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# REMEDIATION SUMMARY AND RISKED-BASED SITE CLOSURE REQUEST

BOPCO, L.P.
POKER LAKE UNIT #158
Eddy County, New Mexico
UNIT LTR "A" (NE ¼ NE ¼ ), Section 7, Township 24 South, Range 30 East
Latitude 32.237400° North, Longitude 103.914150° West
NMOCD Reference # 2RP-400

Prepared For:

BOPCO, L.P. 522 W. Mermod Suite 704 Carlsbad, New Mexico 88220

Prepared By:
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January 2013

Project Manager

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#### INTRODUCTION AND BACKGROUND INFORMATION

Basin Environmental Consulting, LLC (Basin), on behalf of BOPCO, L.P. (BOPCO), has prepared this Remediation Summary and Risk-Based Closure Request for the release site known as Poker Lake Unit #158. The legal description of the release site is Unit Letter "A" (NE ¼ NE ¼), Section 7, Township 24 South, Range 30 East, in Eddy County, New Mexico. The release site latitude is 32.237400° North and the longitude is 103.914150° West. The property affected by the release is owned by The United States Department of the Interior Bureau of Land Management (BLM). Please reference Figure 1 for a Site Location Map and Figure 2 for a Site and Sample Location Map. General photographs are provided as Appendix C.

On March 8, 2010, BOPCO discovered a release had occurred at the Poker Lake Unit #158 site. A valve on the produced water tank was left open, resulting in a release of produced water and crude oil. The release was reported to the New Mexico Oil Conservation Division (NMOCD) Artesia District Office on March 9, 2010. The Release Notification and Corrective Action (Form C-141) indicated approximately five (5) barrels of produced water and approximately forty-five (45) barrels of crude oil was released and approximately forty (40) barrels of produced water and crude oil were recovered. The majority of the release was confined inside the containment area of the facility. A fine overspray impacted the area east of the facility. A Micro Blaze and nutrient enriched solution was applied to the overspray area. The Release Notification and Corrective Action (Form C-141) is provided as Appendix D.

#### NMOCD SITE CLASSIFICATION

A search of the New Mexico Office of the State Engineer (NMOSE) database did not identify the average depth to groundwater information for Section 7, Township 24 South, Range 30 East. A reference map utilized by the NMOCD indicated groundwater should be encountered at approximately 150 to 175 feet below ground surface (bgs) at the site. The depth to groundwater at the Poker Lake Unit #158 release site results in zero (0) points being assigned to the site based on the NMOCD depth to groundwater criteria.

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

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

The NMOCD guidelines indicate the Poker Lake Unit #158 release site has an initial ranking score of zero (0). Based on this score, the soil remediation levels for a site with a ranking score of zero (0) points are as follows:

- Benzene -10 mg/Kg (ppm)
- BTEX -50 mg/Kg (ppm)
- TPH -5,000 mg/Kg (ppm)

The NMOCD chloride clean-up level concentrations are site specific and are set by the NMOCD.

#### SUMMARY OF SOIL REMEDIATION ACTIVITIES

On May 24, 2010, one (1) soil boring (SB-1) was advanced at the site to evaluate the vertical extent of soil impact. The soil boring log is provided as Appendix A. Soil samples were collected at five (5) foot drilling intervals and field screened using a Photo-Ionization Detector (PID) and a chloride field test kit. Selected soil samples were submitted to the laboratory for determination of concentrations of benzene, toluene, ethylbenzene and xylenes (BTEX), total petroleum hydrocarbons (TPH) and chlorides using EPA method 8021b, SW-846 8015M and 4500 Cl-B, respectively.

Soil boring SB-1 was located inside the containment area on the west side of the facility. The soil boring was advanced to a total depth of approximately seventy feet (70') bgs. During advancement of the soil boring, circulation was lost and the bore hole collapsed at approximately seventy feet (70') bgs. Several attempts were made to stabilize the boring without success. The NMOCD Artesia Office was notified of the incident. Soil samples collected at ten feet (10'), twenty-five feet (25'), sixty-five feet (65') and seventy feet (70') bgs were submitted to the laboratory for BTEX and TPH analysis. Soil samples collected at ten feet (10'), twenty feet (20') feet, twenty-five feet (25') feet, thirty feet (30') feet, forty feet (40') feet, fifty feet (50'), fifty-five feet (55'), sixty feet (60'), sixty-five feet (65') and seventy feet (70') bgs were submitted to the laboratory for chloride analysis. Laboratory analytical results indicted benzene and BTEX concentrations were less than the appropriate laboratory method detection limit (MDL) for all the submitted soil samples with the exception of soil sample SB-1 @ 10'; which exhibited a BTEX concentration of 54.61mg/Kg. TPH concentrations ranged from less than the appropriate laboratory MDL for soil sample SB-1 @ 65' to 4,995 mg/Kg for soil sample SB-1 @ 10'. Chloride concentrations ranged from 64 mg/Kg for soil sample SB-1 @ 55' to 3,920 mg/Kg for soil sample SB-1 @ 30'. A review of the analytical results indicated benzene, BTEX and TPH concentrations are less than the NMOCD regulatory standard. A summary of Concentrations of Benzene, BTEX, TPH and Chlorides in Soil is provided as Table 1. Laboratory analytical reports are provided as Appendix B.

A background soil sample (Background) was also collected and analyzed for chloride concentrations. Laboratory analytical results indicated the chloride concentration was less than the laboratory MDL for soil sample Background.

On July 15, 2010, ten (10) soil samples (West Side #1 @ 6", West Side #2 @ 6", West Side #2 @ 6", North RO #1 @ 6", South RO #1 @ 6" and South RO #2 @ 6") were collected from the overspray area and submitted to the laboratory for analysis. Laboratory analytical results indicated benzene concentrations were less than the appropriate laboratory MDL for each submitted soil sample. BTEX concentrations ranged from 3.519 mg/Kg for soil sample West Side #2 @ 2' to 23.3 mg/Kg for soil sample West Side #2 @ 6". TPH concentrations ranged from less than the appropriate laboratory MDL for soil samples Center @ 6", East Side #1 @ 6", East Side #2 @ 6", North RO #1 @ 6", South RO #1 @ 6" and South RO #2 @ 6" to 6,828 mg/Kg for soil sample West Side #2 @ 6". TPH concentrations were less than the appropriate laboratory MDL for each of the soil samples submitted with the exception of soil sample West Side #2 @ 6", which exhibited a concentration of 6,828 mg/Kg. Chloride concentrations were less than the

appropriate laboratory MDL for each of the submitted soil samples with the exception of soil sample West Side #2 @ 6"; which exhibited a concentration of 32 mg/Kg.

On March 7, 2011, Basin began remediation activities on the area east of the PLU #158 Battery. Straw hay was tilled into the underlying soil and the area was treated with water and nitrogen fertilizer in order to facilitate natural attenuation.

Between March 16 and March 28, 2011, the area within the earthen containment was hand-excavated to approximately two feet (2') bgs. Further excavation within the earthen containment was impracticable due to the presence and proximity of numerous active pipelines and/or storage tanks.

On April 20, 2011, a hand-auger was utilized to advance five (5) soil borings (SB-4-20-1, SB-4-20-2, SB-4-20-3, SB-4-20-4 and SB-4-20-5) to approximately four feet (4') bgs within the earthen containment. During the advancement of the soil borings, fifteen (15) soil samples (SB-4-20-1 Surface, SB-4-20-1 2' bgs, SB-4-20-1 4' bgs, SB-4-20-2 Surface, SB-4-20-2 2' bgs, SB-4-20-2 4' bgs, SB-4-20-3 Surface, SB-4-20-3 2' bgs, SB-4-20-3 4' bgs, SB-4-20-4 Surface, SB-4-20-4 2' bgs, SB-4-20-4 4' bgs, SB-4-20-5 Surface, SB-4-20-5 2' bgs and SB-4-20-5 4' bgs) were collected and submitted to the laboratory for analysis of TPH and chloride concentrations. Laboratory analytical results indicated TPH concentrations ranged from 484.4 mg/Kg for soil sample SB-4-20-4 2' bgs to 16,460 mg/Kg for soil sample SB-4-20-2 2' bgs. Analytical results indicated chloride concentrations ranged from 224 mg/Kg for soil sample SB-4-20-2 4' bgs and SB-4-20-5 4' bgs were also analyzed for BTEX concentrations, which were determined to be 74.87 and 104.45, respectively.

Beginning April 20, 2011, the excavated area within the earthen containment was backfilled with non-impacted material to approximately eighteen inches (18") bgs. A Falcon containment area was constructed around the PLU #158 Battery, which includes steel perimeter walls extending approximately two feet (2') above ground surface. A felt liner was installed in the floor of the new containment area, and the floor and perimeter walls of the containment area were coated with an impermeable, spray-on polyurethane liner. This engineering control will help mitigate any future releases and inhibit the vertical migration of contaminants in impacted soil remaining in-situ beneath the PLU # 158 Tank Battery.

#### 4.0 QA/QC PROCEDURES

#### 4.1 Soil Sampling

Soil samples were delivered to Cardinal Laboratories, Inc., in Hobbs, New Mexico, 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 EPA Method SW-846 8015M
- Chloride concentrations in accordance with EPA Method 4500 Cl-B

# 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

Remediation activities conducted at the Poker Lake Unit #158 Battery release site met the objectives set forth in the *Remediation Summary & Risk-Based Site Closure Strategy* dated August 2010. Soil samples collected from impacted area east of the PLU # 158 Battery were analyzed by an NMOCD-approved laboratory, and concentrations of benzene, BTEX, and TPH were below the regulatory remediation action levels established for the site, with the exception of soil sample West Side #2, which exhibited a TPH concentration of 6,828 mg/Kg.

An impermeable, spray-on polyurethane liner was installed on the floor and perimeter walls of the new steel containment area constructed around the PLU #158 Battery. This engineered control will help mitigate future releases and inhibit vertical migration of contaminants in impacted soil remaining in-situ beneath the footprint of the tank battery and containment area. Soil exhibiting concentrations of contaminants in excess of NMOCD regulatory standards will be further investigated following decommission and/or abandonment of the currently active tank battery.

Basin Environmental recommends BOPCO provide the NMOCD Hobbs District Office a copy of this *Remediation Summary & Risk-Based Site Closure Request* and request the NMOCD grant site closure to the Poker Lake Unit #158 Battery release site.

#### **LIMITATIONS**

Basin Environmental Consulting, LLC has prepared this Remediation Summary and Risk-Based Closure Strategy to the best of its ability. No other warranty, expressed or implied, is made or intended.

Basin Environmental Consulting, LLC has examined and relied upon documents referenced in the report and has relied on oral statements made by certain individuals. Basin Environmental Consulting, LLC has not conducted an independent examination of the facts contained in referenced materials and statements. We have presumed the genuineness of the documents and that the information provided in documents or statements is true and accurate. Basin Environmental Consulting, LLC has prepared this report, in a professional manner, using the degree of skill and care exercised by similar environmental consultants. Basin Environmental Consulting, LLC also 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 BOPCO, L.P. 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 Consulting, LLC and/or BOPCO, L.P.

# **DISTRIBUTION:**

Copy 1: Mike Bratcher

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1301 E. Grand Avenue Artesia, New Mexico 88210

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BOPCO, L.P.

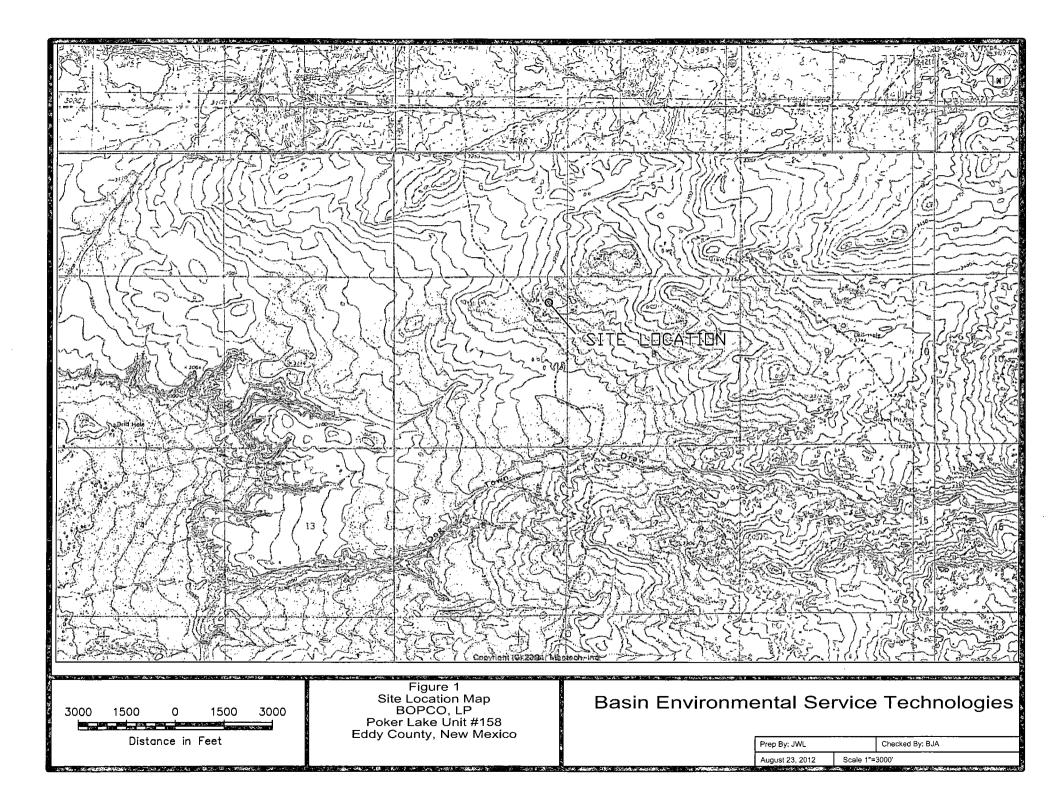
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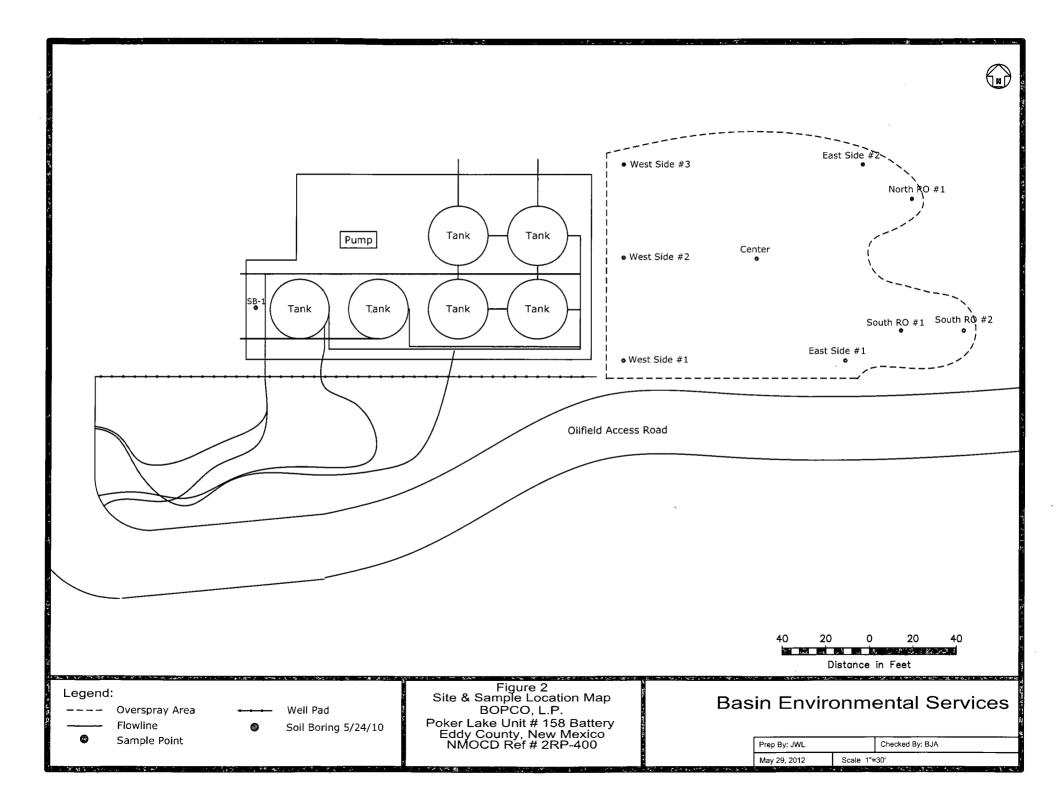
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# **FIGURES**





