Basin Environmental Service Technologies, LLC

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REMEDIATION SUMMARY AND RISK-BASED SITE CLOSURE REQUEST

BOPCO, LP
POKER LAKE UNIT #158
Eddy County, New Mexico
Unit Letter "A" (NE/NE), Section 7, Township 24 South, Range 30 East
Latitude 32.237400° North, Longitude 103.914150° West
NMOCD Reference # 2RP-717

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

June 2012

Project Manager

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1.0 INTRODUCTION AND BACKGROUND INFORMATION

Basin Environmental Service Technologies, LLC (Basin), on behalf of BOPCO, LP (BOPCO), has prepared this *Remediation Summary and Site Closure Request* for the release site known as Poker Lake Unit #158 (PLU #158 Battery). The legal description of the release site is Unit Letter "A" (NE/NE), Section 7, Township 24 South, Range 30 East, in Eddy County, New Mexico. The geographic coordinates of the release site are 32.237400° North latitude and 103.914150° West longitude. The property affected by the release is owned by The United States Department of the Interior - Bureau of Land Management (BLM). Please reference Figure 1 for a "Site Location Map" and Figure 2 for a "Site & Sample Location Map".

On March 21, 2011, BOPCO discovered a release had occurred at the PLU #158 Battery. The release was attributed to the failure a water transfer pump. The release was reported to the New Mexico Oil Conservation Division (NMOCD) Artesia District Office on March 21, 2011. The "Release Notification and Corrective Action" (Form C-141) indicated approximately two hundred thirty (230) barrels of produced water was released, with approximately two hundred (200) barrels being recovered. During initial response activities, a vacuum truck was utilized to recover free-standing fluids, and heavily saturated material was excavated and stockpiled on-site pending final disposition. The release affected an area measuring approximately four thousand, five hundred square feet (4,500 ft²) within the earthen containment. Misting and overspray from the release affected approximately two thousand square feet (2,000 ft²) of caliche well pad outside the earthen containment. A Form C-141 is provided as Appendix A. General Photographs of the release site are provided as Appendix B.

2.0 NMOCD SITE CLASSIFICATION

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

A search of the NMWRRS database indicated there are no water wells within 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 PLU #158 Battery release site has an initial ranking score of zero (0) points. The soil remediation levels for a site with a ranking score of zero (0) points are as follows:

- Benzene 10 mg/Kg (ppm)
- BTEX -50 mg/Kg (ppm)
- TPH -5,000 mg/Kg (ppm)

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

3.0 SUMMARY OF SOIL REMEDIATION ACTIVITIES

On April 20, 2011, delineation activities commenced at the PLU #158 Battery release site. A hand-auger was utilized to advance five (5) soil borings (SB-4-20-1, SB-4-20-2, SB-4-20-3, SB-4-20-4 and SB-4-20-5) to approximately four feet (4') bgs within the earthen containment. During the advancement of the soil borings, fifteen (15) soil samples (SB-4-20-1 Surface, SB-4-20-1 2' bgs, SB-4-20-1 4' bgs, SB-4-20-2 Surface, SB-4-20-2 2' bgs, SB-4-20-2 4' bgs, SB-4-20-3 Surface, SB-4-20-3 2' bgs, SB-4-20-3 4' bgs, SB-4-20-4 Surface, SB-4-20-4 2' bgs, SB-4-20-4 4' bgs, SB-4-20-5 Surface, SB-4-20-5 2' bgs and SB-4-20-5 4' bgs) were collected. Soil samples were submitted to Cardinal Laboratories of Hobbs, New Mexico for analysis of total petroleum hydrocarbon (TPH) by EPA Method SW-846 8015M, chloride concentrations by EPA Method 4500 Cl-B and/or benzene, toluene, ethylbenzene, xylene (BTEX) by EPA Method SW-846 8021B. Table 1 summarizes "Concentrations of BTEX, TPH & Chloride in Soil". Laboratory analytical reports are provided as Appendix C.

Laboratory analytical results indicated TPH concentrations ranged from 484.4 mg/Kg for soil sample SB-4-20-4 2'bgs to 16,460 mg/Kg for soil sample SB-4-20-2 2' bgs. Analytical results indicated chloride concentrations ranged from 30,800 mg/Kg for soil sample SB-4-20-4 Surface to 224 mg/Kg for soil sample SB-4-20-2 4' bgs. Analytical results indicated chloride concentrations ranged from 224 mg/Kg for soil sample SB-4-20-2 4' bgs to 30,800 mg/Kg for soil sample Sb-4-20-4 Surface. Soil samples SB-4-20-2 4'bgs and SB-4-20-5 4' bgs were also analyzed for BTEX concentrations, which were determined to be 74.87 and 104.45, respectively,

Between March 16 and March 28, 2011, the area within the earthen containment was hand-excavated to approximately two feet (2') bgs. Further excavation within the earthen containment was impracticable due to the presence and proximity of numerous active pipelines and/or storage tanks.

On April 26, 2011, a hand-augered soil boring was advanced within the earthen containment to investigate the vertical extent of soil impact. The soil boring was advanced until it met refusal at approximately twelve (12') feet bgs. During the advancement of the soil boring, four (4) soil samples (SB-4 @ 6', SB-4 @ 8', SB-4 @ 10' and SB-4 @12') were collected and submitted to the laboratory for analysis of benzene, toluene, ethylbenzene and xylene (BTEX) by EPA Method SW-846 8021b, TPH and/or chloride concentrations.

Laboratory analytical results indicated soil samples SB-4 @ 6' and SB-4 @ 12' exhibited BTEX concentrations of 27.64 mg/Kg and less than the laboratory method detection limit (MDL) of 0.15 mg/Kg, respectively. Analytical results indicated TPH concentrations ranged from 61.1 mg/Kg for soil sample SB-4 @ 12' to 5,008 mg/Kg for soil sample SB-4 @ 6'. Analytical results indicated the chloride concentration for soil sample SB-4 @ 12' was 2,840 mg/Kg.

A drilling rig was not dispatched to the location due to its inability to adequately delineate the area within the earthen containment during remediation activities associated with the March 8, 2010, release. During the advancement of the soil boring on May 24, 2010, circulation was last

and the bore hole collapsed at approximately seventy feet (70') bgs. Several attempts were made to stabilize the boring without success. The NMOCD Artesia Office was notified of the incident. Please reference the Poker Lake Unit #158 (2RP-400) *Remediation Summary and Risked-Based Closure Strategy* dated August 2010 for details of previous delineation activities.

On or around April 20, 2011, the excavated area within the earthen containment was backfilled with non-impacted material to approximately eighteen inches (18") bgs. A new containment area was constructed around the PLU #158 Battery, which includes steel perimeter walls extending approximately two feet (2') above ground surface. A felt liner was installed in the floor of the new containment area, and the floor and perimeter walls of the containment area were coated with an impermeable, spray-on polyurethane liner. This engineering control will help mitigate any future releases and inhibit the vertical migration of contaminants in impacted soil remaining in-situ beneath the PLU # 158 Tank Battery.

On October 12, 2011, remediation of impacted soil outside the earthen containment west of the PLU # 158 Battery commenced. A Photo-Ionization Detector (PID) and chloride field test kit were used to field-screen the horizontal and vertical extent of impacted soil and to guide the excavation. The excavated soil was stockpiled on-site pending final disposition.

On October 13, 2011, eight (8) confirmation soil samples (Sample #1, Sample #2, Sample #3, Sample #4, Sample #5, Sample #6, Sample #7 and Sample #8) were collected from the floor and sidewalls of the excavation east of the PLU # 158 Battery and submitted to the laboratory for analysis of TPH and chloride concentrations. Laboratory analytical results indicated TPH concentrations were less than the appropriate laboratory method detection limit (MDL) for each of the soil samples submitted. Chloride concentrations ranged from less than the laboratory MDL for soil samples "Sample #4" and "Sample #5" to 544 mg/Kg for soil sample "Sample #7." TPH and chloride concentrations were less than NMOCD regulatory remediation action levels established for this site in each of the submitted soil samples.

Approximately nine hundred forty cubic yards (940 yd³) of impacted material was transported to Lea Land, LLC (NMOCD Permit #WM-01-035), for disposal. The final dimensions of the excavation west of the PLU # 158 Battery were approximately ninety feet (90') in length, approximately sixty feet (60') in width, and ranged in depth from approximately four feet (4') to approximately six feet (6') bgs.

On October 17, 2011, upon receiving verbal approval from an NMOCD representative, the excavated area was backfilled with locally purchased, non-impacted material and compacted in twelve inch (12") lifts. Following the backfilling of the excavation, areas affected by remediation activities were contoured to fit the needs of the well pad.

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 excavation west of the PLU #158 Battery were analyzed by an NMOCD-approved laboratory, and concentrations of TPH and chloride were below the regulatory remediation action levels established for the site.

An impermeable, spray-on polyurethane liner was installed on the floor and perimeter walls of the new steel containment area constructed around the PLU #158 Battery. This engineered control will help mitigate future releases and inhibit vertical migration of contaminants in contaminated soil remaining in-situ beneath the footprint of the tank battery and containment area. Soil exhibiting concentrations of contaminants in excess of the NMOCD regulatory standards will be addressed following decommission and/or abandonment of the currently active tank battery.

