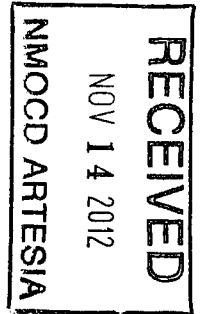


# *Basin Environmental Service Technologies, LLC*

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



## **REMEDIATION SUMMARY & RISK-BASED SITE CLOSURE PROPOSAL**

**BOPCO, LP  
JAMES RANCH UNIT #29 SWD  
Eddy County, New Mexico  
Unit Letter "K" (NE/SW), Section 36, Township 22 South, Range 30 East  
Latitude 32.346284° North, Longitude 103.837459° West  
NMOCD Reference #'s: 2RP-1174 & 2RP-1265**

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**

**November 2012**

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**Ben J. Arguijo  
Project Manager**

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## **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 – Soil Boring Logs

Appendix C – Permits

Appendix D – Laboratory Analytical Reports

## 1.0 INTRODUCTION & BACKGROUND INFORMATION

Basin Environmental Service Technologies, LLC (Basin Environmental), on behalf of BOPCO, LP (BOPCO), has prepared this *Remediation Summary & Risk-Based Site Closure Proposal* for the release site known as James Ranch Unit #29 SWD. The legal description of the release site is Unit Letter "K" (NE/SW), Section 36, Township 22 South, Range 30 East, in Eddy County, New Mexico. The geographic coordinates of the release site are 32.346284° North latitude and 103.837459° West longitude. The property affected by the release is owned by the State of New Mexico and administered by the New Mexico State Land Office (NMSLO). Please reference Figure 1 for a "Site Location Map".

On May 22, 2012, BOPCO discovered a release had occurred near the James Ranch Unit #29 Salt Water Disposal (SWD) site. A two and seven-eighths-inch (2 7/8") flow line developed a leak, resulting a release of produced water. The release was attributed to internal corrosion.

The release was immediately reported to the New Mexico Oil Conservation Division (NMOCD) Artesia District Office. The "Release Notification and Corrective Action" (Form C-141) indicates approximately one hundred and seventy-five barrels (175 bbls) of produced water were released. During initial response activities, the pump at the James Ranch Unit #29 SWD was shut down, and one (1) joint of the pipeline was replaced. A vacuum truck was utilized to recover approximately fifty barrels (50 bbls) of free-standing liquid, resulting in a net loss of approximately one hundred and twenty-five barrels (125 bbls) of produced water. The release was confined to the pipeline right-of-way and affected an area of pastureland measuring approximately three thousand, two hundred and forty square feet (3,240 ft<sup>2</sup>).

On August 8, 2012, BOPCO discovered a second release had occurred near the James Ranch Unit #29 SWD site. A two and seven-eighths-inch (2 7/8") flow line from the James Ranch Unit #29 SWD to the Hudson Federal #1 SWD well developed a leak, resulting in a release of produced water. The release was attributed to internal corrosion.

The release was immediately reported to the NMOCD Artesia District Office. The Form C-141 indicates approximately one hundred barrels (100 bbls) of produced water were released. During initial response activities, a temporary pipeline clamp was employed to mitigate the release. A vacuum truck was utilized to recover approximately eighty barrels (80 bbls) of free-standing liquid, resulting in a net loss of approximately twenty barrels (20 bbls) of produced water. The release affected an area of pastureland measuring approximately two thousand, five hundred and fifty square feet (2,550 ft<sup>2</sup>) and comingled with the flow path of the May 22, 2012, release.

The May 22 and August 8 release sites will be remediated concurrently. The Forms C-141 are provided as Appendix A.

## 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) indicates groundwater should be encountered at approximately two hundred and fifty feet (250') below ground surface (bgs) in Section 36, Township 22 South, Range 30 East. A depth-to-groundwater reference map utilized by the NMOCD indicates groundwater should be encountered at approximately two hundred feet

(200') 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 one thousand feet (1,000') 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 one thousand feet (1,000') 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 James Ranch Unit #29 SWD 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)
- Benzene, ethylbenzene, toluene, and xylenes (BTEX) – 50 mg/Kg (ppm)
- Total petroleum hydrocarbons (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**

Following initial response activities, on May 30, 2012, delineation of the May 22 release site commenced. Four (4) delineation trenches were advanced near the release point and along the flow path of the release to investigate the vertical and horizontal extent of impacted soil. The delineation trenches were each advanced to a total depth of approximately eight feet (8') bgs. Soil samples were collected from the floors of the delineation trenches at two-foot (2') intervals and field-screened using a chloride test kit. Field-screening indicated that further vertical delineation would be required at the site.

On August 21, 2012, soil samples were collected from the sidewalls of an open pipeline trench adjacent to, and to the north of, both the flow path of the May 22 release and the release point of the August 8 release. The soil samples were field-screened using a chloride test kit. Field-screening indicated further horizontal delineation would be required to the north of the release sites.

On August 22, 2012, after having procured the proper permits from the NMSLO ("Right of Entry" #ROE-2170) and NMOSE (File #C-3561), five (5) soil borings (SB-1 through SB-5) were advanced at the site to further delineate the vertical extent of impacted soil. Soil samples were collected at five-foot (5') drilling intervals and field-screened using a Photo-Ionization Detector (PID) and/or chloride test kit. Selected soil samples were submitted to Cardinal Laboratories in Hobbs, New Mexico, for analysis of BTEX, TPH, and/or chloride concentrations in accordance with Environmental Protection Agency (EPA) methods SW-846 8021b, SW-846 8015M, and 4500 Cl-B, respectively. Table 1 summarizes the "Concentrations of Benzene, BTEX, TPH & Chloride in Soil". A "Site & Sample Location Map" is provided as Figure 2. Soil boring logs are

provided as Appendix B. NMSLO and NMOSE permits are provided as Appendix C. Laboratory analytical reports are provided as Appendix D.

Soil boring SB-1 was located in a comingled pooling area of the May 22 and August 8 releases, approximately seventy-eight feet (78') to the west of the August 8 release and approximately four hundred and fifty feet (450') to the west of the May 22 release. The soil boring was advanced to a total depth of approximately thirty feet (30') bgs. Soil samples collected at drilling depths of five feet (5'), ten feet (10'), fifteen feet (15'), twenty feet (20'), twenty-five feet (25'), and thirty feet (30') bgs were submitted to the laboratory for analysis of TPH and/or chloride concentrations. Soil sample SB-1 @ 10' was also submitted for analysis of BTEX concentrations. Laboratory analytical results indicated TPH concentrations were less than the laboratory method detection limit (MDL) in all submitted soil samples. Chloride concentrations ranged from 64.0 mg/Kg in soil sample SB-1 @ 30' to 21,600 mg/Kg in soil sample SB-1 @ 10'. BTEX constituent concentrations in soil sample SB-1 @ 10' were less than the appropriate laboratory MDL.

Soil boring SB-2 was located at the release point of the August 8 release. The soil boring was advanced to a total depth of approximately twenty-five feet (25') bgs. Soil samples collected at drilling depths of five feet (5'), ten feet (10'), fifteen feet (15'), twenty feet (20'), and twenty-five feet (25') bgs were submitted to the laboratory for analysis of TPH and/or chloride concentrations. Soil sample SB-2 @ 10' was also submitted for analysis of BTEX concentrations. Laboratory analytical results indicated TPH concentrations were less than the laboratory MDL in all submitted soil samples. Chloride concentrations ranged from 224 mg/Kg in soil sample SB-2 @ 25' to 13,000 mg/Kg in soil sample SB-2 @ 5'. BTEX constituent concentrations in soil sample SB-2 @ 10' were less than the appropriate laboratory MDL.

Soil boring SB-3 was located in the flowpath of the May 22 release, in a pooling area approximately fifty feet (50') to the west of the release point. The soil boring was advanced to a total depth of approximately twenty-five feet (25') bgs. Soil samples collected at drilling depths of five feet (5'), ten feet (10'), fifteen feet (15'), twenty feet (20'), and twenty-five feet (25') bgs were submitted to the laboratory for analysis of TPH and/or chloride concentrations. Soil sample SB-3 @ 10' was also submitted for analysis of BTEX concentrations. Laboratory analytical results indicated TPH concentrations ranged from less than the laboratory MDL in soil sample SB-3 @ 10' to 32.4 mg/Kg in soil sample SB-3 @ 5'. Chloride concentrations ranged from 128 mg/Kg in soil sample SB-3 @ 25' to 12,000 mg/Kg in soil sample SB-3 @ 5'. BTEX constituent concentrations in soil sample SB-3 @ 10' were less than the appropriate laboratory MDL.

Soil boring SB-4 was located at the release point of the May 22 release. The soil boring was advanced to a total depth of approximately twenty-five feet (25') bgs. Soil samples collected at drilling depths of five feet (5'), ten feet (10'), fifteen feet (15'), twenty feet (20'), and twenty-five feet (25') bgs were submitted to the laboratory for analysis of TPH and/or chloride concentrations. Soil sample SB-4 @ 10' was also submitted for analysis of BTEX concentrations. Laboratory analytical results indicated TPH concentrations were less than the laboratory MDL in all submitted soil samples. Chloride concentrations ranged from 176 mg/Kg in soil sample SB-4 @ 25' to 15,800 mg/Kg in soil sample SB-4 @ 10'. BTEX constituent concentrations in soil sample SB-4 @ 10' were less than the appropriate laboratory MDL.

Soil boring SB-5 was located to the north of a comingled pooling area of the releases in order to 1.) establish the baseline concentration of chloride in the area and 2.) ensure that horizontal

delineation to the north of the pooling area had been achieved. The soil boring was advanced to a total depth of approximately twenty feet (20') bgs. Soil samples collected at drilling depths of five feet (5'), ten feet (10'), fifteen feet (15'), and twenty feet (20') bgs were submitted to the laboratory for analysis of TPH and/or chloride concentrations. Soil sample SB-5 @ 10' was also submitted for analysis of BTEX concentrations. Laboratory analytical results indicated TPH concentrations were less than the laboratory MDL in all submitted soil samples. Chloride concentrations ranged from 32.0 mg/Kg in soil sample SB-5 @ 5' to 160 mg/Kg in soil sample SB-5 @ 15'. BTEX constituent concentrations in soil sample SB-5 @ 10' were less than the appropriate laboratory MDL.

