### Basin Environmental Service Technologies, LLC

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# REMEDIATION SUMMARY AND RISK- BASED SITE CLOSURE REQUEST

BOPCO, LP
POKER LAKE UNIT WELL #149
Eddy County, New Mexico
Unit Letter "1" (NE/SE), Section 31, Township 23 South, Range 30 East
Latitude 32.260954° North, Longitude 103.914777° West
NMOCD Reference #2RP-1206

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

January 2014

Project Manager

MAR 0 7 2014

NMOCD ARTESIA

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### 1.0 INTRODUCTION & BACKGROUND INFORMATION

Basin Environmental Service Technologies, LLC (Basin), on behalf of BOPCO, LP (BOPCO), has prepared this *Remediation Summary and Risk-Based Site Closure Request* for the release site known as Poker Lake Unit Well #149 (PLU #149). The legal description of the release site is Unit Letter "I" (NE/SE), Section 31, Township 23 South, Range 30 East, in Eddy County, New Mexico. The geographic coordinates of the release site are 32.260954° North latitude and 103.914777° West longitude. The property affected by the release is owned by the United States Department of the Interior and administered by the Bureau of Land Management (BLM). A "Site Location Map" is provided as Figure 1.

On May 29, 2012, BOPCO discovered a release had occurred on the PLU #149 Flow Line. The release was attributed to the failure of a section of two and seven-eighths-inch (2 7/8") flow line. The release was reported to the New Mexico Oil Conservation Division (NMOCD) Artesia District Office immediately. The "Release Notification and Corrective Action" (Form C-141) indicated approximately thirty barrels (30 bbls) of produced water and fifteen barrels (15 bbls) of crude oil were released, with no recovery. The initial Form C-141 indicated the release affected approximately two thousand square feet (2,000 ft²) of pasture land. The release occurred on top of an area previously impacted by at least two (2) prior flow line releases. There was also an area in the impact zone that had exposed plastic from a reserve pit location. During initial response activities, a temporary repair clamp was placed on the pipe. The affected segment has since been replaced. The Form C-141 is provided as Appendix A. General photographs of the release site are provided as Appendix B.

Prior to conducting excavation activities, Boone Archaeological Services of New Mexico (Boone) conducted a cultural survey of the affected area resulting in a negative finding. Boone determined that remediation activities associated with the PLU #149 release could be conducted without impacting any cultural resources.

### 2.0 NMOCD SITE CLASSIFICATION

A search of the New Mexico Water Rights Reporting System (NMWRRS) database maintained by the New Mexico Office of the State Engineer (NMOSE) indicated information was unavailable for Section 31, Township 23 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') below ground surface (bgs). Based on the NMOCD ranking system, zero (0) points will be assigned to the site as a result of this criterion.

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

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

NMOCD guidelines indicate the PLU #149 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 xylene (BTEX) 50 mg/Kg (ppm)
- Total petroleum hydrocarbon (TPH) 5,000 mg/Kg (ppm)

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

### 3.0 SUMMARY OF SOIL REMEDIATION ACTIVITIES

On July 27, 2012, Basin conducted an initial investigation at the release site in an effort to determine the nature and extent of soil impact. During the initial investigation, a hand auger was utilized to collect forty-two (42) soil samples from three (3) dry drainages (Flow Path #1, Flow Path #2 and Flow Path #3) north of the release point. Soil samples collected at the surface and at two feet (2') bgs were field-screened for concentrations of chloride using a Hach Quantab® Field Test Kit. Field test results suggested soil impact above NMOCD Regulatory Standards was only present in Flow Path #1. A summary of "Chloride Field Test Results" is provided as Table 1. An "Initial Investigation Map" is provided as Figure 2.

On December 18, 2013, Basin began remediation activities at the release site. The floor and sidewalls of the primary exavation in the western portion of the remediation site were advanced until field tests suggested concentrations of BTEX, TPH and chloride were less than NMOCD Regulatory Standards. A historical release site east of the primary excavation was also remediated during this time. Excavated material was stockpiled on-site, pending final disposition.

On December 19, 2013, three (3) confirmation soil samples (East Wall, South Wall and North Wall) were collected from the sidewalls of the excavation in the eastern portion of the remediation site and submitted to Cardinal Laboratories, of Hobbs, New Mexico, for analysis of chloride concentrations by EPA Method 4500 Cl-B. Laboratory analytical results indicate chloride concentrations ranged from 752 ppm for soil sample South Wall to 400 ppm for soil sample East Wall. A summary of "Concentrations of Benzene, BTEX, TPH and Chloride in Soil" is provided in Table 2. Laboratory analytical reports are provided as Appendix C.

In addition, four (4) soil samples (Pile of Dirt #1, Pile of Dirt #1A, Pile of Dirt #2A and Pile of Dirt #2B) were collected from two (2) on-site soil stockpiles (Pile of Dirt #1 and Pile of Dirt #2) of unknown origin and submitted to the laboratory for analysis of chloride concentrations. Laboratory analytical results indicated chloride concentrations ranged from 2,880 ppm for soil sample Pile of Dirt #1A to 608 ppm for soil sample Pile of Dirt #2B. Two (2) soil samples (Floor #1A and Floor #1B) were collected from beneath the respective stockpiles and submitted to the laboratory for analysis of chloride concentrations. Laboratory analytical results indicated the concentration of chloride for soil samples Floor #1A and Floor #1B was 1,340 and 2,160 ppm, respectively. Based on laboratory analytical results, it was determined that soil stockpiles Pile of Dirt #1 and Pile of Dirt #2 would be hauled to an NMOCD-approved disposal facility, and the soil beneath them remediated to NMOCD Standards.

On December 23, 2013, a test trench (East Pit TT) was advanced in the floor of the eastern excavation in an effort to determine the vertical extent of soil impact. During the advancement of the test trench, five (5) soil samples (East Pit TT @ 7', East Pit TT @ 10', East Pit TT @ 12', East Pit TT @ 15' and East Pit TT @ 18') were collected and submitted to the laboratory for analysis of chloride concentrations. Laboratory analytical results indicated chloride concentrations ranged from 4,400 ppm for soil sample East Pit TT @ 10' to 816 ppm for soil sample East Pit TT @ 18'. Soil samples East Pit TT @ 7' and East Pit TT @ 18' were also for concentrations of TPH using EPA Method SW-846 8015M, which were determined to be 80.0 ppm and less than the laboratory Method Detection Limit (MDL), respectively. Soil Sample East Pit TT @ 18' was also analyzed for concentrations of BTEX using EPA Method SW-846-8021b, which were determined to be less than the laboratory MDL.

One (1) additional confirmation soil sample (East Pit West SW) was collected from the west sidewall of the eastern excavation for chloride analysis. Laboratory analytical results indicated the chloride concentration was 400 ppm.

On December 26, 2013, five (5) confirmation soil samples (West Pit WSW, West Pit NSW, West Pit ESW, West Pit SSW, and West Pit Floor @ 3') were collected from the floor and sidewalls of the primary excavation in the western portion of the remediation site and submitted to the laboratory for analysis of chloride concentrations. Laboratory analytical results indicated chloride concentrations ranged from 720 ppm for soil sample West Pit WSW to 96.0 ppm for soil sample West Pit SSW. Soil sample West Pit Floor @ 3' was also analyzed for concentrations of BTEX and TPH, which were determined to be less than the laboratory MDL and 5,874 ppm respectively. Based on laboratory analytical results the floor of the excavation was advanced an additional two (2') feet.

On December 31, 2012, a twenty-millimeter (20-mil) polyurethane liner was installed on the floor of the eastern excavation at approximately four feet (4') bgs. This engineering control was designed to inhibit the vertical migration of contaminants left in-situ. A one-foot (1') layer of pad sand was installed below and above the liner to maintain its integrity during backfilling activities. The remaining portion of the excavation was backfilled with locally purchased, non-impacted material and contoured to match the surrounding topography. The final dimensions of the excavation in the eastern portion of the remediation site were approximately forty feet (40') in width, forty feet (40') in length and four feet (4') in depth.

On January 9, 2014, one (1) confirmation soil sample (West Floor 5') was collected from the floor of the western excavation and submitted to the laboratory for analysis of TPH concentrations. Laboratory analytical results indicated the TPH concentration was less than the laboratory MDL.

On January 10, 2014, in accordance with BLM requests, approximately three hundred linear feet (300') of Flow Path #1 was excavated to approximately three feet (3') bgs. Three (3) confirmation soil samples (F.P. C @ 5', Trench @ 50' and Trench @ 100') were collected from the floor of the trench and submitted to the laboratory for analysis of chloride concentrations. Laboratory analytical results indicated chloride concentrations ranged from 608 ppm for soil sample Trench @ 50' to 320 ppm for soil sample F.P. C @ 5'. Soil sample F.P. C @ 5' was also analyzed for concentrations of TPH, which were determined to be less than the laboratory MDL.