Basin recommends BOPCO provide the NMOCD Artesia District Office and the BLM Carlsbad Field Office a copy of this *Remediation Summary and Risk-Based Site Closure Request* and request the NMOCD grant closure to the Poker Lake Unit #158 release site.

6.0 LIMITATIONS

Basin Environmental Service Technologies, LLC, has prepared this *Remediation Summary & 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, NM 88220

Copy 3: Tony Savoie

BOPCO, LP

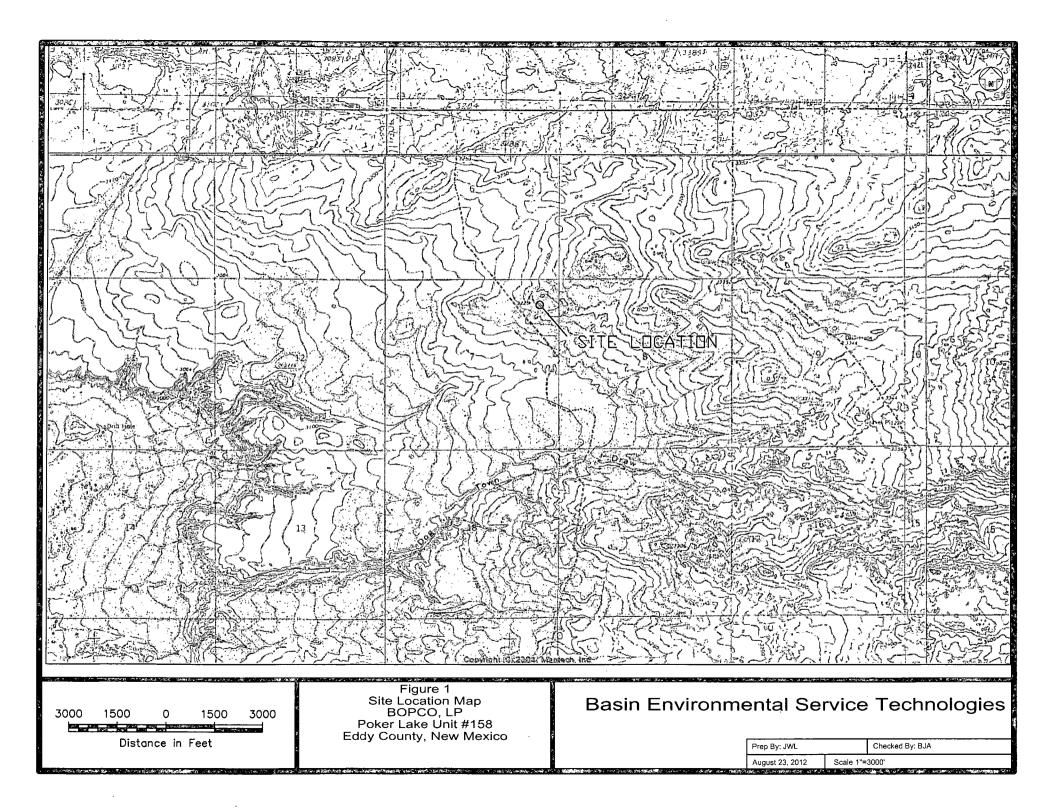
522 W. Mermod, Suite 704 Carlsbad, NM 88220

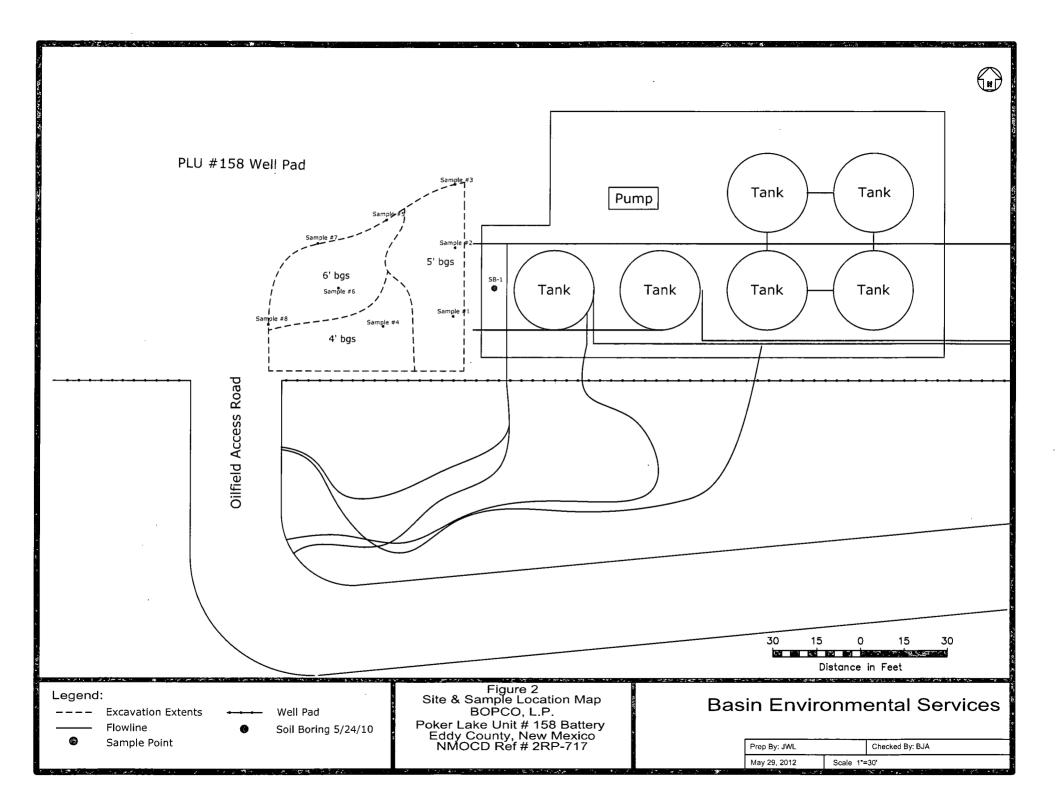
Copy 4: Basin Environmental Service Technologies, LLC

P.O. Box 301

Lovington, NM 88260

FIGURES





TABLES

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

BOPCO, LP POKER LAKE UNIT 158 BATTERY EDDY COUNTY, NEW MEXICO NMOCD REFERENCE NO: 2RP-717

			,						T			98911	
	SAMPLE				METHOD: EI	PA SW 846-80		TOTAL		THOD: 801		TOTAL	SM 4500 CI-B
SAMPLE LOCATION	DEPTH	SAMPLE	SOIL	BENZENE	TOLUENE	ETHYL-	TOTAL	TOTAL	GRO	DRO	ORO	TPH	
	(BGS)	DATE	STATUS	(mg/Kg)	(mg/Kg)	BENZENE	XYLENES	BTEX	C ₆ -C ₁₂	C ₁₂ -C ₂₈	C ₂₈ -C ₃₅	C ₆ -C ₃₅	CHLORIDE
				(mg/Kg)	(ilig/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)
SB - 4 - 20 - 1 Surface	Surface	4/20/2011	Excavated	-	-	-	-	-	1,290	6,200	535	8,025	17,200
SB - 4 - 20 - 1 2' bgs	2'	4/20/2011	Excavated	-	-	-	-	-	1,140	3,470	267	4,877	16,000
SB - 4 - 20 - 1 4' bgs	4'	4/20/2011	In-situ	-	-	-	-	-	2,640	6,170	402	9,212	6,560
SB - 4 - 20 - 2 Surface	Surface	4/20/2011	Excavated	-	-	-	-	-	2,320	8,990	676	11,986	8,400
SB - 4 - 20 - 2 2' bgs	2'	4/20/2011	Excavated	-	-	-	-	-	1,950	13,500	1,010	16,460	272
SB - 4 - 20 - 2 4' bgs	4'	4/20/2011	In-situ	6.37	11.6	10.7	46.2	74.87	1,450	12,100	1,030	14,580_	224
SB - 4 - 20 - 3 Surface	Surface	4/20/2011	Excavated	-	-	-		-	553	2,990	262	3,805	7,800
SB - 4 - 20 - 3 2' bgs	2'	4/20/2011	Excavated	-	-	=	-	-	1,600	4,980	363	6,943	5,440
SB - 4 - 20 - 3 4 bgs	4'	4/20/2011	In-situ	-	-	-	-	-	2,100	6,030	429	8,559	5,440
SB - 4 - 20 - 4 Surface	Surface	4/20/2011	Excavated	_	-	-	-	-	2,570	12,700	934	16,204	30,800
SB - 4 - 20 - 4 2' bgs	2'	4/20/2011	Excavated	- .	-	-	-	-	34.9	412	37.5	484.4	6,480
SB - 4 - 20 - 4 4' bgs	4'	4/20/2011	In-situ	-	-	-	-	-	54.6	642	52.7	749.3	6,080
SB - 4 - 20 - 5 Surface	Surface	4/20/2011	Excavated	-	-	-	=	-	1,320	6,710	542	8,572	8,320
SB - 4 - 20 - 5 2' bgs	2'	4/20/2011	Excavated	-	-	-	-	-	3,020	9,070	657	12,747	1,960
SB - 4 - 20 - 5 4' bgs	4'	4/20/2011	In-situ	2.25	22.7	13.1	66.4	104.45	2,980	11,900	939	15,819	1,360
									· ·				
SB - 4 @ 6'	6'	4/26/2011	In-situ	<1.00	3.92	3.42	20.3	27.64	690	4,050	268	5,008	-
SB - 4 @ 8'	8'	4/26/2011	In-situ	-	-	-	-	-	974	4,840	346	6,160	-
SB - 4 @ 10'	10'	4/26/2011	In-situ	-	-	-	-	-	1,040	5,810	420	7,270	
SB - 4 @ 12'	12'	4/26/2011	In-situ	<0.05	<0.05	< 0.05	<0.15	<0.15	<10	49.9	11.2	61.1	2,840
Sample #1	5'	10/13/2011	In-Situ	-	-	-	-	-	<10.0	<10.0	<10.0	<10.0	256
Sample #2	5'	10/13/2011	In-Situ	-	-	-	-	-	<10.0	<10.0	<10.0	<10.0	160
Sample #3	5'	10/13/2011	In-Situ	-	-	-	-	-	<10.0	<10.0	<10.0	<10.0	192
Sample #4	4'	10/14/2011	In-Situ	-	-	-	-	-	<10.0	<10.0	<10.0	<10.0	<16.0
Sample #5	5'	10/14/2011	In-Situ	-	-	-	-	-	<10.0	<10.0	<10.0	<10.0	<16.0
Sample #6	6'	10/14/2011	In-Situ	-	-	-	-	-	<10.0	<10.0	<10.0	<10.0	16.0
Sample #7	5'	10/14/2011	In-Situ	-	-	-		-	<10.0	<10.0	<10.0	<10.0	544
Sample #8	5'	10/14/2011	In-Situ	-	-	-	-	-	<10.0	<10.0	<10.0	<10.0	240
	•			10				50				E 000	