Following advancement of the soil borings, two (2) soil samples (West Trench - West Wall #1 and West Trench - West Wall #2) were collected from an open pipeline trench in the primary pooling area of the August 8 release. The soil samples were submitted to the laboratory for analysis of chloride concentrations. Laboratory analytical results indicated chloride concentrations ranged from 2,200 mg/Kg in soil sample West Trench - West Wall #1 to 13,800 mg/Kg in soil sample West Trench - West Wall #2.

#### **4.0 PROPOSED ACTIVITIES**

BOPCO proposes the following risk-based closure strategy to progress the James Ranch Unit #29 SWD release site toward an NMOCD-approved closure:

- The release points and flow paths of the May 22 and August 8, 2012, releases will be excavated to a total depth of approximately five feet (5') bgs. Excavated soil will be transported to Lea Land, Inc. (NMOCD Permit # WM-01-035), for disposal.
- The horizontal limits of the excavation will be determined by field-screening using a chloride test kit. Confirmation soil samples will be collected at approximately fifty-foot (50') intervals and submitted to Cardinal Laboratories for analysis of BTEX, TPH, and/or chloride concentrations using EPA methods SW-846 8021b, SW-846 8015M, and 4500 Cl-B, respectively. Horizontal excavation will continue until laboratory analytical results indicate contaminant concentrations are less than or equal to 1,000 mg/Kg. Excavated soil will be transported to Lea Land, Inc. (NMOCD Permit # WM-01-035), for disposal.
- Further delineation and/or excavation in the areas defined by soil samples West Trench - West Wall #1 and West Trench - West Wall #2 will be hampered by the presence of a widely-used oilfield access road adjacent to the trench, as well as numerous pipes and appurtenances. These areas will be excavated to the extent practicable. Soil exhibiting contamination above the remediation action levels established for the site by the NMOCD will be remediated upon decommission or abandonment of the currently active access road and/or pipelines.
- When laboratory analytical results have confirmed that all contaminants are less than the remediation levels established for the site, the excavation will be backfilled in eighteen-inch (18") lifts, compacted, and contoured to fit the surrounding topography.

- Prior to backfilling, a twenty (20) mil polyurethane liner will be installed in the floor of the excavation at approximately five feet (5') bgs. A cushion of sand will be installed approximately one foot (1') both above and below the liner to protect the liner from damage during installation and backfilling activities. This engineered control will inhibit vertical migration of contaminants from below the liner to the surface, protecting the vegetative zone. In addition, the polyurethane liner will shed moisture to the edge of the liner and beyond the maximum horizontal extent of underlying impacted soil, effectively inhibiting vertical migration of contaminants to groundwater.
- In areas where excavation is precluded by the presence of active pipelines and/or roadways, the polyurethane liner will be installed along the sidewalls of the excavation, to approximately one foot (1') bgs, to inhibit migration of contaminants.
- Should it be requested by the landowner, reseedling of affected areas outside of the pipeline right-of-way will take place at the conclusion of the proposed remediation activities.

## 5.0 REPORTING

On review and approval of this proposal by the NMOCD, BOPCO is prepared to begin field activities and perform the corrective actions summarized in this *Remediation Summary & Risk-Based Site Closure Proposal*. Upon completion of the corrective actions, BOPCO will submit a *Remediation Summary & Risk-Based Site Closure Request* to the NMOCD and NMSLO, documenting remediation activities and results of confirmation soil samples.

## 6.0 LIMITATIONS

Basin Environmental Service Technologies, LLC, has prepared this *Remediation Summary & Risk-Based Site Closure Proposal* to the best of its ability. No other warranty, expressed or implied, is made or intended. Basin Environmental has examined and relied upon documents referenced in the report and on oral statements made by certain individuals. Basin Environmental has not conducted an independent examination of the facts contained in referenced materials and statements. Basin Environmental has presumed the genuineness of these documents and statements and that the information provided therein is true and accurate. Basin Environmental has prepared this report in a professional manner, using the degree of skill and care exercised by similar environmental consultants. Basin Environmental 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.

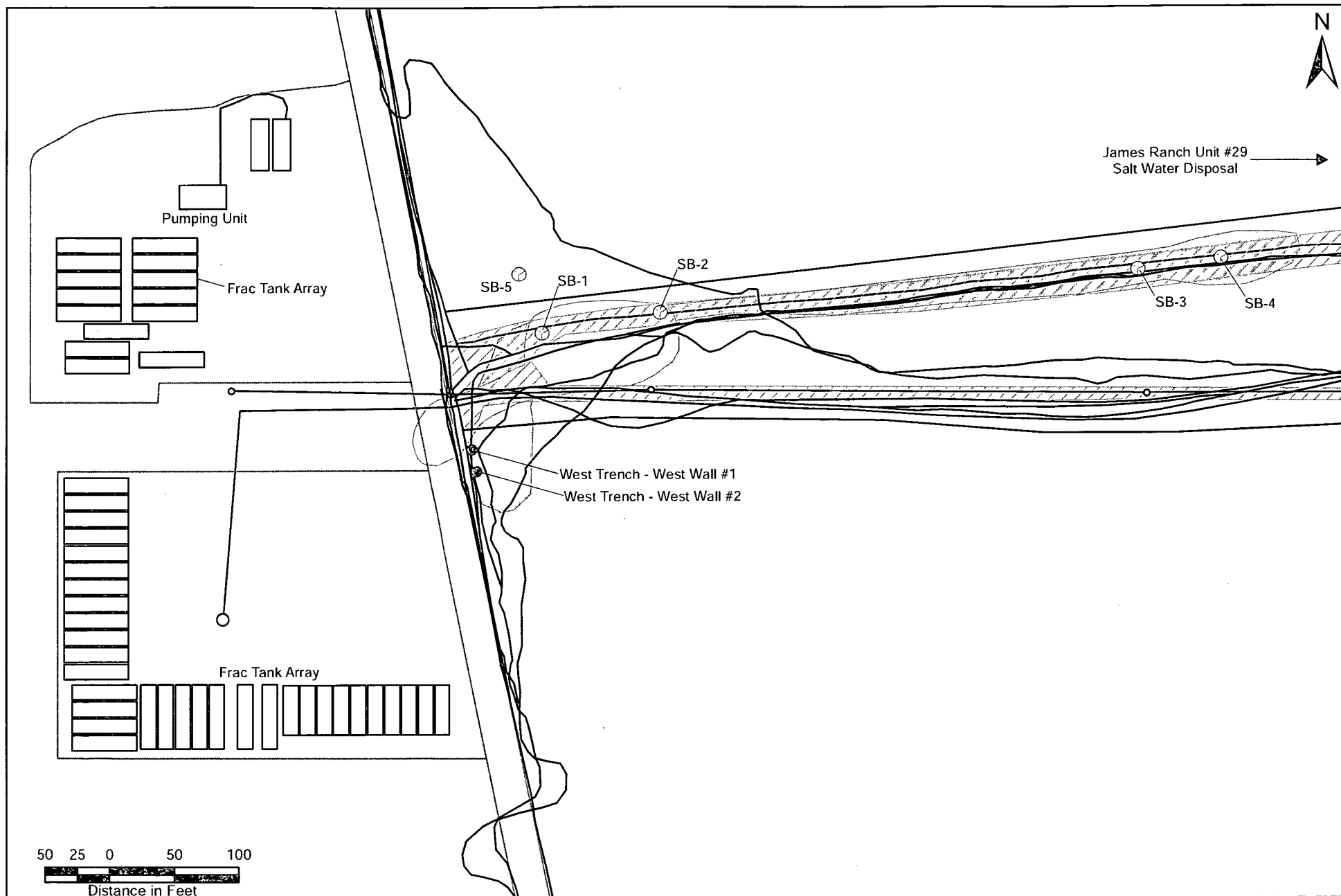
## **7.0 DISTRIBUTION:**

- 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: Andrew Kraemer  
New Mexico State Land Office  
602 N. Canal Street, Suite B  
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





<b>Legend:</b>	
- - - - -	Excavation Extent
—	Pipeline
—	Caliche Road/Pad
—	Power Line
□	Right-of-Way
⊙	Soil Boring
●	Sample Location
□	May 2012 Release
□	August 2012 Release

Figure 2  
 Site & Sample Location Map  
 BOPCO, LP  
 James Ranch Unit #29 SWD  
 Eddy County, New Mexico  
 NMOC Reference #'s: 2RP-1174 & 2RP-1265



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

Drawn By: BJA	Checked By: BRB
November 8, 2012	Scale: 1" = 100'

