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ENVIRONMENTAL SUPIRVISOR
DIRECT: (432) 818-1615
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1 RP-4173 NKJ1603954339

October 1, 2019

Mr. Bradford Billings State of New Mexico Oil Conservation Division 1220 South St Francis Drive Santa Fe, NM 87505

RE: 1RP-4173 DC Hardy Battery

Mr. Billings,

In compliance with 19.15.29.15(B) NMAC and the agreement submitted by Apache Corporation on November 8, 2018, Apache Corporation is submitting information related to deferment request for the release occurring April 10, 2012. Apache is respectfully submitting the deferment request for your approval. Unless further information is requested by NMOCD, Apache Corporation considers this release deferred.

If there are any questions, please feel free to contact me by telephone at 432-818-1615 or by e-mail at David.Feather@ApacheCorp.com.

Sincerely,

David Feather

Environmental Supervisor

Apache Corporation - Permian Basin Region

Attachment: Deferment Report Dated August 30, 2019

1RP-4173 DELINEATION AND DEFERRAL REPORT DC Hardy Battery Crude Oil Release Lea County, New Mexico

Latitude: N 32.45886° Longitude: W 103.18070°

LAI Project No. 19-0112-05

August 30, 2019

Prepared for: Apache Corporation 2350 W. Marland Blvd Hobbs, New Mexico 88240

Prepared by: Larson & Associates, Inc. 507 North Marlenfeld Street, Suite 205 Midland, Texas 79701

Mark J. Larson, P.G. Certified Professional Geologist #10490 Rachel E. Owen Sr. Geoscientist

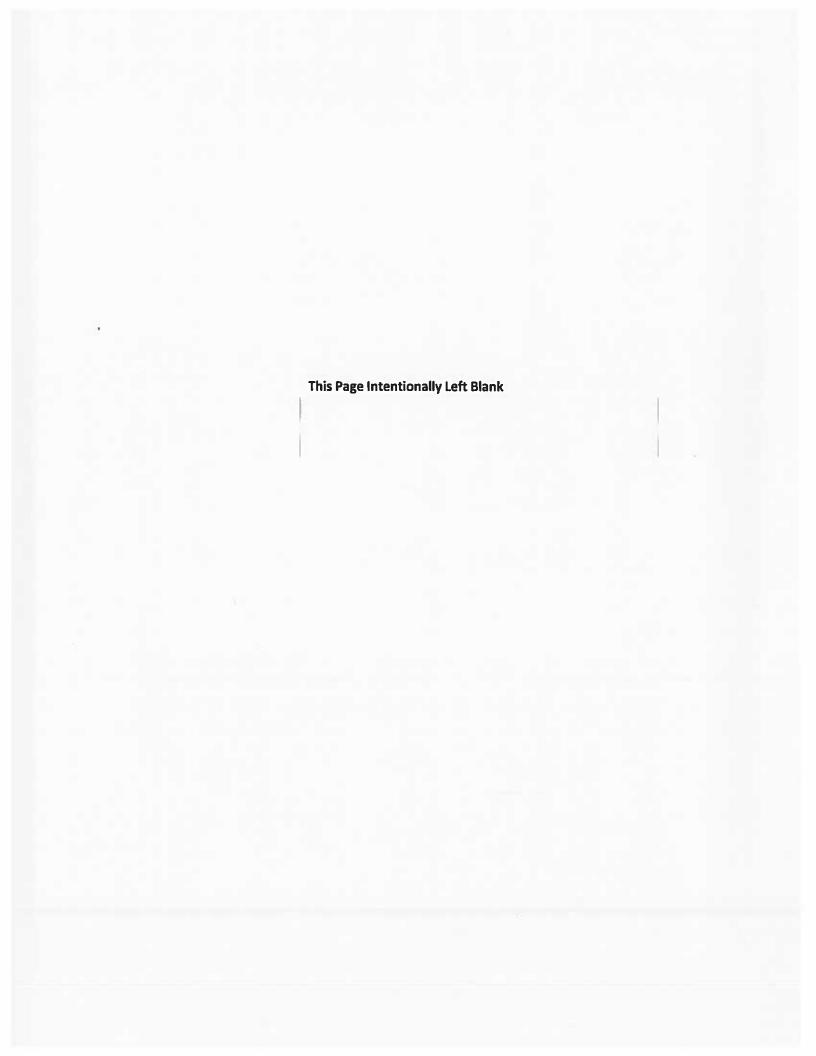


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1.0 INTRODUCTION

Larson & Associates, Inc. (LAI) has prepared this delineation and deferral report on behalf of Apache Corporation (Apache) for submittal to the New Mexico Oil Conservation (OCD) District I for a crude oil release at the DC Hardy Battery located in Unit P (SE/4, SE/4), Section 20, Township 21 South, Range 37 East in Lea County, New Mexico. The geodetic position is North 32.45886° and West -103.18070°. Figure 1 presents a topographic map. Figure 2 presents an aerial map.

1.1 Background

The release occurred on April 10, 2012, due to a lightning strike that shut down power to the transfer pump causing the tank to overflow. The failure allowed for approximately 10 barrels (bbls) of crude oil to be released. Approximately 8 bbls of crude oil were recovered. The fluid was contained inside the earthen berm around the southeastern corner of the Facility. The initial C-141 was submitted on April 18, 2012, and assigned remediation permit number of 1RP-4173.

Initial sampling was conducted by Rice Environmental Consulting & Safety, LLC (RECS) on April 10, 2012. Soil samples were collected from two (2) locations (Point #1 and Point #2) in the spill area at 0, 0.5, 1, and 1.5 feet below ground surface (bgs). The samples were delivered to Cardinal Laboratories located in Hobbs, New Mexico, and analyzed for gasoline range organics (GRO), diesel range organics (DRO), and chloride by EPA SW-846 Method 8015 and titration method SM4500 CL-B, respectively. Chloride reported below the delineation level of 600 milligrams per kilogram (mg/Kg) for all soil samples. GRO and DRO concentrations reported above remediation action levels of 2,500 mg/Kg at Sample Point #1, 0 feet bgs (12,800 mg/Kg and 42,200 mg/Kg) and Sample Point #2, 0 feet bgs (14,400 mg/Kg and 49,200 mg/Kg). Appendix B presents the RECS data.

