Basin Environmental Service Technologies, LLC

3100 Plains Highway P. O. Box 301 Lovington, New Mexico 88260 **jwlowry@basinenv.com** Office: (575) 396-2378 Fax: (575) 396-1429

č٦ **Effective Solutions**

REMEDIATION SUMMARY

AND RISKED-BASED SITE CLOSURE REQUEST

BOPCO, LP

POKER LAKE UNIT WELL #205 AT PLU #158 BATTERY Eddy County, New Mexico Unit Letter "A" (NE/NE), Section 7, Township 24 South, Range 30 East Latitude 32.237400° North, Longitude 103.914150° West NMOCD Reference #s 2RP-_____

Prepared For:

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

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

September 2012

Project Manager

TABLE OF CONTENTS

| 1.0 | INTRODUCTION AND BACKGROUND INFORMATION1 | |
|-----|---|------------------|
| 2.0 | NMOCD SITE CLASSIFICATION | 2 |
| 3.0 | SUMMARY OF SOIL REMEDIATION ACTIVITIES | 2 |
| 4.0 | QA/QC PROCEDURES.4.14.1Soil Sampling.4.2Decontamination of Equipment.4.3Laboratory. | 5 5 5 6 |
| 5.0 | REPORTING | 5 |
| 6.0 | LIMITATIONS | 6 |
| 7.0 | DISTRIBUTION | 7 |

FIGURES

Figure 1 – Site Location Map Figure 2 – Site & Sample Location Map

TABLES

Table 1 - Concentrations of Benzene, BTEX, TPH & Chloride in Soil

APPENDICES

Appendix A – Release Notification and Corrective Action (Form C-141)

.

- Appendix B Photographs
- Appendix C Laboratory Analytical Reports

1.0 INTRODUCTION AND BACKGROUND INFORMATION

Basin Environmental Service Technologies, LLC (Basin), on behalf of BOPCO, LP (BOPCO), has prepared this *Remediation Summary and Site Closure Request* for the release site known as Poker Lake Unit Well #205 at PLU #158 Battery. The legal description of the release site is Unit Letter "A" (NE/NE), Section 7, Township 24 South, Range 30 East, in Eddy County, New Mexico. The geographic coordinates of the release site are 32.237400° North latitude and 103.914150° West longitude. 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 "Site & Sample Location Map".

On September 22, 2011, BOPCO discovered a release had occurred on the Poker Lake Unit #205 Flowline north of the Poker Lake Unit #158 Battery. The release was attributed to the failure of a two and three eighths inch (2 3/8") flowline from the PLU-205 pumping well. The release was reported to the New Mexico Oil Conservation Division (NMOCD) Artesia District Office on September 22, 2011. The "Release Notification and Corrective Action" (Form C-141) indicated approximately thirty (30) barrels of crude oil was released, with approximately twenty-five (25) barrels of crude oil being recovered. During initial response activities a repair clamp was installed on the line and a vacuum truck was utilized to recover free-standing fluids. The release affected approximately three hundred square feet (300 ft²) of pasture land on the north side of the battery pad. A Form C-141, dated is provided as Appendix A. General Photographs of the release site are provided as Appendix B.

2.0 NMOCD SITE CLASSIFICATION

A search of the New Mexico Water Rights Reporting System (NMWRRS) database maintained by the New Mexico Office of the State Engineer (NMOSE) indicated information was unavailable for Section 7, Township 24 South, Range 30 East. A depth to groundwater reference map utilized by the NMOCD indicates groundwater should be encountered at approximately one hundred fifty feet (150') to one hundred seventy-five feet (175') below ground surface (bgs). Based on the NMOCD ranking system, zero (0) points will be assigned to the site as a result of this criterion.

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

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

NMOCD guidelines indicate the Poker Lake Unit Well #205 at Battery PLU-158 release site has an initial ranking score of zero (0) points. The soil remediation levels for a site with a ranking score of zero (0) points are as follows:

- Benzene 10 mg/Kg (ppm)
- BTEX 50 mg/Kg (ppm)

• TPH - 5,000 mg/Kg (ppm)

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

3.0 SUMMARY OF SOIL REMEDIATION ACTIVITIES

On July 25, 2012, following initial response activities, excavation of impacted soil commenced at the release site. A Photo-Ionization Detector (PID) and chloride field kit were used to field screen the horizontal and vertical extent of impacted soil and to guide the excavation. Soil samples were collected and submitted to Cardinal Laboratories in Hobbs, New Mexico, for analysis of benzene, ethylbenzene, toluene, and xylene (BTEX) using EPA SW-846-8021b, total petroleum hydrocarbon (TPH) using EPA SW-846 8015M, and/or chloride concentrations using EPA method 4500 Cl-B. The excavated soil was stockpiled on-site pending final disposition.

On July 27, 2012, five (5) soil samples (North S.W., South S.W., East S.W., West S.W. and Floor @ 4') were collected from the excavation floor and sidewalls and submitted to the laboratory for analysis of TPH and chloride concentrations. Laboratory analytical results indicated TPH concentrations ranged from 63.5 mg/Kg for soil sample South S.W. to 21,380 mg/Kg for soil sample West S.W. Laboratory analytical results indicated chloride concentrations ranged from 128 mg/Kg for soil sample South S.W. to 4,080 mg/Kg for soil sample West S.W. Soil sample Floor @ 4' was also analyzed for constituent concentrations of BTEX, which were determined to be less than the appropriate laboratory method detection limit (MDL) for each constituent. The excavation was advanced in the areas represented by soil samples North S.W., South S.W., East S.W. and West S.W.

On August 29, 2012, six (6) soil samples (Bottom Hole, North Wall, South Wall, East Wall, West Wall, and Bottom Hole 24") were collected from the excavation floor and sidewalls and submitted to the laboratory for analysis of TPH and chloride concentrations. Laboratory analytical results indicated TPH concentrations ranged from less than the appropriate laboratory MDL for soil samples North Wall, South Wall, East Wall, West Wall, and Bottom Hole 24" to 15.9 mg/Kg for soil sample Bottom Hole. Laboratory analytical results indicated chloride concentrations ranged from 48.0 mg/Kg for soil sample West Wall to 4,160 mg/Kg for soil sample Bottom Hole.

On September 7, 2012, a 20-mil polyurethane liner was installed in the floor of the excavation at approximately two feet (2') bgs. This engineer control was designed to inhibit the vertical migration of contaminants left in-situ. On installing the approved liner, the excavation was backfilled with locally purchased, non-impacted material.

Between September 7, 2012, and September 11, 2012, approximately two hundred forty cubic yards (240 yd³) of impacted material was transported to Lea Land (WM-01-035), for disposal. Prior to backfilling, the final dimensions of the excavation were approximately twenty-five (25') in width, forty-five feet (45') in length and two feet (2') in depth.

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 Well #205 at PLU #158 Battery met the objectives set forth during the September 6, 2012, meeting between BOPCO and NMOCD Representatives. Soil samples collected from the floor and sidewalls of the excavation were analyzed by an NMOCD-approved laboratory. Based on these analytical results and the installation of an approved polyurethane liner, Basin recommends BOPCO provide the NMOCD Artesia District Office a copy of this *Remediation Summary & Risk-Based Site Closure Request* and request the NMOCD grant closure to the Poker Lake Unit Well #205 at PLU #158 Battery release site.