# **TABLES**

# TABLE 1 CONCENTRATIONS OF BENZENE, BTEX, TPH & CHLORIDES IN SOIL

#### BOPCO, LP POKER LAKE UNIT 158 BATTERY EDDY COUNTY, NEW MEXICO NMOCD REFERENCE NO: 2RP-400

|                         |          |           |         |         | METHOD: EI                              | PA SW 846-80 | 21B. 5030 |         | ME                              | THOD: 801                        | 5M                               | TOTAL                           | E 300    |
|-------------------------|----------|-----------|---------|---------|---|--------------|-----------|---------|---------------------------------|----------------------------------|----------------------------------|---------------------------------|----------|
| 0.44515100.471011       | SAMPLE   | SAMPLE    | SOIL    |         |   | ETHYL-       | TOTAL     | TOTAL   | GRO                             | DRO                              | ORO                              | TPH                             |          |
| SAMPLE LOCATION         | DEPTH    | DATE      | STATUS  | BENZENE | TOLUENE                                 | BENZENE      | XYLENES   | BTEX    | C <sub>6</sub> -C <sub>12</sub> | C <sub>12</sub> -C <sub>28</sub> | C <sub>28</sub> -C <sub>35</sub> | C <sub>6</sub> -C <sub>35</sub> | CHLORIDE |
|                         | (BGS)    |           |         | (mg/Kg) | (mg/Kg)                                 | (mg/Kg)      | (mg/Kg)   | (mg/Kg) | (mg/Kg)                         | (mg/Kg)                          | (mg/Kg)                          | (mg/Kg)                         | (mg/Kg)  |
| Background              | Surface  | 05/24/10  | In-Situ | -       | _                                       | -            | _         | -       | -                               | -                                | -                                | -                               | <16      |
| SB-1 @ 10'              | 10 Feet  | 05/24/10  | In-Situ | <0.050  | 10.4                                    | 8.11         | 46.5      | 54.61   | 1480                            | 3500                             | 15.4                             | 4,995                           | 448      |
| SB-1 @ 20'              | 20 Feet  | 05/24/10  | In-Situ | -       | -                                       | -            | -         | -       |                                 | -                                | -                                | -                               | 2,960    |
| SB-1 @ 25'              | 25 Feet  | 05/24/10  | In-Situ | <0.050  | <0.050                                  | <0.050       | <0.300    | <0.300  | <10.0                           | 21.6                             | <10.0                            | 21.6                            | -        |
| SB-1 @ 30'              | 30 Feet  | 05/24/10  | In-Situ |         | _                                       | -            | -         | -       | -                               | -                                | -                                | -                               | 3,920    |
| SB-1 @ 40'              | 40 Feet  | 05/24/10  | In-Situ | -       | -                                       | -            | -         | -       | -                               | -                                | -                                | _                               | 240      |
| SB-1 @ 50'              | 50 Feet  | 05/24/10  | In-Situ | -       | -                                       | -            | -         | -       | -                               | _                                | -                                |                                 | 320      |
| SB-1 @ 55'              | 55 Feet  | 05/24/10  | In-Situ | -       | -                                       | _            | -         | -       | -                               | -                                | -                                | -                               | 64       |
| SB-1 @ 60'              | 60 Feet  | 05/24/10  | In-Situ | -       | -                                       | -            | -         | -       | _                               | -                                | -                                |                                 | 480      |
| SB-1 @ 65'              | 65 Feet  | 05/24/10  | In-Situ | <0.050  | <0.050                                  | <0.050       | <0.300    | < 0.050 | <10.0                           | <10.0                            | <10.0                            | <10.0                           | 512      |
| SB-1 @ 70'              | 70 Feet  | 05/24/10  | In-Situ | <0.050  | < 0.050                                 | <0.050       | <0.300    | <0.050  | <10.0                           | 25.1                             | <10.0                            | 25.1                            | 304      |
|                         |          |           |         |         |   |              |           |         |                                 |                                  |                                  |                                 |          |
| West Side #1 @ 6"       | 6 Inches | 07/15/10  | In-Situ | -       | -                                       | -            | -         | _       | <10.0                           | 11.9                             | <10.0                            | 11.9                            | <16      |
| West Side #2 @ 6"       | 6 Inches | 07/15/10  | In-Situ | <0.050  | 2.39                                    | 2.71         | 18.2      | 23.3    | 1,270                           | 5,540                            | 17.7                             | 6,827.7                         | 32       |
| West Side #2 @ 2'       | 2 Feet   | 07/15/10  | In-Situ | < 0.050 | 0.303                                   | 0.336        | 2.88      | 3.519   | 111                             | 1070                             | 18.9                             | 1,199.9                         | <16      |
| West Side #3 @ 6"       | 6 Inches | 07/15/10  | In-Situ | -       | -                                       | -            | -         | -       | <10.0                           | 20.2                             | <10.0                            | 20.2                            | <16      |
| Center @ 6"             | 6 Inches | 07/15/10  | In-Situ | -       | -                                       | •            | -         | -       | <10.0                           | <10.0                            | <10.0                            | <10.0                           | <16      |
| East Side #1 @ 6"       | 6 Inches | 07/15/10  | In-Situ | -       | -                                       |              | -         | -       | <10.0                           | <10.0                            | <10.0                            | <10.0                           | <16      |
| East Side #2 @ 6"       | 6 Inches | 07/15/10  | In-Situ | -       | _                                       | -            | -         | -       | <10.0                           | <10.0                            | <10.0                            | <10.0                           | <16      |
| North RO #1 @ 6"        | 6 Inches | 07/15/10  | In-Situ | -       | -                                       | -            | -         | -       | <10.0                           | <10.0                            | <10.0                            | <10.0                           | <16      |
| South RO #1 @ 6"        | 6 Inches | 07/15/10  | In-Situ | -       | -                                       | -            | -         | -       | <10.0                           | <10.0                            | <10.0                            | <10.0                           | <16      |
| South RO #2 @ 6"        | 6 Inches | 07/15/10  | In-Situ | -       | -                                       | -            | -         | -       | <10.0                           | <10.0                            | <10.0                            | <10.0                           | <16      |
|                         |          |           |         |         | * |              |           |         |                                 |                                  |                                  |                                 |          |
| SB - 4 - 20 - 1 Surface | Surface  | 4/20/2011 | In-situ | -       | -                                       | -            | -         | -       | 1,290                           | 6,200                            | 535                              | 8,025                           | 17,200   |
| SB - 4 - 20 - 1 2' bgs  | 2'       | 4/20/2011 | In-situ | -       | -                                       | -            | -         | -       | 1,140                           | 3,470                            | 267                              | 4,877                           | 16,000   |
| SB - 4 - 20 - 1 4' bgs  | 4'       | 4/20/2011 | In-situ | -       | -                                       | -            | -         | _       | 2,640                           | 6,170                            | 402                              | 9,212                           | 6,560    |
| SB - 4 - 20 - 2 Surface | Surface  | 4/20/2011 | In-situ | -       | -                                       | -            | -         | _       | 2,320                           | 8,990                            | 676                              | 11,986                          | 8,400    |
| SB - 4 - 20 - 2 2' bgs  | 2'       | 4/20/2011 | In-situ | -       | -                                       | -            | -         | -       | 1,950                           | 13,500                           | 1,010                            | 16,460                          | 272      |
| SB - 4 - 20 - 2 4' bgs  | 4'       | 4/20/2011 | In-situ | 6.37    | 11.6                                    | 10.7         | 46.2      | 74.87   | 1,450                           | 12,100                           | 1,030                            | 14,580                          | 224      |
| SB - 4 - 20 - 3 Surface | Surface  | 4/20/2011 | In-situ | -       | -                                       | -            | -         | -       | 553                             | 2,990                            | 262                              | 3,805                           | 7,800    |
| SB - 4 - 20 - 3 2' bgs  | 2'       | 4/20/2011 | In-situ | -       | -                                       | -            | -         | -       | 1,600                           | 4,980                            | 363                              | 6,943                           | 5,440    |
| SB - 4 - 20 - 3 4' bgs  | 4'       | 4/20/2011 | In-situ | -       | -                                       | -            | -         | -       | 2,100                           | 6,030                            | 429                              | 8,559                           | 5,440    |
| SB - 4 - 20 - 4 Surface | Surface  | 4/20/2011 | In-situ | -       | -                                       | -            | -         | -       | 2,570                           | 12,700                           | 934                              | 16,204                          | 30,800   |
| SB - 4 - 20 - 4 2' bgs  | 2'       | 4/20/2011 | In-situ | -       | -                                       | -            | -         | -       | 34.9                            | 412                              | 37.5                             | 484.4                           | 6,480    |
| SB - 4 - 20 - 4 4' bgs  | 4'       | 4/20/2011 | In-situ | -       | -                                       |              | =         | -       | 54.6                            | 642                              | 52.7                             | 749.3                           | 6,080    |
| SB - 4 - 20 - 5 Surface | Surface  | 4/20/2011 | In-situ | -       | -                                       | -            | -         | -       | 1,320                           | 6,710                            | 542                              | 8,572                           | 8,320    |
| SB - 4 - 20 - 5 2' bgs  | 2'       | 4/20/2011 | In-situ | -       | -                                       | -            | - "       | -       | 3,020                           | 9,070                            | 657                              | 12,747                          | 1,960    |
| SB - 4 - 20 - 5 4' bgs  | 4'       | 4/20/2011 | In-situ | 2.25    | 22.7                                    | 13.1         | 66.4      | 104.45  | 2,980                           | 11,900                           | 939                              | 15,819                          | 1,360    |
|                         |          |           |         |         |   |              |           |         |                                 |                                  |                                  |                                 |          |

# **APPENDICES**

Appendix A

Soil Boring Logs

| Depth<br>below  | TALLET STEPPENT CONTROLS |               | <u></u> |             | So           | il Boring SB-1                                  |
|---|--------------------------|---------------|---------|-------------|--------------|---|
| ground  | Soil                     | Chloride      | PID     | Petroleum   |              |   |
| surface   | Columns                  | Field Test    | Reading | <u>Odor</u> | <u>Stain</u> | Soil Description                                |
| F°  | ਨਨਾ                      | >2500         | 408     | Moderate    | Heavy        | Surface- Caliche, yellowish                     |
| ļ.  |                          |               |         | Heavy       | Heavy        |   |
| E۶  |                          | 128           | 1280    |             |              | 0-10' - Sand, brown, fine grained, damp         |
| Ė   |                          |               |         | Heavy       | Heavy        |   |
| F 10  |                          | (448)         | 1296    |             |              | 10-15' - Sand with caliche nodules, tan, dry    |
| 16  | × 4                      |               |         | None        | Moderate     | 10-15 - Sand with caliche hoodies, tan, dry     |
| 15  | 3                        | 1764          | 1038    |             |              |   |
| E   |                          |               |         | None        | Moderate     | 15-20' - Sand with caliche nodules, brown, damp |
| -20   |                          | <b>2,500</b>  | 321     |             |              |   |
| E   |                          |               | _       | None        | Moderate     |   |
| -25   |                          | >2,500        | (52.8)  |             |              |   |
| E   |                          | _             |         | None        | Slight       |   |
| -<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>- |                          | <b>≥2,500</b> | (52.0)  |             |              | •   |
| E   |                          |               |         | None        | None         |   |
|   |                          | >2,500        | 48.8    |             |              |   |
| 35  |                          | _             |         | None        | None         |   |
|   |                          | (244)         | 44.7    |             |              |   |
| - 40<br>  |                          |               |         | None        | None         |   |
| H45   |                          | 358           | 56.1    |             |              | 20-70' - Sand, brown, fine grained, damp        |
| E   |                          |               |         | None        | None         |   |
| 50  |                          | 664           | 43.6    |             |              |   |
| E   |                          |               |         | None        | None         |   |
| -55   |                          | <128          | 36.8    |             |              |   |
| E   |                          |               |         | None        | None         |   |
| F-60  |                          | (436)         | 29.8    |             |              |   |
| E   |                          | _             |         | None        | None         |   |
| -65   |                          | (416)         | (31.2)  |             |              |   |
| E   |                          |               |         | None        | None         |   |
| L 70  | 190947                   | (280)         | 28.8    |             |              |   |

#### Boring SB-1

| Date Drilled             | May 24, 2010 |
|--------------------------|--------------|
| Thickness of Bentonite S | eal70 Ft     |
| Depth of Exploratory Bor | ing70 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

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

# Appendix B

Analytical Reports



June 3, 2010

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

Re: PLU 158 (BOPCO)

Enclosed are the results of analyses for sample number H19994, received by the laboratory on 05/28/10 at 8:20 am.

Cardinal Laboratories is accredited through Texas NELAP for:

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

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

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

Celey D. Keene Laboratory Director



ANALYTICAL RESULTS FOR BASIN ENVIRONMENTAL CONSULTING, LLC

ATTN: CAMILLE BRYANT

P.O. BOX 381

LOVINGTON, NM 88260 FAX TO: (575) 396-1429

Receiving Date: 05/28/10 Reporting Date: 06/02/10 Project Owner: BOPCO

Project Owner: BOPCO Project Name: PLU 158

Project Location: EDDY CO., NM

Analysis Date: 06/01/10 Sampling Date: 05/24/10 Sample Type: SOIL

Sample Condition: COOL & INTACT @ -4°C

Sample Received By: JH

Analyzed By: HM

|              |                 | Cl      |
|--------------|-----------------|---------|
| LAB NO.      | SAMPLE ID       | (mg/kg) |
| H19994-1     | BACKGROUND      | < 16    |
| H19994-2     | SB-1 @ 10'      | 448     |
| H19994-3     | SB-1 @ 20'      | 2,960   |
| H19994-5     | SB-1 @ 30'      | 3,920   |
| H19994-6     | SB-1 @ 40'      | 240     |
| H19994-7     | SB-1 @ 50'      | 320     |
| H19994-8     | SB-1 @ 55'      | 64      |
| H19994-9     | SB-1 @ 60'      | 480     |
| H19994-10    | SB-1 @ 65'      | 512     |
| H19994-11    | SB-1 @ 70'      | 304     |
| Quality Cont | rol             | 500     |
| True Value ( | JC .            | 500     |
| % Recovery   |                 | 100     |
| Relative Per | cent Difference | < 0.1   |

METHOD: Standard Methods 4500-CIB

Note: Analyses performed on 1:4 w:v aqueous extracts.

Not accredited for Chloride.

Chemist

Date



ANALYTICAL RESULTS FOR

BASIN ENVIRONMENTAL CONSULTING, LLC

ATTN: CAMILLE BRYANT

P.O. BOX 381

LOVINGTON, NM 88260 FAX TO: (575) 396-1429

Receiving Date: 05/28/10 Reporting Date: 06/02/10

Project Owner: BOPCO Project Name: PLU 158

LAB NO. SAMPLE ID

Project Location: EDDY CO., NM

Sampling Date: 05/24/10

Sample Type: SOIL

Sample Condition: COOL & INTACT @ -4 °C

Sample Received By: JH

Analyzed By: AB/ZL

GRO DRO DRO ext. ETHYL TOTAL  $(C_6-C_{10})$  (> $C_{10}-C_{28})$  (> $C_{28}-C_{35}$ ) BENZENE TOLUENE BENZENE XYLENES

(mg/kg) (mg/kg) (mg/kg) (mg/kg) (mg/kg)

|                             | (mg/kg)  |
|-----------------------------|----------|----------|----------|----------|----------|----------|----------|
| ANALYSIS DATE:              | 05/28/10 | 05/28/10 | 05/28/10 | 06/01/10 | 06/01/10 | 06/01/10 | 06/01/10 |
| H19994-2 SB-1 @ 10'         | 1480     | 3,500    | 15.4     | <0.050   | 10.4     | 8.11     | 46.5     |
| H19994-4 SB-1 @ 25'         | <10.0    | 21.6     | <10.0    | <0.050   | <0.050   | <0.050   | <0.300   |
| H19994-10 SB-1 @ 65'        | <10.0    | <10.0    | <10.0    | <0.050   | <0.050   | <0.050   | <0.300   |
| H19994-11 SB-1 @ 70'        | <10.0    | 25.1     | <10.0    | < 0.050  | <0.050   | <0.050   | <0.300   |
|                             |          |          |          |          |          |          |          |
| Quality Control             | 469      | 435      |          | 0.019    | 0.020    | 0.019    | 0.060    |
| True Value QC               | 500      | 500      | -        | 0.020    | 0.020    | 0.020    | 0.060    |
| % Recovery                  | 93.8     | 87.0     | -        | 95.0     | 100      | 95.0     | 100      |
| Relative Percent Difference | 0.5      | 7.2      | -        | <1.0     | <1.0     | <1.0     | <1.0     |