On January 13, 2014, three (3) confirmation soil samples (Trench @ 150', Trench @ 200' and Trench @ 250') were collected from the floor of the trench and submitted to the laboratory for analysis of chloride concentrations. Laboratory analytical results indicated chloride concentrations ranged from 304 ppm for soil sample Trench @ 200' to 112 ppm for soil sample Trench @ 250'.

Between December 27, 2013, and January 16, 2014, approximately seven hundred and forty cubic yards (740 yd<sup>3</sup>) of impacted material was transported to Lea Land, LLC (NMOCD Permit #WM-01-035) for disposal. The final dimensions of the primary excavation in the western portion of the remediation site were approximately forty feet (40') in width, forty feet (40') in length and five feet (5') in depth.

Approximately three hundred feet (300') of a narrow flowpath traveling north from the primary release point was excavated to approximately three feet (3') bgs. Upon receiving laboratory analytical data from confirmation soil samples, the excavated areas were backfilled with locally purchased, non-impacted material. River rock was installed in the affected drainage in an effort to mitigate erosion. Following backfilling, areas affected by the remediation activities were contoured to fit the surrounding topography.

### 4.0 QA/QC PROCEDURES

### 4.1 Soil Sampling

Soil samples were delivered to Cardinal Laboratories, Inc., in Hobbs, New Mexico, for BTEX, TPH and/or chloride analyses using the methods described below:

- BTEX concentrations in accordance with EPA Method SW-846 8021b
- TPH concentrations in accordance with EPA Method SW-846 8015M
- Chloride concentrations in accordance with EPA Method 4500 Cl-B

### 4.2 Decontamination of Equipment

Cleaning of the sampling equipment was the responsibility of the environmental technician. Prior to use, and between each sample, the sampling equipment was cleaned with Liqui-Nox® detergent and rinsed with distilled water.

### 4.3 Laboratory Protocol

The laboratory was responsible for proper QA/QC procedures after signing the chain-of-custody form(s). These procedures were either transmitted with the laboratory reports or are on file at the laboratory.

### 5.0 SITE CLOSURE REQUEST

Soil samples collected from the floor and sidewalls of the excavations at the PLU #149 Release Site were analyzed by an NMOCD-approved laboratory. Laboratory analytical results indicated concentrations of BTEX, TPH and chloride were below NMOCD Regulatory Remediation Action Levels established for the site in each of the submitted soil samples, with the exception of those collected from the East Pit Test Trench. An approved twenty-millimeter (20-mil) polyurethane liner was installed in the floor of the eastern excavation in an effort to inhibit the vertical migration of contaminants left in-situ. Based on these laboratory analytical results and the installation of an approved engineering control, Basin recommends BOPCO provide the NMOCD Artesia District Office and BLM a copy of this *Remediation Summary and Risk-Based Site Closure Request* and request the NMOCD grant site closure to the PLU #149 release site.

### 6.0 LIMITATIONS

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

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

### 7.0 **DISTRIBUTION:**

Copy 1: Mike Bratcher

New Mexico Energy, Minerals and Natural Resources Department

Oil Conservation Division (District 2)

1301 E. Grand Avenue Artesia, NM 88210

Copy 2: James Amos

Bureau of Land Management

602 E. Greene Street

Carlsbad, New Mexico 88220

Copy 3: Tony Savoie

BOPCO, LP

522 W. Mermod, Suite 704

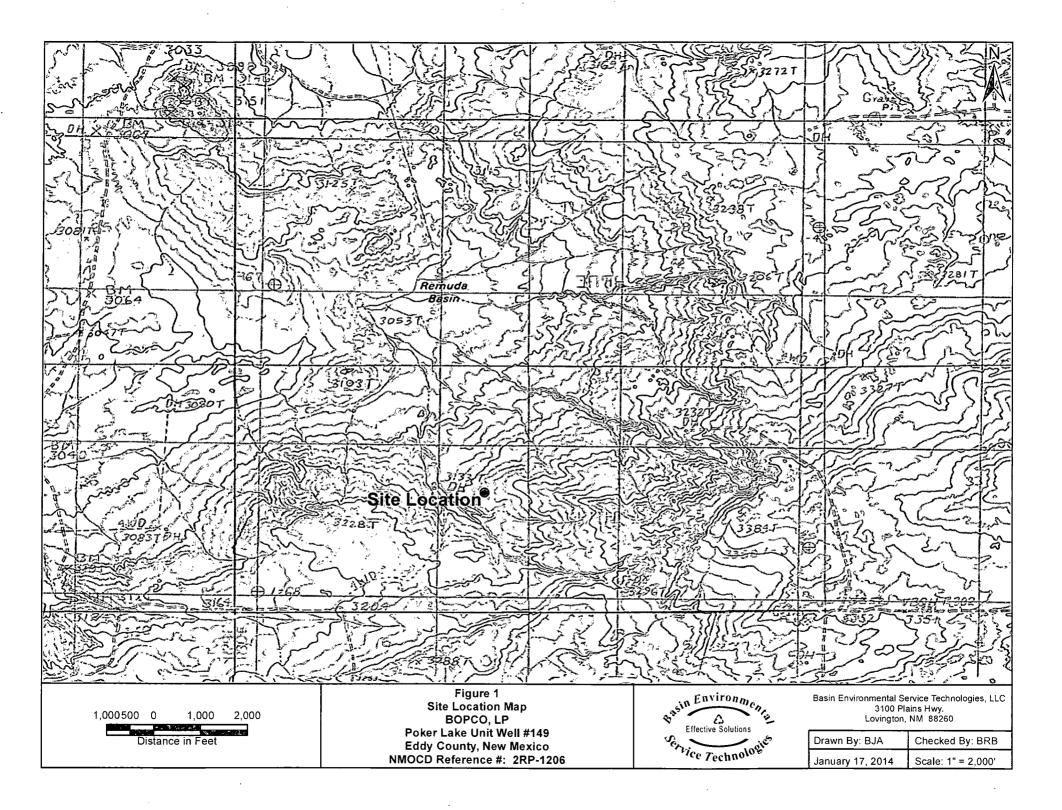
Carlsbad, NM 88220

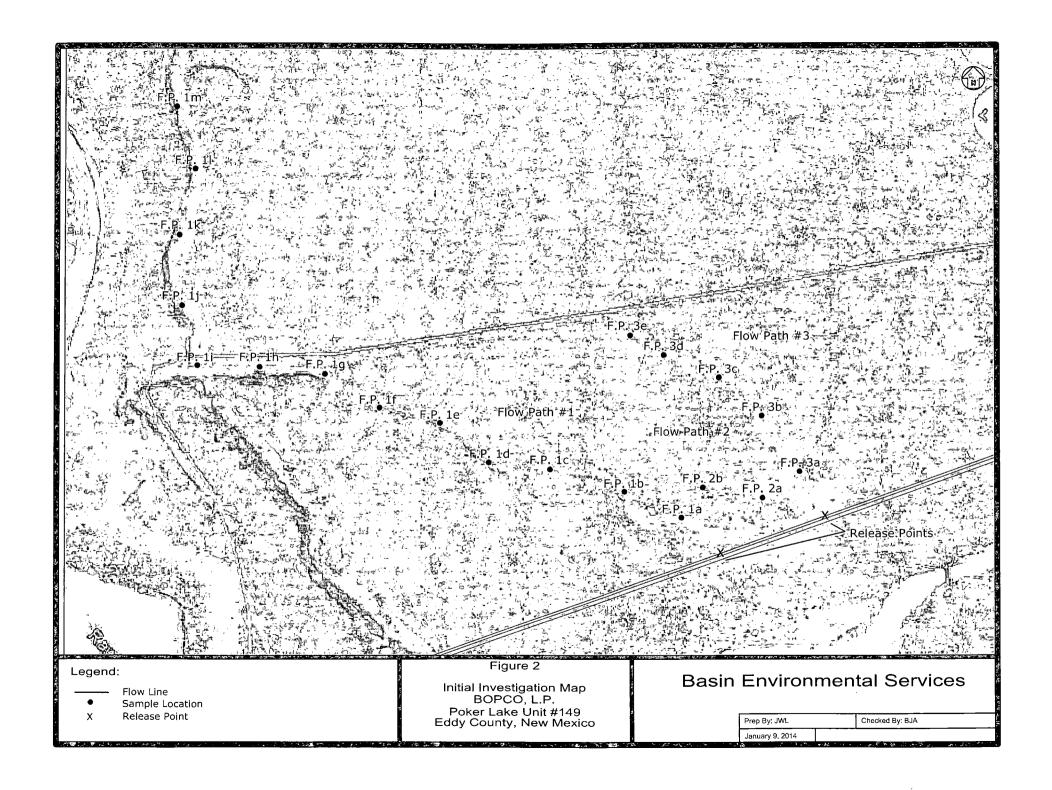
Copy 4: Basin Environmental Service Technologies, LLC

