

Basin Environmental Service Technologies, LLC

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

jwlowry@basinenv.com

Office: (575) 396-2378 Fax: (575) 396-1429



REMEDIATION SUMMARY & SITE CLOSURE REQUEST

**SOUTHERN UNION GAS SERVICES
TRUNK "O" 30-INCH (1RP-1020)
HISTORICAL RELEASE SITE**

Lea County, New Mexico

Unit Letter "O" (SW/SE), Section 33, Township 21 South, Range 36 East

Latitude 32° 25.762' North, Longitude 103° 16.212' West

NMOCD Reference # 1RP-1020

Prepared For:

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

Prepared By:

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

October 2012

Joel W. Lowry
Project Manager

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1.0 INTRODUCTION & BACKGROUND INFORMATION

Basin Environmental Service Technologies, LLC (Basin), on behalf of Southern Union Gas Services (Southern Union), has prepared this *Remediation Summary & Site Closure Request* for the Trunk “O” 30-Inch Historical Release Site (1RP-1020). The legal description of the release site is Unit Letter “O” (SW/SE), Section 33, Township 21 South, Range 36 East, in Lea County, New Mexico. The geographic coordinates of the release site are 32° 25.762' North latitude and 103° 16.212' West longitude. The property affected by the release is owned by the State of New Mexico and administered by the New Mexico State Land Office (NMSLO). Please reference Figure 1 for a "Site Location Map".

On August 21, 2006, Southern Union discovered a release had occurred on the Trunk “O” Pipeline. The Form C-141 indicated failure of a section of a thirty-inch (30”) low-pressure pipeline resulted in the release of approximately ten barrels (10 bbls) of crude oil and thirty-three (33) Mcf of natural gas. During initial response activities the pipeline was shut in, and a vacuum truck was utilized to recover approximately five barrels (5 bbls) of free-standing fluid. Heavily saturated soil was blended with clean soil to reduce the risk to livestock and wildlife. The release was reported to the New Mexico Oil Conservation Division (NMOCD) Hobbs District Office on September 5, 2006. The C-141 indicated the release affected approximately seven hundred square feet (700 ft²) of pasture land. General photographs of the release site are provided as Appendix A. The Form C-141 is provided as Appendix C.

Previous remediation activities were conducted at the Trunk “O” 30-Inch Release Site by an environmental contractor that is no longer affiliated with Southern Union. The nature and extent of the aforementioned activities remains unclear, as environmental reports and work records are not readily available.

On June 22, 2012, at the request of Southern Union, Basin assumed remediation responsibilities at the Trunk “O” 30-Inch Historical Release Site.

2.0 NMOCD SITE CLASSIFICATION

A search of the New Mexico Water Rights Reporting System (NMWRRS) database maintained by the New Mexico Office of the State Engineer (NMOSE) indicated information was unavailable for Section 33, Township 21 South, Range 36 East. An NMOCD representative indicated the depth to groundwater is approximately one hundred ninety-nine feet (199’) below ground surface (bgs) on the initial C-141. Based on the NMOCD ranking system, zero (0) points will be assigned to the site as a result of this criterion.

A search of the NMWRRS database indicated there are no water wells within one thousand feet (1,000’) of the release. Based on the NMOCD ranking system, zero (0) points will be assigned to the site as a result of this criterion.

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

NMOCD guidelines indicate the Trunk “O” 30-Inch Historical Release Site has an initial ranking score of zero (0) points. The soil remediation levels for a site with a ranking score of zero (0) points are as follows:

- Benzene – 10 mg/Kg (ppm)
- Benzene, toluene, ethylbenzene and xylene (BTEX) – 50 mg/Kg (ppm)
- Total petroleum hydrocarbons (TPH) – 5,000 mg/Kg (ppm)

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

3.0 SUMMARY OF SOIL REMEDIATION ACTIVITIES

On August 10, 2012, Basin responded to the Trunk “O” 30-Inch Historical Release Site. An initial investigation indicated previous remediation activities had been conducted at the release site. A series of test trenches were advanced in the disturbed areas around the release point in an effort to determine if impacted soil containing BTEX, TPH and chloride concentrations above NMOCD regulatory standards remained in-situ.

Test Trench #1 was advanced to approximately four feet (4’) bgs near the inferred release point, within the disturbed area. During the advancement of the test trench, select soil samples were field screened using a photo-ionization detector (PID) and chloride field test kit. Two (2) soil samples (TT-1 @ Surface and TT-1 @ 4’) were collected and submitted to TraceAnalysis Inc., of Midland, Texas for determination of BTEX, TPH and chloride concentrations in accordance with EPA Methods SW 846-8021B, SW 846-8015M and SM 4500-Cl B, respectively. Laboratory analytical results indicated benzene and BTEX concentrations were less than the appropriate laboratory method detection limit (MDL) for each of the soil samples submitted. Analytical results indicated TPH concentrations were less than the laboratory MDL for each of the soil samples submitted. Chloride concentrations were less than the laboratory MDL for each of the soil samples submitted. Table 1 summarizes the “Concentrations of Benzene, BTEX, TPH & Chloride in Soil”. Soil sample locations are depicted in Figure 2, “Site & Sample Location Map”. Laboratory analytical reports are provided as Appendix B.

Test Trench #2 was advanced approximately twenty feet (20’) north of the inferred release point, west of the Trunk “O” 30” Line. Test Trench #2 was advanced to approximately one foot (1’) bgs. During the advancement of the test trench, select soil samples were field screened using a PID and chloride field test kit. One (1) soil sample (TT-2 @ 1’) was collected and submitted to the laboratory for analysis. Laboratory analytical results indicated benzene and BTEX concentration were less than the appropriate laboratory MDL. Analytical results indicated the TPH concentration was less than the laboratory MDL. The chloride concentrations was 270 mg/Kg. Laboratory analytical results indicated the area defined by soil sample TT-2 @ 1’ was not fully delineated.

Test Trench #3 was advanced approximately thirty feet (30’) south of the inferred release point, west of the Trunk “O” 30” Line. Test Trench #3 was advanced to approximately one foot (1’) bgs. During the advancement of the test trench, select soil samples were field-screened using a

PID and chloride field test kit. One (1) soil sample (TT-3 @ 1') was collected and submitted to the laboratory for analysis. Laboratory analytical results indicated benzene and BTEX concentrations were less than the appropriate laboratory MDL. Analytical results indicated the TPH concentration was less than the laboratory MDL. The chloride concentration was 198 mg/Kg.

On August 10, 2012, one (1) five-point composite soil sample (Stockpile) was collected from the stockpiled material and submitted to the laboratory for analysis. Laboratory analytical results indicated benzene and BTEX concentrations were less than the appropriate laboratory MDL. Analytical results indicated the TPH concentration was less than the laboratory MDL. The chloride concentration was 545 mg/Kg. Based on laboratory analytical results from the stockpile soil sample, the material was deemed suitable for use as backfill.

On September 3, 2012, delineation activities resumed at the Trunk "O" 30-Inch Historical Release Site in the area defined by soil sample TT-2 @ 1'. Test Trench #2 was advanced to approximately two feet (2') bgs. During the advancement of the test trench, select soil samples were field-screened using a chloride field test kit. One (1) soil sample (TT-2 @ 2') was collected and submitted to Xenco Laboratories, Inc., of Odessa, Texas, for analysis of chloride concentrations in accordance with EPA Method 300.0. Laboratory analytical results indicated the chloride concentration was 57.2 mg/Kg.