6.0 LIMITATIONS

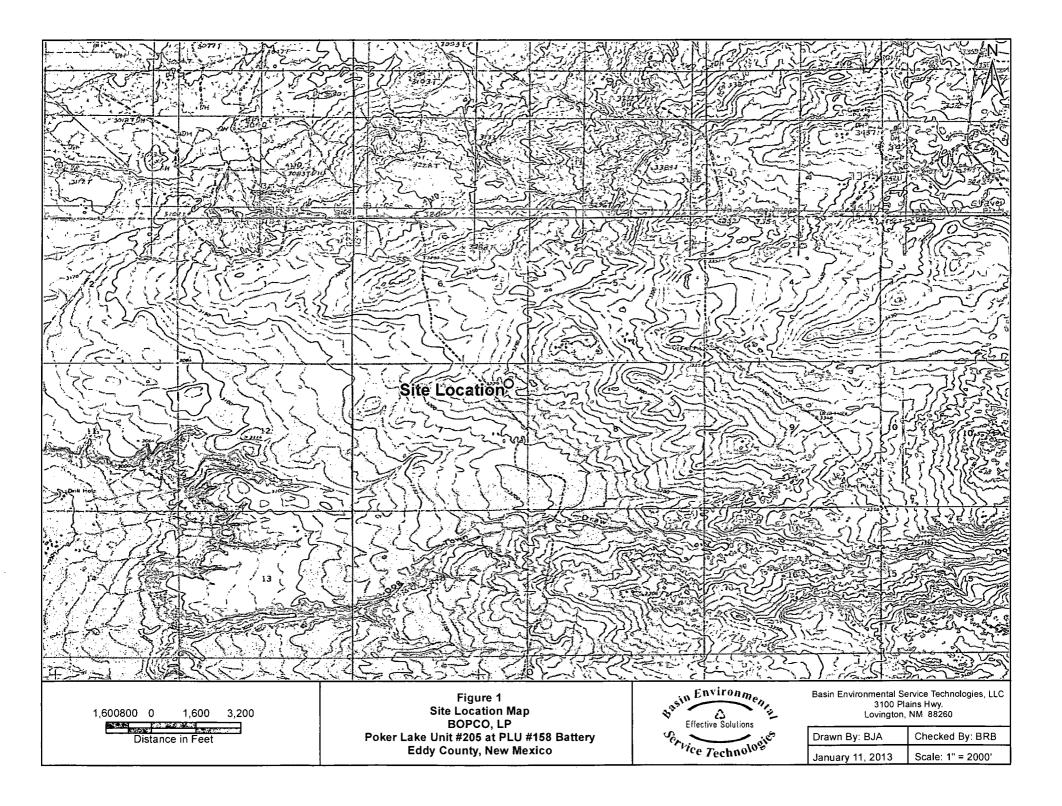
Basin Environmental Service Technologies, LLC, has prepared this *Remediation Summary & Site Closure Request* to the best of its ability. No other warranty, expressed or implied, is made or intended. Basin has examined and relied upon documents referenced in the report and on oral statements made by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

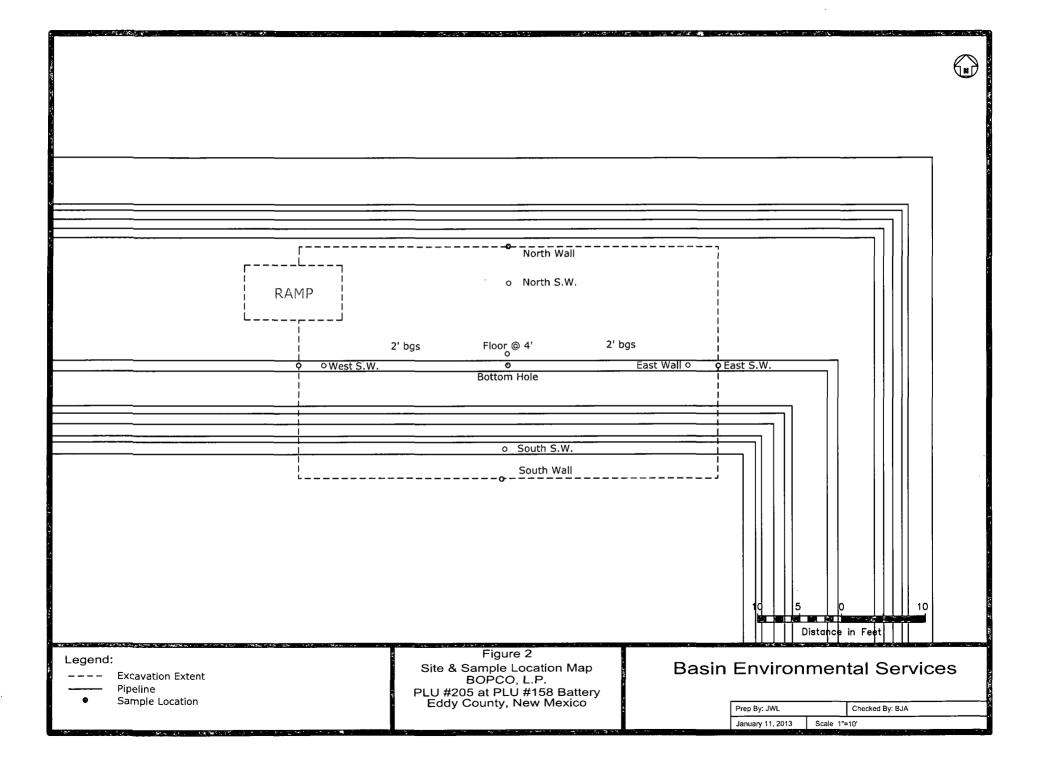
This report has been prepared for the benefit of BOPCO, LP. The information contained in this report, including all exhibits and attachments, may not be used by any other party without the express consent of Basin Environmental Service Technologies, LLC, and/or BOPCO, LP.

