

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Avenue, Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

**HOBBS OCD**

SEP 09 2013

RECEIVED

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 October 10, 2003

Submit 2 Copies to appropriate  
District Office in accordance  
with Rule 116 on back  
side of form

### Release Notification and Corrective Action

#### OPERATOR

☐ Initial Report ☒ Final Report

Name of Company	Apache Corp.	Contact	Natalie Gladden
Address	P.O. Box 1849, Eunice, NM, 88231	Telephone No.	(575) 390-4186
Facility Name	NEDU #220	Facility Type	Producing Well
Surface Owner	State of NM	Mineral Owner	State of NM
		Lease No.	30-025-06358

#### LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
J	2	21S	37E	2886	FNL	2307	FEL	Lea

Latitude \_\_\_\_\_ Longitude \_\_\_\_\_

#### NATURE OF RELEASE

Type of Release	Produced Water and oil	Volume of Release	40 bbl	Volume Recovered	30 bbl
Source of Release	Flow Line	Date and Hour of Occurrence	12/27/12	Date and Hour of Discovery	12/27/12
Was Immediate Notice Given?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom?	Leking		
By Whom?	Natalie Gladden	Date and Hour	12/28/2012 6:42 am		
Was a Watercourse Reached?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.			

If a Watercourse was Impacted, Describe Fully.\*

DTW = 49'

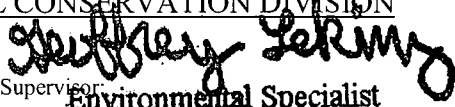
Describe Cause of Problem and Remedial Action Taken.\*

Flow line ruptured due to freezing weather. Standing fluid was recovered and initial assessment of the release area has been conducted.

Describe Area Affected and Cleanup Action Taken.\*

The leak affected 1,244 square feet of pasture land. The leak area was excavated to 6 ft. below ground surface (bgs). Impacted soils were removed to a NMOCD approved disposal facility. Representative soil samples were collected from the excavation walls and a soil bore at the center of the leak. The samples were sent to a commercial laboratory for chloride and TPH confirmation. A 20 mil reinforced plastic liner was installed in the excavation at a depth of 4 ft. bgs as a barrier to the downward migration of any remaining constituents. The excavation was backfilled with clean imported and blended topsoil, and was contoured to the surrounding landscape.

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.

Signature:	OIL CONSERVATION DIVISION 		
Printed Name:	Natalie Gladden	Approved by District Supervisor:	Environmental Specialist
Title:	EH&S Environmental Tech	Approval Date:	9/11/13
E-mail Address:	Natalie.gladden@apachecorp.com	Expiration Date:	-
Date:	Phone: (575) 390-4186	Conditions of Approval:	-
		Attached	<input type="checkbox"/>
		IRP-9-13-2948	

\* Attach Additional Sheets If Necessary





EXPLORING WHAT'S POSSIBLE

HOBBS OCD

SEP 09 2013

RECEIVED

# APACHE CORPORATION

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

approved  
*Jeffrey Yekim*  
Environmental Specialist  
NMOC-DIST 1  
9/11/13

## NEDU #220 AD

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# Closure Report

API 30-025-06358

Release Date: December 27, 2012

Unit Letter J, Section 2, Township 21S, Range 37E

# Rice Environmental Consulting & Safety

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P.O. Box 5630 Hobbs, NM 88241

Phone 575.393.4411 Fax 575.393.0293

**March 1, 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 – NEDU #220 AD**

**UL/J sec. 2 T21S R37E**

**API No. 30-025-06358**

Mr. Leking:

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

## **Background and Previous Work**

The site is an accidental discharge of produced water and hydrocarbon fluids associated with the NEDU #220. A flow line ruptured due to freezing weather and released fluids onto pasture land. The line was repaired and standing fluids were recovered. An initial form C-141 was submitted by Apache Corporation on December 28, 2012 (Appendix A). The site is located north of Eunice, in unit letter 'J' of section 2, T21S, R37E in Lea County, New Mexico.

On November 27, 2012, RECS personnel initiated work on the NEDU #220. Initial soil samples were collected from ground surface (Figure 1). The samples were field tested for chloride. Headspace measurements were also taken in the field using a Photo Ionization Detector (PID). The samples were submitted to a commercial laboratory for chloride and TPH (GRO/DRO) analyses (Appendix C). Chloride ranged from 336 mg/kg to 544 mg/kg, GRO ranged from 8,350 mg/kg to 14,800 mg/kg, and DRO ranged from 28,600 mg/kg to 47,400 mg/kg.

From January 7-8, 2013, RECS personnel collected and field tested soil samples from Vertical #1 to a depth of 24 ft. below ground surface (bgs) and Vertical #2 to a depth of 15 ft. bgs (Figure 2). The leak area was excavated to 6 ft. bgs and representative grab samples of the excavation walls were submitted to a laboratory for chloride and TPH analyses (Appendix C). The wall samples contained 32 mg/kg chloride or less, <10 mg/kg GRO, and <10 mg/kg DRO.

Impacted soils were removed to a NMOCD approved disposal facility. The excavation was backfilled to a depth of 4 ft. bgs. A 20 mil reinforced plastic liner was installed at 4 ft bgs, and the remaining excavation was backfilled with clean soil from the surrounding sand dunes.

On February 14, 2013, a soil bore was advanced at the site to a depth of 39 ft. bgs (Figure 2) (Appendix D). Soil samples were submitted to a laboratory for chloride and TPH analyses (Appendix C). The 36 ft. sample contained 128 mg/kg chloride and <10 mg/kg GRO and DRO. The 39 ft. sample contained 64 mg/kg chloride and <10 mg/kg GRO and DRO. The soil bore was plugged in full with bentonite.

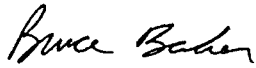
See Appendix B for photographs of field activities.

## **Conclusion**

According to the US Geological Survey (USGS), depth to groundwater in the area approximates 41 ft bgs (Appendix D). Due to the removal of surface impacted soils, the installation of a barrier, and laboratory confirmation of the depth of constituent impact, Apache submits the final C-141 (Appendix E) and respectfully requests the closure of the regulatory file for this site.

Apache Corporation appreciates the opportunity to work with you on this project. Please call Natalie Gladden (575) 390-4186 if you have any questions or comments.

