REMEDIATION SUMMARY

AND SITE

CLOSURE REQUEST

Regency Field Services, LLC
Formerly Southern Union Gas Services
Grobe 4-Inch Historical Release Site
Lea County, New Mexico
UNIT LTR "A" (NE ¼ /NE ¼), Section 8, Township 24 South, Range 37 East
Latitude 32º 14.141' North, Longitude 103º 10.665' West
NMOCD Reference # 1RP-1940

Prepared For:

Regency Field Services, LLC,
801 South Loop 464
Monahans, Texas 79756

Prepared By:

NOVA Safety & Environmental
2057 Commerce
Midland, Texas 79703

September 2014

Curt D. Stanley
Project Manager

Brittan K. Byerly, P.G.
President

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1.0 INTRODUCTION

NOVA Safety & Environmental (NOVA), on behalf of Regency Field Services LLC (Regency), formerly Southern Union Gas Services (SUGS), has prepared this Remediation Summary and Site Closure Request for the Grobe 4-Inch Historical Release Site. The legal description of the Release Site is Unit Letter "A" (NE ¼ NE ¼), Section 8, Township 24 South, Range 37 East, in Lea County, New Mexico. The property affected by the release is owned by Mrs. Elena Grobe. The Release Site GPS coordinates are 32° 14.141' North and 103° 10.665' West. Please reference Figure 1 for a Site Location Map and Figure 2 for a Site Details and Confirmation Soil Sample Locations Map. Site photographs are provided as Appendix B. The Release Notification and Corrective Action (Form C-141) is provided as Appendix C.

On August 26, 2008, Regency discovered a release of crude oil and natural gas had occurred from a four (4) inch steel pipeline. The cause of the release was attributed to failure of a segment of the steel pipeline. The pipeline was blocked in, blown down and approximately five hundred (500) feet of steel pipeline was replaced with poly line. On August 28, 2008, Regency submitted the Release Notification and Corrective Action (C-141) to the New Mexico Oil Conservation Division (NMOCD) Hobbs District Office. The C-141 indicated approximately ten (10) barrels of crude oil and 50 mcf of natural gas were released from the pipeline with no recovery occurring.

Regency has researched and identified various historical release sites located in New Mexico. At the request of Regency, NOVA has reviewed the historical data for these sites and conducted the necessary activities to ensure the sites meet the criteria for closure in accordance with NMOCD regulatory guidelines.

2.0 NMOCD SITE CLASSIFICATION

A search of the New Mexico Office of the State Engineer (NMOSE) database did not identify the average depth to groundwater information for Section 8, Township 24 South, Range 37 East. A reference map utilized by the NMOCD indicated depth to groundwater at the Release Site should be encountered at approximately ninety (90) feet below ground surface (bgs). The depth to groundwater at the Grobe 4-Inch Historical Release Site results in a score of ten (10) points being assigned to the site, based on the NMOCD depth to groundwater criteria.

The water well database, maintained by the NMOSE, indicated there are no water wells less than 1,000 feet from the release, resulting in zero (0) points being assigned to this site as a result of this criteria.

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

The NMOCD guidelines indicate the Grobe 4-Inch Historical Release Site has ranking score of ten (10). Based on this score, the soil remediation levels for a site with a ranking score of ten (10) points are as follows:

- Benzene – 10 mg/Kg (ppm)
- Benzene, Toluene, Ethylbenzene, Xylene (BTEX) – 50 mg/Kg (ppm)
- Total Petroleum Hydrocarbon (TPH) – 1,000 mg/Kg (ppm)

The NMOCD chloride cleanup level concentrations are site specific and will be determined by the NMOCD Hobbs District Office.

3.0 SUMMARY OF SOIL REMEDIATION ACTIVITIES

On March 22, 2013, NOVA commenced soil activities at the Grobe 4-Inch Historical Release Site. The resulting excavation measured approximately one hundred sixty (160) feet in length and varied from approximately thirty-five (35) feet to sixty (60) feet in width, and was approximately nineteen (19) feet in depth. The excavated soil was stockpiled in a cleared area to the south of the excavation pending final disposition. Please reference Figure 2 for site details.

Based on historical documentation and stressed vegetation, two (2) investigation trenches were excavated in the vicinity of the inferred release point. The trenches were completed to varying depths of approximately nine (9) to twenty-three (23) feet bgs. The depth of the trenches was determined by a review of historical data and by field observations conducted during excavation activities.

The first trench was excavated along the SUG pipeline in an east-west direction. The east-west trench measured approximately one hundred five (105) feet in length and was approximately ten (10) feet in width. The second trench was excavated in a north-south direction and intersected the east-west trench. The north-south trench measured approximately sixty-five (65) feet in length and was approximately ten (10) feet in width. Refer to Figure 2 for site details.

On March 22, 2013, two (2) soil samples (RP @ 9' and West S/W-1 @ 8') were collected from the east-west trench and submitted to the laboratory for determination of concentrations of benzene, toluene, ethyl-benzene, and xylene (BTEX), total petroleum hydrocarbons (TPH), and chlorides using EPA SW-846 8021b, 8015M, and E 300, respectively. The laboratory analytical results indicated benzene, BTEX, and TPH concentrations were less than the applicable laboratory method detection limit (MDL) for each sample. Chloride concentrations ranged from 225 mg/Kg for soil sample West S/W-1 @ 8' to 620 mg/Kg for soil sample RP @ 9'. Based on the analytical results for soil sample RP @ 9', vertical delineation was not complete and additional excavation was warranted at the inferred release point. Table 1 Summarizes the Concentrations of Benzene, BTEX, TPH and Chlorides in Soil. Laboratory analytical reports are provided as Appendix A.

On March 25, 2013, six (6) soil samples (RP @ 19', RP @ 21', RP @ 23', East S/W-1 @ 9', East S/W-2 @ 9', and East S/W-3 @ 9') were collected from the east-west trench and submitted to the laboratory for analysis. Laboratory analytical results indicated benzene, BTEX, and TPH concentrations were less than the applicable laboratory MDL for all submitted soil samples. Chloride concentrations ranged from 186 mg/Kg for soil sample RP @ 23' to 633 mg/Kg for soil sample East S/W-1 @ 9'. Based on the analytical results for soil sample RP @ 23', vertical delineation of the Release Site was complete. Based on the analytical results for soil sample East

S/W-3 @ 9', horizontal delineation of the east sidewall on the north side of the pipeline was completed.

On March 26, 2013, five (5) soil samples (North S/W-1 @ 9', North S/W-2 @ 9', South S/W-1 @ 9', South S/W-2 @ 9', and South S/W-3 @ 9') were collected from the north-south trench and submitted to the laboratory for analysis. Laboratory analytical results indicated benzene, and BTEX concentrations were less than the applicable laboratory MDL for all the submitted soil samples. TPH concentrations ranged from less than the applicable laboratory MDL for soil samples North S/W-1 @ 9', North S/W-2 @ 9', and South S/W-1 @ 9' to 18.1 mg/Kg for soil sample South S/W-2 @ 9'. Chloride concentrations ranged from 2.56 mg/Kg for soil sample South S/W-3 @ 9' to 763 mg/Kg for soil sample North S/W-1@ 9'. Based on the analytical results for soil samples North S/W-2 @ 9' and South S/W-2 @ 9', horizontal delineation of the north and south sidewalls was completed.

On March 27, 2013, two (2) soil samples (Caliche and Topsoil) were collected from the stockpiled soil and submitted to the laboratory for analysis. Laboratory analytical results indicated benzene, BTEX and TPH concentrations were less than the applicable laboratory MDL for each soil sample. Chloride concentrations ranged from 39.5 mg/Kg for soil sample Topsoil to 372 mg/Kg for soil sample Caliche. Based on the analytical results, the soil represented by soil samples "Caliche" and "Topsoil" was deemed suitable as backfill material.

On May 13, 2013, Regency and NOVA representatives met with an NMOCD Hobbs District Office representative to present the results of the sampling event and discuss future remediation activities to be conducted. During the meeting the NMOCD representative granted verbal approval to leave soil in-situ exhibiting chloride concentrations less than 500 mg/Kg. The area would be excavated vertically and horizontally until laboratory analytical results confirmed chloride concentrations less than 500 mg/Kg. On confirmation of chloride concentrations less than 500 mg/Kg, the area would be backfilled with the stockpiled soil exhibiting benzene, BTEX, TPH, and chloride concentrations of less than 10 mg/Kg, 50 mg/Kg, 1,000 mg/Kg, and 500 mg/Kg, respectively.

On June 11, 2013, NOVA resumed remediation activities at the site. Excavation activities commenced at the inferred release point and progressed outwardly.

On July 9, 2013, fourteen (14) soil samples (South Excavation SSW-1 @ 18', South Excavation, SSW-2 @ 18', South Excavation SSW-3 @ 18', South Excavation ESE-1 @ 18', South Excavation WSW-1 @ 18', South Excavation NSW-1 @ 18', South Excavation NSW-2 @ 18', South Excavation Floor-1 @ 19', South Excavation Floor-2 @ 19', North Excavation ESW @ 18', North Excavation NSW @ 18', North Excavation WSW @ 18', North Excavation SSW @ 18', and North Excavation Floor @ 19') were collected from the excavated area and submitted to the laboratory for analysis. Laboratory analytical results indicated benzene, BTEX, and TPH concentrations were less than the applicable laboratory MDL for all submitted soil samples with the exception of soil samples South Excavation SSW-1 @ 18' and South Excavation NSW-1 @ 18', which exhibited BTEX concentrations of 0.00124 mg/Kg and 0.0115 mg/Kg, respectively. Chloride concentrations ranged from167 mg/Kg for soil sample South Excavation Floor-1 @ 19' to 688 mg/Kg for soil sample South Excavation NSW-1 @ 18'. A review of analytical results indicated benzene, BTEX, TPH and chloride concentrations were less than NMOCD regulatory guidelines, with the exception of soil samples South Excavation WSW-1 @ 18', South

Excavation NSW-1 @ 18' and South Excavation NSW-2 @ 18', which exhibited chloride concentrations of 677 mg/kg, 688 mg/Kg, and 549 mg/Kg, respectively (Table 1).

Based on the analytical results additional excavation was required on the west sidewall of the South Excavation, in the area represented by soil sample South Excavation WSW-1 @ 18'. Soil samples South Excavation NSW-1 @ 18' and South Excavation NSW-2 @ 18' were collected from the soil "plug" located beneath the Regency pipeline.

Excavated soil was stockpiled south of the excavation in a cleared area and remediated by mixing and blending methods. On July 11, 2013, a portion of the stockpiled soil was subdivided into six (6) discreet stockpiles. One (1) composite soil sample was collected from each of the six (6) stockpiles, resulting in six (6) composite soil samples, identified as SP-1 through SP-4, Topsoil-1 and Topsoil-2. Each soil sample represented approximately five hundred (500) cubic yards of remediated soil. The composite soil samples were submitted to the laboratory and analyzed for concentrations of benzene, BTEX, TPH, and chlorides. Laboratory analytical results indicated benzene, BTEX, and TPH concentrations were less than the applicable laboratory MDL for all submitted soil samples. Chloride concentrations ranged from 26.6 mg/Kg for soil sample Topsoil-1 to 225 mg/Kg for soil sample SP-2 (Table 1). Based on the laboratory analytical results of the stockpiled soil represented by soil samples SP-1 through SP-4, Topsoil-1, and Topsoil-2 was deemed suitable for use as backfill material.

Additional excavation activities were conducted along the west wall of the South Excavation. On August 12, 2013, one (1) soil sample (South Excavation West S/W-1A @ 18') was collected from the excavated area and submitted to the laboratory for analysis. Laboratory analytical results indicated a chloride concentration of 398 mg/Kg for the soil sample.

On August 14, 2013, one (1) soil sample (South Excavation Floor-2 @ 19') was collected from the floor of the excavated area and submitted to the laboratory for analysis. Laboratory analytical results indicated benzene, BTEX and TPH concentrations were less than the applicable laboratory MDL. The soil sample exhibited a chloride concentration of 226 mg/Kg.

On August 15, 2013, a trench was installed outside of the South Excavation, approximately twenty-five (25) feet west of soil sample South Excavation West S/W-1A @ 18'. The trench was installed to horizontally delineate the westernmost extent of chloride impacted soil. The trench was installed to a total depth of approximately nine (9) feet bgs. A soil sample (West S/W-2 @ 9') was collected from the floor of the trench and submitted to the laboratory for analysis. Laboratory analytical results indicated benzene, BTEX, and TPH concentrations were less than the applicable laboratory MDL and the soil sample exhibited a chloride concentration of 84.5 mg/Kg.

On August 16, 2013, the remaining stockpiled soil was subdivided into six (6) discreet stockpiles. One (1) composite soil sample was collected from each stockpile, resulting in six (6) composite soil samples, identified as SP-5 through SP-8, Topsoil-3 and Topsoil-4. Each soil sample represented approximately five hundred (500) cubic yards of remediated soil. The composite soil samples were submitted to the laboratory and analyzed for concentrations of benzene, BTEX, TPH, and chlorides. Laboratory analytical results indicated benzene, BTEX, and TPH concentrations were less than the applicable laboratory MDL for all submitted soil samples with the exception of soil sample Topsoil-3, which exhibited a TPH concentration of

32.9 mg/Kg. Chloride concentrations ranged from 37.1 mg/Kg for soil sample Topsoil-4 to 304 mg/Kg for soil sample SP-6. Based on the laboratory analytical results, the stockpiled soil was deemed suitable for use as backfill material.

On August 23, 2013, Regency and NOVA representatives met with an NMOCD Hobbs District Office representative to present the results of the sampling event and request permission to backfill the excavation. The NMOCD District Office representative granted verbal approval to backfill the excavation with the remediated stockpiled soil. In addition, the NMOCD representative granted approval to leave in-situ, the soil "plug" in-situ beneath the Regency pipeline represented by soil samples South Excavation NSW-1 @ 18' and South Excavation NSW-2 @ 18'. The remaining chloride impacted soil located beneath the pipeline will be remediated at the time of abandonment.

On August 29, 2013, NOVA commenced backfilling activities. The excavation was backfilled with the remediated stockpiled soil and the soil was compacted. On completion of backfilling activities the site was contoured to fit the surrounding topography.

4.0 QA/QC PROCEDURES

4.1 Soil Sampling

Soil samples were delivered to Xenco Laboratories of Odessa, Texas for BTEX and/or TPH and/or chloride analyses using the methods described below. Soil samples were analyzed for BTEX and/or TPH and/or chloride concentrations within fourteen (14) days following the sampling event.

The soil samples were analyzed as follows:

- BTEX by EPA Method 8021B, 5030
- TPH by modified EPA Method 8015M GRO/DRO
- Chloride by Method E 300.

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 (COC) form. These procedures were either transmitted with the laboratory reports or are on file at the laboratory.

5.0 SITE CLOSURE REQUEST

Based on the analytical results of confirmation soil samples, NOVA recommends Regency provide the NMOCD a copy of this Remediation Summary and Site Closure Request and request the NMOCD grant final closure to the Grobe 4-Inch Historical Release Site.

6.0 LIMITATIONS

NOVA Safety and Environmental has prepared this Report on behalf of, and for the sole and exclusive use of Regency Field Services, LLC. This report was prepared by NOVA Safety and Environmental for the benefit of Regency Field Services, LLC. The information contained in this Report may be released to third parties, who may use and rely upon the information at their discretion. However, any use of or reliance upon the information by a party other than specifically named above shall create no rights, obligations, or liabilities on the part of NOVA Safety and Environmental with respect to any such party. The information shall not be used or relied upon by a party that does not agree to be bound by the above statement.

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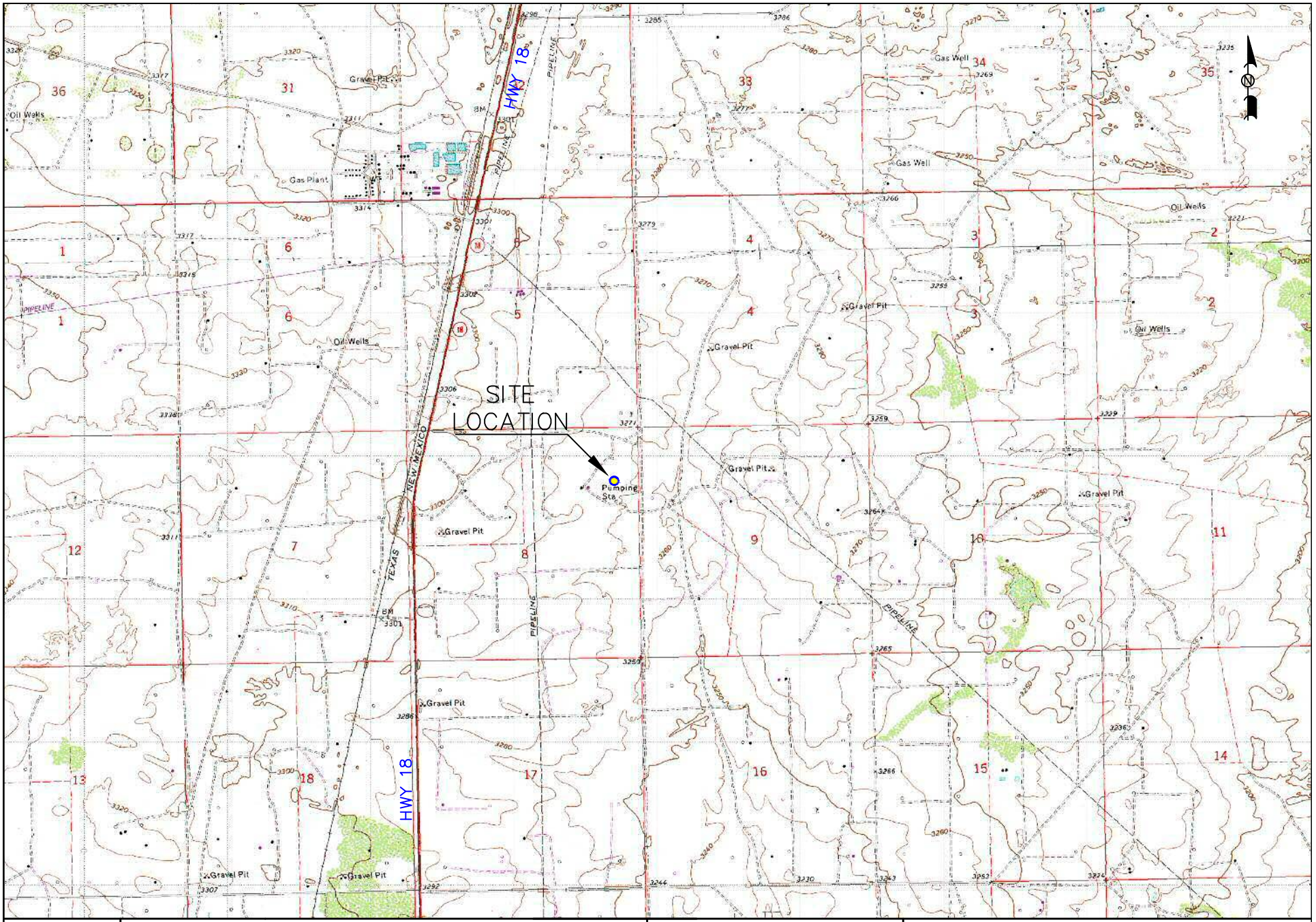
7.0 DISTRIBUTION:

Copy 1: Tomas Oberding
New Mexico Energy, Minerals and Natural Resources Department
Oil Conservation Division (District 1)
1625 French Drive
Hobbs, New Mexico 88240

Copy 2: Crystal Callaway
Regency Energy Partners
301 Commerce Street, Suite 700
Fort Worth, Texas 76102

Copy 3: NOVA Safety & Environmental
2057 Commerce Street
Midland, Texas 79703



Legend:

Mapped edited and Published by the Geological Survey Control by USGS & USC & GS

Map Re-edited by Nova Safety and Environmental for the purpose of Site Location Maps.

Planimetry by Photogrammetric methods from aerial Photographs taken 1958. Topography by Planetabe Surveys 1961.

Fine red dashed lines indicate selected fence lines.

This map Complies with National Map Accuracy Standards

3000 1500 0 1500 3000

Distance in Feet

Figure 1
Site Location Map
Regency Field Services, LLC.
Grobe 4 Inch Historical Release
Lea County, NM
1RP-1940

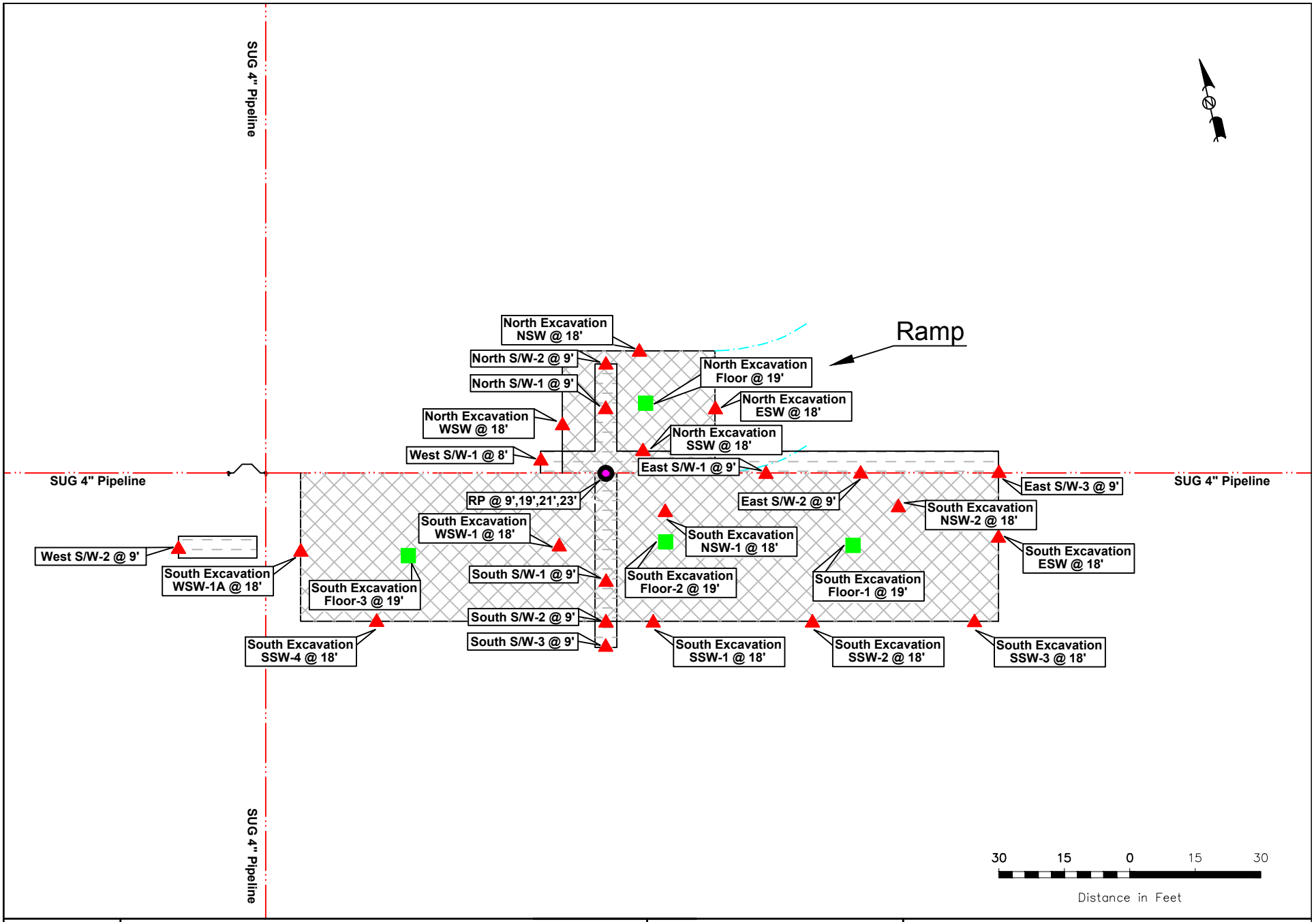
NOVA safety and environmental

2057 Commerce Drive
Midland, Texas 79703
432.520.7720

www.novasafetyandenvironmental.com

April 3, 2013	Scale: 1" - 3000'	CAD By: CAS	Checked By:

Lat. N 32° 14' 8.41" Long. W 103° 10' 39.92"



Legend:

- Sidewall Soil Sample Location
- Floor Soil Sample Location
- Release Point / Clamp Location
- SUG Pipeline
- Trench Area
- Excavation Area

Figure 2
Site Detail & Soil Sample Location Map
Regency Field Services, LLC.
Grobe 4 Inch Historical Release
Lea County, NM
1RP-1940

NOVA safety and environmental
2057 Commerce Drive
Midland, Texas 79703
432.520.7720
www.novasafetyandenvironmental.com

April 25, 2013	Scale: 1" - 30'	CAD By: CAS	Checked By:
Lat. N 32° 14' 8.41"	Long. W 103° 10' 39.92"	Rev Date: 8/16/2013	Rev: 81313-B

