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NMOCD ARTESIA

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

Ben J. Arguijo Project Manager

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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 ft²).

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 ft²) 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 eighteeninch (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, reseeding 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

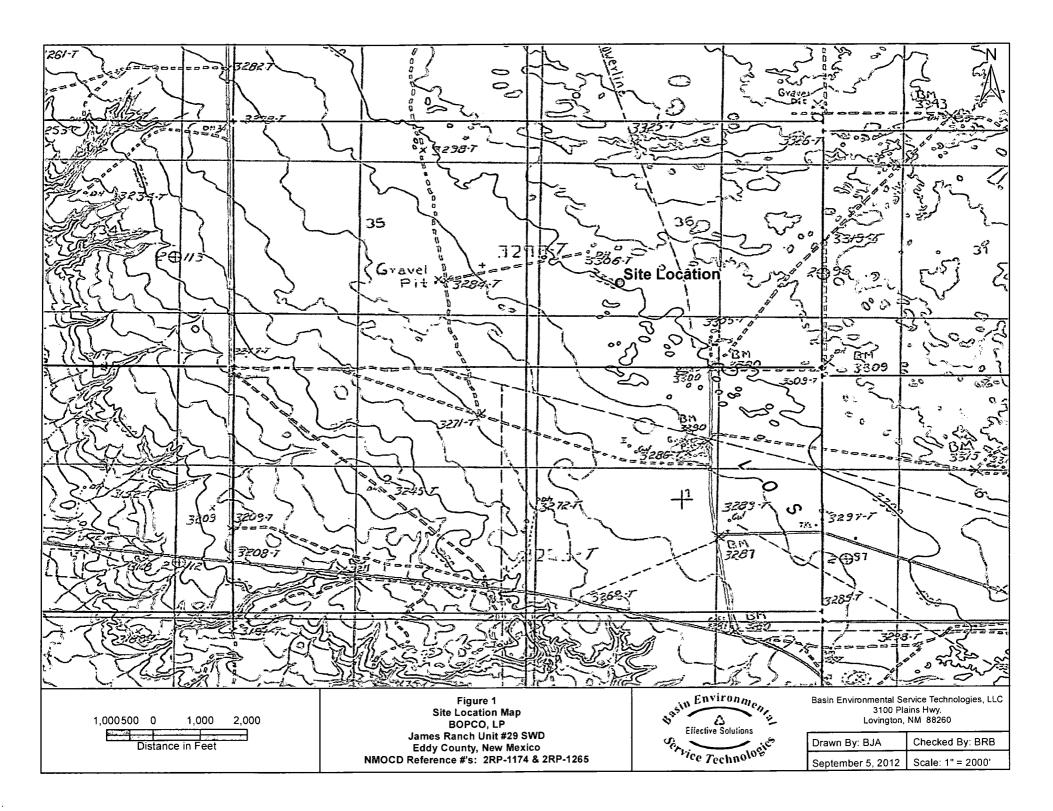
522 W. Mermod, Suite 704 Carlsbad, NM 88220

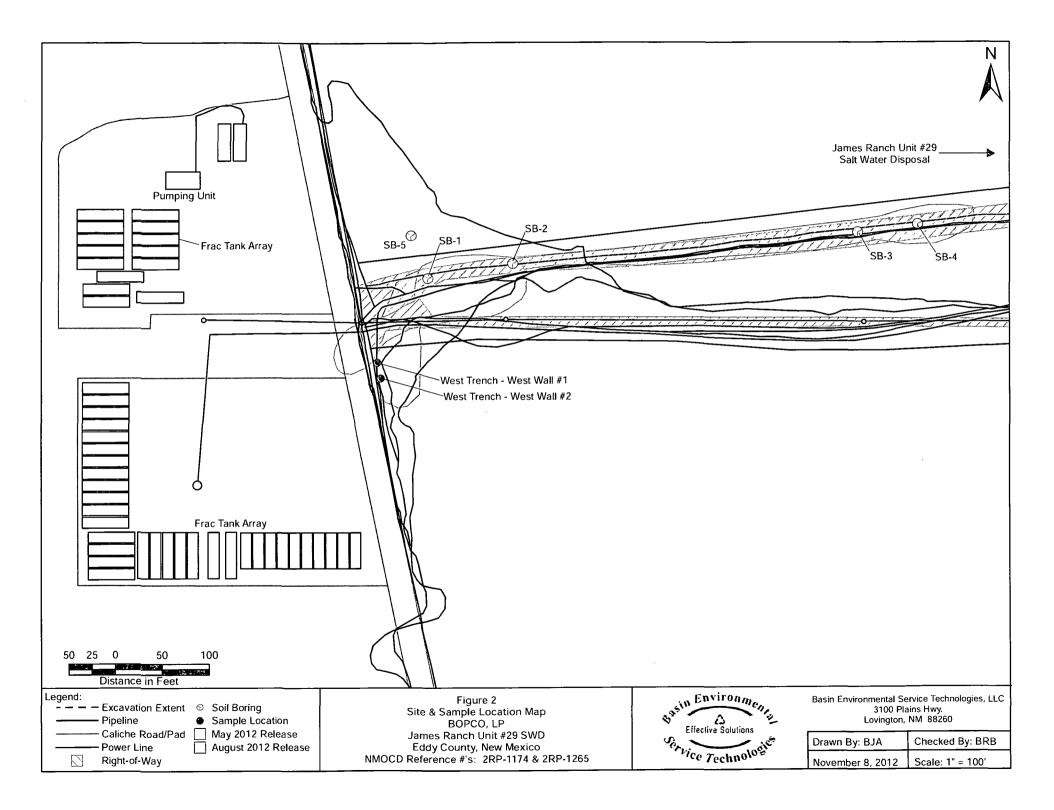
Copy 4: Basin Environmental Service Technologies, LLC

