

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

State of New Mexico  
Energy Minerals and Natural Resources

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

Form C-141  
Revised August 8, 2011

Submit 1 Copy to appropriate District Office in  
accordance with 19.15.29 NMAC.

### Release Notification and Corrective Action

#### OPERATOR

☒ Initial Report ☐ Final Report

|   |                                     |                      |
|---|-------------------------------------|----------------------|
| Name of Company Regency Field Services, LLC | Contact Rachel Johnson              |                      |
| Address P.O. Box 1226 Jal, NM 88252         | Telephone No. 325-514-2636          |                      |
| Facility Name Trunk M                       | Facility Type Natural Gas Gathering |                      |
| Surface Owner Crawford                      | Mineral Owner                       | API No. 30-025-27276 |

#### LOCATION OF RELEASE

|                  |              |                 |              |               |                  |               |                |                      |
|------------------|--------------|-----------------|--------------|---------------|------------------|---------------|----------------|----------------------|
| Unit Letter<br>S | Section<br>6 | Township<br>25S | Range<br>37E | Feet from the | North/South Line | Feet from the | East/West Line | County<br>Lea County |
|------------------|--------------|-----------------|--------------|---------------|------------------|---------------|----------------|----------------------|

Latitude 32.29109 Longitude -103.20259

#### NATURE OF RELEASE

|  |  |   |
|--|--|---|
| Type of Release: Crude Oil, Nat. Gas and Produced Water  | Volume of Release: 40bbls  | Volume Recovered: 0 bbls                          |
| Source of Release 20" Natural Gas Gathering Line   | Date and Hour of Occurrence<br>Unknown                                   | Date and Hour of Discovery<br>12:00 pm on 3/27/14 |
| Was Immediate Notice Given?<br><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required | If YES, To Whom?<br>Email to Geoff Leking on 3/27/14 from Rachel Johnson |   |
| By Whom? N/A   | Date and Hour N/A  |   |
| Was a Watercourse Reached?<br><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No  | If YES, Volume Impacting the Watercourse.<br>N/A                         |   |
| If a Watercourse was Impacted, Describe Fully.* N/A  |  |   |

#### Describe Cause of Problem and Remedial Action Taken.\*

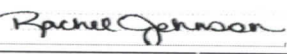
Failure of a segment of twenty inch (20") pipeline resulted in the release of approximately 40 bbls of a mixture of natural gas, crude oil and produced water. Following the discovery of the release, the pipeline was fitted with a temporary pipeline clamp. Crews were able to replace 80 feet of the 20 in pipeline on 3/30/14.

#### Describe Area Affected and Cleanup Action Taken.\*

The release affected approximately 1,500 sq. ft. of rangeland. Panther Energy will remediate in accordance with NMOCD Regulatory Guidelines.

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.

#### OIL CONSERVATION DIVISION

Signature: 

Approved by Environmental Specialist:

Printed Name: Rachel Johnson

Title: EH&S Specialist

Approval Date:

Expiration Date:

E-mail Address: rachel.johnson@regencygas.com

Conditions of Approval:

Attached ☐

Date 4/14/14

Phone: 325-514-2636 (cell)

\* Attach Additional Sheets If Necessary

**PROJECT NAME:**

## FIELD MEASUREMENT/OBSERVATION LOG

**COMPANY:**

COMPANY: Reserve Field Services LLC

PROJECT NAME:

PROJECT NAME: Tumb M3

## FIELD TECHNICIAN:

PROJECT MANAGER: Emmanuel Aducci

DATE:

11-2-11

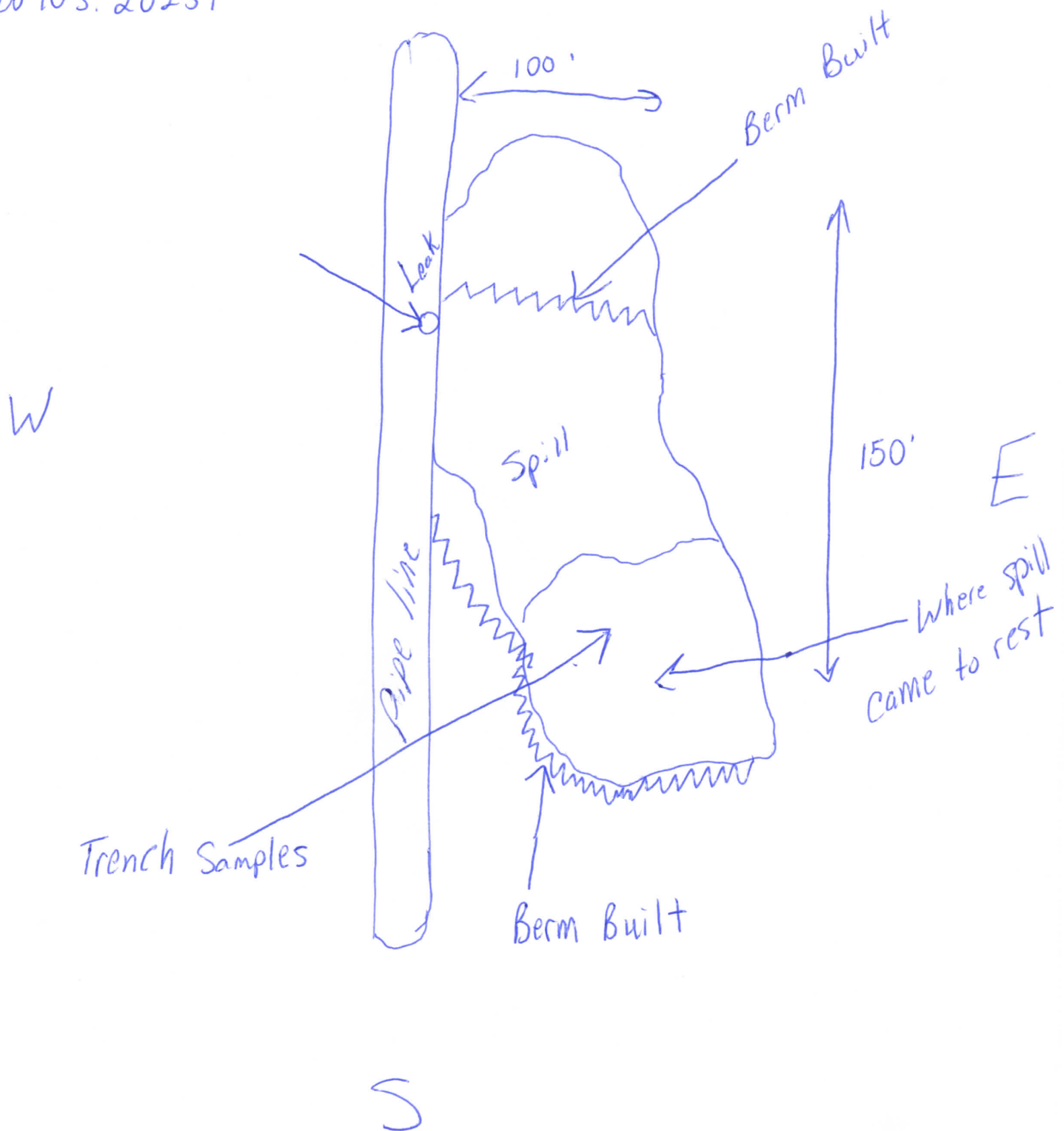
**PROJECT NUMBER:**

[illegible]

