

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

State of New Mexico  
Energy Minerals and Natural Resources

Form C-141  
Revised October 10, 2003

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

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

**Release Notification and Corrective Action**

**OPERATOR**

Initial Report  Final Report

|   |                                      |               |                       |
|---|--------------------------------------|---------------|-----------------------|
| Name of Company   | Southern Union Gas Services, Ltd.    | Contact       | Rose Slade            |
| Address   | 801 S. Loop 464, Monahans, TX, 79756 | Telephone No. | 432-940-5147          |
| Facility Name: Fullerton 14" (RP-1608) Lea County Field Dept. |                                      | Facility Type | Natural Gas Gathering |

|               |                             |                    |           |
|---------------|-----------------------------|--------------------|-----------|
| Surface Owner | Southern Union Gas Services | Mineral Owner: Fee | Lease No. |
|---------------|-----------------------------|--------------------|-----------|

**LOCATION OF RELEASE**

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

Latitude N32 25.691      Longitude W103 12.721

**NATURE OF RELEASE**

|                             |   |   |                                     |                            |                            |
|-----------------------------|---|---|-------------------------------------|----------------------------|----------------------------|
| Type of Release             | Natural Gas and Produced Water                                      | Volume of Release                         | 100 Bbls Fluid and 405 MCF Nat. Gas | Volume Recovered           | 65 Bbls                    |
| Source of Release           | 14" Natural Gas Pipeline  | Date and Hour of Occurrence               | not known                           | Date and Hour of Discovery | 9/24/07<br>Time: 9:03 a.m. |
| Was Immediate Notice Given? | X Yes   No   Not Required   | If YES, To Whom?                          | Gary Wink On-Call NMOCD             |                            |                            |
| By Whom?                    | Tony Savoie   | Date and Hour:                            | 9/24/01 9:41 a.m.                   |                            |                            |
| Was a Watercourse Reached?  | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If YES, Volume Impacting the Watercourse. |                                     |                            |                            |

If a Watercourse was Impacted, Describe Fully.\*

Describe Cause of Problem and Remedial Action Taken:

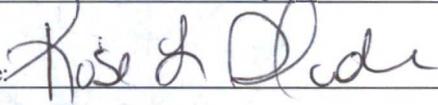
A 14" Natural Gas gathering line operating at approximately 30 p.s.i. developed a leak. Repair crews arrived at the leak site with a vacuum truck and started containing and recovering the produced water. The leak area was excavated and the pipeline was repaired with a temporary leak clamp.

Describe Area Affected and Cleanup Action Taken. Approximately 4,184 sq. ft. of lease road and pipeline right-of-way was affected by the leak and temporary repair. Approximately 65 Bbls of produced water were recovered. Previous soil samples were collected at various locations within the spill site. The samples were analyzed for chloride and TPH, the results of which were submitted to the NMOCD

On or around October 1, 2007, remediation activities were conducted at the Fullerton 14" Release Site by an environmental contractor that is no longer affiliated with the site. On August 30, 2012, the site was revisited in an effort to determine if soil exhibiting benzene, BTEX, TPH and chloride concentrations above NMOCD regulatory standards remained in-situ and collect confirmation soil samples. Laboratory analytical reports from the confirmation soil samples suggested previous remediation activities met the requirements of the NMOCD.

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

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

|  |   |                  |
|--|---|------------------|
| Signature:  | <u>OIL CONSERVATION DIVISION</u>  |                  |
| Printed Name: Rose L. Slade  | Approved by District Supervisor:  |                  |
| Title: EHS Compliance Specialist   | Approval Date:  | Expiration Date: |
| E-mail Address: rose.slade@sug.com   | Conditions of Approval: Environmental Specialist  |                  |
| Date: 10-18-12      Phone: 432-940-5147(cell)  | RP-1608   | 10/18/12         |

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State of New Mexico  
Energy Minerals and Natural Resources  
Oil Conservation Division  
1220 South St. Francis Dr.  
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Form C-141  
Revised October 10, 2003

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

**Release Notification and Corrective Action**

**OPERATOR**

Initial Report  Final Report

|                 |                                   |               |                       |
|-----------------|-----------------------------------|---------------|-----------------------|
| Name of Company | Southern Union Gas Services, Ltd. | Contact       | Tony Savoie           |
| Address         | P.O. Box 1226 Jal, N.M. 88252     | Telephone No. | 505-395-2116          |
| Facility Name   | Lea County Field Dept.            | Facility Type | Natural Gas Gathering |

|  |                    |           |
|--|--------------------|-----------|
| Surface Owner: Southern Union Gas Services | Mineral Owner: Fee | Lease No. |
|--|--------------------|-----------|

**LOCATION OF RELEASE**

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

Latitude N32 25.691 Longitude W103 12.721

**NATURE OF RELEASE**

|  |   |  |
|--|---|--|
| Type of Release : Natural Gas and Produced water   | Volume of Release: 100 Bbbls Fluid and 405 MCF Nat. Gas | Volume Recovered 65 Bbbls                          |
| Source of Release : 14" Natural Gas Pipeline   | Date and Hour of Occurrence not known                   | Date and Hour of Discovery 9/24/07 Time: 9:03 a.m. |
| Was Immediate Notice Given?<br><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required | If YES, To Whom?<br>Gary Wink On-call NMOCD             |  |
| By Whom? Tony Savoie   | Date and Hour: 9/24/07 9:41 a.m.                        |  |
| Was a Watercourse Reached?<br><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No  | If YES, Volume Impacting the Watercourse                |  |

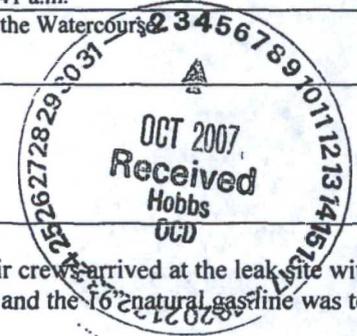
If a Watercourse was Impacted, Describe Fully.\*

Describe Cause of Problem and Remedial Action Taken.\*  
A 14" Natural Gas gathering line operating at approximately 30 p.s.i. developed a leak. Repair crews arrived at the leak site with a vacuum truck and started containing and recovering the produced water. The leak area was excavated and the 16" natural gas line was temporarily repaired with a leak clamp.

Describe Area Affected and Cleanup Action Taken. Approximately 4,184 sq.ft. of lease road and pipeline right-of-way was affected by the leak and temporary repair. Approximately 65 Bbbls of produced water were recovered. Soil samples were collected at various locations within the spill site. The samples were analyzed for chloride and TPH, the analytical results are attached to this report. Final remediation will follow the NMOCD recommended guidelines for leaks and spills.

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

|                                     |   |                           |
|-------------------------------------|---|---------------------------|
| Signature: <i>J. A. Savoie</i>      | <b>OIL CONSERVATION DIVISION</b>  |                           |
| Printed Name: John A. Savoie        | <i>J. Johnson</i><br>Approved by District <b>ENVIRONMENTAL ENGINEER</b> |                           |
| Title: Remediation Supervisor       | Approval Date: 10.4.07  | Expiration Date: 12.10.07 |
| E-mail Address: tony.savoie@sug.com | Conditions of Approval:   |                           |
| Date: 10/4/07 Phone: 505-395-2116   | Attached <input type="checkbox"/> <i>54</i>                             |                           |



*SUBMIT FINAL C-141 w/ DOCUMENTATION 54*

\* Attach Additional Sheets If Necessary

*RP# 1608*

# *Basin Environmental Service Technologies, LLC*

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

[jwlowry@basinenv.com](mailto:jwlowry@basinenv.com)

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



## **REMEDIATION SUMMARY & SITE CLOSURE REQUEST**

**SOUTHERN UNION GAS SERVICES  
FULLERTON 14-INCH (1RP-1608)  
HISTORICAL RELEASE SITE**

**Lea County, New Mexico**

**Unit Letter "P" (SE/SE), Section 36, Township 21 South, Range 36 East**

**Latitude 32° 25.691' North, Longitude 103° 12.721' West**

**NMOCD Reference # 1RP-1608**

Prepared For:

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

Prepared By:

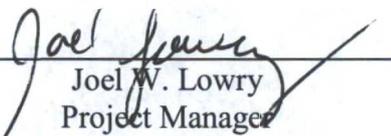
Basin Environmental Service Technologies, LLC  
3100 Plains Highway  
Lovington, New Mexico 88260

**October 2012**

HOBBS OCD

ULL 8/2012

RECEIVED

  
Joel W. Lowry  
Project Manager

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- Appendix A – Photographs
- Appendix B – Laboratory Analytical Reports
- Appendix C – Release Notification and Corrective Action (Form C-141)

## 1.0 INTRODUCTION & BACKGROUND INFORMATION

Basin Environmental Service Technologies, LLC (Basin), on behalf of Southern Union Gas Services (Southern Union), has prepared this *Remediation Summary & Site Closure Request* for the Fullerton 14" Historical Release Site (IRP-1608). The legal description of the release site is Unit Letter "P" (SE/SE), Section 36, Township 21 South, Range 36 East, in Lea County, New Mexico. The geographic coordinates of the release site are 32° 25.691' North latitude and 103° 12.721' West longitude. The property affected by the release is owned by Southern Union Gas Services. Please reference Figure 1 for a "Site Location Map".

On September 24, 2007, Southern Union discovered a release had occurred on the Fullerton 14" Pipeline. The "Release Notification and Corrective Action Form" (Form C-141) indicated failure of a section of fourteen-inch (14") low-pressure pipeline resulted in the release of approximately one hundred barrels (100 bbls) of fluid and four hundred and five (405) mcf of natural gas. During initial response activities the pipeline was shut in and a vacuum truck was utilized to recover approximately sixty-five barrels (65 bbls) of free-standing fluid. The affected section of pipeline was repaired with a leak clamp. The release was reported to the New Mexico Oil Conservation Division (NMOCD) Hobbs District Office on September 24, 2007. The Form C-141 indicated the release affected approximately four thousand, one hundred eighty-four square feet (4,184 ft<sup>2</sup>) of lease road and pipeline right-of-way. General photographs of the release site are provided as Appendix A. The Form C-141 is provided as Appendix C.

Previous remediation activities were conducted at the Fullerton 14" Release Site by an environmental contractor that is no longer affiliated with Southern Union. The nature and extent of the aforementioned activities remains unclear, as environmental reports and work records are not readily available.

On June 22, 2012, at the request of Southern Union, Basin assumed remediation responsibilities at the Fullerton 14" Historical Release Site.

## 2.0 NMOCD SITE CLASSIFICATION

A search of the New Mexico Water Rights Reporting System (NMWRRS) database maintained by the New Mexico Office of the State Engineer (NMOSE) indicated information was unavailable for Section 36, Township 21 South, Range 36 East. An inferred depth to groundwater reference map utilized by the NMOCD indicated groundwater should be encountered at approximately one hundred fifteen feet (115') below ground surface (bgs). Previous environmental records indicated the depth to groundwater is approximately one hundred twenty-six feet (126') bgs. Based on the NMOCD ranking system, zero (0) points will be assigned to the site as a result of this criterion.

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

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

NMOCD guidelines indicate the Fullerton 14” Historical Release Site has an initial ranking score of zero (0) points. The soil remediation levels for a site with a ranking score of zero (0) points are as follows:

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

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

### **3.0 SUMMARY OF SOIL REMEDIATION ACTIVITIES**

On October 1, 2007, four (4) soil samples (S-1 Surface, S-2 Surface, S-3 Surface and S-4 Surface) were collected from the release flowpath and pooling area. The soil samples were analyzed for concentrations of TPH and chloride. Chloride concentrations ranged from 42.5 mg/Kg for soil sample S-3 Surface to 468 mg/Kg for soil sample S-4 Surface. Laboratory analytical results and previous field notes suggest soil was not impacted beyond ten inches (10”) bgs in the release flowpath. Table 1 summarizes the “Concentrations of Benzene, BTEX, TPH & Chloride in Soil”. Soil sample locations are depicted in Figure 2, “Site & Sample Location Map”. Laboratory analytical reports are provided as Appendix B.

On August 30, 2012, Basin responded to the Fullerton 14” Historical Release Site. A hang-auger was utilized to advance a series of soil bores at the release point and within the inferred flowpath in an effort to determine if impacted soil containing BTEX, TPH and chloride concentrations above NMOCD regulatory standards remained in-situ.

Soil bore “R.P” was advanced to approximately two feet (2’) bgs at the release point. During the advancement of the soil bore, two (2) soil samples (R.P.a and R.P.b) were collected and submitted to Permian Basin Environmental Lab of Midland, Texas, for determination of BTEX, TPH and chloride concentrations in accordance with EPA Methods SW 846-8021B, SW 846-8015M and 300.0, respectively. Laboratory analytical results indicated benzene and BTEX concentrations were less than the appropriate laboratory method detection limit (MDL) for each of the soil samples submitted. Analytical results indicated TPH concentrations ranged from less than the appropriate laboratory MDL for soil sample R.P.a to 453 mg/Kg for soil sample R.P.b. Chloride concentrations ranged from 37.5 mg/Kg for soil sample R.P.a to 96.0 mg/Kg for soil sample R.P.b.

Soil bore “S.P #4” was located approximately one thousand feet (1000’) southeast of the release point within the inferred terminus of the release flowpath. The soil boring was advanced to approximately two feet (2’) bgs. During the advancement of the soil bore, two (2) soil samples (S.P. #4a and S.P. #4b) were collected and submitted to the laboratory for analysis. Laboratory analytical results indicated benzene and BTEX concentrations were less than the appropriate laboratory MDL for each of the soil samples submitted. Analytical results indicated TPH concentrations were less than the laboratory MDL for each of the soil samples submitted. Chloride concentrations ranged from 839 mg/Kg for soil sample S.P. #4b to 855 mg/Kg for soil

sample S.P. #4a. Based on laboratory analytical results, further delineation would be required in the area defined by soil samples S.P. #4a and S.P. #4b.

Soil bore "S.P #5" was located approximately one hundred twenty feet (120') northwest of S.P. #4 within the release flowpath. The soil boring was advanced to approximately two feet (2') bgs. During the advancement of the soil bore, two (2) soil samples (S.P. #5a and S.P. #5b) were collected and submitted to the laboratory for analysis. Laboratory analytical results indicated benzene concentrations were less than the appropriate laboratory MDL for each of the soil samples submitted. Analytical results indicated BTEX concentrations ranged from less than the laboratory MDL for soil sample S.P. #5b to 0.00651 mg/Kg for soil sample S.P. #5a. Analytical results indicated TPH concentrations ranged from less than the laboratory MDL for soil sample S.P. #5a to 21.3 mg/Kg for soil sample S.P. #5b. Chloride concentrations ranged from 4.56 mg/Kg for soil sample S.P. #5a to 80.6 mg/Kg for soil sample S.P. #5b.

Soil bore "S.P #6" was located approximately one hundred feet (100') northwest of S.P. #5 within the release flowpath. The soil boring was advanced to approximately two feet (2') bgs. During the advancement of the soil bore, two (2) soil samples (S.P. #6a and S.P. #6b) were collected and submitted to the laboratory for analysis. Laboratory analytical results indicated benzene and BTEX concentrations were less than the appropriate laboratory MDL for each of the soil samples submitted. Analytical results indicated TPH concentrations were less than the appropriate laboratory MDL for each of the soil samples submitted. Chloride concentrations ranged from 1.00 mg/Kg for soil sample S.P. #6a to 1.88 mg/Kg for soil sample S.P. #6b.

Soil bore "S.P #7" was located approximately one hundred feet (100') northwest of S.P. #6 within the release flowpath. The soil boring was advanced to approximately two feet (2') bgs. During the advancement of the soil bore, two (2) soil samples (S.P. #7a and S.P. #7b) were collected and submitted to the laboratory for analysis. Laboratory analytical results indicated benzene and BTEX concentrations were less than the appropriate laboratory MDL for each of the soil samples submitted. Analytical results indicated TPH concentrations were less than the appropriate laboratory MDL for each of the soil samples submitted. Chloride concentrations ranged from less than the laboratory MDL for soil sample S.P. #7b to 7.57 mg/Kg for soil sample S.P. #7a.

