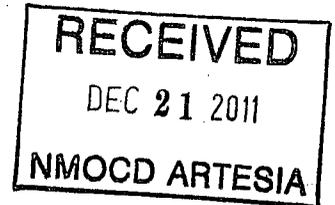


# *Basin Environmental Service Technologies, LLC*

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



## **REMEDIATION SUMMARY AND SITE CLOSURE REQUEST**

**BOPCO, LP  
POKER LAKE UNIT #261  
Eddy County, New Mexico  
Unit Letter "J" (NWSE), Section 21, Township 24 South, Range 30 East  
Latitude 32.201420° North, Longitude 103.883103° West  
NMOCD Reference # 2RP-399**

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**

**April 2011**



---

**Ben J. Arguijo  
Project Manager**

## TABLE OF CONTENTS

1.0 INTRODUCTION.....	1
2.0 NMOCD SITE CLASSIFICATION.....	1
3.0 SUMMARY OF SOIL REMEDIATION ACTIVITIES.....	2
4.0 QA/QC PROCEDURES.....	3
4.1 Soil Sampling.....	3
4.2 Decontamination of Equipment.....	3
4.3 Laboratory Protocol.....	3
5.0 SITE CLOSURE REQUEST.....	3
6.0 LIMITATIONS.....	3
7.0 DISTRIBUTION.....	4

### FIGURES

Figure 1 – Site Location Map

Figure 2 – Site & Sample Location Map

### TABLES

Table 1 – Concentrations of Benzene, BTEX, TPH & Chlorides in Soil

### APPENDICES

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

Appendix B – Photographs

Appendix C – Laboratory Analytical Reports

## **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 #261 (PLU #261). The legal description of the release site is Unit Letter "J" (NWSE), Section 21, Township 24 South, Range 30 East, in Eddy County, New Mexico. The geographic coordinates of the release site are 32.201420° North latitude and 103.883103° West longitude. The property affected by the release is owned by The United States Department of the Interior, Bureau of Land Management (BLM). A "Site Location Map" is provided as Figure 1.

On March 9, 2010, BOPCO discovered a release had occurred at the PLU #261 Tank Battery. A quarter-inch (1/4") fitting on a water transfer pump failed, 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 10, 2010. The "Release Notification and Corrective Action" (Form C-141) indicated approximately three hundred and ten (310) barrels of produced water and approximately ten (10) barrels of crude oil were released, and approximately three hundred (300) barrels were recovered. The release occurred inside the tank battery, which has Falcon BBL poly-lined containment, and the majority of the release was confined inside the containment area. A heavy mist impacted the areas to the east and northeast of the facility. The heavily misted area was back-dragged, and a Micro-Blaze® solution was applied to the affected area. The "Release Notification and Corrective Action" is provided as Appendix A. General photographs of the release site are provided as Appendix B.

## **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 21, Township 24 South, Range 30 East. A depth to groundwater reference map utilized by the NMOCD indicates groundwater should be encountered at approximately three hundred (300) to three hundred and twenty-five (325) feet 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 PLU #261 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.

## **SUMMARY OF SOIL REMEDIATION ACTIVITIES**

On July 20, 2010, Basin collected seventeen (17) soil samples (Background, Sample 1 @ 6", Sample 2 @ 6", Sample 2 @ 2', Sample 2 @ 4', Sample 2 @ 6', Sample 2 @ 7', Sample 2 @ 8', Sample 3 @ 6", Sample 4 @ 6", Sample 5 @ 6", Sample 6 @ 6", Sample 6 @ 2', Sample 6 @ 4', Sample 7 @ 6", Sample 8 @ 6", and Sample 9 @ 6") to delineate the vertical and horizontal impact at the site. The soil samples were submitted to Cardinal Laboratories in Hobbs, New Mexico, for analysis of chloride concentrations using EPA Method 4500 Cl-B. Selected soil samples (Sample 1 @ 6", Sample 2 @ 6", Sample 5 @ 6", Sample 6 @ 6", and Sample 6 @ 2') were also analyzed for total petroleum hydrocarbon (TPH) concentrations using EPA SW-846 8015M. Table 1 summarizes the "Concentrations of Benzene, BTEX, TPH & Chlorides in Soil". A "Site & Sample Location Map" is provided as Figure 2. Laboratory analytical reports are provided as Appendix C.

Laboratory analytical results indicated chloride concentrations ranged from less than the appropriate laboratory method detection limit (MDL) for soil samples Background, Sample 3 @ 6", Sample 5 @ 6", Sample 7 @ 6", and Sample 8 @ 6" to 9,000 mg/Kg for soil sample Sample 1 @ 6". TPH concentrations ranged from less than the appropriate laboratory MDL for soil samples Sample 5 @ 6", Sample 6 @ 6", and Sample 6 @ 2' to 738 mg/Kg for soil sample Sample 2 @ 6". TPH concentrations were less than the NMOCD regulatory standard for each of the submitted soil samples.

On March 11, 2011, excavation of impacted soil commenced at the site. From March 11 through March 14, 2011, approximately one hundred and fifty-four (154) cubic yards (cy) of impacted soil was excavated, blended with non-impacted soil, and stockpiled on-site, pending final disposition.

On March 14, 2011, six (6) soil samples (North Wall, South Wall, East Wall, West Wall, Floor, and Stock Pile) were collected from the floor and sidewalls of the excavation and submitted to Cardinal Laboratories for analysis of TPH and chloride concentrations. Selected soil samples (East Wall and Stock Pile) were also analyzed for concentrations of benzene, toluene, ethylbenzene, and xylenes (BTEX) using EPA Method SW-846 8021b.

Laboratory analytical results indicated benzene and BTEX concentrations were less than the appropriate laboratory MDL for all soil samples analyzed. TPH concentrations ranged from less than the laboratory MDL for soil samples North Wall, South Wall, East Wall, West Wall, and Floor to 11.2 mg/Kg for soil sample Stock Pile. Chloride concentrations ranged from less than the laboratory MDL for soil samples North Wall, South Wall, and Floor to 112 mg/Kg for soil sample Stock Pile.

Based on laboratory analytical results, on March 15 and 16, 2011, the excavation was backfilled in eighteen (18)-inch lifts, compacted, and contoured to fit the surrounding topography. Prior to backfilling, final dimensions of the excavation were approximately sixty-five (65) feet in length, approximately thirty-two (32) feet in width, and approximately two (2) feet in depth.