1.2 Physical Setting

The physical setting is as follows:

- The surface elevation is approximately 3,494 feet above mean sea level (msl);
- The topography slopes gently towards the southeast;
- There are no surface water features within 1,000 feet of the Site;
- The soils are designated as "Pyote and Maljamar fine sands, 0 to 3 percent slopes", consisting of 0 to 24 inches of fine sand underlain by 24 to 50 inches of sandy clay loam and 50 to 60 inches of cemented material (caliche);
- The surface geology consists of Eolian and piedmont deposits (Holocene to middle Pleistocene) interlayed eolian sands and piedmont-slope deposits;
- Groundwater occurs in the Ogallala formation at 65 bgs based on the New Mexico Office of the State Engineer (NMOSE) website;
- According to the New Mexico Office of the State Engineer (OSE) website the nearest groundwater well is located in Unit O, Section 20, Township 21 South, Range 37 East, approximately 0.25 miles or about 1,336.32 feet south of the Site.

1.3 Remediation Levels

The following remediation standards are based on closure criteria for soils impacted by a release as presented in Table 1 of 19.15.29 NMAC:

Benzene 10 mg/Kg
 BTEX 50 mg/Kg
 TPH 2,500 mg/Kg
 Chloride 10,000 mg/Kg

Further, 19.15.29.13 NMAC (Restoration, Reclamation and Re-Vegetation) requires the operator to restore the impacted surface area that existed prior to the release or their final land use.

2.0 DELINEATION

On June 19, 2019, Apache personnel collected additional soil samples at Point #1 (SP-1) and Point #2 (SP-2) using a contracted backhoe. Samples were collected at 2, 3, and 6 feet bgs at SP-1 and 3 feet bgs at SP-2. The samples were delivered to Cardinal Laboratories in Hobbs, NM and analyzed for benzene, toluene, ethylbenzene and xylenes (BTEX) by EPA SW-846 Method 8021B and total petroleum hydrocarbons (TPH), including gasoline range organics (C6-C12), diesel range organics (>C12-C28) and oil range organics (>C28-C35) by EPA SW-846 Method 8015M.

Benzene and BTEX were below the OCD remediation levels of 10 mg/Kg and 50 mg/Kg, respectively. TPH was reported above the remediation levels of 2,500 mg/Kg at SP-1, 3 feet bgs (8,380 mg/Kg), and SP-1, 6 feet bgs (5,146 mg/Kg). TPH was reported below the remediation level (2,500 mg/Kg) in sample SP-2, 3 feet bgs.

On July 29, 2019 and August 19, 2019, LAI personnel used direct push technology (DPT) to vertically delineate the spill directly south of the tank inside the firewall (Sample Point #3). Soil samples were collected every 5 feet to 20 feet bgs. The samples were delivered by Apache personnel to Cardinal Laboratories in Hobbs, New Mexico, and were analyzed for BTEX and TPH, including gasoline range organics (C6-C12), diesel range organics (>C12-C28) and oil range organics (>C28-C35) by EPA SW-846 Methods 8021B and 8015M, respectively. Soil samples collected at 15 and 20 feet bgs were analyzed for chloride by titration method SM4500CL-B. The laboratory reported benzene, BTEX, and chloride below the remediation limits of 10 mg/Kg, 50 mg/kg, and 2,500 mg/Kg, respectively. TPH was reported above the remediation action level of 2,500 mg/Kg in sample SP-3, 10 feet bgs (3,207 mg/Kg). TPH reported below the remediation action level at SP-3, 15 feet bgs (<10 mg/Kg). Table 1 presents the soil sample analytical data summary.

Figure 2 presents the soil sampling locations. Appendix C presents the laboratory report. Appendix D presents the site photographs.

3.0 DEFERRAL REQUEST

Apache has delineated benzene, BTEX, TPH and chloride below the remediation limits of 10 mg/Kg, 50 mg/Kg, 2,500 mg/Kg and 10,000 mg/Kg, respectively. Due to the spill area being in close proximity to production equipment, Apache respectfully requests a deferral to complete remediation at the DC Hardy (1RP-4173) until abandonment.

Tables

Table 1
Delineation Soll Sample Analytical Data Summary
Apache Corporation, DC Hardy Battery
Lea County, New Mexico
32.45886 North -103.18070 West

Page 1 of 1

Sample	Depth (Feet)	Collection Date	Status	Benzene (mg/Kg	BTEX (mg/Kg)	C6 - C12 (mg/Kg)	C12 - C28 (mg/Kg)	C28 - C35 (mg/Kg)	TPH (mg/Kg)	Chloride (mg/Kg)
Remediation	Level:			10	50				2,500	10,000
SP-1	2	6/19/2019	In-Situ	<0.050	<0.300	<10.0	30.3	59	89.4	
	3	6/19/2019	In-Situ	0.91	29.20	1,320	5,820	1,240	8,380	-
	6	6/19/2019	In-Situ	0.740	17.40	611	3,570	965	5,146	-
SP-2	3	6/19/2019	In-Situ	<0.050	<0.300	<10.0	236	64.0	300	
SP-3	5	7/29/2019	In-Situ	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	_
	10	7/29/2019	In-Situ	<0.050	<0.300	<50.0	2,250	957.0	3,207	_
	15	8/19/2019	In-Situ	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	64.0
	20	8/19/2019	In-Situ	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	48.0

Notes: analysis performed by Cardinal Laboratories, Hobbs, New Mexico by EPA SW-846 Methods 80218 (BTEX), 8015M (TPH), and SM4500CL-B (chloride) Depth in feet below ground surface (bgs)

mg/kg: milligrams per kilogram equivalent to parts per million (ppm)

< denotes concentration less than analytical method reporting limit

Bold and Highlighted exceeds OCD remediation levels

Figures

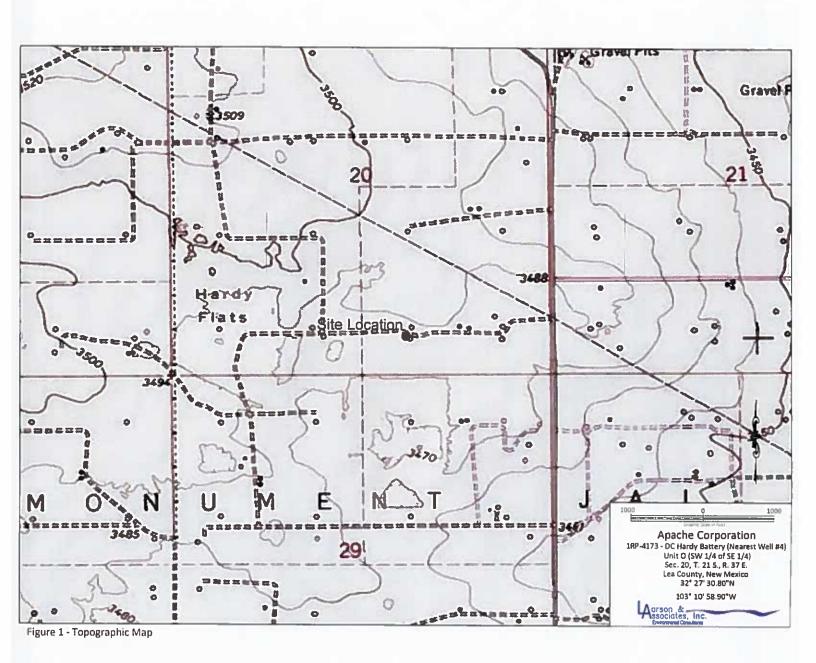




Figure 2 - Aerial Map

Appendix A

Initial C-141

District I 1625 N. French Dr., Hobbs, NM 88240

HOBBS OCD Energy Minerals and Natural Resources State of New Mexico

Form C-141 Revised August 8, 2011

District III
1000 Rio Brazos Road, Aztec, NM 875APR 3 0 2012

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.