10 50 5,000

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

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

			Rele	ease Notific	atio	n and Co	orrective A	ction				
						OPERA'	TOR	\boxtimes	Initi	al Report 🔲 Fina	l Report	
Name of Co						Contact Tor						
		nod, Suite 70 Lake Unit #1		ad, N.M. 88220			No. 432-556-87					
			38				e E&P API 30	-013-31090				
Surface Ow	ner Federa	ıl		Mineral C)wner	Federal		Le	ase N	lo.		
				LOCA	ATIO	N OF REI	LEASE					
Unit Letter	Section	Township	Range	Feet from the		/South Line	Feet from the	East/West L	ine	County		
A	7	248	30E							Eddy		
L	J	L		414 1 N 20 0	25.400		1 11 402 0444	<u> </u>				
•			L	atitude_N 32.2				150		•		
				NAT	URE	OF REL						
Type of Rele			n seal and	l piping failure.			Release: 230 bbl			Recovered: 200 Bbls Hour of Discovery		
Bource of Re	rease. Wate	r transier pun	ip scar aic	piping fandic.		3/21/11 tin		1		:40 a.m.		
Was Immedia	ate Notice C		,			If YES, To						
			Yes L	No Not Ro	quired		/ NMOCD number					
By Whom? T							lour 3/21/11 8:20					
Was a Water	course Reac		Yes 🗵	l No		IT YES, Vo	olume Impacting t	the Watercour	se.	FOUNED	ı	
If a Watercou									H	ECEIVED		
if a watercot	nse was mi	pacicu, Descri	ioe runy.					1		APR 05 2011		
								1				
									NN	OCD ARTESIA	J	
Describe Cau	se of Proble	em and Remed	dial Action	Taken.* A water	transf	cr pump scal a	nd bearings faile	d causing exce	ssive	vibration on the discharg	ge	
Describe Are	pump. The	power was sh	ut off and	valves were close	d ISOla	ting the pump.	The pump was n	eplaced later t	he sa	me day. , approximately 4500 sq.1	ft The	
										ed on-site, remediation	1110	
				nediation plan. Th	e calicl	he pad area me	easuring approxin	nately 2000 sq	.ft. w	as affected by the misting	g of	
the produced				spill will follow	he NM	IOCD anidalin	as for lasks and s	mille				
I hereby certi	fy that the in	nformation gi	ven above	is true and comp	lete to t	the best of my	knowledge and u	nderstand that	purs	uant to NMOCD rules an	d	
regulations al	l operators a	are required to	report an	d/or file certain re	elease n	otifications ar	nd perform correc	tive actions fo	r rele	eases which may endange	r [
public health	or the envir	onment. The	acceptanc	e of a C-141 repo	rt by th	e NMOCD ma	arked as "Final R	eport" does no	t reli	eve the operator of liabili , surface water, human he	ty	
or the environ	ment. In ac	dition, NMO	CD accept	tance of a C-141	report d	loes not relieve	e the operator of	responsibility	raici for co	ompliance with any other	,4141	
federal, state.	or local law	s and/or regu	lations.		· 							
			<i>a</i>				OIL CONS	SERVATION	<u>NC</u>	DIVISION)	
Signature:	1 on	4 5	eun	2	- 1	Approved by	District Supervise	or:				
D :	(Approved by	District Superviso	οι.			l I	
Printed Name	: Tony Savo	ne	·····									
Title: Waste N	Agmt.& Rei	mediation Spe	cialist			Approval Date	e:	Expira	tion I	Date:		
E-mail Addres	ss: TASavo	ie@BassPet.c	om			Conditions of	Approval:			Attached 🗖		
									Attached			

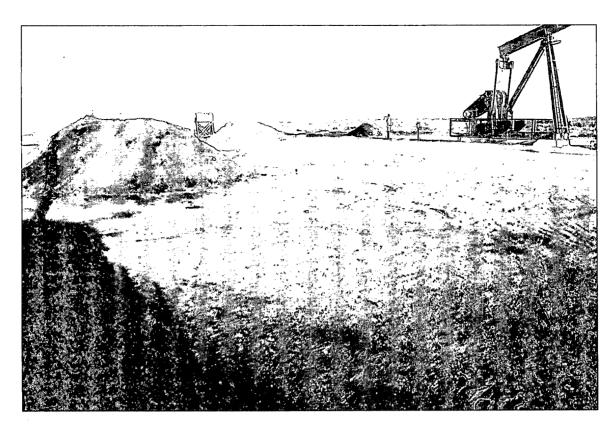
Phone:432-556-8730

Date: 4/4/11

^{*} Attach Additional Sheets If Necessary

Appendix B

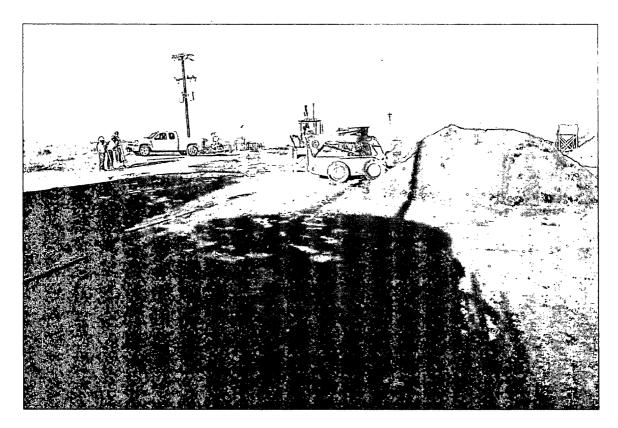
Photographs



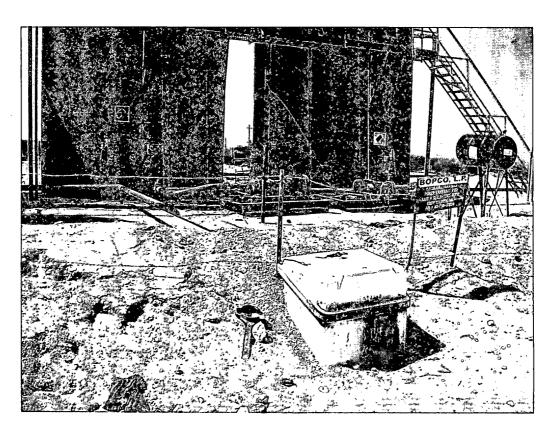
Photograph of Initial Release West of the PLU #158 Battery.



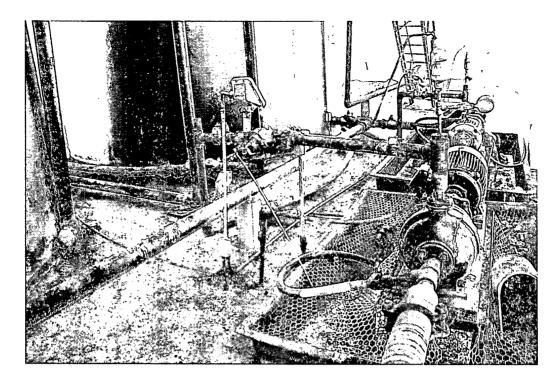
Photograph of Excavation Activities at the PLU #158 Battery.



