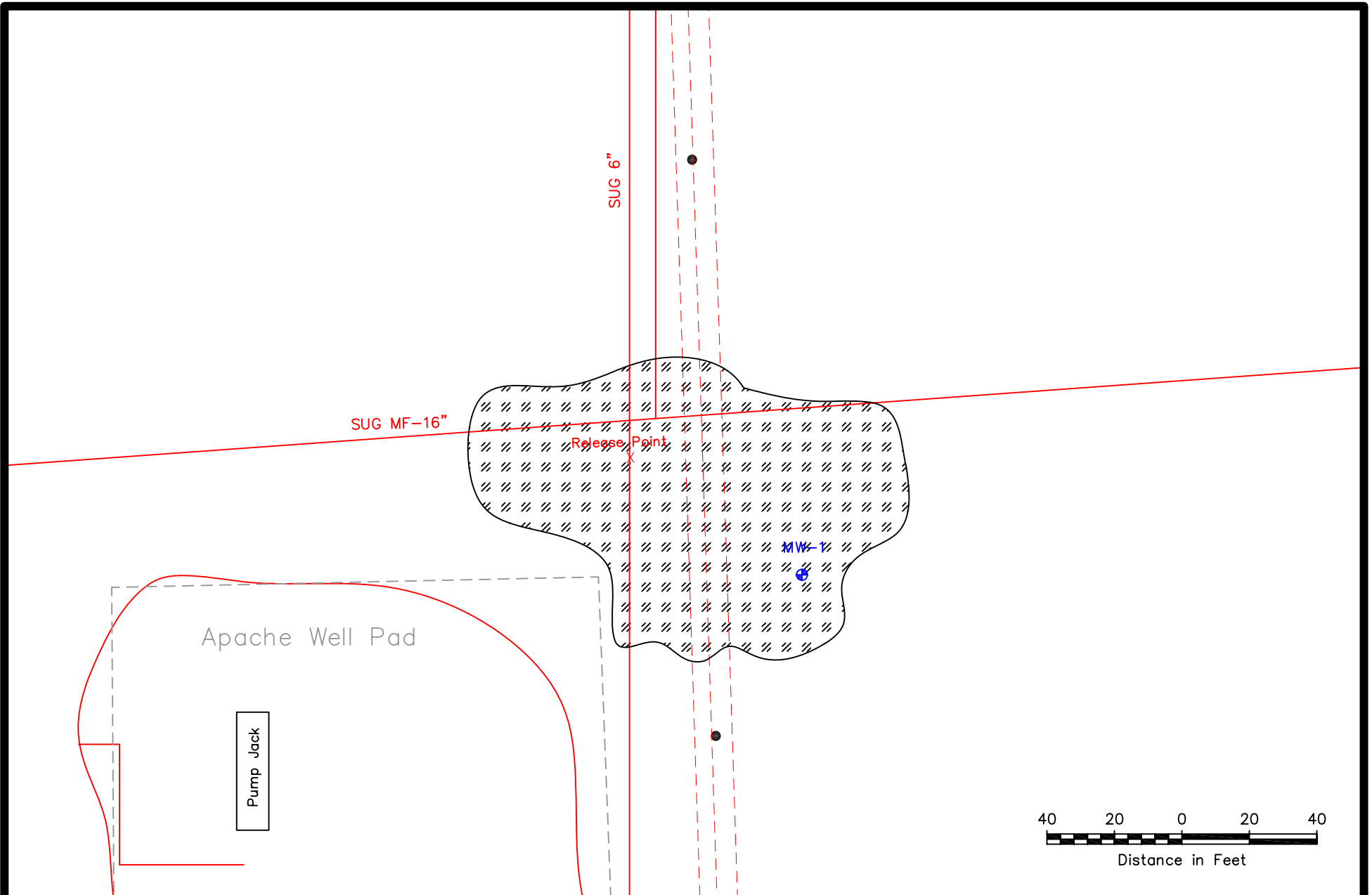


Southern Union Gas services  
L-5 to MF  
NMOCD Ref RP-2184  
Lea County, New Mexico



**Apex TITAN, Inc.**  
505 N. Big Springs Street, Suite 301A  
Midland, Texas 79701  
Phone: (432) 695-6016  
[www.apexcos.com](http://www.apexcos.com)  
A Subsidiary of Apex Companies, LLC

**FIGURE 2**  
**Site Vicinity Map**  
2014 Aerial Photograph  
Source: Google Earth



Legend:

- Pipeline
- - - Well Pad
- ⊕ Monitor Well
- - - Powerlines
- ▨ Disturbed Area
- Power Pole

Figure 3  
Monitor Well Location Map  
Southern Union Gas Services  
L-5 to MF  
NMOCD Ref RP-2184  
Lea County, New Mexico

Basin Environmental Services

Prep By: JWL

Checked By: BJA

October 15, 2012

Scale 1"=40'

## APPENDIX B

Soil Analytical Results  
Groundwater Analytical Results

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TABLE 1

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

SOUTHERN UNION GAS SERVICES  
L-5 TO MF  
HISTORICAL RELEASE SITE  
LEA COUNTY, NEW MEXICO  
NMOCD REF# 1RP-2185

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)	METHOD: E300.0 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)		
B.S	N/A	3/30/2009	N/A	-	-	-	-	-	-	-	-	-	<16
PR @ 19'	19'	3/30/2009	N/A	<0.050	<0.050	<0.050	<0.030	<0.050	-	-	-	-	-
PR @ 26'	26'	4/22/2009	N/A	<0.050	<0.050	<0.050	<0.030	<0.050	<10.0	158	-	158	-
WW-Comp.	N/A	4/29/2009	N/A	-	-	-	-	-	<10.0	65.6	-	65.6	-
SW-Comp.	N/A	4/29/2009	N/A	-	-	-	-	-	<10.0	15.6	-	15.6	-
EW-Comp.	N/A	4/29/2009	N/A	-	-	-	-	-	<10.0	79.9	-	79.9	-
NW-Comp.	N/A	5/4/2009	N/A	-	-	-	-	-	<10.0	1,230	-	1,230	-
2-EW-Comp.	N/A	5/4/2009	N/A	-	-	-	-	-	<10.0	80.0	-	80.0	-
2-WW-Comp.	N/A	5/4/2009	N/A	-	-	-	-	-	<10.0	<10.0	-	<10.0	-
NW-Comp.	N/A	5/12/2009	N/A	-	-	-	-	-	<10.0	12.2	-	12.2	-
MW-1 @ 5'	5'	2/26/2013	In-Situ	<0.00105	<0.00209	<0.00105	<0.00105	<0.00209	<15.7	53.9	<15.7	53.9	392
MW-1 @ 10'	10'	2/26/2013	In-Situ	-	-	-	-	-	<16.2	19.8	<16.2	19.8	500
MW-1 @ 15'	15'	2/26/2013	In-Situ	-	-	-	-	-	<16.6	<16.6	<16.6	<16.6	133
MW-1 @ 20'	20'	2/26/2013	In-Situ	<0.00110	<0.00220	<0.00110	<0.00110	<0.00110	<16.6	<16.6	<16.6	<16.6	53.4
MW-1 @ 25'	25'	2/26/2013	In-Situ	-	-	-	-	-	<16.1	<16.1	<16.1	<16.1	15.1
MW-1 @ 30'	30'	2/26/2013	In-Situ	-	-	-	-	-	<15.9	<15.9	<15.9	<15.9	20.1
MW-1 @ 35'	35'	2/26/2013	In-Situ	<0.00107	<0.00213	<0.00107	<0.00107	<0.00107	<16.0	<16.0	<16.0	<16.0	17.6
<b>NMOCD Standard</b>				<b>10</b>				<b>50</b>				<b>100</b>	<b>250</b>

- = Not analyzed.

TABLE 2

## CONCENTRATIONS OF BENZENE, BTEX, CHLORIDE &amp; TDS IN GROUNDWATER

SOUTHERN UNION GAS SERVICES

L-5 to MF

HISTORICAL RELEASE SITE

LEA COUNTY, NEW MEXICO

NMOCD REF # 1RP-2185

SAMPLE LOCATION	SAMPLE DATE	METHODS: EPA SW 846-8021B							SM2540C	EPA 300
		BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL-BENZENE (mg/L)	M,P-XYLENES (mg/L)	O-XYLENES (mg/L)	TOTAL XYLENE (mg/L)	TOTAL BTEX (mg/L)	TDS (mg/L)	CHLORIDE (mg/L)
MW-1	02/28/13	<0.00100	<0.00200	<0.00100	<0.00200	<0.00100	<0.00100	<0.00100	675	102
MW-1	05/09/13	<0.00100	<0.00200	<0.00100	<0.00200	<0.00100	<0.00100	<0.00100	-	123
MW-1	09/03/13	<0.00100	<0.00100	<0.00100	<0.00200	<0.00100	<0.00100	<0.00100	-	96.4
MW-1	01/09/14	<b>0.0258</b>	<0.00200	0.00344	0.00444	<0.00100	0.00444	0.0337	-	103.0
MW-1	02/28/14	<0.00100	<0.00200	<0.00100	<0.00200	<0.00100	<0.00100	<0.00100		117.0
NMOCD CRITERIA		<b>0.01</b>	<b>0.75</b>	<b>0.75</b>	<b>TOTAL XYLENES 0.62</b>					<b>250</b>

## APPENDIX C

### Laboratory Data Reports & Chain-of-Custody Documents

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**Analytical Report 458517**  
**for**  
**Southern Union Gas Services- Monahans**

**Project Manager: Joel Lowry**

**L-5 to MF**

**03-MAR-13**

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)



03-MAR-13

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

Reference: XENCO Report No(s): **458517**  
**L-5 to MF**  
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(s) 458517. 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. 458517 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.*  
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Houston - Dallas - Odessa - San Antonio - Tampa - Lakeland - Atlanta - Phoenix - Oklahoma - Latin America



# Sample Cross Reference 458517



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

L-5 to MF

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW-1	W	02-28-13 11:00		458517-001



## CASE NARRATIVE

*Client Name: Southern Union Gas Services- Monahans*

*Project Name: L-5 to MF*



Project ID:  
Work Order Number(s): 458517

Report Date: 03-MAR-13  
Date Received: 02/28/2013

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**Sample receipt non conformances and comments:**

None

---

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

None

# Certificate of Analysis Summary 458517

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



**Project Id:**  
**Contact:** Joel Lowry  
**Project Location:** Lea County, NM

**Project Name:** L-5 to MF

**Date Received in Lab:** Thu Feb-28-13 02:22 pm

**Report Date:** 03-MAR-13

**Project Manager:** Nicholas Straccione

<b>Analysis Requested</b>	<b>Lab Id:</b> 458517-001 <b>Field Id:</b> MW-1 <b>Depth:</b> <b>Matrix:</b> WATER <b>Sampled:</b> Feb-28-13 11:00					
<b>BTEX by EPA 8021B</b>	<b>Extracted:</b> Mar-01-13 10:30 <b>Analyzed:</b> Mar-01-13 11:04 <b>Units/RL:</b> mg/L RL					
Benzene	ND 0.00100					
Toluene	ND 0.00200					
Ethylbenzene	ND 0.00100					
m_p-Xylenes	ND 0.00200					
o-Xylene	ND 0.00100					
Total Xylenes	ND 0.00100					
Total BTEX	ND 0.00100					
<b>Inorganic Anions by EPA 300/300.1</b>	<b>Extracted:</b> <b>Analyzed:</b> Mar-01-13 15:19 <b>Units/RL:</b> mg/L RL					
Chloride	102 20.0					
<b>TDS by SM2540C</b>	<b>Extracted:</b> <b>Analyzed:</b> Mar-01-13 12:00 <b>Units/RL:</b> mg/L RL					
Total dissolved solids	675 25.0					

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

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# Form 2 - Surrogate Recoveries

Project Name: L-5 to MF

Work Orders : 458517,

Project ID:

Lab Batch #: 908039

Sample: 458517-001 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 03/01/13 11:04

## SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0289	0.0300	96	80-120	
4-Bromofluorobenzene	0.0317	0.0300	106	80-120	

Lab Batch #: 908039

Sample: 634479-1-BLK / BLK

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 03/01/13 09:10

## SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0314	0.0300	105	80-120	
4-Bromofluorobenzene	0.0294	0.0300	98	80-120	

Lab Batch #: 908039

Sample: 634479-1-BKS / BKS

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 03/01/13 08:38

## SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0277	0.0300	92	80-120	
4-Bromofluorobenzene	0.0338	0.0300	113	80-120	

Lab Batch #: 908039

Sample: 634479-1-BSD / BSD

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 03/01/13 08:54

## SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0268	0.0300	89	80-120	
4-Bromofluorobenzene	0.0328	0.0300	109	80-120	

Lab Batch #: 908039

Sample: 458187-001 S / MS

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 03/01/13 10:15

## SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0275	0.0300	92	80-120	
4-Bromofluorobenzene	0.0345	0.0300	115	80-120	

\* Surrogate outside of Laboratory QC limits

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

\*\*\* Poor recoveries due to dilution

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

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



## Form 2 - Surrogate Recoveries

Project Name: L-5 to MF

Work Orders : 458517,

Lab Batch #: 908039

Sample: 458187-001 SD / MSD

Project ID:

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 03/01/13 10:31

### SURROGATE RECOVERY STUDY

BTEX by EPA 8021B  Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0332	0.0300	111	80-120	
4-Bromofluorobenzene	0.0305	0.0300	102	80-120	