TABLE 1

CONCENTRATIONS OF BENZENE, BTEX, TPH AND CHLORIDE IN SOIL

REGENCY FIELD SERVICES, LLC
GROBE 4 INCH HISTORICAL RELEASE
LEA COUNTY, NEW MEXICO
NMOCD 1RP-1940

All concentrations are reported in mg/Kg

SAMPLE LOCATION	SAMPLE DATE	SOIL STATUS	METHODS: SW 846-8021b						METHOD: SW 8015M				E 300.1
			BENZENE	TOLUENE	ETHYL-BENZENE	m, p - XYLENES	o - XYLENE	TOTAL BTEX	TPH GRO C_6-C_{12}	TPH DRO C_{12}-C_{28}	TPH ORO C_{28}-C_{35}	TOTAL TPH C_6-C_{35}	CHLORIDE
NMOCD Regulatory Limit			**10**	**-**	**-**	**-**	**-**	**50**	**-**	**-**	**-**	**1,000**	**500**
RP @ 9'	03/22/13	Excavated	<0.00108	<0.00217	<0.00108	<0.00217	<0.00108	<0.00217	<16.2	<16.2	<16.2	<16.2	**620**
West S/W-1 @ 8'	03/22/13	In-Situ	<0.00109	<0.00218	<0.00109	<0.00218	<0.00109	<0.00218	<16.4	<16.4	<16.4	<16.4	225
RP @ 19'	03/25/13	Excavated	<0.00108	<0.00216	<0.00108	<0.00216	<0.00108	<0.00218	<16.3	<16.3	<16.3	<16.3	478
RP @ 21'	03/25/13	Excavated	<0.00105	<0.00210	<0.00105	<0.00210	<0.00105	<0.00210	<15.9	<15.9	<15.9	<15.9	287
RP @ 23'	03/25/13	In-Situ	<0.00104	<0.00207	<0.00104	<0.00207	<0.00104	<0.00207	<15.6	<15.6	<15.6	<15.6	186
East S/W-1 @ 9'	03/25/13	Excavated	<0.00108	<0.00216	<0.00108	<0.00216	<0.00108	<0.00216	<16.2	<16.2	<16.2	<16.2	**633**
East S/W-2 @ 9'	03/25/13	Excavated	<0.00107	<0.00214	<0.00107	<0.00214	<0.00107	<0.00214	<16.0	<16.0	<16.0	<16.0	**613**
East S/W-3 @ 9'	03/25/13	In-Situ	<0.00107	<0.00213	<0.00107	<0.00213	<0.00107	<0.00213	<16.0	<16.0	<16.0	<16.0	214
North S/W-1 @ 9'	03/26/13	Excavated	<0.00107	<0.00214	<0.00107	<0.00214	<0.00107	<0.00214	<16.0	<16.0	<16.0	<16.0	**763**
North S/W-2 @ 9'	03/26/13	Excavated	<0.00105	<0.00210	<0.00105	<0.00210	<0.00105	<0.00210	<15.8	<15.8	<15.8	<15.8	171
South S/W-1 @ 9'	03/26/13	Excavated	<0.00109	<0.00218	<0.00109	<0.00218	<0.00109	<0.00218	<16.4	<16.4	<16.4	<16.4	**641**
South S/W-2 @ 9'	03/26/13	In-Situ	<0.00110	<0.00220	<0.00110	<0.00220	<0.00110	<0.00220	<16.6	18.1	<16.6	18.1	201
South S/W-3 @ 9'	03/26/13	In-Situ	<0.00106	<0.00212	<0.00106	<0.00212	<0.00106	<0.00212	<16.1	17.0	<16.1	17.0	2.56
Caliche	03/27/13	Used as Backfill	<0.00104	<0.00209	<0.00104	<0.00209	<0.00104	<0.00209	<15.8	<15.8	<15.8	<15.8	372
Topsoil	03/27/13	Used as Backfill	<0.00102	<0.00204	<0.00102	<0.00204	<0.00102	<0.00204	<15.2	<15.2	<15.2	<15.2	39.5
South Excavation, SSW-1 @ 18'	07/09/13	In-Situ	<0.000994	<0.00199	0.00124	<0.00199	<0.000994	0.00124	<15.4	<15.4	<15.4	<15.4	339
South Excavation, SSW-2 @ 18'	07/09/13	In-Situ	<0.000996	<0.00199	<0.000996	<0.00199	<0.000996	<0.00199	<16.0	<16.0	<16.0	<16.0	380
South Excavation, SSW-3 @ 18'	07/09/13	In-Situ	<0.000998	<0.00200	<0.000998	<0.00200	<0.000998	<0.00200	<16.5	<16.5	<16.5	<16.5	408
South Excavation, ESW-1 @ 18'	07/09/13	In-Situ	<0.00100	<0.00200	<0.00100	<0.00200	<0.00100	<0.00200	<17.2	<17.2	<17.2	<17.2	487
South Excavation, WSW-1 @ 18'	07/09/13	Excavated	<0.000998	<0.00200	<0.000998	<0.00200	<0.000998	<0.00200	<15.2	<15.2	<15.2	<15.2	**677**
South Excavation, NSW-1 @ 18'	07/09/13	In-Situ	<0.000994	<0.00199	0.00633	0.00512	<0.000994	0.0115	<15.1	<15.1	<15.1	<15.1	**688**
South Excavation, NSW-2 @ 18'	07/09/13	In-Situ	<0.000994	<0.00199	<0.000994	<0.00199	<0.000994	<0.00199	<15.4	<15.4	<15.4	<15.4	**549**
South Excavation, Floor-1 @ 19'	07/09/13	In-Situ	<0.00100	<0.00200	<0.00100	<0.00200	<0.00100	<0.00200	<15.9	<15.9	<15.9	<15.9	167
South Excavation, Floor-2 @ 19'	07/09/13	In-Situ	<0.000998	<0.00200	<0.000998	<0.00200	<0.000998	<0.00200	<15.9	<15.9	<15.9	<15.9	319
North Excavation, ESW @ 18'	07/09/13	In-Situ	<0.000992	<0.00198	<0.000992	<0.00198	<0.000992	<0.00198	<16.0	<16.0	<16.0	<16.0	364
North Excavation, NSW @ 18'	07/09/13	In-Situ	<0.00100	<0.00200	<0.00100	<0.00200	<0.00100	<0.00200	<15.9	<15.9	<15.9	<15.9	160
North Excavation, WSW @ 18'	07/09/13	In-Situ	<0.00100	<0.00201	<0.00100	<0.00201	<0.00100	<0.00201	<15.6	<15.6	<15.6	<15.6	339
North Excavation, SSW @ 18'	07/09/13	In-Situ	<0.000998	<0.00200	<0.000998	<0.00200	<0.000998	<0.00200	<16.1	<16.1	<16.1	<16.1	270
North Excavation, Floor @ 19'	07/09/13	In-Situ	<0.00100	<0.00200	<0.00100	<0.00200	<0.00100	<0.00200	<16.3	<16.3	<16.3	<16.3	222
SP-1	07/11/13	Used as Backfill	<0.000998	<0.00200	<0.000998	<0.00200	<0.000998	<0.00200	<15.5	<15.5	<15.5	<15.5	178
SP-2	07/11/13	Used as Backfill	<0.00199	<0.00398	<0.00199	<0.00398	<0.00199	<0.00398	<15.6	<15.6	<15.6	<15.6	225
SP-3	07/11/13	Used as Backfill	<0.00199	<0.00398	<0.00199	<0.00398	<0.00199	<0.00398	<15.5	<15.5	<15.5	<15.5	186
SP-4	07/11/13	Used as Backfill	<0.000998	<0.00200	<0.000998	<0.00200	<0.000998	<0.00200	<15.3	<15.3	<15.3	<15.3	205

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REGENCY FIELD SERVICES, LLC
GROBE 4 INCH HISTORICAL RELEASE
LEA COUNTY, NEW MEXICO
NMOCD 1RP-1940

All concentrations are reported in mg/Kg

SAMPLE LOCATION	SAMPLE DATE	SOIL STATUS	METHODS: SW 846-8021b						METHOD: SW 8015M				E 300.1
			BENZENE	TOLUENE	ETHYL-BENZENE	m, p - XYLENES	o - XYLENE	TOTAL BTEX	TPH GRO C_6-C_{12}	TPH DRO C_{12}-C_{28}	TPH ORO C_{28}-C_{35}	TOTAL TPH C_6-C_{35}	CHLORIDE
NMOCD Regulatory Limit			**10**	**-**	**-**	**-**	**-**	**50**	**-**	**-**	**-**	**1,000**	**500**
Topsoil-1	07/11/13	Used as Backfill	<0.00200	<0.00399	<0.00200	<0.00399	<0.00200	<0.00399	<15.1	<15.1	<15.1	<15.1	26.6
Topsoil-2	07/11/13	Used as Backfill	<0.00200	<0.00400	<0.00200	<0.00400	<0.00200	<0.00400	<15.1	<15.1	<15.1	<15.1	57.0
South Excavation West S/W-1A @ 18'	08/12/13	In-Situ	-	-	-	-	-	-	-	-	-	-	398
South Excavation Floor-3 @ 19'	08/14/13	In-Situ	<0.000998	<0.00200	<0.000998	<0.00200	<0.000998	<0.00200	<15.0	<15.0	<15.0	<15.0	226
West S/W-2 @ 9'	08/15/13	In-Situ	<0.00103	<0.00206	<0.00103	<0.00206	<0.00103	<0.00206	<15.4	<15.4	<15.4	<15.4	84.5
South Excavation SSW-4 @ 18'	08/16/13	In-Situ	<0.00103	<0.00206	<0.00103	<0.00206	<0.00103	<0.00206	<15.5	<15.5	<15.5	<15.5	146
Topsoil-3	08/16/13	Used as Backfill	<0.00102	<0.00204	<0.00102	<0.00204	<0.00102	<0.00204	<15.3	32.9	<15.3	32.9	58.7
Topsoil-4	08/16/13	Used as Backfill	<0.00102	<0.00204	<0.00102	<0.00204	<0.00102	<0.00204	<15.3	<15.3	<15.3	<15.3	37.1
SP-5	08/16/13	Used as Backfill	<0.00105	<0.00210	<0.00105	<0.00210	<0.00105	<0.00210	<15.9	<15.9	<15.9	<15.9	120
SP-6	08/16/13	Used as Backfill	<0.00106	<0.00213	<0.00106	<0.00213	<0.00106	<0.00213	<16.0	<16.0	<16.0	<16.0	304
SP-7	08/16/13	Used as Backfill	<0.00105	<0.00209	<0.00105	<0.00209	<0.00105	<0.00209	<15.8	<15.8	<15.8	<15.8	248
SP-8	08/16/13	Used as Backfill	<0.00107	<0.00213	<0.00107	<0.00213	<0.00107	<0.00213	<16.0	<16.0	<16.0	<16.0	271

Photographic Documentation

Client: Regency Field Services, LLC. **Prepared by:** NOVA
Project Name: Grobe 4 Inch Historical Release (1RP-1940) **Location:** Lea County, New Mexico

Photograph No. 1

Direction:
Facing West

Description:
Excavation activities in progress.

Photograph No. 2

Direction:
Facing East

Description:
Excavation activities in Progress

Client: Regency Field Services, LLC. **Prepared by:** NOVA
Project Name: Grobe 4 Inch Historical Release (1RP-1940) **Location:** Lea County, New Mexico

Photograph No. 3

Direction:
Facing East

Description:
View of completed excavation. Soil sample West S/W-2 @ 9' collected from trench in foreground.

Photograph No. 4

Direction:
Facing Southwest

Description:
View of excavation activities.

Analytical Report 460211

for

Southern Union Gas Services- Monahans

Project Manager: Camille Bryant

SUGS Historical Grobe 4" 1RP-1940

03-APR-13

Collected By: Client

12600 West I-20 East Odessa, Texas 79765

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

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

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

03-APR-13

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

Reference: XENCO Report No(s): **460211**
SUGS Historical Grobe 4" 1RP-1940
Project Address: Lea County, NM

Camille Bryant:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 460211. 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. 460211 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 460211

Southern Union Gas Services- Monahans, Monahans, TX

SUGS Historical Grobe 4" 1RP-1940

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
RP @ 9'	S	03-22-13 13:00		460211-001
West S/W-1 @ 8'	S	03-22-13 14:00		460211-002
RP @ 19'	S	03-25-13 08:50		460211-003
RP @ 21'	S	03-25-13 09:00		460211-004
RP @ 23'	S	03-25-13 10:00		460211-005
East S/W-1 @ 9'	S	03-25-13 10:20		460211-006
East S/W-2 @ 9'	S	03-25-13 11:00		460211-007
East S/W-3 @ 9'	S	03-25-13 12:00		460211-008
North S/W-1 @ 9'	S	03-26-13 09:00		460211-009
North S/W-2 @ 9'	S	03-26-13 10:00		460211-010
South S/W-1 @ 9'	S	03-27-13 09:00		460211-011
Caliche	S	03-27-13 13:00		460211-012
Topsoil	S	03-27-13 13:05		460211-013

Project ID:
Work Order Number(s): *460211*

Report Date: *03-APR-13*
Date Received: *03/28/2013*

Sample receipt non conformances and comments:
None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:
Batch: LBA-910224 BTEX by EPA 8021B
SW8021BM

Batch 910224, Ethylbenzene, m_p-Xylenes recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate. o-Xylene recovered below QC limits in the Matrix Spike Duplicate.
Samples affected are: 460211-001, -003, -013, -005, -010, -007, -008, -009, -006, -002, -004, -012, -011.
The Laboratory Control Sample for Ethylbenzene, m_p-Xylenes , o-Xylene is within laboratory Control Limits

Certificate of Analysis Summary 460211

Southern Union Gas Services- Monahans, Monahans, TX

Project Name: SUGS Historical Grobe 4" 1RP-1940

Project Id:
Contact: Camille Bryant
Project Location: Lea County, NM

Date Received in Lab: Thu Mar-28-13 04:48 pm
Report Date: 03-APR-13
Project Manager: Nicholas Straccione

Analysis Requested													
	Lab Id:	460211-001		460211-002		460211-003		460211-004		460211-005		460211-006	
	Field Id:	RP @ 9'		West S/W-1 @ 8'		RP @ 19'		RP @ 21'		RP @ 23'		East S/W-1 @ 9'	
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Mar-22-13 13:00		Mar-22-13 14:00		Mar-25-13 08:50		Mar-25-13 09:00		Mar-25-13 10:00		Mar-25-13 10:20	
BTEX by EPA 8021B	***Extracted:***	Mar-29-13 09:40		Mar-29-13 09:40		Mar-29-13 09:40		Mar-29-13 09:40		Mar-29-13 09:40		Mar-29-13 09:40	
	Analyzed:	Mar-29-13 10:19		Mar-29-13 10:35		Mar-29-13 11:08		Mar-29-13 11:24		Mar-29-13 11:40		Mar-29-13 11:57	
	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	0.00109	ND	0.00108	ND	0.00105	ND	0.00104	ND	0.00108
Toluene		ND	0.00217	ND	0.00218	ND	0.00216	ND	0.00210	ND	0.00207	ND	0.00216
Ethylbenzene		ND	0.00108	ND	0.00109	ND	0.00108	ND	0.00105	ND	0.00104	ND	0.00108
m_p-Xylenes		ND	0.00217	ND	0.00218	ND	0.00216	ND	0.00210	ND	0.00207	ND	0.00216
o-Xylene		ND	0.00108	ND	0.00109	ND	0.00108	ND	0.00105	ND	0.00104	ND	0.00108
Total Xylenes		ND	0.00108	ND	0.00109	ND	0.00108	ND	0.00105	ND	0.00104	ND	0.00108
Total BTEX		ND	0.00108	ND	0.00109	ND	0.00108	ND	0.00105	ND	0.00104	ND	0.00108
Inorganic Anions by EPA 300/300.1	***Extracted:***	Apr-01-13 10:00		Apr-01-13 10:00		Apr-01-13 10:00		Apr-01-13 10:00		Apr-01-13 10:00		Apr-01-13 10:00	
	Analyzed:	Apr-02-13 03:37		Apr-02-13 03:58		Apr-02-13 04:20		Apr-02-13 05:25		Apr-02-13 05:47		Apr-02-13 06:09	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		620	20.0	225	10.0	478	20.0	287	10.0	186	4.00	633	20.0
Percent Moisture	***Extracted:***												
	Analyzed:	Mar-29-13 14:00		Mar-29-13 14:00		Mar-29-13 14:00		Mar-29-13 14:00		Mar-29-13 14:00		Mar-29-13 14:00	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		7.46	1.00	8.34	1.00	7.95	1.00	5.29	1.00	3.90	1.00	7.81	1.00
TPH By SW8015 Mod	***Extracted:***	Mar-29-13 09:10		Mar-29-13 09:10		Mar-29-13 09:10		Mar-29-13 09:10		Apr-01-13 09:20		Mar-29-13 09:10	
	Analyzed:	Mar-29-13 15:05		Mar-29-13 15:31		Mar-29-13 15:56		Mar-29-13 16:46		Apr-01-13 12:02		Mar-29-13 17:35	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
C6-C12 Gasoline Range Hydrocarbons		ND	16.2	ND	16.4	ND	16.3	ND	15.9	ND	15.6	ND	16.2
C12-C28 Diesel Range Hydrocarbons		ND	16.2	ND	16.4	ND	16.3	ND	15.9	ND	15.6	ND	16.2
C28-C35 Oil Range Hydrocarbons		ND	16.2	ND	16.4	ND	16.3	ND	15.9	ND	15.6	ND	16.2
Total TPH		ND	16.2	ND	16.4	ND	16.3	ND	15.9	ND	15.6	ND	16.2

Nicholas Straccione
Project Manager

Certificate of Analysis Summary 460211

Southern Union Gas Services- Monahans, Monahans, TX

Project Name: SUGS Historical Grobe 4" 1RP-1940

Project Id:
Contact: Camille Bryant
Project Location: Lea County, NM

Date Received in Lab: Thu Mar-28-13 04:48 pm
Report Date: 03-APR-13
Project Manager: Nicholas Straccione

Analysis Requested													
	Lab Id:	460211-007		460211-008		460211-009		460211-010		460211-011		460211-012	
	Field Id:	East S/W-2 @ 9'		East S/W-3 @ 9'		North S/W-1 @ 9'		North S/W-2 @ 9'		South S/W-1 @ 9'		Caliche	
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Mar-25-13 11:00		Mar-25-13 12:00		Mar-26-13 09:00		Mar-26-13 10:00		Mar-27-13 09:00		Mar-27-13 13:00	
BTEX by EPA 8021B	Extracted:	Mar-29-13 09:40		Mar-29-13 09:40		Mar-29-13 09:40		Mar-29-13 09:40		Mar-29-13 09:40		Mar-29-13 09:40	
	Analyzed:	Mar-29-13 12:13		Mar-29-13 12:30		Mar-29-13 12:46		Mar-29-13 13:03		Mar-29-13 13:35		Mar-29-13 13:52	
	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	0.00107	ND	0.00107	ND	0.00105	ND	0.00109	ND	0.00104
Toluene		ND	0.00214	ND	0.00213	ND	0.00214	ND	0.00210	ND	0.00218	ND	0.00209
Ethylbenzene		ND	0.00107	ND	0.00107	ND	0.00107	ND	0.00105	ND	0.00109	ND	0.00104
m_p-Xylenes		ND	0.00214	ND	0.00213	ND	0.00214	ND	0.00210	ND	0.00218	ND	0.00209
o-Xylene		ND	0.00107	ND	0.00107	ND	0.00107	ND	0.00105	ND	0.00109	ND	0.00104
Total Xylenes		ND	0.00107	ND	0.00107	ND	0.00107	ND	0.00105	ND	0.00109	ND	0.00104
Total BTEX		ND	0.00107	ND	0.00107	ND	0.00107	ND	0.00105	ND	0.00109	ND	0.00104
Inorganic Anions by EPA 300/300.1	Extracted:	Apr-01-13 10:00		Apr-01-13 10:00		Apr-01-13 10:00		Apr-01-13 10:00		Apr-01-13 10:00		Apr-01-13 10:00	
	Analyzed:	Apr-02-13 06:30		Apr-02-13 06:52		Apr-02-13 07:14		Apr-02-13 09:24		Apr-02-13 10:07		Apr-02-13 10:29	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		613	20.0	214	10.0	763	20.0	171	10.0	641	20.0	372	10.0
Percent Moisture	Extracted:												
	Analyzed:	Mar-29-13 14:00		Mar-29-13 14:00		Mar-29-13 14:00		Mar-29-13 14:00		Mar-29-13 14:00		Mar-29-13 14:00	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		6.12	1.00	6.10	1.00	6.50	1.00	5.11	1.00	8.47	1.00	4.66	1.00
TPH By SW8015 Mod	Extracted:	Mar-29-13 09:10		Mar-29-13 09:10		Mar-29-13 09:10		Mar-29-13 09:10		Mar-29-13 09:10		Mar-29-13 09:10	
	Analyzed:	Mar-29-13 18:00		Mar-29-13 18:24		Mar-29-13 18:48		Mar-29-13 19:13		Mar-29-13 19:39		Mar-29-13 20:05	
	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	16.0	ND	16.0	ND	16.0	ND	15.8	ND	16.4	ND	15.8
C12-C28 Diesel Range Hydrocarbons		ND	16.0	ND	16.0	ND	16.0	ND	15.8	ND	16.4	ND	15.8
C28-C35 Oil Range Hydrocarbons		ND	16.0	ND	16.0	ND	16.0	ND	15.8	ND	16.4	ND	15.8
Total TPH		ND	16.0	ND	16.0	ND	16.0	ND	15.8	ND	16.4	ND	15.8

Nicholas Straccione
Project Manager

Certificate of Analysis Summary 460211

Southern Union Gas Services- Monahans, Monahans, TX

Project Name: SUGS Historical Grobe 4" 1RP-1940

Project Id:
Contact: Camille Bryant
Project Location: Lea County, NM

Date Received in Lab: Thu Mar-28-13 04:48 pm
Report Date: 03-APR-13
Project Manager: Nicholas Straccione

Analysis Requested							
	Lab Id:	460211-013					
	Field Id:	Topsoil					
	Depth:						
	Matrix:	SOIL					
	Sampled:	Mar-27-13 13:05					
BTEX by EPA 8021B	***Extracted:***	Mar-29-13 09:40					
	Analyzed:	Mar-29-13 14:09					
	Units/RL:	mg/kg RL					
Benzene		ND 0.00102					
Toluene		ND 0.00204					
Ethylbenzene		ND 0.00102					
m_p-Xylenes		ND 0.00204					
o-Xylene		ND 0.00102					
Total Xylenes		ND 0.00102					
Total BTEX		ND 0.00102					
Inorganic Anions by EPA 300/300.1	***Extracted:***	Apr-01-13 10:00					
	Analyzed:	Apr-02-13 10:51					
	Units/RL:	mg/kg RL					
Chloride		39.5 4.00					
Percent Moisture	***Extracted:***						
	Analyzed:	Mar-29-13 14:00					
	Units/RL:	% RL					
Percent Moisture		1.90 1.00					
TPH By SW8015 Mod	***Extracted:***	Mar-29-13 09:10					
	Analyzed:	Mar-29-13 20:31					
	Units/RL:	mg/kg RL					
C6-C12 Gasoline Range Hydrocarbons		ND 15.2					
C12-C28 Diesel Range Hydrocarbons		ND 15.2					
C28-C35 Oil Range Hydrocarbons		ND 15.2					
Total TPH		ND 15.2					

Nicholas Straccione
Project Manager

Flagging Criteria

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

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

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

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

F RPD exceeded lab control limits.

J The target analyte was positively identified below the 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

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9701 Harry Hines Blvd , Dallas, TX 75220	(214) 902 0300	(214) 351-9139
5332 Blackberry Drive, San Antonio TX 78238	(210) 509-3334	(210) 509-3335
2505 North Falkenburg Rd, Tampa, FL 33619	(813) 620-2000	(813) 620-2033
12600 West I-20 East, Odessa, TX 79765	(432) 563-1800	(432) 563-1713
6017 Financial Drive, Norcross, GA 30071	(770) 449-8800	(770) 449-5477
3725 E. Atlanta Ave, Phoenix, AZ 85040	(602) 437-0330	

Form 2 - Surrogate Recoveries

Project Name: SUGS Historical Grobe 4" 1RP-1940

Work Orders : 460211,

Project ID:

Lab Batch #: 910224 **Sample:** 460211-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/29/13 10:19

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0304	0.0300	101	80-120	
4-Bromofluorobenzene	0.0271	0.0300	90	80-120	

Lab Batch #: 910224 **Sample:** 460211-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/29/13 10:35

BTEX by EPA 8021B 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	0.0261	0.0300	87	80-120	

Lab Batch #: 910224 **Sample:** 460211-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/29/13 11:08

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0305	0.0300	102	80-120	
4-Bromofluorobenzene	0.0314	0.0300	105	80-120	

Lab Batch #: 910224 **Sample:** 460211-004 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/29/13 11:24

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0291	0.0300	97	80-120	
4-Bromofluorobenzene	0.0287	0.0300	96	80-120	

Lab Batch #: 910224 **Sample:** 460211-005 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/29/13 11:40

BTEX by EPA 8021B 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	0.0258	0.0300	86	80-120	

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

Form 2 - Surrogate Recoveries

Project Name: SUGS Historical Grobe 4" 1RP-1940

Work Orders : 460211,

Project ID:

Lab Batch #: 910224 **Sample:** 460211-006 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/29/13 11:57

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0272	0.0300	91	80-120	
4-Bromofluorobenzene	0.0290	0.0300	97	80-120	

Lab Batch #: 910224 **Sample:** 460211-007 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/29/13 12:13

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0304	0.0300	101	80-120	
4-Bromofluorobenzene	0.0270	0.0300	90	80-120	

Lab Batch #: 910224 **Sample:** 460211-008 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/29/13 12:30

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0277	0.0300	92	80-120	
4-Bromofluorobenzene	0.0251	0.0300	84	80-120	

Lab Batch #: 910224 **Sample:** 460211-009 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/29/13 12:46

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0312	0.0300	104	80-120	
4-Bromofluorobenzene	0.0257	0.0300	86	80-120	

Lab Batch #: 910224 **Sample:** 460211-010 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/29/13 13:03

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0267	0.0300	89	80-120	
4-Bromofluorobenzene	0.0250	0.0300	83	80-120	

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

Form 2 - Surrogate Recoveries

Project Name: SUGS Historical Grobe 4" 1RP-1940

Work Orders : 460211,

Project ID:

Lab Batch #: 910224 **Sample:** 460211-011 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/29/13 13:35

BTEX by EPA 8021B 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	0.0283	0.0300	94	80-120	

Lab Batch #: 910224 **Sample:** 460211-012 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/29/13 13:52

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0321	0.0300	107	80-120	
4-Bromofluorobenzene	0.0290	0.0300	97	80-120	

Lab Batch #: 910224 **Sample:** 460211-013 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/29/13 14:09

BTEX by EPA 8021B 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	0.0297	0.0300	99	80-120	

Lab Batch #: 910227 **Sample:** 460211-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/29/13 15:05

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	99.5	100	100	70-135	
o-Terphenyl	53.0	50.0	106	70-135	

Lab Batch #: 910227 **Sample:** 460211-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/29/13 15:31

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	54.6	50.1	109	70-135	

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

Form 2 - Surrogate Recoveries

Project Name: SUGS Historical Grobe 4" 1RP-1940

Work Orders : 460211,

Project ID:

Lab Batch #: 910227 **Sample:** 460211-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/29/13 15:56

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	53.2	50.1	106	70-135	

Lab Batch #: 910227 **Sample:** 460211-004 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/29/13 16:46

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	99.5	100	100	70-135	
o-Terphenyl	52.3	50.1	104	70-135	

Lab Batch #: 910227 **Sample:** 460211-006 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/29/13 17:35

