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Effective Solutions

REMEDIATION SUMMARY &

RISK-BASED SITE CLOSURE REQUEST

SOUTHERN UNION GAS SERVICES
A-7 Bettis
Lea County, New Mexico
UNIT "L" (NW/SW), Section 14, Township 21 South, Range 37 East NMPM
Latitude 32° 28.522' North, Longitude 103° 08.529' West
NMOCD Reference #1RP 1540
NMOCD Reference #1RP 09-5-2186

Prepared For:

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

Prepared By:
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3100 Plains Highway
Lovington, New Mexico 88260

March 2013

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 & Risk-Based Site Closure Proposal* for the release site known as A-7 Bettis (SUGS Project #2009-010). The legal description of the release site is Unit Letter "L" (NW/SW), Section 14, Township 21 South, Range 37 East, NMPM, in Lea County, New Mexico. The property affected by the release is owned by Mr. Charlie Bettis of Eunice, New Mexico. The release site GPS coordinates are 32° 28.522' North and 103° 08.529' West. Please reference Figure 1 for a Site Location Map and Figure 2 for a Site, Sample and Photo Location Map. Photographs are provided as Appendix A.

On August 22, 2007, Southern Union discovered a release had occurred on the A-7 pipeline. The failure of the ten inch (10") low pressure natural gas pipeline resulted in a release of a mixture of crude oil, produced water and natural gas. A recent rain shower had added an unknown volume of water to the release. The release was verbally reported to the New Mexico Oil Conservation Division (NMOCD) on August 22, 2007. The "Release Notification and Corrective Action" (Form C-141) indicated approximately two hundred (200) barrels of fluid was released, and approximately one hundred thirty (130) barrels of fluid were recovered using a vacuum truck. Approximately eighty-one (81) MCF of natural gas was released to the atmosphere as a result of the release. Following the discovery of the release a temporary pipeline clamp was employed to mitigate the release. The release affected approximately 26,250 square feet of pasture land.

The initial Form C-141 (1RP 1540) was submitted and approved by the NMOCD Hobbs District Office on August 31, 2007. On March 24, 2009, the initial Form C-141 was resubmitted and approved by the NMOCD Hobbs District Office. The March 24, 2009, submittal was assigned the NMOCD reference #1RP 09-5-2186. Please reference Appendix D for copies of each of the submitted "Release Notification and Corrective Action" forms.

2.0 NMOCD SITE CLASSIFICATION

A depth-to-groundwater reference map utilized by the NMOCD indicates groundwater should be encountered at less than fifty feet (50') below ground surface (bgs). Based on the NMOCD ranking system, twenty (20) points will be assigned to the site as a result of this criterion.

A search of the New Mexico Water Rights Reporting System (NMWRRS) database indicated there were no water wells within 1,000 feet of the release. Based on the NMOCD ranking system, zero (0) points will be assigned to the site as a result of this criterion.

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

The NMOCD guidelines indicate the A-7 Bettis release site has a ranking score of twenty (20) points. The soil remediation levels for a site with a ranking score of twenty (20) points are as follows:

- Benzene – 10 mg/Kg (ppm)
- BTEX – 50 mg/Kg (ppm)
- TPH – 100 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 February 26, 2009, horizontal delineation of the impacted area began; ten (10) surface soil samples (1A, 1B, 2A, 2B, 3A, 3B, 4A, 4B, 5A and 5B) were collected and submitted to the laboratory. Each of the soil samples were analyzed for concentrations of total petroleum hydrocarbon (TPH) using EPA Method SW846-8015B and chloride using EPA Method 4500-Cl-B. Analytical results indicated TPH concentrations ranged from less than the laboratory method detection limit (MDL) of 10 mg/Kg in soil samples 1A, 1B, 2A, 2B, 4A, 4B and 5B to 11,000 mg/Kg in soil sample 5A. Chloride concentrations ranged from less than the laboratory MDL of 16.0 mg/Kg in soil sample 4B to 2,120 mg/Kg in soil sample 2A. Soil sample 5B was analyzed for concentrations of benzene, toluene, ethylbenzene and xylene (BTEX) using EPA Method SW846-8021b. The analytical results indicated BTEX constituent concentrations were less than the appropriate laboratory MDL. Historical Concentrations of Benzene, BTEX, TPH and Chlorides in Soil are provided as Table 1. Laboratory analytical reports are provided as Appendix C.

On March 12, 2009, excavation of the affected soil began. Impacted soil was stockpiled adjacent to the excavation, pending final disposition. On March 13, 2009, a composite soil sample (Chlorides Soil Pile) was collected from the stockpile and analyzed for concentrations of chloride. The analytical results indicated the chloride concentration was less than the laboratory MDL of 16 mg/Kg.

Beginning on March 16, 2009, stockpiled soil was transported to the Southern Union Landfarm (Permit # NM-02-0019) north of Jal, New Mexico.

On March 17, 2009, two composite soil samples (Soil Pile #1 South and Soil Pile #2 North) were collected to evaluate the hydrocarbon impact within the stockpile. Analytical results indicated the TPH concentrations in Soil Pile #1 South and Soil Pile #2 North was 2,140 mg/Kg and 1,705 mg/Kg, respectively. In addition, four (4) excavation floor soil samples (Bottom Start, RP 13', RP 16' and RP 18') were collected and submitted to the laboratory for TPH analysis. Laboratory analytical results indicated TPH concentrations ranged from 8,770 mg/Kg in soil sample RP 16' to 16,000 mg/Kg in soil sample Bottom Start.

On March 18, 2009, two (2) sidewall soil samples (#1 Sample and #1 Sample West Bank) were collected from the excavation and analyzed for concentrations BTEX, TPH and chloride. Analytical results indicated the benzene and BTEX concentration were less than the laboratory MDL of 0.050 mg/Kg and 0.300 mg/Kg, respectively, for each of the samples submitted. The TPH concentration was 25.3 mg/Kg for each of the submitted soil samples, and the chloride

concentration for soil samples #1 Sample and #1 Sample West Bank were 144 mg/Kg and 176 mg/Kg, respectively.

On March 19, 2009, an excavation floor sample (Bottom Hole 28') was collected from the floor of the excavation and analyzed for concentrations of BTEX and TPH. The analytical results indicated the benzene concentration was 1.52 mg/Kg, the BTEX concentration was 77.22 mg/Kg and the TPH concentration was 6,250 mg/Kg.

On March 24, 2009, two (2) excavation floor soil samples (Bottom Hole 37' and Bottom Hole 39') were collected and submitted to the laboratory. Soil sample Bottom Hole 37' was analyzed for concentrations of TPH. The analytical results indicated the TPH concentration was 6,120 mg/Kg. Soil sample Bottom Hole 39' was analyzed for concentrations of TPH and BTEX. Analytical results indicated the TPH concentration was 5,630 mg/Kg, the benzene concentration was 1.04 mg/Kg and the BTEX concentration was 113.34 mg/Kg.

On March 31, 2009, one (1) excavation floor soil sample (Bottom) and four (4) sidewall soil samples (West Bank N, West Bank S, East Bank S and North Bank) were collected and analyzed for concentrations of BTEX and TPH. Analytical results indicated benzene concentrations ranged from 0.25 mg/Kg in soil sample West Bank S to 39.6 mg/Kg in soil sample East Bank S. BTEX concentrations ranged from 20.261 mg/Kg in soil sample West Bank S to 77.321 mg/Kg in soil sample North Bank. TPH concentrations ranged from 2,872 mg/Kg in soil sample West Bank S to 5,930 mg/Kg in soil sample North Bank.

On July 9, 2009, one (1) excavation floor soil sample (Bottom Hole #4 40 ft.) was collected and submitted to the laboratory and analyzed for concentrations of BTEX and TPH. Analytical results indicated the benzene concentration was 0.453 mg/Kg, the BTEX concentration was 29.223 mg/Kg and the TPH concentration was 5,930 mg/Kg.

On July 10, 2009, one (1) excavation floor soil sample (Last Sample 44 ft.) was collected and submitted to the laboratory and analyzed for concentrations of BTEX and TPH. The analytical results indicated the benzene concentration was 0.814 mg/Kg, the BTEX concentration was 46.594 mg/Kg and the TPH concentration was 5,100 mg/Kg.

Between March 16, and July 10, 2009, approximately two thousand, five hundred and fifty cubic yards (2,550 cy) of impacted soil was excavated from the release site and transported to the Southern Union Landfarm (Permit # NM-02-0019) for treatment. The final dimensions of the excavation were approximately forty-five feet (45') in width, sixty feet (60') in length and forty-four feet (44') 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.

On October 21, 2010, representatives of Southern Union Gas Services and a representative of the NMOCD – Hobbs District Office met to discuss a path forward for closure of the release site. The NMOCD representative requested a minimum of five (5) soil borings be advanced around the perimeter of the excavation to demonstrate vertical and horizontal delineation at the release site.

On October 10, 2012, as per the request of the NMOCD, five (5) soil borings (SB-1 through SB-5) were advanced around the perimeter of the excavation. During the advancement of the soil borings, soil samples were collected at five foot (5') drilling intervals and field-screened for chloride and TPH concentrations using a chloride field test kit and photo-ionization detector.

Soil boring SB-1 was advanced to approximately seventy feet (70') bgs, fifty feet (50') southeast of the release point. During the advancement of the soil bore, seven (7) soil samples (MW-1 (SB-1 @ 1'), MW-1 (SB-1 @ 10'), MW-1 (SB-1 @ 20'), MW-1 (SB-1 @ 30'), MW-1 (SB-1 @ 40'), MW-1 (SB-1 @ 50')-core and MW-1 (SB-1 @ 60')) were collected and submitted to the laboratory for analysis of BTEX, TPH and chloride concentrations. Laboratory analytical results indicated BTEX and TPH concentrations were less than the appropriate laboratory MDL for each of the submitted soil samples. Chloride concentrations ranged from 1.66 mg/Kg for soil sample MW-1 (SB-1 @ 10') to 62.5 mg/Kg for soil sample MW-1 (SB-1 @ 60'). Concentrations of Benzene, BTEX, TPH and Chlorides in Soil are provided as Table 2.

Soil boring SB-2 was advanced approximately seventy feet (20') bgs, sixty feet (60') east of the release point. During the advancement of the soil bore, five (5) soil samples (SB-2 (1'), SB-2 (5'), SB-2 (10'), SB-2 (15') and SB-2 (20')) were collected and submitted to the laboratory for analysis of BTEX, TPH and chloride concentrations. Laboratory analytical results indicated BTEX and TPH concentrations were less than the appropriate laboratory MDL for each of the submitted soil samples. Chloride concentrations ranged from 1.38 mg/Kg for soil sample SB-2 (5') to 119 mg/Kg for soil sample SB-2 (10').

Soil boring SB-3 was advanced approximately twenty feet (20' bgs, eighty feet (80') northeast of the release point. During the advancement of the soil bore, five (5) soil samples (SB-3 (1'), SB-3 (5'), SB-3 (10'), SB-3 (15') and SB-3 (20')) were collected and submitted to the laboratory for analysis of BTEX, TPH and chloride concentrations. Laboratory analytical results indicated BTEX and TPH concentrations were less than the appropriate laboratory MDL for each of the submitted soil samples. Chloride concentrations were less than the appropriate laboratory MDL for each of the submitted soil samples with the exception of soil sample SB-3 (5'), which had a concentration of 13.3 mg/Kg.

Soil boring SB-4 was advanced approximately seventy feet (70') bgs, ninety feet (90') north-northwest of the release point. During the advancement of the soil bore, seven (7) soil samples (MW-2 (SB-4 @ 1'), MW-2 (SB-4 @ 10'), MW-2 (SB-4 @ 20'), MW-2 (SB-4 @ 30'), MW-2 (SB-4 @ 40'), MW-2 (SB-4 @ 48')-core and MW-2 (SB-4 @ 55'))were collected and submitted to the laboratory for analysis of BTEX, TPH and chloride concentrations. Laboratory analytical results indicated BTEX and TPH concentrations were less than the appropriate laboratory MDL for each of the submitted soil samples. Chloride concentrations ranged from less than the appropriate laboratory MDL for soil samples MW-2 (SB-4 @ 10'), MW-2 (SB-4 @ 20'), MW-2 (SB-4 @ 40') and MW-2 (SB-4 @ 48')-core to 10.8 mg/Kg for soil sample MW-2 (SB-4 @ 55').

Soil boring SB-5 was advanced approximately seventy feet (70') bgs, ninety feet (90') south-southwest of the release point. During the advancement of the soil bore, seven (7) soil samples (MW-3 (SB-5 @ 1'), MW-3 (SB-5 @ 10'), MW-3 (SB-5 @ 20'), MW-3 (SB-5 @ 30'), MW-3 (SB-5 @ 40'), MW-3 (SB-5 @ 50')-core and MW-3 (SB-5 @ 60')) were collected and submitted to the laboratory for analysis of BTEX, TPH and chloride concentrations. Laboratory

analytical results indicated BTEX and TPH concentrations were less than the appropriate laboratory MDL for each of the submitted soil samples. Chloride concentrations were less than the appropriate laboratory MDL for each of the submitted soil samples with the exception of soil samplesMW-3 (SB-5 @ 50')-core and MW-3 (SB-5 @ 60'), which had concentrations of 1.42 and 3.48 mg/Kg, respectively.

Soil Borings SB-1, SB-4 and SB-5 were converted into two-inch (2") monitor wells to investigate the status of the groundwater. Monitor well MW-1 (SB-1) was installed approximately fifty feet (50') down-gradient from the release point. Monitor well MW-2 (SB-4) was installed approximately ninety feet (90') up-gradient from the release point. Monitor well MW-3 (SB-5) was installed approximately ninety feet (90') cross-gradient from the release point. Soil Boring & Monitor Well Logs are provided as Appendix B. The results of preliminary groundwater sampling and subsequent quarterly sampling events will be provided under a separate cover.

On November 7, 2012, upon receiving NMOCD approval, the excavation was partially backfilled with locally purchased, non-impacted soil. A 20-millimeter polyurethane liner was installed at approximately fifteen feet (15') bgs. This engineering control was designed to inhibit the vertical migration of contaminants left in-situ. Upon installing the approved 20-millimeter polyurethane liner, the remaining portion of the excavation was backfilled. Excavation backfill was water-packed, compacted in lifts contoured to match the surrounding topography. The site will be reseeded at the request of the landowner and a time more condusive to germination.

4.0 QA/QC PROCEDURES

4.1 Soil Sampling

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

- BTEX concentrations in accordance with EPA Method SW-846 8021b
- TPH concentrations in accordance with modified EPA Method SW-846 8015M
- Chloride concentrations in accordance with EPA Method 300.1 and/or 4500 Cl-B

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 SOIL CLOSURE REQUEST

Remediation activities at the A-7 Bettis release site met the objectives of the October 21, 2010, meeting with the NMOCD and the approved *Remediation Summary & Proposed Soil and Groundwater Investigation Strategy* dated July 2012. Basin recommends Southern Union provide the NMOCD Hobbs District Office a copy of this *Remediation Summary & Risk-Based Soil Closure Request* and request the NMOCD grant soil closure to the A-7 Bettis Release Site.

6.0 LIMITATIONS

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

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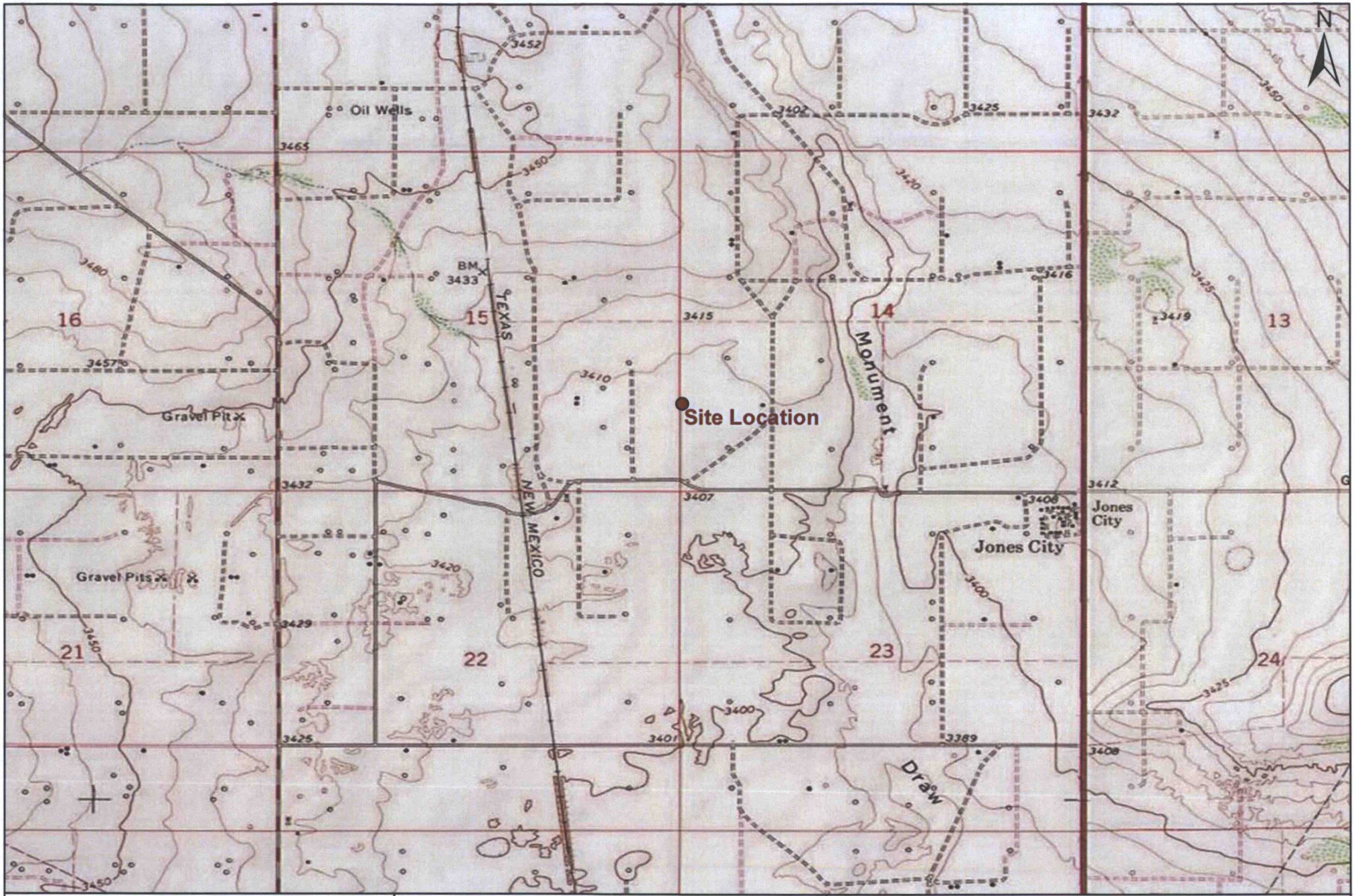