Soil bore "S.P #8" is located approximately one hundred feet (400') northwest of S.P. #7 within the release flowpath. The soil boring was advanced to approximately two feet (2') bgs. During the advancement of the soil bore, two (2) soil samples (S.P #8a and S.P. #8b) were collected and submitted to the laboratory for analysis. Laboratory analytical results indicated benzene and BTEX concentrations were less than the appropriate laboratory MDL for each of the soil samples submitted. Analytical results indicated TPH concentrations were less than the appropriate laboratory MDL for each of the soil samples submitted. Chloride concentrations ranged from 2.87 mg/Kg for soil sample S.P. #8a to 13.6 mg/Kg for soil sample S.P. #8b.

On September 31, 2012, delineation activities resumed at the Fullerton 14" Historical Release site in the area defined by soil samples R.P. #4a and R.P. #4b. The soil boring was advanced to approximately ten feet (10') bgs. During the advancement of the soil boring, select soil samples were field-screened using a photo-ionization detector (PID) and chloride field test kit. One (1) soil sample (S.P. #4c) was collected and submitted to the laboratory for analysis. Laboratory analytical results indicated benzene and BTEX concentrations were less than the appropriate

laboratory MDL. Analytical results indicated the TPH concentration was less than the appropriate laboratory MDL. The chloride concentration was 33.0 mg/Kg.

#### **4.0 QA/QC PROCEDURES**

##### **4.1 Soil Sampling**

Soil samples were delivered to Permian Basin Environmental Lab, of Midland, Texas, for BTEX, TPH, and/or chloride analyses using the methods described below:

- BTEX concentrations in accordance with EPA Method SW-846 8021b
- TPH concentrations in accordance with modified EPA Method SW-846 8015M
- Chloride concentrations in accordance with EPA Method 300.0

##### **4.2 Decontamination of Equipment**

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

##### **4.3 Laboratory Protocol**

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

#### **5.0 SITE CLOSURE REQUEST**

Laboratory analytical results from confirmation soil samples collected from the six (6) on-site soil borings indicated concentrations of benzene, BTEX, TPH and chloride were less than NMOCD regulatory remediation action levels. Based on these laboratory analytical results, Basin recommends Southern Union provide the NMOCD Hobbs District Office a copy of this *Remediation Summary & Site Closure Request* and request the NMOCD grant site closure to the Fullerton 14" Historical Release Site.

## 6.0 LIMITATIONS

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

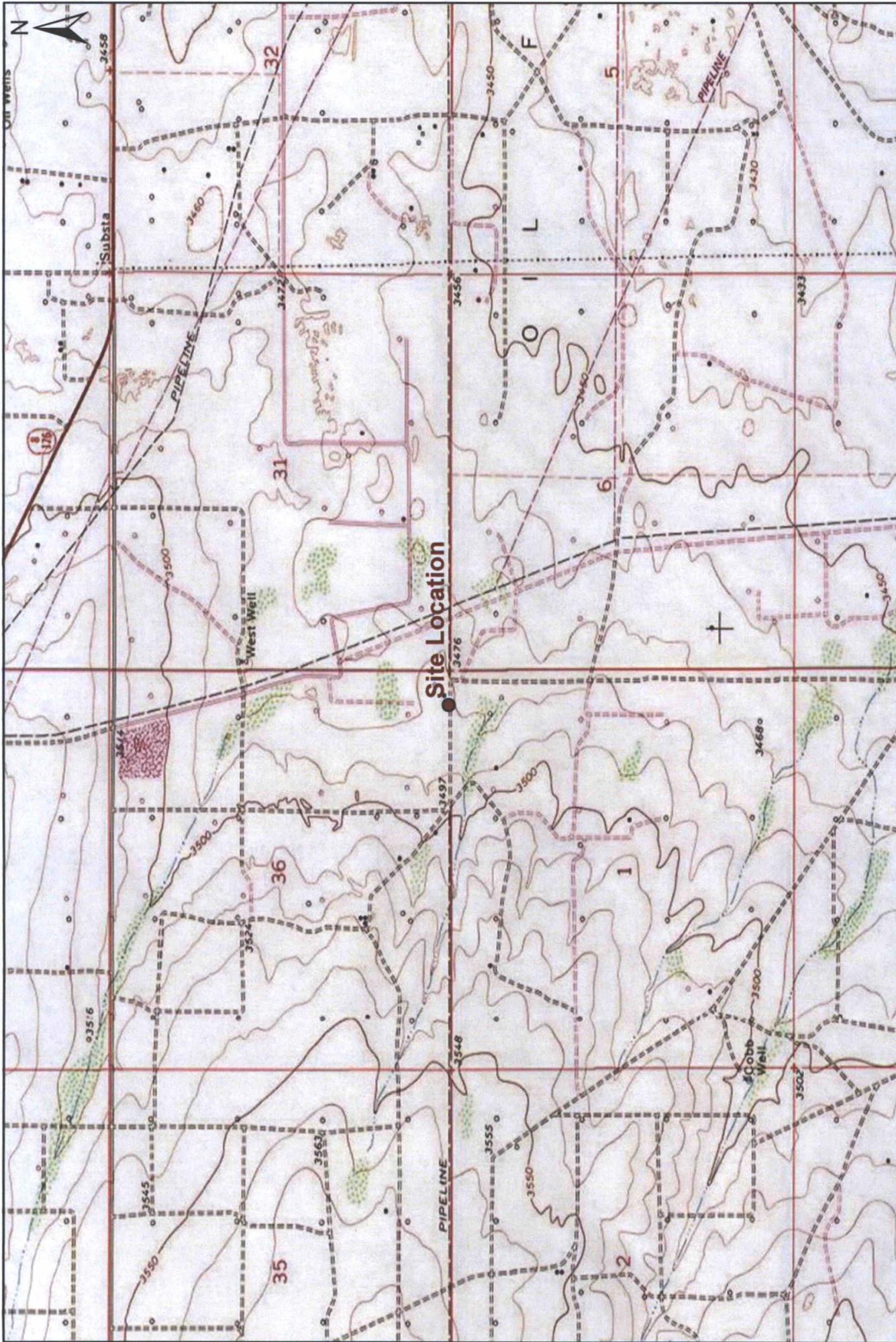
This report has been prepared for the benefit of Southern Union Gas Services. The information contained in this report, including all exhibits and attachments, may not be used by any other party without the express consent of Basin Environmental Service Technologies, LLC, and/or Southern Union Gas Services.

## 7.0 DISTRIBUTION

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

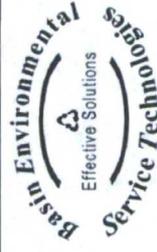
Copy 2: Rose Slade  
Southern Union Gas Services  
801 S. Loop 464  
Monahans, Texas 79756  
rose.slade@sug.com

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

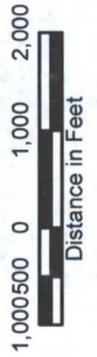


Basin Environmental Service Technologies, LLC  
 3100 Plains Hwy.  
 Lovington, NM 88260

|                    |                 |
|--------------------|-----------------|
| Drawn By: BJA      | Checked By: JWJ |
| September 26, 2012 |                 |
| Scale: 1" = 2000'  |                 |

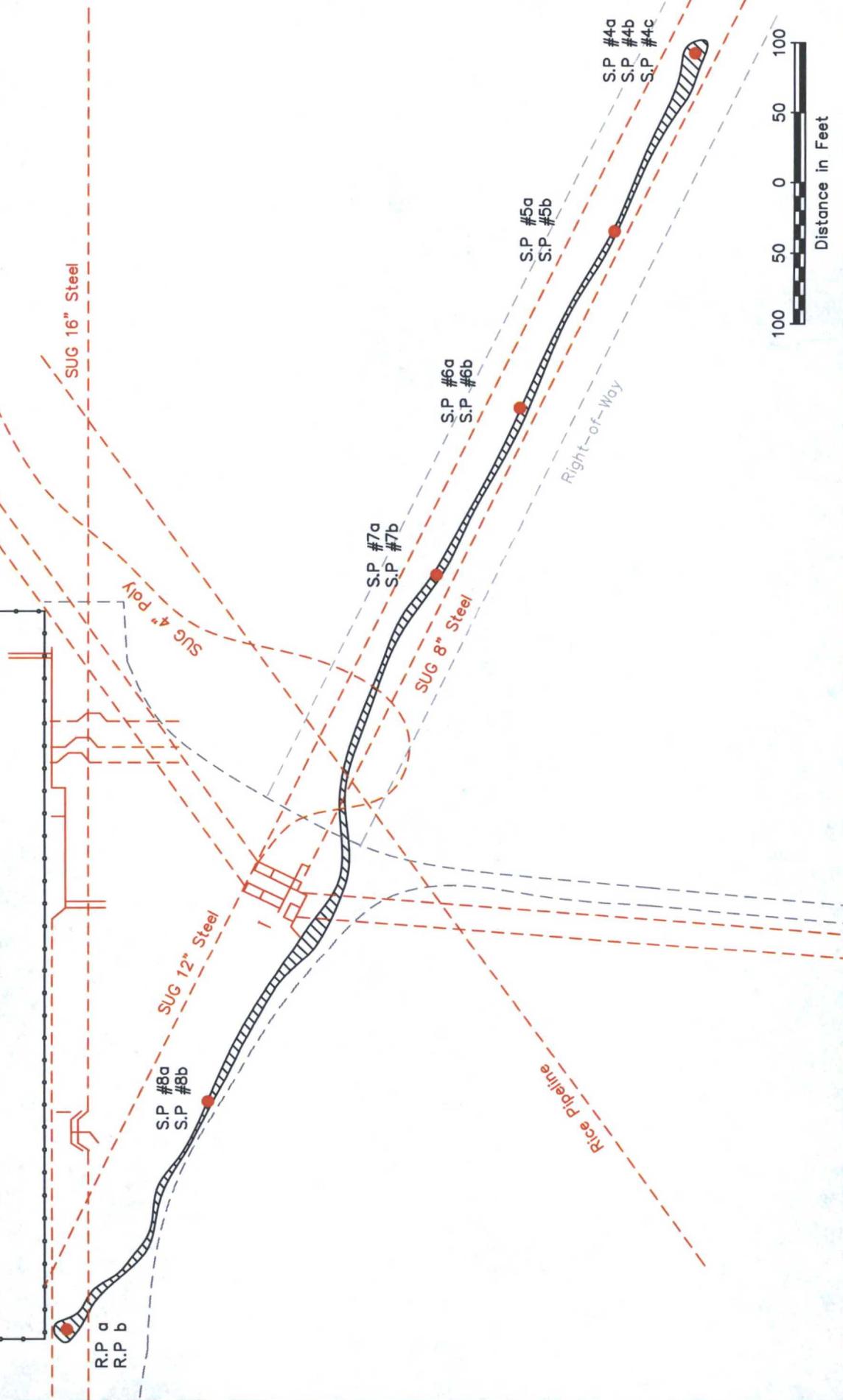


**Figure 1**  
**Site Location Map**  
 Southern Union Gas Services  
 Fullerton 14-Inch  
 Lea County, New Mexico  
 NMOCD Reference #: 1RP-1608





# West Eunice Compressor Station



- Legend**
- Sample Location
  - Pipeline
  - Buried Pipeline
  - Road
  - Fence
  - Flowpath

Figure 2  
 Site & Sample Location Map  
 Southern Union Gas Services  
 Fullerton 14"  
 NMOCD Ref RP-1608  
 Lea County, New Mexico

## Basin Environmental Services

Prep By: JWL  
 September 5, 2012  
 Checked By: BJA  
 Scale 1"=100'

TABLE 1

CONCENTRATIONS OF BENZENE, BTEX, TPH & CHLORIDE IN SOIL

SOUTHERN UNION GAS SERVICES  
 FULLERTON 14"  
 HISTORICAL RELEASE SITE  
 LEA COUNTY, NEW MEXICO  
 NMOCD REF# 1RP-1608

| SAMPLE LOCATION       | SAMPLE DEPTH (BGS) | SAMPLE DATE | SOIL STATUS | METHOD: EPA SW 846-8021B, 5030 |                 |                       |                       |                    |   | METHOD: 8015M                                |  |       |       | TOTAL TPH C <sub>6</sub> -C <sub>35</sub> (mg/Kg) | METHOD: E300.0 CHLORIDE (mg/Kg) |
|-----------------------|--------------------|-------------|-------------|--------------------------------|-----------------|-----------------------|-----------------------|--------------------|---|--|--|-------|-------|---|---------------------------------|
|                       |                    |             |             | BENZENE (mg/Kg)                | TOLUENE (mg/Kg) | ETHYL-BENZENE (mg/Kg) | TOTAL XYLENES (mg/Kg) | TOTAL BTEX (mg/Kg) | GRO C <sub>6</sub> -C <sub>12</sub> (mg/Kg) | DRO C <sub>12</sub> -C <sub>28</sub> (mg/Kg) | ORO C <sub>28</sub> -C <sub>35</sub> (mg/Kg) |       |       |   |                                 |
| S-1 Surface           | Surface            | 10/1/2007   | In-Situ     | -                              | -               | -                     | -                     | -                  | -   | -  | <12.4  | 19.5  | <12.4 | 19.5  | 394*                            |
| S-2 Surface           | Surface            | 10/1/2007   | In-Situ     | -                              | -               | -                     | -                     | -                  | -   | -  | <11.3  | 33.9  | <11.3 | 33.9  | 63.8*                           |
| S-3 Surface           | Surface            | 10/1/2007   | In-Situ     | -                              | -               | -                     | -                     | -                  | -   | -  | <11.1  | 17.0  | <11.1 | 17.0  | 42.5*                           |
| S-4 Surface           | Surface            | 10/1/2007   | In-Situ     | -                              | -               | -                     | -                     | -                  | -   | -  | <11.3  | 38.4  | <11.3 | 38.4  | 468*                            |
| R.P. a                | Surface            | 8/30/2012   | In-Situ     | <0.00100                       | <0.00200        | <0.00100              | <0.00200              | <0.00200           | <0.00200                                    | <0.00200                                     | <15.5  | <15.5 | <15.5 | <15.5   | 37.5                            |
| R.P. b                | 2'                 | 8/30/2012   | In-Situ     | <0.00100                       | <0.00200        | <0.00100              | <0.00200              | <0.00200           | <0.00200                                    | <0.00200                                     | 64.3   | 298   | 90.9  | 453   | 96.0                            |
| S.P. #4 a             | Surface            | 8/30/2012   | In-Situ     | <0.00100                       | <0.00200        | <0.00100              | <0.00200              | <0.00200           | <0.00200                                    | <0.00200                                     | <16.0  | <16.0 | <16.0 | <16.0   | 855                             |
| S.P. #4 b             | 2'                 | 8/30/2012   | In-Situ     | <0.00100                       | <0.00200        | <0.00100              | <0.00200              | <0.00200           | <0.00200                                    | <0.00200                                     | <16.0  | <16.0 | <16.0 | <16.0   | 839                             |
| S.P. #5 a             | Surface            | 8/30/2012   | In-Situ     | <0.00100                       | <0.00200        | 0.00119               | 0.00532               | 0.00651            | 0.00651                                     | 0.00651                                      | <15.0  | <15.0 | <15.0 | <15.0   | 4.56                            |
| S.P. #5 b             | 2'                 | 8/30/2012   | In-Situ     | <0.00100                       | <0.00200        | <0.00100              | <0.00200              | <0.00200           | <0.00200                                    | <0.00200                                     | 21.3   | <15.6 | <15.6 | 21.3  | 80.6                            |
| S.P. #6 a             | Surface            | 8/30/2012   | In-Situ     | <0.00100                       | <0.00200        | <0.00100              | <0.00200              | <0.00200           | <0.00200                                    | <0.00200                                     | <15.0  | <15.0 | <15.0 | <15.0   | 1.00                            |
| S.P. #6 b             | 2'                 | 8/30/2012   | In-Situ     | <0.00100                       | <0.00200        | <0.00100              | <0.00200              | <0.00200           | <0.00200                                    | <0.00200                                     | <15.8  | <15.8 | <15.8 | <15.8   | 1.88                            |
| S.P. #7 a             | Surface            | 8/30/2012   | In-Situ     | <0.00100                       | <0.00200        | <0.00100              | <0.00200              | <0.00200           | <0.00200                                    | <0.00200                                     | <16.0  | <16.0 | <16.0 | <16.0   | 7.57                            |
| S.P. #7 b             | 2'                 | 8/30/2012   | In-Situ     | <0.00100                       | <0.00200        | <0.00100              | <0.00200              | <0.00200           | <0.00200                                    | <0.00200                                     | <15.2  | <15.2 | <15.2 | <15.2   | <1.01                           |
| S.P. #8 a             | Surface            | 8/30/2012   | In-Situ     | <0.00100                       | <0.00200        | <0.00100              | <0.00200              | <0.00200           | <0.00200                                    | <0.00200                                     | <15.3  | <15.3 | <15.3 | <15.3   | 2.87                            |
| S.P. #8 b             | 2'                 | 8/30/2012   | In-Situ     | <0.00100                       | <0.00200        | <0.00100              | <0.00200              | <0.00200           | <0.00200                                    | <0.00200                                     | <16.0  | <16.0 | <16.0 | <16.0   | 13.6                            |
| S.P. #4 c             | 10'                | 8/31/2012   | In-Situ     | <0.00100                       | <0.00200        | <0.00100              | <0.00200              | <0.00200           | <0.00200                                    | <0.00200                                     | <15.6  | <15.6 | <15.6 | <15.6   | 33.0                            |
| <b>NMOCD Standard</b> |                    |             |             | <b>10</b>                      |                 |                       |                       | <b>50</b>          |   |  |  |       |       | <b>5,000</b>                                      | <b>1,000</b>                    |

- = Not analyzed.  
 \* Denotes results by EPA Method 325.3



Photograph of initial release at the Fullerton 14" Historical Release Site.