7.0 **DISTRIBUTION:**

- Copy 1: Mike Bratcher New Mexico Energy, Minerals and Natural Resources Department Oil Conservation Division (District 2) 1301 E. Grand Avenue Artesia, NM 88210
- Copy 2: James Amos Bureau of Land Management 602 E. Greene Street Carlsbad, NM 88220
- Copy 3: Tony Savoie BOPCO, LP 522 W. Mermod, Suite 704 Carlsbad, NM 88220
- Copy 4: Basin Environmental Service Technologies, LLC P.O. Box 301 Lovington, NM 88260

FIGURES





TABLES

ø

TABLE 1

CONCENTRATIONS OF BENZENE, BTEX, TPH & CHLORIDE IN SOIL

BOPCO, LP POKER LAKE UNIT WELL #205 at PLU #158 BATTERY EDDY COUNTY, NEW MEXICO

| | SAMPLE | | | METHOD: EPA SW 846-8021B, 5030 | | | | | METHOD: 8015M | | | TOTAL | 4500 CL-B |
|-----------------|--------|-----------|-----------|--------------------------------|---------|---------|---------|---------|---------------------------------|----------------------------------|----------------------------------|---------------------------------|-----------|
| SAMPLE LOCATION | DEPTH | SAMPLE | SOIL | BENZENE | TOLUENE | ETHYL- | TOTAL | TOTAL | GRO | DRO | ORO | TPH | |
| SAMPLE LOCATION | (BGS) | DATE | STATUS | | | BENZENE | XYLENES | BTEX | C ₆ -C ₁₂ | C ₁₂ -C ₂₈ | C ₂₈ -C ₃₅ | C ₆ -C ₃₅ | CHLORIDE |
| | (663) | | | (mg/Kg) | (mg/Kg) | (mg/Kg) | (mg/Kg) | (mg/Kg) | (mg/Kg) | (mg/Kg) | (mg/Kg) | (mg/Kg) | (mg/Kg) |
| North S.W. | 2' | 7/27/2012 | Excavated | - | - | _ | - | - | <10.0 | 62.0 | 169 | 231 | 1,390 |
| South S.W. | 2' | 7/27/2012 | Excavated | - | - | - | | - | <10.0 | 16.7 | 46.8 | 63.5 | 128 |
| East S.W. | 2' | 7/27/2012 | Excavated | - | - | - | - | _ | <10.0 | 248 | 75.5 | 123.5 | 2,560 |
| West S.W. | 2' | 7/27/2012 | Excavated | | - | - | | - | 2,980 | 15,900 | 2,500 | 21,380 | 4,080 |
| Floor @ 4' | 4' | 7/27/2012 | In-Situ | <0.050 | < 0.050 | < 0.050 | <0.150 | <0.150 | <10.0 | 24.9 | 59.4 | 84.3 | 2,720 |
| · | | | | | | | | | | | | | |
| Bottom Hole | N/A | 8/29/2012 | In-Situ | - | - | - | - | - | <10.0 | <10.0 | 15.9 | 15.9 | 4,160 |
| North Wall | N/A | 8/29/2012 | In-Situ | - | - | - | | - | <10.0 | <10.0 | <10.0 | <10.0 | 2,240 |
| South Wall | N/A | 8/29/2012 | In-Situ | - | - | - | - | - | <10.0 | <10.0 | <10.0 | <10.0 | 1,390 |
| East Wall | N/A | 8/29/2012 | In-Situ | - | - | - | - | - | <10.0 | <10.0 | <10.0 | <10.0 | 2,160 |
| West Wall | N/A | 8/29/2012 | In-Situ | - | - | - | - | - | <10.0 | <10.0 | <10.0 | <10.0 | 48.0 |
| Bottom Hole 24" | 24" | 8/29/2012 | In-Situ | | - | - | - | - | <10.0 | <10.0 | <10.0 | <10.0 | 3,840 |
| | | | | | | | | | | | | | |
| NMOCD Criteria | | | | 10 | | | | 50 | | | | 5,000 | |

- = Not analyzed.

~

APPENDICES

.

Appendix A

Release Notification and Corrective Action (Form C-141)

| 1625 N. French Dr., Hobbs, NM 88240 Energy Minera | of New Mexico Is and Natural Resources | | Form C- Revised October 10, | | | | |
|--|---|---|--|--|--|--|--|
| (30) W. Grand Avenue, Artesia, NM 88210 District III | servation Division | | | | | | |
| 1000 Rio Brazos Road, Aztec, NM 87410 | uth St. Francis Dr. | | Submit 2 Copies th approp District Office in accord | | | | |
| | Fe, NM 87505 | Bitoin | with Rule 116 on side of | | | | |
| | | THE REPORT OF THE PARTY OF THE | | | | | |
| Kelease Nouncau | on and Corrective OPERATOR | | l Report 🔲 Final R | | | | |
| Name of Company BOPCO, L.P. | Contact Tony Savoie | | I Report 🗌 Final R | | | | |
| Address 522 W. Mermod, Suite 704 Carlsbad, N.M. 88220 | Telephone No. 432-556- | 8730 | | | | | |
| Facility Name Poker Lake Unit Well #205 at Battery PLU-158 | Facility Type E&P | | | | | | |
| Surface Owner Federal Mineral Owner | er Federal | Lease N | 0 | | | | |
| LOCATI | ON OF RELEASE | | | | | | |
| | rth/South Line Feet from the | East/West Line | County | | | | |
| A 7 248 30E | | | Eddy | | | | |
| | | ······································ | | | | | |
| — |) Longitude W 103.914 | 150 | | | | | |
| Type of Release: Crude Oil | LE OF RELEASE Volume of Release: 30 bl | ols of Volume R | ecovered: 25 bbls | | | | |
| | crude oil. | | | | | | |
| Source of Release: 2 7/8" flow line | Date and Hour of Occurre 8/22/11, Hour unknown | Hour of Discovery 54 a.m. | | | | | |
| Was Immediate Notice Given? | If YES, To Whom? | If YES, To Whom? | | | | | |
| Yes 🗍 No 🗌 Not Requir | | | | | | | |
| By Whom? Tony Savoie | Date and Hour 8/22/11 1 | :00 p.m. | | | | | |
| By Whom? Tony Savoie Was a Watercourse Reached? ☐ Yes ⊠ No If a Watercourse was Impacted, Describe Fully.* Describe Cause of Problem and Remedial Action Taken.* A flow line clamp was installed on the line. | IT TES, VOIUME IMPACIA | ig the watercourse. | ENV | | | | |
| If a Watercourse was Impacted, Describe Fully.* | | | Jr 3 PUL GIA | | | | |
| | | (An | CR 34 AT | | | | |
| | | | ST I ON | | | | |
| | | | 100 | | | | |
| Describe Cause of Problem and Remedial Action Taken.* A flow line elamp was installed on the line. | from the PLU-205 pumping we | eli developed a leak at | Battery, a rep | | | | |
| | | | · | | | | |
| Describe Area Affected and Cleanup Action Taken.*Approximately 30 picked up with a vacuum truck. A remediation plan will be developed | 00 sq. ft. of pasture land on the | north side of the batte | ry pad, all of the free oil wa | | | | |
| | | - | I | | | | |
| I hereby certify that the information given above is true and complete | to the best of my knowledge an | d understand that purs | uant to NMOCD rules and | | | | |
| regulations all operators are required to report and/or file certain releas public health or the environment. The acceptance of a C-141 report by | the NMOCD marked as "Fina | I Report" does not reli | eve the operator of liability | | | | |
| should their operations have failed to adequately investigate and reme | liate contamination that pose a | threat to ground water | , surface water, human hea | | | | |
| or the environment. In addition, NMOCD acceptance of a C-141 repo federal, state, or local laws and/or regulations. | rt does not relieve the operator | of responsibility for co | Simpliance with any other | | | | |
| reuerar, state, or rotan laws and/or regulations. | OIL CO | NSERVATION | DIVISION | | | | |
| | | | | | | | |
| Signature: 1 Olay Arman | Approved by District Super | visor: | | | | | |
| Printed Name: Tony Savoie | · · · · · · · · · · · · · · · · · · · | | | | | | |
| Title: Waste MgmL& Remediation Specialist | Approval Date: | Expiration | Date: | | | | |
| | Conditions of Approval: | | Attached | | | | |
| E-mail Address: TASavoie@BassPet.com | Conditions of Applova. | | | | | | |
| E-mail Address: TASavoie@BassPet.com Date: 9/11/11 Phone:432-556-8730 | | | Attached | | | | |

