District 1 State of New Mexico Form C-141 1625 N. French Dr., Hobbs, NM 88240 Energy Minerals and Natural Resources Revised August 8, 2011 District II 811 S. First St., Artesia, NM 88210 Submit 1 Copy to appropriate District Office in District III **Oil Conservation Division** accordance with 19.15.29 NMAC. 1000 Rio Brazos Road, Aztec, NM 87410 1220 South St. Francis Dr. District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505 Santa Fe, NM 87505 **Release Notification and Corrective Action OPERATOR** Initial Report Final Report Contact Larry Bruce Baker Name of Company Apache Corporation Address PO Box 1849, Eunice, NM 88231 Telephone No. (432) 631-6982 Facility Name NEDU Satellite #2 Facility Type Satellite API No. 3002506461 Surface Owner State Mineral Owner LOCATION OF RELEASE Unit Letter Section Township Range Feet from the North/South Line Feet from the East/West Line County Е 10 215 37E 1650 FNL 1126 FWL Lea Latitude\_ Longitude NATURE OF RELEASE Volume of Release 220 bbls Type of Release Oil Volume Recovered 180 bbls Source of Release Tank overflowed Date and Hour of Occurrence Date and Hour of Discovery 5/9/13 5:30 am Unknown If YES, To Whom? Was Immediate Notice Given? Yes No Not Required By Whom? Date and Hour Was a Watercourse Reached? If YES, Volume Impacting the Watercourse. Yes 🕅 No If a Watercourse was Impacted, Describe Fully.\* DTW = 44 Describe Cause of Problem and Remedial Action Taken.\* The tank overflowed because the automation was down so the transfer pump did not operate. A total of 220 bbls of oil was released and a total of 180 bbls was recovered. The tanks were equalized when switched to the other transfer pump. Describe Area Affected and Cleanup Action Taken.\* A total of 5,050 sq ft of area inside the bermed facility was affected. An initial C-141 was sent to NMOCD on September 6<sup>th</sup>, 2013 detailing the release. RECS personnel were on site beginning on May 10<sup>th</sup>, 2013 to assess the release. Surface samples were taken throughout the release and field tested for chlorides and hydrocarbons. The samples were then taken to a commercial laboratory for analysis and returned results of elevated chlorides, Gasoline Range Organics (GRO) and Diesel Range Organics (DRO). The facility tanks were washed down and the site was excavated using a hydrovae followed by hand digging to 6 inches bgs. A total of 122 yards of excavated soil was taken to a NMOCD approved facility for disposal. A vertical was installed on August 21ª, 2013 and was advanced to 10.5 fcet. As the vertical was advanced, samples were taken every half foot and field tested for chlorides and hydrocarbons. Representative samples from the vertical were taken to a commercial laboratory for analysis. Based on the vertical data, on September  $6^{th}$ , 2013, NMOCD verbally approved the excavated area be backfilled with 1 inch of bentonite chips, which would be tamped and watered down. The bentonite would provide an infiltration barrier for the site that would inhibit the downward migration of constituents to groundwater. The bentonite would then be covered with 3 inches of clean, imported caliche. RECS began these actions on September 25th, 2013. A total of 9 pallets of bentonite were used to cover the release area to a depth of 1 inch. The bentonite was tamped down and watered. A 3 inch layer of clean, imported caliche was then spread over the bentonite. 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. OILCON Bruce Baker Signature: Zarry Approved by Environmental Speci Environmental Specialist Printed Name: Larry Bruce Baker Approval Date: 2/12/14 Title: Environmental Tech **Expiration Date:** Conditions of Approval: E-mail Address: larry.baker@apachccorp.com Attached 10-8-13 IRP-9-13-2949 Date: Phone: (432) 631-6982

. . .

\* Attach Additional Sheets If Necessary

JUN 1 0 2014

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**EXPLORING WHAT'S POSSIBLE** 

## **APACHE CORPORATION**

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

# NEDU Satellite #2 1RP-9-13-2949

# **Termination Request**

approved Environmental Specialist NMOCD - DISTI 2112/14

API No. 3002506461

Release Discovered On: May 9<sup>th</sup>, 2013

Unit Letter E, Section 10, Township 21S, Range 37E

#### Rice Environmental Consulting & Safety

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

#### October 2<sup>nd</sup>, 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 Satellite #2 (1RP-9-13-2949) UL/E sec. 10 T21S R37E API No. 3002506461

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 3.5 miles north of Eunice, New Mexico at UL/E sec. 10 T21S R37E. NM OSE and BLM records indicate that groundwater will likely be encountered at a depth of approximately 44 +/- feet.