Photograph of initial release and affected right-of-way at the Fullerton 14" Historical Release Site.



Photograph the affected right-of-way at the Fullerton 14" Historical Release Site.



Photograph the affected right-of-way at the Fullerton 14" Historical Release Site.



Photograph of the advancement of soil boring S.P #4 at the Fullerton 14" Historical Release Site.



Photograph of sample point "S.P. #5" at the Fullerton 14" Historical Release Site.



Photograph of sample point "S.P. #6" at the Fullerton 14" Historical Release Site.



Photograph of sample point "S.P. #7" at the Fullerton 14" Historical Release Site.



Photograph of sample point "S.P. #8" at the Fullerton 14" Historical Release Site.



Photograph of sample point "R.P." at the Fullerton 14" Historical Release Site.

# **Analytical Report 290603**

**for**

**Southern Union Gas Services-Jal**

**Project Manager: Tony Savoie**

**Fullerton/West Eunice**

**2007-049**

**03-OCT-07**



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

**A Xenco Laboratories Company**

**Texas certification numbers:**

**Houston, TX T104704215**

**Florida certification numbers:**

**Houston, TX E871002 - Miami, FL E86678 - Tampa, FL E86675**

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Midland - Corpus Christi - Atlanta**



03-OCT-07

Project Manager: **Tony Savoie**  
**Southern Union Gas Services-Jal**  
610 Commerce  
Jal, NM 88252

Reference: XENCO Report No: **290603**  
**Fullerton/West Eunice**  
Project Address: West of Eunice NM

**Tony Savoie:**

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 290603. 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. Estimation of data uncertainty for this report is found in the quality control section of this report unless otherwise noted. 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. 290603 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,

**Brent Barron**

Odessa Laboratory Director

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**Sample Cross Reference 290603**

**Southern Union Gas Services-Jal, Jal, NM**  
Fullerton/West Eunice

| <b>Sample Id</b> | <b>Matrix</b> | <b>Date Collected</b> | <b>Sample Depth</b> | <b>Lab Sample Id</b> |
|------------------|---------------|-----------------------|---------------------|----------------------|
| S-1 Surface      | S             | Oct-01-07 07:20       |                     | 290603-001           |
| S-2 Surface      | S             | Oct-01-07 07:22       |                     | 290603-002           |
| S-3 Surface      | S             | Oct-01-07 07:25       |                     | 290603-003           |
| S-4 Surface      | S             | Oct-01-07 07:30       |                     | 290603-004           |

# Certificate of Analysis Summary 290603

## Southern Union Gas Services-Jal, Jal, NM

**Project Id:** 2007-049  
**Contact:** Tony Savoie  
**Project Location:** West of Eunice NM

**Project Name:** Fullerton/West Eunice

**Date Received in Lab:** Tue Oct-02-07 02:15 pm  
**Report Date:** 03-OCT-07

**Project Manager:** Brent Barron, II

| Analysis Requested                 | Lab Id:    | Field Id:   | Depth: | Matrix: | Sampled:        | Extracted:      | Analysed:       | Units/RL: |
|------------------------------------|------------|-------------|--------|---------|-----------------|-----------------|-----------------|-----------|
|                                    | 290603-001 | S-1 Surface |        | SOIL    | Oct-01-07 07:20 | Oct-02-07 15:10 | Oct-02-07 19:29 | RL        |
| Percent Moisture                   |            |             |        |         |                 | %               |                 | 1.00      |
|                                    |            |             |        |         |                 |                 |                 | 19.4      |
| TPH by SW8015 Mod                  |            |             |        |         |                 | %               |                 | 1.00      |
|                                    |            |             |        |         |                 |                 |                 | 11.6      |
| C6-C12 Gasoline Range Hydrocarbons |            |             |        |         |                 | mg/kg           |                 | RL        |
|                                    |            |             |        |         |                 |                 |                 | ND        |
| C12-C28 Diesel Range Hydrocarbons  |            |             |        |         |                 | mg/kg           |                 | RL        |
|                                    |            |             |        |         |                 |                 |                 | 33.9      |
| C28-C35 Oil Range Hydrocarbons     |            |             |        |         |                 | mg/kg           |                 | RL        |
|                                    |            |             |        |         |                 |                 |                 | ND        |
| Total TPH                          |            |             |        |         |                 |                 |                 | 17        |
|                                    |            |             |        |         |                 |                 |                 | 38.4      |
| Total Chloride by EPA 325.3        |            |             |        |         |                 | mg/kg           |                 | RL        |
|                                    |            |             |        |         |                 |                 |                 | 394       |
| Chloride                           |            |             |        |         |                 | mg/kg           |                 | RL        |
|                                    |            |             |        |         |                 |                 |                 | 468       |

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

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**Brent Barron**  
Odessa Laboratory Director



## 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 effect the recovery of the spike concentration. This condition could also effect 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 MQL and above the SQL.
  - 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.
- \* Outside XENCO'S scope of NELAC Accreditation

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| (210) 509-3334 | (201) 509-3335 |
| (813) 620-2000 | (813) 620-2033 |
| (305) 823-8500 | (305) 823-8555 |



# Form 2 - Surrogate Recoveries

Project Name: Fullerton/West Eunice

Work Order #: 290603

Project ID: 2007-049

Lab Batch #: 705612

Sample: 290603-001 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

### SURROGATE RECOVERY STUDY

| TPH by SW8015 Mod<br>Analytes | Amount Found [A] | True Amount [B] | Recovery %R [D] | Control Limits %R | Flags |
|-------------------------------|------------------|-----------------|-----------------|-------------------|-------|
| 1-Chlorooctadecane            | 37.7             | 50.0            | 75              | 70-135            |       |
| 1-Chlorooctane                | 39.4             | 50.0            | 79              | 70-135            |       |

Lab Batch #: 705612

Sample: 290603-001 S / MS

Batch: 1 Matrix: Soil

Units: mg/kg

### SURROGATE RECOVERY STUDY

| TPH by SW8015 Mod<br>Analytes | Amount Found [A] | True Amount [B] | Recovery %R [D] | Control Limits %R | Flags |
|-------------------------------|------------------|-----------------|-----------------|-------------------|-------|
| 1-Chlorooctadecane            | 38.1             | 50.0            | 76              | 70-135            |       |
| 1-Chlorooctane                | 48.5             | 50.0            | 97              | 70-135            |       |

Lab Batch #: 705612

Sample: 290603-001 SD / MSD

Batch: 1 Matrix: Soil

Units: mg/kg

### SURROGATE RECOVERY STUDY

| TPH by SW8015 Mod<br>Analytes | Amount Found [A] | True Amount [B] | Recovery %R [D] | Control Limits %R | Flags |
|-------------------------------|------------------|-----------------|-----------------|-------------------|-------|
| 1-Chlorooctadecane            | 42.0             | 50.0            | 84              | 70-135            |       |
| 1-Chlorooctane                | 53.5             | 50.0            | 107             | 70-135            |       |

Lab Batch #: 705612

Sample: 290603-002 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

### SURROGATE RECOVERY STUDY

| TPH by SW8015 Mod<br>Analytes | Amount Found [A] | True Amount [B] | Recovery %R [D] | Control Limits %R | Flags |
|-------------------------------|------------------|-----------------|-----------------|-------------------|-------|
| 1-Chlorooctadecane            | 46.6             | 50.0            | 93              | 70-135            |       |
| 1-Chlorooctane                | 45.9             | 50.0            | 92              | 70-135            |       |

Lab Batch #: 705612

Sample: 290603-003 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

### SURROGATE RECOVERY STUDY

| TPH by SW8015 Mod<br>Analytes | Amount Found [A] | True Amount [B] | Recovery %R [D] | Control Limits %R | Flags |
|-------------------------------|------------------|-----------------|-----------------|-------------------|-------|
| 1-Chlorooctadecane            | 39.9             | 50.0            | 80              | 70-135            |       |
| 1-Chlorooctane                | 41.0             | 50.0            | 82              | 70-135            |       |

\*\* 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: Fullerton/West Eunice

Work Order #: 290603

Project ID: 2007-049

Lab Batch #: 705612

Sample: 290603-004 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

### SURROGATE RECOVERY STUDY

| TPH by SW8015 Mod<br>Analytes | Amount Found [A] | True Amount [B] | Recovery %R [D] | Control Limits %R | Flags |
|-------------------------------|------------------|-----------------|-----------------|-------------------|-------|
| 1-Chlorooctadecane            | 41.3             | 50.0            | 83              | 70-135            |       |
| 1-Chlorooctane                | 40.6             | 50.0            | 81              | 70-135            |       |

Lab Batch #: 705612

Sample: 500026-1-BKS / BKS

Batch: 1 Matrix: Solid

Units: mg/kg

### SURROGATE RECOVERY STUDY

| TPH by SW8015 Mod<br>Analytes | Amount Found [A] | True Amount [B] | Recovery %R [D] | Control Limits %R | Flags |
|-------------------------------|------------------|-----------------|-----------------|-------------------|-------|
| 1-Chlorooctadecane            | 38.5             | 50.0            | 77              | 70-135            |       |
| 1-Chlorooctane                | 49.0             | 50.0            | 98              | 70-135            |       |

Lab Batch #: 705612

Sample: 500026-1-BLK / BLK

Batch: 1 Matrix: Solid

Units: mg/kg

### SURROGATE RECOVERY STUDY

| TPH by SW8015 Mod<br>Analytes | Amount Found [A] | True Amount [B] | Recovery %R [D] | Control Limits %R | Flags |
|-------------------------------|------------------|-----------------|-----------------|-------------------|-------|
| 1-Chlorooctadecane            | 39.3             | 50.0            | 79              | 70-135            |       |
| 1-Chlorooctane                | 40.0             | 50.0            | 80              | 70-135            |       |

\*\* 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: Fullerton/West Eunice

Work Order #: 290603

Project ID:

2007-049

Lab Batch #: 705612

Sample: 500026-1-BKS

Matrix: Solid

Date Analyzed: 10/02/2007

Date Prepared: 10/02/2007

Analyst: SHE

Reporting Units: mg/kg

Batch #: 1

### BLANK /BLANK SPIKE RECOVERY STUDY

| TPH by SW8015 Mod<br>Analytes      | Blank Result [A] | Spike Added [B] | Blank Spike Result [C] | Blank Spike %R [D] | Control Limits %R | Flags |
|------------------------------------|------------------|-----------------|------------------------|--------------------|-------------------|-------|
| C6-C12 Gasoline Range Hydrocarbons | ND               | 500             | 473                    | 95                 | 70-135            |       |
| C12-C28 Diesel Range Hydrocarbons  | ND               | 500             | 494                    | 99                 | 70-135            |       |

Lab Batch #: 705533

Sample: 705533-1-BKS

Matrix: Solid

Date Analyzed: 10/02/2007

Date Prepared: 10/02/2007

Analyst: LATCOR

Reporting Units: mg/kg

Batch #: 1

### BLANK /BLANK SPIKE RECOVERY STUDY

| Total Chloride by EPA 325.3<br>Analytes | Blank Result [A] | Spike Added [B] | Blank Spike Result [C] | Blank Spike %R [D] | Control Limits %R | Flags |
|---|------------------|-----------------|------------------------|--------------------|-------------------|-------|
| Chloride                                | ND               | 100             | 95.7                   | 96                 | 75-125            |       |

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

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



# Form 3 - MS, MSD Recoveries

Project Name: Fullerton/West Eunice

Work Order #: 290603

Lab Batch ID: 705612

Date Analyzed: 10/03/2007

Reporting Units: mg/kg

Project ID: 2007-049

QC- Sample ID: 290603-001 S

Batch #: 1 Matrix: Soil

Date Prepared: 10/02/2007

Analyst: SHE

## MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

| TPH by SW8015 Mod<br>Analytes     | Parent<br>Sample<br>Result<br>[A]  | Spike<br>Added<br>[B] | Spiked Sample<br>Result<br>[C] | Spiked Sample<br>%R<br>[D] | Spiked Sample<br>Result [F] | Spiked<br>Dup.<br>%R<br>[G] | RPD<br>% | Control<br>Limits<br>%R | Control<br>Limits<br>%RPD | Flag |
|-----------------------------------|------------------------------------|-----------------------|--------------------------------|----------------------------|-----------------------------|-----------------------------|----------|-------------------------|---------------------------|------|
|                                   | C6-C12 Gasoline Range Hydrocarbons | ND                    | 621                            | 605                        | 97                          | 670                         | 108      | 11                      | 70-135                    | 35   |
| C12-C28 Diesel Range Hydrocarbons | 19.5                               | 621                   | 606                            | 94                         | 673                         | 105                         | 11       | 70-135                  | 35                        |      |

Lab Batch ID: 705533

Date Analyzed: 10/02/2007

Reporting Units: mg/kg

QC- Sample ID: 290562-001 S

Batch #: 1 Matrix: Soil

Date Prepared: 10/02/2007

Analyst: LATCOR

## MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

| Total Chloride by EPA 325.3<br>Analytes | Parent<br>Sample<br>Result<br>[A] | Spike<br>Added<br>[B] | Spiked Sample<br>Result<br>[C] | Spiked Sample<br>%R<br>[D] | Spiked Sample<br>Result [F] | Spiked<br>Dup.<br>%R<br>[G] | RPD<br>% | Control<br>Limits<br>%R | Control<br>Limits<br>%RPD | Flag |
|---|-----------------------------------|-----------------------|--------------------------------|----------------------------|-----------------------------|-----------------------------|----------|-------------------------|---------------------------|------|
|   | Chloride                          | 138                   | 1000                           | 1150                       | 101                         | 1170                        | 103      | 2                       | 75-125                    | 30   |

