Basin Environmental Service Technologies, LLC

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REMEDIATION SUMMARY & RISK-BASED SITE CLOSURE REQUEST

BOPCO, LP
Continental Federal Battery #1
Eddy County, New Mexico
Unit Letter "D" (NW/NW), Section 20, Township 25 South, Range 30 East
Latitude 32.120920° North, Longitude 103.907974° West

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

May 2012

Ben J. Arguijo Project Manager

TABLE OF CONTENTS

1.0	INTRODUCTION	1
2.0	NMOCD SITE CLASSIFICATION	1
3.0	SUMMARY OF SOIL REMEDIATION ACTIVITIES	2
4.0	QA/QC PROCEDURES	4
	4.1 Soil Sampling.	4
	4.2 Decontamination of Equipment	4
	4.3 Laboratory Protocol	4
5.0	SITE CLOSURE REQUEST	4
6.0	LIMITATIONS	5
7.0	DISTRIBUTION	6

FIGURES

Figure 1 – Site Location Map

Figure 2 – Site & Sample Location Map

TABLES

Table 1 - Concentrations of Benzene, BTEX, TPH & Chloride in Soil

APPENDICES

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

Appendix B – Photographs

Appendix C – Laboratory Analytical Reports

1.0 INTRODUCTION AND BACKGROUND INFORMATION

Basin Environmental Service Technologies, LLC (Basin), on behalf of BOPCO, LP (BOPCO), has prepared this *Remediation Summary & Risk-Based Site Closure Request* for the release site known as Continental Federal Battery #1. The legal description of the release site is Unit Letter "D" (NW/NW), Section 20, Township 25 South, Range 30 East, in Eddy County, New Mexico. The geographic coordinates of the release site are 32.120920° North latitude and 103.907974° West longitude. The property affected by the release is owned by The United States Department of the Interior, Bureau of Land Management (BLM). A "Site Location Map" is provided as Figure 1.

On August 30, 2011, BOPCO discovered a release had occurred at the Continental Federal Battery #1 tank battery. Internal corrosion of the manway cover on a heater treater resulted in the release of crude oil. During initial response activities, the heater treater was isolated, and the manway cover was repaired. The release was immediately reported to the New Mexico Oil Conservation Division (NMOCD) Artesia District Office. The "Release Notification and Corrective Action" (Form C-141) indicated approximately thirty barrels (30 bbls) of crude oil were released, with no recovery. The release affected an area of pastureland measuring approximately three thousand, eight hundred square feet (3,800 ft²), which had been affected by several releases in the past. The 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 20, Township 25 South, Range 30 East. A depth-to-groundwater reference map utilized by the NMOCD indicates groundwater should be encountered at approximately two hundred and thirty-five feet (235'). 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 Continental Federal Battery #1 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

Following initial response activities, on November 28, 2011, delineation of the release site commenced. One (1) delineation trench (Heater Trench) was advanced at the site to delineate the vertical extent of impact. The delineation trench was located in the pooling area of the release, approximately twenty feet (20') southeast of the release point. The trench was advanced to a total depth of approximately ten feet (10') bgs. Soil samples were collected at selected intervals and field-screened using a photo-ionization detector (PID) and chloride test kit. Three (3) soil samples (Heater Trench 2', Heater Trench 4', and Heater Trench 10') were collected from the trench and submitted to Cardinal Laboratories in Hobbs, New Mexico, for analysis of benzene, toluene, ethyl-benzene, and xylenes (BTEX), total petroleum hydrocarbon (TPH), and/or chloride concentrations using EPA methods SW-846 8021b, SW-846 8015M, and 4500 Cl-B, respectively.

Laboratory analytical results indicated benzene concentrations ranged from less than the laboratory method detection limit (MDL) in soil sample Heater Trench 10' to 0.061 mg/Kg in soil sample Heater Trench 2'. BTEX concentrations ranged from less than the appropriate laboratory MDL in soil sample Heater Trench 10' to 3.32 mg/Kg in soil sample Heater Trench 2'. TPH concentration ranged from less than the appropriate laboratory MDL in soil sample Heater Trench 10' to 9,000 mg/Kg in soil sample Heater Trench 2'. Chloride concentrations ranged from 912 mg/Kg in soil sample Heater Trench 2' to 1,570 mg/Kg in soil sample Heater Trench 4'. Table 1 summarizes the "Concentrations of Benzene, BTEX, TPH & Chloride in Soil". A "Site & Sample Location Map" is provided as Figure 2.

On November 29, 2011, excavation of impacted soil commenced at the site. A chloride test kit was used to field-screen the horizontal and vertical extent of impacted soil and to guide the excavation. Excavated soil was stockpiled on-site, pending final disposition.

From November 30 through December 1, 2011, the stockpiled material was blended on-site with non-impacted material.

On December 7, 2011, six (6) soil samples (North Wall, North East Wall, North West Wall, South Wall, South East Wall, and South West Wall) were collected from the sidewalls of the excavation and submitted to the laboratory for analysis of TPH and chloride concentrations. Laboratory analytical results indicated TPH concentrations ranged from less than the laboratory MDL in soil samples North West Wall, South Wall, South East Wall, and South West Wall to 2,052 mg/Kg in soil sample North Wall. Chloride concentrations ranged from 128 mg/Kg in soil sample North West Wall to 528 mg/Kg in soil sample South Wall.

A five-point composite sample (Stockpile A) was collected from the stockpiled material and submitted to the laboratory for analysis of BTEX, TPH, and chloride concentrations. Laboratory analytical results indicated the benzene concentration was less than the laboratory MDL. The BTEX concentration was 1.136 mg/Kg, the TPH concentration was 1,321 mg/Kg, and the

chloride concentration was 736 mg/Kg. Soil represented by soil sample Stockpile A was deemed suitable for use as backfill material.

From December 7 through December 9, 2011, the stockpiled material was blended on-site with non-impacted material.

Based on the results of field-screens, it was determined that further vertical delineation would be required in the southern portion of the excavation. On December 8, 2011, one (1) delineation trench (South Trench) was advanced in the floor of the excavation, approximately seventy feet (70') to the south-southeast of the release point. The delineation trench was advanced to a total depth of approximately fifteen feet (15') bgs. Soil samples were collected at five-foot (5') intervals and field-screened using a chloride test kit. Three (3) soil samples (South Floor 5', South Trench 10', and South Trench 15') from the delineation trench were submitted to the laboratory for analysis of TPH and chloride concentrations. Soil sample South Trench 15' was also analyzed for concentrations of BTEX. Laboratory analytical results indicated TPH concentrations ranged from less than the laboratory MDL in soil sample South Floor 5' to 8,407 mg/Kg in soil sample South Trench 10'. Chloride concentrations ranged from 880 mg/Kg in soil sample South Trench 15' to 2,680 mg/Kg in soil sample South Floor 5'.

A five-point composite sample (Stockpile B) was collected from the stockpiled material and submitted to the laboratory for analysis of TPH and chloride concentrations. Laboratory analytical results indicated the TPH concentration was 3,113 mg/Kg, and the chloride concentration was 704 mg/Kg. Soil represented by soil sample Stockpile B was deemed suitable for use as backfill material.