1,000500 0 1,000 2,000

Distance in Feet

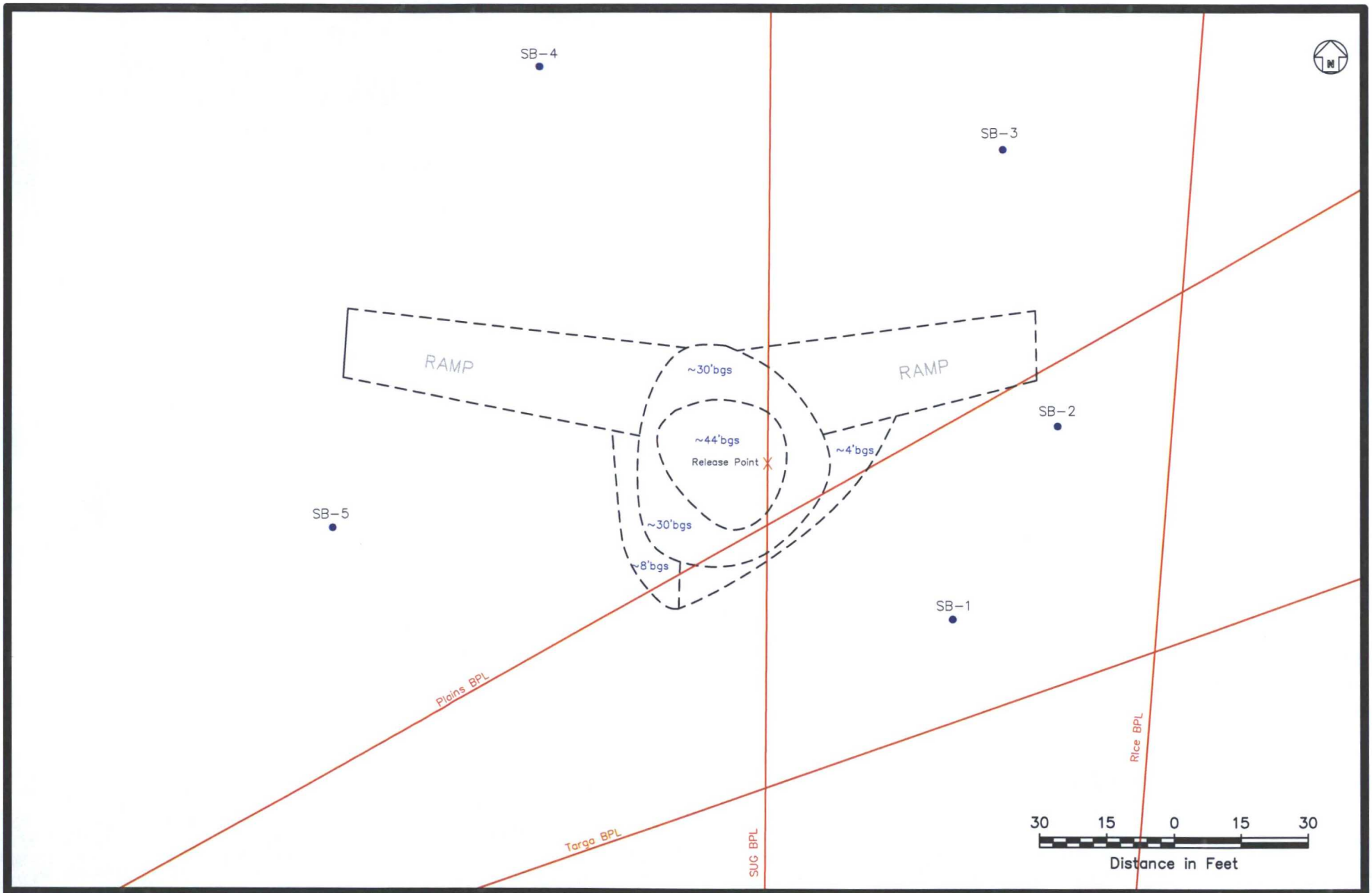
Figure 1
Site Location Map
Southern Union Gas Services
A-7 Bettis
Lea County, New Mexico

Basin Environmental Service Technologies

Effective Solutions

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

Drawn By: BJA	Checked By: BRB
July 13, 2012	Scale: 1" = 2000'



Legend

- Release Point
- Excavation Extent
- Soil Boring
- Buried Pipeline

Figure 2
Site and Sample Location Map
Southern Union Gas Services
A-7 North Site/Bettis
NMOCD Ref 1RP # 09.5.2186
Lea County, New Mexico

Basin Environmental Services

Prep By: JWL	Checked By: BJA
March 4, 2013	Scale 1"=30'

TABLE 1

HISTORICAL CONCENTRATIONS OF BENZENE, BTEX, TPH AND CHLORIDE IN SOIL

SOUTHERN UNION GAS SERVICES
A-7 BETTIS (1RP-2186)
LEA COUNTY, NEW MEXICO

SAMPLE LOCATION	SAMPLE DEPTH (BGS)	SAMPLE DATE	METHOD: EPA SW 846-8021B, 5030					METHOD: 8015B			METHOD: 4500-Cl-B
			BENZENE (mg/Kg)	TOLUENE (mg/Kg)	ETHYL-BENZENE (mg/Kg)	TOTAL - XYLENES (mg/Kg)	TOTAL BTEX (mg/Kg)	GRO C_6-C_{10} (mg/Kg)	DRO C_{10}-C_{28} (mg/Kg)	TOTAL TPH C_6-C_{28} (mg/Kg)	CHLORIDE (mg/Kg)
1A	-	02/26/09	-	-	-	-	-	<10.0	<10.0	<10.0	**256**
1B	-	02/26/09	-	-	-	-	-	<10.0	<10.0	<10.0	16
2A	-	02/26/09	-	-	-	-	-	<10.0	<10.0	<10.0	**2,120**
2B	-	02/26/09	-	-	-	-	-	<10.0	<10.0	<10.0	208
3A	-	02/26/09	-	-	-	-	-	<10.0	51.4	51.4	32
3B	-	02/26/09	-	-	-	-	-	<10.0	10.8	10.8	64
4A	-	02/26/09	-	-	-	-	-	<10.0	<10.0	<10.0	32
4B	-	02/26/09	-	-	-	-	-	<10.0	<10.0	<10.0	<16
5A	-	02/26/09	-	-	-	-	-	<50.0	11,000	**11,000**	**672**
5B	-	02/26/09	<0.050	<0.050	<0.050	<0.300	<0.300	<10.0	<10.0	<10.0	**336**
Chlorides Soil Pile	-	03/13/09	-	-	-	-	-	-	-	-	<16
Soil Pile #1 South	-	03/17/09	-	-	-	-	-	<10	2,140	**2,140**	-
Soil Pile #2 North	-	03/17/09	-	-	-	-	-	215	1,490	**1,705**	-
Bottom Start	-	03/17/09	-	-	-	-	-	3,900	12,100	**16,000**	-
RP 13'	13'	03/17/09	-	-	-	-	-	3,970	9,360	**13,330**	-
RP 16'	16'	03/17/09	-	-	-	-	-	2,270	6,500	**8,770**	-
RP 18'	18'	03/17/09	-	-	-	-	-	3,290	7,670	**10,960**	-
#1 Sample		03/18/09	<0.050	<0.050	<0.050	<0.300	<0.300	<10.0	25.3	25.3	144
#1 Sample West Bank		03/18/09	<0.050	<0.050	<0.050	<0.300	<0.300	<10.0	25.3	25.3	176
Bottom Hole @ 28'	28'	03/19/09	1.52	14.4	15.8	45.5	77.22	1,790	4,460	**6,250**	-
Bottom Hole @ 28'	28'	03/19/09	-	-	-	-	-	*4.78	*3.19	-	-
Bottom Hole 37 ft	37'	03/24/09	-	-	-	-	-	1,670	4,450	**6,120**	-
Bottom Hole 39 ft	39'	03/24/09	1.04	23.2	23.3	65.8	113.34	1,790	3,840	**5,630**	-
Bottom Hole 39 ft	39'	03/24/09						*3.96	*3.98	-	-
Bottom		03/31/09	0.962	9.56	16.0	45.6	72.122	1,790	3,450	**5,240**	-
West Bank N		03/31/09	0.585	9.98	14.0	43	67.565	1,920	2,980	**4,900**	-
West Bank S		03/31/09	0.25	0.071	6.74	13.2	20.261	762	2,110	**2,872**	-
East Bank S		03/31/09	39.6	<0.050	<0.050	<0.300	39.6	1,790	3,450	**5,240**	-
North Bank	-	03/31/09	0.421	10.6	16.4	49.9	77.321	1,680	4,250	**5,930**	-
Bottom Hole #4 40 ft	40'	07/09/10	0.453	5.95	5.22	17.6	29.223	1,680	4,250	**5,930**	-
Last Sample 44 ft	44'	07/10/09	0.814	9.76	7.52	28.5	46.594	1,620	3,480	**5,100**	-
NMOCD Standard			**10**				**50**			**100**	**250**

* indicates TCLP analysis

TABLE 2

CONCENTRATIONS OF BENZENE, BTEX, TPH & CHLORIDE IN SOIL

SOUTHERN UNION GAS SERVICES
A-7 BETTIS (1RP-2186)
LEA COUNTY, NEW MEXICO

SAMPLE LOCATION	SAMPLE DEPTH (BGS)	SAMPLE DATE	SOIL STATUS	METHOD: EPA SW 846-8021B, 5030							METHOD: 8015M			TOTAL TPH	E 300
				BENZENE (mg/Kg)	TOLUENE (mg/Kg)	ETHYL-BENZENE (mg/Kg)	M.P. - XYLENES (mg/Kg)	O-XYLENE (mg/Kg)	TOTAL 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)	C_6-C_{35} (mg/Kg)	CHLORIDE (mg/Kg)
MW-1 (SB-1 @ 1')	1'	10/10/2012	In-situ	<0.00104	<0.00208	<0.00104	<0.00208	<0.00104	<0.00208	<0.00208	<52.3	<52.3	<52.3	<52.3	3.02
MW-1 (SB-1 @ 10')	10'	10/10/2012	In-situ	<0.00113	<0.00227	<0.00113	<0.00227	<0.00113	<0.00227	<0.00227	<56.6	<56.6	<56.6	<56.6	1.66
MW-1 (SB-1 @ 20')	20'	10/10/2012	In-situ	<0.00111	<0.00222	<0.00111	<0.00222	<0.00111	<0.00222	<0.00222	<55.5	<55.5	<55.5	<55.5	6.48
MW-1 (SB-1 @ 30')	30'	10/10/2012	In-situ	<0.00105	<0.00209	<0.00105	<0.00209	<0.00105	<0.00209	<0.00209	<52.3	<52.3	<52.3	<52.3	19.7
MW-1 (SB-1 @ 40')	40'	10/10/2012	In-situ	<0.00107	<0.00214	<0.00107	<0.00214	<0.00107	<0.00214	<0.00214	<53.5	<53.5	<53.5	<53.5	26.4
MW-1 (SB-1 @ 50')-core	50'	10/10/2012	In-situ	<0.00107	<0.00213	<0.00107	<0.00213	<0.00107	<0.00213	<0.00213	<53.6	<53.6	<53.6	<53.6	12.2
MW-1 (SB-1 @ 60')	60'	10/10/2012	In-situ	<0.00108	<0.00216	<0.00108	<0.00216	<0.00108	<0.00216	<0.00216	<54.2	<54.2	<54.2	<54.2	62.5
MW-2 (SB-4 @ 1')	1'	10/10/2012	In-situ	<0.00107	<0.00214	<0.00107	<0.00214	<0.00107	<0.00214	<0.00214	<53.8	<53.8	<53.8	<53.8	4.37
MW-2 (SB-4 @ 10')	10'	10/10/2012	In-situ	<0.00108	<0.00217	<0.00108	<0.00217	<0.00108	<0.00217	<0.00217	<54.4	<54.4	<54.4	<54.4	<1.15
MW-2 (SB-4 @ 20')	20'	10/10/2012	In-situ	<0.00108	<0.00215	<0.00108	<0.00215	<0.00108	<0.00215	<0.00215	<53.9	<53.9	<53.9	<53.9	<1.08
MW-2 (SB-4 @ 30')	30'	10/10/2012	In-situ	<0.00105	<0.00211	<0.00105	<0.00211	<0.00105	<0.00211	<0.00211	<53.0	<53.0	<53.0	<53.0	1.04
MW-2 (SB-4 @ 40')	40	10/10/2012	In-situ	<0.00106	<0.00212	<0.00106	<0.00212	<0.00106	<0.00212	<0.00212	<52.7	<52.7	<52.7	<52.7	<1.12
MW-2 (SB-4 @ 48')-core	48'	10/10/2012	In-situ	<0.00107	<0.00215	<0.00107	<0.00215	<0.00107	<0.00215	<0.00215	<53.8	<53.8	<53.8	<53.8	<1.19
MW-2 (SB-4 @ 55')	55'	10/10/2012	In-situ	<0.00112	<0.00224	<0.00112	<0.00224	<0.00112	<0.00224	<0.00224	<56.1	<56.1	<56.1	<56.1	10.8
MW-3 (SB-5 @ 1')	1'	10/10/2012	In-situ	<0.00108	<0.00217	<0.00108	<0.00217	<0.00108	<0.00217	<0.00217	<54.2	<54.2	<54.2	<54.2	<1.09
MW-3 (SB-5 @ 10')	10'	10/10/2012	In-situ	<0.00107	<0.00213	<0.00107	<0.00213	<0.00107	<0.00213	<0.00213	<53.3	<53.3	<53.3	<53.3	<1.03
MW-3 (SB-5 @ 20')	20'	10/10/2012	In-situ	<0.00100	<0.00200	<0.00100	<0.00200	<0.00100	<0.00200	<0.00200	<55.2	<55.2	<55.2	<55.2	<1.09
MW-3 (SB-5 @ 30')	30'	10/10/2012	In-situ	<0.00994	<0.00199	<0.00994	<0.00199	<0.00994	<0.00199	<0.00199	<52.1	<52.1	<52.1	<52.1	<1.01
MW-3 (SB-5 @ 40')	40'	10/10/2012	In-situ	<0.00996	<0.00199	<0.00996	<0.00199	<0.00996	<0.00199	<0.00199	<53.0	<53.0	<53.0	<53.0	<1.05
MW-3 (SB-5 @ 50')-core	50'	10/10/2012	In-situ	<0.00994	<0.00199	<0.00994	<0.00199	<0.00994	<0.00199	<0.00199	<54.0	<54.0	<54.0	<54.0	1.42
MW-3 (SB-5 @ 60')	60'	10/10/2012	In-situ	<0.00100	<0.00200	<0.00100	<0.00200	<0.00100	<0.00200	<0.00200	<56.6	<56.6	<56.6	<56.6	3.48
SB-2 (1')	1'	10/10/2012	In-situ	<0.00996	<0.00199	<0.00996	<0.00199	<0.00996	<0.00199	<0.00199	<53.2	<53.2	<53.2	<53.2	21.6
SB-2 (5')	5'	10/10/2012	In-situ	<0.00100	<0.00200	<0.00100	<0.00200	<0.00100	<0.00200	<0.00200	<54.1	<54.1	<54.1	<54.1	1.38
SB-2 (10')	10'	10/10/2012	In-situ	<0.00100	<0.00200	<0.00100	<0.00200	<0.00100	<0.00200	<0.00200	<52.8	<52.8	<52.8	<52.8	119
SB-2 (15')	15'	10/10/2012	In-situ	<0.00100	<0.00200	<0.00100	<0.00200	<0.00100	<0.00200	<0.00200	<55.3	<55.3	<55.3	<55.3	17.8
SB-2 (20')	20'	10/10/2012	In-situ	<0.00100	<0.00200	<0.00100	<0.00200	<0.00100	<0.00200	<0.00200	<54.9	<54.9	<54.9	<54.9	11.4
SB-3 (1')	1'	10/10/2012	In-situ	<0.00994	<0.00199	<0.00994	<0.00199	<0.00994	<0.00199	<0.00199	<54.1	<54.1	<54.1	<54.1	<1.00
SB-3 (5')	5'	10/10/2012	In-situ	<0.00100	<0.00200	<0.00100	<0.00200	<0.00100	<0.00200	<0.00200	<51.2	<51.2	<51.2	<51.2	13.3
SB-3 (10')	10'	10/10/2012	In-situ	<0.00996	<0.00199	<0.00996	<0.00199	<0.00996	<0.00199	<0.00199	<53.6	<53.6	<53.6	<53.6	<1.20
SB-3 (15')	15'	10/10/2012	In-situ	<0.00100	<0.00201	<0.00100	<0.00201	<0.00100	<0.00201	<0.00201	<54.7	<54.7	<54.7	<54.7	<1.12
SB-3 (20')	20'	10/10/2012	In-situ	<0.00100	<0.00200	<0.00100	<0.00200	<0.00100	<0.00200	<0.00200	<52.7	<52.7	<52.7	<52.7	<1.16
NMOCD Standard				10						50				100	250

Photograph of surface staining from the initial release at the A-7 Bettis Release Site.

Photograph of surface staining from the initial release at the A-7 Bettis Release Site.

Photograph of initial excavation activities at the A-7 Bettis Release Site.

Photograph of initial excavation activities at the A-7 Bettis Release Site.

Photograph of the final excavation at the A-7 Bettis Release Site.

Photograph of the final excavation at the A-7 Bettis Release Site.

Photograph of the final excavation at the A-7 Bettis Release Site.

Photograph of backfilling activities and the pad sand installation at the A-7 Bettis Release Site.

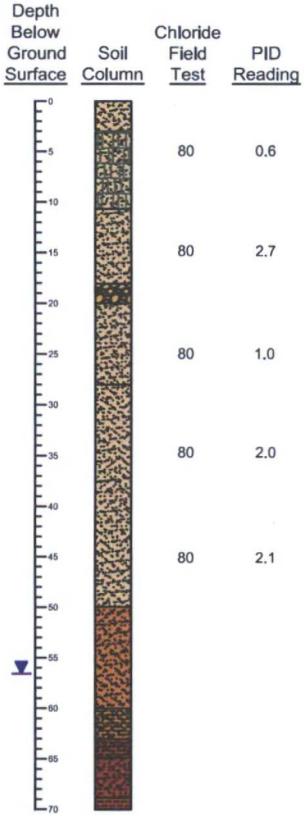
Photograph of the polyurethane liner installation at the A-7 Bettis Release Site.

Photograph of backfilling activities and the pad sand installation at the A-7 Bettis Release Site.

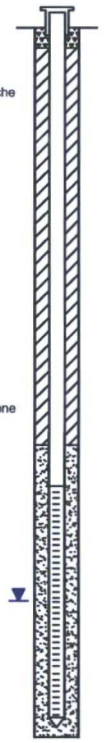
Photograph of backfilling activities at the A-7 Bettis Release Site.

Photograph of A-7 Bettis Release Site after remediation activities.

Soil Boring/Monitor Well Log MW-1



Soil Description



0' - 3' - Red v. fine sand

3' - 11' - Tan fine sand, cement sandstone caliche

11' - 18' - Tan v. fine sand, sandstone

18' - 20' - Chert

20' - 28' - Tan v. fine sand, sandstone

28' - 50' Tan fine sand, layered cement sandstone

50' - 60' Reddish tan v. fine sand, silty

60' - 63' Reddish tan v, fine sand w/ clay

63' - 65' Red silty sand, clay pea gravel

65' - 69' Red silty clay, silty sand

69' - 70' Red silty clay

Date Drilled October 10, 2012
Thickness of Bentonite Seal 39'
Depth of Exploratory Boring 70' bgs
Depth to Groundwater 56.34' bgs
Ground Water Elevation 3354.26'

Indicates the PSH level measured on N/A

Indicates the groundwater level measured on October 29, 2012

Indicates samples selected for Laboratory Analysis.