4.0 QA/QC PROCEDURES

4.1 Soil Sampling

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

- BTEX concentrations in accordance with EPA Method SW-846 8021b
- TPH concentrations in accordance with modified EPA Method SW-846 8015M
- Chloride concentrations in accordance with EPA Method SM 4500-C1 B or 300.0

4.2 Decontamination of Equipment

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

4.3 Laboratory Protocol

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

5.0 SITE CLOSURE REQUEST

Confirmation soil samples collected from the three (3) on-site test trenches indicated previous remediation activities at the Trunk “O” 30-Inch Release Site met the requirements of the NMOCD’s “Guidelines for Remediation of Leaks, Spills and Releases”. Laboratory analytical results indicated benzene, BTEX, TPH and chloride concentrations were less than NMOCD regulatory remediation action levels in each of the submitted soil samples. Based on these laboratory analytical results, Basin recommends Southern Union provide the NMOCD Hobbs District Office a copy of this *Remediation Summary & Site Closure Request* and request the NMOCD grant site closure to the Trunk “O” 30-Inch Historical Release Site.

6.0 LIMITATIONS

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

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

7.0 DISTRIBUTION

Copy 1: Geoffrey Leking
New Mexico Energy, Minerals and Natural Resources Department
Oil Conservation Division (District 1)
1625 French Drive
Hobbs, NM 88240
GeoffreyR.Leking@state.nm.us

Copy 2: Rose Slade
Southern Union Gas Services
801 S. Loop 464
Monahans, Texas 79756
rose.slade@sug.com

Copy 3: Basin Environmental Service Technologies, LLC
P.O. Box 301
Lovington, New Mexico 88260

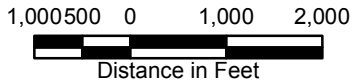
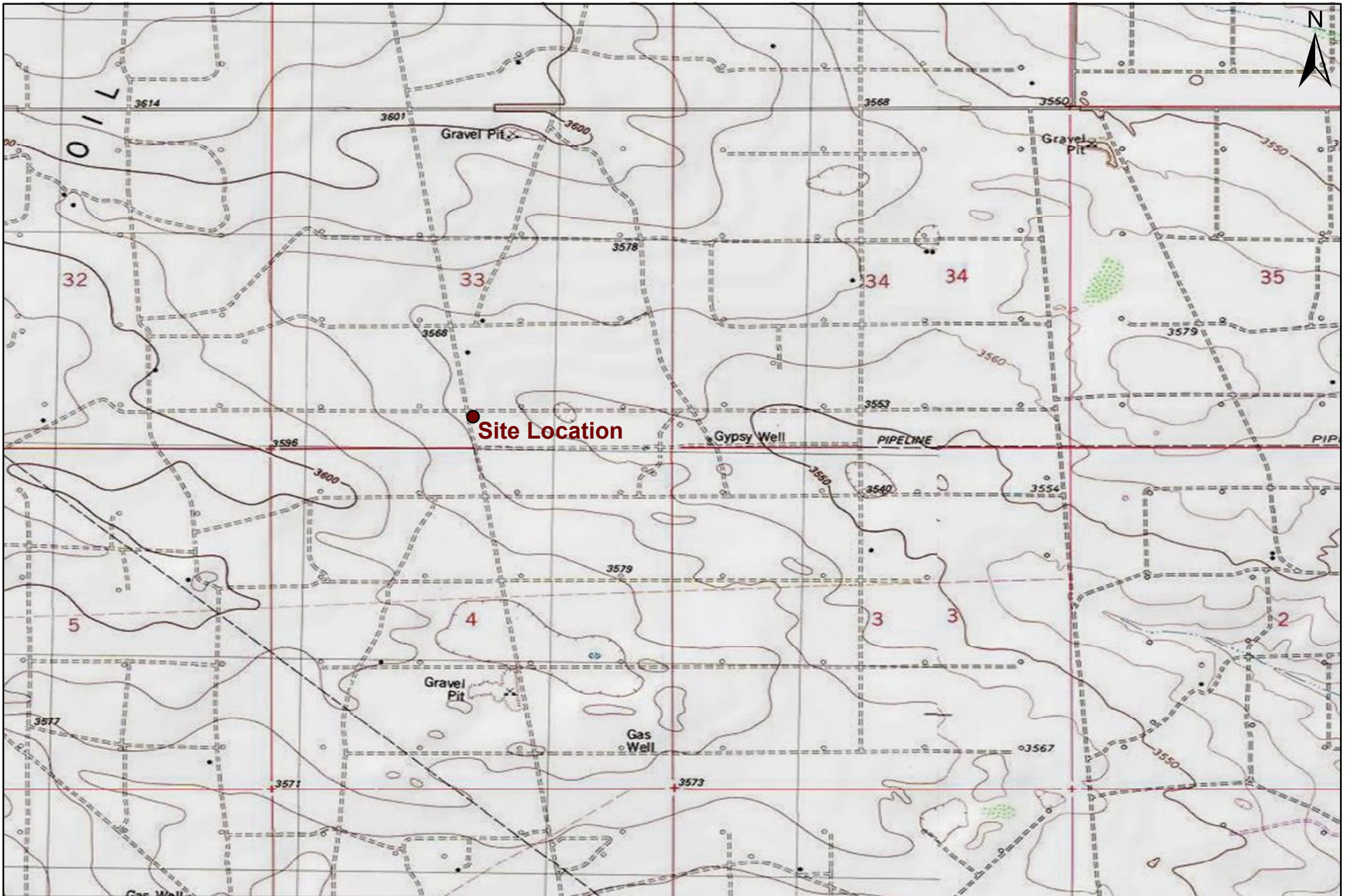


Figure 1
Site Location Map
 Southern Union Gas Services
 Trunk "O" 30-Inch
 Lea County, New Mexico
 NMOCD Reference #: 1RP-1020



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

Drawn By: BJA	Checked By: JWL
August 6, 2012	Scale: 1" = 2000'

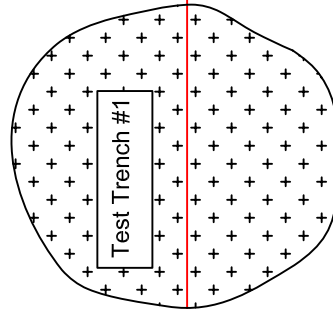
ROAD



Test Trench #2	
Sample ID	Chloride (ppm)
TT-2 @ 1' bgs	208*

Test Trench #2

Test Trench #1	
Sample ID	Chloride (ppm)
TT-1 @ Surface	Non-Detect*
TT-1 @ 2'	Non-Detect*
TT-1 @ 4'	Non-Detect*



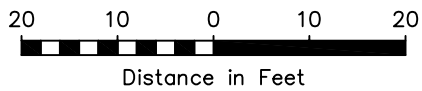
Test Trench #1

Test Trench #3	
Sample ID	Chloride (ppm)
TT-3 @ 1'	Non-Detect*

Test Trench #3

Trunk "O" 30"

SUG 14"



LEGEND:

- Excavation Extent
- Pipeline
- Sample Location
- Depressed Area
- Road
- Chloride Field Test Results

Figure 2
 Site & Sample Location Map
 Southern Union Gas Services
 Trunk "O" 30" (1RP-1020)
 Lea County, NM

Basin Environmental Services

Scale: 1" = 20'	Drawn By: JWL	Prepared By: BRB
August 13, 2012		

TABLE 1

CONCENTRATIONS OF BENZENE, BTEX, TPH & CHLORIDE IN SOIL

SOUTHERN UNION GAS SERVICES
 TRUNK "O" 30-Inch
 HISTORICAL RELEASE SITE
 LEA COUNTY, NEW MEXICO
 NMOCD REF# 1RP-1020

SAMPLE LOCATION	SAMPLE DEPTH (BGS)	SAMPLE DATE	SOIL STATUS	METHOD: EPA SW 846-8021B, 5030					METHOD: 8015M			TOTAL TPH C ₆ -C ₃₅ (mg/Kg)	SM 4500-CI B CHLORIDE (mg/Kg)
				BENZENE (mg/Kg)	TOLUENE (mg/Kg)	ETHYL-BENZENE (mg/Kg)	TOTAL XYLENES (mg/Kg)	TOTAL BTEX (mg/Kg)	GRO C ₆ -C ₁₂ (mg/Kg)	DRO C ₁₂ -C ₂₈ (mg/Kg)	ORO C ₂₈ -C ₃₅ (mg/Kg)		
TT-1 @ Surface	surface	8/10/2012	In-Situ	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<4.00	<50.0	<50.0	<50.0	<50.0
TT-1 @ 4'	4'	8/10/2012	In-Situ	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<4.00	<50.0	<50.0	<50.0	<50.0
TT-2 @ 1'	1'	8/10/2012	In-Situ	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<4.00	<50.0	<50.0	<50.0	270
TT-3 @ 1'	1'	8/10/2012	In-Situ	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	<8.00	<50.0	<50.0	<50.0	198
Stockpile	N/A	8/10/2012	Stockpile	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<4.00	<50.0	<50.0	<50.0	545
TT-2 @ 2ft	2'	9/4/2012	In-Situ	-	-	-	-	-	-	-	-	-	57.2*
NMOCD Standard				10				50				5,000	1,000

- = Not analyzed.