13.30 9/13/11 BLM

| District II 1301 W. Grand District III 1000 Rio Brazos District IV | L. French Dr., Hobbs, NM 88240 LII V. Grand Avenue, Artesia, NM 88210 LIII Lio Brazos Road, Aztec, NM 87410 State of New Mexico Energy Minerals and Natural Resources Oil Conservation Division NMO | | | | | | | | 3 1 20 ART | | bmit 2 Co District O | Form C-141 ised October 10, 2003 opies to appropriate office in accordance h Rule 116 on back side of form | |
|--|---|-----------------|--------------|--------------------------|--------------------------------|-------------------|-----------------|---------|---------------------|----------|-------------------------|---|-----|
| | | | Rele | ease Notific | eatior | n and Co | orrect | ive A | ctio | n | | | |
| | OPERATOR Initial Report Sinal Report | | | | | | | | | | | | |
| Name of Co | ompany | BOPCO, L.I | 2 | | | Contact T | ony Sav | roie | | | | | |
| Address | <u>522 W. M</u> | ermod, Suite | e 704 Car | lsbad, N.M. 882 | 220 | Telephone | No. 4 | 32-556- | 8730 | | | | |
| Facility Nat | ne: Poker | Lake Unit W | /ell #205 | at Battery PLU- | -158 | Facility Ty | pe Eð | čР | | | | | |
| Surface Ow | ner: Fede | ral | | Mineral C |)wner: | Federal | | | | Leas | e No. | | |
| | | | | LOCA | TIO | N OF REI | LEASI | Ξ | | | | | • |
| Unit Letter A | Section 7 | Township 24S | Range 30E | Feet from the | North/South Line Feet from the | | | om the | E East/West Line Co | | | ounty Ed | ldy |
| | | | | <u>Latitude N</u> NAT | | 400 Lor OF REL | igitude EASE | W103.9 | 01415 | <u>0</u> | | | |

RECEIVED

| Type of Release: Crude Oil | Volume of Release 30 bbls of Crude oil | Volume Recovered 25 bbls |
|---|--|---|
| Source of Release: 2 7/8" flow line | Date and Hour of Occurrence 8/22/11, Hour Unknown | Date and Hour of Discovery 8/22/11 8:54 a.m. |
| Was Immediate Notice Given? | If YES, To Whom? | |
| By Whom? Tony Savoie | Date and Hour: 8/22/11 1:00 p.m. | |
| Was a Watercourse Reached? | If YES, Volume Impacting the Wat | ercourse. |
| If a Watercourse was Impacted, Describe Fully.* | <u> </u> | |

Describe Cause of Problem and Remedial Action Taken: A flow line from the PLU-205 pumping well developed a leak at the PLU-158 Battery, a repair clamp was installed on the line.

Describe Area Affected and Cleanup Action Taken.* Approximately 300 sq. ft. of pasture land on the north side of the battery pad, all of the free oil was picked up with a vacuum truck. A remediation plan will be developed in accordance with the NMOCD and BLM remediation guidelines.

Remediation activities conducted at the Poker Lake Unit Well #205 at the PLU #158 Battery met the objectives set forth during the September 6, 2012, meeting between BOPCO and NMOCD Representatives. Soil samples collected from the floor and sidewalls of the excavation were analyzed by an NMOCD-approved laboratory. On September 7, 2012, an NMOCD-approved polyurethane liner was installed in the floor of the excavation. Between September 7 and September 11, 2012, approximately 240 cy of impacted soil was excavated and transported to an NMOCD-approved disposal facility. Prior to backfilling, the final dimensions of the excavation were approximately 25' in width, 45' in length and 2' in depth.

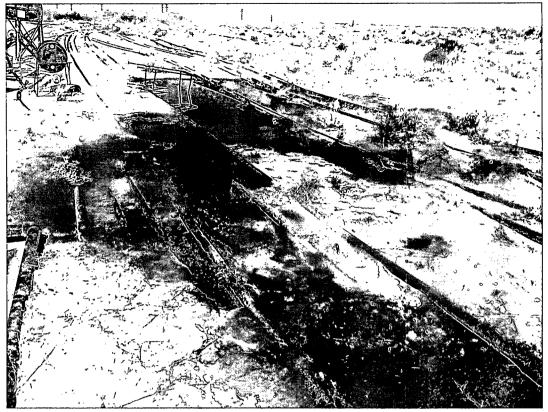
Please reference the attached Basin Environmental Services Technologies Remediation Summary and Risk-Based Site Closure Request for details of remediation activities.

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

| \bigcirc \bigcirc \bigcirc | OIL CONSERVATION DIVISION | | | | | | |
|---|----------------------------------|------------------|--|--|--|--|--|
| Signature: Cry Dunue Printed Name: Tony Savoie | Approved by District Supervisor: | | | | | | |
| Title: Waste Mgmt. & Remediation Specialist | Approval Date: | Expiration Date: | | | | | |
| E-mail Address: TASavoie@BassPet.com | Conditions of Approval: | | | | | | |
| Date: Phone: 432-556-8730 | | | | | | | |

Appendix **B** Photographs

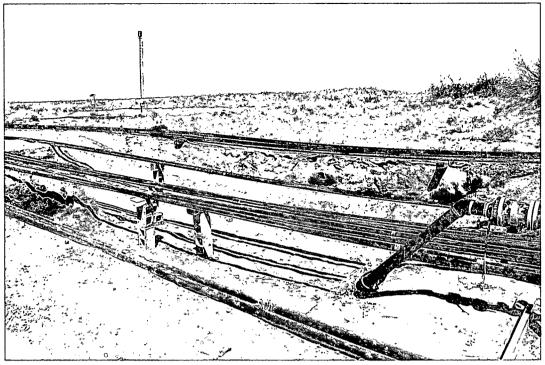
٠



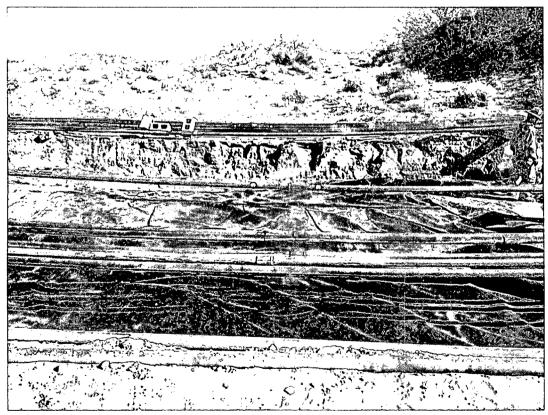
Photograph of the initial release at the Poker Lake Unit Well #205 at PLU #158 Battery.