			Rel	ease Notific VED	catio	n and Co	orrective A	ction				
			RECEI	AED		OPERA?	FOR	0	Initia	al Report		Final Report
Name of Co							talie Gladden					
Address PO							No. 575-390-41					
Facility Nar	ne DC Ha	irdy Battery	(nearest	well #4)		Facility Typ	e Production F	acility				
Surface Ow	ner Sims			Mineral C	wner	NMOCD			API No	. 30-025-0	6691	
						N OF REI	LEASE					
Unit Letter	Section	Township	Range	Feet from the	North	South Line	Feet from the	East/W	est Line	County		
0	20	21S	37E	510	FSL		1980'	FEL		Lea		
			La	titude		Longitud	le					
					HRE	OF REL		********				
Type of Relea	ase Oil			INAI	UKE		Release 10		Volume I	Recovered 8		
Source of Re		ing/Electrical					lour of Occurrence	e	Date and	Hour of Dis		
Was Immedia	ate Notice (Given?				If YES, To	Whom?		04/10/12			
			Yes 🗵	No 🗌 Not Re	equired							
By Whom?						Date and F						
Was a Water	course Read		Yes 🖸	No		If YES, Vo	olume Impacting t	the Water	course.			
If a Watercou	iena ilian Im		- 33									
Describe Cau Due to thund transfer pump	cr and light	ning storms th	e electric	ity was knocked o	out whic	h shut down t	he automation co	mmunical	tion syste	m, which did	not sig	nal the
Describe Are Site will be h				ken.* vill be followed to	closer.		, 7-8-set-					
regulations al public health should their o	Il operators or the envi- operations had a nment. In a	are required to ronment. The ave failed to a ddition, NMC	report and acceptant accep	is true and comp nd/or file certain r ce of a C-141 report investigate and r otance of a C-141	elease nort by the emediat	otifications ar c NMOCD m c contaminati	nd perform correct arked as "Final R on that pose a thre the operator of a	ctive action eport" do eat to gro responsib	ns for rele es not reli und water ility for co	cases which ieve the oper r, surface wa ompliance w	may end ator of l ter, hun ith any	danger liability nan health
Signature:	Natulie C	tali	G	ladde	U	Approved t				DIVISIO		
Title: EHS E						Approval I	2/8/1		I	DV		U
E-mail Addre	ss: natalic.	gladden@apa	checorp.e	om		Conditions of		6		Attached		
Date: 4/18		ate If Nacace		e: 575-390-4186								

Appendix B

Rice Environmental Consulting and Safety, LLC Data



AE Order Number Banner

Report Description

This report shows an AE Order Number in Barcode format for purposes of scanning. The Barcode format is Code 39.



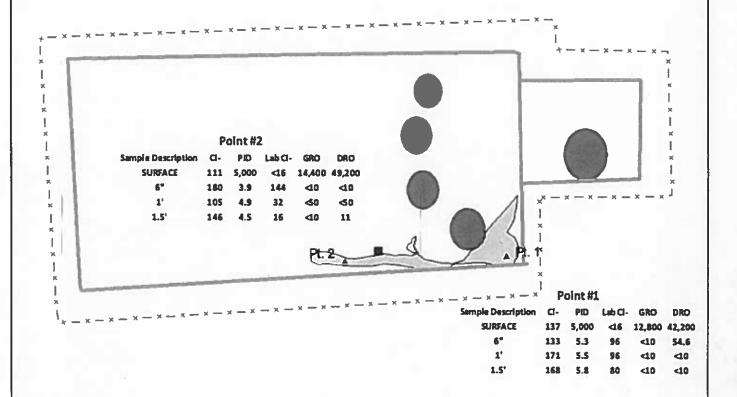
App Number: pKJ1603954488

1RP - 4173

APACHE CORP

C-141

MED MY APPUL



Legend

- ▲ SAMPLE POINTS
- ELECTRICAL CONTROL

BERM

- × - FENCE LINE

STAIN (287 sq ft)

TANKS

Landowner = Apache



APACHE DC HARDY TANK BATTERY NO. 1 AD

LEGALS: UL O & P sec. 20 T-21-S R-37-E LEA COUNTY, NM DGW = 76 ft

0 25 50

GPS date: 4/10/12 DH
Drawing date: 4/16/12
Drafted by: L. Weinheimer

Appendix C

Laboratory Reports



June 25, 2019

BRUCE BAKER

APACHE CORP - HOBBS

2350 W. MARLAND BLVD.

HOBBS, NM 88240

RE: DC HARDY

Enclosed are the results of analyses for samples received by the laboratory on 06/19/19 16:40.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-18-11. 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.qov/field/ga/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.

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



APACHE CORP - HOBBS BRUCE BAKER 2350 W. MARLAND BLVD. **HOBBS NM, 88240**

Fax To:

(575) 393-2432

Received:

06/19/2019 06/25/2019

Reported: Project Name:

DC HARDY Project Number: BATTERY #1 Project Location:

Sampling Date:

06/19/2019 Soil

Sampling Type: Sampling Condition: Sample Received By:

Cool & Intact Tamara Oldaker

NOT GIVEN

Sample ID: SP 1 @ 2' (H902124-01)

BTEX 8021B

Analyzed By: BF mg/kg

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/20/2019	ND	1.78	89.2	2.00	2.66	10:53
Toluene*	<0.050	0.050	06/20/2019	ND	1.76	87.9	2.00	2.19	
Ethylbenzene*	<0.050	0.050	06/20/2019	ND	1.70	85.1	2.00	2.34	
Total Xylenes*	<0.150	0.150	06/20/2019	ND	5.20	86.6	6.00	1.41	
Total BTEX	<0.300	0.300	06/20/2019	ND					

Surrogate: 4-Bromofluorobenzene (PIL

105 %

73.3-129

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	06/21/2019	ND	206	103	200	1.41	
DRO >C10-C28*	30.3	10.0	06/21/2019	ND	176	88.2	200	6.16	
EXT DRO >C28-C36	59.1	10.0	06/21/2019	ND					