* Analyzed by Xenco Laboratories utilizing EPA Method 300.0



Photograph of initial release at the Trunk "O" 30-Inch Historical Release Site.



Photograph of initial release at the Trunk "O" 30-Inch Historical Release Site.



Photograph of initial release at the Trunk "O" 30-Inch Historical Release Site.



Photograph of initial release at the Trunk "O" 30-Inch Historical Release Site.



Photograph of the disturbed area at the Trunk "O" 30-Inch Historical Release Site.



Photograph of the disturbed area at the Trunk "O" 30-Inch Historical Release Site.



Photograph of the disturbed area at the Trunk "O" 30-Inch Historical Release Site.



Photograph of the disturbed area at the Trunk "O" 30-Inch Historical Release Site.



6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800-378-1296 806-794-1296 FAX 806-794-1298
 200 East Sunset Road, Suite E El Paso, Texas 79922 915-585-3443 FAX 915-585-4944
 5002 Basin Street, Suite A1 Midland, Texas 79703 432-689-6301 FAX 432-689-6313
 (BioAquatic) 2501 Mayes Rd., Suite 100 Carrollton, Texas 75006 972-242-7750
 E-Mail: lab@traceanalysis.com WEB: www.traceanalysis.com

Certifications

WBE HUB NCTRCA DBE NELAP DoD LELAP Kansas Oklahoma ISO 17025

Analytical and Quality Control Report

Rose Slade
 Southern Union Gas Services, Ltd.-Monahans
 801 S. Loop 464
 Monahans, TX, 79756

Report Date: August 22, 2012

Work Order: 12081428



Project Location: Lea Co., NM
 Project Name: Trunk O 30 inch (RP 1020)
 Project Number: SUG Historical Releases

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
306710	TT-1 @ Surface	soil	2012-08-10	12:30	2012-08-14
306711	TT-1 @ 4'	soil	2012-08-10	12:50	2012-08-14
306712	TT-2 @ 1'	soil	2012-08-10	13:00	2012-08-14
306713	TT-3 @ 1'	soil	2012-08-10	13:30	2012-08-14
306714	Stockpile	soil	2012-08-10	15:00	2012-08-14

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

This report consists of a total of 28 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director
 Dr. Michael Abel, Project Manager

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QC Batch 93965 - CCV (1)	23
QC Batch 93966 - ICV (1)	24
QC Batch 93966 - CCV (1)	24
QC Batch 93981 - CCV (1)	24
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Case Narrative

Samples for project Trunk O 30 inch (RP 1020) were received by TraceAnalysis, Inc. on 2012-08-14 and assigned to work order 12081428. Samples for work order 12081428 were received intact at a temperature of 1.5 C.

Samples were analyzed for the following tests using their respective methods.

Test	Method	Prep Batch	Prep Date	QC Batch	Analysis Date
BTEX	S 8021B	79758	2012-08-20 at 10:27	94090	2012-08-20 at 10:27
Chloride (Titration)	SM 4500-Cl B	79658	2012-08-16 at 09:00	93965	2012-08-16 at 09:00
Chloride (Titration)	SM 4500-Cl B	79660	2012-08-16 at 10:00	93966	2012-08-16 at 10:00
TPH DRO - NEW	S 8015 D	79657	2012-08-15 at 10:00	93964	2012-08-16 at 14:49
TPH GRO	S 8015 D	79758	2012-08-20 at 10:27	94091	2012-08-20 at 10:27
TPH ORO	S 8015 D	79680	2012-08-15 at 09:00	93981	2012-08-17 at 10:57

Results for these samples are reported on a wet weight basis unless data package indicates otherwise.

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 12081428 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

All other exceptions associated with this report have been footnoted on the appropriate analytical page to assist in general data comprehension. Please contact the laboratory directly if there are any questions regarding this project.

Analytical Report

Sample: 306710 - TT-1 @ Surface

Laboratory: Lubbock	Analytical Method: S 8021B	Prep Method: S 5035
Analysis: BTEX	Date Analyzed: 2012-08-20	Analyzed By: MT
QC Batch: 94090	Sample Preparation: 2012-08-20	Prepared By: MT
Prep Batch: 79758		

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene	u	1	<0.0200	mg/Kg	1	0.0200
Toluene	u	1	<0.0200	mg/Kg	1	0.0200
Ethylbenzene	u	1	<0.0200	mg/Kg	1	0.0200
Xylene	u	1	<0.0200	mg/Kg	1	0.0200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.67	mg/Kg	1	2.00	84	70 - 130
4-Bromofluorobenzene (4-BFB)			1.86	mg/Kg	1	2.00	93	70 - 130

Sample: 306710 - TT-1 @ Surface

Laboratory: Lubbock	Analytical Method: SM 4500-Cl B	Prep Method: N/A
Analysis: Chloride (Titration)	Date Analyzed: 2012-08-16	Analyzed By: LM
QC Batch: 93965	Sample Preparation: 2012-08-16	Prepared By: LM
Prep Batch: 79658		

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			<50.0	mg/Kg	10	50.0

Sample: 306710 - TT-1 @ Surface

Laboratory: Midland	Analytical Method: S 8015 D	Prep Method: N/A
Analysis: TPH DRO - NEW	Date Analyzed: 2012-08-16	Analyzed By: CW
QC Batch: 93964	Sample Preparation: 2012-08-15	Prepared By: CW
Prep Batch: 79657		

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
DRO	u	2	<50.0	mg/Kg	1	50.0

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			125	mg/Kg	1	100	125	70 - 130

Sample: 306710 - TT-1 @ Surface

Laboratory: Lubbock
 Analysis: TPH GRO Analytical Method: S 8015 D Prep Method: S 5035
 QC Batch: 94091 Date Analyzed: 2012-08-20 Analyzed By: MT
 Prep Batch: 79758 Sample Preparation: 2012-08-20 Prepared By: MT

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
GRO	Jb	1	<4.00	mg/Kg	1	4.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.73	mg/Kg	1	2.00	86	70 - 130
4-Bromofluorobenzene (4-BFB)			2.00	mg/Kg	1	2.00	100	70 - 130

Sample: 306710 - TT-1 @ Surface

Laboratory: Midland
 Analysis: TPH ORO Analytical Method: S 8015 D Prep Method: N/A
 QC Batch: 93981 Date Analyzed: 2012-08-17 Analyzed By: CW
 Prep Batch: 79680 Sample Preparation: 2012-08-15 Prepared By: CW

Parameter	Flag	Cert	MDL Result	SQL Result	PQL Result	RL Result	Units	Dilution	MDL	SQL	PQL	RL
ORO	v		<14.5	<50.0	<50.0	<50.0	mg/Kg	1	14.5	50.0	50.0	50.0

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			125	mg/Kg	1	100	125	70 - 130
n-Triacontane			89.2	mg/Kg	1	100	89	70 - 130

Sample: 306711 - TT-1 @ 4'