Trunk M3

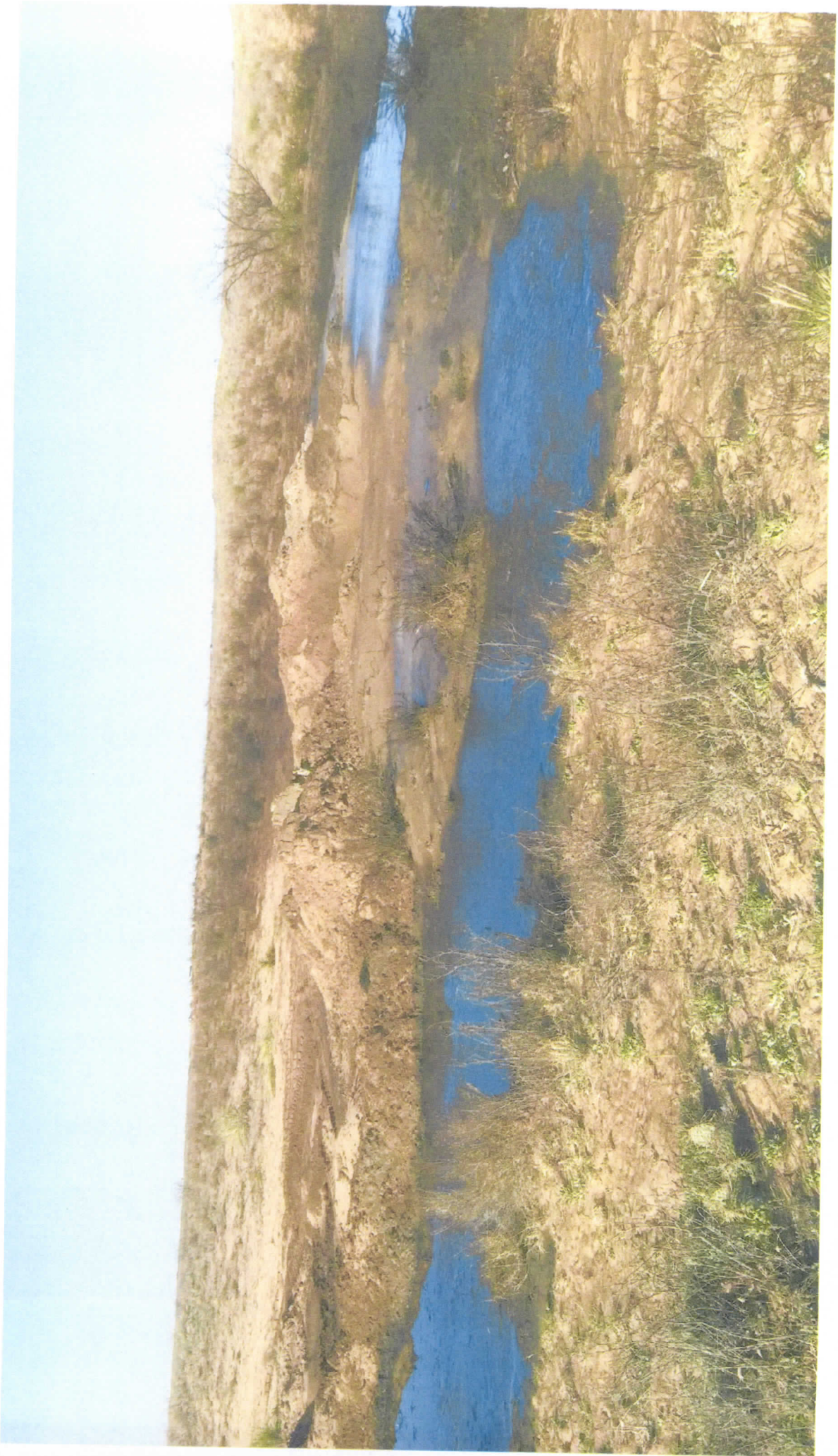
N 32. 29109

W 103. 20259

















# **Analytical Report 482910**

## **for Regency Gas**

**Project Manager: Emmanuel Lujan**

**Trunk M3**

**16-APR-14**

Collected By: Client



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

Xenco-Houston (EPA Lab code: TX00122):

Texas (T104704215-14-16-TX), Arizona (AZ0765), Florida (E871002), Louisiana (03054)  
New Jersey (TX007), North Carolina(681), Oklahoma (9218), Pennsylvania (68-03610)

Xenco-Atlanta (EPA Lab Code: GA00046):

Florida (E87429), North Carolina (483), South Carolina (98015), Kentucky (85), DoD ( L10-135)  
Louisiana (04176), USDA (P330-07-00105)

Xenco-Lakeland: Florida (E84098)

Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-TX)

Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295-TX)

Xenco Phoenix (EPA Lab Code: AZ00901): Arizona(AZ0757)

Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)

Xenco Tucson (EPA Lab code:AZ000989): Arizona (AZ0758)



16-APR-14

Project Manager: **Emmanuel Lujan**

**Regency Gas**

801 South Loop 464

Monahans, TX 79756

Reference: XENCO Report No(s): **482910**

**Trunk M3**

Project Address: NM

**Emmanuel Lujan:**

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 482910. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 482910 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

---

**Kelsey Brooks**

Project Manager

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*Certified and approved by numerous States and Agencies.*

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



## Sample Cross Reference 482910



Regency Gas, Monahans, TX

Trunk M3

| Sample Id | Matrix | Date Collected | Sample Depth | Lab Sample Id |
|-----------|--------|----------------|--------------|---------------|
| M3-TS     | S      | 04-07-14 10:33 | - 3 ft       | 482910-001    |
| M3-TS     | S      | 04-07-14 10:36 | - 4 ft       | 482910-002    |



## CASE NARRATIVE



*Client Name: Regency Gas*

*Project Name: Trunk M3*

Project ID:

Work Order Number(s): 482910

Report Date: 16-APR-14

Date Received: 04/07/2014

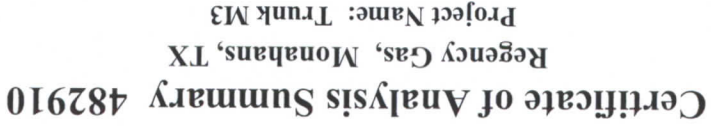
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**Sample receipt non conformances and comments:**

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**Sample receipt non conformances and comments per sample:**

None



|   |                               |
|---|-------------------------------|
| <b>Contact:</b> Emmanuel Lujan                      | <b>Project Location:</b> NM   |
| <b>Date Received in Lab:</b> Mon Apr-07-14 01:37 pm | <b>Report Date:</b> 16-APR-14 |

Project Manager: Kelsey Brooks

Report Date: 16-APR-14

Date Received in Lab:

**Project Name: Trunk M3**

**Regency Gas, Monahans, TX**

# Certificate of Analysis Summary 482910

[illegible]

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

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

Kelsey Brooks  
Project Manager

Wm. H. Beach



## Flagging Criteria



- X** In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.
- B** A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- D** The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
- E** The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- F** RPD exceeded lab control limits.
- J** The target analyte was positively identified below the quantitation limit and above the detection limit.
- U** Analyte was not detected.
- L** The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.
- H** The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.
- K** Sample analyzed outside of recommended hold time.
- JN** A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

**\*\*** Surrogate recovered outside laboratory control limit.

**BRL** Below Reporting Limit.

**RL** Reporting Limit

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

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

**DL** Method Detection Limit

**NC** Non-Calculable

+ NELAC certification not offered for this compound.

