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

1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico Energy Minerals and Natural Resources

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

Form C-141 Revised August 8, 2011

Submit 1 6 by 20 appropriate District Office in accordance with 19.15.29 NMAC.

RECEIVED

			Rele	ease Notific	catio	n and Co	rrective A	ction	1			
						OPERA	ΓOR		☐ Initia	al Report	⊠ F	Final Report
Name of Co	mpany A	pache Corp	oration			Contact B	ruce Baker		-			
		849, Eunice,		240		Telephone N	No. (432) 631-0	5982				
Facility Na	ne Nl	EDU #173				Facility Typ	e Production	Well				
Surface Ow	ner Mill:	ard Deck Est	tate	Mineral C	Owner	State			API No	30-025-4	0554	
				LOCA	ATIO	N OF REI	LEASE		•			
Unit Letter	Section	Township	Range	Feet from the		n/South Line	Feet from the	East/	West Line	County		
В	3	218	37E	3785		FNL	1980		FEL	Lea		
			La	titude		Longitud	le					
				NAT	ΓURE	OF REL	EASE					
Type of Rele	ase Oil/Pro	oduced Water				Volume of	Release 40 bbls		Volume I	Recovered 3	0 bbls	
Source of Re						Date and F 7/12/12	lour of Occurrence	e	Date and	Hour of Disc	overy 7	7/12/12
Was Immedi	ate Notice (Given?				If YES, To	Whom?					
			Yes 🔯	No 🔲 Not R	tequired	Geoffrey L	eking - NMOCD					
By Whom?	Natalie Gla	ıdden				Date and F	Iour 7/16/12		•	•		
Was a Water	course Read			•		If YES, Vo	olume Impacting t	he Wat	tercourse.			
			Yes 🗵] No								
If a Watercoo												
				n Taken.* Whi he fluid from the								
				els of standing f			ca do wii inc no	,, ,,,,,,	vaasing in	0 1010450. 11	. total o	1 10
Describe Are	a Affected	and Cleanup A	Action Tal	ken.* The heade	r valves	s were closed,	the check valve w	as repl	aced, and th	ne standing flu	uid was	recovered.
A total of 6,5	49 sq ft of	pad and pastu	re land wa	s affected. RECS	S persoi	nnel were on s	ite beginning on J	uly 12 ^t	^h , 2012. Ini	tial samples v	vere tak	en .
throughout th	ne release ar	nd field tested	for chlori	des and hydrocar	bons. 7	The surface sar	nples were taken	to a cor	mmercial la	boratory for a	ınalysis.	The site
				evidenced clean vand hydrocarbons								
imported cal	iche. A sam	or analysis of	ported cal	iche was taken to	a com	nercial laborat	ory. The pasture	was co	ntoured to the	he surroundin	g locati	on and the
road was pac	ked to prov	ide a stable di	riving surf	ace.			•					
				e is true and comp								
				nd/or file certain								
should their	or the envi	ronment. The nave failed to:	acceptan adequately	ce of a C-141 report of a C-141 report of a C-141 report of a contract o	remedia	ne NWIOCD in	on that pose a thr	eport eat to s	round wate	r. surface wat	ator or n ter. hum	an health
				otance of a C-141								
		ws and/or regi						<u> </u>		·		
			_				OIL CON	SER V	VATION	DIVISIO	<u>N</u>	
Signature:	Bru	ce Bal	her				NH LOC	RAL	- Yek	Line		
Printed Nam	e: Bruce	Baker				Approved by	Environmental S Enviro	peciali me n	stal Specie	alist O		
Title: Enviro	onmental Te	ech				Approval Da	te. 02/06/14	·	Expiration	Date:		
E-mail Addr	ess: Jarry b	aker@apache	corp.com			Conditions o						
			p o m			0		•		Attached		O
	8 - 30			: (432) 631-69	82					MGP-06	-14-	1086
* Attach Addi	tional She	ets If Necess	sary									