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	102	99.7	102	70-135	
o-Terphenyl	54.2	49.9	109	70-135	

Lab Batch #: 910227 **Sample:** 460211-007 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/29/13 18:00

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	102	100	102	70-135	
o-Terphenyl	54.0	50.1	108	70-135	

Lab Batch #: 910227 **Sample:** 460211-008 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/29/13 18:24

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	98.5	99.9	99	70-135	
o-Terphenyl	51.9	50.0	104	70-135	

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

Form 2 - Surrogate Recoveries

Project Name: SUGS Historical Grobe 4" 1RP-1940

Work Orders : 460211,

Project ID:

Lab Batch #: 910227 **Sample:** 460211-009 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/29/13 18:48

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	98.6	99.9	99	70-135	
o-Terphenyl	52.8	50.0	106	70-135	

Lab Batch #: 910227 **Sample:** 460211-010 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/29/13 19:13

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	53.4	50.1	107	70-135	

Lab Batch #: 910227 **Sample:** 460211-011 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/29/13 19:39

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	98.6	100	99	70-135	
o-Terphenyl	52.3	50.1	104	70-135	

Lab Batch #: 910227 **Sample:** 460211-012 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/29/13 20:05

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	102	100	102	70-135	
o-Terphenyl	53.8	50.1	107	70-135	

Lab Batch #: 910227 **Sample:** 460211-013 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/29/13 20:31

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	96.0	99.7	96	70-135	
o-Terphenyl	49.6	49.9	99	70-135	

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

Form 2 - Surrogate Recoveries

Project Name: SUGS Historical Grobe 4" 1RP-1940

Work Orders : 460211,

Project ID:

Lab Batch #: 910363 **Sample:** 460211-005 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/01/13 12:02

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	52.6	50.0	105	70-135	

Lab Batch #: 910224 **Sample:** 635902-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 03/29/13 10:52

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0277	0.0300	92	80-120	
4-Bromofluorobenzene	0.0241	0.0300	80	80-120	

Lab Batch #: 910227 **Sample:** 635905-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 03/29/13 11:42

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	53.5	50.0	107	70-135	

Lab Batch #: 910363 **Sample:** 635984-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 04/01/13 11:09

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	98.6	100	99	70-135	
o-Terphenyl	52.5	50.1	105	70-135	

Lab Batch #: 910224 **Sample:** 635902-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 03/29/13 09:30

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0297	0.0300	99	80-120	
4-Bromofluorobenzene	0.0312	0.0300	104	80-120	

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

Form 2 - Surrogate Recoveries

Project Name: SUGS Historical Grobe 4" 1RP-1940

Work Orders : 460211,

Project ID:

Lab Batch #: 910227 **Sample:** 635905-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 03/29/13 10:51

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	61.6	50.1	123	70-135	

Lab Batch #: 910363 **Sample:** 635984-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 04/01/13 10:18

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	99.9	91	70-135	
o-Terphenyl	60.6	50.0	121	70-135	

Lab Batch #: 910224 **Sample:** 635902-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 03/29/13 09:46

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0342	0.0300	114	80-120	
4-Bromofluorobenzene	0.0290	0.0300	97	80-120	

Lab Batch #: 910227 **Sample:** 635905-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 03/29/13 11:17

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	100	100	100	70-135	
o-Terphenyl	58.5	50.1	117	70-135	

Lab Batch #: 910363 **Sample:** 635984-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 04/01/13 10:44

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	95.0	100	95	70-135	
o-Terphenyl	59.6	50.1	119	70-135	

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

Form 2 - Surrogate Recoveries

Project Name: SUGS Historical Grobe 4" 1RP-1940

Work Orders : 460211,

Project ID:

Lab Batch #: 910224 **Sample:** 460211-013 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/29/13 14:25

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

Lab Batch #: 910227 **Sample:** 460211-001 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/29/13 20:57

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	95.1	100	95	70-135	
o-Terphenyl	60.3	50.0	121	70-135	

Lab Batch #: 910363 **Sample:** 460328-009 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/01/13 19:17

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	96.6	99.6	97	70-135	
o-Terphenyl	54.3	49.8	109	70-135	

Lab Batch #: 910224 **Sample:** 460211-013 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/29/13 14:42

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0303	0.0300	101	80-120	
4-Bromofluorobenzene	0.0283	0.0300	94	80-120	

Lab Batch #: 910227 **Sample:** 460211-001 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/29/13 21:24

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	58.8	50.0	118	70-135	

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

Form 2 - Surrogate Recoveries

Project Name: SUGS Historical Grobe 4" 1RP-1940

Work Orders : 460211,

Project ID:

Lab Batch #: 910363 **Sample:** 460328-009 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/01/13 19:42

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	95.1	100	95	70-135	
o-Terphenyl	56.2	50.1	112	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: SUGS Historical Grobe 4" 1RP-1940

Work Order #: 460211 **Project ID:**

Analyst: KEB **Date Prepared:** 03/29/2013 **Date Analyzed:** 03/29/2013

Lab Batch ID: 910224 **Sample:** 635902-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B 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	<0.000998	0.0998	0.0968	97	0.0996	0.0817	82	17	70-130	35	
Toluene	<0.00200	0.0998	0.0942	94	0.0996	0.0851	85	10	70-130	35	
Ethylbenzene	<0.000998	0.0998	0.0880	88	0.0996	0.0760	76	15	71-129	35	
m_p-Xylenes	<0.00200	0.200	0.180	90	0.199	0.154	77	16	70-135	35	
o-Xylene	<0.000998	0.0998	0.0957	96	0.0996	0.0827	83	15	71-133	35	

Analyst: AMB **Date Prepared:** 04/01/2013 **Date Analyzed:** 04/01/2013

Lab Batch ID: 910455 **Sample:** 636033-1-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	<2.00	50.0	49.0	98	50.0	49.1	98	0	80-120	20	

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

BS / BSD Recoveries

Project Name: SUGS Historical Grobe 4" 1RP-1940

Work Order #: 460211 **Project ID:**

Analyst: AMB **Date Prepared:** 04/01/2013 **Date Analyzed:** 04/02/2013

Lab Batch ID: 910467 **Sample:** 636056-1-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	<2.00	50.0	48.2	96	50.0	48.3	97	0	80-120	20	

Analyst: KEB **Date Prepared:** 03/29/2013 **Date Analyzed:** 03/29/2013

Lab Batch ID: 910227 **Sample:** 635905-1-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	<15.0	1000	972	97	1000	985	99	1	70-135	35	
C12-C28 Diesel Range Hydrocarbons	<15.0	1000	1060	106	1000	1070	107	1	70-135	35	

Analyst: KEB **Date Prepared:** 04/01/2013 **Date Analyzed:** 04/01/2013

Lab Batch ID: 910363 **Sample:** 635984-1-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	<15.0	999	929	93	1000	910	91	2	70-135	35	
C12-C28 Diesel Range Hydrocarbons	<15.0	999	1030	103	1000	1010	101	2	70-135	35	

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

Form 3 - MS Recoveries

Project Name: SUGS Historical Grobe 4" 1RP-1940

Work Order #: 460211

Lab Batch #: 910455 **Project ID:**

Date Analyzed: 04/01/2013 **Date Prepared:** 04/01/2013 **Analyst:** AMB

QC- Sample ID: 459989-001 S **Batch #:** 1 **Matrix:** Soil

Reporting Units: mg/kg

MATRIX / MATRIX SPIKE RECOVERY STUDY

Inorganic Anions by EPA 300 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	437	250	689	101	80-120	

Lab Batch #: 910455

Date Analyzed: 04/02/2013 **Date Prepared:** 04/01/2013 **Analyst:** AMB

QC- Sample ID: 460076-006 S **Batch #:** 1 **Matrix:** Soil

Reporting Units: mg/kg

MATRIX / MATRIX SPIKE RECOVERY STUDY

Inorganic Anions by EPA 300 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	736	1010	1730	98	80-120	

Lab Batch #: 910467

Date Analyzed: 04/02/2013 **Date Prepared:** 04/01/2013 **Analyst:** AMB

QC- Sample ID: 460211-010 S **Batch #:** 1 **Matrix:** Soil

Reporting Units: mg/kg

MATRIX / MATRIX SPIKE RECOVERY STUDY

Inorganic Anions by EPA 300 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	171	250	402	92	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 / MSD Recoveries

Project Name: SUGS Historical Grobe 4" 1RP-1940

Work Order # : 460211 **Project ID:**

Lab Batch ID: 910224 **QC- Sample ID:** 460211-013 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 03/29/2013 **Date Prepared:** 03/29/2013 **Analyst:** KEB

Reporting Units: mg/kg

BTEX by EPA 8021B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
Benzene	<0.00102	0.102	0.0757	74	0.102	0.0720	71	5	70-130	35	
Toluene	<0.00204	0.102	0.0736	72	0.102	0.0713	70	3	70-130	35	
Ethylbenzene	<0.00102	0.102	0.0629	62	0.102	0.0603	59	4	71-129	35	X
m_p-Xylenes	<0.00204	0.204	0.131	64	0.203	0.123	61	6	70-135	35	X
o-Xylene	<0.00102	0.102	0.0732	72	0.102	0.0713	70	3	71-133	35	X

Lab Batch ID: 910227 **QC- Sample ID:** 460211-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 03/29/2013 **Date Prepared:** 03/29/2013 **Analyst:** KEB

Reporting Units: mg/kg

TPH By SW8015 Mod Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
C6-C12 Gasoline Range Hydrocarbons	<16.2	1080	1010	94	1080	1020	94	1	70-135	35	
C12-C28 Diesel Range Hydrocarbons	<16.2	1080	1120	104	1080	1140	106	2	70-135	35	

Lab Batch ID: 910363 **QC- Sample ID:** 460328-009 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 04/01/2013 **Date Prepared:** 04/01/2013 **Analyst:** KEB

Reporting Units: mg/kg

TPH By SW8015 Mod Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
C6-C12 Gasoline Range Hydrocarbons	<15.5	1030	963	93	1040	962	93	0	70-135	35	
C12-C28 Diesel Range Hydrocarbons	21.2	1030	1080	103	1040	1080	102	0	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: SUGS Historical Grobe 4" 1RP-1940

Work Order #: 460211

Lab Batch #: 910208 **Project ID:**

Date Analyzed: 03/29/2013 14:00 **Date Prepared:** 03/29/2013 **Analyst:** WRU

QC- Sample ID: 460200-001 D **Batch #:** 1 **Matrix:** Soil

Reporting Units: %

Percent Moisture Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Percent Moisture	1.33	1.22	9	20	

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

Xenco Laboratories

The Environmental Lab of Texas

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765

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

Project Manager: Camille Bryant

Company Name: Nova Safety and Environmental

Company Address: 2057 Commerce

City/State/Zip: Midland, TX 79703

Telephone No: 432.520.7720 Fax No: 432.520.7701

Sampler Signature: Camille Bryant

e-mail: cbryant@novatraining.cc
rose.slade@sug.com

Project Name: SUGS Historical Grobe 4" 1RP-1940

Project #:

Project Loc: Lea County, New Mexico

PO #:

Report Format: [X] Standard [ ] TRRP [ ] NPI

(lab use only)
ORDER #: 460211

Analyze For:

TCLP:
TOTAL:

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers: Ice	HNO_3	HCl	H_2SO_4	NaOH	$Na_2S_2O_3$	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge GW=Groundwater S=Soil/Solid NP=Non-Potable Specify Other	TPH: 418.1 / 8015M / 8015B	TPH: TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M.	300.0			RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
01	RP @ 9'			3/22/2013	13:00		1	X								Soil	X								X			X				X
02	West S/W-1 @ 8'			3/22/2013	14:00		1	X								Soil	X								X			X				X
03	RP @ 19'			3/25/2013	8:50		1	X								Soil	X								X			X				X
04	RP @ 21'			3/25/2013	9:00		1	X								Soil	X								X			X				X
05	RP @ 23'			3/25/2013	10:00		1	X								Soil	X								X			X				X
06	East S/W-1 @ 9'			3/25/2013	10:20		1	X								Soil	X								X			X				X
07	East S/W-2 @ 9'			3/25/2013	11:00		1	X								Soil	X								X			X				X
08	East S/W-3 @ 9'			3/25/2013	12:00		1	X								Soil	X								X			X				X
09	North S/W-1 @ 9'			3/26/2013	9:00		1	X								Soil	X								X			X				X
10	North S/W-2 @ 9'			3/26/2013	10:00		1	X								Soil	X								X			X				X

Special Instructions:

Relinquished by:	Date	Time	Received by:	Date	Time
Camille Bryant	3/28/13	1620	Nikki Green	3/28/13	1620
Nikki Green	3/28/13	1648			
			Received by ELOT:	3/28/13	1648

Laboratory Comments:

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

Temperature Upon Receipt: 3.5 °C

Final 1.000

Xenco Laboratories

The Environmental Lab of Texas

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765

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

Project Manager: Camille Bryant
Company Name: Nova Safety and Environmental
Company Address: 2057 Commerce
City/State/Zip: Midland, TX 79703
Telephone No: 432.520.7720
Sampler Signature: Camille Bryant

Fax No: 432.520.7701
e-mail: cbryant@novatraining.cc
rose.slade@sug.com

Project Name: SUGS Historical Grobe 4" 1RP-1940
Project #:
Project Loc: Lea County, New Mexico
PO #:
Report Format: [X] Standard [ ] TRRP [ ] NPI

(lab use only)
ORDER #: 460211

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total #. of Containers	Ice	HNO_3	HCl	H_2SO_4	NaOH	$Na_2S_2O_3$	None	Other (Specify)	Matrix (DW=Drinking Water SL=Sludge, GW = Groundwater S=Soil/Solid, NP=Non-Potable Specify Other)	TPH: 418.1 (8015M circled) 8015B	TPH: TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030 (circled) or BTEX 8260	RCI	N.O.R.M.	Cl 300			RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
11	South S/W-1 @ 9'			3/27/2013	9:00		1	X								Soil	X								X			X				X
12	Caliche			3/27/2013	13:00		1	X								Soil	X								X			X				X
13	Topsoil			3/27/2013	13:05		1	X								Soil	X								X			X				X

Analyze For: TCLP: / TOTAL:

Special Instructions:

Relinquished by:	Date	Time	Received by:	Date	Time
Camille Bryant	3/28/13	1620	Nikki Green	3/28	1620
Nikki Green	3/28/13	1648			
			Received by ELOT: [signature]	3/28/13	16:48

Laboratory Comments:

	Y	N
Sample Containers Intact?	(Y)	N
VOCs Free of Headspace?	Y	(NA)
Labels on container(s)	(Y)	N
Custody seals on container(s)	Y	(N)
Custody seals on cooler(s)	Y	(N)
Sample Hand Delivered	(Y)	N
by Sampler/Client Rep. ?	(Y)	N

by Courier? UPS DHL FedEx Lone Star

Temperature Upon Receipt: 3.5 °C

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: Southern Union Gas Services- Monahan

Date/ Time Received: 03/28/2013 04:48:00 PM

Work Order #: 460211

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

Temperature Measuring device used :

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	3.5
#2 *Shipping container in good condition?	**Yes**
#3 *Samples received on ice?	**Yes**
#4 *Custody Seals intact on shipping container/ cooler?	**Yes**
#5 Custody Seals intact on sample bottles?	**Yes**
#6 *Custody Seals Signed and dated?	**Yes**
#7 *Chain of Custody present?	**Yes**
#8 Sample instructions complete on Chain of Custody?	**Yes**
#9 Any missing/extra samples?	**No**
#10 Chain of Custody signed when relinquished/ received?	**Yes**
#11 Chain of Custody agrees with sample label(s)?	**Yes**
#12 Container label(s) legible and intact?	**Yes**
#13 Sample matrix/ properties agree with Chain of Custody?	**Yes**
#14 Samples in proper container/ bottle?	**Yes**
#15 Samples properly preserved?	**Yes**
#16 Sample container(s) intact?	**Yes**
#17 Sufficient sample amount for indicated test(s)?	**Yes**
#18 All samples received within hold time?	**Yes**
#19 Subcontract of sample(s)?	**Yes**
#20 VOC samples have zero headspace (less than 1/4 inch bubble)?	**Yes**
#21 <2 for all samples preserved with HNO3,HCL, H2SO4?	**Yes**
#22 >10 for all samples preserved with NaAsO2+NaOH, ZnAc+NaOH?	**Yes**

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

Analyst:	PH Device/Lot#:

Checklist completed by: _____ Date: _____

Checklist reviewed by: _____ Date: _____

Analytical Report 460389

for

Southern Union Gas Services- Monahans

Project Manager: Camille Bryant

SUGS Historical Grobe 4" 1 RP-1940

09-APR-13

Collected By: Client

12600 West I-20 East Odessa, Texas 79765

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

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

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

09-APR-13

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

Reference: XENCO Report No(s): **460389**
SUGS Historical Grobe 4" 1 RP-1940
Project Address: Lea County, NM

Camille Bryant:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 460389. 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. 460389 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 460389

Southern Union Gas Services- Monahans, Monahans, TX

SUGS Historical Grobe 4" 1 RP-1940

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
South S/W-2 @ 9'	S	03-26-13 09:30		460389-001
South S/W-3 @ 9'	S	03-26-13 11:00		460389-002

Project ID:
Work Order Number(s): *460389*

Report Date: *09-APR-13*
Date Received: *04/02/2013*

Sample receipt non conformances and comments:
None

Sample receipt non conformances and comments per sample:

None

Certificate of Analysis Summary 460389

Southern Union Gas Services- Monahans, Monahans, TX

Project Name: SUGS Historical Grobe 4" 1 RP-1940

Project Id:
Contact: Camille Bryant
Project Location: Lea County, NM

Date Received in Lab: Tue Apr-02-13 10:00 am
Report Date: 09-APR-13
Project Manager: Nicholas Straccione

Analysis Requested									
	Lab Id:	460389-001		460389-002					
	Field Id:	South S/W-2 @ 9'		South S/W-3 @ 9'					
	Depth:								
	Matrix:	SOIL		SOIL					
	Sampled:	Mar-26-13 09:30		Mar-26-13 11:00					
BTEX by EPA 8021B	***Extracted:***	Apr-08-13 09:20		Apr-08-13 09:20					
	Analyzed:	Apr-08-13 12:49		Apr-08-13 13:06					
	Units/RL:	mg/kg	RL	mg/kg	RL				
Benzene		ND	0.00110	ND	0.00106				
Toluene		ND	0.00220	ND	0.00212				
Ethylbenzene		ND	0.00110	ND	0.00106				
m_p-Xylenes		ND	0.00220	ND	0.00212				
o-Xylene		ND	0.00110	ND	0.00106				
Total Xylenes		ND	0.00110	ND	0.00106				
Total BTEX		ND	0.00110	ND	0.00106				
Inorganic Anions by EPA 300/300.1	***Extracted:***	Apr-03-13 10:00		Apr-03-13 10:00					
	Analyzed:	Apr-04-13 08:23		Apr-04-13 08:44					
	Units/RL:	mg/kg	RL	mg/kg	RL				
Chloride		201	4.00	2.56	2.00				
Percent Moisture	***Extracted:***								
	Analyzed:	Apr-02-13 17:00		Apr-02-13 17:00					
	Units/RL:	%	RL	%	RL				
Percent Moisture		9.98	1.00	6.67	1.00				
TPH By SW8015 Mod	***Extracted:***	Apr-02-13 13:25		Apr-02-13 13:25					
	Analyzed:	Apr-02-13 15:39		Apr-02-13 16:04					
	Units/RL:	mg/kg	RL	mg/kg	RL				
C6-C12 Gasoline Range Hydrocarbons		ND	16.6	ND	16.1				
C12-C28 Diesel Range Hydrocarbons		18.1	16.6	17.0	16.1				
C28-C35 Oil Range Hydrocarbons		ND	16.6	ND	16.1				
Total TPH		18.1	16.6	17.0	16.1				

Nicholas Straccione
Project Manager

Flagging Criteria

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

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

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

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

F RPD exceeded lab control limits.

J The target analyte was positively identified below the 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

Form 2 - Surrogate Recoveries

Project Name: SUGS Historical Grobe 4" 1 RP-1940

Work Orders : 460389,

Project ID:

Lab Batch #: 910536 **Sample:** 460389-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/02/13 15:39

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	98.2	99.8	98	70-135	
o-Terphenyl	51.8	49.9	104	70-135	

Lab Batch #: 910536 **Sample:** 460389-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/02/13 16:04

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	99.1	100	99	70-135	
o-Terphenyl	51.5	50.0	103	70-135	

Lab Batch #: 910870 **Sample:** 460389-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/08/13 12:49

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0312	0.0300	104	80-120	
4-Bromofluorobenzene	0.0307	0.0300	102	80-120	

Lab Batch #: 910870 **Sample:** 460389-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/08/13 13:06

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0261	0.0300	87	80-120	
4-Bromofluorobenzene	0.0302	0.0300	101	80-120	

Lab Batch #: 910536 **Sample:** 636053-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 04/02/13 14:48

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	99.4	100	99	70-135	
o-Terphenyl	53.2	50.0	106	70-135	

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

Form 2 - Surrogate Recoveries

Project Name: SUGS Historical Grobe 4" 1 RP-1940

Work Orders : 460389,

Project ID:

Lab Batch #: 910870 **Sample:** 636306-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 04/08/13 11:11

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
	SURROGATE RECOVERY STUDY				
1,4-Difluorobenzene	0.0258	0.0300	86	80-120	
4-Bromofluorobenzene	0.0324	0.0300	108	80-120	

Lab Batch #: 910536 **Sample:** 636053-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 04/02/13 13:57

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
	SURROGATE RECOVERY STUDY				
1-Chlorooctane	95.7	100	96	70-135	
o-Terphenyl	59.9	50.0	120	70-135	

Lab Batch #: 910870 **Sample:** 636306-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 04/08/13 10:22

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
	SURROGATE RECOVERY STUDY				
1,4-Difluorobenzene	0.0324	0.0300	108	80-120	
4-Bromofluorobenzene	0.0312	0.0300	104	80-120	

Lab Batch #: 910536 **Sample:** 636053-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 04/02/13 14:22

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
	SURROGATE RECOVERY STUDY				
1-Chlorooctane	96.0	99.8	96	70-135	
o-Terphenyl	61.3	49.9	123	70-135	

Lab Batch #: 910870 **Sample:** 636306-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 04/08/13 10:55

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
	SURROGATE RECOVERY STUDY				
1,4-Difluorobenzene	0.0305	0.0300	102	80-120	
4-Bromofluorobenzene	0.0328	0.0300	109	80-120	

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

Form 2 - Surrogate Recoveries

Project Name: SUGS Historical Grobe 4" 1 RP-1940

Work Orders : 460389,

Project ID:

Lab Batch #: 910536 **Sample:** 460389-001 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/02/13 16:55

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	95.0	99.7	95	70-135	
o-Terphenyl	54.9	49.9	110	70-135	

Lab Batch #: 910870 **Sample:** 460525-001 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/08/13 16:06

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0320	0.0300	107	80-120	
4-Bromofluorobenzene	0.0313	0.0300	104	80-120	

Lab Batch #: 910536 **Sample:** 460389-001 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/02/13 17:20

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	96.4	99.6	97	70-135	
o-Terphenyl	55.7	49.8	112	70-135	

Lab Batch #: 910870 **Sample:** 460525-001 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/08/13 16:23

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0322	0.0300	107	80-120	
4-Bromofluorobenzene	0.0279	0.0300	93	80-120	

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

BS / BSD Recoveries

Project Name: SUGS Historical Grobe 4" 1 RP-1940

Work Order #: 460389 **Project ID:**

Analyst: KEB **Date Prepared:** 04/08/2013 **Date Analyzed:** 04/08/2013

Lab Batch ID: 910870 **Sample:** 636306-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B 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	0.0923	92	0.0992	0.0953	96	3	70-130	35	
Toluene	<0.00200	0.100	0.0946	95	0.0992	0.0962	97	2	70-130	35	
Ethylbenzene	<0.00100	0.100	0.0820	82	0.0992	0.0844	85	3	71-129	35	
m_p-Xylenes	<0.00200	0.200	0.170	85	0.198	0.174	88	2	70-135	35	
o-Xylene	<0.00100	0.100	0.0938	94	0.0992	0.0951	96	1	71-133	35	

Analyst: AMB **Date Prepared:** 04/03/2013 **Date Analyzed:** 04/04/2013

Lab Batch ID: 910763 **Sample:** 636228-1-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	<2.00	50.0	48.8	98	50.0	49.1	98	1	80-120	20	

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

BS / BSD Recoveries

Project Name: SUGS Historical Grobe 4" 1 RP-1940

Work Order #: 460389 **Project ID:**

Analyst: KEB **Date Prepared:** 04/02/2013 **Date Analyzed:** 04/02/2013

Lab Batch ID: 910536 **Sample:** 636053-1-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	<15.0	1000	920	92	998	931	93	1	70-135	35	
C12-C28 Diesel Range Hydrocarbons	<15.0	1000	1030	103	998	1040	104	1	70-135	35	

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

Form 3 - MS Recoveries

Project Name: SUGS Historical Grobe 4" 1 RP-1940

Work Order #: 460389
Lab Batch #: 910763
Project ID:
Date Analyzed: 04/04/2013
Date Prepared: 04/03/2013
Analyst: AMB
QC- Sample ID: 460328-001 S
Batch #: 1
Matrix: Soil
Reporting Units: mg/kg

MATRIX / MATRIX SPIKE RECOVERY STUDY

Inorganic Anions by EPA 300 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	34.8	500	529	99	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 / MSD Recoveries

Project Name: SUGS Historical Grobe 4" 1 RP-1940

Work Order # : 460389 **Project ID:**

Lab Batch ID: 910870 **QC- Sample ID:** 460525-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 04/08/2013 **Date Prepared:** 04/08/2013 **Analyst:** KEB

Reporting Units: mg/kg

BTEX by EPA 8021B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
Benzene	<0.00106	0.106	0.0958	90	0.106	0.0863	81	10	70-130	35	
Toluene	<0.00212	0.106	0.0984	93	0.106	0.0827	78	17	70-130	35	
Ethylbenzene	<0.00106	0.106	0.0884	83	0.106	0.0749	71	17	71-129	35	
m_p-Xylenes	<0.00212	0.212	0.184	87	0.211	0.153	73	18	70-135	35	
o-Xylene	<0.00106	0.106	0.0971	92	0.106	0.0787	74	21	71-133	35	

