



AE Order Number Banner

Report Description

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



App Number: pJXK1603348630

1RP - 2752

SOUTHERN UNION GAS SERVICES LTD

3/8/2016

pJXK 1603348630
2752

Basin Environmental Service Technologies, LLC

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

jwlowry@basinenv.com

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

HOBBS OCD

AUG 06 2013

RECEIVED



Geoff Leking

New Mexico Energy, Minerals and Natural Resources Department

New Mexico Oil Conservation Division (District 1)

1625 French Drive

Hobbs, New Mexico 88240

approved MW-1 for P/A
Geoffrey Leking
Environmental Specialist
NMOCD-DIST 1
8/6/13

Re: Permission to P&A Dry Monitor Well
Line 290 (East of Jal South) (NMOCD Reference # 1RP-11-11-2752)
Unit Letter D, Section 34, Township 25 South, Range 37 East
Lea County, New Mexico

Mr. Leking,

This email has been prepared in regard to Regency Field Services, LLC, formerly Southern Union Gas Services' Line 290 (East of Jal South) (1RP-11-11-2752) Historical Remediation Site. The legal description of the release site is Unit Letter "D", Section 34, Township 25 South, Range 37 East, in Lea County, New Mexico. The property affected by the release is owned by George Willis. The release site GPS coordinates are 32°05.467' North and 103°09.406' West. The inferred depth to groundwater was 80-85' bgs prior to the installation of the monitor well. Please reference the attached Site Location Map.

On October 26, 2011, Southern Union discovered a release had occurred on the Line #290 pipeline. Failure of a section of the twelve inch (12") steel, high-pressure natural gas pipeline resulted in the release of approximately twenty barrels (20 bbls) of a mixture of natural gas, crude oil, and produced water. During initial response activities, the pipeline was fitted with a temporary clamp to mitigate the release. Following initial response activities, the affected pipeline segment was replaced with twelve inch (12") steel pipe. The release was reported to the New Mexico Oil Conservation Division (NMOCD) Hobbs District Office on November 3, 2011. The "Release Notification and Corrective Action" (Form C-141) indicated the release affected an area measuring approximately 350' in length and approximately 5' to 10' in width. Please reference the attached Site & Sample Location Map.

On November 15, 2011, one (1) soil boring (SB-1) was advanced at the site in an effort to determine the vertical extent of impacted soil. Soil boring "SB-1" was located at the terminus of the release flowpath. The soil boring was advanced to a total depth of approximately eighty-five feet (85') bgs. Soil samples were collected at five-foot (5') drilling intervals and field-screened using a Photo-Ionization Detector (PID) and/or chloride test kit. Please reference the attached Soil Boring/Monitor Well Logs.

During the advancement of the soil bore, soil samples collected at drilling depths of 5', 15', 25', 35', 45', 55', 65', 75', 80', and 85' bgs were submitted to the laboratory for analysis of BTEX, TPH and/or chloride concentrations. Laboratory analytical results indicated benzene concentrations ranged from less than the laboratory MDL of 0.0207 mg/Kg in soil sample SB-1 @ 55' to 1.70 mg/Kg in soil sample SB-1 @ 15'. Total BTEX concentrations ranged from 0.0440 mg/Kg in soil sample SB-1 @ 45' to 177 mg/Kg in soil sample SB-1 @ 15'. TPH concentrations ranged from 119 mg/Kg in soil sample SB-1 @ 45' to 8,240 mg/Kg in soil sample SB-1 @ 15'. Chloride concentrations ranged from less than the laboratory MDL in soil samples SB-1 @ 15' and SB-1 @ 25' to 490 mg/Kg in soil sample SB-1 @ 5'. Please reference the attached Soil Chemistry Tables.

On May 2, 2012, following NMOCD approval of the *Risk-Based Site Closure Proposal*, Basin began remediation activities at the release site. The excavation floor was advanced and leveled at approximately ten feet (10') bgs, pending the installation of an NMOCD approved twenty (20) mil polyurethane liner. The excavation sidewalls were advanced until laboratory analytical results from confirmation soil samples indicated benzene, BTEX, TPH and chloride concentrations were below NMOCD regulatory standards. Excavated material was stockpiled on-site pending final disposition. Please reference the *Remediation Summary, Risk-Based Soil Closure Request & Groundwater Investigation Proposal* dated June 2012 for details of remediation activities.

Between May 2 and May 18, 2012, approximately 2,700 yd³ of impacted material was transported to Sundance Services, Inc. (NMOCD Permit #NM-01-0003), for disposal.