Surrogate: 1-Chlorooctane Surrogate: 1-Chlorooctadecane 95.6%

41-142

96.2 %

37.6-147

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Slability and Damages. Cardinal's Bability and d in contract or turn, shall be limited to the amount paid by chart for analyses. All claims, including those for neglic 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 eviden including, without limitation, business interruptions, loss of use, or lose of profits incurred by clerks, artifactors or successors arising out of or related to the performance of the services beinginder by Cardina es, affiliates or successors arrang out of or related to the performance of the services hereunder by Cardinal, regardless of whether such

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APACHE CORP - HOBBS BRUCE BAKER 2350 W. MARLAND BLVD. HOBBS NM, 88240

Fax To:

(575) 393-2432

Received:

06/19/2019

Reported: Project Name: 06/25/2019 DC HARDY

Project Number: Project Location:

BATTERY #1 NOT GIVEN Sampling Date:

06/19/2019

Sampling Type:

Soil

Sampling Condition:

Cool & Intact

Sample Received By:

Tamara Oldaker

Sample ID: SP 1 @ 3' (H902124-02)

BTEX 8021B	mg,	/kg	Analyze	d By: BF					5-04
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	0.905	0.500	06/20/2019	ND	1.78	89.2	2.00	2.66	
Toluene*	4.55	1.00	06/20/2019	ND	1.76	87.9	2.00	2.19	
Ethylbenzene*	3.36	1.00	06/20/2019	ND	1.70	85.1	2.00	2.34	
Total Xylenes*	20.4	3.00	06/20/2019	ND	5.20	86.6	6.00	1.41	
Total BTEX	29.2	5.50	06/20/2019	ND					

TPH 8015M	mg	/kg	Analyze	d By: MS					S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	1320	50.0	06/21/2019	ND	206	103	200	1.41	
DRO >C10-C28*	5820	50.0	06/21/2019	ND	176	88.2	200	6.16	
EXT DRO >C28-C36	1240	50.0	06/21/2019	ND					

Surrogate 1-Chlorooctane	151 %	41-142
Surrogate: 1-Chlorooctadecane	195 %	37.6-147

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Celeng & Kenne



APACHE CORP - HOBBS BRUCE BAKER 2350 W. MARLAND BLVD. HOBBS NM, 88240 Fax To: (575) 393-2432

184

Received: 06/19/2019 Reported: 06/25/2019

Project Name: DC HARDY
Project Number: BATTERY #1
Project Location: NOT GIVEN

06/19/2019

Sampling Condition: Sample Received By:

Sampling Date:

Sampling Type:

06/19/2019 Soil

Cool & Intact Tamara Oldaker

Sample ID: SP 2 @ 3' (H902124-03)

BTEX 8021B	mg,	kg	Analyze	d By: BF					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/21/2019	ND	1.78	89.2	2.00	2.66	
Toluene*	<0.050	0.050	06/21/2019	ND	1.76	87.9	2.00	2.19	
Ethylbenzene*	<0.050	0.050	06/21/2019	ND	1.70	85.1	2.00	2.34	
Total Xylenes*	<0.150	0.150	06/21/2019	ND	5.20	86.6	6.00	1.41	
Total BTEX	<0.300	0.300	06/21/2019	ND					
Surrogate: 4-Bromofluorobenzene (PIE	108	% 73.3-12	9				3,977		
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	06/21/2019	ND	196	98.1	200	3.72	
DRO >C10-C28*	236	10.0	06/21/2019	ND	194	97.0	200	0.633	
EXT DRO >C28-C36	64.0	10.0	06/21/2019	ND					
Surrogate: 1-Chlorooctane	96.2	% 41-142) (0.000			
Surrogate: 1-Chlorooctadecane	111 5	% 37.6-14	7						

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Celeg There



APACHE CORP - HOBBS BRUCE BAKER 2350 W. MARLAND BLVD. HOBBS NM, 88240

Fax To:

(575) 393-2432

Received: Reported: 06/19/2019

06/25/2019

Project Name: Project Number: DC HARDY BATTERY #1

Project Location:

NOT GIVEN

Sampling Date:

06/19/2019

Sampling Type:

Soil

Sampling Condition: Sample Received By: Cool & Intact

Tamara Oldaker

Sample ID: SP 1 @ 6' (H902124-04)

BTEX 8021B	mg/	kg	Analyze	d By: BF					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	0.740	0.500	06/21/2019	ND	1.78	89.2	2.00	2.66	
Toluene*	4.93	1.00	06/21/2019	МĐ	1.76	87.9	2.00	2.19	
Ethylbenzene*	3.96	1.00	06/21/2019	ND	1.70	85.1	2.00	2.34	
Total Xylenes*	7.76	3.00	06/21/2019	ND	5.20	86.6	6.00	1.41	
Total BTEX	17.4	5.50	06/21/2019	ND					
Surrogate: 4-Bromofluorobenzene (PIC	113 9	6 73.3-12	9						
TPH 8015M	mg/	kg	Analyze	d By: MS					S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	611	50.0	06/21/2019	ND	196	98.1	200	3.72	QR-03
DRO >C10-C28*	3570	50.0	06/21/2019	ND	194	97.0	200	0.633	QR-03, QM-07
EXT DRO >C28-C36	965	50.0	06/21/2019	ND					
Surrogate: 1-Chlorooctane	1195	6 41-142	?						
Surrogate: 1-Chlorooctadecane	155 9	6 37.6-14	17						

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and chent's exclusive remaily for any claim arising, whether based in concret or tort, shall be limited to the amount paid by cleent for analyses. All claims, including those for negligence and any other cause whitesonver shall be deemed weived 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 autaidanes, 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 measons or otherwise. Results relate only to the semples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboretones.

Celegit Keene



Notes and Definitions

S-06	The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
QR-03	The RPD value for the sample duplicate or MS/MSD was outside of QC acceptance limits due to matrix interference. QC batch accepted based on LCS and/or LCSD recovery and/or RPD values.
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-8 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 cherit's exclusive remedy for any claim arising, whether based in contract or tort, shall be arrested to the amount paid by client for analyses. All claims, including those for negligence and any other chuse whitstoriver shall be deemed waved unless made in writing and recoved by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal bit labele for incisental or consequential damages, including, without limitation, bitiness interruptions, loss of use, or loss of profits incurred by client, its subsidianes, affiliates or successors ensing 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 resons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approved of Cardinal Liaboratomes.