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

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

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



# Sample Duplicate Recovery

Project Name: Fullerton/West Eunice

Work Order #: 290603

Lab Batch #: 705554

Project ID: 2007-049

Date Analyzed: 10/02/2007

Date Prepared: 10/02/2007

Analyst: RBA

QC- Sample ID: 290564-001 D

Batch #: 1

Matrix: Soil

Reporting Units: %

| SAMPLE / SAMPLE DUPLICATE RECOVERY |                          |                             |     |                     |      |
|------------------------------------|--------------------------|-----------------------------|-----|---------------------|------|
| Percent Moisture                   | Parent Sample Result [A] | Sample Duplicate Result [B] | RPD | Control Limits %RPD | Flag |
| Analyte                            |                          |                             |     |                     |      |
| Percent Moisture                   | 3.34                     | 2.94                        | 13  | 20                  |      |

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

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



**Environmental Lab of Texas**  
Variance/ Corrective Action Report- Sample Log-In

Client: S.U.G.S.  
Date/ Time: 10-2-07 2:15  
Lab ID #: 290603  
Initials: AL

**Sample Receipt Checklist**

|  |            |    | Client Initials          |
|--|------------|----|--------------------------|
| #1 Temperature of container/ cooler?                       | <u>Yes</u> | No | C °C                     |
| #2 Shipping container in good condition?                   | <u>Yes</u> | No |                          |
| #3 Custody Seals intact on shipping container/ cooler?     | Yes        | No | <u>Not Present</u>       |
| #4 Custody Seals intact on sample bottles/ container?      | Yes        | No | <u>Not Present</u>       |
| #5 Chain of Custody present?                               | <u>Yes</u> | No |                          |
| #6 Sample instructions complete of Chain of Custody?       | <u>Yes</u> | No |                          |
| #7 Chain of Custody signed when relinquished/ received?    | <u>Yes</u> | No |                          |
| #8 Chain of Custody agrees with sample label(s)?           | <u>Yes</u> | No | ID written on Cont./ Lid |
| #9 Container label(s) legible and intact?                  | <u>Yes</u> | No | Not Applicable           |
| #10 Sample matrix/ properties agree with Chain of Custody? | <u>Yes</u> | No |                          |
| #11 Containers supplied by ELOT?                           | <u>Yes</u> | No |                          |
| #12 Samples in proper container/ bottle?                   | <u>Yes</u> | No | See Below                |
| #13 Samples properly preserved?                            | <u>Yes</u> | No | See Below                |
| #14 Sample bottles intact?                                 | <u>Yes</u> | No |                          |
| #15 Preservations documented on Chain of Custody?          | <u>Yes</u> | No |                          |
| #16 Containers documented on Chain of Custody?             | <u>Yes</u> | No |                          |
| #17 Sufficient sample amount for indicated test(s)?        | <u>Yes</u> | No | See Below                |
| #18 All samples received within sufficient hold time?      | <u>Yes</u> | No | See Below                |
| #19 Subcontract of sample(s)?                              | Yes        | No | <u>Not Applicable</u>    |
| #20 VOC samples have zero headspace?                       | <u>Yes</u> | No | Not Applicable           |

**Variance Documentation**

Contact: \_\_\_\_\_ Contacted by: \_\_\_\_\_ Date/ Time: \_\_\_\_\_

Regarding: \_\_\_\_\_

Corrective Action Taken: \_\_\_\_\_

- Check all that Apply:
- See attached e-mail/ fax
  - Client understands and would like to proceed with analysis
  - Cooling process had begun shortly after sampling event

**PERMIAN BASIN  
ENVIRONMENTAL LAB, LP  
10014 SCR 1213  
Midland, TX 79706**

***PBELAB***

## Analytical Report

**Prepared for:**

Joel Lowry  
Basin Environmental Services  
P.O. Box 301  
Lovington, NM 88260

Project: Fullerton 14 in (RP-1608)  
Project Number: SUG Historical Releases  
Location: Lea County, New Mexico  
Lab Order Number: 2105002



**NELAP/TCEQ # T104704156-12-1**

Report Date: 09/07/12

Basin Environmental Services  
P.O. Box 301  
Lovington NM, 88260

Project: Fullerton 14 in (RP-1608)  
Project Number: SUG Historical Releases  
Project Manager: Joel Lowry

Fax: (505) 396-1429

**ANALYTICAL REPORT FOR SAMPLES**

| Sample ID | Laboratory ID | Matrix | Date Sampled   | Date Received    |
|-----------|---------------|--------|----------------|------------------|
| R.P.a     | 2I05002-01    | Soil   | 08/30/12 09:00 | 09-04-2012 17:12 |
| R.P. b    | 2I05002-02    | Soil   | 08/30/12 09:10 | 09-04-2012 17:12 |
| S.P. #4 a | 2I05002-03    | Soil   | 08/30/12 09:40 | 09-04-2012 17:12 |
| S.P. #4 b | 2I05002-04    | Soil   | 08/30/12 09:50 | 09-04-2012 17:12 |
| S.P. #5 a | 2I05002-05    | Soil   | 08/30/12 10:10 | 09-04-2012 17:12 |
| S.P. #5 b | 2I05002-06    | Soil   | 08/30/12 10:20 | 09-04-2012 17:12 |
| S.P. #6 a | 2I05002-07    | Soil   | 08/30/12 10:40 | 09-04-2012 17:12 |
| S.P. #6 b | 2I05002-08    | Soil   | 08/30/12 11:00 | 09-04-2012 17:12 |
| S.P. #7 a | 2I05002-09    | Soil   | 08/30/12 11:20 | 09-04-2012 17:12 |
| S.P. #7 b | 2I05002-10    | Soil   | 08/30/12 11:40 | 09-04-2012 17:12 |
| S.P. #8 a | 2I05002-11    | Soil   | 08/30/12 13:20 | 09-04-2012 17:12 |
| S.P. #8 b | 2I05002-12    | Soil   | 08/30/12 13:30 | 09-04-2012 17:12 |

**Organics by GC**  
**Permian Basin Environmental Lab**

| Analyte                                | Result      | Reporting Limit | Units     | Dilution | Batch   | Prepared | Analyzed | Method    | Notes |
|--|-------------|-----------------|-----------|----------|---------|----------|----------|-----------|-------|
| <b>R.P.a (2I05002-01) Soil</b>         |             |                 |           |          |         |          |          |           |       |
| Benzene                                | ND          | 0.00100         | mg/kg dry | 1        | EI20704 | 09/05/12 | 09/05/12 | EPA 8021B |       |
| Toluene                                | ND          | 0.00200         | "         | "        | "       | "        | "        | "         |       |
| Ethylbenzene                           | ND          | 0.00100         | "         | "        | "       | "        | "        | "         |       |
| Xylene (p/m)                           | ND          | 0.00200         | "         | "        | "       | "        | "        | "         |       |
| Xylene (o)                             | ND          | 0.00100         | "         | "        | "       | "        | "        | "         |       |
| <i>Surrogate: 4-Bromofluorobenzene</i> |             | 105 %           | 75-125    |          | "       | "        | "        | "         |       |
| <i>Surrogate: 1,4-Difluorobenzene</i>  |             | 99.2 %          | 75-125    |          | "       | "        | "        | "         |       |
| C6-C12                                 | ND          | 15.5            | mg/kg dry | "        | EI20707 | 09/05/12 | 09/05/12 | EPA 8015M |       |
| >C12-C28                               | ND          | 15.5            | "         | "        | "       | "        | "        | "         |       |
| >C28-C35                               | ND          | 15.5            | "         | "        | "       | "        | "        | "         |       |
| Total Hydrocarbons                     | ND          | 15.5            | "         | "        | "       | "        | "        | "         |       |
| <i>Surrogate: 1-Chlorooctane</i>       |             | 94.2 %          | 70-130    |          | "       | "        | "        | "         |       |
| <i>Surrogate: o-Terphenyl</i>          |             | 105 %           | 70-130    |          | "       | "        | "        | "         |       |
| <b>R.P. b (2I05002-02) Soil</b>        |             |                 |           |          |         |          |          |           |       |
| Benzene                                | ND          | 0.00100         | mg/kg dry | 1        | EI20704 | 09/05/12 | 09/05/12 | EPA 8021B |       |
| Toluene                                | ND          | 0.00200         | "         | "        | "       | "        | "        | "         |       |
| Ethylbenzene                           | ND          | 0.00100         | "         | "        | "       | "        | "        | "         |       |
| Xylene (p/m)                           | ND          | 0.00200         | "         | "        | "       | "        | "        | "         |       |
| Xylene (o)                             | ND          | 0.00100         | "         | "        | "       | "        | "        | "         |       |
| <i>Surrogate: 1,4-Difluorobenzene</i>  |             | 100 %           | 75-125    |          | "       | "        | "        | "         |       |
| <i>Surrogate: 4-Bromofluorobenzene</i> |             | 104 %           | 75-125    |          | "       | "        | "        | "         |       |
| <b>C6-C12</b>                          | <b>64.3</b> | 16.5            | mg/kg dry | "        | EI20707 | 09/05/12 | 09/05/12 | EPA 8015M |       |
| >C12-C28                               | <b>298</b>  | 16.5            | "         | "        | "       | "        | "        | "         |       |
| >C28-C35                               | <b>90.9</b> | 16.5            | "         | "        | "       | "        | "        | "         |       |
| <b>Total Hydrocarbons</b>              | <b>453</b>  | 16.5            | "         | "        | "       | "        | "        | "         |       |
| <i>Surrogate: 1-Chlorooctane</i>       |             | 98.2 %          | 70-130    |          | "       | "        | "        | "         |       |
| <i>Surrogate: o-Terphenyl</i>          |             | 113 %           | 70-130    |          | "       | "        | "        | "         |       |
| <b>S.P. #4 a (2I05002-03) Soil</b>     |             |                 |           |          |         |          |          |           |       |
| Benzene                                | ND          | 0.00100         | mg/kg dry | 1        | EI20703 | 09/06/12 | 09/06/12 | EPA 8021B |       |
| Toluene                                | ND          | 0.00200         | "         | "        | "       | "        | "        | "         |       |
| Ethylbenzene                           | ND          | 0.00100         | "         | "        | "       | "        | "        | "         |       |
| Xylene (p/m)                           | ND          | 0.00200         | "         | "        | "       | "        | "        | "         |       |
| Xylene (o)                             | ND          | 0.00100         | "         | "        | "       | "        | "        | "         |       |
| <i>Surrogate: 1,4-Difluorobenzene</i>  |             | 98.3 %          | 75-125    |          | "       | "        | "        | "         |       |
| <i>Surrogate: 4-Bromofluorobenzene</i> |             | 107 %           | 75-125    |          | "       | "        | "        | "         |       |
| <b>C6-C12</b>                          | <b>ND</b>   | 16.0            | mg/kg dry | "        | EI20707 | 09/05/12 | 09/05/12 | EPA 8015M |       |

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| Analyte                                | Result         | Reporting Limit | Units            | Dilution | Batch          | Prepared        | Analyzed        | Method           | Notes |
|--|----------------|-----------------|------------------|----------|----------------|-----------------|-----------------|------------------|-------|
| <b>S.P. #4 a (2105002-03) Soil</b>     |                |                 |                  |          |                |                 |                 |                  |       |
| >C12-C28                               | ND             | 16.0            | mg/kg dry        | 1        | EI20707        | 09/05/12        | 09/05/12        | EPA 8015M        |       |
| >C28-C35                               | ND             | 16.0            | "                | "        | "              | "               | "               | "                |       |
| Total Hydrocarbons                     | ND             | 16.0            | "                | "        | "              | "               | "               | "                |       |
| <i>Surrogate: 1-Chlorooctane</i>       |                | 97.2 %          | 70-130           |          | "              | "               | "               | "                |       |
| <i>Surrogate: o-Terphenyl</i>          |                | 109 %           | 70-130           |          | "              | "               | "               | "                |       |
| <b>S.P. #4 b (2105002-04) Soil</b>     |                |                 |                  |          |                |                 |                 |                  |       |
| Benzene                                | ND             | 0.00100         | mg/kg dry        | 1        | EI20704        | 09/05/12        | 09/05/12        | EPA 8021B        |       |
| Toluene                                | ND             | 0.00200         | "                | "        | "              | "               | "               | "                |       |
| Ethylbenzene                           | ND             | 0.00100         | "                | "        | "              | "               | "               | "                |       |
| Xylene (p/m)                           | ND             | 0.00200         | "                | "        | "              | "               | "               | "                |       |
| Xylene (o)                             | ND             | 0.00100         | "                | "        | "              | "               | "               | "                |       |
| <i>Surrogate: 4-Bromofluorobenzene</i> |                | 107 %           | 75-125           |          | "              | "               | "               | "                |       |
| <i>Surrogate: 1,4-Difluorobenzene</i>  |                | 99.0 %          | 75-125           |          | "              | "               | "               | "                |       |
| <b>C6-C12</b>                          | <b>ND</b>      | <b>16.0</b>     | <b>mg/kg dry</b> | <b>"</b> | <b>EI20707</b> | <b>09/05/12</b> | <b>09/05/12</b> | <b>EPA 8015M</b> |       |
| >C12-C28                               | ND             | 16.0            | "                | "        | "              | "               | "               | "                |       |
| >C28-C35                               | ND             | 16.0            | "                | "        | "              | "               | "               | "                |       |
| Total Hydrocarbons                     | ND             | 16.0            | "                | "        | "              | "               | "               | "                |       |
| <i>Surrogate: 1-Chlorooctane</i>       |                | 94.3 %          | 70-130           |          | "              | "               | "               | "                |       |
| <i>Surrogate: o-Terphenyl</i>          |                | 107 %           | 70-130           |          | "              | "               | "               | "                |       |
| <b>S.P. #5 a (2105002-05) Soil</b>     |                |                 |                  |          |                |                 |                 |                  |       |
| Benzene                                | ND             | 0.00100         | mg/kg dry        | 1        | EI20703        | 09/06/12        | 09/06/12        | EPA 8021B        |       |
| Toluene                                | ND             | 0.00200         | "                | "        | "              | "               | "               | "                |       |
| <b>Ethylbenzene</b>                    | <b>0.00119</b> | 0.00100         | "                | "        | "              | "               | "               | "                |       |
| <b>Xylene (p/m)</b>                    | <b>0.00405</b> | 0.00200         | "                | "        | "              | "               | "               | "                |       |
| <b>Xylene (o)</b>                      | <b>0.00127</b> | 0.00100         | "                | "        | "              | "               | "               | "                |       |
| <i>Surrogate: 1,4-Difluorobenzene</i>  |                | 97.3 %          | 75-125           |          | "              | "               | "               | "                |       |
| <i>Surrogate: 4-Bromofluorobenzene</i> |                | 105 %           | 75-125           |          | "              | "               | "               | "                |       |
| <b>C6-C12</b>                          | <b>ND</b>      | <b>15.0</b>     | <b>mg/kg dry</b> | <b>"</b> | <b>EI20707</b> | <b>09/05/12</b> | <b>09/05/12</b> | <b>EPA 8015M</b> |       |
| >C12-C28                               | ND             | 15.0            | "                | "        | "              | "               | "               | "                |       |
| >C28-C35                               | ND             | 15.0            | "                | "        | "              | "               | "               | "                |       |
| Total Hydrocarbons                     | ND             | 15.0            | "                | "        | "              | "               | "               | "                |       |
| <i>Surrogate: 1-Chlorooctane</i>       |                | 101 %           | 70-130           |          | "              | "               | "               | "                |       |
| <i>Surrogate: o-Terphenyl</i>          |                | 109 %           | 70-130           |          | "              | "               | "               | "                |       |

