

RECEIVED By OCD; Dr. Oberding at 3:29 pm, Mar 16, 2015

APACHE CORPORATION

P.O.Box 1849 Eunice, NM 88231 Phone 575.394.3159

WBDU #42 (1RP-3435)

Termination Request

API No. 30-025-20178

Release Date: November 11th, 2014

Unit Letter I, Section 9, Township 21S, Range 37E



PO Box 2948 | Hobbs, NM 88241 | Phone 575.393.2967

March 11th, 2015

Dr. Tomáš Oberding, PhD

Hydrologist – New Mexico Oil Conservation Division Energy, Minerals and Natural Resources Department 1625 N. French Dr. Hobbs, NM 88240

RE: Termination Request Apache WBDU #42 (1RP-3435) UL/I sec. 9 T21S R37E API No. 30-025-20178

Dr. Oberding:

Apache Corporation (Apache) has retained Rice Environmental Consulting and Safety (RECS) to address potential environmental concerns at the above-referenced site.

Background and Previous Work

The site is located approximately 3.4 miles north of Eunice, New Mexico at UL/I sec. 9 T21S R37E. Based on records from NM OSE, USGS and RECS installed monitor wells near the site, the depth to groundwater at the site is approximately +/- 60 ft bgs.

On November 11th, 2014, Apache discovered a release of produced water from a hole in a 2 inch 90 degree fitting on the well head. A total of 15 barrels of produced water was released over 21,131 square feet of lease pad and pasture land. The line was shut in, and a vacuum truck was dispatched to the site to pick up the standing fluid. The vacuum truck recovered 5 barrels of produced water. BLM was notified of the release on November 12th, 2014, and an initial C-141 was submitted to NMOCD and BLM for their approval. NMOCD approved the initial C-141 on December 8th, 2014.

RECS personnel were on site beginning November 12th, 2014 to assess the release. Based on the assessment, the release was scraped, and samples were taken from the bottom and walls of the scrape. The samples were field tested for chlorides and organic vapors. If field testing indicated that the samples would return chloride, Gasoline Range Organics (GRO) and Diesel Range Organics (DRO) readings below regulatory standards, the samples were taken to a commercial laboratory for analyses. If field testing did not show that all constituents would be below regulatory standards, the scrape was expanded until field testing shows that all constituents would be below regulatory standards.

Using these standards, the site was excavated in four portions (Figure 1). The lease pad was scraped down to 6 inches bgs. Various portions of the pasture area were scraped down to 1 ft bgs, 1.5 ft bgs and 2 ft bgs. Once the 6 inch scrape on the lease pad was completed, final bottom

samples were taken and field tested for chlorides and organic vapors. The two composite samples and the two grab samples were then sent to a commercial laboratory for analyses (Appendix B). The composite samples and the two grab samples returned chloride, GRO and DRO readings at or near non-detectable levels.

Once the scrapes in the pasture areas were completed, final wall and bottom samples were taken and field tested for chlorides and organic vapors. Representative samples were then sent to a commercial laboratory for analyses. All samples returned chloride levels below the regulatory standard of 250 mg/kg. GRO and DRO readings returned values of non-detect.

A request to backfill the site was sent to NMOCD on January 9th, 2015. NMOCD approved the backfill request on January 12th, 2015.

All excavated soil was taken to a NMOCD approved facility for disposal. Clean caliche was imported to the site to backfill the lease pad, and clean top soil was imported to the site to backfill the pasture area. The lease pad and pasture areas were backfilled and contoured to the surrounding location.

Photo documentation of field activities can be found in Appendix C.

Given that Apache removed the contaminated soil and replaced it with clean, imported soil, Apache respectfully requests 'remediation termination' and site closure. A final C-141 can be found in Appendix D.

RECS appreciates the opportunity to work with you on this project. Please call Hack Conder at (575) 393-2967 or me if you have any questions or wish to discuss the site.

Sincerely,

JC.W.