On May 21, 2012, a twenty (20) mil polyurethane liner was installed on the floor of the excavation at approximately ten feet (10') bgs. Approximately one foot (1') of non-impacted pad sand was installed both above and below the liner to protect the liner from damage during installation and backfilling activities. The liner was fitted with 8" PVC conduit in three (3) locations to allow for the installation of groundwater monitor wells without compromising the integrity of the liner.

From May 21 through May 25, 2012, the excavation was backfilled with non-impacted material purchased from the landowner. Backfill was compacted in 18" lifts and contoured to fit the surrounding topography. The final dimensions of the excavation were approximately three hundred feet (300') in length, ranging in width from approximately 12' to approximately 45', and approximately 10' in depth.

Remediation activities conducted at the Line #290 (East of Jal South) release site met the objectives set forth in the *Remediation Summary & Risk-Based Site Closure Proposal* dated April 2012. A *Remediation Summary, Risk Based Soil Closure Request & Groundwater Investigation Proposal* was submitted to the NMOCD and subsequently approved.

On September 4, 2012, in accordance with the Groundwater Investigation portion of the approved proposal, a monitor well (MW-1) was installed in the western portion of the release site in the area defined by soil sample Sample #3. The monitor well was advanced to a depth of 110' bgs. During the installation of the monitor well, soil samples collected at drilling depths of 15', 25', 35', 45', 50', 55', and 60' bgs were submitted to the laboratory for analysis of BTEX, TPH and chloride concentrations. Laboratory analytical results indicated benzene concentrations were less than the appropriate laboratory MDL in soil samples MW-1 @ 35' and MW-1 @ 60' to 0.774 mg/Kg in soil sample MW-1 @ 15'. TPH concentrations ranged from 16.9 mg/Kg in soil sample MW-1 @ 45' to 1,470 mg/Kg in soil sample MW-1 @ 15'. Chloride concentrations ranged from 1.13 mg/Kg in MW-1 @ 15' and to 44.1 mg/Kg in soil sample MW-1 @ 55'. Considerable time was given to allow for the monitor well

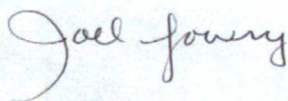
to make water. It was allowed to remain undisturbed overnight to determine whether groundwater had been reached. Subsequent gauging determined that the monitor well was dry.

Between September 5, 2012, and July 23, 2013, as per the NMOCD, monitor well MW-1 was gauged monthly to check for the presence of groundwater. Monthly gauging of the onsite monitor well indicated there was no groundwater within the red, silty clay zone that characterized the subsurface at the Line 290 East of Jal South release site. Please reference the attached groundwater gauging data sheet.

With NMOCD permission, Regency Field Services would like to Plug and Abandon the onsite monitor well during the week of August 12, 2013. A plugging plan has been submitted to the New Mexico Office of the State Engineer and subsequently approved. Plugging activities will be conducted by a licensed driller, a summary of which will be submitted upon request.

If you have any questions or would like any additional information, please feel free to contact me by phone or email. Thanks.

Respectfully,

A handwritten signature in cursive script that reads "Joel Lowry".

Joel W. Lowry
Basin Environmental Service Technologies, LLC

Attachments:

- Attachment #1: Site Location Map
- Attachment #2: Site & Sample Location Map
- Attachment #3: Soil Bore/Monitor Well Logs
- Attachment #4: Soil Chemistry Table
- Attachment #5: Groundwater Gauging Data