\* Surrogate outside of Laboratory QC limits

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

\*\*\* Poor recoveries due to dilution

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

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

**Project Name: L-5 to MF**

**Work Order #: 458517**

**Analyst: KEB**

**Date Prepared: 03/01/2013**

**Project ID:**

**Date Analyzed: 03/01/2013**

**Lab Batch ID: 908039**

**Sample: 634479-1-BKS**

**Batch #: 1**

**Matrix: Water**

**Units: mg/L**

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

<b>BTEX by EPA 8021B</b>	<b>Blank Sample Result [A]</b>	<b>Spike Added [B]</b>	<b>Blank Spike Result [C]</b>	<b>Blank Spike %R [D]</b>	<b>Spike Added [E]</b>	<b>Blank Spike Duplicate Result [F]</b>	<b>Blk. Spk Dup. %R [G]</b>	<b>RPD %</b>	<b>Control Limits %R</b>	<b>Control Limits %RPD</b>	<b>Flag</b>
<b>Analytes</b>											
Benzene	<0.00100	0.100	0.0936	94	0.100	0.0997	100	6	70-125	25	
Toluene	<0.00200	0.100	0.0925	93	0.100	0.0973	97	5	70-125	25	
Ethylbenzene	<0.00100	0.100	0.0943	94	0.100	0.0962	96	2	71-129	25	
m_p-Xylenes	<0.00200	0.200	0.187	94	0.200	0.194	97	4	70-131	25	
o-Xylene	<0.00100	0.100	0.0936	94	0.100	0.0967	97	3	71-133	25	

**Analyst: AMB**

**Date Prepared: 03/01/2013**

**Date Analyzed: 03/01/2013**

**Lab Batch ID: 908083**

**Sample: 908083-1-BKS**

**Batch #: 1**

**Matrix: Water**

**Units: mg/L**

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

<b>Inorganic Anions by EPA 300/300.1</b>	<b>Blank Sample Result [A]</b>	<b>Spike Added [B]</b>	<b>Blank Spike Result [C]</b>	<b>Blank Spike %R [D]</b>	<b>Spike Added [E]</b>	<b>Blank Spike Duplicate Result [F]</b>	<b>Blk. Spk Dup. %R [G]</b>	<b>RPD %</b>	<b>Control Limits %R</b>	<b>Control Limits %RPD</b>	<b>Flag</b>
<b>Analytes</b>											
Chloride	<1.00	25.0	24.3	97	25.0	24.7	99	2	80-120	20	

Relative Percent Difference RPD =  $200 * |(C-F)/(C+F)|$

Blank Spike Recovery [D] =  $100 * (C)/[B]$

Blank Spike Duplicate Recovery [G] =  $100 * (F)/[E]$

All results are based on MDL and Validated for QC Purposes

**Project Name: L-5 to MF**

**Work Order #: 458517**

**Analyst: MTK**

**Date Prepared: 03/01/2013**

**Project ID:**

**Date Analyzed: 03/01/2013**

**Lab Batch ID: 908093**

**Sample: 908093-1-BKS**

**Batch #: 1**

**Matrix: Water**

**Units: mg/L**

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

TDS by SM2540C	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											
Total dissolved solids	<25.0	1000	994	99	1000	1040	104	5	80-120	30	

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: L-5 to MF

Work Order #: 458517

Lab Batch #: 908083

Date Analyzed: 03/01/2013

QC- Sample ID: 458508-001 S

Reporting Units: mg/L

Date Prepared: 03/01/2013

Batch #: 1

Project ID:

Analyst: AMB

Matrix: Water

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	1600	2500	4230	105	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: L-5 to MF

Work Order # : 458517

Project ID:

Lab Batch ID: 908039

QC- Sample ID: 458187-001 S

Batch #: 1 Matrix: Water

Date Analyzed: 03/01/2013

Date Prepared: 03/01/2013

Analyst: KEB

Reporting Units: mg/L

## MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00100	0.100	0.107	107	0.100	0.106	106	1	70-125	25	
Toluene	<0.00200	0.100	0.109	109	0.100	0.102	102	7	70-125	25	
Ethylbenzene	<0.00100	0.100	0.109	109	0.100	0.108	108	1	71-129	25	
m_p-Xylenes	<0.00200	0.200	0.205	103	0.200	0.208	104	1	70-131	25	
o-Xylene	<0.00100	0.100	0.102	102	0.100	0.104	104	2	71-133	25	

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: L-5 to MF**

**Work Order #:** 458517

**Lab Batch #:** 908093

**Project ID:**

**Date Analyzed:** 03/01/2013 12:00

**Date Prepared:** 03/01/2013

**Analyst:** MTK

**QC- Sample ID:** 458508-001 D

**Batch #:** 1

**Matrix:** Water

**Reporting Units:** mg/L

## SAMPLE / SAMPLE DUPLICATE RECOVERY

TDS by SM2540C	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Analyte					
Total dissolved solids	3440	3860	12	30	

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

# Cardinal Laboratories

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Hobbs, NM 88240  
Tel (575) 393-2326  
Fax (575) 393-2476

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## Prelogin/Nonconformance Report- Sample Log-In

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

**Date/ Time Received:** 02/28/2013 02:22:00 PM

**Work Order #:** 458517

**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)?	-1
#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 458453**  
**for**  
**Southern Union Gas Services- Monahans**

**Project Manager: Joel Lowry**

**L-5 to MF**

**(1RP-2184)**

**11-MAR-13**

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)



11-MAR-13

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

Reference: XENCO Report No(s): **458453**  
**L-5 to MF**  
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(s) 458453. 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. 458453 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

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

L-5 to MF

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW-1 @ 5'	S	02-26-13 09:30	5 ft	458453-001
MW-1 @ 10'	S	02-26-13 09:40	10 ft	458453-002
MW-1 @ 15'	S	02-26-13 09:50	15 ft	458453-003
MW-1 @ 20'	S	02-26-13 10:00	20 ft	458453-004
MW-1 @ 25'	S	02-26-13 10:10	25 ft	458453-005
MW-1 @ 30'	S	02-26-13 10:20	30 ft	458453-006
MW-1 @ 35'	S	02-26-13 10:30	35 ft	458453-007





## CASE NARRATIVE

*Client Name: Southern Union Gas Services- Monahans*

*Project Name: L-5 to MF*



Project ID: (IRP-2184)  
Work Order Number(s): 458453

Report Date: 11-MAR-13  
Date Received: 02/27/2013

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**Sample receipt non conformances and comments:**

None

---

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

None

**Analytical non conformances and comments:**

Batch: LBA-908387 Inorganic Anions by EPA 300/300.1  
E300

Batch 908387, Chloride recovered below QC limits in the Matrix Spike.  
Samples affected are: 458453-006, -007, -005.  
The Laboratory Control Sample for Chloride is within laboratory Control Limits

Batch: LBA-908636 BTEX by EPA 8021B  
SW8021BM

Batch 908636, Ethylbenzene, m\_p-Xylenes, o-Xylene recovered below QC limits in the Matrix Spike  
Duplicate.  
Samples affected are: 458453-001, -004.  
The Laboratory Control Sample for Ethylbenzene, m\_p-Xylenes , o-Xylene is within laboratory Control  
Limits

# Certificate of Analysis Summary 458453

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



**Project Id:** (IRP-2184)

**Contact:** Joel Lowry

**Project Name:** L-5 to MF

**Date Received in Lab:** Wed Feb-27-13 10:20 am

**Report Date:** 11-MAR-13

**Project Location:** Lea County, NM

**Project Manager:** Nicholas Straccione

<i>Analysis Requested</i>	<i>Lab Id:</i>	458453-001	458453-002	458453-003	458453-004	458453-005	458453-006
	<i>Field Id:</i>	MW-1 @ 5'	MW-1 @ 10'	MW-1 @ 15'	MW-1 @ 20'	MW-1 @ 25'	MW-1 @ 30'
	<i>Depth:</i>	5- ft	10- ft	15- ft	20- ft	25- ft	30- ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	Feb-26-13 09:30	Feb-26-13 09:40	Feb-26-13 09:50	Feb-26-13 10:00	Feb-26-13 10:10	Feb-26-13 10:20
<b>BTEX by EPA 8021B</b>	<i>Extracted:</i>	Mar-08-13 13:10			Mar-08-13 13:10		
	<i>Analyzed:</i>	Mar-08-13 19:11			Mar-08-13 19:28		
	<i>Units/RL:</i>	mg/kg RL			mg/kg RL		
Benzene		ND 0.00105			ND 0.00110		
Toluene		ND 0.00209			ND 0.00220		
Ethylbenzene		ND 0.00105			ND 0.00110		
m_p-Xylenes		ND 0.00209			ND 0.00220		
o-Xylene		ND 0.00105			ND 0.00110		
Total Xylenes		ND 0.00105			ND 0.00110		
Total BTEX		ND 0.00105			ND 0.00110		
<b>Inorganic Anions by EPA 300/300.1 SUB: TX104704215</b>	<i>Extracted:</i>	Mar-06-13 09:02	Mar-06-13 09:24	Mar-06-13 09:45	Mar-06-13 10:07	Mar-06-13 12:46	Mar-06-13 13:30
	<i>Analyzed:</i>						
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		392 10.0	500 10.0	133 20.0	53.4 10.0	15.1 4.00	20.1 4.00
<b>Percent Moisture</b>	<i>Extracted:</i>						
	<i>Analyzed:</i>	Mar-01-13 13:45	Mar-01-13 13:45	Mar-01-13 13:45	Mar-01-13 13:45	Mar-04-13 13:00	Mar-04-13 13:00
	<i>Units/RL:</i>	% RL	% RL	% RL	% RL	% RL	% RL
Percent Moisture		4.71 1.00	7.89 1.00	9.69 1.00	9.55 1.00	6.77 1.00	5.88 1.00
<b>TPH By SW8015 Mod</b>	<i>Extracted:</i>	Mar-01-13 16:00	Mar-01-13 16:00	Mar-01-13 16:00	Mar-01-13 16:00	Mar-01-13 16:00	Mar-01-13 16:00
	<i>Analyzed:</i>	Mar-02-13 02:01	Mar-02-13 02:25	Mar-02-13 02:49	Mar-02-13 03:14	Mar-02-13 03:38	Mar-02-13 04:02
	<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 16.2	ND 16.6	ND 16.6	ND 16.1	ND 15.9
C12-C28 Diesel Range Hydrocarbons		53.9 15.7	19.8 16.2	ND 16.6	ND 16.6	ND 16.1	ND 15.9
C28-C35 Oil Range Hydrocarbons		ND 15.7	ND 16.2	ND 16.6	ND 16.6	ND 16.1	ND 15.9
Total TPH		53.9 15.7	19.8 16.2	ND 16.6	ND 16.6	ND 16.1	ND 15.9

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.

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Nicholas Straccione  
Project Manager

# Certificate of Analysis Summary 458453

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



**Project Name: L-5 to MF**

**Project Id:** (IRP-2184)

**Contact:** Joel Lowry

**Project Location:** Lea County, NM

**Date Received in Lab:** Wed Feb-27-13 10:20 am

**Report Date:** 11-MAR-13

**Project Manager:** Nicholas Straccione

<b>Analysis Requested</b>	<b>Lab Id:</b> 458453-007 <b>Field Id:</b> MW-1 @ 35' <b>Depth:</b> 35- ft <b>Matrix:</b> SOIL <b>Sampled:</b> Feb-26-13 10:30					
<b>BTEX by EPA 8021B</b>	<b>Extracted:</b> Mar-04-13 08:10 <b>Analyzed:</b> Mar-04-13 09:51 <b>Units/RL:</b> mg/kg RL					
Benzene	ND 0.00107					
Toluene	ND 0.00213					
Ethylbenzene	ND 0.00107					
m_p-Xylenes	ND 0.00213					
o-Xylene	ND 0.00107					
Total Xylenes	ND 0.00107					
Total BTEX	ND 0.00107					
<b>Inorganic Anions by EPA 300/300.1 SUB: TX104704215</b>	<b>Extracted:</b> <b>Analyzed:</b> Mar-06-13 13:51 <b>Units/RL:</b> mg/kg RL					
Chloride	17.6 4.00					
<b>Percent Moisture</b>	<b>Extracted:</b> <b>Analyzed:</b> Mar-04-13 13:00 <b>Units/RL:</b> % RL					
Percent Moisture	6.79 1.00					
<b>TPH By SW8015 Mod</b>	<b>Extracted:</b> Mar-01-13 16:00 <b>Analyzed:</b> Mar-02-13 04:26 <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.