Lara Weinheimer Project Scientist RECS (575) 441-0431

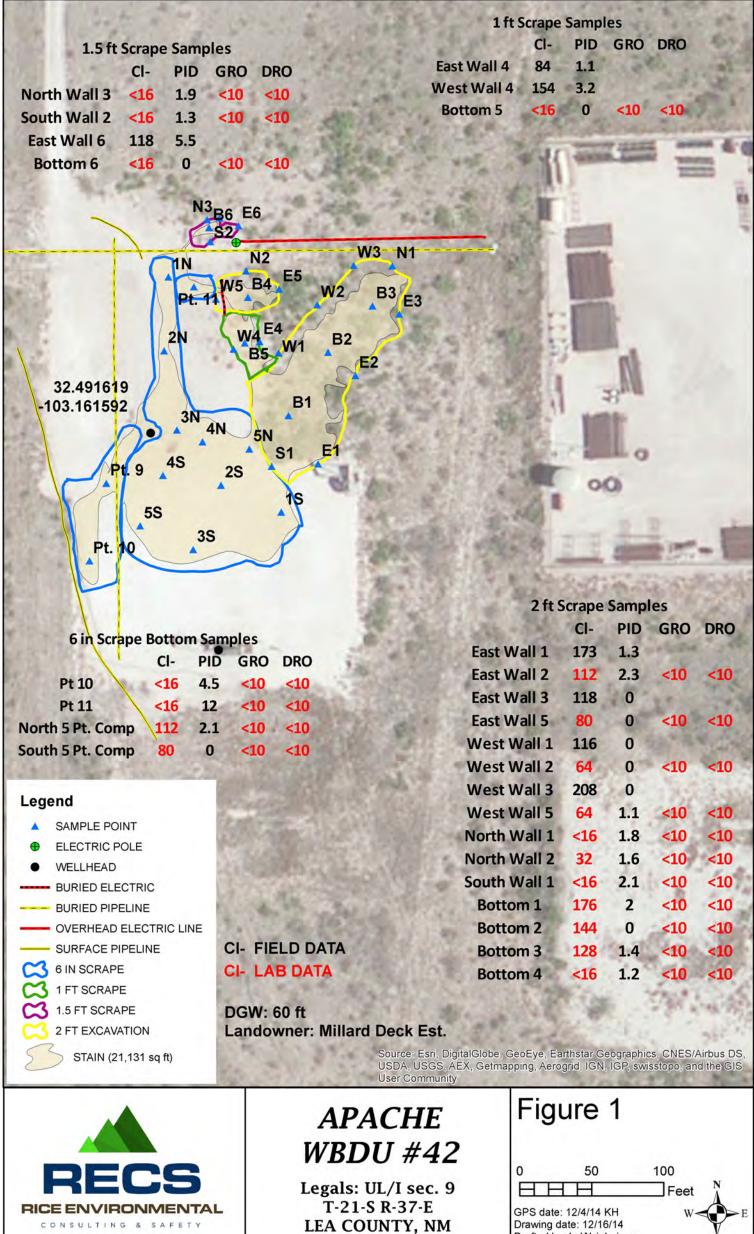
Attachments:

Figure 1 – Excavation Data Appendix A – Initial C-141 Appendix B – Laboratory Analyses Appendix C – Photo Documentation Appendix D – Final C-141

Figures

RICE Environmental Consulting and Safety (RECS) P.O. Box 2948, Hobbs, NM 88241 Phone 575.393.2967

Excavation Data



Drafted by: L. Weinheimer

Appendix A Initial C-141

RICE Environmental Consulting and Safety (RECS) P.O. Box 2948 Hobbs, NM 88241 Phone 575.393.2967

Tops N. French Dr., Flobos, NM 88240 District II District III District III District III District III District III District III District IV District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505 RECEIVED						New Mex and Natura vation Div St. Franc e, NM 875	l Resources vision is Dr.	Form C-141 Revised August 8, 2011 Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC,				
			Rele	ease Notific	ation	and Co	rrective A	ction	A CONTRACTOR OF A	an a		
						OPERA'	FOR	1	Initia	l Report 🔲 Final Report		
	ompany Ap					Contact Bri						
	350 Marland me WBDU		bs NM 88	3240			lo. 432-631-69					
							e injection wel	u				
Surface Ow	vner Millaro	d Deck Esta	ites	Mineral O	wner E	BLM			API No.	30-025-20178		
				LOCA	TION	OF REI	LEASE					
Unit Letter I	Section 9	Township 21S	Range 37E	Feet from the 198'	North	South Line FSL	Feet from the 660'	the second second	est Line EL	County Lca		
	1		La	litude		Longitud		1				
			La		200	_ Longitud	Contraction of the second					
T. (D.1		1.117		NAT	URE	OF RELI		1.1				
Type of Kele	ease Produce	d Water				Volume of water	Release 15 Barr	els of	Volume R	ecovered 5 Barrels of water		
Source of Re	elease injection	on line					our of Occurrence					
Was Immedi	iate Notice Gi	iven?				11/11/14 If YES, To	Whom?		11/11/2014			
iras maneur	ale Honee Ch		Yes [No 🗌 Not Re	quired							
By Whom?	Bruce Baker				-	Date and H	our 11/12/2014	· · · · ·				
Was a Water	course Reach		Yes 🛛	No		If YES, Vo	lume Impacting (the Water	course.			
	use of Probler accurred due t			1. 2	e well h	cad. The line	was shut in and	а уасцит	n truck was	s dispatched to pick up standing		
										square feet of pasture affected IOCD approved facility.		
regulations al public health should their o	Il operators ar or the enviro operations hav nment. In add	re required to nment. The ve failed to a dition, NMO	acceptanc dequately CD accep	d/or file certain re e of a C-141 repor investigate and re	lease no t by the mediate	NMOCD ma contaminatio	d perform correc rked as "Final R on that pose a thre	tive actio eport" do eat to grou	ns for releases not relie und water,	ant to NMOCD rules and ases which may endanger eve the operator of liability surface water, human health mpliance with any other		
Signature:		Bar				12	OIL CON	SERVA	TION	DIVISION		
Printed Name					1	pproved by	environmental S	pecialist:				
Title: Enviro		101			1	Approval Date	12-8-19	E	opiration D	Date: 2-8-14		
E-mail Addre	se larry hak	er@apacheo	orn com		1	onditions of	Approval			3.000 Store 11		
Date: 11/26/	. A.	- Comparence		(432) 631-6982		Conditions of Approval: Site Soper regard Attached [] Delate Constant area as [RP-3435]						