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| Analyte                                | Result      | Reporting Limit | Units     | Dilution | Batch   | Prepared | Analyzed | Method    | Notes |
|--|-------------|-----------------|-----------|----------|---------|----------|----------|-----------|-------|
| <b>S.P. #5 b (2105002-06) Soil</b>     |             |                 |           |          |         |          |          |           |       |
| Benzene                                | ND          | 0.00100         | mg/kg dry | 1        | EI20703 | 09/06/12 | 09/06/12 | EPA 8021B |       |
| Toluene                                | ND          | 0.00200         | "         | "        | "       | "        | "        | "         |       |
| Ethylbenzene                           | ND          | 0.00100         | "         | "        | "       | "        | "        | "         |       |
| Xylene (p/m)                           | ND          | 0.00200         | "         | "        | "       | "        | "        | "         |       |
| Xylene (o)                             | ND          | 0.00100         | "         | "        | "       | "        | "        | "         |       |
| <i>Surrogate: 4-Bromofluorobenzene</i> |             | 106 %           | 75-125    |          | "       | "        | "        | "         |       |
| <i>Surrogate: 1,4-Difluorobenzene</i>  |             | 98.2 %          | 75-125    |          | "       | "        | "        | "         |       |
| <b>C6-C12</b>                          | <b>21.3</b> | 15.6            | mg/kg dry | "        | EI20707 | 09/05/12 | 09/05/12 | EPA 8015M |       |
| >C12-C28                               | ND          | 15.6            | "         | "        | "       | "        | "        | "         |       |
| >C28-C35                               | ND          | 15.6            | "         | "        | "       | "        | "        | "         |       |
| <b>Total Hydrocarbons</b>              | <b>21.3</b> | 15.6            | "         | "        | "       | "        | "        | "         |       |
| <i>Surrogate: 1-Chlorooctane</i>       |             | 90.0 %          | 70-130    |          | "       | "        | "        | "         |       |
| <i>Surrogate: o-Terphenyl</i>          |             | 103 %           | 70-130    |          | "       | "        | "        | "         |       |
| <b>S.P. #6 a (2105002-07) Soil</b>     |             |                 |           |          |         |          |          |           |       |
| Benzene                                | ND          | 0.00100         | mg/kg dry | 1        | EI20703 | 09/06/12 | 09/06/12 | EPA 8021B |       |
| Toluene                                | ND          | 0.00200         | "         | "        | "       | "        | "        | "         |       |
| Ethylbenzene                           | ND          | 0.00100         | "         | "        | "       | "        | "        | "         |       |
| Xylene (p/m)                           | ND          | 0.00200         | "         | "        | "       | "        | "        | "         |       |
| Xylene (o)                             | ND          | 0.00100         | "         | "        | "       | "        | "        | "         |       |
| <i>Surrogate: 1,4-Difluorobenzene</i>  |             | 100 %           | 75-125    |          | "       | "        | "        | "         |       |
| <i>Surrogate: 4-Bromofluorobenzene</i> |             | 77.3 %          | 75-125    |          | "       | "        | "        | "         |       |
| <b>C6-C12</b>                          | ND          | 15.0            | mg/kg dry | "        | EI20707 | 09/05/12 | 09/05/12 | EPA 8015M |       |
| >C12-C28                               | ND          | 15.0            | "         | "        | "       | "        | "        | "         |       |
| >C28-C35                               | ND          | 15.0            | "         | "        | "       | "        | "        | "         |       |
| <b>Total Hydrocarbons</b>              | ND          | 15.0            | "         | "        | "       | "        | "        | "         |       |
| <i>Surrogate: 1-Chlorooctane</i>       |             | 99.1 %          | 70-130    |          | "       | "        | "        | "         |       |
| <i>Surrogate: o-Terphenyl</i>          |             | 113 %           | 70-130    |          | "       | "        | "        | "         |       |
| <b>S.P. #6 b (2105002-08) Soil</b>     |             |                 |           |          |         |          |          |           |       |
| Benzene                                | ND          | 0.00100         | mg/kg dry | 1        | EI20704 | 09/05/12 | 09/05/12 | EPA 8021B |       |
| Toluene                                | ND          | 0.00200         | "         | "        | "       | "        | "        | "         |       |
| Ethylbenzene                           | ND          | 0.00100         | "         | "        | "       | "        | "        | "         |       |
| Xylene (p/m)                           | ND          | 0.00200         | "         | "        | "       | "        | "        | "         |       |
| Xylene (o)                             | ND          | 0.00100         | "         | "        | "       | "        | "        | "         |       |
| <i>Surrogate: 4-Bromofluorobenzene</i> |             | 106 %           | 75-125    |          | "       | "        | "        | "         |       |
| <i>Surrogate: 1,4-Difluorobenzene</i>  |             | 96.8 %          | 75-125    |          | "       | "        | "        | "         |       |
| <b>C6-C12</b>                          | ND          | 15.8            | mg/kg dry | "        | EI20707 | 09/05/12 | 09/05/12 | EPA 8015M |       |

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| Analyte                                | Result | Reporting Limit | Units     | Dilution | Batch   | Prepared | Analyzed | Method    | Notes |
|--|--------|-----------------|-----------|----------|---------|----------|----------|-----------|-------|
| <b>S.P. #6 b (2105002-08) Soil</b>     |        |                 |           |          |         |          |          |           |       |
| >C12-C28                               | ND     | 15.8            | mg/kg dry | 1        | EI20707 | 09/05/12 | 09/05/12 | EPA 8015M |       |
| >C28-C35                               | ND     | 15.8            | "         | "        | "       | "        | "        | "         |       |
| Total Hydrocarbons                     | ND     | 15.8            | "         | "        | "       | "        | "        | "         |       |
| <i>Surrogate: 1-Chlorooctane</i>       |        | 95.0 %          | 70-130    |          | "       | "        | "        | "         |       |
| <i>Surrogate: o-Terphenyl</i>          |        | 107 %           | 70-130    |          | "       | "        | "        | "         |       |
| <b>S.P. #7 a (2105002-09) Soil</b>     |        |                 |           |          |         |          |          |           |       |
| Benzene                                | ND     | 0.00100         | mg/kg dry | 1        | EI20704 | 09/05/12 | 09/05/12 | EPA 8021B |       |
| Toluene                                | ND     | 0.00200         | "         | "        | "       | "        | "        | "         |       |
| Ethylbenzene                           | ND     | 0.00100         | "         | "        | "       | "        | "        | "         |       |
| Xylene (p/m)                           | ND     | 0.00200         | "         | "        | "       | "        | "        | "         |       |
| Xylene (o)                             | ND     | 0.00100         | "         | "        | "       | "        | "        | "         |       |
| <i>Surrogate: 1,4-Difluorobenzene</i>  |        | 96.5 %          | 75-125    |          | "       | "        | "        | "         |       |
| <i>Surrogate: 4-Bromofluorobenzene</i> |        | 104 %           | 75-125    |          | "       | "        | "        | "         |       |
| C6-C12                                 | ND     | 16.0            | mg/kg dry | "        | EI20707 | 09/05/12 | 09/05/12 | EPA 8015M |       |
| >C12-C28                               | ND     | 16.0            | "         | "        | "       | "        | "        | "         |       |
| >C28-C35                               | ND     | 16.0            | "         | "        | "       | "        | "        | "         |       |
| Total Hydrocarbons                     | ND     | 16.0            | "         | "        | "       | "        | "        | "         |       |
| <i>Surrogate: 1-Chlorooctane</i>       |        | 102 %           | 70-130    |          | "       | "        | "        | "         |       |
| <i>Surrogate: o-Terphenyl</i>          |        | 115 %           | 70-130    |          | "       | "        | "        | "         |       |
| <b>S.P. #7 b (2105002-10) Soil</b>     |        |                 |           |          |         |          |          |           |       |
| Benzene                                | ND     | 0.00100         | mg/kg dry | 1        | EI20703 | 09/06/12 | 09/06/12 | EPA 8021B |       |
| Toluene                                | ND     | 0.00200         | "         | "        | "       | "        | "        | "         |       |
| Ethylbenzene                           | ND     | 0.00100         | "         | "        | "       | "        | "        | "         |       |
| Xylene (p/m)                           | ND     | 0.00200         | "         | "        | "       | "        | "        | "         |       |
| Xylene (o)                             | ND     | 0.00100         | "         | "        | "       | "        | "        | "         |       |
| <i>Surrogate: 1,4-Difluorobenzene</i>  |        | 97.3 %          | 75-125    |          | "       | "        | "        | "         |       |
| <i>Surrogate: 4-Bromofluorobenzene</i> |        | 105 %           | 75-125    |          | "       | "        | "        | "         |       |
| C6-C12                                 | ND     | 15.2            | mg/kg dry | "        | EI20707 | 09/05/12 | 09/05/12 | EPA 8015M |       |
| >C12-C28                               | ND     | 15.2            | "         | "        | "       | "        | "        | "         |       |
| >C28-C35                               | ND     | 15.2            | "         | "        | "       | "        | "        | "         |       |
| Total Hydrocarbons                     | ND     | 15.2            | "         | "        | "       | "        | "        | "         |       |
| <i>Surrogate: 1-Chlorooctane</i>       |        | 98.2 %          | 70-130    |          | "       | "        | "        | "         |       |
| <i>Surrogate: o-Terphenyl</i>          |        | 112 %           | 70-130    |          | "       | "        | "        | "         |       |

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| Analyte                                | Result    | Reporting Limit | Units     | Dilution | Batch   | Prepared | Analyzed | Method    | Notes |
|--|-----------|-----------------|-----------|----------|---------|----------|----------|-----------|-------|
| <b>S.P. #8 a (2105002-11) Soil</b>     |           |                 |           |          |         |          |          |           |       |
| Benzene                                | ND        | 0.00100         | mg/kg dry | 1        | EI20704 | 09/05/12 | 09/05/12 | EPA 8021B |       |
| Toluene                                | ND        | 0.00200         | "         | "        | "       | "        | "        | "         |       |
| Ethylbenzene                           | ND        | 0.00100         | "         | "        | "       | "        | "        | "         |       |
| Xylene (p/m)                           | ND        | 0.00200         | "         | "        | "       | "        | "        | "         |       |
| Xylene (o)                             | ND        | 0.00100         | "         | "        | "       | "        | "        | "         |       |
| <i>Surrogate: 1,4-Difluorobenzene</i>  |           | 97.5 %          | 75-125    |          | "       | "        | "        | "         |       |
| <i>Surrogate: 4-Bromofluorobenzene</i> |           | 110 %           | 75-125    |          | "       | "        | "        | "         |       |
| <b>C6-C12</b>                          | <b>ND</b> | 15.3            | mg/kg dry | "        | EI20707 | 09/05/12 | 09/06/12 | EPA 8015M |       |
| <b>&gt;C12-C28</b>                     | <b>ND</b> | 15.3            | "         | "        | "       | "        | "        | "         |       |
| <b>&gt;C28-C35</b>                     | <b>ND</b> | 15.3            | "         | "        | "       | "        | "        | "         |       |
| <b>Total Hydrocarbons</b>              | <b>ND</b> | 15.3            | "         | "        | "       | "        | "        | "         |       |
| <i>Surrogate: 1-Chlorooctane</i>       |           | 94.8 %          | 70-130    |          | "       | "        | "        | "         |       |
| <i>Surrogate: o-Terphenyl</i>          |           | 106 %           | 70-130    |          | "       | "        | "        | "         |       |
| <b>S.P. #8 b (2105002-12) Soil</b>     |           |                 |           |          |         |          |          |           |       |
| Benzene                                | ND        | 0.00100         | mg/kg dry | 1        | EI20704 | 09/05/12 | 09/05/12 | EPA 8021B |       |
| Toluene                                | ND        | 0.00200         | "         | "        | "       | "        | "        | "         |       |
| Ethylbenzene                           | ND        | 0.00100         | "         | "        | "       | "        | "        | "         |       |
| Xylene (p/m)                           | ND        | 0.00200         | "         | "        | "       | "        | "        | "         |       |
| Xylene (o)                             | ND        | 0.00100         | "         | "        | "       | "        | "        | "         |       |
| <i>Surrogate: 4-Bromofluorobenzene</i> |           | 108 %           | 75-125    |          | "       | "        | "        | "         |       |
| <i>Surrogate: 1,4-Difluorobenzene</i>  |           | 96.0 %          | 75-125    |          | "       | "        | "        | "         |       |
| <b>C6-C12</b>                          | <b>ND</b> | 16.0            | mg/kg dry | "        | EI20707 | 09/05/12 | 09/06/12 | EPA 8015M |       |
| <b>&gt;C12-C28</b>                     | <b>ND</b> | 16.0            | "         | "        | "       | "        | "        | "         |       |
| <b>&gt;C28-C35</b>                     | <b>ND</b> | 16.0            | "         | "        | "       | "        | "        | "         |       |
| <b>Total Hydrocarbons</b>              | <b>ND</b> | 16.0            | "         | "        | "       | "        | "        | "         |       |
| <i>Surrogate: 1-Chlorooctane</i>       |           | 88.3 %          | 70-130    |          | "       | "        | "        | "         |       |
| <i>Surrogate: o-Terphenyl</i>          |           | 98.9 %          | 70-130    |          | "       | "        | "        | "         |       |

*The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Permian Basin Environmental Lab.*

**General Chemistry Parameters by EPA / Standard Methods**  
**Permian Basin Environmental Lab**

| Analyte                            | Result | Reporting Limit | Units             | Dilution | Batch   | Prepared | Analyzed | Method        | Notes |
|------------------------------------|--------|-----------------|-------------------|----------|---------|----------|----------|---------------|-------|
| <b>R.P.a (2105002-01) Soil</b>     |        |                 |                   |          |         |          |          |               |       |
| Chloride                           | 37.5   | 1.03            | mg/kg dry wt. dry | 1        | EI20702 | 09/06/12 | 09/07/12 | EPA 300.0     |       |
| % Moisture                         | 3.0    | 0.1             | %                 | "        | EI20701 | 09/06/12 | 09/07/12 | % calculation |       |
| <b>R.P. b (2105002-02) Soil</b>    |        |                 |                   |          |         |          |          |               |       |
| Chloride                           | 96.0   | 2.75            | mg/kg dry wt. dry | 2.5      | EI20702 | 09/06/12 | 09/07/12 | EPA 300.0     |       |
| % Moisture                         | 9.0    | 0.1             | %                 | 1        | EI20701 | 09/06/12 | 09/07/12 | % calculation |       |
| <b>S.P. #4 a (2105002-03) Soil</b> |        |                 |                   |          |         |          |          |               |       |
| Chloride                           | 855    | 2.66            | mg/kg dry wt. dry | 2.5      | EI20702 | 09/06/12 | 09/07/12 | EPA 300.0     |       |
| % Moisture                         | 6.0    | 0.1             | %                 | 1        | EI20701 | 09/06/12 | 09/07/12 | % calculation |       |
| <b>S.P. #4 b (2105002-04) Soil</b> |        |                 |                   |          |         |          |          |               |       |
| Chloride                           | 839    | 2.66            | mg/kg dry wt. dry | 2.5      | EI20702 | 09/06/12 | 09/07/12 | EPA 300.0     |       |
| % Moisture                         | 4.0    | 0.1             | %                 | 1        | EI20701 | 09/06/12 | 09/07/12 | % calculation |       |
| <b>S.P. #5 a (2105002-05) Soil</b> |        |                 |                   |          |         |          |          |               |       |
| Chloride                           | 4.56   | 1.00            | mg/kg dry wt. dry | 1        | EI20702 | 09/06/12 | 09/07/12 | EPA 300.0     |       |
| % Moisture                         | ND     | 0.1             | %                 | "        | EI20701 | 09/06/12 | 09/07/12 | % calculation |       |
| <b>S.P. #5 b (2105002-06) Soil</b> |        |                 |                   |          |         |          |          |               |       |
| Chloride                           | 80.6   | 1.04            | mg/kg dry wt. dry | 1        | EI20702 | 09/06/12 | 09/07/12 | EPA 300.0     |       |
| % Moisture                         | 4.0    | 0.1             | %                 | "        | EI20701 | 09/06/12 | 09/07/12 | % calculation |       |
| <b>S.P. #6 a (2105002-07) Soil</b> |        |                 |                   |          |         |          |          |               |       |
| Chloride                           | 1.00   | 1.00            | mg/kg dry wt. dry | 1        | EI20702 | 09/06/12 | 09/07/12 | EPA 300.0     |       |
| % Moisture                         | ND     | 0.1             | %                 | "        | EI20701 | 09/06/12 | 09/07/12 | % calculation |       |
| <b>S.P. #6 b (2105002-08) Soil</b> |        |                 |                   |          |         |          |          |               |       |
| Chloride                           | 1.88   | 1.05            | mg/kg dry wt. dry | 1        | EI20702 | 09/06/12 | 09/07/12 | EPA 300.0     |       |
| % Moisture                         | 5.0    | 0.1             | %                 | "        | EI20701 | 09/06/12 | 09/07/12 | % calculation |       |