JUN 17 2014



HOBBS OCD

FEB 0 6 2014

RECEIVED

APACHE CORPORATION

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

NEDU #173

Termination Request

API No. 30-025-40554

Release Date: July 12th, 2012

Unit Letter J, Section 3, Township 21S, Range 37E

Rice Environmental Consulting & Safety

P.O. Box 2948, Hobbs, NM 88241 Phone 575.393.2967

August 29th, 2013

Geoffrey Leking

New Mexico Energy, Minerals, & Natural Resources Oil Conservation Division, Environmental Bureau – District 1 1625 N. French Dr. Hobbs, NM 88240-9273

> RE: Termination Request Apache Corporation NEDU #173: UL/J sec. 3 T-21-S R-37-E API No. 30-025-40554

Mr. Leking:

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 5 miles north of Eunice, NM in UL/J sec. 3 T21S R37E. NM OSE and BLM records indicate that groundwater will likely be encountered at a depth of approximately 53 +/- feet.

On July 12th, 2012 a release of oil and produced water occurred at the above-referenced site. While laying out the new flow line to the well, the valves on the header were not closed and the check valve did not hold. The fluid from the battery back-flowed down the flow line causing the release. A total of 40 barrels were released and a total of 30 barrels of standing fluid was recovered. NMOCD was informed of the release of July 12th, 2012 and an initial C-141 was sent to NMOCD on July 16th, 2012 (Appendix A).

RECS personnel were on site beginning on July 12th, 2012. Initial samples were taken throughout the release and field tested for chlorides and hydrocarbons (Figure 1). The surface samples were taken to a commercial laboratory for analysis and returned elevated levels of chlorides and hydrocarbons (Appendix B).

The site was excavated to 3 ft bgs (Figure 2), where field sampling evidenced clean wall and bottom samples. Final grab samples from the walls and bottom were taken to a commercial laboratory for analysis of chlorides and hydrocarbons. Laboratory chloride results showed all samples under 250 mg/kg and showed GRO and DRO readings of non-detect (Appendix C).

The pasture was backfilled with clean, imported soil and the road was backfilled with imported caliche. A sample of the imported caliche was taken to a commercial laboratory and returned a chloride result of 16 mg/kg (Appendix C). The pasture was

contoured to the surrounding location and the road was packed to provide a stable driving surface. Photo documentation of these activities can be found in Appendix D.

Given that the contaminated soils from the release have been excavated to a depth of 3 ft bgs and replaced by clean, imported soil, RECS on behalf of Apache respectfully requests 'remediation termination' or similar closure status of this regulatory file. A final C-141 is provided in Appendix E.

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,

Lara Weinheimer

Project Scientist

RECS

(575) 441-0431

Attachments:

Figure 1 – Initial Sampling Data

Figure 2 – Final Sampling Data

Appendix A – Initial C-141

Appendix B – Initial Laboratory Analyses

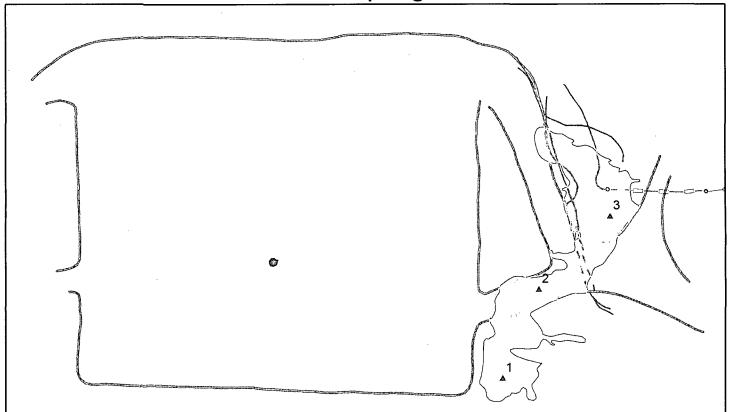
Appendix C – Final Laboratory Analyses

Appendix D – Photo Documentation

Appendix E – Final C-141



Initial Sampling Data



Total Area = 6,549 sq ft wtih 5,806 sq ft in the pasture.