* Attach Additional Sheets If Necessary

Nmoco gante . Solar Fore c-141 by 27-14. DEC 1 1 2010

09~2 273 1010 1434 234516

P70 1439 234688

1

Appendix B Laboratory Analyses

RICE Environmental Consulting and Safety (RECS) P.O. Box 2948 Hobbs, NM 88241 Phone 575.393.2967



November 17, 2014

BRUCE BAKER APACHE CORP - HOBBS 2350 W. MARLAND BLVD.

HOBBS, NM 88240

RE: WBDU #42

Enclosed are the results of analyses for samples received by the laboratory on 11/14/14 12:16.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at 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)

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. Keine

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:	11/14/2014	Sampling Date:	11/14/2014
Reported:	11/17/2014	Sampling Type:	Soil
Project Name:	WBDU #42	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Kathy Perez
Project Location:	NOT GIVEN		

Sample ID: NORTH 5 PT. COMP (H403522-01)

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	112	16.0	11/17/2014	ND	400	100	400	3.92	
TPH 8015M	mg	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	11/15/2014	ND	223	111	200	0.588	
DRO >C10-C28	<10.0	10.0	11/15/2014	ND	220	110	200	0.939	
Surrogate: 1-Chlorooctane	113	% 47.2-15	7						
Surrogate: 1-Chlorooctadecane	117 :	52.1-17	6						

Sample ID: SOUTH 5 PT. COMP (H403522-02)

Chloride, SM4500Cl-B	mg/	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	11/17/2014	ND	400	100	400	3.92	
TPH 8015M	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	11/15/2014	ND	223	111	200	0.588	
DRO >C10-C28	<10.0	10.0	11/15/2014	ND	220	110	200	0.939	
Surrogate: 1-Chlorooctane	117 9	% 47.2-15	7						
Surrogate: 1-Chlorooctadecane	122	% 52.1-17	6						

Cardinal Laboratories

*=Accredited Analyte

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Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



Notes and Definitions

- ND
 Analyte NOT DETECTED at or above the reporting limit

 RPD
 Relative Percent Difference
- ** Samples not received at proper temperature of 6°C or below.
- *** Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST



