

PO Box 2948 | Hobbs, NM 88241 | Phone 575.393.2967

December 21, 2016

Attn: Crystal Weaver

New Mexico Energy, Minerals, & Natural Resources Oil Conservation Division, Environmental Bureau – District 2 811 S. First St. Artesia, NM 88210

> RE: Termination Request Report BOPCO – Big Eddy Unit Hackberry 34 Federal #001 UL/A sec. 34 T19S R31E API No. 30-015-40288 2RP-3376

Ms. Weaver:

BOPCO, LP (BOPCO) has retained Basin Environmental Service Technologies (Basin) to address potential environmental concerns at the above-referenced site.

Background and Previous Work

The site is located approximately 17 miles southwest of Maljamar, New Mexico at Unit Letter A of Section 34 in Township 19 South of Range 31 East. The longitude is 32.622136 and the latitude is -103.850901. This site is located in an area where no known groundwater exists within a five and one-half (5.5) mile radius. (Figure 1).

On October 25th, 2015, BOPCO discovered a release of approximately nine-hundred twenty-seven (927) barrels (bbls) of produced water from a failed connection on the charge pump by-pass line. An estimated three-hundred ninety (390) bbls were recovered. Approximately twenty-seven thousand forty-five (27,045) square feet (ft²) of fenced battery pad was affected by the release. The Bureau of Land Management (BLM) and New Mexico Oil Conservation Division (NMOCD) were notified of the release on October 25th, 2015, and an initial Release Notification and Corrective Action form (C-141) was submitted to NMOCD November 3rd, 2015, for approval (Appendix A).

BOPCO personnel, as soon as possible, excavated the heaviest saturated soils and disposed of them at a NMOCD approved facility. One-hundred thirty-two (132) cubic yards (yd³) of highly impacted soils were disposed.

Basin personnel were on site November 16th, 2016, to assess the impact from the release. The impacted area was sampled in three (3) separate areas until field screens showed delineation was

complete. The discreet soil samples of approximate one-foot increments in depth from the 3 sample points were retrieved and submitted to a certified NMOCD approved commercial laboratory for confirmatory analysis of chloride (Cl⁻) concentration. Location of sample points can be found on Figure 2 – Initial Sampling Data.

Laboratory analysis shows the impacted areas of the release met the criteria necessary for closure of the release.

Soil samples collected from the BOPCO Big Eddy Unit Hackberry 34 Federal #001 release site were analyzed by an NMOCD approved laboratory, and concentrations of chloride were below the recommended remediation action level (RRAL) established for the site (Appendix B). Soil exhibiting chloride concentrations above the RRAL were removed and disposed of at a BLM/NMOCD approved facility. BOPCO via Basin requests site closure to the Big Eddy Unit Hackberry 34 Federal #001 release site.

Photo documentation of the release and remediation activities can be found in Appendix C.

Basin appreciates the opportunity to work with you on this project. Please contact me if you have any questions or wish to discuss the site.

Sincerely,

Robbie Runnels

Project Manager

Basin Environmental Service Technologies

(575) 393-2967

Attachments:

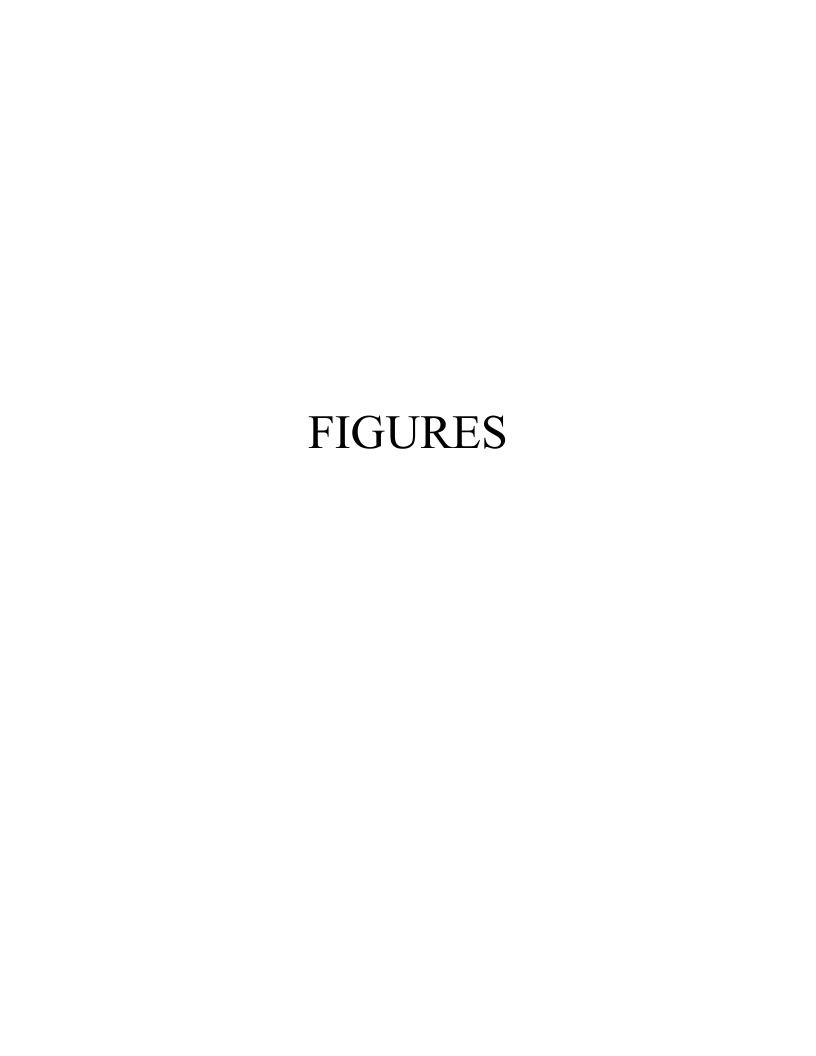
Figure 1 – Site Location Map

Figure 2 - Initial sampling Data

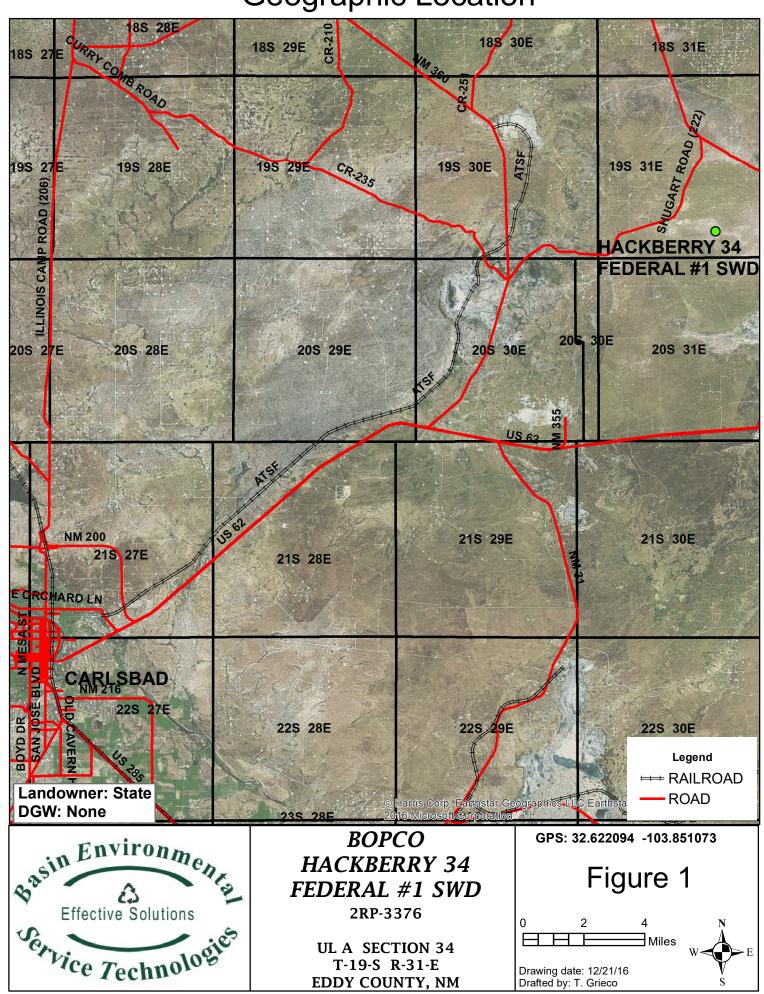
Appendix A – Final C-141

Appendix B – Laboratory Analysis

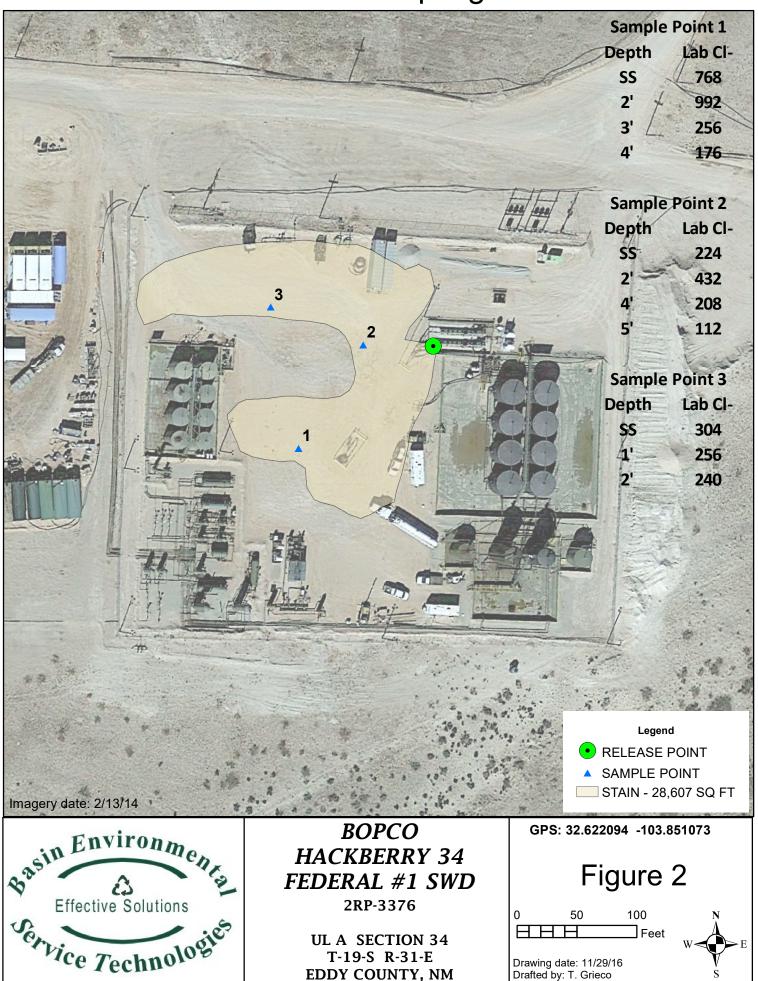
Appendix C – Photo Documentation



Geographic Location



Initial Sampling

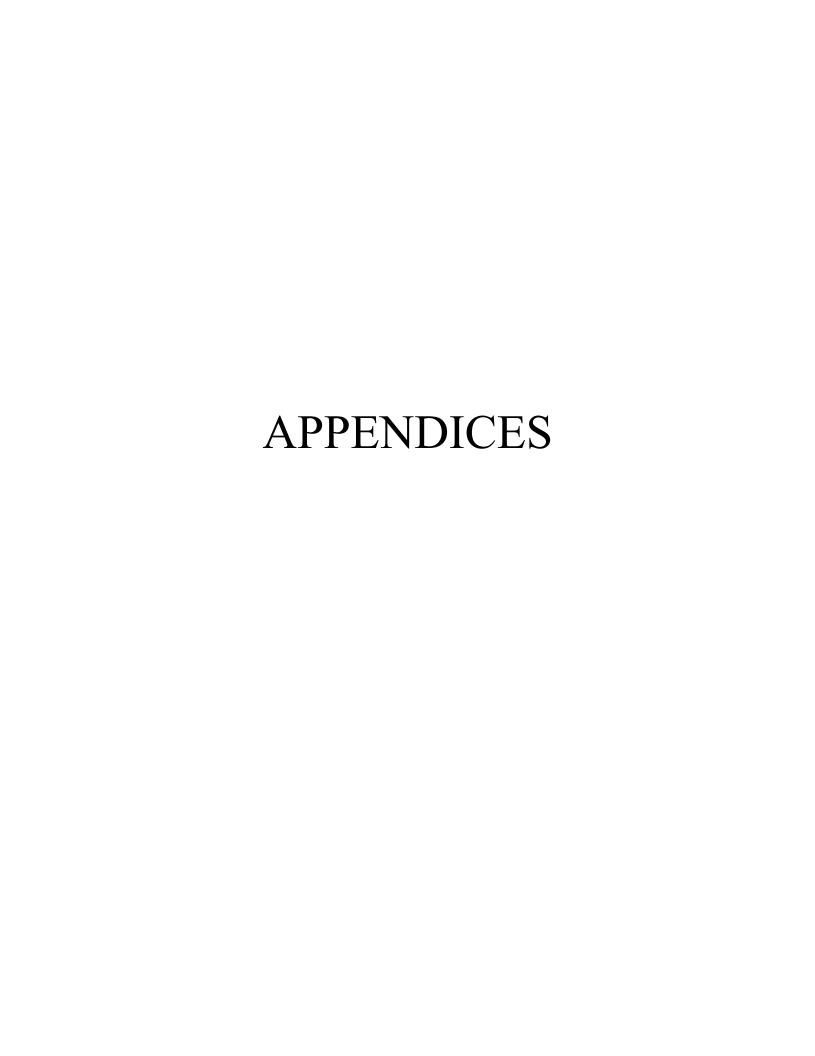


T-19-S R-31-E

EDDY COUNTY, NM

Drawing date: 11/29/16

Drafted by: T. Grieco



APPENDIX – A Final C-141

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

* Attach Additional Sheets If Necessary

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

Form C-141

Revised August 8, 2011

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

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

			Rele	ease Notific	ation	and Co	orrective A	ction	L			
						OPERA	ГOR		☐ Initia	al Report	\boxtimes	Final Report
Name of Co	mpany: Bo	OPCO, L.P.			(Contact: An	ny Ruth					
			04 Carlst	oad, N.M. 88220	7	Telephone N	No. 575-887-732	29				
Facility Nar	ne: BEU I	Hackberry 34	4 Federal	#001	I	Facility Typ	e: Tank Battery	/SWD				
Surface Ow	ner: Feder	al		Mineral O	wner:	Federal			API No	. 30-015-4	0288	
				LOCA	TION	OF RE	LEASE					