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

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9701 Harry Hines Blvd, Dallas, TX 75220  
5332 Blackberry Drive, San Antonio TX 78238  
2505 North Falkenburg Rd, Tampa, FL 33619  
12600 West I-20 East, Odessa, TX 79765  
6017 Financial Drive, Norcross, GA 30071  
3725 E. Atlanta Ave, Phoenix, AZ 85040

| Phone          | Fax            |
|----------------|----------------|
| (281) 240-4200 | (281) 240-4280 |
| (214) 902 0300 | (214) 351-9139 |
| (210) 509-3334 | (210) 509-3335 |
| (813) 620-2000 | (813) 620-2033 |
| (432) 563-1800 | (432) 563-1713 |
| (770) 449-8800 | (770) 449-5477 |
| (602) 437-0330 |                |



## Form 2 - Surrogate Recoveries

Project Name: Trunk M3

Work Orders : 482910, 482910

Lab Batch #: 938268

Sample: 482910-002 / SMP

Project ID:

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 04/09/14 20:58

| SURROGATE RECOVERY STUDY |                  |                 |                 |                   |       |
|--------------------------|------------------|-----------------|-----------------|-------------------|-------|
| BTEX by EPA 8021B        | Amount Found [A] | True Amount [B] | Recovery %R [D] | Control Limits %R | Flags |
| Analytes                 |                  |                 |                 |                   |       |
| 1,4-Difluorobenzene      | 0.0257           | 0.0300          | 86              | 80-120            |       |
| 4-Bromofluorobenzene     | 0.0290           | 0.0300          | 97              | 80-120            |       |

Lab Batch #: 938268

Sample: 482910-001 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 04/09/14 21:14

| SURROGATE RECOVERY STUDY |                  |                 |                 |                   |       |
|--------------------------|------------------|-----------------|-----------------|-------------------|-------|
| BTEX by EPA 8021B        | Amount Found [A] | True Amount [B] | Recovery %R [D] | Control Limits %R | Flags |
| Analytes                 |                  |                 |                 |                   |       |
| 1,4-Difluorobenzene      | 0.0249           | 0.0300          | 83              | 80-120            |       |
| 4-Bromofluorobenzene     | 0.0275           | 0.0300          | 92              | 80-120            |       |

Lab Batch #: 938189

Sample: 482910-001 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 04/09/14 22:59

| SURROGATE RECOVERY STUDY |                  |                 |                 |                   |       |
|--------------------------|------------------|-----------------|-----------------|-------------------|-------|
| TPH By SW8015 Mod        | Amount Found [A] | True Amount [B] | Recovery %R [D] | Control Limits %R | Flags |
| Analytes                 |                  |                 |                 |                   |       |
| 1-Chlorooctane           | 111              | 99.8            | 111             | 70-135            |       |
| o-Terphenyl              | 56.7             | 49.9            | 114             | 70-135            |       |

Lab Batch #: 938189

Sample: 482910-002 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 04/09/14 23:23

| SURROGATE RECOVERY STUDY |                  |                 |                 |                   |       |
|--------------------------|------------------|-----------------|-----------------|-------------------|-------|
| TPH By SW8015 Mod        | Amount Found [A] | True Amount [B] | Recovery %R [D] | Control Limits %R | Flags |
| Analytes                 |                  |                 |                 |                   |       |
| 1-Chlorooctane           | 114              | 99.9            | 114             | 70-135            |       |
| o-Terphenyl              | 58.2             | 50.0            | 116             | 70-135            |       |

Lab Batch #: 938189

Sample: 653672-1-BLK / BLK

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 04/09/14 13:38

| SURROGATE RECOVERY STUDY |                  |                 |                 |                   |       |
|--------------------------|------------------|-----------------|-----------------|-------------------|-------|
| TPH By SW8015 Mod        | Amount Found [A] | True Amount [B] | Recovery %R [D] | Control Limits %R | Flags |
| Analytes                 |                  |                 |                 |                   |       |
| 1-Chlorooctane           | 106              | 100             | 106             | 70-135            |       |
| o-Terphenyl              | 56.3             | 50.0            | 113             | 70-135            |       |

\* Surrogate outside of Laboratory QC limits

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

\*\*\* Poor recoveries due to dilution

Surrogate Recovery [D] =  $100 \times A / B$

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



## Form 2 - Surrogate Recoveries

Project Name: Trunk M3

Work Orders : 482910, 482910

Lab Batch #: 938268

Sample: 653740-1-BLK / BLK

Project ID:

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 04/09/14 19:21

### SURROGATE RECOVERY STUDY

| BTEX by EPA 8021B<br>Analytes | Amount Found<br>[A] | True Amount<br>[B] | Recovery<br>%R<br>[D] | Control Limits<br>%R | Flags |
|-------------------------------|---------------------|--------------------|-----------------------|----------------------|-------|
| 1,4-Difluorobenzene           | 0.0243              | 0.0300             | 81                    | 80-120               |       |
| 4-Bromofluorobenzene          | 0.0263              | 0.0300             | 88                    | 80-120               |       |

Lab Batch #: 938189

Sample: 653672-1-BKS / BKS

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 04/09/14 14:02

### SURROGATE RECOVERY STUDY

| TPH By SW8015 Mod<br>Analytes | Amount Found<br>[A] | True Amount<br>[B] | Recovery<br>%R<br>[D] | Control Limits<br>%R | Flags |
|-------------------------------|---------------------|--------------------|-----------------------|----------------------|-------|
| 1-Chlorooctane                | 119                 | 100                | 119                   | 70-135               |       |
| o-Terphenyl                   | 48.6                | 50.0               | 97                    | 70-135               |       |