Lab Batch ID: 910536 **QC- Sample ID:** 460389-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 04/02/2013 **Date Prepared:** 04/02/2013 **Analyst:** KEB

Reporting Units: mg/kg

TPH By SW8015 Mod Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
C6-C12 Gasoline Range Hydrocarbons	<16.6	1110	1060	95	1110	1060	95	0	70-135	35	
C12-C28 Diesel Range Hydrocarbons	18.1	1110	1180	105	1110	1170	104	1	70-135	35	

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

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

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

Sample Duplicate Recovery

Project Name: SUGS Historical Grobe 4" 1 RP-1940

Work Order #: 460389

Lab Batch #: 910482 **Project ID:**

Date Analyzed: 04/02/2013 17:00 **Date Prepared:** 04/02/2013 **Analyst:** WRU

QC- Sample ID: 460328-001 D **Batch #:** 1 **Matrix:** Soil

Reporting Units: %

Percent Moisture Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Percent Moisture	5.17	5.11	1	20	

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

Xenco Laboratories

The Environmental Lab of Texas

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765

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

Project Manager: Camille Bryant

Project Name: SUGS Historical Grobe 4" 1RP-1940

Company Name: Nova Safety and Environmental

Project #:

Company Address: 2057 Commerce

Project Loc: Lea County, New Mexico

City/State/Zip: Midland, TX 79703

PO #:

Telephone No: 432.520.7720

Fax No: 432.520.7701

Report Format: [X] Standard [ ] TRRP [ ] NPI

Sampler Signature: Camille Bryant

e-mail: cbryant@novatraining.cc
rose.slade@sug.com

(lab use only)
ORDER #: 460389

Final 1.000

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers: Ice	HNO_3	HCl	H_2SO_4	NaOH	$Na_2S_2O_3$	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge GW = Groundwater S=Soil/Solid NP=Non-Potable Specify Other	Analyze For: TCLP: TPH: 418.1 8015B	TOTAL: TPH: 8015B TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M.	300.0			RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
	South S/W-2 @ 9'			3/26/2013	9:30		1	X								Soil	X								X			X				X
	South S/W-3 @ 9'			3/26/2013	11:00		1	X								Soil	X								X			X				X

Special Instructions:

	Date	Time		Date	Time
Relinquished by: Camille Bryant	4/2/13	8:40	Received by: Nathan Callicoatte	4/2/13	8:46
Relinquished by: Nathan Callicoatte	4/2/13	9:15	Received by: Jonathan Repman	4/2/13	9:15
Relinquished by: Jonathan Repman	4/2/13	10:00	Received by ELOT: Maurice Smith	4-2-13	10:00

Laboratory Comments:

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

Temperature Upon Receipt: 0 °C

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: Southern Union Gas Services- Monahan

Date/ Time Received: 04/02/2013 10:00:00 AM

Work Order #: 460389

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)?	0
#2 *Shipping container in good condition?	**Yes**
#3 *Samples received on ice?	**Yes**
#4 *Custody Seals intact on shipping container/ cooler?	**Yes**
#5 Custody Seals intact on sample bottles?	**Yes**
#6 *Custody Seals Signed and dated?	**Yes**
#7 *Chain of Custody present?	**Yes**
#8 Sample instructions complete on Chain of Custody?	**Yes**
#9 Any missing/extra samples?	**No**
#10 Chain of Custody signed when relinquished/ received?	**Yes**
#11 Chain of Custody agrees with sample label(s)?	**Yes**
#12 Container label(s) legible and intact?	**Yes**
#13 Sample matrix/ properties agree with Chain of Custody?	**Yes**
#14 Samples in proper container/ bottle?	**Yes**
#15 Samples properly preserved?	**Yes**
#16 Sample container(s) intact?	**Yes**
#17 Sufficient sample amount for indicated test(s)?	**Yes**
#18 All samples received within hold time?	**Yes**
#19 Subcontract of sample(s)?	**Yes**
#20 VOC samples have zero headspace (less than 1/4 inch bubble)?	**Yes**
#21 <2 for all samples preserved with HNO3,HCL, H2SO4?	**Yes**
#22 >10 for all samples preserved with NaAsO2+NaOH, ZnAc+NaOH?	**Yes**

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

Analyst:	PH Device/Lot#:

Checklist completed by: _____ Date: _____

Checklist reviewed by: _____ Date: _____

Analytical Report 468394

for

Regency Gas

Project Manager: Rachel Johnson

SUGS Historical Grobe 4"

1RP-1940

14-AUG-13

Collected By: Client

12600 West I-20 East Odessa, Texas 79765

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215-13-14-TX), Arizona (AZ0765), Arkansas (08-039-0), Connecticut (PH-0102), Florida (E871002)
Illinois (002082), Indiana (C-TX-02), Iowa (392), Kansas (E-10380), Kentucky (45), Louisiana (03054)
New Hampshire (297408), New Jersey (TX007), New York (11763), Oklahoma (9218), Pennsylvania (68-03610)
Rhode Island (LAO00312), USDA (S-44102), DoD (L11-54)

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

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

14-AUG-13

Project Manager: **Rachel Johnson**
Regency Gas
801 South Loop 464
Monahans, TX 79756

Reference: XENCO Report No(s): **468394**
SUGS Historical Grobe 4"
Project Address: Lea County, New Mexico

Rachel Johnson:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 468394. 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. 468394 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Kelsey Brooks
Project Manager

Sample Cross Reference 468394

Regency Gas, Monahans, TX

SUGS Historical Grobe 4"

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
South Excavation West S/W-1A @ 18'	S	08-12-13 15:15	- 18 ft	468394-001

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Certificate of Analysis Summary 468394

Regency Gas, Monahans, TX

Project Name: SUGS Historical Grobe 4"

Project Id: 1RP-1940
Contact: Rachel Johnson
Project Location: Lea County, New Mexico

Date Received in Lab: Tue Aug-13-13 09:26 am
Report Date: 14-AUG-13
Project Manager: Kelsey Brooks

Analysis Requested							
	Lab Id:	468394-001					
	Field Id:	South Excavation West S/W-					
	Depth:	18 ft					
	Matrix:	SOIL					
	Sampled:	Aug-12-13 15:15					
Inorganic Anions by EPA 300/300.1 SUB: TX104704215	***Extracted:***	Aug-13-13 10:00					
	Analyzed:	Aug-13-13 19:45					
	Units/RL:	mg/kg	RL				
Chloride		398	20.0				
Percent Moisture	***Extracted:***						
	Analyzed:	Aug-13-13 10:55					
	Units/RL:	%	RL				
Percent Moisture		5.01	1.00				

Kelsey Brooks
Project Manager

Flagging Criteria

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

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

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

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

F RPD exceeded lab control limits.

J The target analyte was positively identified below the 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

BS / BSD Recoveries

Project Name: SUGS Historical Grobe 4"

Work Order #: 468394 **Project ID:** 1RP-1940

Analyst: AMB **Date Prepared:** 08/13/2013 **Date Analyzed:** 08/13/2013

Lab Batch ID: 920596 **Sample:** 642510-1-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	49.4	50.0	48.7	97	50.0	49.2	98	1	90-110	20	

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

Form 3 - MS Recoveries

Project Name: SUGS Historical Grobe 4''

Work Order #: 468394
Lab Batch #: 920596
Project ID: 1RP-1940
Date Analyzed: 08/13/2013
Date Prepared: 08/13/2013
Analyst: AMB
QC- Sample ID: 468394-001 S
Batch #: 1
Matrix: Soil
Reporting Units: mg/kg

MATRIX / MATRIX SPIKE RECOVERY STUDY

Inorganic Anions by EPA 300 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	398	500	960	112	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

Sample Duplicate Recovery

Project Name: SUGS Historical Grobe 4"

Work Order #: 468394

Lab Batch #: 920593 **Project ID:** 1RP-1940

Date Analyzed: 08/13/2013 10:55 **Date Prepared:** 08/13/2013 **Analyst:** WRU

QC- Sample ID: 468394-001 D **Batch #:** 1 **Matrix:** Soil

Reporting Units: %

Percent Moisture Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Percent Moisture	5.01	5.06	1	20	

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

Xenco Laboratories

The Environmental Lab of Texas

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765

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

Project Manager: Camille Bryant

Project Name: SUGS Historical Grobe 4" 1RP-1940

Company Name: Nova Safety and Environmental

Project #:

Company Address: 2057 Commerce

Project Loc: Lea County, New Mexico

City/State/Zip: Midland, TX 79703

PO #:

Telephone No: 432.520.7720

Fax No: 432.520.7701

Report Format: [X] Standard [ ] TRRP [ ] NPI

Sampler Signature: Camille Bryant for Rick Perea

e-mail: cbryant@novatraining.cc
rachel.johnson@regencygas.com
phillip.little@regencygas.com

(lab use only) ORDER #: 468394

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers: Ice	HNO_3	HCl	H_2SO_4	NaOH	$Na_2S_2O_3$	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge GW = Groundwater S=Soil/Solid NP=Non-Potable Specify Other	Analyze For: TCLP: TPH: 418.1 8015M 8015B	TPH: TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M.	TOTAL: e 300			RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
	South Excavation West S/W-1A @ 18'			8/12/2013	15:15		1	X								Soil											X			X	

Special Instructions:

Laboratory Comments:

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

Temperature Upon Receipt: 4-5 °C

Relinquished by:	Date	Time	Received by:	Date	Time
Camille Bryant for Rick Perea	8/13/13	9:08	Jonathan Rogers	8/13/13	9:08
Jonathan Rogers	8/13/13	9:26			
			Received by ELOT:	8/13/13	9:26

Final 1.000

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: Regency Gas

Date/ Time Received: 08/13/2013 09:26:00 AM

Work Order #: 468394

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

Temperature Measuring device used :

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	4.5
#2 *Shipping container in good condition?	**Yes**
#3 *Samples received on ice?	**Yes**
#4 *Custody Seals intact on shipping container/ cooler?	**Yes**
#5 Custody Seals intact on sample bottles?	**Yes**
#6 *Custody Seals Signed and dated?	**Yes**
#7 *Chain of Custody present?	**Yes**
#8 Sample instructions complete on Chain of Custody?	**Yes**
#9 Any missing/extra samples?	**No**
#10 Chain of Custody signed when relinquished/ received?	**Yes**
#11 Chain of Custody agrees with sample label(s)?	**Yes**
#12 Container label(s) legible and intact?	**Yes**
#13 Sample matrix/ properties agree with Chain of Custody?	**Yes**
#14 Samples in proper container/ bottle?	**Yes**
#15 Samples properly preserved?	**Yes**
#16 Sample container(s) intact?	**Yes**
#17 Sufficient sample amount for indicated test(s)?	**Yes**
#18 All samples received within hold time?	**Yes**
#19 Subcontract of sample(s)?	**Yes**
#20 VOC samples have zero headspace (less than 1/4 inch bubble)?	**N/A**
#21 <2 for all samples preserved with HNO3,HCL, H2SO4?	**N/A**
#22 >10 for all samples preserved with NaAsO2+NaOH, ZnAc+NaOH?	**N/A**

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

Analyst:	PH Device/Lot#:

Checklist completed by: Kelsey Brooks Date: 08/13/2013

Checklist reviewed by: Kelsey Brooks Date: 08/13/2013

Analytical Report 466416

for

Southern Union Gas Services- Monahans

Project Manager: Camille Bryant

Grobe 4" -1RP-1940

16-JUL-13

Collected By: Client

12600 West I-20 East Odessa, Texas 79765

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215-13-14-TX), Arizona (AZ0765), Arkansas (08-039-0), Connecticut (PH-0102), Florida (E871002)
Illinois (002082), Indiana (C-TX-02), Iowa (392), Kansas (E-10380), Kentucky (45), Louisiana (03054)
New Hampshire (297408), New Jersey (TX007), New York (11763), Oklahoma (9218), Pennsylvania (68-03610)
Rhode Island (LAO00312), USDA (S-44102), DoD (L11-54)

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

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

16-JUL-13

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

Reference: XENCO Report No(s): **466416**
Grobe 4" -1RP-1940
Project Address: Lea County, New Mexico

Camille Bryant:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 466416. 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. 466416 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Kelsey Brooks
Project Manager

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.
Certified and approved by numerous States and Agencies.
A Small Business and Minority Status Company that delivers SERVICE and QUALITY

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

Sample Cross Reference 466416

Southern Union Gas Services- Monahans, Monahans, TX

Grobe 4" -1RP-1940

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
South Excavation, SSW-1@18'	S	07-09-13 13:00	- 18 ft	466416-001
South Excavation, SSW-2@18'	S	07-09-13 13:05	- 18 ft	466416-002
South Excavation, SSW-3@18'	S	07-09-13 13:10	- 18 ft	466416-003
South Excavation, ESW-1@18'	S	07-09-13 13:15	- 18 ft	466416-004
South Excavation, WSW-1@18'	S	07-09-13 13:20	- 18 ft	466416-005
South Excavation, NSW-1@18'	S	07-09-13 13:25	- 18 ft	466416-006
South Excavation, NSW-2@18'	S	07-09-13 13:30	- 18 ft	466416-007
South Excavation, Floor-1@19'	S	07-09-13 13:35	- 19 ft	466416-008
South Excavation, Floor-2@19'	S	07-09-13 13:40	- 19 ft	466416-009
North Excavation, ESW@18'	S	07-09-13 14:00	- 18 ft	466416-010
North Excavation, NSW@18'	S	07-09-13 14:05	- 18 ft	466416-011
North Excavation, WSW@18'	S	07-09-13 14:10	- 18 ft	466416-012
North Excavation, SSW@18'	S	07-09-13 14:15	- 18 ft	466416-013
North Excavation, Floor@18'	S	07-09-13 14:20	- 19 ft	466416-014

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:
Batch: LBA-918517 Inorganic Anions by EPA 300/300.1
E300

Batch 918517, Chloride recovered above QC limits in the Matrix Spike.
Samples affected are: 466416-013, -002, -009, -007, -010, -011, -008, -001, -006, -014, -003, -004, -005, -012.
The Laboratory Control Sample for Chloride is within laboratory Control Limits

Certificate of Analysis Summary 466416

Southern Union Gas Services- Monahans, Monahans, TX

Project Name: Grobe 4" -1RP-1940

Project Id:
Contact: Camille Bryant
Project Location: Lea County, New Mexico

Date Received in Lab: Wed Jul-10-13 09:50 am
Report Date: 16-JUL-13
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	466416-001		466416-002		466416-003		466416-004		466416-005		466416-006	
	Field Id:	South Excavation, SSW-1@		South Excavation, SSW-2@		South Excavation, SSW-3@		South Excavation, ESW-1@		South Excavation, WSW-1@		South Excavation, NSW-1@	
	Depth:	18 ft		18 ft		18 ft		18 ft		18 ft		18 ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Jul-09-13 13:00		Jul-09-13 13:05		Jul-09-13 13:10		Jul-09-13 13:15		Jul-09-13 13:20		Jul-09-13 13:25	
BTEX by EPA 8021B SUB: TX104704215	*Extracted:*	Jul-11-13 15:45		Jul-11-13 15:45		Jul-11-13 15:45		Jul-11-13 15:45		Jul-11-13 15:45		Jul-11-13 15:45	
	Analyzed:	Jul-12-13 13:36		Jul-11-13 21:24		Jul-11-13 21:40		Jul-11-13 21:56		Jul-11-13 22:12		Jul-11-13 22:28	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		ND	0.000994	ND	0.000996	ND	0.000998	ND	0.00100	ND	0.000998	ND	0.000994
Toluene		ND	0.00199	ND	0.00199	ND	0.00200	ND	0.00200	ND	0.00200	ND	0.00199
Ethylbenzene		0.00124	0.000994	ND	0.000996	ND	0.000998	ND	0.00100	ND	0.000998	0.00633	0.000994
m,p-Xylenes		ND	0.00199	ND	0.00199	ND	0.00200	ND	0.00200	ND	0.00200	0.00512	0.00199
o-Xylene		ND	0.000994	ND	0.000996	ND	0.000998	ND	0.00100	ND	0.000998	ND	0.000994
Total Xylenes		ND	0.000994	ND	0.000996	ND	0.000998	ND	0.00100	ND	0.000998	0.00512	0.000994
Total BTEX		0.00124	0.000994	ND	0.000996	ND	0.000998	ND	0.00100	ND	0.000998	0.0115	0.000994
Inorganic Anions by EPA 300/300.1 SUB: TX104704215	*Extracted:*	Jul-12-13 10:00		Jul-12-13 10:00		Jul-12-13 10:00		Jul-12-13 10:00		Jul-12-13 10:00		Jul-12-13 10:00	
	Analyzed:	Jul-12-13 10:39		Jul-12-13 11:27		Jul-12-13 11:50		Jul-12-13 12:14		Jul-12-13 12:38		Jul-12-13 13:01	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		339	10.0	380	20.0	408	10.0	487	20.0	677	40.0	688	20.0
Percent Moisture	*Extracted:*												
	Analyzed:	Jul-10-13 15:05		Jul-10-13 15:05		Jul-10-13 15:05		Jul-10-13 15:05		Jul-10-13 15:05		Jul-10-13 15:05	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		2.97	1.00	6.32	1.00	9.73	1.00	13.1	1.00	1.33	1.00	1.12	1.00
TPH By SW8015 Mod SUB: TX104704215	*Extracted:*	Jul-10-13 14:00		Jul-10-13 14:00		Jul-16-13 10:54		Jul-10-13 14:00		Jul-10-13 14:00		Jul-16-13 10:57	
	Analyzed:	Jul-10-13 20:08		Jul-10-13 20:34		Jul-16-13 13:28		Jul-10-13 20:59		Jul-10-13 21:24		Jul-16-13 13:50	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
C6-C12 Gasoline Range Hydrocarbons		ND	15.4	ND	16.0	ND	16.5	ND	17.2	ND	15.2	ND	15.1
C12 - C28 Diesel Range Hydrocarbons		ND	15.4	ND	16.0	ND	16.5	ND	17.2	ND	15.2	ND	15.1
C28-C35 Oil Range Hydrocarbons		ND	15.4	ND	16.0	ND	16.5	ND	17.2	ND	15.2	ND	15.1
Total TPH 1005		ND	15.4	ND	16.0	ND	16.5	ND	17.2	ND	15.2	ND	15.1

Kelsey Brooks
Project Manager

Certificate of Analysis Summary 466416

Southern Union Gas Services- Monahans, Monahans, TX

Project Name: Grobe 4" -1RP-1940

Project Id:

Contact: Camille Bryant

Project Location: Lea County, New Mexico

Date Received in Lab: Wed Jul-10-13 09:50 am

Report Date: 16-JUL-13

Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	466416-007		466416-008		466416-009		466416-010		466416-011		466416-012	
	Field Id:	South Excavation, NSW-2@		South Excavation, Floor-1@		South Excavation, Floor-2@		North Excavation, ESW@18		North Excavation, NSW@18		North Excavation, WSW@18	
	Depth:	18 ft		19 ft		19 ft		18 ft		18 ft		18 ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Jul-09-13 13:30		Jul-09-13 13:35		Jul-09-13 13:40		Jul-09-13 14:00		Jul-09-13 14:05		Jul-09-13 14:10	
BTEX by EPA 8021B SUB: TX104704215	**Extracted:**	Jul-16-13 15:02		Jul-11-13 15:45		Jul-16-13 15:02		Jul-11-13 15:45		Jul-11-13 15:45		Jul-11-13 15:45	
	Analyzed:	** ** ** **		Jul-11-13 23:00		** ** ** **		Jul-11-13 23:32		Jul-12-13 01:08		Jul-12-13 01:24	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		ND	0.000994	ND	0.00100	ND	0.000998	ND	0.000992	ND	0.00100	ND	0.00100
Toluene		ND	0.00199	ND	0.00200	ND	0.00200	ND	0.00198	ND	0.00200	ND	0.00201
Ethylbenzene		ND	0.000994	ND	0.00100	ND	0.000998	ND	0.000992	ND	0.00100	ND	0.00100
m,p-Xylenes		ND	0.00199	ND	0.00200	ND	0.00200	ND	0.00198	ND	0.00200	ND	0.00201
o-Xylene		ND	0.000994	ND	0.00100	ND	0.000998	ND	0.000992	ND	0.00100	ND	0.00100
Total Xylenes		ND	0.000994	ND	0.00100	ND	0.000998	ND	0.000992	ND	0.00100	ND	0.00100
Total BTEX		ND	0.000994	ND	0.00100	ND	0.000998	ND	0.000992	ND	0.00100	ND	0.00100
Inorganic Anions by EPA 300/300.1 SUB: TX104704215	**Extracted:**	Jul-12-13 10:00		Jul-12-13 10:00		Jul-12-13 10:00		Jul-12-13 10:00		Jul-12-13 10:00		Jul-12-13 10:00	
	Analyzed:	Jul-12-13 14:13		Jul-12-13 14:36		Jul-12-13 15:00		Jul-12-13 15:24		Jul-12-13 15:47		Jul-12-13 16:35	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		549	20.0	167	10.0	319	10.0	364	10.0	160	10.0	339	10.0
Percent Moisture	**Extracted:**												
	Analyzed:	Jul-10-13 15:05		Jul-10-13 15:50		Jul-10-13 15:50		Jul-10-13 15:50		Jul-10-13 15:50		Jul-10-13 15:50	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		3.12	1.00	5.88	1.00	5.68	1.00	6.88	1.00	6.20	1.00	4.03	1.00
TPH By SW8015 Mod SUB: TX104704215	**Extracted:**	Jul-16-13 11:00		Jul-16-13 11:03		Jul-16-13 11:06		Jul-16-13 11:09		Jul-16-13 11:12		Jul-16-13 11:15	
	Analyzed:	Jul-16-13 14:12		Jul-16-13 14:34		Jul-16-13 14:55		Jul-16-13 15:17		Jul-16-13 15:39		Jul-16-13 16:01	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
C6-C12 Gasoline Range Hydrocarbons		ND	15.4	ND	15.9	ND	15.9	ND	16.0	ND	15.9	ND	15.6
C12 - C28 Diesel Range Hydrocarbons		ND	15.4	ND	15.9	ND	15.9	ND	16.0	ND	15.9	ND	15.6
C28-C35 Oil Range Hydrocarbons		ND	15.4	ND	15.9	ND	15.9	ND	16.0	ND	15.9	ND	15.6
Total TPH 1005		ND	15.4	ND	15.9	ND	15.9	ND	16.0	ND	15.9	ND	15.6

Kelsey Brooks
Project Manager

Certificate of Analysis Summary 466416

Southern Union Gas Services- Monahans, Monahans, TX

Project Name: Grobe 4" -1RP-1940

Project Id:
Contact: Camille Bryant
Project Location: Lea County, New Mexico

Date Received in Lab: Wed Jul-10-13 09:50 am
Report Date: 16-JUL-13
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	466416-013				466416-014							
	Field Id:	North Excavation, SSW@18				North Excavation, Floor@18							
	Depth:	18 ft				19 ft							
	Matrix:	SOIL				SOIL							
	Sampled:	Jul-09-13 14:15				Jul-09-13 14:20							
BTEX by EPA 8021B SUB: TX104704215	***Extracted:***	Jul-11-13 15:45				Jul-11-13 15:45							
	Analyzed:	Jul-12-13 01:40				Jul-12-13 01:56							
	Units/RL:	mg/kg	RL			mg/kg	RL						
Benzene		ND	0.000998			ND	0.00100						
Toluene		ND	0.00200			ND	0.00200						
Ethylbenzene		ND	0.000998			ND	0.00100						
m,p-Xylenes		ND	0.00200			ND	0.00200						
o-Xylene		ND	0.000998			ND	0.00100						
Total Xylenes		ND	0.000998			ND	0.00100						
Total BTEX		ND	0.000998			ND	0.00100						
Inorganic Anions by EPA 300/300.1 SUB: TX104704215	***Extracted:***	Jul-12-13 10:00				Jul-12-13 10:00							
	Analyzed:	Jul-12-13 16:58				Jul-12-13 17:22							
	Units/RL:	mg/kg	RL			mg/kg	RL						
Chloride		270	20.0			222	20.0						
Percent Moisture	***Extracted:***												
	Analyzed:	Jul-10-13 15:50				Jul-10-13 15:58							
	Units/RL:	%	RL			%	RL						
Percent Moisture		6.80	1.00			8.84	1.00						
TPH By SW8015 Mod SUB: TX104704215	***Extracted:***	Jul-16-13 11:18				Jul-16-13 11:21							
	Analyzed:	Jul-16-13 16:23				Jul-16-13 16:45							
	Units/RL:	mg/kg	RL			mg/kg	RL						
C6-C12 Gasoline Range Hydrocarbons		ND	16.1			ND	16.3						
C12 - C28 Diesel Range Hydrocarbons		ND	16.1			ND	16.3						
C28-C35 Oil Range Hydrocarbons		ND	16.1			ND	16.3						
Total TPH 1005		ND	16.1			ND	16.3						

Kelsey Brooks
Project Manager

Flagging Criteria

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

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

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

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

F RPD exceeded lab control limits.