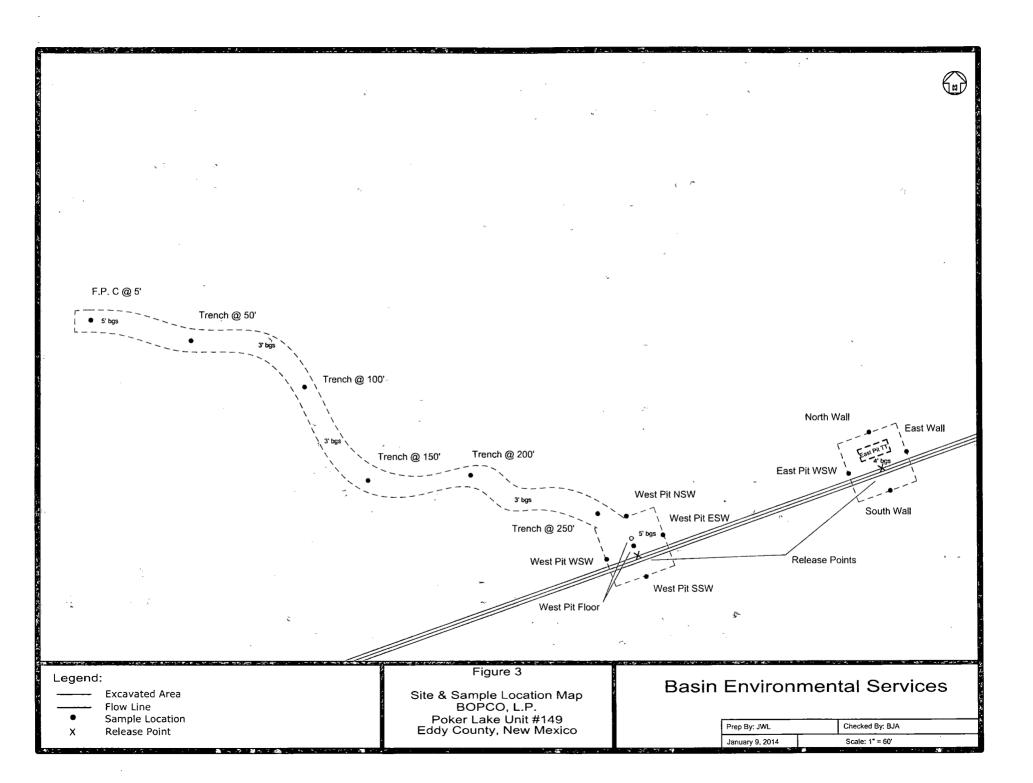
P.O. Box 301

Lovington, NM 88260

·		
	FIGURES	









## TABLE 1 CHLORIDE FIELD TEST RESULTS

### BOPCO, LP POKER LAKE UNIT WELL #149 NMOCD REF # 2RP-1206 EDDY COUNTY, NEW MEXICO

SAMPLE LOCATION	SAMPLE DEPTH (BGS)	SOIL STATUS	CHLORIDE (mg/Kg)
F.P. 1a	Surface	Excavated	8,428
F.P. 1a @ 2'	2'	Excavated	4,040
F.P. 1b	Surface	Excavated	2,460
F.P. 1b @ 2'	2'	Excavated	904
F.P. 1c	Surface	Excavated	5,572
F.P. 1c @ 2'	2'	Excavated	5,140
F.P. 1d	Surface	In-Situ	612
F.P. 1d @ 2'	2'	In-Situ	1,288
F.P. 1e	Surface	In-Situ	1,480
F.P. 1e @ 2'	2'	In-Situ	3,164
F.P. 1f	Surface	In-Situ	2,912
F.P. 1f @ 2'	2'	In-Situ_	5,140
F.P. 1g	Surface	In-Situ	5,140
F.P. 1g @ 2'	2'	In-Situ	472
F.P. 1h	Surface	In-Situ	2,912
F.P. 1h @ 2'	2'	In-Situ	4,040
F.P. 1i	Surface	In-Situ	188
F.P. 1i @ 2'	2'	In-Situ	<112
F.P. 1j	Surface	In-Situ	2,460
F.P. 1j @ 2'	2'	In-Situ	1,380
F.P. 1k	Surface	In-Situ	112
F.P. 1k @ 2'	2'	In-Situ	280
F.P. 1I	Surface	In-Situ	4,040
F.P. 11 @ 2'	2'	In-Situ	720
F.P. 1m	Surface	In-Situ	112
F.P. 1m @ 2'	2'	In-Situ	188
F.P. 1n	Surface	In-Situ	<112
F.P. 1n @ 2'	2'	In-Situ	<112
F.P. 2a	Surface	In-Situ	904
F.P. 2a @ 2'	2'	In-Situ	564
F.P. 2b	Surface	In-Situ	<112
F.P. 2b @ 2'	2'	In-Situ	<112
F.P. 3a	Surface	In-Situ	160
F.P. 3a @ 2'	2'	In-Situ	<112
F.P. 3b	Surface	In-Situ	136
F.P. 3b @ 2'	2'	In-Situ	720
F.P. 3c	Surface	In-Situ	136
F.P. 3c @ 2'	2'	In-Situ	776
F.P. 3d	Surface	In-Situ	560
F.P. 3d @ 2'	2'	In-Situ	560
F.P. 3e	Surface	In-Situ	<112
F.P. 3e @ 2'	3'	In-Situ	160

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

#### BOPCO, LP POKER LAKE UNIT WELL #149 NMOCD REF # 2RP-1206 EDDY COUNTY, NEW MEXICO

	SAMPLE	F .		METHOD: F	EPA SW 84	6-8021B, 503	30	METHOD: 8015M TOTAL			TOTAL	4500 CI-B			
SAMPLE LOCATION	SAMPLE DEPTH (BGS)	SAMPLE DATE	SOIL STATUS		TOLLIENE	ETHYL-	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>	ORO C <sub>28</sub> -C <sub>35</sub>	TPH C <sub>6</sub> -C <sub>35</sub>	CHLORIDE		
East Wall	3'	12/19/2013	In-Situ	-	-	-	-	-	-	-	-	-	400		
South Wall	3,	12/19/2013	In-Situ	- '			- '	-	·	-	-	-	752		
North Wall	3'	12/19/2013	In-Situ	-	-	-	-	-		-	-	-	688		
		'					<u> </u>								
Pile of Dirt #1	N/A	12/19/2013				- '	<u> </u>	-	-	-	-	-	2,400		
Pile of Dirt #1A	N/A	12/19/2013		-	-	-	-	-	· .	-	-	-	2,880		
Floor #1A	Surface	12/19/2013			-	-	-	-	-	-	-	-	1,340		
Floor #1B	Surface	12/19/2013			-	-	-	-	-		-		2,160		
Pile of Dirt #2A	N/A	12/19/2013					<u> </u>	-	-		-	-	1,060		
Pile of Dirt #2B	N/A	12/19/2013	Disposed	'	-	-	'	-		-	-	-	608		
	7'	10/02/2012	In City	<b></b> '	<u> </u>	<u> </u>	<b></b> '	<u> </u>	<10.0	48.2	31.8	80.0	2,920		
East Pit TT @ 7' East Pit TT @ 10'	10'	12/23/2013 12/23/2013		ļ <u>-</u>		-	-	-	₹10.0				4,400		
	10 <sup>-</sup>	12/23/2013		-	-	-		-	<del></del>	-	-	-	4,400		
East Pit TT @ 12' East Pit TT @ 15'	15'	12/23/2013		-	-		-	<del>                                     </del>	<del></del>	-		-	1,150		
East Pit TT @ 15	18'	12/23/2013		<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	- <10.0	<10.0	816		
East Pit West SW	3'	12/23/2013		<0.050	<0.050	<u> </u>	<u> </u>		10.0	10.0	× 10.0	<u> </u>	400		
East Fit vvest Svv		12/23/2013	III-Situ	<del>                                     </del>	<del></del>	<del></del>	<del>                                     </del>	<del>-</del>		<del>-</del>	<del>  -</del>	<del></del>	1 400		
West Pit WSW	2.5'	12/26/2013	In-Situ	-	-	- 1	-	<del>                                     </del>	-	-	-	-	720		
West Pit NSW	2.5'	12/26/2013		-	- 1	-	-	-	<del> </del>	-	-	-	384	. /	
West Pit ESW	2.5'	12/26/2013		<del></del>	- 1		-		<del></del>	-	-	-	320	- Rot	
West Pit SSW	2.5'	12/26/2013	_	<del></del>	<del>- '</del>	- '	-	<del>-</del>	<del>  -</del>	- ,			96.0	Pro C.	
West Pit Floor @ 3'	3'	12/26/2013		<0.050	<0.050	<0.050	<0.150	<0.300	<50.0	4,970	904	5,874	832	460	
) A (		1/0/0044	1.0:	[	'				100	110.0	110.0	110.0		~	<u> </u>
West Floor 5'	5'	1/9/2014	In-Situ	-	-	-	-	<u>-</u>	<10.0	<10.0	<10.0	<10.0	<b></b> →	<b>─</b> 3.	
F.P. C @ 5'	3'	1/10/2014	In-Situ	<del>-</del>	<del>                                     </del>	-	-	<del>-</del>	<10.0	<10.0	<10.0	<10.0	320		
Trench @ 50'	3'	1/10/2014		-	-	-	-	-	-	-	-	-	608	<sup>×</sup> S′	
Trench @ 100'	3'	1/10/2014		-	-	-	-	-	-	-	-	-	576	- rotale	
T		1/12/2011	la Cita	'	<u>'</u>		<u> </u>			ļ			100	-	
Trench @ 150'	3'	1/13/2014	In-Situ	-	-	-		ļ		-	-	<u> </u>	160		
Trench @ 200'	3'	1/13/2014	In-Situ	-		-	-	-	<del>  -</del>	<del> </del> -		-	304		
Trench @ 250'	3,	1/13/2014	In-Situ	<del>                                     </del>	-	<del>  -</del>	-	<del>  -</del>	<del> </del>	<del>  -</del>	-		112		
NMOCD Criteria				10	<del>                                     </del>	<del>                                     </del>	<del>                                     </del>	50	<del>                                     </del>	<del> </del>		5.000	1,000		

<sup>- =</sup> Not analyzed.