## **4.0 QA/QC PROCEDURES**

### **4.1 Soil Sampling**

Soil samples were delivered to Cardinal Laboratories, Inc., of 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 modified EPA Method SW-846 8015M
- Chloride concentrations in accordance with EPA Method SM 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**

Soil samples collected from the floors and sidewalls of the PLU #261 excavation were analyzed by an NMOCD-approved laboratory, and concentrations of Benzene, BTEX, TPH, and chloride were below the remediation action levels established for the site. Based on these analytical results, Basin recommends BOPCO provide the NMOCD Artesia District Office and the BLM a copy of this *Remediation Summary and Site Closure Request* and request the NMOCD grant site closure to the PLU #261 release site.

## **6.0 LIMITATIONS**

Basin Environmental Service Technologies, LLC, has prepared this *Remediation Summary and 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.

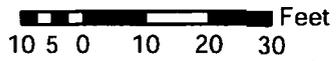
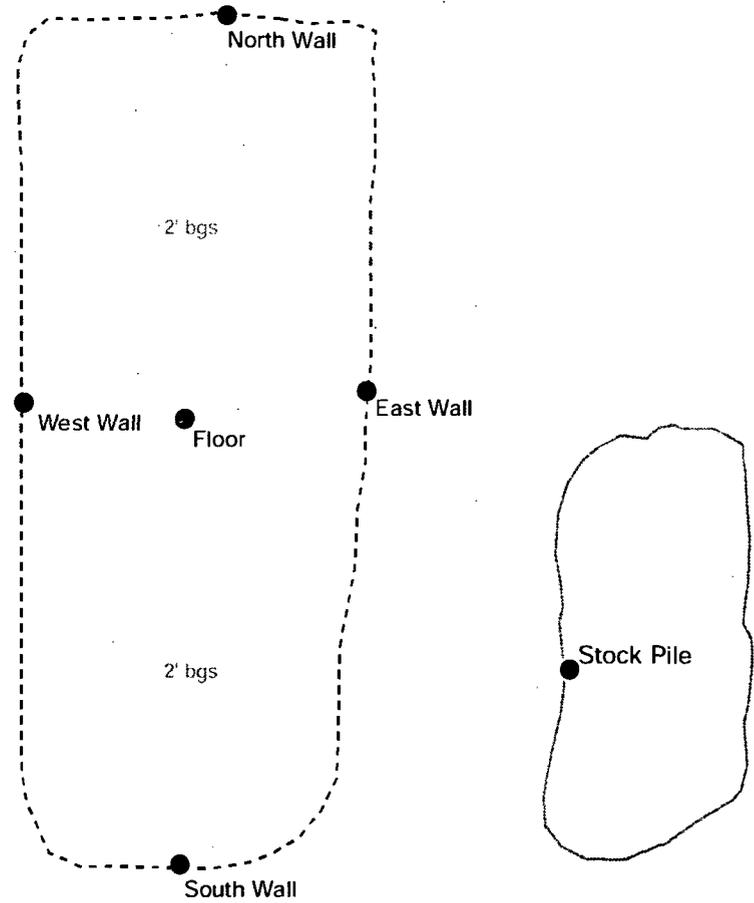
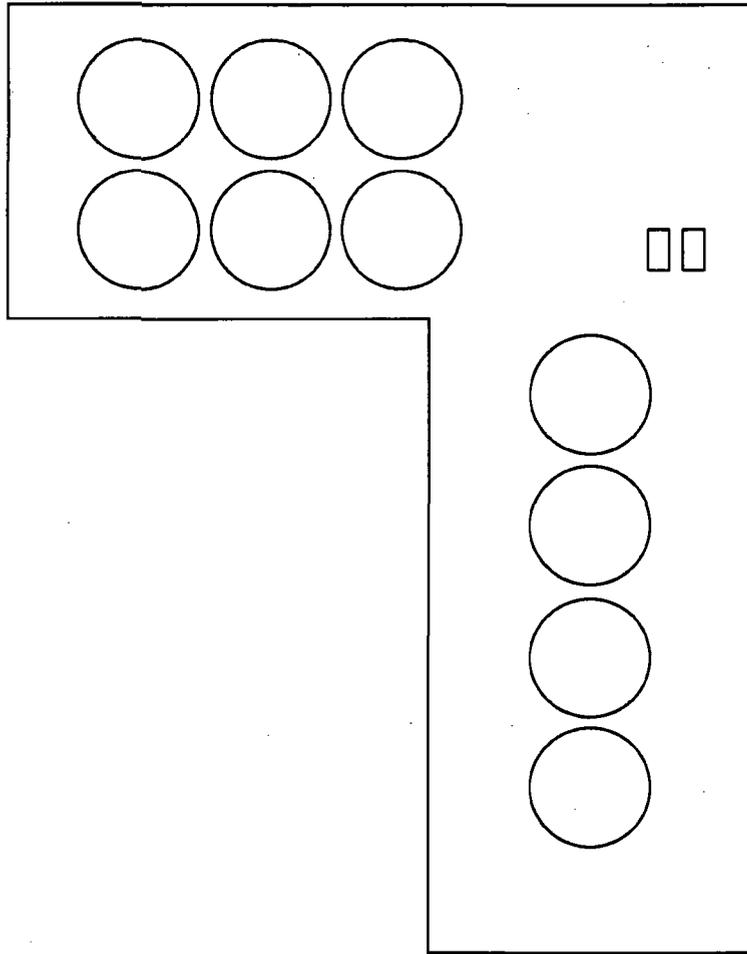
This report has been prepared for the benefit of BOPCO, LP. The information contained in this report, including all exhibits and attachments, may not be used by any other party without the express consent of Basin Environmental Service Technologies, LLC, and/or BOPCO, LP.