On December 9, 2011, a five-point composite sample (Stockpile C) was collected from the stockpiled material and submitted to the laboratory for analysis of BTEX, TPH, and chloride concentrations. Laboratory analytical results indicated BTEX constituent concentrations were less than the appropriate laboratory MDL. The TPH concentration was 399 mg/Kg, and the chloride concentration was 896 mg/Kg. Soil represented by soil sample Stockpile C was deemed suitable for use as backfill material.

On December 13, 2011, approximately one hundred and twenty cubic yards (120 yd³) of impacted soil was transported to Lea Land, Inc. (NMOCD Permit # WM-01-035), for disposal.

Pursuant to a request by the BLM, on December 14 and 15, 2011, an historic drilling pit on-site was backfilled in eighteen-inch (18") lifts, compacted, and contoured to fit the surrounding topography.

Based on laboratory analytical results and field-screens, from December 15 through December 22, 2011, the Continental Federal Battery #1 excavation was backfilled in eighteen-inch (18") lifts, compacted, and contoured to fit the surrounding topography. Prior to backfilling, a twenty (20) mil polyurethane liner was installed in the floor of the excavation at approximately five feet (5') bgs. Approximately six inches (6") of non-impacted pad sand was installed both above and below the liner to protect the liner from damage during installation and backfilling activities. Final dimensions of the excavation were approximately one hundred and ten feet (110') in length, ranging in width from approximately thirty-one feet (31') to approximately thirty-nine feet (39'), and ranging in depth from approximately four feet (4') to approximately five feet (5').

The Continental Federal Battery #1 release site will be seeded with a BLM-approved seed mixture during the 2012 calendar year.

4.0 QA/QC PROCEDURES

4.1 Soil Sampling

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

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

4.2 Decontamination of Equipment

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

4.3 Laboratory Protocol

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

5.0 SITE CLOSURE REQUEST

Soil samples collected from the floor and sidewalls of the Continental Federal Battery #1 excavation were analyzed by an NMOCD-approved laboratory, and concentrations of benzene, BTEX, TPH, and chloride were less than the remediation action levels established for the site by the NMOCD. Based on these analytical results, Basin recommends BOPCO provide the NMOCD Artesia District Office and the BLM a copy of this *Remediation Summary & Risk-Based Site Closure Request* and request the NMOCD grant site closure to the Continental Federal Battery #1 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, New Mexico 88210

Copy 2: James Amos

Bureau of Land Management

602 E. Greene Street

Carlsbad, New Mexico 88220

Copy 3: Tony Savoie

BOPCO, LP

522 W. Mermod, Ste. 704 Carlsbad, New Mexico 88220

Copy 4: Basin Environmental Service Technologies, LLC

P.O. Box 301

Lovington, New Mexico 88260

FIGURES

Figure 1 Site Location Map

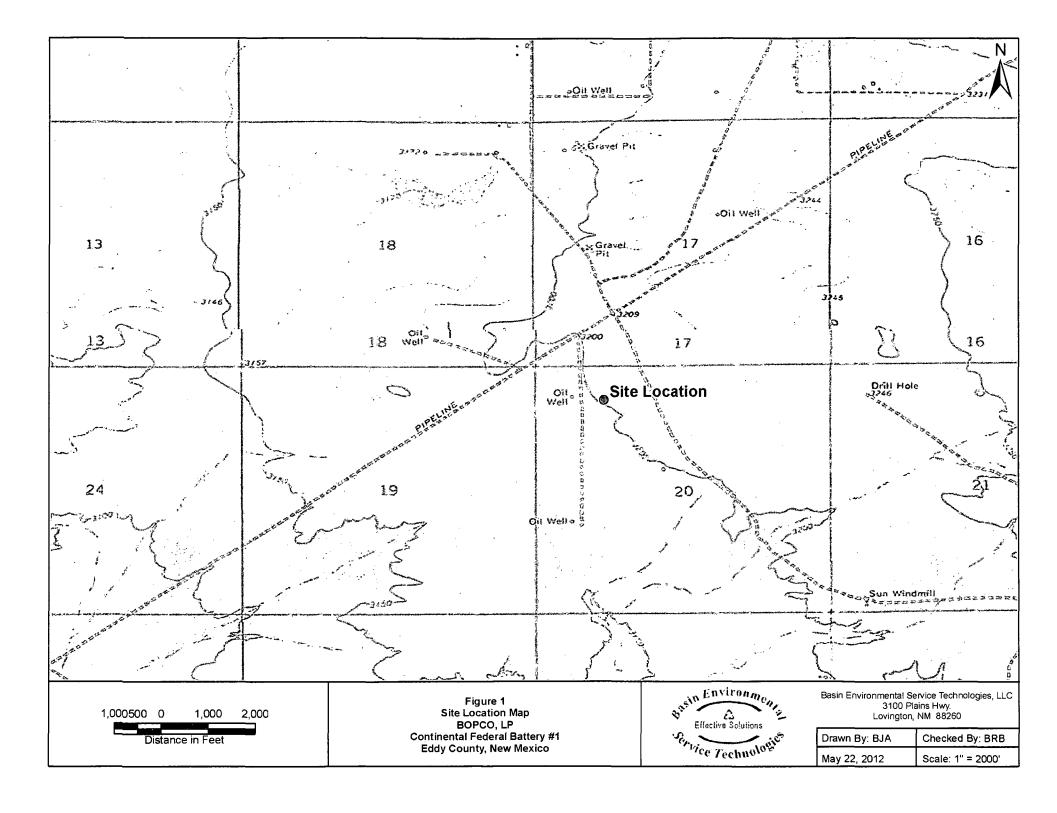
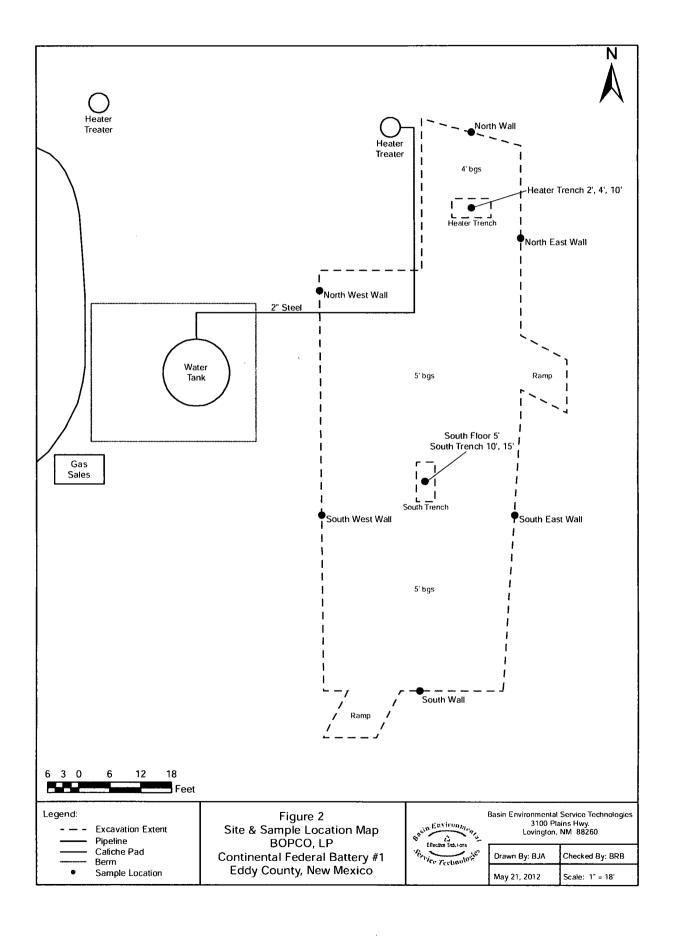