Legend

- ▲ SAMPLE POINTS
- ---- ABOVE GROUND POLY LINE
- · · · · · ABOVE GROUND STEEL LINE
- - BURIED POLY LINE
- ----BURIED STEEL LINE
- ROAD/PAD



WELL HEAD CELLAR



Sample Description	CI-	PID	LAB CI-	GRO	DRO
Pt.1 @ surface	1314	5,000	3,560	15,000	68,900
Pt.1@.5'	4428	307.9			

Point #2

Sample Description	Cl-	PID	LAB CI-	GRO	DRO
Pt.2 @ surface	4938	304.7	3,720	176	1,250
Pt.2 @ .5'	1411	89.5			

Point #3

Sample Description	CI-	PID	LAB CI-	GRO	DRO
Pt.3 @ surface	3761	2975	3,440	220	875
Pt.3 @ .5'	2503	42.9			
Pt.3 @ 1'	2004	32.7			



APACHE NEDU #173 AD

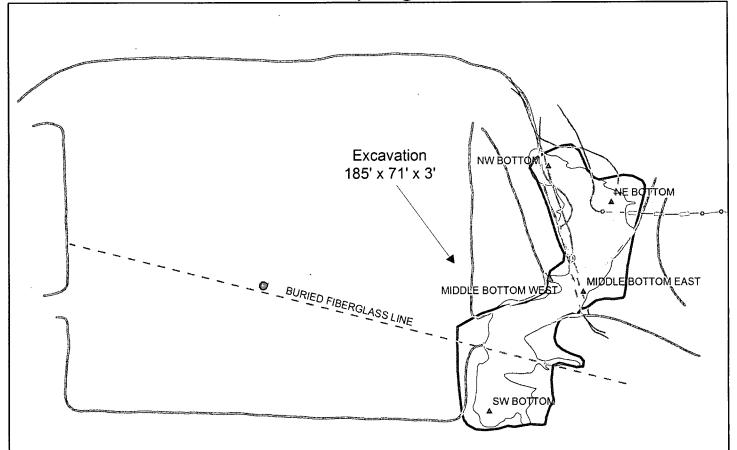
LEGALS: UL/J sec. 3 T-21-S R-37-E LEA COUNTY, NM

Figure 1



60 120 Fee

GPS date: 7/12/12 Drawing date: 7/13/12 Drafted by: L. Weinheimer Final Sampling Data



Total Area = 6,549 sq ft wtih 5,806 sq ft in the pasture.

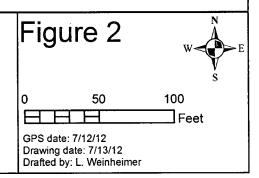
Legend

- ▲ FINAL SAMPLES POINTS
- - BURIED FIBERGLASS LINE
- ----- ABOVE GROUND POLY LINE
- ·-- ABOVE GROUND STEEL LINE
- - BURIED POLY LINE
- --- BURIED STEEL LINE
- ----- ROAD/PAD
- FINAL EXCAVATION
- STAIN
- WELL HEAD CELLAR