**General Chemistry Parameters by EPA / Standard Methods**  
**Permian Basin Environmental Lab**

| Analyte                            | Result | Reporting Limit | Units             | Dilution | Batch   | Prepared | Analyzed | Method        | Notes |
|------------------------------------|--------|-----------------|-------------------|----------|---------|----------|----------|---------------|-------|
| <b>S.P. #7 a (2105002-09) Soil</b> |        |                 |                   |          |         |          |          |               |       |
| Chloride                           | 7.57   | 1.06            | mg/kg dry wt. dry | 1        | EI20702 | 09/06/12 | 09/07/12 | EPA 300.0     |       |
| % Moisture                         | 6.0    | 0.1             | %                 | "        | EI20701 | 09/06/12 | 09/07/12 | % calculation |       |
| <b>S.P. #7 b (2105002-10) Soil</b> |        |                 |                   |          |         |          |          |               |       |
| Chloride                           | ND     | 1.01            | mg/kg dry wt. dry | 1        | EI20702 | 09/06/12 | 09/07/12 | EPA 300.0     |       |
| % Moisture                         | 1.0    | 0.1             | %                 | "        | EI20701 | 09/06/12 | 09/07/12 | % calculation |       |
| <b>S.P. #8 a (2105002-11) Soil</b> |        |                 |                   |          |         |          |          |               |       |
| Chloride                           | 2.87   | 1.02            | mg/kg dry wt. dry | 1        | EI20702 | 09/06/12 | 09/07/12 | EPA 300.0     |       |
| % Moisture                         | 2.0    | 0.1             | %                 | "        | EI20701 | 09/06/12 | 09/07/12 | % calculation |       |
| <b>S.P. #8 b (2105002-12) Soil</b> |        |                 |                   |          |         |          |          |               |       |
| Chloride                           | 13.6   | 1.06            | mg/kg dry wt. dry | 1        | EI20702 | 09/06/12 | 09/07/12 | EPA 300.0     |       |
| % Moisture                         | 6.0    | 0.1             | %                 | "        | EI20701 | 09/06/12 | 09/07/12 | % calculation |       |

**Organics by GC - Quality Control**  
**Permian Basin Environmental Lab**

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---------|--------|-----------------|-------|-------------|---------------|------|-------------|-----|-----------|-------|
|---------|--------|-----------------|-------|-------------|---------------|------|-------------|-----|-----------|-------|

**Batch EI20703 - General Preparation (GC)**

**Blank (EI20703-BLK1)**

Prepared & Analyzed: 09/06/12

|                                 |      |         |           |      |  |      |        |  |  |  |
|---------------------------------|------|---------|-----------|------|--|------|--------|--|--|--|
| Benzene                         | ND   | 0.00100 | mg/kg wet |      |  |      |        |  |  |  |
| Toluene                         | ND   | 0.00200 | "         |      |  |      |        |  |  |  |
| Ethylbenzene                    | ND   | 0.00100 | "         |      |  |      |        |  |  |  |
| Xylene (p/m)                    | ND   | 0.00200 | "         |      |  |      |        |  |  |  |
| Xylene (o)                      | ND   | 0.00100 | "         |      |  |      |        |  |  |  |
| Surrogate: 1,4-Difluorobenzene  | 57.5 |         | ug/kg     | 60.0 |  | 95.8 | 75-125 |  |  |  |
| Surrogate: 4-Bromofluorobenzene | 63.8 |         | "         | 60.0 |  | 106  | 75-125 |  |  |  |

**LCS (EI20703-BS1)**

Prepared & Analyzed: 09/06/12

|                                 |        |         |           |       |  |      |        |  |  |  |
|---------------------------------|--------|---------|-----------|-------|--|------|--------|--|--|--|
| Benzene                         | 0.104  | 0.00100 | mg/kg wet | 0.100 |  | 104  | 80-120 |  |  |  |
| Toluene                         | 0.108  | 0.00200 | "         | 0.100 |  | 108  | 80-120 |  |  |  |
| Ethylbenzene                    | 0.103  | 0.00100 | "         | 0.100 |  | 103  | 80-120 |  |  |  |
| Xylene (p/m)                    | 0.211  | 0.00200 | "         | 0.200 |  | 106  | 80-120 |  |  |  |
| Xylene (o)                      | 0.0970 | 0.00100 | "         | 0.100 |  | 97.0 | 80-120 |  |  |  |
| Surrogate: 1,4-Difluorobenzene  | 55.3   |         | ug/kg     | 60.0  |  | 92.2 | 75-125 |  |  |  |
| Surrogate: 4-Bromofluorobenzene | 63.8   |         | "         | 60.0  |  | 106  | 75-125 |  |  |  |

**LCS Dup (EI20703-BS1)**

Prepared & Analyzed: 09/06/12

|                                 |        |         |           |       |  |      |        |       |    |  |
|---------------------------------|--------|---------|-----------|-------|--|------|--------|-------|----|--|
| Benzene                         | 0.102  | 0.00100 | mg/kg wet | 0.100 |  | 102  | 80-120 | 1.94  | 20 |  |
| Toluene                         | 0.108  | 0.00200 | "         | 0.100 |  | 108  | 80-120 | 0.00  | 20 |  |
| Ethylbenzene                    | 0.102  | 0.00100 | "         | 0.100 |  | 102  | 80-120 | 0.976 | 20 |  |
| Xylene (p/m)                    | 0.208  | 0.00200 | "         | 0.200 |  | 104  | 80-120 | 1.90  | 20 |  |
| Xylene (o)                      | 0.0959 | 0.00100 | "         | 0.100 |  | 95.9 | 80-120 | 1.14  | 20 |  |
| Surrogate: 1,4-Difluorobenzene  | 54.9   |         | ug/kg     | 60.0  |  | 91.5 | 75-125 |       |    |  |
| Surrogate: 4-Bromofluorobenzene | 63.3   |         | "         | 60.0  |  | 106  | 75-125 |       |    |  |

**Matrix Spike (EI20703-MS1)**

Source: 2105002-10

Prepared & Analyzed: 09/06/12

|                                 |        |         |           |       |    |      |        |  |  |       |
|---------------------------------|--------|---------|-----------|-------|----|------|--------|--|--|-------|
| Benzene                         | 0.0751 | 0.00100 | mg/kg dry | 0.101 | ND | 74.4 | 80-120 |  |  | QM-05 |
| Toluene                         | 0.0830 | 0.00200 | "         | 0.101 | ND | 82.2 | 80-120 |  |  |       |
| Ethylbenzene                    | 0.0745 | 0.00100 | "         | 0.101 | ND | 73.8 | 80-120 |  |  | QM-05 |
| Xylene (p/m)                    | 0.150  | 0.00200 | "         | 0.202 | ND | 74.3 | 80-120 |  |  | QM-05 |
| Xylene (o)                      | 0.0704 | 0.00100 | "         | 0.101 | ND | 69.7 | 80-120 |  |  | QM-05 |
| Surrogate: 4-Bromofluorobenzene | 66.5   |         | ug/kg     | 60.0  |    | 111  | 75-125 |  |  |       |
| Surrogate: 1,4-Difluorobenzene  | 58.1   |         | "         | 60.0  |    | 96.8 | 75-125 |  |  |       |

**Organics by GC - Quality Control**  
**Permian Basin Environmental Lab**

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---------|--------|-----------------|-------|-------------|---------------|------|-------------|-----|-----------|-------|
|---------|--------|-----------------|-------|-------------|---------------|------|-------------|-----|-----------|-------|

**Batch EI20703 - General Preparation (GC)**

| Matrix Spike Dup (EI20703-MSD1) | Source: 2105002-10 |         |           | Prepared & Analyzed: 09/06/12 |    |      |        |      |    |       |
|---------------------------------|--------------------|---------|-----------|-------------------------------|----|------|--------|------|----|-------|
| Benzene                         | 0.0743             | 0.00100 | mg/kg dry | 0.101                         | ND | 73.6 | 80-120 | 1.08 | 20 | QM-05 |
| Toluene                         | 0.0805             | 0.00200 | "         | 0.101                         | ND | 79.7 | 80-120 | 3.09 | 20 | QM-05 |
| Ethylbenzene                    | 0.0713             | 0.00100 | "         | 0.101                         | ND | 70.6 | 80-120 | 4.43 | 20 | QM-05 |
| Xylene (p/m)                    | 0.142              | 0.00200 | "         | 0.202                         | ND | 70.3 | 80-120 | 5.53 | 20 | QM-05 |
| Xylene (o)                      | 0.0667             | 0.00100 | "         | 0.101                         | ND | 66.0 | 80-120 | 5.45 | 20 | QM-05 |
| Surrogate: 1,4-Difluorobenzene  | 57.0               |         | ug/kg     | 60.0                          |    | 95.0 | 75-125 |      |    |       |
| Surrogate: 4-Bromofluorobenzene | 65.6               |         | "         | 60.0                          |    | 109  | 75-125 |      |    |       |

**Batch EI20704 - General Preparation (GC)**

| Blank (EI20704-BLK1)            | Prepared & Analyzed: 09/05/12 |         |           |      |  |      |        |  |  |  |
|---------------------------------|-------------------------------|---------|-----------|------|--|------|--------|--|--|--|
| Benzene                         | ND                            | 0.00100 | mg/kg wet |      |  |      |        |  |  |  |
| Toluene                         | ND                            | 0.00200 | "         |      |  |      |        |  |  |  |
| Ethylbenzene                    | ND                            | 0.00100 | "         |      |  |      |        |  |  |  |
| Xylene (p/m)                    | ND                            | 0.00200 | "         |      |  |      |        |  |  |  |
| Xylene (o)                      | ND                            | 0.00100 | "         |      |  |      |        |  |  |  |
| Surrogate: 4-Bromofluorobenzene | 62.3                          |         | ug/kg     | 60.0 |  | 104  | 75-125 |  |  |  |
| Surrogate: 1,4-Difluorobenzene  | 57.9                          |         | "         | 60.0 |  | 96.5 | 75-125 |  |  |  |

| LCS (EI20704-BS1)               | Prepared & Analyzed: 09/05/12 |         |           |       |  |      |        |  |  |  |
|---------------------------------|-------------------------------|---------|-----------|-------|--|------|--------|--|--|--|
| Benzene                         | 0.0909                        | 0.00100 | mg/kg wet | 0.100 |  | 90.9 | 80-120 |  |  |  |
| Toluene                         | 0.102                         | 0.00200 | "         | 0.100 |  | 102  | 80-120 |  |  |  |
| Ethylbenzene                    | 0.0977                        | 0.00100 | "         | 0.100 |  | 97.7 | 80-120 |  |  |  |
| Xylene (p/m)                    | 0.198                         | 0.00200 | "         | 0.200 |  | 99.0 | 80-120 |  |  |  |
| Xylene (o)                      | 0.0914                        | 0.00100 | "         | 0.100 |  | 91.4 | 80-120 |  |  |  |
| Surrogate: 4-Bromofluorobenzene | 64.3                          |         | ug/kg     | 60.0  |  | 107  | 75-125 |  |  |  |
| Surrogate: 1,4-Difluorobenzene  | 58.7                          |         | "         | 60.0  |  | 97.8 | 75-125 |  |  |  |

**Organics by GC - Quality Control**  
**Permian Basin Environmental Lab**

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---------|--------|-----------------|-------|-------------|---------------|------|-------------|-----|-----------|-------|
|---------|--------|-----------------|-------|-------------|---------------|------|-------------|-----|-----------|-------|

**Batch EI20704 - General Preparation (GC)**

**LCS Dup (EI20704-BSD1)**

Prepared & Analyzed: 09/05/12

|                                 |        |         |           |       |  |      |        |       |    |  |
|---------------------------------|--------|---------|-----------|-------|--|------|--------|-------|----|--|
| Benzene                         | 0.0904 | 0.00100 | mg/kg wet | 0.100 |  | 90.4 | 80-120 | 0.552 | 20 |  |
| Toluene                         | 0.101  | 0.00200 | "         | 0.100 |  | 101  | 80-120 | 0.985 | 20 |  |
| Ethylbenzene                    | 0.0969 | 0.00100 | "         | 0.100 |  | 96.9 | 80-120 | 0.822 | 20 |  |
| Xylene (p/m)                    | 0.197  | 0.00200 | "         | 0.200 |  | 98.5 | 80-120 | 0.506 | 20 |  |
| Xylene (o)                      | 0.0916 | 0.00100 | "         | 0.100 |  | 91.6 | 80-120 | 0.219 | 20 |  |
| Surrogate: 1,4-Difluorobenzene  | 57.8   |         | ug/kg     | 60.0  |  | 96.3 | 75-125 |       |    |  |
| Surrogate: 4-Bromofluorobenzene | 64.5   |         | "         | 60.0  |  | 108  | 75-125 |       |    |  |

**Matrix Spike (EI20704-MS1)**

Source: 2105002-01

Prepared & Analyzed: 09/05/12

|                                 |        |         |           |       |    |      |        |  |  |       |
|---------------------------------|--------|---------|-----------|-------|----|------|--------|--|--|-------|
| Benzene                         | 0.0605 | 0.00100 | mg/kg dry | 0.103 | ND | 58.7 | 80-120 |  |  | QM-05 |
| Toluene                         | 0.0553 | 0.00200 | "         | 0.103 | ND | 53.7 | 80-120 |  |  | QM-05 |
| Ethylbenzene                    | 0.0468 | 0.00100 | "         | 0.103 | ND | 45.4 | 80-120 |  |  | QM-05 |
| Xylene (p/m)                    | 0.0890 | 0.00200 | "         | 0.206 | ND | 43.2 | 80-120 |  |  | QM-05 |
| Xylene (o)                      | 0.0447 | 0.00100 | "         | 0.103 | ND | 43.4 | 80-120 |  |  | QM-05 |
| Surrogate: 1,4-Difluorobenzene  | 59.4   |         | ug/kg     | 60.0  |    | 99.0 | 75-125 |  |  |       |
| Surrogate: 4-Bromofluorobenzene | 66.9   |         | "         | 60.0  |    | 112  | 75-125 |  |  |       |

**Matrix Spike Dup (EI20704-MSD1)**

Source: 2105002-01

Prepared & Analyzed: 09/05/12

|                                 |        |         |           |       |    |      |        |      |    |       |
|---------------------------------|--------|---------|-----------|-------|----|------|--------|------|----|-------|
| Benzene                         | 0.0567 | 0.00100 | mg/kg dry | 0.103 | ND | 55.0 | 80-120 | 6.51 | 20 | QM-05 |
| Toluene                         | 0.0540 | 0.00200 | "         | 0.103 | ND | 52.4 | 80-120 | 2.45 | 20 | QM-05 |
| Ethylbenzene                    | 0.0452 | 0.00100 | "         | 0.103 | ND | 43.9 | 80-120 | 3.36 | 20 | QM-05 |
| Xylene (p/m)                    | 0.0855 | 0.00200 | "         | 0.206 | ND | 41.5 | 80-120 | 4.01 | 20 | QM-05 |
| Xylene (o)                      | 0.0422 | 0.00100 | "         | 0.103 | ND | 41.0 | 80-120 | 5.69 | 20 | QM-05 |
| Surrogate: 1,4-Difluorobenzene  | 57.5   |         | ug/kg     | 60.0  |    | 95.8 | 75-125 |      |    |       |
| Surrogate: 4-Bromofluorobenzene | 67.1   |         | "         | 60.0  |    | 112  | 75-125 |      |    |       |