Laboratory: Lubbock
 Analysis: BTEX Analytical Method: S 8021B Prep Method: S 5035
 QC Batch: 94090 Date Analyzed: 2012-08-20 Analyzed By: MT
 Prep Batch: 79758 Sample Preparation: 2012-08-20 Prepared By: MT

Parameter	Flag	Cert	RL		Dilution	RL
			Result	Units		
Benzene	u	1	<0.0200	mg/Kg	1	0.0200
Toluene	u	1	<0.0200	mg/Kg	1	0.0200
Ethylbenzene	u	1	<0.0200	mg/Kg	1	0.0200
Xylene	u	1	<0.0200	mg/Kg	1	0.0200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.69	mg/Kg	1	2.00	85	70 - 130
4-Bromofluorobenzene (4-BFB)			1.78	mg/Kg	1	2.00	89	70 - 130

Sample: 306711 - TT-1 @ 4'

Laboratory: Lubbock
 Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
 QC Batch: 93965 Date Analyzed: 2012-08-16 Analyzed By: LM
 Prep Batch: 79658 Sample Preparation: 2012-08-16 Prepared By: LM

Parameter	Flag	Cert	RL		Dilution	RL
			Result	Units		
Chloride			<50.0	mg/Kg	10	5.00

Sample: 306711 - TT-1 @ 4'

Laboratory: Midland
 Analysis: TPH DRO - NEW Analytical Method: S 8015 D Prep Method: N/A
 QC Batch: 93964 Date Analyzed: 2012-08-16 Analyzed By: CW
 Prep Batch: 79657 Sample Preparation: 2012-08-15 Prepared By: CW

Parameter	Flag	Cert	RL		Dilution	RL
			Result	Units		
DRO	u	2	<50.0	mg/Kg	1	50.0

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			126	mg/Kg	1	100	126	70 - 130

Sample: 306711 - TT-1 @ 4'

Laboratory: Lubbock
 Analysis: TPH GRO Analytical Method: S 8015 D Prep Method: S 5035
 QC Batch: 94091 Date Analyzed: 2012-08-20 Analyzed By: MT
 Prep Batch: 79758 Sample Preparation: 2012-08-20 Prepared By: MT

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
GRO	Jb	1	<4.00	mg/Kg	1	4.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.76	mg/Kg	1	2.00	88	70 - 130
4-Bromofluorobenzene (4-BFB)			1.83	mg/Kg	1	2.00	92	70 - 130

Sample: 306711 - TT-1 @ 4'

Laboratory: Midland
 Analysis: TPH ORO Analytical Method: S 8015 D Prep Method: N/A
 QC Batch: 93981 Date Analyzed: 2012-08-17 Analyzed By: CW
 Prep Batch: 79680 Sample Preparation: 2012-08-15 Prepared By: CW

Parameter	Flag	Cert	MDL Result	MDL Result	PQL Result	RL Result	Units	Dilution	MDL	MDL	PQL	RL
ORO	v		<14.5	<50.0	<50.0	<50.0	mg/Kg	1	14.5	50.0	50.0	50.0

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			124	mg/Kg	1	100	124	70 - 130
n-Triacontane			92.5	mg/Kg	1	100	92	70 - 130

Sample: 306712 - TT-2 @ 1'

Laboratory: Lubbock
 Analysis: BTEX Analytical Method: S 8021B Prep Method: S 5035
 QC Batch: 94090 Date Analyzed: 2012-08-20 Analyzed By: MT
 Prep Batch: 79758 Sample Preparation: 2012-08-20 Prepared By: MT

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene	v	1	<0.0200	mg/Kg	1	0.0200
Toluene	v	1	<0.0200	mg/Kg	1	0.0200
Ethylbenzene	v	1	<0.0200	mg/Kg	1	0.0200
Xylene	v	1	<0.0200	mg/Kg	1	0.0200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.59	mg/Kg	1	2.00	80	70 - 130
4-Bromofluorobenzene (4-BFB)			1.80	mg/Kg	1	2.00	90	70 - 130

Sample: 306712 - TT-2 @ 1'

Laboratory: Lubbock	Analytical Method: SM 4500-Cl B	Prep Method: N/A
Analysis: Chloride (Titration)	Date Analyzed: 2012-08-16	Analyzed By: LM
QC Batch: 93965	Sample Preparation: 2012-08-16	Prepared By: LM
Prep Batch: 79658		

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			270	mg/Kg	20	5.00

Sample: 306712 - TT-2 @ 1'

Laboratory: Midland	Analytical Method: S 8015 D	Prep Method: N/A
Analysis: TPH DRO - NEW	Date Analyzed: 2012-08-16	Analyzed By: CW
QC Batch: 93964	Sample Preparation: 2012-08-15	Prepared By: CW
Prep Batch: 79657		

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
DRO	u	2	<50.0	mg/Kg	1	50.0

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			128	mg/Kg	1	100	128	70 - 130

Sample: 306712 - TT-2 @ 1'

Laboratory: Lubbock	Analytical Method: S 8015 D	Prep Method: S 5035
Analysis: TPH GRO	Date Analyzed: 2012-08-20	Analyzed By: MT
QC Batch: 94091	Sample Preparation: 2012-08-20	Prepared By: MT
Prep Batch: 79758		

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
GRO	u	1	<4.00	mg/Kg	1	4.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.64	mg/Kg	1	2.00	82	70 - 130
4-Bromofluorobenzene (4-BFB)			1.92	mg/Kg	1	2.00	96	70 - 130

Sample: 306712 - TT-2 @ 1'

Laboratory: Midland
 Analysis: TPH ORO Analytical Method: S 8015 D Prep Method: N/A
 QC Batch: 93981 Date Analyzed: 2012-08-17 Analyzed By: CW
 Prep Batch: 79680 Sample Preparation: 2012-08-15 Prepared By: CW

Parameter	Flag	Cert	MDL Result	MQL Result	PQL Result	RL Result	Units	Dilution	MDL	MQL	PQL	RL
ORO	u		<14.5	<50.0	<50.0	<50.0	mg/Kg	1	14.5	50.0	50.0	50.0

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			127	mg/Kg	1	100	127	70 - 130
n-Triacontane			89.3	mg/Kg	1	100	89	70 - 130

Sample: 306713 - TT-3 @ 1'

Laboratory: Lubbock
 Analysis: BTEX Analytical Method: S 8021B Prep Method: S 5035
 QC Batch: 94090 Date Analyzed: 2012-08-20 Analyzed By: MT
 Prep Batch: 79758 Sample Preparation: 2012-08-20 Prepared By: MT

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene	1	u	<0.0400	mg/Kg	2	0.0200
Toluene		u	<0.0400	mg/Kg	2	0.0200
Ethylbenzene		u	<0.0400	mg/Kg	2	0.0200
Xylene		u	<0.0400	mg/Kg	2	0.0200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.78	mg/Kg	2	2.00	89	70 - 130
4-Bromofluorobenzene (4-BFB)			1.89	mg/Kg	2	2.00	94	70 - 130

Sample: 306713 - TT-3 @ 1'

Laboratory: Lubbock
 Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
 QC Batch: 93965 Date Analyzed: 2012-08-16 Analyzed By: LM
 Prep Batch: 79658 Sample Preparation: 2012-08-16 Prepared By: LM

continued ...

sample 306713 continued ...