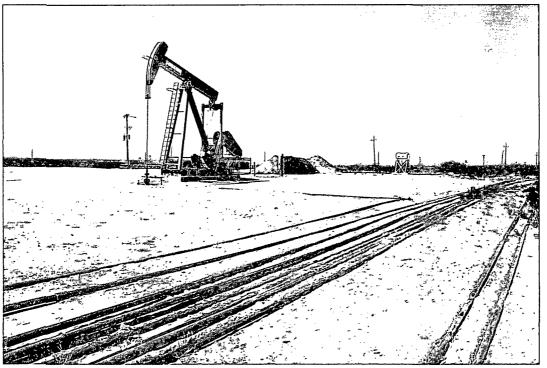
Photograph of the initial release at the Poker Lake Unit Well #205 at PLU #158 Battery.



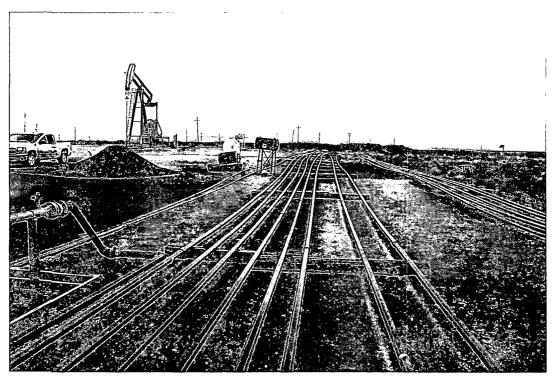
Photograph of the Excavation at the Poker Lake Unit Well #205 at PLU #158 Battery.



Photograph of the Liner installation at the Poker Lake Unit Well #205 at PLU #158 Battery.



Photograph of the Poker Lake Unit Well #205 at PLU #158 Battery Remediation Site after being backfilled.



Photograph of the Poker Lake Unit Well #205 at PLU #158 Battery Remediation Site after being backfilled.

Appendix C

Laboratory Analytical Reports



August 06, 2012

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

RE: PLU WELL #205 AT BATTERY PLU-158

Enclosed are the results of analyses for samples received by the laboratory on 07/30/12 15:25.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-11-3. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceg.texas.gov/field/ga/lab accredited certif.html.

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 (V1, V2, V3) |

Accreditation applies to public drinking water matrices.

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,

Celeg & 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: | 07/30/2012 | Sampling Date: | 07/27/2012 |
|-------------------|----------------------------------|---------------------|---------------|
| Reported: | 08/06/2012 | Sampling Type: | Soil |
| Project Name: | PLU WELL #205 AT BATTERY PLU-158 | Sampling Condition: | Cool & Intact |
| Project Number: | NONE GIVEN | Sample Received By: | Jodi Henson |
| Project Location: | EDDY COUNTY, NM | | |

Sample ID: NORTH S. W. (H201762-01)

| Chloride, SM4500CI-B | mg, | /kg | Analyze | d By: AP | | | | | |
|-------------------------------|--------|-----------------|------------|--------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 1390 | 16.0 | 08/01/2012 | ND | 384 | 96.0 | 400 | 4.08 | |
| TPH 8015M | mg, | /kg | Analyze | d By: MS | | | | | |
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10 | <10.0 | 10.0 | 08/01/2012 | ND | 189 | 94.6 | 200 | 2.42 | |
| DRO >C10-C28 | 62.0 | 10.0 | 08/01/2012 | ND | 192 | 95.9 | 200 | 5.37 | |
| EXT DRO >C28-C35 | 169 | 10.0 | 08/01/2012 | ND | | | | | |
| Surrogate: 1-Chlorooctane | 99.3 | % 65.2-14 | 0 | | | | | | |
| Surrogate: 1-Chlorooctadecane | 106 | % 63.6-15 | 4 | | | | | | |

Sample ID: SOUTH S. W. (H201762-02)

| Chloride, SM4500CI-B | mg, | /kg | Analyze | d By: AP | | | | | |
|-------------------------------|--------|-----------------|-----------------|--------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 128 | 16.0 | 08/01/2012 | ND | 384 | 96.0 | 400 | 4.08 | |
| TPH 8015M | mg/kg | | Analyzed By: MS | | | | | | |
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10 | <10.0 | 10.0 | 08/01/2012 | ND | 189 | 94.6 | 200 | 2.42 | |
| DRO >C10-C28 | 16.7 | 10.0 | 08/01/2012 | ND | 192 | 95.9 | 200 | 5.37 | |
| EXT DRO >C28-C35 | 46.8 | 10.0 | 08/01/2012 | ND | | | | | |
| Surrogate: 1-Chlorooctane | 102 | % 65.2-14 | 0 | | | | | | |
| Surrogate: 1-Chlorooctadecane | 107 | % 63.6-15 | 4 | | | | | | |

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whitstoever shall be deemed waved unless made in writing and received by Cardinal wthin thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successions arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claims based upon any of the above stated resons or otherwise. Results relate only to the samples item/fet above. This reproduced except in full with writen approval of Cardinal Laboratories.

Celey D. Kune

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: | 07/30/2012 | Sampling Date: | 07/27/2012 |
|-------------------|----------------------------------|---------------------|---------------|
| Reported: | 08/06/2012 | Sampling Type: | Soil |
| Project Name: | PLU WELL #205 AT BATTERY PLU-158 | Sampling Condition: | Cool & Intact |
| Project Number: | NONE GIVEN | Sample Received By: | Jodi Henson |
| Project Location: | EDDY COUNTY, NM | | |

Sample ID: EAST S. W. (H201762-03)

| Chloride, SM4500Cl-B | mg/ | /kg | Апајуze | d By: AP | | | | | |
|-------------------------------|--------|-----------------|-----------------|--------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 2560 | 16.0 | 08/01/2012 | ND | 384 | 96.0 | 400 | 4.08 | |
| TPH 8015M | mg/kg | | Analyzed By: MS | | | | | | |
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10 | <10.0 | 10.0 | 08/01/2012 | ND | 189 | 94.6 | 200 | 2.42 | |
| DRO >C10-C28 | 248 | 10.0 | 08/01/2012 | ND | 192 | 95.9 | 200 | 5.37 | |
| EXT DRO >C28-C35 | 75.5 | 10.0 | 08/01/2012 | ND | | | | | |
| Surrogate: 1-Chlorooctane | 94.3 | % 65.2-14 | 0 | | | | | | |
| Surrogate: 1-Chlorooctadecane | 96.2 | % 63.6-15 | 4 | | | | | | |

Sample ID: WEST S. W. (H201762-04)

| Chloride, SM4500CI-B | mg/ | kg | Analyze | d By: AP | | | | | |
|-------------------------------|--------|-----------------|------------|--------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 4080 | 16.0 | 08/01/2012 | ND | 384 | 96.0 | 400 | 4.08 | |
| TPH 8015M | mg/ | 'kg | Analyze | d By: MS | | | | | S-06 |
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10 | 2980 | 50.0 | 08/01/2012 | ND | 189 | 94.6 | 200 | 2.42 | |
| DRO >C10-C28 | 15900 | 50.0 | 08/01/2012 | ND | 192 | 95.9 | 200 | 5.37 | |
| EXT DRO >C28-C35 | 2500 | 50.0 | 08/01/2012 | ND | | | | | |
| Surrogate: 1-Chlorooctane | 145 | % 65.2-14 | 0 | | | | | | |
| Surrogate: 1-Chlorooctadecane | 76.2 | % 63.6-15 | 4 | | | | | | |

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whitsoever shall be deemed waived unless made in writing and received by Cardinal within (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incidental by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claims based upon any of the above stated reasons or otherwse. Results relate only to the samples identified above. This reprotivued exception in full with mitten approval of Cardinal Laborationes.