**DISTRIBUTION:**

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

# Figures





Legend:

- - - - - Excavation Extent
- Storage Tank
- Caliche Pad
- Sample Location
- Stockpile

Figure 2  
Site & Sample Location Map  
BOPCO, LP  
Poker Lake Unit #261  
Eddy County, New Mexico  
2RP-399

Basin Environmental Service Technologies, LLC

Drawn By: BJA

Checked By: BRB

April 5, 2011

# Tables

TABLE 1

## CONCENTRATIONS OF BENZENE, BTEX, TPH &amp; CHLORIDES IN SOIL

BOPCO, LP  
 POKER LAKE UNIT #261  
 EDDY COUNTY, NEW MEXICO  
 NMOCD REFERENCE #: 2RP-399

SAMPLE LOCATION	SAMPLE DEPTH (BGS)	SAMPLE DATE	SOIL STATUS	METHOD: EPA SW-846 8021B					METHOD: SW-846 8015M			TOTAL TPH C <sub>6</sub> -C <sub>35</sub> (mg/Kg)	SM 4500 Cl-B CHLORIDE (mg/Kg)	
				BENZENE (mg/Kg)	TOLUENE (mg/Kg)	ETHYL-BENZENE (mg/Kg)	TOTAL XYLENES (mg/Kg)	TOTAL BTEX (mg/Kg)	GRO C <sub>6</sub> -C <sub>12</sub> (mg/Kg)	DRO C <sub>12</sub> -C <sub>28</sub> (mg/Kg)	ORO C <sub>28</sub> -C <sub>35</sub> (mg/Kg)			
Background	Surface	7/20/2010	In-Situ	-	-	-	-	-	-	-	-	-	-	<16.0
Sample 1 @ 6"	6"	7/20/2010	In-Situ	-	-	-	-	-	<10.0	32.5	<10.0	32.5	9,000	
Sample 2 @ 6"	6"	7/20/2010	In-Situ	-	-	-	-	-	<10.0	738	<10.0	738	1,600	
Sample 2 @ 2"	2"	7/20/2010	In-Situ	-	-	-	-	-	-	-	-	-	992	
Sample 2 @ 4"	4"	7/20/2010	In-Situ	-	-	-	-	-	-	-	-	-	64.0	
Sample 2 @ 6"	6"	7/20/2010	In-Situ	-	-	-	-	-	-	-	-	-	224	
Sample 2 @ 7"	7"	7/20/2010	In-Situ	-	-	-	-	-	-	-	-	-	384	
Sample 2 @ 8"	8"	7/20/2010	In-Situ	-	-	-	-	-	-	-	-	-	272	
Sample 3 @ 6"	6"	7/20/2010	In-Situ	-	-	-	-	-	-	-	-	-	<16.0	
Sample 4 @ 6"	6"	7/20/2010	In-Situ	-	-	-	-	-	-	-	-	-	64.0	
Sample 5 @ 6"	6"	7/20/2010	In-Situ	-	-	-	-	-	<10.0	<10.0	<10.0	<10.0	<16.0	
Sample 6 @ 6"	6"	7/20/2010	In-Situ	-	-	-	-	-	<10.0	<10.0	<10.0	<10.0	224	
Sample 6 @ 2"	2"	7/20/2010	In-Situ	-	-	-	-	-	<10.0	<10.0	<10.0	<10.0	1,880	
Sample 6 @ 4"	4"	7/20/2010	In-Situ	-	-	-	-	-	-	-	-	-	2,960	
Sample 7 @ 6"	6"	7/20/2010	In-Situ	-	-	-	-	-	-	-	-	-	<16.0	
Sample 8 @ 6"	6"	7/20/2010	In-Situ	-	-	-	-	-	-	-	-	-	<16.0	
Sample 9 @ 6"	6"	7/20/2010	In-Situ	-	-	-	-	-	-	-	-	-	80.0	
North Wall	2'	3/14/2011	In-situ	-	-	-	-	-	<10.0	<10.0	<10.0	<10.0	<16.0	
South Wall	2'	3/14/2011	In-situ	-	-	-	-	-	<10.0	<10.0	<10.0	<10.0	<16.0	
East Wall	2'	3/14/2011	In-situ	<0.050	<0.050	<0.050	<0.150	<0.150	<10.0	<10.0	<10.0	<10.0	16.0	
West Wall	2'	3/14/2011	In-situ	-	-	-	-	-	<10.0	<10.0	<10.0	<10.0	16.0	
Floor	2'	3/14/2011	In-situ	-	-	-	-	-	<10.0	<10.0	<10.0	<10.0	<16.0	
Stock Pile	N/A	3/14/2011	N/A	<0.050	<0.050	<0.050	<0.150	<0.150	<10.0	11.2	<10.0	11.2	112	
<b>NMOCD Criteria</b>				<b>10</b>				<b>50</b>				<b>5,000</b>	<b>1,000</b>	

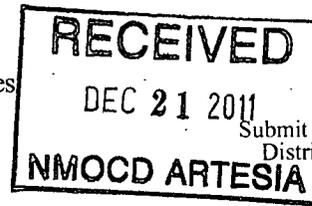
- = Not analyzed.

# **Appendices**

**Appendix A**  
**Release Notification &**  
**Corrective Action (Form C-141)**

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

State of New Mexico  
Energy Minerals and Natural Resources  
Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505



Form C-141  
Revised October 10, 2003  
Submit 2 Copies to appropriate District Office in accordance with Rule 116 on back side of form.

**Release Notification and Corrective Action**

**OPERATOR**

Initial Report

X Final Report

Name of Company	BOPCO, LP	Contact	Tony Savoie
Address	522 W. Mermod, Suite 704, Carlsbad, NM 88220	Telephone No.	(432)556-8730
Facility Name	Poker Lake Unit #261	Facility Type	E&P
Surface Owner	Federal	Mineral Owner	Federal
		Lease No.	30-015-34877

**LOCATION OF RELEASE**

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
J	21	24S	30E	1980	South	1880	East	Eddy

Latitude 32.201420° North

Longitude 103.883103° West

**NATURE OF RELEASE**

Type of Release	Produced water and crude oil	Volume of Release	310 bbls of produced water and <10 bbls of crude oil	Volume Recovered	300 bbls
Source of Release	Pipe fitting failure on a water transfer pump	Date and Hour of Occurrence	3/9/10, approximately 14:00	Date and Hour of Discovery	3/9/2010, 16:00
Was Immediate Notice Given?	X Yes No Not Required	If YES, To Whom?	Sherry Bonham		
By Whom?	Tony Savoie	Date and Hour	3/10/10, 0700 Left mssg. Returned call later.		
Was a Watercourse Reached?	<input type="checkbox"/> Yes X No	If YES, Volume Impacting the Watercourse.			

If a Watercourse was Impacted, Describe Fully.\*

Describe Cause of Problem and Remedial Action Taken:

A 1/4" fitting on a water transfer pump broke off, causing mostly produced water to be released.

Describe Area Affected and Cleanup Action Taken.