J The target analyte was positively identified below the 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

Form 2 - Surrogate Recoveries

Project Name: Grobe 4'' -1RP-1940

Work Orders : 466416,

Project ID:

Lab Batch #: 918179 **Sample:** 466416-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 07/10/13 20:08

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	88.9	99.9	89	70-135	
o-Terphenyl	53.6	50.0	107	70-135	

Lab Batch #: 918179 **Sample:** 466416-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 07/10/13 20:34

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	90.7	100	91	70-135	
o-Terphenyl	55.1	50.0	110	70-135	

Lab Batch #: 918179 **Sample:** 466416-004 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 07/10/13 20:59

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	89.6	99.9	90	70-135	
o-Terphenyl	54.0	50.0	108	70-135	

Lab Batch #: 918179 **Sample:** 466416-005 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 07/10/13 21:24

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	92.9	100	93	70-135	
o-Terphenyl	57.2	50.1	114	70-135	

Lab Batch #: 918272 **Sample:** 466416-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 07/11/13 21:24

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0303	0.0300	101	80-120	
4-Bromofluorobenzene	0.0278	0.0300	93	80-120	

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

Form 2 - Surrogate Recoveries

Project Name: Grobe 4'' -1RP-1940

Work Orders : 466416,

Project ID:

Lab Batch #: 918272 **Sample:** 466416-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 07/11/13 21:40

BTEX by EPA 8021B 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	0.0263	0.0300	88	80-120	

Lab Batch #: 918272 **Sample:** 466416-004 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 07/11/13 21:56

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0304	0.0300	101	80-120	
4-Bromofluorobenzene	0.0293	0.0300	98	80-120	

Lab Batch #: 918272 **Sample:** 466416-005 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 07/11/13 22:12

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0328	0.0300	109	80-120	
4-Bromofluorobenzene	0.0275	0.0300	92	80-120	

Lab Batch #: 918272 **Sample:** 466416-006 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 07/11/13 22:28

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0298	0.0300	99	80-120	
4-Bromofluorobenzene	0.0287	0.0300	96	80-120	

Lab Batch #: 918272 **Sample:** 466416-008 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 07/11/13 23:00

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0310	0.0300	103	80-120	
4-Bromofluorobenzene	0.0255	0.0300	85	80-120	

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

Form 2 - Surrogate Recoveries

Project Name: Grobe 4'' -1RP-1940

Work Orders : 466416,

Project ID:

Lab Batch #: 918272 **Sample:** 466416-010 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 07/11/13 23:32

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0331	0.0300	110	80-120	
4-Bromofluorobenzene	0.0270	0.0300	90	80-120	

Lab Batch #: 918272 **Sample:** 466416-011 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 07/12/13 01:08

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0322	0.0300	107	80-120	
4-Bromofluorobenzene	0.0270	0.0300	90	80-120	

Lab Batch #: 918272 **Sample:** 466416-012 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 07/12/13 01:24

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0333	0.0300	111	80-120	
4-Bromofluorobenzene	0.0276	0.0300	92	80-120	

Lab Batch #: 918272 **Sample:** 466416-013 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 07/12/13 01:40

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0328	0.0300	109	80-120	
4-Bromofluorobenzene	0.0283	0.0300	94	80-120	

Lab Batch #: 918272 **Sample:** 466416-014 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 07/12/13 01:56

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0314	0.0300	105	80-120	
4-Bromofluorobenzene	0.0259	0.0300	86	80-120	

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

Form 2 - Surrogate Recoveries

Project Name: Grobe 4'' -1RP-1940

Work Orders : 466416,

Project ID:

Lab Batch #: 918272 **Sample:** 466416-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 07/12/13 13:36

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0322	0.0300	107	80-120	
4-Bromofluorobenzene	0.0275	0.0300	92	80-120	

Lab Batch #: 918540 **Sample:** 466416-007 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 07/16/13 10:27

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0326	0.0300	109	80-120	
4-Bromofluorobenzene	0.0323	0.0300	108	80-120	

Lab Batch #: 918540 **Sample:** 466416-009 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 07/16/13 10:43

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0315	0.0300	105	80-120	
4-Bromofluorobenzene	0.0321	0.0300	107	80-120	

Lab Batch #: 918543 **Sample:** 466416-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 07/16/13 13:28

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	87.7	99.4	88	70-135	
o-Terphenyl	50.7	49.7	102	70-135	

Lab Batch #: 918543 **Sample:** 466416-006 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 07/16/13 13:50

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	81.4	99.6	82	70-135	
o-Terphenyl	48.7	49.8	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.

Form 2 - Surrogate Recoveries

Project Name: Grobe 4'' -1RP-1940

Work Orders : 466416,

Project ID:

Lab Batch #: 918543 **Sample:** 466416-007 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 07/16/13 14:12

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	78.8	99.3	79	70-135	
o-Terphenyl	46.0	49.7	93	70-135	

Lab Batch #: 918543 **Sample:** 466416-008 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 07/16/13 14:34

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	85.9	99.9	86	70-135	
o-Terphenyl	49.7	50.0	99	70-135	

Lab Batch #: 918543 **Sample:** 466416-009 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 07/16/13 14:55

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	85.4	99.8	86	70-135	
o-Terphenyl	48.2	49.9	97	70-135	

Lab Batch #: 918543 **Sample:** 466416-010 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 07/16/13 15:17

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	84.7	99.6	85	70-135	
o-Terphenyl	48.6	49.8	98	70-135	

Lab Batch #: 918543 **Sample:** 466416-011 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 07/16/13 15:39

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	81.9	99.2	83	70-135	
o-Terphenyl	48.0	49.6	97	70-135	

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

Form 2 - Surrogate Recoveries

Project Name: Grobe 4'' -1RP-1940

Work Orders : 466416,

Project ID:

Lab Batch #: 918543 **Sample:** 466416-012 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 07/16/13 16:01

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	85.5	100	86	70-135	
o-Terphenyl	51.8	50.0	104	70-135	

Lab Batch #: 918543 **Sample:** 466416-013 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 07/16/13 16:23

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	84.9	99.9	85	70-135	
o-Terphenyl	48.2	50.0	96	70-135	

Lab Batch #: 918543 **Sample:** 466416-014 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 07/16/13 16:45

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	84.9	99.3	85	70-135	
o-Terphenyl	48.6	49.7	98	70-135	

Lab Batch #: 918179 **Sample:** 640919-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 07/10/13 10:35

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	75.1	99.7	75	70-135	
o-Terphenyl	41.5	49.9	83	70-135	

Lab Batch #: 918272 **Sample:** 640993-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 07/11/13 20:53

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0294	0.0300	98	80-120	
4-Bromofluorobenzene	0.0257	0.0300	86	80-120	

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

Form 2 - Surrogate Recoveries

Project Name: Grobe 4'' -1RP-1940

Work Orders : 466416,

Project ID:

Lab Batch #: 918540 **Sample:** 641162-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 07/16/13 10:11

BTEX by EPA 8021B 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	0.0313	0.0300	104	80-120	

Lab Batch #: 918543 **Sample:** 641141-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 07/16/13 10:57

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	86.1	100	86	70-135	
o-Terphenyl	49.8	50.0	100	70-135	

Lab Batch #: 918179 **Sample:** 640919-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 07/10/13 09:17

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	84.3	99.9	84	70-135	
o-Terphenyl	52.8	50.0	106	70-135	

Lab Batch #: 918272 **Sample:** 640993-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 07/11/13 20:05

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0328	0.0300	109	80-120	
4-Bromofluorobenzene	0.0279	0.0300	93	80-120	

Lab Batch #: 918540 **Sample:** 641162-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 07/16/13 09:22

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0355	0.0300	118	80-120	
4-Bromofluorobenzene	0.0292	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.

Form 2 - Surrogate Recoveries

Project Name: Grobe 4'' -1RP-1940

Work Orders : 466416,

Project ID:

Lab Batch #: 918543 **Sample:** 641141-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 07/16/13 11:18

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	84.0	100	84	70-135	
o-Terphenyl	50.1	50.0	100	70-135	

Lab Batch #: 918179 **Sample:** 640919-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 07/10/13 10:10

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	81.8	100	82	70-135	
o-Terphenyl	51.0	50.1	102	70-135	

Lab Batch #: 918272 **Sample:** 640993-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 07/11/13 20:21

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0324	0.0300	108	80-120	
4-Bromofluorobenzene	0.0273	0.0300	91	80-120	

Lab Batch #: 918540 **Sample:** 641162-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 07/16/13 09:39

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0357	0.0300	119	80-120	
4-Bromofluorobenzene	0.0293	0.0300	98	80-120	

Lab Batch #: 918543 **Sample:** 641141-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 07/16/13 11:39

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	88.5	100	89	70-135	
o-Terphenyl	52.6	50.0	105	70-135	

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

Form 2 - Surrogate Recoveries

Project Name: Grobe 4'' -1RP-1940

Work Orders : 466416,

Project ID:

Lab Batch #: 918179 **Sample:** 466325-002 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 07/10/13 16:03

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	79.7	99.6	80	70-135	
o-Terphenyl	50.8	49.8	102	70-135	

Lab Batch #: 918543 **Sample:** 466712-001 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 07/16/13 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	118	100	118	70-135	
o-Terphenyl	53.6	50.0	107	70-135	

Lab Batch #: 918179 **Sample:** 466325-002 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 07/10/13 16:36

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	82.3	100	82	70-135	
o-Terphenyl	50.9	50.0	102	70-135	

Lab Batch #: 918272 **Sample:** 466416-010 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 07/12/13 00:04

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0341	0.0300	114	80-120	
4-Bromofluorobenzene	0.0351	0.0300	117	80-120	

Lab Batch #: 918543 **Sample:** 466712-001 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 07/16/13 13:06

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	117	99.7	117	70-135	
o-Terphenyl	52.0	49.9	104	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: Grobe 4'' -1RP-1940

Work Order #: 466416 **Project ID:**

Analyst: MAB **Date Prepared:** 07/11/2013 **Date Analyzed:** 07/11/2013

Lab Batch ID: 918272 **Sample:** 640993-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B 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	<0.000998	0.0998	0.0881	88	0.100	0.0896	90	2	70-130	35	
Toluene	<0.00200	0.0998	0.0842	84	0.100	0.0852	85	1	70-130	35	
Ethylbenzene	<0.000998	0.0998	0.0857	86	0.100	0.0865	87	1	71-129	35	
m,p-Xylenes	<0.00200	0.200	0.169	85	0.200	0.171	86	1	70-135	35	
o-Xylene	<0.000998	0.0998	0.0853	85	0.100	0.0859	86	1	71-133	35	

Analyst: MAB **Date Prepared:** 07/16/2013 **Date Analyzed:** 07/16/2013

Lab Batch ID: 918540 **Sample:** 641162-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B 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	0.0849	85	0.100	0.0861	86	1	70-130	35	
Toluene	<0.00201	0.100	0.0819	82	0.100	0.0833	83	2	70-130	35	
Ethylbenzene	<0.00100	0.100	0.0854	85	0.100	0.0867	87	2	71-129	35	
m,p-Xylenes	<0.00201	0.201	0.165	82	0.201	0.168	84	2	70-135	35	
o-Xylene	<0.00100	0.100	0.0840	84	0.100	0.0860	86	2	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

BS / BSD Recoveries

Project Name: Grobe 4'' -1RP-1940

Work Order #: 466416 **Project ID:**

Analyst: AMB **Date Prepared:** 07/12/2013 **Date Analyzed:** 07/12/2013

Lab Batch ID: 918517 **Sample:** 641156-1-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	<2.00	50.0	52.5	105	50.0	52.2	104	1	90-110	20	

Analyst: DYV **Date Prepared:** 07/10/2013 **Date Analyzed:** 07/10/2013

Lab Batch ID: 918179 **Sample:** 640919-1-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	<15.0	999	873	87	1000	853	85	2	70-135	35	
C12 - C28 Diesel Range Hydrocarbons	<15.0	999	1060	106	1000	1060	106	0	70-135	35	

Analyst: KAN **Date Prepared:** 07/16/2013 **Date Analyzed:** 07/16/2013

Lab Batch ID: 918543 **Sample:** 641141-1-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	<15.0	1000	1050	105	1000	1060	106	1	70-135	35	
C12 - C28 Diesel Range Hydrocarbons	<15.0	1000	955	96	1000	922	92	4	70-135	35	

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

Form 3 - MS Recoveries

Project Name: Grobe 4" -1RP-1940

Work Order #: 466416

Lab Batch #: 918517 **Project ID:**

Date Analyzed: 07/12/2013 **Date Prepared:** 07/12/2013 **Analyst:** AMB

QC- Sample ID: 466416-001 S **Batch #:** 1 **Matrix:** Soil

Reporting Units: mg/kg

MATRIX / MATRIX SPIKE RECOVERY STUDY

Inorganic Anions by EPA 300 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	339	250	653	126	80-120	X

Lab Batch #: 918517

Date Analyzed: 07/12/2013 **Date Prepared:** 07/12/2013 **Analyst:** AMB

QC- Sample ID: 466416-011 S **Batch #:** 1 **Matrix:** Soil

Reporting Units: mg/kg

MATRIX / MATRIX SPIKE RECOVERY STUDY

Inorganic Anions by EPA 300 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	160	250	458	119	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 / MSD Recoveries

Project Name: Grobe 4" -1RP-1940

Work Order # : 466416 **Project ID:**

Lab Batch ID: 918179 **QC- Sample ID:** 466325-002 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 07/10/2013 **Date Prepared:** 07/10/2013 **Analyst:** DYV

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C12 Gasoline Range Hydrocarbons	<15.5	1040	843	81	1040	863	83	2	70-135	35	
C12 - C28 Diesel Range Hydrocarbons	<15.5	1040	1090	105	1040	1100	106	1	70-135	35	

Lab Batch ID: 918543 **QC- Sample ID:** 466712-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 07/16/2013 **Date Prepared:** 07/16/2013 **Analyst:** KAN

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C12 Gasoline Range Hydrocarbons	<15.1	1010	1060	105	1010	1050	104	1	70-135	35	
C12 - C28 Diesel Range Hydrocarbons	<15.1	1010	937	93	1010	940	93	0	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 Applicable
N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.

Sample Duplicate Recovery

Project Name: Grobe 4'' -1RP-1940

Work Order #: 466416

Lab Batch #: 918211 **Project ID:**

Date Analyzed: 07/10/2013 14:45 **Date Prepared:** 07/10/2013 **Analyst:** AMB

QC- Sample ID: 466408-001 D **Batch #:** 1 **Matrix:** Soil

Reporting Units: %

Percent Moisture Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY				
	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Percent Moisture	4.41	4.13	7	20	

Lab Batch #: 918214

Date Analyzed: 07/10/2013 15:58 **Date Prepared:** 07/10/2013 **Analyst:** AMB

QC- Sample ID: 466416-014 D **Batch #:** 1 **Matrix:** Soil

Reporting Units: %

Percent Moisture Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY				
	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Percent Moisture	8.84	8.58	3	20	

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

Xenco Laboratories

PAGE 1 OF 2

The Environmental Lab of Texas

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765

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

Project Manager: Camille Bryant

Company Name: Nova Safety and Environmental

Company Address: 2057 Commerce

City/State/Zip: Midland, TX 79703

Telephone No: 432.520.7720 Fax No: 432.520.7701

Sampler Signature:

e-mail: cbryant@novatraining.cc
cstanley@novatraining.cc
phillip.little@regencygas.com
rachel.johnson@regencygas.com

Project Name: Grobe 4" - 1RP-1940

Project #:

Project Loc: Lea County, NM

PO #:

Report Format: ☐ Standard ☐ TRRP ☐ NPDES

(lab use only)
ORDER #: 466416

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers: Ice	HNO_3	HCl	H_2SO_4	NaOH	$Na_2S_2O_3$	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge GW = Groundwater S=Soil/Solid NP=Non-Potable Specify Other	Analyze For: TPH: 418.1 / 8015M	TPH: TX 1005 / TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se (TCLP: / TOTAL:)	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M.	Chlorides E 300.1	Paint Filter	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
	South Excavation, SSW-1@18'			7/9/2013	1300		1	x								Soil	X								X			X			X
	South Excavation, SSW-2@18'			7/9/2013	1305		1	x								Soil	X								X			X			X
	South Excavation, SSW-3@18'			7/9/2013	1310		1	x								Soil	X								X			X			X
	South Excavation, ESW-1@18'			7/9/2013	1315		1	x								Soil	X								X			X			X
	South Excavation, WSW-1@18'			7/9/2013	1320		1	x								Soil	X								X			X			X
	South Excavation, NSW-1@18'			7/9/2013	1325		1	x								Soil	X								X			X			X
	South Excavation, NSW-2@18'			7/9/2013	1330		1	x								Soil	X								X			X			X
	South Excavation, Floor-1 @19'			7/9/2013	1335		1	x								Soil	X								X			X			X
	South Excavation, Floor-2 @19'			7/9/2013	1340		1	x								Soil	X								X			X			X
	North Excavation, ESW@18'			7/9/2013	1400		1	x								Soil	X								X			X			X

Special Instructions:

BILL TO SUES (REGENCY GAS)

Relinquished by:	Date	Time	Received by:	Date	Time
	7/10/13	9:00		7/10/13	900
Relinquished by:	Date	Time	Received by:	Date	Time
	7/10/13	945			
Relinquished by:	Date	Time	Received by ELOT:	Date	Time
				7/10/13	09:10

Laboratory Comments:

Sample Containers Intact?	Y	N
VOCs Free of Headspace?	Y	N/A
Labels on container(s)	Y	N
Custody seals on container(s)	Y	N
Custody seals on cooler(s)	Y	N
Sample Hand Delivered by Sampler/Client Rep. ?	Y	N

by Courier? UPS DHL FedEx Lone Star

Temperature Upon Receipt: 4.0 °C

Final 1.000

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Xenco Laboratories

The Environmental Lab of Texas

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765

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

Project Manager: Camille Bryant

Company Name: Nova Safety and Environmental

Company Address: 2057 Commerce

City/State/Zip: Midland, TX 79703

Telephone No: 432.520.7720 Fax No: 432.520.7701

Sampler Signature:

e-mail: cbryant@novatraining.cc
cstanley@novatraining.cc
Phillip.Little@regencygas.com
Rachel.Johnson@regencygas.com

Project Name: Grobe 4" - 1RP-1940

Project #:

Project Loc: Lea County, NM

PO #:

Report Format: ☐ Standard ☐ TRRP ☐ NPDES

(lab use only)
ORDER #: 466416

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers: Ice	HNO_3	HCl	H_2SO_4	NaOH	$Na_2S_2O_3$	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge GW = Groundwater S=Soil/Solid NP=Non-Potable Specify Other	Analyze For: TPH: 418.1 8015M 8015B	TPH: TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8260 (TCLP: / TOTAL: x)	RCI	N.O.R.M.	Chlorides E 300.1	Paint Filter	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
	North Excavation, NSW@18'			7/9/2013	1405		1	x								Soil	X							X			X			X
	North Excavation, WSW@18'			7/9/2013	1410		1	x								Soil	X							X			X			X
	North Excavation, SSW@18'			7/9/2013	1415		1	x								Soil	X							X			X			X
	North Excavation, Floor@19'			7/9/2013	1420		1	x								Soil	X							X			X			X

Special Instructions: BILL TO SIGS (REGENCY GAS)

Relinquished by:	Date	Time	Received by:	Date	Time
	7/10/13	9:00		7/10/13	900
Relinquished by:	Date	Time	Received by:	Date	Time
	7/10/13	945			
Relinquished by:	Date	Time	Received by ELOT:	Date	Time
				7/10/13	09:10

Laboratory Comments:

Sample Containers Intact?	Y	N
VOCs Free of Headspace?	Y	N/A
Labels on container(s)	Y	N
Custody seals on container(s)	Y	N
Custody seals on cooler(s)	Y	N
Sample Hand Delivered	Y	N
by Sampler/Client Rep. ?	Y	N

by Courier? UPS DHL FedEx Lone Star

Temperature Upon Receipt: °C

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: Southern Union Gas Services- Monahan

Date/ Time Received: 07/10/2013 09:50:00 AM

Work Order #: 466416

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

Temperature Measuring device used :

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

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

Analyst:	PH Device/Lot#:

Checklist completed by: Kelsey Brooks Date: 07/12/2013

Checklist reviewed by: Kelsey Brooks Date: 07/12/2013

Analytical Report 466585

for

Southern Union Gas Services- Monahans

Project Manager: Camille Bryant

SUGS Historical Grobe 4" 1RP-1940

19-JUL-13

Collected By: Client

12600 West I-20 East Odessa, Texas 79765

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215-13-14-TX), Arizona (AZ0765), Arkansas (08-039-0), Connecticut (PH-0102), Florida (E871002)
Illinois (002082), Indiana (C-TX-02), Iowa (392), Kansas (E-10380), Kentucky (45), Louisiana (03054)
New Hampshire (297408), New Jersey (TX007), New York (11763), Oklahoma (9218), Pennsylvania (68-03610)
Rhode Island (LAO00312), USDA (S-44102), DoD (L11-54)

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

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

19-JUL-13

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

Reference: XENCO Report No(s): **466585**
SUGS Historical Grobe 4" 1RP-1940
Project Address: Lea County, New Mexico

Camille Bryant:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 466585. 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. 466585 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Kelsey Brooks
Project Manager

Sample Cross Reference 466585

Southern Union Gas Services- Monahans, Monahans, TX

SUGS Historical Grobe 4" 1RP-1940

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SP-1	S	07-11-13 14:00	ft	466585-001
SP-2	S	07-11-13 14:10	ft	466585-002
SP-3	S	07-11-13 14:20	ft	466585-003
SP-4	S	07-11-13 14:30	ft	466585-004
Topsoil-1	S	07-11-13 14:40	ft	466585-005
Topsoil-2	S	07-11-13 14:50	ft	466585-006

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:
Batch: LBA-918682 BTEX by EPA 8021B
SW8021BM

Batch 918682, Benzene recovered below QC limits in the Matrix Spike.
Samples affected are: 466585-005, -006, -003, -002.
The Laboratory Control Sample for Benzene is within laboratory Control Limits

Certificate of Analysis Summary 466585

Southern Union Gas Services- Monahans, Monahans, TX

Project Name: SUGS Historical Grobe 4" 1RP-1940

Project Id:

Contact: Camille Bryant

Project Location: Lea County, New Mexico

Date Received in Lab: Fri Jul-12-13 09:30 am

Report Date: 19-JUL-13

Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	466585-001		466585-002		466585-003		466585-004		466585-005		466585-006	
	Field Id:	SP-1		SP-2		SP-3		SP-4		Topsoil-1		Topsoil-2	
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Jul-11-13 14:00		Jul-11-13 14:10		Jul-11-13 14:20		Jul-11-13 14:30		Jul-11-13 14:40		Jul-11-13 14:50	
BTEX by EPA 8021B	***Extracted:***	Jul-16-13 15:02		Jul-17-13 16:00		Jul-17-13 16:00		Jul-16-13 15:02		Jul-18-13 09:52		Jul-18-13 09:52	
	Analyzed:	** ** ** **		Jul-17-13 21:46		Jul-17-13 22:02		** ** ** **		Jul-18-13 16:32		Jul-18-13 16:48	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		ND	0.000998	ND	0.00199	ND	0.00199	ND	0.000998	ND	0.00200	ND	0.00200
Toluene		ND	0.00200	ND	0.00398	ND	0.00398	ND	0.00200	ND	0.00399	ND	0.00400
Ethylbenzene		ND	0.000998	ND	0.00199	ND	0.00199	ND	0.000998	ND	0.00200	ND	0.00200
m,p-Xylenes		ND	0.00200	ND	0.00398	ND	0.00398	ND	0.00200	ND	0.00399	ND	0.00400
o-Xylene		ND	0.000998	ND	0.00199	ND	0.00199	ND	0.000998	ND	0.00200	ND	0.00200
Total Xylenes		ND	0.000998	ND	0.00199	ND	0.00199	ND	0.000998	ND	0.00200	ND	0.00200
Total BTEX		ND	0.000998	ND	0.00199	ND	0.00199	ND	0.000998	ND	0.00200	ND	0.00200
Inorganic Anions by EPA 300/300.1	***Extracted:***	Jul-16-13 10:00		Jul-16-13 10:00		Jul-16-13 10:00		Jul-16-13 10:00		Jul-16-13 10:00		Jul-16-13 10:00	
	Analyzed:	Jul-16-13 22:28		Jul-16-13 23:14		Jul-16-13 23:36		Jul-16-13 23:59		Jul-17-13 00:22		Jul-17-13 00:45	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		178	10.0	225	10.0	186	10.0	205	10.0	26.6	2.00	57.0	10.0
Percent Moisture	***Extracted:***												
	Analyzed:	Jul-12-13 16:35		Jul-12-13 16:35		Jul-12-13 16:35		Jul-12-13 16:35		Jul-12-13 16:35		Jul-12-13 16:35	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		3.80	1.00	4.02	1.00	3.67	1.00	2.59	1.00	1.08	1.00	1.01	1.00
TPH By SW8015 Mod SUB: TX104704215	***Extracted:***	Jul-17-13 14:51		Jul-17-13 14:54		Jul-17-13 14:57		Jul-17-13 15:00		Jul-17-13 15:03		Jul-17-13 15:06	
	Analyzed:	Jul-17-13 23:19		Jul-17-13 23:40		Jul-18-13 00:01		Jul-18-13 00:22		Jul-18-13 00:43		Jul-18-13 01:04	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
C6-C12 Gasoline Range Hydrocarbons		ND	15.5	ND	15.6	ND	15.5	ND	15.3	ND	15.1	ND	15.1
C12 - C28 Diesel Range Hydrocarbons		ND	15.5	ND	15.6	ND	15.5	ND	15.3	ND	15.1	ND	15.1
C28-C35 Oil Range Hydrocarbons		ND	15.5	ND	15.6	ND	15.5	ND	15.3	ND	15.1	ND	15.1
Total TPH 1005		ND	15.5	ND	15.6	ND	15.5	ND	15.3	ND	15.1	ND	15.1

Kelsey Brooks
Project Manager

Flagging Criteria

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

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

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

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

F RPD exceeded lab control limits.