Figure 2 Site & Sample Location Map



TABLES

Table 1 Concentrations of Benzene, BTEX, TPH & Chloride in Soil

TABLE 1

CONCENTRATIONS OF BENZENE, BTEX, TPH & CHLORIDE IN SOIL

BOPCO, LP CONTINENTAL FEDERAL BATTERY #1 EDDY COUNTY, NEW MEXICO

		<u> </u>			METHOD: E	PA SW 846-80	21B, 5030		ME	THOD: 801	5M	TOTAL	E 300
SAMPLE LOCATION	SAMPLE DEPTH (BGS)	SAMPLE DATE	SOIL STATUS	BENZENE (mg/Kg)	TOLUENE (mg/Kg)	ETHYL- BENZENE (mg/Kg)	TOTAL XYLENES (mg/Kg)	TOTAL BTEX (mg/Kg)	GRO C ₆ -C ₁₂ (mg/Kg)	DRO C ₁₂ -C ₂₈ (mg/Kg)	ORO C ₂₈ -C ₃₅ (mg/Kg)	TPH C ₆ -C ₃₅ (mg/Kg)	CHLORIDE (mg/Kg)
Heater Trench 2'	2'	11/28/2011	In-situ	0.061	0.296	0.877	2.09	3.32	480	8,520	<100	9,000	912
Heater Trench 4'	4'	11/28/2011	In-situ	-	-	-	-	-	<10.0	24.6	<10.0	24.6	1,570
Heater Trench 10'	10'	11/28/2011	in-situ	<0.050	<0.050	<0.050	<0.150	<0.150	<10.0	<10.0	<10.0	<10.0	1,010
	1. 9. Din 1. 1	1940年3月1日		DEFENCE	SALALI KAD		据200 m 100 17	CONTRACTOR	为水品等代表	China Tinha	The same	DAY COM	144 34 34 3
North Wall	3.5'	12/7/2011	In-situ	-	-	-	-		184	1,720	148	2,052	256
North East Wall	3.5'	12/7/2011	In-situ	-	-	-	-	-	<10.0	20.8	<10.0	20.8	176
North West Wall	3.5'	12/7/2011	In-situ	-		-	-		<10.0	<10.0	<10.0	< 10.0	128
South Wall	3.5'	12/7/2011	In-situ	-	-	-	-	-	<10.0	<10.0	<10.0	<10.0	528
South East Wall	3.5'	12/7/2011	In-situ		-	-	-	-	<10.0	<10.0	<10.0	<10.0	208
South West Wall	3.5'	12/7/2011	In-situ		-	-	-		<10.0	<10.0	<10.0	<10.0	512
Stockpile A	N/A	12/7/2011	Excavated	<0.050	0.052	0.386	0.698	1.136	221	1,100	<50.0	1,321	736
いるかであれるとのできる。		AN JANES	展行家法を含	William Control	をはれている。	建 为"产"的第三		12 LE 1930		Mile Sam	134 美元 江		
South Floor 5'	5'	12/8/2011	In-situ		-	-	-		<10.0	<10.0	<10.0	<10.0	2,680
South Trench 10'	10'	12/8/2011	In-situ	-	-		-		107	8,300	<50.0	8,407	1,310
South Trench 15'	15'	12/8/2011	In-situ	<0.050	<0.050	<0.050	<0.150	<0.150	<10.0	39.8	<10.0	39.8	880
Stockpile B	N/A	12/8/2011	Excavated	-	-		-	-	387	2,610	116	3,113	704
心的人们或者疾的种类或不同种公	THE WAR	5366 Z	17.5		TARL TO HIS AND	HARRY TO	"这种",这种"				N. 238.	1 16 16 1	
Stockpile C	N/A	12/9/2011	Excavated	<0.050	<0.050	<0.050	<0.150	<0.150	<10.0	399	<10.0	399	896
なが、研究を表現はなければ、	11/1/19		45 67 38 E	AND THE TERM	Edding to	WORLD DE	Service Services	はなる	*** ** * * * * * * * * * * * * * * * *				1.25 2.50
NMOCD Standard				10				50	l			5,000	1,000

^{- =} 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

			Rel	ease Notific	catio	n and Co	rrective A	ction				
						OPERA'	FOR	,	🛛 Initi	al Report		Final Repor
Name of Co						Contact Tor						
				ad, N.M. 88220			No. 432-556-87	30				
Facility Na	me: Contin	ental Federa	l Battery	#1	l	Facility Typ	e E&P					
Surface Ow		of New Mexi	co	Mineral ()wner	State of New			Lease 1	٧o٠		
	f- e	disal		LOCA	\TTO	N OF REI	LEASE					
Unit Letter	Section	Township	Range	Feet from the		/South Line	Feet from the	East/V	Vest Line	County	•	
D	20	258	30E							Eddy		
	<u>. </u>		La	titude_N 32.120				4				
NATURE OF RELEASE Type of Release: Crude oil Source of Release: Heater Treater Source of Release: Heater Treater Date and Hour of Occurrence 8/30/11, Hour unknown Was Immediate Notice Given? Yes □ No □ Not Required NMOCD emergency #104 17 30/11 By Whom? Tony Savoic Date and Hour 8/23/41-approximately 1:00 p.m. Was a Watercourse Reached? If YES, Volume Impacting the Watercourse.												.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Source of Re	lease: Heate	er Treater						ce			covery	
Was Immedi	ate Notice (Yes [No Not Ro	equired:							
By Whom? 7	ony Savoic					Date and H	lour 8/23/11-appr	oximatel	ly 1:00 p.n	1.		
		hed?	Yes 🗵] No		If YES, Vo	lume Impacting	the Wate	rcourse.	ECEN	IEI	
If a Watercou	irse was Im	pacted, Descr	ibe Fully.							SEP 13	ART	ESIA
Describe Cat repair the ma			lial Actio	Taken.* The ma	ın way	cover had inte	rnal corrosion. Th	he heater	was isolai	ed and crew	s are v	orking to
into the grow	nd, this was	in an area tha	t had beer	cen.*Approximate impacted by spil crude oil spill wi	ls in the	e past.		-			oduct	had soaked
regulations a public health should their c or the environ	operators or the envir operations h opent. In a	are required to continent. The ave failed to a	o report ar acceptance dequately CD accep	is true and comp ad/or file certain re- ce of a C-141 repo- investigate and re- tance of a C-141	elease r ort by the omedia	notifications and NMOCD mate contamination	nd perform correct arked as "Final Room that pose a thr	ctive acti teport" de reat to gre	ons for reli nes not reli ound water	cases which ieve the oper r, surface wa	may ea ator of ter, hu	idanger Liability man health
							OIL CON	SERV	ATION	DIVISIO	N	
Signature:	Tony Sav	1	(3 (2.635)			Approved by	District Supervis	:0r:				
Title: Waste	Mgmt& Ro	mediation Spe	cialist			Approval Dat	#:	E	Expiration	Date:		
E-mail Addre	ss: TASavo	oic@BassPet.c	om			Conditions of	Approval:			Attached		