The facility has a Falcon BBL poly-lined containment, which contained most of the product released. A vacuum truck was dispatched to the location the same day, and all of the free-standing fluid was removed. An area measuring approximately 2,000 sq ft east of the site was heavily misted by the release, and this area was backdraged. Another 30,000 sq ft of pasture land was affected by the mist of the produced water release. This area was washed down with a nutrient and microblaze solution the following day. Following initial response activities, the release was remediated as per NMOCD approval. Please reference the attached *Remediation Summary and Site Closure Request* for remediation details.

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

Signature:	<u>OIL CONSERVATION DIVISION</u>	
Printed Name: 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: 12/6/2011	Phone: (432)556-8730	

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Avenue, Artesia, NM 88210  
District III  
1000 Kin 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

**RECEIVED**  
MAR 16 2010  
NMOCD ARTESIA

Form C-141  
Revised October 10, 2003

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

**Release Notification and Corrective Action**

**OPERATOR**  Initial Report  Final Report

Name of Company BOPCO, L.P. *260737* Contact Tony Savoie  
Address 522 W. Mermod, Suite 704 Carlsbad, N.M. 88220 Telephone No. 432-556-8730  
Facility Name Poker Lake Unit #261 Facility Type E&P

Surface Owner Federal Mineral Owner Federal Lease No.

*3001534877*

**LOCATION OF RELEASE**

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
J	21	24S	30E	<i>1980</i>		<i>1980</i>		Eddy

Latitude N 32.201420 Longitude W 103.883103

*Flow 7100*

**NATURE OF RELEASE**

Type of Release: Produced water and crude oil	Volume of Release: 310 Bbbs of Produced water and Less than 10 Bbbs of crude oil	Volume Recovered: 300 Bbbs
Source of Release: Pipe fitting failure on a water transfer pump	Date and Hour of Occurrence: 3/9/10 Approximately 2:00 p.m.	Date and Hour of Discovery: 3/9/10 4:00 p.m.
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Sherry Bonham	
By Whom? Tony Savoie	Date and Hour 3/10/10 7:00 a.m. Left Msg. Returned call later	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.\*

Describe Cause of Problem and Remedial Action Taken.\* A "W" fitting on a water transfer pump broke off causing mostly produced water to be released. The pump was shut down and the damaged fitting was repaired.  
Describe Area Affected and Cleanup Action Taken.\* The facility has a Falcon RBL poly lined containment which contained most of the product released. A vacuum truck was dispatched to the location the same day and all of the free standing fluid was removed. An area measuring approximately 2,000 sq. ft. east of the site was heavily misted by the release. This area was backdraged. Another 30,000 Sq. ft. of pasture land was affected by the mist of the produced water release. This area was washed down with a nutrient and microblaze solution the following day.  
The Site remediation for the produced water and crude oil spill will follow the NMOCD guidelines for leaks and spills.

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

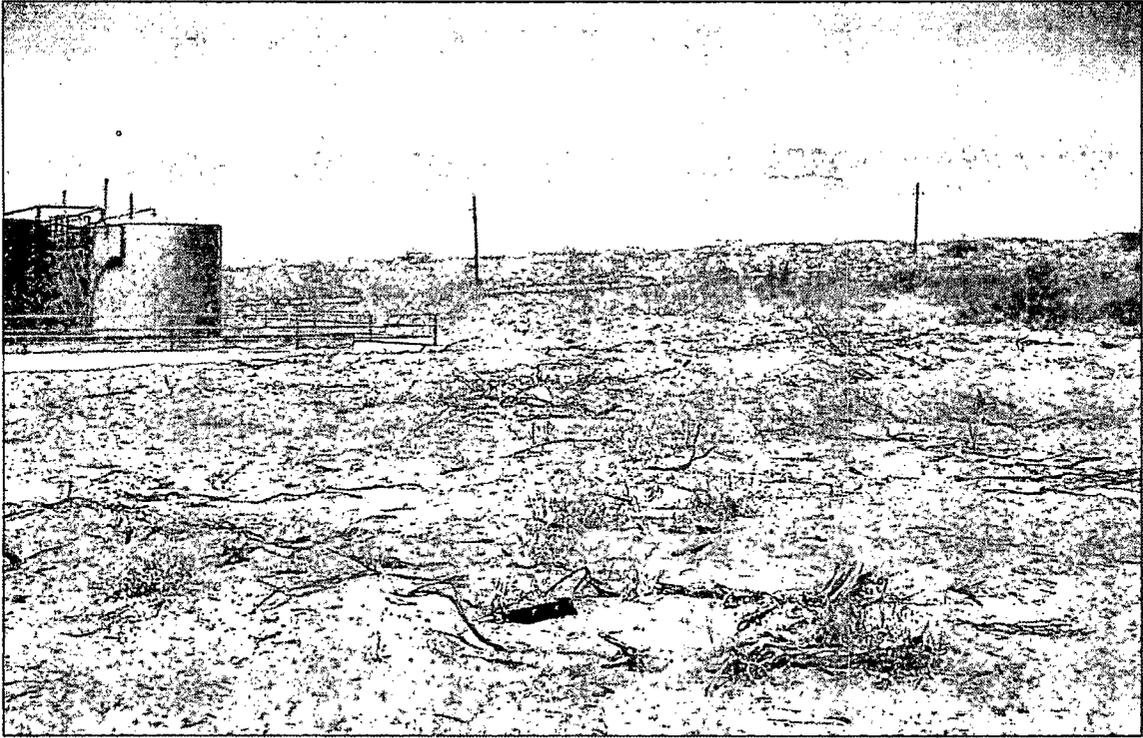
**OIL CONSERVATION DIVISION**

Signature: <i>Tony Savoie</i>	Approved by District Supervisor: <i>[Signature]</i>	Remediation Action to be completed by Final C-141 submitted with supporting and proof documentation on or before the Expiration Date.
Printed Name: Tony Savoie	Title: Waste Mgmt & Remediation Specialist	Approval Date: <i>4-8-10</i> Expiration Date: <i>6-8-10</i>
E-mail Address: T.Savoie@BassPet.com	Date: 3/15/10 Phone: 432-556-8730	Conditions of Approval: Notify OCD 48 hours prior to obtaining samples where analyses are to be presented to OCD
Attach Additional Sheets If Necessary		Attached <input type="checkbox"/> <i>JRP-399</i>