Sincerely,



Bruce Baker  
Head Foreman  
RECS  
(575) 631-5157

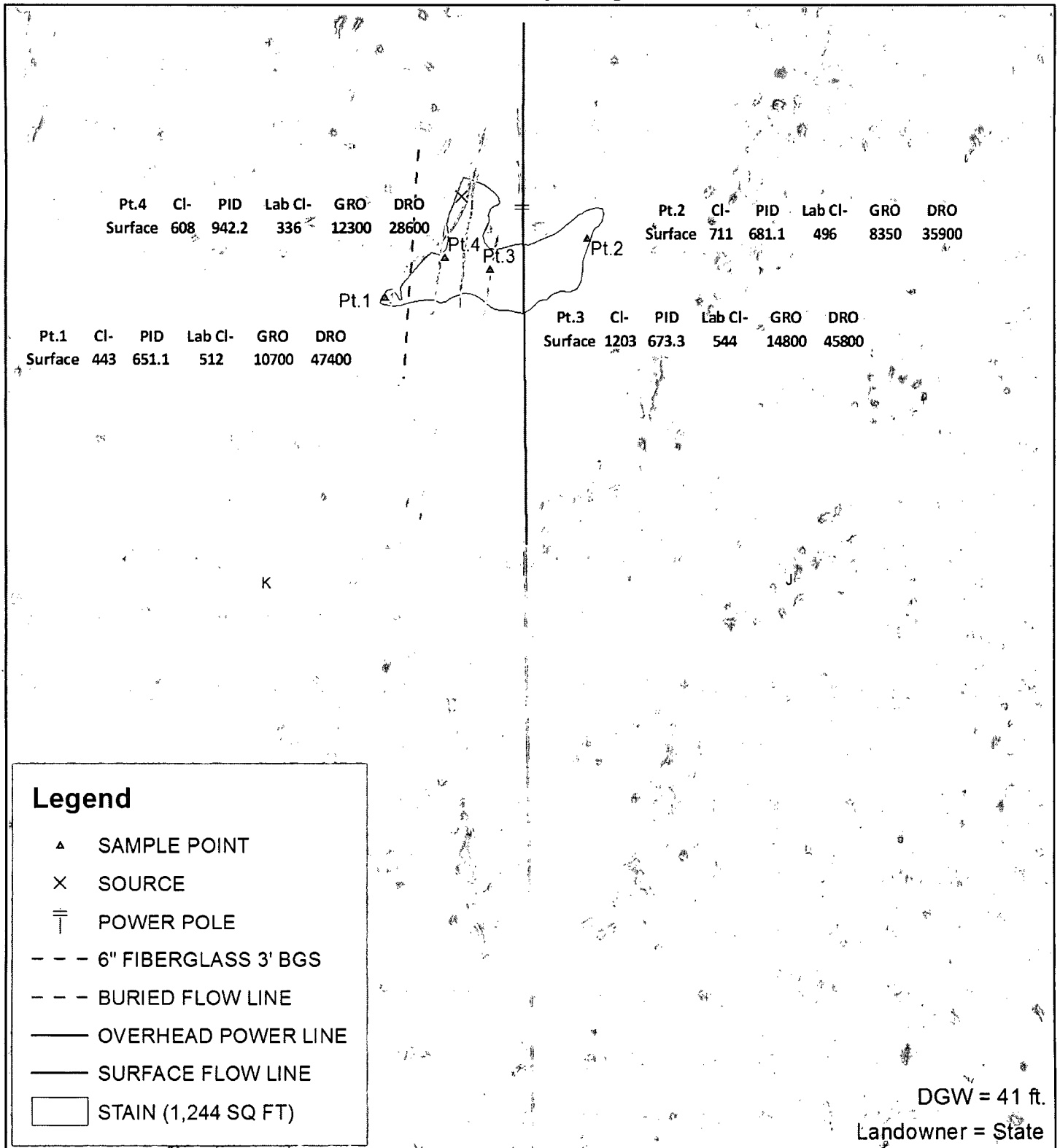
## **Attachments:**

- Figure 1: Site Plat with Initial Sampling Data
- Figure 2: Site Plat with Vertical, Soil Bore, and Excavation Data
- Appendix A: Initial Form C-141
- Appendix B: Site Photographs
- Appendix C: Laboratory Results
- Appendix D: Soil Bore Log and Soil Bore Site Photographs
- Appendix E: Groundwater Study
- Appendix F: Final Form C-141

# Figures

**RICE Environmental Consulting and Safety (RECS)**  
P.O. Box 5630 Hobbs, NM 88241  
Phone 575.393.4411 Fax 575.393.0293

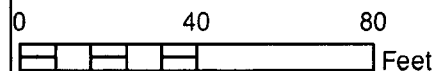
# Initial Sampling Data



## APACHE NEDU #220 AD

LEGALS: UL/K&J SEC 2  
T21S R37E  
LEA COUNTY, NM

Figure 1



GPS date: 1/8/2013 KN  
Drawing date: 1/8/2013  
Drafted by: L. Weinheimer, A.C. Ruth

# Vertical, Soil Bore, and Excavation Data

Pt.1 CI- PID Lab CI- GRO DRO  
Surface 443 651.1 512 10700 47400

Pt.3 CI- PID Lab CI- GRO DRO  
Surface 1203 673.3 544 14800 45800

Pt.2 CI- PID Lab CI- GRO DRO  
Surface 711 681.1 496 8350 35900

Pt.4 CI- PID Lab CI- GRO DRO  
Surface 608 942.2 336 12300 28600



## Excavation

Sample Description	CI-	GRO	DRO
N Wall Center	32	<10	<10
S Wall Center	32	<10	<10
E Wall Center	32	<10	<10
W Wall Center	<16	<10	<10

SB-1

Depth	CI-	PID	LAB CI-	GRO	DRO
18	1000	2.7	1600	<10	<10
21	857	3.5			
24	892	4.3			
27	491	5			
30	429	4.6			
33	379	5.1			
36	180	1.4	128	<10	<10
39	118	2.6	64	<10	<10

Vertical #1

Depth	CI-	PID
1'	560	5,000
2'	503	5,000
3'	538	5,000
4'	442	4,939
5'	451	3,514
6'	512	226.5
7'	592	24.3
8'	449	11.7
9'	1387	6.8
10'	931	5.9
11'	688	9.2
12'	692	6.4
13'	418	8.7
14'	918	1.7
15'	1224	1.5
16'	1159	84.6
17'	755	117.2
18'	875	4.2
19'	829	4.1
20'	938	20.3
21'	963	29
22'	1152	4.9
23'	1245	2.9
24'	1951	2.5

Vertical #2

Depth	CI-	PID
6'	871	3,350
7'	638	1,800
8'	473	3,346
9'	575	4,337
10'	985	4,491
11'	770	4,650
12'	1029	5,000
13'	864	3,911
14'	1216	44.7
15'	1442	94.6

## Legend

- ⊙ Soil Bore
- ▲ SAMPLE POINT
- × SOURCE
- VERTICAL
- ⏏ POWER POLE
- - - 6" FIBERGLASS 3' BGS
- - - BURIED FLOW LINE
- OVERHEAD POWER LINE
- SURFACE FLOW LINE
- ▭ EXCAVATION
- ▭ STAIN (1,244 SQ FT)

DGW = 41 ft.

Landowner = State



**APACHE**  
**NEDU #220 AD**

LEGALS: UL/K&J SEC 2  
T21S R37E  
LEA COUNTY, NM

Figure 2



0 40 80  
Feet

GPS date: 2/14/2013 KN  
Drawing date: 2/22/2013  
Drafted by: LS, A.C.Ruth

# Appendix A

Initial Form C-141

**RICE Environmental Consulting and Safety (RECS)**  
P.O. Box 5630 Hobbs, NM 88241  
Phone 575.393.4411 Fax 575.393.0293



District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
811 S. First St., Artesia, NM 88210  
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District IV  
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

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 Natalie Gladden	
Address PO Box 1849 Eunice, NM 88231	Telephone No. 575-390-4186	
Facility Name NEDU #220	Facility Type Producing well	
Surface Owner State of NM	Mineral Owner State of NM	API No. 30-025-06358

**LOCATION OF RELEASE**

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
J	2	21S	37E	2886'	FNL	2307'	FEL	Lea

Latitude \_\_\_\_\_ Longitude \_\_\_\_\_

**NATURE OF RELEASE**

Type of Release Produced water and oil	Volume of Release 40	Volume Recovered 30
Source of Release Flowline	Date and Hour of Occurrence 12/27/2012	Date and Hour of Discovery 12/27/2012
Was Immediate Notice Given? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Leking	
By Whom? Natalie Gladden	Date and Hour 12/28/2012 642am	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.\*

Describe Cause of Problem and Remedial Action Taken.\*


Flowline ruptured due to freezing weather. Standing fluid was recovered and initial assessment of the release area has been conducted.

Describe Area Affected and Cleanup Action Taken.\*

The release area is in a sandy loam area. Verticals will be excavated to find depth and extent of contamination then a remediation plan will be formed and will be followed to closure.