Lab Batch #: 938268

Sample: 653740-1-BKS / BKS

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 04/09/14 19:37

### SURROGATE RECOVERY STUDY

| BTEX by EPA 8021B<br>Analytes | Amount Found<br>[A] | True Amount<br>[B] | Recovery<br>%R<br>[D] | Control Limits<br>%R | Flags |
|-------------------------------|---------------------|--------------------|-----------------------|----------------------|-------|
| 1,4-Difluorobenzene           | 0.0266              | 0.0300             | 89                    | 80-120               |       |
| 4-Bromofluorobenzene          | 0.0309              | 0.0300             | 103                   | 80-120               |       |

Lab Batch #: 938189

Sample: 653672-1-BSD / BSD

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 04/09/14 14:27

### SURROGATE RECOVERY STUDY

| TPH By SW8015 Mod<br>Analytes | Amount Found<br>[A] | True Amount<br>[B] | Recovery<br>%R<br>[D] | Control Limits<br>%R | Flags |
|-------------------------------|---------------------|--------------------|-----------------------|----------------------|-------|
| 1-Chlorooctane                | 116                 | 100                | 116                   | 70-135               |       |
| o-Terphenyl                   | 47.2                | 50.0               | 94                    | 70-135               |       |

Lab Batch #: 938268

Sample: 653740-1-BSD / BSD

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 04/09/14 19:53

### SURROGATE RECOVERY STUDY

| BTEX by EPA 8021B<br>Analytes | Amount Found<br>[A] | True Amount<br>[B] | Recovery<br>%R<br>[D] | Control Limits<br>%R | Flags |
|-------------------------------|---------------------|--------------------|-----------------------|----------------------|-------|
| 1,4-Difluorobenzene           | 0.0267              | 0.0300             | 89                    | 80-120               |       |
| 4-Bromofluorobenzene          | 0.0303              | 0.0300             | 101                   | 80-120               |       |

\* Surrogate outside of Laboratory QC limits

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

\*\*\* Poor recoveries due to dilution

Surrogate Recovery [D] =  $100 * A / B$

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



## Form 2 - Surrogate Recoveries

Project Name: Trunk M3

Work Orders : 482910, 482910

Lab Batch #: 938189

Sample: 482903-021 S / MS

Project ID:

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 04/09/14 15:20

| SURROGATE RECOVERY STUDY |                  |                 |                 |                   |       |
|--------------------------|------------------|-----------------|-----------------|-------------------|-------|
| TPH By SW8015 Mod        | Amount Found [A] | True Amount [B] | Recovery %R [D] | Control Limits %R | Flags |
| Analytes                 |                  |                 |                 |                   |       |
| 1-Chlorooctane           | 127              | 99.8            | 127             | 70-135            |       |
| o-Terphenyl              | 55.3             | 49.9            | 111             | 70-135            |       |

Lab Batch #: 938268

Sample: 482910-002 S / MS

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 04/09/14 20:09

| SURROGATE RECOVERY STUDY |                  |                 |                 |                   |       |
|--------------------------|------------------|-----------------|-----------------|-------------------|-------|
| BTEX by EPA 8021B        | Amount Found [A] | True Amount [B] | Recovery %R [D] | Control Limits %R | Flags |
| Analytes                 |                  |                 |                 |                   |       |
| 1,4-Difluorobenzene      | 0.0278           | 0.0300          | 93              | 80-120            |       |
| 4-Bromofluorobenzene     | 0.0318           | 0.0300          | 106             | 80-120            |       |

Lab Batch #: 938189

Sample: 482903-021 SD / MSD

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 04/09/14 15:44

| SURROGATE RECOVERY STUDY |                  |                 |                 |                   |       |
|--------------------------|------------------|-----------------|-----------------|-------------------|-------|
| TPH By SW8015 Mod        | Amount Found [A] | True Amount [B] | Recovery %R [D] | Control Limits %R | Flags |
| Analytes                 |                  |                 |                 |                   |       |
| 1-Chlorooctane           | 118              | 99.9            | 118             | 70-135            |       |
| o-Terphenyl              | 49.5             | 50.0            | 99              | 70-135            |       |

Lab Batch #: 938268

Sample: 482910-002 SD / MSD

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 04/09/14 20:25

| SURROGATE RECOVERY STUDY |                  |                 |                 |                   |       |
|--------------------------|------------------|-----------------|-----------------|-------------------|-------|
| BTEX by EPA 8021B        | Amount Found [A] | True Amount [B] | Recovery %R [D] | Control Limits %R | Flags |
| Analytes                 |                  |                 |                 |                   |       |
| 1,4-Difluorobenzene      | 0.0279           | 0.0300          | 93              | 80-120            |       |
| 4-Bromofluorobenzene     | 0.0317           | 0.0300          | 106             | 80-120            |       |

\* Surrogate outside of Laboratory QC limits

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

\*\*\* Poor recoveries due to dilution

Surrogate Recovery [D] =  $100 * A / B$

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



Work Order #: 482910, 482910

Analyst: ARM  
Lab Batch ID: 938268  
Sample: 653740-1-BKS  
Date Prepared: 04/09/2014  
Date Analyzed: 04/09/2014  
Matrix: Solid