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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

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# Form 2 - Surrogate Recoveries

Project Name: L-5 to MF

Work Orders : 458453,

Project ID: (1RP-2184)

Lab Batch #: 908102

Sample: 458453-001 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 03/02/13 02:01

## SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	101	99.5	102	70-135	
o-Terphenyl	52.5	49.8	105	70-135	

Lab Batch #: 908102

Sample: 458453-002 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 03/02/13 02:25

## SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	97.5	99.7	98	70-135	
o-Terphenyl	51.7	49.9	104	70-135	

Lab Batch #: 908102

Sample: 458453-003 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 03/02/13 02:49

## SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	95.1	99.8	95	70-135	
o-Terphenyl	50.4	49.9	101	70-135	

Lab Batch #: 908102

Sample: 458453-004 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 03/02/13 03:14

## SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	98.7	99.8	99	70-135	
o-Terphenyl	52.4	49.9	105	70-135	

Lab Batch #: 908102

Sample: 458453-005 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 03/02/13 03:38

## SURROGATE RECOVERY STUDY

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

\* Surrogate outside of Laboratory QC limits

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

\*\*\* Poor recoveries due to dilution

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

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

## Form 2 - Surrogate Recoveries

Project Name: L-5 to MF

Work Orders : 458453,

Project ID: (1RP-2184)

Lab Batch #: 908102

Sample: 458453-006 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg Date Analyzed: 03/02/13 04:02		SURROGATE RECOVERY STUDY			
TPH By SW8015 Mod		Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R
Analytes					
1-Chlorooctane		97.0	99.9	97	70-135
o-Terphenyl		51.3	50.0	103	70-135

Lab Batch #: 908102

Sample: 458453-007 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg Date Analyzed: 03/02/13 04:26		SURROGATE RECOVERY STUDY			
TPH By SW8015 Mod		Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R
Analytes					
1-Chlorooctane		98.7	99.7	99	70-135
o-Terphenyl		52.0	49.9	104	70-135

Lab Batch #: 908204

Sample: 458453-007 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg Date Analyzed: 03/04/13 09:51		SURROGATE RECOVERY STUDY			
BTEX by EPA 8021B		Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R
Analytes					
1,4-Difluorobenzene		0.0261	0.0300	87	80-120
4-Bromofluorobenzene		0.0278	0.0300	93	80-120

Lab Batch #: 908636

Sample: 458453-001 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg Date Analyzed: 03/08/13 19:11		SURROGATE RECOVERY STUDY			
BTEX by EPA 8021B		Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R
Analytes					
1,4-Difluorobenzene		0.0320	0.0300	107	80-120
4-Bromofluorobenzene		0.0317	0.0300	106	80-120

Lab Batch #: 908636

Sample: 458453-004 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg Date Analyzed: 03/08/13 19:28		SURROGATE RECOVERY STUDY			
BTEX by EPA 8021B		Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R
Analytes					
1,4-Difluorobenzene		0.0252	0.0300	84	80-120
4-Bromofluorobenzene		0.0273	0.0300	91	80-120

\* Surrogate outside of Laboratory QC limits

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

\*\*\* Poor recoveries due to dilution

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

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

## Form 2 - Surrogate Recoveries

Project Name: L-5 to MF

Work Orders : 458453,

Project ID: (1RP-2184)

Lab Batch #: 908102

Sample: 634524-1-BLK / BLK

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 03/02/13 01:36

### SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	98.9	99.8	99	70-135	
o-Terphenyl	52.7	49.9	106	70-135	

Lab Batch #: 908204

Sample: 634606-1-BLK / BLK

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 03/04/13 09:35

### SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0292	0.0300	97	80-120	
4-Bromofluorobenzene	0.0302	0.0300	101	80-120	

Lab Batch #: 908636

Sample: 634866-1-BLK / BLK

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 03/08/13 15:06

### SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0305	0.0300	102	80-120	
4-Bromofluorobenzene	0.0287	0.0300	96	80-120	

Lab Batch #: 908102

Sample: 634524-1-BKS / BKS

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 03/02/13 00:47

### SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	89.3	99.7	90	70-135	
o-Terphenyl	51.5	49.9	103	70-135	

Lab Batch #: 908204

Sample: 634606-1-BKS / BKS

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 03/04/13 09:02

### SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0323	0.0300	108	80-120	
4-Bromofluorobenzene	0.0324	0.0300	108	80-120	

\* Surrogate outside of Laboratory QC limits

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

\*\*\* Poor recoveries due to dilution

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

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

## Form 2 - Surrogate Recoveries

Project Name: L-5 to MF

Work Orders : 458453,

Project ID: (1RP-2184)

Lab Batch #: 908636

Sample: 634866-1-BKS / BKS

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 03/08/13 14:33

### SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0318	0.0300	106	80-120	
4-Bromofluorobenzene	0.0301	0.0300	100	80-120	

Lab Batch #: 908102

Sample: 634524-1-BSD / BSD

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 03/02/13 01:12

### SURROGATE RECOVERY STUDY

TPH By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	94.9	99.9	95	70-135	
o-Terphenyl	55.0	50.0	110	70-135	

Lab Batch #: 908204

Sample: 634606-1-BSD / BSD

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 03/04/13 09:19

### SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0331	0.0300	110	80-120	
4-Bromofluorobenzene	0.0338	0.0300	113	80-120	

Lab Batch #: 908636

Sample: 634866-1-BSD / BSD

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 03/08/13 14:49

### SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0276	0.0300	92	80-120	
4-Bromofluorobenzene	0.0297	0.0300	99	80-120	

Lab Batch #: 908102

Sample: 458454-001 S / MS

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 03/02/13 10:35

### SURROGATE RECOVERY STUDY

TPH By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	93.7	99.7	94	70-135	
o-Terphenyl	53.9	49.9	108	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: L-5 to MF

Work Orders : 458453,

Project ID: (1RP-2184)

Lab Batch #: 908204

Sample: 458453-007 S / MS

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 03/04/13 12:02

### SURROGATE RECOVERY STUDY

BTEX by EPA 8021B  Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0310	0.0300	103	80-120	
4-Bromofluorobenzene	0.0306	0.0300	102	80-120	

Lab Batch #: 908636

Sample: 458452-004 S / MS

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 03/08/13 20:01

### SURROGATE RECOVERY STUDY

BTEX by EPA 8021B  Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0335	0.0300	112	80-120	
4-Bromofluorobenzene	0.0329	0.0300	110	80-120	

Lab Batch #: 908102

Sample: 458454-001 SD / MSD

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 03/02/13 11:01

### SURROGATE RECOVERY STUDY

TPH By SW8015 Mod  Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	94.2	99.9	94	70-135	
o-Terphenyl	55.2	50.0	110	70-135	

Lab Batch #: 908204

Sample: 458453-007 SD / MSD

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 03/04/13 12:19

### SURROGATE RECOVERY STUDY

BTEX by EPA 8021B  Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0335	0.0300	112	80-120	
4-Bromofluorobenzene	0.0344	0.0300	115	80-120	

Lab Batch #: 908636

Sample: 458452-004 SD / MSD

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 03/08/13 20:17

### SURROGATE RECOVERY STUDY

BTEX by EPA 8021B  Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0315	0.0300	105	80-120	
4-Bromofluorobenzene	0.0342	0.0300	114	80-120	

\* Surrogate outside of Laboratory QC limits

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

\*\*\* Poor recoveries due to dilution

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

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

**Project Name: L-5 to MF**

**Work Order #: 458453**

**Analyst: KEB**

**Date Prepared: 03/04/2013**

**Project ID: (1RP-2184)**

**Date Analyzed: 03/04/2013**

**Lab Batch ID: 908204**

**Sample: 634606-1-BKS**

**Batch #: 1**

**Matrix: Solid**

**Units: mg/kg**

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

<b>BTEX by EPA 8021B</b>	<b>Blank Sample Result [A]</b>	<b>Spike Added [B]</b>	<b>Blank Spike Result [C]</b>	<b>Blank Spike %R [D]</b>	<b>Spike Added [E]</b>	<b>Blank Spike Duplicate Result [F]</b>	<b>Blk. Spk Dup. %R [G]</b>	<b>RPD %</b>	<b>Control Limits %R</b>	<b>Control Limits %RPD</b>	<b>Flag</b>
<b>Analytes</b>											
Benzene	<0.00100	0.100	0.0892	89	0.0996	0.0950	95	6	70-130	35	
Toluene	<0.00200	0.100	0.0864	86	0.0996	0.0937	94	8	70-130	35	
Ethylbenzene	<0.00100	0.100	0.0880	88	0.0996	0.0969	97	10	71-129	35	
m_p-Xylenes	<0.00200	0.200	0.170	85	0.199	0.190	95	11	70-135	35	
o-Xylene	<0.00100	0.100	0.0888	89	0.0996	0.0924	93	4	71-133	35	

**Analyst: KEB**

**Date Prepared: 03/08/2013**

**Date Analyzed: 03/08/2013**

**Lab Batch ID: 908636**

**Sample: 634866-1-BKS**

**Batch #: 1**

**Matrix: Solid**

**Units: mg/kg**

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

<b>BTEX by EPA 8021B</b>	<b>Blank Sample Result [A]</b>	<b>Spike Added [B]</b>	<b>Blank Spike Result [C]</b>	<b>Blank Spike %R [D]</b>	<b>Spike Added [E]</b>	<b>Blank Spike Duplicate Result [F]</b>	<b>Blk. Spk Dup. %R [G]</b>	<b>RPD %</b>	<b>Control Limits %R</b>	<b>Control Limits %RPD</b>	<b>Flag</b>
<b>Analytes</b>											
Benzene	<0.00100	0.100	0.0812	81	0.0998	0.0812	81	0	70-130	35	
Toluene	<0.00201	0.100	0.0807	81	0.0998	0.0801	80	1	70-130	35	
Ethylbenzene	<0.00100	0.100	0.0779	78	0.0998	0.0786	79	1	71-129	35	
m_p-Xylenes	<0.00201	0.201	0.151	75	0.200	0.147	74	3	70-135	35	
o-Xylene	<0.00100	0.100	0.0778	78	0.0998	0.0777	78	0	71-133	35	

Relative Percent Difference RPD =  $200 * |(C-F)/(C+F)|$

Blank Spike Recovery [D] =  $100 * (C)/[B]$

Blank Spike Duplicate Recovery [G] =  $100 * (F)/[E]$

All results are based on MDL and Validated for QC Purposes

**Project Name: L-5 to MF**

**Work Order #: 458453**

**Analyst: AMB**

**Date Prepared: 03/06/2013**

**Project ID: (1RP-2184)**

**Date Analyzed: 03/06/2013**

**Lab Batch ID: 908358**

**Sample: 908358-1-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	<2.00	50.0	51.7	103	50.0	51.4	103	1	80-120	20	

**Analyst: AMB**

**Date Prepared: 03/06/2013**

**Date Analyzed: 03/06/2013**

**Lab Batch ID: 908387**

**Sample: 908387-1-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	<2.00	50.0	51.6	103	50.0	51.7	103	0	80-120	20	

**Analyst: KEB**

**Date Prepared: 03/01/2013**

**Date Analyzed: 03/02/2013**

**Lab Batch ID: 908102**

**Sample: 634524-1-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	997	1010	101	999	996	100	1	70-135	35	
C12-C28 Diesel Range Hydrocarbons	<15.0	997	1040	104	999	1040	104	0	70-135	35	

Relative Percent Difference RPD =  $200 * |(C-F)/(C+F)|$

Blank Spike Recovery [D] =  $100 * (C)/[B]$

Blank Spike Duplicate Recovery [G] =  $100 * (F)/[E]$

All results are based on MDL and Validated for QC Purposes

Project Name: L-5 to MF

Work Order #: 458453

Lab Batch #: 908358

Date Analyzed: 03/06/2013

QC- Sample ID: 458450-001 S

Reporting Units: mg/kg

Project ID: (IRP-2184)

Analyst: AMB

Date Prepared: 03/06/2013

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	94.3	250	356	105	80-120	

Lab Batch #: 908358

Date Analyzed: 03/06/2013

QC- Sample ID: 458452-002 S

Reporting Units: mg/kg

Date Prepared: 03/06/2013

Analyst: AMB

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	35.7	250	282	99	80-120	

Lab Batch #: 908387

Date Analyzed: 03/06/2013

QC- Sample ID: 458453-005 S

Reporting Units: mg/kg

Date Prepared: 03/06/2013

Analyst: AMB

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	15.1	100	122	107	80-120	

Lab Batch #: 908387

Date Analyzed: 03/06/2013

QC- Sample ID: 458532-001 S

Reporting Units: mg/kg

Date Prepared: 03/06/2013

Analyst: AMB

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	1990	1000	2880	89	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: L-5 to MF

Work Order #: 458453

Project ID: (IRP-2184)

Lab Batch ID: 908204

QC- Sample ID: 458453-007 S

Batch #: 1 Matrix: Soil

Date Analyzed: 03/04/2013

Date Prepared: 03/04/2013

Analyst: KEB

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY											
BTEX by EPA 8021B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00107	0.107	0.0988	92	0.107	0.0921	86	7	70-130	35	
Toluene	<0.00214	0.107	0.0980	92	0.107	0.0912	85	7	70-130	35	
Ethylbenzene	<0.00107	0.107	0.0973	91	0.107	0.0849	79	14	71-129	35	
m_p-Xylenes	<0.00214	0.214	0.187	87	0.214	0.164	77	13	70-135	35	
o-Xylene	<0.00107	0.107	0.0939	88	0.107	0.0835	78	12	71-133	35	

Lab Batch ID: 908636

QC- Sample ID: 458452-004 S

Batch #: 1 Matrix: Soil

Date Analyzed: 03/08/2013

Date Prepared: 03/08/2013

Analyst: KEB

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY											
BTEX by EPA 8021B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00110	0.110	0.0885	80	0.110	0.0866	79	2	70-130	35	
Toluene	<0.00221	0.110	0.0838	76	0.110	0.0782	71	7	70-130	35	
Ethylbenzene	<0.00110	0.110	0.0864	79	0.110	0.0764	69	12	71-129	35	X
m_p-Xylenes	<0.00221	0.221	0.155	70	0.220	0.140	64	10	70-135	35	X
o-Xylene	<0.00110	0.110	0.0789	72	0.110	0.0738	67	7	71-133	35	X