P.O. Box 301

Lovington, NM 88260

Figures





Tables

TABLE 1 CONCENTRATIONS OF BENZENE, BTEX, TPH & CHLORIDE IN SOIL

BOPCO, LP JAMES RANCH UNIT #29 SWD EDDY COUNTY, NEW MEXICO

NMOCD REFERENCE #'S: 2RP-1174 & 2RP-1265

	METHOD: EPA SW 846-8021B, 5030						THOD: 801	5M	TOTAL	4500 CI-B			
SAMPLE LOCATION	SAMPLE DEPTH (BGS)	SAMPLE DATE	SOIL STATUS	BENZENE (mg/Kg)	TOLUENE (mg/Kg)	ETHYL- BENZENE (mg/Kg)	TOTAL XYLENES (mg/Kg)	TOTAL BTEX (mg/Kg)	GRO C ₆ -C ₁₂ (mg/Kg)	DRO C ₁₂ -C ₂₈ (mg/Kg)	ORO C ₂₈ -C ₃₅ (mg/Kg)	TPH C ₆ -C ₃₅ (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	•	<u>-</u>	-			<u>-</u>	-	-	•	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	<0.000	- ~0.000	- <0.030			710.0	V10.0	- 10.0	710.0	1,740
SB-4 @ 20'	20'	8/22/2012	In-Situ	-	_								2,120
SB-4 @ 25'	25'	8/22/2012	In-Situ	-	-	-	-	-	-	-	-	-	176
	5'	8/22/2012	In-Situ						10.0	<10.0	<10.0	10.0	32.0
SB-5 @ 5'	10'	8/22/2012	In-Situ In-Situ	<0.050	- 0.050	- 0.050	<0.150	<0.150	<10.0	<10.0	<10.0	<10.0	64.0
SB-5 @ 10'	15'	8/22/2012	In-Situ	<0.050	<0.050	<0.050	<0.150	<0.150	<10.0	<10.0	<10.0	<10.0	160
SB-5 @ 15'	20'		In-Situ	-	<u>-</u>	-		<u> </u>		-	-	-	144
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 !
1625 N. French Dr., Hobbs, NM 88240
District !!
1301 W. Grand Avenue, Artesia, NM 88210
District !!! District IV 1000 Rio Brazos Road, Aztec, NM 87410 District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico **Energy Minerals and Natural Resources**

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

Revised October 10, 2003

Form C-141

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

			Rele	ease Notific	ation	and Co	rrective A	ction	1			
nMLB 121						OPERA'			🛛 Initi	al Report		Final Report
Name of Co				26073		Contact Tony Savoie						
				ad, N.M. 88220			No. 432-556-87	30				
Facility Nar	ne James I	Ranch Unit 2	9 SWD			Facility Typ	e E&P					
Surface Ow	ner State o	of New Mexi	со	Mineral C	wner S	State of New	Mexico		Lease	TO. APZ	4	
				LOCA	OIT	N OF RE	LEASE	30	-01	5-27	773	5
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 Rele	ase: Produc	ced water		NAI	UKE	Volume of	Release: 175 Bb	ls of	Volume	Recovered:	50 Bbls	
Source of Re	lease: 2 7/8	" flow line					vater Iour of Occurrence me unkown	ce	Date and 5/22/12 9	Hour of Dis	covery	
Was Immedi	ate Notice (Yes [No Not Re	equired	If YES, To						
By Whom?							lour 5/22/12 2:30					
Was a Water	course Read		Yes 🗵] No		If YES, Vo	olume Impacting	the Wate	ercourse.			
shut down ar Describe Are vacuum trucl 5/30/12 to de I hereby cert regulations a public health	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 I 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										with a areas on les and danger liability nan health	
federal, state	, or local la	ws and/or regu	ulations.				OIL CON					
Signature: Printed Name	/ au	•	100			Approved by	Distrigrate StuBeyrvin	A.I.) 4	Brener	West_	-	
		emediation Sp	ecialist			Approval Da	HUN 1 5 20	12	Expiration	Date:		
E-mail Addre Date: 6/3/12	ess: TASavo	oie@BassPet.	com	Phone:432-556-8	730_	Conditions o	f Approval: Ition per OCD	Rules i	<u> </u>	Attached		
' Attach Addi	tional She	ets If Necess		EIVED	_ G _ P	uidelines.	NOT LATER TH	IAN:		ai	P.	-1174