APACHE NEDU #173 AD

LEGALS: UL/J sec. 3 T-21-S R-37-E LEA COUNTY, NM





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

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

Form C-141 Revised August 8, 2011

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

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

			Rele	ease Notific	cation	and Co	rrective A	ction				
	*				٠	OPERAT	TOR	\boxtimes	Initia	al Report		Final Report
		pache Corpo					alie Gladden					
		9 Eunice, NI	<u>√1 88240</u>				To. 575-390-41					
Facility Nar	ne NEDU	J #173			<u> </u>	Facility Typ	e Production V	Vell -				
Surface Ow	ner Deck	Estate		Mineral (Owner S	State		Al	PI No	. 30-025-4	10554	
				LOCA	ATION	OF REI	LEASE					
Unit Letter	Section	Township	Range	Feet from the	North/	South Line	Feet from the	East/West I	ine	County	-	
В	3	21S	37E	3785'	FNL		1980	FEL		Lea		
			La	titude	·	_ Longitud	e					
				NAT	TURE (OF REL	EASE					
Type of Rele	ase Oil/Pro	duced Water					Release 40	Vol	ume F	Recovered 3	30	
Source of Re	lease Valv	е					lour of Occurrence	.,		Hour of Dis	covery	
Was Immedi	ota Motica (Siven?				07/12/12 If YES, To	Whom?	07/	12/12			
was minicul	ate Notice V		Yes 🛭	No 🗌 Not R	equired	Geoffrey L						
By Whom? N							lour 07/16/12					
Was a Water	course Read		Yes ⊠	71 N.		If YES, Vo	lume Impacting	the Watercou	rse.			
If a Watercou	irse was Im	pacted, Descr	ibe Fully.	*					-			
While laying	out a new	em and Reme flow-line to a ving down the	new drill,	the valves on the	header w	where not clos	sed and the check	valve did no	t hold,	, therefore th	he fluid	in the
	s were clos	and Cleanup A ed, check valv		ken.* llaced, standing fl	uid was r	ecovered and	i one-call was pla	aced. NMOC	D Rul	es and Regu	ulations	will be
regulations a public health should their or the environment.	Il operators or the envi operations homent. In a	are required to ronment. The nave failed to	o report a acceptana adequately OCD accep	e is true and comp nd/or file certain ce of a C-141 rep y investigate and ptance of a C-141	release no ort by the remediate	otifications a NMOCD m contamination	nd perform correct arked as "Final R on that pose a thu	ctive actions the deport" does note to ground	for related to the control of the co	eases which ieve the ope r, surface w	may en rator of ater, hu	ndanger f liability man health
Signature:	di	ani	R) ordd		<u>-</u>	OIL CON	SERVAT	ION	DIVISIO	<u>ON</u>	
Printed Name	e: Natalie (Gladden				Approved by	Environmental S	pecialist:				
Title: EHS E	Environmen	tal Tech				Approval Da	ie:	Expi	ation	Date:		
E-mail Addre	ess: natalie	.gladden@yal	100.com		(Conditions o	f Approval:			Attached	1 🔲	
Date: 07/1	6/12	Phone: 57:	5-390-418	6	l							

^{*} Attach Additional Sheets If Necessary



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



July 18, 2012

NATALIE GLADDEN

APACHE - EUNICE

P. O. BOX 1849

EUNICE, NM 88231

RE: NEDU #173 AD

Enclosed are the results of analyses for samples received by the laboratory on 07/13/12 14:45.

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

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

Method EPA 552.2

Haloacetic Acids (HAA-5)

Method EPA 524.2

Total Trihalomethanes (TTHM)

Method EPA 524.4

Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

Celes 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 - EUNICE NATALIE GLADDEN P. O. BOX 1849 EUNICE NM, 88231 Fax To: 394-2425

Received:

07/13/2012

Reported:

07/18/2012

Project Name:

NEDU #173 AD

Project Number: Project Location:

NONE GIVEN

Sampling Date:

07/12/2012

Sampling Type:

Soil

Sampling Condition:

Cool & Intact

Sample Received By:

Jodi Henson

Sample ID: PT. 1 @ SURFACE (H201612-01)

Chloride, SM4500CI-B	mg,	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3560	16.0	07/18/2012	ND	400	100	400	3.92	
TPH 8015M	mg,	/kg	Analyzed By: AM						S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	15000	200	07/17/2012	ND	176	87.8	200	0.370	
DRO >C10-C28	68900	200	07/17/2012	ND	187	93.3	200	1.37	