Unit Letter A	Section 34	Township 19S	Range 31E	Feet from the 800	North/S North	South Line	Feet from the 825	East/V East	Vest Line	County Eddy		
			L	atitude32.622				o				
				NAT	URE	OF REL			77.1 P		200111	
Type of Rele		roduced Wate					Release 927 bbls			Recovered : Hour of Dis		S
Source of Re	lease Chai	rge pump con	nection		a.	10/25/2015	Iour of Occurrenc time unknown	e	10/25/201		Covery	
Was Immedia	ate Notice G		Yes [No Not Re	quired	If YES, To Mike Brate	Whom? cher/Heather Patte	erson (N	MOCD), Ji	im Amos (B	LM)	
By Whom?							Hour 10/25/2015					
Was a Water	course Reac		Yes 🗵	No		If YES, Vo	olume Impacting t	he Wate	ercourse.			
If a Watercou	ırse was Imp	oacted, Descr	ibe Fully.									
Describe Cau	ise of Proble	em and Reme	dial Actio	n Taken.*						AND		
A connection	on the char	ge pump by-	pass line f	ailed. The connec	tion was	s repaired.						
	4.00	1.01		4						agen		
Describe Are	a Affected a	and Cleanup A	Action Tak f caliche r	ten.* oad within the fenc	ed batte	rv area. Vac	num trucks recov	ered sta	nding fluid	s. The impa	acted ar	ea was
scraped and	132 cubic ya	ards of saturat	ed caliche	surface soils were	e remove	ed to a NMO	CD approved disp	posal fac	cility. In N	ovember, 20	016, soi	l samples
were collecte	ed and sent t	o a commerci	al laborate	ory for chloride an	alysis.	Chlorides the	roughout the soil p	orofile v	vere confirm	ned to be be	low the	;