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

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

Lab Direct

Date



# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

| Company Name                 | e: Basin Consultina  | ·                   |                   |                |             |            |          | T        |          | ********** | BI           | IL                                      | L TO               |                             |           |            |  |     | ANA          | LYS      | IS R     | EQUE         | ST             | -            | -                                      |              |
|------------------------------|--|---------------------|-------------------|----------------|-------------|------------|----------|----------|----------|------------|--------------|---|--------------------|-----------------------------|-----------|------------|--|-----|--------------|----------|----------|--------------|----------------|--------------|--|--------------|
| Project Manage               | er: Camille Brown  |                     |                   |                |             |            |          | 7        | P. O.    | #:         |              | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, |                    |                             | T         |            |  |     |              | T        |          |              |                | 1            |  |              |
| Address: P.O                 | e: Basin Consulting<br>Pr: Camille Biyans<br>Box 381   |                     |                   |                |             |            |          | (        | Com      | par        | ıy: <i>E</i> | 30                                      | PCO                |                             | 1         |            |  |     |              |          |          |              |                |              |  | 1            |
| City: Louing                 | atom Sta   | ate: JVW            | Zip:              | 8              | 326         | 0          |          | 1        | Attn:    | To         | NY           | 5                                       | Baube              | .و                          | 1         |            |  |     |              |          |          |              | Ì              |              |  |              |
| Phone #: 575                 | -605-7010 Fax  |                     |                   |                |             |            |          |          | Addr     |            | - 1          |   |                    |                             | 1         |            |  |     |              |          |          |              | 1              |              | Í                                      | 1            |
| Project #:                   | Proj   | ject Owner:         | 130               | DPO            | 0           |            |          | 7        | City:    |            |              |   |                    |                             | ] _       |            |  |     |              |          |          |              |                |              | ļ                                      |              |
| Project Name:                | PLU 158  |                     |                   |                |             |            |          | 5        | State    | 2:         |              | Z                                       | ip:                |                             | $\bar{z}$ |            |  |     |              |          |          |              |                | ĺ            |  |              |
|                              | n: Eddy Co / NM  |                     |                   |                |             |            |          | F        | hor      | 1e#        | :            |   |                    |                             | ] ~       |            |  |     |              |          |          | 1            |                |              |  |              |
| Sampler Name:                | Camine Bryan   | イ                   |                   |                |             |            |          | F        | ax #     | <b>#</b> : |              |   |                    |                             | ₹         |            | ၂ ႙  |     | 1            |          |          | 1            |                |              |  |              |
| FOR LAB USE ONLY             |  |                     |                   |                |             | MA         | TRIX     |          | P        | RES        | ERV          | I                                       | SAMPL              | ING                         | 1 "       | 3          | 005h   |     |              |          |          |              |                | ļ            | •                                      |              |
| Lab I.D.                     | Sample I.D.  |                     | (G)RAB OR (C)OMP. | # CONTAINERS   | GROUNDWATER | WASTEWATER | OIL      | SLUDGE   | OTHER:   | ICE / COOI | OTHER:       | î                                       | LOID               | TIME                        | TPH 8015  | BEEX 80216 | culbride   |     |              |          |          |              |                |              |  |              |
| H19994-1                     | Background   |                     | 6                 | ١              |             | X          |          |          |          | 1          |              | _                                       | 5124               | 100                         |           |            | 1  |     |              |          |          |              |                |              |  |              |
| 2                            | 36-1@10'   |                     | 6                 | 1              |             | 1          |          |          |          | 1          |              | Ŀ                                       | 5/24               | 120                         | X         | ٨          | X  |     |              |          |          |              |                |              |  |              |
| 3                            | 5B-1@ 20'  |                     | 6                 | 7              |             | 1          |          |          | _        | 1          |              | -                                       | 124                | 130                         | <b></b>   |            | ×  | ··· |              |          |          | <u> </u>     |                |              |  | <u> </u>     |
| 4                            | 5B-1025'   |                     | 6                 | 7              | _           | 1          |          | _        |          | 1          |              |   | 124                | 140                         | メ         | X          |  |     |              |          | ļ        |              |                |              |  | ļ            |
| 5                            | 5B-1@30 ·  |                     | 6                 |                | _           | 1          |          | _        | _        | 1          | -            | _                                       | 124                | 145                         |           |            | <u> </u>   |     |              | <u> </u> | <u> </u> | <del> </del> | <u> </u>       | <u> </u>     | ļ!                                     | ļ            |
| ۵                            | 3B-1040'   |                     | 6                 | 1              | _           | ^          |          | _ _      | _        | 1          | 4            | -                                       | 124                | 155                         | -         |            | X  |     | <del> </del> | <u> </u> | <b> </b> | -            | <del> </del>   | <del> </del> | ļ!                                     |              |
| <u> </u>                     | 3B-1@50'   |                     | 12                | 7              | $\dashv$    | 1          | $\vdash$ | - -      | _        | 1          | -            | -                                       | 5/24               | 210                         |           |            | <del>-                                    </del> |     | -            | -        | ╁        | <del> </del> | <b>↓</b>       | <del> </del> | <b> </b>                               | <del> </del> |
| 8                            | 3B-10 55   |                     | 0                 | 4              | 4           | Ϋ́         | $\vdash$ |          | _        | 14         | 4-1          |   | 124                | 215                         |           |            | 1  |     | ऻ            | ╂        | -        | <del> </del> | —              | <b>├</b>     | <b></b>                                | ļ            |
| - 'č                         | 3B-10 60'  |                     | <u>6</u>          | -              | -           | \ <u>\</u> | $\vdash$ | -        | +        | 1          | +            | T                                       | 5/24               | 225                         | <u> </u>  |            | 1  |     | <del> </del> | -        | ╂        | +-           | ├—             | ┼            | <b></b>                                | <del> </del> |
| PLEASE NOTE: Liability a     | 56-10 65'<br>nd Damages, Cardinal's liability and client's exclu-                                      | sive remedy for any | ctaim             | arisin         | g whet      | ner base   | in con   | ract or  | tort, sh | all be     | limsed       | -                                       | 24<br>le amount pa | 240<br>ld by the client for | the       | <b>λ</b> , | 1  |     | <u> </u>     |          |          |              | <u> </u>       | سسس          |  | <u> </u>     |
| service, in no event shall C | ng those for negligence and any other cause wha<br>ardinal be liable for incidental or consequental da | images, including w | ithout            | <u>Emitati</u> | ion, bu:    | ni ezanla  | emptic   | ns, los: | s of use | , or lo    | ss of pr     | roāts                                   | incurred by        | client, its subsidia        | uies,     | oto        |  |     |              |          |          |              |                |              |  |              |
| Relinquished B               | ng out of or related to the performance of service  V:  Date   |                     |                   |                | ed E        |            | such cl  | im is b  | ased u   | DOU BI     | ny of the    | e spo                                   | ove stated re      | Phone Re                    |           | U Ye       | s D  | No  | Add'         | Phone    | #:       |              | Zakonicinionak | <del></del>  | 10000000000000000000000000000000000000 |              |
| 3000 W                       | 3/2  | 20                  |                   |                |             |            |          |          |          |            |              |   |                    | Fax Resul                   | t:        | ☐ Ye       |  |     |              | Fax #:   |          |              |                |              |  |              |
| Relinquished B               |  | 54)In               | Rec               | eiv            | ed B        | y:         |          | 1)       |          |            |              |   |                    | l                           |           |            |  |     |              |          |          |              |                |              |  |              |

† Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2476

Delivered By: (Circle One)

Sampler - UPS - Bus - Other:

#26

Cool /intact /

# ARDINAL LABORATORIES

# **CHAIN-OF-CUSTODY AND ANALYSIS REQUEST**

101 East Marland, Hobbs, NM 88240 (505) 393-2326 FAX (505) 393-2476

| Company Name   | Basin Cons<br>Caunille B  | Saltiner   |                  |              |                        |                             |                     | Ĭ                       |                    |                    | B                   | ILL TO                                    |                      |                      |           |          |          | ANA            | LYSI     | S RE                                    | QUE          | ST | ************************************** |      |
|--|---|--|------------------|--------------|------------------------|-----------------------------|---------------------|-------------------------|--------------------|--------------------|---------------------|---|----------------------|----------------------|-----------|----------|----------|----------------|----------|---|--------------|----|--|------|
| Project Manage   | r. Camine B.  | rvant  |                  |              |                        |                             |                     |                         | P.O                | . #:               |                     |   |                      |                      |           |          | T        |                | Ī        |   |              |    |  |      |
| Address: P. D  | BOX 381   |  |                  |              |                        |                             |                     |                         | Con                | npa                | ny:                 | BOP(0                                     |                      | ]                    |           |          |          |                |          |   | l            |    |  |      |
| •  | gton  | State: [VW   | Zip              | : 8          | 02 <i>w</i>            | o                           |                     |                         | Attr               | ו: ד               | 01/2                | 4000                                      | `e                   |                      |           | ]        |          |                |          |   | ļ            |    |  | ļ    |
|  | -405-7210   | Fax #:   |                  |              |                        |                             |                     |                         | Add                |                    | •                   |   |                      |                      |           |          |          |                |          |   | 1            | 1  |  |      |
| Project #:   |   | Project Owne   | r: B             | ope          | υ                      |                             |                     |                         | City               | :                  |                     |   |                      | 1-                   |           |          |          | ļ              |          |   |              | İ  |  |      |
| Project Name:  | PLU 158   |  |                  |              |                        |                             |                     |                         | Stat               | e:                 |                     | Zip:                                      |                      | 12                   |           | <u>ا</u> |          | 1              |          |   |              |    |  |      |
| Project Location   | 1: Eddy Col   | NM   |                  |              |                        |                             |                     |                         | Pho                | ne #               | ¥:                  |   |                      |                      | 8         | 4500     |          |                |          |   |              |    |  |      |
| Sampler Name:  | Caucille &  |  |                  |              |                        |                             |                     |                         | Fax                | #:                 |                     |   |                      | 3                    |           | 芸        |          |                |          |   | 1            | 1  |  |      |
| FOR LABUSE ONLY  |   |  | Π                |              |                        | MA                          | TRIX                |                         | F                  | RE                 | SERV                | / SAMPI                                   | ING                  | 1                    | B         |          |          | l              | İ        |   |              |    |  |      |
| Lab I.D.   | Sample  | e I.D.   | (G)RAB OR (C)OMP | # CONTAINERS | GROUNDWATER            | SOIL                        | OIL                 | SLUDGE                  | OTHER:             | ACID/BASE:         | OTHER:              | DATE                                      | TIME                 | TPH 8015             | BTEX 8021 | Chloude  |          |                |          |   |              |    |  |      |
| 419994-11  | 3B-10 70'   |  | 6                | Ī            |                        | X                           | 1                   |                         |                    |                    | ٨                   | 5/24                                      | 245                  | X                    | X         | X        |          |                |          |   |              |    |  |      |
|  |   |  |                  |              |                        |                             |                     |                         |                    |                    |                     |   |                      |                      |           |          |          |                |          |   |              |    |  |      |
|  |   |  |                  |              | _                      | $\perp$                     |                     | _                       |                    | _                  |                     | <u> </u>                                  |                      |                      |           |          |          | ļ              | ļ        | ļ                                       | ļ            |    |  |      |
|  |   |  | L                |              |                        | $\perp$                     |                     |                         | 1                  | _                  |                     | ļ   |                      |                      |           |          |          |                | <u> </u> |   |              |    |  | <br> |
|  |   | ***************************************                              |                  | $\Box$       |                        | $\perp$                     |                     | _                       | _                  | _                  | 4                   |   |                      |                      |           |          |          |                | ļ        |   | ļ            | -  |  | <br> |
|  |   |  | lacksquare       |              |                        | +                           |                     |                         | 4                  | +                  |                     | <del> </del>                              |                      |                      |           |          |          |                | <u> </u> |   | ļ            |    |  |      |
|  |   |  |                  |              |                        |                             |                     | $\dashv$                | +                  | +                  | +-                  | <u> </u>                                  |                      |                      |           |          |          |                |          |   |              |    |  | <br> |
|  |   |  | -                | $\vdash$     | -                      | +                           |                     |                         | $\dashv$           | +                  | +                   | <del> </del>                              | <b> </b>             |                      |           |          |          |                | -        | -                                       | <del> </del> |    |  |      |
|  | ······································  |  |                  |              | +                      | +                           | $\dashv$            | $\dashv$                | +                  | $\dashv$           |                     | <u> </u>                                  |                      |                      |           |          |          |                | <b>-</b> | <del> </del>                            |              |    |  |      |
| analyses. All claims includin<br>service. In no event shall Ca | d Damages. Cardnal's liability an<br>g those for negligence and any o<br>clinal be liable for incidental or c<br>g out of or related to the perform | other cause whatsoever shall be o<br>consequental damages, including | deemed<br>withou | waive:       | untess :<br>ion, busin | nade in<br>less inte        | writing<br>erruptio | g and n<br>ons, los     | eceive:<br>es of u | d by C<br>se, or l | ardinal<br>oss of p | within 30 days aft<br>profits incurred by | er completion of the | re applicat<br>ries, | de        |          | <u></u>  | <b>!</b>       | <u> </u> | 1                                       | <u> </u>     |    | <u></u>                                |      |
| Relinquished By  | •   | Date:<br>5/28/10   |                  |              | ed By                  |                             | ****                |                         |                    |                    |                     |   | Phone Res            | sult:                | ☐ Ye      |          | No<br>No | Add'I<br>Add'I | Phone    | #:                                      |              |    |  |      |
| soc low  | usry  | Time:  | 1                |              |                        |                             |                     |                         |                    |                    |                     |   | Fax Resul            |                      | LI TE     | <u> </u> | NO       | Aoui           | rux #:   | *************************************** | ·····        |    |  | <br> |
| Relinquished By  |   | Date:   24  <br>Timp: 20   | B.               | ceiv         | ed By<br>U             | ر م                         | 1                   | He                      | J                  | U                  | ) Ø                 | W   |                      | •                    |           |          |          |                |          |   |              |    |  |      |
| Delivered By:<br>Sampler - UPS                                 |   | •••  | 4                | 0            | Sar<br>Co              | nple<br>ol / l<br>Yes<br>No | Con                 | ditio<br>t<br>Yes<br>No | n                  | CI                 | HECH                | KED BY:                                   |                      |                      |           |          |          |                |          |   |              |    |  |      |

† Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2476



July 27, 2010

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

Re: PLU 158 Battery (BOPCO)

Enclosed are the results of analyses for sample number H20381, received by the laboratory on 07/20/10 at 3:50 pm.

Cardinal Laboratories is accredited through Texas NELAP for:

Method SW-846 8021

Benzene, Toluene, Ethyl Benzene, and Total Xylenes

Method SW-846 8260

Benzene, Toluene, Ethyl Benzene, and Total Xylenes

Method TX 1005

Total Petroleum Hydrocarbons

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

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

Method EPA 552.2

Haloacetic Acids (HAA-5)

Method EPA 524.2

Total Trihalomethanes (TTHM)

Method EPA 524.2

Regulated VOCs (V2, V3)

Accreditation applies to public drinking water matrices.

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

Sincerely

Celey D. Keene Laboratory Director



ANALYTICAL RESULTS FOR BASIN ENVIRONMENTAL CONSULTING, LLC

ATTN: CAMILLE BRYANT

P.O. BOX 381

LOVINGTON, NM 88260 FAX TO: (575) 396-1429

Receiving Date: 07/20/10 Reporting Date: 07/26/10

Project Owner: BOPCO

Project Name: PLU 158 BATTERY

Project Location: EDDY CO., NM

Analysis Date: 07/22/10 Sampling Date: 07/15/10 Sample Type: SOIL

Sample Condition: COOL & INTACT @ 2.5°C

Sample Received By: JH

Analyzed By: HM

CI LAB NO. SAMPLE ID (mg/kg) H20381-1 WEST SIDE #1 @ 6" < 16 H20381-2 WEST SIDE #2 @ 6" 32 H20381-3 WEST SIDE #2 @ 2' < 16 H20381-4 WEST SIDE #3 @ 6" < 16 H20381-5 CENTER @ 6" < 16 H20381-6 EAST SIDE #1 @ 6" < 16 H20381-7 EAST SIDE #2 @ 6" < 16 H20381-8 NORTH RO #1 @ 6" < 16 H20381-9 SOUTH RO #1 @ 6" < 16 H20381-10 SOUTH RO #2 @ 6" < 16 **Quality Control** 510 True Value QC 500 % Recovery 102 Relative Percent Difference < 0.1

METHOD: Standard Methods 4500-Cl<sup>-</sup>B

Note: Analyses performed on 1:4 w:v aqueous extracts.

Not accredited for Chloride.

Chemist

Date



ANALYTICAL RESULTS FOR BASIN ENVIRONMENTAL CONSULTING

ATTN: CAMILLE BRYANT

P.O. BOX 381

LOVINGTON, NM 88260 FAX TO: (575) 396-1429

Receiving Date: 07/20/10 Reporting Date: 07/26/10

Sampling Date: 07/15/10

DRO ext.