Phone:432-556-8730

Date: 9/11/11

^{*} Attach Additional Sheets If Necessary

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
SEP 0.6 2012 Revised October 10, 2003

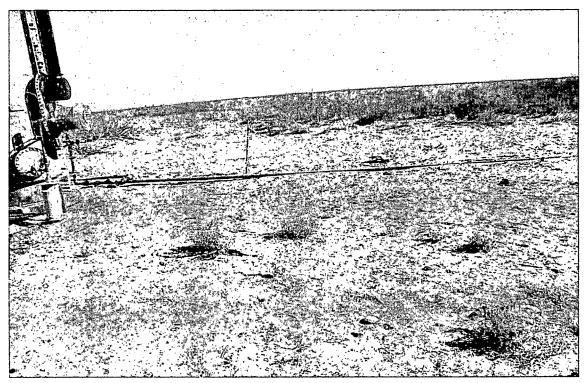
Submit 2 Copies to appropriate Office in accordance ith Rule 116 on back

side of form

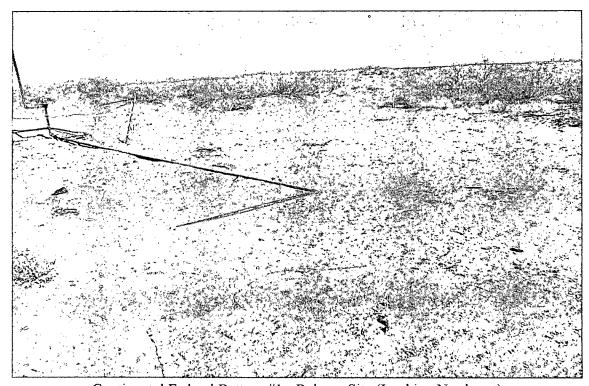
Release Notification and Corrective Action

		OPERA	ΓOR		☐ Initia	al Report	⊠ F	Final Report
Name of Company BOPCO, L.P.		Contact Tor	<u> </u>					
Address 522 W. Mermod, Suite 704 Carlsbad, N.M. 88220			No. 432-556-873	30				
Facility Name: Continental Federal Battery #1	I	Facility Typ	e E&P					-
Surface Owner Federal Mineral C	Owner F	ederal			Lease N	lo.		
LOCA	ATION	OF RE	LEASE					
Unit Letter Section Township Range 25S 30E Feet from the	North/S	South Line	Feet from the	East/W	est Line	County Eddy		
Latitude_N 32.12	20920	Longitud	e W 103.907974	4				
NAT	TURE (OF REL	EASE					,
Type of Release: Crude oil		Volume of oil	Release: 30 bls c	rude	Volume R	Recovered: 0		
Source of Release: Heater Treater		1	Iour of Occurrenc	e	Date and 8/30/11 1	Hour of Disc	overy	
Was Immediate Notice Given? ☐ Yes ☐ No ☐ Not R	Leauired	If YES, To			3.20711		: '	
By Whom? Tony Savoie			Iour 8/30/11 appr	ovimatel	v 1:00 n m	· · · · · · · · · · · · · · · · · · ·	- jr.	<u>-3 5-</u>
Was a Watercourse Reached? ☐ Yes ☒ No			olume Impacting t			DE		HVE
If a Watercourse was Impacted, Describe Fully.*							ζ.,	006 22012 Para etes
Describe Cause of Problem and Remedial Action Taken.* The marrepair the man way cover.	an way co	over had inte	rnal corrosion. Th	heater	was isolat	ed and crews	are wo	rking to
Describe Area Affected and Cleanup Action Taken.*Approximatinto the ground, this was in an area that had been impacted by spi The Site was remediated to the NMOCD and BLM standards. Ple of the remediation activities.	ills in the	past.				-		
I hereby certify that the information given above is true and compregulations all operators are required to report and/or file certain upublic health or the environment. The acceptance of a C-141 reposhould their operations have failed to adequately investigate and upor the environment. In addition, NMOCD acceptance of a C-141 federal, state, or local laws and/or regulations.	release no ort by the remediate	otifications a NMOCD m contamination	nd perform correct arked as "Final Roon that pose a thr	ctive acti eport" de eat to gr	ons for rele oes not reli ound water	eases which r ieve the opera r, surface wat	nay end tor of l er, hum	langer iability nan health
Signature: Tony Savoie Printed Name: Tony Savoie		Approved by	OIL CON District Supervis		ATION	DIVISIO	N	
Title: Waste Mgmt.& Remediation Specialist	A	Approval Da	te:	F	Expiration	Date:		
E-mail Address: TASavoie@BassPet.com	(Conditions o	f Approval:			Attached		
Date: 9/5/12 Phone:432-556-8 Attach Additional Sheets If Necessary	730	·						

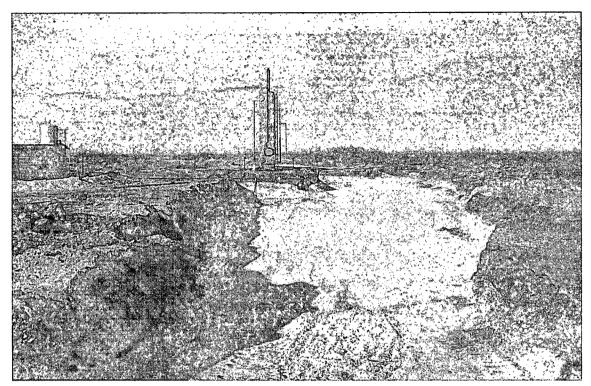
Appendix B Photographs



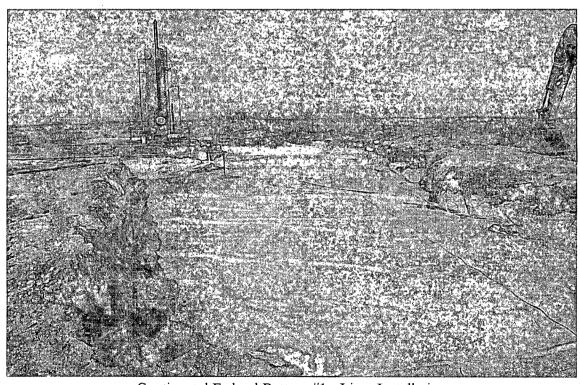
Continental Federal Battery #1 - Release Site (Looking East)