101 East Marland, Hobbs, NM 88240 2111 Beechwood, Abilene, TX 79603

(505) 393-2326 FAX (505) 393-2476 (325) 673-7001 FAX (325)673-7020

	BILL TO	ANALYSIS REQUEST				
Project Manager: Laura Flores	P.O. #:					
Address:	Company:					
City: Hobbs State: NM Zip: 88240	Attn:					
Phone #: Fax #:	Address:					
Project #: Project Owner:	City:					
Project Name:	State: Zip:					
Project Location: WBDU #42	Phone #:	Chlorides TPH 8015 N BTEX Texas TPH Texas TPH TDS TDS				
Sampler Name:	Fax #:	Ilorid 3TEX 3TEX 1801				
FOR LAB USE ONLY MATRIX	PRESERV. SAMPLING					
Lab I.D. Sample I.D. H40363A North 50017 Compt. 1 North 50017 Compt. 2 South 50017 Compt. 3 South 50017 Compt. 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 1 <td< th=""><th></th><th>Chlorides Chlorides TPH 8015 M BTEX BTEX Texas TPH Complete Cations/Anions TDS</th></td<>		Chlorides Chlorides TPH 8015 M BTEX BTEX Texas TPH Complete Cations/Anions TDS				
PLEASE NOTE: Liability and Demages. Cerdinal's liability and client's exclusive remedy for any claim arising whether based in contri- analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unleas made in writing arrvice. In no event shall Cardinal be liable for incidental or consequential demages, including without limitation, business interruption filiates or successors arising out of or related to the performance for sampling barrows business interruption filiates or successors arising out of or related to the performance of sampling barrows barrows and any construction of the sampling of the sample of the samp	nd received by Cardinal within 30 days after completion of th	the e applicable				
Relinquished By: Relinquished By: Relinquished By: Received By: Time: Time: Time: Received By:	is based upon any of the above stated reasons or otherwise Phone Res Fax Result REMARKS	ult: □ Yes ☑ No Add'I Phone #: : □ Yes ☑ No Add'I Fax #:				
Relinquished By: Date: Time: Delinered By:	Iweinhe	hconder@riceswd.com; lflores@rice-ecs.com; eimer@rice-ecs.com; knorman@rice-ecs.com;				
Delivered By: (Circle One) Sample Condi Cool Intact	(Initiala) CUITS 20	ain@rice-ecs.com; sedwards@rice-ecs.com; c@rice-ecs.com				
Sampler - UPS - Bus - Other: 57	s KP Enviror	mental Tech: K Humphren @rice-ecs.com				



December 05, 2014

BRUCE BAKER APACHE CORP - HOBBS 2350 W. MARLAND BLVD.

HOBBS, NM 88240

RE: WBDU #42

Enclosed are the results of analyses for samples received by the laboratory on 12/04/14 13:20.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/ga/lab_accred_certif.html.

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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.

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. Keine

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:	12/04/2014	Sampling Date:	12/04/2014
Reported:	12/05/2014	Sampling Type:	Soil
Project Name:	WBDU #42	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: BOTTOM 4 (H403695-01)

Chloride, SM4500Cl-B	mg,	/kg	Analyze	Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	12/05/2014	ND	400	100	400	3.92	
TPH 8015M	mg/kg		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	12/04/2014	ND	201	101	200	0.950	
DRO >C10-C28	<10.0	10.0	12/04/2014	ND	209	105	200	2.49	
Surrogate: 1-Chlorooctane	125	% 47.2-15	7						
Surrogate: 1-Chlorooctadecane	143	% 52.1-17	6						

Sample ID: BOTTOM 5 (H403695-02)

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	12/05/2014	ND	400	100	400	3.92	
TPH 8015M	mg	/kg	Analyze	d By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	12/04/2014	ND	201	101	200	0.950	
DRO >C10-C28	<10.0	10.0	12/04/2014	ND	209	105	200	2.49	
Surrogate: 1-Chlorooctane	129	% 47.2-15	7						
Surrogate: 1-Chlorooctadecane	147	% 52.1-17	6						

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Celeg D. Keine

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:	12/04/2014	Sampling Date:	12/04/2014
Reported:	12/05/2014	Sampling Type:	Soil
Project Name:	WBDU #42	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: BOTTOM 6 (H403695-03)

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	12/05/2014	ND	400	100	400	3.92	
TPH 8015M	mg	mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	12/04/2014	ND	201	101	200	0.950	
DRO >C10-C28	<10.0	10.0	12/04/2014	ND	209	105	200	2.49	
Surrogate: 1-Chlorooctane	131	% 47.2-15	7						
Surrogate: 1-Chlorooctadecane	152	% 52.1-17	6						

Sample ID: NORTH WALL 2 (H403695-04)

Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	12/05/2014	ND	400	100	400	3.92	
TPH 8015M	mg/kg		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	12/04/2014	ND	201	101	200	0.950	
DRO >C10-C28	<10.0	10.0	12/04/2014	ND	209	105	200	2.49	
Surrogate: 1-Chlorooctane	125	% 47.2-15	7						
Surrogate: 1-Chlorooctadecane	143	% 52.1-17	6						

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Celeg D. Keine

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:	12/04/2014	Sampling Date:	12/04/2014
Reported:	12/05/2014	Sampling Type:	Soil
Project Name:	WBDU #42	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: NORTH WALL 3 (H403695-05)

