

AE Order Number Banner

Report Description

This report shows an AE Order Number in Barcode format for purposes of scanning. The Barcode format is Code 39.



App Number: pGRL0905637054

1RP - 2086

SOUTHERN UNION GAS COMPANY

7/26/2016

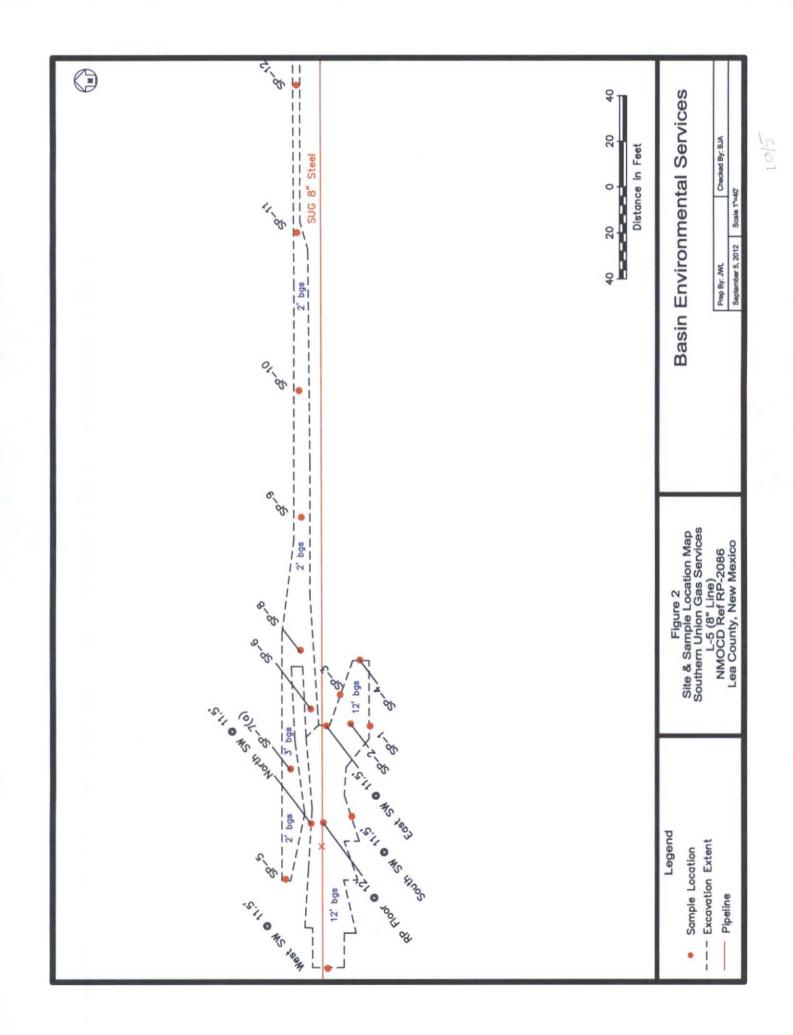


TABLE 1

CONCENTRATIONS OF BENZENE, BTEX, TPH & CHLORIDE IN SOIL

SOUTHERN UNION GAS SERVICES L-5 (8" LINE) LEA COUNTY, NEW MEXICO NMOCD REF# 1RP-2334

| | | | | | METHOD: EF | METHOD: EPA SW 846-8021B, 5030 | 21B, 5030 | | MET | METHOD: 8015M | SM | TOTAL | SM 4500-CL B |
|--|-----------------|-----------------|---------------|--------------|-----------------------|--------------------------------|------------------------|-------------------|---------------------------------|----------------|----------------|---------------------------------|---|
| CAMPLE LOCATION | SAMPLE | SAMPLE | SOIL | DENTENE | - COLUMN | ETHYL- | TOTAL | TOTAL | GRO | DRO | ORO | TPH | |
| SAMPLE LOCATION | (BGS) | DATE | STATUS | (ma/ka) | (ma/ka) | BENZENE | XYLENES | BTEX | C ₆ -C ₁₂ | C12-C28 | C28-C35 | C ₆ -C ₃₅ | (ma/Ka) |
| | 10001 | | | Runnin | RuRuit | (mg/Kg) | (mg/Kg) | (mg/Kg) | (mg/Kg) | (mg/Kg) | (mg/Kg) | (mg/Kg) | (Ru/Rui) |
| West SW @ 11.5' | 11.5' | 11/19/2009 | In-Situ | <0.050 | <0.050 | <0.050 | <0.300 | <0.300 | <10.0 | <10.0 | <10.0 | <10.0 | 64 |
| South SW @ 11.5' | 11.5' | 11/19/2009 | In-Situ | <0.050 | <0.050 | <0.050 | <0.300 | <0.300 | <10.0 | <10.0 | <10.0 | <10.0 | 96 |
| North SW @ 11.5' | 11.5' | 11/19/2009 | In-Situ | <0.050 | <0.050 | <0.050 | <0.300 | <0.300 | <10.0 | 28.4 | <10.0 | 28.4 | <16 |
| East SW @ 11.5' | 11.5' | 11/19/2009 | In-Situ | <0.050 | <0.050 | <0.050 | <0.300 | <0.300 | <10.0 | 93.2 | <10.0 | 93.2 | <16 |
| RP Floor @ 12' | 12' | 11/19/2009 | In-Situ | <0.050 | <0.050 | <0.050 | <0.300 | <0.300 | <10.0 | 25.2 | <10.0 | 25.2 | 112 |
| SP-1 | 11.5' | 11/19/2009 | In-Situ | <0.050 | <0.050 | <0.050 | <0.300 | <0.300 | <10.0 | 24.2 | <10.0 | 24.2 | <16 |
| SP-2 | 12' | 11/19/2009 | In-Situ | <0.050 | <0.050 | <0.050 | <0.300 | <0.300 | <10.0 | 36.5 | <10.0 | 36.5 | <16 |
| SP-3 | 2' | 11/19/2009 | In-Situ | <0.050 | <0.050 | <0.050 | <0.300 | <0.300 | <10.0 | 37.4 | <10.0 | 37.4 | <16 |
| SP-4 | 11.5' | 11/19/2009 | In-Situ | <0.050 | <0.050 | <0.050 | <0.300 | <0.300 | <10.0 | 32.2 | <10.0 | 32.2 | <16 |
| SP-5 | 2' | 11/19/2009 | In-Situ | <0.050 | <0.050 | <0.050 | <0.300 | <0.300 | <10.0 | 15.8 | <10.0 | 15.8 | <16 |
| SP-6 | 2' | 11/19/2009 | In-Situ | <0.050 | <0.050 | <0.050 | <0.300 | <0.300 | <10.0 | 16.2 | <10.0 | 16.2 | <16 |
| SP-7 | 2' | 11/19/2009 | Excavated | <0.050 | <0.050 | 0.090 | 0.378 | 0.468 | <10.0 | 267.0 | <10.0 | 267.0 | 64 |
| SP-8 | 2' | 11/19/2009 | In-Situ | <0.050 | <0.050 | <0.050 | <0.300 | <0.300 | <10.0 | 17.2 | <10.0 | 17.2 | <16 |
| SP-9 | 2' | 11/19/2009 | In-Situ | <0.050 | <0.050 | <0.050 | <0.300 | <0.300 | <10.0 | 33.7 | <10.0 | 33.7 | <16 |
| SP-10 | 2' | 11/19/2009 | In-Situ | <0.050 | <0.050 | <0.050 | <0.300 | <0.300 | <10.0 | 30.7 | <10.0 | 30.7 | <16 |
| SP-11 | 2' | 11/19/2009 | In-Situ | <0.050 | <0.050 | <0.050 | <0.300 | <0.300 | <10.0 | 15.2 | <10.0 | 15.2 | <16 |
| SP-12 | 2' | 11/19/2009 | In-Situ | <0.050 | <0.050 | <0.050 | <0.300 | <0.300 | <10.0 | <10.0 | <10.0 | <10.0 | <16 |
| STOCKPILE BASE LINE | N/A | 11/19/2009 | Stockpiled | <0.050 | <0.050 | 0.257 | 1.19 | 1.447 | 25.5 | 1,070 | 61.5 | 1,157 | <16 |
| | Sold Barries | Note that the | and the state | Statute Line | A DISCONTINUES OF | A Street and the second second | A STREET STREET STREET | | | AND STATISTICS | Contraction of | A STATE OF | A PARTICULAR DATA |
| SP-7A | 3' | 1/12/2010 | In-Situ | <0.050 | <0.050 | <0.050 | <0.300 | <0.300 | <10.0 | <10.0 | <10.0 | <10.0 | <16 |
| STOCKPILE EAST | N/A | 1/12/2010 | Stockpiled | <0.050 | <0.050 | <0.050 | <0.300 | <0.300 | 23.9 | 847 | 67.0 | 937.9 | <16 |
| STOCKPILE WEST | N/A | 1/12/2010 | Stockpiled | <0.050 | <0.050 | <0.050 | <0.300 | <0.300 | <10.0 | 648 | 51.6 | 699.6 | 32 |
| | | Subtraction and | 「「「「「」」」 | | Station of the second | A PARTY AND A PARTY AND A | の語言の言語 | The second second | | | | Construction of the | 三十二十二十二十二十二十二十二十二十二十二十二十二十二十二十二十二十二十二十二 |
| STOCKPILE | N/A | 9/14/2012 | Stockpiled | <0.00104 | <0.00208 | <0.00104 | <0.00208 | <0.00208 | <15.6 | 217 | 16.4 | 233 | 22.4* |
| A REAL PROPERTY OF A REAL PROPER | 「「「「「「「」」」 | E State State | THE ALTER | | A DESCRIPTION OF | A THE ADDRESS OF THE OWNER | 「「「「「「」」 | | And a lot of the | 「「「ないたい」」 | The state | 「「「「「」」 | State State State |
| STOCKPILE #2 | N/A | 9/25/2012 | Stockpiled | <0.00105 | <0.00210 | <0.00105 | <0.00210 | <0.00210 | <15.8 | 72.0 | <15.8 | 72.0 | |
| 「「日」「「「「「「「」」」」」」」」」」」」」」」」」」」」」」」」」」 | Statistical and | - Hotel - Hotel | A CONTRACTOR | 「「「「「「」」」 | の一部のでの言葉 | | | | No. N.C. Stratt | | | | の日本の一般の日本の |
| NMOCD Standard | | | | 10 | | | | 50 | | | | 100 | 250 |
| | | | | | | | | | | | | | |

- = Not analyzed.
 * Denotes Laboratory Analytical Results in accordance with EPA 300/300.1

Page 1 of 1

9/01



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

January 19, 2010

Camille Bryant Basin Environmental Consulting, LLC. P.O. Box 381 Lovington, NM 88260

Re: SUG 2009-055 (8 inch lateral L-5)

Enclosed are the results of analyses for sample number H19041, received by the laboratory on 01/12/10 at 4:50 pm.