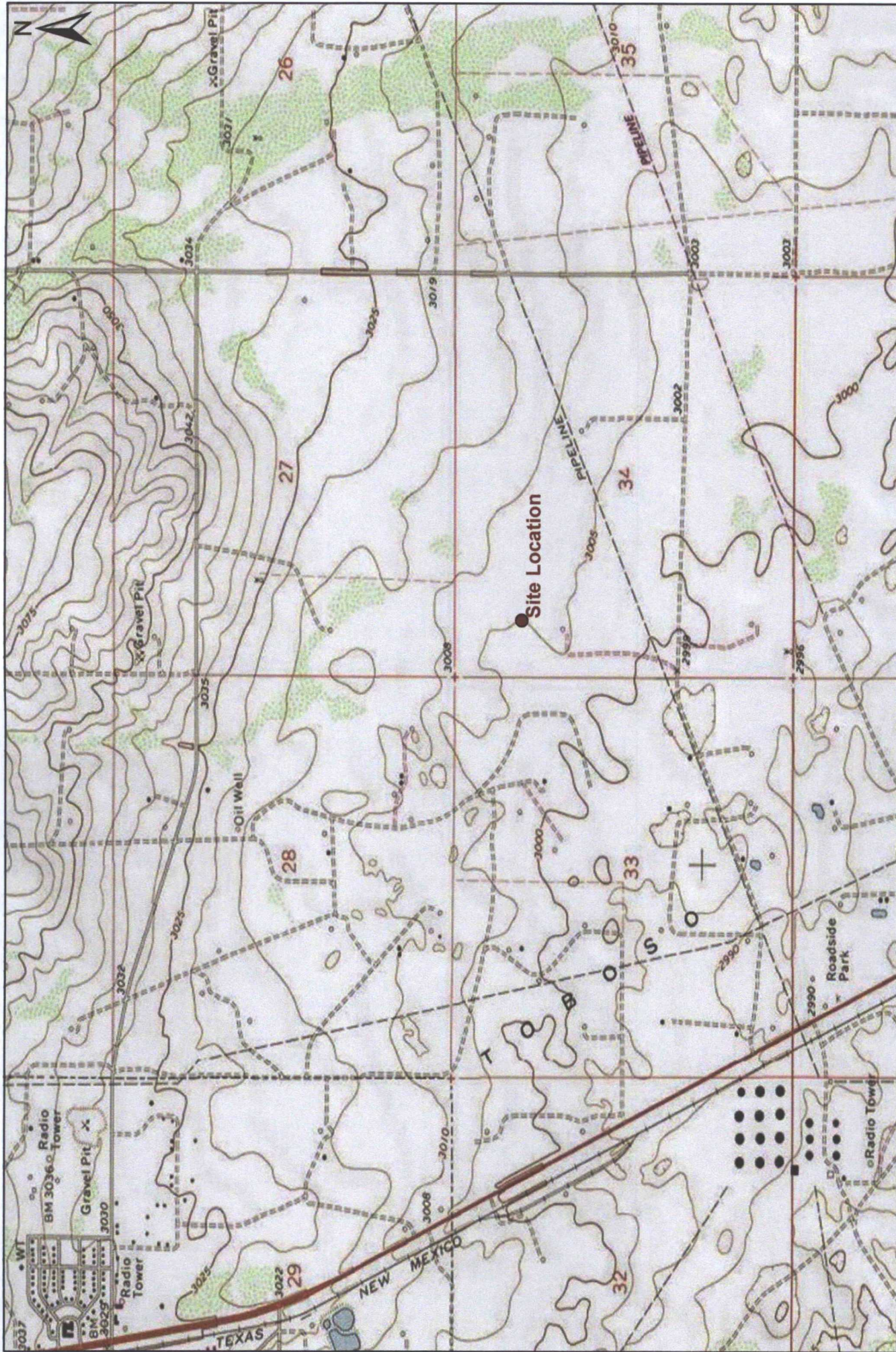
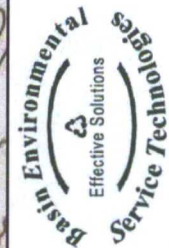


Figure 1
Site Location Map
 Southern Union Gas Services
 Line #290 (East of Jal South)
 Lea County, New Mexico
 NMOCD Ref. #: 1RP-11-11-2752

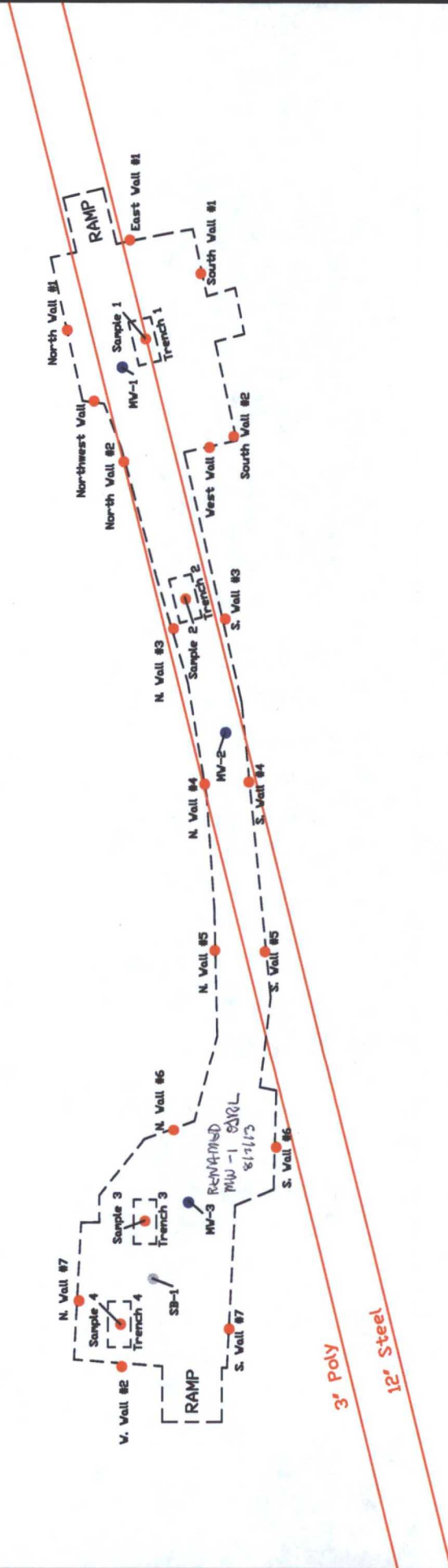
1,000 500 0 1,000 2,000
 Distance in Feet