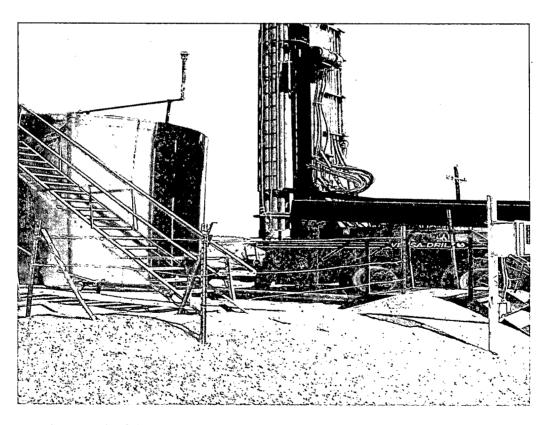
Photograph of Excavation Activities at the PLU #158 Battery.



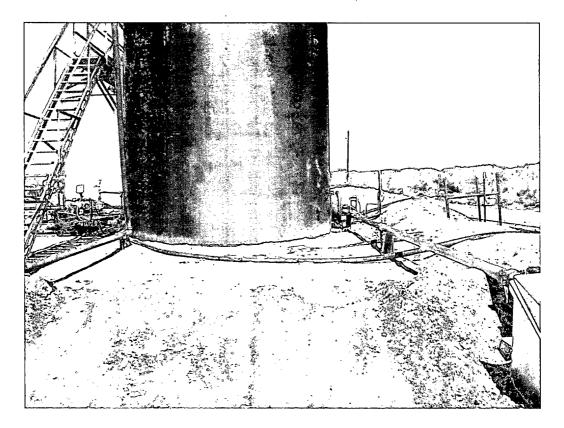
Photograph of the Excavation within the earthen containment at the PLU #158 Battery.



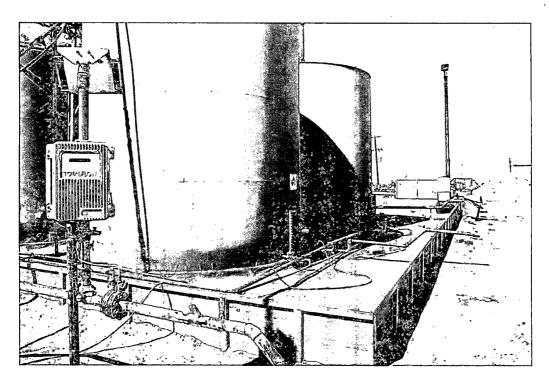
Photograph of the excavation within the earthen containment at the PLU #158 Battery.



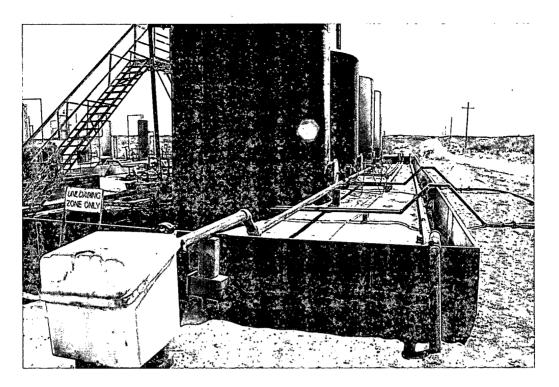
Photograph of the May 24, 2010, Drilling event at the PLU #158 Tank Battery.



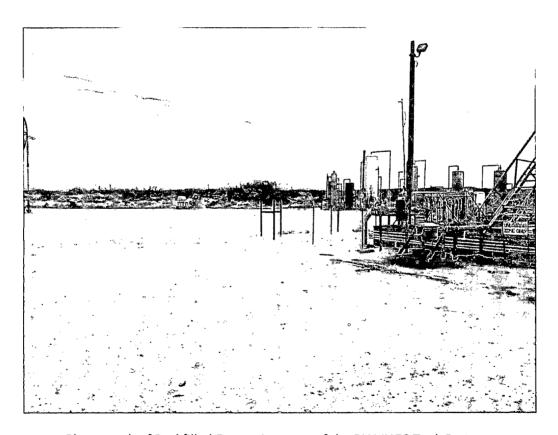
Photograph of the backfilled earthen containment prior to the installation of Falcon Liner System at the PLU #158 Battery.



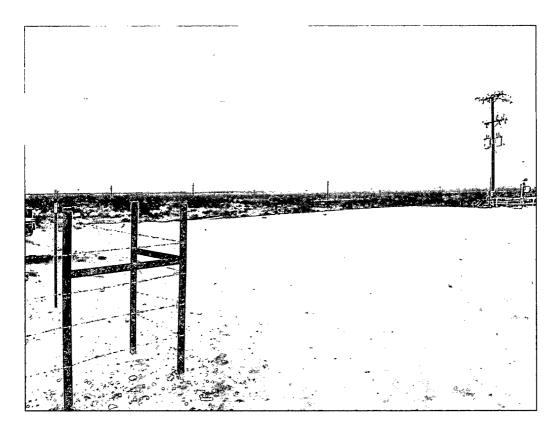
Photograph of newly installed Falcon containment system at the PLU #158 Tank Battery.



Photograph of newly installed Falcon containment system at the PLU #158 Tank Battery.



Photograph of Backfilled Excavation west of the PLU #158 Tank Battery.



Photograph of remediated area west of the PLU #158 Tank Battery.

Appendix C

Laboratory Analytical Reports



May 05, 2011

BEN J. ARGUIJO

Basin Environmental Service

P.O. Box 301

Lovington, NM 88260

RE: POKER LAKE UNIT 158 BATTERY

Enclosed are the results of analyses for samples received by the laboratory on 04/21/11 8:04.

Cardinal Laboratories is accredited through Texas NELAP for:

Method SW-846 8021

Benzene, Toluene, Ethyl Benzene, and Total Xylenes

Method SW-846 8260

Benzene, Toluene, Ethyl Benzene, and Total Xylenes

Method TX 1005

Total Petroleum Hydorcarbons

Certificate number T104704398-08-TX. Accreditation applies to solid and chemical materials and non-potable water matrices.

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 (V2, V3)

Accreditation applies to public drinking water matrices.

Celey & Keena

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:

04/21/2011

Sampling Date:

04/20/2011

Reported:

Sampling Type:

Soil

05/05/2011

Cool & Intact

Project Name: Project Number:

AFB 24735

Sampling Condition: Sample Received By:

Celey D. Keene

Project Location:

EDDY CO, NEW MEXICO

POKER LAKE UNIT 158 BATTERY

Sample ID: SB - 4 - 20 - 1 SURFACE (H100814-01)

Chloride, SM4500Cl-B	mg,	'kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	17200	16.0	04/25/2011	ND	432	108	400	0.00	
TPH 8015M	mg,	/kg	Analyze	d By: AB					S-04
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	1290	50.0	04/23/2011	ND	230	115	200	0.179	
DRO >C10-C28	6200	50.0	04/23/2011	ND	230	115	200	0.717	
EXT DRO >C28-C35	535	50.0	04/23/2011	ND					
Surrogate: 1-Chlorooctane	167	% 70-130)						
Surrogate: 1-Chlorooctadecane	107	% 70-130)						

Sample ID: SB - 4 - 20 - 1 2' BGS (H100814-02)

Chloride, SM4500Cl-B	mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16000	16.0	04/25/2011	ND	432	108	400	0.00	
TPH 8015M	mg	/kg	Analyze	d By: AB					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	1140	50.0	04/23/2011	ND	230	115	200	0.179	
DRO >C10-C28	3470	50.0	04/23/2011	ND	230	115	200	0.717	
EXT DRO >C28-C35	267	50.0	04/23/2011	ND					
Surrogate: 1-Chlorooctane	111	% 70-130)			1			
Surrogate: 1-Chlorooctadecane	113	% 70-130)						

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

Received:

04/21/2011

Sampling Date:

04/20/2011

Reported:

05/05/2011

Sampling Type:

200

99.8

Soil

200

1.84

Project Name: Project Number: POKER LAKE UNIT 158 BATTERY AFB 24735

Sampling Condition: Sample Received By: Cool & Intact Celey D. Keene

Project Location:

EDDY CO, NEW MEXICO

Sample ID: SB - 4 - 20 - 1 4' BGS (H100814-03)

Chloride, SM4500CI-B

mg/kg

Analyzed By: HM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	6560	16.0	04/25/2011	ND	432	108	400	0.00	
TPH 8015M	mg,	/kg	Analyze	d By: AB					S-04
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	2640	50.0	04/23/2011	ND	207	104	200	6.50	

DRO >C10-C28 6170 50.0 04/23/2011 ND **EXT DRO > C28-C35** 402 50.0 04/23/2011 ND

Surrogate: 1-Chlorooctane

192%

70-130

Surrogate: 1-Chlorooctadecane

129%

107%

70-130

70-130

Sample ID: SB - 4 - 20 - 2 SURFACE (H100814-04)