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	12/05/2014	ND	400	100	400	3.92	
TPH 8015M	mg,	mg/kg Analyzed E		d By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	12/04/2014	ND	201	101	200	0.950	
DRO >C10-C28	<10.0	10.0	12/04/2014	ND	209	105	200	2.49	
Surrogate: 1-Chlorooctane	123	% 47.2-15	7						
Surrogate: 1-Chlorooctadecane	141	% 52.1-17	6						

Sample ID: EAST WALL S (H403695-06)

Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	12/05/2014	ND	400	100	400	3.92	
TPH 8015M	mg,	/kg	Analyze	d By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	12/04/2014	ND	201	101	200	0.950	
DRO >C10-C28	<10.0	10.0	12/04/2014	ND	209	105	200	2.49	
Surrogate: 1-Chlorooctane	125	% 47.2-15	7						
Surrogate: 1-Chlorooctadecane	142	% 52.1-17	6						

Cardinal Laboratories

*=Accredited Analyte

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Celeg D. Keine

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:	12/04/2014	Sampling Date:	12/04/2014
Reported:	12/05/2014	Sampling Type:	Soil
Project Name:	WBDU #42	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: WEST WALL S (H403695-07)

Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	12/05/2014	ND	400	100	400	3.92	
TPH 8015M	mg	mg/kg A		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	12/05/2014	ND	201	101	200	0.950	
DRO >C10-C28	<10.0	10.0	12/05/2014	ND	209	105	200	2.49	
Surrogate: 1-Chlorooctane	119	% 47.2-15	7						
Surrogate: 1-Chlorooctadecane	132	% 52.1-17	6						

Sample ID: SOUTH WALL 2 (H403695-08)

Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	12/05/2014	ND	400	100	400	3.92	
TPH 8015M	mg	/kg	Analyze	d By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	12/05/2014	ND	201	101	200	0.950	
DRO >C10-C28	<10.0	10.0	12/05/2014	ND	209	105	200	2.49	
Surrogate: 1-Chlorooctane	131	% 47.2-15	7						
Surrogate: 1-Chlorooctadecane	146	% 52.1-17	6						

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Celeg D. Keine

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:	12/04/2014	Sampling Date:	12/04/2014
Reported:	12/05/2014	Sampling Type:	Soil
Project Name:	WBDU #42	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: POINT 10 @ 6" (H403695-09)

Chloride, SM4500Cl-B	mg,	′kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	12/05/2014	ND	400	100	400	3.92	
TPH 8015M	mg,	′kg	Analyze	d By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	12/05/2014	ND	201	101	200	0.950	
DRO >C10-C28	<10.0	10.0	12/05/2014	ND	209	105	200	2.49	
Surrogate: 1-Chlorooctane	124	% 47.2-15	7						
Surrogate: 1-Chlorooctadecane	138	% 52.1-17	6						

Sample ID: POINT 11 @ 6" (H403695-10)

Chloride, SM4500CI-B	mg,	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	12/05/2014	ND	400	100	400	3.92	
TPH 8015M	mg	/kg	Analyze	d By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	12/05/2014	ND	201	101	200	0.950	
DRO >C10-C28	<10.0	10.0	12/05/2014	ND	209	105	200	2.49	
Surrogate: 1-Chlorooctane	122	% 47.2-15	7						
Surrogate: 1-Chlorooctadecane	137	% 52.1-17	6						

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



Notes and Definitions

- ND
 Analyte NOT DETECTED at or above the reporting limit

 RPD
 Relative Percent Difference
- ** Samples not received at proper temperature of 6°C or below.
- *** Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

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Celey D. Keene, Lab Director/Quality Manager

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST



RDINAL LABORATORIES

101 East Marland, Hobbs, NM 88240 2111 Beechwood, Abilene, TX 79603 1002 0476 (225) 673-7001 FAX (325)673-7020

(505) 393-2326 FAX (505) 393-2478 (325) 873-7001	5111 TQ		A	NALYSI	S REQUEST
company Name: APachy	P.O. #:			1.1	
Project Manager: DIVCE DCKO	Company:			S	
Address:	Attn:			5	
City: Hobbs State: NM Zip: 88240	-			L.	
Phone #: Fax #:	Address:	E		Cations/Anions TDS	
Project #: Project Owner:	City:	5 G	TPH	L I	
	State: Zip:	1 de		N E	
Project Name: Project Location: WBDV # 42	Phone #:	Chloride PH 801	BTEX exas Th	TD	
	Fax #:	TI	X B		
Sampler Name: Kyle Humphrey MATRIX	PRESERV. SAMPLING	OL	μ	ete	
Lab I.D. Sample I.D. H403695 $1 00 \pm 0000 \text{ Summunous}$ $1 00 \pm 00000 \text{ Summunous}$ $1 00 \pm 000000 \text{ Summunous}$ $1 00 \pm 00000000000000000000000000000000$	Вспрове Вспрове Вспровивание Вспрови Вспрови Вспрови Вспровиние Вспрови Вспрови Вспрови В	1 / / 1 / / 5 / /		Complete	