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

Drawn By: BJA
 May 21, 2012

Checked By: BRB
 Scale: 1" = 2000'



Legend

- Sample Location
- - - Excavation Extents
- [- -] Delineation Trench
- Pipeline
- Soil Boring
- Proposed Monitor Well
- Monitor Well

Figure 2
Site & Sample Location Map
Southern Union Gas Services
Line #290 (East of Jal South)
NMOCD Ref #1RP-11-11-2752
Lea County, New Mexico

Basin Environmental Services




Prep By: JWL
June 18, 2012
Checked By: BJA
Scale 1"=40'

Soil Boring SB-1

| Depth Below Ground Surface | Soil Column | Chloride Field Test | PID Reading | Petroleum Odor | Petroleum Stain | Soil Description |
|-------------------------------------|----------------|---------------------------|----------------|-------------------|--------------------|-----------------------------------------------|
| 0 | | | | | | 0' - 1' - Tan fine sand |
| 5 | | 632 | 267 | Heavy | None | 1' - 7' - Red fine sand |
| 10 | | 168 | | Heavy | None | 7' - 9' - Tan fine sand |
| 15 | | <120 | 1,518 | Slight | None | 9' - 25' - Red fine sand |
| 20 | | <120 | | Moderate | None | |
| 25 | | | 1,415 | Slight | None | |
| 30 | | | 1,921 | Slight | None | 25 - 33' - Tan fine sand, calcified sandstone |
| 35 | | 835 | | Slight | None | 33' - 35' - Gypsum |
| 40 | | 456 | | Slight | None | 35' - 44' - Tan fine sand, sandstone |
| 45 | | | | Slight | None | |
| 50 | | | 373 | Slight | None | |
| 55 | | 2,352 | | Moderate | None | |
| 60 | | | | Moderate | None | |
| 65 | | 1,605 | | Moderate | None | 44' - 81' - Red very fine to fine sand |
| 70 | | | | Moderate | None | |
| 75 | | 864 | | Moderate | None | |
| 80 | | | | Slight | None | |
| 85 | | 1,109 | | Moderate | None | 81' - 85' - Red silty clay |

Boring SB-1

Date Drilled November 15, 2011
 Thickness of Bentonite Seal 85 Ft
 Depth of Exploratory Boring 85 Ft bgs
 Depth to Groundwater _____
 Ground Water Elevation _____

-  Indicates the PSH level measured on _____
 Indicates the groundwater level measured on _____
 Indicates samples selected for Laboratory Analysis.
 PID Head-space reading in ppm obtained with a photo-ionization detector.