Cardinal Laboratories is accredited through Texas NELAP for:

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

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

Cardinal Laboratories is accredited though the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2 Method EPA 524.2 Method EPA 524.2 Haloacetic Acids (HAA-5) Total Trihalomethanes (TTHM) Regulated VOCs (V2, V3)

Accreditation applies to public drinking water matrices.

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

Sincerely, Celev D/Keene

Laboratory Director

This report conforms with NELAP requirements.



ANALYTICAL RESULTS FOR BASIN ENVIRONMENTAL CONSULTING ATTN: CAMILLE BRYANT 2800 PLAINS HWY LOVINGTON, NM 88260 FAX TO: (575) 396-1429

Receiving Date: 01/12/10 Reporting Date: 01/18/10 Project Number: 2009-055 (SUG) Project Name: 8-INCH LATERAL L-5 Project Location: LEA CO., NM Sampling Date: 01/12/10 Sample Type: SOIL Sample Condition: INTACT @ 9⁰C Sample Received By: JH Analyzed By: AB/ZL

| | | GRO | DRO | DRO ext. | | | ETHYL | TOTAL |
|---------|-----------|------------------------------------|------------|------------|---------|---------|---------|---------|
| LAB NO. | SAMPLE ID | (C ₆ -C ₁₀) | (>C10-C28) | (>C28-C35) | BENZENE | TOLUENE | BENZENE | XYLENES |
| | | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) |

| ANALYSIS DATE: | 01/15/10 | 01/15/10 | 01/15/10 | 01/13/10 | 01/13/10 | 01/13/10 | 01/13/10 |
|-----------------------------|----------|----------|----------|----------|----------|----------|----------|
| H19041-1 SP-7A | <10.0 | <10.0 | <10.0 | < 0.050 | < 0.050 | < 0.050 | < 0.300 |
| H19041-2 STOCKPILE EAST | 23.9 | 847 | 67.0 | < 0.050 | < 0.050 | <0.050 | 0.501 |
| H19041-3 STOCKPILE WEST | <10.0 | 648 | 51.6 | <0.050 | <0.050 | <0.050 | 0.339 |
| | | | | | | | |
| Quality Control | 456 | 458 | | 0.051 | 0.049 | 0.051 | 0.136 |
| True Value QC | 500 | 500 | - | 0.050 | 0.050 | 0.050 | 0.150 |
| % Recovery | 91.2 | 91.6 | - | 102 | 98.0 | 102 | 90.7 |
| Relative Percent Difference | 3.8 | 0.4 | | 2.0 | <1.0 | 2.0 | 1.9 |

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

TEXAS NELAP ACCREDITATION T104704398-08-TX FOR BENZENE, TOLUENE, ETHYL BENZENE, AND TOTAL XYLENES. Reported on wet weight. Not accredited for GRO/DRO/DRO ext.

Lab Directo

H19041 TPHextBTEX BASIN

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above-stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



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

ANALYTICAL RESULTS FOR BASIN ENVIRONMENTAL CONSULTING, LLC ATTN: CAMILLE BRYANT P.O. BOX 381 LOVINGTON, NM 88260 FAX TO: (575) 396-1429

Receiving Date: 01/12/10 Reporting Date: 01/14/10 Project Number: 2009-055 (SUG) Project Name: 8 INCH LATERAL L-5 Project Location: LEA CO., NM

Analysis Date: 01/13/10 Sampling Date: 01/12/10 Sample Type: SOIL Sample Condition: INTACT @ 9°C Sample Received By: JH Analyzed By: HM

CI

| LAB NO. | SAMPLE ID | (mg/kg) |
|-------------|---|---------|
| H19041-1 | SP-7A | < 16 |
| H19041-2 | STOCKPILE EAST | < 16 |
| H19041-3 | STOCKPILE WEST | 32 |
| | | |
| Quality Con | strol | 500 |
| True Value | second and the second | 500 |
| % Recover | y | 100 |
| Relative Pe | ercent Difference | < 0.1 |

4500-CI'B **METHOD: Standard Methods** Note: Analyses performed on 1:4 w:v aqueous extracts. Not accredited for Chloride.

eme Chemist

Date

H19041 Basin Environmental

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above-stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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#26

Analytical Report 449054

for

Southern Union Gas Services- Monahans

Project Manager: Ben Arguijo

L-5 (8" line)

(RP-2334)

18-SEP-12

Collected By: Client



Celebrating 20 Years of commitment to excellence in Environmental Testing Services



12600 West I-20 East Odessa, Texas 79765

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

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

> Xenco-Tampa Mobile (EPA Lab code: FL01212): Florida (E84900) Xenco-Lakeland: Florida (E84098) Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-TX) Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295-TX) Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757) Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757) Xenco Tucson (EPA Lab code: AZ00989): Arizona (AZ0758)





18-SEP-12

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

Reference: XENCO Report No: 449054 L-5 (8" line) Project Address: Lea County, NM

Ben Arguijo:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number 449054. 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. 449054 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Nicholas Straccione Project Manager

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







Southern Union Gas Services- Monahans, Monahans, TX

| | | L-5 (8" line) | | |
|-----------|--------|----------------|--------------|---------------|
| Sample Id | Matrix | Date Collected | Sample Depth | Lab Sample Id |
| Stockpile | S | 09-14-12 13:00 | | 449054-001 |





Client Name: Southern Union Gas Services- Monahans Project Name: L-5 (8" line)



Project ID: (RP-2334) Work Order Number: 449054 Report Date: 18-SEP-12 Date Received: 09/14/2012

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments: Batch: LBA-896685 TPH By SW8015 Mod SW8015MOD_NM

Batch 896685, C12-C28 Diesel Range Hydrocarbons recovered below QC limits in the Matrix Spike Duplicate. Samples affected are: 449054-001. The Laboratory Control Sample for C12-C28 Diesel Range Hydrocarbons is within laboratory Control Limits

Batch: LBA-896763 BTEX by EPA 8021B SW8021BM

Batch 896763, Ethylbenzene, m,p-Xylenes, o-Xylene recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate.

Samples affected are: 449054-001.

The Laboratory Control Sample for m,p-Xylenes , Ethylbenzene, o-Xylene is within laboratory Control Limits



Contact: Ben Arguijo Project Id: (RP-2334)

Southern Union Gas Services- Monahans, Monahans, TX Certificate of Analysis Summary 449054 Project Name: L-5 (8" line)



| Date Received in Lab: | Fri Sep-14-12 03:30 pm |
|-----------------------|------------------------|
| Report Date: | 18-SEP-12 |
| | |

| | | | | Project Manager: | r: Nicholas Straccione | |
|------------------------------------|-------------------------|----------------------------|-----------|------------------|------------------------|--|
| | Lab Id: | 449054-001 | | | | |
| Analysis Romostad | Field Id: | Stockpile | | | | |
| noiconhour ciclimut | Depth: | | | | | |
| | Matrix: | SOIL | | | | |
| | Sampled: | Sep-14-12 13:00 | 00 | | | |
| BTEX by EPA 8021B | Extracted: | Sep-18-12 12:20 | .20 | | | |
| | Analyzed: Unite/R1 - | Sep-18-12 15:41 mo/ko R | :41 RI | | | |
| Benzene | | - | 0.00104 | | | |
| Toluene | | | 0.00208 | | | |
| Ethylbenzene | | QN | 0.00104 | | | |
| m,p-Xylenes | | QN | 0.00208 | | | |
| o-Xylene | | QN | 0.00104 | | | |
| Total Xylenes | | QN | 0.00104 | | | |
| Total BTEX | | QN | 0.00104 | | | |
| Inorganic Anions by EPA 300/300.1 | Extracted: | Sep-15-12 13:30 | :30 | | | |
| SUB: E871002 | Analyzed: | Sep-15-12 19:18 | :18 | | | |
| | Units/RL: | mg/kg | RL | | | |
| Chloride | | 22.4 | 1.09 | | | |
| Percent Moisture | Extracted: | | | | | |
| | Analyzed: | Sep-17-12 12:45 | :45 | | | |
| | Units/RL: | % | RL | | | |
| Percent Moisture | | 3.93 | 1.00 | | | |
| TPH By SW8015 Mod | Extracted: | Sep-17-12 09:30 | :30 | | | |
| | Analyzed: | Sep-17-12 19:23 | :23 | | | |
| | Units/RL: | mg/kg | RL | | | |
| C6-C12 Gasoline Range Hydrocarbons | | QN | 15.6 | | | |
| C12-C28 Diesel Range Hydrocarbons | | 217 | 15.6 | | | |
| C28-C35 Oil Range Hydrocarbons | | 16.4 | 15.6 | | | |
| Total TPH | | 233 | 15.6 | | | |