Surrogate: 1-Chlorooctane

1140 %

65.2-140

Surrogate: 1-Chlorooctadecane

531%

120 %

63.6-154

63.6-154

Sample ID: PT. 2 @ SURFACE (H201612-02)

Chloride, SM4500CI-B	mg	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3720	16.0	07/18/2012	ND	400	100	400	3.92	
ТРН 8015М	mg	/kg	Analyze	d By: AM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	176	50.0	07/17/2012	ND	176	87.8	200	0.370	
DRO >C10-C28	1250	50.0	07/17/2012	ND	187	93.3	200	1.37	
Surrogate: 1-Chlorooctane	83.9	% 65.2-14	0		•••	,			

Cardinal Laboratories

Surrogate: 1-Chlorooctadecane

*=Accredited Analyte

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

Celeg D. Keene



APACHE - EUNICE NATALIE GLADDEN P. O. BOX 1849 **EUNICE NM, 88231**

Fax To:

394-2425

Received:

07/13/2012

Reported:

07/18/2012

Project Name: Project Number: NEDU #173 AD NONE GIVEN

Project Location:

NOT GIVEN

Sampling Date:

07/12/2012

Sampling Type:

Soil

Sampling Condition:

Cool & Intact

Sample Received By:

Jodi Henson

Sample ID: PT. 3 @ SURFACE (H201612-03)

Chloride, SM4500CI-B	mg	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3440	16.0	07/18/2012	ND	400	100	400	3.92	
ТРН 8015М	mg	/kg	Analyze	d By: AM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	220	50.0	07/17/2012	ND	176	87.8	200	0.370	
DRO >C10-C28	875	50.0	07/17/2012	ND	187	93.3	200	1.37	
Surrogate: 1-Chlorooctane	81.5	% 65.2-14	0	····					

Surrogate: 1-Chlorooctadecane

109 %

63.6-154

*=Accredited Analyte Cardinal Laboratories

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

Celeg D. Keine Celey D. Keene, Lab Director/Quality Manager



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.

QM-4X The spike recovery was outside of QC acceptance limits for the MS and/or MSD due to analyte concentration at 4 times or

greater the spike concentration. The QC batch was accepted based on LCS and/or LCSD recoveries within the acceptance

limits.

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. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subclainers, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claims is based upon any of the above 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 Laboratories.

Celey D. Keene



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

ARDINAL LABORATORIES
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	Apache Corp.		V				I			B	LL TO					-	ANA	LYSI	S RE	QUE	ST			
Project Manager	Natalie Gladden						F	P.O.	#:															
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City:	State:	Zip	· ·	*************			Δ	ttn	:								<u> </u>							
Phone #:	Fax #:						Α	ddi	ress	:							1							
Project#:	Project Owne	r:					c	ity:						≥		I	1/8							
Project Name:	NEDU # 173 40						s	tate) :		Zip:		ě	15	×	6	E		İ					
Project Location	:						P	hor	ne #	:			ΙΞ	ĺ	Ш	်တ	aţ;	TDS						
Sampler Name:) Kanylain			ويسبراني			F	ax		<u> </u>	·		Chlorides	TPH 8015 M	BTEX	Texas TPH	Ö	 				1		
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Lab I.D. 11201612	Sample I.D.	(G)RAB OR (C)OMP	# CONTAINERS	GROUNDWATER	SOIL	OIL	SLUDGE	OTHER.	CE / COO!	OTHER:	DATE.	TIME		 			Complete Cations/Anions							
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analyses: All claims including service. In no event shall Ca	I Damages. Cardinal's bublisty and client's exclusive remedy for a g those for negligence and any other cause whotsoever shall be rained be liable tur incidental or consequental damages, including g out of or related to the performance of kervices hereunder by C	deemed withou	walve:	d unless ion, bus	made in iness int	gniting oblgáne	and re is, losi	ceived of us	by Ca	to aac	within 30 days alto rofits incurred by	n completion of th	e applica! rics	ble	 	I	<u> </u>		1	<u></u> -l				J
Relinquished By	Date: 7.13-12	Re	ceiv	ed/B	y:	7	1			1	7	Phone Res		□ Ye		No No	Add'l Add'l	Phone	#:					
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Sampler-UPS	- Bus - Other:	رهو سا ترک	ارت ا	_ 	⊒'Ýes		es				对	jkampl												