Celeg & Keine



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Common Monor				
Company Name: LOCOLE		BILLIO	ANALYSIS	YSIS REQUEST
Project Manager: SDU Brook		P.O. #:		
Address:		Company:		
City: Labhs State: 6911	State: 69/1/12ip: 88,240	Attn:		
# .		Address:		
Project #: Project Owner:		City:		
Project Name:		State: Zip:		
Project Location: DC Hardy Bythery	100	Phone #:	0	
Ser Over		Fax #:	PA	
	MATRIX	PRESERV. SAMPLING	TF	
Lab I.D. _U Sample I.D.	(G)RAB OR (C)OM # CONTAINERS GROUNDWATER WASTEWATER SOIL OIL SLUDGE	OTHER: ACID/BASE: ICE / COOL OTHER: DATE		
1 20/02	7	~		
2 501031	0 1	1 (4/52	2	
,	5 2	1 / 5:547		
4 301061	6 1 1	1 7 10:114	-	
PLEASE NOTE: Liability and Displayon. Candina's lability and clerity anchaive ramindy for any claim arising whether based in contract or lad, shall be limited to the amount paid by the clerit anchains analyses. All claims including those les negligence and any other cause whetherers in all the develop the contract within 10 days after competence of septicable annives. In one event shall candinat be liable for inclined at contract and any other cause whetherers without members, including without inflation, before, the subject of the claim is the claim of the	'n auchaisse zerniedy foi any claim artung whether bassed in contract or tod, an auchaisserer shall be deemed welved urbas medie in writing and received au whetseaver shall be deemed welved urbas medie in writing and received auchaisse indexemble and an auchaisse and such death of the best of secretary beautorists.	nitract or text, whall be limited to the amount past by the elevet for the grand received by Continue within 30 days silve completes of the text, less of u.e., or loss of publis incurred by client, its subsidiaries which is broad sews of the above a triad exercer or ordereduce.	ert for the or of the applicable field arises.	
10			Phone Result: ☐ Yes ☐ No Add'I Phone #: Fax Result: ☐ Yes ☐ No Add'I Fax #: REMARKS:	hone #: ax #:
Relinquished By: Date: Time:	Received By:	Carrier .	Email Rusults	3
Delivered By: (Circle One)	Sample Condition Cool Intact	on CHECKED BY: (Initials)	(

Sampler - UPS - Bus - Other:

3.8.0

Sample Condition
Cool Intact
Cool Intact
Tes
No No



August 01, 2019

BRUCE BAKER

APACHE CORP - HOBBS

2350 W. MARLAND BLVD.

HOBBS, NM 88240

RE: DC HARDY

Enclosed are the results of analyses for samples received by the laboratory on 07/29/19 16:12.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-18-11. 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 accredited certif.html.

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

Method EPA 552.2

Haloacetic Acids (HAA-5)

Method EPA 524.2

Total Trihalomethanes (TTHM)

Method EPA 524.4

Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

Celeg D. 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



APACHE CORP - HOBBS BRUCE BAKER 2350 W. MARLAND BLVD. HOBBS NM, 88240

Fax To:

(575) 393-2432

Received: Reported: 07/29/2019 08/01/2019

Project Name: Project Number:

Project Location:

DC HARDY NONE GIVEN NOT GIVEN

Sampling Date:

07/29/2019

Sampling Type:

Soil

Sampling Condition:

Cool & Intact

Sample Received By:

Tamara Oldaker

Sample ID: SP 3 @ 5' (H902589-01)

BTEX 8021B	mg/l	kg	Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/01/2019	ND	1.94	97.0	2.00	0.844	
Toluene*	<0.050	0.050	08/01/2019	ND	2.04	102	2.00	2.80	
Ethylbenzene*	<0.050	0.050	08/01/2019	ND	1.97	98.4	2.00	1.37	- 12
Total Xylenes*	<0.150	0.150	08/01/2019	ND	5.95	99.2	6.00	2.11	
Total BTEX	<0.300	0.300	08/01/2019	ND					
Surrogate: 4-Bromofluorobenzene (PIE	104 %	6 73,3-12	9						
TPH 8015M	mg/l	kg	Analyze	d By: MS					

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	07/31/2019	ND	201	100	200	0.472	
DRO >C10-C28*	<10.0	10.0	07/31/2019	ND	201	100	200	3.79	
EXT DRO >C28-C36	<10.0	10.0	07/31/2019	ND					

Surrogate: 1-Chlorooctane Surrogate: 1-Chlorooctadecane 96.5 %

41-142

103 %

37.6-147

Cardinal Laboratories

*=Accredited Analyte

PLEASE PROTE: Liability and Damages. Cardenal's Bability and client's suckeinve ramedy for any claim arrang, whether based in contract or tork, shall be limited to the amount paid by cleint for analyses. All claims, including those for negligence and any other cause whistoners shall be deemed weight distributions, because in more shall Cardenal be Bable for incidental or consequential dismapes, recluding, without limitation, business intermations, loss of size, or loss of profits incident by cleint, it is subsidiaries, efficiency or accession arising out of or related to the performance or the services hereunder by Cardenal, regardless of whether such claims is based upon any of the above stated readout or otherwise. Results related only to the samples identified above. This report shall not be reproduced ecopie in full with written approved of Cardenal Liboretones.

Celay To Karne.



APACHE CORP - HOBBS BRUCE BAKER 2350 W. MARLAND BLVD. HOBBS NM, 88240

Fax To:

(575) 393-2432

Received:

07/29/2019 08/01/2019

Reported: Project Name:

DC HARDY NONE GIVEN

Project Number: Project Location:

NOT GIVEN

Sampling Date:

impling Date:

07/29/2019

Sampling Type:

Soil

Sampling Condition: Sample Received By: Cool & Intact

Tamara Oldaker

Sample ID: SP 3 @ 10' (H902589-02)

BTEX 8021B

ma/k

Analyzed By: ms

				J - 1112					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/01/2019	ND	1.94	97.0	2.00	0.844	
Toluene*	<0.050	0.050	08/01/2019	ND	2.04	102	2.00	2.80	
Ethylbenzene*	<0.050	0.050	08/01/2019	ND	1.97	98.4	2.00	1.37	
Total Xylenes*	<0.150	0.150	08/01/2019	ND	5.95	99.2	6.00	2.11	
Total BTEX	<0.300	0.300	08/01/2019	ND					
Surrogate: 4-Bromofluorobenzene (PIL	101 9	6 73.3-12	9					1100	
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*	<50.0	50.0	08/01/2019	ND	201	100	200	0.472	
DRO >C10-C28*	2250	50.0	08/01/2019	ND	201	100	200	3.79	
EXT DRO >C28-C36	957	50.0	08/01/2019	ND					

		the latest and the la
Surrogate: 1-Chlorooctane	92.8 %	41-142
Surrogate: 1-Chlorooctadecane	144 %	37.6-147

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 whistovers shall be idented waved unless made in writing and received by Cardinal within thirty (30) days after completions of the applicable service. In no event shall Cardinal be liable for incidental or consequential demages, including, without limitations, because training the contract of the services training out of or related to the performance of the services hereander by Cardinal, regardless of whether such claims to based upon any of the above scool research or contractive. Results relate only to the samples identified above. This report shall not be reproduced except in full with vertical aboverance.