Completion Notes

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

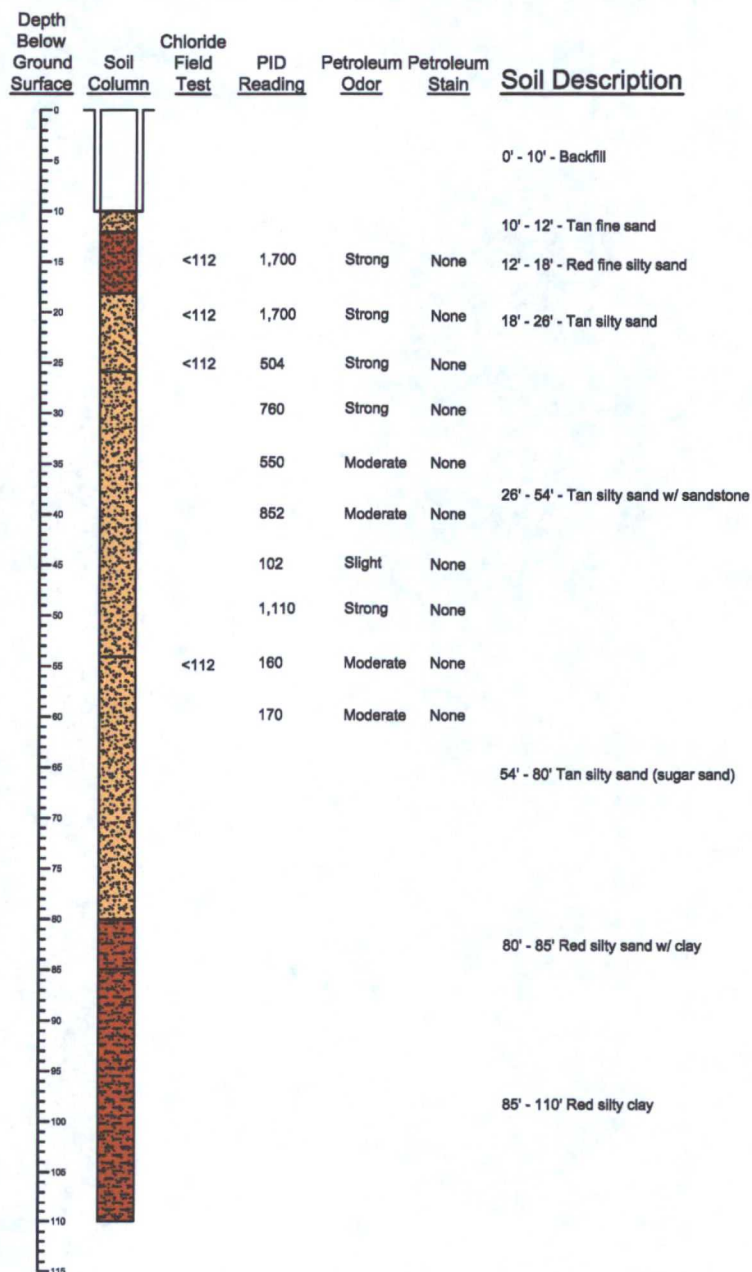
Soil Boring SB-1

Southern Union Gas Services
 Line #290 (East of Jal South)
 Lea County, New Mexico




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

| | |
|---------------|-----------------|
| Prep By: JWL | Checked By: BJA |
| June 19, 2012 | |

Soil Boring/Monitor Well Log MW-1



Date Drilled, September 4, 2012
 Thickness of Bentonite Seal 71 Ft
 Depth of Exploratory Boring 110 Ft bgs
 Depth to Groundwater 85 Ft bgs
 Ground Water Elevation _____

 Indicates the PSH level measured on _____
 Indicates the groundwater level measured on _____
 Indicates samples selected for Laboratory Analysis.
 PID Head-space reading in ppm obtained with a photo-ionization detector.

 Grout Surface Seal
 Bentonite Pellet Seal
 Sand Pack
 Screen

Completion Notes

- 1.) Monitor Well MW-1 was advanced through an established 8" PVC conduit to maintain the integrity of a 20-mil poly liner installed within the excavation at 10' bgs.
- 2.) Monitor well was advanced on date using air rotary drilling techniques.
- 3.) Monitor well was constructed with 2" ID, 0.10-inch factory slotted, threaded joint, Schedule 40 PVC pipe.
- 4.) Well is protected with a locked stick-up steel cover and compression cap.
- 5.) Lines between material types shown on the profile log represent approximate boundaries. Actual transitions may be gradual.
- 6.) Depths indicated are referenced from ground surface.
- 7.) Borehole began to collapse at approximately 60' bgs. Fresh water was injected to maintain the integrity of the borehole.