J The target analyte was positively identified below the 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

Form 2 - Surrogate Recoveries

Project Name: SUGS Historical Grobe 4" 1RP-1940

Work Orders : 466585,

Project ID:

Lab Batch #: 918540 **Sample:** 466585-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 07/16/13 10:59

BTEX by EPA 8021B 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	0.0306	0.0300	102	80-120	

Lab Batch #: 918540 **Sample:** 466585-004 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 07/16/13 11:47

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0320	0.0300	107	80-120	
4-Bromofluorobenzene	0.0310	0.0300	103	80-120	

Lab Batch #: 918682 **Sample:** 466585-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 07/17/13 21:46

BTEX by EPA 8021B 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	0.0303	0.0300	101	80-120	

Lab Batch #: 918682 **Sample:** 466585-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 07/17/13 22:02

BTEX by EPA 8021B 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	0.0288	0.0300	96	80-120	

Lab Batch #: 918702 **Sample:** 466585-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 07/17/13 23:19

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	99.5	96	70-135	
o-Terphenyl	57.8	49.8	116	70-135	

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

Form 2 - Surrogate Recoveries

Project Name: SUGS Historical Grobe 4" 1RP-1940

Work Orders : 466585,

Project ID:

Lab Batch #: 918702 **Sample:** 466585-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 07/17/13 23:40

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	81.7	99.6	82	70-135	
o-Terphenyl	49.4	49.8	99	70-135	

Lab Batch #: 918702 **Sample:** 466585-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 07/18/13 00:01

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	83.0	99.8	83	70-135	
o-Terphenyl	50.0	49.9	100	70-135	

Lab Batch #: 918702 **Sample:** 466585-004 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 07/18/13 00:22

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	89.1	99.4	90	70-135	
o-Terphenyl	53.7	49.7	108	70-135	

Lab Batch #: 918702 **Sample:** 466585-005 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 07/18/13 00:43

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	79.7	99.7	80	70-135	
o-Terphenyl	47.0	49.9	94	70-135	

Lab Batch #: 918702 **Sample:** 466585-006 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 07/18/13 01:04

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	76.9	99.6	77	70-135	
o-Terphenyl	45.4	49.8	91	70-135	

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

Form 2 - Surrogate Recoveries

Project Name: SUGS Historical Grobe 4" 1RP-1940

Work Orders : 466585,

Project ID:

Lab Batch #: 918682 **Sample:** 466585-005 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 07/18/13 16:32

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0315	0.0300	105	80-120	
4-Bromofluorobenzene	0.0243	0.0300	81	80-120	

Lab Batch #: 918682 **Sample:** 466585-006 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 07/18/13 16:48

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0308	0.0300	103	80-120	
4-Bromofluorobenzene	0.0288	0.0300	96	80-120	

Lab Batch #: 918540 **Sample:** 641162-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 07/16/13 10:11

BTEX by EPA 8021B 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	0.0313	0.0300	104	80-120	

Lab Batch #: 918702 **Sample:** 641226-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 07/17/13 17:56

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	77.3	100	77	70-135	
o-Terphenyl	49.2	50.0	98	70-135	

Lab Batch #: 918682 **Sample:** 641245-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 07/17/13 20:26

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0297	0.0300	99	80-120	
4-Bromofluorobenzene	0.0247	0.0300	82	80-120	

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

Form 2 - Surrogate Recoveries

Project Name: SUGS Historical Grobe 4" 1RP-1940

Work Orders : 466585,

Project ID:

Lab Batch #: 918540 **Sample:** 641162-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 07/16/13 09:22

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0355	0.0300	118	80-120	
4-Bromofluorobenzene	0.0292	0.0300	97	80-120	

Lab Batch #: 918702 **Sample:** 641226-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 07/17/13 18:17

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	91.8	100	92	70-135	
o-Terphenyl	51.4	50.0	103	70-135	

Lab Batch #: 918682 **Sample:** 641245-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 07/17/13 19:23

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0340	0.0300	113	80-120	
4-Bromofluorobenzene	0.0289	0.0300	96	80-120	

Lab Batch #: 918540 **Sample:** 641162-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 07/16/13 09:39

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0357	0.0300	119	80-120	
4-Bromofluorobenzene	0.0293	0.0300	98	80-120	

Lab Batch #: 918702 **Sample:** 641226-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 07/17/13 18:39

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	82.4	100	82	70-135	
o-Terphenyl	44.5	50.0	89	70-135	

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

Form 2 - Surrogate Recoveries

Project Name: SUGS Historical Grobe 4" 1RP-1940

Work Orders : 466585,

Project ID:

Lab Batch #: 918682 **Sample:** 641245-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 07/17/13 19:38

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0349	0.0300	116	80-120	
4-Bromofluorobenzene	0.0356	0.0300	119	80-120	

Lab Batch #: 918702 **Sample:** 466619-001 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 07/17/13 19:23

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	110	99.6	110	70-135	
o-Terphenyl	51.2	49.8	103	70-135	

Lab Batch #: 918682 **Sample:** 466585-006 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 07/18/13 18:24

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0299	0.0300	100	80-120	
4-Bromofluorobenzene	0.0354	0.0300	118	80-120	

Lab Batch #: 918702 **Sample:** 466619-001 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 07/17/13 19:45

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	115	99.8	115	70-135	
o-Terphenyl	52.5	49.9	105	70-135	

Lab Batch #: 918682 **Sample:** 466585-006 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 07/18/13 18:40

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0333	0.0300	111	80-120	
4-Bromofluorobenzene	0.0356	0.0300	119	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.

BS / BSD Recoveries

Project Name: SUGS Historical Grobe 4" 1RP-1940

Work Order #: 466585 **Project ID:**

Analyst: MAB **Date Prepared:** 07/16/2013 **Date Analyzed:** 07/16/2013

Lab Batch ID: 918540 **Sample:** 641162-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B 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	0.0849	85	0.100	0.0861	86	1	70-130	35	
Toluene	<0.00201	0.100	0.0819	82	0.100	0.0833	83	2	70-130	35	
Ethylbenzene	<0.00100	0.100	0.0854	85	0.100	0.0867	87	2	71-129	35	
m,p-Xylenes	<0.00201	0.201	0.165	82	0.201	0.168	84	2	70-135	35	
o-Xylene	<0.00100	0.100	0.0840	84	0.100	0.0860	86	2	71-133	35	

Analyst: MAB **Date Prepared:** 07/17/2013 **Date Analyzed:** 07/17/2013

Lab Batch ID: 918682 **Sample:** 641245-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B 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	<0.000998	0.0998	0.0904	91	0.0994	0.0809	81	11	70-130	35	
Toluene	<0.00200	0.0998	0.0884	89	0.0994	0.0814	82	8	70-130	35	
Ethylbenzene	<0.000998	0.0998	0.0935	94	0.0994	0.0888	89	5	71-129	35	
m,p-Xylenes	<0.00200	0.200	0.183	92	0.199	0.176	88	4	70-135	35	
o-Xylene	<0.000998	0.0998	0.0929	93	0.0994	0.0940	95	1	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

BS / BSD Recoveries

Project Name: SUGS Historical Grobe 4" 1RP-1940

Work Order #: 466585 **Project ID:**

Analyst: AMB **Date Prepared:** 07/16/2013 **Date Analyzed:** 07/16/2013

Lab Batch ID: 918835 **Sample:** 641325-1-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	<2.00	50.0	47.9	96	50.0	47.9	96	0	90-110	20	

Analyst: KAN **Date Prepared:** 07/17/2013 **Date Analyzed:** 07/17/2013

Lab Batch ID: 918702 **Sample:** 641226-1-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	<15.0	1000	1090	109	1000	1060	106	3	70-135	35	
C12 - C28 Diesel Range Hydrocarbons	<15.0	1000	935	94	1000	957	96	2	70-135	35	

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

Form 3 - MS Recoveries

Project Name: SUGS Historical Grobe 4" 1RP-1940

Work Order #: 466585

Lab Batch #: 918835 **Project ID:**

Date Analyzed: 07/16/2013 **Date Prepared:** 07/16/2013 **Analyst:** AMB

QC- Sample ID: 466585-001 S **Batch #:** 1 **Matrix:** Soil

Reporting Units: mg/kg

MATRIX / MATRIX SPIKE RECOVERY STUDY

Inorganic Anions by EPA 300 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	178	250	459	112	80-120	

Lab Batch #: 918835

Date Analyzed: 07/17/2013 **Date Prepared:** 07/16/2013 **Analyst:** AMB

QC- Sample ID: 466692-001 S **Batch #:** 1 **Matrix:** Soil

Reporting Units: mg/kg

MATRIX / MATRIX SPIKE RECOVERY STUDY

Inorganic Anions by EPA 300 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	3.43	51.5	51.7	94	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 / MSD Recoveries

Project Name: SUGS Historical Grobe 4" 1RP-1940

Work Order # : 466585 **Project ID:**

Lab Batch ID: 918682 **QC- Sample ID:** 466585-006 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 07/18/2013 **Date Prepared:** 07/18/2013 **Analyst:** MAB

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00200	0.200	0.130	65	0.200	0.161	81	21	70-130	35	X
Toluene	<0.00399	0.200	0.160	80	0.200	0.169	85	5	70-130	35	
Ethylbenzene	<0.00200	0.200	0.163	82	0.200	0.193	97	17	71-129	35	
m,p-Xylenes	<0.00399	0.399	0.307	77	0.400	0.383	96	22	70-135	35	
o-Xylene	<0.00200	0.200	0.170	85	0.200	0.206	103	19	71-133	35	

Lab Batch ID: 918702 **QC- Sample ID:** 466619-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 07/17/2013 **Date Prepared:** 07/17/2013 **Analyst:** KAN

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C12 Gasoline Range Hydrocarbons	<16.0	1070	1030	96	1070	1090	102	6	70-135	35	
C12 - C28 Diesel Range Hydrocarbons	<16.0	1070	967	90	1070	970	91	0	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 Applicable
N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.

Sample Duplicate Recovery

Project Name: SUGS Historical Grobe 4" 1RP-1940

Work Order #: 466585

Lab Batch #: 918458 **Project ID:**

Date Analyzed: 07/12/2013 16:35 **Date Prepared:** 07/12/2013 **Analyst:** KEB

QC- Sample ID: 466585-001 D **Batch #:** 1 **Matrix:** Soil

Reporting Units: %

Percent Moisture Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Percent Moisture	3.80	3.67	3	20	

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

Xenco Laboratories

The Environmental Lab of Texas

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765

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

Project Manager: Camille Bryant

Project Name: SUGS Historical Grobe 4" 1RP-1940

Company Name: Nova Safety and Environmental

Project #:

Company Address: 2057 Commerce

Project Loc: Lea County, New Mexico

City/State/Zip: Midland, TX 79703

PO #:

Telephone No: 432.520.7720

Fax No: 432.520.7701

Report Format: ☒ Standard ☐ TRRP ☐ NPI

Sampler Signature: Camille Bryant for Edward Belloc

e-mail: cbryant@novatraining.cc, cstanley@novatraining.cc, rachel.johnson@regencygas.com, phillip.little@regencygas.com

(lab use only) ORDER #: 466585

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers: Ice	HNO_3	HCl	H_2SO_4	NaOH	$Na_2S_2O_3$	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge / GW = Groundwater S=Soil/Solid / NP=Non-Potable Specify Other	Analyze For: TPH: 418.1 8015M 8015B	TPH: TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M.	Chloride E300		RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
01	SP-1			7/11/2013	1400		1	X								Soil	X								X			X			X
02	SP-2			7/11/2013	1410		1	X								Soil	X								X			X			X
03	SP-3			7/11/2013	1420		1	X								Soil	X								X			X			X
04	SP-4			7/11/2013	1430		1	X								Soil	X								X			X			X
05	Topsoil-1			7/11/2013	1440		1	X								Soil	X								X			X			X
06	Topsoil-2			7/11/2013	1450		1	X								Soil	X								X			X			X

Special Instructions:

Relinquished by: Camille Bryant for Edward Belloc	Date 7/12/13	Time 8:56	Received by:	Date 7/12/13	Time 8:56	
Relinquished by:	Date 7/12/13	Time 9:30	Received by:	Date	Time	
Relinquished by:	Date	Time	Received by ELOT:	Date 7-12-13	Time 9:30	

Laboratory Comments:

Sample Containers Intact?	Y	N
VOCs Free of Headspace?	Y	N
Labels on container(s)	Y	N
Custody seals on container(s)	Y	N
Custody seals on cooler(s)	Y	N
Sample Hand Delivered	Y	N
by Sampler/Client Rep. ?	Y	N

by Courier? UPS DHL FedEx Lone Star

Temperature Upon Receipt: 5.5 °C

Final 1.000

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: Southern Union Gas Services- Monahan

Date/ Time Received: 07/12/2013 09:30:00 AM

Work Order #: 466585

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)?	5.5
#2 *Shipping container in good condition?	**Yes**
#3 *Samples received on ice?	**Yes**
#4 *Custody Seals intact on shipping container/ cooler?	**Yes**
#5 Custody Seals intact on sample bottles?	**Yes**
#6 *Custody Seals Signed and dated?	**Yes**
#7 *Chain of Custody present?	**Yes**
#8 Sample instructions complete on Chain of Custody?	**Yes**
#9 Any missing/extra samples?	**No**
#10 Chain of Custody signed when relinquished/ received?	**Yes**
#11 Chain of Custody agrees with sample label(s)?	**Yes**
#12 Container label(s) legible and intact?	**Yes**
#13 Sample matrix/ properties agree with Chain of Custody?	**Yes**
#14 Samples in proper container/ bottle?	**Yes**
#15 Samples properly preserved?	**Yes**
#16 Sample container(s) intact?	**Yes**
#17 Sufficient sample amount for indicated test(s)?	**Yes**
#18 All samples received within hold time?	**Yes**
#19 Subcontract of sample(s)?	**Yes**
#20 VOC samples have zero headspace (less than 1/4 inch bubble)?	**Yes**
#21 <2 for all samples preserved with HNO3,HCL, H2SO4?	**Yes**
#22 >10 for all samples preserved with NaAsO2+NaOH, ZnAc+NaOH?	**Yes**

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

Analyst:	PH Device/Lot#:

Checklist completed by: Kelsey Brooks Date: 07/15/2013

Checklist reviewed by: Kelsey Brooks Date: 07/15/2013

Analytical Report 468609

for

Regency Gas

Project Manager: Camille Bryant

SUGS Historical Grobe 4"

1RP-1940

20-AUG-13

Collected By: Client

12600 West I-20 East Odessa, Texas 79765

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215-13-14-TX), Arizona (AZ0765), Arkansas (08-039-0), Connecticut (PH-0102), Florida (E871002)
Illinois (002082), Indiana (C-TX-02), Iowa (392), Kansas (E-10380), Kentucky (45), Louisiana (03054)
New Hampshire (297408), New Jersey (TX007), New York (11763), Oklahoma (9218), Pennsylvania (68-03610)
Rhode Island (LAO00312), USDA (S-44102), DoD (L11-54)

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

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

20-AUG-13

Project Manager: **Camille Bryant**
Regency Gas
801 South Loop 464
Monahans, TX 79756

Reference: XENCO Report No(s): **468609**
SUGS Historical Grobe 4"
Project Address: Lea County, New Mexico

Camille Bryant:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 468609. 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. 468609 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Kelsey Brooks
Project Manager

Sample Cross Reference 468609

Regency Gas, Monahans, TX

SUGS Historical Grobe 4"

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
South Excavation Floor-3 @19'	S	08-14-13 11:00	- 19 ft	468609-001

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Certificate of Analysis Summary 468609

Regency Gas, Monahans, TX

Project Name: SUGS Historical Grobe 4"

Project Id: 1RP-1940
Contact: Camille Bryant
Project Location: Lea County, New Mexico

Date Received in Lab: Thu Aug-15-13 11:30 am
Report Date: 20-AUG-13
Project Manager: Kelsey Brooks

Analysis Requested							
	Lab Id:	468609-001					
	Field Id:	South Excavation Floor-3 @					
	Depth:	19 ft					
	Matrix:	SOIL					
	Sampled:	Aug-14-13 11:00					
BTEX by EPA 8021B	***Extracted:***	Aug-16-13 12:00					
	Analyzed:	Aug-16-13 16:29					
	Units/RL:	mg/kg RL					
Benzene		ND 0.000998					
Toluene		ND 0.00200					
Ethylbenzene		ND 0.000998					
m,p-Xylenes		ND 0.00200					
o-Xylene		ND 0.000998					
Total Xylenes		ND 0.000998					
Total BTEX		ND 0.000998					
Inorganic Anions by EPA 300/300.1 SUB: TX104704215	***Extracted:***	Aug-20-13 13:21					
	Analyzed:	Aug-20-13 15:32					
	Units/RL:	mg/kg RL					
Chloride		226 2.00					
Percent Moisture	***Extracted:***						
	Analyzed:	Aug-15-13 15:20					
	Units/RL:	% RL					
Percent Moisture		5.29 1.00					
TPH By SW8015 Mod	***Extracted:***	Aug-19-13 17:00					
	Analyzed:	Aug-20-13 03:04					
	Units/RL:	mg/kg RL					
C6-C12 Gasoline Range Hydrocarbons		ND 15.0					
C12 - C28 Diesel Range Hydrocarbons		ND 15.0					
C28-C35 Oil Range Hydrocarbons		ND 15.0					
Total TPH 1005		ND 15.0					

Kelsey Brooks
Project Manager

Flagging Criteria

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

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

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

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

F RPD exceeded lab control limits.

J The target analyte was positively identified below the 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

Form 2 - Surrogate Recoveries

Project Name: SUGS Historical Grobe 4"

Work Orders : 468609,

Project ID: 1RP-1940

Lab Batch #: 920843 **Sample:** 468609-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 08/16/13 16:29

BTEX by EPA 8021B 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	0.0271	0.0300	90	80-120	

Lab Batch #: 921023 **Sample:** 468609-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 08/20/13 03:04

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	100	90	70-135	
o-Terphenyl	50.0	50.0	100	70-135	

Lab Batch #: 920843 **Sample:** 642654-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 08/16/13 14:53

BTEX by EPA 8021B 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	0.0256	0.0300	85	80-120	

Lab Batch #: 921023 **Sample:** 642764-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 08/19/13 20:34

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	90.4	100	90	70-135	
o-Terphenyl	49.8	50.0	100	70-135	

Lab Batch #: 920843 **Sample:** 642654-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 08/16/13 14:04

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0333	0.0300	111	80-120	
4-Bromofluorobenzene	0.0286	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.

Form 2 - Surrogate Recoveries

Project Name: SUGS Historical Grobe 4"

Work Orders : 468609, **Project ID:** 1RP-1940

Lab Batch #: 921023 **Sample:** 642764-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 08/19/13 19:41

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	96.3	100	96	70-135	
o-Terphenyl	53.6	50.0	107	70-135	

Lab Batch #: 920843 **Sample:** 642654-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 08/16/13 14:20

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0331	0.0300	110	80-120	
4-Bromofluorobenzene	0.0289	0.0300	96	80-120	

Lab Batch #: 921023 **Sample:** 642764-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 08/19/13 20:08

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	91.2	100	91	70-135	
o-Terphenyl	51.3	50.0	103	70-135	

Lab Batch #: 920843 **Sample:** 468304-001 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 08/16/13 17:02

BTEX by EPA 8021B 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	0.0303	0.0300	101	80-120	

Lab Batch #: 921023 **Sample:** 468745-001 S / MS **Batch:** 1 **Matrix:** Water

Units: mg/kg **Date Analyzed:** 08/20/13 06:08

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	92.0	100	92	70-135	
o-Terphenyl	53.5	50.0	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.

Form 2 - Surrogate Recoveries

Project Name: SUGS Historical Grobe 4''

Work Orders : 468609,

Project ID: 1RP-1940

Lab Batch #: 920843 **Sample:** 468304-001 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 08/16/13 17:18

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0330	0.0300	110	80-120	
4-Bromofluorobenzene	0.0293	0.0300	98	80-120	

Lab Batch #: 921023 **Sample:** 468745-001 SD / MSD **Batch:** 1 **Matrix:** Water

Units: mg/kg **Date Analyzed:** 08/20/13 06:34

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	89.0	100	89	70-135	
o-Terphenyl	52.7	50.0	105	70-135	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

Blank Spike Recovery

Project Name: SUGS Historical Grobe 4"

Work Order #: 468609 **Project ID:** 1RP-1940

Lab Batch #: 921047 **Sample:** 642757-1-BKS **Matrix:** Solid

Date Analyzed: 08/20/2013 **Date Prepared:** 08/20/2013 **Analyst:** RKO

Reporting Units: mg/kg **Batch #:** 1

BLANK /BLANK SPIKE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1 Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
Chloride	<2.00	200	198	99	90-110	

Blank Spike Recovery [D] = 100*[C]/[B]
All results are based on MDL and validated for QC purposes.

BRL - Below Reporting Limit

BS / BSD Recoveries

Project Name: SUGS Historical Grobe 4''

Work Order #: 468609 **Project ID:** 1RP-1940

Analyst: KEB **Date Prepared:** 08/16/2013 **Date Analyzed:** 08/16/2013

Lab Batch ID: 920843 **Sample:** 642654-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B 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	<0.000998	0.0998	0.0991	99	0.100	0.0992	99	0	70-130	35	
Toluene	<0.00200	0.0998	0.0953	95	0.100	0.0954	95	0	70-130	35	
Ethylbenzene	<0.000998	0.0998	0.0977	98	0.100	0.0984	98	1	71-129	35	
m,p-Xylenes	<0.00200	0.200	0.194	97	0.200	0.195	98	1	70-135	35	
o-Xylene	<0.000998	0.0998	0.0980	98	0.100	0.0987	99	1	71-133	35	

Analyst: JUM **Date Prepared:** 08/19/2013 **Date Analyzed:** 08/19/2013

Lab Batch ID: 921023 **Sample:** 642764-1-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	<15.0	1000	924	92	1000	913	91	1	70-135	35	
C12 - C28 Diesel Range Hydrocarbons	<15.0	1000	936	94	1000	918	92	2	70-135	35	

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

Form 3 - MS / MSD Recoveries

Project Name: SUGS Historical Grobe 4''

Work Order # : 468609 **Project ID:** 1RP-1940

Lab Batch ID: 920843 **QC- Sample ID:** 468304-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 08/16/2013 **Date Prepared:** 08/16/2013 **Analyst:** KEB

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00101	0.101	0.0834	83	0.101	0.0946	94	13	70-130	35	
Toluene	<0.00202	0.101	0.0787	78	0.101	0.0901	89	14	70-130	35	
Ethylbenzene	<0.00101	0.101	0.0767	76	0.101	0.0906	90	17	71-129	35	
m,p-Xylenes	<0.00202	0.202	0.151	75	0.202	0.179	89	17	70-135	35	
o-Xylene	<0.00101	0.101	0.0770	76	0.101	0.0916	91	17	71-133	35	

Lab Batch ID: 921047 **QC- Sample ID:** 468745-001 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 08/20/2013 **Date Prepared:** 08/20/2013 **Analyst:** RKO

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	84.5	205	253	82	205	256	84	1	80-120	20	

Lab Batch ID: 921023 **QC- Sample ID:** 468745-001 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 08/20/2013 **Date Prepared:** 08/19/2013 **Analyst:** JUM

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C12 Gasoline Range Hydrocarbons	<15.4	1030	906	88	1030	901	87	1	70-135	35	
C12 - C28 Diesel Range Hydrocarbons	<15.4	1030	934	91	1030	946	92	1	70-135	35	

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

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

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

Sample Duplicate Recovery

Project Name: SUGS Historical Grobe 4"

Work Order #: 468609

Lab Batch #: 920902 **Project ID:** 1RP-1940

Date Analyzed: 08/15/2013 15:20 **Date Prepared:** 08/15/2013 **Analyst:** WRU

QC- Sample ID: 468467-001 D **Batch #:** 1 **Matrix:** Soil

Reporting Units: %

Percent Moisture Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Percent Moisture	<1.00	1.00	NC	20	

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

Xenco Laboratories

The Environmental Lab of Texas

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765

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

Project Manager: Camille Bryant

Project Name: SUGS Historical Grobe 4" 1RP-1940

Company Name: Nova Safety and Environmental

Project #:

Company Address: 2057 Commerce

Project Loc: Lea County, New Mexico

City/State/Zip: Midland, TX 79703

PO #:

Telephone No: 432.520.7720

Fax No: 432.520.7701

Report Format: [X] Standard [ ] TRRP [ ] NPI

Sampler Signature: Camille Bryant for Rick Perna

e-mail: cbryant@novatraining.cc
rachel.johnson@regencygas.com
phillip.little@regencygas.com

(lab use only)
ORDER #: 468609

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers: Ice	HNO_3	HCl	H_2SO_4	NaOH	$Na_2S_2O_3$	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge / GW = Groundwater S=Soil/Solid / NP=Non-Potable Specify Other	Analyze For: TCLP: TPH: 418.1	8015M (8015B)	TPH: TX 1005	TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M.	TOTAL: (C) 300			RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
	South Excavation Floor-3 @ 19'			8/14/2013	11:00		1	X								Soil	X										X			X					X

Special Instructions:

Laboratory Comments:

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

Temperature Upon Receipt: 3.0 °C

	Date	Time		Date	Time
Relinquished by: Camille Bryant for Rick Perna	8/15/13	10:30	Received by:	8/15/13	1030
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	8/15/13	11:30	Received by ELOT:	8/15/13	11:30

Final 1.000

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: Regency Gas

Date/ Time Received: 08/15/2013 11:30:00 AM

Work Order #: 468609

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

Temperature Measuring device used :

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

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

Analyst:	PH Device/Lot#:

Checklist completed by: Kelsey Brooks Date: 08/16/2013

Checklist reviewed by: Kelsey Brooks Date: 08/16/2013

Analytical Report 468745

for

Regency Gas

Project Manager: Camille Bryant

Historical Grobe 4"

1RP-1940

20-AUG-13

Collected By: Client

12600 West I-20 East Odessa, Texas 79765

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215-13-14-TX), Arizona (AZ0765), Arkansas (08-039-0), Connecticut (PH-0102), Florida (E871002)
Illinois (002082), Indiana (C-TX-02), Iowa (392), Kansas (E-10380), Kentucky (45), Louisiana (03054)
New Hampshire (297408), New Jersey (TX007), New York (11763), Oklahoma (9218), Pennsylvania (68-03610)
Rhode Island (LAO00312), USDA (S-44102), DoD (L11-54)

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

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

20-AUG-13

Project Manager: **Camille Bryant**
Regency Gas
801 South Loop 464
Monahans, TX 79756

Reference: XENCO Report No(s): **468745**
Historical Grobe 4"
Project Address: Lea County, New Mexico

Camille Bryant:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 468745. 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. 468745 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Kelsey Brooks
Project Manager

Sample Cross Reference 468745

Regency Gas, Monahans, TX

Historical Grobe 4"

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
West S/W-2 @9'	W	08-15-13 11:20	9 ft	468745-001

CASE NARRATIVE

Client Name: Regency Gas
Project Name: Historical Grobe 4"

Project ID: *1RP-1940*
Work Order Number(s): *468745*

Report Date: *20-AUG-13*
Date Received: *08/16/2013*

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:
Batch: LBA-920988 BTEX by EPA 8021B
SW8021BM

Batch 920988, Ethylbenzene, m,p-Xylenes, o-Xylene recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate. Toluene recovered below QC limits in the Matrix Spike Duplicate.
Samples affected are: 468745-001.
The Laboratory Control Sample for m,p-Xylenes , Toluene, Ethylbenzene, o-Xylene is within laboratory Control Limits

Certificate of Analysis Summary 468745

Regency Gas, Monahans, TX

Project Name: Historical Grobe 4"

Project Id: 1RP-1940
Contact: Camille Bryant
Project Location: Lea County, New Mexico

Date Received in Lab: Fri Aug-16-13 10:01 am
Report Date: 20-AUG-13
Project Manager: Kelsey Brooks

Analysis Requested							
	Lab Id:	468745-001					
	Field Id:	West S/W-2 @9'					
	Depth:	9- ft					
	Matrix:	WATER					
	Sampled:	Aug-15-13 11:20					
BTEX by EPA 8021B	***Extracted:***	Aug-19-13 08:50					
	Analyzed:	Aug-19-13 12:22					
	Units/RL:	mg/kg RL					
Benzene		ND 0.00103					
Toluene		ND 0.00206					
Ethylbenzene		ND 0.00103					
m,p-Xylenes		ND 0.00206					
o-Xylene		ND 0.00103					
Total Xylenes		ND 0.00103					
Total BTEX		ND 0.00103					
Inorganic Anions by EPA 300/300.1 SUB: E871002	***Extracted:***	Aug-20-13 13:21					
	Analyzed:	Aug-20-13 14:36					
	Units/RL:	mg/kg RL					
Chloride		84.5 2.05					
Percent Moisture	***Extracted:***						
	Analyzed:	Aug-19-13 16:15					
	Units/RL:	% RL					
Percent Moisture		2.71 1.00					
TPH By SW8015 Mod	***Extracted:***	Aug-19-13 17:00					
	Analyzed:	Aug-20-13 04:22					
	Units/RL:	mg/kg RL					
C6-C12 Gasoline Range Hydrocarbons		ND 15.4					
C12-C28 Diesel Range Hydrocarbons		ND 15.4					
C28-C35 Oil Range Hydrocarbons		ND 15.4					
Total TPH		ND 15.4					

Kelsey Brooks
Project Manager

Flagging Criteria

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

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

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

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

F RPD exceeded lab control limits.