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

Houston - Dallas - San Antonio - Atlanta - Tampa - Boca Raton - Latin America - Odessa - Corpus Christi

Nicholas Straccione Project Manager

Nul Ch

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Final 1.000



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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 (770) 449-8800
 (770) 449-5477

 (602) 437-0330
 (210) 509-3335

Final 1.000



Project Name: L-5 (8" line)

| ork Orders : 449054 | sample: 449054-001 / SMP | Bate | and the second second | D: (RP-2334) | | |
|----------------------|-------------------------------|------------------------|-----------------------|-----------------------|-------------------------|------|
| Units: mg/kg | Date Analyzed: 09/17/12 19:23 | | RROGATE R | | STUDY | |
| | By SW8015 Mod Analytes | Amount Found [A] | True Amount [B] | Recovery %R [D] | Control Limits %R | Flag |
| 1-Chlorooctane | Analytes | 95.8 | 99.6 | 96 | 70-135 | |
| o-Terphenyl | | 48.5 | 49.8 | 90 | 70-135 | |
| Lab Batch #: 896763 | Sample: 449054-001 / SMP | Bate | h: 1 Matrix | : Soil | | |
| Units: mg/kg | Date Analyzed: 09/18/12 15:41 | | RROGATE R | | STUDY | |
| | X by EPA 8021B Analytes | Amount Found [A] | True Amount [B] | Recovery %R [D] | Control Limits %R | Flag |
| 1,4-Difluorobenzene | Analytes | 0.0259 | 0.0300 | 86 | 80-120 | |
| 4-Bromofluorobenzene | | 0.0239 | 0.0300 | 83 | 80-120 | |
| Lab Batch #: 896685 | Sample: 627274-1-BLK / BL | K Bate | h: 1 Matrix | ·· Solid | | |
| Units: mg/kg | Date Analyzed: 09/17/12 11:58 | | RROGATE R | | STUDY | |
| ТРН | By SW8015 Mod Analytes | Amount Found [A] | True Amount [B] | Recovery %R [D] | Control Limits %R | Flag |
| 1-Chlorooctane | | 94.2 | 99.6 | 95 | 70-135 | |
| o-Terphenyl | | 47.0 | 49.8 | 94 | 70-135 | |
| Lab Batch #: 896763 | Sample: 627327-1-BLK / BL | K Batc | h: 1 Matrix | :Solid | | |
| Units: mg/kg | Date Analyzed: 09/18/12 14:12 | SU | RROGATE R | ECOVERY S | STUDY | |
| BTE | X by EPA 8021B Analytes | Amount Found [A] | True Amount [B] | Recovery %R [D] | Control Limits %R | Flag |
| 1,4-Difluorobenzene | | 0.0257 | 0.0300 | 86 | 80-120 | |
| 4-Bromofluorobenzene | | 0.0261 | 0.0300 | 87 | 80-120 | |
| Lab Batch #: 896685 | Sample: 627274-1-BKS / BK | | | | | |
| Units: mg/kg | Date Analyzed: 09/17/12 11:00 | SU | RROGATE R | ECOVERY S | STUDY | |
| ТРН | By SW8015 Mod Analytes | Amount Found [A] | True Amount [B] | Recovery %R [D] | Control Limits %R | Flag |
| 1-Chlorooctane | | 101 | 100 | 101 | 70-135 | |
| o-Terphenyl | | 53.9 | 50.1 | 108 | 70-135 | - |

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / BAll results are based on MDL and validated for QC purposes.



Project Name: L-5 (8" line)

| Lab Batch #: 896763 | Sample: 627327-1-BKS / BI | CS Bate | h: 1 Matrix | c: Solid | | |
|----------------------|-------------------------------|------------------------|-----------------------|-----------------------|-------------------------|-------|
| Units: mg/kg | Date Analyzed: 09/18/12 13:36 | SU | RROGATE R | ECOVERYS | STUDY | |
| BTE | X by EPA 8021B | Amount Found [A] | True Amount [B] | Recovery %R | Control Limits %R | Flags |
| | Analytes | | | [D] | | |
| 1,4-Difluorobenzene | | 0.0312 | 0.0300 | 104 | 80-120 | |
| 4-Bromofluorobenzene | | 0.0322 | 0.0300 | 107 | 80-120 | _ |
| Lab Batch #: 896685 | Sample: 627274-1-BSD / BS | | | :Solid | | |
| Units: mg/kg | Date Analyzed: 09/17/12 11:29 | SU | RROGATE R | ECOVERY S | STUDY | |
| TPH | By SW8015 Mod Analytes | Amount Found [A] | True Amount [B] | Recovery %R [D] | Control Limits %R | Flag |
| 1-Chlorooctane | | 102 | 100 | 102 | 70-135 | |
| o-Terphenyl | | 52.6 | 50.1 | 105 | 70-135 | |
| Lab Batch #: 896763 | Sample: 627327-1-BSD / BS | D Bate | h: 1 Matrix | : Solid | | |
| Units: mg/kg | Date Analyzed: 09/18/12 13:51 | 10.5.010 | RROGATE R | | STUDY | |
| | X by EPA 8021B Analytes | Amount Found [A] | True Amount [B] | Recovery %R [D] | Control Limits %R | Flag |
| 1.4-Difluorobenzene | | 0.0276 | 0.0300 | 92 | 80-120 | |
| 4-Bromofluorobenzene | | 0.0307 | 0.0300 | 102 | 80-120 | |
| Lab Batch #: 896685 | Sample: 448788-015 S / MS | Bate | h: 1 Matrix | e: Soil | | |
| Units: mg/kg | Date Analyzed: 09/17/12 12:28 | | RROGATE R | | STUDY | |
| | By SW8015 Mod Analytes | Amount Found [A] | True Amount [B] | Recovery %R [D] | Control Limits %R | Flag |
| 1-Chlorooctane | | 90.7 | 100 | 91 | 70-135 | |
| o-Terphenyl | | 49.9 | 50.2 | 99 | 70-135 | |
| Lab Batch #: 896763 | Sample: 449054-001 S / MS | Bate | h: 1 Matrix | : Soil | | |
| Units: mg/kg | Date Analyzed: 09/18/12 15:26 | SU | RROGATE R | ECOVERY S | STUDY | |
| BTE | X by EPA 8021B Analytes | Amount Found [A] | True Amount [B] | Recovery %R [D] | Control Limits %R | Flag |
| 1,4-Difluorobenzene | | 0.0302 | 0.0300 | 101 | 80-120 | |
| | | | | | 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 / BAll results are based on MDL and validated for QC purposes.



Project Name: L-5 (8" line)

| ork Orders : 449054, | | Project I | D: (RP-2334) | | |
|---|------------------------|-----------------------|-----------------------|-------------------------|-------|
| Lab Batch #: 896685 Sample: 448788-015 SD / N | ASD Bate | h: 1 Matrix | : Soil | | |
| Units: mg/kg Date Analyzed: 09/17/12 12:57 | SU | RROGATE R | ECOVERY S | STUDY | |
| TPH By SW8015 Mod Analytes | Amount Found [A] | True Amount [B] | Recovery %R [D] | Control Limits %R | Flag |
| 1-Chlorooctane | 89.2 | 99.9 | 89 | 70-135 | |
| o-Terphenyl | 49.3 | 50.0 | 99 | 70-135 | |
| Lab Batch #: 896763 Sample: 449054-001 SD / N | ASD Bate | h: 1 Matrix | r: Soil | | |
| Units: mg/kg Date Analyzed: 09/18/12 15:55 | SU | RROGATE R | ECOVERY S | STUDY | |
| BTEX by EPA 8021B Analytes | 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 | 0.0342 | 0.0300 | 114 | 80-120 | |

* Surrogate outside of Laboratory QC limits
 ** Surrogates outside limits; data and surrogates confirmed by reanalysis
 *** Poor recoveries due to dilution
 Surrogate Recovery [D] = 100 * A / B

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



BS / BSD Recoveries



Project Name: L-5 (8" line)

Work Order #: 449054 Analyst: KEB Lab Batch ID: 896763 Sample: 627327-1-BKS

Date Prepared: 09/18/2012

Batch #: 1

Project ID: (RP-2334) Date Analyzed: 09/18/2012 Matrix: Solid

| Units: mg/kg | | BLANH | BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY | PIKE / B | LANK S | PIKE DUPI | ICATE] | RECOVE | ERY STUD | X | |
|---|-------------------------------|-----------------------|---|-----------------------------|-----------------------|---|-------------------------------|---------------|---------------------------|---------------------------|------|
| 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 | 0.0940 | 94 | 0.100 | 0.0940 | 94 | 0 | 70-130 | 35 | |
| Toluene | <0.00200 | 0.100 | 0.0935 | 94 | 0.100 | 0.0928 | 93 | 1 | 70-130 | 35 | |
| Ethylbenzene | <0.00100 | 0.100 | 0.0907 | 91 | 0.100 | 0.0904 | 60 | 0 | 71-129 | 35 | |
| m,p-Xylenes | <0.00200 | 0.200 | 0.196 | 98 | 0.200 | 0.199 | 100 | 2 | 70-135 | 35 | |
| o-Xylene | <0.00100 | 0.100 | 0.0940 | 94 | 0.100 | 0.0969 | 26 | 3 | 71-133 | 35 | |
| Analyst: TTE | Da | te Prepare | Date Prepared: 09/15/2012 | 2 | | | Date A | nalyzed: (| Date Analyzed: 09/15/2012 | | |
| Lab Batch ID: 896628 Sample: 627250-1-BKS | 1-BKS | Batch #: | #: 1 | | | | | Matrix: Solid | Solid | | |

| 1180 DAUNT 11 020070 | CVG-1-007/70 milling | | Datum T. | 1 | | | | | ALLON AVELONDAL | | | | |
|-----------------------------------|----------------------|-------------------------------|----------------|--------------------------|----------------|----------------|---|------------------|-----------------|-------------------|-------------------|------|--|
| Units: mg/kg | | | BLAN | K /BLANK S | PIKE / E | LANK S | 3LANK /BLANK SPIKE / BLANK SPIKE DUPLICATE | ICATE 1 | RECOVERY | RY STUDY | X | | |
| Inorganic Anions by EPA 300/300.1 | 00/300.1 | Blank Sample Result IAI | Spike Added | Blank Spike Result | Blank Spike | Spike Added | Blank Spike Dunlicate | Bik. Spk Dup. | RPD % | Control Limits | Control Limits | Flag | |
| Analytes | | <u>ē</u> | [B] | [C] | [q] | [E] | Result [F] | [6] | ę | VID/ | T TVIA/ | | |
| Chloride | | <779.0> | <i>T.</i> 79 | 6.79 | 100 | 102 | 105 | 103 | 7 | 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 Page 10 of 16