Chloride, SM4500CI-B	mg	/kg	Analyze	Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	8400	16.0	04/25/2011	ND	432	108	400	0.00	
TPH 8015M	mg	/kg	Analyze	d By: AB					S-04
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	2320	50.0	04/23/2011	ND	207	104	200	6.50	
DRO >C10-C28	8990	50.0	04/23/2011	ND	200	99.8	200	1.84	
EXT DRO >C28-C35	676	50.0	04/23/2011	ND					
Surrogate: 1-Chlorooctane	177	% 70-130)				· · · · · · · · · · · · · · · · · · ·		

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Surrogate: 1-Chlorooctadecane

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Received:

04/21/2011

Sampling Date:

04/20/2011

Reported:

05/05/2011

Sampling Type:

Soil

Project Name:

POKER LAKE UNIT 158 BATTERY

Sampling Condition:

Project Number:

AFB 24735

Sample Received By:

Cool & Intact Celey D. Keene

Project Location:

EDDY CO, NEW MEXICO

Sample ID: SB - 4 - 20 - 2 2' BGS (H100814-05)

Chloride, SM4500CI-B	mg	/kg	Analyze	ed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	272	16.0	04/25/2011	ND	432	108	400	0.00	
TPH 8015M	mg	/kg	Analyze	ed By: AB					S-04
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	1950	50.0	04/23/2011	ND	207	104	200	6.50	
DRO >C10-C28	13500	50.0	04/23/2011	ND	200	99.8	200	1.84	
EXT DRO >C28-C35	1010	50.0	04/23/2011	ND					
Surrogate: 1-Chlorooctane	212	% 70-130)	, ,,b- <u>-</u>					-
			_						

Surrogate: 1-Chlorooctadecane 128 % 70-130

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

Fax To:

Received: Reported: 04/21/2011

05/05/2011

Project Name: Project Number:

AFB 24735

Project Location:

POKER LAKE UNIT 158 BATTERY

EDDY CO, NEW MEXICO

Sampling Date:

04/20/2011

Sampling Type:

Soil

Sampling Condition: Sample Received By: Cool & Intact

Celey D. Keene

Sample ID: SB - 4 - 20 - 2 4' BGS (H100814-06)

BTEX 8021B	mg/	kg	Analyze	d By: CMS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	6.37	2.50	05/03/2011	ND	2.04	102	2.00	2.03	
Toluene*	11.6	2.50	05/03/2011	ND	1.99	99.4	2.00	0.937	
Ethylbenzene*	10.7	2.50	05/03/2011	ND	2.02	101	2.00	0.321	
Total Xylenes*	46.2	7.50	05/03/2011	ND	5.93	98.8	6.00	0.190	
Surrogate: 4-Bromofluorobenzene (PIL	89.7	% 70-130)						
Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	224	16.0	04/25/2011	ND	432	108	400	0.00	
TPH 8015M	mg/	'kg	Analyze	d By: AB					S-04
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	1450	50.0	04/23/2011	ND	207	104	200	6.50	
DRO >C10-C28	12100	50.0	04/23/2011	ND	200	99.8	200	1.84	
EXT DRO >C28-C35	1030	50.0	04/23/2011	ND					
Surrogate: 1-Chlorooctane	172 :	% 70-130)		,	_	· -		
Surrogate: 1-Chlorooctadecane	114	% 70-130)						

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Received: Reported: 04/21/2011

07/21/2011

05/05/2011

Project Name:

POKER LAKE UNIT 158 BATTERY

Project Number: Project Location:

AFB 24735

EDDY CO, NEW MEXICO

Sampling Date:

04/20/2011 Soil

Sampling Type: Sampling Condition:

3011

Sample Received By:

Cool & Intact

Celey D. Keene

Sample ID: SB - 4 - 20 - 3 SURFACE (H100814-07)

Chloride, SM4500CI-B	mg/kg		Analyzed By: HM		· · · · · · · · · · · · · · · · · · ·		****		
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	7800	16.0	04/25/2011	ND	432	108	400	0.00	
TPH 8015M	mg/	'kg	Analyze	d By: AB					S-04
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	553	50.0	04/23/2011	ND	207	104	200	6.50	
DRO >C10-C28	2990	50.0	04/23/2011	ND	200	99.8	200	1.84	
EXT DRO >C28-C35	262	50.0	04/23/2011	ND					
Surrogate: 1-Chlorooctane	148 9	% 70-130)						
Surrogate: 1-Chlorooctadecane	127 9	% 70-130)						

Sample ID: SB - 4 - 20 - 3 2' BGS (H100814-08)

Chloride, SM4500CI-B	mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	5440	16.0	04/25/2011	ND	432	108	400	0.00	
TPH 8015M	mg/	/kg	Analyze	d By: AB					S-04
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	1600	50.0	04/23/2011	ND	207	104	200	6.50	
DRO >C10-C28	4980	50.0	04/23/2011	ND	200	99.8	200	1.84	
EXT DRO >C28-C35	363	50.0	04/23/2011	ND					
Surrogate: 1-Chlorooctane	156	% 70-130							
Surrogate: 1-Chlorooctadecane	120	% 70-130							

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

Fax To:

(575) 396-1429

Received:

04/21/2011

Sampling Date:

04/20/2011

Reported:

05/05/2011

Sampling Type:

Soil

Project Name:

POKER LAKE UNIT 158 BATTERY

Sampling Condition:

Cool & Intact

Project Number:

AFB 24735

Sample Received By:

Celey D. Keene

Project Location:

EDDY CO, NEW MEXICO

Sample ID: SB - 4 - 20 - 3 4' BGS (H100814-09)

Chloride, SM4500Cl-B	mg/kg		Analyzed By: HM					,	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	5440	16.0	04/25/2011	ND	432	108	400	0.00	
TPH 8015M	mg	/kg	Analyze	d By: AB					S-04
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	2100	50.0	04/23/2011	ND	207	104	200	6.50	
DRO >C10-C28	6030	50.0	04/23/2011	ND	200	99.8	200	1.84	
EXT DRO >C28-C35	429	50.0	04/23/2011	ND					
Surrogate: 1-Chlorooctane	164	% 70-130)						
Surrogate: 1-Chlorooctadecane	117	% 70-130)						

Sample ID: SB - 4 - 20 - 4 SURFACE (H100814-10)

Chloride, SM4500CI-B	mg/	/kg	Analyze	d By: HM			,			
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	30800	16.0	04/25/2011	ND	432	108	400	0.00		
TPH 8015M	mg/	/kg	Analyze	d By: AB					S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	2570	50.0	04/23/2011	ND	207	104	200	6.50		
DRO >C10-C28	12700	50.0	04/23/2011	ND	200	99.8	200	1.84		
EXT DRO >C28-C35	934	50.0	04/23/2011	ND						
Surrogate: 1-Chlorooctane	252	% 70-130				 -				
Surrogate: 1-Chlorooctadecane	170	% 70-130								

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

Fax To:

(575) 396-1429

Received:

04/21/2011

Sampling Date:

04/20/2011

Reported:

05/05/2011

Sampling Type:

Soil

Project Name:

POKER LAKE UNIT 158 BATTERY

Sampling Condition:

Cool & Intact

Project Number:

AFB 24735

Sample Received By:

Celey D. Keene

Project Location:

EDDY CO, NEW MEXICO

Sample ID: SB - 4 - 20 - 4 2' BGS (H100814-11)

Chloride, SM4500CI-B	mg	/kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	6480	16.0	04/25/2011	ND	432	108	400	0.00	
TPH 8015M	mg	/kg	Analyze	d By: AB					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	34.9	10.0	04/23/2011	ND	207	104	200	6.50	
DRO >C10-C28	412	10.0	04/23/2011	ND	200	99.8	200	1.84	
EXT DRO >C28-C35	37.5	10.0	04/23/2011	ND					
Surrogate: 1-Chlorooctane	108	% 70-130)				-		
Surrogate: 1-Chlorooctadecane 108		% 70-130)						

Sample ID: SB - 4 - 20 - 4 4' BGS (H100814-12)

Chloride, SM4500CI-B	· mg	/kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	6080	16.0	04/25/2011	ND	432	108	400	0.00	
TPH 8015M	mg	/kg	Analyze	Analyzed By: AB					
Analyte	Result	Result Reporting Limit		Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	54.6	10.0	04/23/2011	ND	207	104	200	6.50	
DRO >C10-C28	642	10.0	04/23/2011	ND	200	99.8	200	1.84	
EXT DRO >C28-C35	52.7	10.0	04/23/2011	ND					
Surrogate: 1-Chlorooctane	99.8	% 70-130	1						
Surrogate: 1-Chlorooctadecane	101	% 70-130	1						

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Celeg D. Keine



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

Fax To:

Received:

04/21/2011

Reported:

05/05/2011 POKER LAKE UNIT 158 BATTERY Project Name:

Project Number:

AFB 24735

Project Location:

EDDY CO, NEW MEXICO

Sampling Date:

04/20/2011

Sampling Type:

Sample Received By:

Sampling Condition:

Soil Cool & Intact

Celey D. Keene

Sample ID: SB - 4 - 20 - 5 SURFACE (H100814-13)