Celey Di 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: | 07/30/2012 | Sampling Date: | 07/27/2012 |
|-------------------|----------------------------------|---------------------|---------------|
| Reported: | 08/06/2012 | Sampling Type: | Soil |
| Project Name: | PLU WELL #205 AT BATTERY PLU-158 | Sampling Condition: | Cool & Intact |
| Project Number: | NONE GIVEN | Sample Received By: | Jodi Henson |
| Project Location: | EDDY COUNTY, NM | | |

Sample ID: FLOOR @ 4' (H201762-05)

| BTEX 8021B | mg, | /kg | Analyze | d By: AP | | | | | |
|----------------|--------|-----------------|------------|--------------|------|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Benzene* | <0.050 | 0.050 | 08/06/2012 | ND | 1.71 | 85.7 | 2.00 | 7.69 | |
| Toluene* | <0.050 | 0.050 | 08/06/2012 | ND | 1.82 | 91.0 | 2.00 | 6.67 | |
| Ethylbenzene* | <0.050 | 0.050 | 08/06/2012 | ND | 1.85 | 92.6 | 2.00 | 6.57 | |
| Total Xylenes* | <0.150 | 0.150 | 08/06/2012 | ND | 5.58 | 93.0 | 6.00 | 5.76 | |

Surrogate: 4-Bromofluorobenzene (PIC 100 % 89.4-126

| Chloride, SM4500Cl-B | mg, | /kg | Analyze | d By: AP | | | | | |
|-------------------------------|--------|-----------------|------------|--------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 2720 | 16.0 | 08/01/2012 | ND | 384 | 96.0 | 400 | 4.08 | |
| TPH 8015M | mg, | /kg | Analyze | d By: MS | | | | | |
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10 | <10.0 | 10.0 | 08/01/2012 | ND | 189 | 94.6 | 200 | 2.42 | |
| DRO >C10-C28 | 24.9 | 10.0 | 08/01/2012 | ND | 192 | 95.9 | 200 | 5.37 | |
| EXT DRO >C28-C35 | 59.4 | 10.0 | 08/01/2012 | ND | | | | | |
| Surrogate: 1-Chlorooctane | 102 | % 65.2-14 | 10 | | | | | | |
| Surrogate: 1-Chlorooctadecane | 106 | % 63.6-15 | 4 | | | | | | |

Cardinal Laboratories

*=Accredited Analyte

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

Celey Di Keine

Celey D. Keene, Lab Director/Quality Manager



Notes and Definitions

| S-06 | The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's. |
|------|--|
| 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 SM4500CI-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 |
| | |

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Kune

Celey D. Keene, Lab Director/Quality Manager

| CA | RDINAL L | ABORATO | RIE | S | | | | | | Eas obs, | t Ma | rla | nd | | | TO | DY F | REC | ORI | D AI | ND . | P | hor | ne: ! | 505- | QUE 393-2 393-2 | 2326 | | | | Page 6 of 6 |
|----------------------|--------------------|--|-----------------|-------------------------------------|---|---------------|----------------|------------------------|--------|---------------|-------------|--------------|-----------------|------|------------------|--------------------------------|-----------------------------|------------------------|-----------|----------------|------------------------------|---------------------------------------|--|--------------------------|-----------------------|-------------------------------------|--------------|--|--------------|-----------------------------|---------------|
| | Project Manager: | Joel Lowry | | | PAGE 01 OF | 01 | | | | | | | | | | - | Pi | ojec | t Na | me: | PL | <u>u v</u> | lell | #20 | 15 a | Bat | tery | PL | U-15 | <u>8</u> | Pa |
| | Company Name | Basin Environmental Se | rvice T | echnol | ogies, LLC | | | | | | | | | | | - | | Ρ | roje | :t #: | | | | | | | | | | | |
| | Company Address: | P. O. Box 301 | | ······· | | | | | | | | | | | | - | | Proj | ject l | .oc: | Edd | ly C | oun | ty, N | M | | | | | | |
| | City/State/Zip: | Lovington, NM 88260 | | | | | | | | | | | | | | - | | | P | 0 #: | DIR | ECT | BIL | LB | OPC | :0 L.F | <u>.</u> | | | | |
| | Telephone No: | (505) 441-2124 | | | | Fax No: | | (50 | 5) 39 | 96-14 | 29 | | | | | _ 1 | Repo | rt Fo | orma | t: | X | Star | ndar | đ | | [] ТР | ₹RP | | 0, | NPDE | s |
| | Sampler Signature: | Savelocer | | | | e-mail: | | <u>pn</u> | n@ | bas | ine | nv | .cor | n | | | | | | | | | | | | وينفل براعن | | | anne a thank | | |
| (lab use | | | | | | | | | | | | | | | | | | E | | •••••••• | | CLP: | An | ialyzi | e Fo | r. | T | | | 72 hrs | |
| ORDER | R#: H201 | 762 | | | | | | | Pre | eserva | ation | 8 į | Of Co | inta | ners | N | Aatrix | | | Γ | TO | TAL: | | -+ | -+ | | | 0 | | 48, 72 | |
| LAB # (lab use only) | FIE | LD CODE | Beginning Depth | Ending Depth | Date Sampled | Time Sampled | cletd Scroened | Fotal #. of Containers | lce | HNO3 | HCI H SO | Poor | NBOH Na-S-O. | None | Other (Specify) | DW - Drinking Water SL - Sludg | CW = Croundwater 5= SolVSol | TPH: 418.1 8015M 8015B | TX 10 | za | Anions (CI, SO4, Alkalinity) | SAR / ESP / CEC | Metals: As Ag Ba Cd Cr Pb Hg Se | Volatiles | Semivolatiles | BTEX 80218/5030 or BTEX 8260 RCI | N.O.R.M. | Chlorides EA P 300.0 45の <i>(</i>) | | RUSH TAT (Pre-Schedule) 24, | Standard TAT |
| 1 | ·No | rth S.W. | | | 27-Jul-12 | 1200 | Ē | + | x | | 1 | T | T | T | | 1- | SOIL | X | - | | | | | | | T | T | x | | T | X |
| 2 | Sou | uth S.W. | | | 27-Jul-12 | 1210 | | 1 | X | | | | | | | 5 | SOIL | X | <u> </u> | | | | | | \downarrow | | \perp | X | | | × |
| 3 | Ea | st S.W. | | ļ | 27-Jul-12 | 1220 | ļ | 1 | X | | | \square | | | | 5 | SOIL | <u> </u> | 4 | | | | | | \downarrow | | ╞ | X | └─┴ | 4 | <u> </u> |
| 4 | We | est S.W. | _ | ļ | 27-Jul-12 | 1230 | ļ | 1 | x | -+ | | \downarrow | | 4 | _ | Ls | SOIL | <u> </u> | 4- | | | | | | - | | \downarrow | X | \vdash | | <u> </u> |
| .5 | Fic | oor @ 4' | | | 27-Jul-12 | 1240 | ┞ | 1 | × | \rightarrow | + | ╇ | + | + | + | 15 | SOIL | +× | <u>' </u> | | | | | | - | X - | ╇ | X | ┝╌┼ | ╇ | × |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | $\frac{1}{1}$ |
| | | | | | | | <u> </u> | \square | ┠─┤ | \dashv | | - | _ | +- | + | ┣ | | 4- | | – | | | | | \rightarrow | | +- | + | ┝─┼ | + | ╇ |
| | | pm@basinenv.com | | | under 5,000 fo | r soil sample | E Flo | oor | @ ' | 4', ri | ın it | for | BTE | EX | | I | | 1 | | Sal | nple Cs f | Cor | ntair of H | iers lead | ents Intag spag | :t? | ـــــ | لــــــــــــــــــــــــــــــــــــ | | NNN | |
| | toury | Date 7/36/12 Date 7.384 Date | 9:0 73: | ime Io A nu Ime Z D Ime | Received by: Received by: Received by: Received by Can | Her Her | N/S | 2 Ø | , M | | | | | | 7-30 | ate D | 10 | Tin 3 | î;a | Cu Cu Sa | stod nple by (| y sei y sei Hai Samp Cour | als c als c nd D pler/f ier? | on co Delive Clien | intai | o. ? Di | | Fet | うわい | N N N Lone S | Star |
| L | | 6 | | | <u> </u> | • | | | | | | | | | | | | | | | | | | | | 12 | | 2 | 9 | | |