PID Head-space reading in ppm obtained with a photo-ionization detector.

Grout Surface Seal

Bentonite Pellet Seal

Sand Pack

Screen

Completion Notes

1.) Monitor well was advanced on date using air rotary drilling techniques.
2.) Monitor well was constructed with 2" ID, 0.10-inch factory slotted, threaded joint, Schedule 40 PVC pipe.
3.) Well is protected with a locked stick-up steel cover and compression cap.
4.) Lines between material types shown on the profile log represent approximate boundaries. Actual transitions may be gradual.
5.) Depths indicated are referenced from ground surface.

Soil Boring/ Monitor Well Log MW-1

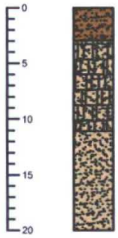
Southern Union Gas Services
A-7 Bettis
Lea County, New Mexico
NMOCD Reference #: 1RP-2186

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

Prep By: JWL	Checked By: BRB
November 1, 2012	

Soil Boring SB-1

Depth Below Ground Surface | Soil Column



Soil Description

0' - 3' - Brown fine sand

3' - 11' - Tan fine sand, cement sandstone, caliche

11' - 20' - Tan v. fine sand, sandstone

Boring SB-1

Date Drilled October 10, 2012
Thickness of Bentonite Seal 18 Ft
Depth of Exploratory Boring 20 Ft bgs
Depth to Groundwater N/A
Ground Water Elevation N/A

Indicates the PSH level measured on N/A
Indicates the groundwater level measured on N/A
Indicates samples selected for Laboratory Analysis.

Completion Notes

1.) The soil boring was advanced on date using air rotary drilling techniques.
2.) The lines between material types shown on the profile log represent approximate boundaries. Actual transitions may be gradual.

Soil Boring SB-1

Southern Union Gas Services
A-7 Bettis
Lea County, New Mexico
NMOCD Reference #: 1RP-2186

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

Prep By: JWL	Checked By: BJA
November 1, 2012	

Soil Boring SB-2

Depth Below Ground Surface | Soil Column

Soil Description

0' - 3' - Brown fine sand

3' - 20' - Tan v. fine sand, sandstone

Boring SB-2

Date Drilled October 10, 2012
Thickness of Bentonite Seal 18 Ft
Depth of Exploratory Boring 20 Ft bgs
Depth to Groundwater N/A
Ground Water Elevation N/A

Indicates the PSH level measured on N/A
Indicates the groundwater level measured on N/A
Indicates samples selected for Laboratory Analysis.

Completion Notes

1.) The soil boring was advanced on date using air rotary drilling techniques.
2.) The lines between material types shown on the profile log represent approximate boundaries. Actual transitions may be gradual.

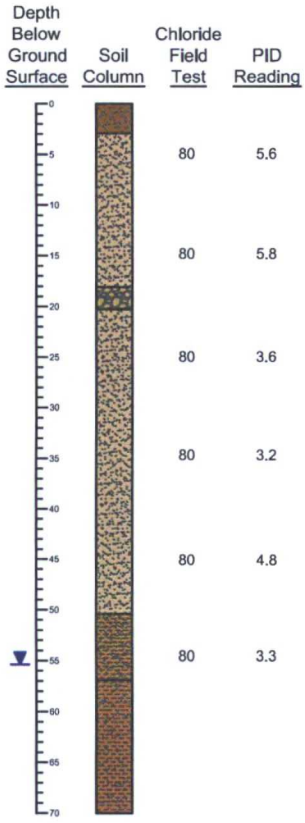
Soil Boring SB-2

Southern Union Gas Services
A-7 Bettis
Lea County, New Mexico
NMOCD Reference #: 1RP-2186

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

Prep By: JWL	Checked By: BJA
November 1, 2012	

Soil Boring/Monitor Well Log MW-2



Soil Description

0' - 3' - Brown fine sand

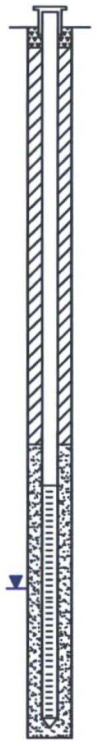
3' - 18' - Tan v. fine sand, sandstone

18' - 20' - Chert

20' - 51' - Tan v. fine sand, sandstone

51' - 57' Reddish tan v, fine sand w/ clay

57' - 70' Red silty clay, silty sand



Date Drilled October 10, 2012
Thickness of Bentonite Seal 39'
Depth of Exploratory Boring 70' bgs
Depth to Groundwater 55.16' bgs
Ground Water Elevation 3354.6'

Indicates the PSH level measured on N/A
Indicates the groundwater level measured on October 29, 2012
Indicates samples selected for Laboratory Analysis.
PID Head-space reading in ppm obtained with a photo-ionization detector.

Grout Surface Seal
Bentonite Pellet Seal
Sand Pack
Screen

Completion Notes

1.) Monitor well was advanced on date using air rotary drilling techniques.
2.) Monitor well was constructed with 2" ID, 0.10-inch factory slotted, threaded joint, Schedule 40 PVC pipe.
3.) Well is protected with a locked stick-up steel cover and compression cap.
4.) Lines between material types shown on the profile log represent approximate boundaries. Actual transitions may be gradual.
5.) Depths indicated are referenced from ground surface.

Soil Boring/ Monitor Well Log MW-2

Southern Union Gas Services
A-7 Bettis
Lea County, New Mexico
NMOCD Reference #: 1RP-2186

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

Prep By: JWL	Checked By: BRB
November 1, 2012	

Soil Boring/Monitor Well Log MW-3

Depth Below Ground Surface	Chloride Field Test	PID Reading
5	80	2.8
15	80	1.6
25	80	3.0
35	80	3.1
45	80	2.0
55	80	5.0

Soil Description

0' - 3' - Brown fine sand

3' - 8' - Tan v. fine sand, sandstone, caliche

8' - 27' - Tan v. fine sand, sandstone

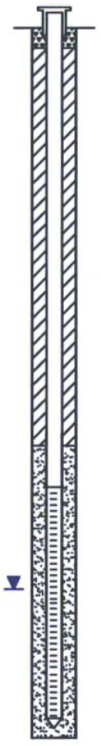
27' - 32' - Tan fine sand

32' - 50' - Tan v. fine sand, sandstone (layers)

50' - 54' - Tan v. fine sand, sandstone (layers)

54' - 57' Reddish tan v, fine sand w/ clay

57' - 70' Red silty sand, silty clay



Date Drilled October 10, 2012
Thickness of Bentonite Seal 39'
Depth of Exploratory Boring 70' bgs
Depth to Groundwater 55.23' bgs
Ground Water Elevation 3354.56'

Indicates the PSH level measured on N/A
Indicates the groundwater level measured on October 29, 2012
Indicates samples selected for Laboratory Analysis.
PID Head-space reading in ppm obtained with a photo-ionization detector.

Grout Surface Seal
Bentonite Pellet Seal
Sand Pack
Screen

Completion Notes

1.) Monitor well was advanced on date using air rotary drilling techniques.
2.) Monitor well was constructed with 2" ID, 0.10-inch factory slotted, threaded joint, Schedule 40 PVC pipe.
3.) Well is protected with a locked stick-up steel cover and compression cap.
4.) Lines between material types shown on the profile log represent approximate boundaries. Actual transitions may be gradual.
5.) Depths indicated are referenced from ground surface.

Soil Boring/ Monitor Well Log MW-3

Southern Union Gas Services
A-7 Bettis
Lea County, New Mexico
NMOCD Reference #: 1RP-2186

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

Prep By: JWL	Checked By: BRB
November 1, 2012	

CARDINAL LABORATORIES

PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR
SOUTHERN UNION GAS SERVICES
ATTN: TONY SAVOIE
P.O. BOX 1226
JAL, NM 88252

Receiving Date: 02/26/09
Reporting Date: 03/03/09
Project Number: 2009-010
Project Name: A-7 NORTH SITE / BETTIS
Project Location: NORTH OF EUNICE

Sampling Date: 02/26/09
Sample Type: SOIL
Sample Condition: COOL & INTACT
Sample Received By: ML
Analyzed By: CK/AB/HM

LAB NUMBER	SAMPLE ID	GRO (C_6-C_{10}) (mg/kg)	DRO (>C_{10}-C_{28}) (mg/kg)	Cl* (mg/kg)
ANALYSIS DATE		02/27/09	02/27/09	02/26/09
H16976-1	1A	<10.0	<10.0	256
H16976-2	1B	<10.0	<10.0	16
H16976-3	2A	<10.0	<10.0	2,120
H16976-4	2B	<10.0	<10.0	208
H16976-5	3A	<10.0	51.4	32
H16976-6	3B	<10.0	10.8	64
H16976-7	4A	<10.0	<10.0	32
Quality Control		549	553	500
True Value QC		500	500	500
% Recovery		110	111	100
Relative Percent Difference		0.6	11.4	< 0.1

METHODS: TPH GRO & DRO: EPA SW-846 8015 M; Cl^-: Std. Methods 4500-Cl^-B
*Analyses performed on 1:4 w:v aqueous extracts.

Chemist

03/04/09
Date

H16976 TCL SUGS

CARDINAL LABORATORIES

PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR
SOUTHERN UNION GAS SERVICES
ATTN: TONY SAVOIE
P.O. BOX 1226
JAL, NM 88252

Receiving Date: 02/26/09
Reporting Date: 03/03/09
Project Number: 2009-010
Project Name: A-7 NORTH SITE / BETTIS
Project Location: NORTH OF EUNICE

Sampling Date: 02/26/09
Sample Type: SOIL
Sample Condition: COOL & INTACT
Sample Received By: ML
Analyzed By: CK/AB/HM

LAB NUMBER	SAMPLE ID	GRO (C_6-C_{10}) (mg/kg)	DRO (>C_{10}-C_{28}) (mg/kg)	Cl* (mg/kg)
ANALYSIS DATE		03/02/09	03/02/09	02/26/09
H16976-8	4B	<10.0	<10.0	< 16
H16976-9	5A	<50.0	11,000	672
H16976-10	5B	<10.0	<10.0	336
Quality Control		476	546	500
True Value QC		500	500	500
% Recovery		95.2	109	100
Relative Percent Difference		0.6	6.6	< 0.1

METHODS: TPH GRO & DRO: EPA SW-846 8015 M; Cl^-: Std. Methods 4500-Cl^-B
*Analyses performed on 1:4 w:v aqueous extracts.

Chemist

03/04/09
Date

H16976 TCL SUGS

CARDINAL LABORATORIES

PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR
SOUTHERN UNION GAS SERVICES
ATTN: TONY SAVOIE
P.O. BOX 1226
JAL, NM 88252

Receiving Date: 02/26/09
Reporting Date: 02/27/09
Project Number: 2009-010
Project Name: A-7 NORTH SITE / BETTIS
Project Location: NORTH OF EUNICE

Sampling Date: 02/26/09
Sample Type: SOIL
Sample Condition: COOL & INTACT
Sample Received By: ML
Analyzed By: ZL

LAB NUMBI SAMPLE ID	BENZENE (mg/kg)	TOLUENE (mg/kg)	ETHYL BENZENE (mg/kg)	TOTAL XYLENES (mg/kg)
ANALYSIS DATE	02/26/09	02/26/09	02/26/09	02/26/09
H16976-10 5B	<0.050	<0.050	<0.050	<0.300
Quality Control	0.050	0.051	0.051	0.154
True Value QC	0.050	0.050	0.050	0.150
% Recovery	100	102	102	103
Relative Percent Difference	2.0	1.9	<1.0	1.3

METHOD: EPA SW-846 8021B

TEXAS NELAP CERTIFICATION T104704398-08-TX FOR BENZENE, TOLUENE, ETHYL BENZENE, AND TOTAL XYLENES.

Chemist

03/04/09
Date

H16976 B-SUGS

CARDINAL LABORATORIES

101 East Marland, Hobbs, NM 88240
(505) 393-2326 FAX (505) 393-2476

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name:	Southern Union Gas Services	**BILL TO**	
Project Manager:	TONY Savoie	**P.O. #:**	
Address:	P.O. Box 1226	**Company:**	
City:	JAL **State:** NM **Zip:** 88252	**Attn:**	
Phone #:	575-631-9376 **Fax #:**	**Address:**	
Project #:	2009-010 **Project Owner:**	**City:**	
Project Name:	A-7 North Site / Bettis	**State:** **Zip:**	
Project Location:	North OF Eunice	**Phone #:**	
Sampler Name:	Gary Coy	**Fax #:**	

FOR LAB USE ONLY				MATRIX						PRESERV.			SAMPLING		ANALYSIS REQUEST										
Lab I.D.	**Sample I.D.**	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:	ICE / COOL	OTHER :	**DATE**	**TIME**	8015 M	BTEX 8021 B	Chlorides 4500-Cl B								
H16976-1	1 A	G	1			✓					✓		2/26/09	0800	✓		✓								
-2	1 B	"	1			✓					✓		"	0809	✓		✓								
-3	2 A	"	1			✓					✓		"	0902	✓		✓								
-4	2 B	"	1			✓					✓		"	0910	✓		✓								
-5	3 A	"	1			✓					✓		"	0920	✓		✓								
-6	3 B	"	1			✓					✓		"	0930	✓		✓								
-7	4 A	"	1			✓					✓		"	1015	✓		✓								
-8	4 B	"	1			✓					✓		"	1030	✓		✓								
-9	5 A	"	1			✓					✓		"	0813	✓		✓								
-10	5 B	"	1			✓					✓		"	0914	✓	✓	✓								

Relinquished By:	**Date:** 2-26-09	**Received By:**	**Phone Result:** ☐ Yes ☐ No **Add'l Phone #:**
Gary Coy	**Time:** 11:10	Misty LeBart	**Fax Result:** ☐ Yes ☐ No **Add'l Fax #:**
Relinquished By:	**Date:**	**Received By:**	**REMARKS:**
	Time:		

Delivered By: (Circle One)
Sampler - UPS - Bus - Other:

Sample Condition		CHECKED BY:
Cool	Intact	(Initials)
☑ Yes ☐ No	☑ Yes ☐ No	MCB

† Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2476

CARDINAL LABORATORIES

PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR
SOUTHERN UNION GAS SERVICES
ATTN: TONY SAVOIE
P.O. BOX 1226
JAL, NM 88252

Receiving Date: 03/13/09
Reporting Date: 03/13/09
Project Number: NOT GIVEN
Project Name: A-7
Project Location: NOT GIVEN

Analysis Date: 03/13/09
Sampling Date: 03/13/09
Sample Type: SOIL
Sample Condition: INTACT
Sample Received By: CK
Analyzed By: TR

LAB NO.	SAMPLE ID	Cl^- (mg/kg)
H17055-1	CHLORIDES SOIL PILE	< 16
Quality Control		500
True Value QC		500
% Recovery		100
Relative Percent Difference		< 0.1

METHOD: Standard Methods	4500-Cl^-B

Note: Analysis performed on a 1:4 w:v aqueous extract.

Chemist

03/13/09
Date

H17055 SUGS

CARDINAL LABORATORIES

101 East Marland, Hobbs, NM 88240
(505) 393-2326, FAX (505) 393-2476

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name:	Southern Union	**BILL TO**	
Project Manager:	Tony Savion	P.O. #:	
Address:		Company:	
City:	Eunice	State: NM Zip: 88231	
Phone #:	Fax #:	Attn:	
Project #:	Project Owner:	Address:	
Project Name:	A-7	City:	
Project Location:		State: Zip:	
Sampler Name:	Gary Cox	Phone #:	
		Fax #:	

ANALYSIS REQUEST

Chloride ✓

FOR LAB USE ONLY				MATRIX						PRESERV.			SAMPLING	
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:	ICE / COOL	OTHER :	DATE	TIME
H17055-														
1 A-7	Chlorides Soil Pile		1			✓							3-13-09	0800

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequental damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By: Gary Cox	Date:	Received By:	
	Time:		
Relinquished By:	Date: 3/13/09	Received By:	
	Time: 8:35		

Delivered By: (Circle One)
Sampler - UPS - Bus - Other:

Sample Condition Cool	Intact	CHECKED BY: (Initials)
☐ Yes ☑ No	☑ Yes ☐ No	CDL

Phone Result:	☐ Yes	☐ No	Add'l Phone #:
Fax Result:	☐ Yes	☐ No	Add'l Fax #:
REMARKS: email results			

† Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2476

CARDINAL LABORATORIES

PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR
SOUTHERN UNION GAS SERVICES
ATTN: TONY SAVOIE
P.O. BOX 1226
JAL, NM 88252

Receiving Date: 03/17/09
Reporting Date: 03/17/09
Project Number: NOT GIVEN
Project Name: A-7
Project Location: NOT GIVEN

Sampling Date: 03/17/09
Sample Type: SOIL
Sample Condition: INTACT
Sample Received By: ML
Analyzed By: CK

LAB NUMBER	SAMPLE ID	GRO (C_6-C_{10}) (mg/kg)	DRO (>C_{10}-C_{28}) (mg/kg)
ANALYSIS DATE		03/17/09	03/17/09
H17067-1	SOIL PILE #1 SOUTH	<10.0	2,140
H17067-2	SOIL PILE #2 NORTH	215	1,490
Quality Control		473	516
True Value QC		500	500
% Recovery		94.6	103
Relative Percent Difference		2.3	1.7

METHODS: TPH GRO & DRO: EPA SW-846 8015 M

Chemist

03/17/09
Date

H17067 T SUGS

CARDINAL LABORATORIES

101 East Marland, Hobbs, NM 88240
(505) 393-2326 FAX (505) 393-2476

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: Southern Union		BILL TO	
Project Manager: Tony S.		P.O. #:	
Address:		Company:	
City: Eunice	State: NM Zip: 88231	Attn:	
Phone #:	Fax #:	Address:	
Project #:	Project Owner:	City:	
Project Name:		State: Zip:	
Project Location:		Phone #:	
Sampler Name: Gary Coy		Fax #:	

ANALYSIS REQUEST: 8015 M

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE / COOL	OTHER :	SAMPLING: DATE	TIME
H170671-1	A-7 Soil Pile #1 South					✓							3-17-09	0900
-2	A-7 Soil Pile #2 North												3-17-09	0900

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By: Gary Coy	Date: 3-17-09 Time: 0900	Received By: Misty LeBert	
Relinquished By:	Date: Time:	Received By:	
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Sample Condition Cool: ☐ Yes ☐ No Intact: ☑ Yes ☐ No	CHECKED BY: (Initials) MCB	

Phone Result: ☐ Yes ☐ No Add'l Phone #:
Fax Result: ☐ Yes ☐ No Add'l Fax #:
REMARKS:
Email Rusults to Tony
call Gary w/results 575-605-1748

† Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2476

CARDINAL LABORATORIES

PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR
SOUTHERN UNION GAS SERVICES
ATTN: TONY SAVOIE
P.O. BOX 1226
JAL, NM 88252

Receiving Date: 03/17/09
Reporting Date: 03/19/09
Project Number: NOT GIVEN
Project Name: NOT GIVEN
Project Location: NOT GIVEN