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

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

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

ApplicableN = See Narrative, EQL = Estimated Quantitation Limit



# Form 3 - MS / MSD Recoveries



Project Name: L-5 to MF

Work Order # : 458453

Project ID: (IRP-2184)

Lab Batch ID: 908102

QC- Sample ID: 458454-001 S

Batch #: 1 Matrix: Soil

Date Analyzed: 03/02/2013

Date Prepared: 03/01/2013

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	<15.9	1060	1060	100	1060	1070	101	1	70-135	35	
C12-C28 Diesel Range Hydrocarbons	45.5	1060	1140	103	1060	1150	104	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: L-5 to MF**

**Work Order #: 458453**

**Lab Batch #: 908071**

**Project ID: (1RP-2184)**

**Date Analyzed: 03/01/2013 13:45**

**Date Prepared: 03/01/2013**

**Analyst: WRU**

**QC- Sample ID: 458450-001 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	16.1	16.0	1	20	

**Lab Batch #: 908175**

**Date Analyzed: 03/04/2013 13:00**

**Date Prepared: 03/04/2013**

**Analyst: WRU**

**QC- Sample ID: 458432-001 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	24.0	24.1	0	20	

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

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

BRL - Below Reporting Limit

# 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: L-5 to MF

Company Name: Basin Environmental Service Technologies, LLC

Project #: (1RP-2184)

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, cyndi.inskeep@sug.com, rose.slade@sug.com

(lab use only)  
ORDER #: 458453

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																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
LAB # (lab use only)									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	TPH: 418.1 8015B 8015M TX 1006	TPH: TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO <sub>4</sub> , Alkalinity)	SAR / ESP / OEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M.	CHLORIDES	Total Dissolved Solids																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
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Special Instructions: Hold For BTEX

### Laboratory Comments:

Sample Containers Intact?	<u>Y</u>	<u>N</u>
VOCs Free of Headspace?	<u>Y</u>	<u>NA</u>
Labels on container(s)	<u>Y</u>	<u>N</u>
Custody seals on container(s)	<u>Y</u>	<u>N</u>
Custody seals on cooler(s)	<u>Y</u>	<u>N</u>
Sample Hand Delivered	<u>Y</u>	<u>N</u>
by Sampler/Client Rep.?	<u>Y</u>	<u>N</u>
by Courier?	<u>Y</u>	<u>N</u>
UPS	<u>Y</u>	<u>N</u>
DHL	<u>Y</u>	<u>N</u>
FedEx	<u>Y</u>	<u>N</u>
Lone Star	<u>Y</u>	<u>N</u>
Temperature Upon Receipt:	<u>3.9</u>	<u>10.0</u>

Relinquished by:	Date	Time	Received by:	Date	Time
<u>Joel Lowry</u>	<u>2-27-13</u>	<u>06:45</u>	<u>Paul Ramsey</u>	<u>2-27-13</u>	<u>06:45</u>
Relinquished by:	Date	Time	Received by:	Date	Time
<u>Paul Ramsey</u>	<u>2-27-13</u>	<u>10:10</u>	<u>JB</u>	<u>2-27-13</u>	<u>10:20</u>
Relinquished by:	Date	Time	Received by Xenco:	Date	Time
			<u>Maureen Smith</u>	<u>2/28/13</u>	<u>13:16</u>





## Prelogin/Nonconformance Report- Sample Log-In

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

**Date/ Time Received:** 02/27/2013 10:20:00 AM

**Work Order #:** 458453

**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)?	1.5
#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 463105**  
**for**  
**Southern Union Gas Services- Monahans**

**Project Manager: Joel Lowry**

**L-5 to MF**

**20-MAY-13**

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)



20-MAY-13

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

Reference: XENCO Report No(s): **463105**  
**L-5 to MF**  
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(s) 463105. 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. 463105 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.*

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## Sample Cross Reference 463105



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

L-5 to MF

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW-1	W	05-09-13 12:00		463105-001



## CASE NARRATIVE



*Client Name: Southern Union Gas Services- Monahans*

*Project Name: L-5 to MF*

Project ID:

Work Order Number(s): 463105

Report Date: 20-MAY-13

Date Received: 05/13/2013

---

**Sample receipt non conformances and comments:**

---

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

None

# Certificate of Analysis Summary 463105

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



**Project Id:**  
**Contact:** Joel Lowry  
**Project Location:** Lea County, NM

**Project Name:** L-5 to MF

**Date Received in Lab:** Mon May-13-13 02:50 pm

**Report Date:** 20-MAY-13

**Project Manager:** Kelsey Brooks

<i>Analysis Requested</i>	<b>Lab Id:</b> 463105-001 <b>Field Id:</b> MW-1 <b>Depth:</b> <b>Matrix:</b> WATER <b>Sampled:</b> May-09-13 12:00					
<b>BTEX by EPA 8021B</b>	<b>Extracted:</b> May-15-13 14:00 <b>Analyzed:</b> May-16-13 03:50 <b>Units/RL:</b> mg/L RL					
Benzene	ND 0.00100					
Toluene	ND 0.00200					
Ethylbenzene	ND 0.00100					
m_p-Xylenes	ND 0.00200					
o-Xylene	ND 0.00100					
Total Xylenes	ND 0.00100					
Total BTEX	ND 0.00100					
<b>Inorganic Anions by EPA 300/300.1</b>	<b>Extracted:</b> May-16-13 10:00 <b>Analyzed:</b> May-17-13 00:17 <b>Units/RL:</b> mg/L RL					
Chloride	123 5.00					

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

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Kelsey Brooks  
Project Manager

- 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

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*Certified and approved by numerous States and Agencies.*

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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: L-5 to MF

Work Orders : 463105, 463105

Project ID:

Lab Batch #: 913832

Sample: 463105-001 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 05/16/13 03:50

### SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0282	0.0300	94	80-120	
4-Bromofluorobenzene	0.0295	0.0300	98	80-120	

Lab Batch #: 913832

Sample: 638135-1-BLK / BLK

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 05/15/13 23:44

### SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0263	0.0300	88	80-120	
4-Bromofluorobenzene	0.0289	0.0300	96	80-120	

Lab Batch #: 913832

Sample: 638135-1-BKS / BKS

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 05/15/13 23:11

### SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0335	0.0300	112	80-120	
4-Bromofluorobenzene	0.0311	0.0300	104	80-120	

Lab Batch #: 913832

Sample: 638135-1-BSD / BSD

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 05/16/13 09:45

### SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0260	0.0300	87	80-120	
4-Bromofluorobenzene	0.0266	0.0300	89	80-120	

Lab Batch #: 913832

Sample: 462995-001 S / MS

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 05/16/13 00:00

### SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0250	0.0300	83	80-120	
4-Bromofluorobenzene	0.0336	0.0300	112	80-120	

\* Surrogate outside of Laboratory QC limits

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

\*\*\* Poor recoveries due to dilution

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

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





## Form 2 - Surrogate Recoveries

Project Name: L-5 to MF

Work Orders : 463105, 463105

Project ID:

Lab Batch #: 913832

Sample: 462995-001 SD / MSD

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 05/16/13 00:16

### SURROGATE RECOVERY STUDY

BTEX by EPA 8021B  Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0282	0.0300	94	80-120	
4-Bromofluorobenzene	0.0254	0.0300	85	80-120	

\* Surrogate outside of Laboratory QC limits

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

\*\*\* Poor recoveries due to dilution

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

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

**Project Name: L-5 to MF**

**Work Order #: 463105, 463105**

**Analyst: DYV**

**Date Prepared: 05/15/2013**

**Project ID:**

**Date Analyzed: 05/15/2013**

**Lab Batch ID: 913832**

**Sample: 638135-1-BKS**

**Batch #: 1**

**Matrix: Water**

**Units: mg/L**

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

<b>BTEX by EPA 8021B</b>	<b>Blank Sample Result [A]</b>	<b>Spike Added [B]</b>	<b>Blank Spike Result [C]</b>	<b>Blank Spike %R [D]</b>	<b>Spike Added [E]</b>	<b>Blank Spike Duplicate Result [F]</b>	<b>Blk. Spk Dup. %R [G]</b>	<b>RPD %</b>	<b>Control Limits %R</b>	<b>Control Limits %RPD</b>	<b>Flag</b>
<b>Analytes</b>											
Benzene	<0.00100	0.100	0.102	102	0.100	0.0860	86	17	70-125	25	
Toluene	<0.00200	0.100	0.106	106	0.100	0.0962	96	10	70-125	25	
Ethylbenzene	<0.00100	0.100	0.106	106	0.100	0.110	110	4	71-129	25	
m_p-Xylenes	<0.00200	0.200	0.195	98	0.200	0.204	102	5	70-131	25	
o-Xylene	<0.00100	0.100	0.102	102	0.100	0.0981	98	4	71-133	25	

**Analyst: AMB**

**Date Prepared: 05/16/2013**

**Date Analyzed: 05/16/2013**

**Lab Batch ID: 914057**

**Sample: 638301-1-BKS**

**Batch #: 1**

**Matrix: Water**

**Units: mg/L**

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

<b>Inorganic Anions by EPA 300/300.1</b>	<b>Blank Sample Result [A]</b>	<b>Spike Added [B]</b>	<b>Blank Spike Result [C]</b>	<b>Blank Spike %R [D]</b>	<b>Spike Added [E]</b>	<b>Blank Spike Duplicate Result [F]</b>	<b>Blk. Spk Dup. %R [G]</b>	<b>RPD %</b>	<b>Control Limits %R</b>	<b>Control Limits %RPD</b>	<b>Flag</b>
<b>Analytes</b>											
Chloride	<1.00	25.0	25.5	102	25.0	25.4	102	0	90-110	20	

Relative Percent Difference RPD =  $200 * |(C-F)/(C+F)|$

Blank Spike Recovery [D] =  $100 * (C)/[B]$

Blank Spike Duplicate Recovery [G] =  $100 * (F)/[E]$

All results are based on MDL and Validated for QC Purposes



## Form 3 - MS Recoveries



Project Name: L-5 to MF

Work Order #: 463105

Lab Batch #: 914057

Date Analyzed: 05/17/2013

QC- Sample ID: 463105-001 S

Reporting Units: mg/L

Date Prepared: 05/16/2013

Batch #: 1

Project ID:

Analyst: AMB

Matrix: Water

### 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	123	125	243	96	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: L-5 to MF

Work Order # : 463105

Project ID:

Lab Batch ID: 913832

QC- Sample ID: 462995-001 S

Batch #: 1 Matrix: Water

Date Analyzed: 05/16/2013

Date Prepared: 05/15/2013

Analyst: DYV

Reporting Units: mg/L

## MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00100	0.100	0.0899	90	0.100	0.0882	88	2	70-125	25	
Toluene	<0.00200	0.100	0.0897	90	0.100	0.0817	82	9	70-125	25	
Ethylbenzene	<0.00100	0.100	0.0992	99	0.100	0.0924	92	7	71-129	25	
m_p-Xylenes	<0.00200	0.200	0.185	93	0.200	0.168	84	10	70-131	25	
o-Xylene	<0.00100	0.100	0.0930	93	0.100	0.0893	89	4	71-133	25	

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 Applicable  
N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.





# XENCO Laboratories



## Prelogin/Nonconformance Report- Sample Log-In

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

**Date/ Time Received:** 05/13/2013 02:50:00 PM

**Work Order #:** 463105

**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)?	3
#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:**

Kelsey Brooks  
Kelsey Brooks

Date: 05/14/2013

**Checklist reviewed by:**

Kelsey Brooks  
Kelsey Brooks

Date: 05/14/2013

# Analytical Report 469766

for  
**Regency Gas**

**Project Manager: Joel Lowry**

**L-5 to MF Historical**

**09-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)





09-SEP-13

Project Manager: **Joel Lowry**

**Regency Gas**

801 South Loop 464

Monahans, TX 79756

Reference: XENCO Report No(s): **469766**

**L-5 to MF Historical**

Project Address: Lea County, 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) 469766. 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. 469766 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

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## Sample Cross Reference 469766



### Regency Gas, Monahans, TX

L-5 to MF Historical

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW-1	W	09-03-13 14:30		469766-001



## CASE NARRATIVE



*Client Name: Regency Gas*  
*Project Name: L-5 to MF Historical*

Project ID:  
Work Order Number(s): 469766

Report Date: 09-SEP-13  
Date Received: 09/04/2013

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**Sample receipt non conformances and comments:**

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

None



# Certificate of Analysis Summary 469766

Regency Gas, Monahans, TX

Project Name: L-5 to MF Historical



Project Id:

Contact: Joel Lowry

Project Location: Lea County, New Mexico

Draft

Date Received in Lab: Wed Sep-04-13 08:52 am

Report Date: 09-SEP-13

Project Manager: Kelsey Brooks

<b>Analysis Requested</b>	<b>Lab Id:</b> 469766-001 <b>Field Id:</b> MW-1 <b>Depth:</b> <b>Matrix:</b> WATER <b>Sampled:</b> Sep-03-13 14:30					
<b>BTEX by SW 8260B SUB: TX104704215</b>	<b>Extracted:</b> Sep-07-13 14:38 <b>Analyzed:</b> Sep-07-13 18:41 <b>Units/RL:</b> mg/L RL					
Benzene	ND 0.00100					
Toluene	ND 0.00100					
Ethylbenzene	ND 0.00100					
m,p-Xylenes	ND 0.00200					
o-Xylene	ND 0.00100					
Total Xylenes	ND 0.00100					
Total BTEX	ND 0.00100					
<b>Inorganic Anions by EPA 300/300.1 SUB: TX104704215</b>	<b>Extracted:</b> Sep-06-13 12:00 <b>Analyzed:</b> Sep-07-13 03:57 <b>Units/RL:</b> mg/L RL					
Chloride	96.4 10.0					

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.