# Tables

TABLE 1

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

BOPCO, LP  
 JAMES RANCH UNIT #29 SWD  
 EDDY COUNTY, NEW MEXICO  
 NMOCD REFERENCE #'S: 2RP-1174 & 2RP-1265

SAMPLE LOCATION	SAMPLE DEPTH (BGS)	SAMPLE DATE	SOIL STATUS	METHOD: EPA SW 846-8021B, 5030					METHOD: 8015M			TOTAL TPH	4500 Cl-B
				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)	C <sub>6</sub> -C <sub>35</sub> (mg/Kg)	CHLORIDE (mg/Kg)
SB-1 @ 5'	5'	8/22/2012	In-Situ	-	-	-	-	-	<10.0	<10.0	<10.0	<10.0	16,800
SB-1 @ 10'	10'	8/22/2012	In-Situ	<0.050	<0.050	<0.050	<0.150	<0.150	<10.0	<10.0	<10.0	<10.0	21,600
SB-1 @ 15'	15'	8/22/2012	In-Situ	-	-	-	-	-	-	-	-	-	19,200
SB-1 @ 20'	20'	8/22/2012	In-Situ	-	-	-	-	-	-	-	-	-	448
SB-1 @ 25'	25'	8/22/2012	In-Situ	-	-	-	-	-	-	-	-	-	176
SB-1 @ 30'	30'	8/22/2012	In-Situ	-	-	-	-	-	-	-	-	-	64.0
SB-2 @ 5'	5'	8/22/2012	In-Situ	-	-	-	-	-	<10.0	<10.0	<10.0	<10.0	13,000
SB-2 @ 10'	10'	8/22/2012	In-Situ	<0.050	<0.050	<0.050	<0.150	<0.150	<10.0	<10.0	<10.0	<10.0	7,700
SB-2 @ 15'	15'	8/22/2012	In-Situ	-	-	-	-	-	-	-	-	-	5,520
SB-2 @ 20'	20'	8/22/2012	In-Situ	-	-	-	-	-	-	-	-	-	1,440
SB-2 @ 25'	25'	8/22/2012	In-Situ	-	-	-	-	-	-	-	-	-	224
SB-3 @ 5'	5'	8/22/2012	In-Situ	-	-	-	-	-	<10.0	21.3	11.1	32.4	12,000
SB-3 @ 10'	10'	8/22/2012	In-Situ	<0.050	<0.050	<0.050	<0.150	<0.150	<10.0	<10.0	<10.0	<10.0	4,480
SB-3 @ 15'	15'	8/22/2012	In-Situ	-	-	-	-	-	-	-	-	-	480
SB-3 @ 20'	20'	8/22/2012	In-Situ	-	-	-	-	-	-	-	-	-	144
SB-3 @ 25'	25'	8/22/2012	In-Situ	-	-	-	-	-	-	-	-	-	128
SB-4 @ 5'	5'	8/22/2012	In-Situ	-	-	-	-	-	<10.0	<10.0	<10.0	<10.0	14,800
SB-4 @ 10'	10'	8/22/2012	In-Situ	<0.050	<0.050	<0.050	<0.150	<0.150	<10.0	<10.0	<10.0	<10.0	15,800
SB-4 @ 15'	15'	8/22/2012	In-Situ	-	-	-	-	-	-	-	-	-	1,740
SB-4 @ 20'	20'	8/22/2012	In-Situ	-	-	-	-	-	-	-	-	-	2,120
SB-4 @ 25'	25'	8/22/2012	In-Situ	-	-	-	-	-	-	-	-	-	176
SB-5 @ 5'	5'	8/22/2012	In-Situ	-	-	-	-	-	<10.0	<10.0	<10.0	<10.0	32.0
SB-5 @ 10'	10'	8/22/2012	In-Situ	<0.050	<0.050	<0.050	<0.150	<0.150	<10.0	<10.0	<10.0	<10.0	64.0
SB-5 @ 15'	15'	8/22/2012	In-Situ	-	-	-	-	-	-	-	-	-	160
SB-5 @ 20'	20'	8/22/2012	In-Situ	-	-	-	-	-	-	-	-	-	144
West Trench - West Wall #1	3'	8/22/2012	In-Situ	-	-	-	-	-	-	-	-	-	2,200
West Trench - West Wall #2	3'	8/22/2012	In-Situ	-	-	-	-	-	-	-	-	-	13,800
NMOCD Regulatory Standard				10				50				5,000	1,000

- = 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

nMLB 1216757185

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 James Ranch Unit 29 SWD		Facility Type E&P

Surface Owner State of New Mexico	Mineral Owner State of New Mexico	Lease No. APZ *
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LOCATION OF RELEASE

30-015-27735

Unit Letter K	Section 36	Township 22S	Range 30E	Feet from the	North/South Line	Feet from the	East/West Line	County Eddy
------------------	---------------	-----------------	--------------	---------------	------------------	---------------	----------------	----------------

Latitude N 32.346284 Longitude W 103.837459

NATURE OF RELEASE

Type of Release: Produced water	Volume of Release: 175 Bbls of Produced water	Volume Recovered: 50 Bbls
Source of Release: 2 7/8" flow line	Date and Hour of Occurrence 5/22/12 Time unknown	Date and Hour of Discovery 5/22/12 9:00 a.m.
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? NMOCD Emergency #104	
By Whom? Tony Savoie	Date and Hour 5/22/12 2:30 p.m.	
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.\*

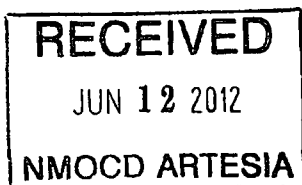
Describe Cause of Problem and Remedial Action Taken.\* The flow line developed a leak due to internal corrosion. The SWD pump at the JRU-29 was shut down and 1 joint of pipe was replaced.

Describe Area Affected and Cleanup Action Taken.\* Approximately 3240 sq. ft. of pasture land. All of the free standing water was picked up with a vacuum truck. The spill stayed within the pipeline right-of-way. A backhoe was used to collect samples at the point of release and the ponded areas on 5/30/12 to determine the vertical and horizontal extent. The remediation will comply with the NMOCD and BLM requirements for 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.

Signature: <i>Tony Savoie</i>	OIL CONSERVATION DIVISION	
Printed Name: Tony Savoie	Approved by District Supervisor <i>M. L. Benavides</i>	
Title: Waste Mgmt. & Remediation Specialist	Approval Date: JUN 15 2012	Expiration Date:
E-mail Address: TASavoie@BassPet.com	Conditions of Approval: Remediation per OCD Rules & Guidelines. SUBMIT REMEDIATION PROPOSAL NOT LATER THAN: 7/15/2012	Attached <input type="checkbox"/>
Date: 6/3/12 Phone: 432-556-8730		

\* Attach Additional Sheets If Necessary



2RA-1174



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

State of New Mexico  
Energy Minerals and Natural Resources

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

Form C-141  
Revised August 8, 2011

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

**Release Notification and Corrective Action**

<b>nmn/1224160735</b>		<b>OPERATOR</b>	<input checked="" type="checkbox"/> Initial Report	<input type="checkbox"/> Final Report
Name of Company: BOPCO, L.P.		Contact: Tony Savoie		
Address: 522 W. Mermod, Suite 704 Carlsbad, N.M. 88220		Telephone No. 575-887-7329		
Facility Name: JRU-29 to Hudson Federal #1 SWD The spill was 200 ft. east of the JRU-67 pumping well.		Facility Type: Exploration and Production		
Surface Owner: State of N.M.		Mineral Owner: State of N.M.		API No. 30-015-31004

**LOCATION OF RELEASE**

Unit Letter K	Section 36	Township 22S	Range 30 E	Feet from the	North/South Line	Feet from the	East/West Line	County Eddy
------------------	---------------	-----------------	---------------	---------------	------------------	---------------	----------------	----------------

Latitude N 32.346239 Longitude W 103.838688

**NATURE OF RELEASE**

Type of Release: Produced water	Volume of Release: 100 bbls.	Volume Recovered: 80 bbls.
Source of Release: A buried 2 7/8" SWD line	Date and Hour of Occurrence: 8/8/12 Approximately 12:00 p.m.	Date and Hour of Discovery: 8/8/12 Approximately 1:45 p.m.
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? The NMOCD emergency #104	
By Whom? Tony Savoie	Date and Hour: 8/8/12 at 2:57 p.m.	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

**RECEIVED**

AUG 20 2012

NMOCD ARTESIA

If a Watercourse was Impacted, Describe Fully.\*

Describe Cause of Problem and Remedial Action Taken.\*

The 2 7/8 SWD line from the JRU-29 disposal to the Hudson Federal #1 SWD well developed and internal corrosion leak, the SWD pump was shut down and a temporary repair clamp was placed on the affected area of the pipe. The entire line will be replaced during the time of the remediation effort.

Describe Area Affected and Cleanup Action Taken.\* Approximately 2550 sq. ft. of pasture land was affected by the release, a vacuum truck was used to remove all of the free standing water from the pool areas. this area was previously impacted by a produced water spill on 5/22/12. A C-141 was submitted by BOPCO for that release. An air rotary rig was scheduled to determine the horizontal extent of the release the week of 8/6/12 but was delayed due to scheduling problems. The applications to drill and remediate the area had been approved by the NMOSE and the NMSLO. The rig is set up for the week of 8/13/12 to drill the soil bores. A remediation plan will be developed and submitted to the NMOCD.

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>Tony Savoie</u>		<b>OIL CONSERVATION DIVISION</b>	
Printed Name: Tony Savoie		Approved by Environmental Specialist: Signed By <u>M. L. B...</u>	
Title: Waste Management and Remediation Specialist		Approval <b>AUG 28 2012</b>	Expiration Date:
E-mail Address: <u>tasavoie@basspet.com</u>		Conditions of Approval:	
Date: 8/15/12 Phone: 432-556-8730		Remediation per OCD Rules & Guidelines. <b>SUBMIT REMEDIATION PROPOSAL NOT LATER THAN:</b>	

Attached ☐

\* Attach Additional Sheets If Necessary

9/28/12

2RP-1265

# **Appendix B**

## **Soil Boring Logs**

# Soil Boring SB-1

Depth Below Ground Surface	Soil Column	Chloride Field Test	PID Reading	Petroleum Odor	Petroleum Stain	Soil Description	Boring SB-1
0						0' - 5' - Red very fine sand with clay	Date Drilled <u>August 22, 2012</u>
5			0.8	None	None	5' - 6' - Tan fine sand; sandstone	Thickness of Bentonite Seal <u>30 Ft</u>
10			0.6	None	None	6' - 15' - Red very fine sand with clay	Depth of Exploratory Boring <u>30 Ft bgs</u>
15			1.3	None	None		Depth to Groundwater _____
20		612	0.5	None	None	15' - 24' - Red silty clay	Ground Water Elevation _____
25		352	1.1	None	None	24' - 25' - Red sandstone; gypsum	Indicates the PSH level measured on _____
30		<112	0.3	None	None	25' - 27' - Red silty clay; gypsum	Indicates the groundwater level measured on _____
						27' - 30' - Tannish red silty clay	Indicates samples selected for Laboratory Analysis.
							PID Head-space reading in ppm obtained with a photo-ionization detector.