Final 1.000



BS / BSD Recoveries



Project Name: L-5 (8" line)

| BLANK /BLANK SPI | | Units: mg/kg |
|---------------------------|----------------------|----------------------|
| Batch #: 1 | Sample: 627274-1-BKS | Lab Batch ID: 896685 |
| Date Prepared: 09/17/2012 | | Analyst: KEB |
| | | Work Order #: 449054 |

Project ID: (RP-2334) Date Analyzed: 09/17/2012 Matrix: Solid

| Units: mg/kg | | BLAN | BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY | PIKE / B | LANK S | PIKE DUPL | ICATE 1 | RECOVE | RY STUD | Y | |
|------------------------------------|-------------------------------|----------------|---|----------------------|----------------|-----------------------------|------------------------|----------|-------------------------|---------------------------|------|
| TPH By SW8015 Mod | Blank Sample Result [A] | Spike Added | Blank Spike Result | Blank Spike %R | Spike Added | Blank Spike Duplicate | Blk. Spk Dup. %R | RPD % | Control Limits %R | Control Limits %RPD | Flag |
| Analytes | | [B] | [C] | [ŋ] | [E] | Result [F] | [G] | | | | |
| C6-C12 Gasoline Range Hydrocarbons | <15.0 | 1000 | 945 | 95 | 1000 | 934 | 93 | 1 | 70-135 | 35 | |
| C12-C28 Diesel Range Hydrocarbons | <15.0 | 1000 | 925 | 93 | 1000 | 914 | 91 | 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

Date Prepared: 09/15/2012

Project Name: L-5 (8" line)



Work Order #: 449054 Lab Batch #: 896628 Date Analyzed: 09/15/2012 QC- Sample ID: 449054-001 S Reporting Units: mg/kg

Project ID: (RP-2334)

Analyst: TTE

| QC- Sample ID: 449054-001 S | Batch #: 1 | | M | Matrix: S | oil | |
|---|-----------------------------------|-----------------------|--------------------------------|-----------|-------------------------|------|
| Reporting Units: mg/kg | MATE | RIX / MA | TRIX SPIKE | RECO | VERY STU | DY |
| Inorganic Anions by EPA 300 Analytes | Parent Sample Result [A] | Spike Added [B] | Spiked Sample Result [C] | %R [D] | Control Limits %R | Flag |
| Chloride | 22.4 | 109 | 129 | 98 | 80-120 | |

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

BRL - Below Reporting Limit

XENCO Laboratories

Form 3 - MS / MSD Recoveries



Work Order #: 449054

Date Analyzed: 09/18/2012 Lab Batch ID: 896 63 Reporting Units: mg/kg

Project ID: (RP-2334)

Batch #: Analyst: QC-Sample ID: 449054-001 S Date Prepared: 09/18/2012

Matrix: Soil I EB 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 |
|-------------------------------|-----------------------------------|-----------------------|--------------------------------|-------------------------------|-----------------------|--|-----------------------------|----------|-------------------------|---------------------------|------|
| Benlène | D.00104 | 0.104 | 0.0918 | 88 | 0.104 | 0.09[2 | 93 | 9 | 0-130 | 35 | |
| Toluene | 0.00208 | 0.104 | 0.0826 | 0 | 0.104 | 0.0826 | 6 | 0 | 0-130 | 35 | |
| Ethylben Ene | 0.00104 | 0.104 | 0.0614 | 59 | 0.104 | 0.061 | 59 | 0 | □-129 | 35 | |
| m [p- ⊡y lenes | 0.00208 | 0.208 | 0.124 | 60 | 0.208 | 0.124 | 60 | 0 | 0-135 | 35 | |
| o-⊡ylene | 0.00104 | 0.104 | 0.0649 | 62 | 0.104 | 0.0645 | 62 | 1 | □-133 | 35 | a |
| Lab Batch ID: 896685 Q | QC- Sample ID: 448_88-015 S | 448 88- | -015 S | Ba | Batch #: | 1 Matrix: | : Soil | | | | |

| Date Analyzed: 09/1 [72012 | Date Prepared: 09/1 [2012 | 09/1 []/20 | 12 | Ans | Analyst: | DEB | | | | | |
|-----------------------------------|---------------------------|------------|---------------|----------|----------|--|---------|---------------|---------|---------|------|
| Reporting Units: mg/kg | | M | ATRIX SPIKI | E / MATI | AIX SPI | MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY | TE RECO | VERY S | TUDY | | |
| TDU D., CW9016 Mod | Parent | | Spiked Sample | Spiked | | Duplicate | Spiked | | Control | Control | |
| notal crooks c kg H J I | Sample | Spike | Result | Sample | Spike | Spiked Sample | Dup. | RPD | Limits | Limits | Flag |
| | Result | Added | | %R | Added | Result [F] | %R | % | %R | %RPD | P. |
| Analytes | [Y] | [B] | | [ŋ] | [E] | | [6] | | | | |
| C6-C12 | 015.2 | 1010 | 924 | 16 | 1010 | 842 | 83 | 6 | 0-135 | 35 | |
| C12-C28 Diesel Range Dydrocarbons | 520 | 1010 | 12:0 | đ | 1010 | 1180 | 65 | | 0-135 | 35 | |

Matrix Spike Percent Recovery $[D] = 100^{\circ}(C-A)/B$ Relative Percent Difference RPD = $200^{\circ}(C-D)(C+\Box)$

Matrix Spike Duplicate Percent Recovery []] = 100*(DA)E

□D = □ot Detected □ = Present Below Reporting Limit □ = Present in Blank □ R = □ot Re □ ested □ = □interference □ A = □ot Applicable □ = See □ arrative □EQL = Estimated Quantitation Limit

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Sample Duplicate Recovery



Project Name: L-5 (8" line)

Work Order #: 449054

| Lab Batch #: 896699 | | | Project I | D: (RP-233 | 4) |
|--------------------------------|--------------------------------|-------------------------------|-------------|---------------------------|-------|
| Date Analyzed: 09/1 2012 12 45 | Date Prepared: 09/1 2012 | Ana | lyst: 🗆 R 🗆 | | |
| QC- Sample ID: 449054-001 D | Batch #: 1 | Mat | rix: Soil | | |
| Reporting Units: | SAMPLE / | SAMPLE | DUPLIC | ATE REC | OVERY |
| Percent Moisture | Parent Sample Result [A] | Sample Duplicate Result | RPD | Control Limits %RPD | Flag |
| Analyte | | [B] | | | |
| Percent Moisture | 3.93 | 4.02 | 2 | 15 | |