**Soil Boring/
Monitor Well Log MW-1**

**Southern Union Gas Services
Line 290 (East of Jal South)
Lea County, New Mexico
NMOCD Reference #: 1RP-11-11-2752**

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

| | |
|-------------------|-----------------|
| Prep By: JWL | Checked By: BRB |
| September 5, 2012 | |

TABLE 1

CONCENTRATIONS OF BENZENE, BTX, TPH & CHLORIDE IN SOIL

SOUTHERN UNION GAS SERVICES
LINE #290 (EAST OF JAL SOUTH)
LEA COUNTY, NEW MEXICO
NIMOD REFERENCE NO: 1RP-11-11-2762

| SAMPLE LOCATION | SAMPLE DEPTH (9GS) | SAMPLE DATE | SOIL STATUS | METHOD: EPA SW 846-8021B, 8030 | | | | | | | | | | METHOD: 8015M | | | | | TOTAL TPH C ₁₀ -C ₁₅ (mg/Kg) | TOTAL CHLORIDE (mg/Kg) |
|-----------------|--------------------|-------------|-------------|--------------------------------|-----------------|---------------------------|---------------------------|----------------------|-------------------------|----------------------|-------------------------------------------------|-------------------------------------------------|-------------------------------------------------|---------------|-------|---|---|---|----------------------------------------------------|------------------------|
| | | | | BENZENE (mg/Kg) | TOLUENE (mg/Kg) | ETHYL- BENZENE (mg/Kg) | M.P. - XYLENES (mg/Kg) | O- XYLENE (mg/Kg) | TOTAL XYLENE (mg/Kg) | TOTAL BTX (mg/Kg) | GRO C ₁₀ -C ₁₂ (mg/Kg) | DRO C ₁₃ -C ₁₅ (mg/Kg) | ORO C ₁₆ -C ₁₈ (mg/Kg) | | | | | | | |
| Sample #1 | 7' | 11/10/2011 | Excavated | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 18,800 | 676 |
| Sample #2 | 1.5' | 11/10/2011 | Excavated | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 14,800 | 1,150 |
| Sample #3 | 14' | 11/10/2011 | Excavated | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 39,900 | 5.62 |
| Sample #4 | 6' | 11/10/2011 | Excavated | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 20,400 | <4.42 |
| SB-1 @ 5' | 5' | 11/15/2011 | Excavated | 0.273 | 3.56 | 7.00 | 21.5 | 9.33 | 30.8 | 41.7 | 1.440 | 2.010 | 75.6 | 3.530 | 490 | | | | | |
| SB-1 @ 15' | 15' | 11/15/2011 | In-Situ | 1.70 | 16.0 | 28.3 | 95.2 | 35.3 | 131 | 177 | 4.640 | 3.410 | 186 | 8.240 | <4.38 | | | | | |
| SB-1 @ 25' | 25' | 11/15/2011 | In-Situ | 0.719 | 4.38 | 9.03 | 28.5 | 11.1 | 39.6 | 53.7 | 1.550 | 1.460 | 65.5 | 3.080 | <4.37 | | | | | |
| SB-1 @ 35' | 35' | 11/15/2011 | In-Situ | 0.0118 | 0.0459 | 0.216 | 0.0260 | 0.0414 | 0.0674 | 0.341 | 0.309 | 182 | <15.8 | 213 | - | | | | | |
| SB-1 @ 45' | 45' | 11/15/2011 | In-Situ | 0.00720 | <0.0102 | 0.00643 | 0.0213 | 0.00904 | 0.0303 | 0.0440 | <15.3 | 119 | <15.3 | 119 | 9.70 | | | | | |
| SB-1 @ 55' | 55' | 11/15/2011 | In-Situ | <0.0207 | 0.219 | 0.619 | 2.03 | 0.816 | 2.85 | 3.68 | 3.60 | 885 | 52.1 | 1,300 | - | | | | | |
| SB-1 @ 65' | 65' | 11/15/2011 | In-Situ | 0.00907 | 0.0235 | 0.0636 | 0.246 | 0.0903 | 0.336 | 0.432 | 1.09 | 412 | 43.4 | 564 | 55.3 | | | | | |
| SB-1 @ 75' | 75' | 11/15/2011 | In-Situ | 0.00954 | <0.0105 | 0.00755 | 0.0449 | 0.0159 | 0.0608 | 0.0779 | 41.5 | 246 | 22.0 | 310 | 19.2 | | | | | |
| SB-1 @ 80' | 80' | 11/15/2011 | In-Situ | 0.00785 | 0.0254 | 0.0839 | 0.264 | 0.108 | 0.372 | 0.489 | 94.7 | 444 | 24.9 | 564 | 15.6 | | | | | |
| SB-1 @ 85' | 85' | 11/15/2011 | In-Situ | 0.00955 | <0.0106 | 0.00591 | 0.0269 | 0.00976 | 0.0367 | 0.0521 | 25.7 | 178 | <15.9 | 204 | 12.8 | | | | | |
| North Wall #1 | 9' | 5/3/2012 | In-Situ | <0.0010 | <0.0020 | <0.0010 | <0.0020 | <0.0010 | <0.0020 | <0.0020 | <15.0 | <15.0 | <15.0 | <15.0 | 4.32 | | | | | |
| North Wall #1 | 9' | 5/3/2012 | In-Situ | - | - | - | - | - | - | - | - | - | - | - | 9.89 | | | | | |