### **APPENDICES**

# Appendix A Release Notification and 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

				ease Notific	atio		orrective A	ction	ì			
MMLn	11210	13469	13			<b>OPER</b>	TOR		🛛 Initi	al Report		Final Report
Name of Co				2607	37	Contact To	··					
				ad, N.M. 88220			No. 432-556-873	30				
Facility Nar	ne Poker I	Lake Unit W	ell #149			Facility T	pe E&P					
Surface Ow	ner Federa	1	•	Mineral O	wner	Federal	<del></del>		Lease 1	No.		
<u> </u>				LOCA	TIO	N OF RI	LEASE	30-	015-	- 3/4/6		
Unit Letter	Section 31	Township 23S	Range 30E	Feet from the		/South Line	Feet from the		West Line	County Eddy		
			<u> </u>	<u> </u>			<u></u>			<u> </u>		
			I	_atitude_N 32.20	60954	Longi	ude W 103.9147	77				
		<del></del>		NAT	URE	OF REI			Γ.,			
Type of Relea	ase: Produc	ed water and	crude oil				of Release: 30 Bbls water and 15 Bbls		Volume I	Recovered: No	ne	
Source of Re	lease: 2 7/8	" flow line				_ =	Hour of Occurrenc	e	Date and 5/29/12 2	Hour of Disco	overy	
Was Immedia	ate Notice (		Yes [	] No	quired	If YES, 7	o Whom? Mike Bratcher and	BLM				
By Whom? T	ony Savoie	:	144170				Hour 6/1/12, NMC t was delayed to a				5 a.m	
Was a Watero	course Reac		Yes 🛚	] No			olume Impacting t			RECE	=1\	/ED
If a Watercou	rse was Im	pacted, Descri	be Fully.							JUN 2	26	2012
on the pipe. F	our joints c	of pipe were re	placed be	tween 5/30/12 and	6/14/	12.	eak due to external					
happened on a reserve pit I with the NMO	top of an ar ocation. The DCD and Bl	ea previously e release site LM requireme	impacted will be revents for sp	by at least 2 prior viewed with the BI ills.	flow li	ne releases. d NMOCD to	sture land. All of there is also an are determine the best	a in the t course	impact zor of action.	ne that has exp The remediati	osed on w	plastic from ill comply
regulations all public health should their o	I operators a or the envir perations ha ament. In a	are required to onment. The ave failed to a ddition, NMO	report an acceptance dequately CD accep	id/or file certain re se of a C-141 repor investigate and re	lease r t by th media	notifications ne NMOCD r te contamina	y knowledge and un and perform correct narked as "Final Re- tion that pose a three we the operator of r	tive acti eport" d eat to gr	ions for rele oes not reli ound water	eases which m leve the operator, surface wate	nay er tor of er, hu	danger liability man health
'		-0	n				OIL CONS	SERV	ATION	DIVISION	1	
Signature: C	· Tony Save		uu _		$\dashv$	Approved by	District Superviso		ed By	Vily De	MAN SA	MOR_
Title: Waste N			cialist			Approval Da	JUL 1 1 2012		Expiration 1	Date:		
E-mail Addres	ss: TASavo	ie@BassPet.c	om			Conditions of				Attached	— П	
Date: 6/24/12				Phone:432-556-87	730							
Attach Additi	ional Shee	ts If Necessa	ry		Gui		on per OCD Rul			2RF	)_	1206

Guidelines. SUBMIT REMEDIATION PROPOSAL NOT LATER THAN:

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 RESCRIVED

Oil Conservation Division MAR 0 7 2014
1220 South St. Francis Dr.
Santa Fe, NM 87505 NMOCD ARTESIA

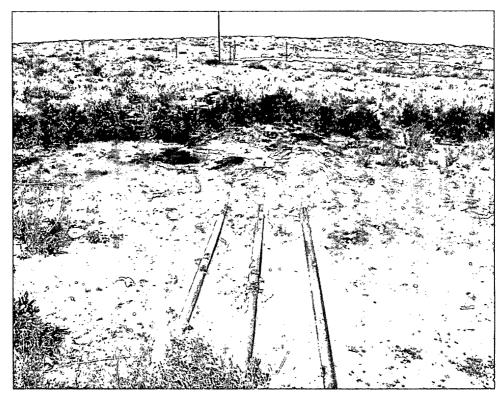
Form C-141 Revised October 10, 2003

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

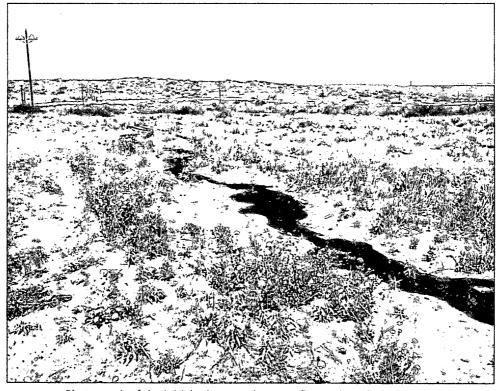
### Release Notification and Corrective Action

						OD	ED ATOD		Tlai	al Danamt	⊠ Final Bond
Nama of Co		BOPCO, L.I	<del></del>	260737			ERATOR		iniu	al Report	
Name of Co				1sbad, N.M. 88	220		Fony Savoie No. 575-887-	7320			
				(2RP-1206)	440	Facility Ty		1329			
			CII # 147	·····			pe Læi				
Surface Ow	ner: Feder	al		Mineral (	Owner:	Federal			API No	<u>. 30-015-31</u>	416
	· · · · · · · · · · · · · · · · · · ·					N OF REI		T			
Unit Letter I	Section 31	Township 23S	Range 30E	Feet from the	North	/South Line	Feet from the	East/V	Vest Line	County Ec	ldy
				Latitude N	32.260	954 Lon	gitude W 103.9	91477 <u>7</u>			
				NAT	URE	OF REL	EASE				
Type of Rele	ase: Produ	ced water and	l crude oil			1	Release 30 bbls water and 15 bbls		Volume R	Recovered N	one
Source of Re	lease: 2 7/8	3" flow line	·			Date and H	Iour of Occurrence me unknown	e	Date and 5/29/12 2:	Hour of Disc :00 p.m.	overy:
Was Immedia	ate Notice Gi		Yes [	No Not Re	equired	If YES, To NMOCD N	Whom? Aike Bratcher and	BLM J	im Amos		
By Whom?	Tony Savoie						lour: 6/1/12, NMC was delayed to a				5 a.m.
Was a Water	course Reach	ed?	Yes [	] No		If YES, Vo	lume Impacting t	he Wate	rcourse.		
If a Watercou	rse was Impa	acted, Descri	be Fully.*						<del></del>		
on the pipe. F	our joints of	pipe were rep	placed bet	ween 5/30/12 and	16/14/12	2.					clamp was placed
happened on	op of an area	a previously i clease site wil	impacted      be revie	by at least 2 prior	flow lir	ne releases. Ti	he is also an area	in the in	npact zone	that has expe	e ground. The spill osed plastic from a n will comply with
the western excav Western excav On December Between Dec	action we ation was ex 31, 2013, a 18, 2013, a reference	re approxima cavated to 3' a 20-mil line and Jan. 16, the attached	itely 40' i bgs. The r was plad 2014, app	n width, 40' in le final dimensions ced on the floor proximately 740	ngth and of the ea of the e cy of in	d 5' in depth. astern excava- eastern excava- apacted soil	Approximately 3 tion were approxi ation to inhibit the was excavated as	00' of a mately 4 he vertice of trans	narrow flo 40' in width cal migration ported to a	owpath travel h, 40' in leng on of contan an NMOCD-	inal dimensions of ing north from the th and 4' in depth. ninants left in-situ approved disposal osure Request for
I hereby certify are required to acceptance of a and remediate c	that the inform report and/or C-141 report ontamination t	nation given ab file certain re by the NMOC hat pose a thre	elease notif D marked a at to groun	ications and perfor is "Final Report" do	m corrections not re- tter, huma	ctive actions for elieve the opera an health or the	or releases, which a stor of liability shoust environment. In a	may enda	anger publicoperations ha	health or the	ulations all operators e environment. The dequately investigate -141 report does not
Signature:	1 000	Dan	wie.				OIL CONS	ERV/	ATION I	<u>OIVISION</u>	<u>1</u>
Printed Name:	Tony Savo	ie	<del></del>		A	pproved by [	District Supervisor	r:			
Title: Waste M	/lgmt. & Ren	nediation Spe	ecialist		Λ	pproval Date	:	Ex	xpiration D	ate:	····
E-mail Addres	s: TASavoie	@BassPet.co	m		c	onditions of A	Approval:				·
Date: 3/7	114	Pho	one: 432-5	556-8730							