Chloride, SM4500CI-B	mg,	/kg	Analyze	d By: HM			_		
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride 8320		16.0	04/25/2011	ND	432	108	400	0.00	
TPH 8015M	mg,	/kg	Analyze	d By: AB				-	S-04
Analyte	Result	Reporting Limit	Analyzed	Method Blank BS		% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	1320	50.0	04/23/2011	ND	207	104	200	6.50	
DRO >C10-C28	6710	50.0	04/23/2011	ND	200	99.8	200	1.84	
EXT DRO >C28-C35	542	50.0	04/23/2011	ND					
Surrogate: 1-Chlorooctane	149	% 70-130)						
Surrogate: 1-Chlorooctadecane	114 % 70-130)						

Sample ID: SB - 4 - 20 - 5 2' BGS (H100814-14)

Chloride, SM4500CI-B	mg,	/kg	Analyze	d By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	1960	1960 16.0		04/25/2011 ND		108	400	0.00		
TPH 8015M	mg	/kg	Analyze	d By: AB					S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	3020	50.0	04/23/2011	ND	207	104	200	6.50		
DRO >C10-C28	9070	50.0	04/23/2011	ND	200	99.8	200	1.84		
EXT DRO >C28-C35	657	50.0	04/23/2011	ND						
Surrogate: 1-Chlorooctane	190	% 70-130								
Surrogate: 1-Chlorooctadecane	116	% 70-130	•							

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Celey D. Keine



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

Received:

04/21/2011

Sampling Date:

04/20/2011

Reported:

Sampling Type:

Soil

Project Name:

05/05/2011

POKER LAKE UNIT 158 BATTERY AFB 24735

Sampling Condition: Sample Received By: Cool & Intact Celey D. Keene

Project Number: Project Location:

EDDY CO, NEW MEXICO

Sample ID: SB - 4 - 20 - 5 4' BGS (H100814-15)

BTEX 8021B	mg/	kg	Analyze	d By: CMS								
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier			
Benzene*	2.25	1.25	05/03/2011	ND	2.04	102	2.00	2.03				
Toluene*	22.7	2.50	05/03/2011	ND	1.99	99.4	2.00	0.937				
Ethylbenzene*	13.1	2.50	05/03/2011	ND	2.02	101	2.00	0.321				
Total Xylenes*	66.4	7.50	05/03/2011	ND	5.93	98.8	6.00	0.190				
Surrogate: 4-Bromofluorobenzene (PIL	72.4	% 70-130	1									
Chloride, SM4500Cl-B	mg/	'kg	Analyze	d By: HM								
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier			
Chloride	1360	16.0	04/25/2011	ND 432		108	400	0.00				
TPH 8015M	mg/	/kg	Analyze	d By: AB					S-04			
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier			
GRO C6-C10	2980	50.0	04/23/2011	ND	207	104	200	6.50				
DRO >C10-C28	11900	50.0	04/23/2011	ND	200	200 99.8 200		1.84				
EXT DRO >C28-C35	939	50.0	04/23/2011	ND								
Surrogate: I-Chlorooctane	186	% 70-130)			.						
Surrogate: 1-Chlorooctadecane	133 % 70-13)									

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Kune



Notes and Definitions

S-04 The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.

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 & Keene



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name: Basin Environmental Service Technologies, LLC							Į.	BILL T	0	ANALYSIS REQUEST												
Project Manage	^{f:} Ben J. Arguij	0				P.C	P.O. #:															
Address: P.O						Со	mpany:	ворсо,	LP													
City: Lovingto	on	State: NM	Zip	: 88	260	Att	n: Tor	ny Savoi	ie													
Phone #: (575)396-2378					Ad	dress:	522 w. N	lern	od.		}											
Project #: AFE 24735 Project Owner: BOPCO, LP					Cit	y: Carl	sbad															
Project Name:	Poker Lake L	Init 158 Bat	Lery			Sta	ate: NM	Zip: 88	8220	;												
	1: EDDY NE					Ph	one #: (432)556	- 87	30												
Sampler Name:	Jody Walt					Fax	x #:						1,7			İ	1					
FOR LAB USE ONLY	,		T.	П	MATRIX		PRESE	RV. SAN	/IPLI	/IG	δ		13.7	i l								
Lab I.D.	Sampl	e I.D.	(G)RAB OR (C)OMP	# CONTAINERS	GROUNDWATER WASTEWATER SOIL OIL	OTHER:	ACID/BASE: ICE / COOL	OTHER:	те	TIME	Sabinola)	8015 M	Hald for									
H100314-1	SB-4-20-1	Surface	G	,	ΙX		X	4-20-1	1	9:00	X	χ	Χ									
	SB-4-20-1	2'365	G	١	. 🗶		X	4-20-	11	9:10	X	X	X	<u> </u>			<u> </u>					
3	53-4-20-1	4. B6-5	C	1	X		<u> </u>	420	-1/	9:20	Χ	X	X									
4	SB-4-20.2		000000		<u> X </u>		Х	4-20-	1/	9:30	$\overline{\lambda}$	X	X_			ļ			L			
5	SB-4-20-2	2'365	G		X		Х	4-70-	11	9:40	ΙΧ_	X	LX.					<u> </u>				
6	SB-4-20-2	4' B65	G	1	X		Х	4-20-	1/	9:50	X	X	<u> X </u>	1		<u> </u>		L				
	SB-4-20-3	Surface	G		X		Х	4-20-	-11	10:00	Χ_	X_	X_{-}			<u> </u>	ļ					
~ ~ ~ ~	SB-4-20-3	2'365	G	Ш	X		X	4-20-	1/	10:1D	LΧ.	X.	X				<u> </u>					
c/	SB-4-20-3	4. B65	G		X		X	4-20-	·IJ	10:20	X	X	X	<u> </u>							<u> </u>	
10	SB-4-20-4	Surface	G	Ш	X		X	4-20-	_	10:30	X	\times	<u> </u>	<u> </u>					<u> </u>			
analyses. All claims includi	nd Damages, Cardinal's liability a ng those for negligence and any	other cause whatspever shall be	desme	d waive	d unless made in writing a	nd recei	ived by Cardi	na! within 30 da	ys after	completion of th	e applica	ble	,									
	ardinal be liable for incidental or ng out of or related to the perfor											***************************************	******					ng ti gara t to gara g'		The state of the state of		
Relinguished By: Date: /-1/ Received By:								ı	Phone Res	t:	☐ Ye	s 🖸	No No	Add'l	Phone Fax #:							
Ting: of									REMARKS	-\ ₀ 10	FOR	<i>i</i> 3T.	E¥	Run	two	hishe	est T	PH fo	1 B#1	الأنتي		
Relinguished B		Date: 2111	R	gelv A	ed By: f	n	L			•					ts to							
Delivered By	: (Circle One)				Sample Condi	tion		CKED BY: Inițials)	.		TA:	avoie	e@Bas	sPet	.com							
Sampler - UPS - Bus - Other:					25		. V 1															

Sampler - UPS - Bus - Other:



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Please email results to pm@basinenv.com

& TAsavoie@BassPet.com

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

Zofz

Company Name	Basin Environm	ental Service	Tech	nol	ogies, L	LC		BI	LL TO					/	ANAL	YSIS	RE	QUE:	ST			
Project Manage	^{f:} Ben J. Arguijo						P.O.	#;									-				H 74421 2749	
Address: P.O							Com	oany: B	OPCO, LE	>		ĺ										
City: Lovingt	on	State: NM	Zip	: 38	260		Attn:	Tony	Savoie													
Phone # : (575	396-2378	Fax #: (575)3	96-1	429			Addr	ess: 52.	2 w. Mer	mod												
Project#: AF	8 24735	Project Owne	r: BC	PCO	, LP		City:	Carlsh	ad]]]	ļ		
Project Name:	Poker Lake 1	Init 158 B	atta	2/4			State	: NM	Zip : 8822	0												
Project Locatio	n: EDDY, NE	WMexico					Phon	e #:(43	2)556-87	30			12									
Sampler Name:	• •						Fax #	:				1	15									
FOR LAB USE ONLY)				MAT	RIX	PF	RESERV.	SAMPL	ING	١	1_	[2]							1		
Lab I.D.	Sample	I.D.	C) (G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER WASTEWATER SOIL	SLUDGE	OTHER:	ICE / COOL OTHER	DATE	TIME	() M()	8015M	Holofor	·								
H-5184701H	SB-4-20-4	2' 365	G		V	:		χ	4-20-11	10:40	X	X	X									
17	SB-4-20-4 SB-4-20-5	4' Bbes	G	1	Y			X		10:50	X	X	Ž.									
13	513-4-20-5	Surtace	000	<u> </u>		:		X	4-20-11		X X	X	X									
14	SB-4-20-5 SB-4-20-5	1 863	6					Y	4-20-11 4-20-1	1.4	÷	X	X									
	30-9-20-5	9 000	100		+ 1		-	+/-	4-20-11	11.20		1/0	^_							***		
			\vdash							ļ	 	ļ —										
	1										<u> </u>	<u> </u>										
analyses, All claims includi service. In no event shall C	nd Damages: Cardmal's fiability and those for negligence and any oil ardinal be liable for incidental or ocing out of or related to the performance.	her cause v _i halsoever shall be insequental damages, includin	g.wihou Cardinal	l waived t limitat regard CEIV	d unless made in s ion, business inte	writing and	treceived loss of use	by Cardinal v or loss of p	vithin 30 days aft rofits incurred by	er completion of the client, its subsidict asons or otherwise Phone Re Fax Resul	ne applica ines, se, sult: t:	Ye OK	s 🗆	No	Add'l i Add'l i	ax#:		lest	TP):	l Fol	e B7	ex .