| East Wall #1 | 9' | 5/3/2012 | In-Situ | <0.0010 | <0.0020 | <0.0010 | <0.0020 | <0.0010 | <0.0020 | <0.0020 | <15.0 | <15.0 | <15.0 | <15.0 | 14.9 | | | | | |
| South Wall #1 | 9' | 5/3/2012 | In-Situ | <0.0010 | <0.0020 | <0.0010 | <0.0020 | <0.0010 | <0.0020 | <0.0020 | <15.0 | <15.0 | <15.0 | <15.0 | <4.24 | | | | | |
| South Wall #2 | 9' | 5/4/2012 | In-Situ | <0.0010 | <0.0020 | <0.0010 | <0.0020 | <0.0010 | <0.0020 | <0.0020 | <15.0 | <15.0 | <15.0 | <15.0 | 7.16 | | | | | |
| West Wall | 9' | 5/7/2012 | In-Situ | <0.0010 | <0.0020 | <0.0010 | <0.0020 | <0.0010 | <0.0020 | <0.0020 | <15.0 | <15.0 | <15.0 | <15.0 | 6.40 | | | | | |
| North Wall #2 | 9' | 5/7/2012 | In-Situ | <0.0010 | <0.0020 | <0.0010 | <0.0020 | <0.0010 | <0.0020 | <0.0020 | <15.0 | <15.0 | <15.0 | <15.0 | 7.13 | | | | | |
| N. Wall #3 | 9' | 5/9/2012 | In-Situ | <0.0010 | <0.0020 | <0.0010 | <0.0020 | <0.0010 | <0.0020 | <0.0020 | <15.2 | <15.2 | <15.2 | <15.2 | <1.02 | | | | | |
| N. Wall #4 | 9' | 5/9/2012 | In-Situ | <0.0010 | <0.0020 | <0.0010 | <0.0020 | <0.0010 | <0.0020 | <0.0020 | <15.3 | <15.3 | <15.3 | <15.3 | <1.02 | | | | | |
| N. Wall #5 | 9' | 5/9/2012 | In-Situ | <0.0010 | <0.0020 | <0.0010 | <0.0020 | <0.0010 | <0.0020 | <0.0020 | <15.3 | <15.3 | <15.3 | <15.3 | <1.02 | | | | | |
| S. Wall #3 | 9' | 5/9/2012 | In-Situ | <0.0010 | <0.0020 | <0.0010 | <0.0020 | <0.0010 | <0.0020 | <0.0020 | <15.1 | <15.1 | <15.1 | <15.1 | <1.01 | | | | | |
| S. Wall #4 | 9' | 5/9/2012 | In-Situ | <0.0010 | <0.0020 | <0.0010 | <0.0020 | <0.0010 | <0.0020 | <0.0020 | <15.5 | <15.5 | <15.5 | <15.5 | <1.03 | | | | | |
| S. Wall #5 | 9' | 5/9/2012 | In-Situ | <0.0010 | <0.0020 | <0.0010 | <0.0020 | <0.0010 | <0.0020 | <0.0020 | <15.9 | <15.9 | <15.9 | <15.9 | <1.06 | | | | | |
| N. Wall #6 | 9' | 5/17/2012 | In-Situ | <0.0010 | 0.00264 | <0.0010 | 0.00279 | 0.00135 | 0.00414 | 0.00678 | <15.3 | <15.3 | <15.3 | <15.3 | 5.38 | | | | | |
| S. Wall #6 | 9' | 5/17/2012 | In-Situ | <0.0010 | 0.00465 | <0.0010 | 0.00263 | <0.0010 | 0.00263 | 0.00728 | <15.3 | <15.3 | <15.3 | <15.3 | 16.8 | | | | | |
| W. Wall #2 | 9' | 5/17/2012 | In-Situ | <0.0010 | <0.0020 | <0.0010 | <0.0020 | <0.0010 | <0.0020 | <0.0020 | <15.7 | <15.7 | <15.7 | <15.7 | 4.88 | | | | | |
| N. Wall #7 | 9' | 5/17/2012 | In-Situ | <0.0010 | <0.0020 | <0.0010 | <0.0020 | <0.0010 | <0.0020 | <0.0020 | <15.3 | <15.3 | <15.3 | <15.3 | 9.57 | | | | | |
| S. Wall #7 | 9' | 5/17/2012 | In-Situ | <0.0010 | 0.00453 | 0.00103 | 0.00381 | 0.00121 | 0.00502 | 0.0106 | <15.3 | <15.3 | <15.3 | <15.3 | 12.9 | | | | | |
| MW-1 @ 15' bgs | 15' | 9/4/2012 | In-Situ | <0.0112 | 0.0967 | 0.116 | 0.420 | 0.141 | 0.561 | 0.774 | 681 | 748 | 44.8 | 1,470 | 1.13 | | | | | |
| MW-1 @ 25' bgs | 25' | 9/4/2012 | In-Situ | <0.0106 | 0.0105 | 0.00610 | 0.0229 | 0.00881 | 0.0317 | 0.0483 | <16.0 | 104 | <16.0 | 104 | 2.75 | | | | | |
| MW-1 @ 35' bgs | 35' | 9/4/2012 | In-Situ | <0.0104 | <0.00208 | <0.00104 | 0.00279 | 0.00113 | 0.00392 | 0.00392 | <15.7 | 95.5 | <15.7 | 95.5 | 11.9 | | | | | |
| MW-1 @ 45' bgs | 45' | 9/4/2012 | In-Situ | <0.0102 | <0.00205 | <0.00102 | <0.00205 | <0.00102 | <0.00205 | <0.00205 | <15.4 | 16.9 | <15.4 | <16.9 | 37.8 | | | | | |
| MW-1 @ 50' bgs | 50' | 9/4/2012 | In-Situ | <0.0101 | <0.00203 | <0.00101 | 0.00208 | <0.00101 | 0.00208 | 0.00208 | 44.8 | 29.6 | <15.3 | 74.4 | 28.4 | | | | | |
| MW-1 @ 55' bgs | 55' | 9/4/2012 | In-Situ | <0.0102 | <0.00204 | <0.00102 | 0.00263 | 0.00118 | 0.00381 | 0.00381 | <15.5 | 30.2 | <15.5 | 30.2 | 44.1 | | | | | |
| MW-1 @ 60' bgs | 60' | 9/4/2012 | In-Situ | <0.0100 | <0.00200 | <0.00100 | <0.00200 | <0.00100 | <0.00200 | <0.00200 | <17.0 | 31.3 | <17.0 | 31.3 | 7.59 | | | | | |
| NIMOD Criteria | | | | 10 | | | | | | 50 | | | | 100 | | | | | | |