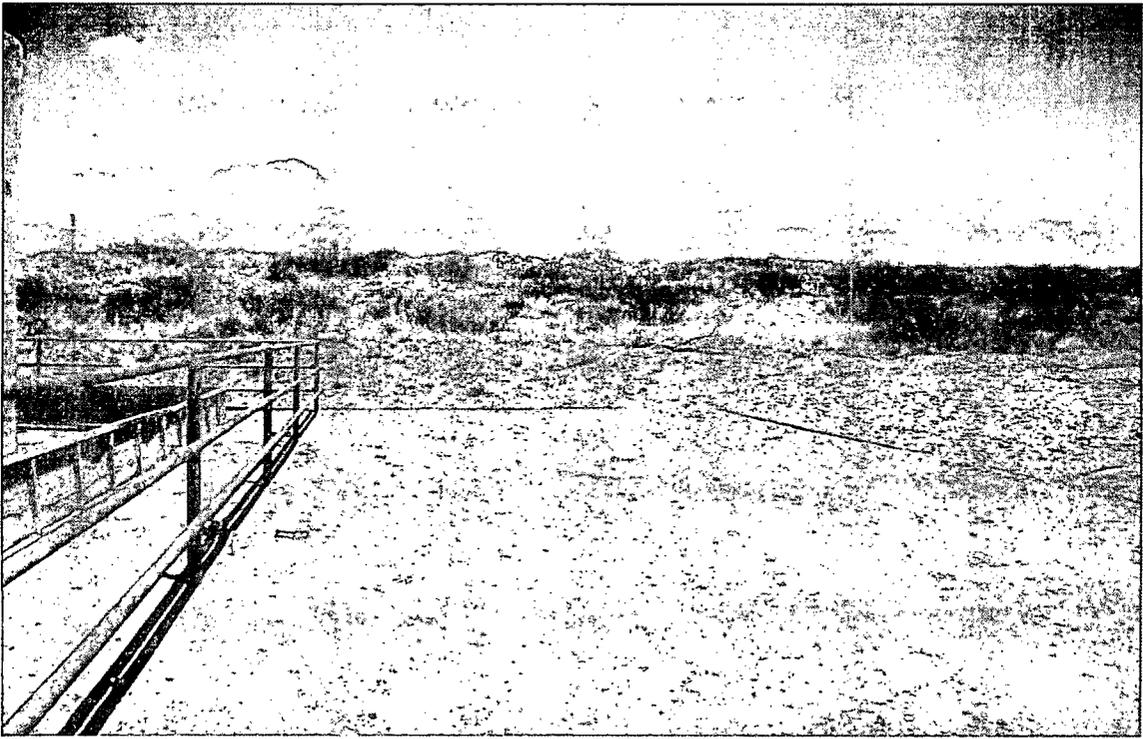
1546 1007855101  
1546 1007855101  
1546 1007855101