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**

Signature: 	Approved by Environmental Specialist:		
Printed Name: Natalie Gladden			
Title: Sr. Environmental Tech	Approval Date:	Expiration Date:	
E-mail Address: natalie.gladden@apachecorp.com	Conditions of Approval:		Attached <input type="checkbox"/>
Date: 12/28/2012 Phone: 575-390-4186			

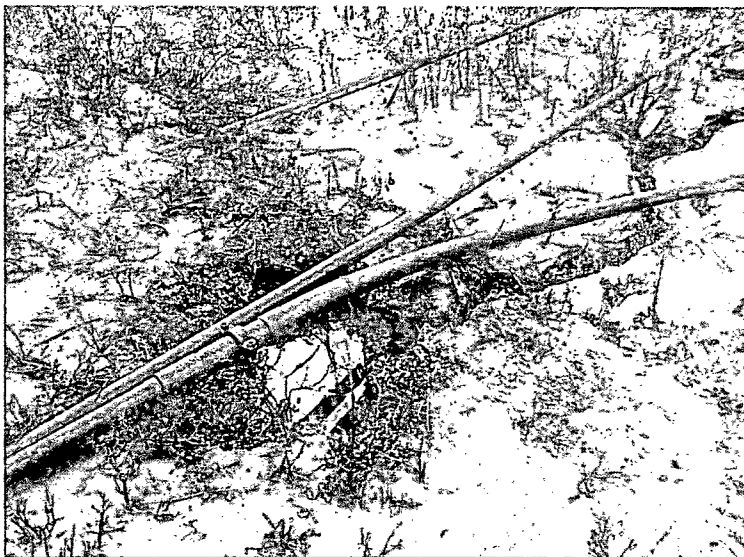
\* Attach Additional Sheets If Necessary

# Appendix B

## Site Photographs

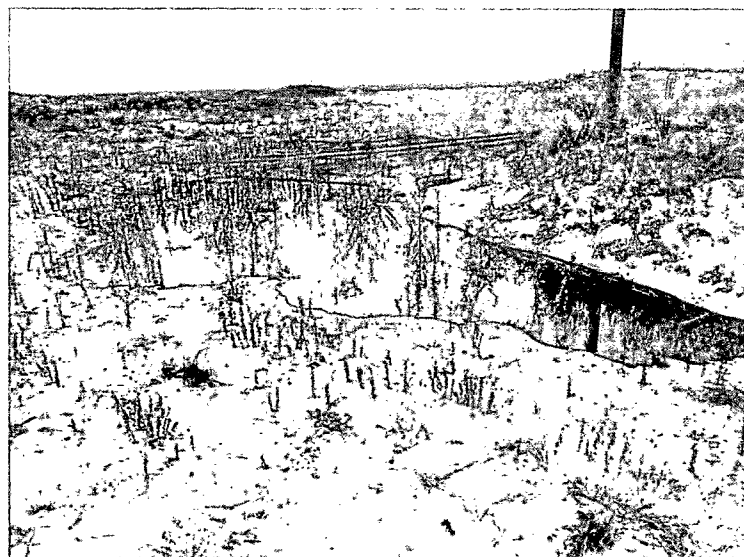
**RICE Environmental Consulting and Safety (RECS)**  
P.O. Box 5630 Hobbs, NM 88241  
Phone 575.393.4411 Fax 575.393.0293