CHECKED BY:

Delivered By: (Circle One)

Sampler - UPS - Bus - Other:

Sample Condition
Cool totact

Yes Yes
No No



May 02, 2011

BEN J. ARGUIJO

Basin Environmental Service

P.O. Box 301

Lovington, NM 88260

RE: POKER LAKE UNIT 158 BATTERY

Enclosed are the results of analyses for samples received by the laboratory on 04/27/11 8:04.

Cardinal Laboratories is accredited through Texas NELAP for:

Method SW-846 8021

Benzene, Toluene, Ethyl Benzene, and Total Xylenes

Method SW-846 8260

Benzene, Toluene, Ethyl Benzene, and Total Xylenes

Method TX 1005

Total Petroleum Hydorcarbons

Certificate number T104704398-08-TX. Accreditation applies to solid and chemical materials and non-potable water matrices.

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

Received:

04/27/2011

Sampling Date:

04/26/2011

Reported:

05/02/2011

Sampling Type:

Soil

Project Name:

Sampling Condition:

Project Number:

AFB 24735

Sample Received By:

Cool & Intact Jodi Henson

Project Location:

EDDY CO, NEW MEXICO

POKER LAKE UNIT 158 BATTERY

Sample ID: SB - 4 @ 6' (H100864-01)

BTEX 8021B	mg/l	кg	Analyze	d By: CMS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<1.00	1.00	04/29/2011	ND	2.11	105	2.00	2.03	
Toluene*	3.92	1.00	04/29/2011	ND	2.11	106	2.00	2.61	
Ethylbenzene*	3.42	1.00	04/29/2011	ND	2.14	107	2.00	1.81	
Total Xylenes*	20.3	3.00	04/29/2011	ND	6.33	106	6.00	1.82	
Surrogate: 4-Bromofluorobenzene (PIL	90.9 %	6 70-130)						-
TPH 8015M	mg/l	kg	Analyze	d By: ck/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	690	10.0	04/30/2011	ND	214	107	200	2.00	
DRO >C10-C28	4050	10.0	04/30/2011	ND	180	90.1	200	1.11	
EXT DRO >C28-C35	268	10.0	04/30/2011	ND					
Surrogate: 1-Chlorooctane	101 %	6 70-130)						
Surrogate: 1-Chlorooctadecane	78.0 %	6 70-130)						

Cardinal Laboratories

*=Accredited Analyte

any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such daim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celeg & Keine



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

Fax To:

(575) 396-1429

Received:

04/27/2011

Sampling Date:

04/26/2011

Reported:

05/02/2011

Sampling Type:

Soil

Project Name:

POKER LAKE UNIT 158 BATTERY

Sampling Condition:

Cool & Intact

Project Number:

AFB 24735

Sample Received By:

Jodi Henson

Project Location:

EDDY CO, NEW MEXICO

Sample ID: SB - 4 @ 8' (H100864-02)

TPH 8015M	mg/i	kg	Analyze	d By: ck/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	974	10.0	04/30/2011	ND	214	107	200	2.00	
DRO >C10-C28	4840	10.0	04/30/2011	ND	180	90.1	200	1.11	
EXT DRO >C28-C35	346	10.0	04/30/2011	ND					
Surrogate: 1-Chlorooctane	111%	6 70-130)						
Surrogate: 1-Chlorooctadecane	98.7 %	6 70-130)						

Sample ID: SB - 4 @ 10' (H100864-03)

TPH 8015M	mg/k	kg	Analyze	d By: ck/					
· Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	1040	10.0	04/30/2011	ND	214	107	200	2.00	
DRO >C10-C28	5810	10.0	04/30/2011	ND	180	90.1	200	1.11	
EXT DRO >C28-C35	420	10.0	04/30/2011	ND					
Surrogate: 1-Chlorooctane	110 %	5 70-130	-)						
Surrogate: 1-Chlorooctadecane	88.2 %	6 70-130)						

Cardinal Laboratories

*=Accredited Analyte

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alex D. Keine



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

Received:

04/27/2011

Sampling Date:

04/26/2011

Reported:

05/02/2011

Sampling Type:

Soil

Project Name:

Project Number:

POKER LAKE UNIT 158 BATTERY AFB 24735

Sampling Condition: Sample Received By: Cool & Intact Jodi Henson

Project Location:

EDDY CO, NEW MEXICO

Sample ID: SB - 4 @ 12' (H100864-04)

BTEX 8021B	mg/	kg	Analyze	d By: CMS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/29/2011	ND	2.11	105	2.00	2.03	
Toluene*	<0.050	0.050	04/29/2011	ND	2.11	106	2.00	2.61	
Ethylbenzene*	<0.050	0.050	04/29/2011	ND	2.14	107	2.00	1.81	
Total Xylenes*	<0.150	0.150	04/29/2011	ND	6.33	106	6.00	1.82	
Surrogate: 4-Bromofluorobenzene (PIL	91.6	% 70-130							
Chloride, SM4500CI-B	mg/	kg	Analyze	d By: HM				_ #=- ##	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2840	16.0	04/29/2011	ND	448	112	400	3.64	
TPH 8015M	mg/	'kg	Analyze	d By: ck/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	04/30/2011	ND	214	107	200	2.00	
DRO >C10-C28	49.9	10.0	04/30/2011	ND	180	90.1	200	1.11	
EXT DRO >C28-C35	11.2	10.0	04/30/2011	ND					
Surrogate: 1-Chlorooctane	98.9	% 70-130	1						
Surrogate: 1-Chlorooctadecane	105 9	% 70-130							

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Kenne



Notes and Definitions

ND Analyte NOT DETECTED at or above the reporting limit

RPD Relative Percent Difference

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

*** Insufficient time to reach temperature.

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

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

Cardinal Laboratories *=Accredited Analyte

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

Celey D. Keene



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240

	(5/5) 393-2326 FAX (5/5) 393-		*****************				6 277 1			***************************************				-					
Company Name	Basin Environmental Servic	e Tech	nolo	gies, LLC			BILL	. TO					ANA	LYSI	S RE	QUES	ST		
Project Manage	^{r:} Ben J. Arguijo				P.	0. #:							-		l				
Address: P.O.	Box 301	····			C	ompany	; BOP	CO, LP											
City: Lovingto	on State: N	₁ Zip:	382	60	A	tn: To	ny Sa	avoie											
Phone # : (575)) 396-2378 Fax #: (575	396-1	429		A	dress:	522 v	w. Mert	rod										
Project#: AF	€ 24735 Project Ov				Ci	ty: Car	lsbad	[
Project Name:	Poker Lake Unit 19	8 B	NAP	14	St	ate: NM	Zij	p: 8822	0			4							
Project Location			,	/	Pł	one #:	(432)	556-87	30										
Sampler Name:	B. Havis				Fa	x #:												- 1	
FOR LAB USE ONLY	7 3			MATRIX		PRESE	RV.	SAMPLI	NG	•	2							İ	İ
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMF	# CONTAINERS	WASTEWATER SOIL	SLUDGE OTHER:	ACID/BASE: ICE / COOL	OTHER:	DATE	TIME	24/20192	2015/1								
4100664-1	5B-4 66'	_X	1	X		X	4	126/11	0840	-	X	X							
2	5B-4 @ 8'		1					1	0845										
3	5B.4 @ 10'		Ш						0850										
-	5B·4 E 12'	V	V	V				V	0900	X	V	K							
									•										
		\perp																	
		$\perp \downarrow \perp$					\bot								ļ				
į l	a Damages. Cardinal's liability and client's exclusive remed																		

service. In no event shall Carcinal be liable for incidental or consequental damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries,

	nance of services hereunder by C	Cardinal, regardless of whether such claim is based upon any of the above s	ive stated reasons or otherwise.
Relinquished By:	Date;	Received By:	Phone Result: Yes No Add'l Phone #:
	4/26/11	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	Fax Result: ☐ Yes ☐ No Add'I Fax #:
Of my	Time: 1630		REMARKS:
Relinquished By:	Date: 27 11 Time: DU	Received By: AULU MUNDOUL	Please email results to pm@basinenv.com
Delivered By: (Circle One) Sampler - UPS - Bus - Other:		Sample Condition CHECKED BY Cool Intact (Initials)	L TARAMON AND ARCHARGE PAT COM
		D. O C NO NO 97	

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



October 20, 2011

BEN J. ARGUIJO

Basin Environmental Service

P.O. Box 301

Lovington, NM 88260

RE: PLU 158 BATTERY PAD

Enclosed are the results of analyses for samples received by the laboratory on 10/17/11 9:12.