*1546 1007855101*

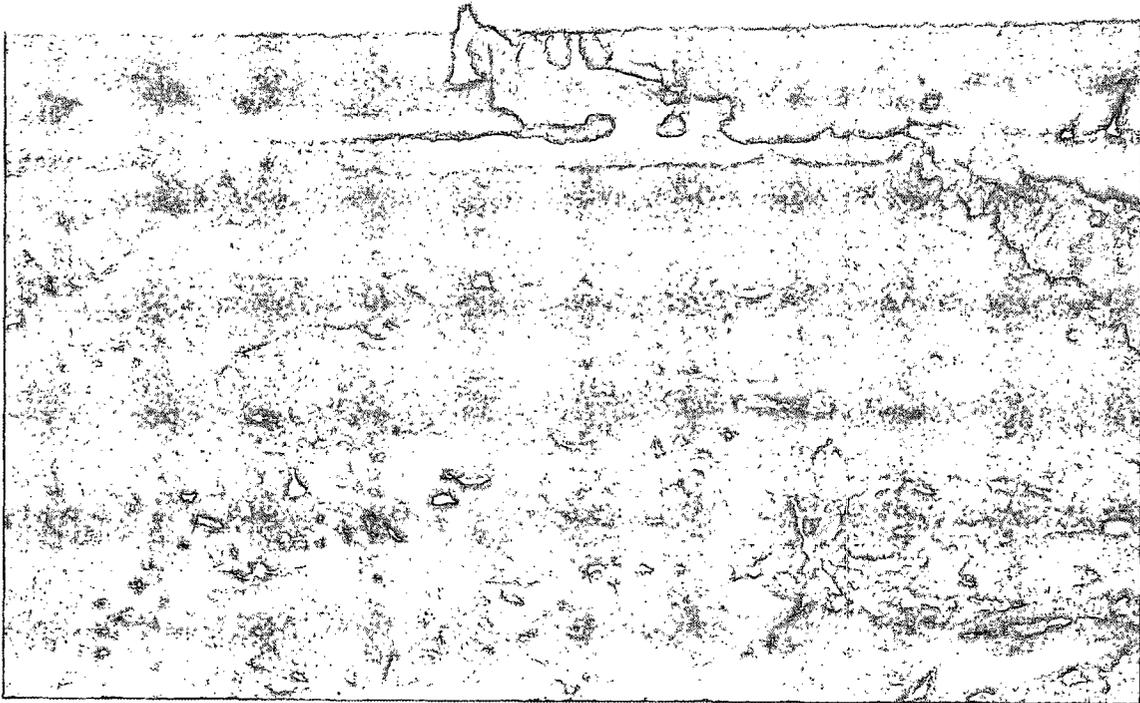
**Appendix B**  
**Photographs**



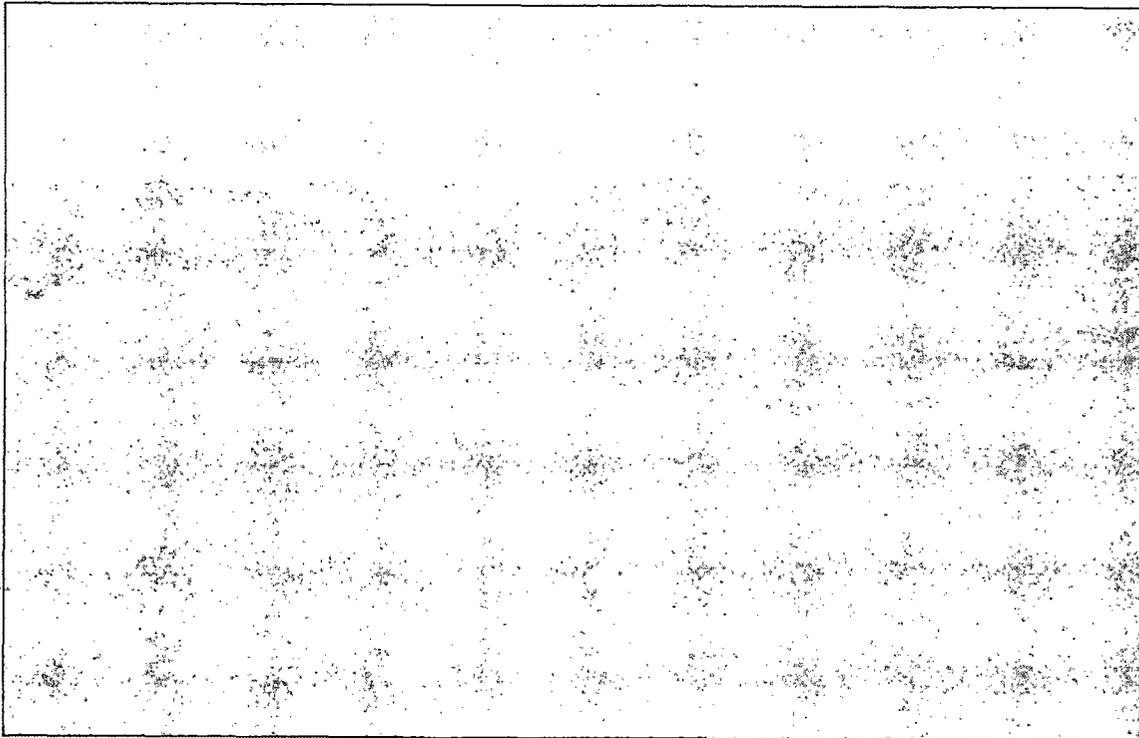
Poker Lake Unit #261 Release (looking Northwest)



Poker Lake Unit #261 Release (looking North)



Poker Lake Unit #261 - Excavation (sample points flagged)



Poker Lake Unit #261 (looking North, following backfill)

**Appendix C**  
**Laboratory Analytical Reports**



# ARDINAL LABORATORIES

PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

---

August 2, 2010

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

Re: PLU 261 (BOPCO)

Enclosed are the results of analyses for sample number H20425, received by the laboratory on 07/27/10 at 10:20 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.

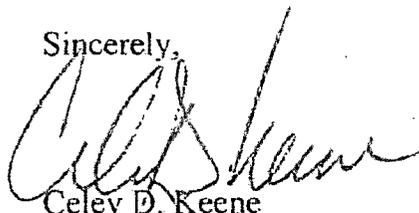
Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.2	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



# ARDINAL LABORATORIES

PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR  
BASIN ENVIRONMENTAL CONSULTING, LLC  
ATTN: CAMILLE BRYANT  
P.O. BOX 381  
LOVINGTON, NM 88260  
FAX TO: (575) 396-1429

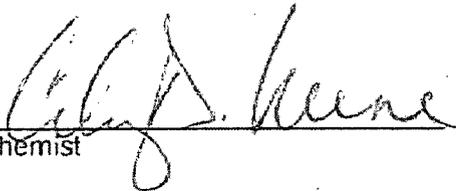
Receiving Date: 07/27/10  
Reporting Date: 07/29/10  
Project Owner: BOPCO  
Project Name: PLU 261  
Project Location: EDDY CO., NM

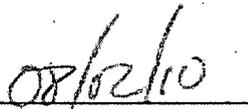
Analysis Date: 07/29/10  
Sampling Date: 07/20/10  
Sample Type: SOIL  
Sample Condition: COOL & INTACT @ 6°C  
Sample Received By: JH  
Analyzed By: HM

LAB NO.	SAMPLE ID	Cl <sup>-</sup> (mg/kg)
H20425-1	BACKGROUND	< 16
H20425-2	SAMPLE 1 @ 6"	9,000
H20425-3	SAMPLE 2 @ 6"	1,600
H20425-4	SAMPLE 2 @ 2'	992
H20425-5	SAMPLE 3 @ 6"	< 16
H20425-6	SAMPLE 4 @ 6"	64
H20425-7	SAMPLE 5 @ 6"	< 16
H20425-8	SAMPLE 6 @ 6"	224
H20425-9	SAMPLE 6 @ 2'	1,880
H20425-10	SAMPLE 6 @ 4'	2,960
H20425-11	SAMPLE 7 @ 6"	< 16
H20425-12	SAMPLE 8 @ 6"	< 16
H20425-13	SAMPLE 9 @ 6"	80
	Quality Control	520
	True Value QC	500
	% Recovery	104
	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

H20425 Basin Environmental

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 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.



# ARDINAL LABORATORIES

PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

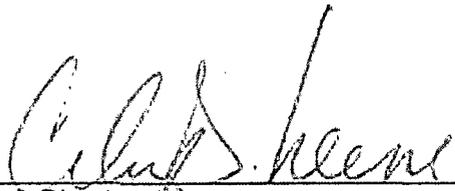
ANALYTICAL RESULTS FOR  
BASIN ENVIRONMENTAL CONSULTING  
ATTN: CAMILLE BRYANT  
P.O. BOX 381  
LOVINGTON, NM 88260  
FAX TO: (575) 396-1429

Receiving Date: 07/27/10  
Reporting Date: 08/02/10  
Project Owner: BOPCO  
Project Name: PLU 261  
Project Location: EDDY COUNTY, NM

Sampling Date: 07/20/10  
Sample Type: SOIL  
Sample Condition: COOL & INTACT @ 6°C  
Sample Received By: JH  
Analyzed By: AB

LAB NUMBER	SAMPLE ID	GRO (C <sub>6</sub> -C <sub>10</sub> ) (mg/kg)	DRO (>C <sub>10</sub> -C <sub>28</sub> ) (mg/kg)	DRO ext. (>C <sub>28</sub> -C <sub>35</sub> ) (mg/kg)
	ANALYSIS DATE	07/30/10	07/30/10	07/30/10
H20425-2	SAMPLE 1 @ 6"	<10.0	32.5	<10.0
H20425-3	SAMPLE 2 @ 6"	<10.0	738	<10.0
H20425-7	SAMPLE 5 @ 6"	<10.0	<10.0	<10.0
H20425-8	SAMPLE 6 @ 6"	<10.0	<10.0	<10.0
H20425-9	SAMPLE 6 @ 2'	<10.0	<10.0	<10.0
	Quality Control	459	447	-
	True Value QC	500	500	-
	% Recovery	91.8	89.4	-
	Relative Percent Difference	0.6	1.1	-

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

  
\_\_\_\_\_  
Lab Director

  
\_\_\_\_\_  
Date

H20425 TPHEXT BASIN

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 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.