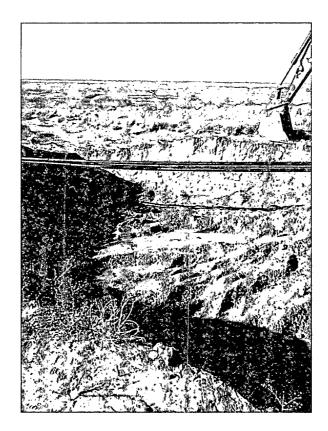
Appendix B
Photographs



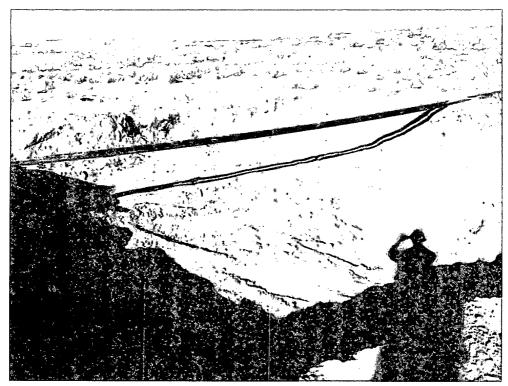
Photograph of the initial release at the PLU #149.



Photograph of the initial release and narrow flowpath at the PLU #149.



Photograph of excavation in the eastern portion of the remediation site at the PLU #149.



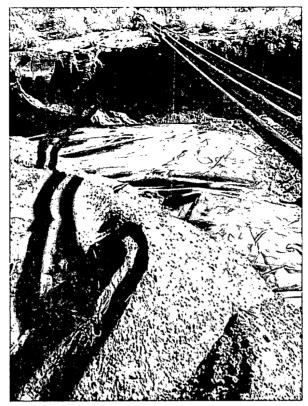
Photograph of the excavated release point (West Pit) at the PLU #149 Release Site.



Photograph of liner installation in the eastern portion of the remediation site at the PLU #149.



Photograph of the excavated flow path at the PLU #149.



Photograph of backfilling activities at the PLU #149 Release Site.



Photograph of PLU #149 Release Site after remediation activities.



Photograph of PLU #149 Release Site after remediation activities.



Photograph of narrow flowpath at the PLU #149 Release Site after remediation activities.

# **Appendix C Laboratory Analytical Reports**



December 26, 2013

JOEL LOWRY

Basin Environmental Service

P.O. Box 301

Lovington, NM 88260

RE: PLU #149

Enclosed are the results of analyses for samples received by the laboratory on 12/20/13 8:30.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. 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 <a href="https://www.tceq.texas.gov/field/qa/lab-accred-certif.html">www.tceq.texas.gov/field/qa/lab-accred-certif.html</a>.

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 & Keens

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 JOEL LOWRY P.O. Box 301 Lovington NM, 88260

Fax To: (575) 396-1429

Received:

12/20/2013

Sampling Date:

12/19/2013

Reported:

12/26/2013

Sampling Type:

Soil

Project Name:

PLU #149

Sampling Condition:

Cool & Intact

Project Number:

NONE GIVEN

Sample Received By:

Project Location:

EDDY COUNTY, NM

Jodi Henson

### Sample ID: PILE OF DIRT #1 (H303093-01)

Chloride, SM4500CI-B	mg	/kg	Analyze	d By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2400	16.0	12/26/2013	ND	432	108	400	3.77	
Sample ID: PILE OF DIR	T #1A (H30309	93-02)						•	
Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2880	16.0	12/26/2013	ND	432	108	400	3.77	
Sample ID: EAST WALL (	H303093-03)								
Chloride, SM4500CI-B	mg	/kg	Analyze	d By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	400	16.0	12/26/2013	ND	432	108	400	3.77	
Sample ID: FLOOR #1A (	(H303093-04)								
Chloride, SM4500CI-B	mg	/kg	Analyze	d By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1340	16.0	12/26/2013	ND	432	108	400	3.77	

### Cardinal Laboratories

\*=Accredited Analyte

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Celeg E. Keine

Celey D. Keene, Lab Director/Quality Manager



Basin Environmental Service JOEL LOWRY P.O. Box 301 Lovington NM, 88260

Fax To: (575) 396-1429

Received: Reported: 12/20/2013

12/26/2013 PLU #149

Project Name: Project Number:

NONE GIVEN

Project Location:

EDDY COUNTY, NM

Sampling Date:

mpling Date:

12/19/2013

Sampling Type:

Soil

Sampling Condition:

Cool & Intact

Sample Received By:

Jodi Henson

### Sample ID: SOUTH WALL (H303093-05)

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	752	16.0	12/26/2013	ND	432	108	400	3.77	
Sample ID: FLOOR #1B (H	1303093-06)								
Chloride, SM4500CI-B	mg	/kg	Analyze	d By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2160	16.0	12/26/2013	ND	432	108	400	3.77	
Sample ID: NORTH WALL	(H303093-07	)							
Chloride, SM4500CI-B	mg	/kg	Analyze	d By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	688	16.0	12/26/2013	ND	432	108	400	3.77	
Sample ID: PILE OF DIRT	#2A (H30309	<b>)3-08</b> )							
Chloride, SM4500CI-B	mg	/kg	Analyze	d By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1060	16.0	12/26/2013	ND	432	108	400	3.77	
Sample ID: PILE OF DIRT	#2B (H30309	3-09)							
Chloride, SM4500Cl-B	Analyze	d By: CK				_			
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	608	16.0	12/26/2013	ND	400	100	400	7.69	

#### Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keine

Celey D. Keene, Lab Director/Quality Manager



### **Notes and Definitions**

ND Analyte NOT DETECTED at or above the reporting limit

RPD Relative Percent Difference

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

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

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

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

Cardinal Laboratories \*=Accredited Analyte

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Celey D. Keine

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

### CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name:	Basin Environmental Service Techn	ologies, LLC		81	LL TO				Α	NALYSI	REC	UEST	: ::		
Project Manager:	Joel Lowry			P.O. #:						:::	1.			- I	
Address: P.O. E	Box 301			Company:	BOPCO, LP				.	`     ·					
City: Lovington	State: NM	Zip: 88260		Attn:	Tony Savoie							·.			
Phone #: (575)	396-2378 <b>Fax #</b> : (575)	396-1429		Address:	522 W. Marland		1			1			-		.
Project#:	Project Own	er:	: '	City:	Carlsbad				ļ						
Project Name:	PLU #149			State: NM	<b>Zip:</b> 88220		<u>§</u>	1B)		·					
Project Location:	Eddy Co., NM	. :		Phone #:	(432)556-8730	Chloride	TPH (8015M)	BTEX (8021B)				F :			
Sampler Name	Viel low			Fax #:		Š	Į Ĕ	Ĕ							
FOR LAB USE ONLY		MA	TRIX	PRESERV.	SAMPLING		=	<u> </u>				. : .			.,
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Lab I.D.	Sample I.D.	AINE WAT	ш	BASE: COOL ER:					. : . :		ĺ			İ	
ilanacan		(G)RAB OR (C)OF # CONTAINERS GROUNDWATER WASTEWATER SOIL		# IO \ #					. :				1 .		
H303093		(a) # (a)   S	SEL SEL	ACII OTT	DATE TIME		,		•	1 11.			;		
	Pile of Dirt#1				13/14/13 11:3				-		<u> </u>	. "."			
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	Fastwall Hay				12/14/13 121		-		-		1		-+		+
5	Floor#IA Southwall		++-		12/19/13 /2:4		+-				<del> </del>	· · ·	: 1	-+	+-1
<u> </u>	Floor#1B				12/19/13 1:1		+					11 11			
	North Wall				12/19/13 /3		- :	: : : :			1	-			+
4	Pile of Dirt#24				12/19/13 1:4		<del></del>		+ 1			-			T
9	Pile of Dirt#24 Pile of Dirt#2B			1111	12/19/13 220		•				<del>  .  </del>		-	+	+
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PLEASE NOTE: Liability and	Damages. Cardinai's liability and client's exclusive ren	edy for any claim arising whe	ther based l	n contract or tort, s	hall be limited to the amo	unt paid b	y the client	for the	<del>-                                    </del>		ــــــــــــــــــــــــــــــــــــــ				