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Kelsey Brooks  
Project Manager

- 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

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 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: L-5 to MF Historical

Work Orders : 469766,

Project ID:

Lab Batch #: 922281

Sample: 469766-001 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 09/07/13 18:41

### SURROGATE RECOVERY STUDY

BTEX by SW 8260B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Dibromofluoromethane	0.0523	0.0500	105	75-131	
1,2-Dichloroethane-D4	0.0523	0.0500	105	63-144	
Toluene-D8	0.0522	0.0500	104	80-117	
4-Bromofluorobenzene	0.0483	0.0500	97	74-124	

Lab Batch #: 922281

Sample: 643565-1-BLK / BLK

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 09/07/13 14:50

### SURROGATE RECOVERY STUDY

BTEX by SW 8260B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Dibromofluoromethane	0.0475	0.0500	95	75-131	
1,2-Dichloroethane-D4	0.0503	0.0500	101	63-144	
Toluene-D8	0.0493	0.0500	99	80-117	
4-Bromofluorobenzene	0.0521	0.0500	104	74-124	

Lab Batch #: 922281

Sample: 643565-1-BKS / BKS

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 09/07/13 13:58

### SURROGATE RECOVERY STUDY

BTEX by SW 8260B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Dibromofluoromethane	0.0516	0.0500	103	75-131	
1,2-Dichloroethane-D4	0.0521	0.0500	104	63-144	
Toluene-D8	0.0499	0.0500	100	80-117	
4-Bromofluorobenzene	0.0508	0.0500	102	74-124	

Lab Batch #: 922281

Sample: 469599-001 S / MS

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 09/07/13 15:43

### SURROGATE RECOVERY STUDY

BTEX by SW 8260B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Dibromofluoromethane	0.0482	0.0500	96	75-131	
1,2-Dichloroethane-D4	0.0485	0.0500	97	63-144	
Toluene-D8	0.0514	0.0500	103	80-117	
4-Bromofluorobenzene	0.0509	0.0500	102	74-124	

\* 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: L-5 to MF Historical

Work Orders : 469766,

Lab Batch #: 922281

Sample: 469599-001 SD / MSD

Project ID:

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 09/07/13 16:09

### SURROGATE RECOVERY STUDY

BTEX by SW 8260B  Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Dibromofluoromethane	0.0508	0.0500	102	75-131	
1,2-Dichloroethane-D4	0.0510	0.0500	102	63-144	
Toluene-D8	0.0514	0.0500	103	80-117	
4-Bromofluorobenzene	0.0493	0.0500	99	74-124	

\* 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: L-5 to MF Historical**

**Work Order #: 469766**

**Project ID:**

**Lab Batch #: 922281**

**Sample: 643565-1-BKS**

**Matrix: Water**

**Date Analyzed: 09/07/2013**

**Date Prepared: 09/07/2013**

**Analyst: SAD**

**Reporting Units: mg/L**

**Batch #: 1**

## BLANK /BLANK SPIKE RECOVERY STUDY

<b>BTEX by SW 8260B</b>	<b>Blank Result [A]</b>	<b>Spike Added [B]</b>	<b>Blank Spike Result [C]</b>	<b>Blank Spike %R [D]</b>	<b>Control Limits %R</b>	<b>Flags</b>
<b>Analytes</b>						
Benzene	<0.00100	0.100	0.0944	94	66-142	
Toluene	<0.00100	0.100	0.0933	93	59-139	
Ethylbenzene	<0.00100	0.100	0.101	101	75-125	
m,p-Xylenes	<0.00200	0.200	0.204	102	75-125	
o-Xylene	<0.00100	0.100	0.0969	97	75-125	

**Lab Batch #: 922267**

**Sample: 643517-1-BKS**

**Matrix: Water**

**Date Analyzed: 09/06/2013**

**Date Prepared: 09/06/2013**

**Analyst: RKO**

**Reporting Units: mg/L**

**Batch #: 1**

## BLANK /BLANK SPIKE RECOVERY STUDY

<b>Inorganic Anions by EPA 300/300.1</b>	<b>Blank Result [A]</b>	<b>Spike Added [B]</b>	<b>Blank Spike Result [C]</b>	<b>Blank Spike %R [D]</b>	<b>Control Limits %R</b>	<b>Flags</b>
<b>Analytes</b>						
Chloride	<1.00	100	96.4	96	90-110	

Blank Spike Recovery [D] =  $100 * [C] / [B]$

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

BRL - Below Reporting Limit



# Form 3 - MS / MSD Recoveries



Project Name: L-5 to MF Historical

Work Order # : 469766

Project ID:

Lab Batch ID: 922281

QC- Sample ID: 469599-001 S

Batch #: 1 Matrix: Water

Date Analyzed: 09/07/2013

Date Prepared: 09/07/2013

Analyst: SAD

Reporting Units: mg/L

## MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

BTEX by SW 8260B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00100	0.100	0.0930	93	0.100	0.101	101	8	66-142	20	
Toluene	<0.00100	0.100	0.0892	89	0.100	0.0989	99	10	59-139	20	
Ethylbenzene	<0.00100	0.100	0.0977	98	0.100	0.108	108	10	75-125	20	
m,p-Xylenes	<0.00200	0.200	0.199	100	0.200	0.215	108	8	75-125	20	
o-Xylene	<0.00100	0.100	0.0969	97	0.100	0.110	110	13	75-125	20	

Lab Batch ID: 922267

QC- Sample ID: 469750-001 S

Batch #: 1 Matrix: Water

Date Analyzed: 09/06/2013

Date Prepared: 09/06/2013

Analyst: RKO

Reporting Units: mg/L

## MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1 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
Chloride	101	1000	1070	97	1000	1080	98	1	80-120	20	

Lab Batch ID: 922267

QC- Sample ID: 469763-003 S

Batch #: 1 Matrix: Water

Date Analyzed: 09/07/2013

Date Prepared: 09/06/2013

Analyst: RKO

Reporting Units: mg/L

## MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1 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
Chloride	191	1000	1190	100	1000	1190	100	0	80-120	20	

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

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

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable  
N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.



**CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST**

12600 West I-20 East  
Odessa, Texas 79765

Phone: 432-563-18000  
Fax: 432-563-17133

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

RUSH TAT (Pre-Schedule)

DHL Fedex Lone Star

ript: 12

Draft 1.000



# XENCO Laboratories

## Prelogin/Nonconformance Report- Sample Log-In



Client: Regency Gas

Date/ Time Received: 09/04/2013 08:52:00 AM

Work Order #: 469766

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)?	12.2
#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?	Yes
#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?	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: 09/05/2013

Checklist reviewed by:

*Kelsey Brooks*

Kelsey Brooks

Date: 09/05/2013

# Analytical Report 477213

for  
**Regency Gas**

**Project Manager: Rachel Johnson**

**L-5 to MF**

**15-JAN-14**

Collected By: Client



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

Xenco-Houston (EPA Lab code: TX00122):

Texas (T104704215-13-15-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)



15-JAN-14

Project Manager: **Rachel Johnson**

**Regency Gas**

801 South Loop 464

Monahans, TX 79756

Reference: XENCO Report No(s): **477213**

**L-5 to MF**

Project Address: NM

**Rachel Johnson:**

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) 477213. 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. 477213 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

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## Sample Cross Reference 477213



### Regency Gas, Monahans, TX

L-5 to MF

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW-1	W	01-09-14 10:48		477213-001
MW-1	W	01-09-14 10:49		477213-002



## CASE NARRATIVE



*Client Name: Regency Gas*

*Project Name: L-5 to MF*

Project ID:

Work Order Number(s): 477213

Report Date: 15-JAN-14

Date Received: 01/09/2014

---

**Sample receipt non conformances and comments:**

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

None

**Project Id:**

**Contact:** Rachel Johnson

**Project Location:** NM

**Date Received in Lab:** Thu Jan-09-14 03:20 pm

**Report Date:** 15-JAN-14

**Project Manager:** Kelsey Brooks

<b>Analysis Requested</b>	<b>Lab Id:</b> 477213-001 <b>Field Id:</b> MW-1 <b>Depth:</b> <b>Matrix:</b> WATER <b>Sampled:</b> Jan-09-14 10:48	477213-002 MW-1  WATER Jan-09-14 10:49				
<b>BTEX by EPA 8021B</b>	<b>Extracted:</b> Jan-13-14 11:00 <b>Analyzed:</b> Jan-13-14 17:13 <b>Units/RL:</b> mg/L RL					
Benzene	0.0258	0.00100				
Toluene	ND	0.00200				
Ethylbenzene	0.00344	0.00100				
m_p-Xylenes	0.00444	0.00200				
o-Xylene	ND	0.00100				
Total Xylenes	0.00444	0.00100				
Total BTEX	0.0337	0.00100				
<b>Inorganic Anions by EPA 300/300.1</b>	<b>Extracted:</b> <b>Analyzed:</b> <b>Units/RL:</b>		Jan-13-14 16:02 Jan-13-14 16:02 mg/L RL			
Chloride			103 5.00			
<b>TPH By SW8015 Mod SUB: TX104704215</b>	<b>Extracted:</b> Jan-13-14 10:56 <b>Analyzed:</b> Jan-13-14 13:18 <b>Units/RL:</b> mg/L RL					
C6-C12 Gasoline Range Hydrocarbons	ND	1.37				
C12-C28 Diesel Range Hydrocarbons	ND	1.37				
C28-C35 Oil Range Hydrocarbons	ND	1.37				
Total TPH	ND	1.37				

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

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Kelsey Brooks  
Project Manager

- 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

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 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: L-5 to MF

Work Orders : 477213,

Lab Batch #: 931858

Sample: 477213-001 / SMP

Project ID:

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 01/13/14 13:18

## SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	7.57	9.14	83	70-135	
o-Terphenyl	5.21	4.57	114	70-135	

Lab Batch #: 931889

Sample: 477213-001 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 01/13/14 17:13

## SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0255	0.0300	85	80-120	
4-Bromofluorobenzene	0.0284	0.0300	95	80-120	

Lab Batch #: 931858

Sample: 649637-1-BLK / BLK

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 01/13/14 12:08

## SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	8.09	10.0	81	70-135	
o-Terphenyl	5.56	5.00	111	70-135	

Lab Batch #: 931889

Sample: 649640-1-BLK / BLK

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 01/13/14 16:57

## SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0256	0.0300	85	80-120	
4-Bromofluorobenzene	0.0257	0.0300	86	80-120	

Lab Batch #: 931858

Sample: 649637-1-BKS / BKS

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 01/13/14 12:33

## SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	9.39	10.0	94	70-135	
o-Terphenyl	5.03	5.00	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.



## Form 2 - Surrogate Recoveries

Project Name: L-5 to MF

Work Orders : 477213,

Lab Batch #: 931889

Sample: 649640-1-BKS / BKS

Project ID:

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 01/13/14 15:37

### SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0299	0.0300	100	80-120	
4-Bromofluorobenzene	0.0303	0.0300	101	80-120	

Lab Batch #: 931858

Sample: 649637-1-BSD / BSD

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 01/13/14 12:56

### SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	9.58	10.0	96	70-135	
o-Terphenyl	4.95	5.00	99	70-135	

Lab Batch #: 931889

Sample: 477213-001 S / MS

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 01/13/14 16:09

### SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0292	0.0300	97	80-120	
4-Bromofluorobenzene	0.0294	0.0300	98	80-120	

Lab Batch #: 931889

Sample: 477213-001 SD / MSD

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 01/13/14 16:25

### SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0296	0.0300	99	80-120	
4-Bromofluorobenzene	0.0289	0.0300	96	80-120	

\* Surrogate outside of Laboratory QC limits

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

\*\*\* Poor recoveries due to dilution

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

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



# Blank Spike Recovery

Project Name: L-5 to MF



Work Order #: 477213

Project ID:

Lab Batch #: 931889

Sample: 649640-1-BKS

Matrix: Water

Date Analyzed: 01/13/2014

Date Prepared: 01/13/2014

Analyst: JUM

Reporting Units: mg/L

Batch #: 1

## BLANK /BLANK SPIKE RECOVERY STUDY

BTEX by EPA 8021B		Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
Analytes							
Benzene		<0.00100	0.100	0.0905	91	70-125	
Toluene		<0.00200	0.100	0.0882	88	70-125	
Ethylbenzene		<0.00100	0.100	0.0910	91	71-129	
m_p-Xylenes		<0.00200	0.200	0.188	94	70-131	
o-Xylene		<0.00100	0.100	0.0948	95	71-133	