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

2 of 2

Company Name: <b>Basin Consulting</b>				<b>BILL TO</b>				<b>ANALYSIS REQUEST</b>											
Project Manager: <b>Camille Bryant</b>				P.O. #:				Chloride 4500 TPA 8015 M extended											
Address: <b>2800 Plains Blvd</b>				Company: <b>BOPCO</b>															
City: <b>Lovington</b> State: <b>NM</b> Zip: <b>88260</b>				Attn: <b>Tony Savie</b>															
Phone #: <b>575-605-7411</b> Fax #: <b>575-396-1429</b>				Address:															
Project #: Project Owner: <b>BOPCO</b>				City:															
Project Name: <b>PLU 261</b>				State: Zip:															
Project Location: <b>Eddy Co</b>				Phone #:															
Sampler Name: <b>[Signature]</b>				Fax #:															
FOR LAB USE ONLY				MATRIX								PRESERV				SAMPLING			
Lab I.D.	Sample I.D.	GRAB OR (COMP. # CONTAINERS)	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE					OTHER	ACID/BASE	ICE/COOL	OTHER	DATE	TIME		
A20425-11	Sample 7 @ 6"	11			X					X		7/20	1530	X					
	12 Sample 8 @ 6"	11											1550	X					
	13 Sample 9 @ 6"	11											1610	X					

PLEASE NOTE: Liability and Damages: Cardinal's liability and client's exclusive remedy for any claim arising whether liability is covered or not, shall be limited to the amount paid by the client for the 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 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 contractors, 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: <b>[Signature]</b>	Date: <b>7-27-10</b>	Received By:	Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Phone #:
	Time: <b>10:20</b>		Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Fax #:
Relinquished By:	Date:	Received By: <b>[Signature]</b>	REMARKS:	
Delivered By: (Circle One)	Sample Condition	CHECKED BY:		
Sampler - UPS - Bus - Other:	Cool - Intact	(initials)		
	6°C <input type="checkbox"/> Yes <input type="checkbox"/> No	<b>[Signature]</b>		

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

#26



August 12, 2010

CAMILLE BRYANT

BASIN ENVIRONMENTAL CONSULTING

P. O. BOX 381

LOVINGTON, NM 88260

RE: PLU 261

Enclosed are the results of analyses for samples received by the laboratory on 08/10/10 8:40.

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 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.

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 CONSULTING  
 CAMILLE BRYANT  
 P. O. BOX 381  
 LOVINGTON NM, 88260  
 Fax To: (575) 396-1429

Received: 08/10/2010  
 Reported: 08/12/2010  
 Project Name: PLU 261  
 Project Number: NOT GIVEN  
 Project Location: EDDY COUNTY, NM

Sampling Date: 07/20/2010  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: SAMPLE 2 @ 4' (H020591-01)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	64.0	16.0	08/11/2010	ND	432	108	400	0.00		

**Sample ID: SAMPLE 2 @ 6' (H020591-02)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	224	16.0	08/11/2010	ND	432	108	400	0.00		

**Sample ID: SAMPLE 2 @ 7' (H020591-03)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	384	16.0	08/11/2010	ND	432	108	400	0.00		

**Sample ID: SAMPLE 2 @ 8' (H020591-04)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	272	16.0	08/11/2010	ND	432	108	400	0.00		

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. 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 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. Keene, Lab Director/Quality Manager



**CARDINAL LABORATORIES**

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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: <i>Basin Consulting</i>		<b>BILL TO</b>		<b>ANALYSIS REQUEST</b>											
Project Manager: <i>Cassille Bryant</i>		P.O. #:		<i>Colorado 360 4500 PLA</i>											
Address: <i>2800 Plains Hwy</i>		Company: <i>BOPCO LP</i>													
City: <i>Livingston</i> State: <i>NM</i> Zip: <i>88260</i>		Attn: <i>Tony Sandip</i>													
Phone #: <i>505-396-2318</i> Fax #: <i>505-396-1219</i>		Address:													
Project #:		City:													
Project Name: <i>PLU 261</i>		State: Zip:													
Project Location: <i>Eddy Co/NM</i>		Phone #:													
Sampler Name: <i>J. Lowry</i>		Fax #:													

Lab I.D.	Sample I.D.	(S)RAB OR (C)OMP.	# CONTAINERS	MATRIX						PRESERV			SAMPLING		
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	ACID/BASE	ICE/COOL	OTHER:	DATE	TIME	
H20591-1	Sample 2 @ 4'	6	1			X					X		7/20/10	11:00	K
	2 Sample 2 @ 6'	6	1			X					X		7/20/10	11:05	K
	3 Sample 2 @ 7'	6	1			X					X		7/20/10	11:10	K
	4 Sample 2 @ 8'	6	1			X					X		7/20/10	11:15	K

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 the client for the 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 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 services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By:	Date:	Received By:	Phone Result:	<input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Phone #:
	Time:		Fax Result:	<input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Fax #:
Relinquished By:	Date: <i>8/10/10</i>	Received By:	REMARKS:		
<i>Scott Lowry</i>	Time: <i>8:40</i>	<i>Gadi Henson</i>			
Delivered By: (Circle One)	0	Sample Condition	CHECKED BY:		
Sampler - UPS - Bus - Other:		Cool Intact <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No	<i>ASH</i>		

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

*#26*

March 19, 2011

BEN J. ARGUIJO

Basin Environmental Service

P.O. Box 301

Lovington, NM 88260

RE: POKER LAKE 261

Enclosed are the results of analyses for samples received by the laboratory on 03/15/11 16:39.

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.

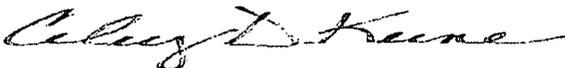
Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

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.