Project Owner: BOPCO

Sample Type: SOIL

Project Name: PLU 158 BATTERY

Sample Condition: COOL & INTACT @ 2.5°C

Project Location: EDDY COUNTY, NM

Sample Received By: JH

Analyzed By: AB

**DRO** 

GRO

|                |                   | (C <sub>6</sub> -C <sub>10</sub> ) | (>C <sub>10</sub> -C <sub>28</sub> ) | (>C <sub>28</sub> -C <sub>35</sub> ) |
|----------------|-------------------|------------------------------------|--------------------------------------|--------------------------------------|
| LAB NUMBER     | R SAMPLE ID       | (mg/kg)                            | (mg/kg)                              | (mg/kg)                              |
| ANALYSIS D     | ATE               | 07/23/10                           | 07/23/10                             | 07/23/10                             |
| H20381-1       | WEST SIDE #1 @ 6" | <10.0                              | 11.9                                 | <10.0                                |
| H20381-2*      | WEST SIDE #2 @ 6" | 1,270                              | 5,540                                | 17.7                                 |
| H20381-3       | WEST SIDE #2 @ 2' | 111                                |                                      | 18.9                                 |
| H20381-4       | WEST SIDE #3 @ 6" | <10.0                              | 20.2                                 | <10.0                                |
| H20381-5       | CENTER @ 6"       | <10.0                              | <10.0                                | <10.0                                |
| H20381-6       | EAST SIDE #1 @ 6" | <10.0                              | <10.0                                | <10.0                                |
| H20381-7       | EAST SIDE #2 @ 6" | <10.0                              | <10.0                                | <10.0                                |
| H20381-8       | NORTH RO #1 @ 6"  | <10.0                              | <10.0                                | <10.0                                |
| H20381-9       | SOUTH RO #1 @ 6"  | <10.0                              | <10.0                                | <10.0                                |
| H20381-10      | SOUTH RO #2 @ 6"  | <10.0                              | <10.0                                | <10.0                                |
|                |                   |                                    | İ                                    |                                      |
| Quality Contro |                   | 453                                | 443                                  | -                                    |
| True Value Q   | C                 | 500                                | 500                                  | -                                    |
| % Recovery     |                   | 90.6                               | 88.6                                 | -                                    |
| Relative Perc  | ent Difference    | 0.2                                | 1.1                                  | -                                    |

METHODS: TPH GRO & DRO: EPA SW-846 8015 M extended Reported on wet weight. Not accredited for GRO/DRO/DRO Ext.

\*One or more TPH surrogates outside historical limits due to matrix interference.



ANALYTICAL RESULTS FOR BASIN ENVIRONMENTAL CONSULTING

ATTN: CAMILLE BRYANT

P.O. BOX 381

LOVINGTON, NM 88260 FAX TO: (575) 396-1429

Receiving Date: 07/20/10 Reporting Date: 07/22/10

Project Number: BOPCO

Project Name: PLU 158 BATTERY Project Location: EDDY CO., NM

Sampling Date: 07/15/10 Sample Type: SOIL

Sample Condition: COOL & INTACT @ 2.5 °C

Sample Received By: JH

Analyzed By: ZL

| LAB NUMBE SAMPLE ID         | BENZENE<br>(mg/kg) | TOLUENE<br>(mg/kg) | ETHYL<br>BENZENE<br>(mg/kg) | TOTAL<br>XYLENES<br>(mg/kg) |
|-----------------------------|--------------------|--------------------|-----------------------------|-----------------------------|
| ANALYSIS DATE               | 07/21/10           | 07/21/10           | 07/21/10                    | 07/21/10                    |
| H20381-2 WEST SIDE #2 @ 6"  | <0.050             | 2.39               | 2.71                        | 18.2                        |
| H20381-3 WEST SIDE #2 @ 2'  | <0.050             | 0.303              | 0.336                       | 2.88                        |
|                             |                    |                    |                             |                             |
| Quality Control             | 0.009              | 0.009              | 0.009                       | 0.026                       |
| True Value QC               | 0.010              | 0.010              | 0.010                       | 0.030                       |
| % Recovery                  | 90.0               | 90.0               | 90.0                        | 86.7                        |
| Relative Percent Difference | <1.0               | <1.0               | <1.0                        | 1.0                         |

METHOD: EPA SW-846 8021B

TEXAS NELAP ACCREDITATION T104704398-08-TX FOR BENZENE, TOLUENE, ETHYL BENZENE,

AND TOTAL XYLENES./Reported on wet weight.

Chemist

Date



# ARDINAL LABORATORIES

101 East Mariand, Hobbs, NM 88240 (505) 393-2326 FAX (505) 393-2476

| Company Name                  | Basin Enviro   | amountal (   | De             | يك           | ut                | نامد          |   |                | L            |         |   | 811         |                          | TO                                      | -                     |  | *************************************** |                | *         | AN | IAL'                                    | YSIS                                     | RE                      | QUE                                     | ST                                      |  |   |                    |
|-------------------------------|--|--|----------------|--------------|-------------------|---------------|---|----------------|--------------|---------|---|-------------|--------------------------|---|-----------------------|--|---|----------------|-----------|----|---|--|-------------------------|---|---|--|---|--------------------|
| Project Manage                | "Cauxille Bry  | aut  | ting to secure | *****        |                   | · ノ           |   |                | P.           | 0. 1    | 1:                                      |             | ***********              |   |                       |  |   | T              |           |    | T                                       |  |                         |   |   |  |   |                    |
| Address: P ()                 | Ba. 381  |  | ****           |              | Quest Congress of |               | *************************************** |                | C            | omp     | any                                     | у: <u>В</u> | DP                       | COL                                     | P                     |  |   |                |           |    |   |  | İ                       |   |   |  |   |                    |
| City: Lowing                  | ton  | State: JUM   | Zi             | p: <i>{</i>  | 38:               | 16 C          | )                                       | -              | A            | tn:     | To                                      | m           | £                        | <u>Savo</u>                             | ie                    |  |   |                |           |    |   |  | İ                       |   |   |  |   |                    |
| Phone #: 525                  | -1005-7210   | Fax #:   | W.W            |              | ***               |               |   |                |              | id re   |   |             |                          |   |                       |  |   |                |           |    |   |  |                         |   |   |  |   |                    |
| Project #:                    |  | Project Owner  | r: ¢           | OP(          | ٥                 |               |   |                | Ci           | ty:     |   |             |                          |   |                       |  |   |                |           |    |   |  |                         |   |   |  |   |                    |
| Project Name:                 | PLU 158 Batte  | r-y  |                |              |                   |               |   |                | St           | ate:    |   |             | Zip                      | :                                       |                       |  |   |                |           |    |   | ļ  |                         |   |   |  |   |                    |
| Project Locatio               | n: Eddy Colium   | n'   |                |              |                   |               |   |                | Pr           | one     | e #:                                    |             |                          |   |                       | $\log$                                       | EXT.                                    |                |           |    |   |  |                         |   |   |  |   |                    |
| Sampler Name:                 | Dovel Lowry  |  |                |              |                   |               |   |                | Fa           | x #:    |   |             |                          |   |                       | 4500   | سر ا                                    | .01            |           |    |   |  |                         |   |   |  |   |                    |
| FOR LAB USE ONLY              |  |  | Γ.             |              |                   | M             | ATR                                     | IX             | 7            | PR      | ESE                                     | RV          | <u> </u>                 | SAMPL                                   | NG                    | 7 5  | ٤                                       | -              |           |    | .                                       |  |                         |   |   |  |   |                    |
|                               |  |  | (C)OMP         |              | æ                 |               |   |                |              |         |   |             |                          |   |                       | 9  | 8015                                    | 2002           |           |    |   |  |                         |   |   |  |   |                    |
|                               |  | -  |                | ER           | ATE               | E             |   |                |              |         | ١.                                      |             |                          |   |                       | 13   | 2                                       |                |           |    |   |  |                         |   |   |  |   |                    |
| Lab I.D.                      | Sample I   | .D.  | 30             | Ž            | Š                 | EWA           |   | 1 23           | 12           | ASE     | Ö                                       | : :         |                          |   |                       | 100  | 4                                       | EX.            |           |    |   |  |                         |   |   |  |   |                    |
|                               |  |  | (G)RAB OR      | # CONTAINERS | GROUNDWATER       | WASTEWATER    | {   _                                   | SLUDGE         | 田田           | Ä       | E/C                                     | E           |                          |   |                       | Chilorida                                    | PH                                      | 1              |           |    |   |  |                         |   |   |  |   |                    |
| Una Zal I                     |  |  | 6              | my manage    | 0                 | <u> </u>      | 7 0                                     | 1 8            | 0            | Ĭ       | <u> </u>                                | 10          | - L                      | DATE                                    | TIME                  | -  |   | -1             |           |    |   |  | -                       | -                                       | -                                       |  |   | <u> </u>           |
| 100201                        | West side #10<br>West side #20   | <u> </u>   | 1              | ╁:           | -                 |               | +                                       | -              | -            |         | A                                       |             | 21.1                     | 5/10                                    | 3:30<br>3:40          | X  | X                                       | X              | +-        |    | +                                       |  |                         |   |   |  |   |                    |
| 1 8                           | West side #202   | <u> </u>   | ╫              | +            | }                 |               | $\dashv$                                | - <del> </del> | <del> </del> | -       | ╁┠╌                                     |             |                          | *************************************** | 3:50                  | 1  | - <u>\</u> _                            | X              | -         | -  | $\dashv$                                |  |                         |   |   |  |   |                    |
| 4                             | West side # 306  | š †  | H              | H            | 1-                |               |   | <u> </u>       | -            |         |   |             |                          |   | 4:00                  | 17   | <u> </u>                                | <del>  ^</del> | +         | _  | $\dashv$                                |  |                         |   | <b> </b>                                |  |   |                    |
| 5                             | Center@ 6"   | y nganitati tamini tanih tanih tanih tanih tanih tanih tanih tanih tanih tanih tanih tanih tanih tanih tanih t | $\Pi$          | Ħ            |                   |               |   | - <del> </del> |              |         |   |             | 1                        | ettekaninan ing manakkanin              | 4:05                  |  | 1                                       | <u> </u>       | 1         | 1  | $\top$                                  | 1  |                         |   |   |  |   |                    |
| 6                             | Gast Side #106   | , <sup>(</sup> '   |                | $\Pi$        |                   |               |   |                |              |         |   |             |                          |   | 4:10                  | 1  | Κ.                                      |                |           |    |   |  |                         |   |   |  |   |                    |
| 7                             | Gasi Side #206<br>Verth RO#106   |  |                |              |                   |               |   |                |              |         |   |             |                          |   | 4:15                  | X  | χ.                                      |                |           |    |   |  |                         |   |   |  |   |                    |
| 8                             | Worth RO#106   | ζ,   |                |              |                   |               |   |                |              |         |   |             |                          |   | 4:20                  | 1  | X                                       |                |           |    |   |  |                         |   |   |  |   |                    |
| 9                             | bouth RO#106   |  | Ш              |              |                   |               | Щ_                                      | <u> </u>       |              |         |   |             |                          |   | 4:30                  | 1  | X                                       |                |           |    |   |  |                         |   |   |  |   |                    |
| 10                            | South RO #200<br>of Damages, Cardina's babely and che                                |  | M              | LV           |                   |               | <u>لا</u>                               | 1              | <u> </u>     |         | Ų.                                      |             | errenier<br>V            |   | 1:35                  | <u>                                     </u> | _λ_                                     |                |           |    |   |  |                         |   |   |  |   |                    |
| analyses. All claims includir | ig those for negligence and any other (  | tause whatsoever shall be d  | eeme           | d waiw       | ed unic           | ss music      | in writ                                 | ing and        | l rocai      | word by | Care                                    | inal wi     | thin 30                  | ) days ste                              | r completion of t     | he suchest                                   | ło                                      |                |           |    |   |  |                         |   |   |  |   |                    |
| Relinguished B                | ardinal be liable for incidental or conse<br>ng out of or related to the performance | of services herounder by C   | ยติกส          | regar        | diesa (           | d whether     | r such                                  | cialm I        | esso<br>ebas | ed upo  | or ioss<br>in any                       | of the      | nbave<br>evodn           | suited by c                             | cons or otherwi       | 50.  | ar inches                               | (moneton)      | September |    | *************************************** | en en en en en en en en en en en en en e | fangsin materialssinnin |   | January Company                         |  |   | MINISTER PROCESSAL |
|                               |  | Date:<br>フ/20  | Ke             | cei          | /ea               | ыy:           |   |                |              |         |   |             |                          |   | Phone Re<br>Fax Resul |  | U Ye<br>□ Ye                            |                | J No      |    | i'l Ph<br>i'l Fa                        | one#<br>x#:                              | 1                       |   | *************************************** |  | gas-erimer-mean.                        |                    |
| 5000 10 W                     |  | Time: 4:45.5   |                |              |                   |               |   |                |              |         |   |             |                          |   | REMARK                | S:   |   |                |           |    |   |  |                         | *************************************** |   |  | *************************************** |                    |
| Relinquished By               | f.   | 979711   | Re             | ceiv         | red               | Ву:           | •                                       | M              |              |         | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, |             | - mongalaysia (disaster) |   |                       |  |   |                |           |    |   |  |                         |   |   |  |   |                    |
|                               |  | であり  |                | $\bigcap$    | 1                 | , ,           | 1                                       | Up             | 11           | Λ       | R                                       | 11          | f                        |   |                       |  |   |                |           |    |   |  |                         |   |   |  |   |                    |
| Delivered By:                 | (Circle One)   |  | 4              | 4            | ير                | ampl          | e Co                                    | nditi          | on           | ~       | CHE                                     | ECKE        | EDB                      | Ύ:                                      |                       |  |   |                |           |    |   |  | •                       |   |   |  |   |                    |
| Sampler - UPS                 | - Bus - Other:   | ,  | າັ່າ           | 10           | 2                 | Cool<br>Tilva | Anta                                    | ict            |              |         | 9                                       | yriliz<br>Z | 1/1                      |   |                       |  |   |                |           |    |   |  |                         |   |   |  |   |                    |

† Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2476

1-



July 27, 2010

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

Re: PLU 158 Battery (BOPCO)

Enclosed are the results of analyses for sample number H20381, received by the laboratory on 07/20/10 at 3:50 pm.

Cardinal Laboratories is accredited through Texas NELAP for:

Method SW-846 8021 Benzene, Toluene, Ethyl Benzene, and Total Xylenes Method SW-846 8260

Benzene, Toluene, Ethyl Benzene, and Total Xylenes

Method TX 1005

Total Petroleum Hydrocarbons

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

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

Method EPA 552.2

Haloacetic Acids (HAA-5)

Method EPA 524.2

Total Trihalomethanes (TTHM)

Method EPA 524.2

Regulated VOCs (V2, V3)

Accreditation applies to public drinking water matrices.

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

Sincerely

Celev D. Keene Laboratory Director



ANALYTICAL RESULTS FOR BASIN ENVIRONMENTAL CONSULTING, LLC

ATTN: CAMILLE BRYANT

P.O. BOX 381

LOVINGTON, NM 88260 FAX TO: (575) 396-1429

Receiving Date: 07/20/10 Reporting Date: 07/26/10

Project Owner: BOPCO
Project Name: PLU 158 BATTERY

Project Location: EDDY CO., NM

Analysis Date: 07/22/10 Sampling Date: 07/15/10 Sample Type: SOIL

Sample Condition: COOL & INTACT @ 2.5°C

Sample Received By: JH

Analyzed By: HM

CI SAMPLE ID LAB NO. (mg/kg) WEST SIDE #1 @ 6" H20381-1 < 16 H20381-2 WEST SIDE #2 @ 6" 32 H20381-3 WEST SIDE #2 @ 2' < 16 < 16 H20381-4 WEST SIDE #3 @ 6" H20381-5 CENTER @ 6" < 16 H20381-6 EAST SIDE #1 @ 6" < 16 H20381-7 EAST SIDE #2 @ 6" < 16 H20381-8 NORTH RO #1 @ 6" < 16 H20381-9 SOUTH RO #1 @ 6" < 16 H20381-10 SOUTH RO #2 @ 6" < 16 **Quality Control** 510 True Value QC 500 % Recovery 102 Relative Percent Difference < 0.1

METHOD: Standard Methods 4500-CIB

Note: Analyses performed on 1:4 w:v aqueous extracts.

Not accredited for Chloride.

Chemist

Date

07/27/10



ANALYTICAL RESULTS FOR BASIN ENVIRONMENTAL CONSULTING

ATTN: CAMILLE BRYANT

P.O. BOX 381

LOVINGTON, NM 88260 FAX TO: (575) 396-1429

Receiving Date: 07/20/10 Reporting Date: 07/26/10 Sampling Date: 07/15/10

Project Owner: BOPCO

Sample Type: SOIL

DRO ext.

Project Name: PLU 158 BATTERY

Sample Condition: COOL & INTACT @ 2.5°C

Project Name: PLO 138 BATTERT

Project Location: EDDY COUNTY, NM

Sample Received By: JH

Analyzed By: AB

DRO

**GRO** 

|                |                   | $(C_{6}-C_{10})$ | (>C <sub>10</sub> -C <sub>28</sub> ) | (>C <sub>28</sub> -C <sub>35</sub> ) |
|----------------|-------------------|------------------|--------------------------------------|--------------------------------------|
| LAB NUMBER     | R SAMPLE ID       | (mg/kg)          | (mg/kg)                              | (mg/kg)                              |
| ANALYSIS DA    | TE                | 07/23/10         | 07/23/10                             | 07/23/10                             |
| H20381-1       | WEST SIDE #1 @ 6" | <10.0            | 11.9                                 | <10.0                                |
| H20381-2*      | WEST SIDE #2 @ 6" | 1,270            | 5,540                                | 17.7                                 |
| H20381-3       | WEST SIDE #2 @ 2' | 111              | 1,070                                | 18.9                                 |
| H20381-4       | WEST SIDE #3 @ 6" | <10.0            | 20.2                                 | <10.0                                |
| H20381-5       | CENTER @ 6"       | <10.0            | <10.0                                | <10.0                                |
| H20381-6       | EAST SIDE #1 @ 6" | <10.0            | <10.0                                | <10.0                                |
| H20381-7       | EAST SIDE #2 @ 6" | <10.0            | <10.0                                | <10.0                                |
| H20381-8       | NORTH RO #1 @ 6"  | <10.0            | <10.0                                | <10.0                                |
| H20381-9       | SOUTH RO #1 @ 6"  | <10.0            | <10.0                                | <10.0                                |
| H20381-10      | SOUTH RO #2 @ 6"  | <10.0            | <10.0                                | <10.0                                |
|                |                   |                  |                                      |                                      |
| Quality Contro | 1                 | 453              | 443                                  | -                                    |
| True Value QC  |                   | 500              | 500                                  | -                                    |
| % Recovery     |                   | 90.6             | 88.6                                 | -                                    |
| Relative Perce | ent Difference    | 0.2              | 1.1                                  | -                                    |

METHODS: TPH GRO & DRO: EPA SW-846 8015 M extended Reported on wet weight. Not accredited for GRO/DRO/DRO Ext.