Celeny L. Keine



Notes and Definitions

ND Analyte NOT DETECTED at or above the reporting limit

RPD Relative Percent Difference

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

Insufficient time to reach temperature.

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

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

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cerdinal's liability and chemits exclusive remedy for any claim amining, whether based in contract or tort, shall be inneed to the amount paid by clerk for analyses. All claims, including those for negligence and any other claims whistoever shall be idented with exercise and in writing and recovered within thirty (30) days after completion of the applicable services. In no event shall Cerdinal to lable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by clerk, it is subsidered, efficiency among out of or related to the performance 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 approved of Cardinal Laborisonness.

Celeny L. Kenne



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name:	ADDONE CAD	71	B///-70			ANALYSIS BEOLISET	
Project Manager:		P.O. #:		+			
Address:		Cor	Company:				
City:	State:	Zip: Attn:	2.				
Phone #:	Fax #:		Address:	100	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		
Project #:	Project Owner:		7:				
Project Name:	DC HARDY		te: Zip:				
Project Location:	DC	Pho	*		193		
Sampler Name:	8.	Fax #	*				
FOR LAB USE CHLY		MATRIX	PRESERV SAMPLING		,		
Lab I.D. H962589	Sample I.D.	(G)RAB OR (C)OMI # CONTAINERS GROUNDWATER WASTEWATER SOIL OIL SLUDGE OTHER:	ACID/BASE: ICE / COOL OTHER :	BTEX	BTEX EXT. TPH		
1	50305		7-25-15 1	1221	١		
2	SP3 @10'		7.35.6 1241	111	1		
LEASE NOTE: LIAMEY an	LEASE NOTE: Liability and Damages, Candinat's bability and client's exclusive namedy for any claim shaing whether based in conteact or text, shall be smed to the arrows paid by the client for the	file any Chirn arising whether based in contract or lart.	theil be Armine of a the armount paid by t	he chent for the			
nelyses. All châns, includin ervice. In so event shall Ca fillettes or successors analy	mayes. All claims including those for ingigenes and any other cause winasserer shall be deemed weived unless made in weiting and modered by Cardinal within 30 days abor completion of the applicable order. In no event will Cardinal in Each its incidental or consequential dismagns, including without shallong fundation, business interest by call, its subsidiaries. Effects or successor public out of the above stated by death, its subsidiaries.	sissies witessever shall be deerined weiwal unless mote in willing and received by C questal dermages, locksting without fortision, business interruptors, loss of use of of services henounder by Continual repursions of whether seath chaim is based use	d by Cardinal within 30 days allow completion of the see, or base of profits incurred by clerk, its subsidiaries were not the above stated mesons or otherwise.	piedon of the applicate to subsidiaries. or otherwise			
Relinquished By:		Received By:	Ke	ħ	☐ Yes ☐ No	Add'l Phone #: Add'l Fax #:	
kelinguisned by:	Time:	Received By:				IR	
Delivered By: (Circle One)	(Circle One) スプ	#07 Sample Condition	CHECKED BY:				

Sampier - UPS - Bus - Other:



August 22, 2019

BRUCE BAKER

APACHE CORP - HOBBS

2350 W. MARLAND BLVD.

HOBBS, NM 88240

RE: DC HARDY

Enclosed are the results of analyses for samples received by the laboratory on 08/19/19 16:30.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-18-11. 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 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.

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



APACHE CORP - HOBBS BRUCE BAKER 2350 W. MARLAND BLVD. HOBBS NM, 88240

Fax To:

(575) 393-2432

Received:

08/19/2019

Reported: Project Name: 08/22/2019 DC HARDY

Project Number: Project Location: NONE GIVEN

Sampling Date:

08/19/2019

Sampling Type:

Soil

Sampling Condition: Sample Received By: Cool & Intact

Tamara Oldaker

Sample ID: SP 3 @ 15' (H902841-01)

BTEX 8021B	mg,	/kg	Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/20/2019	ND	1.84	91.8	2.00	0.0339	
Toluene*	<0.050	0.050	08/20/2019	NĐ	2.01	100	2.00	0.828	
Ethylbenzene*	<0.050	0.050	08/20/2019	NĐ	2.11	105	2.00	0.122	
Total Xylenes*	<0.150	0.150	08/20/2019	ND	6.28	105	6.00	0.569	
Total BTEX	<0.300	0.300	08/20/2019	ND					
Surrogate: 4-Bromofluorobenzene (PIE	96.2	% 73.3-12	9			No. of London			
Chloride, SM4500CI-B	mg,	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	08/20/2019	ND	400	100	400	0.00	
TPH 8015M	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/20/2019	ND	205	103	200	3.16	
DRO >C10-C28*	<10.0	10.0	08/20/2019	ND	194	97.1	200	3.77	
EXT DRO >C28-C36	<10.0	10.0	08/20/2019	ND					
Surrogate: 1-Chlorooctane	103	% 41-142					12/24	- 1	
Surrogate: 1-Chlorooctadecane	111 5	% 37.6-14	7						

Cardinal Laboratories

*=Accredited Analyte

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Celeny Therman



APACHE CORP - HOBBS BRUCE BAKER 2350 W. MARLAND BLVD. HOBBS NM, 88240

Fax To:

(575) 393-2432

Received: Reported:

DTEV OASID

08/19/2019 08/22/2019

Project Name: Project Number: DC HARDY NONE GIVEN

Project Location:

NOT GIVEN

Sampling Date:

08/19/2019

Sampling Type:

Soil

Sampling Condition:

Cool & Intact

Sample Received By:

Tamara Oldaker

Sample ID: SP 3 @ 20' (H902841-02)

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	08/20/2019	ND	1.84	91.8	2.00	0.0339	ļ
Toluene*	<0.050	0.050	08/20/2019	ND	2.01	100	2.00	0.828	
Ethylbenzene*	<0.050	0.050	08/20/2019	ND	2.11	105	2.00	0.122	
Total Xylenes*	<0.150	0.150	08/20/2019	ND	6.28	105	6.00	0.569	
Total BTEX	<0.300	0.300	08/20/2019	ND					
Surrogate: 4-Bromofluorobenzene (PIE	96.9	% 73.3-12	19						
Chloride, SM4500CI-B	mg/	'kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	08/20/2019	ND	400	100	400	0.00	
TPH 8015M	mg/	/kg	Analyze	ed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/20/2019	ND	205	103	200	3.16	
DRO >C10-C28*	<10.0	10.0	08/20/2019	ND	194	97.1	200	3,77	
EXT DRO >C28-C36	<10.0	10.0	08/20/2019	ND					
Surrogate: 1-Chlorooctane	108	% 41+142	?			APPROVIDE			
Surrogate: 1-Chlorooctadecane	116	% 37.6-14	17						

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and cleart's exclusive releasely for any clear answig, whether based in contract or tort, skell be limited to the amount paid by clear for analyses. All cleares, including those for negligence and any other cause whitsoever 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 incidenceal or consequential damages, including, without firsting, without firsting, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affisions or successions arising out of or related to the performance of the services heritander by Cardinal, regardless of whether such claim is besed 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 Laboratomes.