Project ID:

| Units:              |          | mg/kg       |        | BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY |       |                |        |             |     |                              |     |                     |     |       |                |    |                |          |      |
|---------------------|----------|-------------|--------|---|-------|----------------|--------|-------------|-----|------------------------------|-----|---------------------|-----|-------|----------------|----|----------------|----------|------|
| BTEX by EPA 8021B   |          |             |        |   |       |                |        |             |     |                              |     |                     |     |       |                |    |                | Analytes |      |
| Blank Sample Result | [A]      | Spike Added | [B]    | Blank Spike Result  | [C]   | Blank Spike %R | [D]    | Spike Added | [E] | Blank Spike Duplicate Result | [F] | Blank Spike Dup. %R | [G] | RPD % | Control Limits | %R | Control Limits | %RPD     | Flag |
| Benzen              | <0.00100 | 0.100       | 0.0964 | 96  | 0.100 | 0.100          | 0.0976 | 98          | 1   | 70-130                       | 35  |                     |     |       |                |    |                |          |      |
| Toluene             | <0.00200 | 0.100       | 0.0968 | 97  | 0.100 | 0.100          | 0.0978 | 98          | 1   | 70-130                       | 35  |                     |     |       |                |    |                |          |      |
| Ethylbenzene        | <0.00100 | 0.100       | 0.104  | 104   | 0.100 | 0.104          | 0.104  | 104         | 0   | 71-129                       | 35  |                     |     |       |                |    |                |          |      |
| m,p-Xylenes         | <0.00200 | 0.200       | 0.216  | 108   | 0.200 | 0.217          | 0.217  | 109         | 0   | 70-135                       | 35  |                     |     |       |                |    |                |          |      |
| o-Xylene            | <0.00100 | 0.100       | 0.108  | 108   | 0.100 | 0.108          | 0.108  | 108         | 0   | 71-133                       | 35  |                     |     |       |                |    |                |          |      |

Analyst: AMB  
Lab Batch ID: 938225  
Sample: 653688-1-BKS  
Date Prepared: 04/09/2014  
Date Analyzed: 04/09/2014  
Matrix: Solid

| mg/kg                             |  | BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY |                     |             |     |                    |                     |                |     |             |     |                        |                        |                     |     |       |                |           |                |         |      |
|-----------------------------------|--|---|---------------------|-------------|-----|--------------------|---------------------|----------------|-----|-------------|-----|------------------------|------------------------|---------------------|-----|-------|----------------|-----------|----------------|---------|------|
| Inorganic Anions by EPA 300/300.1 |  | Sample Result   | [A]<br>Blank Result | Spike Added | [B] | Blank Spike Result | [C]<br>Spike Result | Blank Spike %R | [D] | Spike Added | [E] | Spike Duplicate Result | [F]<br>Spike Duplicate | Blank Spike Dup. %R | [G] | RPD % | Control Limits | 80-120 %R | Control Limits | 20 %RPD | Flag |
| Analytes                          |  |   |                     |             |     |                    |                     |                |     |             |     |                        |                        |                     |     |       |                |           |                |         |      |
| Chloride                          |  | <2.00   | 50.0                | 45.2        | 90  | 50.0               | 45.5                | 91             | 1   | 80-120      | 20  |                        |                        |                     |     |       |                |           |                |         |      |

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



BS / BSD Recoveries

Project Name: Trunk M3



Work Order #: 482910, 482910

Analyst: ARM

Lab Batch ID: 938189

Sample: 653672-1-BKS

Batch #: 1

Date Prepared: 04/08/2014

Date Analyzed: 04/09/2014

Project ID:

Matrix: Solid

Units: mg/kg

| units:            |     | mg/kg                              |      | BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY |     |                |      |             |     |                        |     |                  |     |       |                   |                     |      |
|-------------------|-----|------------------------------------|------|---|-----|----------------|------|-------------|-----|------------------------|-----|------------------|-----|-------|-------------------|---------------------|------|
| TPH By SW8015 Mod |     |                                    |      |   |     |                |      |             |     |                        |     |                  |     |       |                   |                     |      |
| Analytes          |     |                                    |      |   |     |                |      |             |     |                        |     |                  |     |       |                   |                     |      |
| Sample Result     | [A] | Spike Added                        | [B]  | Blank Spike Result  | [C] | Blank Spike %R | [D]  | Spike Added | [E] | Blank Duplicate Result | [F] | Blk. Spk Dup. %R | [G] | RPD % | Control Limits %R | Control Limits %RPD | Flag |
|                   |     | <15.0                              | 1000 | 1010  | 101 | 1000           | 975  | 98          | 4   | 70-135                 | 35  |                  |     |       |                   |                     |      |
|                   |     | <15.0                              | 1000 | 1010  | 101 | 1000           | 1020 | 102         | 1   | 70-135                 | 35  |                  |     |       |                   |                     |      |
|                   |     | C12-C28 Diesel Range Hydrocarbons  |      |   |     |                |      |             |     |                        |     |                  |     |       |                   |                     |      |
|                   |     | C6-C12 Gasoline Range Hydrocarbons |      |   |     |                |      |             |     |                        |     |                  |     |       |                   |                     |      |