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 urtess 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 consequental damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries,

	attributes of successors ansing out of or related to the performance of se	stylces heredical by Cardinal, regardless of whether such call it is based about any of the above	e stated reasons of other	iwise.				
,	Relinquished By:	Date: Received By		Phone Result:   Yes	□ No Ade	d'I Phone #:	- :	
		10/20/13	- 1 <b>-,</b> 1111 [	Fax Result: ☐ Yes	. □ No Ade	d'I Fax #:		- :
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	Revision 1.0	t Cardinal connet accent verbal change	J					

† Cardinal cannot accept verbal changes. Please fax written changes to 575-393-2476



January 03, 2014

JOEL LOWRY

Basin Environmental Service

P.O. Box 301

Lovington, NM 88260

RE: PLU #149

Enclosed are the results of analyses for samples received by the laboratory on 12/26/13 9:15.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. 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 <a href="https://www.tceq.texas.gov/field/qa/lab">www.tceq.texas.gov/field/qa/lab</a> accred 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 & Keine

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

Sincerely,

Celey D. Keene

Lab Director/Quality Manager



Basin Environmental Service **JOEL LOWRY** P.O. Box 301 Lovington NM, 88260

Fax To: (575) 396-1429

Received:

12/26/2013

01/03/2014

Sampling Date: Sampling Type: 12/23/2013

Reported:

Soil

Project Name:

PLU #149

Sampling Condition:

\*\* (See Notes)

Project Number:

NONE GIVEN

Sample Received By:

Kathy Perez

Project Location:

EDDY COUNTY, NM

### Sample ID: EAST PIT TT @ 7' (H303129-01)

Chloride, SM4500CI-B	mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2920	16.0	01/02/2014	ND	400	100	400	11.3	
TPH 8015M	mg/kg		Analyze	Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	12/27/2013	ND	189	94.6	200	5.41	
DRO >C10-C28	48.2	10.0	12/27/2013	ND	184	91.9	200	10.3	
EXT DRO >C28-C35	31.8	10.0	12/27/2013	ND					
Surrogate: I-Chlorooctane	101	% 65.2-14	10						
Surrogate: 1-Chlorooctadecane	101	% 63.6-15	4						

#### Sample ID: EAST PIT TT @ 10' (H303129-02)

Chloride, SM4500CI-B	mg	mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	4400	16.0	01/02/2014	ND	400	100	400	11.3	
Sample ID: EAST PIT TT	@ 12' (H30312	9-03)							
Chloride, SM4500CI-B	mg	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	4240	16.0	01/02/2014	ND	400	100	400	11 3	

### Cardinal Laboratories

\*=Accredited Analyte

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Clay Steens



Basin Environmental Service

JOEL LOWRY

P.O. Box 301

Lovington NM, 88260

Fax To:

(575) 396-1429

Received:

12/26/2013

Sampling Date:

12/23/2013

Reported:

01/03/2014

Sampling Type:

Soil

Project Name:

PLU #149

Sampling Condition:

\*\* (See Notes)

Project Number:

NONE GIVEN

Sample Received By:

Kathy Perez

Project Location:

EDDY COUNTY, NM

### Sample ID: EAST PIT TT @ 15' (H303129-04)

Chloride, SM4500CI-B	mg/kg		Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1150	16.0	01/02/2014	ND	400	100	400	11.3	

Cardinal Laboratories

\*=Accredited Analyte

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Celeg D. Keena



Basin Environmental Service JOEL LOWRY P.O. Box 301 Lovington NM, 88260

Fax To: (575) 396-1429

Received:

12/26/2013

Sampling Date:

12/23/2013

Reported:

01/03/2014

Sampling Type:

Project Name:

Sampling Condition:

\*\* (See Notes)

Project Number:

PLU #149 NONE GIVEN

Project Location:

EDDY COUNTY, NM

Sample Received By:

Kathy Perez

### Sample ID: EAST PIT TT @ 18' (H303129-05)

BTEX 8021B	mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/30/2013	ND	1.77	88.5	2.00	3.75	
Toluene*	<0.050	0.050	12/30/2013	ND	1.76	87.9	2.00	3.39	
Ethylbenzene*	<0.050	0.050	12/30/2013	ND	1.73	86.5	2.00	3.04	
Total Xylenes*	<0.150	0.150	12/30/2013	ND	5.08	84.6	6.00	2.87	
Total BTEX	<0.300	0.300	12/30/2013	ND					
Surrogate: 4-Bromofluorobenzene (PIL	103 9	% 89.4-12	6						
Chloride, SM4500Cl-B	mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	816	16.0	01/02/2014	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	12/27/2013	ND	189	94.6	200	5.41	
DRO >C10-C28	<10.0	10.0	12/27/2013	ND	184	91.9	200	10.3	
EXT DRO >C28-C35	<10.0	10.0	12/27/2013	ND					
Surrogate: 1-Chlorooctane	99.1	% 65.2-14	0	<del></del>				***	
Surrogate: 1-Chlorooctadecane	92.6	% 63.6-15	4						

### Cardinal Laboratories

\*=Accredited Analyte

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alex D. Keine



Basin Environmental Service

JOEL LOWRY P.O. Box 301

Lovington NM, 88260

Fax To:

(575) 396-1429

Received:

12/26/2013

Sampling Date:

12/23/2013

Reported:

01/03/2014

Sampling Type:

Soil

Project Name:

PLU #149

Sampling Condition:

\*\* (See Notes)

Project Number:

NONE GIVEN

Sample Received By:

Kathy Perez

Project Location:

EDDY COUNTY, NM

### Sample ID: EAST PIT WEST SW (H303129-06)

Chloride, SM4500Cl-B	mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	400	16.0	01/02/2014	ND	416	104	400	0.00	

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager



ND Analyte NOT DETECTED at or above the reporting limit

RPD Relative Percent Difference

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

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

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

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

Cardinal Laboratories \*=Accredited Analyte

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

Celey E. Keine

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

(5/5) 393-2320 FAX (5/5) 393-24/0		B. 121		***************	888888											
Company Name: Basin Environmental Service Technologies, LLC			8	LL TO				· : .	ANA	<u>LYSI</u>	S RE	QUES	ST			 
Project Manager: Joel Lowry		P.0	O. #:						:					[ · · ]		
Address: P.O. Box 301	• :	Co	mpany:	BOPCO, LP				·				l.	1.			
City: Lovington State: NM Zip: 88260		Att	n:	Tony Savoie				1.1.1	:	ł						
Phone #: (575)396-2378		Ad	dress:	522 W. Mermod										:		
Project #: Project Owner:		Cit	y:	Carlsbad	_	: :										
Project Name: PLU #149		Sta	ate: NM	Zip: 88220	<u>ه</u>	5M)	BTEX (8021B)	::	::				1 :			
Project Location: Eddy County		Ph	one #:	432 556 8730	Chloride	801	8	İ			1					
Sampler Name: Wulder	1111		x #:		_ ទី	TPH (8015M)	Ĕ		:	.						
FOR LAB USE ONLY MA	TRIX	<u>:</u>	PRESER	SAMPLING	-]::	-	8	i.,				· · · · · · · · · · · · · · · · · · ·	i			: ::::
C)OMP.					:					i ivi			:			
Tab I.D. Sample I.D. CONTAINERS SROUNDWATER WASTEWATER	OIL	IER:	ACID/BASE: CE / COOL DTHER:										1			1 1114
H303129	SLU SLU	OTH	ACIT ICE OTH	DATE TIME						1				:	· . ·:	
East Pit TT @ 7' G 1 x		1	x	12/23/2013 1115	х	x	:				, "					
A East Pit Π @ 10' G 1 x			x	12/23/2013 1120	х				<u> </u>	<u> </u>		:		ĹШ		
3 East Pit TT @ 12' G 1 x	1		х	12/23/2013 1125	x						<u> </u>	<u> </u>				
Ψ         East Pit TT @ 15'         G         1         x	- -	<u> </u>		12/23/2013 1130	x	1 : :					ļ					
5 East Pit Π @ 18' G 1 x			·   ·	12/23/2013 1135	×	×	х	:								: ::
East Pit West SW G 1 x				12/223/13 1140	x									لــنــا		
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PLEASE NOTE: Liability and Damages. Cardinal's flability and client's exclusive remedy for any claim arising w	etner bas	ea in c	contract or to	rt. snak de limited to the amount i	naid by th	e client fo	rtne ·									

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arrivates or successors arising coror or related to the performance of	A SELACES LEGERING DA CALCILET LEGERINGS	Of WILESANT SCIENT DISCOURT IN DISSESS APOIT IN	IN OF THE GOOD STREET THE STREET OF CHARLE	WISO.				
Relinquished By:		red By:	/	Phone Result:	☐ Yes ☐ No	Add'l Phone #:		
	12-26-13			Fax Result:	JYes □ No	Add'l Fax #:		
Jul Joen	Time: 8100	po	52	REMARKS:				
Rélinquished	Date: 12-26-3 Receiv	ed By:	Hen	Please email re	sults to Tony	Savoje Jody Wali	ters and PM@basii	neny com
Delivered By: (Circle One)		Sample Condition	CHECKED BY:		,			
Sampler - UPS - Bus - Other: FORM-006	8.4°C	Cool Antact  Thes I ves	(Initials)		:* 			.* : :
Revision 1.0	1/5/	:i	nal abangan Plagas fa		4- 575 000 0470			