recommende	d action leve	el.										
I hereby certi	ify that the i	nformation gi	ven above	is true and compl	lete to th	ne best of my	knowledge and u	nderstar	nd that purs	suant to NM	OCD rt	iles and
regulations a	ll operators	are required t	o report ar	nd/or file certain rece of a C-141 repo	elease no	otifications a	nd perform correc	tive act	ions for rela	eases which	may en	danger
should their	or the envir	onment. The	acceptant	investigate and re	ert by the emediate	e contaminat	ion that pose a thr	eat to g	ound water	r. surface wa	ater, hu	man health
or the enviro	nment. In a	ddition, NMC	OCD accep	otance of a C-141	report de	oes not reliev	ve the operator of	respons	ibility for c	ompliance v	vith any	other
federal, state	, or local lav	vs and/or regu	ılations.									
Signature:	Virul	Un	ts				OIL CON	SERV	<u>ATION</u>	DIVISIO	<u>)N</u>	
Printed Name	e: Amy F	Ruth			1	Approved by	Environmental S	pecialis	t:			
Title: En	vironmental	Supervisor				Approval Da	te:		Expiration	Date:		
Title. Dil	· · · · · · · · · · · · · · · · · · ·	Super vibor										
E-mail Addre	ess: ACI	Ruth@basspe	t.com		(Conditions o	f Approval:			Attached		
Date: 1/4/2	017		Phone:	432-661-0571								