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

Appendix C
Final Laboratory Analyses

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



July 26, 2012

NATALIE GLADDEN

APACHE - EUNICE

P. O. BOX 1849

EUNICE, NM 88231

RE: NEDU #173 AD

Enclosed are the results of analyses for samples received by the laboratory on 07/20/12 13:35.

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

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

Method EPA 552.2

Haloacetic Acids (HAA-5)

Method EPA 524.2

Total Trihalomethanes (TTHM)

Method EPA 524.4

Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

Celeg D. Keene

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 - EUNICE NATALIE GLADDEN P. O. BOX 1849 **EUNICE NM, 88231** Fax To: 394-2425

Received:

07/20/2012

Reported: Project Name: 07/26/2012 NEDU #173 AD

Project Number: Project Location: NONE GIVEN

NOT GIVEN

Sampling Date:

07/19/2012

Sampling Type:

Soil

Sampling Condition:

Cool & Intact

Sample Received By:

Jodi Henson

Sample ID: NORTH WALL CENTER (H201680-01)

Chloride, SM4500CI-B	mg,	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC.	RPD	Qualifier
Chloride	64.0	16.0	07/24/2012	ND	416	104	400	0.00	
TPH 8015M	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	07/24/2012	ND	169	84.4	200	11.8	
DRO >C10-C28	<10.0	10.0	07/24/2012	ND.	178	89.2	200	11.0	
Surrogate: 1-Chlorooctane	79.4	% 65.2-14	0						
Surrogate: 1-Chlorooctadecane	102	% 63.6-15	4						

Sample ID: SOUTH WALL CENTER (H201680-02)

Chloride, SM4500CI-B	mg,	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	07/24/2012	ND	416	104	400	0.00	
TPH 8015M	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	07/24/2012	ND	169	84.4	200	11.8	
DRO >C10-C28	<10.0	10.0	07/24/2012	ND	178	89.2	200	11.0	
Surrogate: 1-Chlorooctane	66.6	% 65.2-14	0						
Surrogate: 1-Chlorooctadecane	79.7	% 63.6-15	4						

Cardinal Laboratories *=Accredited Analyte

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Project Number:

NONE GIVEN

Project Location:

NOT GIVEN

Sampling Date:

07/19/2012

Sampling Type:

Soil

Sampling Condition:

Cool & Intact

Sample Received By:

Jodi Henson

Sample ID: EAST WALL CENTER (H201680-03)

Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	07/24/2012	ND	416	104	400	0.00	
TPH 8015M	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	07/24/2012	ND	169	84.4	200	11.8	
DRO >C10-C28	<10.0	10.0	07/24/2012	ND	178	89.2	200	11.0	
Surrogate: 1-Chlorooctane	74.7	% 65.2-14	0						
Surrogate: 1-Chlorooctadecane	98.0	% 63.6-15	4						

Sample ID: WEST WALL CENTER (H201680-04)

Chloride, SM4500CI-B	mg,	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	07/24/2012	ND	416	104	400	0.00	
TPH 8015M	mg	/kg	Analyze	d By: MS			<u> </u>		_
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0 10.0		07/24/2012	ND	169	84.4	200	11.8	
DRO >C10-C28	<10.0	10.0	07/24/2012	ND	178	89.2	200	11.0	
Surrogate: 1-Chlorooctane	81.2	% 65.2-14	0						
Surrogate: 1-Chlorooctadecane	102	% 63.6-15	4						