January 03, 2014

JOEL LOWRY

Basin Environmental Service

P.O. Box 301

Lovington, NM 88260

RE: PLU #149

Enclosed are the results of analyses for samples received by the laboratory on 12/27/13 8:25.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. 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 <a href="https://www.tceq.texas.gov/field/qa/lab">www.tceq.texas.gov/field/qa/lab</a> accred 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



Basin Environmental Service JOEL LOWRY P.O. Box 301 Lovington NM, 88260

Fax To:

(575) 396-1429

Received:

12/27/2013

Reported:

01/03/2014

Project Name: Project Number: PLU #149

Project Location:

NONE GIVEN

EDDY COUNTY, NM

Sampling Date:

12/26/2013

Sampling Type:

Soil

Sampling Condition:

Cool & Intact

Sample Received By:

Jodi Henson

# Sample ID: WEST PIT WSW (H303132-01)

Chloride,	SM4500CI-B

Chloride

Chloride

Chloride

mg/kg

Analyzed By: AP

Analyte

Result

720

Result

384

Reporting Limit 16.0

Analyzed 01/02/2014

01/02/2014

Method Blank ND

BS 416

BS

416

% Recovery 104

True Value QC 400

RPD 0.00 Qualifier

Sample ID: WEST PIT NSW (H303132-02)

Chloride, SM4500Cl-B

Analyte

mg/kg

Analyzed By: AP Analyzed

Method Blank

% Recovery 104

True Value QC

400

RPD

Qualifier 0.00

Sample ID: WEST PIT ESW (H303132-03)

Chioride, SM4500CI-B

Analyzed By: AP

Analyte Result 320 Reporting Limit 16.0

Reporting Limit

16.0

Analyzed 01/02/2014 Method Blank ND

ND

ND

BS 416 % Recovery

104

True Value QC 400

RPD 0.00 Qualifier

Sample ID: WEST PIT SSW (H303132-04)

Chloride, SM4500CI-B

mg/kg

Analyzed By: AP

Analyte Chloride

Result 96.0 Reporting Limit 16.0

Analyzed 01/02/2014

Method Blank

BS 416 % Recovery 104

True Value QC 400

RPD 0.00 Qualifier

Cardinal Laboratories

\*=Accredited Analyte

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Celeg D. Keine



Basin Environmental Service JOEL LOWRY P.O. Box 301 Lovington NM, 88260

Fax To:

(575) 396-1429

Received: Reported: 12/27/2013

01/03/2014

Project Name: Project Number: PLU #149 NONE GIVEN

Project Location:

EDDY COUNTY, NM

Sampling Date:

12/26/2013

Sampling Type:

Soil

Sampling Condition:

Cool & Intact

Sample Received By:

Jodi Henson

# Sample ID: WEST PIT FLOOR @ 3' (H303132-05)

BTEX 8021B	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/02/2014	ND	1.85	92.7	2.00	4.48	
Toluene*	<0.050	0.050	01/02/2014	ND	1.90	94.8	2.00	3.83	
Ethylbenzene*	<0.050	0.050	01/02/2014	ND	1.91	95.3	2.00	3.12	
Total Xylenes*	<0.150	0.150	01/02/2014	ND	5.55	92.6	6.00	3.00	
Total BTEX	<0.300	0.300	01/02/2014	ND					
Surrogate: 4-Bromofluorobenzene (PIL	104	% 89.4-12	6						
Chloride, SM4500CI-B	mg/	kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	832	16.0	01/02/2014	ND	416	104	400	0.00	
ТРН 8015М	mg/	kg	Analyze	d By: ms					S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<50.0	50.0	12/27/2013	ND	189	94.6	200	5.41	
DRO >C10-C28	4970	50.0	12/27/2013	ND	184	91.9	200	10.3	
EXT DRO >C28-C35	904	50.0	12/27/2013	ND					
Surrogate: 1-Chlorooctane	118 9	65.2-14	0						
Surrogate: 1-Chlorooctadecane	213 9	% 63.6-15	4						

# Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keine



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

ND Analyte NOT DETECTED at or above the reporting limit

RPD Relative Percent Difference

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

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

Chloride by 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 Ditiena



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

(575) 393-2326 FAX (575) 393-2476 BILL TO Basin Environmental Service Technologies, LLC **ANALYSIS REQUEST** Company Name: P.O. #: Joel Lowry Project Manager: Address: P.O. Box 301 BOPCO, LP Company: City: Lovington State: NM Zip: 88260 Attn: Tony Savole Phone #: (575)396-2378 Fax #: (575)396-1429 Address: 522 W. Marland Project Owner: Project #: City: Carlsbad TPH (8015M) BTEX (8021B) Project Name: PLU #149 State: NM Zip: 88220 Chloride Eddy Co., NM Project Location: Phone #: (432)556-8730 Sampler Name: Joel Lowry Fax #: MATRIX PRESERV SAMPLING FOR LAB USE ONLY Sample I.D. Lab I.D. H303132 DATE TIME West Pit WSW ·G 12/26/13 1200 West Pit NSW y G Х 12/26/13 1205 West Pit ESW X Х G 12/26/13 1210 х West Pit SSW G Х 12/26/13 1215 West Pit Floor @ 3' G 12/26/13 1220

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Relinguished By:	Date: 10 Date: Received By	Phone Result:    Yes    No Add'l Phone #:
	4-17-15	Fax Result: ☐ Yes ☐ No Add'l Fax #.
I will have	Time: 7:30	REMARKS:
Relinguished	Date: Received By	
	12-27-13 Modi May 11 16	Please email results to pm@basinenv.com,
	7 8:25 year Sterior	TASavoie@BassPet.com & SJWalters@BassPet.com
Delivered By: (Circle One)		KED BY:
		ittals)
Sampler - UPS - Bus - Other: FORM-006	3.80 Pres Il res	
Doublion 4.0		



January 10, 2014

JOEL LOWRY

Basin Environmental Service

P.O. Box 301

Lovington, NM 88260

RE: PLU #149

Enclosed are the results of analyses for samples received by the laboratory on 01/09/14 16:20.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. 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 <a href="https://www.tceq.texas.gov/field/ga/lab">www.tceq.texas.gov/field/ga/lab</a> accred 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



Basin Environmental Service

JOEL LOWRY P.O. Box 301

Lovington NM, 88260

Fax To: (575) 396-1429

Received:

01/09/2014

Sampling Date:

01/09/2014

Jodi Henson

Reported:

01/10/2014

Sampling Type:

Soil

Project Name:

PLU #149

Sampling Condition: Sample Received By: \*\* (See Notes)

Project Number:

NONE GIVEN

Project Location:

EDDY COUNTY, NM

Sample ID: WEST FLOOR 5' (H400085-01)

TPH 8015M	mg/l	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	01/10/2014	ND	211	106	200	0.499	
DRO >C10-C28	<10.0	10.0	01/10/2014	ND	218	109	200	2.11	
EXT DRO >C28-C35	<10.0	10.0	01/10/2014	ND					
Surrogate: I-Chlorooctane	106 %	65.2-14	70				<u></u>		
Surrogate: 1-Chlorooctadecane	108 %	63.6-15	4						

# Cardinal Laboratories

\*=Accredited Analyte

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Clay Exerce



ND

# **Notes and Definitions**

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

Analyte NOT DETECTED at or above the reporting limit

Cardinal Laboratories \*=Accredited Analyte

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Celey D. Keena

# IAL LABORATORIES Fast Marland Hobbs, NM 88240

(575) 393-2326 FAX (575) 393-2476	19999		Garagananan	<del> </del>	<u> </u>					<u>.</u>	:		_
Company Name: Basin Environmental Service Technologies, LLC		BILL TO				A	NALYSI	S RE	QUEST	<u>Γ.</u>			
Project Manager: Joel Lowry	P.O	P.O. #:		]					"				
Address: P.O. Box 301	Coi	Company: BC	PCO, LP										
City: Lovington State: NM Zip: 88260	Atti	Attn: Tony S	avoie :		İ		:-						11
Phone #: (575)396-2378	Add	Address: 522 W	Marland							i			
Project #: Project Owner:	Cit	ity: Carlsi	ad	1			: :					: :	
Project Name: PLU #149		State: NM Zip:	88220		(B)								:
Project Location: Eddy Co., NM			56-8730	Ĕ	802					.			•
Sampler Name: Steve Taylor		ax #:		Chloride	TPH (8015M) BTEX (8021B)								
FOR LAB USE ONLY MATR		PRESERV. SAMP	LING	1	F F								
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(C)OM ATER			:  :		. H								
F CONTAINERS OR (C)OT HACTERWATER ASSIGNATION OF SOOL		SE O			•				1. 1				
NOUNE OF THE PARTY	SLUDGE OTHER	ACID/BASE ICE / COOL OTHER				: .				:			
	SLUDGE OTHER	DATE	TIME		:				:			: . :	
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Z west Floor 7'		1/9/1	11:30		*	Ho	d						::
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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 consequental 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 se	services hereunder by Cardinal, regardless of whether such claim is based upon a	ny of the above stated reasons or oth	erwise.		
Relinquished By:	Date: Received By:	11 14	Phone Result: ☐ Yes ☐	No Add'l Phone #:	
	1/8/14		Fax Result:	No Add'l Fax #:	
of the Vale	Times: 20 Wall Sle	nson	REMARKS:		
Relinquished By:	Date: Received By:	:			
	Time:		Please email results to put TASavoie@BassPet.com	m@basinenv.com, m & SJWalters@BassPet.com	
Delivered By: (Circle One)	Sample Condition	. CHEC/KE/D/RY:	i :i		·
Sampler - UPS - Bus - Other: FORM-006	23.6 Cool Intact Yes Yes		[	Zush!!	
Povision 4.0	No No				