## Completion Notes

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

**Soil Boring SB-1**

**BOPCO, LP**  
James Ranch Unit #29 SWD  
Eddy County, New Mexico  
NMOCD Reference #: 2RP-1174 & 2RP-1265



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

Prep By: BJA	Checked By: BRB
September 5, 2012	

# Soil Boring SB-2

Depth Below Ground Surface	Soil Column	Chloride Field Test	PID Reading	Petroleum Odor	Petroleum Stain	Soil Description	Boring SB-2
0							Date Drilled <u>August 22, 2012</u>
							Thickness of Bentonite Seal <u>25 Ft</u>
							Depth of Exploratory Boring <u>25 Ft bgs</u>
							Depth to Groundwater _____
							Ground Water Elevation _____
5			2.8	None	None	0' - 14' - Red very fine sand w/ clay	
10			2.3	None	None		
15		>2,432		None	None		<div> <div>  Indicates the PSH level measured on _____ </div> <div>  Indicates the groundwater level measured on _____ </div> <div>  Indicates samples selected for Laboratory Analysis. </div> <div>                     PID Head-space reading in ppm obtained with a photo-ionization detector. </div> </div>
20		388		None	None	14' - 25' - Red silty clay	
25		280		None	None		

## Completion Notes

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

**Soil Boring SB-2**

**BOPCO, LP**  
**James Ranch Unit #29 SWD**  
**Eddy County, New Mexico**  
**NMOCD Reference #: 2RP-1174 & 2RP-1265**






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

Prep By: BJA	Checked By: BRB
September 5, 2012	

# Soil Boring SB-3

Depth Below Ground Surface	Soil Column	Chloride Field Test	PID Reading	Petroleum Odor	Petroleum Stain	Soil Description	Boring SB-3
0						0' - 5' - Red very fine sand w/ clay	Date Drilled <u>August 22, 2012</u>
5			1.6	None	None	5' - 7' - Tan fine sand; caliche; sandstone	Thickness of Bentonite Seal <u>25 Ft</u>
10			0.7	None	None	7' - 16' - Tan fine sand; sandstone	Depth of Exploratory Boring <u>25 Ft bgs</u>
15		516		None	None		Depth to Groundwater _____
20		136		None	None	16' - 25' - Red silty clay	Ground Water Elevation _____
25		248		None	None		

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

## Completion Notes

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

**Soil Boring SB-3**

**BOPCO, LP**  
 James Ranch Unit #29 SWD  
 Eddy County, New Mexico  
 NMOCD Reference #: 2RP-1174 & 2RP-1265




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

Prep By: BJA

Checked By: BRB

September 5, 2012

# Soil Boring SB-4

Depth Below Ground Surface	Soil Column	Chloride Field Test	PID Reading	Petroleum Odor	Petroleum Stain	Soil Description
0						0' - 3' - Red fine sand w/ clay
5			0.5	None	None	3' - 4' - Tan fine sand; caliche; sandstone
10			0.1	None	None	4' - 12' - Tan fine sand; sandstone
15				None	None	12' - 16' - Red fine sand
20		428		None	None	16' - 25' - Red silty clay
25		188		None	None	

## Boring SB-4

Date Drilled August 22, 2012  
 Thickness of Bentonite Seal 25 Ft  
 Depth of Exploratory Boring 25 Ft bgs  
 Depth to Groundwater  
 Ground Water Elevation

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

## Completion Notes

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

Soil Boring SB-4


BOPCO, LP  
 James Ranch Unit #29 SWD  
 Eddy County, New Mexico  
 NMOCD Reference #: 2RP-1174 & 2RP-1265



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

Prep By: BJA	Checked By: BRB
September 5, 2012	

# Soil Boring SB-5

Depth Below Ground Surface	Soil Column	Chloride Field Test	PID Reading	Petroleum Odor	Petroleum Stain	Soil Description
0		<112	0.1	None	None	0' - 2' - Red fine sand w/ clay
5		146	0.5	None	None	2' - 5' - Tan fine sand; caliche
10		216		None	None	5' - 8' - Tan fine sand; sandstone
15		216		None	None	8' - 20' - Red silty clay
20						

## Boring SB-5

Date Drilled August 22, 2012  
 Thickness of Bentonite Seal 20 Ft  
 Depth of Exploratory Boring 20 Ft bgs  
 Depth to Groundwater \_\_\_\_\_  
 Ground Water Elevation \_\_\_\_\_

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

## Completion Notes

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

**Soil Boring SB-5**

**BOPCO, LP**  
 James Ranch Unit #29 SWD  
 Eddy County, New Mexico  
 NMOCD Reference #: 2RP-1174 & 2RP-1265



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

Prep By: BJA	Checked By: BRB
September 5, 2012	

# **Appendix C**

## **Permits**





**Ray Powell, M.S., D.V.M.**  
**COMMISSIONER**

*State of New Mexico*  
*Commissioner of Public Lands*

310 OLD SANTA FE TRAIL  
P.O. BOX 1148  
SANTA FE, NEW MEXICO 87504-1148

**COMMISSIONER'S OFFICE**

Phone (505) 827-5760  
Fax (505) 827-5766  
[www.nmstatelands.org](http://www.nmstatelands.org)

July 20, 2012

**BOBCO, LP**  
**522 W. Mermod**  
**Carlsbad, New Mexico 88220**

Attn: Tony Savoie

Re: Right-of-Entry Application No. ROE-2170

Dear Mr. Savoie,

Enclosed is the completed captioned Right-of-Entry permit. If any corrections are necessary, please let us know and we will retype or amend this lease as necessary.

If you have any questions, please feel free to contact this office at the above address or for Donald Martinez, Surface Director @ (505) 827-5731 or myself @ 827-5710.

Sincerely,

A handwritten signature in dark ink, appearing to read "Anthony Vigil", written over a horizontal line.

Anthony Vigil, Management Analyst  
Right of Ways &  
Water Resources Bureau

**NEW MEXICO STATE LAND OFFICE**  
**Ray Powell, M.S., D.V.M., Commissioner of Public Lands**  
**New Mexico State Land Office Building**  
**P.O. Box 1148, Santa Fe, NM 87504-1148**

**RIGHT OF ENTRY PERMIT**  
**CONTRACT NO. ROE-2170**  
**(Remediation)**

**1. RIGHT OF ENTRY PERMIT**

This permit is issued under the authority of NMSA 1978, Section 19-1-2. Therefore, and in consideration of and subject to the terms, covenants, conditions, agreements, obligations and reservations contained in the permit and all other existing rights, the Commissioner of Public Lands, New Mexico State Land Office, State Of New Mexico, hereinafter called "COMMISSIONER," grants to **BOPCO, LP** State of Incorporation (if applicable), whose address is **522 W. Mermod, Carlsbad, NM 88220** hereinafter called "PERMITTEE," authorized use of a specific tract(s) of State Trust Land only for the term, and only for the permitted use, described in this permit.

**2. TERM AND LAND DESCRIPTION**

Right of entry is granted for a term of **180 days**, commencing **July 5, 2012** and ending **January 1, 2013** to the following State Trust Lands.

**Section 36, Township 22 South, Range 30 East. NE ¼ SW ¼ Eddy County**

**3. APPLICATION and PROCESSING FEE**

**\$ 530.00 (Five Hundred Thirty Dollars)**

**4. PERMITTED USE, PERSONNEL, EQUIPMENT AND MATERIALS**

Permitted use is for the purpose of: **Perform Soil Remediation.** (Please note that this permit does Not cover Monitor Wells).

Personnel present on State Trust Land: **Representatives of BOPCO, Basin Environmental and Straub Corporation.**

Equipment & Materials present on State Trust Land: **Drilling rig, excavator, backhoe, dump trucks and pickups**

***Prior to execution of project company must identify and contact the Grazing Lessee.***

***The granting of this permit does not allow access across private lands.***

## **5. IMPROVEMENTS**

No improvements shall be placed on the premises without the prior written consent of the Commissioner.

## **6. RESERVATIONS**

Commissioner reserves the right to execute leases, rights of way, easements, permits, exchange agreements, sale agreements, permits and other lawful rights on or across the land covered by this permit, including but not limited to any such rights for mining purposes and for the extraction of oil, gas, salt, geothermal resources, and other mineral deposits there from and the right to go upon, explore for, mine, remove and sell same.

## **7. COMPLIANCE WITH LAWS**

Permittee shall at its own expense comply fully with and be subject to all applicable regulations, rules, ordinances, and requirements of law or of the Commissioner, including but not limited to the regulations of the State Land Office; Chapter 19 NMSA governing State Trust Lands; federal and state environmental laws and regulations; and the New Mexico Cultural Properties Act, NMSA 1978 Sections 18-6-1 through 18-6-23. It is illegal for any person or his agent to appropriate, excavate, injure, or destroy any historic, or prehistoric ruin or monument, or any object of historical, archaeological, architectural, or scientific value situated on lands owned or controlled by the State Land Office without a valid permit issued by the Cultural Properties Review Committee and approved by the Commissioner of Public Lands.

## **8. HOLD HARMLESS AND INDEMNIFICATION**

Permittee shall save, hold harmless, indemnify and defend Commissioner, the State Land Office, the State of New Mexico, and any of their officers, employees or agents, in their official and individual capacities, of and from any and all liability, claims, losses, damages, costs, and fees arising out of or alleged to arise out of, or directly or indirectly connected with, the operations of Permittee under this permit on or off State Trust Lands or arising out of the presence on State Trust Lands of any equipment, material, agent, invitee, contractor or subcontractor of Permittee. This Hold Harmless and Indemnification clause covers any claim, including any brought in any court or before any administrative agency, of any loss or alleged loss, and any damages or alleged damages asserted with respect to any violation or alleged violation of any state, federal or local law or regulation, including but not limited to any environmental law or regulation, any cultural properties law (including the New Mexico Cultural Properties Act, cited above) or regulation, and any alleged damage to the property, rights or interests of any

State Land Office lessee, right-of-way holder, or other permittee.

## **9. AMENDMENT**

This permit shall not be altered, changed, or amended except by an instrument in writing executed by Commissioner and Permittee.

## **10. WITHDRAWAL**

Commissioner reserves the right to withdraw any or all of the land authorized for use under this permit. If applicable, Permittee shall vacate the acreage specified within 30 days after receipt of written notification of withdrawal from the Commissioner.

## **11. CANCELLATION**

The violation by Permittee of any of the terms, conditions, or covenants of this permit or the nonpayment by Permittee of the fees due under this permit shall at the option of the Commissioner be considered a default and shall cause the cancellation of this permit 30 days after Permittee has been sent written notice of such.

## **12. PRESERVE AND PROTECT**

The Permittee agrees to preserve and protect the natural environmental conditions of the land encompassed in this permit, and to take those reclamation or corrective actions that are accepted soil and water conservation practices and that are deemed necessary by the Commissioner to protect the land from pollution, erosion, or other environmental degradation. The Permittee further agrees not to injure the property of, or interfere with the operations or rights of, any State Land Office lessee, right-of-way holder, easement holder or other permittee who has rights to use the State Trust Land subject to this permit.

## **13. RECLAMATION, REMOVAL OF EQUIPMENT, MATERIALS, AND WASTE**

The Permittee agrees to reclaim those areas that may be damaged by activities conducted thereon.

The Permittee agrees to remove from the State Trust Lands, no later than the end of the term of this permit, all equipment, and materials it has placed or brought upon the land and to clean up and remove from the land any trash, waste, effluent, or other products used or brought upon the land in connection with this permit.

## **14. SPECIAL INSTRUCTIONS AND/OR RESTRICTIONS**

1. No off road traffic allowed.
2. No wood collection or tree cutting allowed.
3. Disturbing, dislodging, damaging, defacing, destroying or removing historical

archaeological, paleontological or cultural sites or artifacts is prohibited.

4. Disturbing, dislodging, damaging, defacing, destroying any improvement, fixture, item, object or thing placed or located in, under or upon the land is prohibited.