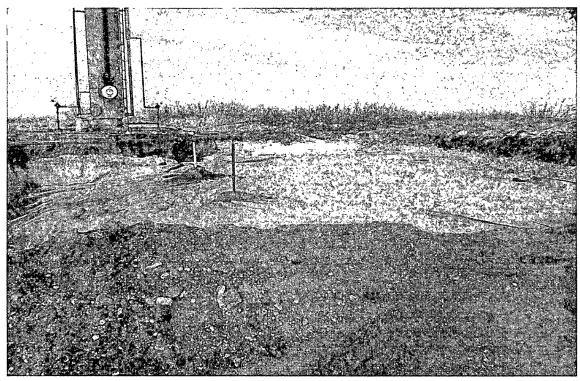
Continental Federal Battery #1 - Release Site (Looking Northeast)



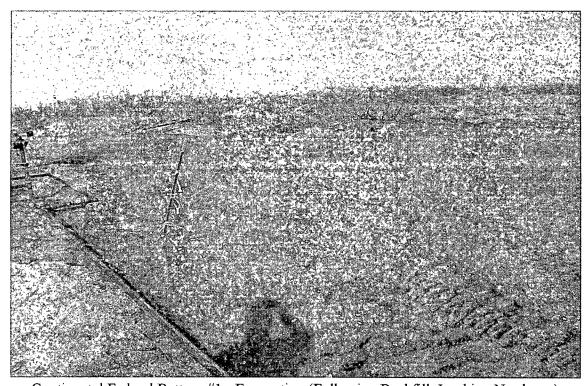
Continental Federal Battery #1 - Excavation (Looking North)



Continental Federal Battery #1 - Liner Installation



Continental Federal Battery #1 - Excavation (Backfilling Activities, Looking Northeast)



Continental Federal Battery #1 - Excavation (Following Backfill, Looking Northeast)

Appendix C Laboratory Analytical Reports



December 02, 2011

BEN J. ARGUIJO

Basin Environmental Service

P.O. Box 301

Lovington, NM 88260

RE: CONTINENTAL FEDERAL BATTERY #1 HEATER

Enclosed are the results of analyses for samples received by the laboratory on 11/29/11 16:25.

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 (575) 396-1429

Fax To:

Sampling Date:

11/28/2011

Received: Reported: 11/29/2011

Soil

12/02/2011

Sampling Type:

Project Name:

CONTINENTAL FEDERAL BATTERY #1 HI

Sampling Condition:

Cool & Intact

Project Number:

NONE GIVEN

Project Location:

EDDY COUNTY, NM

Sample Received By:

Jodi Henson

Sample ID: TRENCH 2' HEATER (H102574-01)

BTEX 8021B	mg ,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	0.061	0.050	12/01/2011	ND	2.02	101	2.00	6.79	
Toluene*	0.296	0.050	12/01/2011	ND	1.96	97.9	2.00	7.39	
Ethylbenzene*	0.877	0.050	12/01/2011	ND	2.23	112	2.00	7.93	
Total Xylenes*	2.09	0.150	12/01/2011	ND	6.47	108	6.00	7.96	
Surrogate: 4-Bromofluorobenzene (PIL	119	% 64.4-13	34				,		
Chloride, SM4500CI-B	mg	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	912	16.0	12/01/2011	ND	432	108	400	0.00	
TPH 8015M	mg	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	480	100	12/02/2011	ND	170	85.1	200	1.77	
DRO >C10-C28	8520	100	12/02/2011	ND	176	87.8	200	0.0911	
EXT DRO >C28-C35	<100	100	12/02/2011	ND					
Surrogate: 1-Chlorooctane	147	% 55.5-15	4						

Surrogate: 1-Chlorooctadecane

152 %

57.6-158

Cardinal Laboratories

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alex Esterna

Celey D. Keene, Lab Director/Quality Manager

Page 2 of 6



Basin Environmental Service BEN J. ARGUIJO

P.O. Box 301

Lovington NM, 88260

Fax To:

(575) 396-1429

Received:

11/29/2011

Sampling Date:

11/28/2011

Reported:

Sampling Type:

Soil

12/02/2011

Project Name:

CONTINENTAL FEDERAL BATTERY #1 HI

Sampling Condition:

Cool & Intact

Project Number:

NONE GIVEN

Sample Received By:

Jodi Henson

Project Location:

EDDY COUNTY, NM

Sample ID: TRENCH 4' HEATER (H102574-02)

Chloride, SM4500CI-B	mg/l	cg	Analyze	d By: AP		·			
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1570	16.0	12/01/2011	ND	432	108	400	0.00	
TPH 8015M	mg/l	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	85	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	12/01/2011	ND	170	85.1	200	1.77	
DRO >C10-C28	24.6	10.0	12/01/2011	ND	176	87.8	200	0.0911	
EXT DRO >C28-C35	<10.0	10.0	12/01/2011	ND					
Surrogate: 1-Chlorooctane	93.6 %	6 55.5-15	4						
Surrogate: 1-Chlorooctadecane	86.3 %	6 57.6-15	8						

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Celeg E Keens 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: Reported: 11/29/2011

12/02/2011

Project Name: Project Number: CONTINENTAL FEDERAL BATTERY #1 HI

Project Location:

NONE GIVEN EDDY COUNTY, NM Sampling Date:

Sampling Type:

11/28/2011 Soil

Cool & Intact

Sampling Condition: Sample Received By:

Jodi Henson

Sample ID: TRENCH 10' HEATER (H102574-03)

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	12/01/2011	ND	2.02	101	2.00	6.79	
Toluene*	<0.050	0.050	12/01/2011	ND	1.96	97.9	2.00	7.39	
Ethylbenzene*	<0.050	0.050	12/01/2011	ND	2.23	112	2.00	7.93	
Total Xylenes*	<0.150	0.150	12/01/2011	ND	6.47	108	6.00	7.96	
Surrogate: 4-Bromofluorobenzene (PIL	105	% 64.4-13	4						
Chloride, SM4500CI-B	mg/	'kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1010	16.0	12/01/2011	ND	432	108	400	0.00	
TPH 8015M	mg /	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	12/02/2011	ND	170	85.1	200	1.77	
DRO >C10-C28	<10.0	10.0	12/02/2011	ND	176	87.8	200	0.0911	
EXT DRO >C28-C35	<10.0	10.0	12/02/2011	ND					
Surrogate: 1-Chlorooctane	91.8	% 55.5-15	4						
Surrogate: 1-Chlorooctadecane	85.6	% 57.6-15	8						

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*=Accredited Analyte

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Celeg & Keine



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

PLEASE NOTE: Liability and Damages. Cardinal's liability and clients 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 whistowers shall be deemed watered unless made in withing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be Bable 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 clients 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 to Keena