APPENDIX – B Analytical Results



November 17, 2016

ROBBIE RUNNELS

Basin Environmental Service

P.O. Box 301

Lovington, NM 88260

RE: HACKBERRY SWD

Enclosed are the results of analyses for samples received by the laboratory on 11/16/16 15:50.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-16-8. 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/ga/lab accred certif.html.

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

Method EPA 552.2 Haloacetic Acids (HAA-5)
Method EPA 524.2 Total Trihalomethanes (TTHM)
Method EPA 524.4 Regulated VOCs (V1, V2, V3)

Celey D. Keine

Accreditation applies to public drinking water matrices.

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

Sincerely,

Celey D. Keene

Lab Director/Quality Manager



Analytical Results For:

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

Received: 11/16/2016 Sampling Date: 11/16/2016
Reported: 11/17/2016 Sampling Type: Soil

Project Name: HACKBERRY SWD Sampling Condition: ** (See Notes)
Project Number: NONE GIVEN Sample Received By: Jodi Henson

Project Location: EDDY COUNTY, NM

992

16.0

Sample ID: SP 1 @ SURFACE (H602578-01)

Chloride, SM4500CI-B	mg	/kg	Analyze	ed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	768	16.0	11/17/2016	ND	416	104	400	0.00	
Sample ID: SP 1 @ 2' (H6	02578-02)								
Chloride, SM4500CI-B	mg	/kg	Analyze	ed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier

Sample ID: SP 1 @ 3' (H602578-03)

Chloride

Chloride, SM4500CI-B	mg,	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	256	16.0	11/17/2016	ND	416	104	400	0.00	

ND

416

104

400

0.00

11/17/2016

Sample ID: SP 1 @ 4' (H602578-04)

Chloride, SM4500CI-B	mg	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	176	16.0	11/17/2016	ND	416	104	400	0.00	

Cardinal Laboratories *=Accredited Analyte

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Celey D. Keine



Analytical Results For:

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

Received: 11/16/2016 Sampling Date: 11/16/2016

Reported: 11/17/2016 Sampling Type: Soil

Project Name: HACKBERRY SWD Sampling Condition: ** (See Notes)
Project Number: NONE GIVEN Sample Received By: Jodi Henson

Project Location: EDDY COUNTY, NM

Sample ID: SP 2 @ SURFACE (H602578-05)

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	224	16.0	11/17/2016	ND	416	104	400	0.00	

Sample ID: SP 2 @ 1' (H602578-06)

Chloride, SM4500CI-B	mg/	kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	432	16.0	11/17/2016	ND	416	104	400	0.00	

Sample ID: SP 2 @ 4' (H602578-07)

Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	208	16.0	11/17/2016	ND	416	104	400	0.00	

Sample ID: SP 2 @ 5' (H602578-08)

Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	112	16.0	11/17/2016	ND	416	104	400	0.00	

Sample ID: SP 3 @ SURFACE (H602578-09)

Chloride, SM4500Cl-B	` mg	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	304	16.0	11/17/2016	ND	416	104	400	0.00	

Cardinal Laboratories *=Accredited Analyte

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Celey D. Keine



Analytical Results For:

Basin Environmental Service ROBBIE RUNNELS P.O. Box 301 Lovington NM, 88260

(575) 396-1429

Received: 11/16/2016 Sampling Date: 11/16/2016

Reported: 11/17/2016 Sampling Type: Soil

Fax To:

Project Name: HACKBERRY SWD Sampling Condition: ** (See Notes)
Project Number: NONE GIVEN Sample Received By: Jodi Henson

Project Location: EDDY COUNTY, NM

Sample ID: SP 3 @ 1' (H602578-10)