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

| Xenco Labor Project Manager: Company Name | -aboratories Manager: Joel Lowry IV Name Basin Environmental Service Technologies, | fice Tec | chnolo | gies, LLC | | | 20 | CHAIN OF 12600 West I-20 East Odessa, Texas 79765 | Wes a, Te | CHA xas | D Eat | SS SS | Sna | CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST t1-20 East Phone: 432-563-180 xas 79765 Fax: 432-563-171; project Name: L-5 (8"line) Project #: (RP-2334) | Phone Phone Phone Phone Phone Phone Phone Phone Phone Project Name: <u>L-5 (8"line</u> Project #: <u>(RP-2334)</u> | ct N | CORD AND ANALY Phor Fax set Name: <u>L-5 (8"line</u> Project #: <u>(RP-2334)</u> | R L N | AN/A | AL YS hone Fax: 11ne) | SIS 8:4: | REQ 32-56 | ALYSIS REQUEST Phone: 432-563-1713 Fax: 432-563-1713 ("line) | | | | |
|---|--|-----------------|--------------|------------------|---------------|----------------|------------------------|---|---------------------------------|--------------------|----------|-------|------------------|--|--|-------------------------|--|---------------------------------|------------------------------|---------------------------------|--|--|---|----|--------------------|---------------------------|--------------------|
| Company Address: P.O. Box 301 | P.O. Box 301 | | | | | | | | | | | | | | Pro | ject | Project Loc: Lea County, NM | Ē | Col | unty, | NN | | | | | | |
| City/State/Zip: | Lovington, NM 88260 | 3 | | | L'AND | 1 | | | | | | | | | - | | #Od | | | | | | | | | | |
| Telephone No: Sampler Signature: | 5 | | | | e-mail: | 9 4 | 1215) | (575) 396-1429 pm@basinerv.com; Rose.Stade@SUG.com | 429 | Rose | Slade | ns@ | .0 0.0 | | Report Format: | Eo | ť | < | Standard | dard | - | | LI TRRP | | | NPDE | S |
| ab use only / //// Ar | | 2 | | | | 1 | | | | | 1 | | | | | | 111 | F | TCLP: | And A | Analyze For | For | IL | | | | |
| OPPER # 140 | 7 | | | | | | L | Pres | Preservation & # of Contrainens | | 000 | ala | | Matrix | + | | 1 | ₽ | ł | - | + | < | _ | | _ | 67.8 | _ |
| | FIELD CODE | daginning Depth | Ending Depth | beiqmeS ete0 | belqms2 emlT | Field Filtered | Total #. of Containers | | HCI | *OS ² H | S HOPN | None | Other (Specify) | GW=Drinking Water SL=Sludge | I man formate manual times and | TPH: 418.1 (015/1) 8015 | Cations (Ca, Mg, Va, K) | Anions (CI, SO4, Alkalinity) | SAR / ESP / CEC | Metals: As Ag Ba Cd Cr Pb Hg Se | Volatijes Semivolatijes | GTEX 805 1816030 or BTEX 8260 | CHLORIDES E 300.0 | | | AL (Pro-Solinedule) 24, 4 | YAG & TAT brabnat2 |
| Stockpile | | | | 21/ 4/12 | 1300 | | - | × | | - | | _ | | 5 | - | × | | | | | | X | × | _ | | | X |
| | | | | | | | + | - | | -+ | -+ | | | | | - | - | | | | -+ | | | - | | - | |
| | | | | | | | + | | | + | + | - | | | + | - | | | |) | + | | | | | + | - |
| | | | | | | | + | - | | - | - | - | | | + | +- | - | | | | - | - | | | | + | |
| | | | | | | | | | | - | \vdash | | | | | | | | | | \vdash | | | | | | |
| | | | | | | | + | - | | - | + | + | | | + | + | - | | 1 | + | -+ | - | | - | | + | _ |
| | | T | | | | | - | - | | - | +- | - | | | + | | - | | | - | - | - | - | - | | - | |
| | | | | | | | - | - | | - | - | - | | | + | + | - | | 1 | + | - | - | | - | | - | |
| Special Instructions: | | | | - | | 1 | 1 | | 1 | 1 | 1 | | | | 1 | 4 | No. Con La | mple Cos F | Con | Com | Laboratory Comments: Sample Containers Intac VOCs Free of Headspac | Laboratory Comments: Sample Containers Intact? VOCs Free of Headspace? | | | (A)× | - ZE | |
| Relinquished by: | Date 9/14/12 | Time 13.05 | 26 | Received by: | G | $ \rangle$ | | | $ \setminus $ | 11% | | 0 | Date M | 9/14/12 | Time 1305 | a So | 333 | Labels of Custody Custody | on con y seals y seals | Is or Is or | container(s) eals on containe eals on cooler(s) | n container(s) seals on container(s seals on cooler(s) | (s) | | 82 × | 产生花 | |
| All he Of a | 9.14.12 | ₹.S | S.30 | Receiv | | | | P | | h | | | Date | ete | F . | Time | Sa | Sample I by Sa by Co | | d De | nple Hand Delivered by Sampler/Client Rep. by Courter? UPS | ered It Rep. 7 UPS | HO | L. | QD <u>1</u> | N | |
| blinquished by: | Dete | L. | e | Received by ELOT | CUN Q | N | 00 | A | 1 | AC | | 0 | 140 | 1-12 | EGI | en C | CTe | mpel | ature | d' | on Re | Temperature Upon Receipt | | | "G | 20 | And P |
| | | | |) | Page 15 of 16 | 15 0 | f 16 | 5.00 | | : | | | u. | Final 1.000 | 00 | | | | | | | | | | 1 | | |



XENCO Laboratories



Prelogin/Nonconformance Report- Sample Log-In

Client: Southern Union Gas Services- MonahanAcceptable Temperature Range: 0 - 6 degCDate/ Time Received: 09/14/2012 03:30:00 PMAir and Metal samples Acceptable Range: AmbientWork Order #: 449054Temperature Measuring device used :

| Sample Receipt Checklist | | Comments |
|--|-----|----------|
| #1 *Temperature of cooler(s)? | 7.5 | |
| #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/ container? | Yes | |
| #6 *Custody Seals Signed and dated for Containers/coolers | Yes | |
| #7 *Chain of Custody present? | Yes | |
| #8 Sample instructions complete on Chain of Custody? | Yes | |
| #9 Any missing/extra samples? | No | |
| #10 Chain of Custody signed when relinquished/ received? | Yes | |
| #11 Chain of Custody agrees with sample label(s)? | Yes | |
| #12 Container label(s) legible and intact? | Yes | |
| #13 Sample matrix/ properties agree with Chain of Custody? | Yes | |
| #14 Samples in proper container/ bottle? | Yes | |
| #15 Samples properly preserved? | Yes | |
| #16 Sample container(s) intact? | Yes | |
| #17 Sufficient sample amount for indicated test(s)? | Yes | |
| #18 All samples received within hold time? | Yes | |
| #19 Subcontract of sample(s)? | Yes | |
| #20 VOC samples have zero headspace (less than 1/4 inch bubble)? | Yes | |
| #21 <2 for all samples preserved with HNO3,HCL, H2SO4? | Yes | |
| #22 >10 for all samples preserved with NaAsO2+NaOH, ZnAc+NaOH? | Yes | |

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

Analyst: PH Device/Lot#:

Checklist completed by:

Checklist reviewed by:

Date:



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

January 19, 2010

Camille Bryant Basin Environmental Consulting, LLC. P.O. Box 381 Lovington, NM 88260

Re: SUG 2009-055 (8 inch lateral L-5)

Enclosed are the results of analyses for sample number H19041, received by the laboratory on 01/12/10 at 4:50 pm.

Cardinal Laboratories is accredited through Texas NELAP for:

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

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

Cardinal Laboratories is accredited though the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2 Method EPA 524.2 Method EPA 524.2 Haloacetic Acids (HAA-5) Total Trihalomethanes (TTHM) Regulated VOCs (V2, V3)

Accreditation applies to public drinking water matrices.

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

Sincerely. Celey D/Keene

Laboratory Director

This report conforms with NELAP requirements.



ANALYTICAL RESULTS FOR BASIN ENVIRONMENTAL CONSULTING ATTN: CAMILLE BRYANT 2800 PLAINS HWY LOVINGTON, NM 88260 FAX TO: (575) 396-1429

Receiving Date: 01/12/10 Reporting Date: 01/18/10 Project Number: 2009-055 (SUG) Project Name: 8-INCH LATERAL L-5 Project Location: LEA CO., NM Sampling Date: 01/12/10 Sample Type: SOIL Sample Condition: INTACT @ 9⁰C Sample Received By: JH Analyzed By: AB/ZL

| | | GRO | DRO | DRO ext. | | | ETHYL | TOTAL |
|---------|-----------|------------------------------------|------------|------------|---------|---------|---------|---------|
| LAB NO. | SAMPLE ID | (C ₆ -C ₁₀) | (>C10-C28) | (>C28-C35) | BENZENE | TOLUENE | BENZENE | XYLENES |
| | | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) |

| ANALYSIS DATE: | 01/15/10 | 01/15/10 | 01/15/10 | 01/13/10 | 01/13/10 | 01/13/10 | 01/13/10 |
|--|----------|--|----------|----------|----------|--|----------|
| H19041-1 SP-7A | <10.0 | <10.0 | <10.0 | < 0.050 | < 0.050 | < 0.050 | < 0.300 |
| H19041-2 STOCKPILE EAST | 23.9 | 847 | 67.0 | < 0.050 | < 0.050 | <0.050 | 0.501 |
| H19041-3 STOCKPILE WEST | <10.0 | 648 | 51.6 | <0.050 | <0.050 | <0.050 | 0.339 |
| | | | | | | | |
| Quality Control | 456 | 458 | | 0.051 | 0.049 | 0.051 | 0.136 |
| True Value QC | 500 | 500 | - | 0.050 | 0.050 | 0.050 | 0.150 |
| and the second | | and the second s | | | | the second statement of the se | |
| % Recovery | 91.2 | 91.6 | - | 102 | 98.0 | 102 | 90.7 |

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

TEXAS NELAP ACCREDITATION T104704398-08-TX FOR BENZENE, TOLUENE, ETHYL BENZENE, AND TOTAL XYLENES. Reported on wet weight. Not accredited for GRO/DRO/DRO ext.

Lab Director

H19041 TPHextBTEX BASIN

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above-stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



ANALYTICAL RESULTS FOR BASIN ENVIRONMENTAL CONSULTING, LLC ATTN: CAMILLE BRYANT P.O. BOX 381 LOVINGTON, NM 88260 FAX TO: (575) 396-1429

Receiving Date: 01/12/10 Reporting Date: 01/14/10 Project Number: 2009-055 (SUG) Project Name: 8 INCH LATERAL L-5 Project Location: LEA CO., NM Analysis Date: 01/13/10 Sampling Date: 01/12/10 Sample Type: SOIL Sample Condition: INTACT @ 9°C Sample Received By: JH Analyzed By: HM

CL

| LAB NO. | SAMPLE ID | (mg/kg) |
|-------------|---|---------|
| H19041-1 | SP-7A | < 16 |
| H19041-2 | STOCKPILE EAST | < 16 |
| H19041-3 | STOCKPILE WEST | 32 |
| | | |
| Quality Con | ntrol | 500 |
| True Value | And an and a second | 500 |
| % Recover | the second se | 100 |
| | ercent Difference | < 0.1 |

METHOD: Standard Methods 4500-CI'B Note: Analyses performed on 1:4 w:v aqueous extracts. Not accredited for Chloride.