Sampling Date: 03/17/09
Sample Type: SOIL
Sample Condition: INTACT
Sample Received By: CK
Analyzed By: AB

LAB NUMBER	SAMPLE ID	GRO (C_6-C_{10}) (mg/kg)	DRO (>C_{10}-C_{28}) (mg/kg)
ANALYSIS DATE		03/18/09	03/18/09
H17072-1	BOTTOM START	3,900	12,100
H17072-2	RP 13°	3,970	9,360
H17072-3	RP 16°	2,270	6,500
H17072-4	RP 18°	3,290	7,670
Quality Control		505	561
True Value QC		500	500
% Recovery		101	112
Relative Percent Difference		0.6	0.1

METHODS: TPH GRO & DRO: EPA SW-846 8015 M

Chemist

03/19/09
Date

H17072 T SUGS

CARDINAL LABORATORIES

101 East Marland, Hobbs, NM 88240
(505) 393-2326 FAX (505) 393-2476

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: Souther Union		**BILL TO**	**ANALYSIS REQUEST**
Project Manager: Tony S.		**P.O. #:**	
Address: Eunice		**Company:**	
City: Eunice	**State:** NM **Zip:** 88231	**Attn:**	
Phone #:	**Fax #:**	**Address:**	
Project #:	**Project Owner:**	**City:**	
Project Name:		**State:** **Zip:**	
Project Location:		**Phone #:**	
Sampler Name: Gary Coy		**Fax #:**	

FOR LAB USE ONLY				MATRIX						PRESERV.			SAMPLING		
Lab I.D.	**Sample I.D.**	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:	ICE / COOL	OTHER :	DATE	TIME	8015 M
	#17072-														
Bottom Stake	1		1			✓							3-17		✓
RP 13'6"	2		1			✓									✓
RP 16'	3		1			✓									✓
RP 18'	4		1			✓									✓

Relinquished By: Gary Coy	**Date:** **Time:** 1200	**Received By:**	**Phone Result:** ☐ Yes ☐ No **Add'l Phone #:**
Relinquished By:	**Date:** 3-17-09 **Time:**	**Received By:**	**Fax Result:** ☐ Yes ☐ No **Add'l Fax #:**
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	**Sample Condition** Cool: ☐ Yes ☐ No Intact: ☑ Yes ☐ No	**CHECKED BY: (Initials)** CDK	**REMARKS:** EMAIL Results

† Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2476

CARDINAL LABORATORIES

PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR
SOUTHERN UNION GAS SERVICES
ATTN: TONY SAVOIE
P.O. BOX 1226
JAL, NM 88252

Receiving Date: 03/18/09
Reporting Date: 03/23/09
Project Owner: NOT GIVEN
Project Name: 2009-010
Project Location: A-7

Sampling Date: 03/18/09
Sample Type: SOIL
Sample Condition: INTACT
Sample Received By: ML
Analyzed By: AB/ZL/HM

LAB NO.	SAMPLE ID	GRO (C_6-C_{10}) (mg/kg)	DRO (>C_{10}-C_{28}) (mg/kg)	BENZENE (mg/kg)	TOLUENE (mg/kg)	ETHYL BENZENE (mg/kg)	TOTAL XYLENES (mg/kg)	Cl* (mg/kg)
ANALYSIS DATE:		03/19/09	03/19/09	03/19/09	03/19/09	03/19/09	03/19/09	03/18/09
H17079-1	#1 SAMPLE	<10.0	25.3	<0.050	<0.050	<0.050	<0.300	144
H17079-2	#1 SAMPLE WEST BANK	<10.0	441	<0.050	<0.050	<0.050	<0.300	176
Quality Control		505	561	0.050	0.051	0.050	0.150	500
True Value QC		500	500	0.050	0.050	0.050	0.150	500
% Recovery		101	112	100	102	100	100	100
Relative Percent Difference		0.6	0.1	3.0	1.8	1.9	2.0	< 0.1

METHODS: TPH GRO & DRO - EPA SW-846 8015 M; BTEX - SW-846 8021B; Cl-: Std. Methods 4500-Cl-B
*Analyses performed on 1:4 w:v aqueous extracts.

TEXAS NELAP ACCREDITATION T104704398-08-TX FOR BENZENE, TOLUENE, ETHYL BENZENE, AND TOTAL XYLENES.

Lab Director

03/24/09
Date

H17079 TBCL SUGS

CARDINAL LABORATORIES

101 East Marland, Hobbs, NM 88240
(505) 393-2326 FAX (505) 393-2476

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name:	Southern Union
Project Manager:	Tony Savoie
Address:	
City:	Eunice
State:	NM
Zip:	88231
Phone #:	
Fax #:	
Project #:	
Project Owner:	
Project Name:	2009-010
Project Location:	A-7
Sampler Name:	G. Coy

BILL TO

P.O. #:	
Company:	
Attn:	
Address:	
City:	
State:	Zip:
Phone #:	
Fax #:	

ANALYSIS REQUEST

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE / COOL	OTHER :	SAMPLING: DATE	TIME	8015 M	BTEX	Chlorides
H17079-1	RP #1					✓							3-18-09	0800	✓	✓	✓
-2	RP #1					✓							3-18-09	0815	✓	✓	✓

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Relinquished By: Gary Coy	Date: 3-18-09 Time: 0800	Received By:	
Relinquished By:	Date: Time:	Received By:	

Delivered By: (Circle One)
Sampler - UPS - Bus - Other:

Sample Condition: Cool ☐ Yes ☐ No; Intact ☑ Yes ☐ No

CHECKED BY: (Initials) MCRB

Phone Result: ☐ Yes ☐ No Add'l Phone #:
Fax Result: ☐ Yes ☐ No Add'l Fax #:
REMARKS: EMAIL Results

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CARDINAL LABORATORIES

PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR
SOUTHERN UNION GAS SERVICES
ATTN: TONY SAVOIE
P.O. BOX 1226
JAL, NM 88252

Receiving Date: 03/19/09
Reporting Date: 03/23/09
Project Number: 2009-010
Project Name: A-7
Project Location: BETTIS

Sampling Date: 03/19/09
Sample Type: SOIL
Sample Condition: INTACT
Sample Received By: ML
Analyzed By: AB

LAB NUMBER	SAMPLE ID	GRO (C_6-C_{10}) (mg/kg)	DRO (>C_{10}-C_{28}) (mg/kg)
ANALYSIS DATE		03/20/09	03/20/09
H17089-1	BOTTOM HOLE 28'	1,790	4,460
Quality Control		494	556
True Value QC		500	500
% Recovery		98.8	111
Relative Percent Difference		0.6	5.6

METHODS: TPH GRO & DRO: EPA SW-846 8015 M

Chemist

03/23/09
Date

H17089 T SUGS

CARDINAL LABORATORIES

PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR
SOUTHERN UNION GAS SERVICES
ATTN: TONY SAVOIE
P.O. BOX 1226
JAL, NM 88252

Receiving Date: 03/19/09
Reporting Date: 03/23/09
Project Number: 2009-010
Project Name: A-7
Project Location: BETTIS

Sampling Date: 03/19/09
Sample Type: SOIL
Sample Condition: INTACT
Sample Received By: ML
Analyzed By: AB

LAB NUMBER	SAMPLE ID	TCLP GRO (C_6-C_{10}) (mg/L)	TCLP DRO (>C_{10}-C_{28}) (mg/L)
ANALYSIS DATE		03/20/09	03/20/09
H17089-1	BOTTOM HOLE 28'	4.78	3.19
Quality Control		494	556
True Value QC		500	500
% Recovery		98.8	111
Relative Percent Difference		0.2	0.8

METHODS: TPH GRO & DRO: EPA SW-846 1311/8015 M

Chemist

03/23/09
Date

H17089 TCLP T SUGS

CARDINAL LABORATORIES

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ANALYTICAL RESULTS FOR
SOUTHERN UNION GAS SERVICES
ATTN: TONY SAVOIE
P.O. BOX 1226
JAL, NM 88252

Receiving Date: 03/19/09
Reporting Date: 03/23/09
Project Number: 2009-010
Project Name: A-7
Project Location: BETTIS

Sampling Date: 03/19/09
Sample Type: SOIL
Sample Condition: INTACT
Sample Received By: ML
Analyzed By: AB

LAB NUMBI SAMPLE ID	BENZENE (mg/kg)	TOLUENE (mg/kg)	ETHYL BENZENE (mg/kg)	TOTAL XYLENES (mg/kg)
ANALYSIS DATE	03/20/09	03/20/09	03/20/09	03/20/09
H17089-1 BOTTOM HOLE 28'	1.52	14.4	15.8	45.5
Quality Control	0.049	0.050	0.049	0.149
True Value QC	0.050	0.050	0.050	0.150
% Recovery	98.0	100	98.0	99.3
Relative Percent Difference	1.8	3.4	3.4	4.6

METHOD: EPA SW-846 8021B

TEXAS NELAP CERTIFICATION T104704398-08-TX FOR BENZENE, TOLUENE, ETHYL BENZENE, AND TOTAL XYLENES.

Chemist

03/23/09
Date

H17089BSUGS

CARDINAL LABORATORIES

101 East Marland, Hobbs, NM 88240
(505) 393-2326 FAX (505) 393-2476

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: Southern Union		BILL TO	
Project Manager: Tony Savoie		P.O. #:	
Address: Roswell		Company:	
City:	State: Zip:	Attn:	
Phone #:	Fax #:	Address:	
Project #: 2009-010	Project Owner:	City:	
Project Name: A-7		State: Zip:	
Project Location: Battis		Phone #:	
Sampler Name: Gary Coy		Fax #:	

FOR LAB USE ONLY				MATRIX						PRESERV.			SAMPLING		ANALYSIS REQUEST										
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:	ICE / COOL	OTHER :	DATE	TIME	8015 M	BTEX	8015 TCLP								
28BT	Bottom Hole					✓							3/9/09	0900	✓	✓	✓								
H17089-1																									

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By: Gary Coy	Date:	Received By:		Phone Result: ☐ Yes ☐ No	Add'l Phone #:
	Time: 0900			Fax Result: ☐ Yes ☐ No	Add'l Fax #:
Relinquished By:	Date: 3-19-09	Received By: Marty LeBeau		REMARKS: email Results RUSH!!	
	Time:				
Delivered By: (Circle One) Sampler - UPS - Bus - Other:		Sample Condition Cool ☐ Yes ☐ No Intact ☐ Yes ☐ No	CHECKED BY: (Initials)		

† Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2476

CARDINAL LABORATORIES

PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR
SOUTHERN UNION GAS SERVICES
ATTN: TONY SAVOIE
P.O. BOX 1226
JAL, NM 88252

Receiving Date: 03/24/09
Reporting Date: 03/26/09
Project Number: 2009-010
Project Name: A-7 10" NORTH SIDE
Project Location: NORTH OF EUNICE, NM

Sampling Date: 03/24/09
Sample Type: SOIL
Sample Condition: INTACT
Sample Received By: ML
Analyzed By: AB

LAB NUMBER	SAMPLE ID	GRO (C_6-C_{10}) (mg/kg)	DRO (>C_{10}-C_{28}) (mg/kg)
ANALYSIS DATE		03/25/09	03/25/09
H17110-1	BOTTOM HOLE 37FT	1,670	4,450
H17110-2	BOTTOM HOLE 39FT	1,790	3,840
Quality Control		402	440
True Value QC		500	500
% Recovery		80.4	88.0
Relative Percent Difference		3.2	18.2

METHODS: TPH GRO & DRO: EPA SW-846 8015 M

Chemist

03/26/09
Date

H17110 T SUGS

CARDINAL LABORATORIES

PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR
SOUTHERN UNION GAS SERVICES
ATTN: TONY SAVOIE
P.O. BOX 1226
JAL, NM 88252

Receiving Date: 03/24/09
Reporting Date: 03/26/09
Project Number: 2009-010
Project Name: A-7 10" NORTH SIDE
Project Location: NORTH OF EUNICE, NM

Sampling Date: 03/24/09
Sample Type: SOIL
Sample Condition: INTACT
Sample Received By: ML
Analyzed By: ZL

LAB NUMBI SAMPLE ID	BENZENE (mg/kg)	TOLUENE (mg/kg)	ETHYL BENZENE (mg/kg)	TOTAL XYLENES (mg/kg)
ANALYSIS DATE	03/25/09	03/25/09	03/25/09	03/25/09
H17110-2 BOTTOM HOLE 39FT	1.04	23.2	23.3	65.8
Quality Control	0.049	0.050	0.048	0.147
True Value QC	0.050	0.050	0.050	0.150
% Recovery	98.0	100	96.0	98.0
Relative Percent Difference	<1.0	1.4	1.5	3.4

METHOD: EPA SW-846 8021B

TEXAS NELAP ACCREDITATION T104704398-08-TX FOR BENZENE, TOLUENE, ETHYL BENZENE, AND TOTAL XYLENES.

Chemist

03/26/09
Date

H17110 SUGS

CARDINAL LABORATORIES

101 East Marland, Hobbs, NM 88240
(505) 393-2326 FAX (505) 393-2476

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name:	Southern Union	BILL TO	
Project Manager:	Tony Savoie	P.O. #:	
Address:	[illegible]	Company:	
City:	Eunice	State: NM Zip: 88231	Attn:
Phone #:		Fax #:	Address:
Project #:	2009-010	Project Owner:	City:
Project Name:	AT 10" North Side	State:	Zip:
Project Location:	North of Eunice	Phone #:	
Sampler Name:		Fax #:	

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE / COOL	OTHER :	SAMPLING: DATE	TIME	ANALYSIS REQUEST: 8015 M	Btex
H17110-1	#1					✓							3-24	0100	✓	✓
-2	#2					✓							3-24	0200	✓	✓

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequental damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By: Gary Coy	Date: 3-24-09 Time: 0230	Received By: [signature]	Phone Result: ☐ Yes ☐ No Add'l Phone #:
Relinquished By:	Date: Time:	Received By:	Fax Result: ☐ Yes ☐ No Add'l Fax #:
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Sample Condition Cool: ☐ Yes ☑ No Intact: ☑ Yes ☐ No	CHECKED BY: (Initials) MCAB	REMARKS: EMAIL Results

† Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2476

CARDINAL LABORATORIES

PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR
SOUTHERN UNION GAS SERVICES
ATTN: TONY SAVOIE
P.O. BOX 1226
JAL, NM 88252

Receiving Date: 03/24/09
Reporting Date: 03/30/09
Project Number: 2009-010
Project Name: A-7 10" NORTH SIDE
Project Location: NORTH OF EUNICE, NM

Sampling Date: 03/24/09
Sample Type: SOIL
Sample Condition: INTACT
Sample Received By: ML
Analyzed By: AB

LAB NUMBER SAMPLE ID	TCLP GRO (C_6-C_{10}) (mg/L)	TCLP DRO (>C_{10}-C_{28}) (mg/L)
ANALYSIS DATE	03/28/09	03/28/09
H17110-2 BOTTOM HOLE 39 FT	3.96	3.98
Quality Control	439	462
True Value QC	500	500
% Recovery	87.8	92.4
Relative Percent Difference	1.9	8.6

METHODS: TPH GRO & DRO: EPA SW-846 1311/8015 M

Chemist

03/30/09
Date

H17110 TCLP T SUGS

CARDINAL LABORATORIES

PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR
SOUTHERN UNION GAS SERVICES
ATTN: TONY SAVOIE
P.O. BOX 1226
JAL, NM 88252

Receiving Date: 03/24/09
Reporting Date: 03/26/09
Project Number: 2009-010
Project Name: A-7 10" NORTH SIDE
Project Location: NORTH OF EUNICE, NM

Sampling Date: 03/24/09
Sample Type: SOIL
Sample Condition: INTACT
Sample Received By: ML
Analyzed By: AB

LAB NUMBER	SAMPLE ID	GRO (C_6-C_{10}) (mg/kg)	DRO (>C_{10}-C_{28}) (mg/kg)
ANALYSIS DATE		03/25/09	03/25/09
H17110-1	BOTTOM HOLE 37FT	1,670	4,450
H17110-2	BOTTOM HOLE 39FT	1,790	3,840
Quality Control		402	440
True Value QC		500	500
% Recovery		80.4	88.0
Relative Percent Difference		3.2	18.2

METHODS: TPH GRO & DRO: EPA SW-846 8015 M

Chemist

03/26/09
Date

H17110 T SUGS

CARDINAL LABORATORIES

PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR
SOUTHERN UNION GAS SERVICES
ATTN: TONY SAVOIE
P.O. BOX 1226
JAL, NM 88252

Receiving Date: 03/24/09
Reporting Date: 03/26/09
Project Number: 2009-010
Project Name: A-7 10" NORTH SIDE
Project Location: NORTH OF EUNICE, NM

Sampling Date: 03/24/09
Sample Type: SOIL
Sample Condition: INTACT
Sample Received By: ML
Analyzed By: ZL

LAB NUMBI SAMPLE ID	BENZENE (mg/kg)	TOLUENE (mg/kg)	ETHYL BENZENE (mg/kg)	TOTAL XYLENES (mg/kg)
ANALYSIS DATE	03/25/09	03/25/09	03/25/09	03/25/09
H17110-2 BOTTOM HOLE 39FT	1.04	23.2	23.3	65.8
Quality Control	0.049	0.050	0.048	0.147
True Value QC	0.050	0.050	0.050	0.150
% Recovery	98.0	100	96.0	98.0
Relative Percent Difference	<1.0	1.4	1.5	3.4

METHOD: EPA SW-846 8021B

TEXAS NELAP ACCREDITATION T104704398-08-TX FOR BENZENE, TOLUENE, ETHYL BENZENE, AND TOTAL XYLENES.

Chemist

03/26/09
Date

H17110 BSUGS

CARDINAL LABORATORIES

101 East Marland, Hobbs, NM 88240
(505) 393-2326 FAX (505) 393-2476

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: Southern Union		BILL TO	
Project Manager: Tony Savoie		P.O. #:	
Address: Eunice		Company:	
City: Eunice	State: NM Zip: 88231	Attn:	
Phone #:	Fax #:	Address:	
Project #: 2009-010	Project Owner:	City:	
Project Name: AT 10" North Side		State: Zip:	
Project Location: North of Eunice		Phone #:	
Sampler Name:		Fax #:	

ANALYSIS REQUEST: 8015 m ✓; Batex ✓; TCLP 8015 * added 3/26/09 X

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	PRESERV.: ACID/BASE:	ICE / COOL	OTHER:	SAMPLING: DATE	TIME
H17110-1 #1	Bottom Hole 37 Ft					✓		/					3-24	0100
.2 #2	Bottom Hole 39 Ft					✓							324	0200

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequental damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By: Tony Coy	Date: 3-24-09 Time: 0230	Received By:	
Relinquished By:	Date: Time:	Received By:	

Phone Result: ☐ Yes ☐ No Add'l Phone #:
Fax Result: ☐ Yes ☐ No Add'l Fax #:
REMARKS: EMAIL Results

Delivered By: (Circle One)
Sampler - UPS - Bus - Other:

Sample Condition: Cool ☐ Yes ☐ No; Intact ☑ Yes ☐ No
CHECKED BY: (Initials) MCKB

* added as per Tony (see email). Ch 3/26/09

† Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2476

CARDINAL LABORATORIES

PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR
SOUTHERN UNION GAS SERVICES
ATTN: TONY SAVOIE
P.O. BOX 1226
JAL, NM 88252

Receiving Date: 03/31/09
Reporting Date: 04/01/09
Project Number: 2009-010
Project Name: A-7 10" NORTH SITE
Project Location: NORTH OF EUNICE, NM

Sampling Date: 03/31/09
Sample Type: SOIL
Sample Condition: INTACT
Sample Received By: ML
Analyzed By: AB/ZL

LAB NO.	SAMPLE ID	GRO (C_6-C_{10}) (mg/kg)	DRO (>C_{10}-C_{28}) (mg/kg)	BENZENE (mg/kg)	TOLUENE (mg/kg)	ETHYL BENZENE (mg/kg)	TOTAL XYLENES (mg/kg)
ANALYSIS DATE:		03/31/09	03/31/09	04/01/09	04/01/09	04/01/09	04/01/09
H17156-1	BOTTOM	1,790	3,450	0.962	9.56	16.0	45.6
H17156-2	WEST BANK N	1,920	2,980	0.585	9.98	14.0	43.0
H17156-3	WEST BANK S	762	2,110	0.250	0.071	6.74	13.2
H17156-4	EAST BANK S	<10.0	39.6	<0.050	<0.050	<0.050	<0.300
H17156-5	NORTH BANK	1,680	4,250	0.421	10.6	16.4	49.9
Quality Control		543	564	0.052	0.052	0.05	0.150
True Value QC		500	500	0.050	0.050	0.050	0.150
% Recovery		109	113	104	104	100	100
Relative Percent Difference		12.4	8.9	1.6	1.4	2.0	2.0

METHODS: TPH GRO & DRO - EPA SW-846 8015 M; BTEX - SW-846 8021B.