Relative Percent Difference RPD =  $200 * (C-F) / (C+F)$

Blank Spike Recovery [D] =  $100 * (C) / (B)$

Blank Spike Duplicate Recovery [G] =  $100 * (F) / (E)$

All results are based on MDL and Validated for QC Purposes



# Form 3 - MS Recoveries

Project Name: Trunk M3



Work Order #: 482910

Lab Batch #: 938225

Date Analyzed: 04/09/2014

QC- Sample ID: 482920-001 S

Reporting Units: mg/kg

Date Prepared: 04/09/2014

Batch #: 1

Project ID:

Analyst: AMB

Matrix: Soil

| MATRIX / MATRIX SPIKE RECOVERY STUDY |                          |                 |                          |        |                   |      |
|--------------------------------------|--------------------------|-----------------|--------------------------|--------|-------------------|------|
| Inorganic Anions by EPA 300          | Parent Sample Result [A] | Spike Added [B] | Spiked Sample Result [C] | %R [D] | Control Limits %R | Flag |
| Analytes                             |                          |                 |                          |        |                   |      |
| Chloride                             | 11800                    | 10500           | 20900                    | 87     | 80-120            |      |

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

BRL - Below Reporting Limit

**Form 3 - MS / MSD Recoveries**

Project Name: Trunk M3



Work Order #: 482910  
 Lab Batch ID: 938268  
 Date Analyzed: 04/09/2014  
 Reporting Units: mg/kg  
 QC-Sample ID: 482910-002 S  
 Batch #: 1  
 Matrix: Soil  
 Analyst: ARM  
 Date Prepared: 04/09/2014  
 Project ID:

**MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY**

| BTEx by EPA 8021B        |                 |                          |                      |                 |                             |                           |       |                   |                     |      |
|--------------------------|-----------------|--------------------------|----------------------|-----------------|-----------------------------|---------------------------|-------|-------------------|---------------------|------|
| Parent Sample Result [A] | Spike Added [B] | Spiked Sample Result [C] | Spiked Sample %R [D] | Spike Added [E] | Duplicate Sample Result [F] | Spiked Sample Dup. %R [G] | RPD % | Control Limits %R | Control Limits %RPD | Flag |
| <0.00104                 | 0.104           | 0.0994                   | 96                   | 0.103           | 0.0985                      | 96                        | 1     | 70-130            | 35                  |      |
| <0.00207                 | 0.104           | 0.0993                   | 95                   | 0.103           | 0.0990                      | 96                        | 0     | 70-130            | 35                  |      |
| <0.00104                 | 0.104           | 0.106                    | 102                  | 0.103           | 0.105                       | 102                       | 1     | 71-129            | 35                  |      |
| <0.00207                 | 0.207           | 0.220                    | 106                  | 0.207           | 0.219                       | 106                       | 0     | 70-135            | 35                  |      |
| <0.00104                 | 0.104           | 0.110                    | 106                  | 0.103           | 0.109                       | 106                       | 1     | 71-133            | 35                  |      |
| <0.00104                 | 0.104           | 0.0994                   | 96                   | 0.103           | 0.0985                      | 96                        | 1     | 70-130            | 35                  |      |
| <0.00207                 | 0.104           | 0.0993                   | 95                   | 0.103           | 0.0990                      | 96                        | 0     | 70-130            | 35                  |      |
| <0.00104                 | 0.104           | 0.106                    | 102                  | 0.103           | 0.105                       | 102                       | 1     | 71-129            | 35                  |      |
| <0.00207                 | 0.207           | 0.220                    | 106                  | 0.207           | 0.219                       | 106                       | 0     | 70-135            | 35                  |      |
| <0.00104                 | 0.104           | 0.110                    | 106                  | 0.103           | 0.109                       | 106                       | 1     | 71-133            | 35                  |      |

Lab Batch ID: 938189  
 Date Analyzed: 04/09/2014  
 Reporting Units: mg/kg  
 QC-Sample ID: 482903-021 S  
 Batch #: 1  
 Matrix: Soil  
 Analyst: ARM  
 Date Prepared: 04/08/2014  
 MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

| TPH By SW8015 Mod        |                 |                          |                      |                 |                             |                           |       |                   |                     |      |
|--------------------------|-----------------|--------------------------|----------------------|-----------------|-----------------------------|---------------------------|-------|-------------------|---------------------|------|
| Parent Sample Result [A] | Spike Added [B] | Spiked Sample Result [C] | Spiked Sample %R [D] | Spike Added [E] | Duplicate Sample Result [F] | Spiked Sample Dup. %R [G] | RPD % | Control Limits %R | Control Limits %RPD | Flag |
| <16.2                    | 1080            | 1180                     | 109                  | 1080            | 1070                        | 99                        | 10    | 70-135            | 35                  |      |
| <16.2                    | 1080            | 1320                     | 122                  | 1080            | 1160                        | 107                       | 13    | 70-135            | 35                  |      |
| <16.2                    | 1080            | 1320                     | 122                  | 1080            | 1160                        | 107                       | 13    | 70-135            | 35                  |      |

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

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable  
 N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.