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name	e: Basin Enviror	mental Service	Tec	nan	logi	is.	LLC			81	LL TO		THE PERSON				ANA	YSIS	RE	QUE	ST			
Project Manage	^{er:} Bon J. Arguij	io						Ρ.	O. #	·														
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City: Lovings	on	State: NM	Zig): 8	8260	***************************************		ΑI	tn:	Tony	Savois				<u> </u>									
Phone #: {575) 396-2378	Fax #:(575)3	95	1,42	9			Ac	ddre	ss: 52	2 w. Mor	mod												
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Project Locatio		,						PF	one	2 #:{43	2)556-87	30												
Sampler Name:	Jody Walters							Fa	1X #:															
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Lab I.D.	Sampl	le I.D.	(G)RAB OR (C)OMP	# CONTAINERS	GROUNDWATER	WASTEWATER SOIL	OIL. SLUDGE	OTHER;	ACIDIBASE:	ICE/COOL OTHER:	DATE	TIME	Bois of	Chlorides	13Tex		and the second of the second o							
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analyses. At etams including service, to no event shall the	ing those for negligence and un Cardinal be liable for modertal t	y etner cluse whatsoever shak be ir consequental damages, includin mance of services hercunder by	deeme givalne Cardina	o val et las et legt	red untes Igtion, siu Irdiess or	9 81936 9 916655 18 WHE(11 0 1	a valag di Jeruppors	loss Ioss	eived b or use	ry Carolnai Or 1964 of p	oithin 30 days all relas mauned by	er completion of chieff, de sebelid cascus or oit crec	ne applical anes, se.		en allenda ar album		~~~~	eagean Walled		Day Charles			The Market According	***
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December 13, 2011

BEN J. ARGUIJO

Basin Environmental Service

P.O. Box 301

Lovington, NM 88260

RE: CONTINENTAL FEDERAL BATTERY #1 HEATER

Enclosed are the results of analyses for samples received by the laboratory on 12/07/11 16:10.

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 & treene

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:

12/07/2011

Sampling Date:

12/07/2011

Reported:

12/13/2011

Sampling Type:

Soil

Project Name:

CONTINENTAL FEDERAL BATTERY #1 HI

Sampling Condition:

Cool & Intact

Project Number:

NONE GIVEN

Sample Received By:

Jodi Henson

Project Location:

EDDY COUNTY, NM

Sample ID: NORTH WALL (H102621-01)

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	256	16.0	12/08/2011	ND	416	104	400	0.00	
TPH 8015M	mg	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	184	10.0	12/08/2011	ND	177	88.7	200	3.39	
DRO >C10-C28	1720	10.0	12/08/2011	ND	157	78.7	200	5.35	
EXT DRO >C28-C35	148	10.0	12/08/2011	ND					
Surrogate: 1-Chlorooctane	87.9	% 55.5-15	4						
a	0.4.0	04 57 6 16							

86.0 % Surrogate: 1-Chlorooctadecane 57.6-158

Sample ID: NORTH EAST WALL (H102621-02)

Chloride, SM4500CI-B	mg ,	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	176	16.0	12/08/2011	ND	416	104	400	0.00	
TPH 8015M	mg,	/kg	Analyze	d By: MS					s-Low
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	12/09/2011	ND	177	88.7	200	3.39	
DRO >C10-C28	20.8	10.0	12/09/2011	ND	157	78.7	200	5.35	
EXT DRO >C28-C35	<10.0	10.0	12/09/2011	ND					
Surrogate: 1-Chlorooctane	71.3	% 55.5-15	4						
Surrogate: 1-Chlorooctadecane	56.4	% 57.6-15	8						

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Celey Exero-



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

Fax To:

12/07/2011 12/13/2011

CONTINENTAL FEDERAL BATTERY #1 HI

Project Number: NONE GIVEN

Received:

Reported:

Project Name:

Project Location: EDDY COUNTY, NM

Sampling Date:

12/07/2011

Sampling Type:

Soil Cool & Intact

Sampling Condition: Sample Received By:

Jodi Henson

Sample ID: NORTH WEST WALL (H102621-03)

Chloride, SM4500CI-B	mg/	kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	128	16.0	12/08/2011	ND	416	104	400	0.00	
TPH 8015M	mg /	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10 `	<10.0	10.0	12/08/2011	ND	177	88.7	200	3.39	
DRO >C10-C28	<10.0	10.0	12/08/2011	ND	157	78.7	200	5.35	
EXT DRO >C28-C35	<10.0	10.0	12/08/2011	ND					
Surrogate: 1-Chlorooctane	84.4	% 55.5-15	4						
Surrogate: 1-Chlorooctadecane	66.9	% 57.6-15	8						

Sample ID: SOUTH EAST WALL (H102621-04)

Chloride, SM4500CI-B	mg/	kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	208	16.0	12/08/2011	ND	416	104	400	0.00	
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	12/09/2011	ND	177	88.7	200	3.39	
DRO >C10-C28	<10.0	10.0	12/09/2011	ND	157	78.7	200	5.35	
EXT DRO >C28-C35	<10.0	10.0	12/09/2011	ND					
Surrogate: 1-Chlorooctane	84.7 9	% 55.5-15	4						
Surrogate: 1-Chlorooctadecane	64.4 9	% 57.6-15	8						

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Celeg & Keene



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

Fax To:

(575) 396-1429

Received: Reported: 12/07/2011

12/13/2011

CONTINENTAL FEDERAL BATTERY #1 HI

Project Name: Project Number: Project Location:

NONE GIVEN

EDDY COUNTY, NM

Sampling Date:

12/07/2011

Sampling Type:

Soil

Sampling Condition: Sample Received By: Cool & Intact

Jodi Henson

Sample ID: SOUTH WEST WALL (H102621-05)

Chloride, SM4500CI-B Analyte	mg/kg		Analyzed By: AP						
	Result	Reporting Limit	Analyzed	Method Blank	BS % Reco	% Recovery	True Value QC	RPD	Qualifier
Chloride	512	16.0	12/08/2011	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	12/09/2011	ND	177	88.7	200	3.39	
DRO >C10-C28	<10.0	10.0	12/09/2011	ND	157	78.7	200	5.35	
EXT DRO >C28-C35	<10.0	10.0	12/09/2011	ND					
Surrogate: 1-Chlorooctane	82.4	% 55.5-15	4						
Surrogate: 1-Chlorooctadecane	63.3	% 57.6-15	8						

Sample ID: SOUTH WALL (H102621-06)

Chloride, SM4500Cl-B	mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	528	16.0	12/08/2011	ND	416	104	400	0.00	
TPH 8015M	5M 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	12/09/2011	ND	177	88.7	200	3.39	
DRO >C10-C28	<10.0	10.0	12/09/2011	ND	157	78.7	200	5.35	
EXT DRO >C28-C35	<10.0	10.0	12/09/2011	ND					
Surrogate: 1-Chlorooctane	87.8	% 55.5-15	4						
Surrogate: 1-Chlorooctadecane	65.5	% 57.6-15	8						

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*=Accredited Analyte

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aleg Estreno



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

Fax To:

(575) 396-1429

Received:

12/07/2011

Sampling Date:

12/07/2011

Reported:

12/13/2011

Sampling Type:

Soil

Project Name:

CONTINENTAL FEDERAL BATTERY #1 HI

Sampling Condition:

Cool & Intact

Project Number:

NONE GIVEN

Sample Received By:

Jodi Henson

Project Location:

EDDY COUNTY, NM

Sample ID: STOCK PILE A (H102621-07)

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	12/08/2011	ND	2.00	100	2.00	0.748	
Toluene*	0.052	0.050	12/08/2011	ND	1.95	97.4	2.00	0.380	
Ethylbenzene*	0.386	0.050	12/08/2011	ND	2.24	112	2.00	0.550	
Total Xylenes*	0.698	0.150	12/08/2011	ND	6.51	109	6.00	0.285	
Surrogate: 4-Bromofluorobenzene (PIL	172 % 64.4-13		4						
Chloride, SM4500CI-B	mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	736	16.0	12/08/2011	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	221	50.0	12/09/2011	ND	177	88.7	200	3.39	
DRO >C10-C28	1100	50.0	12/09/2011	ND	157	78.7	200	5.35	
EXT DRO >C28-C35	<50.0	50.0	12/09/2011	ND					
Surrogate: 1-Chlorooctane	88.8 % 55.5-15		4				-		
Surrogate: 1-Chlorooctadecane	87.4	% 57.6-15	8						

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and clients exclusive remedy for any claim arising, whether based in contact or bott, 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 unkess 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 hereunded 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 Laboratories.

Celeg & Keens.



Notes and Definitions

S-LOW Low surrogate recovery confirmed as a matrix effect by a second analysis.

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 clients exclusive remedy for any cleim 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 whistocers shall be deemed writered unless made in writing and received by Cardinal within tility (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including unless the interpretation, but the states, but the samplest incidental cardinal be liable for incidental or consequential damages, including unless the interpretation of the services hereunder by Cardinal, regardless of whether such claims to 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.

aligh Kuna



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name	Easin Environmental Service	Tec	hno	logies, LLC		BI.	LL TO						ANAL	YSIS	RE	QUES	ST			
Project Manage	r: Ren J. Arguijo				P.0). #;		***						EKATE AT NO HARR						PERENEALEN
Address: P.O	. Box 301				Cor	mpany: B	OPCO, LP													
City: Lowingt	on State: ម្រា	Zij); B	8260	Attr	N: Tony	Savcie												.	
Phone #: (575)396-2378 Fax#:(575)3	196 -	142	9	Add	dress: 52	2 w. Wer	nod												
Project #:	Project Owne				City	y: Carlst	ad .												. 1	
Project Name:	Continental Federal Ba	42.	14	<u> </u>	Sta	te: NM	Zip:8822	2											, 1	
	n: EDDY NM			······································	Pho	one #:(43	3)556-87	30												
Sampler Name:	Jody Walters				Fax		ducts and these has decree													
FOR LAB USE ONLY	,	Τ.	Ī	MATRIX		PRESERV.	SAMPL	NG												. 1
Lab I.D.	Sample I.D.	(G)RAB OR (C)OIMP.	Air	GROUNDWATER WASTEWATER SOIL OIL SLUDGE	ОТНЕЯ:	ACIDIBASE: ICE / COOL OTHER:	DATE	TIME	80.57N	(hlorides	3 Te/									
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5	South West wall	G	1	X		___	1.2-7-1	11:40	\mathcal{X}	1			-,							*************
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Sampler - UPS	- Bus - Other:	j	79	PÝes PÝe	s	13.4	31	•												



December 14, 2011

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

RE: CONTINENTAL FEDERAL BATTERY #1 HEATER

Enclosed are the results of analyses for samples received by the laboratory on 12/08/11 16:30.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-11-3. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab accredited certif.html.

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

Method EPA 552.2

Haloacetic Acids (HAA-5)

Method EPA 524.2

Total Trihalomethanes (TTHM)

Method EPA 524.4

Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

Celeg & 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:

12/08/2011

Sampling Date:

12/08/2011

Reported:

12/14/2011

Sampling Type:

Soil

Project Name:

CONTINENTAL FEDERAL BATTERY #1 HI

Sampling Condition:

Cool & Intact

Project Number:

NONE GIVEN

Project Location:

EDDY COUNTY, NM

Sample Received By:

Jodi Henson

Sample ID: SOUTH FLOOR 5' (H102641-01)

Chloride, SM4500CI-B	mg	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2680	16.0	12/09/2011	ND	432	108	400	3.77	
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	12/12/2011	ND	194	96.9	200	4.73	
DRO >C10-C28	<10.0	10.0	12/12/2011	ND	189	94.5	200	0.994	
EXT DRO >C28-C35	<10.0	10.0	12/12/2011	ND					
Surrogate: 1-Chlorooctane	101	% 55.5-15	4						
Surrogate: 1-Chlorooctadecane	94.5	% 57.6-15	8						

Sample ID: SOUTH TRENCH 10' (H102641-02)

Chloride, SM4500CI-B	mg/	kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1310	16.0	12/09/2011	ND	432	108	400	3.77	
TPH 8015M	mg/	kg	Analyze	d By: MS					S-HI
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	107	50.0	12/12/2011	ND	194	96.9	200	4.73	
DRO >C10-C28	8300	50.0	12/12/2011	ND	189	94.5	200	0.994	
EXT DRO >C28-C35	<50.0	50.0	12/12/2011	ND					
Surrogate: 1-Chlorooctane	141 9	% 55.5-15	4						
Surrogate: 1-Chlorooctadecane	229 9	% 57.6-15	8						

Cardinal Laboratories

*=Accredited Analyte

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alex & Keena



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

Fax To:

(575) 396-1429

Received:

12/08/2011

Sampling Date:

12/08/2011

Reported:

12/14/2011

Sampling Type:

Soil

Project Name:

CONTINENTAL FEDERAL BATTERY #1 HI

Sampling Condition:

Cool & Intact

Project Number:

NONE GIVEN

Sample Received By:

Jodi Henson

Project Location:

EDDY COUNTY, NM

Sample ID: SOUTH TRENCH 15' (H102641-03)

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	12/09/2011	ND	1.98	98.8	2.00	2.72	
Toluene*	<0.050	0.050	12/09/2011	ND	1.83	91.5	2.00	3.07	
Ethylbenzene*	<0.050	0.050	12/09/2011	ND	2.07	103	2.00	3.27	
Total Xylenes*	<0.150	0.150	12/09/2011	ND	5.88	97.9	6.00	3.27	
Surrogate: 4-Bromofluorobenzene (PIL	107 9	% 64.4-13	4						
Chloride, SM4500Cl-B	mg/	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	880	16.0	12/09/2011	ND	432	108	400	3.77	
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	12/12/2011	ND	194	96.9	200	4.73	
DRO >C10-C28	39.8	10.0	12/12/2011	ND	189	94.5	200	0.994	
EXT DRO >C28-C35	<10.0	10.0	12/12/2011	ND					
Surrogate: 1-Chlorooctane	115	% 55.5-15	4						
Surrogate: 1-Chlorooctadecane	135	% 57.6-15	8						