JUN 12 2012

NMOCD ARTESIA

District 1
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

Revised August 8, 2011

Form C-141

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

Release Notification and Corrective Action												
ntula	12241	50735)			OPERA'I	OR		☑ Initia	ıl Report		Final Report
Name of Co	mpany: Bo	OPCO, L.P.		260737		Contact: Tony Savoie						
				ad, N.M. 88220		Telephone No. 575-887-7329 Facility Type: Exploration and Production						
		9 to Hudson ast of the JR				Facility Typ	e: Exploration a	and Pro	duction			
The spin wa	15 200 11. 6	asi of the JK	0-67 pur	nping wen.								
Surface Ow	ner: State	of N.M.		Mineral O	wner: S	State of N.M	<u>l </u>		API No	. 30-015-3	1004	
				LOCA	TION	OF REI	LEASE					
Unit Letter	Section	Township	Range	Feet from the	North/	South Line	Feet from the	East/V	Vest Line	County		
K	36	22S	30 E							Eddy		
Latitude N 32.346239 Longitude W 103.838688												
	NATURE OF RELEASE											
Type of Rele							Release: 100 bbl			Recovered: 8		
Source of Re	lease: A bui	ried 2 7/8" SV	/D line				lour of Occurrence proximately 12:00			Hour of Dis		m
Was Immedi	ate Notice (Given?				If YES, To		<i>y</i> p.m. ₁	0/0/12 A	proximater	y 1.45 p.	
		\boxtimes	Yes [No 🗌 Not Re	quired		CD emergency #1	104				
By Whom?						Date and I-	lour: 8/8/12 at 2:	57 p.m.				
Was a Water	course Read	_	V 57	1 31		If YES, Vo	olume Impacting	the Wate	ercourse.	RE	CEI\	VED
										ł		, 1
If a Waterco	urse was Im	pacted, Descr	ibe Fully.	•						AU	Ĝ 20	ZUIZ
į.										NAAOC	יח אב	RTESIA
										INIOC	JU AI	TILOTA
Describe Co.	ise of Probl	em and Reme	dial Action	n Taken *								
				the Hudson Fede	eral #1 S	SWD well dev	veloped and inter	nal corre	sion leak,	the SWD pu	ımp was	shut down
and a tempor	ary repair c	lamp was plac	ed on the	affected area of th	ne pipe.	The entire lin	e will be replaced	d during	the time of	the remedi	ation eff	ort.
Describe Are	a Affected	and Cleanup /	Action Tal	cen.*Approximate	lv 2550	so ft of past	ure land was affe	cted by t	he release	a vacuum t	nick was	used to
remove all o	f the free sta	inding water f	rom the pe	ool areas, this area	was pro	eviously impa	acted by a produc	ed water	r spill on 5/	/22/12. A C	141 was	submitted
by BOPCO I	or that relea	ise. An air rot	ary rig wa	s scheduled to det nd remediate the a	ermine t	he horizontal	extent of the rele	ease the	week of 8/	6/12 but wa	s delayed	due to
				n will be develope				e and the	: INVISEO.	The rig is s	et up for	ine week of
<u> </u>	· C - 1 - 1											
				is true and comp nd/or file certain r								
public health	or the envi	ronment. The	acceptane	ce of a C-141 repo	ort by the	NMOCD m	arked as "Final R	Report" d	loes not rel	ieve the ope	rator of	liability
should their	operations h	ave failed to	adequately	investigate and r	emediat	e contaminati	ion that pose a the	reat to gi	round wate	r, surface w	ater, hun	nan health
		ws and/or regi		otance of a C-141	герогі а	oes not renev	e the operator of	respons	ibility for c	ompliance v	with any	otner
							OIL CON	SERV	ATION	DIVISION	ON	
Signature: / One Sauce												
Signature. / Graf / Carrotte							Environmental S	2manialia			i	
Printed Nam	e: Tony Sav	oie				Approved by	Environmental S	Si	igned By_	11/4	D)KAA	Estles
Title: Waste	Manageme	nt and Remed	iation Spe	cialist		Annroval Di	IG 28 2012	,	Evalentian	Datas		ļ
True. Waste	Manageme	nt and remed	iation spc	Ciarist		Approvat Equ	IO Z O ZUIZ		Expiration	Date:		
E-mail Addr	ess: tasavoi	e@basspet.co	m		Conditions of Approval:							
Date: 8/15/1	2			Phone: 432-556-8	Remediation per OCD Rules &							
* Attach Add		ets If Necess		1 Hone. +32-330-0	,,30 _	Guideline	s. SUBMIT RE I	MEDIA	TION		2 R P.	-1265
			-			PROPOSA	L NOT LATER	THAN:		•		ررس

Appendix B Soil Boring Logs

Depth Below		Chloride						
Ground	Soil	Field	PID	Petroleum	Petroleum			
<u>Surface</u>	Column	<u>Test</u>	Reading	<u>Odor</u>	<u>Stain</u>	Soil Description		Boring SB-1
- - - 5			0.8	None	None	0' - 5' - Red very fine sand with clay 5' - 6' - Tan fine sand; sandstone	Thick Depth Depth	Drilled August 22, 2012 inness of Bentonite Seal 30 Ft in of Exploratory Boring 30 Ft bgs in to Groundwater
E				None	None	o o ran into dana, danasano	Grou	nd Water Elevation
10			(0.6)	None	None	6' - 15' - Red very fine sand with clay	/ ¥ • •	Indicates the PSH level measured on
20		612	0.5	None	None	15' - 24' - Red silty clay	PID	Laboratory Analysis. Head-space reading in ppm obtained with a photo-ionization detector.
Ė				None	None			
25 		(352)	$\begin{array}{c} (1.1) \\ \end{array}$			24' - 25' - Red sandstone; gypsum 25' - 27' - Red silty clay; gypsum		
E ₃₀		<112	0.3	None	None	27' - 30' - Tannish red silty clay		

Completion Notes

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

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

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

Completion Notes

- The soil boring was advanced on date using air rotary drilling techniques.

 The lines between material types shown on the profile log represent approximate boundaries. Actual trensitions may be gradual.

Basin Environments

September 5, 2012

					~ • • • • • • • • • • • • • • • • • • •	3 	
Depth Below Ground Surface	Soil <u>Column</u>	Chloride Field <u>Test</u>	PID Reading	Petroleum <u>Odor</u>	Petroleum <u>Stain</u>	Soil Description	Boring SB-3
E°			(1.6)	None	None	0' - 5' - Red very fine sand w/ clay	Date Drilled August 22, 2012 Thickness of Bentonite Seal 25 Ft Depth of Exploratory Boring 25 Ft bgs Depth to Groundwater
				None	None	5' - 7' - Tan fine sand; caliche; sandstone	Ground Water Elevation
10 - - - - - - - - - - - - -		516	0.7	None	None	7' - 16' - Tan fine sand; sandstone	Indicates the PSH level measured on Indicates the groundwater level measured on Indicates samples selected for
- - - - - - - 20		(136)	,	None	None		Laboratory Analysis. PID Head-space reading in ppm obtained with a photo-ionization detector.
		248	,)	None	None	16' - 25' - Red silty clay	

Completion Notes

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

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

Basin Environmenta

Tree Technologie

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

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

				0011	~~ ,	9 00 .		
Depth Below Ground Surface	Soil Column	Chloride Field <u>Test</u>	PID Reading	Petroleum F	Petroleum <u>Stain</u>	Soil Description		Boring SB-4
- 0 5 - 5			0.5	None	None	0' - 3' - Red fine sand w/ clay 3' - 4' - Tan fine sand; caliche; sandstone	Depth Depth	Orlifed August 22, 2012 less of Bentonite Seal 25 Ft of Exploratory Borling 25 Ft bgs to Groundwater d Water Elevation
- 10			0.1	None	None	4' - 12' - Tan fine sand; sandstone	.▼.	Indicates the PSH level measured
- - - - 15				None	None	12' - 16' - Red fine sand	y	on Indicates the groundwater level measured on Indicates samples selected for
_ _ _ 		428)	None	None		PID	Laboratory Analysis. Head-space reading in ppm obtained with a photo-ionization detector.
25		188	,)	None	None	16' - 25' - Red silty clay		

Completion Notes

- 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.