5. This permit does not grant a right to enter State Trust Lands to which there is no public access.

6. Any uses or activities not within the scope of this permit are not allowed unless prior written approval from the Commissioner of Public Lands is granted.

7. OTHER:

WITNESS the hands and seals of PERMITTEE and COMMISSIONER on the day(s) and year entered below.

[Signature]  
PERMITTEE

Telephone: (432) 683-2277

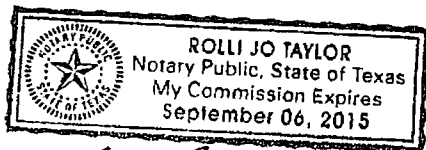
#### ACKNOWLEDGMENT

STATE OF Texas )

COUNTY OF Midland )

The foregoing instrument was acknowledged before me this 11 day of July, 20 12.

My Commission Expires: 9/6/2015 [Signature]  
NOTARY PUBLIC



[Signature]  
COMMISSIONER OF PUBLIC LANDS

DATE: 7/20/12

ROE- 2170 (Remediation)

Scott A. Verhines, P.E.  
State Engineer



Roswell Office  
1900 WEST SECOND STREET  
ROSWELL, NM 88201

**STATE OF NEW MEXICO  
OFFICE OF THE STATE ENGINEER**

Trn Nbr: 507736  
File Nbr: C 03561

Aug. 01, 2012

BEN ARGUIJO (BASIN ENVIRONMENTAL  
BOPCO, LP  
522 WEST MERMOD  
CARLSBAD, NM 88220

Greetings:

Enclosed is your copy of the above numbered permit that has been approved subject to the conditions set forth on the approval page. In accordance with the conditions of approval, the well can only be tested for 10 cumulative days, and the well is to be plugged on or before 08/31/2013, unless a permit to use the water is acquired from this office.

A Well Record & Log (OSE Form wr-20) shall be filed in this office within twenty (20) days after completion of drilling, but no later than 08/31/2013.

Appropriate forms can be downloaded from the OSE website [www.ose.state.nm.us](http://www.ose.state.nm.us) or will be mailed upon request.

Sincerely,

  
Bill Duemling  
(575) 622-6521

Enclosure

explore

File No.

C-3561

## NEW MEXICO OFFICE OF THE STATE ENGINEER

APPLICATION FOR PERMIT TO DRILL A WELL  
WITH NO CONSUMPTIVE USE OF WATER

(check applicable box):

For fees, see State Engineer website: <http://www.ose.state.nm.us/>

Purpose:

☒ Exploratory☐ Pollution Control And / Or Recovery☐ Geo-Thermal☐ Construction Site De-Watering☐ Other (Describe):☐ Monitoring☐ Mineral De-Watering2-31549 \$5.00  
2-31727 \$20.00

A separate permit will be required to apply water to beneficial use.

☐ Temporary Request - Requested Start Date: 6/8/2012

Requested End Date: 6/8/2013

Plugging Plan of Operations Submitted? ☐ Yes ☒ No

## 1. APPLICANT(S)

Name: BOPCO, LP	Name:
Contact or Agent: Ben J. Arguijo (Basin Environmental) check here if Agent <input checked="" type="checkbox"/>	Contact or Agent: check here if Agent <input checked="" type="checkbox"/>
Mailing Address: 522 W. Mermod	Mailing Address:
City: Carlsbad	City:
State: NM Zip Code: 88220	State: Zip Code:
Phone: (432)556-8730 <input type="checkbox"/> Home <input checked="" type="checkbox"/> Cell Phone (Work):	Phone: <input type="checkbox"/> Home <input type="checkbox"/> Cell Phone (Work):
E-mail (optional): TASavole@BassPet.com bjarguijo@basinenv.com	E-mail (optional):

JUN 9 - 2012

FOR OSE INTERNAL USE

Application for Permit, Form wr-07, Rev 4/12/12

STATE ENGINEER OFFICE  
ROSWELL, NEW MEXICO

File Number: C-3561	Trm Number: 507736
Trans Description (optional): EXPL	
Sub-Basin: C	
PCW/LOG Due Date: 08-31-2013	

2. WELL(S) Describe the well(s) applicable to this application.

<b>Location Required:</b> Coordinate location must be reported in NM State Plane (NAD 83), UTM (NAD 83), or Latitude/Longitude (Lat/Long - WGS84). District II (Roswell) and District VII (Cimarron) customers, provide a PLSS location in addition to above.			
<input type="checkbox"/> NM State Plane (NAD83) (Feet) <input type="checkbox"/> NM West Zone <input type="checkbox"/> NM East Zone <input type="checkbox"/> NM Central Zone		<input type="checkbox"/> UTM (NAD83) (Meters) <input type="checkbox"/> Zone 12N <input type="checkbox"/> Zone 13N	
<input checked="" type="checkbox"/> Lat/Long (WGS84) (to the nearest 1/10 <sup>th</sup> of second)			
Well Number (if known):	X or Easting or Longitude:	Y or Northing or Latitude:	Provide if known: -Public Land Survey System (PLSS) (Quarters or Halves, Section, Township, Range) OR - Hydrographic Survey Map & Tract; OR - Lot, Block & Subdivision; OR - Land Grant Name
SB-1 POD1	32.346284 32,20,46.62	-103.837495 -103,50,14.98	Unit Letter "K" (NE/SW), Section 36, Township 22 South, Range 30 East
SB-2 POD2	32.346284	-103.837495	Unit Letter "K" (NE/SW), Section 36, Township 22 South, Range 30 East
SB-3 POD3	32.346284	-103.837495	Unit Letter "K" (NE/SW), Section 36, Township 22 South, Range 30 East
SB-4 POD4	32.346284	-103.837495	Unit Letter "K" (NE/SW), Section 36, Township 22 South, Range 30 East
SB-5 POD5	32.346284	-103.837495	Unit Letter "K" (NE/SW), Section 36, Township 22 South, Range 30 East
NOTE: If more well locations need to be described, complete form WR-08 (Attachment 1 – POD Descriptions) Additional well descriptions are attached: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, how many _____			
Other description relating well to common landmarks, streets, or other: See attached Site Location Map.			
Well is on land owned by: New Mexico State Land Office			
Well Information: NOTE: If more than one (1) well needs to be described, provide attachment. Attached? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, how many _____			
Approximate depth of well (feet): 50.00		Outside diameter of well casing (inches): 0.00	
Driller Name: Straub Corporation		Driller License Number: WD1478	

3. ADDITIONAL STATEMENTS OR EXPLANATIONS

Up to five (5) soil borings will be drilled on-site to investigate the vertical extent of contamination following a crude oil and produced water release at BOPCO's James Ranch Unit 29 Disposal. The exact number, location(s), and depth(s) of the soil bore(s) will be determined on the drilling date by field-screens using a chloride test kit and/or Photo-Ionization Detector. Due to the depth to water at the location (approximately 200 feet below ground surface), it is unlikely that monitor wells will be required.

172 :8 A 9 - JUN 2017

STATE ENGINEER OFFICE  
ROSSELL, NEW MEXICO

FOR OSE INTERNAL USE

Application for Permit, Form wr-07

File Number: C-3561

Trm Number: 567736



**4. SPECIFIC REQUIREMENTS:** The applicant must include the following, as applicable to each well type. Please check the appropriate boxes, to indicate the information has been included and/or attached to this application:

<b>Exploratory:</b> <input type="checkbox"/> Include a description of any proposed pump test, if applicable.	<b>Pollution Control and/or Recovery:</b> <input type="checkbox"/> Include a plan for pollution control/recovery, that includes the following: <input type="checkbox"/> A description of the need for the pollution control or recovery operation. <input type="checkbox"/> The estimated maximum period of time for completion of the operation. <input type="checkbox"/> The annual diversion amount. <input type="checkbox"/> The annual consumptive use amount. <input type="checkbox"/> The maximum amount of water to be diverted and injected for the duration of the operation. <input type="checkbox"/> The method and place of discharge.	<b>Construction De-Watering:</b> <input type="checkbox"/> Include a description of the proposed dewatering operation, <input type="checkbox"/> The estimated duration of the operation, <input type="checkbox"/> The maximum amount of water to be diverted, <input type="checkbox"/> A description of the need for the dewatering operation, and, <input type="checkbox"/> A description of how the diverted water will be disposed of.	<b>Mine De-Watering:</b> <input type="checkbox"/> Include a plan for pollution control/recovery, that includes the following: <input type="checkbox"/> A description of the need for mine dewatering. <input type="checkbox"/> The estimated maximum period of time for completion of the operation. <input type="checkbox"/> The source(s) of the water to be diverted. <input type="checkbox"/> The geohydrologic characteristics of the aquifer(s). <input type="checkbox"/> The maximum amount of water to be diverted per annum. <input type="checkbox"/> The maximum amount of water to be diverted for the duration of the operation. <input type="checkbox"/> The quality of the water.
<b>Monitoring:</b> <input checked="" type="checkbox"/> Include the reason for the monitoring well, and, <input checked="" type="checkbox"/> The duration of the planned monitoring.	<input type="checkbox"/> The method of measurement of water produced and discharged. <input type="checkbox"/> The source of water to be injected. <input type="checkbox"/> The method of measurement of water injected. <input type="checkbox"/> The characteristics of the aquifer. <input type="checkbox"/> The method of determining the resulting annual consumptive use of water and depletion from any related stream system. <input type="checkbox"/> Proof of any permit required from the New Mexico Environment Department. <input type="checkbox"/> An access agreement if the applicant is not the owner of the land on which the pollution plume control or recovery well is to be located.	<b>Geo-Thermal:</b> <input type="checkbox"/> Include a description of the geothermal heat exchange project, <input type="checkbox"/> The amount of water to be diverted and re-injected for the project, <input type="checkbox"/> The time frame for constructing the geothermal heat exchange project, and, <input type="checkbox"/> The duration of the project. <input type="checkbox"/> Preliminary surveys, design data, and additional information shall be included to provide all essential facts relating to the request.	<input type="checkbox"/> The method of measurement of water diverted. <input type="checkbox"/> The recharge of water to the aquifer. <input type="checkbox"/> Description of the estimated area of hydrologic effect of the project. <input type="checkbox"/> The method and place of discharge. <input type="checkbox"/> An estimation of the effects on surface water rights and underground water rights from the mine dewatering project. <input type="checkbox"/> A description of the methods employed to estimate effects on surface water rights and underground water rights. <input type="checkbox"/> Information on existing wells, rivers, springs, and wetlands within the area of hydrologic effect.

#### ACKNOWLEDGEMENT

I, We (name of applicant(s)), Ben J. Arguljo

Print Name(s)

affirm that the foregoing statements are true to the best of (my, our) knowledge and belief.