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: 03/15/2011  
 Reported: 03/19/2011  
 Project Name: POKER LAKE 261  
 Project Number: NONE GIVEN  
 Project Location: EDDY COUNTY, NM

 Sampling Date: 03/14/2011  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: NORTH WALL 2' BGS (H100504-01)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	03/16/2011	ND	400	100	400	0.00		
TPH 8015M		mg/kg		Analyzed By: CK/						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	03/17/2011	ND	217	109	200	6.43		
DRO >C10-C28	<10.0	10.0	03/17/2011	ND	192	96.2	200	5.24		
EXT DRO >C28-C35	<10.0	10.0	03/17/2011	ND						
<i>Surrogate: 1-Chlorooctane</i>		<i>109 %</i>	<i>70-130</i>							
<i>Surrogate: 1-Chlorooctadecane</i>		<i>109 %</i>	<i>70-130</i>							

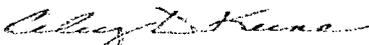
**Sample ID: WEST WALL 2' BGS (H100504-02)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<b>16.0</b>	16.0	03/16/2011	ND	400	100	400	0.00		
TPH 8015M		mg/kg		Analyzed By: CK/						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	03/17/2011	ND	217	109	200	6.43		
DRO >C10-C28	<10.0	10.0	03/17/2011	ND	192	96.2	200	5.24		
EXT DRO >C28-C35	<10.0	10.0	03/17/2011	ND						
<i>Surrogate: 1-Chlorooctane</i>		<i>111 %</i>	<i>70-130</i>							
<i>Surrogate: 1-Chlorooctadecane</i>		<i>115 %</i>	<i>70-130</i>							

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. 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: 03/15/2011  
 Reported: 03/19/2011  
 Project Name: POKER LAKE 261  
 Project Number: NONE GIVEN  
 Project Location: EDDY COUNTY, NM

 Sampling Date: 03/14/2011  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: EAST WALL 2' BGS (H100504-03)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16.0	16.0	03/16/2011	ND	400	100	400	0.00		
TPH 8015M		mg/kg		Analyzed By: CK/						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	03/17/2011	ND	217	109	200	6.43		
DRO >C10-C28	<10.0	10.0	03/17/2011	ND	192	96.2	200	5.24		
EXT DRO >C28-C35	<10.0	10.0	03/17/2011	ND						
Surrogate: 1-Chlorooctane	109 %	70-130								
Surrogate: 1-Chlorooctadecane	111 %	70-130								

**Sample ID: FLOOR 2' BGS (H100504-04)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	03/16/2011	ND	400	100	400	0.00		
TPH 8015M		mg/kg		Analyzed By: CK/						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	03/17/2011	ND	217	109	200	6.43		
DRO >C10-C28	<10.0	10.0	03/17/2011	ND	192	96.2	200	5.24		
EXT DRO >C28-C35	<10.0	10.0	03/17/2011	ND						
Surrogate: 1-Chlorooctane	108 %	70-130								
Surrogate: 1-Chlorooctadecane	107 %	70-130								

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. Keene, Lab Director/Quality Manager

**Analytical Results For:**

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

 Received: 03/15/2011  
 Reported: 03/19/2011  
 Project Name: POKER LAKE 261  
 Project Number: NONE GIVEN  
 Project Location: EDDY COUNTY, NM

 Sampling Date: 03/14/2011  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: SOUTH WALL 2' BGS (H100504-05)**

Chloride, SM4500Cl-B

mg/kg

Analyzed By: HM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	03/16/2011	ND	400	100	400	0.00	

TPH 8015M

mg/kg

Analyzed By: CK/

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	03/17/2011	ND	217	109	200	6.43	
DRO >C10-C28	<10.0	10.0	03/17/2011	ND	192	96.2	200	5.24	
EXT DRO >C28-C35	<10.0	10.0	03/17/2011	ND					

Surrogate: 1-Chlorooctane 120 % 70-130

Surrogate: 1-Chlorooctadecane 123 % 70-130

**Sample ID: STOCK PILE (H100504-06)**

Chloride, SM4500Cl-B

mg/kg

Analyzed By: HM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	112	16.0	03/16/2011	ND	400	100	400	0.00	

TPH 8015M

mg/kg

Analyzed By: CK/

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	03/17/2011	ND	217	109	200	6.43	
DRO >C10-C28	11.2	10.0	03/17/2011	ND	192	96.2	200	5.24	
EXT DRO >C28-C35	<10.0	10.0	03/17/2011	ND					

Surrogate: 1-Chlorooctane 116 % 70-130

Surrogate: 1-Chlorooctadecane 113 % 70-130

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. Keene, Lab Director/Quality Manager

**Notes and Definitions**

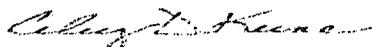
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received 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 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.



---

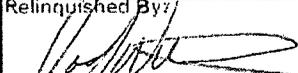
Celey D. Keene, Lab Director/Quality Manager

## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name: Basin Environmental Service Technologies, LLC		BILL TO				ANALYSIS REQUEST																			
Project Manager: Ben J. Arcuino		P.O. #:																							
Address: P.O. Box 301		Company: BOPCO, LP																							
City: Lovington State: NM Zip: 88260		Attn: Tony Savoie																							
Phone #: (575) 396-2378 Fax #: (575) 396-1429		Address: 522 W. Mermod																							
Project #: Project Owner: BOPCO, LP		City: Carlsbad																							
Project Name: Poker Lake 261		State: NM Zip: 88220																							
Project Location: EDDY NM		Phone #: (432) 556-8730																							
Sampler Name: Jody Walkers		Fax #:																							
FOR LAB USE ONLY		C/RABOR (C/O)IMP.	# CONTAINERS	MATRIX														PRESERV.		SAMPLING		BOISM	Chlorides		
Lab I.D.	Sample I.D.			GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER	ACID/BASE	ICE/COOL	OTHER	DATE	TIME											
H100504-1	North wall 2' BGS	6	1		X					X	3-14-11	8:50AM	X	X											
2	West wall 2' BGS	6	1		Y					X	3-14-11	9:20AM	X	X											
3	EAST wall 2' BGS	6	1		X					X	3-14-11	9:10AM	X	X											
4	Floor 2' BGS	6	1		X					X	3-14-11	9:20AM	X	X											
5	South wall 2' BGS	6	1		X					X	3-14-11	9:30AM	X	Y											
6	Stack Pile	6	1		X					X	3-14-11	9:40AM	X	Y											

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 the client for the 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 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 services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By: 	Date: 3/15/11 Time: 4:39	Received By: 	Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Phone #:
Relinquished By:	Date:	Received By:	Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Fax #:
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	3°C	Sample Condition Cool Intact <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> No <input type="checkbox"/> No	CHECKED BY: 	
			REMARKS:  Please email results to pm@basinenv.com & TSavoie@BassPoc.com	

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

TA 260