Surrogate: 1-Chlorooctadecane 135 % 57.6-158

Cardinal Laboratories *=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remody 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 whistoevers shall be deemed warved 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, histolary, without limitation, bushness interruptions, loss of use, or loss of profits incurred by client, its substitutives, 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 started 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.

alex & Kenn



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

Fax To:

(575) 396-1429

Received:

12/08/2011

Sampling Date:

12/08/2011

Reported:

12/14/2011

Sampling Type:

Soil

Project Name:

CONTINENTAL FEDERAL BATTERY #1 HI

Sampling Condition:

Cool & Intact

Project Number:

NONE GIVEN

Project Location:

EDDY COUNTY, NM

Sample Received By:

Jodi Henson

Sample ID: STOCKPILE B (H102641-04)

Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	704	16.0	12/12/2011	ND	432	108	400	0.00	
TPH 8015M	mg/	kg	Analyze	d By: ZZZ			·		
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	387	50.0	12/09/2011	ND	186	93.2	200	3.31	
DRO >C10-C28	2610	50.0	12/09/2011	ND	161	80.5	200	13.5	
EXT DRO >C28-C35	116	50.0	12/09/2011	ND					
Surrogate: 1-Chlorooctane	92.2 %	% 55.5-15	4						
Surrogate: 1-Chlorooctadecane	130 %	6 57.6-15	8						

Cardinal Laboratories *=Accredited Analyte

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alegat treens



Notes and Definitions

S-HI High surrogate recovery was confirmed as a matrix effect by a second analysis.

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: Libibility and Danages. Cardinal's liability and clients 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 wholesoever 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 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.

alay & Keens



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name	Basin Environmental Service	Tecl	nol	ogies, LLC	I	81	LL TO		7.11774100			/	ANAL	YSIS	RE	QUE:	ST	TO BE REAL PROPERTY.	, SECULE OF THE	***************************************
Project Manage	T. Ben J. Arquijo	***************************************			ρ.	O. #:				- Cale was					A STATE OF THE SECTION					
Address: P.O					C	ompany: £	OPCO, LP)												Ì
City: Lovings	on State: NM	Zip	: 88	9260	А	ttn: Tony	Savoie													1
Phone #: (575	1396-2378 Fax #:(575):	396-1	1429	;	A	ddress: 52:	w. Her	mod												
Project#:	Project Owne	er: BK)PCC	, LP	Ci	ity: Carlsb	ad													
Project Name: (Continental Federal Ba	++er	ų _{je}	1	St	tate: MM	Zip: 8822	0												
	n: EDDY N/M		,		PI	hone #: (43	2)556-87	'30										1		1
Sampler Name:					Fá	ax #:					İ								l	
FOR LAB USE ONLY		Τ.		MATRIX		PRESERV	SAMPL	ING												
Lab I.D. 뭐10건641	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER WASTEWATER SOIL OIL	OTHER	ACIDIBASE: ICE / COOL OTHER:	DATE	TIME	8015M	Chlaides	BTEX	RusH								
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† Cardinal	I cannot accept verbal changes. Pleas	se tax	C WY	men changes i) DU	5-393-2416	1,													Pag
						- Warner	16													



December 14, 2011

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

RE: CONTINENTAL FEDERAL BATTERY #1 HEATER

Enclosed are the results of analyses for samples received by the laboratory on 12/09/11 16:33.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-11-3. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab accredited certif.html.

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

Method EPA 552.2

Haloacetic Acids (HAA-5)

Method EPA 524.2

Total Trihalomethanes (TTHM)

Method EPA 524.4

Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

Celeg & 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: Reported: 12/09/2011

12/14/2011

Project Name: Project Number: CONTINENTAL FEDERAL BATTERY #1 HI

Project Location:

NONE GIVEN
EDDY COUNTY, NM

Sampling Date:

Sampling Type:

12/09/2011

Soil

Sampling Condition: Sample Received By: Cool & Intact

Qualifier

Jodi Henson

Sample ID: STOCKPILE "C" (H102649-01)

BTEX 8021B	mg/	kg	Analyze	d By: MS				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD
Benzene*	<0.050	0.050	12/14/2011	ND	2.02	101	2.00	1.23

Toluene* < 0.050 0.050 12/14/2011 95.1 2.00 0.630 ND 1.90 Ethylbenzene* < 0.050 0.050 12/14/2011 ND 2.15 107 2.00 0.633 Total Xylenes* < 0.150 0.150 12/14/2011 ND 6.14 102 6.00 0.343

Surrogate: 4-Bromofluorobenzene (PIL

112 %

64.4-134

Chloride, SM4500Cl-B	mg	/kg	Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	896	16.0	12/12/2011	ND	432	108	400	0.00	
TPH 8015M	mg	/kg	Analyze	d By: MS		4			
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	12/12/2011	ND	194	96.9	200	4.73	
DRO >C10-C28	399	10.0	12/12/2011	ND	189	94.5	200	0.994	
EXT DRO >C28-C35	<10.0	10.0	12/12/2011	ND					

Surrogate: 1-Chlorooctane

90.3 %

55.5-154

Surrogate: 1-Chlorooctadecane

102 %

57.6-158

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, inclining, 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.

alle & Keena



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: Likefilty and Damages. Cardinal's likelilly 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 trose for negligence and any other cruse whistowers shall be deemed watered 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 hierarchicons, loss of use, or loss of profilts incurred by client, its subsidiaries, diffiliates 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 laboratories.

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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240 (575) 303-2326 EAV (575) 303-2476

	Basin Environmental Service		220	00	ias II		Т			RI	LL T	70				 .		ΔΝΔΙ	YSIS	s RE	QUE:	ST		
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Sampler Name:	Jody Walters							ax#	t:								1/2			ŀ				
FOR LAB USE ONLY		Τ.			MAT	RIX		PF	RES	ERV.	SAI	MPLI	NG	1	\		8			Ì				
Lab I.D. H102649	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER SOIL	OIL	SLUDGE	ACID/BASE:	ICE / COOL	OTHER:	DA	TE	TIME	8015A	Chloside	RusH	HO10 FOR	RIEK*	,					
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	nd Damages. Cardinal's liability and client's exclusive remedy for a ng those for negligence and any other cause whatsoever shall be														ble									

service. In no event shall Cardinal be tiable for incidental or consequental damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries. affiliates o/successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By:	Received By:	Phone Result:
(wa	"4:33 Wal Juster	REMARKS: 111-3307 text
Relinquished By:	Date: Received By:	1 441-5001 (6)
	Time:	Please email results to pm@basinenv.com
Delivered By: (Circle One)	Sample Condition CHECKED BY:	& TAsavoie@BassPet.com
Sampler - UPS - Bus - Other:	Cool Intact (Infinials) Yes Tyes No No	* BTEX added 12/14/11. Ch

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