Celeng to Kenne



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 SM4500CI-8 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: Usblisty and Damages. Cardnal's liability and chemits exclusive remedy for any claim arising, whether based in contract or ton't, shall be lemited to the amount paid by cleim for analyses. All claims, including those for negligence and any other cause whitstoorwer shall be deemed weared unless made in writing and reserved by Cardnal within thirty (30) days after completion of the applicable service. In no event shall Cardnal be liable for incidental demages, including, without limitation, business interruption, loss of upon or unless in source of the contraction, contraction, or contraction or contraction or contraction or contraction or contraction. The performance of the services hereunder by Cardnal, regardless of whether such claims to be applicable above stated reasons or otherwise. Results related into the samples identified above. The report shall not be reproducted except in full with written approval of Cardnal Laboritomes.

Celeg & Kenne



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name: Marke (xxxxx)	BILL TO	ANALYSIS REQUEST
	P.O. #:	
Address:	Company:	
City: State:	Zip: Attn:	
Phone #: Fax #:	Address:	
Project #: Project Owner:	ar: City:	
Project Name: DC HARDY	State: Zip:	
ž	Phone #:	
Sampler Name: JEF know	Fax 非:	
FOR IAB USE DALY	MATRIX PRESERV SAMPLING	Y
Lab i.D. Sample I.D.	RAB OR (C)OMP. CONTAINERS COUNDWATER ASTEWATER III L UDGE HER: EID/BASE: E/ COOL	CL BTEX EXT. TPH
1 568 0115'	8/15/13	0.50
2 503 @ 20	2 8/14/14 11:	11.48 + + + + + 1.11
PLEASE (NOTE: Libbaly and Darmger, Candeath looky and defect sectuate number is not marked to see the contract or not cause to enter our property in a property based in contract or not, cause to enter our property and property of the security and tender of the security and tender of the security and tender of the security and the security and tender of the security and	PLEASE NOTE: Listaday and Chargons, Candent's labely and cleant acctates remarks for a will related to based in contract or lot, state de intend to the amount part by an order or or analyses. All claims including State for negligency and any other cause wholeverver shall be desented verbrat unless and mother by Candent which 10 days after cause who order claims to which the state of the state	segent ser year each each each each each each each each

Relinquished By:

Relinquished By:

Time: 4/3

Received By:

Phone Result: Fax Result: REMARKS:

☐ Yes ☐ No Add'I Phone #:

Delivered By: (Circle One)
Sampler - UPS - Bus - Other:

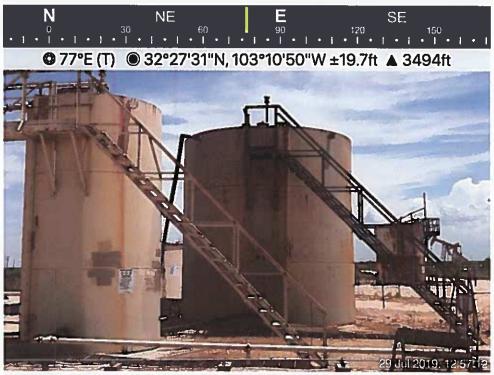
1.80

courted 2.2

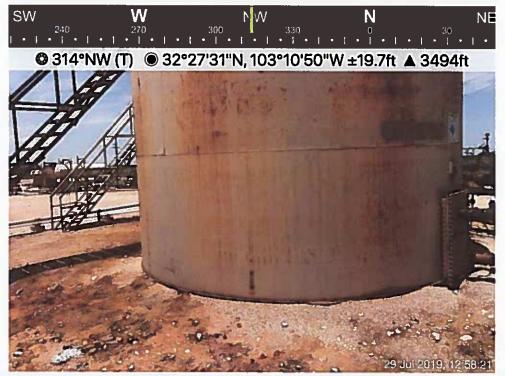
Sample Condition Cool Intact The Tres

CHECKED BY:

Appendix D
Photographs



Spill Area Viewing East, July 29, 2019



Spill Area Viewing Northwest, July 29, 2019

District 1
1625 N. French Dr., Hobbs, NM 88240
District III
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico Energy Minerals and Natural Resources Department

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Form C-141 Revised August 24, 2018 Submit to appropriate OCD District office