Lab Directo

Date

## H20381 TPHEXT BASIN

<sup>\*</sup>One or more TPH surrogates outside historical limits due to matrix interference.



ANALYTICAL RESULTS FOR BASIN ENVIRONMENTAL CONSULTING ATTN: CAMILLE BRYANT P.O. BOX 381

LOVINGTON, NM 88260 FAX TO: (575) 396-1429

Receiving Date: 07/20/10 Reporting Date: 07/22/10

Project Number: BOPCO

Project Name: PLU 158 BATTERY Project Location: EDDY CO., NM

Sampling Date: 07/15/10 Sample Type: SOIL

Sample Condition: COOL & INTACT @ 2.5 °C

Sample Received By: JH

Analyzed By: ZL

| LAB NUMBE SAMPLE ID         | BENZENE<br>(mg/kg) | TOLUENE<br>(mg/kg) | ETHYL<br>BENZENE<br>(mg/kg) | TOTAL<br>XYLENES<br>(mg/kg) |
|-----------------------------|--------------------|--------------------|-----------------------------|-----------------------------|
| ANALYSIS DATE               | 07/21/10           | 07/21/10           | 07/21/10                    | 07/21/10                    |
| H20381-2 WEST SIDE #2 @ 6"  | <0.050             | 2.39               | 2.71                        | 18.2                        |
| H20381-3 WEST SIDE #2 @ 2'  | <0.050             | 0.303              | 0.336                       | 2.88                        |
|                             |                    |                    |                             |                             |
| Quality Control             | 0.009              | 0.009              | 0.009                       | 0.026                       |
| True Value QC               | 0.010              | 0.010              | 0.010                       | 0.030                       |
| % Recovery                  | 90.0               | 90.0               | 90.0                        | 86.7                        |
| Relative Percent Difference | <1.0               | <1.0               | <1.0                        | 1.0                         |

METHOD: EPA SW-846 8021B

TEXAS NELAP ACCREDITATION T104704398-08-TX FOR BENZENE, TOLUENE, ETHYL BENZENE,

AND TOTAL XYLENES./Reported on wet weight.

Chemist

Date



# ARDINAL LABORATORIES

101 East Marland, Hobbs, NM 88240 (505) 393-2326 FAX (505) 393-2476

| Company Name: Basin Environmental Consulting   |   |                   |              |                     | 7                       | BILL TO ANALYSIS REQUEST |                     |   |                   |   |   |  | THE STREET STREET, STR |           |             |   |           |   |                                       |                   |   |   |  |                |  |  |            |
|--|---|-------------------|--------------|---------------------|-------------------------|--------------------------|---------------------|---|-------------------|---|---|--|--|-----------|-------------|---|-----------|---|---------------------------------------|-------------------|---|---|--|----------------|--|--|------------|
| Doctors Manage   | "Dasin Fruironnacional  | CON               | ليك          | <u>ttu</u>          | حود                     |                          |                     | P.O. #:                                 |                   |   |   | 7  | demon  | mayen     | aanaa       | in the second second second second second second second second second second second second second second second | ANA       | LYSI                                    | D K                                   | EUU               | EOI   | anamaye:                                | -  |                | r en en en en en en en en en en en en en |  |            |
| Project Manage   | "Camille Bryant   | ~                 |              | *********           |                         |                          |                     |   |                   |   |   |  |  |           |             |   |           |   |                                       |                   |   |   |  |                |  |  |            |
| Address: ₽.O.  | SON 381   | -                 |              |                     |                         | ***                      |                     | Company: BOPCO LP                       |                   |   |   |  |  |           |             |   |           | Ì                                       |                                       |                   |   | 1                                       |  |                |  |  |            |
| City: Lovington State: IVIM Zip: 88260   |   |                   |              | A                   | Attn: Tony Savoje       |                          |                     |   |                   |   |   |  |  |           |             | l   |           |   | 1                                     |                   |   |   |  |                |  |  |            |
| Phone #: 525   | - 1005-7210 Fax#:   |                   |              | a vancendo aproprio | WARRANT TO AND A CORNEL | -                        | A                   | ddr                                     | ess:              | !                                       |   |  |  |           |             |   |           |   |                                       |                   |   |   |  |                | l  |  |            |
| Project #:   | Project Own   | er: 🛭 🛭 B         | OPC          | ٥                   |                         |                          | <u> c</u>           | ity:                                    | ************      |   |   |  |  |           |             |   |           |   |                                       |                   | l   |   |  |                |  |  |            |
| Project Name:  | PLU 158 Battery   |                   |              |                     |                         |                          | s                   | tate:                                   | :                 |   | Zip:                                    |  | •  |           | +           | :   |           |   |                                       |                   |   |   |  | l              |  |  |            |
| Project Location   | n: Eddy Co/IVM  |                   |              |                     |                         |                          | P                   | hon                                     | e#:               |   |   |  |  |           | Y           | 3   |           |   |                                       |                   |   | 1                                       |  | •              |  |  |            |
| Sampler Name:  | Divel Lown  |                   |              | **********          |                         |                          | F                   | ax#                                     | l;                | *************************************** | *************************************** | -  | hing the same and same   | 00517     |             |   | 90        |   |                                       |                   |   |   |  |                |  |  |            |
| FOR LAB USE CHLY   |   | Τ.                |              |                     | MA                      | TRIX                     |                     | PF                                      | RESE              | RV                                      | SAME                                    | ווופ   | VG   | 3         | 1           | -   |           |   |                                       |                   |   |   |  |                |  |  |            |
| Lab I.D.   | Sample I.D.   | (G)RAB OR (C)OMP. | # CONTAINERS | GROUNDWATER         | SOIL                    | )](,                     | SLUDGE<br>OTHER:    | (CID/BASE:                              | ICE / COOL        | OTHER:                                  | DATE                                    |  | TIME   | Chievich  | TOH GOIC    |   | BTEX 8021 |   |                                       |                   | OLOCO CO-puralmenta de composições de composições de composições de composições de composições de composições d |   | enter de la companya de la companya de la companya de la companya de la companya de la companya de la companya |                |  | e de la constante de la consta |            |
| H29381-1   | West side #106"   | 16                | Ť            |                     | X                       | ĬĬ                       | <u> </u>            | 1                                       | 1                 | and the same of the                     | 7/15/10                                 |  | 3:30   | X         | V           |   |           | OROMORA RATI                            |                                       | <u> </u>          | ┪━  | +                                       |  | 十              |  |  |            |
| 2  | West side #2@6"   | Ti                | 1            |                     | ΤÍΤ                     |                          | _                   |   |                   | 1                                       | .:1.1. <i>JJ.1</i> .1.                  |  | 3:40   | X         | 1           |   | k         | *************************************** |                                       | 1                 | <b>-</b>  | 1                                       | 1  | _              |  |  |            |
| 3  | West side #202'   | $\Pi$             |              |                     |                         |                          |                     | 1                                       | $\Pi$             |   |   |  | 3:50   | K         | 1           |   | X         |   |                                       | 1                 | 1   | 1                                       | 1  |                | $\neg \uparrow$                          |  |            |
| 9.8  | West Side # 306"  |                   |              |                     |                         |                          |                     | 1                                       |                   |   |   |  | 1:00   | 1         | 1           |   |           |   |                                       |                   | 1   | 1                                       | 1  |                |  |  |            |
| 5  | Center @ 6"   | П                 |              |                     |                         |                          |                     |   |                   |   |   | 1  | 1:05   | 7         | X           | 1   |           | *************************************** | alle all milliones de l'adopte in par |                   | 1   | 1                                       |  | 1              |  | 1  |            |
| 64   | East Side #106"   |                   |              |                     |                         |                          |                     |   |                   |   |   | 1  | 1:10   | 7         | X           |   |           |   |                                       |                   |   |   | 1  |                |  |  |            |
| 7  | 5ast Side # 206"  |                   |              |                     |                         |                          |                     |   |                   |   |   | L  | 1:15   | X         | X           | T   |           |   |                                       |                   |   |   |  |                |  |  |            |
| 8  | Ver1 L RO # 106"  | Ш                 |              |                     |                         |                          |                     |   |                   |   |   | ,  | 1:20   | K         | Х           |   |           |   |                                       |                   |   |   |  |                |  |  |            |
| 9  | 5asi Side # 2@6"<br>Verth RO#1@6"<br>South RO#1@6"  | Ш                 |              |                     |                         | 1                        |                     |   | Ш                 |   |   | L  | 1:30   | X         | χ           |   |           |   |                                       |                   |   |   |  |                |  |  |            |
| 10/1   | 3044 RO # 266   | Th                | Y            |                     | V                       |                          |                     | <u> </u>                                | 6                 |   | V                                       | 12   | 1:35   | X         | LX          |   |           | enerikan                                |                                       |                   | <u> </u>  |   |  |                |  |  |            |
| onalyses. All claims includin  | d Damages, Cardinal's bassay and client's exclusive remedy for<br>g those for negligence and any other cause whatsoever shall b     | desmed            | Wat Vit      | d uniess            | made in                 | anistw                   | and roc             | elved b                                 | y Cardi           | nai witi                                | irin 30 days i                          | nage:  | completion of the  | e apphica | ble         |   | •         |   |                                       |                   |   |   |  |                |  |  |            |
| Relinguished By  | rdinal be liable for incluental or consequental damages, includ-<br>g out of or related to the performance of pervious hereunder by | Cardinal,         | require      | less of w           | theffser s              | eruptio<br>wch cla       | na loss<br>im la ba | or use.<br>sed up:                      | er loss<br>on any | of the i                                | ets incurred t<br>roove stated          | mas  | ons ar atherwise   |           | **C*******  | ranjanjan   | 3.0000000 | entymostatischen                        |                                       | roposadona        | uncarios arcus  |   | OE C'YETHEREN  | eumates        |  |  |            |
| , ,  | 1/2/2   | Ke                | ceiv         | ed B                | y:                      |                          |                     |   |                   |   |   |  | Phone Res<br>Fax Result  |           | U Y         |   |           |   | Add'l<br>Add'l                        |                   | #:  | *********                               | NONCOLONIA, CON  |                |  | contribution contribution  |            |
| 500710 W   | Time: 4:453   |                   |              |                     |                         |                          |                     |   |                   |   |   |  | REMARKS  |           |             |   |           | terioren ageneria.                      | \$1000 Carrier (1800)                 | ***************** |   | *************************************** | ***************************************  |                |  | ***************************************  |            |
| Relinquished By  | 97/27/15  | Re                | ceiv         | ed By               | y:                      | <i>L</i>                 | Γ                   | *************************************** |                   |   | ****                                    |  |  |           |             |   |           |   |                                       |                   |   |   |  |                |  |  |            |
| 118:00/100/ 1/10   |   |                   |              | 0 11                | MARIA                   |                          |                     |   |                   |   |   |  |  | •         |             |   |           |   |                                       |                   |   |   |  |                |  |  |            |
| Delivered By: (Circle One) Sample Conditi  |   |                   |              |                     | lition                  | ion   CHECKED BY:        |                     |   |                   |   |   |  |  |           |             |   |           |   |                                       |                   |   |   |  |                |  |  |            |
| Sampler - UPS  | - Bus - Other:  | 7.5               | 58           | c <sup>c</sup> p    | oi d<br>Yes<br>No       | ntaci                    | es<br>No            |   | 2                 | 1                                       | 料                                       | accession to the contract of t |  |           |             |   |           |   |                                       |                   |   |   |  |                |  | ٠  | Managerine |
| The second secon |   |                   | TO COLUMN    |                     | - Contract To           |                          | CONCLUSION CO       | THE RESERVE                             |                   | ji.                                     |   | ಜಾನಿ::   | THE RESERVE THE PROPERTY OF  | COMPANY   | *********** |   |           |   |                                       | esculture with    | on consequences   |   | -  | and the second |  |  |            |

† Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2476



May 05, 2011

BEN J. ARGUIJO

Basin Environmental Service

P.O. Box 301

Lovington, NM 88260

RE: POKER LAKE UNIT 158 BATTERY

Enclosed are the results of analyses for samples received by the laboratory on 04/21/11 8:04.

Cardinal Laboratories is accredited through Texas NELAP for:

Method SW-846 8021

Benzene, Toluene, Ethyl Benzene, and Total Xylenes

Method SW-846 8260

Benzene, Toluene, Ethyl Benzene, and Total Xylenes

Method TX 1005

**Total Petroleum Hydorcarbons** 

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

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2

Haloacetic Acids (HAA-5)

Method EPA 524.2

Total Trihalomethanes (TTHM)

Method EPA 524.4

Regulated VOCs (V2, V3)

Accreditation applies to public drinking water matrices.

Celey & Keine

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keene

Lab Director/Quality Manager



## Analytical Results For:

Basin Environmental Service BEN J. ARGUIJO P.O. Box 301 Lovington NM, 88260

Fax To:

(575) 396-1429

Received:

04/21/2011

Sampling Date:

04/20/2011

Reported:

05/05/2011

Sampling Type:

Soil

Project Name:

POKER LAKE UNIT 158 BATTERY

Sampling Condition:

Cool & Intact

Project Number:

AFB 24735

Sample Received By:

Celey D. Keene

Project Location:

EDDY CO, NEW MEXICO

# Sample ID: SB - 4 - 20 - 1 SURFACE (H100814-01)

| Chloride, SM4500Cl-B          | mg,    | /kg             | Analyze    | d By: HM     |     |            |               |       |           |
|-------------------------------|--------|-----------------|------------|--------------|-----|------------|---------------|-------|-----------|
| Analyte                       | Result | Reporting Limit | Analyzed   | Method Blank | BS  | % Recovery | True Value QC | RPD   | Qualifier |
| Chloride                      | 17200  | 16.0            | 04/25/2011 | ND           | 432 | 108        | 400           | 0.00  |           |
| TPH 8015M                     | mg,    | /kg             | Analyze    | ed By: AB    |     |            |               |       | S-04      |
| Analyte                       | Result | Reporting Limit | Analyzed   | Method Blank | BS  | % Recovery | True Value QC | RPD   | Qualifier |
| GRO C6-C10                    | 1290   | 50.0            | 04/23/2011 | ND           | 230 | 115        | 200           | 0.179 |           |
| DRO >C10-C28                  | 6200   | 50.0            | 04/23/2011 | ND           | 230 | 115        | 200           | 0.717 |           |
| EXT DRO >C28-C35              | 535    | 50.0            | 04/23/2011 | ND           |     |            |               |       |           |
| Surrogate: 1-Chlorooctane     | 167    | % 70-130        | )          |              |     |            |               |       |           |
| Surrogate: 1-Chlorooctadecane | 107    | % 70-130        | )          |              |     |            |               |       |           |

#### Sample ID: SB - 4 - 20 - 1 2' BGS (H100814-02)

| Chloride, SM4500Cl-B          | mg/    | kg              | Analyze    | d By: HM     |     |            |               |       |           |
|-------------------------------|--------|-----------------|------------|--------------|-----|------------|---------------|-------|-----------|
| Analyte                       | Result | Reporting Limit | Analyzed   | Method Blank | BS  | % Recovery | True Value QC | RPD   | Qualifier |
| Chloride                      | 16000  | 16.0            | 04/25/2011 | ND           | 432 | 108        | 400           | 0.00  |           |
| TPH 8015M                     | mg/kg  |                 | Analyze    | d By: AB     |     |            |               |       |           |
| Analyte                       | Result | Reporting Limit | Analyzed   | Method Blank | BS  | % Recovery | True Value QC | RPD   | Qualifier |
| GRO C6-C10                    | 1140   | 50.0            | 04/23/2011 | ND           | 230 | 115        | 200           | 0.179 |           |
| DRO >C10-C28                  | 3470   | 50.0            | 04/23/2011 | ND           | 230 | 115        | 200           | 0.717 |           |
| EXT DRO >C28-C35              | 267    | 50.0            | 04/23/2011 | ND           |     |            |               |       |           |
| Surrogate: 1-Chlorooctane     | 1115   | % 70-130        |            |              |     |            |               |       |           |
| Surrogate: 1-Chlorooctadecane | 113 9  | % 70-130        |            |              |     |            |               |       |           |