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07/26/2012

Project Name: Project Number: NEDU #173 AD NONE GIVEN

Project Location:

NOT GIVEN

Sampling Date:

07/19/2012

Sampling Type:

Soil

Sampling Condition:

Cool & Intact

Sample Received By:

Jodi Henson

Sample ID: 5 PT BOTTOM (H201680-05)

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	07/24/2012	ND	416	104	400	0.00	
TPH 8015M	mg	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10 <		10.0	07/24/2012	ND	169	84.4	200	11.8	
DRO >C10-C28	<10.0	10.0	07/24/2012	ND	178	89.2	200	11.0	

Surrogate: 1-Chlorooctane

79.5 %

65.2-140

Surrogate: 1-Chlorooctadecane

101%

63.6-154

Sample ID: IMPORTED CALICHE (H201680-06)

Chloride, SM4500CI-B	mg,	/kg	Analyze	d By: HM				_	
Analyte	nalyte Result		Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	07/25/2012	ND	416	104	400	0.00	

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ND

Notes and Definitions

RPD Relative Percent Difference

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

*** Insufficient time to reach temperature.

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

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

Analyte NOT DETECTED at or above the reporting limit

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Celey L. Keene

ARDINAL LABORATORIES

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

Company Name: Apache Corp.					BILL TO ANALYSIS REQUEST																		
Project Manager	: Natalie Gladden						P.O. #:																
Address:							Company:									က္ခ]	
City:	State: Zip:						Attn:								9					1			
Phone #:	Fax #:						Address:					1		1						- 1			
Project #: Project Owner:							City:			, n	≥	ļ	二	1/8					- 1	l			
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FOR LAB USE ONLY	1			MA	TRIX	(_	PRES	ERV.	SAMPL	NG	O				e						ł	
Lab I.D. H <i>Z01b</i> 80	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER WASTEWATER SOIL	OIL	SLUDGE	OTHER:	ACID/BASE:	OTHER:	DATE	TIME		L			Complete							
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analyses. All claims includin	d Damages. Cordina's limbility and clients exclusive remedy for a g those for negligence and any other cause Witatsoever shall be ridinal be flable for incidental or consequental damages, including g-out of brirelated to the performance of services hereuarder by C	deeme g withou Cardina	j walvo	uniesa made	in writir	ng and i	eceive	ed by C	ardinai -	within 30 days ofte	r completion of th	ne applicat	ble	-	.		·						أحسببنده.
Relinquished/By	Date: 7-20-12 Time: 7715	Re	cely	ed By:		V	4	/x	E)	Phone Re Fax Resul REMARKS	sult: lt: 3:	□ Ye		No. No	Add'l	Phone Fax #:	#:					
Relindushed By: Date: Date: Time: Jags Sample Condition							on	с		(ED BY:	email results natalie.gladden@apachecorp.com Zconder@rice-ecs.com; Bbaker@rice-ecs.com;												
Sampler - UPS - Bus - Other: Sampler - UPS - Bus - Other: Sampler - UPS - Bus - Other:						ct. Yes			(mitals) hconder@rice-ecs.com; Lweinheimer@rice-ecs.com jkamplain@rice-ecs.com														

† Cardinal cannot accept verbal changes. Please fax written changes to 505-393-24/6

#26



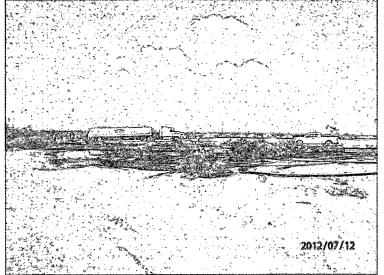
RICE Environmental Consulting and Safety (RECS)
P.O. Box 2948 Hobbs, NM 88241
Phone 575.393.2967