- = Not analyzed.

TABLE 1

GROUNDWATER ELEVATION DATA

SOUTHERN UNION GAS SERVICES
 LINE 290 EAST OF JAL SOUTH
 NMOCD REF # 1RP-11-11-2752
 LEA COUNTY, NEW MEXICO

| WELL NUMBER | DATE MEASURED | CASING WELL ELEVATION | DEPTH TO PRODUCT | DEPTH TO WATER | PSH THICKNESS | TOTAL DEPTH | CORRECTED GROUNDWATER ELEVATION |
|----------------|------------------|--------------------------|---------------------|-------------------|------------------|----------------|---------------------------------------|
| MW-1 | 9/4/2013 | 200.00* | - | dry | - | 124.5 | - |
| MW-1 | 9/7/2013 | 200.00* | - | dry | - | 124.5 | - |
| MW-1 | 10/26/2013 | 200.00* | - | dry | - | 124.5 | - |
| MW-1 | 11/28/2013 | 200.00* | - | dry | - | 124.5 | - |
| MW-1 | 12/20/2013 | 200.00* | - | dry | - | 124.5 | - |
| MW-1 | 1/21/2013 | 200.00* | - | dry | - | 124.5 | - |
| MW-1 | 2/27/2013 | 200.00* | - | dry | - | 124.5 | - |
| MW-1 | 3/28/2013 | 200.00* | - | dry | - | 124.5 | - |
| MW-1 | 4/8/2013 | 200.00* | - | dry | - | 124.5 | - |
| MW-1 | 5/9/2013 | 200.00* | - | dry | - | 124.5 | - |
| MW-1 | 6/26/2013 | 200.00* | - | dry | - | 124.5 | - |
| MW-1 | 7/23/2013 | 200.00* | - | dry | - | 124.5 | - |
| | | | | | | | |

*Arbitrary value. Well has not been surveyed.