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

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

Cash Environments

Educated Scientists

Service Technologies

BOPCO, LP James Ranch Unit #29 SWD

Eddy County, New Mexico NMOCD Reference #: 2RP-1174 & 2RP-1265

Depth Below		Chloride					
Ground Surface	Soil <u>Column</u>	Field Test	PID <u>Reading</u>	Petroleum <u>Odor</u>	Petroleum <u>Stain</u>	Soil Description	Boring SB-5
- 0 - 0 - 1		(<112	01)	None	None	0' - 2' - Red fine sand w/ clay 2' - 5' - Tan fine sand; caliche	Date Drilled August 22, 2012 Thickness of Bentonite Seat 29 Ft Depth of Exploratory Boring 20 Ft bgs Depth to Groundwater
- - - - 10		146	0.5	None	None	5' - 8' - Tan fine sand; sandstone	Ground Water Elevation
- - - - - - 15		216		None	None	8' - 20' - Red silty clay	Indicates the PSH level measured on indicates the groundwater level measured on indicates samples selected for
		(216)	<u></u>	None	None		Laboratory Analysis. PID Head-space reading in ppm obtained with a photo-ionization detector.

Completion Notes

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

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

Effective Solutions

Tre Technologies

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

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

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

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,

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 IMDEMNIFICATION

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:

PERMITTEE

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

ACKNOWLEDGMENT

COUNTY OF Midland

The foregoing instrument was acknowledged before me this day of commission Expires: 9/6/2015 Roll for Taylor

Notary Public, State of Texas My Commission Expires September 06, 2015

May Towell Javan

DATE: 7/20/2

COMMISSIONER OF PUBLIC LANDS

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 or will be mailed upon request.

Sincerely,

Bill Duemling (575)622-6521

Enclosure

explore

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! File "'	າ. <i>I</i>	-///	
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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 wet	osite: http://www.ose.state.nm.us/	2-31549	& 2.0,
Purpose:	☐ Pollution Control And / Or Recovery	☐ Geo-Thermal	2-31549	\$2000
Exploratory	☐ Construction Site De-Watering	Other (Describe):		
■ Monitoring	☐ Mineral De-Watering			
A separate permit will	be required to apply water to beneficial use.			
☐ Temporary Reque	st - Requested Start Date: 6/8/2012	Requested End	d Date: 6/8/2013	
Plugging Plan of Ope	rations Submitted? Yes No			
I. APPLICANT(S)				
Name: BOPCO, LP		Name:		
Contact or Agent: Ben J. Arguijo (Basi	check here if Agent 🔯	Contact or Agent:	check here if Agent	⊠
Mailing Address: 522	W. Mermod	Mailing Address:		
City: Carlsbad		City:		
State: NM	Zip Code: 88220	State:	Zip Code:	
Phone: (432)556-873 Phone (Work):	0 ☐ Home ☒ Cell	Phone: Phone (Work):	☐ Home ☐ Cell	
E-mail (optional): TAS bjarguijo@basin	Savole@BassPet.com env.com	E-mail (optional):		
ບ່ວ	FOR OSE INTERNAL FOR OSE INTERNAL FILE Number: BUSMETT :: LE Number:	ptional): ExpL	ition for Permit, Form wr-07, R lumber: 507736	ev 4/12/12

2. WELL(S) Describe the well(s) applicable to Location Required: 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. ☐ NM State Plane (NAD83) (Feet) UTM (NAD83) (Meters) □ Lat/Long (WGS84) (to the nearest ☐ NM West Zone □Zone 12N 1/10th of second) NM East Zone ☐Zone 13N ☐ NM Central Zone Provide if known: -Public Land Survey System (PLSS) (Quarters or Halves, Section, Township, Range) OR X or Easting or Y or Northing Well Number (if known): Lonaitude: or Latitude: - Hydrographic Survey Map & Tract; OR - Lot, Block & Subdivision; OR - Land Grant Name 32.346284 -103.837495 SB-1 Unit Letter "K" (NE/SW), Section 36, Township 22 South, POD1 Range 30 East -103,50,14.98 32,20,46.62 -103.837495 SB-2 32.346284 Unit Letter "K" (NE/SW), Section 36, Township 22 South, PODZ Range 30 East SB-3 32.346284 -103.837495 Unit Letter "K" (NE/SW), Section 36, Township 22 South. Range 30 East -103.837495 **SB-4** 32.346284 Unit Letter "K" (NE/SW), Section 36, Township 22 South, Range 30 East SB-5 -103.837495 32.346284 Unit Letter "K" (NE/SW), Section 36, Township 22 South, PODS 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:

Yes
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? ☐ Yes ☐ 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. 1701 JUN -6 A 8: 24 1 BOSMETT HE WALKIEU