Applicant Signature

Applicant Signature

#### ACTION OF THE STATE ENGINEER

This application is:

☒ approved

☐ partially approved

☐ denied

provided it is not exercised to the detriment of any others having existing rights, and is not contrary to the conservation of water in New Mexico nor detrimental to the public welfare and further subject to the attached conditions of approval.

Witness my hand and seal this 1st day of August 20 12, for the State Engineer,

Scott A. Verhines, P.E., State Engineer

By: Bill Duemling  
Signature

Bill Duemling  
Print

Title: Carlsbad Basin Supervisor

FOR OSE INTERNAL USE

Application for Permit, Form wr-07

File Number: C-3561

Trn Number: 507736

**NEW MEXICO STATE ENGINEER OFFICE  
PERMIT TO EXPLORE**

**SPECIFIC CONDITIONS OF APPROVAL**

- 1A Depth of the well shall not exceed the thickness of the valley fill.
- 4 No water shall be appropriated and beneficially used under this permit.
- B The well shall be drilled by a driller licensed in the State of New Mexico in accordance with Section 72-12-12 New Mexico Statutes Annotated.
- C Driller's well record must be filed with the State Engineer, within 20 days after the well is drilled or driven. Well record forms will be provided by the State Engineer upon request.
- LOG The Point of Diversion C 03561 POD1 must be completed and the Well Log filed on or before 08/31/2013.
- LOG The Point of Diversion C 03561 POD2 must be completed and the Well Log filed on or before 08/31/2013.
- LOG The Point of Diversion C 03561 POD3 must be completed and the Well Log filed on or before 08/31/2013.
- LOG The Point of Diversion C 03561 POD4 must be completed and the Well Log filed on or before 08/31/2013.
- LOG The Point of Diversion C 03561 POD5 must be completed and the Well Log filed on or before 08/31/2013.

NO WATER SHALL BE DIVERTED FROM EACH BOREHOLE EXCEPT FOR TESTING PURPOSES WHICH SHALL NOT EXCEED TEN (10) CUMULATIVE DAYS, AND EACH BOREHOLE SHALL BE PLUGGED OR CAPPED ON OR BEFORE AUGUST 31, 2013, UNLESS A SEPARATE PERMIT TO USE WATER IS ACQUIRED FROM THE OFFICE OF THE STATE ENGINEER.

EACH BOREHOLE SHALL BE CONSTRUCTED, MAINTAINED AND OPERATED THAT EACH WATER SHALL BE CONFINED TO THE AQUIFER IN WHICH IT IS ENCOUNTERED.

Trn Desc: C 03561

File Number: C 03561

Trn Number: 507736

NEW MEXICO STATE ENGINEER OFFICE  
PERMIT TO EXPLORE

ACTION OF STATE ENGINEER

Notice of Intention Rcvd:                      Date Rcvd. Corrected:  
Formal Application Rcvd: 07/19/2012      Pub. of Notice Ordered:  
Date Returned - Correction:                  Affidavit of Pub. Filed:

This application is approved provided it is not exercised to the detriment of any others having existing rights, and is not contrary to the conservation of water in New Mexico nor detrimental to the public welfare of the state; and further subject to the specific conditions listed previously.

Witness my hand and seal this 01 day of Aug A.D., 2012

Scott A. Verhines, P.E., State Engineer

By: Bill Duemling  
Bill Duemling, Basin Supv.

Trn Desc: C 03561

File Number: C 03561  
Trn Number: 507736

## **Locator Tool Report**

### **General Information:**

Application ID:30                      Date: 06-19-2012                      Time: 15:31:45

WR File Number: C  
Purpose: POINT OF DIVERSION

Applicant First Name: BOPCO SOIL BORINGS  
Applicant Last Name: JAMES RANCH UNIT 29 DISPOSAL

GW Basin: CARLSBAD  
County: EDDY

Critical Management Area Name(s): NONE  
Special Condition Area Name(s): NONE  
Land Grant Name: NON GRANT

### **PLSS Description (New Mexico Principal Meridian):**

NE 1/4 of SW 1/4 of NE 1/4 of SW 1/4 of Section 36, Township 22S, Range 30E.

### **Coordinate System Details:**

#### **Geographic Coordinates:**

Latitude: 32 Degrees 20 Minutes 46.6 Seconds N  
Longitude: 103 Degrees 50 Minutes 15.0 Seconds W

#### **Universal Transverse Mercator Zone: 13N**

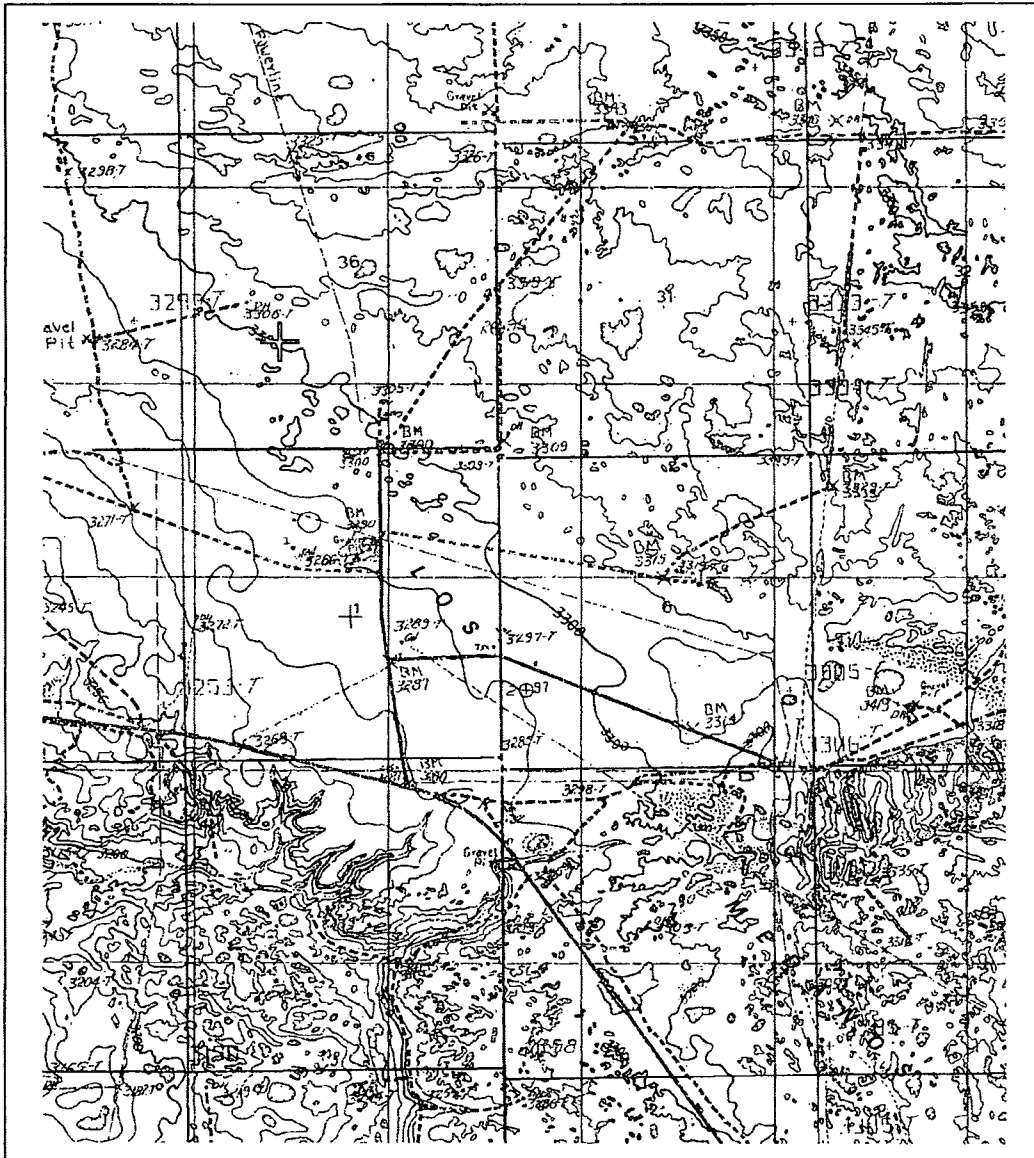
NAD 1983(92) (Meters)	N: 3,579,413	E: 609,393
NAD 1983(92) (Survey Feet)	N: 11,743,459	E: 1,999,318
NAD 1927 (Meters)	N: 3,579,212	E: 609,442
NAD 1927 (Survey Feet)	N: 11,742,797	E: 1,999,478

#### **State Plane Coordinate System Zone: New Mexico East**

NAD 1983(92) (Meters)	N: 149,372	E: 211,672
NAD 1983(92) (Survey Feet)	N: 490,064	E: 694,462
NAD 1927 (Meters)	N: 149,354	E: 199,120
NAD 1927 (Survey Feet)	N: 490,004	E: 653,279

**NEW MEXICO OFFICE OF STATE ENGINEER**

**Locator Tool Report**



WR File Number: C

Scale: 1:38,023

Northing/Easting: UTM83(92) (Meter): N: 3,579,413

E: 609,393

Northing/Easting: SPCS83(92) (Feet): N: 490,064

E: 694,462

GW Basin: Carlsbad

# **Appendix D**

## **Laboratory Analytical Reports**

August 31, 2012

BEN J. ARGUIJO

Basin Environmental Service

P.O. Box 301

Lovington, NM 88260

RE: JAMES RANCH UNIT #29 SWD

Enclosed are the results of analyses for samples received by the laboratory on 08/24/12 8:35.