**Apache NEDU #220 AD**  
Unit Letter K&J, Section 2, T21S, R37E



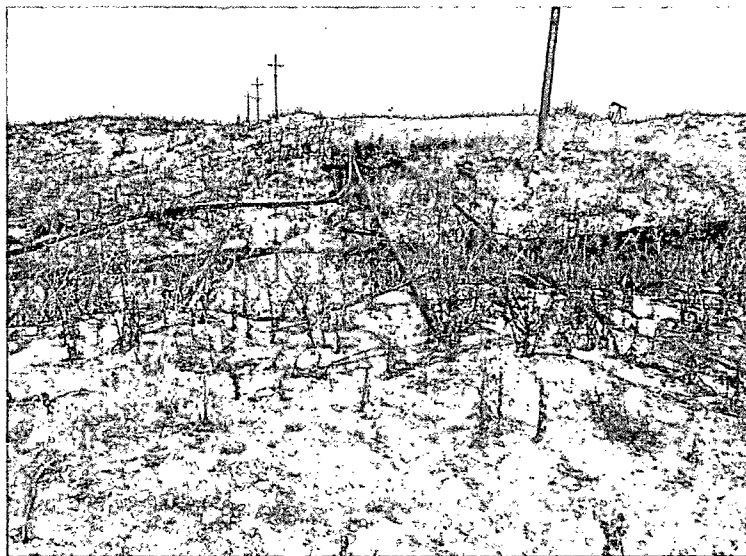
Release source, facing east

12/27/12



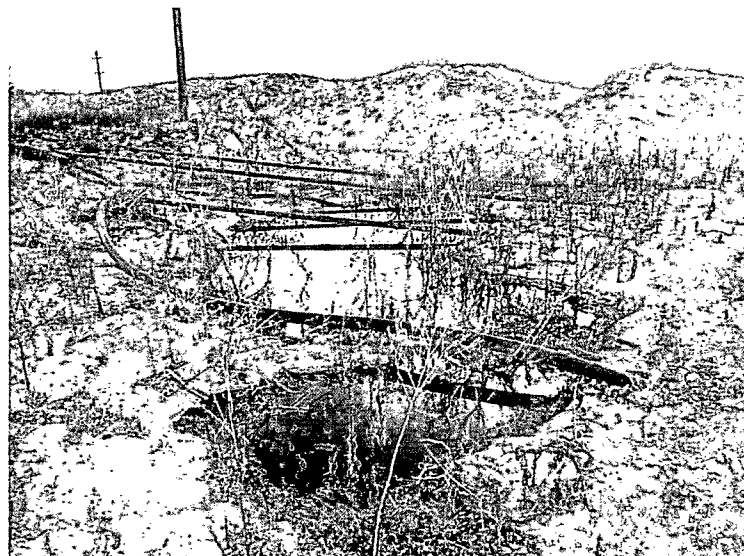
Initial release area, facing west

12/27/12



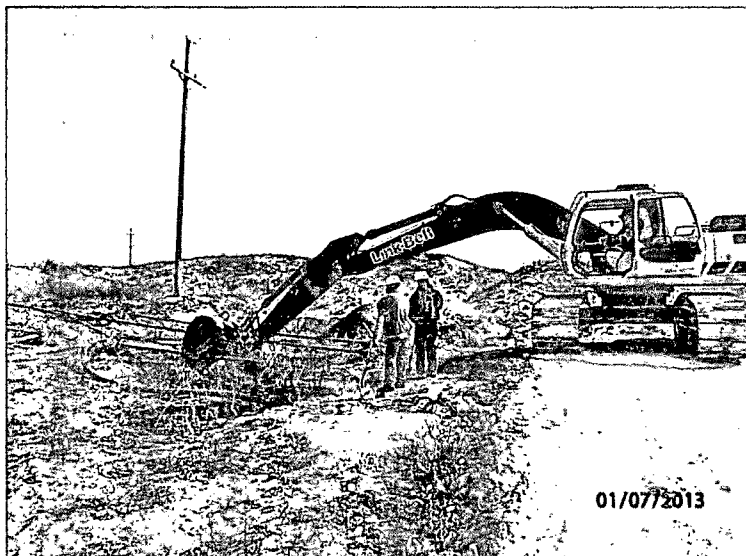
Initial release area, facing north

12/27/12



Initial release area, facing east

12/27/12



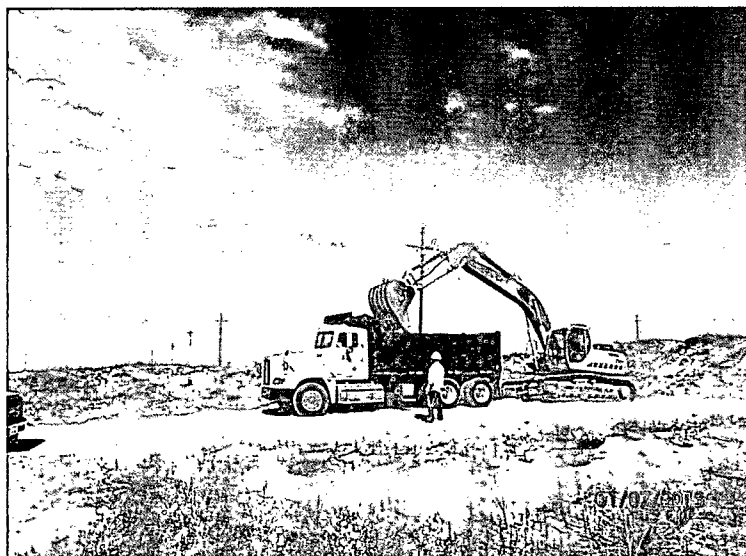
Excavating, facing east

1/7/13



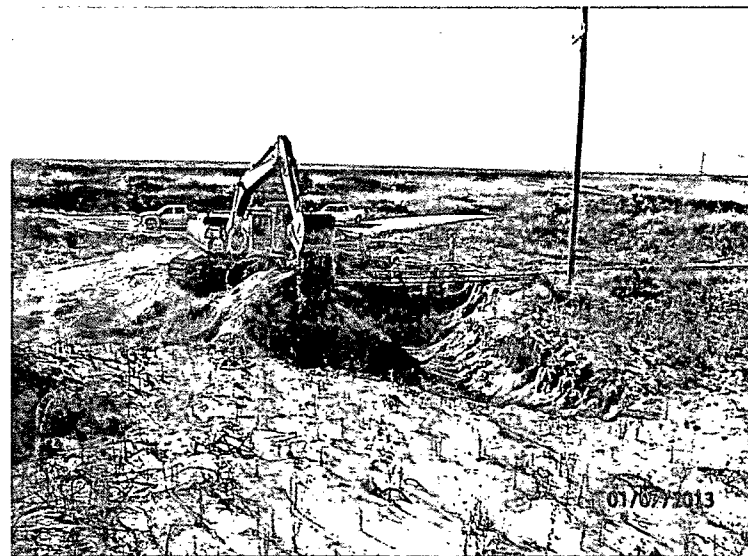
Digging Vertical #1, facing northeast

1/7/13



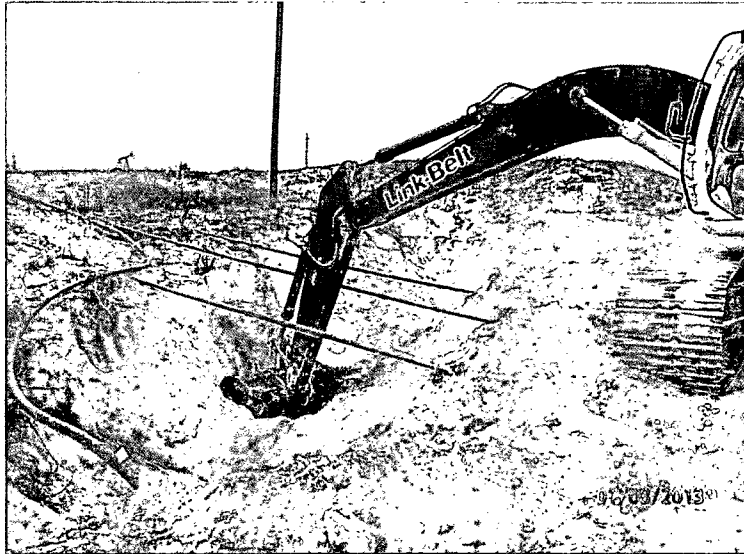
Exporting soil, facing northeast

1/7/13



Excavating, facing west

1/7/13



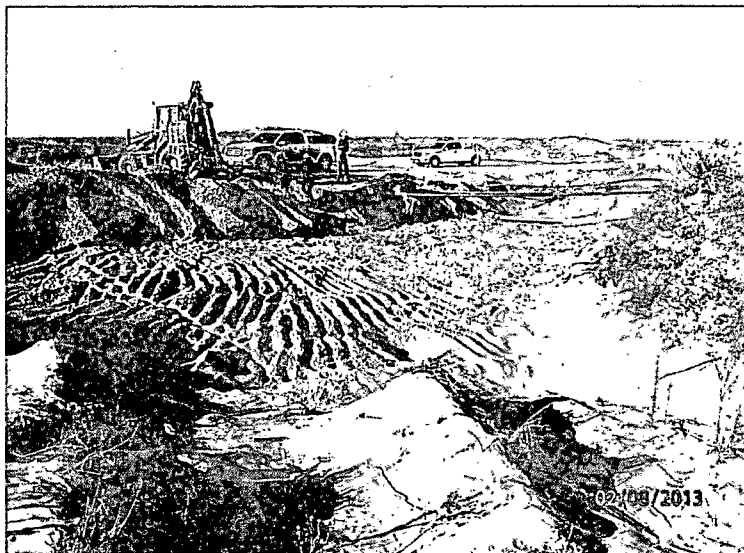
Digging Vertical #2, facing northeast

1/8/13



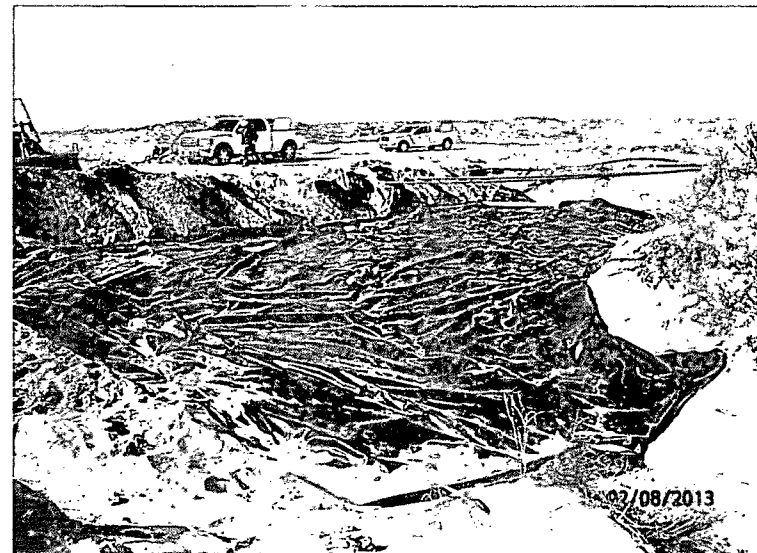
Backfilling excavation, facing west

1/9/13



Excavation backfilled to 4 ft. bgs, facing south

2/8/13



Liner installed, facing south

2/8/13



Backfilling above liner, facing east

2/8/13



Backfilling above liner, facing east

2/8/13

# Appendix C

## Laboratory Results

**RICE Environmental Consulting and Safety (RECS)**  
P.O. Box 5630 Hobbs, NM 88241  
Phone 575.393.4411 Fax 575.393.0293

January 03, 2013

NATALIE GLADDEN

APACHE - EUNICE

P. O. BOX 1849

EUNICE, NM 88231

RE: NEDU #220

Enclosed are the results of analyses for samples received by the laboratory on 12/27/12 16:30.