Apache NEDU #173 AD

Unit Letter J, Section 3, T21S, R37E

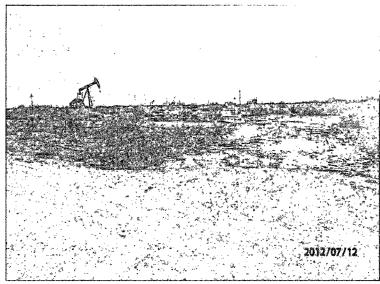


Site sign 7/12/12



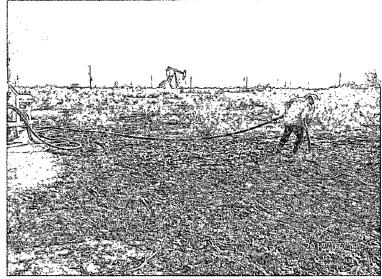
Initial release, facing southwest

7/12/12



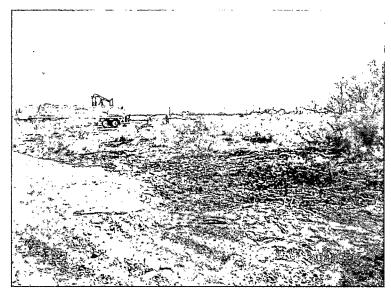
Initial release, facing northeast

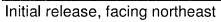
7/12/12



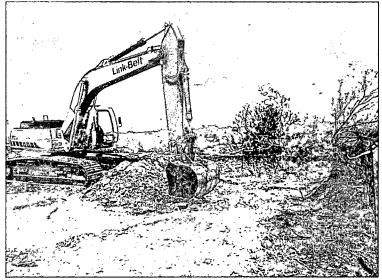
Initial release, facing northeast

7/12/12

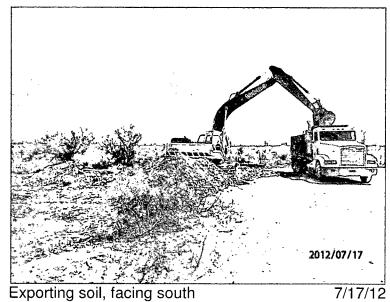




7/12/12



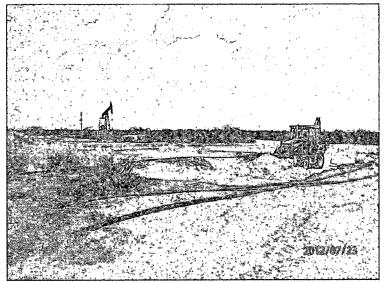
Excavating site, facing northeast

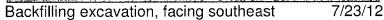


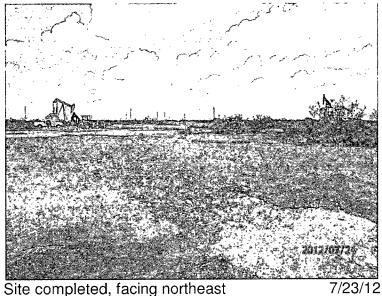
Exporting soil, facing south



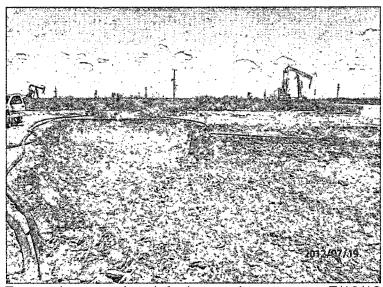
Importing soil, facing south



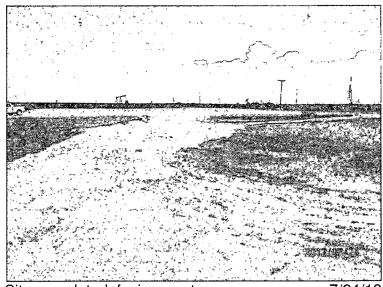




Site completed, facing northeast



Excavation completed, facing northeast



Site completed, facing west

7/24/12

Appendix E