On May 9<sup>th</sup>, 2013, Apache discovered that a tank overflowed at the Satellite #2 because the automation was down so the transfer pump did not operate. A total of 220 barrels of oil was released at the site and a total of 180 barrels was recovered. The tanks were equalized when switched to another transfer pump. A total of 5,050 sq ft of the bermed facility was affected. An initial C-141 was sent to NMOCD on September 6<sup>th</sup>, 2013 detailing the release (Appendix A).

RECS personnel were on site beginning on May 10<sup>th</sup>, 2013 to assess the release. Surface samples were taken throughout the release and field tested for chlorides and hydrocarbons (Figure 1). The samples were then taken to a commercial laboratory for analysis and returned results of elevated chlorides, Gasoline Range Organics (GRO) and Diesel Range Organics (DRO) (Appendix B).

The facility tanks were washed down and the site was excavated using a hydrovac followed by hand digging to 6 inches bgs (Figure 2). A total of 122 yards of excavated soil was taken to a NMOCD approved facility for disposal. A vertical was installed on August 21<sup>st</sup>, 2013 and was advanced to 10.5 feet. As the vertical was advanced, samples were taken every half foot and field tested for chlorides and hydrocarbons. Representative samples from the vertical were taken to a commercial laboratory for analysis (Appendix C).

Based on the vertical data, on September 6<sup>th</sup>, 2013, NMOCD verbally approved the excavated area be backfilled with 1 inch of bentonite chips, which would be tamped and watered down. The bentonite would provide an infiltration barrier for the site that would inhibit the downward migration of constituents to groundwater. The bentonite would then be covered with 3 inches of clean, imported caliche.

RECS began these actions on September 25<sup>th</sup>, 2013. A total of 9 pallets of bentonite were used to cover the release area to a depth of 1 inch. The bentonite was tamped down and watered. A 3 inch layer of clean, imported caliche was then spread over the bentonite.

Photo Documentation of these activities can be found in Appendix D.

Six inches of impacted soils were removed from the site. The site was backfilled with 1 inch of bentonite chips and 3 inches of caliche as approved by NMOCD. Therefore, Apache submits the final C-141 and respectfully request the closure of the regulatory file for this site (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.

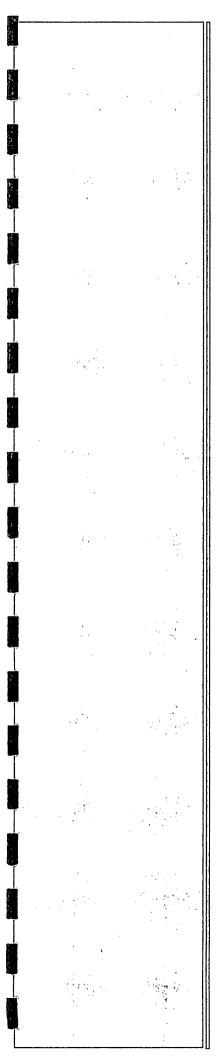
Sincerely,

JC.W.

Lara Weinheimer Project Scientist RECS -(575) 441-0431

Attachments:

Figure 1 – Initial Sampling Map Figure 2 – Vertical Map Appendix A – Initial C-141 Appendix B – Initial Sampling Lab Appendix C – Vertical Sampling Lab Appendix D – Photo Documentation Appendix E – Final C-141