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\\_accred\\_certif.html](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

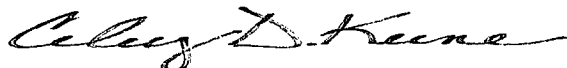
Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

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. Keene

Lab Director/Quality Manager



**Analytical Results For:**

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

Received: 12/27/2012  
Reported: 01/03/2013  
Project Name: NEDU #220  
Project Number: NONE GIVEN  
Project Location: NOT GIVEN

Sampling Date: 12/27/2012  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: SP. 1 (H203096-01)**

Chloride, SM4500Cl-B			mg/kg		Analyzed By: AP				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>512</b>	16.0	12/31/2012	ND	432	108	400	11.8	
TPH 8015M			mg/kg		Analyzed By: MS				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>GRO C6-C10</b>	<b>10700</b>	100	12/29/2012	ND	188	94.0	200	10.0	
<b>DRO &gt;C10-C28</b>	<b>47400</b>	100	12/29/2012	ND	198	99.0	200	13.6	

Surrogate: 1-Chlorooctane 620 % 65.2-140

Surrogate: 1-Chlorooctadecane 1130 % 63.6-154

**Sample ID: SP. 2 (H203096-02)**

Chloride, SM4500Cl-B			mg/kg		Analyzed By: AP				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>496</b>	16.0	12/31/2012	ND	432	108	400	11.8	
TPH 8015M			mg/kg		Analyzed By: MS				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>GRO C6-C10</b>	<b>8350</b>	50.0	12/29/2012	ND	188	94.0	200	10.0	
<b>DRO &gt;C10-C28</b>	<b>35900</b>	50.0	12/29/2012	ND	198	99.0	200	13.6	

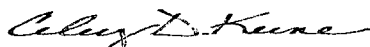
Surrogate: 1-Chlorooctane 476 % 65.2-140

Surrogate: 1-Chlorooctadecane 837 % 63.6-154

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 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.



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

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

 Received: 12/27/2012  
 Reported: 01/03/2013  
 Project Name: NEDU #220  
 Project Number: NONE GIVEN  
 Project Location: NOT GIVEN

 Sampling Date: 12/27/2012  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: SP. 3 (H203096-03)**

Chloride, SM4500Cl-B			mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier		
Chloride	544	16.0	12/31/2012	ND	432	108	400	11.8			
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	14800	100	12/29/2012	ND	188	94.0	200	10.0			
DRO >C10-C28	45800	100	12/29/2012	ND	198	99.0	200	13.6			

Surrogate: 1-Chlorooctane 652 % 65.2-140

Surrogate: 1-Chlorooctadecane 1060 % 63.6-154

**Sample ID: SP. 4 (H203096-04)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	336	16.0	12/31/2012	ND	432	108	400	11.8		
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	12300	50.0	12/31/2012	ND	187	93.5	200	0.497		
DRO >C10-C28	28600	50.0	12/31/2012	ND	199	99.5	200	0.749		

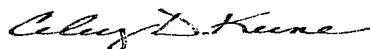
Surrogate: 1-Chlorooctane 417 % 65.2-140

Surrogate: 1-Chlorooctadecane 622 % 63.6-154

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 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.



Celey D. Keene, Lab Director/Quality Manager

**Notes and Definitions**

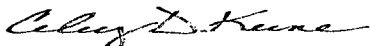
- S-06      The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
- ND        Analyte NOT DETECTED at or above the reporting limit
- RPD      Relative Percent Difference
- \*\*        Samples not received 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

---

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name: <u>Apache</u>		<b>BILL TO</b>		<b>ANALYSIS REQUEST</b>																				
Project Manager: <u>Natalie Gladden</u>		P.O. #:																						
Address:		Company:																						
City: State: Zip:		Attn:																						
Phone #: Fax #:		Address:																						
Project #: Project Owner:		City:																						
Project Name: <u>Apache - NEDU # 220</u>		State: Zip:																						
Project Location:		Phone #:																						
Sampler Name:		Fax #:																						
FOR LAB USE ONLY		MATRIX		PRESERV		SAMPLING																		
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER	ACID/BASE	ICE / COOL	OTHER	DATE	TIME										
<u>H203050</u>	<u>Sp. 1</u>	<u>6</u>	<u>1</u>			<u>1</u>							<u>12/27/12</u>	<u>2:28</u>	<u>1</u>	<u>1</u>								
<u>2</u>	<u>Sp. 2</u>	<u>6</u>	<u>1</u>			<u>1</u>							<u>12/27/12</u>	<u>2:28</u>	<u>1</u>	<u>1</u>								
<u>3</u>	<u>Sp. 3</u>	<u>6</u>	<u>1</u>			<u>1</u>							<u>12/27/12</u>	<u>2:36</u>	<u>1</u>	<u>1</u>								
<u>4</u>	<u>Sp. 4</u>	<u>6</u>	<u>1</u>			<u>1</u>							<u>12/27/12</u>	<u>2:35</u>	<u>1</u>	<u>1</u>								

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Relinquished By: <u>[Signature]</u>	Date: <u>12/27/12</u> Time: <u>4:30</u>	Received By: <u>[Signature]</u>	Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Phone #:
Relinquished By:	Date:	Received By:	Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Fax #:
Delivered By: (Circle One) Sampler - UPS - Bus - Other: <u>30</u>			REMARKS: <u>Bruce Baker</u> <u>Hack Cander</u> <u>Zach Cander</u> <u>Natalie Gladden</u> <u>Laura LV</u>	
Sample Condition Cool <input checked="" type="checkbox"/> Intact <input checked="" type="checkbox"/> <input type="checkbox"/> Yes <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> No			CHECKED BY: (Initials) <u>[Signature]</u>	

† Cardinal cannot accept verbal changes. Please fax written changes to (575) 393-2326



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

---

January 15, 2013

NATALIE GLADDEN

APACHE - EUNICE

P. O. BOX 1849

EUNICE, NM 88231

RE: NEDU #220

Enclosed are the results of analyses for samples received by the laboratory on 01/09/13 13:55.

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\\_accred\\_certif.html](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

Cardinal Laboratories is accredited 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,

A handwritten signature in black ink that reads "Coley D. Keene". The signature is written in a cursive, flowing style.

Celey D. Keene

Lab Director/Quality Manager

**Analytical Results For:**

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

 Received: 01/09/2013  
 Reported: 01/15/2013  
 Project Name: NEDU #220  
 Project Number: NONE GIVEN  
 Project Location: NOT GIVEN

 Sampling Date: 01/08/2013  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: N WALL CENTER (H300051-01)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: DW					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	01/15/2013	ND	432	108	400	0.00	
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	01/14/2013	ND	195	97.4	200	0.708	
DRO >C10-C28	<10.0	10.0	01/14/2013	ND	205	103	200	0.931	

Surrogate: 1-Chlorooctane 89.2 % 65.2-140

Surrogate: 1-Chlorooctadecane 99.2 % 63.6-154

**Sample ID: S WALL CENTER (H300051-02)**

Chloride, SM4500Cl-B			mg/kg		Analyzed By: DW					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	01/15/2013	ND	432	108	400	0.00		
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	01/14/2013	ND	195	97.4	200	0.708		
DRO >C10-C28	<10.0	10.0	01/14/2013	ND	205	103	200	0.931		

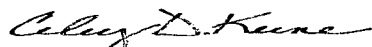
Surrogate: 1-Chlorooctane 92.0 % 65.2-140

Surrogate: 1-Chlorooctadecane 104 % 63.6-154

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

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

 Received: 01/09/2013  
 Reported: 01/15/2013  
 Project Name: NEDU #220  
 Project Number: NONE GIVEN  
 Project Location: NOT GIVEN

 Sampling Date: 01/08/2013  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: E WALL CENTER (H300051-03)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: DW					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	01/15/2013	ND	432	108	400	0.00	
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	01/14/2013	ND	195	97.4	200	0.708	
DRO >C10-C28	<10.0	10.0	01/14/2013	ND	205	103	200	0.931	
Surrogate: 1-Chlorooctane		90.6 %	65.2-140						
Surrogate: 1-Chlorooctadecane		102 %	63.6-154						

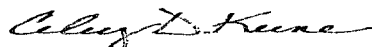
**Sample ID: W WALL CENTER (H300051-04)**

Chloride, SM4500Cl-B			mg/kg Analyzed By: DW							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	01/15/2013	ND	432	108	400	0.00		
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	01/14/2013	ND	195	97.4	200	0.708		
DRO >C10-C28	<10.0	10.0	01/14/2013	ND	205	103	200	0.931		
Surrogate: 1-Chlorooctane	90.5 %	65.2-140								
Surrogate: 1-Chlorooctadecane	102 %	63.6-154								

Cardinal Laboratories

\* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Notes and Definitions**

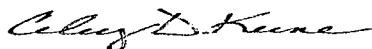
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received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

---

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager





## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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February 21, 2013

NATALIE GLADDEN

APACHE - EUNICE

P. O. BOX 1849

EUNICE, NM 88231

RE: NEDU #220

Enclosed are the results of analyses for samples received by the laboratory on 02/14/13 15:20.