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			198	mg/Kg	10	5.00

Sample: 306713 - TT-3 @ 1'

Laboratory: Midland	Analytical Method: S 8015 D	Prep Method: N/A
Analysis: TPH DRO - NEW	Date Analyzed: 2012-08-16	Analyzed By: CW
QC Batch: 93964	Sample Preparation: 2012-08-15	Prepared By: CW
Prep Batch: 79657		

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
DRO		2	<50.0	mg/Kg	1	50.0

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane	Q _{sr}	Q _{sr}	131	mg/Kg	1	100	131	70 - 130

Sample: 306713 - TT-3 @ 1'

Laboratory: Lubbock	Analytical Method: S 8015 D	Prep Method: S 5035
Analysis: TPH GRO	Date Analyzed: 2012-08-20	Analyzed By: MT
QC Batch: 94091	Sample Preparation: 2012-08-20	Prepared By: MT
Prep Batch: 79758		

Parameter	Flag	Cert	RL Result	Units	Dilution	RL	
GRO	2	U	1	<8.00	mg/Kg	2	4.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.79	mg/Kg	2	2.00	90	70 - 130
4-Bromofluorobenzene (4-BFB)			1.98	mg/Kg	2	2.00	99	70 - 130

Sample: 306713 - TT-3 @ 1'

Laboratory: Midland
 Analysis: TPH ORO Analytical Method: S 8015 D Prep Method: N/A
 QC Batch: 93981 Date Analyzed: 2012-08-17 Analyzed By: CW
 Prep Batch: 79680 Sample Preparation: 2012-08-15 Prepared By: CW

Parameter	Flag	Cert	MDL Result	MQL Result	PQL Result	RL Result	Units	Dilution	MDL	MQL	PQL	RL
ORO	u		<14.5	<50.0	<50.0	<50.0	mg/Kg	1	14.5	50.0	50.0	50.0

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane	Qsr	Qsr	131	mg/Kg	1	100	131	70 - 130
n-Triacontane			99.8	mg/Kg	1	100	100	70 - 130

Sample: 306714 - Stockpile

Laboratory: Lubbock
 Analysis: BTEX Analytical Method: S 8021B Prep Method: S 5035
 QC Batch: 94090 Date Analyzed: 2012-08-20 Analyzed By: MT
 Prep Batch: 79758 Sample Preparation: 2012-08-20 Prepared By: MT

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Benzene	u	1	<0.0200	mg/Kg	1	0.0200
Toluene	u	1	<0.0200	mg/Kg	1	0.0200
Ethylbenzene	u	1	<0.0200	mg/Kg	1	0.0200
Xylene		1	<0.0200	mg/Kg	1	0.0200

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.58	mg/Kg	1	2.00	79	70 - 130
4-Bromofluorobenzene (4-BFB)			1.87	mg/Kg	1	2.00	94	70 - 130

Sample: 306714 - Stockpile

Laboratory: Lubbock
 Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
 QC Batch: 93966 Date Analyzed: 2012-08-16 Analyzed By: LM
 Prep Batch: 79660 Sample Preparation: 2012-08-16 Prepared By: LM

continued ...

sample 306714 continued ...

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
Chloride			545	mg/Kg	20	5.00

Sample: 306714 - Stockpile

Laboratory: Midland
 Analysis: TPH DRO - NEW Analytical Method: S 8015 D Prep Method: N/A
 QC Batch: 93964 Date Analyzed: 2012-08-16 Analyzed By: CW
 Prep Batch: 79657 Sample Preparation: 2012-08-15 Prepared By: CW

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
DRO		2	<50.0	mg/Kg	1	50.0

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			122	mg/Kg	1	100	122	70 - 130

Sample: 306714 - Stockpile

Laboratory: Lubbock
 Analysis: TPH GRO Analytical Method: S 8015 D Prep Method: S 5035
 QC Batch: 94091 Date Analyzed: 2012-08-20 Analyzed By: MT
 Prep Batch: 79758 Sample Preparation: 2012-08-20 Prepared By: MT

Parameter	Flag	Cert	RL Result	Units	Dilution	RL
GRO	U	1	<4.00	mg/Kg	1	4.00

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.59	mg/Kg	1	2.00	80	70 - 130
4-Bromofluorobenzene (4-BFB)			1.95	mg/Kg	1	2.00	98	70 - 130

Sample: 306714 - Stockpile

Laboratory: Midland	Analytical Method: S 8015 D	Prep Method: N/A
Analysis: TPH ORO	Date Analyzed: 2012-08-17	Analyzed By: CW
QC Batch: 93981	Sample Preparation: 2012-08-15	Prepared By: CW
Prep Batch: 79680		

Parameter	Flag	Cert	MDL Result	MQL Result	PQL Result	RL Result	Units	Dilution	MDL	MQL	PQL	RL
ORO	u		<14.5	<50.0	<50.0	<50.0	mg/Kg	1	14.5	50.0	50.0	50.0

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			123	mg/Kg	1	100	123	70 - 130
n-Triacontane			89.3	mg/Kg	1	100	89	70 - 130

Method Blanks

Method Blank (1) QC Batch: 93964

QC Batch: 93964 Date Analyzed: 2012-08-16 Analyzed By: CW
Prep Batch: 79657 QC Preparation: 2012-08-15 Prepared By: CW

Parameter	Flag	Cert	MDL Result	Units	RL
DRO		2	<14.5	mg/Kg	50

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			110	mg/Kg	1	100	110	70 - 130

Method Blank (1) QC Batch: 93965

QC Batch: 93965 Date Analyzed: 2012-08-16 Analyzed By: LM
Prep Batch: 79658 QC Preparation: 2012-08-16 Prepared By: LM

Parameter	Flag	Cert	MDL Result	Units	RL
Chloride			<3.05	mg/Kg	5

Method Blank (1) QC Batch: 93966

QC Batch: 93966 Date Analyzed: 2012-08-16 Analyzed By: LM
Prep Batch: 79660 QC Preparation: 2012-08-16 Prepared By: LM

Parameter	Flag	Cert	MDL Result	Units	RL
Chloride			<3.05	mg/Kg	5

Method Blank (1) QC Batch: 93981

QC Batch: 93981 Date Analyzed: 2012-08-17 Analyzed By: CW
Prep Batch: 79680 QC Preparation: 2012-08-15 Prepared By: CW

Parameter	Flag	Cert	MDL Result	Units	RL
ORO			<14.5	mg/Kg	50

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			108	mg/Kg	1	100	108	70 - 130
n-Triacontane			81.5	mg/Kg	1	100	82	70 - 130

Method Blank (1) QC Batch: 94090

QC Batch: 94090 Date Analyzed: 2012-08-20 Analyzed By: MT
Prep Batch: 79758 QC Preparation: 2012-08-20 Prepared By: MT

Parameter	Flag	Cert	MDL Result	Units	RL
Benzene		1	<0.00365	mg/Kg	0.02
Toluene		1	<0.00816	mg/Kg	0.02
Ethylbenzene		1	<0.00560	mg/Kg	0.02
Xylene		1	<0.00460	mg/Kg	0.02

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.86	mg/Kg	1	2.00	93	70 - 130
4-Bromofluorobenzene (4-BFB)			1.82	mg/Kg	1	2.00	91	70 - 130

Method Blank (1) QC Batch: 94091

QC Batch: 94091 Date Analyzed: 2012-08-20 Analyzed By: MT
Prep Batch: 79758 QC Preparation: 2012-08-20 Prepared By: MT

Parameter	Flag	Cert	MDL Result	Units	RL
GRO		1	0.984	mg/Kg	4

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			2.07	mg/Kg	1	2.00	104	70 - 130
4-Bromofluorobenzene (4-BFB)			1.97	mg/Kg	1	2.00	98	70 - 130

Laboratory Control Spikes

Laboratory Control Spike (LCS-1)

QC Batch: 93964 Date Analyzed: 2012-08-16 Analyzed By: CW
 Prep Batch: 79657 QC Preparation: 2012-08-15 Prepared By: CW

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO		2	251	mg/Kg	1	250	<14.5	100	70 - 130

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO		2	241	mg/Kg	1	250	<14.5	96	70 - 130	4	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
n-Tricosane	116	109	mg/Kg	1	100	116	109	70 - 130

Laboratory Control Spike (LCS-1)

QC Batch: 93981 Date Analyzed: 2012-08-17 Analyzed By: CW
 Prep Batch: 79680 QC Preparation: 2012-08-15 Prepared By: CW

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
n-Tricosane	116	108	mg/Kg	1	100	116	108	70 - 130
n-Triacontane	87.5	77.0	mg/Kg	1	100	88	77	70 - 130