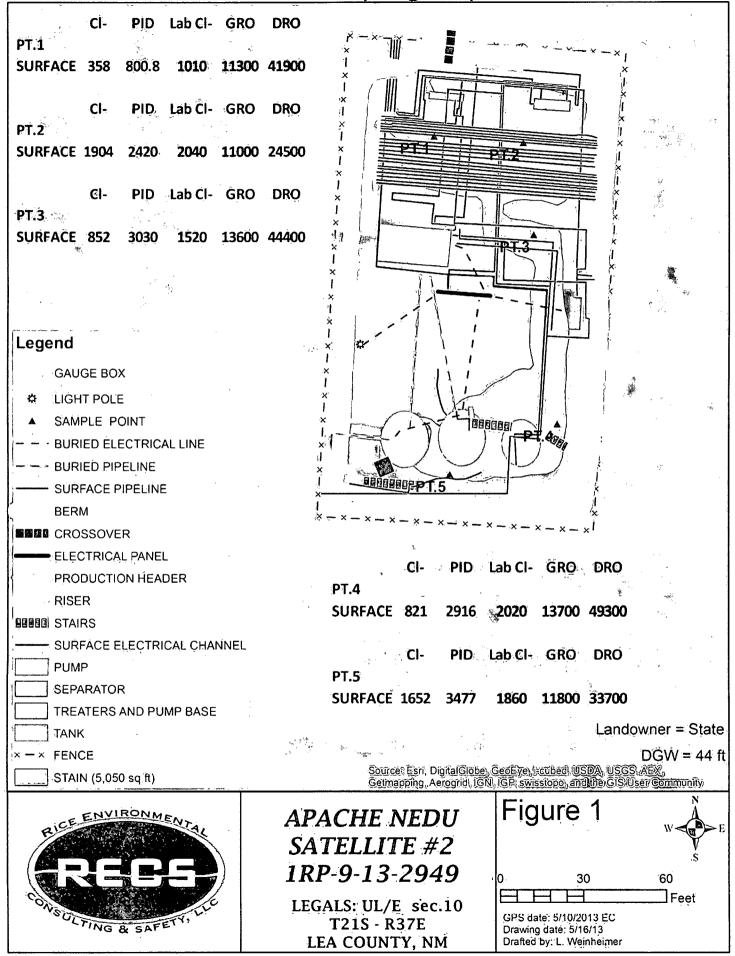


Figures

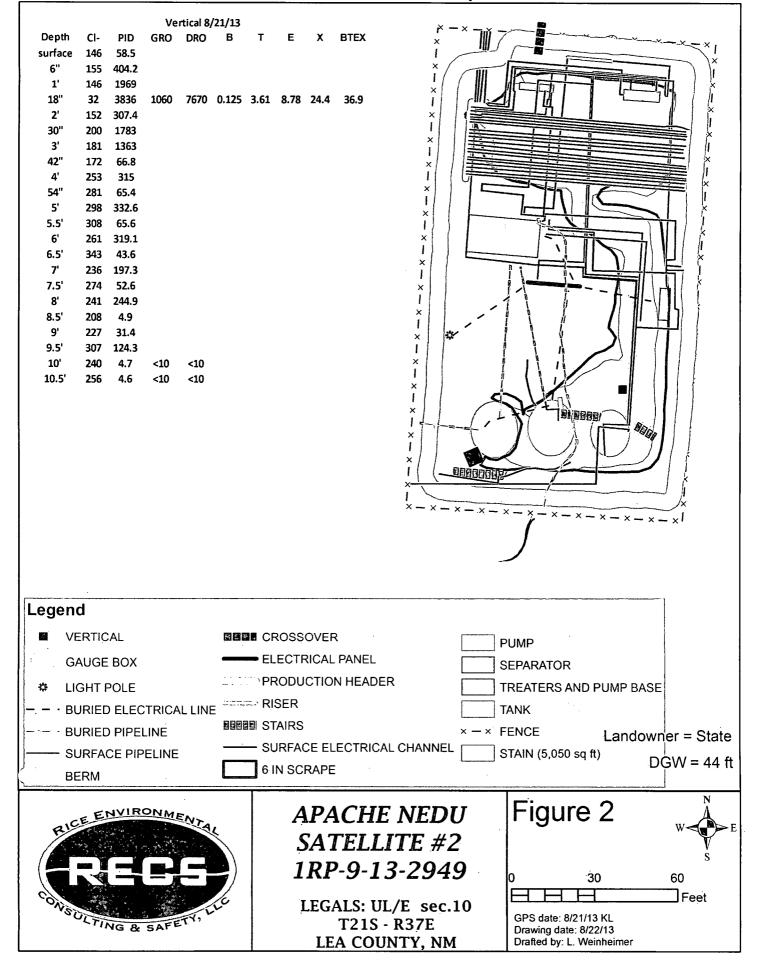
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RICE Environmental Consulting and Safety (RECS) P.O. Box 2948, Hobbs, NM 88241 Phone 575.393.2967

## **Initial Sampling Map**



## Vertical Map





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

#### HOBBS OCD State of New Mexico Energy Minerals and Natural Resources

5

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

1220 South St. Francis Dr.

RECEIVED Santa Fe, NM 87505

SEP 092013 Oil Conservation Division

			Rel	ease Notifi	catior	and Co	orrective A	ction					
						<b>OPERA</b>			🛛 Initi	al Report	Final Repor		
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Address PC Facility Nar				1			be Satellite	982					
Surface Ow	ner State			Mineral (					APING	b. 3002506461			
						NOF REI	I FASF		1				
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Source of Re	lease Tank	c overflowed				Date and H Unknown	Iour of Occurrenc	e	Date and 5:30 am	Hour of Discovery	5/9/13		
Was Immedia	ate Notice (					If YES, To	Whom?	l.	<u>0.00 um</u>	<u>, , , , , , , , , , , , , , , , , , , </u>			
<b>D U</b> "			Yes 🖄	No 🗌 Not R	equired		•			<u></u>			
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regulations al public health should their c	l operators or the envir perations h innent. In a	are required to ronment. The ave failed to a ddition, NMC	o report and acceptance adequately OCD accept	nd/or file certain r ce of a C-141 repo investigate and r	elease no ort by the emediate	otifications and NMOCD m contaminati	nd perform correc arked as "Final Re on that pose a thre e the operator of r	tive active eport" do eat to gro responsil	ons for reli- bes not reli- ound water bility for c	suant to NMOCD rul eases which may end ieve the operator of 1 r, surface water, hum compliance with any o	langer iability an health		
Signature: Printed Name	Signature: Larry Bruce Baker					Approved by	<u>OIL CONS</u> Environmental S <sub>I</sub>		sery	DIVISION SeRMy al Specialist	Ď		
Title: Enviro	nmental Te	ch				Approval Dat	e: 05/09/13	E	Expiration	Date: 07/09/13			
-E-mail Addre Date: E	ss: larry.ba	nker@apachec	Phone	(432) 631-6982	r (	Conditions of	Approval: SVBI	mor r		Attached KRP-9-13-2			