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\\_accred\\_certif.html](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

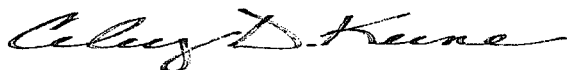
Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

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. Keene

Lab Director/Quality Manager

**Analytical Results For:**

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

 Received: 02/14/2013  
 Reported: 02/21/2013  
 Project Name: NEDU #220  
 Project Number: NONE GIVEN  
 Project Location: NOT GIVEN

 Sampling Date: 02/14/2013  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: SB-1 @ 18' (H300422-01)**

Chloride, SM4500Cl-B			mg/kg		Analyzed By: DW				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>1600</b>	16.0	02/19/2013	ND	432	108	400	0.00	
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	02/20/2013	ND	202	101	200	0.0243	
DRO >C10-C28	<10.0	10.0	02/20/2013	ND	179	89.3	200	0.188	

Surrogate: 1-Chlorooctane 86.3 % 65.2-140

Surrogate: 1-Chlorooctadecane 101 % 63.6-154

**Sample ID: SB-1 @ 36' (H300422-02)**

Chloride, SM4500Cl-B			mg/kg		Analyzed By: DW				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>128</b>	16.0	02/19/2013	ND	432	108	400	0.00	
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	02/20/2013	ND	202	101	200	0.0243	
DRO >C10-C28	<10.0	10.0	02/20/2013	ND	179	89.3	200	0.188	

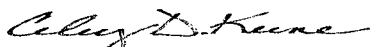
Surrogate: 1-Chlorooctane 68.8 % 65.2-140

Surrogate: 1-Chlorooctadecane 77.1 % 63.6-154

Cardinal Laboratories

\* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

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

Received: 02/14/2013  
Reported: 02/21/2013  
Project Name: NEDU #220  
Project Number: NONE GIVEN  
Project Location: NOT GIVEN

Sampling Date: 02/14/2013  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

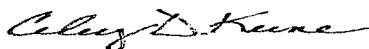
**Sample ID: SB-1 @ 39' (H300422-03)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: DW					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	02/19/2013	ND	432	108	400	0.00	
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	02/20/2013	ND	202	101	200	0.0243	
DRO >C10-C28	<10.0	10.0	02/20/2013	ND	179	89.3	200	0.188	
Surrogate: 1-Chlorooctane		74.2 %	65.2-140						
Surrogate: 1-Chlorooctadecane		84.6 %	63.6-154						

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Notes and Definitions**

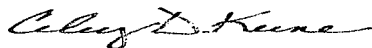
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received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

---

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



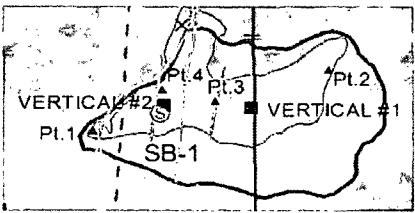

## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

# Appendix D

## Soil Bore Log and Soil Bore Site Photographs

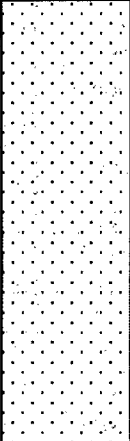


**RICE Environmental Consulting and Safety (RECS)**  
P.O. Box 5630 Hobbs, NM 88241  
Phone 575.393.4411 Fax 575.393.0293

<b>Logger:</b>	Kyle Norman			
<b>Driller:</b>	Harrison & Cooper, Inc.			
<b>Drilling Method:</b>	Air rotary		<b>Project Name:</b>	<b>Well ID:</b>
<b>Start Date:</b>	2/14/2013		Apache NEDU #220	SB-1
<b>End Date:</b>	2/14/2013	<b>Project Consultant:</b> RECS		<b>Location:</b> UL/K&J sec. 2 T-21-S R-37-E
<b>Comments:</b> SB-1 is located 3 ft south of Vertical #2. All samples were from cuttings <b>DRAFTED BY:</b> L. Weinheimer TD = 39 ft                      GW = 41 ft			<b>Lat:</b> 32°30'47.153"N <b>County:</b> Lea <b>Long:</b> 103°8'2.017"W <b>State:</b> NM	

Depth (feet)	Chloride field tests	LAB	PID	Description	Lithology	Well Construction
				Regolith		
SS						
15 ft						
				Moist Tan Sand		
18 ft	1000	CI-1600	2.7			
		GRO <10		Moist Red/Tan Sand With Some Sandstone		
		DRO <10				
21 ft	857		3.5			
24 ft	892		4.3			
27 ft	491		5			
30 ft	1000		4.6			
33 ft	857		5.1			

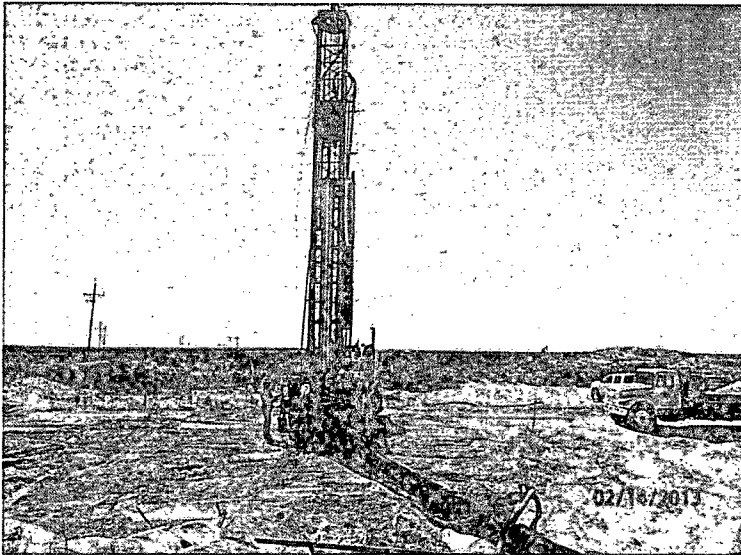
bentonite seal



Depth (feet)	Chloride field tests	LAB	PID	Description		Lithology		Well Construction		
				Red/Tan Sand						
36 ft	892	CI-128	1.4							
		GRO <10								
		DRO <10								
39 ft	491	CI-64	2.6							
		GRO <10								
		DRO <10								

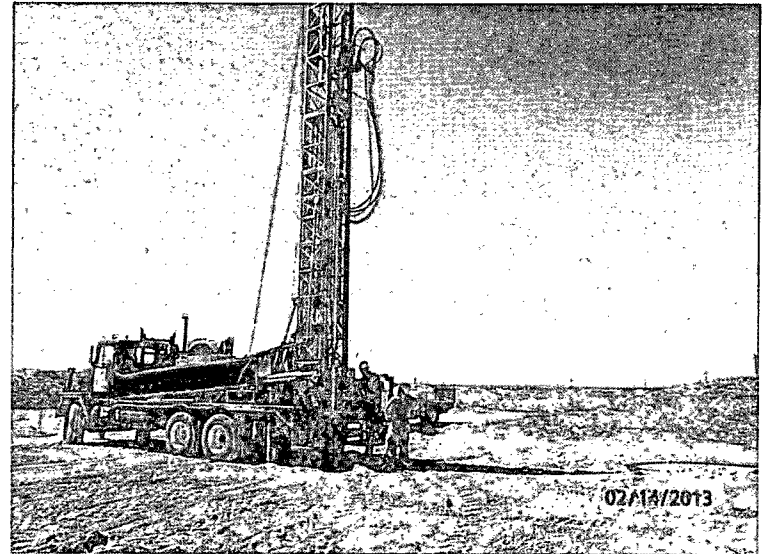
# Apache NEDU #220 AD Soil Bore Installation