TEXAS NELAP ACCREDITATION T104704398-08-TX FOR BENZENE, TOLUENE, ETHYL BENZENE, AND TOTAL XYLENES.

Lab Director

04/02/09
Date

H17156 BTEX8015 SUGS

CARDINAL LABORATORIES

101 East Marland, Hobbs, NM 88240
(575) 393-2326 Fax (575) 393-2476

Page____ of____

Company Name: Southern Union		**BILL TO**	
Project Manager: Tony Savoie		P.O. #:	
Address:		Company:	
City: Eunice	State: NM Zip: 88231	Attn:	
Phone #:	Fax #:	Address:	
Project #: 2009-010	Project Owner:	City:	
Project Name: A-7 10" North Site		State: Zip:	
Project Location: North of Eunice		Phone #:	
Sampler Name: Gary Cory		Fax #:	

FOR LAB USE ONLY				MATRIX						PRESERV.			SAMPLING		ANALYSIS REQUEST	
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:	ICE / COOL	OTHER :	DATE	TIME	B.Tex	8015 M
Bottom	H17156-1					✓							3-31-09	0830	✓	✓
West Bank N	-2					✓							"	"	✓	✓
West Bank S	-3					✓							"	"	✓	✓
East Bank S	-4					✓							"	"	✓	✓
North Bank	-5					✓							"	"	✓	✓

Sampler Relinquished: Gary Cory	Date: 3-31-09	Received By: Misty LeBeau	Phone Result: ☐	No	Add'l Phone #:
Relinquished By:	Time: 0830	Received By:	Fax Result: ☐	No	Add'l Fax #:
	Date:		REMARKS: EMAIL Results		
	Time:				
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Temp.	Sample Condition Cool ☐ Yes ☐ No Intact ☑ Yes ☐ No	CHECKED BY: (Initials) MCB		

† Cardinal cannot accept verbal changes. Please fax written changes to 575-393-2476.

CARDINAL LABORATORIES

PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

July 16, 2009

Tony Savoie
Southern Union Gas Services
P.O. Box 1226
Jal, NM 88252

Re: A-7 10" North Site

Enclosed are the results of analyses for sample number H17777, received by the laboratory on 07/10/09 at 10:00 am.

Cardinal Laboratories is accredited through Texas NELAP for:

Method SW-846 8021	Benzene, Toluene, Ethyl Benzene, and Total Xylenes
Method SW-846 8260	Benzene, Toluene, Ethyl Benzene, and Total Xylenes
Method TX 1005	Total Petroleum Hydrocarbons

Certificate number T104704398-08-TX. Accreditation applies to solid and chemical materials and non-potable water matrices.

Total Number of Pages of Report: 4 (includes Chain of Custody)

Sincerely,

Celey D. Keene

Celey D. Keene
Laboratory Director

This report conforms with NELAP requirements.

CARDINAL LABORATORIES

PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR
SOUTHERN UNION GAS SERVICES
ATTN: TONY SAVOIE
P.O. BOX 1226
JAL, NM 88252

Receiving Date: 07/10/09
Reporting Date: 07/13/09
Project Number: 2009-010
Project Name: A-7 10" NORTH SITE
Project Location: NORTH OF EUNICE, NM

Sampling Date: 07/09/09 & 07/10/09
Sample Type: SOIL
Sample Condition: COOL & INTACT @ 5^{0}C
Sample Received By: ML
Analyzed By: AB

LAB NUMBER	SAMPLE ID	GRO (C_6-C_{10}) (mg/kg)	DRO (>C_{10}-C_{28}) (mg/kg)
ANALYSIS DATE		07/10/09	07/10/09
H17777-1	BOTTOM HOLE #4 40FT	5,170	9,220
H17777-2	LAST SAMPLE 44FT*	1,620	3,480
Quality Control		598	598
True Value QC		500	500
% Recovery		120	120
Relative Percent Difference		19.6	18.3

METHODS: TPH GRO & DRO: EPA SW-846 8015 M. Reported on wet weight.
Not accredited for GRO/DRO.
*Surrogates outside historical limits due to sample matrix interference.

Chemist

07/16/09
Date

H17777 T SUGS

CARDINAL LABORATORIES

PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR
SOUTHERN UNION GAS SERVICES
ATTN: TONY SAVOIE
P.O. BOX 1226
JAL, NM 88252

Receiving Date: 07/10/09
Reporting Date: 07/15/09
Project Number: 2009-010
Project Name: A-7 10" NORTH SITE
Project Location: NORTH OF EUNICE, NM

Sampling Date: 07/09/09 & 07/10/09
Sample Type: SOIL
Sample Condition: COOL & INTACT @ 5^{0}C
Sample Received By: ML
Analyzed By: ZL

LAB NO.	SAMPLE ID	BENZENE (mg/kg)	TOLUENE (mg/kg)	ETHYL BENZENE (mg/kg)	TOTAL XYLENES (mg/kg)
ANALYSIS DATE:		07/15/09	07/15/09	07/15/09	07/15/09
H17777-1	BOTTOM HOLE #4 40FT	0.453	5.95	5.22	17.6
H17777-2	LAST SAMPLE 44FT*	0.814	9.76	7.52	28.5
Quality Control		0.054	0.052	0.051	0.161
True Value QC		0.050	0.050	0.050	0.150
% Recovery		108	104	102	107
Relative Percent Difference		10.7	7.8	7.0	8.2

METHODS: EPA SW-846 8021B.

TEXAS NELAP ACCREDITATION T104704398-08-TX FOR BENZENE, TOLUENE, ETHYL BENZENE, AND TOTAL XYLENES.
Reported on wet weight.
*Surrogate outside historical limits due to sample matrix interference.

Lab Director

07/16/09
Date

H17777 BTEX SUGS

CARDINAL LABORATORIES

101 East Marland, Hobbs, NM 88240
(575) 393-2326 Fax (575) 393-2476

Page____ of____

Company Name: Southern Union		**BILL TO**	
Project Manager: Tony Savioe		P.O. #:	
Address:		Company:	
City: Eunice	State: NM Zip: 88231	Attn:	
Phone #:	Fax #:	Address:	
Project #: 2009-010	Project Owner:	City:	
Project Name: A-7 10" North site		State: Zip:	
Project Location: North of Eunice		Phone #:	
Sampler Name: Gary Coy		Fax #:	

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE / COOL	OTHER :	SAMPLING: DATE	TIME	ANALYSIS REQUEST: B-Tex	8015 M
Bottom Hole	#4 40 FT					✓							7-09-09	3:30p	✓	✓
Last Sample	44 FT					✓							9:00A	7-10-09	✓	✓

H17777.1 -2

Sampler Relinquished: Gary Coy	Date: 7-10-09 Time: 10:00A	Received By:	Phone Result: ☐ No Add'l Phone #:
Relinquished By:	Date: Time:	Received By:	Fax Result: ☐ No Add'l Fax #:
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Temp. 59	Sample Condition Cool ☑ Yes ☐ No Intact ☑ Yes ☐ No	CHECKED BY: (Initials) MCAB

REMARKS: E-MAIL Rusults to Tony

† Cardinal cannot accept verbal changes. Please fax written changes to 575-393-2476.

#26

Analytical Report 450687

for

Environmental Plus, Incorporated

Project Manager: David Duncan

UL "L" Section 14, T21S, R37E

19-OCT-12

Collected By: Client

12600 West I-20 East Odessa, Texas 79765

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215-10-6-TX), Arizona (AZ0765), Arkansas (08-039-0), Connecticut (PH-0102), Florida (E871002)
Illinois (002082), Indiana (C-TX-02), Iowa (392), Kansas (E-10380), Kentucky (45), Louisiana (03054)
New Hampshire (297408), New Jersey (TX007), New York (11763), Oklahoma (9218), Pennsylvania (68-03610)
Rhode Island (LAO00312), USDA (S-44102), DoD (L11-54)

Xenco-Atlanta (EPA Lab Code: GA00046):
Florida (E87429), North Carolina (483), South Carolina (98015), Kentucky (85), DoD (L10-135)
Louisiana (04176), USDA (P330-07-00105)

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

19-OCT-12

Project Manager: **David Duncan**
Environmental Plus, Incorporated
P.O. Box 1558
Eunice, NM 88231

Reference: XENCO Report No: **450687**
UL "L" Section 14, T21S, R37E
Project Address: Eunice New Mexico

David Duncan:

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 450687. 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. 450687 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

Sample Cross Reference 450687

Environmental Plus, Incorporated, Eunice, NM

UL "L" Section 14, T21S, R37E

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW-1 (SB-1 @ 1')	S	10-10-12 09:24		450687-001
MW-1 (SB-1 @ 10')	S	10-10-12 09:28		450687-002
MW-1 (SB-1 @ 20')	S	10-10-12 09:33		450687-003
MW-1 (SB-1 @ 30')	S	10-10-12 09:37		450687-004
MW-1 (SB-1 @ 40')	S	10-10-12 09:43		450687-005
MW-1 (SB-1 @ 50')- Core	S	10-10-12 10:00		450687-006
MW-1 (SB-1 @ 60')	S	10-10-12 10:10		450687-007
MW-2 (SB-4 @ 1')	S	10-10-12 12:46		450687-008
MW-2 (SB-4 @ 10')	S	10-10-12 12:51		450687-009
MW-2 (SB-4 @ 20')	S	10-10-12 12:54		450687-010
MW-2 (SB-4 @ 30')	S	10-10-12 13:00		450687-011
MW-2 (SB-4 @ 40')	S	10-10-12 13:05		450687-012
MW-2 (SB-4 @ 48')-Core	S	10-10-12 13:17		450687-013
MW-2 (SB-4 @ 55')	S	10-10-12 13:20		450687-014
MW-3 (SB-5 @ 1')	S	10-10-12 14:30		450687-015
MW-3 (SB-5 @ 10')	S	10-10-12 14:35		450687-016
MW-3 (SB-5 @ 20')	S	10-10-12 14:38		450687-017
MW-3 (SB-5 @ 30')	S	10-10-12 14:41		450687-018
MW-3 (SB-5 @ 40')	S	10-10-12 14:45		450687-019
MW-3 (SB-5 @ 50')-Core	S	10-10-12 14:57		450687-020
MW-3 (SB-5 @ 60')	S	10-10-12 15:04		450687-021
SB-2(1')	S	10-11-12 09:08		450687-022
SB-2(5')	S	10-11-12 09:33		450687-023
SB-2(10')	S	10-11-12 09:36		450687-024
SB-2(15')	S	10-11-12 09:38		450687-025
SB-2(20')	S	10-11-12 09:39		450687-026
SB-3(1')	S	10-11-12 10:06		450687-027
SB-3(5')	S	10-11-12 10:14		450687-028
SB-3(10')	S	10-11-12 10:16		450687-029
SB-3(15')	S	10-11-12 10:17		450687-030
SB-3(20')	S	10-11-12 10:19		450687-031

CASE NARRATIVE

XENCO Laboratories

Client Name: Environmental Plus, Incorporated
Project Name: UL "L" Section 14, T21S, R37E

Project ID:
Work Order Number: 450687

Report Date: 19-OCT-12
Date Received: 10/12/2012

Sample receipt non conformances and comments:
None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:
Batch: LBA-898786 BTEX by EPA 8021
SW8021BM

Batch 898786, Ethylbenzene recovered below QC limits in the Matrix Spike Duplicate.
Samples affected are: 450687-001.
The Laboratory Control Sample for Ethylbenzene is within laboratory Control Limits

Certificate of Analysis Summary 450687

Environmental Plus, Incorporated, Eunice, NM

Project Name: UL "L" Section 14, T21S, R37E

Project Id:
Contact: David Duncan
Project Location: Eunice New Mexico

Date Received in Lab: Fri Oct-12-12 03:12 pm
Report Date: 19-OCT-12
Project Manager: Nicholas Straccione

Analysis Requested													
	Lab Id:	450687-001		450687-002		450687-003		450687-004		450687-005		450687-006	
	Field Id:	MW-1 (SB-1 @ 1')		MW-1 (SB-1 @ 10')		MW-1 (SB-1 @ 20')		MW-1 (SB-1 @ 30')		MW-1 (SB-1 @ 40')		MW-1 (SB-1 @ 50')- Core	
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Oct-10-12 09:24		Oct-10-12 09:28		Oct-10-12 09:33		Oct-10-12 09:37		Oct-10-12 09:43		Oct-10-12 10:00	
BTEX by EPA 8021	*Extracted:*	Oct-15-12 10:00		Oct-15-12 15:30		Oct-15-12 15:30		Oct-15-12 15:30		Oct-15-12 15:30		Oct-15-12 15:30	
	Analyzed:	Oct-15-12 14:47		Oct-15-12 16:55		Oct-15-12 17:10		Oct-15-12 17:25		Oct-15-12 17:40		Oct-15-12 17:55	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		ND	0.00104	ND	0.00113	ND	0.00111	ND	0.00105	ND	0.00107	ND	0.00107
Toluene		ND	0.00208	ND	0.00227	ND	0.00222	ND	0.00209	ND	0.00214	ND	0.00213
Ethylbenzene		ND	0.00104	ND	0.00113	ND	0.00111	ND	0.00105	ND	0.00107	ND	0.00107
m_p-Xylenes		ND	0.00208	ND	0.00227	ND	0.00222	ND	0.00209	ND	0.00214	ND	0.00213
o-Xylene		ND	0.00104	ND	0.00113	ND	0.00111	ND	0.00105	ND	0.00107	ND	0.00107
Xylenes, Total		ND	0.00104	ND	0.00113	ND	0.00111	ND	0.00105	ND	0.00107	ND	0.00107
Total BTEX		ND	0.00104	ND	0.00113	ND	0.00111	ND	0.00105	ND	0.00107	ND	0.00107
Inorganic Anions by EPA 300/300.1 SUB: TX104704215	*Extracted:*	Oct-16-12 17:50		Oct-16-12 18:22		Oct-16-12 18:38		Oct-16-12 18:55		Oct-16-12 19:11		Oct-16-12 19:27	
	Analyzed:	Oct-16-12 17:50		Oct-16-12 18:22		Oct-16-12 18:38		Oct-16-12 18:55		Oct-16-12 19:11		Oct-16-12 19:27	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		3.02	1.02	1.66	1.08	6.48	1.14	19.7	1.00	26.4	1.11	12.2	1.06
Percent Moisture	*Extracted:*												
	Analyzed:	Oct-15-12 15:25		Oct-15-12 15:25		Oct-15-12 15:25		Oct-15-12 15:25		Oct-15-12 15:25		Oct-15-12 15:25	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		4.31	1.00	11.8	1.00	9.98	1.00	4.22	1.00	6.73	1.00	6.73	1.00
TPH by SW8015 Mod	*Extracted:*	Oct-15-12 14:50		Oct-15-12 14:50		Oct-15-12 14:50		Oct-15-12 14:50		Oct-15-12 14:50		Oct-15-12 14:50	
	Analyzed:	Oct-16-12 06:54		Oct-16-12 07:23		Oct-16-12 07:53		Oct-16-12 08:25		Oct-16-12 09:00		Oct-16-12 10:00	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
C6-C12 Gasoline Range Hydrocarbons		ND	52.3	ND	56.6	ND	55.5	ND	52.3	ND	53.5	ND	53.6
C12-C28 Diesel Range Hydrocarbons		ND	52.3	ND	56.6	ND	55.5	ND	52.3	ND	53.5	ND	53.6
C28-C35 Oil Range Hydrocarbons		ND	52.3	ND	56.6	ND	55.5	ND	52.3	ND	53.5	ND	53.6
Total TPH		ND	52.3	ND	56.6	ND	55.5	ND	52.3	ND	53.5	ND	53.6

Nicholas Straccione
Project Manager

Certificate of Analysis Summary 450687

Environmental Plus, Incorporated, Eunice, NM

Project Name: UL "L" Section 14, T21S, R37E

Project Id:

Contact: David Duncan

Project Location: Eunice New Mexico

Date Received in Lab: Fri Oct-12-12 03:12 pm

Report Date: 19-OCT-12

Project Manager: Nicholas Straccione

Analysis Requested													
	Lab Id:	450687-007		450687-008		450687-009		450687-010		450687-011		450687-012	
	Field Id:	MW-1 (SB-1 @ 60')		MW-2 (SB-4 @ 1')		MW-2 (SB-4 @ 10')		MW-2 (SB-4 @ 20')		MW-2 (SB-4 @ 30')		MW-2 (SB-4 @ 40')	
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Oct-10-12 10:10		Oct-10-12 12:46		Oct-10-12 12:51		Oct-10-12 12:54		Oct-10-12 13:00		Oct-10-12 13:05	
BTEX by EPA 8021	*Extracted:*	Oct-15-12 15:30		Oct-15-12 15:30		Oct-15-12 15:30		Oct-15-12 15:30		Oct-15-12 15:30		Oct-15-12 15:30	
	Analyzed:	Oct-15-12 18:10		Oct-15-12 18:25		Oct-15-12 18:40		Oct-15-12 18:55		Oct-15-12 19:10		Oct-15-12 19:40	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		ND	0.00108	ND	0.00107	ND	0.00108	ND	0.00108	ND	0.00105	ND	0.00106
Toluene		ND	0.00216	ND	0.00214	ND	0.00217	ND	0.00215	ND	0.00211	ND	0.00212
Ethylbenzene		ND	0.00108	ND	0.00107	ND	0.00108	ND	0.00108	ND	0.00105	ND	0.00106
m_p-Xylenes		ND	0.00216	ND	0.00214	ND	0.00217	ND	0.00215	ND	0.00211	ND	0.00212
o-Xylene		ND	0.00108	ND	0.00107	ND	0.00108	ND	0.00108	ND	0.00105	ND	0.00106
Xylenes, Total		ND	0.00108	ND	0.00107	ND	0.00108	ND	0.00108	ND	0.00105	ND	0.00106
Total BTEX		ND	0.00108	ND	0.00107	ND	0.00108	ND	0.00108	ND	0.00105	ND	0.00106
Inorganic Anions by EPA 300/300.1 SUB: TX104704215	*Extracted:*	Oct-16-12 20:15		Oct-16-12 20:31		Oct-16-12 20:47		Oct-16-12 21:03		Oct-16-12 21:19		Oct-16-12 21:36	
	Analyzed:	Oct-16-12 20:15		Oct-16-12 20:31		Oct-16-12 20:47		Oct-16-12 21:03		Oct-16-12 21:19		Oct-16-12 21:36	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		62.5	1.17	4.37	1.06	ND	1.15	ND	1.08	1.04	0.997	ND	1.12
Percent Moisture	*Extracted:*												
	Analyzed:	Oct-15-12 15:25		Oct-15-12 15:25		Oct-15-12 15:25		Oct-15-12 15:25		Oct-15-12 15:25		Oct-15-12 15:25	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		7.98	1.00	6.83	1.00	7.92	1.00	6.99	1.00	5.73	1.00	5.10	1.00
TPH by SW8015 Mod	*Extracted:*	Oct-15-12 14:50		Oct-15-12 14:50		Oct-15-12 14:50		Oct-15-12 14:50		Oct-15-12 14:50		Oct-16-12 14:00	
	Analyzed:	Oct-16-12 10:36		Oct-16-12 11:06		Oct-16-12 11:36		Oct-16-12 12:14		Oct-16-12 12:45		Oct-16-12 19:05	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
C6-C12 Gasoline Range Hydrocarbons		ND	54.2	ND	53.8	ND	54.4	ND	53.9	ND	53.0	ND	52.7
C12-C28 Diesel Range Hydrocarbons		ND	54.2	ND	53.8	ND	54.4	ND	53.9	ND	53.0	ND	52.7
C28-C35 Oil Range Hydrocarbons		ND	54.2	ND	53.8	ND	54.4	ND	53.9	ND	53.0	ND	52.7
Total TPH		ND	54.2	ND	53.8	ND	54.4	ND	53.9	ND	53.0	ND	52.7

Nicholas Straccione
Project Manager

Certificate of Analysis Summary 450687

Environmental Plus, Incorporated, Eunice, NM

Project Name: UL "L" Section 14, T21S, R37E

Project Id:
Contact: David Duncan
Project Location: Eunice New Mexico

Date Received in Lab: Fri Oct-12-12 03:12 pm
Report Date: 19-OCT-12
Project Manager: Nicholas Straccione

Analysis Requested													
	Lab Id:	450687-013		450687-014		450687-015		450687-016		450687-017		450687-018	
	Field Id:	MW-2 (SB-4 @ 48')-Core		MW-2 (SB-4 @ 55')		MW-3 (SB-5 @ 1')		MW-3 (SB-5 @ 10')		MW-3 (SB-5 @ 20')		MW-3 (SB-5 @ 30')	
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Oct-10-12 13:17		Oct-10-12 13:20		Oct-10-12 14:30		Oct-10-12 14:35		Oct-10-12 14:38		Oct-10-12 14:41	
BTEX by EPA 8021	***Extracted:***	Oct-15-12 15:30		Oct-15-12 15:30		Oct-15-12 15:30		Oct-15-12 15:30		Oct-16-12 08:00		Oct-16-12 08:00	
	Analyzed:	Oct-15-12 19:55		Oct-15-12 20:10		Oct-15-12 20:24		Oct-15-12 20:39		Oct-16-12 09:37		Oct-16-12 09:52	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		ND	0.00107	ND	0.00112	ND	0.00108	ND	0.00107	ND	0.00100	ND	0.000994
Toluene		ND	0.00215	ND	0.00224	ND	0.00217	ND	0.00213	ND	0.00200	ND	0.00199
Ethylbenzene		ND	0.00107	ND	0.00112	ND	0.00108	ND	0.00107	ND	0.00100	ND	0.000994
m_p-Xylenes		ND	0.00215	ND	0.00224	ND	0.00217	ND	0.00213	ND	0.00200	ND	0.00199
o-Xylene		ND	0.00107	ND	0.00112	ND	0.00108	ND	0.00107	ND	0.00100	ND	0.000994
Xylenes, Total		ND	0.00107	ND	0.00112	ND	0.00108	ND	0.00107	ND	0.00100	ND	0.000994
Total BTEX		ND	0.00107	ND	0.00112	ND	0.00108	ND	0.00107	ND	0.00100	ND	0.000994
Inorganic Anions by EPA 300/300.1 SUB: TX104704215	***Extracted:***	Oct-16-12 21:52		Oct-16-12 22:08		Oct-16-12 22:24		Oct-16-12 22:40		Oct-16-12 23:28		Oct-16-12 23:44	
	Analyzed:	Oct-16-12 21:52		Oct-16-12 22:08		Oct-16-12 22:24		Oct-16-12 22:40		Oct-16-12 23:28		Oct-16-12 23:44	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		ND	1.19	10.8	1.08	ND	1.09	ND	1.03	ND	1.09	ND	1.01
Percent Moisture	***Extracted:***												
	Analyzed:	Oct-15-12 15:25		Oct-15-12 15:25		Oct-15-12 15:43		Oct-15-12 15:43		Oct-16-12 15:35		Oct-16-12 15:35	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		7.22	1.00	11.1	1.00	7.92	1.00	6.59	1.00	9.81	1.00	4.34	1.00
TPH by SW8015 Mod	***Extracted:***	Oct-16-12 14:00		Oct-16-12 14:00		Oct-16-12 14:00		Oct-16-12 14:00		Oct-16-12 14:00		Oct-16-12 14:00	
	Analyzed:	Oct-16-12 19:33		Oct-16-12 20:06		Oct-16-12 20:41		Oct-16-12 21:11		Oct-16-12 21:40		Oct-16-12 22:11	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
C6-C12 Gasoline Range Hydrocarbons		ND	53.8	ND	56.1	ND	54.2	ND	53.3	ND	55.2	ND	52.1
C12-C28 Diesel Range Hydrocarbons		ND	53.8	ND	56.1	ND	54.2	ND	53.3	ND	55.2	ND	52.1
C28-C35 Oil Range Hydrocarbons		ND	53.8	ND	56.1	ND	54.2	ND	53.3	ND	55.2	ND	52.1
Total TPH		ND	53.8	ND	56.1	ND	54.2	ND	53.3	ND	55.2	ND	52.1

Nicholas Straccione
Project Manager

Certificate of Analysis Summary 450687

Environmental Plus, Incorporated, Eunice, NM

Project Name: UL "L" Section 14, T21S, R37E

Project Id:

Contact: David Duncan

Project Location: Eunice New Mexico

Date Received in Lab: Fri Oct-12-12 03:12 pm

Report Date: 19-OCT-12

Project Manager: Nicholas Straccione

Analysis Requested													
	Lab Id:	450687-019		450687-020		450687-021		450687-022		450687-023		450687-024	
	Field Id:	MW-3 (SB-5 @ 40')		MW-3 (SB-5 @ 50')-Core		MW-3 (SB-5 @ 60')		SB-2(1')		SB-2(5')		SB-2(10')	
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Oct-10-12 14:45		Oct-10-12 14:57		Oct-10-12 15:04		Oct-11-12 09:08		Oct-11-12 09:33		Oct-11-12 09:36	
BTEX by EPA 8021	*Extracted:*	Oct-16-12 08:00		Oct-16-12 08:00		Oct-16-12 08:00		Oct-16-12 08:00		Oct-16-12 08:00		Oct-16-12 08:00	
	Analyzed:	Oct-16-12 10:22		Oct-16-12 10:37		Oct-16-12 10:52		Oct-16-12 11:07		Oct-16-12 11:22		Oct-16-12 11:37	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		ND	0.000996	ND	0.000994	ND	0.00100	ND	0.000996	ND	0.00100	ND	0.00100
Toluene		ND	0.00199	ND	0.00199	ND	0.00200	ND	0.00199	ND	0.00200	ND	0.00200
Ethylbenzene		ND	0.000996	ND	0.000994	ND	0.00100	ND	0.000996	ND	0.00100	ND	0.00100
m_p-Xylenes		ND	0.00199	ND	0.00199	ND	0.00200	ND	0.00199	ND	0.00200	ND	0.00200
o-Xylene		ND	0.000996	ND	0.000994	ND	0.00100	ND	0.000996	ND	0.00100	ND	0.00100
Xylenes, Total		ND	0.000996	ND	0.000994	ND	0.00100	ND	0.000996	ND	0.00100	ND	0.00100
Total BTEX		ND	0.000996	ND	0.000994	ND	0.00100	ND	0.000996	ND	0.00100	ND	0.00100
Inorganic Anions by EPA 300/300.1 SUB: TX104704215	*Extracted:*	Oct-17-12 00:00		Oct-17-12 00:17		Oct-17-12 02:09		Oct-17-12 02:41		Oct-17-12 02:58		Oct-17-12 03:14	
	Analyzed:	Oct-17-12 00:00		Oct-17-12 00:17		Oct-17-12 02:09		Oct-17-12 02:41		Oct-17-12 02:58		Oct-17-12 03:14	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		ND	1.05	1.42	1.06	3.48	1.13	21.6	1.15	1.38	1.01	119	1.12
Percent Moisture	*Extracted:*												
	Analyzed:	Oct-16-12 15:35		Oct-16-12 15:35		Oct-16-12 15:35		Oct-16-12 15:35		Oct-16-12 15:35		Oct-16-12 15:35	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		5.74	1.00	7.48	1.00	11.7	1.00	6.44	1.00	7.59	1.00	5.60	1.00
TPH by SW8015 Mod	*Extracted:*	Oct-16-12 14:00		Oct-16-12 14:00		Oct-16-12 14:00		Oct-16-12 14:00		Oct-16-12 14:00		Oct-16-12 14:00	
	Analyzed:	Oct-16-12 22:44		Oct-16-12 23:18		Oct-16-12 23:52		Oct-17-12 00:55		Oct-17-12 01:26		Oct-17-12 02:03	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
C6-C12 Gasoline Range Hydrocarbons		ND	53.0	ND	54.0	ND	56.6	ND	53.2	ND	54.1	ND	52.8
C12-C28 Diesel Range Hydrocarbons		ND	53.0	ND	54.0	ND	56.6	ND	53.2	ND	54.1	ND	52.8
C28-C35 Oil Range Hydrocarbons		ND	53.0	ND	54.0	ND	56.6	ND	53.2	ND	54.1	ND	52.8
Total TPH		ND	53.0	ND	54.0	ND	56.6	ND	53.2	ND	54.1	ND	52.8

Nicholas Straccione
Project Manager

Certificate of Analysis Summary 450687

Environmental Plus, Incorporated, Eunice, NM

Project Name: UL "L" Section 14, T21S, R37E

Project Id:
Contact: David Duncan
Project Location: Eunice New Mexico

Date Received in Lab: Fri Oct-12-12 03:12 pm
Report Date: 19-OCT-12
Project Manager: Nicholas Straccione

Analysis Requested													
	Lab Id:	450687-025		450687-026		450687-027		450687-028		450687-029		450687-030	
	Field Id:	SB-2(15')		SB-2(20')		SB-3(1')		SB-3(5')		SB-3(10')		SB-3(15')	
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Oct-11-12 09:38		Oct-11-12 09:39		Oct-11-12 10:06		Oct-11-12 10:14		Oct-11-12 10:16		Oct-11-12 10:17	
BTEX by EPA 8021	*Extracted:*	Oct-16-12 08:00		Oct-16-12 08:00		Oct-16-12 08:00		Oct-16-12 08:00		Oct-16-12 08:00		Oct-16-12 08:00	
	Analyzed:	Oct-16-12 11:52		Oct-16-12 12:07		Oct-16-12 12:38		Oct-16-12 12:53		Oct-16-12 13:08		Oct-16-12 13:22	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		ND	0.00100	ND	0.00100	ND	0.000994	ND	0.00100	ND	0.000996	ND	0.00100
Toluene		ND	0.00200	ND	0.00200	ND	0.00199	ND	0.00200	ND	0.00199	ND	0.00201
Ethylbenzene		ND	0.00100	ND	0.00100	ND	0.000994	ND	0.00100	ND	0.000996	ND	0.00100
m_p-Xylenes		ND	0.00200	ND	0.00200	ND	0.00199	ND	0.00200	ND	0.00199	ND	0.00201
o-Xylene		ND	0.00100	ND	0.00100	ND	0.000994	ND	0.00100	ND	0.000996	ND	0.00100
Xylenes, Total		ND	0.00100	ND	0.00100	ND	0.000994	ND	0.00100	ND	0.000996	ND	0.00100
Total BTEX		ND	0.00100	ND	0.00100	ND	0.000994	ND	0.00100	ND	0.000996	ND	0.00100
Inorganic Anions by EPA 300/300.1 SUB: TX104704215	*Extracted:*	Oct-17-12 03:30		Oct-17-12 03:46		Oct-17-12 04:34		Oct-17-12 04:50		Oct-17-12 05:06		Oct-17-12 05:22	
	Analyzed:	Oct-17-12 03:30		Oct-17-12 03:46		Oct-17-12 04:34		Oct-17-12 04:50		Oct-17-12 05:06		Oct-17-12 05:22	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		17.8	1.18	11.4	1.10	ND	1.00	13.3	1.07	ND	1.20	ND	1.12
Percent Moisture	*Extracted:*												
	Analyzed:	Oct-16-12 15:35		Oct-16-12 15:35		Oct-16-12 15:35		Oct-16-12 15:35		Oct-16-12 15:35		Oct-16-12 15:35	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		9.83	1.00	9.34	1.00	7.59	1.00	2.42	1.00	7.02	1.00	8.66	1.00
TPH by SW8015 Mod	*Extracted:*	Oct-16-12 14:00		Oct-16-12 14:00		Oct-16-12 14:00		Oct-16-12 14:00		Oct-16-12 14:00		Oct-16-12 14:00	
	Analyzed:	Oct-17-12 02:41		Oct-17-12 03:17		Oct-17-12 03:53		Oct-17-12 04:29		Oct-17-12 05:03		Oct-17-12 05:34	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
C6-C12 Gasoline Range Hydrocarbons		ND	55.3	ND	54.9	ND	54.1	ND	51.2	ND	53.6	ND	54.7
C12-C28 Diesel Range Hydrocarbons		ND	55.3	ND	54.9	ND	54.1	ND	51.2	ND	53.6	ND	54.7
C28-C35 Oil Range Hydrocarbons		ND	55.3	ND	54.9	ND	54.1	ND	51.2	ND	53.6	ND	54.7
Total TPH		ND	55.3	ND	54.9	ND	54.1	ND	51.2	ND	53.6	ND	54.7

Nicholas Straccione
Project Manager

Certificate of Analysis Summary 450687

Environmental Plus, Incorporated, Eunice, NM

Project Name: UL "L" Section 14, T21S, R37E

Project Id:
Contact: David Duncan
Project Location: Eunice New Mexico

Date Received in Lab: Fri Oct-12-12 03:12 pm
Report Date: 19-OCT-12
Project Manager: Nicholas Straccione

Analysis Requested							
	Lab Id:	450687-031					
	Field Id:	SB-3(20')					
	Depth:						
	Matrix:	SOIL					
	Sampled:	Oct-11-12 10:19					
BTEX by EPA 8021	*Extracted:*	Oct-16-12 08:00					
	Analyzed:	Oct-16-12 13:37					
	Units/RL:	mg/kg	RL				
Benzene		ND	0.00100				
Toluene		ND	0.00200				
Ethylbenzene		ND	0.00100				
m_p-Xylenes		ND	0.00200				
o-Xylene		ND	0.00100				
Xylenes, Total		ND	0.00100				
Total BTEX		ND	0.00100				
Inorganic Anions by EPA 300/300.1 SUB: TX104704215	*Extracted:*	Oct-17-12 05:38					
	Analyzed:	Oct-17-12 05:38					
	Units/RL:	mg/kg	RL				
Chloride		ND	1.16				
Percent Moisture	*Extracted:*						
	Analyzed:	Oct-16-12 15:35					
	Units/RL:	%	RL				
Percent Moisture		5.21	1.00				
TPH by SW8015 Mod	*Extracted:*	Oct-16-12 14:00					
	Analyzed:	Oct-17-12 06:11					
	Units/RL:	mg/kg	RL				
C6-C12 Gasoline Range Hydrocarbons		ND	52.7				
C12-C28 Diesel Range Hydrocarbons		ND	52.7				
C28-C35 Oil Range Hydrocarbons		ND	52.7				
Total TPH		ND	52.7				

Nicholas Straccione
Project Manager

XENCO Laboratories

Flagging Criteria

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

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

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

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

F RPD exceeded lab control limits.

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

U Analyte was not detected.

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

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

K Sample analyzed outside of recommended hold time.

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

* Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

\+ NELAC certification not offered for this compound.