line Chemist

Date

Date

H19041 Basin Environmental

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above-stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

| | ANALYSIS REQUEST | | 0.12 | 0.02 | 7/210 | | | No Add'I Fax #: No Add'I Fax #: |
|-------------------------------|------------------|--|--|-----------------|--|--------------------------------|--|---|
| | 8/17.70 | P.O. #: company: SUCI Attn: Address: | City: State: Zip: Phone #: Fax #: | ESERV. SAMPLING | DATER: DA | XXX | ntract of tort, shall be limited offen unter a fare completion offen to the proving a sub or of profile incurred by clerk, its and or of the above stated reasons or a | LdS Phone Result: D Fax Result: D REMARKS: D REMARKS: D REMARKS: D REMARKS: D REMARKS: D |
| s, NM 88240 (575) 393-2476 | Surgen x | 322160 0-1429 | Project Owner: SUCT City: Verte L - S state Phon Fax 6 | MATRIX | (G)RAB OR (C)ON CONTAINERS GROUNDWATER WASTEWATER SOIL OIL SLUDGE SLUDGE | × × × | da o da o | 11100 |
| \$ d | T D | Project Manager: Cumulou H Address: 2800 HCUM4 City: LOVINAM | Project #: A(091-055) P Project Name: 8 - T/NCh LC Project Location: 0 2 C C Y Samuler Name: 0 M 100. | | Lab I.D. Sample I.D. | HIGHI-1 SU-7A -3 Shock pule | vages. Cardinars sap! r negligence and any of lable for incidental or co trelated to the performa | In sent |

#26

Analytical Report 449822

for

Southern Union Gas Services- Monahans

Project Manager: Joel Lowry

L-5(8"line)

(RP-2334)

03-OCT-12

Collected By: Client





12600 West I-20 East Odessa, Texas 79765

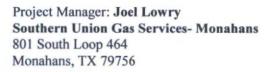
Xenco-Houston (EPA Lab code: TX00122): Texas (T104704215-10-6-TX), Arizona (AZ0765), Arkansas (08-039-0), Connecticut (PH-0102), Florida (E871002) Illinois (002082), Indiana (C-TX-02), Iowa (392), Kansas (E-10380), Kentucky (45), Louisiana (03054) New Hampshire (297408), New Jersey (TX007), New York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

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

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



03-OCT-12



Reference: XENCO Report No: 449822 L-5(8"line) Project Address: Lea County, NM

Joel Lowry:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number 449822. 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. 449822 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,

Alejandro Montoya Odessa Laboratory Director

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Sample Cross Reference 449822



Southern Union Gas Services- Monahans, Monahans, TX

L-5(8"line)

| Sample Id | Matrix | Date Collected | Sample Depth | Lab Sample Id |
|--------------|--------|----------------|--------------|---------------|
| Stockpile #2 | S | 09-25-12 13:30 | | 449822-001 |



CASE NARRATIVE

Client Name: Southern Union Gas Services- Monahans Project Name: L-5(8"line)



Project ID: (RP-2334) Work Order Number: 449822 Report Date: 03-OCT-12 Date Received: 09/27/2012

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments: Batch: LBA-897637 BTEX by EPA 8021B SW8021BM

Batch 897637, Ethylbenzene recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate. Samples affected are: 449822-001. The Laboratory Control Sample for Ethylbenzene is within laboratory Control Limits



Certificate of Analysis Summary 449822 Southern Union Gas Services- Monahans, Monahans, TX Project Name: L-5(8"line)



Date Received in Lab: Thu Sep-27-12 02:56 pm

| (RP-2334) | Joel Lowry | Lea County, NM |
|-------------|------------|-------------------|
| Project Id: | Contact: | Project Location: |

| Project Location: Lea County, NM | | | | Project Manager: | Project Manager: Nicholas Straccione | |
|------------------------------------|------------|-----------------|---------|------------------|--------------------------------------|--|
| | Lab Id: | 449822-001 | | | | |
| Analysis Ronnostod | Field Id: | Stockpile #2 | 2 | | | |
| matcanhav acclimits | Depth: | | | | | |
| | Matrix: | SOIL | | | | |
| | Sampled: | Sep-25-12 13:30 | :30 | | | |
| BTEX by EPA 8021B | Extracted: | Sep-28-12 12:05 | :05 | | | |
| | Analyzed: | Sep-28-12 15:18 | :18 | | | |
| | Units/RL: | mg/kg | RL | | | |
| Benzene | | ON ON | 0.00105 | | | |
| Toluene | | QN | 0.00210 | | | |
| Ethylbenzene | | O QN | 0.00105 | | | |
| m_p-Xylenes | | ON ON | 0.00210 | | | |
| o-Xylene | | QN | 0.00105 | | | |
| Total Xylenes | | ND | 0.00105 | | | |
| Total BTEX | | ND | 0.00105 | | | |
| Percent Moisture | Extracted: | | | | | |
| | Analyzed: | Oct-01-12 14:30 | :30 | | | |
| | Units/RL: | % | RL | | | |
| Percent Moisture | | 5.11 | 1.00 | | | |
| TPH By SW8015 Mod | Extracted: | Oct-01-12 12:00 | 00: | | | |
| | Analyzed: | Oct-01-12 16:31 | 31 | | | |
| | Units/RL: | mg/kg | RL | | | |
| C6-C12 Gasoline Range Hydrocarbons | | QN | 15.8 | | | |
| C12-C28 Diesel Range Hydrocarbons | | 72.0 | 15.8 | | | |
| C28-C35 Oil Range Hydrocarbons | | ND | 15.8 | | | |
| Total TPH | | 72.0 | 15.8 | | | |

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

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11002001 - Danas - San Annonio - Anania - Tanipa - Doca Natori - Laun Annenca - Ouessa - Colpus Chirisu

Version: 1.%

Final 1.000

Page 5 of 14

Odessa Laboratory Director Alejandro Montoya

Alyondus M.



Flagging Criteria

- X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.
- B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- D The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
- E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.

F RPD exceeded lab control limits.

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

U Analyte was not detected.

- L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.
- H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.
- K Sample analyzed outside of recommended hold time.
- JN A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

LOD Limit of Detection

LOQ Limit of Quantitation

* Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

PQL Practical Quantitation Limit MQL Method Quantitation Limit

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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Final 1.000



Project Name: L-5(8"line)

| ork Orders : 449822 Lab Batch #: 897637 | Sample: 449822-001 / SMP | Bate | | D: (RP-2334) c: Soil | | |
|--|-------------------------------|------------------------|-----------------------|-------------------------|-------------------------|------|
| Units: mg/kg | Date Analyzed: 09/28/12 15:18 | SU | RROGATE R | ECOVERY | STUDY | |
| BTE | K by EPA 8021B | Amount Found [A] | True Amount [B] | Recovery %R | Control Limits %R | Flag |
| | Analytes | | | [D] | | |
| 1,4-Difluorobenzene | | 0.0241 | 0.0300 | 80 | 80-120 | |
| 4-Bromofluorobenzene | | 0.0285 | 0.0300 | 95 | 80-120 | |
| Lab Batch #: 897742 | Sample: 449822-001 / SMP | Bate | | | | |
| Units: mg/kg | Date Analyzed: 10/01/12 16:31 | SU | RROGATE R | ECOVERY | STUDY | |
| TPH | By SW8015 Mod Analytes | Amount Found [A] | True Amount [B] | Recovery %R [D] | Control Limits %R | Flag |
| 1-Chlorooctane | | 86.5 | 100 | 87 | 70-135 | |
| o-Terphenyl | | 41.8 | 50.0 | 84 | 70-135 | |
| Lab Batch #: 897637 | Sample: 627872-1-BLK / BL | K Bate | h: 1 Matrix | : Solid | | |
| Units: mg/kg | Date Analyzed: 09/28/12 14:12 | | RROGATE R | | STUDY | |
| BTE | X by EPA 8021B Analytes | Amount Found [A] | True Amount [B] | Recovery %R [D] | Control Limits %R | Flag |
| 1,4-Difluorobenzene | | 0.0267 | 0.0300 | 89 | 80-120 | |
| 4-Bromofluorobenzene | | 0.0294 | 0.0300 | 98 | 80-120 | |
| Lab Batch #: 897742 | Sample: 627936-1-BLK / BL | K Bate | h: 1 Matrix | :Solid | | |
| Units: mg/kg | Date Analyzed: 10/01/12 14:32 | SU | RROGATE R | ECOVERY S | STUDY | |
| TPH | By SW8015 Mod Analytes | Amount Found [A] | True Amount [B] | Recovery %R [D] | Control Limits %R | Flag |
| 1-Chlorooctane | | 93.7 | 99.9 | 94 | 70-135 | |
| o-Terphenyl | | 46.2 | 50.0 | 92 | 70-135 | |
| Lab Batch #: 897637 | Sample: 627872-1-BKS / BK | S Bate | h: 1 Matrix | :Solid | | |
| Units: mg/kg | Date Analyzed: 09/28/12 13:14 | SU | RROGATE R | ECOVERY S | STUDY | |
| BTE | K by EPA 8021B Analytes | Amount Found [A] | True Amount [B] | Recovery %R [D] | Control Limits %R | Flag |
| 1,4-Difluorobenzene | | 0.0310 | 0.0300 | 103 | 80-120 | |
| 4-Bromofluorobenzene | | 0.0348 | 0.0300 | 116 | 80-120 | |

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B All results are based on MDL and validated for QC purposes.