Unit Letter K&J, Section 2, T21S, R37E



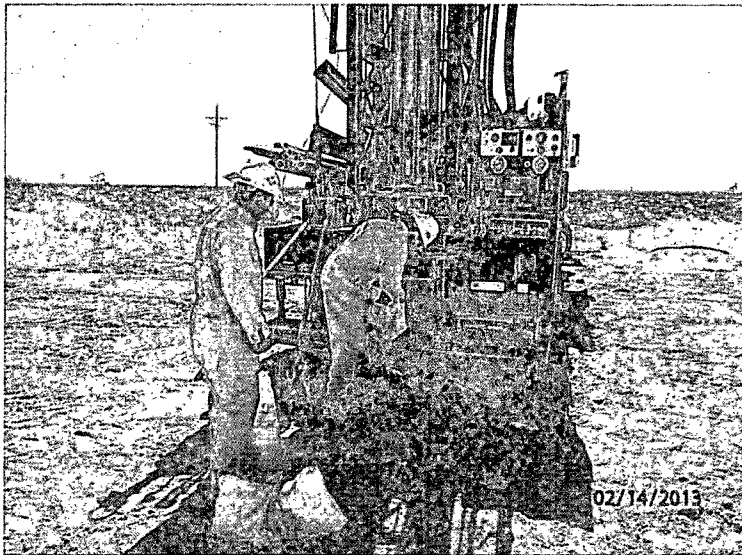
Drilling SB1, facing south

2/14/13



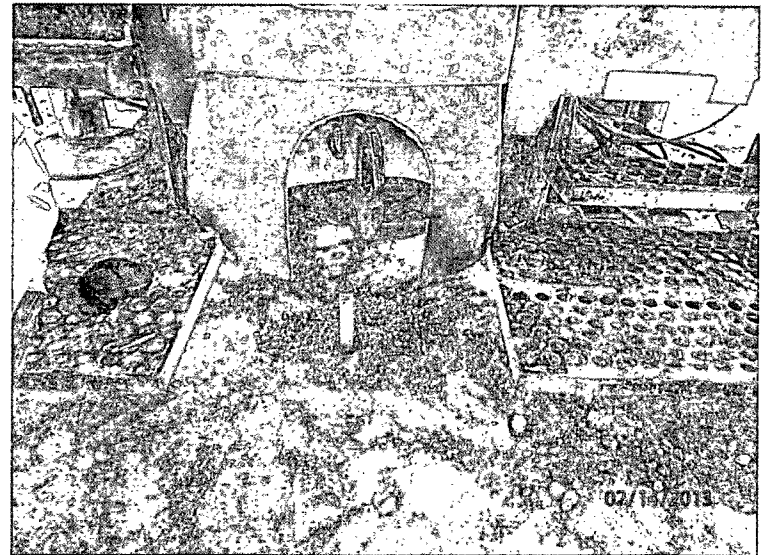
Drilling SB1, facing west

2/14/13



Plugging SB1 with bentonite, facing south

2/14/13



SB1 complete, facing south

2/14/13

# Appendix E

## Groundwater Study

**RICE Environmental Consulting and Safety (RECS)**  
P.O. Box 5630 Hobbs, NM 88241  
Phone 575.393.4411 Fax 575.393.0293

Apache  
Company

NEDU #220 AD  
site name

K&J  
Unit Letter

2  
Section

21S  
Township

37E  
Range

Groundwater Depth: 41 ft

Compiled by: Amy C. Ruth

Date: 12/28/2012

Comments: \_\_\_\_\_

○ = Wells of unknown use (USGS)

○ = Non-production wells  
(commercial, sanitation, stock)

☆ = Subject

	34	35 ○ 61'	36	T20S R37E
	○ 22' 3	2 ☆	1	T21S R37E
	10	11	12	

**USGS 323016103092001 21S.37E.03.31221**

Available data for this site

Groundwater: Field measurements

[ GO ]

Lea County, New Mexico

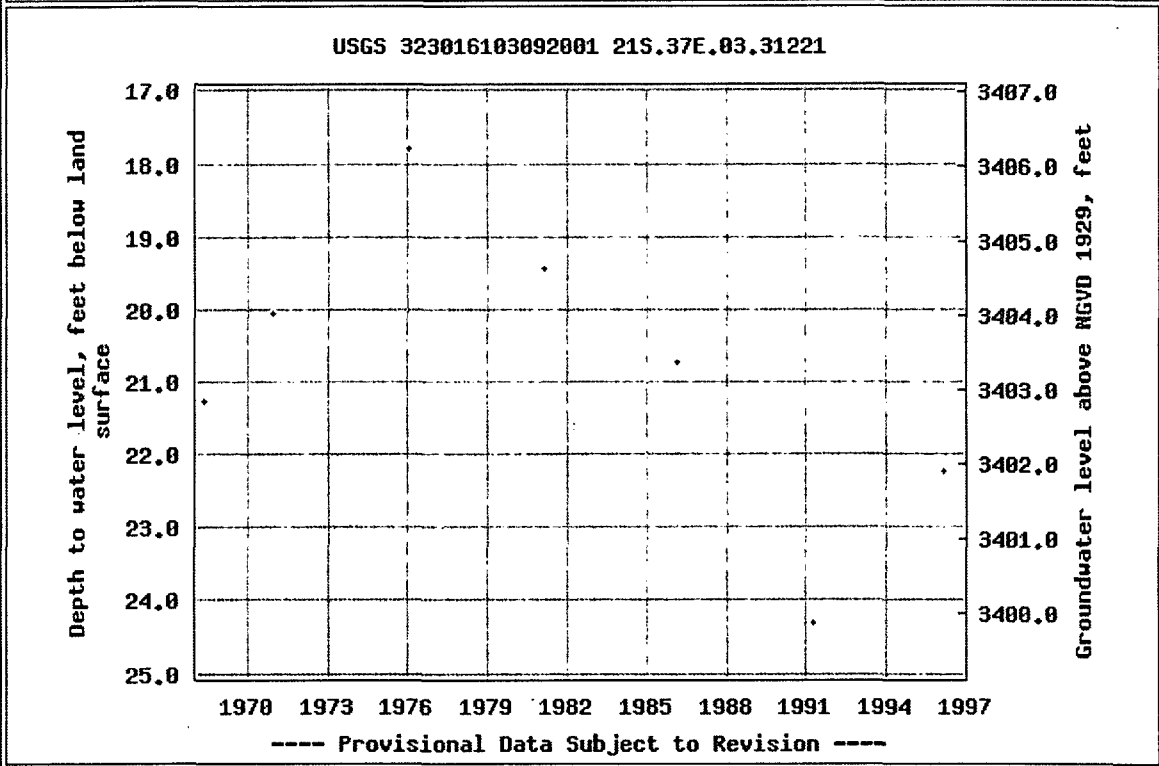
Hydrologic Unit Code 13070007

Latitude 32°30'40", Longitude 103°19'21" NAD27

Land-surface elevation 3,424.10 feet above NGVD29

The depth of the well is 36 feet below land surface.

This well is completed in the Alluvium, Bolson Deposits and Other Surface Deposits (110AVMB) local aquifer.