January 13, 2014

JOEL LOWRY

Basin Environmental Service

P.O. Box 301

Lovington, NM 88260

RE: PLU #149

Enclosed are the results of analyses for samples received by the laboratory on 01/10/14 16:20.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. 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 <a href="https://www.tceq.texas.qov/field/qa/lab">www.tceq.texas.qov/field/qa/lab</a> accred 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 & 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



Basin Environmental Service JOEL LOWRY P.O. Box 301 Lovington NM, 88260

Fax To:

(575) 396-1429

Received:

01/10/2014

Sampling Date:

01/10/2014

Reported:

01/13/2014

Sampling Type:

Soil

Project Name:

PLU #149

Sampling Condition:

Cool & Intact

Project Number:

NONE GIVEN

Project Location:

EDDY COUNTY, NM

Sample Received By:

Jodi Henson

# Sample ID: F.P. C @ 5' (H400099-01)

Chloride, SM4500CI-B	mg,	/kg	Analyze	d By: AP				_	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	320	16.0	01/13/2014	ND	400	100	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	01/11/2014	ND	190	94.8	200	1.69	
DRO >C10-C28	<10.0	10.0	01/11/2014	ND	195	97.7	200	2.06	
EXT DRO >C28-C35	<10.0	10.0	01/11/2014	, ND					
Surrogate: 1-Chlorooctane	98.8	% 65.2-14	0						
Surrogate: I-Chlorooctadecane	114	% 63.6-15	4						

# Sample ID: TRENCH @ 50' (H400099-02)

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	608	16.0	01/13/2014	ND	400	100	400	3.92	
Sample ID: TRENCH @ 10	00' (H400099-	03)							
Sample ID: TRENCH @ 10 Chloride, SM4500CI-B	00' (H400099- mg	-	Analyze	d By: AP					
		-	<b>Analyze</b> Analyzed	d By: AP  Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride, SM4500CI-B	mg	/kg			BS 400	% Recovery	True Value QC 400	RPD 3.92	Qualifier

# Cardinal Laboratories

\*=Accredited Analyte

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alay 1. Keene



ND Analyte NOT DETECTED at or above the reporting limit

RPD Relative Percent Difference

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

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

- Chloride by SM4500CI-B does not require samples be received at or below 6°C

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

Cardinal Laboratories \*=Accredited Analyte

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Celey D. Keena

· ·	(5/5) 393-2326 FAX (	3/3/383-24/0			• •					 	erreserenteerin		····											
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Project Manager:	Joel Lowry							P.O.	#:										1:					
Address: P.O.	Box 301	: :			:	: :		Com	pany:		ВОР	00, LP									-			::
City: Lovington		State: NM	Zip:	88	260			Attn:	-:		Tony Sav	ole .				ļ	i							1
Phone #: (575)	396-2378 I	Fax #: (575)396	-1429	9				Addr	ess:		522 W. N	larland				: .	-		1					
Project #:	· į	Project Owner:				:::		City:			Carlsba	d	1	1.				j.	1: :					
Project Name:	PLU #14	19	:					State	: N	M	Zip:	88220		) Š	BTEX (8021B)									
Project Location:	Eddy Co., NM					:	<u>-</u>	Phon	e#:	•	(432)556	-8730	Chloride	TPH (8015M)	(802									;
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service. In no event shall Card	inal be liable for incidental or consequental da	mages, including without	imitation	ı, busine	ass interru	plions, los	s of use,	or loss o	f profits in	псите	d by client, its sub	sidiaries,				1.11	1			100				

affiliates or successors arising out of or related to the performance of s	services hereunder by Cardinal, re	gardless of whether such claim is based upon any	of the above stated reasons of o	nerwise.					
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† Cardinal cannot accept verbal changes. Please fax written changes to 575-393-2476



January 14, 2014

JOEL LOWRY

Basin Environmental Service

P.O. Box 301

Lovington, NM 88260

RE: PLU #149

Enclosed are the results of analyses for samples received by the laboratory on 01/13/14 16:26.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. 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 <a href="https://www.tceq.texas.gov/field/qa/lab">www.tceq.texas.gov/field/qa/lab</a> accred 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 & 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



Basin Environmental Service JOEL LOWRY P.O. Box 301 Lovington NM, 88260

Fax To:

(575) 396-1429

Received:

01/13/2014

Reported:

01/14/2014

Project Name: Project Number: PLU #149

Project Location:

EDDY COUNTY, NM

NONE GIVEN

Sampling Date:

01/13/2014

Sampling Type:

Soil

Sampling Condition:

Cool & Intact

Sample Received By:

Jodi Henson

# Sample ID: TRENCH @ 150' (H400110-01)

Chloride

Chloride

Chle

mg/kg

160

Result

304

Analyzed By: AP

Analyte

Analyte

Result Reporting Limit

16.0

Reporting Limit

16.0

Analyzed 01/14/2014

Analyzed

01/14/2014

Method Blank

ND

Method Blank

ND

BS 432

BS

432

% Recovery 108

True Value QC

RPD 7.14

RPD

7.14

Qualifier

Sample ID: TRENCH @ 200' (H400110-02)

Chloride, SM4500Cl-B

mg/kg

Analyzed By: AP

% Recovery

108

400

True Value QC

400

Qualifier

Sample ID: TRENCH @ 250' (H400110-03)

Chloride, SM4500CI-B

mg/kg

Analyzed By: AP

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
loride	112	16.0	01/14/2014	ND	432	108	400	7.14	

Cardinal Laboratories

\*=Accredited Analyte

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Celeg D. Keene



ND Analyte NOT DETECTED at or above the reporting limit

RPD Relative Percent Difference

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\*\*\* 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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Celey D. Keena

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

(5/5) 393-2326 FAX (5/5) 393-24/6		·			
Company Name: Basin Environmental Service Technologies, LLC	BILL TO	ANALYSIS REQUEST			
Project Manager: Joel Lowry	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. Marland				
Project #: Project Owner:	City: Carlsbad				
Project Name: PLU #149	State: NM Zip: 88220	21B) (NB)			
Project Location: Eddy Co., NM	Phone #: (432)556-8730	Chloride  PH (8015M  EX (8021			
Sampler Name: Steve Taylor	Fax #:	Chloride TPH (8015M) BTEX (8021B)			
FOR LAB USE ONLY MATRIX	PRESERV. SAMPLING				
PACOTTO ORAB OR (C)OI OTHERS SECUNDIVIVATER WASTEWATER SOIL					
Fab I.D. Sample I.D. CCONTAINERS ON (C) NATEWATER SOUL	(BASE:				
(G)RAB C (G)	ACID/BASE OTHER:				
Trench & 130	<del>                                     </del>	<del>┠╒╶┩╸┈╎┈╍╬┈┈╎┈╺┩╸┈╎┈╍╽┈╍╽┈╺╏╸┈┥</del> ┈╌ <del>╽</del>			
1 Trench & 150' 2 Trench & 200' 3 Trench & 250'	1/13/14 12:30				
Jyench e 250	7/3/14 3.00				
PLEASE NOTE: Liability and Damages, Cardinal's liability and client's exclusive remedy for any claim arising whether base analyses. All claims including those for negligence and any other cause whatsoever shall be deemed walved unless made in writing and receive					

service. In no event shall Cardinal be liable for incidental or consequental 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	e of services hereunder by Cardinal, regardless of	whether such claim is based upon any	of the above stated reasons or oth	erwise.	<u>all and the second sec</u>	
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Reithquished By:	Date: Receive	ed By:			pur	
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	Time:	1. 11.		<ul> <li>Please email results</li> </ul>	to pm@basinenv.com,	
The state of the s				TASavoie@BassPe	t.com & SJWalters@BassPet.com	
Delivered By: (Circle One)		Sample Condition	CHECKED BY:	ranîsa a i		· · ·
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Sampler - UPS - Bus - Other:	4.7%	Les 4 Yes	1/1/		•	•
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