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

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: UL "L" Section 14, T21S, R37E

Work Orders : 450687,

Project ID:

Lab Batch #: 898786 **Sample:** 450687-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/15/12 14:47

BTEX by EPA 8021	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0241	0.0300	80	80-120	
4-Bromofluorobenzene	0.0256	0.0300	85	80-120	

Lab Batch #: 898800 **Sample:** 450687-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/15/12 16:55

BTEX by EPA 8021	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0300	0.0300	100	80-120	
4-Bromofluorobenzene	0.0348	0.0300	116	80-120	

Lab Batch #: 898800 **Sample:** 450687-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/15/12 17:10

BTEX by EPA 8021	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0257	0.0300	86	80-120	
4-Bromofluorobenzene	0.0291	0.0300	97	80-120	

Lab Batch #: 898800 **Sample:** 450687-004 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/15/12 17:25

BTEX by EPA 8021	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0264	0.0300	88	80-120	
4-Bromofluorobenzene	0.0282	0.0300	94	80-120	

Lab Batch #: 898800 **Sample:** 450687-005 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/15/12 17:40

BTEX by EPA 8021	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0268	0.0300	89	80-120	
4-Bromofluorobenzene	0.0284	0.0300	95	80-120	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: UL "L" Section 14, T21S, R37E

Work Orders : 450687,

Project ID:

Lab Batch #: 898800 **Sample:** 450687-006 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/15/12 17:55

BTEX by EPA 8021	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0287	0.0300	96	80-120	
4-Bromofluorobenzene	0.0310	0.0300	103	80-120	

Lab Batch #: 898800 **Sample:** 450687-007 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/15/12 18:10

BTEX by EPA 8021	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0242	0.0300	81	80-120	
4-Bromofluorobenzene	0.0279	0.0300	93	80-120	

Lab Batch #: 898800 **Sample:** 450687-008 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/15/12 18:25

BTEX by EPA 8021	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0279	0.0300	93	80-120	
4-Bromofluorobenzene	0.0262	0.0300	87	80-120	

Lab Batch #: 898800 **Sample:** 450687-009 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/15/12 18:40

BTEX by EPA 8021	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0240	0.0300	80	80-120	
4-Bromofluorobenzene	0.0245	0.0300	82	80-120	

Lab Batch #: 898800 **Sample:** 450687-010 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/15/12 18:55

BTEX by EPA 8021	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0273	0.0300	91	80-120	
4-Bromofluorobenzene	0.0240	0.0300	80	80-120	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: UL "L" Section 14, T21S, R37E

Work Orders : 450687,

Project ID:

Lab Batch #: 898800 **Sample:** 450687-011 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/15/12 19:10

BTEX by EPA 8021	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0329	0.0300	110	80-120	
4-Bromofluorobenzene	0.0324	0.0300	108	80-120	

Lab Batch #: 898800 **Sample:** 450687-012 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/15/12 19:40

BTEX by EPA 8021	SURROGATE RECOVERY STUDY				
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	0.0311	0.0300	104	80-120	

Lab Batch #: 898800 **Sample:** 450687-013 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/15/12 19:55

BTEX by EPA 8021	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0306	0.0300	102	80-120	
4-Bromofluorobenzene	0.0278	0.0300	93	80-120	

Lab Batch #: 898800 **Sample:** 450687-014 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/15/12 20:10

BTEX by EPA 8021	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0254	0.0300	85	80-120	
4-Bromofluorobenzene	0.0266	0.0300	89	80-120	

Lab Batch #: 898800 **Sample:** 450687-015 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/15/12 20:24

BTEX by EPA 8021	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0278	0.0300	93	80-120	
4-Bromofluorobenzene	0.0309	0.0300	103	80-120	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: UL "L" Section 14, T21S, R37E

Work Orders : 450687,

Project ID:

Lab Batch #: 898800 **Sample:** 450687-016 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/15/12 20:39

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0253	0.0300	84	80-120	
4-Bromofluorobenzene	0.0242	0.0300	81	80-120	

Lab Batch #: 898864 **Sample:** 450687-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/16/12 06:54

TPH by SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	95.8	100	96	70-135	
o-Terphenyl	46.4	50.0	93	70-135	

Lab Batch #: 898864 **Sample:** 450687-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/16/12 07:23

TPH by SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	94.2	99.9	94	70-135	
o-Terphenyl	46.4	50.0	93	70-135	

Lab Batch #: 898864 **Sample:** 450687-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/16/12 07:53

TPH by SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	94.1	100	94	70-135	
o-Terphenyl	45.8	50.0	92	70-135	

Lab Batch #: 898864 **Sample:** 450687-004 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/16/12 08:25

TPH by SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	93.6	100	94	70-135	
o-Terphenyl	45.3	50.1	90	70-135	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: UL "L" Section 14, T21S, R37E

Work Orders : 450687,

Project ID:

Lab Batch #: 898864 **Sample:** 450687-005 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/16/12 09:00

TPH by SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	92.5	99.8	93	70-135	
o-Terphenyl	44.1	49.9	88	70-135	

Lab Batch #: 898869 **Sample:** 450687-017 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/16/12 09:37

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0263	0.0300	88	80-120	
4-Bromofluorobenzene	0.0266	0.0300	89	80-120	

Lab Batch #: 898869 **Sample:** 450687-018 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/16/12 09:52

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY 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	0.0299	0.0300	100	80-120	

Lab Batch #: 898864 **Sample:** 450687-006 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/16/12 10:00

TPH by SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	94.1	100	94	70-135	
o-Terphenyl	45.7	50.0	91	70-135	

Lab Batch #: 898869 **Sample:** 450687-019 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/16/12 10:22

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY 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	0.0346	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.

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: UL "L" Section 14, T21S, R37E

Work Orders : 450687,

Project ID:

Lab Batch #: 898864 **Sample:** 450687-007 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/16/12 10:36

TPH by SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	87.4	99.8	88	70-135	
o-Terphenyl	41.9	49.9	84	70-135	

Lab Batch #: 898869 **Sample:** 450687-020 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/16/12 10:37

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0352	0.0300	117	80-120	
4-Bromofluorobenzene	0.0309	0.0300	103	80-120	

Lab Batch #: 898869 **Sample:** 450687-021 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/16/12 10:52

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0244	0.0300	81	80-120	
4-Bromofluorobenzene	0.0251	0.0300	84	80-120	

Lab Batch #: 898864 **Sample:** 450687-008 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/16/12 11:06

TPH by SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	95.3	100	95	70-135	
o-Terphenyl	46.1	50.1	92	70-135	

Lab Batch #: 898869 **Sample:** 450687-022 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/16/12 11:07

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0242	0.0300	81	80-120	
4-Bromofluorobenzene	0.0244	0.0300	81	80-120	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: UL "L" Section 14, T21S, R37E

Work Orders : 450687,

Project ID:

Lab Batch #: 898869 **Sample:** 450687-023 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/16/12 11:22

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY				
	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0254	0.0300	85	80-120	
4-Bromofluorobenzene	0.0249	0.0300	83	80-120	

Lab Batch #: 898864 **Sample:** 450687-009 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/16/12 11:36

TPH by SW8015 Mod Analytes	SURROGATE RECOVERY STUDY				
	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	97.2	100	97	70-135	
o-Terphenyl	46.7	50.1	93	70-135	

Lab Batch #: 898869 **Sample:** 450687-024 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/16/12 11:37

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY				
	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0275	0.0300	92	80-120	
4-Bromofluorobenzene	0.0280	0.0300	93	80-120	

Lab Batch #: 898869 **Sample:** 450687-025 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/16/12 11:52

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY				
	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0258	0.0300	86	80-120	
4-Bromofluorobenzene	0.0282	0.0300	94	80-120	

Lab Batch #: 898869 **Sample:** 450687-026 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/16/12 12:07

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY				
	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0253	0.0300	84	80-120	
4-Bromofluorobenzene	0.0290	0.0300	97	80-120	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: UL "L" Section 14, T21S, R37E

Work Orders : 450687,

Project ID:

Lab Batch #: 898864 **Sample:** 450687-010 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/16/12 12:14

TPH by SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	87.8	100	88	70-135	
o-Terphenyl	42.0	50.1	84	70-135	

Lab Batch #: 898869 **Sample:** 450687-027 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/16/12 12:38

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0242	0.0300	81	80-120	
4-Bromofluorobenzene	0.0268	0.0300	89	80-120	

Lab Batch #: 898864 **Sample:** 450687-011 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/16/12 12:45

TPH by SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	93.2	100	93	70-135	
o-Terphenyl	45.5	50.0	91	70-135	

Lab Batch #: 898869 **Sample:** 450687-028 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/16/12 12:53

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0295	0.0300	98	80-120	
4-Bromofluorobenzene	0.0305	0.0300	102	80-120	

Lab Batch #: 898869 **Sample:** 450687-029 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/16/12 13:08

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0265	0.0300	88	80-120	
4-Bromofluorobenzene	0.0268	0.0300	89	80-120	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: UL "L" Section 14, T21S, R37E

Work Orders : 450687,

Project ID:

Lab Batch #: 898869 **Sample:** 450687-030 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/16/12 13:22

BTEX by EPA 8021	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0244	0.0300	81	80-120	
4-Bromofluorobenzene	0.0261	0.0300	87	80-120	

Lab Batch #: 898869 **Sample:** 450687-031 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/16/12 13:37

BTEX by EPA 8021	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0259	0.0300	86	80-120	
4-Bromofluorobenzene	0.0265	0.0300	88	80-120	

Lab Batch #: 898913 **Sample:** 450687-012 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/16/12 19:05

TPH by SW8015 Mod	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	93.3	100	93	70-135	
o-Terphenyl	44.6	50.1	89	70-135	

Lab Batch #: 898913 **Sample:** 450687-013 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/16/12 19:33

TPH by SW8015 Mod	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	97.7	99.8	98	70-135	
o-Terphenyl	47.0	49.9	94	70-135	

Lab Batch #: 898913 **Sample:** 450687-014 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/16/12 20:06

TPH by SW8015 Mod	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	89.5	99.7	90	70-135	
o-Terphenyl	43.1	49.9	86	70-135	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: UL "L" Section 14, T21S, R37E

Work Orders : 450687,

Project ID:

Lab Batch #: 898913 **Sample:** 450687-015 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/16/12 20:41

TPH by SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	85.7	99.9	86	70-135	
o-Terphenyl	41.8	50.0	84	70-135	

Lab Batch #: 898913 **Sample:** 450687-016 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/16/12 21:11

TPH by SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	88.7	99.6	89	70-135	
o-Terphenyl	42.1	49.8	85	70-135	

Lab Batch #: 898913 **Sample:** 450687-017 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/16/12 21:40

TPH by SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	91.3	99.6	92	70-135	
o-Terphenyl	44.6	49.8	90	70-135	

Lab Batch #: 898913 **Sample:** 450687-018 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/16/12 22:11

TPH by SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	89.4	99.6	90	70-135	
o-Terphenyl	42.3	49.8	85	70-135	

Lab Batch #: 898913 **Sample:** 450687-019 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/16/12 22:44

TPH by SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	87.0	99.9	87	70-135	
o-Terphenyl	41.4	50.0	83	70-135	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: UL "L" Section 14, T21S, R37E

Work Orders : 450687,

Project ID:

Lab Batch #: 898913 **Sample:** 450687-020 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/16/12 23:18

TPH by SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	88.7	100	89	70-135	
o-Terphenyl	42.0	50.0	84	70-135	

Lab Batch #: 898913 **Sample:** 450687-021 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/16/12 23:52

TPH by SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	89.4	100	89	70-135	
o-Terphenyl	43.0	50.0	86	70-135	

Lab Batch #: 898913 **Sample:** 450687-022 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/17/12 00:55

TPH by SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	85.7	99.6	86	70-135	
o-Terphenyl	41.8	49.8	84	70-135	

Lab Batch #: 898913 **Sample:** 450687-023 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/17/12 01:26

TPH by SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	89.8	99.9	90	70-135	
o-Terphenyl	43.4	50.0	87	70-135	

Lab Batch #: 898913 **Sample:** 450687-024 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/17/12 02:03

TPH by SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	83.2	99.7	83	70-135	
o-Terphenyl	40.5	49.9	81	70-135	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: UL "L" Section 14, T21S, R37E

Work Orders : 450687,

Project ID:

Lab Batch #: 898913 **Sample:** 450687-025 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/17/12 02:41

TPH by SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	85.6	99.8	86	70-135	
o-Terphenyl	41.5	49.9	83	70-135	

Lab Batch #: 898913 **Sample:** 450687-026 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/17/12 03:17

TPH by SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	87.8	99.6	88	70-135	
o-Terphenyl	42.0	49.8	84	70-135	

Lab Batch #: 898913 **Sample:** 450687-027 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/17/12 03:53

TPH by SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	84.0	99.9	84	70-135	
o-Terphenyl	40.9	50.0	82	70-135	

Lab Batch #: 898913 **Sample:** 450687-028 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/17/12 04:29

TPH by SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	81.1	100	81	70-135	
o-Terphenyl	37.7	50.0	75	70-135	

Lab Batch #: 898913 **Sample:** 450687-029 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/17/12 05:03

TPH by SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	86.8	99.7	87	70-135	
o-Terphenyl	41.2	49.9	83	70-135	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: UL "L" Section 14, T21S, R37E

Work Orders : 450687,

Project ID:

Lab Batch #: 898913 **Sample:** 450687-030 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/17/12 05:34

TPH by SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	91.0	100	91	70-135	
o-Terphenyl	44.0	50.0	88	70-135	

Lab Batch #: 898913 **Sample:** 450687-031 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/17/12 06:11

TPH by SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	84.5	99.9	85	70-135	
o-Terphenyl	41.0	50.0	82	70-135	

Lab Batch #: 898786 **Sample:** 628592-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 10/15/12 11:18

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY 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	0.0246	0.0300	82	80-120	

Lab Batch #: 898800 **Sample:** 628601-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 10/15/12 16:40

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0302	0.0300	101	80-120	
4-Bromofluorobenzene	0.0283	0.0300	94	80-120	

Lab Batch #: 898864 **Sample:** 628651-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 10/16/12 03:51

TPH by SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	102	99.9	102	70-135	
o-Terphenyl	48.8	50.0	98	70-135	

* Surrogate outside of Laboratory QC limits
** Surrogates outside limits; data and surrogates confirmed by reanalysis
*** Poor recoveries due to dilution
Surrogate Recovery [D] = 100 * A / B
All results are based on MDL and validated for QC purposes.

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: UL "L" Section 14, T21S, R37E

Work Orders : 450687,

Project ID:

Lab Batch #: 898869 **Sample:** 628652-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 10/16/12 09:21

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0242	0.0300	81	80-120	
4-Bromofluorobenzene	0.0245	0.0300	82	80-120	

Lab Batch #: 898913 **Sample:** 628678-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 10/16/12 18:30

TPH by SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	98.9	99.8	99	70-135	
o-Terphenyl	48.7	49.9	98	70-135	

Lab Batch #: 898786 **Sample:** 628592-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 10/15/12 10:48

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0288	0.0300	96	80-120	
4-Bromofluorobenzene	0.0325	0.0300	108	80-120	

Lab Batch #: 898800 **Sample:** 628601-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 10/15/12 16:10

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0313	0.0300	104	80-120	
4-Bromofluorobenzene	0.0296	0.0300	99	80-120	

Lab Batch #: 898864 **Sample:** 628651-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 10/16/12 02:50

TPH by SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	106	99.7	106	70-135	
o-Terphenyl	43.8	49.9	88	70-135	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: UL "L" Section 14, T21S, R37E

Work Orders : 450687,

Project ID:

Lab Batch #: 898869 **Sample:** 628652-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 10/16/12 08:51

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0306	0.0300	102	80-120	
4-Bromofluorobenzene	0.0332	0.0300	111	80-120	

Lab Batch #: 898913 **Sample:** 628678-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 10/16/12 17:26

TPH by SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	103	99.9	103	70-135	
o-Terphenyl	54.9	50.0	110	70-135	

Lab Batch #: 898786 **Sample:** 628592-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 10/15/12 11:03

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0317	0.0300	106	80-120	
4-Bromofluorobenzene	0.0334	0.0300	111	80-120	

Lab Batch #: 898800 **Sample:** 628601-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 10/15/12 16:25

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0278	0.0300	93	80-120	
4-Bromofluorobenzene	0.0300	0.0300	100	80-120	

Lab Batch #: 898864 **Sample:** 628651-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 10/16/12 03:19

TPH by SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	105	99.7	105	70-135	
o-Terphenyl	43.7	49.9	88	70-135	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: UL "L" Section 14, T21S, R37E

Work Orders : 450687,

Project ID:

Lab Batch #: 898869 **Sample:** 628652-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 10/16/12 09:07

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY				
	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0339	0.0300	113	80-120	
4-Bromofluorobenzene	0.0348	0.0300	116	80-120	

Lab Batch #: 898913 **Sample:** 628678-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 10/16/12 18:02

TPH by SW8015 Mod Analytes	SURROGATE RECOVERY STUDY				
	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	101	100	101	70-135	
o-Terphenyl	53.5	50.0	107	70-135	

Lab Batch #: 898786 **Sample:** 450647-001 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/15/12 15:01

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY				
	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0300	0.0300	100	80-120	
4-Bromofluorobenzene	0.0329	0.0300	110	80-120	

Lab Batch #: 898800 **Sample:** 450687-002 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/15/12 20:54

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY				
	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0338	0.0300	113	80-120	
4-Bromofluorobenzene	0.0348	0.0300	116	80-120	

Lab Batch #: 898864 **Sample:** 450687-001 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/16/12 13:44

TPH by SW8015 Mod Analytes	SURROGATE RECOVERY STUDY				
	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	103	100	103	70-135	
o-Terphenyl	53.9	50.2	107	70-135	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: UL "L" Section 14, T21S, R37E

Work Orders : 450687,

Project ID:

Lab Batch #: 898869 **Sample:** 450687-017 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/16/12 14:36

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY 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	0.0322	0.0300	107	80-120	

Lab Batch #: 898913 **Sample:** 450687-017 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/17/12 06:46

TPH by SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	91.1	99.6	91	70-135	
o-Terphenyl	48.4	49.8	97	70-135	

Lab Batch #: 898786 **Sample:** 450647-001 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/15/12 15:16

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0309	0.0300	103	80-120	
4-Bromofluorobenzene	0.0321	0.0300	107	80-120	

Lab Batch #: 898864 **Sample:** 450687-001 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/16/12 14:20

TPH by SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	96.2	100	96	70-135	
o-Terphenyl	49.6	50.2	99	70-135	

Lab Batch #: 898869 **Sample:** 450687-017 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/16/12 14:51

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0284	0.0300	95	80-120	
4-Bromofluorobenzene	0.0338	0.0300	113	80-120	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: UL "L" Section 14, T21S, R37E

Work Orders : 450687,

Project ID:

Lab Batch #: 898913 **Sample:** 450687-017 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/17/12 07:21

TPH by SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	94.7	100	95	70-135	
o-Terphenyl	50.0	50.1	100	70-135	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

BS / BSD Recoveries

Project Name: UL "L" Section 14, T21S, R37E

Work Order #: 450687 **Project ID:**

Analyst: KEB **Date Prepared:** 10/15/2012 **Date Analyzed:** 10/15/2012

Lab Batch ID: 898786 **Sample:** 628592-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021 Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.000996	0.0996	0.0939	94	0.100	0.103	103	9	70-130	35	
Toluene	<0.00199	0.0996	0.0969	97	0.100	0.102	102	5	70-130	35	
Ethylbenzene	<0.000996	0.0996	0.0935	94	0.100	0.102	102	9	71-129	35	
m_p-Xylenes	<0.00199	0.199	0.199	100	0.200	0.214	107	7	70-135	35	
o-Xylene	<0.000996	0.0996	0.0959	96	0.100	0.103	103	7	71-133	35	

Analyst: KEB **Date Prepared:** 10/15/2012 **Date Analyzed:** 10/15/2012

Lab Batch ID: 898800 **Sample:** 628601-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021 Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00100	0.100	0.0989	99	0.0994	0.0879	88	12	70-130	35	
Toluene	<0.00200	0.100	0.0996	100	0.0994	0.0887	89	12	70-130	35	
Ethylbenzene	<0.00100	0.100	0.0982	98	0.0994	0.0881	89	11	71-129	35	
m_p-Xylenes	<0.00200	0.200	0.209	105	0.199	0.188	94	11	70-135	35	
o-Xylene	<0.00100	0.100	0.0993	99	0.0994	0.0915	92	8	71-133	35	

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

XENCO Laboratories

BS / BSD Recoveries

Project Name: UL "L" Section 14, T21S, R37E

Work Order #: 450687 **Project ID:**

Analyst: KEB **Date Prepared:** 10/16/2012 **Date Analyzed:** 10/16/2012

Lab Batch ID: 898869 **Sample:** 628652-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021 Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00100	0.100	0.0956	96	0.0998	0.104	104	8	70-130	35	
Toluene	<0.00200	0.100	0.0976	98	0.0998	0.109	109	11	70-130	35	
Ethylbenzene	<0.00100	0.100	0.0944	94	0.0998	0.104	104	10	71-129	35	
m_p-Xylenes	<0.00200	0.200	0.200	100	0.200	0.220	110	10	70-135	35	
o-Xylene	<0.00100	0.100	0.0972	97	0.0998	0.107	107	10	71-133	35	