SIVIE ENGINEEU OLLICE

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: Construction Pollution Control and/or Recovery: Mine De-Watering: **Exploratory:** ☐ Include a Include a plan for pollution De-Watering: ☐ Include a plan for pollution description of control/recovery, that includes the ☐ Include a description of the control/recovery, that includes the following: proposed dewatering any proposed following: A description of the need for mine pump test, if A description of the need for the operation. dewatering. applicable. pollution control or recovery operation. ☐ The estimated duration of ☐ The estimated maximum period of time The estimated maximum period of the operation. for completion of the operation. time for completion of the operation. The maximum amount of ☐ The source(s) of the water to be diverted. ☐ The annual diversion amount. ☐ The geohydrologic characteristics of the water to be diverted. The annual consumptive use ☐ A description of the need aquifer(s). amount. for the dewatering operation, ☐The maximum amount of water to be ☐ The maximum amount of water to be diverted per annum. diverted and injected for the duration of A description of how the ☐The maximum amount of water to be diverted water will be disposed the operation. diverted for the duration of the operation. ☐ The method and place of discharge. ☐ The quality of the water. of. The method of measurement of Monitoring: Geo-Thermal: The method of measurement of water water produced and discharged. Include the ☐ Include a description of the diverted. reason for the ☐ The source of water to be injected. geothermal heat exchange ☐ The recharge of water to the aquifer. ☐ The method of measurement of monitoring project. Description of the estimated area of water injected. well, and, hydrologic effect of the project. The amount of water to be ☐ The method and place of discharge. ☑ The The characteristics of the aguifer. diverted and re-injected for the ☐ The method of determining the duration project. ☐An estimation of the effects on surface resulting annual consumptive use of of the planned water rights and underground water rights ☐ The time frame for water and depletion from any related monitoring. from the mine dewatering project. constructing the geothermal stream system. heat exchange project, and, ☐A description of the methods employed to Proof of any permit required from the estimate effects on surface water rights and ☐ The duration of the project. New Mexico Environment Department. ☐ Preliminary surveys, design underground water rights. ☐ An access agreement if the ☐Information on existing wells, rivers, data, and additional applicant is not the owner of the land on springs, and wetlands within the area of information shall be included to which the pollution plume control or provide all essential facts hydrologic effect. recovery well is to be located. relating to the request. **ACKNOWLEDGEMENT** I, We (name of applicant(s)), Ben J. Arguijo 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: partially approved **☑** 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 $\frac{15+}{}$ day of $\frac{12+}{}$ day of $\frac{12+}{}$ day of $\frac{12+}{}$ for the State Engineer, Application for Permit, Form wr-07

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:

Formal Application Rcvd: 07/19/2012	Pub. of Notice Ordered:
Date Returned - Correction:	Affidavit of Pub. Filed:
This application is approved provided i	
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 conditi	ons listed previously.
Witness my hand and seal this 01 day	of Aug A.D., 2012
-	
Scott A. Verhines, P.E. , State E	Ingineer
140	-
By: Bell Sugar	
Bill Duemling, Basth Supv.	

Date Rcvd. Corrected:

 Trn Desc:
 C 03561
 File Number:
 C 03561

 Trn Number:
 507736

page: 2

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

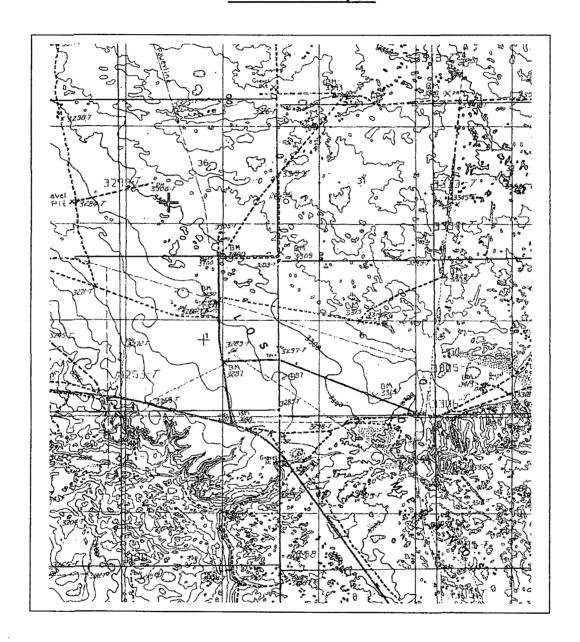
 NAD 1927 (Meters)
 N: 149,354
 E: 199,120

 NAD 1927 (Survey Feet)
 N: 490,004
 E: 653,279

Page 1 of 2 Print Date: 06/19/2012

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

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

E: 609,393 E: 694,462

GW Basin: Carlsbad

Page 2 of 2

Print Date: 06/19/2012

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 accredited certif.html.

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

Method EPA 552.2

Haloacetic Acids (HAA-5)

Method EPA 524.2

Total Trihalomethanes (TTHM)

Method EPA 524.4

Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

Celeg D. Keene

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



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 @ 5' (H202030-01)

Chloride, SM4500CI-B	mg,	/kg	Analyze	d 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	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	08/28/2012	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	% 65.2-14	0						
Surrogate: 1-Chlorooctadecane	98.0	% 63.6-15	4						

Cardinal Laboratories

*=Accredited Analyte

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Celeg D. Keine



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

Fax To:

(575) 396-1429

Received:

08/24/2012

Sampling Date:

08/22/2012

Reported:

Sampling Type:

Soil

Project Name:

08/31/2012

Sampling Condition:

Cool & Intact

Project Number:

NONE GIVEN

Sample Received By:

Project Location:

EDDY COUNTY, NM

JAMES RANCH UNIT #29 SWD

Jodi Henson

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

BTEX 8021B	mg/	kg	Analyze	d By: AP			···		
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/29/2012	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 (PIL	99.7	% 89.4-12	6						
Chloride, SM4500CI-B	mg,	/kg	Analyze	d 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	Analyze	d By: MS	_				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	08/28/2012	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	% 65.2-14	10						
Surrogate: 1-Chlorooctadecane	102	% 63.6-15	4						

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

Chloride, SM4500Cl-B	mg	/kg	Analyze	d 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	

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aleg D. Keine



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

(575) 396-1429 Fax To:

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

Project Location:

EDDY COUNTY, NM

Sample Received By:

Jodi Henson

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

Chloride, SM4500CI-B

Chloride

Chloride

mg/kg

Analyzed By: HM

Analyte

Result

448

Reporting Limit

16.0

Analyzed 08/28/2012 Method Blank ND

BS 416 % Recovery 104

True Value QC 400

RPD 0.00 Qualifier

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

Chloride, SM4500CI-B

mg/kg

Analyzed By: HM

Analyte

Result 176

Reporting Limit Analyzed 16.0 08/28/2012 Method Blank

ND

Method Blank

ND

BS 416 % Recovery 104

True Value QC 400

RPD Qualifier

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

Chloride, SM4500CI-B

Analyzed By: HM

Analyte Result Reporting Limit Chloride 64.0 16.0

Analyzed 08/28/2012

BS 416 % Recovery 104

True Value QC 400

RPD 0.00

0.00

Qualifier

Cardinal Laboratories

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Celey D. Keene, Lab Director/Quality Manager