Project Name: L-5(8"line)

| ork Orders : 449822 | | VC D | - | D: (RP-2334) | | |
|-------------------------------------|---|------------------------|-----------------------|-----------------------|-------------------------|-------|
| Lab Batch #: 897742 Units: mg/kg | Sample: 627936-1-BKS / B Date Analyzed: 10/01/12 15:01 | | h: 1 Matrix | COVERY | STUDY | |
| | By SW8015 Mod Analytes | Amount Found [A] | True Amount [B] | Recovery %R [D] | Control Limits %R | Flags |
| 1-Chlorooctane | Analytes | 100 | 100 | 100 | 70-135 | |
| o-Terphenyl | | 53.2 | 50.0 | 100 | 70-135 | |
| Lab Batch #: 897637 | Sample: 627872-1-BSD / B | SD Bate | h: 1 Matrix | c: Solid | | |
| Units: mg/kg | Date Analyzed: 09/28/12 13:51 | | RROGATE R | | STUDY | |
| | X by EPA 8021B | Amount Found [A] | True Amount [B] | Recovery %R [D] | Control Limits %R | Flags |
| 1,4-Difluorobenzene | Tanka je vo | 0.0279 | 0.0300 | 93 | 80-120 | |
| 4-Bromofluorobenzene | | 0.0323 | 0.0300 | 108 | 80-120 | |
| Lab Batch #: 897742 | Sample: 627936-1-BSD / B | SD Bate | h: 1 Matrix | :Solid | | |
| Units: mg/kg | Date Analyzed: 10/01/12 15:29 | | RROGATE R | 2.0 | STUDY | |
| 00 | By SW8015 Mod Analytes | Amount Found [A] | True Amount [B] | Recovery %R [D] | Control Limits %R | Flag |
| 1-Chlorooctane | | 106 | 100 | 106 | 70-135 | |
| o-Terphenyl | | 56.7 | 50.0 | 113 | 70-135 | |
| Lab Batch #: 897637 | Sample: 449822-001 S / MS | Bate | h: 1 Matrix | : Soil | | |
| Units: mg/kg | Date Analyzed: 09/28/12 17:33 | | RROGATE R | ECOVERY S | STUDY | |
| BTEX | X by EPA 8021B Analytes | Amount Found [A] | True Amount [B] | Recovery %R [D] | Control Limits %R | Flags |
| 1,4-Difluorobenzene | | 0.0274 | 0.0300 | 91 | 80-120 | |
| 4-Bromofluorobenzene | | 0.0322 | 0.0300 | 107 | 80-120 | |
| Lab Batch #: 897742 | Sample: 449818-001 S / MS | Bate | h: 1 Matrix | : Soil | | |
| Units: mg/kg | Date Analyzed: 10/02/12 00:22 | SU | RROGATE R | ECOVERY S | STUDY | |
| TPH | By SW8015 Mod Analytes | Amount Found [A] | True Amount [B] | Recovery %R [D] | Control Limits %R | Flags |
| 1-Chlorooctane | | 101 | 100 | 101 | 70-135 | |
| o-Terphenyl | | 47.9 | 50.0 | 96 | 70-135 | |

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B All results are based on MDL and validated for QC purposes.



Project Name: L-5(8"line)

| ork Orders : 449822 Lab Batch #: 897637 | 2, Sample: 449822-001 SD / N | ASD Bate | | D: (RP-2334) : Soil | | |
|--|---------------------------------|------------------------|-----------------------|------------------------|-------------------------|-------|
| Units: mg/kg | Date Analyzed: 09/28/12 17:33 | | RROGATE R | ECOVERY | STUDY | |
| BTE | X by EPA 8021B Analytes | Amount Found [A] | True Amount [B] | Recovery %R [D] | Control Limits %R | Flag |
| 1,4-Difluorobenzene | | 0.0274 | 0.0300 | 91 | 80-120 | |
| 4-Bromofluorobenzene | | 0.0322 | 0.0300 | 107 | 80-120 | |
| Lab Batch #: 897742 | Sample: 449818-001 SD / M | ASD Bate | h: 1 Matrix | c: Soil | | |
| Units: mg/kg | Date Analyzed: 10/02/12 00:52 | SU | RROGATE R | ECOVERY | STUDY | |
| ТРН | By SW8015 Mod Analytes | Amount Found [A] | True Amount [B] | Recovery %R [D] | Control Limits %R | Flags |
| 1-Chlorooctane | | 100 | 99.8 | 100 | 70-135 | |
| o-Terphenyl | | 46.8 | 49.9 | 94 | 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: L-5(8"line)

 Work Order #: 449822

 Analyst: KEB

 Lab Batch ID: 897637
 Sample: 627872-1-BKS

Date Prepared: 09/28/2012

Batch #: 1

Project ID: (RP-2334) Date Analyzed: 09/28/2012 Matrix: Solid

| Units: mg/kg | | BLAN | BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY | PIKE / B | LANKS | PIKE DUPL | ICATE F | RECOVE | RY STUD | X | |
|-------------------------------|-------------------------------|-----------------------|---|-----------------------------|-----------------------|---|-------------------------------|---------------------------|-------------------------|---------------------------|------|
| 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 | 0.107 | 107 | 0.0998 | 0.0975 | 98 | 6 | 70-130 | 35 | |
| Toluene | <0.00200 | 0.0998 | 0.108 | 108 | 0.0998 | 0.0971 | 67 | Ξ | 70-130 | 35 | |
| Ethylbenzene | <0.000998 | 0.0998 | 0.102 | 102 | 0.0998 | 0.0932 | 93 | 6 | 71-129 | 35 | |
| m_p-Xylenes | <0.00200 | 0.200 | 0.222 | 111 | 0.200 | 0.205 | 103 | 80 | 70-135 | 35 | |
| o-Xylene | <0.000998 | 0.0998 | 0.109 | 109 | 0.0998 | 0.100 | 100 | 6 | 71-133 | 35 | |
| Analyst: KFB | De | te Prenar | Date Prenared. 10/01/2012 | 2 | | | Date An | Date Analyzed: 10/01/2012 | 2102/10/0 | | |

| Analyst: KEB | Da | te Prepar | Date Prepared: 10/01/2012 | 2 | | | Date A | nalyzed: 1 | Date Analyzed: 10/01/2012 | | |
|---|-------------------------------|-----------|---|----------------------|----------------|-----------------------------|------------------------|---------------|---------------------------|---------------------------|-----------|
| Lab Batch ID: 897742 Sample: 627936-1-BKS | BKS | Batch #: | 1 :# 1 | | | | | Matrix: Solid | olid | | |
| Units: mg/kg | | BLAN | BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY | PIKE / B | LANK S | PIKE DUPL | ICATE 1 | RECOVE | RY STUD | X | \square |
| TPH By SW8015 Mod | Blank Sample Result IAI | Spike | Blank Spike Result | Blank Spike %R | Spike Added | Blank Spike Dunlicate | Blk. Spk Dup. %R | RPD % | Control Limits %R | Control Limits %RPD | Flag |
| Analytes | 2 | [B] | [C] | [0] | [E] | Result [F] | [6] | : | | | |
| C6-C12 Gasoline Range Hydrocarbons | <15.0 | 1000 | 166 | 66 | 1000 | 1020 | 102 | 3 | 70-135 | 35 | |
| C12-C28 Diesel Range Hydrocarbons | <15.0 | 1000 | 980 | 98 | 1000 | 1010 | 101 | 3 | 70-135 | 35 | |

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

Version: 1.%

Page 10 of 14

Final 1.000



Form 3 - MS / MSD Recoveries



Work Order #: 449822

Date Analyzed: 09/28/2012 Lab Batch ID: 897637 Reporting Units: mg/kg

Project Name: L-5(8"line)

Project ID: (RP-2334)

Analyst: Batch #: QC- Sample ID: 449822-001 S Date Prepared: 09/28/2012

Matrix: Soil -KEB MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

| BTEX by EPA 8021B Analytes | Parent Sample Result [A] | Spike Added [B] | Spiked Sample 1 Result C B B C 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 | <0.00105 | 0.105 | 0.0897 | 85 | 0.105 | 0.0900 | 86 | 0 | 70-130 | 35 | |
| Toluene | <0.00209 | 0.105 | 0.0844 | 80 | 0.105 | 0.0848 | 81 | 0 | 70-130 | 35 | |
| Ethylbenzene | <0.00105 | 0.105 | 0.0707 | 67 | 0.105 | 0.0710 | 68 | 0 | 71-129 | 35 | х |
| m_p-Xylenes | <0.00209 | 0.209 | 0.150 | 2 | 0.210 | 0.150 | 71 | 0 | 70-135 | 35 | |
| o-Xylene | <0.00105 | 0.105 | 0.0750 | 11 | 0.105 | 0.0753 | 72 | 0 | 71-133 | 35 | |
| Lab Batch ID: 897742 Q | QC- Sample ID: | 449818-001 S | 001 S | Bat | Batch #: | 1 Matrix: | : Soil | | | | |

| Date Analyzed: 10/02/2012 | Date Prepared: 10/01/2012 | 10/01/2 | 012 | Ani | Analyst: | KEB | | | | | |
|------------------------------------|---------------------------|---------|---------------------------------|--------|----------|--|----------------|---------------|---------|---------|------|
| Reporting Units: mg/kg | | M | ATRIX SPIKI | Z/MAT | RIX SPI | MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY | FE RECO | VERY S | TUDY | | |
| TPH By SW8015 Mod | Parent Sample | | Spiked Sample Spi Result San | Spiked | Snike | Duplicate Sniked Samule | Spiked | RPD | Control | Control | Flao |
| A malitice | Result | Added | [C] | %R | Added | Result [F] | %R | % | %R | | ſ |
| Autarytes | | [13] | | [1] | | | 2 | | | | |
| C6-C12 Gasoline Range Hydrocarbons | <18.8 | 1250 | 1230 | 98 | 1250 | 1220 | 98 | 1 | 70-135 | 35 | |
| C12-C28 Diesel Range Hydrocarbons | <18.8 | 1250 | 1250 | 100 | 1250 | 1240 | 66 | - | 70-135 | 35 | |

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

Version: 1.%

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: L-5(8"line)

Work Order #: 449822

| Lab Batch #: 897752 | | | Project I | D: (RP-233 | 4) |
|---------------------------------|--------------------------------|-------------------------------|------------------|---------------------------|-------|
| Date Analyzed: 10/01/2012 14:30 | Date Prepared: 10/01/2012 | Ana | lyst: 🗆 R 🗆 | | |
| QC- Sample ID: 449829-001 D | Batch #: 1 | Ma | trix: Soil | | |
| Reporting Units: % | SAMPLE / | SAMPLE | DUPLIC | ATE REC | OVERY |
| Percent Moisture | Parent Sample Result [A] | Sample Duplicate Result | RPD | Control Limits %RPD | Flag |
| Analyte | | [B] | | | |
| Percent Moisture | 1.21 | 1.05 | 14 | 15 | |