August 31, 2012

TONY SAVOIE Bass Enterprises 522 W. Mermod #709 Carlsbad, NM 88220

RE: PLU - 205 FLOWLINE

Enclosed are the results of analyses for samples received by the laboratory on 08/29/12 15:33.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-11-3. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab accredited certif.html.

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 (V1, V2, V3) |

Accreditation applies to public drinking water matrices.

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,

Celeg D. Keine

Celey D. Keene Lab Director/Quality Manager



Bass Enterprises TONY SAVOIE 522 W. Mermod #709 Carlsbad NM, 88220 Fax To: (505) 887-7473

| Received: | 08/29/2012 | Sampling Date: | 08/29/2012 |
|-------------------|----------------------------|---------------------|---------------|
| Reported: | 08/31/2012 | Sampling Type: | Soil |
| Project Name: | PLU - 205 FLOWLINE | Sampling Condition: | Cool & Intact |
| Project Number: | NONE GIVEN | Sample Received By: | Jodi Henson |
| Project Location: | NASH DRAW, SE CARLSBAD, NM | | |

Sample ID: BOTTOM HOLE (H202087-01)

Chloride, SM4500Cl-B mg/kg Analyzed By: HM Analyte Result Reporting Limit Analyzed Method Blank BS % Recovery True Value QC RPD Qualifier Chloride 4160 16.0 08/31/2012 ND 400 100 400 3.92 TPH 8015M mg/kg Analyzed By: MS Analyte Result Reporting Limit Analyzed Method Blank True Value QC RPD Qualifier BS % Recovery GRO C6-C10 <10.0 10.0 08/30/2012 ND 199 99.6 200 2.83 DRO >C10-C28 <10.0 10.0 08/30/2012 ND 198 98.9 200 3.32 EXT DRO >C28-C35 15.9 10.0 08/30/2012 ND 86.7 % 65.2-140 Surrogate: 1-Chlorooctane 99.5 % 63.6-154 Surrogate: 1-Chlorooctadecane

Sample ID: NORTH WALL (H202087-02)

| Chloride, SM4500Cl-B | mg, | /kg | Analyze | d By: HM | | | | | |
|-------------------------------|--------|-----------------|------------|--------------|-----|------------|---------------|-------------------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 2240 | 16.0 | 08/31/2012 | ND | 400 | 100 | 400 | 3. 9 2 | |
| TPH 8015M | mg, | /kg | Analyze | d By: MS | | | | | |
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10 | <10.0 | 10.0 | 08/30/2012 | ND | 199 | 99.6 | 200 | 2.83 | |
| DRO >C10-C28 | <10.0 | 10.0 | 08/30/2012 | ND | 198 | 98.9 | 200 | 3.32 | |
| EXT DRO >C28-C35 | <10.0 | 10.0 | 08/30/2012 | ND | | | | | |
| Surrogate: 1-Chlorooctane | 81.1 | % 65.2-14 | 0 | | | | | | |
| Surrogate: 1-Chlorooctadecane | 98. I | % 63.6-15 | 4 | | | | | | |

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and clent's exclusive remedy for any daim ansing, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by client, its subsidiaries, affiliates or completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This reproduced except in full with writen approval of Cardinal Laboratories.

Celey Di Keine

Celey D. Keene, Lab Director/Quality Manager



Bass Enterprises TONY SAVOIE 522 W. Mermod #709 Carlsbad NM, 88220 Fax To: (505) 887-7473

| Received: | 08/29/2012 | Sampling Date: | 08/29/2012 |
|-------------------|----------------------------|---------------------|---------------|
| Reported: | 08/31/2012 | Sampling Type: | Soil |
| Project Name: | PLU - 205 FLOWLINE | Sampling Condition: | Cool & Intact |
| Project Number: | NONE GIVEN | Sample Received By: | Jodi Henson |
| Project Location: | NASH DRAW, SE CARLSBAD, NM | | |

Sample ID: SOUTH WALL (H202087-03)

Chloride, SM4500Cl-B mg/kg Analyzed By: HM Analyte Result Reporting Limit Analyzed Method Blank BS % Recovery True Value QC RPD Qualifier Chloride 1390 16.0 08/31/2012 ND 400 100 400 3.92 TPH 8015M Analyzed By: MS mg/kg Analyte Result Reporting Limit Analyzed Method Blank BS % Recovery True Value QC RPD Qualifier GRO C6-C10 <10.0 08/30/2012 ND 200 10.0 199 99.6 2.83 DRO >C10-C28 <10.0 10.0 08/30/2012 ND 198 98.9 200 3.32 EXT DRO >C28-C35 <10.0 08/30/2012 ND 10.0 Surrogate: 1-Chlorooctane 74.4 % 65.2-140 Surrogate: 1-Chlorooctadecane 90.0 % 63.6-154

Sample ID: EAST WALL (H202087-04)

| Chloride, SM4500Cl-B | mg, | /kg | Analyze | d By: HM | | | | | |
|-------------------------------|--------|-----------------|------------|--------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 2160 | 16.0 | 08/31/2012 | ND | 400 | 100 | 400 | 3.92 | |
| трн 8015м | mg, | /kg | Analyze | d By: MS | | | | | |
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10 | <10.0 | 10.0 | 08/30/2012 | ND | 199 | 99.6 | 200 | 2.83 | |
| DRO >C10-C28 | <10.0 | 10.0 | 08/30/2012 | ND | 198 | 98.9 | 200 | 3.32 | |
| EXT DRO >C28-C35 | <10.0 | 10.0 | 08/30/2012 | ND | | | | | |
| Surrogate: 1-Chlorooctane | 74.4 | % 65.2-14 | 0 | | | | | | |
| Surrogate: 1-Chlorooctadecane | 90.1 | % 63.6-15 | 4 | | | | | | |

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Clardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by clientifie above. This reproduced excepts arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claims based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This reproduced exception fulfill abortations.