#### Cardinal Laboratories

\*=Accredited Analyte

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Celeg E Keene

Celey D. Keene, Lab Director/Quality Manager



## Analytical Results For:

Basin Environmental Service BEN J. ARGUIJO P.O. Box 301 Lovington NM, 88260

Fax To:

(575) 396-1429

Received:

04/21/2011

Sampling Date:

04/20/2011

Reported:

05/05/2011

Sampling Type:

Soil

Project Name:

POKER LAKE UNIT 158 BATTERY

Sampling Condition:

Cool & Intact

Project Number:

AFB 24735

Sample Received By:

Celey D. Keene

Project Location:

EDDY CO, NEW MEXICO

#### Sample ID: SB - 4 - 20 - 1 4' BGS (H100814-03)

| Chloride, SM4500CI-B          | mg,    | кд              | Analyze    | а ву: нм     |     |            |               |      |           |
|-------------------------------|--------|-----------------|------------|--------------|-----|------------|---------------|------|-----------|
| Analyte                       | Result | Reporting Limit | Analyzed   | Method Blank | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| Chloride                      | 6560   | 16.0            | 04/25/2011 | ND           | 432 | 108        | 400           | 0.00 |           |
| TPH 8015M                     | mg,    | /kg             | Analyze    | d By: AB     |     |            |               |      | S-04      |
| Analyte                       | Result | Reporting Limit | Analyzed   | Method Blank | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| GRO C6-C10                    | 2640   | 50.0            | 04/23/2011 | ND           | 207 | 104        | 200           | 6.50 |           |
| DRO >C10-C28                  | 6170   | 50.0            | 04/23/2011 | ND           | 200 | 99.8       | 200           | 1.84 |           |
| EXT DRO >C28-C35              | 402    | 50.0            | 04/23/2011 | ND           |     |            |               |      |           |
| Surrogate: 1-Chlorooctane     | 192    | % 70-130        | ) .        |              |     |            |               |      |           |
| Surrogate: 1-Chlorooctadecane | 129    | % 70-130        | )          |              |     |            |               |      |           |

# Sample ID: SB - 4 - 20 - 2 SURFACE (H100814-04)

| Chloride, SM4500CI-B          | mg,           | /kg             | Analyze         | d By: HM     |     |            | True Value QC |      |           |
|-------------------------------|---------------|-----------------|-----------------|--------------|-----|------------|---------------|------|-----------|
| Analyte                       | Result        | Reporting Limit | Analyzed        | Method Blank | BS  | % Recovery |               | RPD  | Qualifier |
| Chloride                      | 8400          | 16.0            | 04/25/2011      | ND           | 432 | 108        | 400           | 0.00 |           |
| TPH 8015M                     | H 8015M mg/kg |                 | Analyzed By: AB |              |     |            |               |      | S-04      |
| Analyte                       | Result        | Reporting Limit | Analyzed        | Method Blank | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| GRO C6-C10                    | 2320          | 50.0            | 04/23/2011      | ND           | 207 | 104        | 200           | 6.50 |           |
| DRO >C10-C28                  | 8990          | 50.0            | 04/23/2011      | ND           | 200 | 99.8       | 200           | 1.84 |           |
| EXT DRO >C28-C35              | 676           | 50.0            | 04/23/2011      | ND           |     |            |               |      |           |
| Surrogate: 1-Chlorooctane     | 177           | % 70-130        | )               |              |     |            |               |      |           |
| Surrogate: 1-Chlorooctadecane | 107           | % 70-130        | )               |              |     |            |               |      |           |

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\*=Accredited Analyte

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Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager



## Analytical Results For:

Basin Environmental Service BEN J. ARGUIJO P.O. Box 301 Lovington NM, 88260

Fax To: (575) 396-1429

Received:

04/21/2011

Sampling Date:

04/20/2011

Reported:

05/05/2011

Sampling Type:

Soil

Project Name:

POKER LAKE UNIT 158 BATTERY

Sampling Condition:

Cool & Intact

Project Number:

AFB 24735

Sample Received By:

Celey D. Keene

Project Location:

EDDY CO, NEW MEXICO

Sample ID: SB - 4 - 20 - 2 2' BGS (H100814-05)

| Chloride, SM4500CI-B          | mg,    | /kg             | Analyze    | d By: HM     |     |            |               |      |            |
|-------------------------------|--------|-----------------|------------|--------------|-----|------------|---------------|------|------------|
| Analyte                       | Result | Reporting Limit | Analyzed   | Method Blank | BS  | % Recovery | True Value QC | RPD  | .Qualifier |
| Chloride                      | 272    | 16.0            | 04/25/2011 | ND           | 432 | 108        | 400           | 0.00 |            |
| TPH 8015M                     | mg,    | /kg             | Analyze    | d By: AB     |     |            |               |      | S-04       |
| Analyte                       | Result | Reporting Limit | Analyzed   | Method Blank | BS  | % Recovery | True Value QC | RPD  | Qualifier  |
| GRO C6-C10                    | 1950   | 50.0            | 04/23/2011 | ND           | 207 | 104        | 200           | 6.50 |            |
| DRO >C10-C28                  | 13500  | 50.0            | 04/23/2011 | ND           | 200 | 99.8       | 200           | 1.84 |            |
| EXT DRO >C28-C35              | 1010   | 50.0            | 04/23/2011 | ND           |     |            |               |      |            |
| Surrogate: 1-Chlorooctane     | 212    | % 70-130        | )          |              |     |            |               |      |            |
| Surrogate: 1-Chlorooctadecane | 128    | % 70-130        | ) .        |              |     |            |               |      |            |

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\*=Accredited Analyte

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Celeg D. Keine



Basin Environmental Service BEN J. ARGUIJO P.O. Box 301 Lovington NM, 88260

Fax To:

(575) 396-1429

Received:

04/21/2011

Sampling Date:

04/20/2011

Reported:

Sampling Type:

Soil

05/05/2011

Project Name: Project Number: POKER LAKE UNIT 158 BATTERY

Sampling Condition: Sample Received By: Cool & Intact Celey D. Keene

Project Location:

AFB 24735

EDDY CO, NEW MEXICO

Sample ID: SB - 4 - 20 - 2 4' BGS (H100814-06)

| BTEX 8021B                           | mg/    | kg              | Analyze         | d By: CMS       |      |            |               |       |           |
|--------------------------------------|--------|-----------------|-----------------|-----------------|------|------------|---------------|-------|-----------|
| Analyte                              | Result | Reporting Limit | Analyzed        | Method Blank    | BS   | % Recovery | True Value QC | RPD   | Qualifier |
| Benzene*                             | 6.37   | 2.50            | 05/03/2011      | ND .            | 2.04 | 102        | 2.00          | 2.03  | •         |
| Toluene*                             | 11.6   | 2.50            | 05/03/2011      | ND              | 1.99 | 99.4       | 2.00          | 0.937 |           |
| Ethylbenzene*                        | 10.7   | 2.50            | 05/03/2011      | ND              | 2.02 | 101        | 2.00          | 0.321 |           |
| Total Xylenes*                       | 46.2   | 7.50            | 05/03/2011      | ND              | 5.93 | 98.8       | 6.00          | 0.190 |           |
| Surrogate: 4-Bromofluorobenzene (PIL | 89.7   | % 70-130        |                 |                 |      |            |               |       |           |
| Chloride, SM4500Cl-B                 | mg/kg  |                 | Analyzed By: HM |                 |      | ·          |               |       |           |
| Analyte                              | Result | Reporting Limit | Analyzed        | Method Blank    | BS   | % Recovery | True Value QC | RPD   | Qualifier |
| Chloride                             | 224    | 16.0            | 04/25/2011      | ND              | 432  | 108        | 400           | 0.00  |           |
| TPH 8015M                            | mg,    | /kg             | Analyze         | Analyzed By: AB |      |            |               |       | S-04      |
| Analyte                              | Result | Reporting Limit | Analyzed        | Method Blank    | BS   | % Recovery | True Value QC | RPD   | Qualifier |
| GRO C6-C10                           | 1450   | 50.0            | 04/23/2011      | ND              | 207  | 104        | 200           | 6.50  |           |
| DRO >C10-C28                         | 12100  | 50.0            | 04/23/2011      | ND              | 200  | 99.8       | 200           | 1.84  |           |
| EXT DRO >C28-C35                     | 1030   | 50.0            | 04/23/2011      | ND              |      |            |               |       |           |
| Surrogate: 1-Chlorooctane            | 172    | % 70-130        | )               |                 |      |            | ************  |       |           |
| Surrogate: 1-Chlorooctadecane        | 114    | % 70-130        | 1               |                 |      |            |               |       |           |

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\*=Accredited Analyte

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Celeg & Keine



Basin Environmental Service BEN J. ARGUIJO P.O. Box 301 Lovington NM, 88260

Fax To:

(575) 396-1429

Received:

04/21/2011

Sampling Date:

04/20/2011

Reported:

05/05/2011

Sampling Type:

Soil

Project Name:

POKER LAKE UNIT 158 BATTERY

Sampling Condition:

Cool & Intact

Project Number:

AFB 24735

Sample Received By:

Celey D. Keene

Project Location:

EDDY CO, NEW MEXICO

## Sample ID: SB - 4 - 20 - 3 SURFACE (H100814-07)

| Chloride, SM4500CI-B      | mg/kg  |                 | Analyzed By: HM |              |     |            |               |      |           |
|---------------------------|--------|-----------------|-----------------|--------------|-----|------------|---------------|------|-----------|
| Analyte                   | Result | Reporting Limit | Analyzed        | Method Blank | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| Chloride                  | 7800   | 16.0            | 04/25/2011      | ND           | 432 | 108        | 400           | 0.00 |           |
| TPH 8015M                 | mg     | /kg             | Analyze         | ed By: AB    |     |            |               |      | S-04      |
| Analyte                   | Result | Reporting Limit | Analyzed        | Method Blank | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| GRO C6-C10                | 553    | 50.0            | 04/23/2011      | ND           | 207 | 104        | 200           | 6.50 |           |
| DRO >C10-C28              | 2990   | 50.0            | 04/23/2011      | ND           | 200 | 99.8       | 200           | 1.84 | •         |
| EXT DRO >C28-C35          | 262    | 50.0            | 04/23/2011      | ND           |     |            |               |      |           |
| Surrogate: 1-Chlorooctane | 148    | % 70-130        | )               |              | •   |            |               |      |           |

148 %

Surrogate: 1-Chlorooctadecane

127%

70-130

#### Sample ID: SB - 4 - 20 - 3 2' BGS (H100814-08)

| Chloride, SM4500CI-B      | mg/kg  |                 | Analyzed By: HM |              |     |            |               |      |           |
|---------------------------|--------|-----------------|-----------------|--------------|-----|------------|---------------|------|-----------|
| Analyte                   | Result | Reporting Limit | Analyzed        | Method Blank | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| Chloride                  | 5440   | 16.0            | 04/25/2011      | ND           | 432 | 108        | 400           | 0.00 |           |
| TPH 8015M                 | mg     | /kg             | Analyze         | d By: AB     |     |            |               |      | S-04      |
| Analyte                   | Result | Reporting Limit | Analyzed        | Method Blank | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| GRO C6-C10                | 1600   | 50.0            | 04/23/2011      | ND           | 207 | 104        | 200           | 6.50 |           |
| DRO >C10-C28              | 4980   | 50.0            | 04/23/2011      | ND           | 200 | 99.8       | 200           | 1.84 |           |
| EXT DRO >C28-C35          | 363    | 50.0            | 04/23/2011      | ND           |     |            |               |      |           |
| Surrogate: 1-Chlorooctane | 156    | % 70-136        | )               |              |     |            |               |      |           |

Surrogate: 1-Chlorooctadecane

120 %

70-130

#### Cardinal Laboratories

\*=Accredited Analyte

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Celeg D. Keena

Celey D. Keene, Lab Director/Quality Manager



Basin Environmental Service BEN J. ARGUIJO P.O. Box 301 Lovington NM, 88260

Fax To:

(575) 396-1429

Received:

04/21/2011

Sampling Date:

04/20/2011

Reported:

05/05/2011

Sampling Type:

Soil

Sampling Condition:

Cool & Intact

Project Name: Project Number:

AFB 24735

117%

70-130

Sample Received By:

Celey D. Keene

Project Location:

Surrogate: 1-Chlorooctadecane

EDDY CO, NEW MEXICO

POKER LAKE UNIT 158 BATTERY

# Sample ID: SB - 4 - 20 - 3 4' BGS (H100814-09)

| Chloride, SM4500CI-B      | mg/kg  |                 | Analyze         | Analyzed By: HM |     |            |               |      |           |
|---------------------------|--------|-----------------|-----------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte                   | Result | Reporting Limit | Analyzed        | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| Chloride                  | 5440   | 16.0            | 04/25/2011      | ND              | 432 | 108        | 400           | 0.00 |           |
| TPH 8015M                 | mg/kg  |                 | Analyzed By: AB |                 |     |            |               |      | S-04      |
| Analyte                   | Result | Reporting Limit | Analyzed        | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| GRO C6-C10                | 2100   | 50.0            | 04/23/2011      | ND              | 207 | 104        | 200           | 6.50 |           |
| DRO >C10-C28              | 6030   | 50.0            | 04/23/2011      | ND              | 200 | 99.8       | 200           | 1.84 |           |
| EXT DRO >C28-C35          | 429    | 50.0            | 04/23/2011      | ND              |     |            |               |      |           |
| Surrogate: 1-Chlorooctane | 164    | % 70-130        | )               |                 |     |            |               |      |           |

#### Sample ID: SB - 4 - 20 - 4 SURFACE (H100814-10)

| Chloride, SM4500CI-B          | mg/kg  |                 | Analyzed By: HM |              |     |             |               |      |           |
|-------------------------------|--------|-----------------|-----------------|--------------|-----|-------------|---------------|------|-----------|
| Analyte                       | Result | Reporting Limit | Analyzed        | Method Blank | BS  | % Recovery  | True Value QC | RPD  | Qualifier |
| Chloride                      | 30800  | 16.0            | 04/25/2011      | ND           | 432 | 108         | 400           | 0.00 |           |
| TPH 8015M mg/kg               |        | Analyzed By: AB |                 |              |     |             |               | 5-04 |           |
| Analyte                       | Result | Reporting Limit | Analyzed        | Method Blank | BS  | % Recovery  | True Value QC | RPD  | Qualifier |
| GRO C6-C10                    | 2570   | 50.0            | 04/23/2011      | ND           | 207 | 104         | 200           | 6.50 |           |
| DRO >C10-C28                  | 12700  | 50.0            | 04/23/2011      | ND           | 200 | 99.8        | 200           | 1.84 |           |
| EXT DRO >C28-C35              | 934    | 50.0            | 04/23/2011      | ND           |     |             |               |      |           |
| Surrogate: 1-Chlorooctane     | 252    | % 70-130        | )               |              |     | <del></del> |               |      |           |
| Surrogate: 1-Chlorooctadecane | 170    | % 70-130        | )               |              |     |             |               |      |           |

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\*=Accredited Analyte

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



Basin Environmental Service BEN J. ARGUIJO P.O. Box 301 Lovington NM, 88260

Fax To:

(575) 396-1429

Received: Reported: 04/21/2011

05/05/2011

**POKER LAKE UNIT 158 BATTERY** 

Project Name: Project Number:

AFB 24735

Project Location:

EDDY CO, NEW MEXICO

Sampling Date:

Sampling Type:

Soil

Sampling Condition:

Cool & Intact

04/20/2011

Sample Received By:

Celey D. Keene

#### Sample ID: SB - 4 - 20 - 4 2' BGS (H100814-11)

| Chloride, SM4500CI-B          | mg/kg  |                 | Analyze    | Analyzed By: HM |     |            |               |      |           |
|-------------------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte                       | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| Chloride                      | 6480   | 16.0            | 04/25/2011 | ND              | 432 | 108        | 400           | 0.00 |           |
| TPH 8015M mg/kg               |        | Analyze         | d By: AB   |                 |     |            |               |      |           |
| Analyte                       | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| GRO C6-C10                    | 34.9   | 10.0            | 04/23/2011 | ND              | 207 | 104        | 200           | 6.50 |           |
| DRO >C10-C28                  | 412    | 10.0            | 04/23/2011 | ND              | 200 | 99.8       | 200           | 1.84 |           |
| EXT DRO >C28-C35              | 37.5   | 10.0            | 04/23/2011 | ND              |     |            |               |      |           |
| Surrogate: 1-Chlorooctane     | 108 9  | % 70-130        | )          |                 |     |            |               |      |           |
| Surrogate: 1-Chlorooctadecane | 108 9  | % 70-130        | )          |                 |     |            |               |      |           |