# Appendix B Initial Sampling Lab

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



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May 16, 2013

STEVEN FLEMING

APACHE - EUNICE

P. O. BOX 1849

EUNICE, NM 88231

**RE: NEDU SATELLITE #2 BATTERY** 

Enclosed are the results of analyses for samples received by the laboratory on 05/14/13 8:25.

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 <a href="https://www.tceq.texas.gov/field/qa/lab">www.tceq.texas.gov/field/qa/lab</a> 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.

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.

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Sincerely,

Celey D. Keine

Celey D. Keene Lab Director/Quality Manager



#### Analytical Results For:

APACHE - EUNICE STEVEN FLEMING P. O. BOX 1849 EUNICE NM, 88231 Fax To: 394-2425

Received:	05/14/2013	Sampling Date:	05/10/2013
Reported:	05/16/2013	Sampling Type:	Soil
Project Name:	NEDU SATELLITE #2 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

#### Sample ID: PT. 1 SURFACE SAMPLE (H301143-01)

Analyzed By: DW Chloride, SM4500CI-B mg/kg Analyte Result **Reporting Limit** Analyzed Method Blank BS % Recovery True Value QC RPD Qualifier Chloride 1010 16.0 05/14/2013 ND 432 108 400 0.00 **TPH 8015M** Analyzed By: MS mg/kg S-06 Reporting Limit Analyzed Method Blank RPD Analyte Result BS % Recovery True Value QC Qualifier GRO C6-C10 11300 100 05/14/2013 ND 211 106 200 1.96 DR0 >C10-C28 41900 100 05/14/2013 ND 208 104 200 1.47 Surrogate: 1-Chlorooctane 363 % 65.2-140 Surrogate: 1-Chlorooctadecane 1160 % 63.6-154

#### Sample ID: PT. 2 SURFACE SAMPLE (H301143-02)

Chloride, SM4500CI-B	mg/	'kg	Analyze	d By: DW						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	2040	16.0	05/14/2013	ND	432	108	400	0.00		
TPH 8015M	mg/kg		Analyzed By: MS						S-06	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	11000	50.0	05/14/2013	ND	211	106	200	1.96		
DRO >C10-C28	24500	50.0	05/14/2013	ND	208	104	200	1.47		
Surrogate: 1-Chlorooctane	285	65.2-14	0							
Surrogate: 1-Chlorooctadecane	616 5	63.6-15	4							

#### **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 whatboever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after competion 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 learnified above. This reproduced exception full with mitten approval of Cardinal Laboratories.

Celez Di Kune

Celey D. Keene, Lab Director/Quality Manager



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#### Analytical Results For:

APACHE - EUNICE STEVEN FLEMING P. O. BOX 1849 EUNICE NM, 88231 Fax To: 394-2425

Received:	05/14/2013	Sampling Date:	05/10/2013
Reported:	05/16/2013	Sampling Type:	Soil
Project Name:	NEDU SATELLITE #2 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

#### Sample ID: PT. 3 SURFACE SAMPLE (H301143-03)

Chloride, SM4500Cl-B mg/kg Analyzed By: DW Analyte Result Reporting Limit Analyzed Method Blank BS % Recovery True Value QC RPD Qualifier Chloride 1520 16.0 05/14/2013 ND 432 108 400 0.00 TPH 8015M Analyzed By: MS S-06 mg/kg Analyte Result Reporting Limit Analyzed Method Blank BS % Recovery True Value QC RPD Qualifier GRO C6-C10 13600 100 05/14/2013 ND 211 106 200 1.96 DRO >C10-C28 44400 100 05/14/2013 ND 208 104 200 1,47 Surrogate: 1-Chlorooctane 410% 65.2-140 Surrogate: 1-Chlorooctadecane 1260 % 63.6-154

#### Sample ID: PT. 4 SURFACE SAMPLE (H301143-04)

Chloride, SM4500Cl-B	mg,	/kg	Analyzed By: DW						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2020	16.0	05/14/2013	ND	432	108	400	0.00	
TPH 8015M	mg/kg		Analyzed By: MS						S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	13700	100	05/14/2013	ND	211	106	200	1.96	
		100	05/14/2013	ND	208	104	200	1.47	