Chloride, SM4500Cl-B mg/kg Analyzed By: AC Analyte Result Reporting Limit Analyzed Method Blank BS % Recovery True Value QC RPD Qualifier Chloride 256 16.0 11/17/2016 ND 416 104 400 0.00

Sample ID: SP 3 @ 2' (H602578-11)

Chloride, SM4500Cl-B mg/kg Analyzed By: AC Reporting Limit Analyzed Method Blank BS True Value QC RPD Qualifier Analyte Result % Recovery Chloride 240 16.0 11/17/2016 416 104 400 0.00 ND

Cardinal Laboratories *=Accredited Analyte

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Celeg D. Kreene



Notes and Definitions

QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS

recovery.

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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Celeg D. Freene



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

· · · · · · · · · · · · · · · · · · ·	A CONTRACTOR DESCRIPTION OF THE PROPERTY OF TH			
Company Maine. KaSIX		BILL TO		ANALYSIS REQUEST
Project Manager: 2066 / Kunnels		P.O. #:		
Address:		Company: Balco		
City: State:	Zip:	3	Ruth	
Phone #: Fax #:		Address:		
Project #: Project Owner:	BOPC O	City:		
Project Name: Hackberry Swb		State: Zip:		
Project Location: Eddy County	7	#		
Sampler Name: Rebbie Kunhel	7	Fax #:		
FOR LAB USE ONLY	MATRIX	PRESERV SAMPLING	"]	
	S ER		•	
Lab I.D. Sample I.D.	AINERS DWATE WATER	SE: OL	1-	
H1007578	(G)RAB # CONT GROUN WASTE SOIL OIL SLUDG OTHER	ACID/BAICE / CO	TIME	
3 185	9	11/16/16	0930	
2 5/10 2:	61 '		1580	
J 4/ 8 3	-		1000 0	
sold.			1010	
5 Shale surface	,		w30 /	
1 27 K			1100	
£20 4			1138	
5 2005			145	
J SP360 Suctice			130 V	
PLEASE NOTE: Liability and Damages Cartinal's liability and clients available consols for	-	11/14/16	1240 0	
analyses. All claims including those for negligence and any other cause whatscever shall be deemed waived unless made in writing and provided by Cardinal within an demonstration to the amount paid by the client for the	claim arising whether based in contract or to emed waived unless made in writing and rec	ort, shall be limited to the amount paid by	the client for the	

25.80

Sample Condition
Cool Intact
Yes Yes
No No

Sampler - UPS - Bus - Other: #75

Delivered By: (Circle One)

Time:

Received By:

Fax Result: REMARKS:

□ Yes

O ON

Relinquished By:

Relinquished By:



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name: BCX'L	BILL TO ANALYSIS REQUEST
Project Manager: 2061 Cunnell	
Address:	Company: 30 PC 0
City: State: Zip:	
Phone #: Fax #:	Address:
Project #: Project Owner: Rape O	City:
	State: Zip:
Project Location: Eddy County, Nr.	Phone #:
Sampler Name: Robbit Kunhels	Fax #:
FOR LAB USE ONLY MATRIX	PRESERV. SAMPLING
CONTAINERS GROUNDWATER WASTEWATER SOIL OIL SLUDGE	OTHER: ACID/BASE: ICE / COOL OTHER: TIME
7	14/16/k
Jamages. Cardinal's liability and clent's exculsive remedy for any claim arising those for negligence and any other cause whatsoever shall be deemed walved final be liable for incidental or consequental damages, including without limitati out of or related to the performance of services hereunder by Cardinal, regard) whether based in contract or tort, shall be limited to the amount paid by the client for the unless made in writing and received by Cardinal within 30 days after completion of the applicable on, business interruptions, loss of use, or loss of profits incurred by client, its subdistairies, less of whether such claim is based upon any of the above stated reasons or otherwise.
M Regelved By:	
Relinquished By: Date: Received By:	REMARKS:

Sampler - UPS - Bus - Other: # 75

Sample Condition
Cool Intact
Yes Yes
No No

Delivered By: (Circle One)

Time:

APPENDIX – C Photo Documentation

Big Eddy Unit, Hackberry 34 Federal #001 Unit Letter A, Section 34, T19S, R31E



Initial release, facing south

10/25/15



Initial release, facing north





Initial release, facing northwest

10/25/15



Initial release, facing northeast

10/25/15