Celey D. Kune

Celey D. Keene, Lab Director/Quality Manager



Bass Enterprises TONY SAVOIE 522 W. Mermod #709 Carlsbad NM, 88220 Fax To: (505) 887-7473

| Received: | 08/29/2012 | Sampling Date: | 08/29/2012 |
|-------------------|----------------------------|---------------------|---------------|
| Reported: | 08/31/2012 | Sampling Type: | Soil |
| Project Name: | PLU - 205 FLOWLINE | Sampling Condition: | Cool & Intact |
| Project Number: | NONE GIVEN | Sample Received By: | Jodi Henson |
| Project Location: | NASH DRAW, SE CARLSBAD, NM | | |

Sample ID: WEST WALL (H202087-05)

| Chloride, SM4500CI-B | mg, | mg/kg | | Analyzed By: HM | | | | | |
|-------------------------------|--------|-----------------|-----------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 48.0 | 16.0 | 08/31/2012 | ND | 400 | 100 | 400 | 3.92 | |
| TPH 8015M | mg, | /kg | Analyzed By: MS | | | | | | |
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10 | <10.0 | 10.0 | 08/30/2012 | ND | 199 | 99.6 | 200 | 2.83 | |
| DRO >C10-C28 | <10.0 | 10.0 | 08/30/2012 | ND | 198 | 98.9 | 200 | 3.32 | |
| EXT DRO >C28-C35 | <10.0 | 10.0 | 08/30/2012 | ND | | | | | |
| Surrogate: 1-Chlorooctane | 76.3 | % 65.2-14 | 0 | | | | | | |
| Surrogate: 1-Chlorooctadecane | 91.7 | % 63.6-15 | 4 | | | | | | |

Sample ID: BOTTOM HOLE 24" (H202087-06)

| Chloride, SM4500CI-B | mg/kg | | Analyzed By: HM | | | | | | |
|-------------------------------|--------|-----------------|-----------------|--------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 3840 | 16.0 | 08/31/2012 | ND | 400 | 100 | 400 | 3.92 | |
| TPH 8015M | | /kg | Analyzed By: MS | | | | | | |
| Analyte . | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10 | <10.0 | 10.0 | 08/30/2012 | ND | 199 | 99.6 | 200 | 2.83 | |
| DRO >C10-C28 | <10.0 | 10.0 | 08/30/2012 | ND | 198 | 98.9 | 200 | 3.32 | |
| EXT DRO >C28-C35 | <10.0 | 10.0 | 08/30/2012 | ND | | | | | |
| Surrogate: 1-Chlorooctane | 78.3 | % 65.2-14 | 0 | | | | | | |
| Surrogate: 1-Chlorooctadecane | 92.0 | % 63.6-15 | 4 | | | | | | |

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keine

Celey D. Keene, Lab Director/Quality Manager



Notes and Definitions

| 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 |

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whistoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidential or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claims based unover stater desources or otherwise. Results relate only to the sample identified above. This reproduced exception full indivitien approved Cardinal Laboratories.

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

| Company Name: BUPCO, LP | | | BILL TO ANALYSIS REQUEST | | | | | | |
|------------------------------|--|---|--|--|----------------|--|--|--|--|
| Project Manage | r: TUNY Savoie | P.O. #: | | | | | | | |
| | 2 w. mermod Suite - | Company: | | | | | | | |
| City: CARIS | beid State: MAN | Zip: 88220 | Attn: 5 | Attn: Scale Company. Address: Company City: | | | | | |
| Phone #: | 1-556-8730 Fax #: - | •••••• | Address: | *·) | | | | | |
| Project #: - | Project Owne | r: BLPCC | City: | | | | | | |
| Project Name: | PLU-205 Flow Line | | State: | State: Zip: | | | | | |
| Project Location | n: SE. CARISDING NASH D | DRA W. | Phone #: | | | | | | |
| Sampler Name: | CAY Cox | | Fax #: | | | | | | |
| FOR LAB USE ONLY | 7 | MATRIX | PRESERV. | SAMPLING | Ŭ Ŭ | | | | |
| Lab I.D. H202087 | Sample I.D. | (G)RAB OR (C)OW # CONTAINERS GROUNDWATER WASTEWATER SOIL OIL | OTHER : ACID/BASE: ICE / COOL OTHER : | DATE TIME | TPH Chlori | | | | |
| 1 | Bottom hote | G V | | 8-29-12 | <u> </u> | | | | |
| 2 | NORTH WALL | 0 1 | and a state of the | <u>8-29-12</u> | | | | | |
| | South LOALL | | and a second sec | 8-29-12 | V V | | | | |
| <u> </u> | EAST WALL | | | 8-29-12 | | | | | |
| 5 | Bottom hole 24" | 667 | | 8-25-12 8-25-12 | N | | | | |
| Q | <u>potrory 1012</u> | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| analyses. All claims include | nd Damages, Cardinal's liability and client's exclusive remedy for ing those for negligence and any other cause whatsoever shall be | deemed waived unless made in writing a | nd received by Cardinal w | ithin 30 days after completion of It | the applicable | | | | |
| | ardinal be liable for incidental or consequental domages, includin no out of or related to the performance of services become by (| | | | | | | | |

| Relinquished By: | | Received By: | | Phone Resul | t: 🖸 Yes | 🗆 No | Add'l Phone #: | | |
|-------------------------------|--------------------|------------------|---------------------|-------------|----------|------|----------------|---|----|
| ol | 60110 | | Int A. | Fax Result: | 🗆 Yes | 🗆 No | Add'l Fax #: | | |
| Clay Car | Ting: 17 | MAI | HOM SIDIA | REMARKS: | | | | | |
| Dollar CON | 2.21 | Received By: | approach a | e_V | | | | | |
| Relinquished By: | Date: | Received By: | | | | | | | |
| | Time: | 1 | | | | | | | |
| | | 1 | | | | | | | |
| Delivered By: (Circle One) | | | Condition CHECKED B | Y: | | | | | |
| Sampler - UPS - Bus - Other: | | E Cool | Tologan / allow | | | | | | |
| Sampler - 0PS - Bus - Other: | | JELINO | | | | | | | |
| † Cardinal cannot accept verb | al changes Diseas | fax written chan | Tes to 505-393-7476 | | | | | | |
| Caromai cannot accept verb | ai changes, riease | ax written chang | #77 | | | | | | Pa |
| | | | T 60 | | | | | • | |