**Batch EI20707 - 8015M**

**Blank (EI20707-BLK1)**

Prepared & Analyzed: 09/05/12

|                           |      |      |           |      |  |     |        |  |  |  |
|---------------------------|------|------|-----------|------|--|-----|--------|--|--|--|
| C6-C12                    | ND   | 15.0 | mg/kg wet |      |  |     |        |  |  |  |
| >C12-C28                  | ND   | 15.0 | "         |      |  |     |        |  |  |  |
| >C28-C35                  | ND   | 15.0 | "         |      |  |     |        |  |  |  |
| Total Hydrocarbons        | ND   | 15.0 | "         |      |  |     |        |  |  |  |
| Surrogate: 1-Chlorooctane | 105  |      | "         | 100  |  | 105 | 70-130 |  |  |  |
| Surrogate: o-Terphenyl    | 60.7 |      | "         | 50.0 |  | 121 | 70-130 |  |  |  |

**Organics by GC - Quality Control**  
**Permian Basin Environmental Lab**

| Analyte  | Result | Reporting Limit | Units     | Spike Level | Source Result | %REC | %REC Limits | RPD  | RPD Limit | Notes |
|--|--------|-----------------|-----------|-------------|---------------|------|-------------|------|-----------|-------|
| <b>Batch EI20707 - 8015M</b>                                       |        |                 |           |             |               |      |             |      |           |       |
| <b>LCS (EI20707-BS1)</b>   |        |                 |           |             |               |      |             |      |           |       |
| Prepared & Analyzed: 09/05/12                                      |        |                 |           |             |               |      |             |      |           |       |
| C6-C12   | 799    | 15.0            | mg/kg wet | 1000        |               | 79.9 | 75-125      |      |           |       |
| >C12-C28   | 854    | 15.0            | "         | 1000        |               | 85.4 | 75-125      |      |           |       |
| >C28-C35   | ND     | 15.0            | "         | 0.00        |               |      | 75-125      |      |           |       |
| Total Hydrocarbons   | ND     | 15.0            | "         | 0.00        |               |      | 75-125      |      |           |       |
| Surrogate: 1-Chlorooctane  | 115    |                 | "         | 100         |               | 115  | 70-130      |      |           |       |
| Surrogate: o-Terphenyl   | 44.4   |                 | "         | 50.0        |               | 88.8 | 70-130      |      |           |       |
| <b>LCS Dup (EI20707-BSD1)</b>                                      |        |                 |           |             |               |      |             |      |           |       |
| Prepared & Analyzed: 09/05/12                                      |        |                 |           |             |               |      |             |      |           |       |
| C6-C12   | 822    | 15.0            | mg/kg wet | 1000        |               | 82.2 | 75-125      | 2.84 | 20        |       |
| >C12-C28   | 894    | 15.0            | "         | 1000        |               | 89.4 | 75-125      | 4.58 | 20        |       |
| Total Hydrocarbons   | ND     | 15.0            | "         | 0.00        |               |      | 75-125      |      | 20        |       |
| Surrogate: 1-Chlorooctane  | 115    |                 | "         | 100         |               | 115  | 70-130      |      |           |       |
| Surrogate: o-Terphenyl   | 58.8   |                 | "         | 50.0        |               | 118  | 70-130      |      |           |       |
| <b>Matrix Spike (EI20707-MS1)</b>                                  |        |                 |           |             |               |      |             |      |           |       |
| Source: 2105002-01      Prepared: 09/05/12      Analyzed: 09/06/12 |        |                 |           |             |               |      |             |      |           |       |
| C6-C12   | 783    | 15.5            | mg/kg dry | 1030        | ND            | 76.0 | 75-125      |      |           |       |
| >C12-C28   | 836    | 15.5            | "         | 1030        | ND            | 81.2 | 75-125      |      |           |       |
| Total Hydrocarbons   | ND     | 15.5            | "         | 0.00        | ND            |      | 75-125      |      |           |       |
| Surrogate: 1-Chlorooctane  | 119    |                 | "         | 103         |               | 116  | 70-130      |      |           |       |
| Surrogate: o-Terphenyl   | 50.2   |                 | "         | 51.5        |               | 97.5 | 70-130      |      |           |       |
| <b>Matrix Spike Dup (EI20707-MSD1)</b>                             |        |                 |           |             |               |      |             |      |           |       |
| Source: 2105002-01      Prepared: 09/05/12      Analyzed: 09/06/12 |        |                 |           |             |               |      |             |      |           |       |
| C6-C12   | 900    | 15.5            | mg/kg dry | 1030        | ND            | 87.4 | 75-125      | 14.0 | 20        |       |
| >C12-C28   | 811    | 15.5            | "         | 1030        | ND            | 78.7 | 75-125      | 3.13 | 20        |       |
| Total Hydrocarbons   | ND     | 15.5            | "         | 0.00        | ND            |      | 75-125      |      | 20        |       |
| Surrogate: 1-Chlorooctane  | 130    |                 | "         | 103         |               | 126  | 70-130      |      |           |       |
| Surrogate: o-Terphenyl   | 51.7   |                 | "         | 51.5        |               | 100  | 70-130      |      |           |       |

Basin Environmental Services  
P.O. Box 301  
Lovington NM, 88260

Project: Fullerton 14 in (RP-1608)  
Project Number: SUG Historical Releases  
Project Manager: Joel Lowry

Fax: (505) 396-1429

**General Chemistry Parameters by EPA / Standard Methods - Quality Control**  
**Permian Basin Environmental Lab**

| Analyte                                     | Result   | Reporting Limit | Units             | Spike Level | Source Result | %REC | %REC Limits | RPD  | RPD Limit | Notes |
|---|--|-----------------|-------------------|-------------|---------------|------|-------------|------|-----------|-------|
| <b>Batch EI20701 - *** DEFAULT PREP ***</b> |  |                 |                   |             |               |      |             |      |           |       |
| <b>Blank (EI20701-BLK1)</b>                 | Prepared: 09/06/12 Analyzed: 09/07/12                    |                 |                   |             |               |      |             |      |           |       |
| % Moisture                                  | ND   | 0.1             | %                 |             |               |      |             |      |           |       |
| <b>Duplicate (EI20701-DUP1)</b>             | Source: 2105001-01 Prepared: 09/06/12 Analyzed: 09/07/12 |                 |                   |             |               |      |             |      |           |       |
| % Moisture                                  | 6.0  | 0.1             | %                 |             | 6.0           |      |             | 0.00 | 20        |       |
| <b>Batch EI20702 - *** DEFAULT PREP ***</b> |  |                 |                   |             |               |      |             |      |           |       |
| <b>Blank (EI20702-BLK1)</b>                 | Prepared: 09/06/12 Analyzed: 09/07/12                    |                 |                   |             |               |      |             |      |           |       |
| Chloride                                    | ND   | 1.00            | mg/kg dry wt. wet |             |               |      |             |      |           |       |
| <b>LCS (EI20702-BS1)</b>                    | Prepared: 09/06/12 Analyzed: 09/07/12                    |                 |                   |             |               |      |             |      |           |       |
| Chloride                                    | 10.4   |                 | mg/kg Wet         | 10.0        |               | 104  | 80-120      |      |           |       |
| <b>LCS Dup (EI20702-BSD1)</b>               | Prepared: 09/06/12 Analyzed: 09/07/12                    |                 |                   |             |               |      |             |      |           |       |
| Chloride                                    | 10.4   |                 | mg/kg Wet         | 10.0        |               | 104  | 80-120      | 0.00 | 20        |       |
| <b>Duplicate (EI20702-DUP1)</b>             | Source: 2105001-01 Prepared: 09/06/12 Analyzed: 09/07/12 |                 |                   |             |               |      |             |      |           |       |
| Chloride                                    | 44.3   | 1.06            | mg/kg dry wt. dry |             | 43.5          |      |             | 1.82 | 20        |       |
| <b>Matrix Spike (EI20702-MS1)</b>           | Source: 2105001-01 Prepared: 09/06/12 Analyzed: 09/07/12 |                 |                   |             |               |      |             |      |           |       |
| Chloride                                    | 152  | 1.06            | mg/kg dry wt. dry | 106         | 43.5          | 102  | 80-120      |      |           |       |
| <b>Matrix Spike (EI20702-MS2)</b>           | Source: 2105002-10 Prepared: 09/06/12 Analyzed: 09/07/12 |                 |                   |             |               |      |             |      |           |       |
| Chloride                                    | 96.7   | 1.01            | mg/kg dry wt. dry | 101         | ND            | 95.7 | 80-120      |      |           |       |

### Notes and Definitions

|       |  |
|-------|--|
| QM-05 | The spike recovery was outside acceptance limits for the MS and/or MSD due to matrix interference. The LCS and/or LCSD were within acceptance limits showing that the laboratory is in control and the data is acceptable. |
| DET   | Analyte DETECTED   |
| ND    | Analyte NOT DETECTED at or above the reporting limit   |
| NR    | Not Reported   |
| dry   | Sample results reported on a dry weight basis  |
| RPD   | Relative Percent Difference  |
| LCS   | Laboratory Control Spike   |
| MS    | Matrix Spike   |
| Dup   | Duplicate  |

Report Approved By: \_\_\_\_\_



Date: 9/7/2012

Brent Barron, Laboratory Director/Technical Director

This material is intended only for the use of the individual (s) or entity to whom it is addressed, and may contain information that is privileged and confidential.

If you have received this material in error, please notify us immediately at 432-661-4184.



**PERMIAN BASIN  
ENVIRONMENTAL LAB, LP  
10014 SCR 1213  
Midland, TX 79706**

**PBELAB**

## Analytical Report

**Prepared for:**

Joel Lowry  
Basin Environmental Services  
P.O. Box 301  
Lovington, NM 88260

Project: Fullerton 14 in (RP-1608)  
Project Number: SUG Historical Releases  
Location: Lea County, New Mexico  
Lab Order Number: 2106001



**NELAP/TCEQ # T104704156-12-1**

Report Date: 09/07/12

Basin Environmental Services  
P.O. Box 301  
Lovington NM, 88260

Project: Fullerton 14 in (RP-1608)  
Project Number: SUG Historical Releases  
Project Manager: Joel Lowry

Fax: (505) 396-1429

**ANALYTICAL REPORT FOR SAMPLES**

| Sample ID | Laboratory ID | Matrix | Date Sampled   | Date Received    |
|-----------|---------------|--------|----------------|------------------|
| S.P. #4c  | 2106001-01    | Soil   | 09/05/12 10:00 | 09-06-2012 12:14 |

**Organics by GC**  
**Permian Basin Environmental Lab**

| Analyte                                | Result    | Reporting Limit | Units     | Dilution | Batch   | Prepared | Analyzed | Method    | Notes |
|--|-----------|-----------------|-----------|----------|---------|----------|----------|-----------|-------|
| <b>S.P. #4c (2I06001-01) Soil</b>      |           |                 |           |          |         |          |          |           |       |
| Benzene                                | ND        | 0.00100         | mg/kg dry | 1        | EI20703 | 09/06/12 | 09/06/12 | EPA 8021B |       |
| Toluene                                | ND        | 0.00200         | "         | "        | "       | "        | "        | "         |       |
| Ethylbenzene                           | ND        | 0.00100         | "         | "        | "       | "        | "        | "         |       |
| Xylene (p/m)                           | ND        | 0.00200         | "         | "        | "       | "        | "        | "         |       |
| Xylene (o)                             | ND        | 0.00100         | "         | "        | "       | "        | "        | "         |       |
| <i>Surrogate: 4-Bromofluorobenzene</i> |           | 106 %           | 75-125    |          | "       | "        | "        | "         |       |
| <i>Surrogate: 1,4-Difluorobenzene</i>  |           | 96.0 %          | 75-125    |          | "       | "        | "        | "         |       |
| <b>C6-C12</b>                          | <b>ND</b> | 15.6            | mg/kg dry | "        | EI20705 | 09/06/12 | 09/06/12 | EPA 8015M |       |
| >C12-C28                               | ND        | 15.6            | "         | "        | "       | "        | "        | "         |       |
| >C28-C35                               | ND        | 15.6            | "         | "        | "       | "        | "        | "         |       |
| Total Hydrocarbons                     | ND        | 15.6            | "         | "        | "       | "        | "        | "         |       |
| <i>Surrogate: 1-Chlorooctane</i>       |           | 82.5 %          | 70-130    |          | "       | "        | "        | "         |       |
| <i>Surrogate: o-Terphenyl</i>          |           | 91.4 %          | 70-130    |          | "       | "        | "        | "         |       |

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**General Chemistry Parameters by EPA / Standard Methods**  
**Permian Basin Environmental Lab**

| Analyte                           | Result      | Reporting Limit | Units             | Dilution | Batch   | Prepared | Analyzed | Method        | Notes |
|-----------------------------------|-------------|-----------------|-------------------|----------|---------|----------|----------|---------------|-------|
| <b>S.P. #4c (2106001-01) Soil</b> |             |                 |                   |          |         |          |          |               |       |
| <b>Chloride</b>                   | <b>33.0</b> | 1.04            | mg/kg dry wt. dry | 1        | EI20702 | 09/06/12 | 09/07/12 | EPA 300.0     |       |
| <b>% Moisture</b>                 | <b>4.0</b>  | 0.1             | %                 | "        | EI20701 | 09/06/12 | 09/07/12 | % calculation |       |

**Organics by GC - Quality Control**  
**Permian Basin Environmental Lab**

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---------|--------|-----------------|-------|-------------|---------------|------|-------------|-----|-----------|-------|
|---------|--------|-----------------|-------|-------------|---------------|------|-------------|-----|-----------|-------|

**Batch EI20703 - General Preparation (GC)**

**Blank (EI20703-BLK1)**

Prepared & Analyzed: 09/06/12

|                                 |      |         |           |      |  |      |        |  |  |  |
|---------------------------------|------|---------|-----------|------|--|------|--------|--|--|--|
| Benzene                         | ND   | 0.00100 | mg/kg wet |      |  |      |        |  |  |  |
| Toluene                         | ND   | 0.00200 | "         |      |  |      |        |  |  |  |
| Ethylbenzene                    | ND   | 0.00100 | "         |      |  |      |        |  |  |  |
| Xylene (p/m)                    | ND   | 0.00200 | "         |      |  |      |        |  |  |  |
| Xylene (o)                      | ND   | 0.00100 | "         |      |  |      |        |  |  |  |
| Surrogate: 1,4-Difluorobenzene  | 57.5 |         | ug/kg     | 60.0 |  | 95.8 | 75-125 |  |  |  |
| Surrogate: 4-Bromofluorobenzene | 63.8 |         | "         | 60.0 |  | 106  | 75-125 |  |  |  |

**LCS (EI20703-BS1)**

Prepared & Analyzed: 09/06/12

|                                 |        |         |           |       |  |      |        |  |  |  |
|---------------------------------|--------|---------|-----------|-------|--|------|--------|--|--|--|
| Benzene                         | 0.104  | 0.00100 | mg/kg wet | 0.100 |  | 104  | 80-120 |  |  |  |
| Toluene                         | 0.108  | 0.00200 | "         | 0.100 |  | 108  | 80-120 |  |  |  |
| Ethylbenzene                    | 0.103  | 0.00100 | "         | 0.100 |  | 103  | 80-120 |  |  |  |
| Xylene (p/m)                    | 0.211  | 0.00200 | "         | 0.200 |  | 106  | 80-120 |  |  |  |
| Xylene (o)                      | 0.0970 | 0.00100 | "         | 0.100 |  | 97.0 | 80-120 |  |  |  |
| Surrogate: 4-Bromofluorobenzene | 63.8   |         | ug/kg     | 60.0  |  | 106  | 75-125 |  |  |  |
| Surrogate: 1,4-Difluorobenzene  | 55.3   |         | "         | 60.0  |  | 92.2 | 75-125 |  |  |  |