Celey Steine

Page 4 of 17



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 - 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
Chloride	13000	16.0	08/28/2012	ND	416	104	400	0.00	
TPH 8015M	mg	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	08/28/2012	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	83.8	% 65.2-14	0						
Surrogate: 1-Chlorooctadecane	98.7	% 63.6-15	4						

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Celeg D. Keine



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

Fax To:

(575) 396-1429

Received:

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 - 2 @ 10' (H202030-08)

BTEX 8021B	mg,	kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/30/2012	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 (PIL	98.0	% 89.4-12	16						
Chloride, SM4500CI-B	mg,	'kg	Analyze	d 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	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	08/28/2012	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	% 65.2-14	10						
Surrogate: 1-Chlorooctadecane	96.2	% 63.6-15	54						

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

Chloride, SM4500CI-B	mg	/kg	Analyze	d 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	

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Celly D. Kune



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

(575) 396-1429 Fax To:

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 - 2 @ 20' (H202030-10)

Chloride, SM4500CI-B

mg/kg

Analyzed By: HM

Analyte

Chloride

Chloride

Result

1440

Result

224

Reporting Limit

16.0

Analyzed 08/28/2012 Method Blank ND

BS 416

BS

416

% Recovery 104

True Value QC

RPD

Qualifier

Chloride, SM4500CI-B

Analyte

Analyzed

08/28/2012

400

0.00

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

mg/kg

Method Blank

ND

% Recovery

True Value QC

RPD

Qualifier

Qualifier

Chloride, SM4500CI-B

Reporting Limit

16.0

Analyzed By: HM

104

400

3.92

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

mg/kg

Analyzed By: HM

Analyte Result Reporting Limit Analyzed Method Blank BS % Recovery True Value QC RPD 12000 16.0 08/28/2012 ND 416 104 400

Chloride 3.92 **TPH 8015M** Analyzed By: MS mg/kg Analyte True Value QC RPD Qualifier Result Reporting Limit Analyzed Method Blank BS % Recovery 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 08/28/2012 ND 11.1 10.0

Surrogate: 1-Chlorooctane

72.7 %

65.2-140

Surrogate: 1-Chlorooctadecane

88.9 %

63.6-154

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Clay Steens Celey D. Keene, Lab Director/Quality Manager

Page 7 of 17



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 - 3 @ 10' (H202030-13)

BTEX 8021B	mg/	'kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/30/2012	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 (PIL	97.9	% 89.4-12	6						
Chloride, SM4500CI-B	mg,	/kg	Analyze	d 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	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	08/28/2012	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: I-Chlorooctane	77.5	% 65.2-14	10						
Surrogate: 1-Chlorooctadecane	91.0	% 63.6-15	4						

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

Chloride, SM4500CI-B	mg	/kg	Analyze	d 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	

Cardinal Laboratories

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Celey D. Keine



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 - 3 @ 20' (H202030-15)

mg/k	(
------	---

Analyzed By: HM

Analyte

Reporting Limit Result

Analyzed

Method Blank

BS

% Recovery 104

True Value QC

Qualifier

Chloride

144

16.0

08/28/2012

ND

416

400

3.92

RPD

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

Chloride, SM4500Cl-B

Analyzed By: HM

Method Blank

Chloride

Analyte Result 128

Reporting Limit

16.0

Analyzed 08/28/2012

ND

BS 416 % Recovery 104

True Value QC 400

Qualifier

RPD 3.92

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

Chloride, SM4500CI-B

Analyzed Rv. HM

Chloride, SM4500Cl-B	nig,	rkg	Analyze	и ву: пм					
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	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	08/28/2012	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

Cardinal Laboratories

*=Accredited Analyte

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Celey & Keene



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

Fax To:

(575) 396-1429

Analyzed By: AP

Received:

08/24/2012

Sampling Date:

08/22/2012

Reported:

BTEX 8021B

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

mg/kg

91.0%

63.6-154

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

			<u> </u>						
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	% 89.4-12	6						
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d 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	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	08/29/2012	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: I-Chlorooctane	78.4	% 65.2-14	0						

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

Chloride, SM4500Cl-B	OCI-B mg/kg		Analyze	d 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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Surrogate: 1-Chlorooctadecane

*=Accredited Analyte

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Celey & Keene



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 - 4 @ 20' (H202030-20)

Chloride, S	M4500CI-B
-------------	-----------

Chloride

mg/kg

Analyzed By: HM

Analyte

Result

2120

Reporting Limit

16.0

Analyzed 08/28/2012

Method Blank

BS 416 % Recovery 104 True Value QC 400 RPD Qualifier

3.92

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

Chloride,	SM4500CI-B

Analyzed	By:	НМ
----------	-----	----

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:

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	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	08/29/2012	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

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene



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

Jodi Henson

Sample Received By:

Project Location:

EDDY COUNTY, NM

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

BTEX 8021B	mg/	'kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/30/2012	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 (PIC	98.5	% 89.4-12	6		•				
Chloride, SM4500CI-B	mg/kg		Analyze	d 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	Analyze	d By: MS		· · · · · · · · · · · · · · · · · · ·			
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	08/29/2012	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) >C28-C35 <10.0 10.0 08/29/2012 ND		ND						
Surrogate: 1-Chlorooctane	ogate: 1-Chlorooctane 80.8 % 65.2-140		10						
Surrogate: 1-Chlorooctadecane 87.5 % 63.6-154									

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

Chloride, SM4500CI-B	mg	/kg	Analyze	d 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	

Cardinal Laboratories

*=Accredited Analyte

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Celeg & Keine



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

Fax To:

(575) 396-1429

Received:

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

Project Location:

EDDY COUNTY, NM

Sample Received By:

Jodi Henson

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

Chloride, SM4500Cl-B	mg	/kg	Analyze	d 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	