## Sample ID: SB - 4 - 20 - 4 4' BGS (H100814-12)

| Chloride, SM4500CI-B          | mg/kg  |                 | Analyzed By: HM |              |     |            |               |      |           |
|-------------------------------|--------|-----------------|-----------------|--------------|-----|------------|---------------|------|-----------|
| Analyte                       | Result | Reporting Limit | Analyzed        | Method Blank | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| Chloride                      | 6080   | 16.0            | 04/25/2011      | ND           | 432 | 108        | 400           | 0.00 |           |
| TPH 8015M                     | mg/kg  |                 | Analyzed By: AB |              |     |            |               |      |           |
| Analyte                       | Result | Reporting Limit | Analyzed        | Method Blank | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| GRO C6-C10                    | 54.6   | 10.0            | 04/23/2011      | ND           | 207 | 104        | 200           | 6.50 |           |
| DRO >C10-C28                  | 642    | 10.0            | 04/23/2011      | ND           | 200 | 99.8       | 200           | 1.84 |           |
| EXT DRO >C28-C35              | 52.7   | 10.0            | 04/23/2011      | ND           |     |            |               |      |           |
| Surrogate: 1-Chlorooctane     | 99.8 % | 6 70-130        | 1               |              |     |            |               |      |           |
| Surrogate: 1-Chlorooctadecane | 101 %  | 6 70-130        |                 |              |     |            |               |      |           |

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Celeg D. Keene



Basin Environmental Service BEN J. ARGUIJO P.O. Box 301 Lovington NM, 88260

Fax To:

(575) 396-1429

Received:

04/21/2011

Sampling Date:

04/20/2011

Reported:

05/05/2011

Sampling Type:

Soil

Project Name:

POKER LAKE UNIT 158 BATTERY

Sampling Condition:

Cool & Intact

Project Number:

AFB 24735

Sample Received By:

Celey D. Keene

Project Location:

EDDY CO, NEW MEXICO

### Sample ID: SB - 4 - 20 - 5 SURFACE (H100814-13)

| Chloride, SM4500CI-B          | mg/kg  |                 | Analyze    | Analyzed By: HM |     |            |               |      |           |
|-------------------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte                       | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| Chloride                      | 8320   | 16.0            | 04/25/2011 | ND              | 432 | 108        | 400           | 0.00 |           |
| TPH 8015M mg/kg               |        | Analyze         | d By: AB   |                 |     |            | S-04          |      |           |
| Analyte                       | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| GRO C6-C10                    | 1320   | 50.0            | 04/23/2011 | ND              | 207 | 104        | 200           | 6.50 |           |
| DRO >C10-C28                  | 6710   | 50.0            | 04/23/2011 | ND              | 200 | 99.8       | 200           | 1.84 |           |
| EXT DRO >C28-C35              | 542    | 50.0            | 04/23/2011 | ND              |     |            |               |      |           |
| Surrogate: 1-Chlorooctane     | 149 %  | 6 70-130        | 1          |                 |     |            |               |      |           |
| Surrogate: 1-Chlorooctadecane | 1149   | 6 70-130        | •          |                 |     |            |               |      |           |

# Sample ID: SB - 4 - 20 - 5 2' BGS (H100814-14)

| Chloride, SM4500Cl-B          | mg/kg  |                 | Analyzed By: HM |              |     |            |               |      |           |
|-------------------------------|--------|-----------------|-----------------|--------------|-----|------------|---------------|------|-----------|
| Analyte                       | Result | Reporting Limit | Analyzed        | Method Blank | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| Chloride                      | 1960   | 16.0            | 04/25/2011      | ND           | 432 | 108        | 400           | 0.00 |           |
| TPH 8015M mg/kg               |        | Analyze         | d By: AB        |              |     |            |               | S-04 |           |
| Analyte                       | Result | Reporting Limit | Analyzed        | Method Blank | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| GRO C6-C10                    | 3020   | 50.0            | 04/23/2011      | ND           | 207 | 104        | 200           | 6.50 |           |
| DRO >C10-C28                  | 9070   | 50.0            | 04/23/2011      | ND           | 200 | 99.8       | 200           | 1.84 |           |
| EXT DRO >C28-C35              | 657    | 50.0            | 04/23/2011      | ND           |     |            |               |      |           |
| Surrogate: 1-Chlorooctane     | 190    | % 70-130        |                 | ٧            |     |            |               |      |           |
| Surrogate: 1-Chlorooctadecane | 116    | % 70-130        |                 |              |     |            |               |      |           |

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Celey & Kune



Basin Environmental Service BEN J. ARGUIJO P.O. Box 301 Lovington NM, 88260 Fax To: (575) 396-1429

Received:

04/21/2011

Sampling Date:

04/20/2011

Reported:

Sampling Type:

Soil

05/05/2011

Project Name:

POKER LAKE UNIT 158 BATTERY AFB 24735

Sampling Condition: Sample Received By:

Cool & Intact Celey D. Keene

Project Number: Project Location:

EDDY CO, NEW MEXICO

Sample ID: SB - 4 - 20 - 5 4' BGS (H100814-15)

| BTEX 8021B                           | mg/kg  |                 | Analyzed By: CMS |              |      |            |               |       |           |
|--------------------------------------|--------|-----------------|------------------|--------------|------|------------|---------------|-------|-----------|
| Analyte                              | Result | Reporting Limit | Analyzed         | Method Blank | BS   | % Recovery | True Value QC | RPD   | Qualifier |
| Benzene*                             | 2.25   | 1.25            | 05/03/2011       | ND           | 2.04 | 102        | 2.00          | 2.03  |           |
| Toluene*                             | 22.7   | 2.50            | 05/03/2011       | ND           | 1.99 | 99.4       | 2.00          | 0.937 |           |
| Ethylbenzene*                        | 13.1   | 2.50            | 05/03/2011       | ND           | 2.02 | 101        | 2.00          | 0.321 |           |
| Total Xylenes*                       | 66.4   | 7.50            | 05/03/2011       | ND           | 5.93 | 98.8       | 6.00          | 0.190 |           |
| Surrogate: 4-Bromofluorobenzene (PIL | 72.4   | % 70-130        | )                |              |      |            |               |       |           |
| Chloride, SM4500Cl-B                 | mg/kg  |                 | Analyzed By: HM  |              |      |            |               |       | _         |
| Analyte                              | Result | Reporting Limit | Analyzed         | Method Blank | BS   | % Recovery | True Value QC | RPD   | Qualifier |
| Chloride                             | 1360   | 16.0            | 04/25/2011       | ND           | 432  | 108        | 400           | 0.00  |           |
| TPH 8015M                            | mg,    | /kg             | Analyzed By: AB  |              |      |            |               |       | S-04      |
| Analyte                              | Result | Reporting Limit | Analyzed         | Method Blank | BS   | % Recovery | True Value QC | RPD   | Qualifier |
| GRO C6-C10                           | 2980   | 50.0            | 04/23/2011       | ND           | 207  | 104        | 200           | 6.50  |           |
| DRO >C10-C28                         | 11900  | 50.0            | 04/23/2011       | ND           | 200  | 99.8       | 200           | 1.84  |           |
| EXT DRO >C28-C35                     | 939    | 50.0            | 04/23/2011       | ND           |      |            |               |       |           |
| Surrogate: 1-Chlorooctane            | 186    | % 70-130        | 1                |              |      |            |               |       |           |
| Surrogate: 1-Chlorooctadecane        | 133    | % 70-130        | )                |              |      |            |               |       |           |

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#### **Notes and Definitions**

S-04 The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.

ND Analyte NOT DETECTED at or above the reporting limit

RPD Relative Percent Difference

\*\* Samples not received at proper temperature of 6°C or below.

\*\*\* Insufficient time to reach temperature.

- Chloride by SM4500Cl-B does not require samples be received at or below 6°C

Samples reported on an as received basis (wet) unless otherwise noted on report

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Celey D. Kune



# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240 (575) 393-2326 FAX (575) 393-2476

10f2

| Company Name                            | Basin Environmental Service  | Technologies, LLC  | BILL TO  | CHANTED TO THE CONTRACTOR OF THE PROPERTY OF T | ANALYSIS REQU | EST |
|---|--|--|--|--|---------------|-----|
| Project Manage                          | E Ben J. Arguijo   | 100000000000000000000000000000000000000                      | P.O. #:  |  |               |     |
| Address: P.O.                           |  | <u></u>  | Company: BOPCO, LP                                     |  |               |     |
| City: Lovingto                          |  | Zip: 88260   | Attn: Tony Savoie                                      |  |               |     |
| Phone #: (575)                          |  |  | Address: 522 w. Mermod                                 |  |               |     |
|   | # 24735 Project Owne   |  | City: Carlsbad   |  |               |     |
| *************************************** |  |  |  |  |               |     |
|   | Poker Lake Unit 158 Bat  | rery   | State: NM Zip: 88220                                   |  |               |     |
| Project Location                        | 1: EDDY NEW Mexico   |  | Phone #: (432) 556-8730                                | \  |               |     |
| Sampler Name:                           | Jody Walters   |  | Fax #:   | 76.X   |               |     |
| FOR LABUSE ONLY                         | ,  | MATRIX   | PRESERV. SAMPLING                                      | 1 1 1 1  |               |     |
| Lab I.D.                                | Sample I.D.  | (G)RAB OR (C)OM # CONTAINERS GROUNDWATER WASTEWATER SOIL OIL | OTHER: ACID/BASE: ICE / COOL OTHER:                    | Chloridus<br>Boism<br>Holdfar B  |               |     |
| 1-418001H                               | 5B-4-20-1 surface  | G' X   |  | N X X OO   |               |     |
|   | SB-4-20-1 2'365  | G 1 X  | X 4-20-11 9:   | 10 X X X   |               |     |
| 3                                       | SB-4-20-1 4B65   | G 1 X  | X 4~20-11 9;   | 20 X X X   |               |     |
| ¥                                       | SB-4-20.2 Surface  | G 1 X  | X 4-20-11 9:   | 30 X X X   |               |     |
| 5                                       | SB-4-20-2 2'B6S  | G 1 X  | X 4-20-11 9:   |  |               |     |
|   | SB-4-20-2 4'BGS  | G 1 X  | X 4-20-11 9:   | 50 X X X   |               |     |
| ")                                      | SB-4-20-3 Surface  | GIX  | X 4-20-11 10   | X X X 00:  |               |     |
| ල                                       | SB-4-20-3 2'B6S  | G 1 X  | X 4-20-1/ 10   | 10 X X X   |               |     |
| q                                       | SB-4-20-3 4'B65  | G I X  | X 4-20-4 10:   | 20 X X X   |               |     |
| 10                                      | SB-4-20-4 Surface  | G / X  | X 4-20-11 10   | 30 X X X   |               |     |
| PLEASE NOTE: Liability at               | nd Damages, Cardinat's liability and client's exclusive remedy for | any daim arising whether based in contrac                    | ct or tort, shall be limited to the amount paid by the | client for the   |               |     |

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| athliates of successors arising out of or related to the performa | ince of services hereunder by Cardinal, re | gardless of whether such claim is based upon any of the ab | ove stated reasons or otherwise.                    |
|---|--|--|---|
| Relinguished By:  | Date: Rece                                 | eived By:  | Phone Result: 🔲 Yes 🔲 No   Add'l Phone #:           |
| // / / / / / /  | 4-21-11                                    |  | Fax Result: ☐ Yes ☐ No Add'l Fax #:                 |
| Value Value   | Tima: of                                   |  | REMARKS: Hold FOR BTEX Run two highest TPH for BTEV |
| 10000   |  | <u> </u>   | -lold for DIES TOWN TWO MY                          |
| Relinguished By:  | Date:////Rece                              | e∥ved∕By:∦   | ,   |
|   | 7/4/1/                                     | 11 141, 0  |   |
|   | Time 1900                                  |  |   |
|   | 1 00/10                                    | J J J J J J J J J J J J J J J J J J J                      | Please email results to pm@basinenv.com             |
| Delivered By: (Circle One)  |  | Sample Condition   CHECKEI                                 | & TASAVO1e@BassPet.com                              |
|   | سر مُرْمِ                                  | Cool Intact (Inifial                                       | 5)  |
| Sampler - UPS - Bus - Other:                                      | 41   | Yes Yes  |   |
|   | , v v                                      | No No Man  |   |



# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240 (575) 393-2326 FAX (575) 393-2476

20f2

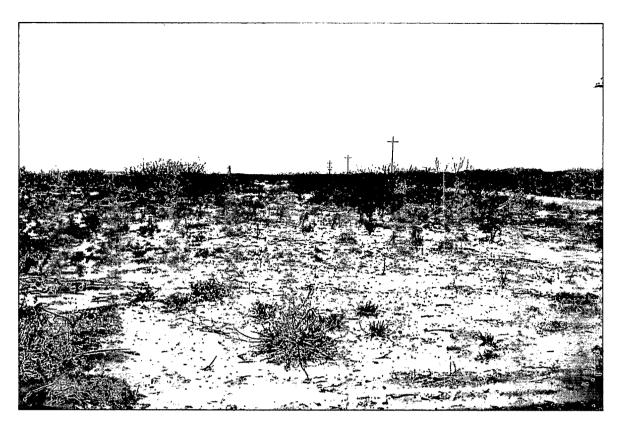
| Company Name: Basin Environmental Service Technologies, LLC  | BILL TO   | ANALYSIS REQUEST                |  |  |  |  |  |  |
|--|---|---------------------------------|--|--|--|--|--|--|
| Project Manager: Ben J. Arguijo  | P.O. #:   |                                 |  |  |  |  |  |  |
| Address: P.O. Box 301  | Company: BOPCO, LP  |                                 |  |  |  |  |  |  |
| City: Lovington State: NM Zip: 38260   | Attn: Tony Savoie   |                                 |  |  |  |  |  |  |
| Phone #: (575) 396-2378  | Address: 522 w. Mermod  |                                 |  |  |  |  |  |  |
| Project #: AFE 24735 Project Owner: BGPCO, LP  | City: Carlsbad  |                                 |  |  |  |  |  |  |
| Project Name: Poker Lake Unit 158 Battery  | State: NM Zip: 88220  |                                 |  |  |  |  |  |  |
| Project Location: EDDY, NEW Mexico   | <b>Phone</b> #: (432) 556 - 8730                                  |                                 |  |  |  |  |  |  |
| Sampler Name: Jody Walters   | Fax #:  |                                 |  |  |  |  |  |  |
| FOR LAB USE ONLY MATRIX  | PRESERV. SAMPLING   |                                 |  |  |  |  |  |  |
| CG)RAB OR (C)OM # CONTAINERS GROUNDWATER WASTEWATER SOIL OIL   | ACID/GE ACID/GE ACID/GE ACID/GE COOL OTHER: OTHER:                | Chlorides<br>BOISM<br>Holdfor B |  |  |  |  |  |  |
| HIDDF14-11 SB-4-20-4 2'B65 G1  | X 4-20-11 10:40   | X X X                           |  |  |  |  |  |  |
| 12 SB-4-20-4 4 Bbs G1 X  | X 4-20-11 10:50   | X X X                           |  |  |  |  |  |  |
| 13 SB-4-20-5 Surface G 1 X   | X 4-20-11 11:00   | XXX                             |  |  |  |  |  |  |
| 13 SB-4-20-5 Surface 6 1 X<br>14 SB-4-20-5 2'BbS 6 1 X<br>15 SB-4-20-5 4'BbS 6 1 X   | X 4-20-11 11:10   | XXX                             |  |  |  |  |  |  |
| 15 SB-4-20-5 4'B65 G 1 X   | X 4-20-V 11:20  |                                 |  |  |  |  |  |  |
|  |   |                                 |  |  |  |  |  |  |
|  |   |                                 |  |  |  |  |  |  |
|  |   |                                 |  |  |  |  |  |  |
|  |   |                                 |  |  |  |  |  |  |
| PLEASE NOTE: Uability and Damages, Cardinal's liability and client's exclusive remedy for any claim arising whether based in cor | act or tort, shall be limited to the amount paid by the client fo | the                             |  |  |  |  |  |  |

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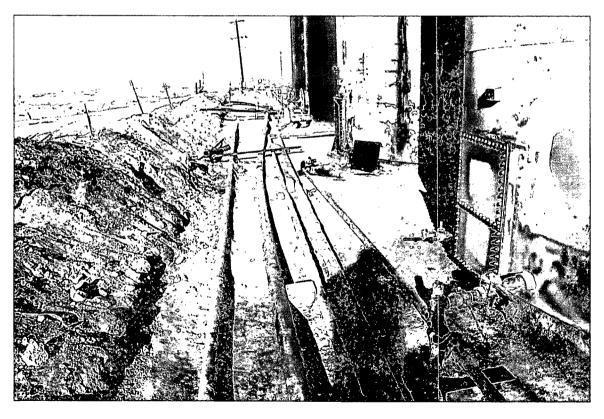
| athliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. |                                       |  |   |  |  |  |  |  |  |
|--|---------------------------------------|--|---|--|--|--|--|--|--|
| Relinquished By:   | Date: 2/-//                           | Received By:                             | Phone Result: 🗆 Yes 🔲 No   Add'l Phone #:   |  |  |  |  |  |  |
| 1// 1/3  | 4-01-11                               |  | Fax Result:                                 |  |  |  |  |  |  |
| 1/4/4-25   | Tings: of                             | /  | REMARKS:                                    |  |  |  |  |  |  |
| 1/2/000  |                                       | ji                                       | Hold for BTEX Run two Highes + TPH FOR BTEX |  |  |  |  |  |  |
| Relinquished By:   | Date/                                 | Received By                              | Hold tok Die                                |  |  |  |  |  |  |
| $\iota \nu$  | Tike                                  | 11/1/1/1/1/1/1/1/1/1/1/1/1/1/1/1/1/1/1/1 |   |  |  |  |  |  |  |
|  | 11117104                              | 1 ( Challe in )                          | Please email results to pm@basinenv.com     |  |  |  |  |  |  |
| Delivered By: (Circle One)   | · · · · · · · · · · · · · · · · · · · | Sample Condition CHECKED BY:             | % TAsavoie@BassPet.com                      |  |  |  |  |  |  |
| . ,  | 1                                     | Cool tract (Initials)                    | W IASAVOIEWDASSPWL.COM                      |  |  |  |  |  |  |
| Sampler - UPS - Bus - Other:   | Ĺį                                    | Yes Yes ( )                              |   |  |  |  |  |  |  |
|  |                                       | No No No                                 |   |  |  |  |  |  |  |