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

Xenco Laboratories



XENCO Laboratories



Comments

Prelogin/Nonconformance Report- Sample Log-In

 Client: Southern Union Gas Services- Monahan
 Acceptable Temperature Range: 0 - 6 degC

 Date/ Time Received: 09/27/2012 02:56:00 PM
 Air and Metal samples Acceptable Range: Ambient

 Work Order #: 449822
 Temperature Measuring device used :

| Sample Receipt Checklist | | |
|--|-----|--|
| #1 *Temperature of cooler(s)? | 4.8 | |
| #2 *Shipping container in good condition? | Yes | |
| #3 *Samples received on ice? | Yes | |
| #4 *Custody Seals intact on shipping container/ cooler? | Yes | |
| #5 Custody Seals intact on sample bottles? | Yes | |
| #6 *Custody Seals Signed and dated? | Yes | |
| #7 *Chain of Custody present? | Yes | |
| #8 Sample instructions complete on Chain of Custody? | Yes | |
| #9 Any missing/extra samples? | No | |
| #10 Chain of Custody signed when relinquished/ received? | Yes | |
| #11 Chain of Custody agrees with sample label(s)? | Yes | |
| #12 Container label(s) legible and intact? | Yes | |
| #13 Sample matrix/ properties agree with Chain of Custody? | Yes | |
| #14 Samples in proper container/ bottle? | Yes | |
| #15 Samples properly preserved? | Yes | |
| #16 Sample container(s) intact? | Yes | |
| #17 Sufficient sample amount for indicated test(s)? | Yes | |
| #18 All samples received within hold time? | Yes | |
| #19 Subcontract of sample(s)? | Yes | |
| #20 VOC samples have zero headspace (less than 1/4 inch bubble)? | Yes | |
| #21 <2 for all samples preserved with HNO3,HCL, H2SO4? | Yes | |
| #22 >10 for all samples preserved with NaAsO2+NaOH, ZnAc+NaOH? | Yes | |
| | | |

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

Analyst: PH Device/Lot#:

Checklist completed by:

Date: 09/27/2012

Checklist reviewed by:

Date: 09/27/2012



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

December 1, 2009

Camille Bryant Basin Environmental Consulting, LLC. P.O. Box 381 Lovington, NM 88260

Re: 8 Inch Lateral L-5 (SUG)

Enclosed are the results of analyses for sample number H18775, received by the laboratory on 11/20/09 at 4:50 pm.

Cardinal Laboratories is accredited through Texas NELAP for:

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

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

Cardinal Laboratories is accredited though the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2 Method EPA 524.2 Method EPA 524.2 Haloacetic Acids (HAA-5) Total Trihalomethanes (TTHM) Regulated VOCs (V2, V3)

Accreditation applies to public drinking water matrices.

Total Number of Pages of Report: 5 (includes Chain of Custody)

Sincerely, une

Celey D. Keene Laboratory Director



ANALYTICAL RESULTS FOR BASIN ENVIRONMENTAL ATTN: CAMILLE BRYANT 2800 PLAINS HWY LOVINGTON, NM 88260 FAX TO: (575) 396-1429

Receiving Date: 11/20/09 Reporting Date: 11/30/09 Project Owner: SUG (2009-055) Project Name: 8-INCH LATERAL L-5 Project Location: LEA CO., NM Sampling Date: 11/19/09 Sample Type: SOIL Sample Condition: COOL & INTACT @ 3.5°C Sample Received By: ML Analyzed By: AB

GRO DRO DRO ext. (C₆-C₁₀) (>C₁₀-C₂₈) (>C₂₆-C₃₅)

| LAB NUMBER | SAMPLE ID | (mg/kg) | (mg/kg) | (mg/kg) |
|----------------|---|----------|----------|----------|
| ANALYSIS DA | TE | 11/25/09 | 11/25/09 | 11/25/09 |
| H18775-1 | WEST SW @ 11.5' | <10.0 | <10.0 | <10.0 |
| H18775-2 | SOUTH SW @ 11.5' | <10.0 | <10.0 | <10.0 |
| H18775-3 | NORTH SW @ 11.5' | <10.0 | 28.4 | <10.0 |
| H18775-4 | EAST SW @ 11.5' | <10.0 | 93.2 | <10.0 |
| H18775-5 | RP FLOOR @ 12' | <10.0 | 25.2 | <10.0 |
| H18775-6 | SP-1 | <10.0 | 24.2 | <10.0 |
| H18775-7 | SP-2 | <10.0 | 36.5 | <10.0 |
| H18775-8 | SP-3 | <10.0 | 37.4 | <10.0 |
| H18775-9 | SP-4 | <10.0 | 32.2 | <10.0 |
| H18775-10 | SP-5 | <10.0 | 15.8 | <10.0 |
| H18775-11 | SP-6 | <10.0 | 16.2 | <10.0 |
| H18775-12 | SP-7 | <10.0 | 267 | <10.0 |
| H18775-13 | SP-8 | <10.0 | 17.2 | <10.0 |
| H18775-14 | SP-9 | <10.0 | 33.7 | <10.0 |
| H18775-15 | SP-10 | <10.0 | 30.7 | <10.0 |
| H18775-16 | SP-11 | <10.0 | 15.2 | <10.0 |
| H18775-17 | SP-12 | <10.0 | <10.0 | <10.0 |
| H18775-18 | STOCKPILE BASELINE | 25.5 | 1,070 | 61.5* |
| Quality Contro | | 447 | 585 | - |
| True Value QC | second | 500 | 500 | |
| % Recovery | | 89.4 | 117 | |
| Relative Perce | nt Difference | 10.1 | 0.4 | |

METHODS: TPH GRO & DRO: EPA SW-846 8015 M extended. Reported on wet weight. *G35 peak less than 75% of C28 peak. Not accredited for GRO/DRO/EXT DRO.

ene Lab Director

12/01/09

H18775 TPHEXT BASIN

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ANALYTICAL RESULTS FOR BASIN ENVIRONMENTAL ATTN: CAMILLE BRYANT 2800 PLAINS HWY LOVINGTON, NM 88260 FAX TO: (575) 396-1429

Receiving Date: 11/20/09 Reporting Date: 11/25/09 Project Owner: SUG (2009-055) Project Name: 8-INCH LATERAL L-5 Project Location: LEA CO., NM Sampling Date: 11/19/09 Sample Type: SOIL Sample Condition: COOL & INTACT @ 3.5°C Sample Received By: ML Analyzed By: ZL/HM ETHYL TOTAL

CI*

LAB NO. SAMPLE ID

BENZENE TOLUENE BENZENE XYLENES

| | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) |
|------------------------------|----------|----------|----------|----------|----------|
| ANALYSIS DATE: | 11/23/09 | 11/23/09 | 11/23/09 | 11/23/09 | 11/24/09 |
| H18775-1 WEST SW @ 11.5' | < 0.050 | <0.050 | <0.050 | < 0.300 | 64 |
| H18775-2 SOUTH SW @ 11.5' | < 0.050 | < 0.050 | < 0.050 | < 0.300 | 96 |
| H18775-3 NORTH SW @ 11.5' | < 0.050 | <0.050 | < 0.050 | < 0.300 | < 16 |
| H18775-4 EAST SW @ 11.5' | < 0.050 | <0.050 | < 0.050 | < 0.300 | < 16 |
| H18775-5 RP FLOOR @ 12' | < 0.050 | < 0.050 | < 0.050 | <0.300 | 112 |
| H18775-6 SP-1 | < 0.050 | <0.050 | < 0.050 | < 0.300 | < 16 |
| H18775-7 SP-2 | < 0.050 | < 0.050 | < 0.050 | <0.300 | < 16 |
| H18775-8 SP-3 | < 0.050 | < 0.050 | < 0.050 | < 0.300 | < 16 |
| H18775-9 SP-4 | < 0.050 | < 0.050 | < 0.050 | < 0.300 | < 16 |
| H18775-10 SP-5 | < 0.050 | < 0.050 | < 0.050 | <0.300 | < 16 |
| H18775-11 SP-6 | < 0.050 | < 0.050 | <0.050 | <0.300 | < 16 |
| H18775-12 SP-7 | < 0.050 | <0.050 | 0.090 | 0.378 | 64 |
| H18775-13 SP-8 | < 0.050 | < 0.050 | <0.050 | < 0.300 | < 16 |
| H18775-14 SP-9 | < 0.050 | <0.050 | <0.050 | <0.300 | < 16 |
| H18775-15 SP-10 | < 0.050 | < 0.050 | < 0.050 | <0.300 | < 16 |
| H18775-16 SP-11 | < 0.050 | < 0.050 | < 0.050 | < 0.300 | < 16 |
| H18775-17 SP-12 | < 0.050 | <0.050 | < 0.050 | <0.300 | < 16 |
| H18775-18 STOCKPILE BASELINE | < 0.050 | <0.050 | 0.257 | 1.19 | < 16 |
| Quality Control | 0.049 | 0.048 | 0.050 | 0.150 | 490 |
| True Value QC | 0.050 | 0.050 | 0.050 | 0.150 | 500 |
| % Recovery | 98.0 | 96.0 | 100 | 100 | 98.0 |
| Relative Percent Difference | 1.0 | <1.0 | <1.0 | <1.0 | 2.0 |

METHODS: BTEX - SW-846 8021B; CI-: Std. Methods 4500-CI-B

*Analyses performed on 1:4 w:v aqueous extracts. Reported on wet weight.

TEXAS NELAP ACCREDITATION T104704398-08-TX FOR BENZENE, TOLUENE, ETHYL BENZENE, AND TOTAL XYLENES. Not accredited for Chloride.

une Lab Director

12/01/09

H18775 BCL BASIN

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