**Output formats**[Table of data](#)[Tab-separated data](#)[Graph of data](#)[Reselect period](#)

**USGS 323114103130601 20S.37E.35.414234**

Available data for this site

Groundwater: Field measurements

Lea County, New Mexico

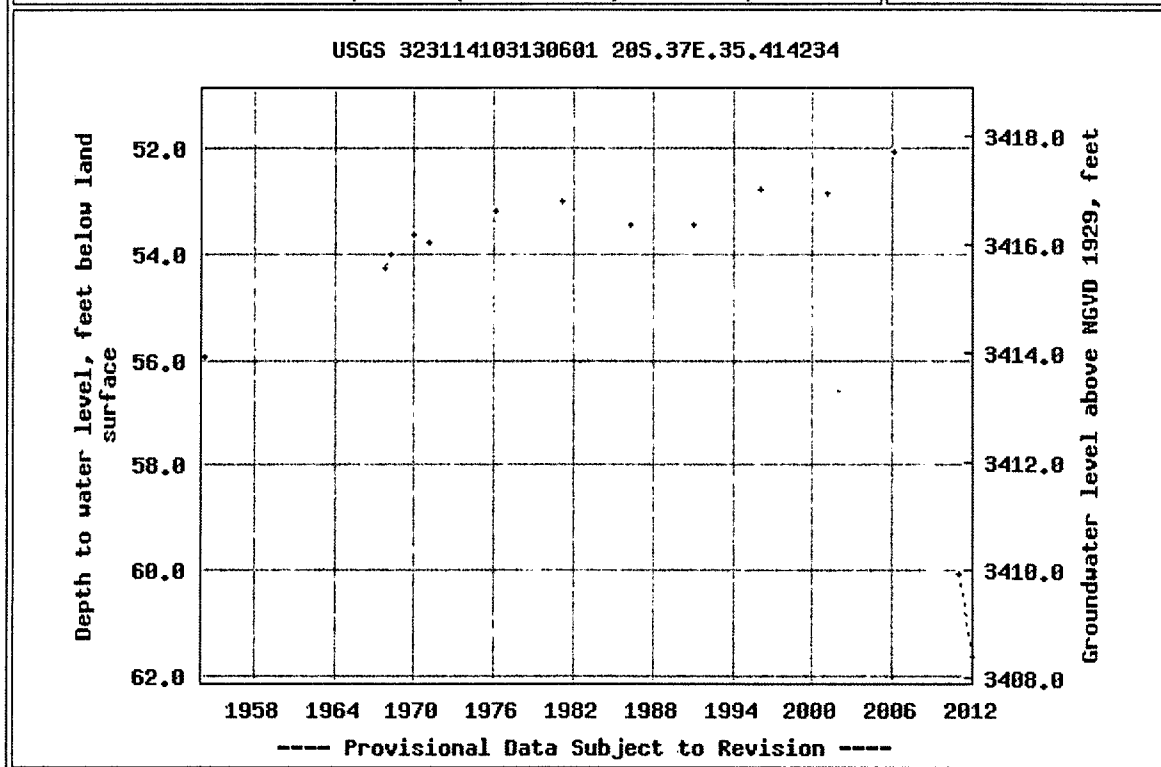
Hydrologic Unit Code 13070007

Latitude 32°31'37", Longitude 103°13'06" NAD27

Land-surface elevation 3,469.90 feet above NGVD29

The depth of the well is 63 feet below land surface.

This well is completed in the Alluvium, Bolson Deposits and Other Surface Deposits (110AVMB) local aquifer.

**Output formats**[Table of data](#)[Tab-separated data](#)[Graph of data](#)[Reselect period](#)



# New Mexico Office of the State Engineer

## Water Column/Average Depth to Water

(A CLW##### in the  
POD suffix indicates the  
POD has been replaced  
& no longer serves a  
water right file.)

(R=POD has  
been replaced,  
O=orphaned,

C=the file is (quarters are 1=NW 2=NE 3=SW 4=SE)  
closed) (quarters are smallest to largest)

(NAD83 UTM in meters)

(In feet)

POD Number	POD Code	Subbasin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Depth Well	Depth Water	Water Column
------------	----------	----------	--------	------	------	-----	-----	-----	-----	---	---	------------	-------------	--------------

CP 00197

LE 1 4 1 01 21S 37E

676611 3598599\* 85

Average Depth to Water: --

Minimum Depth: --

Maximum Depth: --

Record Count: 1

PLSS Search:

Section(s): 1, 2, 3, 10, 11, 12 Township: 21S Range: 37E

\*UTM location was derived from PLSS - see Help

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.



# *New Mexico Office of the State Engineer* **Water Column/Average Depth to Water**

No records found.

**PLSS Search:**

**Section(s):** 34, 35, 36

**Township:** 20S

**Range:** 37E

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

12/28/12 8:52 AM

Page 1 of 1

WATER COLUMN/ AVERAGE  
DEPTH TO WATER



# Appendix F

Final Form C-141

**RICE Environmental Consulting and Safety (RECS)**  
P.O. Box 5630 Hobbs, NM 88241  
Phone 575.393.4411 Fax 575.393.0293

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Avenue, Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

HOBBS OCD

State of New Mexico

Energy Minerals and Natural Resources

SEP 09 2013

Oil Conservation Division

1220 South St. Francis Dr.

Santa Fe, NM 87505

RECEIVED

Form C-141  
Revised October 10, 2003

Submit 2 Copies to appropriate  
District Office in accordance  
with Rule 116 on back  
side of form

## Release Notification and Corrective Action

### OPERATOR

☐ Initial Report ☒ Final Report

Name of Company	Apache Corp.	Contact	Natalie Gladden
Address	P.O. Box 1849, Eunice, NM, 88231	Telephone No.	(575) 390-4186
Facility Name	NEDU #220	Facility Type	Producing Well

Surface Owner	State of NM	Mineral Owner	State of NM	Lease No.	30-025-06358
---------------	-------------	---------------	-------------	-----------	--------------

### LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
J	2	21S	37E	2886	FNL	2307	FEL	Lea

Latitude \_\_\_\_\_ Longitude \_\_\_\_\_

### NATURE OF RELEASE

Type of Release	Produced Water and oil	Volume of Release	40 bbl	Volume Recovered	30 bbl
Source of Release	Flow Line	Date and Hour of Occurrence	12/27/12	Date and Hour of Discovery	12/27/12
Was Immediate Notice Given?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom?	Leking		
By Whom?	Natalie Gladden	Date and Hour	12/28/2012 6:42 am		
Was a Watercourse Reached?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.			

If a Watercourse was Impacted, Describe Fully.\*

DTW = 49'

Describe Cause of Problem and Remedial Action Taken.\*

Flow line ruptured due to freezing weather. Standing fluid was recovered and initial assessment of the release area has been conducted.

Describe Area Affected and Cleanup Action Taken.\*

The leak affected 1,244 square feet of pasture land. The leak area was excavated to 6 ft. below ground surface (bgs). Impacted soils were removed to a NMOCD approved disposal facility. Representative soil samples were collected from the excavation walls and a soil bore at the center of the leak. The samples were sent to a commercial laboratory for chloride and TPH confirmation. A 20 mil reinforced plastic liner was installed in the excavation at a depth of 4 ft. bgs as a barrier to the downward migration of any remaining constituents. The excavation was backfilled with clean imported and blended topsoil, and was contoured to the surrounding landscape.

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.

Signature:		OIL CONSERVATION DIVISION	
Printed Name: Natalie Gladden		Approved by District Supervisor <i>Natalie Gladden</i> Environmental Specialist	
Title: EH&S Environmental Tech	Approval Date: 9/11/13	Expiration Date: -	
E-mail Address: Natalie.gladden@apachecorp.com	Conditions of Approval: -	Attached <input type="checkbox"/>	
Date: _____	Phone: (575) 390-4186	IRP-9-13-2948	

\* Attach Additional Sheets If Necessary