Laboratory Control Spike (LCS-1)

QC Batch: 94090 Date Analyzed: 2012-08-20 Analyzed By: MT
 Prep Batch: 79758 QC Preparation: 2012-08-20 Prepared By: MT

Param	F	C	LCS		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
			Result	Units					
Benzene		1	1.88	mg/Kg	1	2.00	<0.00365	94	75.4 - 120
Toluene		1	1.81	mg/Kg	1	2.00	<0.00816	90	74.9 - 120
Ethylbenzene		1	1.84	mg/Kg	1	2.00	<0.00560	92	78.1 - 120
Xylene		1	5.54	mg/Kg	1	6.00	<0.00460	92	77.3 - 120

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
			Result	Units							
Benzene		1	1.89	mg/Kg	1	2.00	<0.00365	94	75.4 - 120	0	20
Toluene		1	1.85	mg/Kg	1	2.00	<0.00816	92	74.9 - 120	2	20
Ethylbenzene		1	1.88	mg/Kg	1	2.00	<0.00560	94	78.1 - 120	2	20
Xylene		1	5.65	mg/Kg	1	6.00	<0.00460	94	77.3 - 120	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
4-Bromofluorobenzene (4-BFB)	1.84	1.88	mg/Kg	1	2.00	92	94	70 - 130

Laboratory Control Spike (LCS-1)

QC Batch: 94091
Prep Batch: 79758

Date Analyzed: 2012-08-20
QC Preparation: 2012-08-20

Analyzed By: MT
Prepared By: MT

Param	F	C	LCS		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
			Result	Units					
GRO		1	19.5	mg/Kg	1	20.0	0.984	92	68.9 - 120

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
			Result	Units							
GRO		1	20.0	mg/Kg	1	20.0	0.984	95	68.9 - 120	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
4-Bromofluorobenzene (4-BFB)	1.80	2.07	mg/Kg	1	2.00	90	104	70 - 130

Matrix Spike (MS-1) Spiked Sample: 306704

QC Batch: 93964 Date Analyzed: 2012-08-16 Analyzed By: CW
 Prep Batch: 79657 QC Preparation: 2012-08-15 Prepared By: CW

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO		2	299	mg/Kg	1	250	15.5	113	70 - 130

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO		2	306	mg/Kg	1	250	15.5	116	70 - 130	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
n-Tricosane <small>Q_{sr}</small> <small>Q_{sr}</small>	131	128	mg/Kg	1	100	131	128	70 - 130

Matrix Spike (MS-1) Spiked Sample: 306713

QC Batch: 93965 Date Analyzed: 2012-08-16 Analyzed By: LM
 Prep Batch: 79658 QC Preparation: 2012-08-16 Prepared By: LM

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride			607	mg/Kg	10	500	<30.5	121	80 - 120

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride			607	mg/Kg	10	500	<30.5	121	80 - 120	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 306717

QC Batch: 93966 Date Analyzed: 2012-08-16 Analyzed By: LM
 Prep Batch: 79660 QC Preparation: 2012-08-16 Prepared By: LM

Param	F	C	MS			Spike Amount	Matrix Result	Rec.	Rec. Limit
			Result	Units	Dil.				
Chloride			521	mg/Kg	10	500	<30.5	104	80 - 120

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD			Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
			Result	Units	Dil.						
Chloride			521	mg/Kg	10	500	<30.5	104	80 - 120	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 306704

QC Batch: 93981
 Prep Batch: 79680

Date Analyzed: 2012-08-17
 QC Preparation: 2012-08-15

Analyzed By: CW
 Prepared By: CW

Surrogate	Q _{sr}	Q _{sr}	MS		Units	Dil.	Spike Amount	MS	MSD	Rec. Limit
			Result	Result				Rec.	Rec.	
n-Tricosane			134	127	mg/Kg	1	100	134	127	70 - 130
n-Triacontane			91.2	88.9	mg/Kg	1	100	91	89	70 - 130

Matrix Spike (MS-1) Spiked Sample: 306704

QC Batch: 94090
 Prep Batch: 79758

Date Analyzed: 2012-08-20
 QC Preparation: 2012-08-20

Analyzed By: MT
 Prepared By: MT

Param	F	C	MS			Spike Amount	Matrix Result	Rec.	Rec. Limit
			Result	Units	Dil.				
Benzene		1	1.83	mg/Kg	1	2.00	<0.00365	92	37.6 - 142
Toluene		1	1.94	mg/Kg	1	2.00	<0.00816	97	38.6 - 153
Ethylbenzene		1	2.03	mg/Kg	1	2.00	<0.00560	102	36.7 - 172
Xylene		1	6.06	mg/Kg	1	6.00	<0.00460	101	36.7 - 173

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD			Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
			Result	Units	Dil.						
Benzene		1	1.81	mg/Kg	1	2.00	<0.00365	90	37.6 - 142	1	20
Toluene		1	1.93	mg/Kg	1	2.00	<0.00816	96	38.6 - 153	0	20
Ethylbenzene		1	2.05	mg/Kg	1	2.00	<0.00560	102	36.7 - 172	1	20
Xylene		1	6.14	mg/Kg	1	6.00	<0.00460	102	36.7 - 173	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	1.98	1.98	mg/Kg	1	2	99	99	70 - 130
4-Bromofluorobenzene (4-BFB)	1.92	1.91	mg/Kg	1	2	96	96	70 - 130

Matrix Spike (MS-1) Spiked Sample: 306704

QC Batch: 94091
Prep Batch: 79758

Date Analyzed: 2012-08-20
QC Preparation: 2012-08-20

Analyzed By: MT
Prepared By: MT

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO		1	16.0	mg/Kg	1	20.0	<0.359	80	68.9 - 120

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO		1	16.8	mg/Kg	1	20.0	<0.359	84	68.9 - 120	5	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	1.82	1.82	mg/Kg	1	2	91	91	70 - 130
4-Bromofluorobenzene (4-BFB)	2.13	2.17	mg/Kg	1	2	106	108	70 - 130

Calibration Standards

Standard (CCV-1)

QC Batch: 93964 Date Analyzed: 2012-08-16 Analyzed By: CW

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		2	mg/Kg	250	248	99	80 - 120	2012-08-16

Standard (CCV-2)

QC Batch: 93964 Date Analyzed: 2012-08-16 Analyzed By: CW

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		2	mg/Kg	250	235	94	80 - 120	2012-08-16

Standard (CCV-3)

QC Batch: 93964 Date Analyzed: 2012-08-16 Analyzed By: CW

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		2	mg/Kg	250	258	103	80 - 120	2012-08-16

Standard (ICV-1)

QC Batch: 93965 Date Analyzed: 2012-08-16 Analyzed By: LM

Param	Flag	Cert	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride			mg/Kg	100	99.8	100	85 - 115	2012-08-16

Standard (CCV-1)

QC Batch: 93965 Date Analyzed: 2012-08-16 Analyzed By: LM

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride			mg/Kg	100	100	100	85 - 115	2012-08-16

Standard (ICV-1)

QC Batch: 93966 Date Analyzed: 2012-08-16 Analyzed By: LM

Param	Flag	Cert	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride			mg/Kg	100	99.8	100	85 - 115	2012-08-16

Standard (CCV-1)

QC Batch: 93966 Date Analyzed: 2012-08-16 Analyzed By: LM

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride			mg/Kg	100	100	100	85 - 115	2012-08-16

Standard (CCV-1)

QC Batch: 93981 Date Analyzed: 2012-08-17 Analyzed By: CW

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
ORO			mg/Kg	250	0.170	0	-	2012-08-17

Standard (CCV-1)

QC Batch: 94090 Date Analyzed: 2012-08-20 Analyzed By: MT

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/kg	0.100	0.0928	93	80 - 120	2012-08-20
Toluene		1	mg/kg	0.100	0.0904	90	80 - 120	2012-08-20
Ethylbenzene		1	mg/kg	0.100	0.0903	90	80 - 120	2012-08-20
Xylene		1	mg/kg	0.300	0.274	91	80 - 120	2012-08-20