J The target analyte was positively identified below the 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

Form 2 - Surrogate Recoveries

Project Name: Historical Grobe 4"

Work Orders : 468745,

Project ID: 1RP-1940

Lab Batch #: 920988 **Sample:** 468745-001 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/kg **Date Analyzed:** 08/19/13 12:22

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0305	0.0300	102	80-120	
4-Bromofluorobenzene	0.0261	0.0300	87	80-120	

Lab Batch #: 921023 **Sample:** 468745-001 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/kg **Date Analyzed:** 08/20/13 04:22

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	89.3	100	89	70-135	
o-Terphenyl	50.2	50.0	100	70-135	

Lab Batch #: 920988 **Sample:** 642741-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 08/19/13 10:29

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0311	0.0300	104	80-120	
4-Bromofluorobenzene	0.0264	0.0300	88	80-120	

Lab Batch #: 921023 **Sample:** 642764-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 08/19/13 20:34

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	90.4	100	90	70-135	
o-Terphenyl	49.8	50.0	100	70-135	

Lab Batch #: 920988 **Sample:** 642741-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 08/19/13 09:41

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0350	0.0300	117	80-120	
4-Bromofluorobenzene	0.0279	0.0300	93	80-120	

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

Form 2 - Surrogate Recoveries

Project Name: Historical Grobe 4"

Work Orders : 468745, **Project ID:** 1RP-1940

Lab Batch #: 921023 **Sample:** 642764-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 08/19/13 19:41

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	96.3	100	96	70-135	
o-Terphenyl	53.6	50.0	107	70-135	

Lab Batch #: 920988 **Sample:** 642741-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 08/19/13 09:57

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0345	0.0300	115	80-120	
4-Bromofluorobenzene	0.0273	0.0300	91	80-120	

Lab Batch #: 921023 **Sample:** 642764-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 08/19/13 20:08

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	91.2	100	91	70-135	
o-Terphenyl	51.3	50.0	103	70-135	

Lab Batch #: 920988 **Sample:** 468537-003 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 08/19/13 15:46

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0358	0.0300	119	80-120	
4-Bromofluorobenzene	0.0274	0.0300	91	80-120	

Lab Batch #: 921023 **Sample:** 468745-001 S / MS **Batch:** 1 **Matrix:** Water

Units: mg/kg **Date Analyzed:** 08/20/13 06:08

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	92.0	100	92	70-135	
o-Terphenyl	53.5	50.0	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.

Form 2 - Surrogate Recoveries

Project Name: Historical Grobe 4"

Work Orders : 468745,

Project ID: 1RP-1940

Lab Batch #: 920988 **Sample:** 468537-003 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 08/19/13 16:03

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0344	0.0300	115	80-120	
4-Bromofluorobenzene	0.0276	0.0300	92	80-120	

Lab Batch #: 921023 **Sample:** 468745-001 SD / MSD **Batch:** 1 **Matrix:** Water

Units: mg/kg **Date Analyzed:** 08/20/13 06:34

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	89.0	100	89	70-135	
o-Terphenyl	52.7	50.0	105	70-135	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

Blank Spike Recovery

Project Name: Historical Grobe 4"

Work Order #: 468745 **Project ID:** 1RP-1940

Lab Batch #: 921047 **Sample:** 642757-1-BKS **Matrix:** Solid

Date Analyzed: 08/20/2013 **Date Prepared:** 08/20/2013 **Analyst:** RKO

Reporting Units: mg/kg **Batch #:** 1

BLANK /BLANK SPIKE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1 Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
Chloride	<2.00	200	198	99	80-120	

Blank Spike Recovery [D] = 100*[C]/[B]
All results are based on MDL and validated for QC purposes.

BRL - Below Reporting Limit

BS / BSD Recoveries

Project Name: Historical Grobe 4"

Work Order #: 468745 **Project ID:** 1RP-1940

Analyst: KEB **Date Prepared:** 08/19/2013 **Date Analyzed:** 08/19/2013

Lab Batch ID: 920988 **Sample:** 642741-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B 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	<0.000998	0.0998	0.0982	98	0.100	0.0966	97	2	70-130	35	
Toluene	<0.00200	0.0998	0.0908	91	0.100	0.0897	90	1	70-130	35	
Ethylbenzene	<0.000998	0.0998	0.0889	89	0.100	0.0879	88	1	71-129	35	
m,p-Xylenes	<0.00200	0.200	0.177	89	0.201	0.175	87	1	70-135	35	
o-Xylene	<0.000998	0.0998	0.0884	89	0.100	0.0873	87	1	71-133	35	

Analyst: JUM **Date Prepared:** 08/19/2013 **Date Analyzed:** 08/19/2013

Lab Batch ID: 921023 **Sample:** 642764-1-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	<15.0	1000	924	92	1000	913	91	1	70-135	35	
C12-C28 Diesel Range Hydrocarbons	<15.0	1000	936	94	1000	918	92	2	70-135	35	

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

Form 3 - MS / MSD Recoveries

Project Name: Historical Grobe 4"

Work Order # : 468745 **Project ID:** 1RP-1940

Lab Batch ID: 920988 **QC- Sample ID:** 468537-003 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 08/19/2013 **Date Prepared:** 08/19/2013 **Analyst:** KEB

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00103	0.103	0.0887	86	0.104	0.0839	81	6	70-130	35	
Toluene	<0.00207	0.103	0.0756	73	0.104	0.0697	67	8	70-130	35	X
Ethylbenzene	<0.00103	0.103	0.0672	65	0.104	0.0604	58	11	71-129	35	X
m,p-Xylenes	<0.00207	0.207	0.132	64	0.208	0.118	57	11	70-135	35	X
o-Xylene	<0.00103	0.103	0.0661	64	0.104	0.0591	57	11	71-133	35	X

Lab Batch ID: 921047 **QC- Sample ID:** 468745-001 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 08/20/2013 **Date Prepared:** 08/20/2013 **Analyst:** RKO

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	84.5	205	253	82	205	256	84	1	80-120	20	

Lab Batch ID: 921023 **QC- Sample ID:** 468745-001 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 08/20/2013 **Date Prepared:** 08/19/2013 **Analyst:** JUM

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C12 Gasoline Range Hydrocarbons	<15.4	1030	906	88	1030	901	87	1	70-135	35	
C12-C28 Diesel Range Hydrocarbons	<15.4	1030	934	91	1030	946	92	1	70-135	35	

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

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

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

Sample Duplicate Recovery

Project Name: Historical Grobe 4"

Work Order #: 468745

Lab Batch #: 920991 **Project ID:** 1RP-1940

Date Analyzed: 08/19/2013 16:15 **Date Prepared:** 08/19/2013 **Analyst:** WRU

QC- Sample ID: 468745-001 D **Batch #:** 1 **Matrix:** Water

Reporting Units: %

Percent Moisture Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Percent Moisture	2.71	2.76	2	20	

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

Xenco Laboratories

The Environmental Lab of Texas

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765

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

Project Manager: Camille Bryant

Company Name: Nova Safety and Environmental

Company Address: 2057 Commerce

City/State/Zip: Midland, TX 79703

Telephone No: 432.520.7720 Fax No: 432.520.7701

Sampler Signature: Camille Bryant for Rick Pena

e-mail: cbryant@novatraining.cc
rachel.johnson@regencygas.com
phillip.little@regencygas.com

Project Name: SUGS Historical Grobe 4" 1RP-1940

Project #:

Project Loc: Lea County, New Mexico

PO #:

Report Format: [X] Standard [ ] TRRP [ ] NPI

(lab use only)

ORDER #: 468745

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers: Ice	HNO_3	HCl	H_2SO_4	NaOH	$Na_2S_2O_3$	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge GW = Groundwater S=Soil/Solid NP=Non-Potable Specify Other	Analyze For: TCLP: TPH: 8015B	TPH: 8015M	TPH: TX 1005	TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	TOTAL: BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M.	Cl 300			RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
	West S/W-2 @ 9'			8/15/2013	11:20		1	X								Soil	X									X			X				X

Special Instructions:

Relinquished by:	Date	Time	Received by:	Date	Time
Camille Bryant for Rick Pena	8/16/13	9:15	Matt Rapp	8/16/13	9:15
Matt Rapp	8/16/13	10:01			
			Received by ELOT:	8/16/13	10:01

Laboratory Comments:

Sample Containers Intact?	Y	N
VOCs Free of Headspace?	Y	N
Labels on container(s)	Y	N
Custody seals on container(s)	Y	N
Custody seals on cooler(s)	Y	N
Sample Hand Delivered	Y	N
by Sampler/Client Rep. ?	Y	N

by Courier? UPS DHL FedEx Lone Star

Temperature Upon Receipt: 4.0 °C

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: Regency Gas

Date/ Time Received: 08/16/2013 10:01:00 AM

Work Order #: 468745

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)?	
#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)?	**N/A**
#21 <2 for all samples preserved with HNO3,HCL, H2SO4?	**N/A**
#22 >10 for all samples preserved with NaAsO2+NaOH, ZnAc+NaOH?	**N/A**

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

Analyst:	PH Device/Lot#:

Checklist completed by: Kelsey Brooks Date: 08/19/2013

Checklist reviewed by: Kelsey Brooks Date: 08/19/2013

Analytical Report 468804

for

Regency Gas

Project Manager: Camille Bryant

Historical Grobe 4" 1RP-1940

22-AUG-13

Collected By: Client

12600 West I-20 East Odessa, Texas 79765

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215-13-14-TX), Arizona (AZ0765), Arkansas (08-039-0), Connecticut (PH-0102), Florida (E871002)
Illinois (002082), Indiana (C-TX-02), Iowa (392), Kansas (E-10380), Kentucky (45), Louisiana (03054)
New Hampshire (297408), New Jersey (TX007), New York (11763), Oklahoma (9218), Pennsylvania (68-03610)
Rhode Island (LAO00312), USDA (S-44102), DoD (L11-54)

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

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

22-AUG-13

Project Manager: **Camille Bryant**
Regency Gas
801 South Loop 464
Monahans, TX 79756

Reference: XENCO Report No(s): **468804**
Historical Grobe 4" 1RP-1940
Project Address: Lea County, New Mexico

Camille Bryant:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 468804. 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. 468804 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Kelsey Brooks
Project Manager

Sample Cross Reference 468804

Regency Gas, Monahans, TX

Historical Grobe 4" 1RP-1940

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
Topsoil-3	S	08-16-13 12:00		468804-001
Topsoil-4	S	08-16-13 12:05		468804-002
SP-5	S	08-16-13 13:00		468804-003
SP-6	S	08-16-13 13:05		468804-004
SP-7	S	08-16-13 13:10		468804-005
SP-8	S	08-16-13 13:15		468804-006

CASE NARRATIVE

Client Name: Regency Gas

Project Name: Historical Grobe 4" 1RP-1940

Project ID:
Work Order Number(s): *468804*

Report Date: *22-AUG-13*
Date Received: *08/19/2013*

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Certificate of Analysis Summary 468804

Regency Gas, Monahans, TX

Project Name: Historical Grobe 4" 1RP-1940

Project Id:
Contact: Camille Bryant
Project Location: Lea County, New Mexico

Date Received in Lab: Mon Aug-19-13 03:10 pm
Report Date: 22-AUG-13
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	468804-001		468804-002		468804-003		468804-004		468804-005		468804-006	
	Field Id:	Topsoil-3		Topsoil-4		SP-5		SP-6		SP-7		SP-8	
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Aug-16-13 12:00		Aug-16-13 12:05		Aug-16-13 13:00		Aug-16-13 13:05		Aug-16-13 13:10		Aug-16-13 13:15	
BTEX by EPA 8021B	***Extracted:***	Aug-21-13 10:00		Aug-21-13 10:00		Aug-21-13 10:00		Aug-21-13 10:00		Aug-21-13 10:00		Aug-21-13 10:00	
	Analyzed:	Aug-21-13 12:43		Aug-21-13 12:59		Aug-21-13 13:15		Aug-21-13 13:32		Aug-21-13 13:48		Aug-21-13 14:04	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		ND	0.00102	ND	0.00102	ND	0.00105	ND	0.00106	ND	0.00105	ND	0.00107
Toluene		ND	0.00204	ND	0.00204	ND	0.00210	ND	0.00213	ND	0.00209	ND	0.00213
Ethylbenzene		ND	0.00102	ND	0.00102	ND	0.00105	ND	0.00106	ND	0.00105	ND	0.00107
m,p-Xylenes		ND	0.00204	ND	0.00204	ND	0.00210	ND	0.00213	ND	0.00209	ND	0.00213
o-Xylene		ND	0.00102	ND	0.00102	ND	0.00105	ND	0.00106	ND	0.00105	ND	0.00107
Total Xylenes		ND	0.00102	ND	0.00102	ND	0.00105	ND	0.00106	ND	0.00105	ND	0.00107
Total BTEX		ND	0.00102	ND	0.00102	ND	0.00105	ND	0.00106	ND	0.00105	ND	0.00107
Inorganic Anions by EPA 300/300.1 SUB: E871002	***Extracted:***	Aug-21-13 12:18		Aug-21-13 12:18		Aug-21-13 12:18		Aug-21-13 12:18		Aug-21-13 12:18		Aug-21-13 12:18	
	Analyzed:	Aug-21-13 17:51		Aug-21-13 16:55		Aug-21-13 18:10		Aug-21-13 18:28		Aug-21-13 18:47		Aug-21-13 19:06	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		58.7	2.03	37.1	2.04	120	2.11	304	2.13	248	2.11	271	2.13
Percent Moisture	***Extracted:***												
	Analyzed:	Aug-20-13 12:55		Aug-20-13 12:55		Aug-20-13 12:55		Aug-20-13 12:55		Aug-20-13 12:55		Aug-20-13 12:55	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		2.18	1.00	2.05	1.00	5.49	1.00	6.26	1.00	5.24	1.00	6.13	1.00
TPH By SW8015 Mod	***Extracted:***	Aug-20-13 18:30		Aug-20-13 18:30		Aug-20-13 18:30		Aug-20-13 18:30		Aug-20-13 18:30		Aug-20-13 18:30	
	Analyzed:	Aug-21-13 03:53		Aug-21-13 04:17		Aug-21-13 04:40		Aug-21-13 05:28		Aug-21-13 05:52		Aug-21-13 06:17	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
C6-C12 Gasoline Range Hydrocarbons		ND	15.3	ND	15.3	ND	15.9	ND	16.0	ND	15.8	ND	16.0
C12-C28 Diesel Range Hydrocarbons		32.9	15.3	ND	15.3	ND	15.9	ND	16.0	ND	15.8	ND	16.0
C28-C35 Oil Range Hydrocarbons		ND	15.3	ND	15.3	ND	15.9	ND	16.0	ND	15.8	ND	16.0
Total TPH		32.9	15.3	ND	15.3	ND	15.9	ND	16.0	ND	15.8	ND	16.0

Kelsey Brooks
Project Manager

Flagging Criteria

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

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

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

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

F RPD exceeded lab control limits.

J The target analyte was positively identified below the 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

Form 2 - Surrogate Recoveries

Project Name: Historical Grobe 4" 1RP-1940

Work Orders : 468804,

Project ID:

Lab Batch #: 921078 **Sample:** 468804-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 08/21/13 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	88.0	100	88	70-135	
o-Terphenyl	46.2	50.0	92	70-135	

Lab Batch #: 921078 **Sample:** 468804-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 08/21/13 04:17

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	87.5	100	88	70-135	
o-Terphenyl	46.1	50.0	92	70-135	

Lab Batch #: 921078 **Sample:** 468804-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 08/21/13 04:40

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	100	90	70-135	
o-Terphenyl	48.2	50.0	96	70-135	

Lab Batch #: 921078 **Sample:** 468804-004 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 08/21/13 05:28

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	47.7	50.0	95	70-135	

Lab Batch #: 921078 **Sample:** 468804-005 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 08/21/13 05:52

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	50.9	50.0	102	70-135	

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

Form 2 - Surrogate Recoveries

Project Name: Historical Grobe 4" 1RP-1940

Work Orders : 468804,

Project ID:

Lab Batch #: 921078 **Sample:** 468804-006 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 08/21/13 06:17

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	88.0	100	88	70-135	
o-Terphenyl	47.8	50.0	96	70-135	

Lab Batch #: 921117 **Sample:** 468804-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 08/21/13 12:43

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0303	0.0300	101	80-120	
4-Bromofluorobenzene	0.0275	0.0300	92	80-120	

Lab Batch #: 921117 **Sample:** 468804-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 08/21/13 12:59

BTEX by EPA 8021B 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	0.0269	0.0300	90	80-120	

Lab Batch #: 921117 **Sample:** 468804-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 08/21/13 13:15

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0298	0.0300	99	80-120	
4-Bromofluorobenzene	0.0273	0.0300	91	80-120	

Lab Batch #: 921117 **Sample:** 468804-004 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 08/21/13 13:32

BTEX by EPA 8021B 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	0.0274	0.0300	91	80-120	

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

Form 2 - Surrogate Recoveries

Project Name: Historical Grobe 4" 1RP-1940

Work Orders : 468804,

Project ID:

Lab Batch #: 921117 **Sample:** 468804-005 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 08/21/13 13:48

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0303	0.0300	101	80-120	
4-Bromofluorobenzene	0.0283	0.0300	94	80-120	

Lab Batch #: 921117 **Sample:** 468804-006 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 08/21/13 14:04

BTEX by EPA 8021B 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	0.0268	0.0300	89	80-120	

Lab Batch #: 921078 **Sample:** 642800-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 08/21/13 01:06

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	90.5	100	91	70-135	
o-Terphenyl	49.8	50.0	100	70-135	

Lab Batch #: 921117 **Sample:** 642828-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 08/21/13 11:38

BTEX by EPA 8021B 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	0.0272	0.0300	91	80-120	

Lab Batch #: 921078 **Sample:** 642800-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 08/21/13 01:30

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	96.7	100	97	70-135	
o-Terphenyl	52.8	50.0	106	70-135	

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

Form 2 - Surrogate Recoveries

Project Name: Historical Grobe 4" 1RP-1940

Work Orders : 468804,

Project ID:

Lab Batch #: 921117 **Sample:** 642828-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 08/21/13 10:50

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0347	0.0300	116	80-120	
4-Bromofluorobenzene	0.0295	0.0300	98	80-120	

Lab Batch #: 921078 **Sample:** 642800-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 08/21/13 01:54

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	95.4	100	95	70-135	
o-Terphenyl	50.9	50.0	102	70-135	

Lab Batch #: 921117 **Sample:** 642828-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 08/21/13 11:06

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0345	0.0300	115	80-120	
4-Bromofluorobenzene	0.0301	0.0300	100	80-120	

Lab Batch #: 921078 **Sample:** 468866-001 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 08/21/13 02:42

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	92.1	100	92	70-135	
o-Terphenyl	42.1	50.0	84	70-135	

Lab Batch #: 921117 **Sample:** 468804-001 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 08/21/13 14:20

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0331	0.0300	110	80-120	
4-Bromofluorobenzene	0.0293	0.0300	98	80-120	

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

Form 2 - Surrogate Recoveries

Project Name: Historical Grobe 4" 1RP-1940

Work Orders : 468804,

Project ID:

Lab Batch #: 921078 **Sample:** 468866-001 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 08/21/13 03:06

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	90.8	100	91	70-135	
o-Terphenyl	42.3	50.0	85	70-135	

Lab Batch #: 921117 **Sample:** 468804-001 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 08/21/13 14:36

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0335	0.0300	112	80-120	
4-Bromofluorobenzene	0.0295	0.0300	98	80-120	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

Blank Spike Recovery

Project Name: Historical Grobe 4" 1RP-1940

Work Order #: 468804 **Project ID:**

Lab Batch #: 921150 **Sample:** 642811-1-BKS **Matrix:** Solid

Date Analyzed: 08/21/2013 **Date Prepared:** 08/21/2013 **Analyst:** RKO

Reporting Units: mg/kg **Batch #:** 1

BLANK /BLANK SPIKE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1 Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
Chloride	<2.00	200	191	96	80-120	

Blank Spike Recovery [D] = 100*[C]/[B]
All results are based on MDL and validated for QC purposes.

BRL - Below Reporting Limit

BS / BSD Recoveries

Project Name: Historical Grobe 4" 1RP-1940

Work Order #: 468804 **Project ID:**

Analyst: KEB **Date Prepared:** 08/21/2013 **Date Analyzed:** 08/21/2013

Lab Batch ID: 921117 **Sample:** 642828-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B 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	<0.000994	0.0994	0.0942	95	0.0996	0.0957	96	2	70-130	35	
Toluene	<0.00199	0.0994	0.0896	90	0.0996	0.0910	91	2	70-130	35	
Ethylbenzene	<0.000994	0.0994	0.0904	91	0.0996	0.0925	93	2	71-129	35	
m,p-Xylenes	<0.00199	0.199	0.180	90	0.199	0.184	92	2	70-135	35	
o-Xylene	<0.000994	0.0994	0.0912	92	0.0996	0.0935	94	2	71-133	35	

Analyst: ARM **Date Prepared:** 08/20/2013 **Date Analyzed:** 08/21/2013

Lab Batch ID: 921078 **Sample:** 642800-1-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	<15.0	1000	922	92	1000	912	91	1	70-135	35	
C12-C28 Diesel Range Hydrocarbons	<15.0	1000	937	94	1000	916	92	2	70-135	35	

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

Form 3 - MS / MSD Recoveries

Project Name: Historical Grobe 4" 1RP-1940

Work Order # : 468804 **Project ID:**

Lab Batch ID: 921117 **QC- Sample ID:** 468804-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 08/21/2013 **Date Prepared:** 08/21/2013 **Analyst:** KEB

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00103	0.103	0.0906	88	0.102	0.0888	87	2	70-130	35	
Toluene	<0.00205	0.103	0.0861	84	0.102	0.0846	83	2	70-130	35	
Ethylbenzene	<0.00103	0.103	0.0861	84	0.102	0.0848	83	2	71-129	35	
m,p-Xylenes	<0.00205	0.205	0.172	84	0.204	0.169	83	2	70-135	35	
o-Xylene	<0.00103	0.103	0.0878	85	0.102	0.0865	85	1	71-133	35	

Lab Batch ID: 921150 **QC- Sample ID:** 468804-002 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 08/21/2013 **Date Prepared:** 08/21/2013 **Analyst:** RKO

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	37.1	204	224	92	204	227	93	1	80-120	20	

Lab Batch ID: 921078 **QC- Sample ID:** 468866-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 08/21/2013 **Date Prepared:** 08/20/2013 **Analyst:** ARM

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C12 Gasoline Range Hydrocarbons	<15.3	1020	907	89	1020	903	89	0	70-135	35	
C12-C28 Diesel Range Hydrocarbons	141	1020	983	83	1020	1080	92	9	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 Applicable
N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.