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\\_accred\\_certif.html](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

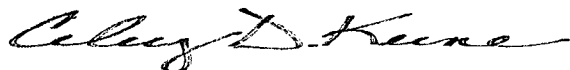
Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (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,



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: 08/24/2012  
Reported: 08/31/2012  
Project Name: JAMES RANCH UNIT #29 SWD  
Project Number: NONE GIVEN  
Project Location: EDDY COUNTY, NM

Sampling Date: 08/22/2012  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: SB - 1 @ 5' (H202030-01)**

Chloride, SM4500Cl-B			mg/kg							Analyzed By: HM
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16800	16.0	08/28/2012	ND	416	104	400	0.00		
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	08/28/2012	ND	197	98.3	200	2.52		
DRO >C10-C28	<10.0	10.0	08/28/2012	ND	198	98.8	200	1.52		
EXT DRO >C28-C35	<10.0	10.0	08/28/2012	ND						
Surrogate: 1-Chlorooctane	84.9 %	65.2-140								
Surrogate: 1-Chlorooctadecane	98.0 %	63.6-154								

Cardinal Laboratories

\* = Accredited Analyte

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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: 08/24/2012  
 Reported: 08/31/2012  
 Project Name: JAMES RANCH UNIT #29 SWD  
 Project Number: NONE GIVEN  
 Project Location: EDDY COUNTY, NM

 Sampling Date: 08/22/2012  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: SB - 1 @ 10' (H202030-02)**

BTEX 80218		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/29/2012	ND	1.64	82.1	2.00	2.13	
Toluene*	<0.050	0.050	08/29/2012	ND	1.67	83.7	2.00	2.70	
Ethylbenzene*	<0.050	0.050	08/29/2012	ND	1.74	87.2	2.00	3.08	
Total Xylenes*	<0.150	0.150	08/29/2012	ND	5.53	92.1	6.00	3.19	

Surrogate: 4-Bromofluorobenzene (PIC) 99.7 % 89.4-126

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	21600	16.0	08/28/2012	ND	416	104	400	0.00	

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	08/28/2012	ND	197	98.3	200	2.52	
DRO >C10-C28	<10.0	10.0	08/28/2012	ND	198	98.8	200	1.52	
EXT DRO >C28-C35	<10.0	10.0	08/28/2012	ND					

Surrogate: 1-Chlorooctane 87.6 % 65.2-140

Surrogate: 1-Chlorooctadecane 102 % 63.6-154

**Sample ID: SB - 1 @ 15' (H202030-03)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	19200	16.0	08/28/2012	ND	416	104	400	0.00	

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received:	08/24/2012	Sampling Date:	08/22/2012
Reported:	08/31/2012	Sampling Type:	Soil
Project Name:	JAMES RANCH UNIT #29 SWD	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

**Sample ID: SB - 1 @ 20' (H202030-04)**

Chloride, SM4500Cl-B		mg/kg	Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	448	16.0	08/28/2012	ND	416	104	400	0.00	

**Sample ID: SB - 1 @ 25' (H202030-05)**

Chloride, SM4500Cl-B		mg/kg	Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	176	16.0	08/28/2012	ND	416	104	400	0.00	

**Sample ID: SB - 1 @ 30' (H202030-06)**

Chloride, SM4500Cl-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	08/28/2012	ND	416	104	400	0.00	

Cardinal Laboratories

\*=Accredited Analyte

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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: 08/24/2012  
 Reported: 08/31/2012  
 Project Name: JAMES RANCH UNIT #29 SWD  
 Project Number: NONE GIVEN  
 Project Location: EDDY COUNTY, NM

 Sampling Date: 08/22/2012  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

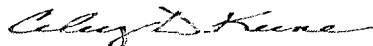
**Sample ID: SB - 2 @ 5' (H202030-07)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>13000</b>	16.0	08/28/2012	ND	416	104	400	0.00	
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	08/28/2012	ND	197	98.3	200	2.52	
DRO >C10-C28	<10.0	10.0	08/28/2012	ND	198	98.8	200	1.52	
EXT DRO >C28-C35	<10.0	10.0	08/28/2012	ND					
<hr/>									
Surrogate: 1-Chlorooctane	83.8 %	65.2-140							
Surrogate: 1-Chlorooctadecane	98.7 %	63.6-154							

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\* = Accredited Analyte

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Celestine 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: 08/24/2012  
 Reported: 08/31/2012  
 Project Name: JAMES RANCH UNIT #29 SWD  
 Project Number: NONE GIVEN  
 Project Location: EDDY COUNTY, NM

 Sampling Date: 08/22/2012  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: SB - 2 @ 10' (H202030-08)**

BTEX 8021B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/30/2012	ND	2.23	111	2.00	2.49		
Toluene*	<0.050	0.050	08/30/2012	ND	2.30	115	2.00	3.25		
Ethylbenzene*	<0.050	0.050	08/30/2012	ND	2.31	115	2.00	3.89		
Total Xylenes*	<0.150	0.150	08/30/2012	ND	7.49	125	6.00	4.19		

Surrogate: 4-Bromofluorobenzene (PIE) 98.0 % 89.4-126

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	7700	16.0	08/28/2012	ND	416	104	400	0.00	
TPH 8015M		mg/kg		Analyzed By: MS					

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	08/28/2012	ND	197	98.3	200	2.52	
DRO >C10-C28	<10.0	10.0	08/28/2012	ND	198	98.8	200	1.52	
EXT DRO >C28-C35	<10.0	10.0	08/28/2012	ND					

Surrogate: 1-Chlorooctane 83.4 % 65.2-140

Surrogate: 1-Chlorooctadecane 96.2 % 63.6-154

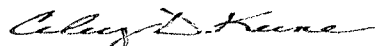
**Sample ID: SB - 2 @ 15' (H202030-09)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	5520	16.0	08/28/2012	ND	416	104	400	0.00	

Cardinal Laboratories

\*=Accredited Analyte

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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: 08/24/2012  
 Reported: 08/31/2012  
 Project Name: JAMES RANCH UNIT #29 SWD  
 Project Number: NONE GIVEN  
 Project Location: EDDY COUNTY, NM

 Sampling Date: 08/22/2012  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: SB - 2 @ 20' (H202030-10)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1440	16.0	08/28/2012	ND	416	104	400	0.00	

**Sample ID: SB - 2 @ 25' (H202030-11)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	224	16.0	08/28/2012	ND	416	104	400	3.92	

**Sample ID: SB - 3 @ 5' (H202030-12)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	12000	16.0	08/28/2012	ND	416	104	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	08/28/2012	ND	201	100	200	0.929	
DRO >C10-C28	21.3	10.0	08/28/2012	ND	204	102	200	0.300	
EXT DRO >C28-C35	11.1	10.0	08/28/2012	ND					

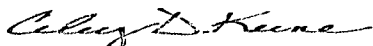
Surrogate: 1-Chlorooctane 72.7 % 65.2-140

Surrogate: 1-Chlorooctadecane 88.9 % 63.6-154

Cardinal Laboratories

\*=Accredited Analyte

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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: 08/24/2012  
 Reported: 08/31/2012  
 Project Name: JAMES RANCH UNIT #29 SWD  
 Project Number: NONE GIVEN  
 Project Location: EDDY COUNTY, NM

 Sampling Date: 08/22/2012  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: SB - 3 @ 10' (H202030-13)**

BTEX 8021B			mg/kg		Analyzed By: AP				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/30/2012	ND	2.23	111	2.00	2.49	
Toluene*	<0.050	0.050	08/30/2012	ND	2.30	115	2.00	3.25	
Ethylbenzene*	<0.050	0.050	08/30/2012	ND	2.31	115	2.00	3.89	
Total Xylenes*	<0.150	0.150	08/30/2012	ND	7.49	125	6.00	4.19	

Surrogate: 4-Bromofluorobenzene (PIE) 97.9 % 89.4-126

Chloride, SM4500Cl-B			mg/kg		Analyzed By: HM				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	4480	16.0	08/28/2012	ND	416	104	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	08/28/2012	ND	201	100	200	0.929	
DRO >C10-C28	<10.0	10.0	08/28/2012	ND	204	102	200	0.300	
EXT DRO >C28-C35	<10.0	10.0	08/28/2012	ND					

Surrogate: 1-Chlorooctane 77.5 % 65.2-140

Surrogate: 1-Chlorooctadecane 91.0 % 63.6-154

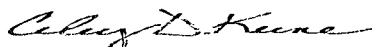
**Sample ID: SB - 3 @ 15' (H202030-14)**

Chloride, SM4500Cl-B			mg/kg		Analyzed By: HM				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	480	16.0	08/28/2012	ND	416	104	400	3.92	

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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: 08/24/2012  
Reported: 08/31/2012  
Project Name: JAMES RANCH UNIT #29 SWD  
Project Number: NONE GIVEN  
Project Location: EDDY COUNTY, NM

Sampling Date: 08/22/2012  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: SB - 3 @ 20' (H202030-15)**

Chloride, SM4500Cl-B		mg/kg	Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	144	16.0	08/28/2012	ND	416	104	400	3.92	

**Sample ID: SB - 3 @ 25' (H202030-16)**

Chloride, SM4500Cl-B		mg/kg	Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	128	16.0	08/28/2012	ND	416	104	400	3.92	

**Sample ID: SB - 4 @ 5' (H202030-17)**

Chloride, SM4500Cl-B		mg/kg	Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	14800	16.0	08/28/2012	ND	416	104	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	08/28/2012	ND	201	100	200	0.929	
DRO >C10-C28	<10.0	10.0	08/28/2012	ND	204	102	200	0.300	
EXT DRO >C28-C35	<10.0	10.0	08/28/2012	ND					

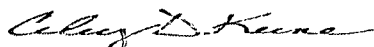
Surrogate: 1-Chlorooctane 75.6 % 65.2-140

Surrogate: 1-Chlorooctadecane 88.3 % 63.6-154

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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: 08/24/2012  
 Reported: 08/31/2012  
 Project Name: JAMES RANCH UNIT #29 SWD  
 Project Number: NONE GIVEN  
 Project Location: EDDY COUNTY, NM

 Sampling Date: 08/22/2012  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: SB - 4 @ 10' (H202030-18)**

BTEX 8021B			mg/kg		Analyzed By: AP				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/30/2012	ND	2.23	111	2.00	2.49	
Toluene*	<0.050	0.050	08/30/2012	ND	2.30	115	2.00	3.25	
Ethylbenzene*	<0.050	0.050	08/30/2012	ND	2.31	115	2.00	3.89	
Total Xylenes*	<0.150	0.150	08/30/2012	ND	7.49	125	6.00	4.19	

Surrogate: 4-Bromofluorobenzene (PIE) 98.2 % 89.4-126

Chloride, SM4500Cl-B			mg/kg		Analyzed By: HM				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	15800	16.0	08/28/2012	ND	416	104	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	08/29/2012	ND	201	100	200	0.929	
DRO >C10-C28	<10.0	10.0	08/29/2012	ND	204	102	200	0.300	
EXT DRO >C28-C35	<10.0	10.0	08/29/2012	ND					

Surrogate: 1-Chlorooctane 78.4 % 65.2-140

Surrogate: 1-Chlorooctadecane 91.0 % 63.6-154

**Sample ID: SB - 4 @ 15' (H202030-19)**

Chloride, SM4500Cl-B			mg/kg		Analyzed By: HM				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1740	16.0	08/28/2012	ND	416	104	400	3.92	