**LCS Dup (EI20703-BS1)**

Prepared & Analyzed: 09/06/12

|                                 |        |         |           |       |  |      |        |       |    |  |
|---------------------------------|--------|---------|-----------|-------|--|------|--------|-------|----|--|
| Benzene                         | 0.102  | 0.00100 | mg/kg wet | 0.100 |  | 102  | 80-120 | 1.94  | 20 |  |
| Toluene                         | 0.108  | 0.00200 | "         | 0.100 |  | 108  | 80-120 | 0.00  | 20 |  |
| Ethylbenzene                    | 0.102  | 0.00100 | "         | 0.100 |  | 102  | 80-120 | 0.976 | 20 |  |
| Xylene (p/m)                    | 0.208  | 0.00200 | "         | 0.200 |  | 104  | 80-120 | 1.90  | 20 |  |
| Xylene (o)                      | 0.0959 | 0.00100 | "         | 0.100 |  | 95.9 | 80-120 | 1.14  | 20 |  |
| Surrogate: 1,4-Difluorobenzene  | 54.9   |         | ug/kg     | 60.0  |  | 91.5 | 75-125 |       |    |  |
| Surrogate: 4-Bromofluorobenzene | 63.3   |         | "         | 60.0  |  | 106  | 75-125 |       |    |  |

**Matrix Spike (EI20703-MS1)**

Source: 2105002-10

Prepared & Analyzed: 09/06/12

|                                 |        |         |           |       |    |      |        |  |  |       |
|---------------------------------|--------|---------|-----------|-------|----|------|--------|--|--|-------|
| Benzene                         | 0.0751 | 0.00100 | mg/kg dry | 0.101 | ND | 74.4 | 80-120 |  |  | QM-05 |
| Toluene                         | 0.0830 | 0.00200 | "         | 0.101 | ND | 82.2 | 80-120 |  |  |       |
| Ethylbenzene                    | 0.0745 | 0.00100 | "         | 0.101 | ND | 73.8 | 80-120 |  |  | QM-05 |
| Xylene (p/m)                    | 0.150  | 0.00200 | "         | 0.202 | ND | 74.3 | 80-120 |  |  | QM-05 |
| Xylene (o)                      | 0.0704 | 0.00100 | "         | 0.101 | ND | 69.7 | 80-120 |  |  | QM-05 |
| Surrogate: 4-Bromofluorobenzene | 66.5   |         | ug/kg     | 60.0  |    | 111  | 75-125 |  |  |       |
| Surrogate: 1,4-Difluorobenzene  | 58.1   |         | "         | 60.0  |    | 96.8 | 75-125 |  |  |       |

**Organics by GC - Quality Control**  
**Permian Basin Environmental Lab**

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---------|--------|-----------------|-------|-------------|---------------|------|-------------|-----|-----------|-------|
|---------|--------|-----------------|-------|-------------|---------------|------|-------------|-----|-----------|-------|

**Batch EI20703 - General Preparation (GC)**

**Matrix Spike Dup (EI20703-MSD1)**

Source: 2105002-10

Prepared & Analyzed: 09/06/12

|                                 |        |         |           |       |    |      |        |      |    |       |
|---------------------------------|--------|---------|-----------|-------|----|------|--------|------|----|-------|
| Benzene                         | 0.0743 | 0.00100 | mg/kg dry | 0.101 | ND | 73.6 | 80-120 | 1.08 | 20 | QM-05 |
| Toluene                         | 0.0805 | 0.00200 | "         | 0.101 | ND | 79.7 | 80-120 | 3.09 | 20 | QM-05 |
| Ethylbenzene                    | 0.0713 | 0.00100 | "         | 0.101 | ND | 70.6 | 80-120 | 4.43 | 20 | QM-05 |
| Xylene (p/m)                    | 0.142  | 0.00200 | "         | 0.202 | ND | 70.3 | 80-120 | 5.53 | 20 | QM-05 |
| Xylene (o)                      | 0.0667 | 0.00100 | "         | 0.101 | ND | 66.0 | 80-120 | 5.45 | 20 | QM-05 |
| Surrogate: 4-Bromofluorobenzene | 65.6   |         | ug/kg     | 60.0  |    | 109  | 75-125 |      |    |       |
| Surrogate: 1,4-Difluorobenzene  | 57.0   |         | "         | 60.0  |    | 95.0 | 75-125 |      |    |       |

**Batch EI20705 - 8015M**

**Blank (EI20705-BLK1)**

Prepared & Analyzed: 09/06/12

|                           |      |      |           |      |  |      |        |  |  |  |
|---------------------------|------|------|-----------|------|--|------|--------|--|--|--|
| C6-C12                    | ND   | 15.0 | mg/kg wet |      |  |      |        |  |  |  |
| >C12-C28                  | ND   | 15.0 | "         |      |  |      |        |  |  |  |
| Surrogate: 1-Chlorooctane | 91.0 |      | "         | 100  |  | 91.0 | 70-130 |  |  |  |
| Surrogate: o-Terphenyl    | 52.7 |      | "         | 50.0 |  | 105  | 70-130 |  |  |  |

**LCS (EI20705-BS1)**

Prepared & Analyzed: 09/06/12

|                           |      |      |           |      |  |      |        |  |  |  |
|---------------------------|------|------|-----------|------|--|------|--------|--|--|--|
| C6-C12                    | 859  | 15.0 | mg/kg wet | 1000 |  | 85.9 | 75-125 |  |  |  |
| >C12-C28                  | 859  | 15.0 | "         | 1000 |  | 85.9 | 75-125 |  |  |  |
| Surrogate: 1-Chlorooctane | 128  |      | "         | 100  |  | 128  | 70-130 |  |  |  |
| Surrogate: o-Terphenyl    | 52.4 |      | "         | 50.0 |  | 105  | 70-130 |  |  |  |

**LCS Dup (EI20705-BSD1)**

Prepared & Analyzed: 09/06/12

|                           |      |      |           |      |  |      |        |      |    |  |
|---------------------------|------|------|-----------|------|--|------|--------|------|----|--|
| C6-C12                    | 818  | 15.0 | mg/kg wet | 1000 |  | 81.8 | 75-125 | 4.89 | 20 |  |
| >C12-C28                  | 778  | 15.0 | "         | 1000 |  | 77.8 | 75-125 | 9.90 | 20 |  |
| Surrogate: 1-Chlorooctane | 121  |      | "         | 100  |  | 121  | 70-130 |      |    |  |
| Surrogate: o-Terphenyl    | 48.0 |      | "         | 50.0 |  | 96.0 | 70-130 |      |    |  |

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Project: Fullerton 14 in (RP-1608)  
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Fax: (505) 396-1429

**Organics by GC - Quality Control**  
**Permian Basin Environmental Lab**

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---------|--------|-----------------|-------|-------------|---------------|------|-------------|-----|-----------|-------|
|---------|--------|-----------------|-------|-------------|---------------|------|-------------|-----|-----------|-------|

**Batch EI20705 - 8015M**

**Matrix Spike (EI20705-MS1)**

Source: 2106001-01

Prepared: 09/06/12

Analyzed: 09/07/12

|                           |      |      |           |      |    |      |        |  |  |  |
|---------------------------|------|------|-----------|------|----|------|--------|--|--|--|
| C6-C12                    | 867  | 15.6 | mg/kg dry | 1040 | ND | 83.4 | 75-125 |  |  |  |
| >C12-C28                  | 818  | 15.6 | "         | 1040 | ND | 78.7 | 75-125 |  |  |  |
| Surrogate: 1-Chlorooctane | 131  |      | "         | 104  |    | 126  | 70-130 |  |  |  |
| Surrogate: o-Terphenyl    | 53.7 |      | "         | 52.1 |    | 103  | 70-130 |  |  |  |

**Matrix Spike Dup (EI20705-MSD1)**

Source: 2106001-01

Prepared: 09/06/12

Analyzed: 09/07/12

|                           |      |      |           |      |    |      |        |      |    |  |
|---------------------------|------|------|-----------|------|----|------|--------|------|----|--|
| C6-C12                    | 801  | 15.6 | mg/kg dry | 1040 | ND | 77.0 | 75-125 | 7.98 | 20 |  |
| >C12-C28                  | 806  | 15.6 | "         | 1040 | ND | 77.5 | 75-125 | 1.54 | 20 |  |
| Surrogate: 1-Chlorooctane | 120  |      | "         | 104  |    | 115  | 70-130 |      |    |  |
| Surrogate: o-Terphenyl    | 47.6 |      | "         | 52.1 |    | 91.4 | 70-130 |      |    |  |

**General Chemistry Parameters by EPA / Standard Methods - Quality Control**  
**Permian Basin Environmental Lab**

| Analyte  | Result | Reporting Limit | Units             | Spike Level | Source Result | %REC | %REC Limits | RPD  | RPD Limit | Notes |
|--|--------|-----------------|-------------------|-------------|---------------|------|-------------|------|-----------|-------|
| <b>Batch EI20701 - *** DEFAULT PREP ***</b>  |        |                 |                   |             |               |      |             |      |           |       |
| <b>Blank (EI20701-BLK1)</b> Prepared: 09/06/12 Analyzed: 09/07/12                          |        |                 |                   |             |               |      |             |      |           |       |
| % Moisture   | ND     | 0.1             | %                 |             |               |      |             |      |           |       |
| <b>Duplicate (EI20701-DUP1)</b> Source: 2105001-01 Prepared: 09/06/12 Analyzed: 09/07/12   |        |                 |                   |             |               |      |             |      |           |       |
| % Moisture   | 6.0    | 0.1             | %                 |             | 6.0           |      |             | 0.00 | 20        |       |
| <b>Batch EI20702 - *** DEFAULT PREP ***</b>  |        |                 |                   |             |               |      |             |      |           |       |
| <b>Blank (EI20702-BLK1)</b> Prepared: 09/06/12 Analyzed: 09/07/12                          |        |                 |                   |             |               |      |             |      |           |       |
| Chloride   | ND     | 1.00            | mg/kg dry wt. wet |             |               |      |             |      |           |       |
| <b>LCS (EI20702-BS1)</b> Prepared: 09/06/12 Analyzed: 09/07/12                             |        |                 |                   |             |               |      |             |      |           |       |
| Chloride   | 10.4   |                 | mg/kg Wet         | 10.0        |               | 104  | 80-120      |      |           |       |
| <b>LCS Dup (EI20702-BSD1)</b> Prepared: 09/06/12 Analyzed: 09/07/12                        |        |                 |                   |             |               |      |             |      |           |       |
| Chloride   | 10.4   |                 | mg/kg Wet         | 10.0        |               | 104  | 80-120      | 0.00 | 20        |       |
| <b>Duplicate (EI20702-DUP1)</b> Source: 2105001-01 Prepared: 09/06/12 Analyzed: 09/07/12   |        |                 |                   |             |               |      |             |      |           |       |
| Chloride   | 44.3   | 1.06            | mg/kg dry wt. dry |             | 43.5          |      |             | 1.82 | 20        |       |
| <b>Matrix Spike (EI20702-MS1)</b> Source: 2105001-01 Prepared: 09/06/12 Analyzed: 09/07/12 |        |                 |                   |             |               |      |             |      |           |       |
| Chloride   | 152    | 1.06            | mg/kg dry wt. dry | 106         | 43.5          | 102  | 80-120      |      |           |       |
| <b>Matrix Spike (EI20702-MS2)</b> Source: 2105002-10 Prepared: 09/06/12 Analyzed: 09/07/12 |        |                 |                   |             |               |      |             |      |           |       |
| Chloride   | 96.7   | 1.01            | mg/kg dry wt. dry | 101         | ND            | 95.7 | 80-120      |      |           |       |

### Notes and Definitions

- QM-05 The spike recovery was outside acceptance limits for the MS and/or MSD due to matrix interference. The LCS and/or LCSD were within acceptance limits showing that the laboratory is in control and the data is acceptable.
- DET Analyte DETECTED
- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- dry Sample results reported on a dry weight basis
- RPD Relative Percent Difference
- LCS Laboratory Control Spike
- MS Matrix Spike
- Dup Duplicate

Report Approved By:



Date:

9/7/2012

Brent Barron, Laboratory Director/Technical Director

This material is intended only for the use of the individual (s) or entity to whom it is addressed, and may contain information that is privileged and confidential.

If you have received this material in error, please notify us immediately at 432-661-4184.

Basin Environmental Services  
P.O. Box 301  
Lovington NM, 88260

Project: Fullerton 14 in (RP-1608)  
Project Number: SUG Historical Releases  
Project Manager: Joel Lowry

Fax: (505) 396-1429

**Pernian Basin Environmental Lab**

10014 SCR 1213  
Midland, Texas 79706  
79702-81418

|   |            |  |               |
|---|------------|--|---------------|
| Company Name: Basin Environmental Services Technologies |            | Phone #: 575-396-2178                              |               |
| Address: P.O. 301<br>Lovington, NM 88260                |            | Fax #: 575-396-1429                                |               |
| Contact Person: Rose State (SUG) Joel Lowry (Basin)     |            | Email: jml@basinenv.com<br>rose.state@ugm.com      |               |
| Project: SUG Historical Releases                        |            | Project Name: Fullerton 14 (RP-1608)               |               |
| Project Location: Lea County, New Mexico                |            | Sample Type: <i>Test Nails</i>                     |               |
| LAB USE ONLY  | FIELD CODE | # CONTAINERS                                       | VOLUME/AMOUNT |
| 0   |            | 1  |               |
| S.P. #:   |            | DATE TIME  |               |
|   |            | 9/5/14   |               |
| LAB USE ONLY  |            | MATRIX PRESERVATIVE METHOD                         |               |
|   |            | WATER  |               |
|   |            | SOIL   |               |
|   |            | AIR  |               |
|   |            | SLUDGE   |               |
|   |            | HCL  |               |
|   |            | HNO3   |               |
|   |            | H2SO4  |               |
|   |            | NaOH   |               |
|   |            | ICE  |               |
|   |            | NONE   |               |
| LAB USE ONLY  |            | SAMPLING   |               |
|   |            | MTBE 8021B / 802 / 8260B / 624                     |               |
|   |            | BTEX 8021B / 802 / 8260B / 624                     |               |
|   |            | TPH 418.1 / TX1005 / DRO / TVHC                    |               |
|   |            | PAH 8270C / 625                                    |               |
|   |            | Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B / 200.7 |               |
|   |            | TCLP Metals Ag As Ba Cd Cr Pb Se Hg                |               |
|   |            | TCLP Volatiles                                     |               |
|   |            | TCLP Semi Volatiles                                |               |
|   |            | TCLP Pesticides                                    |               |
|   |            | RCI  |               |
|   |            | GC/MS Vol. 8260B / 624                             |               |
|   |            | GC/MS Semi. Vol. 8270C/625                         |               |
|   |            | PCB's 8082 / 608                                   |               |
|   |            | Pesticides 8081A / 608                             |               |
|   |            | BOD, TSS, pH                                       |               |
|   |            | Moisture Content                                   |               |
|   |            | Cl, F, SO4, NO3-N, NO2-N, PO4-P, Alkalinity        |               |
|   |            | Na, Ca, Mg, K, TDS, EC                             |               |
|   |            | Turn Around Time if different from standard        |               |
|   |            | Hold   |               |

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Signature of sample collector agreement to Terms and Conditions

LAB USE ONLY

REMARKS

ANALYSIS REQUEST  
(Circle or Specify Method No.)