Blank Spike Recovery [D] =  $100 * [C] / [B]$

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

BRL - Below Reporting Limit



# BS / BSD Recoveries



**Project Name: L-5 to MF**

**Work Order #: 477213**

**Project ID:**

**Analyst: AMB**

**Date Prepared: 01/13/2014**

**Date Analyzed: 01/13/2014**

**Lab Batch ID: 931977**

**Sample: 649635-1-BKS**

**Batch #: 1**

**Matrix: Water**

**Units: mg/L**

## 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	25.0	22.9	92	25.0	23.1	92	1	90-110	20	

**Analyst: FOV**

**Date Prepared: 01/13/2014**

**Date Analyzed: 01/13/2014**

**Lab Batch ID: 931858**

**Sample: 649637-1-BKS**

**Batch #: 1**

**Matrix: Water**

**Units: mg/L**

## 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	<1.50	100	108	108	100	119	119	10	70-135	25	
C12-C28 Diesel Range Hydrocarbons	<1.50	100	83.4	83	100	88.9	89	6	70-135	25	

Relative Percent Difference RPD =  $200 * |(C-F)/(C+F)|$

Blank Spike Recovery [D] =  $100 * (C)/[B]$

Blank Spike Duplicate Recovery [G] =  $100 * (F)/[E]$

All results are based on MDL and Validated for QC Purposes



# Form 3 - MS Recoveries

Project Name: L-5 to MF



Work Order #: 477213

Lab Batch #: 931977

Date Analyzed: 01/13/2014

QC- Sample ID: 477208-001 S

Reporting Units: mg/L

Date Prepared: 01/13/2014

Batch #: 1

Project ID:

Analyst: AMB

Matrix: Water

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	60.6	125	183	98	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: L-5 to MF

Work Order # : 477213

Project ID:

Lab Batch ID: 931889

QC- Sample ID: 477213-001 S

Batch #: 1 Matrix: Water

Date Analyzed: 01/13/2014

Date Prepared: 01/13/2014

Analyst: JUM

Reporting Units: mg/L

## MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	0.0258	0.100	0.112	86	0.100	0.115	89	3	70-125	25	
Toluene	<0.00200	0.100	0.0912	91	0.100	0.0925	93	1	70-125	25	
Ethylbenzene	0.00344	0.100	0.0989	95	0.100	0.0998	96	1	71-129	25	
m_p-Xylenes	0.00444	0.200	0.201	98	0.200	0.203	99	1	70-131	25	
o-Xylene	<0.00100	0.100	0.0991	99	0.100	0.0997	100	1	71-133	25	

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 Applicable  
N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.

### Chain of Custody Form

LAB  
XencoFinal 1.000





# XENCO Laboratories

## Prelogin/Nonconformance Report- Sample Log-In



Client: Regency Gas

Date/ Time Received: 01/09/2014 03:20:00 PM

Work Order #: 477213

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)?	7.3
#2 *Shipping container in good condition?	N/A
#3 *Samples received on ice?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	N/A
#5 Custody Seals intact on sample bottles?	N/A
#6 *Custody Seals Signed and dated?	N/A
#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?	N/A

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

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

Checklist completed by: Kelsey Brooks  
Kelsey Brooks

Date: 01/10/2014

Checklist reviewed by: Kelsey Brooks  
Kelsey Brooks

Date: 01/10/2014



# Analytical Report 480359

## for Regency Gas

**Project Manager: Joel Lowry**  
**L5 to MF Historical SUG 0009**

**06-MAR-14**

Collected By: Client



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

Xenco-Houston (EPA Lab code: TX00122):  
Texas (T104704215-14-16-TX), Arizona (AZ0765), Florida (E871002), Louisiana (03054)  
New Jersey (TX007), North Carolina(681), Oklahoma (9218), Pennsylvania (68-03610)

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-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)



06-MAR-14

Project Manager: **Joel Lowry**

**Regency Gas**

801 South Loop 464

Monahans, TX 79756

Reference: XENCO Report No(s): **480359**

**L5 to MF Historical SUG 0009**

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(s) 480359. 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. 480359 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.***

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## Sample Cross Reference 480359



### Regency Gas, Monahans, TX

L5 to MF Historical SUG 0009

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW-1	W	02-28-14 11:00		480359-001



## CASE NARRATIVE



***Client Name: Regency Gas***

***Project Name: L5 to MF Historical SUG 0009***

Project ID:

Work Order Number(s): 480359

Report Date: 06-MAR-14

Date Received: 02/28/2014

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**Sample receipt non conformances and comments:**

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

None



# Certificate of Analysis Summary 480359

Regency Gas, Monahans, TX



Project Id:

Contact: Joel Lowry

Project Name: L5 to MF Historical SUG 0009

Date Received in Lab: Fri Feb-28-14 03:40 pm

Report Date: 06-MAR-14

Project Location: Lea County, NM

Project Manager: Kelsey Brooks

<b>Analysis Requested</b>	<b>Lab Id:</b>	480359-001					
	<b>Field Id:</b>	MW-1					
	<b>Depth:</b>						
	<b>Matrix:</b>	WATER					
	<b>Sampled:</b>	Feb-28-14 11:00					
<b>BTEX by EPA 8021B</b>	<b>Extracted:</b>	Mar-03-14 15:00					
	<b>Analyzed:</b>	Mar-04-14 13:49					
	<b>Units/RL:</b>	mg/L RL					
Benzene		ND 0.00100					
Toluene		ND 0.00200					
Ethylbenzene		ND 0.00100					
m,p-Xylenes		ND 0.00200					
o-Xylene		ND 0.00100					
Total Xylenes		ND 0.00100					
Total BTEX		ND 0.00100					
<b>Inorganic Anions by EPA 300/300.1</b>	<b>Extracted:</b>	Mar-04-14 02:19					
	<b>Analyzed:</b>	Mar-04-14 02:19					
	<b>Units/RL:</b>	mg/L RL					
Chloride		117 10.0					

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

Kelsey Brooks  
Project Manager

- 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

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 2505 North Falkenburg Rd, Tampa, FL 33619  
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(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: L5 to MF Historical SUG 0009

Work Orders : 480359,

Lab Batch #: 935419

Sample: 480359-001 / SMP

Project ID:

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 03/04/14 13:49

## SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0274	0.0300	91	80-120	
4-Bromofluorobenzene	0.0268	0.0300	89	80-120	

Lab Batch #: 935419

Sample: 651907-1-BLK / BLK

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 03/04/14 08:44

## SURROGATE RECOVERY STUDY

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

Lab Batch #: 935419

Sample: 651907-1-BKS / BKS

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 03/04/14 09:00

## SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0308	0.0300	103	80-120	
4-Bromofluorobenzene	0.0321	0.0300	107	80-120	

Lab Batch #: 935419

Sample: 651907-1-BSD / BSD

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 03/04/14 09:16

## SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0301	0.0300	100	80-120	
4-Bromofluorobenzene	0.0317	0.0300	106	80-120	

Lab Batch #: 935419

Sample: 480361-002 S / MS

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 03/04/14 09:32

## SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0301	0.0300	100	80-120	
4-Bromofluorobenzene	0.0320	0.0300	107	80-120	

\* Surrogate outside of Laboratory QC limits

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

\*\*\* Poor recoveries due to dilution

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

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



# Form 2 - Surrogate Recoveries

Project Name: L5 to MF Historical SUG 0009

Work Orders : 480359,

Lab Batch #: 935419

Sample: 480361-002 SD / MSD

Project ID:

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 03/04/14 09:48

## SURROGATE RECOVERY STUDY

BTEX by EPA 8021B  Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0301	0.0300	100	80-120	
4-Bromofluorobenzene	0.0318	0.0300	106	80-120	

\* Surrogate outside of Laboratory QC limits

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

\*\*\* Poor recoveries due to dilution

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

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



**Project Name: L5 to MF Historical SUG 0009**

**Work Order #: 480359**

**Project ID:**

**Analyst: ARM**

**Date Prepared: 03/03/2014**

**Date Analyzed: 03/04/2014**

**Lab Batch ID: 935419**

**Sample: 651907-1-BKS**

**Batch #: 1**

**Matrix: Water**

**Units: mg/L**

**BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY**

<b>BTEX by EPA 8021B</b>	<b>Blank Sample Result [A]</b>	<b>Spike Added [B]</b>	<b>Blank Spike Result [C]</b>	<b>Blank Spike %R [D]</b>	<b>Spike Added [E]</b>	<b>Blank Spike Duplicate Result [F]</b>	<b>Blk. Spk Dup. %R [G]</b>	<b>RPD %</b>	<b>Control Limits %R</b>	<b>Control Limits %RPD</b>	<b>Flag</b>
<b>Analytes</b>											
Benzene	<0.00100	0.100	0.103	103	0.100	0.0987	99	4	70-125	25	
Toluene	<0.00200	0.100	0.101	101	0.100	0.0971	97	4	70-125	25	
Ethylbenzene	<0.00100	0.100	0.106	106	0.100	0.102	102	4	71-129	25	
m,p-Xylenes	<0.00200	0.200	0.218	109	0.200	0.212	106	3	70-131	25	
o-Xylene	<0.00100	0.100	0.111	111	0.100	0.108	108	3	71-133	25	

**Analyst: AMB**

**Date Prepared: 03/03/2014**

**Date Analyzed: 03/03/2014**

**Lab Batch ID: 935550**

**Sample: 651848-1-BKS**

**Batch #: 1**

**Matrix: Water**

**Units: mg/L**

**BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY**

<b>Inorganic Anions by EPA 300/300.1</b>	<b>Blank Sample Result [A]</b>	<b>Spike Added [B]</b>	<b>Blank Spike Result [C]</b>	<b>Blank Spike %R [D]</b>	<b>Spike Added [E]</b>	<b>Blank Spike Duplicate Result [F]</b>	<b>Blk. Spk Dup. %R [G]</b>	<b>RPD %</b>	<b>Control Limits %R</b>	<b>Control Limits %RPD</b>	<b>Flag</b>
<b>Analytes</b>											
Chloride	<1.00	25.0	26.3	105	25.0	25.7	103	2	80-120	20	

Relative Percent Difference RPD =  $200 * |(C-F)/(C+F)|$

Blank Spike Recovery [D] =  $100 * (C)/[B]$

Blank Spike Duplicate Recovery [G] =  $100 * (F)/[E]$

All results are based on MDL and Validated for QC Purposes



# Form 3 - MS Recoveries

Project Name: L5 to MF Historical SUG 0009



Work Order #: 480359

Lab Batch #: 935550

Date Analyzed: 03/03/2014

QC- Sample ID: 480355-001 S

Reporting Units: mg/L

Project ID:

Date Prepared: 03/03/2014

Batch #: 1

Analyst: AMB

Matrix: Water

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	1350	1250	2830	118	80-120	

Lab Batch #: 935550

Date Analyzed: 03/03/2014

QC- Sample ID: 480358-001 S

Reporting Units: mg/L

Date Prepared: 03/03/2014

Batch #: 1

Analyst: AMB

Matrix: Water

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	1220	1250	2700	118	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: L5 to MF Historical SUG 0009

Work Order # : 480359

Project ID:

Lab Batch ID: 935419

QC- Sample ID: 480361-002 S

Batch #: 1 Matrix: Water

Date Analyzed: 03/04/2014

Date Prepared: 03/03/2014

Analyst: ARM

Reporting Units: mg/L

## MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00100	0.100	0.0938	94	0.100	0.0963	96	3	70-125	25	
Toluene	<0.00200	0.100	0.0925	93	0.100	0.0945	95	2	70-125	25	
Ethylbenzene	<0.00100	0.100	0.0976	98	0.100	0.0995	100	2	71-129	25	
m,p-Xylenes	<0.00200	0.200	0.202	101	0.200	0.206	103	2	70-131	25	
o-Xylene	<0.00100	0.100	0.102	102	0.100	0.105	105	3	71-133	25	

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 Applicable  
N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.





# XENCO Laboratories

## Prelogin/Nonconformance Report- Sample Log-In



Client: Regency Gas

Date/ Time Received: 02/28/2014 03:40:00 PM

Work Order #: 480359

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)?	4
#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)?	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:

Ruriko Konuma

Date: 03/03/2014

Checklist reviewed by:

Kelsey Brooks

Date: 03/03/2014

## APPENDIX D

### Manifests

---

S.H.G.S.  
MF-16" X L-5  
2009-008  
3-23-09

4-Loads To CELL #6

OCOTILLO ENVIRONMENTAL, LLC

HOURS WORKED 10 PER HOUR \$  
TRUCKER G.L. CARVER 12' DUMP TRUCK #1107 DATE 3-23-09  
ADDRESS  
COMPANY S.H.G.S.  
BIG OWNER LAND FARM INITIAL DON 48 RATE  
ADDRESS DATE PAID

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	RATE	LOADS	TOTAL
XXXX																													4			

S.H.G.S.  
MF-16" X L-5  
2009-008  
3-23-09

4-Loads To CELL #6

OCOTILLO ENVIRONMENTAL, LLC

HOURS WORKED 10 PER HOUR \$  
TRUCKER L. Combs 12' DUMP TRUCK #1108 DATE 3-23-09  
ADDRESS  
COMPANY S.H.G.S.  
BIG OWNER LAND FARM INITIAL DON 48 RATE  
ADDRESS DATE PAID

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	RATE	LOADS	TOTAL
XXXX																													4			



S.H.G.S.  
MFX L-5 CROSS-OVER  
2009-008  
3-24-09

7 - Loads To CELL #6

OCOTILLO ENVIRONMENTAL, LLC

HOURS WORKED 10 PER HOUR \$  
TRUCKER L. Combs 12YD DUMP TRUCK # 1108 DATE 3-24-09  
ADDRESS  
COMPANY S.H.G.S.  
PIT OWNER LAND FARM TOTAL YDS 84 RATE TOTAL  
ADDRESS DATE PAID  
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 RATE LOADS TOTAL  
XXXXXX 7

S.H.G.S.  
MFX L-5 X-OVER  
2009-008  
3-24-09

loads To CELL #6

OCOTILLO ENVIRONMENTAL, LLC

HOURS WORKED 10 PER HOUR \$  
TRUCKER L. Combs 12YD DUMP TRUCK # 1108 DATE 3-24-09  
ADDRESS  
COMPANY S.H.G.S.  
PIT OWNER LAND FARM TOTAL YDS 84 RATE TOTAL  
ADDRESS DATE PAID  
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 RATE LOADS TOTAL  
XXXXXX 7

S.H.G.S.  
M-F X L-5 X-OVER  
2009-008  
3-25-09

6 - Loads To CELL #6

OCOTILLO ENVIRONMENTAL, LLC

HOURS WORKED 10 PER HOUR \$  
TRUCKER CL. CARVEN 12YD DUMP TRUCK # 1107 DATE 3-25-09  
ADDRESS  
COMPANY S.H.G.S.  
PIT OWNER LAND FARM TOTAL YDS 72 RATE TOTAL  
ADDRESS DATE PAID CK NO  
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 RATE LOADS TOTAL  
XXXXXX 6



6- Loads To CELL #6

MOTILLO ENVIRONMENTAL, LLC

HOURS WORKED 10

TRUCKER L-Combs PER HOUR \$           

ADDRESS                                  12YD DUMP TRUCK # 1108 DATE 3-25-09

COMPANY S.Y.G.S.