Cardinal Laboratories *=Accredited Analyte

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Celeg D. Keine



Notes and Definitions

ND Analyte NOT DETECTED at or above the reporting limit

RPD Relative Percent Difference

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

*** Insufficient time to reach temperature.

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

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

Cardinal Laboratories *=Accredited Analyte

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Celley D. Keene

Laboratories

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

	Rasin Environmental Service	ronmental Service Technologies, LLC					BIL	L TO	7		HEPC/HAMIN				ANAI	YSIS	RE	QUE	ST		
Project Manager	் Ben ி. Arguijo			<i>J</i>	P.O. #:					<u> </u>											
Address: P.O.	•				Co	mpany	; BC	OPCO,	LP		1										
City: Loyingto	State: NM	Zip); g:	8260	Attn: Tony Savoie			1													
Phone #: (575)					Address: 522 W. Mermod																
Project #:	Project Owne		···········	***************************************	City: Carlsbad			1									- 1				
Project Name:	James Ranch Unit #29 SWD	*********			State: IM Zip: 88220			1													
	n: Eddy Co., NM			***************************************	Phone #: (432) 556-8730			1													
Sampler Name:					1	x.#:					ĺ										
FOR LAB USE ONLY				MATRIX		PRESE	RV	SAM	PLIN	IG	1										
Lab I.D. H 202630	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER WASTEWATER SOIL OIL SLUDGE	отнек:	ACID/BASE; ICE / COOL	OTHER:	DATI	E	TIME	Chloride	E015111	BIEX								
]	3B-1Q51	6	1	I X I		X		8/00/	12	<i>j030</i>	X	X									
2	33-18101									1035		X	X							 	
3	58-1815'	_ _							_	1040								 -		 	
· ·	5B-1820'	\sqcup	- -		1				_	1045	-										
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	58 2010	╀	╀		-	$\vdash \!$		_	+	1135		X	X						 		
10	56-3P 15' 58-3R 30'							V		1130 1135	V					·					

PLEASE NOTE: Usbally and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in control or fort, shall be limited to the amount paid by the client for the analyses. As clients, including those for negligence and any other cause whatseever shall be deemed walved unless mane in waiting and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequental damages, including without limitation, business interruptions, flors of use, or loss of profits incurred by client, its substications, attained to incidental the performance of sequence previous by Cardinal implantees of sequence state upon any of the above stated phase is of others.

available and the contract of	or selvices herealined by e-	archigi. Teggs die 27 of talledie: 30ch class 13 garet opon an	y or the above stated to	Backla or otherwise.			
Relinquished By:	Date: / /	Received By: / / /		Phone Result:	☐ Yes	□ No	Add'l Phone #:
	8/23/12	1719. 12 /		Fax Result:	□ Yes	□ No	Add'l Fax #:
	Time: 1645	My / Vin		REMARKS:			
Relinguished By:	Date:	Received By: ADAL ALMA	ION	Pleas	se email	. result	e to pm@bašinenv.čóm
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	<u>ک</u>		ECKED BY:	& TAs	savoie@E	BassPet.	СОП

Laboratories

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240

	(5/5) 393-2326 FAX (5/5) 393-24/																	
Company Name: Basin Environmental Service Technologies, LLC				BILL TO							 ANAI	LYSIS	S RE	QUE	ST			
Project Manager: Ben E. Arguijo				P.O. #:														
Àddress: P.O.	. Box 301				Co	mpany: E	OPCO, D	р										
City: Lovingto	on State: NM	Zip): g	9260	Αt	in: Tony	Savoie											
Phone #: (575)396-2378 Fax #: (575)3	96-	142	9	Ad	ldress: 52	2 W. Me.	emod						İ	ļ			
Project #:	Project Owne	r: BC)PC'(), LP	Cit	ty: Caris	oåd											İ
Project Name:	James Ranch Unit #29 SWD				St	ate: NM	Z ip: 882	20						l				
Project Location	ı: Eddy Co., NM				Ph	one #: (43	2)556-8	730			1							
Sampler Name:						x #:								ļ				
FOR LAB USE CHLY			Π	MATRIX	1	PRESERV.	SAMPI	ING	1				İ	İ				İ
Lab I.D. 남고02030	Sample I.D.	(G)RAB OR (C)OMP	# CONTAINERS	GROUNDWATER WASTEWATER SOIL OIL	OTHER;	ACID/BASE: ICE / COOL OTHER:	DATE	TIME	(Aloc. do	MINOR	STEK							
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13	3B-3P51	L			L.	_	1.	1335		X	'							<u>.</u>
13	5B-3P D'	1						1330		1	<u> K</u>		<u> </u>					
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17	38.4051	1	Ш					1415		X		 					 ,	
18	5B 4610'	1	Ш					1420		X	X	 	<u> </u>				 	
19	3B.4P15'	Щ	Ш		<u> </u>			1495		<u> </u>		 	<u> </u>		ļ	<u> </u>	 	
20	58-4 R301	W	\mathbb{W}		1	W		1430	W									

PLEASE NOTE: Lisbary and Damages, Cardina's liability and client's exclusive remedy for any dam arising whether based in contract or lon, 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 eyent shall Carbinal be table for incidental or consequental damages, including visious implation, business interruptions, loss of use, or loss of profits incurred by clean, as substitutions.