Standard (CCV-2)

QC Batch: 94090

Date Analyzed: 2012-08-20

Analyzed By: MT

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/kg	0.100	0.0934	93	80 - 120	2012-08-20
Toluene		1	mg/kg	0.100	0.0918	92	80 - 120	2012-08-20
Ethylbenzene		1	mg/kg	0.100	0.0914	91	80 - 120	2012-08-20
Xylene		1	mg/kg	0.300	0.272	91	80 - 120	2012-08-20

Standard (CCV-3)

QC Batch: 94090

Date Analyzed: 2012-08-20

Analyzed By: MT

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		1	mg/kg	0.100	0.0921	92	80 - 120	2012-08-20
Toluene		1	mg/kg	0.100	0.0902	90	80 - 120	2012-08-20
Ethylbenzene		1	mg/kg	0.100	0.0923	92	80 - 120	2012-08-20
Xylene		1	mg/kg	0.300	0.276	92	80 - 120	2012-08-20

Standard (CCV-1)

QC Batch: 94091

Date Analyzed: 2012-08-20

Analyzed By: MT

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		1	mg/Kg	1.00	1.01	101	80 - 120	2012-08-20

Standard (CCV-2)

QC Batch: 94091 Date Analyzed: 2012-08-20 Analyzed By: MT

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		1	mg/Kg	1.00	0.867	87	80 - 120	2012-08-20

Standard (CCV-3)

QC Batch: 94091 Date Analyzed: 2012-08-20 Analyzed By: MT

Param	Flag	Cert	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		1	mg/Kg	1.00	1.05	105	80 - 120	2012-08-20

Appendix

Report Definitions

Name	Definition
MDL	Method Detection Limit
MQL	Minimum Quantitation Limit
SDL	Sample Detection Limit

Laboratory Certifications

C	Certifying Authority	Certification Number	Laboratory Location
-	NCTRCA	WFWB384444Y0909	TraceAnalysis
-	DBE	VN 20657	TraceAnalysis
-	HUB	1752439743100-86536	TraceAnalysis
-	WBE	237019	TraceAnalysis
1	NELAP	T104704219-12-8	Lubbock
2	NELAP	T104704392-12-4	Midland

Standard Flags

F	Description
B	Analyte detected in the corresponding method blank above the method detection limit
H	Analyzed out of hold time
J	Estimated concentration
Jb	The analyte is positively identified and the value is approximated between the SDL and MQL. Sample contains less than ten times the concentration found in the method blank. The result should be considered non-detect to the SDL.
Je	Estimated concentration exceeding calibration range.
Qc	Calibration check outside of laboratory limits.
Qr	RPD outside of laboratory limits
Qs	Spike recovery outside of laboratory limits.
Qsr	Surrogate recovery outside of laboratory limits.
U	The analyte is not detected above the SDL

Result Comments

- 1 Sample dilution due to surfactants.
- 2 Sample dilution due to surfactants.

Attachments

The scanned attachments will follow this page.
Please note, each attachment may consist of more than one page.

TraceAnalysis, Inc.

email: lab@traceanalysis.com

6701 Aberdeen Ave. Ste 9
Lubbock, Texas 79424
Tel (806) 794-1296
Fax (806) 794-1298
1 (800) 378-1296

5002 Basin Street, Suite A1
Midland, Texas 79703
Tel (432) 689-6301
Fax (432) 689-6313

BioAquatic Testing
2501 Mayes Rd., Ste 100
Carrollton, Texas 75006
Tel (972) 242-7750

Company Name: Basin Environmental Service Technologies
Address: P.O. 301 Lovington, NM, 88260
Contact Person: Rose Slade (SUG) Joel Lowry (Basin)
Phone #: 575-396-2378
Fax #: 575-396-1429
E-mail: pm@basinenv.com
 rose.slade@sug.com

Invoice to: Southern Union Gas Services
Project #: SUG Historical Releases
Project Location: (include state) Lea County, New Mexico
Project Name: Trunk "O" 30-inch (RP 1020)
Sampler Signature: *Bobby R. Slade*

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX			PRESERVATIVE METHOD				SAMPLING		
				WATER	SOIL	AIR	SLUDGE	HCL	HNO ₃	H ₂ SO ₄	NaOH	ICE	NONE
306710	TT-1 @ Surface	1		X						X		8/10	12:30
711	TT-1 @ 4'	1		X						X		8/10	12:50
712	TT-2 @ 1'	1		X						X		8/10	13:40
713	TT-3 @ 1'	1		X						X		8/10	13:50
714	Stockpile	1		X						X		8/10	14:00

Relinquished by: Bobby R. Slade
 Date: 8/14/12 Time: 8:00
 Company: 5002 lowry

Received by: *[Signature]*
 Date: 8/14/12 Time: 8:00
 Company: 5002 lowry

Relinquished by: *[Signature]*
 Date: 8/14/12 Time: 9:00
 Company: 5002 lowry

Received by: *[Signature]*
 Date: 8/14/12 Time: 9:00
 Company: 5002 lowry

Relinquished by: *[Signature]*
 Date: 8/14/12 Time: 13:45
 Company: 5002 lowry

Received by: *[Signature]*
 Date: 8/14/12 Time: 13:45
 Company: 5002 lowry

ANALYSIS REQUEST
(Circle or Specify Method No.)

MTBE 8021B / 602 / 8260B / 624	X
BTEX 8021B / 602 / 8260B / 624	X
TPH 418.1 / TX1005 / DRO / TVHC	X
PAH 8270C / 625	
Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B / 200.7	
TCLP Metals Ag As Ba Cd Cr Pb Se Hg	
TCLP Volatiles	
TCLP Semi Volatiles	
TCLP Pesticides	
RCI	
G/MS Vol. 8260B / 624	
G/MS Semi. Vol. 8270C/625	
PCB's 8082 / 608	
Pesticides 8081A / 608	
BOD, TSS, pH	
Moisture Content	
Cl, F, SO ₄ , NO ₃ -N, NO ₂ -N, PO ₄ -P, Alkalinity	X
Na, Ca, Mg, K, TDS, EC	
Turn Around Time if different from standard	Hold

LAB USE ONLY

Intact Y/N

Headspace Y/N/NA

Log-in Review Y

Carrier # *15-201840*

REMARKS:
 4 oz c.g. w/seals intact
 Dry Weight Basis Required
 Seal check ok
 TRRP Report Required
 Midland - all other
 Check if Special Reporting Limits Are Needed

Submittal of samples constitutes agreement to Terms and Conditions
A. Hernandez TA 8/14/12 14:30 ORIGINAL COPY
 8/14/12 9:00 3.1/13.3

Analytical Report 448468

for
PLAINS ALL AMERICAN EH&S

Project Manager: Ben Arguijo

Trunk "O" "30"

RP 1020

07-SEP-12

Collected By: Client



Celebrating 20 Years of commitment to excellence in Environmental Testing Services



12600 West I-20 East Odessa, Texas 79765

Xenco-Houston (EPA Lab code: TX00122):

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



07-SEP-12

Project Manager: **Ben Arguijo**
PLAINS ALL AMERICAN EH&S
1301 S. COUNTY ROAD 1150
Midland, TX 79706

Reference: XENCO Report No: **448468**
Trunk "O" "30"
Project Address: Lea, N.M.