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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: 08/24/2012  
 Reported: 08/31/2012  
 Project Name: JAMES RANCH UNIT #29 SWD  
 Project Number: NONE GIVEN  
 Project Location: EDDY COUNTY, NM

 Sampling Date: 08/22/2012  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: SB - 4 @ 20' (H202030-20)**

Chloride, SM4500Cl-B	mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2120	16.0	08/28/2012	ND	416	104	400	3.92	

**Sample ID: SB - 4 @ 25' (H202030-21)**

Chloride, SM4500Cl-B	mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	176	16.0	08/28/2012	ND	416	104	400	3.92	

**Sample ID: SB - 5 @ 5' (H202030-22)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	08/28/2012	ND	416	104	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	08/29/2012	ND	201	100	200	0.929	
DRO >C10-C28	<10.0	10.0	08/29/2012	ND	204	102	200	0.300	
EXT DRO >C28-C35	<10.0	10.0	08/29/2012	ND					

 Surrogate: 1-Chlorooctane 80.0 % 65.2-140  
 Surrogate: 1-Chlorooctadecane 93.9 % 63.6-154

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Celey D. Keene, Lab Director/Quality Manager

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

Received: 08/24/2012  
Reported: 08/31/2012  
Project Name: JAMES RANCH UNIT #29 SWD  
Project Number: NONE GIVEN  
Project Location: EDDY COUNTY, NM

Sampling Date: 08/22/2012  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: SB - 5 @ 10' (H202030-23)**

BTEX 8021B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/30/2012	ND	2.23	111	2.00	2.49		
Toluene*	<0.050	0.050	08/30/2012	ND	2.30	115	2.00	3.25		
Ethylbenzene*	<0.050	0.050	08/30/2012	ND	2.31	115	2.00	3.89		
Total Xylenes*	<0.150	0.150	08/30/2012	ND	7.49	125	6.00	4.19		

Surrogate: 4-Bromofluorobenzene (PIE) 98.5 % 89.4-126

Chloride, SM4500Cl-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	08/28/2012	ND	416	104	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	08/29/2012	ND	201	100	200	0.929	
DRO >C10-C28	<10.0	10.0	08/29/2012	ND	204	102	200	0.300	
EXT DRO >C28-C35	<10.0	10.0	08/29/2012	ND					

Surrogate: 1-Chlorooctane 80.8 % 65.2-140

Surrogate: 1-Chlorooctadecane 87.5 % 63.6-154


**Sample ID: SB - 5 @ 15' (H202030-24)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	160	16.0	08/28/2012	ND	416	104	400	3.92	

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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: 08/24/2012  
Reported: 08/31/2012  
Project Name: JAMES RANCH UNIT #29 SWD  
Project Number: NONE GIVEN  
Project Location: EDDY COUNTY, NM

Sampling Date: 08/22/2012  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

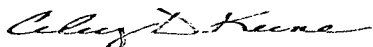
**Sample ID: SB - 5 @ 20' (H202030-25)**

Chloride, SM4500Cl-B		mg/kg	Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	144	16.0	08/28/2012	ND	416	104	400	3.92	

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Celey D. Keene, Lab Director/Quality Manager

**Notes and Definitions**

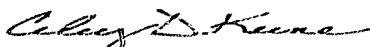
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received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

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Celey D. Keene, Lab Director/Quality Manager

[illegible]

## 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		<b>BILL TO</b>		<b>ANALYSIS REQUEST</b>																																																																																																																																																																																																																																																							
Project Manager: Ben E. Arquijo		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: James Ranch Unit #29 SWD		State: NM Zip: 88220																																																																																																																																																																																																																																																									
Project Location: Eddy Co., NM		Phone #: (432) 556-8730																																																																																																																																																																																																																																																									
Sampler Name:		Fax #:																																																																																																																																																																																																																																																									
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† Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2476

#26

## 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				<b>BILL TO</b>				<b>ANALYSIS REQUEST</b>											
Project Manager: Ben J. Arquijo				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) 396-1439				Address: 522 W. Mermod															
Project #: Project Owner: BOPCO, LP				City: Carlsbad															
Project Name: James Ranch Unit #29 SWD				State: NM Zip: 88220															
Project Location: Eddy Co., NM				Phone #: (432) 556-8730															
Sampler Name:				Fax #:															
FOR LAB USE ONLY																			
Lab I.D.	Sample I.D.	(GRAB OR (COMP. # CONTAINERS	MATRIX	PRESERV.	SAMPLING														
			GROUNDWATER																
			WASTEWATER																
			SOIL																
			OIL																
			SLUDGE																
			OTHER:																
			ACID/BASE:																
			ICE / COOL																
			OTHER:																
					DATE	TIME													
H2O2030																			
21	SB-4005'	6	X		8/23/12	1435	X												
22	SB-5005'					1505		X											
23	SB-5010'					1510		X	X										
24	SB-5015'					1515													
25	SB-5020'					1530													

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Relinquished By:	Date: 8/23/12	Received By:	Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Phone #:
	Time: 1645		Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Fax #:
Relinquished By:	Date: 8-24-12	Received By:	REMARKS:	
	Time: 7:55			
Delivered By: (Circle One)		Sample Condition	CHECKED BY: (Initials)	
Sampler - UPS - Bus - Other:		Cool Intact		
		Yes <input type="checkbox"/> No <input type="checkbox"/>		

Please email results to pm@basinenv.com  
& TSavoie@BassPet.com

August 23, 2012

BEN J. ARGUIJO

Basin Environmental Service

P.O. Box 301

Lovington, NM 88260

RE: JAMES RANCH UNIT #29 SWD

Enclosed are the results of analyses for samples received by the laboratory on 08/23/12 9:00.

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\\_accred\\_certif.html](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

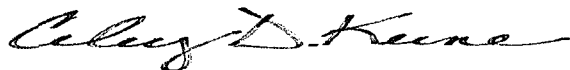
Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (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,



Celey D. Keene

Lab Director/Quality Manager





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

**Analytical Results For:**

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

Received:	08/23/2012	Sampling Date:	08/22/2012
Reported:	08/23/2012	Sampling Type:	Soil
Project Name:	JAMES RANCH UNIT #29 SWD	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

**Sample ID: WEST TRENCH-WEST WALL #1 (H202014-01)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2200	16.0	08/23/2012	ND	400	100	400	4.08	

**Sample ID: WEST TRENCH-WEST WALL #2 (H202014-02)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	13800	16.0	08/23/2012	ND	400	100	400	4.08	

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Notes and Definitions**

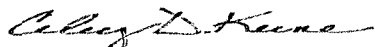
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received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

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Cardinal Laboratories

\*=Accredited Analyte

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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				<b>BILL TO</b>				<b>ANALYSIS REQUEST</b>																			
Project Manager: Ben J. Arquijo				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: James Ranch Unit #29 SWD				State: NM Zip: 88220																							
Project Location: Eddy Co., NM				Phone #: (532) 556-8730																							
Sampler Name: <i>Ben J. Arquijo</i>				Fax #:																							
FOR LAB USE ONLY				MATRIX		PRESERV.		SAMPLING		<i>Chloride</i>																	
Lab I.D.		Sample I.D.																									
H202014																											
1		West Trench-West Wall #1		G 1		X		X														8/23/12		1500		X	
2		West Trench-West Wall #2		G 1		X		X														8/23/12		1505		X	

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: <i>Ben J. Arquijo</i>		Date: <i>8/23/12</i>		Received By: <i>[Signature]</i>		Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No		Add'l Phone #:	
		Time: <i>0730</i>				Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No		Add'l Fax #:	
Relinquished By: <i>[Signature]</i>		Date: <i>8/23/12</i>		Received By: <i>B. Blackman</i>		REMARKS:			
		Time: <i>0740</i>							
Delivered By: (Circle One) Sampler - UPS <i>Bus</i> <i>Other</i>		Sample Condition Cool Intact <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		CHECKED BY: (Initials) <i>[Signature]</i>					

Please email results to pm@basinerv.com  
& TSavoie@Basinerv.com

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

**Bratcher, Mike, EMNRD**

---

**From:** Ben J. Arguijo <bjarguijo@basinenv.com>  
**Sent:** Thursday, November 15, 2012 7:22 AM  
**To:** Bratcher, Mike, EMNRD  
**Cc:** 'Savoie, Tony A.'  
**Subject:** RE: Work Plan for review - BOPCO's JRU #29 SWD

Mr. Bratcher,

I am just following up on the message below I sent you last Friday. We are hoping to begin work at this site ASAP.

Thank you.

Ben J. Arguijo

Ben J. Arguijo  
Project Manager  
Basin Environmental  
3100 Plains Hwy.  
P.O. Box 301  
Lovington, NM 88260  
p:(575)396-2378 m:(806)549-9597  
f:(575)396-1429  
bjarguijo@basinenv.com

---

**From:** Ben J. Arguijo [<mailto:bjarguijo@basinenv.com>]  
**Sent:** Friday, November 09, 2012 8:34 AM  
**To:** 'Bratcher, Mike, EMNRD'  
**Cc:** 'Savoie, Tony A.'  
**Subject:** Work Plan for review - BOPCO's JRU #29 SWD  
**Importance:** High

Mr. Bratcher,

Attached please find the "Remediation Summary & Risk-Based Site Closure Proposal" for BOPCO's James Ranch Unit #29 SWD release site (NMOC reference #'s 2RP-1174 & 2RP-1265).

Due to time constraints, we (Basin) are hoping to commence the proposed remediation activities at this site next week, if at all possible. Please contact Tony Savoie at your earliest convenience to discuss this matter.

A hard copy of the report will be forwarded via postal mail.

If you have any questions, comments, or concerns, please do not hesitate to contact me or Mr. Savoie.

Respectfully,  
Ben J. Arguijo

Ben J. Arguijo  
Project Manager  
Basin Environmental  
3100 Plains Hwy.

P.O. Box 301  
Lovington, NM 88260  
p:(575)396-2378 m:(806)549-9597  
f:(575)396-1429  
bjarguijo@basinenv.com

## Bratcher, Mike, EMNRD

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**Sent:** Friday, November 09, 2012 8:34 AM  
**To:** Bratcher, Mike, EMNRD  
**Cc:** 'Savoie, Tony A.'  
**Subject:** Work Plan for review - BOPCO's JRU #29 SWD  
**Attachments:** JRU 29 SWD\_WorkPlan.pdf  
  
**Importance:** High

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Respectfully,  
Ben J. Arguijo

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Project Manager  
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Lovington, NM 88260  
p:(575)396-2378 m:(806)549-9597  
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