63.6-154

Surrogate: 1-Chlorooctadecane 1440 %

#### Cardinal Laboratories

#### \*=Accredited Analyte

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Celey Di Keine

Celey D. Keene, Lab Director/Quality Manager



#### Analytical Results For:

APACHE - EUNICE STEVEN FLEMING P. O. BOX 1849 EUNICE NM, 88231 Fax To: 394-2425

Received:	05/14/2013	Sampling Date:	05/10/2013
Reported:	05/16/2013	Sampling Type:	Soil
Project Name:	NEDU SATELLITE #2 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

#### Sample ID: PT. 5 SURFACE SAMPLE (H301143-05)

Chloride, SM4500Cl-B mg/kg Analyzed By: DW Analyte Result Reporting Limit Analyzed Method Blank BS % Recoverv True Value QC RPD Oualifier Chloride 1860 16.0 05/14/2013 ND 432 108 400 0.00 TPH 8015M mg/kg Analyzed By: MS S-06 Analyte Reporting Limit Analyzed Method Blank True Value QC RPD Qualifier Result BS % Recovery GRO C6-C10 11800 50.0 05/14/2013 ND 211 106 200 1.96 DRO >C10-C28 33700 50.0 05/14/2013 ND 208 104 200 1.47 Surrogate: 1-Chlorooctane - 325 % 65.2-140 Surrogate: 1-Chlorooctadecane 932 % 63.6-154

**Cardinal Laboratories** 

\*=Accredited Analyte

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Celey D. Kune

Celey D. Keene, Lab Director/Quality Manager

Page 4 of 6



#### PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

#### **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.
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

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Celey D. Kune

Celey D. Keene, Lab Director/Quality Manager

Page 5 of 6

CARDINAL Laboratories

#### CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name: APACHE	· · ·	<b>B</b>	LL TO					ANAL	YSIS	RE	QUE	ST .			
Project Manager: STEVE FLEMMINGS		P.O. #:							· ·						· ·
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EASE NOTE: Lability and Damages. Cardinal's lisbility and client's exclusive remody for any claim alyses. All claims including those for negligence and any other cause whatpeever shall be deemed v vice. In no event shall Cardinal be liable for incidental or conseque exclusion for the share who filiates exclusers of entry and or related to the performance of space best builded by Cardinal, n					cable		• •		:					•	
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Page 6 of 6

# $\underset{\text{Vertical Sampling Lab}{\text{Lab}}$

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



August 22, 2013

BRUCE BAKER

APACHE - EUNICE

P. O. BOX 1849

EUNICE, NM 88231

RE: NEDU SATELLITE #2 AD

Enclosed are the results of analyses for samples received by the laboratory on 08/21/13 17:40.

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 <a href="https://www.tceq.texas.gov/field/qa/lab">www.tceq.texas.gov/field/qa/lab</a> 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.

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,

Celeg & Keine

Celey D. Keene Lab Director/Quality Manager



#### Analytical Results For:

APACHE - EUNICE BRUCE BAKER P. O. BOX 1849 EUNICE NM, 88231 Fax To: 394-2425

Received:	08/21/2013	Sampling Date:	08/21/2013
Reported:	08/22/2013	Sampling Type:	Soil
Project Name:	NEDU SATELLITE #2 AD	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

#### Sample ID: VERTICAL @ 10' (H302006-01)

Chloride, SM4500CI-B	mg,	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	240	16.0	08/22/2013	ND	416	104	400	3.92	
TPH 8015M	mg.	/kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	08/22/2013	ND	214	107	200	7.90	
DRO >C10-C28	<10.0	10.0	08/22/2013	ND	221	111	200	7.69	
Surrogate: 1-Chlorooctane	83.3	% 65.2-14	0						- , <u>, , , , , , , , , , , , , , , , , ,</u>
Surrogate: 1-Chlorooctadecane	92.9	% 63.6-15	4						

#### Sample ID: VERTICAL @ 10.5' (H302006-02)

Chloride, SM4500CI-B	mg,	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	256	16.0	08/22/2013	. 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	08/22/2013	ND	214	107	200	7.90	
DRO >C10-C28	<10.0	10.0	08/22/2013	ND	221	111	200	7.69	
Surrogate: 1-Chlorvoctane	82.4	% 65.2-14	0						
Surrogate: 1-Chlorooctadecane	90.3	% 63.6-15	4.						

#### 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 whitscevere shall be deemed waived unless made in writing and received by Cardinal within thirry (30) days after completion of the applicable service. In no event shall Cardinal be liable for inodential 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 state/releasings or otherwse. Results relate only to the samples identified above. This reproduced exception in full with mitten approval of Cardinal Laboratories.