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service. In no event shall Cardinal to judge for inclusion of co attituates or successors wising out of or related to the performa Relinquished By:	I clen's exclusive remarky for any claim acting whether based in contract or lon, an ter cause whataoever shall be deemed waived unless made in writing and received neceouted admages, including without limitation, business interruptions, tass of usiness of services hereunder by Cardinal, regardless of whether such claim is based un perfect of services hereunder by Cardinal, regardless of whether such claim is based un perfect of the services hereunder by Cardinal, regardless of whether such claim is based un perfect of the services hereunder by Cardinal, regardless of whether such claim is based un perfect of the services hereunder by Cardinal, regardless of whether such claim is based un perfect of the services hereunder by Cardinal, regardless of whether such claim is based un perfect of the services hereunder by Cardinal, regardless of whether such claim is based un perfect of the services hereunder by Cardinal, regardless of whether such claim is based un perfect of the services hereunder by Cardinal, regardless of whether such claim is based of perfect of the services hereunder by Cardinal, regardless of whether such claim is based of the services hereunder by Cardinal, regardless of whether such claim is based or perfect of the services hereunder by Cardinal, regardless of the services hereunder by the services hereunder by Cardinal, regardless of the services hereunder by the serv	n any of the above stated reasons or otherwise. Phone Result: Yes No Add'l Phone #: Fax Result: Yes No Add'l Fax #: REMARKS:
Relinquished By:	Date: Time:	email results Knorman@rice-ecs.com Kjones@riceswd.com; jkamplain@rice-ecs.com hconder@rice-ecs.com; Lweinheimer@rice-ecs.com
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	5.42 Sample Condition Cool Intact Pres Pres No No	CHECKED BY: Lweinheimer@rice-ecs.com Khumphrey@rice-ecs.com sedwards@rice-ecs.com,lflores@rice-ecs.com

† Cardinal cannot accept verbal changes. Please fax written changes to 505-396/2476



December 05, 2014

BRUCE BAKER APACHE CORP - HOBBS 2350 W. MARLAND BLVD.

HOBBS, NM 88240

RE: WBDU #42

Enclosed are the results of analyses for samples received by the laboratory on 12/04/14 13:20.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at 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)

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. Keine

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:	12/04/2014	Sampling Date:	12/03/2014
Reported:	12/05/2014	Sampling Type:	Soil
Project Name:	WBDU #42	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: BOTTOM 1 (H403696-01)

Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	176	16.0	12/05/2014	ND	400	100	400	3.92	
TPH 8015M	mg,	/kg	Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	12/05/2014	ND	201	101	200	0.950	
DRO >C10-C28	<10.0	10.0	12/05/2014	ND	209	105	200	2.49	
Surrogate: 1-Chlorooctane	133	% 47.2-15	7						
Surrogate: 1-Chlorooctadecane	152	% 52.1-17	6						

Sample ID: BOTTOM 2 (H403696-02)

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	144	16.0	12/05/2014	ND	400	100	400	3.92	
TPH 8015M	mg	/kg	Analyze	d By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	12/05/2014	ND	201	101	200	0.950	
DRO >C10-C28	<10.0	10.0	12/05/2014	ND	209	105	200	2.49	
Surrogate: 1-Chlorooctane	129	% 47.2-15	7						
Surrogate: 1-Chlorooctadecane	145	% 52.1-17	6						

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Celeg D. Keine

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:	12/04/2014	Sampling Date:	12/03/2014
Reported:	12/05/2014	Sampling Type:	Soil
Project Name:	WBDU #42	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: BOTTOM 3 (H403696-03)

Chloride, SM4500Cl-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	12/05/2014	ND	400	100	400	3.92	
TPH 8015M	mg	/kg	Analyze	d By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	12/05/2014	ND	201	101	200	0.950	
DRO >C10-C28	<10.0	10.0	12/05/2014	ND	209	105	200	2.49	
Surrogate: 1-Chlorooctane	126	% 47.2-15	7						
Surrogate: 1-Chlorooctadecane	140	% 52.1-17	6						

Sample ID: NORTH WALL 1 (H403696-04)

Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	12/05/2014	ND	400	100	400	3.92	
TPH 8015M	mg/kg		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	12/05/2014	ND	201	101	200	0.950	
DRO >C10-C28	<10.0	10.0	12/05/2014	ND	209	105	200	2.49	
Surrogate: 1-Chlorooctane	126	% 47.2-15	7						
Surrogate: 1-Chlorooctadecane	144	% 52.1-17	6						

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Celeg D. Keine

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:	12/04/2014	Sampling Date:	12/03/2014
Reported:	12/05/2014	Sampling Type:	Soil
Project Name:	WBDU #42	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: SOUTH WALL 1 (H403696-05)

Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	12/05/2014	ND	400	100	400	3.92	
TPH 8015M	mg,	/kg	Analyze	d By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	12/05/2014	ND	201	101	200	0.950	
DRO >C10-C28	<10.0	10.0	12/05/2014	ND	209	105	200	2.49	
Surrogate: 1-Chlorooctane	126	% 47.2-15	7						
Surrogate: 1-Chlorooctadecane	142	% 52.1-17	6						

Sample ID: EAST WALL 2 (H403696-06)

Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	112	16.0	12/05/2014	ND	400	100	400	3.92	
TPH 8015M	mg	mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	12/05/2014	ND	201	101	200	0.950	
DRO >C10-C28	<10.0	10.0	12/05/2014	ND	209	105	200	2.49	
Surrogate: 1-Chlorooctane	123	% 47.2-15	7						
Surrogate: 1-Chlorooctadecane	136	% 52.1-17	6						

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Celeg D. Keine

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:	12/04/2014	Sampling Date:	12/03/2014
Reported:	12/05/2014	Sampling Type:	Soil
Project Name:	WBDU #42	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: WEST WALL 2 (H403696-07)

Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	12/05/2014	ND	400	100	400	3.92	
TPH 8015M	mg,	/kg	Analyze	d By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	12/05/2014	ND	201	101	200	0.950	
DRO >C10-C28	<10.0	10.0	12/05/2014	ND	209	105	200	2.49	
Surrogate: 1-Chlorooctane	134	% 47.2-15	7						
Surrogate: 1-Chlorooctadecane	152	% 52.1-17	6						

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Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



Notes and Definitions

- ND
 Analyte NOT DETECTED at or above the reporting limit

 RPD
 Relative Percent Difference
- ** Samples not received at proper temperature of 6°C or below.
- *** Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

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Celey D. Keene, Lab Director/Quality Manager

Page 6 of 7

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

RIES

AA					
E.	RDI	NAL	LABO	ORAT	OF
	404	East	Marland	Hobbe	NN

S.T.

101 East Marland, Hobbs, NM 88240 2111 Beechwood, Abilene, TX 79603

(505) 393-2326 FAX (505) 393-2476 (325) 673-7001 FAX (325)673-7020

Company Name: Afache					BILL TO							ANALYSIS REQUEST											
Project Manager: Bruce Baker					Ρ.	P.Q. #:																	
Address:					C	Company:									S								
City: Hobbs State: NM Zip: 88240					A	Attn:									5								
					A	Address:									in l								
FIGHER.					C	City:						8015 M	BTEX	T	SIF								
						State: Zip:					Chlorides			TPH	Cations/Anions								
Project Name:											D.					S				1 1			
Project Location: WBDU#42					Phone #:						PH 8(E	Texas		TDS								
Sampler Name: Kyle Humphrey MATRIX				Fi	Fax #: PRESERV. SAMPLING							m											
FOR LAB USE ONLY		a.		-	MAI			-	SER	×1	JAMPLI		10	E -		F	ete					1 1	
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER WASTEWATER	SolL	OIL	SLUDGE	ACID/BASE:	ICE / COOL		DATE	TIME					Complete						
1	Bottom 2	6	11		1	-			1	12	-)-M	9:00	1	1	-						_		-
2	Bottom 2	6	1						/	12	-3-14	9:05	1	1				1					-
3	BO HOM D	6	17		1				1	n	-3-14	5:10	1	1							1		
ŭ	NOCH Wall 1	6	1		1				1	12	-3-14	(1:00	1/	1									
5	South Well 1	6	1		1/				1	12	-J- H	11:05	1	1		-							-
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7	Lest Well 2	G			1				1			11:15	1/	1			111						
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analyses. All claims including those for negligence and any other cause whatsoever shall be doemed waived unloss made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall cardinat be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profiles incurred by client, its subsidiarios,

service. In no event shall Cardinal be liable for incidential or consequential damages, incide	ing windut initiation, busitess interruptions, tas or use, or loss or prove interries of citori, as showed	1000
allificiants or successors arising out of or related to the performance of services hereunder t	y Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherw	rts