Analyst: TTE **Date Prepared:** 10/16/2012 **Date Analyzed:** 10/16/2012

Lab Batch ID: 898910 **Sample:** 628676-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1 Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	<1.00	100	104	104	102	106	104	2	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

XENCO Laboratories

BS / BSD Recoveries

Project Name: UL "L" Section 14, T21S, R37E

Work Order #: 450687 **Project ID:**

Analyst: TTE **Date Prepared:** 10/17/2012 **Date Analyzed:** 10/17/2012

Lab Batch ID: 898912 **Sample:** 628677-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1 Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	<1.00	100	101	101	102	103	101	2	90-110	20	

Analyst: KEB **Date Prepared:** 10/15/2012 **Date Analyzed:** 10/16/2012

Lab Batch ID: 898864 **Sample:** 628651-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TPH by SW8015 Mod Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C12 Gasoline Range Hydrocarbons	<49.9	997	1070	107	997	1030	103	4	70-135	35	
C12-C28 Diesel Range Hydrocarbons	<49.9	997	1040	104	997	1040	104	0	70-135	35	

Analyst: KEB **Date Prepared:** 10/16/2012 **Date Analyzed:** 10/16/2012

Lab Batch ID: 898913 **Sample:** 628678-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TPH by SW8015 Mod Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C12 Gasoline Range Hydrocarbons	<50.0	999	1030	103	1000	1010	101	2	70-135	35	
C12-C28 Diesel Range Hydrocarbons	<50.0	999	1020	102	1000	989	99	3	70-135	35	

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

XENCO Laboratories

Form 3 - MS Recoveries

Project Name: UL "L" Section 14, T21S, R37E

Work Order #: 450687
Lab Batch #: 898800
Project ID:
Date Analyzed: 10/15/2012 **Date Prepared:** 10/15/2012 **Analyst:** KEB
QC- Sample ID: 450687-002 S **Batch #:** 1 **Matrix:** Soil
Reporting Units: mg/kg

BTEX by EPA 8021B	MATRIX / MATRIX SPIKE RECOVERY STUDY					
Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Benzene	<0.00113	0.113	0.0945	84	70-130	
Toluene	<0.00225	0.113	0.0936	83	70-130	
Ethylbenzene	<0.00113	0.113	0.0877	78	71-129	
m_p-Xylenes	<0.00225	0.225	0.181	80	70-135	
o-Xylene	<0.00113	0.113	0.0913	81	71-133	

Lab Batch #: 898910
Date Analyzed: 10/16/2012 **Date Prepared:** 10/16/2012 **Analyst:** TTE
QC- Sample ID: 450687-001 S **Batch #:** 1 **Matrix:** Soil
Reporting Units: mg/kg

Inorganic Anions by EPA 300	MATRIX / MATRIX SPIKE RECOVERY STUDY					
Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	3.02	102	106	101	80-120	

Lab Batch #: 898910
Date Analyzed: 10/17/2012 **Date Prepared:** 10/17/2012 **Analyst:** TTE
QC- Sample ID: 450687-020 S **Batch #:** 1 **Matrix:** Soil
Reporting Units: mg/kg

Inorganic Anions by EPA 300	MATRIX / MATRIX SPIKE RECOVERY STUDY					
Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	1.42	106	107	100	80-120	

Lab Batch #: 898912
Date Analyzed: 10/17/2012 **Date Prepared:** 10/17/2012 **Analyst:** TTE
QC- Sample ID: 450687-021 S **Batch #:** 1 **Matrix:** Soil
Reporting Units: mg/kg

Inorganic Anions by EPA 300	MATRIX / MATRIX SPIKE RECOVERY STUDY					
Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	3.48	113	117	100	80-120	

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

BRL - Below Reporting Limit

Form 3 - MS Recoveries

Project Name: UL "L" Section 14, T21S, R37E

Work Order #: 450687
Lab Batch #: 898912
Project ID:
Date Analyzed: 10/17/2012
Date Prepared: 10/17/2012
Analyst: TTE
QC- Sample ID: 450687-031 S
Batch #: 1
Matrix: Soil
Reporting Units: mg/kg

Inorganic Anions by EPA 300	MATRIX / MATRIX SPIKE RECOVERY STUDY					
Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	<1.16	116	118	102	80-120	

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

BRL - Below Reporting Limit

XENCO Laboratories

Form 3 - MS / MSD Recoveries

Project Name: UL "L" Section 14, T21S, R37E

Work Order # : 450687 **Project ID:**

Lab Batch ID: 898786 **QC- Sample ID:** 450647-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 10/15/2012 **Date Prepared:** 10/15/2012 **Analyst:** KEB

Reporting Units: mg/kg

BTEX by EPA 8021 Analytes	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00102	0.102	0.103	101	0.102	0.0918	90	11	70-130	35	
Toluene	<0.00205	0.102	0.0935	92	0.102	0.0855	84	9	70-130	35	
Ethylbenzene	<0.00102	0.102	0.0760	75	0.102	0.0713	70	6	71-129	35	X
m_p-Xylenes	<0.00205	0.205	0.157	77	0.204	0.145	71	8	70-135	35	
o-Xylene	<0.00102	0.102	0.0802	79	0.102	0.0730	72	9	71-133	35	

Lab Batch ID: 898869 **QC- Sample ID:** 450687-017 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 10/16/2012 **Date Prepared:** 10/16/2012 **Analyst:** KEB

Reporting Units: mg/kg

BTEX by EPA 8021 Analytes	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00100	0.100	0.0797	80	0.100	0.0786	79	1	70-130	35	
Toluene	<0.00200	0.100	0.0817	82	0.100	0.0779	78	5	70-130	35	
Ethylbenzene	<0.00100	0.100	0.0764	76	0.100	0.0734	73	4	71-129	35	
m_p-Xylenes	<0.00200	0.200	0.156	78	0.201	0.150	75	4	70-135	35	
o-Xylene	<0.00100	0.100	0.0792	79	0.100	0.0738	74	7	71-133	35	

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

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

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

XENCO Laboratories

Form 3 - MS / MSD Recoveries

Project Name: UL "L" Section 14, T21S, R37E

Work Order # : 450687 **Project ID:**

Lab Batch ID: 898864 **QC- Sample ID:** 450687-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 10/16/2012 **Date Prepared:** 10/15/2012 **Analyst:** KEB

Reporting Units: mg/kg

TPH by SW8015 Mod Analytes	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C12 Gasoline Range Hydrocarbons	<52.5	1050	1050	100	1050	1000	95	5	70-135	35	
C12-C28 Diesel Range Hydrocarbons	<52.5	1050	1080	103	1050	1010	96	7	70-135	35	

Lab Batch ID: 898913 **QC- Sample ID:** 450687-017 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 10/17/2012 **Date Prepared:** 10/16/2012 **Analyst:** KEB

Reporting Units: mg/kg

TPH by SW8015 Mod Analytes	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C12 Gasoline Range Hydrocarbons	<55.2	1100	1030	94	1110	1050	95	2	70-135	35	
C12-C28 Diesel Range Hydrocarbons	<55.2	1100	1080	98	1110	1040	94	4	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

Sample Duplicate Recovery

Project Name: UL "L" Section 14, T21S, R37E

Work Order #: 450687

Lab Batch #: 898811 **Project ID:**

Date Analyzed: 10/15/2012 15:25 **Date Prepared:** 10/15/2012 **Analyst:** WRU

QC- Sample ID: 450654-005 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	8.61	8.83	3	20	

Lab Batch #: 898992

Date Analyzed: 10/16/2012 15:35 **Date Prepared:** 10/16/2012 **Analyst:** WRU

QC- Sample ID: 450687-017 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	9.81	9.93	1	20	

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

Environmental Plus, Inc.

2100 Avenue "O", P.O. Box 1558, Eunice, NM 88231
(575) 394-3481 FAX: (575) 394-2601

450687

LAB: XENCO

Company Name	Environmental Plus, Inc.
EPI Project Manager	David P. Duncan
Mailing Address	P.O. BOX 1558
City, State, Zip	Eunice New Mexico 88231
EPI Phone#/Fax#	575-394-3481 / 575-394-2601
Client Company	Southern Union Gas Services
Facility Name	Bettis A-7 Release
Location	UL "L", Section 14, T21S, R37E
Project Reference	#1RP 09-5-2186
EPI Sampler Name	David Robinson

Remit Invoice To:

Southern Union Gas Services
Attn: Ms. Rose Slade
801 South Loop 464
Monahans, Texas 79756

LAB I.D.	SAMPLE I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUND WATER	MATRIX: WASTEWATER	MATRIX: SOIL	MATRIX: CRUDE OIL	MATRIX: SLUDGE	MATRIX: OTHER:	PRESERV.: ACID/BASE	PRESERV.: ICE/COOL	PRESERV.: OTHER	SAMPLING: DATE	SAMPLING: TIME	ANALYSIS REQUEST: BTEX 8021B	TPH 8015M	CHLORIDES (Cl^-)	SULFATES ($SO_4^{=}$)	pH	TCLP	OTHER >>>	PAH
1	MW-1 (SB-1 @ 1')	G				X					X		10-Oct-12	9:24	X	X	X					
2	MW-1 (SB-1 @ 10')	G				X					X		10-Oct-12	9:28	X	X	X					
3	MW-1 (SB-1 @ 20')	G				X					X		10-Oct-12	9:33	X	X	X					
4	MW-1 (SB-1 @ 30')	G				X					X		10-Oct-12	9:37	X	X	X					
5	MW-1 (SB-1 @ 40')	G				X					X		10-Oct-12	9:43	X	X	X					
6	MW-1 (SB-1 @ 50') - Core	G				X					X		10-Oct-12	10:00	X	X	X					
7	MW-1 (SB-1 @ 60')	G				X					X		10-Oct-12	10:10	X	X	X					
8	MW-2 (SB-4 @ 1')	G				X					X		10-Oct-12	12:46	X	X	X					
9	MW-2 (SB-4 @ 10')	G				X					X		10-Oct-12	12:51	X	X	X					
10	MW-2 (SB-4 @ 20')	G				X					X		10-Oct-12	12:54	X	X	X					

Sampler Relinquished: David Robinson — 10/12/2012 10:30
Received By: [signature]

Relinquished by: [signature] — 10/12/2012 Time 15:12
Received By: (lab staff) [signature]

Delivered by:
Sample Cool & Intact: (Yes) No
Checked By:

E-mail results to: rose.slade@sug.com and dduncanepi@gmail.com

9.5

Environmental Plus, Inc.

2100 Avenue "O", P.O. Box 1558, Eunice, NM 88231
(575) 394-3481 FAX: (575) 394-2601

450687

LAB: XENCO

Company Name	Environmental Plus, Inc.
EPI Project Manager	David P. Duncan
Mailing Address	P.O. BOX 1558
City, State, Zip	Eunice New Mexico 88231
EPI Phone#/Fax#	575-394-3481 / 575-394-2601
Client Company	Southern Union Gas Services
Facility Name	Bettis A-7 Release
Location	UL "L", Section 14, T21S, R37E
Project Reference	#1RP 09-5-2186
EPI Sampler Name	David Robinson

Remit Invoice To:

Southern Union Gas Services
Attn: Ms. Rose Slade
801 South Loop 464
Monahans, Texas 79756

LAB I.D.	SAMPLE I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUND WATER	MATRIX: WASTEWATER	MATRIX: SOIL	MATRIX: CRUDE OIL	MATRIX: SLUDGE	MATRIX: OTHER:	PRESERV.: ACID/BASE	PRESERV.: ICE/COOL	PRESERV.: OTHER	SAMPLING: DATE	SAMPLING: TIME	ANALYSIS REQUEST: BTEX 8021B	TPH 8015M	CHLORIDES (Cl)	SULFATES ($SO_4^{=}$)	pH	TCLP	OTHER >>>	PAH			
1	MW-2 (SB-4 @ 30')	G				X					X		10-Oct-12	13:00	X	X	X								
2	MW-2 (SB-4 @ 40')	G				X					X		10-Oct-12	13:05	X	X	X								
3	MW-2 (SB-4 @ 48') - Core	G				X					X		10-Oct-12	13:17	X	X	X								
4	MW-2 (SB-4 @ 55')	G				X					X		10-Oct-12	13:20	X	X	X								
5	MW-3 (SB-5 @ 1')	G				X					X		10-Oct-12	14:30	X	X	X								
6	MW-3 (SB-5 @ 10')	G				X					X		10-Oct-12	14:35	X	X	X								
7	MW-3 (SB-5 @ 20')	G				X					X		10-Oct-12	14:38	X	X	X								
8	MW-3 (SB-5 @ 30')	G				X					X		10-Oct-12	14:41	X	X	X								
9	MW-3 (SB-5 @ 40')	G				X					X		10-Oct-12	14:45	X	X	X								
10	MW-3 (SB-5 @ 50') - Core	G				X					X		10-Oct-12	14:57	X	X	X								

Sampler Relinquished: David Robinson	10/12/2012 10:30	Received By: D.P. Duncan	E-mail results to: rose.slade@sug.com and dduncanepi@gmail.com
Relinquished by: D.P. Duncan	10/12/2012 Time 15:12	Received By: (lab staff) Shawnee Smith	9.5
Delivered by:	Sample Cool & Intact: (Yes) No	Checked By:	

Environmental Plus, Inc.

2100 Avenue "O", P.O. Box 1558, Eunice, NM 88231
(575) 394-3481 FAX: (575) 394-2601

450687

LAB: XENCO

Company Name	Environmental Plus, Inc.
EPI Project Manager	David P. Duncan
Mailing Address	P.O. BOX 1558
City, State, Zip	Eunice New Mexico 88231
EPI Phone#/Fax#	575-394-3481 / 575-394-2601
Client Company	Southern Union Gas Services
Facility Name	Bettis A-7 Release
Location	UL "L", Section 14, T21S, R37E
Project Reference	#1RP 09-5-2186
EPI Sampler Name	David Robinson

Remit Invoice To:

Southern Union Gas Services
Attn: Ms. Rose Slade
801 South Loop 464
Monahans, Texas 79756

LAB I.D.	SAMPLE I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUND WATER	MATRIX: WASTEWATER	MATRIX: SOIL	MATRIX: CRUDE OIL	MATRIX: SLUDGE	MATRIX: OTHER:	PRESERV.: ACID/BASE	PRESERV.: ICE/COOL	PRESERV.: OTHER	SAMPLING: DATE	SAMPLING: TIME	ANALYSIS REQUEST: BTEX 8021B	TPH 8015M	CHLORIDES (Cl)	SULFATES ($SO_4^{=}$)	pH	TCLP	OTHER >>>	PAH			
1	MW-3 (SB-5 @ 60')	G				X					X		10-Oct-12	15:04	X	X	X								
2	SB-2 (1')	G				X					X		11-Oct-12	9:08	X	X	X								
3	SB-2 (5')	G				X					X		11-Oct-12	9:33	X	X	X								
4	SB-2 (10')	G				X					X		11-Oct-12	9:36	X	X	X								
5	SB-2 (15')	G				X					X		11-Oct-12	9:38	X	X	X								
6	SB-2 (20')	G				X					X		11-Oct-12	9:39	X	X	X								
7	SB-3 (1')	G				X					X		11-Oct-12	10:06	X	X	X								
8	SB-3 (5')	G				X					X		11-Oct-12	10:14	X	X	X								
9	SB-3 (10')	G				X					X		11-Oct-12	10:16	X	X	X								
10	SB-3 (15')	G				X					X		11-Oct-12	10:17	X	X	X								

Sampler Relinquished: David Robison — 10/12/2012 10:30

Received By: D B Duncan

Relinquished by: D B Duncan — 10/12/2012 Time 15:12

Received By: (lab staff) Shawnee Smith

Delivered by:

Sample Cool & Intact: (Yes) No

Checked By:

E-mail results to: rose.slade@sug.com and dduncanepi@gmail.com

9.5

Environmental Plus, Inc.

2100 Avenue "O", P.O. Box 1558, Eunice, NM 88231
(575) 394-3481 FAX: (575) 394-2601

450687

LAB: XENCO

Company Name	Environmental Plus, Inc.
EPI Project Manager	David P. Duncan
Mailing Address	P.O. BOX 1558
City, State, Zip	Eunice New Mexico 88231
EPI Phone#/Fax#	575-394-3481 / 575-394-2601
Client Company	Southern Union Gas Services
Facility Name	Bettis A-7 Release
Location	UL "L", Section 14, T21S, R37E
Project Reference	#1RP 09-5-2186
EPI Sampler Name	David Robinson

Remit Invoice To:

Southern Union Gas Services
Attn: Ms. Rose Slade
801 South Loop 464
Monahans, Texas 79756

ANALYSIS REQUEST

LAB I.D.	SAMPLE I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUND WATER	MATRIX: WASTEWATER	MATRIX: SOIL	MATRIX: CRUDE OIL	MATRIX: SLUDGE	MATRIX: OTHER:	PRESERV.: ACID/BASE	PRESERV.: ICE/COOL	PRESERV.: OTHER	SAMPLING: DATE	SAMPLING: TIME	BTEX 8021B	TPH 8015M	CHLORIDES (Cl^-)	SULFATES (SO_4^{2-})	pH	TCLP	OTHER >>>	PAH			
1	SB-3 (20')	G				X					X		11-Oct-12	10:19	X	X	X								
2																									
3																									
4																									
5																									
6																									
7																									
8																									
9																									
10																									

Sampler Relinquished: David Robinson	10/12/2012 10:30	Received By: L.B. Duncan	E-mail results to: rose.slade@sug.com and dduncanepi@gmail.com
Relinquished by: L.B. Duncan	10/12/2012 Time 15:12	Received By: (lab staff) Shaneesmith	9.5
Delivered by:	Sample Cool & Intact Yes / No	Checked By:	

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: Environmental Plus, Incorporated

Date/ Time Received: 10/12/2012 03:12:00 PM

Work Order #: 450687

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used :

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	8
#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: _____

CARDINAL LABORATORIES

PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR
SOUTHERN UNION GAS SERVICES
ATTN: TONY SAVOIE
P.O. BOX 1226
JAL, NM 88252

Receiving Date: 02/26/09
Reporting Date: 03/03/09
Project Number: 2009-010
Project Name: A-7 NORTH SITE / BETTIS
Project Location: NORTH OF EUNICE

Sampling Date: 02/26/09
Sample Type: SOIL
Sample Condition: COOL & INTACT
Sample Received By: ML
Analyzed By: CK/AB/HM

LAB NUMBER	SAMPLE ID	GRO (C_6-C_{10}) (mg/kg)	DRO (>C_{10}-C_{28}) (mg/kg)	Cl* (mg/kg)
ANALYSIS DATE		02/27/09	02/27/09	02/26/09
H16976-1	1A	<10.0	<10.0	256
H16976-2	1B	<10.0	<10.0	16
H16976-3	2A	<10.0	<10.0	2,120
H16976-4	2B	<10.0	<10.0	208
H16976-5	3A	<10.0	51.4	32
H16976-6	3B	<10.0	10.8	64
H16976-7	4A	<10.0	<10.0	32
Quality Control		549	553	500
True Value QC		500	500	500
% Recovery		110	111	100
Relative Percent Difference		0.6	11.4	< 0.1

METHODS: TPH GRO & DRO: EPA SW-846 8015 M; Cl^-: Std. Methods 4500-Cl^-B
*Analyses performed on 1:4 w:v aqueous extracts.

Chemist

03/04/09
Date

H16976 TCL SUGS