Appendix C

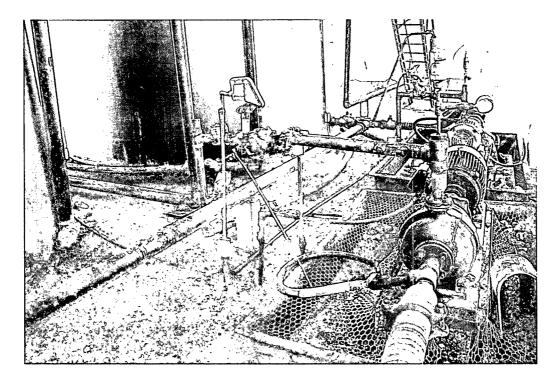
Photographs



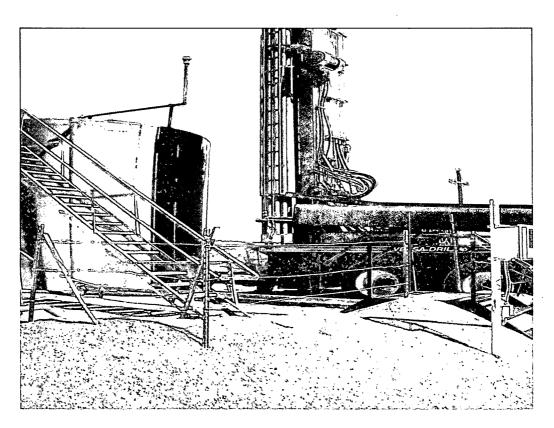
Photograph of overspray area east of the PLU #158 Battery.



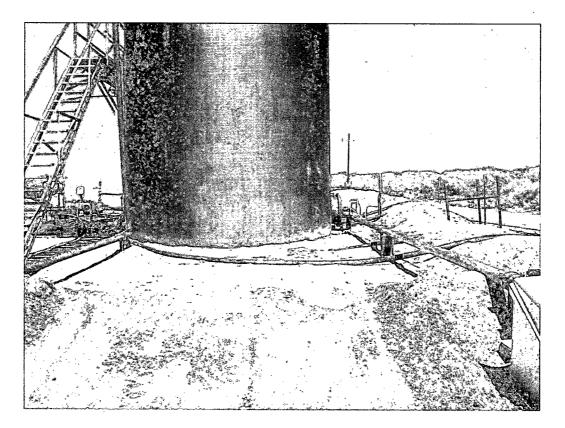
Photograph of the Excavation within the earthen containment at the PLU #158 Battery.



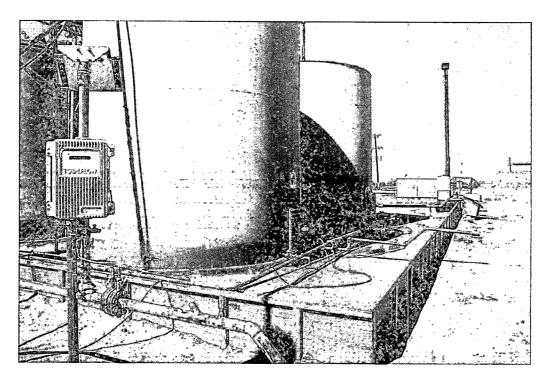
Photograph of the excavation within the earthen containment at the PLU #158 Battery.



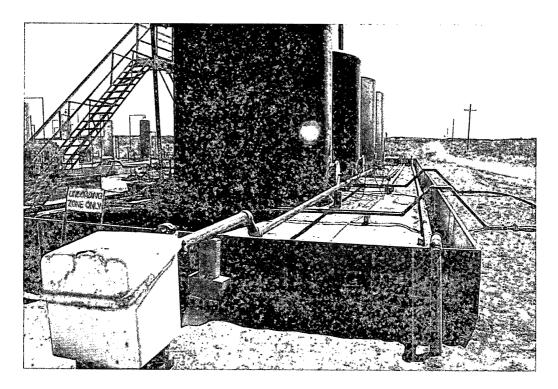
Photograph of the May 24, 2010, drilling event at the PLU #158 Tank Battery.



Photograph of the backfilled earthen containment prior to the installation of Falcon Liner System at the PLU #158 Battery.



Photograph of newly installed Falcon containment system at the PLU #158 Tank Battery.



Photograph of newly installed Falcon containment system at the PLU #158 Tank Battery.

# Appendix D

Release Notification and Corrective Action (Form C-141)

<u>District 1</u> 1625 N. French Dr., Hobbs, NM 88240 <u>District II</u> 1301 W. Grand Avenue, Artesia, NM 88210 District III 1000 Rio Brazos Road, Aztec, NM 87410 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

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

Form C-141

Revised October 10, 2003

| Release Notification and Corrective Action   |  |   |  |   |   |  |   |  |   |  |  |  |
|--|--|---|--|---|---|--|---|--|---|--|--|--|
|  |  |   |  |   |   |  | OPERATOR  |  |   |  |  |  |
|  |  |   |  |   |   | Contact Tony Savoie  |   |  |   |  |  |  |
|  |  |   |  |   |   | Telephone No. 432-556-8730   |   |  |   |  |  |  |
|  |  |   |  |   |   |  | Facility Type E&P API 30-015-31690  |  |   |  |  |  |
| Surface Owner Federal Mineral Owner Fe   |  |   |  |   |   | ederal   |   |  | Lease N   | lo.  |  |  |
|  |  |   |  | LOCA  | TION  | N OF RE  | LEASE   |  |   |  |  |  |
| Unit Letter<br>A   | Section 7  | Township<br>24S   | Range<br>30E   | Feet from the   | North/  | South Line   | Feet from the   | East/V   | West Line   | County<br>Eddy   |  |  |
| Latitude_N 32.237400 Longitude W 103.914150  |  |   |  |   |   |  |   |  |   |  |  |  |
| Tymo of Pala   | Type of Release: Crude oil and produced water  NATURE OF RELEASE  Volume of Release: 5 Bbls of Volume Recovered: 40 Bbls |   |  |   |   |  |   |  |   |  |  |  |
| Type of Kele   | ase. Crude (   | on and produc   | ed water   |   |   | Produced v   | Accordical 40 Bbis  |  |   |  |  |  |
| Source of Re   | lease: Tank  | overflow  |  |   |   | Date and Hour of Occurrence   Date and Hour of Discovery 3/8/10 Approximately 2:30 p.m.   3/8/10 4:30 p.m. |   |  |   |  |  |  |
| Was Immedi   | ate Notice C   |   | Yes [  | No Not Rec  | quired  | If YES, To Whom? Randy, emergency NMOCD number   |   |  |   |  |  |  |
| By Whom?   |  |   |  |   |   | Date and Hour 3/9/10 12:04 p.m.  |   |  |   |  |  |  |
| Was a Watercourse Reached? ☐ Yes ☑ No  |  |   |  |   |   | If YES, Volume Impacting the Watercourse.  |   |  |   |  |  |  |
|  | If a Watercourse was Impacted, Describe Fully.*  |   |  |   |   |  |   |  |   |  |  |  |
| Describe Cause of Problem and Remedial Action Taken.* A valve on the produced water tanks was left open while the operator was tending to other activities, the source of the overflow was corrected and a vacuum truck was dispatched to the area to remove the fluid inside of the earthen containment.  Describe Area Affected and Cleanup Action Taken.*The entire area of the earthen containment was covered with crude oil, approximately 4500 sq.ft. The free standing oil was removed and the saturated area around the tanks inside the containment was covered with dry to dirt to allow for normal operations to |  |   |  |   |   |  |   |  |   |  |  |  |
| was washed   | down with a  | nutrient and  | microblaz  |   |   |  |   |  |   | nat day. The affected vegetation   |  |  |
| I hereby cert<br>regulations a<br>public health<br>should their<br>or the enviro   | ify that the i<br>Il operators<br>or the environerations homent. In a  | information gi<br>are required to<br>ronment. The<br>have failed to | ven above<br>o report an<br>acceptand<br>adequately<br>OCD accep | e is true and comple<br>nd/or file certain re<br>ce of a C-141 report<br>investigate and re | ete to the<br>clease notes the<br>crt by the<br>crediat | he best of my<br>otifications a<br>e NMOCD me<br>contaminat  | knowledge and und perform correctarked as "Final Right on that pose a thi | understa<br>ctive act<br>Report" or<br>reat to g | nd that pur<br>ions for rel<br>does not rel<br>round wate | suant to NMOCD rules and<br>eases which may endanger<br>ieve the operator of liability<br>r, surface water, human health<br>ompliance with any other |  |  |
| rederal, state   | , or rocar ia  | ws and/or rege  | ilutions.  |   |   |  | OIL CON   | SERV   | ATION   | DIVISION   |  |  |
| Signature:   |  |   |  | OIL CONSERVATION DIVISION  Approved by District Supervisor:                                 |   |  |   |  |   |  |  |  |
| Printed Nam  | e: Tony Sav  | roie  |  |   |   |  |   |  |   |  |  |  |
| Title: Waste   | Mgmt.& Re  |   |  | Approval Date: Expiration   |   |  | Date:   |  |   |  |  |  |
| E-mail Addr  | E-mail Address: TASavoie@BassPet.com   |   |  |   |   |  | Conditions of Approval:  Attached   |  |   |  |  |  |
| Date: 3/15/1   | 0  |   |  | Phone:432-556-8   | 730   |  |   |  |   |  |  |  |

<sup>\*</sup> Attach Additional Sheets If Necessary

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

# State of New Mexico Energy Minerals and Natural Resources

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

Revised October 10, 2003 Submit 2 Copies to appropriate District Office in accordance

Form C-141

with Rule 116 on back side of form

# **Release Notification and Corrective Action**

| OPERATOR   |                             |                                   |              |  |                      |  |                    |                        | Initial F                | Report                  | <b>X</b> Fi           | inal Report    |
|--|-----------------------------|-----------------------------------|--------------|--|----------------------|--|--------------------|------------------------|--------------------------|-------------------------|-----------------------|----------------|
| Name of Co   |                             | BOPCO, LP                         | (            | Contact Tony Savoie                      |                      |  |                    |                        |                          |                         |                       |                |
|  |                             | rmod, Suite 7                     |              | Telephone No. (432)556-8730              |                      |  |                    |                        |                          |                         |                       |                |
| Facility Name Poker Lake Unit #158 Facility Type E&P   |                             |                                   |              |  |                      |  |                    |                        |                          |                         |                       |                |
| Surface Own  | ner Feder                   | ·al                               | wner         | Federal                                  |                      |  | Lease N            | lo.                    |                          |                         |                       |                |
|  |                             |                                   |              | LOCA                                     | TION                 | OF REI   | LEASE              |                        | 3                        | 30-0                    | 15-                   | 31690          |
| Unit Letter<br>A   | Section 7                   | Township<br>24S                   | Range<br>30E |  |                      | South Line   | Feet from the      | East/V                 | Vest Line                | County<br>Eddy          |                       |                |
|  | ·                           | ,                                 |              |  |                      |  |                    |                        |                          | .,                      |                       |                |
| Latitude 32.237274° North Longitude 103. 914835° West  |                             |                                   |              |  |                      |  |                    |                        |                          |                         | <u></u> J             |                |
| NATURE OF RELEASE  |                             |                                   |              |  |                      |  |                    |                        |                          |                         |                       |                |
| Type of Rele   | ase Produc                  | ed water and c                    | rude oil     |  |                      |  | Release 5 bbls     | of                     | Volume I                 | Recovered               | 40 Bbl                | is             |
|  |                             |                                   |              |  |                      | 1 .  | vater and 45 bbls  | of                     |                          |                         |                       |                |
| Source of Re   | lease Tank                  | coverflow                         |              |  |                      | Crude oil Date and l-  | lour of Occurren   | ce                     | Date and                 | Hour of D               | iscovery              | .,             |
|  |                             |                                   |              |  |                      |  | proximately 2:30   |                        | 3/8/2010,                |                         | 1,500,101,            |                |
| Was Immedia  | ate Notice (                |                                   | os No        | Nigt Damiland                            |                      | If YES, To   |                    |                        |                          |                         |                       |                |
| D 11/1 0   | m. c                        |                                   | es No        | Not Required                             |                      |  | AOCD emergenc      | -                      | Г                        |                         |                       |                |
| By Whom?<br>Was a Water  |                             |                                   |              |  |                      |  | Jour 3/9/10, 12:0  |                        | ercourse                 |                         |                       |                |
| ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,  |                             |                                   | Yes X        | . No                                     |                      | 11 12.5, 1   | June impacting     | the water              |                          |                         |                       |                |
| If a Watercou  | ırse was Im                 | pacted, Descri                    | be Fully.*   |  |                      | . <del></del>  |                    |                        |                          | <del> </del>            |                       |                |
| 1  |                             |                                   |              |  |                      |  |                    |                        |                          |                         |                       |                |
|  |                             | em and Remed                      |              |  |                      |  |                    |                        |                          |                         |                       |                |
| A valve on t   | he produce                  | d water tanks<br>ched to the are  | was left o   | open while the op<br>ve the fluid inside | erator v             | was tending  | to other activitie | es, the so             | ource of th              | e overflov              | v was co              | orrected and a |
|  |                             | and Cleanup /                     |              |  | Of the t             | carrier conta  | mment.             |                        |                          |                         |                       |                |
| The entire an  | ca of the car               | rthen contaims                    | nent was co  | overed with crude                        | oil, app             | proximately 4  | 1,500 sq.ft. The f | ree stand              | ling oil was             | removed.                | and the               | saturated area |
| around the ta  | nks inside t<br>hv a fine m | he containmer<br>ist of crude oil | it was covi  | ered with dry dirt<br>e excessive winds  | to allow<br>that day | officer of the first of the second se | operations to con  | itinuc. Ap<br>s washed | pproximate<br>Ldova with | 4y 30.600<br>4a nutrien | sq. II. of<br>Land mi | rpasture land  |
| solution.  |                             |                                   |              |  |                      |  | _                  |                        |                          |                         |                       |                |
|  |                             |                                   |              | was remediated as                        | per NN               | 10CD appro   | val. Please refere | ence the a             | attached Re              | emediation              | Summa                 | ry & Site      |
| Ciosure Keqi   | iesi ior rem                | ediation detail                   | S.           |  |                      |  |                    |                        |                          |                         |                       |                |
| 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   |                             |                                   |              |  |                      |  |                    |                        |                          | OCD 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 |                             |                                   |              |  |                      |  |                    |                        |                          | may endanger            |                       |                |
| should their   | operations l                | have failed to                    | adequately   | investigate and i                        | remedia              | te contamina   | tion that pose a   | threat to              | ground wa                | iter, surfac            | e water,              | , human health |
| or the envire  | onment. In                  | addition, NM                      | OCD acc      | eptance of a C-14                        | 11 repoi             | rt does not r  | elieve the operat  | tor of res             | sponsibility             | for comp                | oliance v             | with any other |
| federal, state, or local laws and/or regulations.  |                             |                                   |              |  |                      |  |                    |                        |                          |                         |                       |                |
|  |                             | $\bigcirc$                        | 1            | OIL CONSERVATION DIVISION                |                      |  |                    |                        |                          |                         |                       |                |
| Signature:   | 10                          | w Xai                             | <u>iitti</u> | ·  |                      |  |                    |                        |                          |                         |                       | ļ              |
| Printed Name   | e: Tony Sa                  | voie                              |              | Approved by District Supervisor:         |                      |  |                    |                        |                          |                         |                       |                |
| Title: Waste   | Mgmt. & I                   | Remediation S                     |              | Approval Da                              | te:                  |  | Expiration         | Date:                  |                          |                         |                       |                |
| E-mail Addr  | ess: TASav                  | oie@BassPet.                      |              | Conditions of Approval:                  |                      |  |                    |                        |                          |                         |                       |                |
| Date: 7/25/20  | 011                         |                                   | P            | honc: (432)556-8°                        | 730                  |  |                    |                        |                          |                         |                       |                |

Tay Copy 2RP-400 Basic 8/1/11