Cardinal Laboratories is accredited through Texas NELAP for:

Method SW-846 8021

Benzene, Toluene, Ethyl Benzene, and Total Xylenes

Method SW-846 8260

Benzene, Toluene, Ethyl Benzene, and Total Xylenes

Method TX 1005

Total Petroleum Hydorcarbons

Certificate number T104704398-08-TX. Accreditation applies to solid and chemical materials and non-potable water matrices.

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 (V2, V3)

Accreditation applies to public drinking water matrices.

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

Received:

10/17/2011

Reported:

10/20/2011

Project Name:

PLU 158 BATTERY PAD

Project Number:

NONE GIVEN

Sampling Date:

10/13/2011

Sampling Type:

Soil

Sampling Condition:

Cool & Intact Jodi Henson

Sample Received By:

Project Location:

NOT GIVEN

Sample ID: SAMPLE #1 (H102231-01)

Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	256	16.0	10/18/2011	ND	448	112	400	3.64	
TPH 8015M	mg,	/kg	Analyze	d By: AB					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	10/18/2011	ND	172	85.9	200	4.35	
DRO >C10-C28	<10.0	10.0	10/18/2011	ND	157	78.6	200	6.92	
EXT DRO >C28-C35	<10.0	10.0	10/18/2011	ND					
Surrogate: 1-Chlorooctane	88.6	% 55.5-15	4						
Surrogate: 1-Chlorooctadecane	81.1	% 57.6-15	8						

Sample ID: SAMPLE #2 (H102231-02)

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	10/18/2011	ND	448	112	400	3.64	
TPH 8015M	mg	/kg	Analyze	d By: AB					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	10/18/2011	ND	172	85.9	200	4.35	
DRO >C10-C28	<10.0	10.0	10/18/2011	ND	157	78.6	200	6.92	
EXT DRO >C28-C35	<10.0	10.0	10/18/2011	ND					
Surrogate: 1-Chlorooctane	87.6	% 55.5-15	4						
Surrogate: 1-Chlorooctadecane	89.0	% 57.6-15	8						

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Celey & Keine



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

Fax To:

(575) 396-1429

Received:

10/17/2011

Reported:

10/20/2011

Project Name:

PLU 158 BATTERY PAD

Project Number:

NONE GIVEN

Project Location:

NOT GIVEN

Sampling Date:

10/13/2011

Sampling Type:

Soil

Sampling Condition:

Cool & Intact

Sample Received By:

Jodi Henson

Sample ID: SAMPLE #3 (H102231-03)

Chloride, SM4500CI-B	mg	/kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	192	16.0	10/18/2011	ND	448	112	400	3.64	
TPH 8015M	mg	/kg	Analyze	d By: AB					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	10/18/2011	ND	172	85.9	200	4.35	
DRO >C10-C28	<10.0	10.0	10/18/2011	ND	157	78.6	200	6.92	
EXT DRO >C28-C35	<10.0	10.0	10/18/2011	ND					
Surrogate: 1-Chlorooctane	89.4	% 55.5-15	:4						
Surrogate: 1-Chlorooctadecane	90.6	% 57.6-15	8						

Sample ID: SAMPLE #4 (H102231-04)

Chloride, SM4500CI-B	mg,	/kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	10/18/2011	ND	448	112	400	3.64	
TPH 8015M	mg,	/kg	Analyze	d By: AB					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	10/19/2011	ND	172	86.1	200	4.07	
DRO >C10-C28	<10.0	10.0	10/19/2011	ND	158	79.1	200	4.56	
EXT DRO >C28-C35	<10.0	10.0	10/19/2011	ND					
Surrogate: 1-Chlorooctane	80.4	% 55.5-15	4				_		
Surrogate: 1-Chlorooctadecane	83.8	% 57.6-15	8	>					

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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:

10/17/2011

Reported:

10/20/2011

Project Name:

PLU 158 BATTERY PAD

Project Number: Project Location:

NONE GIVEN

NOT GIVEN

Sampling Date:

10/14/2011

Sampling Type:

Soil

Sampling Condition:

Cool & Intact

Sample Received By: Jodi Henson

Sample ID: SAMPLE #5 (H102231-05)

Chloride, SM4500CI-B	mg	/kg	Analyze	d By: HM					
. Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	10/18/2011	ND	448	112	400	3.64	
TPH 8015M	mg	/kg	Analyze	d By: AB					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	10/19/2011	ND	172	86.1	200	4.07	
DRO >C10-C28	<10.0	10.0	10/19/2011	ND	158	79.1	200	4.56	
EXT DRO >C28-C35	<10.0	10.0	10/19/2011	ND					
Surrogate: 1-Chlorooctane	80.8	% 55.5-15	·4				***		
Surrogate: 1-Chlorooctadecane	83.2	% 57.6-15	8						

Sample ID: SAMPLE #6 (H102231-06)

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	10/18/2011	ND	448	112	400	3.64	
TPH 8015M	mg/kg		Analyzed By: AB						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	10/19/2011	ND	172	86.1	200	4.07	
DRO >C10-C28	<10.0	10.0	10/19/2011	ND	158	79.1	200	4.56	
EXT DRO >C28-C35	<10.0	10.0	10/19/2011	ND					
Surrogate: 1-Chlorooctane	80.1	% 55.5-15	4						
Surrogate: 1-Chlorooctadecane	83.5	% 57.6-15	8						

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Celey D. Keene

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: Reported: 10/17/2011

10/20/2011

Project Name:

PLU 158 BATTERY PAD

Project Number:

NONE GIVEN

Sampling Date:

10/14/2011

Sampling Type:

Soil

Sampling Condition:

Cool & Intact

Sample Received By:

Jodi Henson

Project Location:

NOT GIVEN

Sample ID: SAMPLE #7 (H102231-07)

Chloride, SM4500CI-B	mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	544	16.0	10/18/2011	ND	432	108	400	3.77	
TPH 8015M	mg/kg		Analyzed By: AB						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	10/19/2011	ND	172	86.1	200	4.07	
DRO >C10-C28	<10.0	10.0	10/19/2011	ND	158	79.1	200	4.56	
EXT DRO >C28-C35	<10.0	10.0	10/19/2011	ND					
Surrogate: 1-Chlorooctane	82.3	% 55.5-15	4						
Surrogate: 1-Chlorooctadecane	84.0	% 57.6-15	8						

Sample ID: SAMPLE #8 (H102231-08)

Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	240	16.0	10/18/2011	ND	432	108	400	3.77	
TPH 8015M	mg/kg		Analyzed By: AB						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qùalifier
GRO C6-C10	<10.0	10.0	10/19/2011	ND	172	86.1	200	4.07	
DRO >C10-C28	<10.0	10.0	10/19/2011	ND	158	79.1	200	4.56	
EXT DRO >C28-C35	<10.0	10.0	10/19/2011	ND					
Surrogate: 1-Chlorooctane	81.4	% 55.5-15	4						
Surrogate: 1-Chlorooctadecane	84.8	% 57.6-15	8						

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Celeg 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

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Celey D. Keene



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name	Basin Environmental Bervice	Technologies, LLC	BILL TO	YSIS REQUEST					
Project Manage	"Ben J. Arguijo		P.O. #:						
Address: P.O.			Company: BOPCO, LP						
City: Lovingto	State: NM	Zip: 88260	Attn: Tony Savoie						
Phone #: (575)	396-2378 Fax #: (575) 39	96-1429	Address: 522 w. Mermo	1					
Project#:	Project Owner	; BOPCO, LP	City: Carlsbad						
Project Name:	PLU 158 Bather	4 PAD	State: NM Zip: 88220						
Project Location	1:	J	Phone #: (432) 556-8730						
Sampler Name:			Fax #:	1/2					
у 5 6	Sample I.D. Sample#1 Sample#2 Sample#3 Sample#4 Sample#4 Sample#6 Sample#6 Sample#7 Sample#8	(5)RAB OR (C)OMP # CONTAINERS # CONTAINERS # CONTAINERS # CONTAINERS # CONTAINERS # CONTAINERS # CONTAINERS # CONTAINERS # CONTAINERS # CONTAINERS # CONTAINERS # CONTAINERS # CONTAINERS # CONTAINERS # CONTAINERS # CONTAINERS # CONTAINERS # CONTAINERS	X 10-13-11 3 X 10-13-11 3 X 10-13-11 3 X 10-14-11 4 X 10-14-11 4 X 10-14-11 4 X 10-14-11 4	TIME					
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	ng out of or related to the performance of services hereunder by C		is based upon any of the above stated reason						
Relinguished By	Time: 7:45	Mark Jean Received BV:		EMARKS:	uv.r.				
Mik I	10/17/1) 1007 12	godi da	lemon	Please email results to pm@basinenv.com					
Delivered By: (Circle One) Sample Condition Cool Intact Sampler - UPS - Bus - Other:			(Initials)	& TAsavoie@BassPet.com					
	•	Cool Intact Yes Yes No No	s ((hitlals)	a mouvoresumores.com					