Celey D. Kune

Celey D. Keene, Lab Director/Quality Manager

ı,



#### Analytical Results For:

APACHE - EUNICE BRUCE BAKER P. O. BOX 1849 EUNICE NM, 88231 Fax To: 394-2425

Received:	08/21/2013	Sampling Date:	08/21/2013
Reported:	08/22/2013	Sampling Type:	Soil
Project Name:	NEDU SATELLITE #2 AD	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

#### Sample ID: VERTICAL @ 18" (H302006-03)

BTEX 8021B	mg,	/kg	Analyze	d By: DW					S-04
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	0,125	0.050	08/22/2013	ND	2.36	118	2.00	16.6	
Toluene*	3.61	0.050	08/22/2013	ND	2.31	115	2.00	17.1	
Ethylbenzene*	8.78	0.050	08/22/2013	ND	2.47	124	2.00	17.2	
Total Xylenes*	24.4	0.150	08/22/2013	. ND	7.46	124	6.00	17.4	
Total BTEX	36.9	0.300	08/22/2013	ND					

Surrogate: 4-Bromofluorobenzene (PIL 717 % 89.4-126

218 %

63.6-154

Chloride, SM4500CI-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	08/22/2013	ND	400	100	400	3.92		
ГРН 8015М	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	1060	100	08/22/2013	ND	214	107	200	7.90		
DRO >C10-C28	7670	100	08/22/2013	ND	221	111	200	7.69		

## Cardinal Laboratories

Surrogate: 1-Chlorooctadecane

#### \*=Accredited Analyte

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Celey D. Kune

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.
S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
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

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Celuz D. Kune

Celey D. Keene, Lab Director/Quality Manager



#### CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name	Apache				•		• •			8		L 70		-		• •		ANA	LYSI	S RE	QUE	ST			
Project Manager: Bruce Baker							P.O. #:							ŀ					•		:	· • ]			
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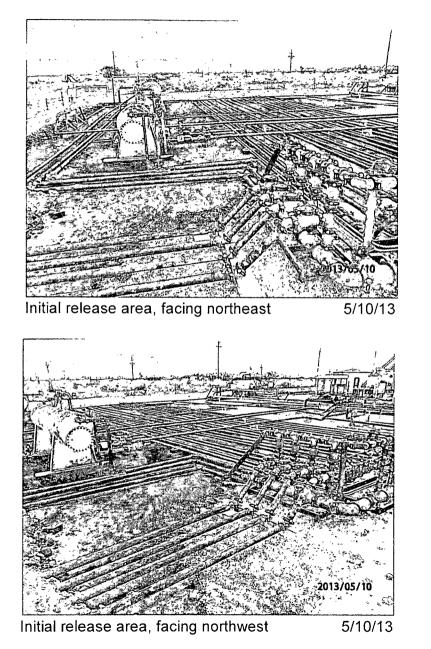
## Appendix D Photo Documentation