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Relinquished By: Date: -/ Received By:	Phone Result: Yes No Add'l Phone #:
8/33/10 10/10	Fax Result: ☐ Yes ☐ No Add'l Fax #:
Time: 1645 / Wey 20-10	REMARKS:
Relinitiushed By: Date: 8 24 Received By: Times: 35 COCK JULIOUSE	Please email results to pm@basinenv.com
Delivered By: (Circle One) / Sample Condition CHECKED I	i & TASAVOIEGBASSPEC.COM
Sampler : UPS - Bus - Other: 5 Tyes Yes No No	



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name	Basin Environmental Service	Tach	naic	rcies tic	Т	BI.	LL TO					Δ	NALY	SIS	RF(OUES	ST			7
Company Name: Basin Environmental Service Technologies, LLC Project Manager: Ben J. Arquijo				P.O. #:			ľ				Ī	Ť				Ī		*********		
Address: P.O.				***************************************	Cor	Company: BOPCO, LP			1			1		ı				l		
City: Lovingto	······································	Zip:	.882	260		1: Tony			1			ı		-				İ		
Phone #: (575		**************************************					2 W. Mer	mod						- 1				j		
Project#:	Project Owne			LP		/: Carlsi	***************************************							ļ				İ		
Project Name:	James Ranch Unit #29 SWD						Zip: 8822	0						- [ļ			Į		
	n: Eddy Co., NM	·····	<u></u>		1-		2)556-87													
Sampler Name:	-		······		Fax									- 1	ł					
FOR LAB USE ONLY			T	MATRIX		PRESERV.	SAMPLI	NG .	1				1							
Lab I.D. H202130	Sample I.D.	(G)RAB OR (C)OMP	# CONTAINERS	GROUNDWA IER WASTEWATER SOIL OIL	OTHER:	ACID/BASE: ICE / COOL OTHER:	ĎÀTÉ	TIME	Chloc de	M5108	STEX									
2.1	5B-4P051	6	1	X		XI.	हिटि	1.435	X											
22	5B-5B5'	Ш	1				·	1505		X										
23 74	SB-5@10'	Ш		1 11 1				1510		X	X			_						
24	5B-5Q 10' 5B-5Q 15' 5B-5Q 30'	Щ,	-		-			1515	 				_	_						
25	3b-5@ 20'	\mathbb{V}		4-141-4		141	V_	15a0	V					-						
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BLEASE NOVE LIGHTS	of Damaries Cardinal's hardly and clean's avelying remerly for	أسسا			بلسبا				<u> </u>											

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BUTTER OF SUCCESSE	as enough payor or related to the helyndraude.	to a crateria describer of chiowill sedimena a diametra	such dam is based upon any of the above stated	isazonz promorwas			
Relinquishe	d By:	Date: p/on / Received By:	A / .	Phone Result:	☐ Yes	□No	Add'i Phone #:
	_//	0/23/12 0/1 1	11-4-3	Fax Result:	☐ Yes	□ No	Add'l Fax #:
		Time: 1445 1/1 200	Wither	REMARKS:			
The	A Tana	Date: Received By:	Merson	Pleas	se émail	result	ts to pm@basinenv.com
Delivered	By: (Circle One)	— — — — — — — — — — — — — — — — — — —	Condition CHECKED BY:	& TA	savoie@B	assPet.	. COM
Sampler - t	JPS - Bus - Other:		Intact (Initials)				



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 accredited certif.html.

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

Method EPA 552.2

Haloacetic Acids (HAA-5)

Method EPA 524.2

Total Trihalomethanes (TTHM)

Method EPA 524.4

Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

Celeg D. Keina

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



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

Fax To:

Received:

08/23/2012

08/23/2012

Sampling Date:

08/22/2012

Reported:

Sampling Type:

Soil

Project Name:

JAMES RANCH UNIT #29 SWD

Sampling Condition:

Cool & Intact

Project Number:

NONE GIVEN

Sample Received By:

Project Location:

EDDY COUNTY, NM

Jodi Henson

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

Chloride, SM4500CI-B	mg,	/kg	Analyze						
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	Analyze	d By: HM		<u></u>			
Analyte	Analyte Result Reporting Limi		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 & Keene



Notes and Definitions

ND Analyte NOT DETECTED at or above the reporting limit

RPD Relative Percent Difference

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

*** Insufficient time to reach temperature.

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

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

Cardinal Laboratories *=Accredited Analyte

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Celeg D. Keine



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Please email results to pm@basinenv.com

& TAsavoic@BassPet.com

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

Company Name: Basin Environmental Service Technologies, LLC	BILL TO	ANALYSIS REQUEST
Project Manager: Ren J. Arguijo	P.O. #:	
Address: P.O. Box 301	Company: BOPCO, LP	
City: Lovington State: NM Zip: 88260	Attn: Tony Savoie	
Phone #: (575) 396-2378	Address: 522 W. Mermod	
Project #: Project Owner: BOPCO, LP	City: Carlsbad	
Project Name: Games Ranch Unit #29 SWD	State: NM Zip: \$8220	
Project Location: Eddy Co., NM	Phone #: (432) 556-8730	
Sampler Name: Yllygul White	Fax #:	
FOR LAB USE CHILY / MATRIX	PRESERV. SAMPLING	
Tab I.D. Sample I.D. H202014 WASTEWATER SOUTH WASTEWATER SOUTH WASTEWATER SOUTH WASTEWATER SOUTH WASTEWATER SOUTH WASTEWATER SOUTH WASTEWATER SOUTH WASTEWATER SOUTH WASTEWATER SOUTH WASTEWATER SOUTH WASTEWATER SOUTH WASTEWATER SOUTH WASTEWATER SOUTH WASTEWATER SOUTH WASTEWATER WASTEWAT	OTHER: ACID/BASE: OTHER: THAT	Chlocile
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analyses. All claims including those for negagence and any other cause whatsoever shall be deemed waived unless made in wrong service. In no event shall Cardinal be facte for incidental or consequental damages, including without linguation, business interruption.	and received by Cardinal within 30 days after completion of the is roos of use, or loss of profits incurred by client, its subsiciarie	apolicable
aribilates or successors arising out of or related to the performance of services hereunder by Carchal, reparciess of whether such of Relinquished By: Date:	m is based upon any of the apove stated reasons or otherwise. Phone Rest Fax Result: REMARKS:	☐ Yes ☐ No Add'l Fax#:
Relinquished By: Date: 8/33/12 Received By:		

CHECKED BY:

Sample Condition

Cool Intact

Yes 4-Yes
No No

Delivered By: (Circle One)

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

Bratcher, Mike, EMNRD

From:

Ben J. Arguijo

 sinenv.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:bjarquijo@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 (NMOCD 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

From:

Ben J. Arguijo

bjärguijo@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

Attachments:

JRU 29 SWD_WorkPlan.pdf

Importance:

High

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