Incident ID	
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

				73				
					lephone 432-631-6982			
Contact email	Larry.Bake	er@apachecorp.co	m	Incident #	(assigned by OCD) 1RP-4173			
Contact maili	ng address 2	2350 West Marland	l Blvd. Hobbs, Ne	w Mexico 88240				
-			Location	of Release Se	ource			
atitude 32.4	5886° N			Longitude _	e -103.18070° W			
II.			(NAD 83 in deci	mal degrees to 5 decin				
Site Name DO	C Hardy Batt	tery		Site Type	Tank Battery			
Date Release Discovered 4/10/2012 API# (if ap					licable) 30-025-06691			
				tu				
Unit Letter	Section	Township	Range	COUR				
O O urface Owner		Township 21S Pederal Tri	Nature and	Volume of I	Release)		
O urface Owner	20 State Material	21S Tri	37E bal X Private (N Nature and	Lea Sims Volume of I	Release justification for the volumes provided			
0	20 : □ State □	21S Federal Tri (s) Released (Select all	37E bal X Private (N Nature and that apply and attach of (bbls) 10 bbls	Lea Sims Volume of I	Release justification for the volumes provided Volume Recovered (bbls) 8 1			
O urface Owner	20 : □ State □	21S Federal Tri (s) Released (Select all Volume Released	37E bal X Private (N Nature and that apply and attach of (bbls) 10 bbls	Lea Jame: Sims Volume of I calculations or specific	Release justification for the volumes provided Volume Recovered (bbls) 8 to			
O urface Owner Crude Oil Produced	20 : State Material	21S Federal Tri (s) Released (Select all Volume Released Volume Released Is the concentration the produced w	37E bal X Private (N Nature and that apply and attach of (bbls) 10 bbls (bbls) on of total dissolv vater >10,000 mg/	Volume of leadculations or specific ed solids (TDS)	Release Justification for the volumes provided Volume Recovered (bbls) 8 to Volume Recovered (bbls) Yes No			
O urface Owner	20 : State Material	21S Federal Tri (s) Released (Select all Volume Released Volume Released	37E bal X Private (N Nature and that apply and attach of (bbls) 10 bbls (bbls) on of total dissolv vater >10,000 mg/	Volume of leadculations or specific ed solids (TDS)	Release justification for the volumes provided Volume Recovered (bbls) 8 to			
O urface Owner Crude Oil Produced	20 :: State Material	21S Federal Tri (s) Released (Select all Volume Released Volume Released Is the concentration the produced w	37E bal X Private (N Nature and that apply and attach of (bbls) 10 bbls (bbls) on of total dissolv vater >10,000 mg/	Volume of leadculations or specific ed solids (TDS)	Release Justification for the volumes provided Volume Recovered (bbls) 8 to Volume Recovered (bbls) Yes No			
O urface Owner Crude Oil Produced Condensat	20 State Material Water te as	21S Federal Tri (s) Released (Select all Volume Released Volume Released Is the concentrati in the produced w Volume Released Volume Released	37E bal X Private (N Nature and that apply and attach of (bbls) 10 bbls (bbls) on of total dissolv vater >10,000 mg/	Volume of I calculations or specific ed solids (TDS)	Release justification for the volumes provided Volume Recovered (bbls) 8 to Volume Recovered (bbls) Yes No Volume Recovered (bbls)	obls		
O urface Owner Crude Oil Produced Condensat	20 State Material Water te as scribe)	21S Federal Tri (s) Released (Select all Volume Released Volume Released Is the concentrati in the produced w Volume Released Volume Released	bal X Private (N Nature and that apply and attach of (bbls) 10 bbls (bbls) on of total dissolv (vater >10,000 mg/l) (bbls)	Volume of I calculations or specific ed solids (TDS)	Release justification for the volumes provided Volume Recovered (bbls) 8 to Volume Recovered (bbls) Yes No Volume Recovered (bbls) Volume Recovered (bbls) Volume Recovered (Mcf)	obls		

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Was this a major release as defined by 19.15.29.7(A) NMAC?	If YES, for what reason(s) does the respon	sible party consider this a major release?					
☐ Yes ☒ No							
	*						
If YES, was immediate no	tice given to the OCD? By whom? To wh	om? When and by what means (phone, email, etc)?					
	Initial Re	esponse					
The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury							
X The source of the release has been stopped.							
X The impacted area has	s been secured to protect human health and	the environment.					
Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.							
X All free liquids and recoverable materials have been removed and managed appropriately.							
If all the actions described above have <u>not</u> been undertaken, explain why:							
has begun, please attach a	a narrative of actions to date. If remedial	emediation immediately after discovery of a release. If remediation efforts have been successfully completed or if the release occurred lease attach all information needed for closure evaluation.					
regulations all operators are republic health or the environmentalled to adequately investigations.	within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation. I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.						
Printed Name: Bruce Bak	er	Title: Sr. Environmental Tech					
Signature: Bruce	Baher	Date: 8/30/2019					
email: Larry.Baker@apac	hecorp.com	Telephone: 432-631-6982					
OCD Only							
Received by:		Date:					

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Site Assessment/Characterization

This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

what is the shahowest depth to groundwater beneath the area affected by the release?	<u>65</u> (# bgs)			
Did this release impact groundwater or surface water?	☐ Yes 🗓 No			
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?				
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?				
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	Yes X No			
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?				
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?				
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☒ No			
Are the lateral extents of the release within 300 feet of a wetland?	Yes X No			
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes 🗓 No			
Are the lateral extents of the release overlying an unstable area such as karst geology?				
Are the lateral extents of the release within a 100-year floodplain?				
Did the release impact areas not on an exploration, development, production, or storage site?				
Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.				
Characterization Report Checklist: Each of the following items must be included in the report.				
 Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells. Field data Data table of soil contaminant concentration data 				
Depth to water determination Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release				
X Boring or excavation logs X Photographs including date and GIS information				
X Topographic/Aerial maps Laboratory data including chain of custody				

If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 19.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

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regulations all operators are required to report and/or file certain release not public health or the environment. The acceptance of a C-141 report by the failed to adequately investigate and remediate contamination that pose a threaddition, OCD acceptance of a C-141 report does not relieve the operator of and/or regulations.	ifications and perform corrective actions for releases which may endanger OCD does not relieve the operator of liability should their operations have eat to groundwater, surface water, human health or the environment. In
Printed Name: Bruce Baker	Title: Sr. Environmental Tech
Signature: Bruce Bahr	Date: 8/30/2019
email: Larry.Baker@apachecorp.com	Telephone: 432-631-6982
OCD Only	
Received by:	Date:

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Remediation Plan

Remediation Plan Checklist: Each of the following it	tems must be included in the plan.			
 Detailed description of proposed remediation techni Scaled sitemap with GPS coordinates showing delin Estimated volume of material to be remediated 	neation points			
Closure criteria is to Table 1 specifications subject to				
Proposed schedule for remediation (note if remediat	tion plan timeline is more than 90 days OCD a	ipproval is required)		
<u>Deferral Requests Only</u> : Each of the following items	must be confirmed as part of any request for	deferral of remediation.		
Contamination must be in areas immediately under deconstruction.	or around production equipment where remed	iation could cause a major facility		
X Extents of contamination must be fully delineated.				
X Contamination does not cause an imminent risk to human health, the environment, or groundwater.				
I hereby certify that the information given above is true rules and regulations all operators are required to report which may endanger public health or the environment. liability should their operations have failed to adequately surface water, human health or the environment. In add responsibility for compliance with any other federal, sta Printed Name: Bruce Baker	and/or file certain release notifications and per The acceptance of a C-141 report by the OCD y investigate and remediate contamination that lition, OCD acceptance of a C-141 report does	erform corrective actions for releases does not relieve the operator of t pose a threat to groundwater, not relieve the operator of		
Signature: Bruce Bahr	Date: 8/30/2019			
email: Larry.Baker@apachecorp.com	Telephone: 432-631-6982			
OCD Only				
Received by:	Date:			
Approved Approved with Attached Co	onditions of Approval Denied	Deferral Approved		
Signature: Bradford Billings	Date: 05/22/2020			

Note: If the nearest well at \sim 1/2 mile is used for derived depth to water, Deferral is approved. If this is not the case, please idicate exactly the determied dwpth to water an submit data.