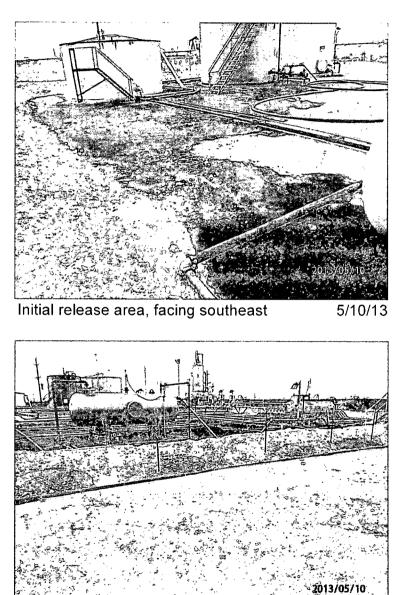
1. 10 miles

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

### Apache NEDU Satellite #2 AD

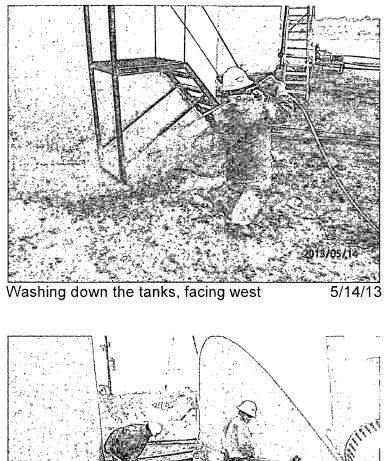
Unit Letter E, Section 10, T21S, R37E



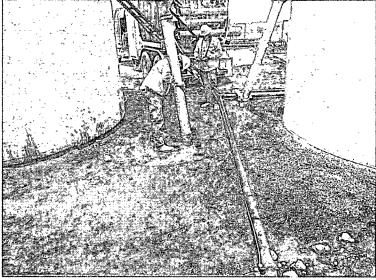


Initial release area, facing south

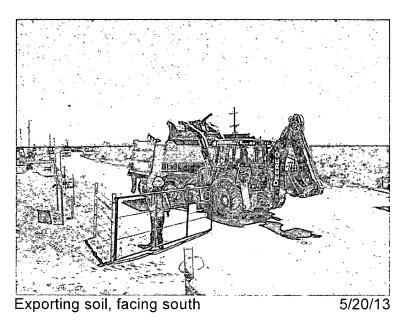
5/10/13

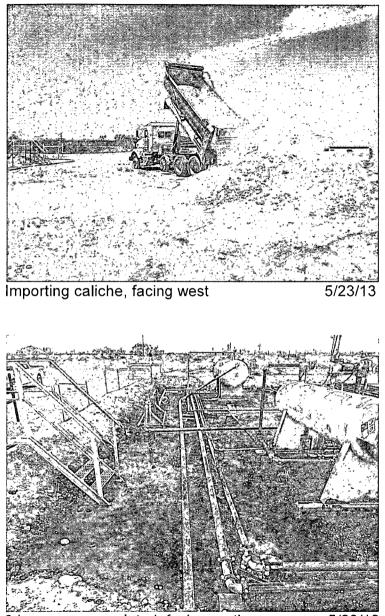






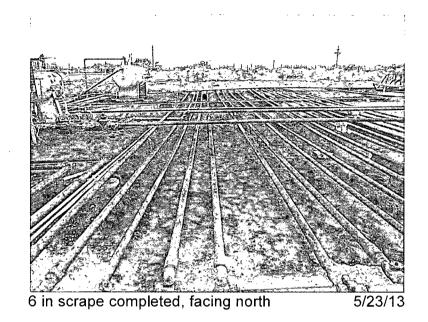
Using the hydro-vac to clean up release, facing north 5/15/13

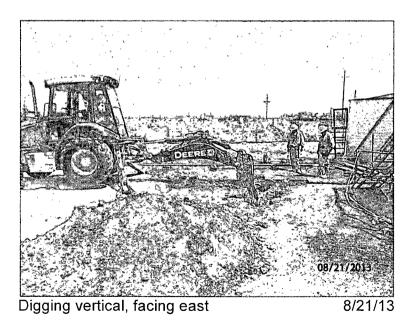


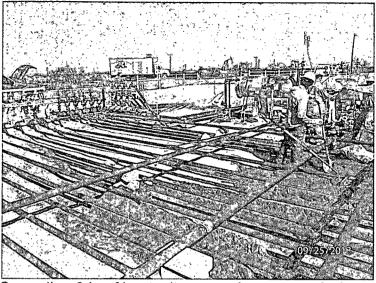


6 in scrape completed, facing north

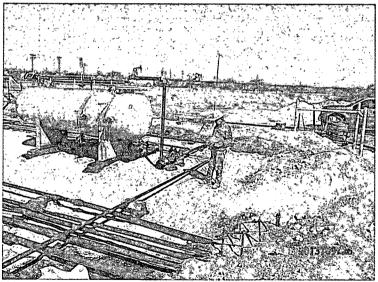
5/23/13





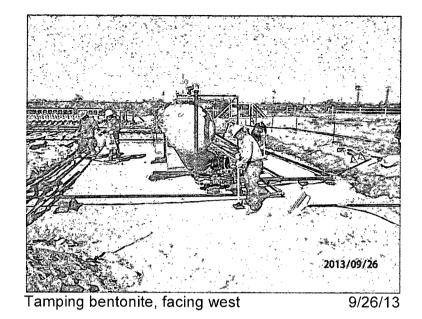


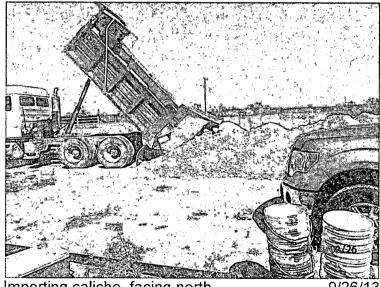
Spreading 6 in of bentonite over release area, facing northwest 9/25/13