Ben Arguijo:

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 448468. 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. 448468 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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Houston - Dallas - Odessa - San Antonio - Tampa - Lakeland - Atlanta - Phoenix - Oklahoma - Latin America



Sample Cross Reference 448468



PLAINS ALL AMERICAN EH&S, Midland, TX

Trunk "O" "30"

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
TT-2 @ 2FT	S	09-04-12 12:10		448468-001



CASE NARRATIVE

Client Name: PLAINS ALL AMERICAN EH&S

Project Name: Trunk "O" "30"



Project ID: RP 1020
Work Order Number: 448468

Report Date: 07-SEP-12
Date Received: 09/04/2012

Sample receipt non conformance and comments:

None

Sample receipt non conformance and comments per sample:

None



Certificate of Analysis Summary 448468
PLAINS ALL AMERICAN EH&S, Midland, TX



Project Id: RP 1020

Contact: Ben Arguijo

Project Name: Trunk "O" "30"

Date Received in Lab: Tue Sep-04-12 04:07 pm

Report Date: 07-SEP-12

Project Location: Lea, N.M.

Project Manager: Nicholas Straccione

Analysis Requested	Lab Id:	448468-001					
	Field Id:	TT-2 @ 2FT					
	Depth:						
	Matrix:	SOIL					
	Sampled:	Sep-04-12 12:10					
Inorganic Anions by EPA 300/300.1 SUB: E871002	Extracted:	Sep-06-12 15:30					
	Analyzed:	Sep-07-12 00:29					
	Units/RL:	mg/kg RL					
Chloride		57.2 1.04					
Percent Moisture	Extracted:						
	Analyzed:	Sep-05-12 11:00					
	Units/RL:	% RL					
Percent Moisture		3.61 1.00					

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.

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 **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	



BS / BSD Recoveries



Project Name: Trunk "O" "30"

Work Order #: 448468

Analyst: DEP

Date Prepared: 09/06/2012

Project ID: RP 1020

Date Analyzed: 09/06/2012

Lab Batch ID: 895991

Sample: 626879-1-BKS

Batch #: 1

Matrix: Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes											
Chloride	<1.00	100	98.9	99	100	99.9	100	1	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: Trunk "O" "30"

Work Order #: 448468

Lab Batch #: 895991

Project ID: RP 1020

Date Analyzed: 09/06/2012

Date Prepared: 09/06/2012

Analyst: DEP

QC- Sample ID: 448012-003 S

Batch #: 1

Matrix: Soil

Reporting Units: mg/kg

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	980	1050	2150	111	80-120	

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

BRL - Below Reporting Limit

Sample Duplicate Recovery

Project Name: Trunk "O" "30"

Work Order #: 448468

Lab Batch #: 895803

Project ID: RP 1020

Date Analyzed: 09/05/2012 09:30

Date Prepared: 09/05/2012

Analyst: WRU

QC- Sample ID: 448467-001 D

Batch #: 1

Matrix: Soil

Reporting Units: %

SAMPLE / SAMPLE DUPLICATE RECOVERY

Percent Moisture Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Percent Moisture	4.00	4.38	9	15	

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



Prelogin/Nonconformance Report- Sample Log-In

Client: PLAINS ALL AMERICAN EH&S

Acceptable Temperature Range: 0 - 6 degC

Date/ Time Received: 09/04/2012 04:07:00 PM

Air and Metal samples Acceptable Range: Ambient

Work Order #: 448468

Temperature Measuring device used :

Sample Receipt Checklist

Comments

#1 *Temperature of cooler(s)?	3.6
#2 *Shipping container in good condition?	Yes
#3 *Samples received on ice?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	Yes
#5 Custody Seals intact on sample bottles/ container?	Yes
#6 *Custody Seals Signed and dated for Containers/coolers	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: _____

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

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: State of New Mexico	Mineral Owner: State of New Mexico	Lease No.	

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
O	33	21S	36E					Lea

Latitude N32 25.762 Longitude W103 16.212

NATURE OF RELEASE

Type of Release : Crude oil and natural gas	Volume of Release 33 mcf gas, 10 bbls oil	Volume Recovered 5 bbls
Source of Release Pipeline	Date and Hour of Occurrence Unknown	Date and Hour of Discovery 8/21/06 Time: 12:02 p.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, Southern Union Gas Services	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 30" steel gathering pipeline, operating at 25 psi developed a leak, the line was excavated and the affected area was clamped at 3:46 p.m. on 8/21/06. All of the free standing fluid was removed with a vacuum truck. Clean soil was added to the impacted area to eliminate the risk to livestock and wildlife. Normal operating pressure on the line is 20 psi to 30 psi, with a potential H2S content of 4000 ppm.

Describe Area Affected and Cleanup Action Taken. The affected area is pasture. An area covering approximately 700 sq. ft. was affected by the release and response activities. Remediation activities will start after a section of the pipeline has been replaced. All remediation activities will follow the NMOCD Recommended Guidelines For The Remediation of Leaks and Spills.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: Tony Savoie	OIL CONSERVATION DIVISION Approved by District Supervisor: <i>Ernie Engr</i>	
Printed Name: John A. Savoie		
Title: EH&S Comp. Coord.	Approval Date: 9.5.06	Expiration Date: 11.1.06
E-mail Address: jasavoie@sidrichgas.com	Conditions of Approval: Notify Prior to Closure Sampling - Submit Closure Report w/ Sample	Attached <input type="checkbox"/>
Date: 8/2806	Phone: 505-395-2116	

* Attach Additional Sheets If Necessary

Incident # PAC0625730876
Application # PAC0625731004

ATTACHED w/ TABLES INCLUDED
a/c lat

RP # 1020

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

Form C-141
Revised October 10, 2003

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

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

Release Notification and Corrective Action

OPERATOR

Initial Report Final Report

Name of Company	Southern Union Gas Services, Ltd.	Contact	Crystal Callaway
Address	801 S. Loop 464, Monahans, TX, 79756	Telephone No.	(817) 302-9407
Facility Name: Trunk "O" 30" (RP-1020) Lea County Field Dept.		Facility Type	Natural Gas Gathering

Surface Owner	State of New Mexico	Mineral Owner: State of New Mexico	Lease No.
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LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
O	33	21S	36E					Lea

Latitude N32 25.762 Longitude W103 16.212

NATURE OF RELEASE

Type of Release	Crude Oil and Natural Gas	Volume of Release	33 mcf gas, 10 bbls oil	Volume Recovered	5 bbls
Source of Release	Pipeline	Date and Hour of Occurrence	Unknown	Date and Hour of Discovery	8/21/06 Time: 12:02 p.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, Southern Union Gas Services	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.*

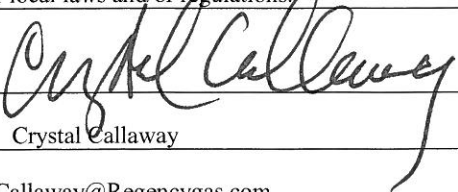
Describe Cause of Problem and Remedial Action Taken:
The 30" steel gathering pipeline, operating at 25 p.s.i. developed a leak, the line was excavated and the affected area was clamped at 3:46 p.m. on 8/21/06. All of the free standing fluid was removed with a vacuum truck. Clean soil was added to the impacted area to eliminate the risk to livestock and wildlife. Normal operating pressure on the line is 20 psi to 30 psi, with a potential H2S content of 4000 ppm. The affected section of pipeline has since been replaced.

Describe Area Affected and Cleanup Action Taken. The affected area is pasture. An area covering approximately 700 sq. ft. was affected by the release and response activities.

On or around August 30, 2006, remediation activities were conducted at the Trunk "O" 30" Release Site by an environmental contractor that is no longer affiliated with the site. On August 10, 2012, the site was revisited in an effort to determine if soil exhibiting benzene, BTEX, TPH and chloride concentrations above NMOCD regulatory standards remained in-situ and collect confirmation soil samples. Laboratory analytical reports from the confirmation soil samples suggested previous remediation activities met the requirements of the NMOCD.

Please see the attached Basin Environmental Services Technologies Remediation Summary and Site Closure Request for details of remedial activities and the site investigation.

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 District Supervisor:	
Title:	Crystal.Callaway@Regencygas.com	Approval Date:	Expiration Date:
E-mail Address:	Crystal.Callaway@Regencygas.com	Conditions of Approval:	
Date:	11/17/2014	Phone:	(817) 302-9407