PIT OWNER Land Farm TOTAL YDS 72 RATE            TOTAL           

ADDRESS                                  DATE PAID            CK NO           

CK NO. 6

XX XX XX

54.G.S.  
MF X L-5, X-OVER  
2009-008  
3-26-09

6-LOADS TO CELL #6

OCOTILLO ENVIRONMENTAL, LLC

HOURS WORKED 10

PER HOUR \$ \_\_\_\_\_

TRUCKER L. Combs 12YD DUMP TRUCK #1108 DATE 3-26-09

ADDRESS \_\_\_\_\_

COMPANY S.H.G.S.

PITOWNER Land Farm TOTAL YDS 72 RATE \_\_\_\_\_ TOTAL \_\_\_\_\_

ADDRESS \_\_\_\_\_ DATE PAID \_\_\_\_\_ CK NO \_\_\_\_\_

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 RATE GROSS TOTAL

XY XXXX

6- Loads To CELL #6

MCOTILLO ENVIRONMENTAL, LLC

[illegible]

5-LOADS TO CELL #6

PROFILIO ENVIRONMENTAL, LLC

HOURS WORKED 9 PER HOUR \$  
TRUCKER L. Combs 12YD DUMP TRUCK #108 DATE 3-27-09  
ADDRESS \_\_\_\_\_  
COMPANY SUGS.  
PIT OWNER LAND FARM TOTAL YDS 60 RATE \_\_\_\_\_ TOTAL \_\_\_\_\_  
ADDRESS \_\_\_\_\_ DATE PAID \_\_\_\_\_ CK NO \_\_\_\_\_  
**LOG** 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 RATE LOADS TOTAL  
XV VXX 5

MOTILLO ENVIRONMENTAL, LLC

[illegible]

OCOTILLO ENVIRONMENTAL, LLC

009-008 X X X 3

009-008-A X X X 3

4- Loads To CELL #9

MOTILLO ENVIRONMENTAL, LLC

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	RATE	LOADS	TOTAL	
XXXX																																4	

6-LOADS TO CALL #6

MOTILLO ENVIRONMENTAL, LLC

[illegible]

MOTILLO ENVIRONMENTAL, LLC

S.H.G.S.  
M-F X L-5, + - OVER.  
2009-008  
4-1-09  
4- LOADS TO CELL #6

OCOTILLO ENVIRONMENTAL, LLC

HOURS WORKED 5 PER HOUR \$  
 TRUCKER L. Combs 13YD DUMP TRUCK # 1108 DATE 4-1-09  
 ADDRESS \_\_\_\_\_  
 COMPANY S.H.G.S.  
 PLOT OWNER LANE FARM TOTAL YDS 48 RATE \_\_\_\_\_ TOTAL \_\_\_\_\_  
 ADDRESS \_\_\_\_\_ DATE PAID \_\_\_\_\_ CK NO. \_\_\_\_\_  
 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 RATE \_\_\_\_\_ GROSS TOTAL \_\_\_\_\_  
XVXX 4

PROTILLO ENVIRONMENTAL, LLC

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 RATE GAGE TOTAL  
 XXXX  
 4

OCOTILLO ENVIRONMENTAL, LLC

CR NO

XXXXXX

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 RATE LOADS TOTAL

6

6-LOADS TO CELL #6

OCOTILLO ENVIRONMENTAL, LLC

HOURS WORKED 10

TRUCKER L. Combs PER HOUR \$          

ADDRESS                                  12YD DUMP TRUCK # 1108 DATE 4-2-09

COMPANY S.H.G.S

PIT OWNER LAND FARM TOTAL YDS 72 RATE            TOTAL           

ADDRESS                                  PAID            CK NO           

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 RATE LOADS TOTAL

XXXXXX

6

54. G. S.  
MF & L-5, 1-Over  
2009-008  
4-3-09

5-LOADS TO CELL #6

DOTILLO ENVIRONMENTAL, LLC

HOURS WORKED 10 PER HOUR \$  
TRUCKER C.L. CARVER 13YD DUMP TRUCK # 1107 DATE 4-3-09  
ADDRESS \_\_\_\_\_  
COMPANY S.V.G-S.  
PIT OWNER LAND FARM TOTAL YDS 60 RATE \_\_\_\_\_ TOTAL \_\_\_\_\_  
ADDRESS \_\_\_\_\_ DATE PAID \_\_\_\_\_ CK NO \_\_\_\_\_

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 RATE LOADS TOTAL

XXXXXX

5



5-LOADS TO CELL #6

MCOTILLO ENVIRONMENTAL, LLC

HOURS WORKED 10 PER HOUR \$ \_\_\_\_\_  
TRUCKER L. Combs 12YD DUMP TRUCK # 1108 DATE 4-3-09  
ADDRESS \_\_\_\_\_  
COMPANY SU. G. S.  
PIT OWNER LAND FARM TOTAL YDS 60 RATE \_\_\_\_\_ TOTAL \_\_\_\_\_  
ADDRESS \_\_\_\_\_ DATE PAID \_\_\_\_\_ CK NO \_\_\_\_\_

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 RATE GAGE TOTAL

XXXXY

5

S.H.G.S.  
M-FX L-5, T-OVER  
2009-008  
4-6-09

6-LOADS TO CELL #8

COTILLIO ENVIRONMENTAL, LLC

HOURS WORKED 10 PER HOUR \$ \_\_\_\_\_  
TRUCKER C.L. CRAVER 12YD DUMP TRUCK # 1108 DATE 4-6-09  
ADDRESS \_\_\_\_\_  
COMPANY S.H.G.S.  
PIT OWNER LAND FARM TOTAL YDS 72 RATE \_\_\_\_\_ TOTAL \_\_\_\_\_  
ADDRESS \_\_\_\_\_ DATE PAID \_\_\_\_\_ CK NO \_\_\_\_\_

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 RATE PAGE TOTAL  
 XXXXXX 6



4-LOADS TO CELL #1

MOTILLO ENVIRONMENTAL, LLC

HOURS WORKED 9

PER HOUR \$ \_\_\_\_\_

TRUCKER Ed. Dixon 12YD DUMP TRUCK #1108 DATE 4-9-09

ADDRESS \_\_\_\_\_

COMPANY S.H.G.S.

PIT OWNER LAND FARM TOTAL YDS 48 RATE \_\_\_\_\_ TOTAL \_\_\_\_\_

ADDRESS \_\_\_\_\_ DATE PAID \_\_\_\_\_ CK NO \_\_\_\_\_

XXXX

4

10-LOADS CLEAN SOIL FROM DECK PIT  
3-LOADS TO CELL #9

MOTILLO ENVIRONMENTAL, LLC

HOURS WORKED 10 PER HOUR \$  
TRUCKER C.L. CRAVER 12YD DUMP TRUCK #1107 DATE 4-8-09  
ADDRESS \_\_\_\_\_  
COMPANY S.H.G.S.  
PIT OWNER DECK ESTATE TOTAL YDS 120 RATE \_\_\_\_\_ TOTAL \_\_\_\_\_  
ADDRESS \_\_\_\_\_ DATE PAID \_\_\_\_\_ CK NO \_\_\_\_\_

LEARN XV VXY XYY XXXX  
OMI AM. XYX

10 120 yds  
3 36 yds. To call #9

DOTILLO ENVIRONMENTAL, LLC

CR NO. \_\_\_\_\_  
CLEAN XXX XX XX X V XX  
11 132 yds

ENTAM. X X

MOTILLO ENVIRONMENTAL, LLC

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 RATE LOADS TOTAL

XXXXXX

1775

ONMFNTAL, 146

AL YDS 72 RATE        TO  
R PAID                      CK NO

9 20 21 22 23 24 25 26 27 28 29 30 31

6- Loads To CELL #02

DOTTILO ENVIRONMENTAL, LLC

HOURS WORKED 10 PER HOUR \$ \_\_\_\_\_  
TRUCKER Ed Dixon 12YD DUMP TRUCK # 1108 DATE 4-14-09  
ADDRESS \_\_\_\_\_  
COMPANY S.G.S.  
PIT OWNER Land Farm TOTAL YDS 73 RATE \_\_\_\_\_ TOTAL \_\_\_\_\_  
ADDRESS \_\_\_\_\_ DATE PAID \_\_\_\_\_ CK NO \_\_\_\_\_

XXXXXXX

54 G.S.  
M-FX L-5, 7-OVER  
2009-008  
4-14-09

6- LOADS TO CELL #1

MOTILLO ENVIRONMENTAL, LLC

HOURS WORKED 10

PER HOUR \$ \_\_\_\_\_

TRUCKER C.L. CARVER 12YD DUMP TRUCK #1107 DATE 4-14-09

ADDRESS \_\_\_\_\_

COMPANY S.H.G.S.

PIT OWNER LAND FARM TOTAL YDS 72 RATE \_\_\_\_\_ TOTAL \_\_\_\_\_

ADDRESS \_\_\_\_\_ DATE PAID \_\_\_\_\_ CK NO \_\_\_\_\_

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 RATE PAGE TOTAL  
 XXXXX  
 6

6-LOADS TO CELL # 9

MOTILLO ENVIRONMENTAL, LLC

HOURS WORKED 10 PER HOUR \$ \_\_\_\_\_  
TRUCKER C.L. CARVAR 12YD DUMP TRUCK # 107 DATE 4-15-09  
ADDRESS \_\_\_\_\_  
COMPANY SH. G.S.  
PIT OWNER LAND FARM TOTAL YDS 72 RATE \_\_\_\_\_ TOTAL \_\_\_\_\_  
ADDRESS \_\_\_\_\_ DATE PAID \_\_\_\_\_ CK NO \_\_\_\_\_

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100  
 XXX XXX  
 CADE TOTAL  
 6

54.G.S.  
M-FXL-5, + -OVER  
2009-008  
4-15-09

6-LOADS TO CALL #1

COTILLI ENVIRONMENTAL, LLC

HOURS WORKED 10

PER HOUR \$ \_\_\_\_\_

TRUCKER E. DIXON 12YD DUMP TRUCK \*1108 DATE 4-15-09

ADDRESS \_\_\_\_\_

COMPANY S.U.G.S.

PIT OWNER LAND FARM TOTAL YDS 72 RATE \_\_\_\_\_ TOTAL \_\_\_\_\_

ADDRESS \_\_\_\_\_ DATE PAID \_\_\_\_\_ CK NO \_\_\_\_\_

[illegible]

2- Loads To CELL #9

PROTILLO ENVIRONMENTAL, LLC

HOURS WORKED 3 PER HOUR \$ \_\_\_\_\_  
TRUCKER CL. CARVER 12YD DUMP TRUCK # 1107 DATE 4-16-09  
ADDRESS \_\_\_\_\_  
COMPANY S.H.G.S.  
PIT OWNER LAND FARM TOTAL YDS 36 RATE \_\_\_\_\_ TOTAL \_\_\_\_\_  
ADDRESS \_\_\_\_\_ DATE PAID \_\_\_\_\_ CK NO \_\_\_\_\_

[illegible]

54.65  
M-F X L-5 + - OVER  
2009-008  
4-16-09  
7-LOAD TO CELL #9

PROTILLO ENVIRONMENTAL, LLC

HOURS WORKED 2

TRUCKER G.T. CARVER PER HOUR \$          

13YD DUMP TRUCK #1108 DATE 4-16-09

ADDRESS \_\_\_\_\_

COMPANY S.H.G.S.

PITOWNER LAND FARM TOTAL YDS 24 RATE \_\_\_\_\_ TOTAL \_\_\_\_\_

ADDRESS \_\_\_\_\_ DATE PAID \_\_\_\_\_ CK NO \_\_\_\_\_

[illegible]

DOTILLO ENVIRONMENTAL, LLC

S.U.G.S.  
MFX L. 5, + - OVER  
2009-008  
4-17-09

5-Loads To CELL #9

MOTILLO ENVIRONMENTAL, LLC

HOURS WORKED 10 PER HOUR \$ \_\_\_\_\_  
TRUCKER G.L. CARVER 13YD DUMP TRUCK # 102 DATE 4-17-09  
ADDRESS \_\_\_\_\_  
COMPANY SUGS  
PIT OWNER LAND FARM TOTAL YDS 60 RATE \_\_\_\_\_ TOTAL \_\_\_\_\_  
ADDRESS \_\_\_\_\_ DATE PAID \_\_\_\_\_ CK NO \_\_\_\_\_  
XXXXX



OCOTILLO ENVIRONMENTAL, LLC.