Watering down bentonite, facing northwest

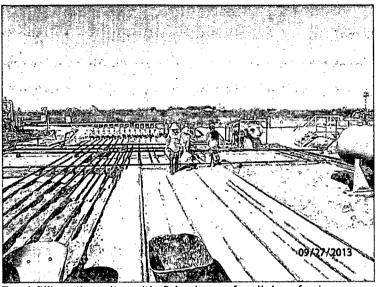
9/26/13



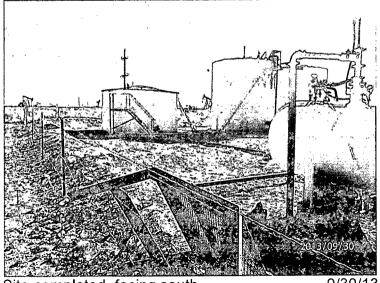


Importing caliche, facing north

9/26/13

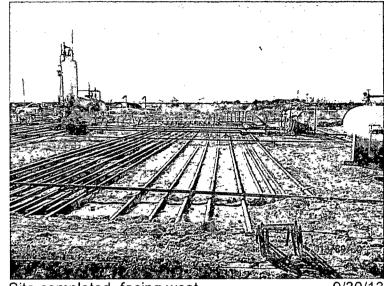


Backfilling the site with 3 inches of caliche, facing 9/27/13



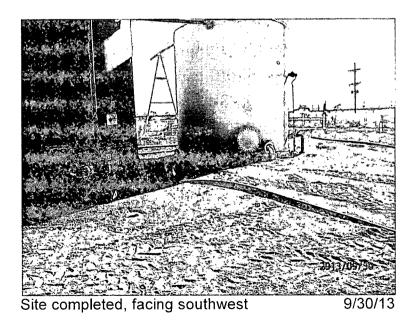
Site completed, facing south

9/30/13



Site completed, facing west

9/30/13



# Appendix E Final C-141

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

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

**Release Notification and Corrective Action** 

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

1

						OPERATOR 🗌 Initial Report 🛛 Final I											
Name of Co	mpany A	pache Corpo	oration			Contact Larry Bruce Baker											
Address P	<b>D Box 184</b>	9, Eunice, N	IM 8823	1		Telephone No. (432) 631-6982											
Facility Nar	ne NEDU	Satellite #2				Facility Type Satellite											
Surface Ow	ner State			Mineral C	)wner	r API No. 3002506461											
				LOCA	<b>IOIT</b>	ON OF RELEASE											
Unit Letter	Section	Township	Range	Feet from the	North/	South Line	Feet from the	Eașt/V	West Line County								
Е	10	215	37E	1650	F	<sup>7</sup> NL	1126	F	WL	Lea							
			La	titude		_ Longitud	le										
NATURE OF RELEASE																	
Type of Relea							Release 220 bbl			Recovered 1							
Source of Rel	ease Tank	overflowed				Date and H Unknown	lour of Occurrenc	xe	Date and 5:30 am	Hour of Disc	covery	5/9/1	3				
Was Immedia	ite Notice G		Yes 🗵	No 🗌 Not Re	quired	If YES, To	Whom?										
By Whom?						Date and H	lour				• •						
Was a Waterc	ourse Reac	hed?	Yes 🗵	No		If YES, Volume Impacting the Watercourse.											
If a Watercourse was Impacted, Describe Fully.*																	
				Taken.* The ta					own so the t	ransfer pum	o did n		rate.				
A total of 220 bbls of oil was released and a total of 180 bbls was recovered. The tanks were equalized when switched to the other transfer pump Describe Area Affected and Cleanup Action Taken.* A total of 5,050 sq ft of area inside the bermed facility was affected. An initial C-141 was sent to N September 6 <sup>th</sup> , 2013 detailing the release. RECS personnel were on site beginning on May 10 <sup>th</sup> , 2013 to assess the release. Surface samples were taken throughout and field tested for chlorides and hydrocarbons. The samples were then taken to a commercial laboratory for analysis and returned results of elevated chlorides, Gr Range Organics (GRO) and Diesel Range Organics (DRO). The facility tanks were washed down and the site was excavated using a hydrovae followed by hand d inches bgs. A total of 122 yards of excavated soil was taken to a NMOCD approved facility for disposal. A vertical was installed on August 21 <sup>st</sup> , 2013 and was ad 10.5 feet. As the vertical was advanced, samples were taken every half foot and field tested for chlorides and hydrocarbons. Representative samples from the verti- taken to a commercial laboratory for analysis. Based on the vertical data, on September 6 <sup>th</sup> , 2013, NMOCD verbally approved the excavated area be backfilled wi of bentonite chips, which would be tamped and watered down. The bentonite would provide an infiltration barrier for the site that would inhibit the downward mi constituents to groundwater. The bentonite would then be covered with 3 inches of clean, imported caliche. RECS began these actions on September 25 <sup>th</sup> , 2013. 9 pallets of bentonite were used to cover the release area to a depth of 1 inch.										Gasoli diggin advancertical with 1 nigrati A to	ne ng to 6 ced to were inch ion of tal of						
then spread over the bentonite. 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 endange 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 liabilit should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human he 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.											er ity ealth						
Signature:	Larry	Bruce	Bake	(		OIL CONSER MATION DIVISION											
Printed Name:	: Larry Вп	ice Baker				Approved by Environmental Specification											
Title: Enviror	nmental Tec	:h				Approval Date: 2 12 14 Expiration Date: -											
E-mail Addres	s: larry.ba	ker@apachec	orp.com		0	Conditions of Approval:											
Date: 10	- 8-13	,	Phone:	(432) 631-6982		IRP-9-13							949				

10-8-13 Date:

\* Attach Additional Sheets If Necessary