Sample Duplicate Recovery

Project Name: Historical Grobe 4" 1RP-1940

Work Order #: 468804

Lab Batch #: 921085 **Project ID:**

Date Analyzed: 08/20/2013 12:55 **Date Prepared:** 08/20/2013 **Analyst:** WRU

QC- Sample ID: 468808-001 D **Batch #:** 1 **Matrix:** Soil

Reporting Units: %

Percent Moisture Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Percent Moisture	3.35	3.39	1	20	

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

Xenco Laboratories

The Environmental Lab of Texas

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765

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

Project Manager: Camille Bryant

Company Name: Nova Safety and Environmental

Company Address: 2057 Commerce

City/State/Zip: Midland, TX 79703

Telephone No: 432.520.7720 Fax No: 432.520.7701

Sampler Signature: Camille Bryant for Rick Pena

e-mail: cbryant@novatraining.cc
rachel.johnson@regencygas.com
phillip.little@regencygas.com

Project Name: SUGS Historical Grobe 4" 1RP-1940

Project #:

Project Loc: Lea County, New Mexico

PO #:

Report Format: [X] Standard [ ] TRRP [ ] NPI

(lab use only)
ORDER #: 468804

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total #. of Containers	Preservation & # of Containers: Ice	HNO_3	HCl	H_2SO_4	NaOH	$Na_2S_2O_3$	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge GW = Groundwater S=Soil/Solid NP=Non-Potable Specify Other	Analyze For: TPH: 418.1 8015M 8015B	TPH: TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M.	Chloride E 300			RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT	
	Topsoil-3			8/16/2013	12:00		1	X								Soil	X								X			X				X	1A
	Topsoil-4			8/16/2013	12:05		1	X								Soil	X								X			X				X	2A
	SP-5			8/16/2013	13:00		1	X								Soil	X								X			X				X	1B
	SP-6			8/16/2013	13:05		1	X								Soil	X								X			X				X	2B
	SP-7			8/16/2013	13:10		1	X								Soil	X								X			X				X	2C
	SP-8			8/16/2013	13:15		1	X								Soil	X								X			X				X	2D

TCLP:
TOTAL: X

Special Instructions:

Relinquished by: Rick Pena / Camille Bryant for	Date 8/19/13	Time 11:58	Received by:	Date 8/19/13	Time 1158
Relinquished by:	Date 8/19/13	Time 15:10	Received by:	Date 8/19/13	Time 15:10
Relinquished by:	Date	Time	Received by ELOT:	Date	Time

Laboratory Comments:

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

Temperature Upon Receipt: 2.5 °C

Final 1.000

22-AUG-13

Project Manager: **Camille Bryant**
Regency Gas
801 South Loop 464
Monahans, TX 79756

Reference: XENCO Report No(s): **468804**
Historical Grobe 4" 1RP-1940
Project Address: Lea County, New Mexico

Camille Bryant:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 468804. 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. 468804 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Kelsey Brooks
Project Manager

Sample Cross Reference 468804

Regency Gas, Monahans, TX

Historical Grobe 4" 1RP-1940

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
Topsoil-3	S	08-16-13 12:00		468804-001
Topsoil-4	S	08-16-13 12:05		468804-002
SP-5	S	08-16-13 13:00		468804-003
SP-6	S	08-16-13 13:05		468804-004
SP-7	S	08-16-13 13:10		468804-005
SP-8	S	08-16-13 13:15		468804-006

CASE NARRATIVE

Client Name: Regency Gas

Project Name: Historical Grobe 4" 1RP-1940

Project ID:
Work Order Number(s): *468804*

Report Date: *22-AUG-13*
Date Received: *08/19/2013*

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Certificate of Analysis Summary 468804

Regency Gas, Monahans, TX

Project Name: Historical Grobe 4" 1RP-1940

Project Id:

Contact: Camille Bryant

Project Location: Lea County, New Mexico

Date Received in Lab: Mon A

Report Date: 22-AU

Project Manager: Kelsey

Analysis Requested																
	Lab Id:	468804-001		468804-002		468804-003		468804-004								
	Field Id:	Topsoil-3		Topsoil-4		SP-5		SP-6								
	Depth:															
	Matrix:	SOIL		SOIL		SOIL		SOIL								
	Sampled:	Aug-16-13 12:00		Aug-16-13 12:05		Aug-16-13 13:00		Aug-16-13 13:05								Au
BTEX by EPA 8021B	***Extracted:***	Aug-21-13 10:00		Aug-21-13 10:00		Aug-21-13 10:00		Aug-21-13 10:00								Au
	Analyzed:	Aug-21-13 12:43		Aug-21-13 12:59		Aug-21-13 13:15		Aug-21-13 13:32								Au
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL							m
Benzene		ND	0.00102	ND	0.00102	ND	0.00105	ND	0.00106							
Toluene		ND	0.00204	ND	0.00204	ND	0.00210	ND	0.00213							
Ethylbenzene		ND	0.00102	ND	0.00102	ND	0.00105	ND	0.00106							
m,p-Xylenes		ND	0.00204	ND	0.00204	ND	0.00210	ND	0.00213							
o-Xylene		ND	0.00102	ND	0.00102	ND	0.00105	ND	0.00106							
Total Xylenes		ND	0.00102	ND	0.00102	ND	0.00105	ND	0.00106							
Total BTEX		ND	0.00102	ND	0.00102	ND	0.00105	ND	0.00106							
Inorganic Anions by EPA 300/300.1 SUB: E871002	***Extracted:***	Aug-21-13 12:18		Aug-21-13 12:18		Aug-21-13 12:18		Aug-21-13 12:18								Au
	Analyzed:	Aug-21-13 17:51		Aug-21-13 16:55		Aug-21-13 18:10		Aug-21-13 18:28								Au
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL							m
Chloride		58.7	2.03	37.1	2.04	120	2.11	304	2.13							
Percent Moisture	***Extracted:***															
	Analyzed:	Aug-20-13 12:55		Aug-20-13 12:55		Aug-20-13 12:55		Aug-20-13 12:55								Au
	Units/RL:	%	RL	%	RL	%	RL	%	RL							
Percent Moisture		2.18	1.00	2.05	1.00	5.49	1.00	6.26	1.00							
TPH By SW8015 Mod	***Extracted:***	Aug-20-13 18:30		Aug-20-13 18:30		Aug-20-13 18:30		Aug-20-13 18:30								Au
	Analyzed:	Aug-21-13 03:53		Aug-21-13 04:17		Aug-21-13 04:40		Aug-21-13 05:28								Au
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL							m
C6-C12 Gasoline Range Hydrocarbons		ND	15.3	ND	15.3	ND	15.9	ND	16.0							
C12-C28 Diesel Range Hydrocarbons		32.9	15.3	ND	15.3	ND	15.9	ND	16.0							
C28-C35 Oil Range Hydrocarbons		ND	15.3	ND	15.3	ND	15.9	ND	16.0							
Total TPH		32.9	15.3	ND	15.3	ND	15.9	ND	16.0							

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

Form 2 - Surrogate Recoveries

Project Name: Historical Grobe 4" 1RP-1940

Work Orders : 468804,

Project ID:

Lab Batch #: 921078 **Sample:** 468804-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 08/21/13 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	88.0	100	88	70-135	
o-Terphenyl	46.2	50.0	92	70-135	

Lab Batch #: 921078 **Sample:** 468804-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 08/21/13 04:17

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	87.5	100	88	70-135	
o-Terphenyl	46.1	50.0	92	70-135	

Lab Batch #: 921078 **Sample:** 468804-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 08/21/13 04:40

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	100	90	70-135	
o-Terphenyl	48.2	50.0	96	70-135	

Lab Batch #: 921078 **Sample:** 468804-004 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 08/21/13 05:28

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	47.7	50.0	95	70-135	

Lab Batch #: 921078 **Sample:** 468804-005 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 08/21/13 05:52

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	50.9	50.0	102	70-135	

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

Form 2 - Surrogate Recoveries

Project Name: Historical Grobe 4" 1RP-1940

Work Orders : 468804,

Project ID:

Lab Batch #: 921078 **Sample:** 468804-006 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 08/21/13 06:17

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	88.0	100	88	70-135	
o-Terphenyl	47.8	50.0	96	70-135	

Lab Batch #: 921117 **Sample:** 468804-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 08/21/13 12:43

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0303	0.0300	101	80-120	
4-Bromofluorobenzene	0.0275	0.0300	92	80-120	

Lab Batch #: 921117 **Sample:** 468804-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 08/21/13 12:59

BTEX by EPA 8021B 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	0.0269	0.0300	90	80-120	

Lab Batch #: 921117 **Sample:** 468804-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 08/21/13 13:15

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0298	0.0300	99	80-120	
4-Bromofluorobenzene	0.0273	0.0300	91	80-120	

Lab Batch #: 921117 **Sample:** 468804-004 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 08/21/13 13:32

BTEX by EPA 8021B 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	0.0274	0.0300	91	80-120	

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

Form 2 - Surrogate Recoveries

Project Name: Historical Grobe 4" 1RP-1940

Work Orders : 468804,

Project ID:

Lab Batch #: 921117 **Sample:** 468804-005 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 08/21/13 13:48

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0303	0.0300	101	80-120	
4-Bromofluorobenzene	0.0283	0.0300	94	80-120	

Lab Batch #: 921117 **Sample:** 468804-006 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 08/21/13 14:04

BTEX by EPA 8021B 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	0.0268	0.0300	89	80-120	

Lab Batch #: 921078 **Sample:** 642800-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 08/21/13 01:06

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	90.5	100	91	70-135	
o-Terphenyl	49.8	50.0	100	70-135	

Lab Batch #: 921117 **Sample:** 642828-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 08/21/13 11:38

BTEX by EPA 8021B 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	0.0272	0.0300	91	80-120	

Lab Batch #: 921078 **Sample:** 642800-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 08/21/13 01:30

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	96.7	100	97	70-135	
o-Terphenyl	52.8	50.0	106	70-135	

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

Form 2 - Surrogate Recoveries

Project Name: Historical Grobe 4" 1RP-1940

Work Orders : 468804,

Project ID:

Lab Batch #: 921117 **Sample:** 642828-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 08/21/13 10:50

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0347	0.0300	116	80-120	
4-Bromofluorobenzene	0.0295	0.0300	98	80-120	

Lab Batch #: 921078 **Sample:** 642800-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 08/21/13 01:54

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	95.4	100	95	70-135	
o-Terphenyl	50.9	50.0	102	70-135	

Lab Batch #: 921117 **Sample:** 642828-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 08/21/13 11:06

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0345	0.0300	115	80-120	
4-Bromofluorobenzene	0.0301	0.0300	100	80-120	

Lab Batch #: 921078 **Sample:** 468866-001 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 08/21/13 02:42

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	92.1	100	92	70-135	
o-Terphenyl	42.1	50.0	84	70-135	

Lab Batch #: 921117 **Sample:** 468804-001 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 08/21/13 14:20

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0331	0.0300	110	80-120	
4-Bromofluorobenzene	0.0293	0.0300	98	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.

o-Terphenyl	42.3	50.0	85	70-135	

Lab Batch #: 921117 **Sample:** 468804-001 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 08/21/13 14:36

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0335	0.0300	112	80-120	
4-Bromofluorobenzene	0.0295	0.0300	98	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.

Analytes	[A]	[B]	Result [C]	%R [D]	%R	
Chloride	<2.00	200	191	96	80-120	

Blank Spike Recovery [D] = 100*[C]/[B]
All results are based on MDL and validated for QC purposes.

BRL - Below Reporting Limit

BS / BSD Recoveries

Project Name: Historical Grobe 4" 1RP-1940

Work Order #: 468804 **Project ID:**

Analyst: KEB **Date Prepared:** 08/21/2013 **Date Analyzed:** 08/21/2013

Lab Batch ID: 921117 **Sample:** 642828-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B 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	<0.000994	0.0994	0.0942	95	0.0996	0.0957	96	2	70-130	35	
Toluene	<0.00199	0.0994	0.0896	90	0.0996	0.0910	91	2	70-130	35	
Ethylbenzene	<0.000994	0.0994	0.0904	91	0.0996	0.0925	93	2	71-129	35	
m,p-Xylenes	<0.00199	0.199	0.180	90	0.199	0.184	92	2	70-135	35	
o-Xylene	<0.000994	0.0994	0.0912	92	0.0996	0.0935	94	2	71-133	35	

Analyst: ARM **Date Prepared:** 08/20/2013 **Date Analyzed:** 08/21/2013

Lab Batch ID: 921078 **Sample:** 642800-1-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	<15.0	1000	922	92	1000	912	91	1	70-135	35	
C12-C28 Diesel Range Hydrocarbons	<15.0	1000	937	94	1000	916	92	2	70-135	35	

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

Form 3 - MS / MSD Recoveries

Project Name: Historical Grobe 4" 1RP-1940

Work Order # : 468804 **Project ID:**

Lab Batch ID: 921117 **QC- Sample ID:** 468804-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 08/21/2013 **Date Prepared:** 08/21/2013 **Analyst:** KEB

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00103	0.103	0.0906	88	0.102	0.0888	87	2	70-130	35	
Toluene	<0.00205	0.103	0.0861	84	0.102	0.0846	83	2	70-130	35	
Ethylbenzene	<0.00103	0.103	0.0861	84	0.102	0.0848	83	2	71-129	35	
m,p-Xylenes	<0.00205	0.205	0.172	84	0.204	0.169	83	2	70-135	35	
o-Xylene	<0.00103	0.103	0.0878	85	0.102	0.0865	85	1	71-133	35	

Lab Batch ID: 921150 **QC- Sample ID:** 468804-002 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 08/21/2013 **Date Prepared:** 08/21/2013 **Analyst:** RKO

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	37.1	204	224	92	204	227	93	1	80-120	20	

Lab Batch ID: 921078 **QC- Sample ID:** 468866-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 08/21/2013 **Date Prepared:** 08/20/2013 **Analyst:** ARM

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C12 Gasoline Range Hydrocarbons	<15.3	1020	907	89	1020	903	89	0	70-135	35	
C12-C28 Diesel Range Hydrocarbons	141	1020	983	83	1020	1080	92	9	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 Applicable
N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.

Sample Duplicate Recovery

Project Name: Historical Grobe 4" 1RP-1940

Work Order #: 468804

Lab Batch #: 921085 **Project ID:**

Date Analyzed: 08/20/2013 12:55 **Date Prepared:** 08/20/2013 **Analyst:** WRU

QC- Sample ID: 468808-001 D **Batch #:** 1 **Matrix:** Soil

Reporting Units: %

Percent Moisture Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Percent Moisture	3.35	3.39	1	20	

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

Xenco Laboratories

The Environmental Lab of Texas

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765

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

Project Manager: Camille Bryant

Company Name: Nova Safety and Environmental

Company Address: 2057 Commerce

City/State/Zip: Midland, TX 79703

Telephone No: 432.520.7720 Fax No: 432.520.7701

Sampler Signature: Camille Bryant for Rick Pena

e-mail: cbryant@novatraining.cc
rachel.johnson@regencygas.com
phillip.little@regencygas.com

Project Name: SUGS Historical Grobe 4" 1RP-1940

Project #:

Project Loc: Lea County, New Mexico

PO #:

Report Format: [X] Standard [ ] TRRP [ ] NPI

(lab use only)
ORDER #: 468804

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total #. of Containers	Preservation & # of Containers: Ice	HNO_3	HCl	H_2SO_4	NaOH	$Na_2S_2O_3$	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge GW = Groundwater S=Soil/Solid NP=Non-Potable Specify Other	Analyze For: TPH: 418.1 8015M 8015B	TPH: TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M.	Chloride E 300			RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT	
	Topsoil-3			8/16/2013	12:00		1	X								Soil	X								X			X				X	1A
	Topsoil-4			8/16/2013	12:05		1	X								Soil	X								X			X				X	2A
	SP-5			8/16/2013	13:00		1	X								Soil	X								X			X				X	1B
	SP-6			8/16/2013	13:05		1	X								Soil	X								X			X				X	2B
	SP-7			8/16/2013	13:10		1	X								Soil	X								X			X				X	2C
	SP-8			8/16/2013	13:15		1	X								Soil	X								X			X				X	2D

TCLP:
TOTAL: X

Special Instructions:

Relinquished by: Rick Pena / Camille Bryant for	Date 8/19/13	Time 11:58	Received by:	Date 8/19/13	Time 1158
Relinquished by:	Date 8/19/13	Time 15:10	Received by:	Date 8/19/13	Time 15:10
Relinquished by:	Date	Time	Received by ELOT:	Date	Time

Laboratory Comments:

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

Temperature Upon Receipt: 2.5 °C

Final 1.000

Analytical Report 468806

for

Regency Gas

Project Manager: Camille Bryant

Historical Grobe 4" 1RP-1940

22-AUG-13

Collected By: Client

12600 West I-20 East Odessa, Texas 79765

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215-13-14-TX), Arizona (AZ0765), Arkansas (08-039-0), Connecticut (PH-0102), Florida (E871002)
Illinois (002082), Indiana (C-TX-02), Iowa (392), Kansas (E-10380), Kentucky (45), Louisiana (03054)
New Hampshire (297408), New Jersey (TX007), New York (11763), Oklahoma (9218), Pennsylvania (68-03610)
Rhode Island (LAO00312), USDA (S-44102), DoD (L11-54)

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

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

22-AUG-13

Project Manager: **Camille Bryant**
Regency Gas
801 South Loop 464
Monahans, TX 79756

Reference: XENCO Report No(s): **468806**
Historical Grobe 4" 1RP-1940
Project Address: Lea County, New Mexico

Camille Bryant:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 468806. 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. 468806 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Kelsey Brooks
Project Manager

Sample Cross Reference 468806

Regency Gas, Monahans, TX

Historical Grobe 4" 1RP-1940

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
South Excavation SSW-4 @ 18'	S	08-16-13 13:30		468806-001

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Certificate of Analysis Summary 468806

Regency Gas, Monahans, TX

Project Name: Historical Grobe 4" 1RP-1940

Project Id:
Contact: Camille Bryant
Project Location: Lea County, New Mexico

Date Received in Lab: Mon Aug-19-13 03:10 pm
Report Date: 22-AUG-13
Project Manager: Kelsey Brooks

Analysis Requested							
	Lab Id:	468806-001					
	Field Id:	South Excavation SSW-4 @					
	Depth:						
	Matrix:	SOIL					
	Sampled:	Aug-16-13 13:30					
BTEX by EPA 8021B	***Extracted:***	Aug-21-13 10:00					
	Analyzed:	Aug-21-13 12:27					
	Units/RL:	mg/kg	RL				
Benzene		ND	0.00103				
Toluene		ND	0.00206				
Ethylbenzene		ND	0.00103				
m_p-Xylenes		ND	0.00206				
o-Xylene		ND	0.00103				
Total Xylenes		ND	0.00103				
Total BTEX		ND	0.00103				
Inorganic Anions by EPA 300/300.1 SUB: TX104704215	***Extracted:***	Aug-21-13 12:18					
	Analyzed:	Aug-21-13 19:24					
	Units/RL:	mg/kg	RL				
Chloride		146	2.07				
Percent Moisture	***Extracted:***						
	Analyzed:	Aug-20-13 12:55					
	Units/RL:	%	RL				
Percent Moisture		3.51	1.00				
TPH By SW8015 Mod	***Extracted:***	Aug-20-13 18:30					
	Analyzed:	Aug-21-13 06:41					
	Units/RL:	mg/kg	RL				
C6-C12 Gasoline Range Hydrocarbons		ND	15.5				
C12-C28 Diesel Range Hydrocarbons		ND	15.5				
C28-C35 Oil Range Hydrocarbons		ND	15.5				
Total TPH		ND	15.5				

Kelsey Brooks
Project Manager

Flagging Criteria

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

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

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

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

F RPD exceeded lab control limits.

J The target analyte was positively identified below the 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

Form 2 - Surrogate Recoveries

Project Name: Historical Grobe 4" 1RP-1940

Work Orders : 468806,

Project ID:

Lab Batch #: 921078 **Sample:** 468806-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 08/21/13 06:41

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	84.8	100	85	70-135	
o-Terphenyl	45.3	50.0	91	70-135	

Lab Batch #: 921117 **Sample:** 468806-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 08/21/13 12:27

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0307	0.0300	102	80-120	
4-Bromofluorobenzene	0.0275	0.0300	92	80-120	

Lab Batch #: 921078 **Sample:** 642800-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 08/21/13 01:06

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	90.5	100	91	70-135	
o-Terphenyl	49.8	50.0	100	70-135	

Lab Batch #: 921117 **Sample:** 642828-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 08/21/13 11:38

BTEX by EPA 8021B 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	0.0272	0.0300	91	80-120	

Lab Batch #: 921078 **Sample:** 642800-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 08/21/13 01:30

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	96.7	100	97	70-135	
o-Terphenyl	52.8	50.0	106	70-135	

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

Form 2 - Surrogate Recoveries

Project Name: Historical Grobe 4" 1RP-1940

Work Orders : 468806,

Project ID:

Lab Batch #: 921117 **Sample:** 642828-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 08/21/13 10:50

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0347	0.0300	116	80-120	
4-Bromofluorobenzene	0.0295	0.0300	98	80-120	

Lab Batch #: 921078 **Sample:** 642800-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 08/21/13 01:54

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	95.4	100	95	70-135	
o-Terphenyl	50.9	50.0	102	70-135	

Lab Batch #: 921117 **Sample:** 642828-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 08/21/13 11:06

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0345	0.0300	115	80-120	
4-Bromofluorobenzene	0.0301	0.0300	100	80-120	

Lab Batch #: 921078 **Sample:** 468866-001 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 08/21/13 02:42

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	92.1	100	92	70-135	
o-Terphenyl	42.1	50.0	84	70-135	

Lab Batch #: 921117 **Sample:** 468804-001 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 08/21/13 14:20

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0331	0.0300	110	80-120	
4-Bromofluorobenzene	0.0293	0.0300	98	80-120	

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

Form 2 - Surrogate Recoveries

Project Name: Historical Grobe 4" 1RP-1940

Work Orders : 468806,

Project ID:

Lab Batch #: 921078 **Sample:** 468866-001 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 08/21/13 03:06

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	90.8	100	91	70-135	
o-Terphenyl	42.3	50.0	85	70-135	

Lab Batch #: 921117 **Sample:** 468804-001 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 08/21/13 14:36

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0335	0.0300	112	80-120	
4-Bromofluorobenzene	0.0295	0.0300	98	80-120	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

Blank Spike Recovery

Project Name: Historical Grobe 4" 1RP-1940

Work Order #: 468806 **Project ID:**

Lab Batch #: 921150 **Sample:** 642811-1-BKS **Matrix:** Solid

Date Analyzed: 08/21/2013 **Date Prepared:** 08/21/2013 **Analyst:** RKO

Reporting Units: mg/kg **Batch #:** 1

BLANK /BLANK SPIKE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1 Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
Chloride	<2.00	200	191	96	80-120	

Blank Spike Recovery [D] = 100*[C]/[B]
All results are based on MDL and validated for QC purposes.

BRL - Below Reporting Limit

BS / BSD Recoveries

Project Name: Historical Grobe 4" 1RP-1940

Work Order #: 468806 **Project ID:**

Analyst: KEB **Date Prepared:** 08/21/2013 **Date Analyzed:** 08/21/2013

Lab Batch ID: 921117 **Sample:** 642828-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B 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	<0.000994	0.0994	0.0942	95	0.0996	0.0957	96	2	70-130	35	
Toluene	<0.00199	0.0994	0.0896	90	0.0996	0.0910	91	2	70-130	35	
Ethylbenzene	<0.000994	0.0994	0.0904	91	0.0996	0.0925	93	2	71-129	35	
m_p-Xylenes	<0.00199	0.199	0.180	90	0.199	0.184	92	2	70-135	35	
o-Xylene	<0.000994	0.0994	0.0912	92	0.0996	0.0935	94	2	71-133	35	

Analyst: ARM **Date Prepared:** 08/20/2013 **Date Analyzed:** 08/21/2013

Lab Batch ID: 921078 **Sample:** 642800-1-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	<15.0	1000	922	92	1000	912	91	1	70-135	35	
C12-C28 Diesel Range Hydrocarbons	<15.0	1000	937	94	1000	916	92	2	70-135	35	

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

Form 3 - MS / MSD Recoveries

Project Name: Historical Grobe 4" 1RP-1940

Work Order # : 468806 **Project ID:**

Lab Batch ID: 921117 **QC- Sample ID:** 468804-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 08/21/2013 **Date Prepared:** 08/21/2013 **Analyst:** KEB

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00103	0.103	0.0906	88	0.102	0.0888	87	2	70-130	35	
Toluene	<0.00205	0.103	0.0861	84	0.102	0.0846	83	2	70-130	35	
Ethylbenzene	<0.00103	0.103	0.0861	84	0.102	0.0848	83	2	71-129	35	
m_p-Xylenes	<0.00205	0.205	0.172	84	0.204	0.169	83	2	70-135	35	
o-Xylene	<0.00103	0.103	0.0878	85	0.102	0.0865	85	1	71-133	35	

Lab Batch ID: 921150 **QC- Sample ID:** 468804-002 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 08/21/2013 **Date Prepared:** 08/21/2013 **Analyst:** RKO

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	37.1	204	224	92	204	227	93	1	80-120	20	

Lab Batch ID: 921078 **QC- Sample ID:** 468866-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 08/21/2013 **Date Prepared:** 08/20/2013 **Analyst:** ARM

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C12 Gasoline Range Hydrocarbons	<15.3	1020	907	89	1020	903	89	0	70-135	35	
C12-C28 Diesel Range Hydrocarbons	141	1020	983	83	1020	1080	92	9	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 Applicable
N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.

Sample Duplicate Recovery

Project Name: Historical Grobe 4" 1RP-1940

Work Order #: 468806

Lab Batch #: 921085 **Project ID:**

Date Analyzed: 08/20/2013 12:55 **Date Prepared:** 08/20/2013 **Analyst:** WRU

QC- Sample ID: 468808-001 D **Batch #:** 1 **Matrix:** Soil

Reporting Units: %

Percent Moisture Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY				
	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Percent Moisture	3.35	3.39	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

FAXED TO DON GREEN
11:30 AM 8 28 08.
575 395 9949

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

State of New Mexico
Energy Minerals and Natural Resources

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

Form C-141
Revised October 10, 2003

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

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company	Southern Union Gas Services, Ltd.	Contact	Tony Savoie
Address	P.O. Box 1226 Jal, N.M. 88252	Telephone No.	575-395-2116
Facility Name	Lea County Field Dept.	Facility Type	Natural Gas Gathering

Surface Owner: Elena Bell Grobe	Mineral Owner: Fee	Lease No. API # 30-025-11087

WIR 90

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
A	8	24S	37E					Lea

Latitude N32 14.141 Longitude W103 10.665

NATURE OF RELEASE

Type of Release : Natural Gas	Volume of Release: 10 bbls Crude Oil and 50mcf natural gas	Volume Recovered None
Source of Release : 4" Natural Gas Pipeline	Date and Hour of Occurrence Unknown	Date and Hour of Discovery 8/26/08 Time: 9:10 a.m.
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Buddy Hill NMOCD	
By Whom?	Date and Hour: 8/26/08 9:12 a.m.	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Water	

300 BBLS RECOVD

If a Watercourse was Impacted, Describe Fully.*

DIST I REQ'D INFO ON ALL LEAKS →

PIPELINE LEAK INFO (C-141)
Line size, Normal operating PSI, Daily thruput, H2S ppm, Line depth, Gravity (if oil), field gathering line or transmission, areal dimensions of liquid spill, year of installation

Describe Cause of Problem and Remedial Action Taken.*
A 4" Natural gas pipeline leaked releasing natural gas and crude oil. The line was blocked in and blown down. Permanent repairs will be made by replacing approximately 500 ft. of 4" steel line with 4" Poly pipe.

Describe Area Affected and Cleanup Action Taken. Pasture land. An area measuring approximately 2340 sq. ft. was affected by the crude oil that ponded on the pipeline right of way and was soaked up with dry soil on site. An area measuring approximately 21,000 sq. ft. was affected by the crude oil that misted to the north west carried by the wind. All of the affected release area will be remediated in accordance to the NMOCD guidelines for leaks and spills.

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

Signature: Tony Savoie	OIL CONSERVATION DIVISION
Printed Name: John A. Savoie	Approved by District Supervisor: ENVIRONMENTAL ENGINEER
Title: Waste Management and Remediation Specialist	Approval Date: 8-28-08 Expiration Date: 9-28-08
E-mail Address: tony.savoie@sug.com	Conditions of Approval: SUBMIT FINAL C-141 BY 1RP# 1940 Attached ☐
Date: 8/27/08 Phone: 575-395-2116	

* Attach Additional Sheets If Necessary

INCLUDE ALL SAMPLING & BILLS OF LADING FOR HAULED MATERIAL

RECEIVED
AUG 28 2008
HOBBS OCD