## Sample Duplicate Recovery



Project Name: Trunk M3

Work Order #: 482910

Lab Batch #: 938195

Date Analyzed: 04/09/2014 17:10

Date Prepared: 04/09/2014

Project ID:

Analyst: WRU

QC- Sample ID: 482829-021 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                   | 28.0                     | 28.3                        | 1   | 20                  |      |

Lab Batch #: 938195

Date Analyzed: 04/09/2014 17:10

Date Prepared: 04/09/2014

Analyst: WRU

QC- Sample ID: 482921-001 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                   | <1.00                    | 1.12                        | NC  | 20                  |      |

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

# Kenco Laboratories

The Environmental Lab of Texas

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

42600 West 120 East  
Odessa, Texas 79765

Phone: 432-563-4800  
Fax: 432-563-4713

Project Manager:

*Emmanuel Kujan*

Project Name:

*Trinit M3*

Company Name:

*Parthen Energy Services*

Project #:

Company Address:

*101 E Parthen*

Project Location:

City/State/Zip:

*Jal NM 88052*

PO #:

Telephone No:

*575-395-2654*

Fax No:

*575-4363-2115*

Report Format:

☒ Standard

☐ TAPP

☐ IUPATS

Sample Signature:

*[Signature]*

e-mail:

*mekh1.kujan@parthenenergy.com*

Lab use only)

ORDER #:

*482910*

LAB # (lab use only)

FIELD CODE

Beginning Depth

Ending Depth

Date Sampled

Time Sampled

Field Filtered

Total #. of Containers

Ice

HNO<sub>3</sub>

HCl

H<sub>2</sub>SO<sub>4</sub>

H<sub>2</sub>O<sub>2</sub>

Na<sub>2</sub>S<sub>2</sub>O<sub>8</sub>

None

Other (Specify)

DW=Drinking Water SW=Sludge

GW=Groundwater S=Solid

NP=Non Potable Sp=Spill Other

TPH: 410.1 8015W 8015S

TPH: TX 1005 TX 1008

Cations (Ca, Mg, Na, K)

Anions (Cl, SO<sub>4</sub>, Alkalinity)

SAR / ESP / CED

Metals: As Ag Ba Cd Cr Pb -4 Se

Volatiles

Semivolatiles

BTEX 00113 00010 BTEX 0293

PCI

K.O.R.M.

RUSH TAT (Pre-Specimen) 24, 48, 72 hrs

Standard TAT

Special Instructions:

Relinquished by:

Date

Time

Received by:

Date

Time

Relinquished by:

Date

Time

Received by:

Date

Time

Relinquished by:

Date

Time

Received by ELDT:

Date

Time

Laboratory Comments:

Sample Containers Intact?

Labels on Containers?

Labels on Containers?

Sample Hand Delivered?

Temperature Upon Receipt:

Y

Y

Y

Y

63



**XENCO Laboratories**  
**Prelogin/Nonconformance Report- Sample Log-In**



Client: Regency Gas

Date/ Time Received: 04/07/2014 01:37:00 PM

Work Order #: 482910

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

Temperature Measuring device used :

| Sample Receipt Checklist   | Comments |
|--|----------|
| #1 *Temperature of cooler(s)?  | 7.8      |
| #2 *Shipping container in good condition?  | Yes      |
| #3 *Samples received on ice?   | Yes      |
| #4 *Custody Seals intact on shipping container/ cooler?  | N/A      |
| #5 Custody Seals intact on sample bottles?   | N/A      |
| #6 *Custody Seals Signed and dated?  | N/A      |
| #7 *Chain of Custody present?  | Yes      |
| #8 Sample instructions complete on Chain of Custody?   | Yes      |
| #9 Any missing/extra samples?  | No       |
| #10 Chain of Custody signed when relinquished/ received?                                       | Yes      |
| #11 Chain of Custody agrees with sample label(s)?  | Yes      |
| #12 Container label(s) legible and intact?   | Yes      |
| #13 Sample matrix/ properties agree with Chain of Custody?                                     | Yes      |
| #14 Samples in proper container/ bottle?   | Yes      |
| #15 Samples properly preserved?  | N/A      |
| #16 Sample container(s) intact?  | Yes      |
| #17 Sufficient sample amount for indicated test(s)?  | Yes      |
| #18 All samples received within hold time?   | Yes      |
| #19 Subcontract of sample(s)?  | No       |
| #20 VOC samples have zero headspace (less than 1/4 inch bubble)?                               | N/A      |
| #21 <2 for all samples preserved with HNO <sub>3</sub> , HCL, H <sub>2</sub> SO <sub>4</sub> ? | N/A      |
| #22 >10 for all samples preserved with NaAsO <sub>2</sub> +NaOH, ZnAc+NaOH?                    | N/A      |

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

|          |                 |
|----------|-----------------|
| Analyst: | PH Device/Lot#: |
|----------|-----------------|

Checklist completed by:

Ruriko Konuma

Date: 04/08/2014

Checklist reviewed by:

Kelsey Brooks

Date: 04/08/2014