Relinquished By:	Date:	Received By:	Knorman@rice-ecs.com
	Time:	Received By:	Kjones@riceswd.com; jkamplain@rice-ecs.com hconder@rice-ecs.com;
Delivered By: (Circle One) Sampler - UPS - Bus - Other:		Sample Condition Cool Intact 5.42 Pres Pres	 Lweinheimer@rice-ecs.com Khumphrey@rice-ecs.com sedwards@rice-ecs.com,lflores@rice-ecs.com

† Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2446

Appendix C Photo Documentation

RICE Environmental Consulting and Safety (RECS) P.O. Box 2948 Hobbs, NM 88241 Phone 575.393.2967

Apache WBDU #42 Unit Letter I, Section 9, T21S, R37E



Initial site photo, facing north

11/12/14



Initial site photo, facing east

11/12/14



Initial site photo, facing northwest

11/12/14



Initial site photo, facing east

11/12/14



Installing trench, facing west

11/12/14



Exporting soil, facing north

11/13/14



Scraping release, facing northeast

11/12/14



Continue to scrape site, facing west

11/14/14



Excavating pasture, facing southwest

12/2/14



Excavation completed, facing east

12/4/14



Excavating, facing southwest

12/4/14



Excavating pasture, facing south

12/4/14



Site completed, facing north

3/4/15



Site completed, facing southwest

3/4/15



Site completed, facing northeast

3/4/15



Site completed, facing north

3/4/15

Appendix D Final C-141

RICE Environmental Consulting and Safety (RECS) P.O. Box 2948 Hobbs, NM 88241 Phone 575.393.2967

3-11-15

Date:

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 August 8, 2011

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

Release Notification and Corrective Action OPERATOR Initial Report Final Report Name of Company Apache Corporation Contact Bruce Baker Address 2350 Marland Blvd., Hobbs, NM 88240 Telephone No. (432) 631-6982 Facility Name WBDU #42 Facility Type Injection Well Surface Owner Millard Deck Estates Mineral Owner BLM API No. 30-025-20178 LOCATION OF RELEASE Unit Letter Section Township Range Feet from the North/South Line Feet from the East/West Line County 9 21S 37E 198 660 Lea Ĭ FSL FEL Latitude Longitude_ NATURE OF RELEASE Type of Release Produced Water Volume of Release 15 Barrels of Volume Recovered 5 Barrels of water water Source of Release injection line Date and Hour of Occurrence Date and Hour of Discovery 11/11/14 11/11/14 Was Immediate Notice Given? If YES, To Whom? Yes I No Not Required Jeffery Robertson (BLM) By Whom? Bruce Baker Date and Hour 11/12/2014 Was a Watercourse Reached? If YES, Volume Impacting the Watercourse, □ Yes 🛛 No If a Watercourse was Impacted, Describe Fully.* Describe Cause of Problem and Remedial Action Taken.* The release occurred due to a hole in 2 inch 90 degree fitting on the well head. The line was shut in and a vacuum truck was dispatched to pick up standing fluid. Describe Area Affected and Cleanup Action Taken.* RECS personnel were on site beginning November 12th, 2014 to assess the release. Based on the assessment, the release was scraped, and samples were taken from the bottom and walls of the scrape. The samples were field tested for chlorides and organic vapors. If field testing indicated that the samples would return chloride, GRO and DRO readings below regulatory standards, the samples were taken to a commercial laboratory for analyses. If field testing did not show that all constituents would be below regulatory standards, the scrape was expanded until field testing shows that all constituents would be below regulatory standards. Using these standards, the site was excavated in four portions. The lease pad was scraped down to 6 inches bgs. Various portions of the pasture area were scraped down to 1 ft bgs, 1.5 ft bgs and 2 ft bgs. A request to backfill the site was sent to NMOCD on January 9th, 2015. NMOCD approved the backfill request on January 12th, 2015. All excavated soil was taken to a NMOCD approved facility for disposal. Clean caliche was imported to the site to backfill the lease pad, and clean top soil was imported to the site to backfill the pasture area. The lease pad and pasture areas were backfilled and contoured to the surrounding location. I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD 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 NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD 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. **OIL CONSERVATION DIVISION** Bruce Baher Signature: Approved by Environmental Specialist: Printed Name: Bruce Baker Title: Environmental Technician Approval Date: **Expiration Date:** E-mail Address: larry.baker@apachecorp.com Conditions of Approval: Attached

Phone: . (432) 631-6982