HOURS WORKED \_\_\_\_\_10\_\_\_\_\_ PER HOUR \$\_\_\_\_\_  
TRUCKER \_\_\_\_\_L. Combs\_\_\_\_\_ 12YD DUMP TRUCK #1108 DATE 4-20-09  
ADDRESS \_\_\_\_\_  
COMPANY \_\_\_\_\_S.H.G.S.\_\_\_\_\_  
PIT OWNER LAND FARM TOTAL YDS 60 RATE \_\_\_\_\_ TOTAL \_\_\_\_\_  
ADDRESS \_\_\_\_\_ DATE PAID \_\_\_\_\_ CK NO \_\_\_\_\_  
XXXXX

6-LOADS TO CALL #9

DOTILLO ENVIRONMENTAL, LLC

HOURS WORKED 10 PER HOUR \$ \_\_\_\_\_  
TRUCKER CL. CARVER 12YD DUMP TRUCK # 1107 DATE 4-20-09  
ADDRESS \_\_\_\_\_  
COMPANY S.H.G.S.  
PIT OWNER LAND FARM TOTAL YDS 72 RATE \_\_\_\_\_ TOTAL \_\_\_\_\_  
ADDRESS \_\_\_\_\_ DATE PAID \_\_\_\_\_ CK NO \_\_\_\_\_  
XXXXXX

DOTILLO ENVIRONMENTAL, LLC

S.H.G.S.  
M-FX L-5, +OVER  
2004-008  
4-21-09  
5-LOADS TO CELL #1

MOTILLO ENVIRONMENTAL, LLC

[illegible]



4-LOADS TO CELL #1

HOURS WORKED 10 PER HOUR \$ 11.08  
TRUCKER L. Combs 12YD DUMP TRUCK 1108 DATE 4-22-09  
ADDRESS \_\_\_\_\_  
COMPANY S.H.G.S.  
PITOWNER Land Farm TOTAL YDS 48 RATE \_\_\_\_\_ TOTAL \_\_\_\_\_  
ADDRESS \_\_\_\_\_ DATE PAID \_\_\_\_\_ CK NO \_\_\_\_\_

*[Faint, illegible text from bleed-through]*

3- Loads To CELL # 2

HOURS WORKED 10

TRUCKER C. L. CARVER PER HOUR \$          

12' DUMP TRUCK #1107 DATE 4-22-09

ADDRESS \_\_\_\_\_

COMPANY S.H.G.S.

PIT OWNER LAND FARM TOTAL YDS 36 RATE \_\_\_\_\_ TOTAL \_\_\_\_\_

ADDRESS \_\_\_\_\_ DATE PAID \_\_\_\_\_ CK NO \_\_\_\_\_

\_\_\_\_\_

MOTILLO ENVIRONMENTAL, LLC

HOURS WORKED 10 PER HOUR \$  
TRUCKER C.L. CARVER 12YD DUMP TRUCK #1107 DATE 4-23-09  
ADDRESS \_\_\_\_\_  
COMPANY S.H.G.S.  
PIT OWNER Land Farm TOTAL YDS 60 RATE \_\_\_\_\_ TOTAL \_\_\_\_\_  
ADDRESS \_\_\_\_\_ DATE PAID \_\_\_\_\_ CK NO \_\_\_\_\_

XXXXXX

5-LOADS TO CELL #1

MOTILLO ENVIRONMENTAL, LLC

HOURS WORKED 10 PER HOUR \$ \_\_\_\_\_  
TRUCKER L. COMPS 12YD DUMP TRUCK # 1108 DATE 4-23-09  
ADDRESS \_\_\_\_\_  
COMPANY S.H.G.S.  
PIT OWNER Land Farm TOTAL YDS 60 RATE \_\_\_\_\_ TOTAL \_\_\_\_\_  
ADDRESS \_\_\_\_\_ DATE PAID \_\_\_\_\_ CK NO \_\_\_\_\_

XXXXXX

S.H.G.S.  
M-F X L-5, T-OVER (North)  
2009-008  
4-29-09

5- Loads To CELL #7

MOBILE ENVIRONMENTAL, LLC

HOURS WORKED 10 PER HOUR \$ \_\_\_\_\_  
TRUCKER CL. CARVER 12YD DUMP TRUCK # 1107 DATE 4-29-09  
ADDRESS \_\_\_\_\_  
COMPANY S.H.G.S.  
PIT OWNER Land Farm TOTAL YDS 60 RATE \_\_\_\_\_ TOTAL \_\_\_\_\_  
ADDRESS \_\_\_\_\_ DATE PAID \_\_\_\_\_ CK NO \_\_\_\_\_  
XXXXXX  
5

S.H.G.S.  
M-F X L-5, T-OVER (North)  
2009-008  
4-29-09

5- Loads To CELL #7

MOBILE ENVIRONMENTAL, LLC

HOURS WORKED 10 PER HOUR \$ \_\_\_\_\_  
TRUCKER L. Combs 12YD DUMP TRUCK # 1108 DATE 4-29-09  
ADDRESS \_\_\_\_\_  
COMPANY S.H.G.S.  
PIT OWNER Land Farm TOTAL YDS 60 RATE \_\_\_\_\_ TOTAL \_\_\_\_\_  
ADDRESS \_\_\_\_\_ DATE PAID \_\_\_\_\_ CK NO \_\_\_\_\_  
XXXXXX  
5

5-Loads TO CELL#7

MOTILLO ENVIRONMENTAL, LLC

[illegible]

S.H.G.S.  
M-R X L-5, + OVER  
2009-008  
4-30-09

5- Loads To CELL #7

MOTILLO ENVIRONMENTAL, LLC

HOURS WORKED 10

TRUCKER C.L. CARVER PER HOUR \$          

ADDRESS                      12YD DUMP TRUCK # 1107 DATE 4-30-89

COMPANY S.H.G.S.

PIT OWNER LAND FARM TOTAL YDS 66 RATE          TOTAL         

ADDRESS                      DATE PAID          CK NO         

**TOTAL**     1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 RATE TOTAL  
XXXXX 5

6- Loads To CELL #7

HOURS WORKED 10

TRUCKER L. Combs PER HOUR \$          

ADDRESS            12YD DUMP TRUCK #1108 DATE 5-1-09

COMPANY S.H.G.S.

PIT OWNER Land Farm TOTAL YDS 72 RATE          TOTAL         

ADDRESS            DATE PAID              CK NO         

X X X X X X

6

6-LOADS TO CELL #7

HOURS WORKED, 10

PER HOUR \$          

TRUCKER C.L. CARVER 12YD DUMP TRUCK #1107 DATE 5-1-09

ADDRESS   

COMPANY S.H.G.S.

PIT OWNER LAND FARM TOTAL YDS 12 RATE            TOTAL           

ADDRESS    DATE PAID            CK NO           

XXXXXX

6

S.H.G.S.  
M-FX L-5, 7-OVER  
2009-008  
5-7-09  
6-LOADS TO CELL #7

MOBILE ENVIRONMENTAL, LLC

HOURS WORKED 10 PER HOUR \$  
TRUCKER L. Combs 13YD DUMP TRUCK # 1108 DATE 5-7-09  
ADDRESS \_\_\_\_\_  
COMPANY S.H.G.S.  
PIT OWNER LAND FARM TOTAL YDS 72 RATE \_\_\_\_\_ TOTAL \_\_\_\_\_  
ADDRESS \_\_\_\_\_ DATE PAID \_\_\_\_\_ CK NO \_\_\_\_\_  
XX XX XX  
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 RATE LOADS TOTAL  
6

S.H.G.S.  
M-FX L-5, 7-OVER  
2009-008  
5-7-09  
6-LOADS TO CELL #7

MOBILE ENVIRONMENTAL, LLC

HOURS WORKED 10 PER HOUR \$  
TRUCKER C.L. CARVER 13YD DUMP TRUCK # 1107 DATE 5-7-09  
ADDRESS \_\_\_\_\_  
COMPANY S.H.G.S.  
PIT OWNER LAND FARM TOTAL YDS 72 RATE \_\_\_\_\_ TOTAL \_\_\_\_\_  
ADDRESS \_\_\_\_\_ DATE PAID \_\_\_\_\_ CK NO \_\_\_\_\_  
XX XX XX  
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 RATE LOADS TOTAL  
6

## APPENDIX E

### Initial and Final C-141

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

State of New Mexico  
Energy Minerals and Natural Resources

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

Form C-141  
Revised October 10, 2003

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

2009-008

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: Millard Deck	Mineral Owner: State	Lease No.
-----------------------------	----------------------	-----------

LOCATION OF RELEASE *Noney well*  
API # 30-025-39231-00-00

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
O	15	21S	37E					Lea

Latitude N32 28.326 Longitude W103 9.077

NATURE OF RELEASE

Type of Release : Crude Oil, and Natural Gas	Volume of Release: Greater than 50 MCF gas Greater than 5 bbls crude oil	Volume Recovered NONE
Source of Release : 10" Natural Gas Pipeline	Date and Hour of Occurrence not known	Date and Hour of Discovery 1/7/09 9:07 a.m.
Was Immediate Notice Given? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom?	
By Whom? Tony Savoie	Date and Hour:	
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.\*

The 10" Natural gas pipeline developed a leak prior to the discovery date of 2/26/09. The leak area had been excavated and 3 temporary leak clamps had been installed on the pipeline. There were no fluids standing or gas leaking upon discovery. There were 2 areas noted during the discovery that were oil stained. One area measured approximately 10 ft. X 18 ft. and the other measured approximately 40 ft. X 20 ft.

Describe Area Affected and Cleanup Action Taken. Approximately 1340 sq.ft. of pasture land was affected by the leak and temporary repair. Final remediation will follow the NMOCD recommended guidelines for 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.

Signature: <i>Tony Savoie</i>	OIL CONSERVATION DIVISION	
Printed Name: John A. Savoie	Approved by District Supervisor: <i>[Signature]</i>	
Title: Remediation Supervisor	ENVIRONMENTAL ENGINEER	
E-mail Address: tony.savoie@sug.com	Approval Date: 3.24.09	Expiration Date: 5.24.09
Date: 3/23/09 Phone: 505-395-2116	Conditions of Approval:	Attached <input type="checkbox"/> 1 RP# 09.5.2105

\* Attach Additional Sheets If Necessary



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

Form C-141  
Revised August 8, 2011

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: Regency Field Services LLC.	Contact: Crystal Callaway	
Address: 301 Commerce Street, Suite 700, Fort Worth, TX 76102	Telephone No.: (817) 302-9407	
Facility Name: L5 to MF	Facility Type: Natural Gas Gathering	
Surface Owner: Millard Deck	Mineral Owner: State	API No.: 30025-39231-00-00

### LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
O	15	21S	37E					Lea

Latitude 32.472081 Longitude -103.151236

### NATURE OF RELEASE

Type of Release: Crude Oil and Natural Gas	Volume of Release: Greater than 50 MCF gas, Greater than 5 bbls crude oil	Volume Recovered: None
Source of Release: 10" Natural Gas Pipeline	Date and Hour of Occurrence: Unknown	Date and Hour of Discovery: 01/07/2009 9:07 am
Was Immediate Notice Given? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom?	
By Whom? Tony Savoie	Date and Hour	
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.\*

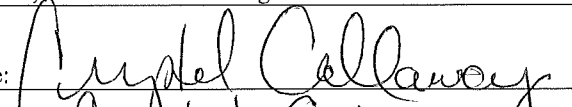
Describe Cause of Problem and Remedial Action Taken.\*

The 10" Natural gas pipeline developed a leak prior to the discovery date of 02/26/2009. The leak area had been excavated and three (3) temporary leak clamps had been installed on the pipeline. There were no fluids standing or gas leaking upon discovery. There were two (2) area noted during the discovery that were oil stained. One (1) area measured approximately 10' x 18' and the other measured approximately 40' x 20'.

Describe Area Affected and Cleanup Action Taken.\*

Reportedly, in 2009, approximately 2,904 cubic yards (yd<sup>3</sup>) of impacted soil was excavate from the release site by Basin Environmental and transported to an approved Landfarm. Further excavation was determined to be unsafe and impracticable given the risks associated with the depth of the excavation and the proximity of the floor of the excavation to groundwater. Two (2) confirmation samples exceeded the NMOCD Guidelines and as a result one (1) monitor well was installed in order to confirm there was not an impact to groundwater. Five (5) sampling events confirmed that there was not a chloride impact and laboratory results indicated that BTEX concentrations were less than the laboratory MDL for each of the submitted groundwater samples, with the exception of benzene at 0.0258 mg/L for the January 9, 2014 sampling event.

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: Sr. Environmental Remediation Spec	Approval Date:	Expiration Date:	
E-mail Address: Crystal.Callaway@RegencyNS.com	Conditions of Approval:		Attached <input type="checkbox"/>
Date: 10/3/14	Phone: 817-302-1514		

\* Attach Additional Sheets If Necessary