

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

State of New Mexico
Energy Minerals and Natural Resources
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

HOBBS OCD

OCT 10 2013

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	EBDU Satellite #2	Facility Type	Production Facility
Surface Owner	McNeil Ranch	Mineral Owner	Federal
		Lease No.	30-025-06548

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
C	12	21S	37E	990	FNL	1650	FWL	Lea

Latitude _____ Longitude _____

NATURE OF RELEASE

Type of Release	Oil	Volume of Release	25 bbl	Volume Recovered	20 bbl
Source of Release	Dump valve failure	Date and Hour of Occurrence	11/10/11 302 pm	Date and Hour of Discovery	11/10/11 302 pm
Was Immediate Notice Given?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom?	Geoffrey Leking		
By Whom?	Natalie Gladden	Date and Hour	11/10/11 401 pm		
Was a Watercourse Reached?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.			

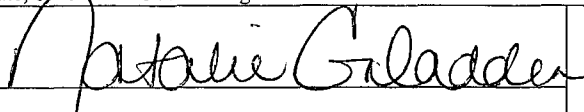
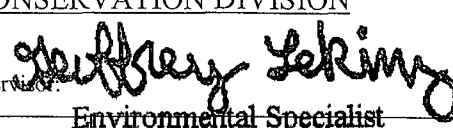
If a Watercourse was Impacted, Describe Fully.*

DTW = 57'

Describe Cause of Problem and Remedial Action Taken.*
Dump valve failure causing oil to be released out of vent line.

Describe Area Affected and Cleanup Action Taken.*
The leak affected the caliche pad surrounding and within the facility. Impacted soils were removed to a NMOCD approved disposal facility. Representative soil samples were collected from the excavation, field tested, and sent to a commercial laboratory for chloride and TPH confirmation. The excavation was backfilled with clean caliche and contoured to the surrounding area.

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:	
Title:	EH&S Environmental Tech	Approval Date:	10/10/13
E-mail Address:	Natalie.gladden@apachecorp.com	Expiration Date:	
Date:	Phone: (575) 390-4186	Conditions of Approval:	-
		Attached	<input type="checkbox"/>
		IRP - 10-13 - 2973	

* Attach Additional Sheets If Necessary

JUN 10 2014



EXPLORING WHAT'S POSSIBLE

APACHE CORPORATION

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

EBDU Satellite #2

Closure Report

API 30-025-06548

Release Date: November 10, 2011

Unit Letter C, Section 12, Township 21S, Range 37E

Rice Environmental Consulting & Safety

P.O. Box 5630 Hobbs, NM 88241

Phone 575.393.4411 Fax 575.393.0293

May 4, 2012

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 – EBDU Satellite #2 AD

UL/C sec. 12 T21S R37E

API No. 30-025-06548

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 crude oil associated with the EBDU Satellite #2. A unit dump valve failed, and oil was released onto the facility pad from the vent line. The valve was repaired and an initial form C-141 was submitted by Apache Corporation on November 16, 2011 (Appendix A). The site is located 4 miles north of Eunice, in unit letter 'C' of section 12, T21S, R37E in Lea County, New Mexico.

On November 10, 2011, RECS personnel initiated work on the EBDU Satellite #2. Surface soil samples were collected and field tested for chloride. Headspace measurements were also taken in the field using a Photo Ionization Detector (PID) (Figure 1). The samples were submitted to a commercial laboratory for chloride and TPH (GRO/DRO) analyses (Appendix C). Chloride was 480 ppm (parts per million or mg/kg) in the Pt.3 sample and 208 ppm or less in the remaining samples. TPH totaled 19,570 ppm in the Pt.1 sample and 282 ppm or less in the remaining samples.

The areas in the vicinity of Pt.1 and Pt.3 were scraped to a depth of 6 inches (Figure 2). On November 14, 2011, RECS personnel collected representative grab samples from the walls and a composite sample from the floor of the excavation at Pt.1. The samples were field tested with a PID and chloride test. The samples were submitted to a commercial laboratory for chloride and TPH analyses (Appendix C). In all samples, chloride did not exceed 80.0 ppm, and TPH did not exceed 277 ppm. RECS personnel also collected a sample from the excavation floor at Pt.3, and

tested the sample using the field-adapted Standard Method 4500 Cl- B which showed chloride reduced to 145 ppm.

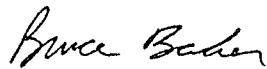
Impacted soils were removed from the excavation and transported to a NMOCD approved disposal facility. The excavation was backfilled with clean caliche and contoured to the surrounding area. See Appendix B for photographs of field activities.

Conclusion

According to the New Mexico Office of the State Engineer and the United States Geological Survey (USGS), depth to groundwater in the area approximated 52 ft bgs (Appendix D). Due to the removal of impacted soils relative to necessary groundwater depth, 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 Diagram with Initial Sampling Data
- Figure 2: Site Diagram with Final Sampling Data
- Appendix A: Initial Form C-141
- Appendix B: Site Photographs
- Appendix C: Laboratory Results
- Appendix D: Groundwater Study
- Appendix E: 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

INITIAL LAB DATA

Sample Description	Cl-	GRO	DRO
PT.1	208	7,870	11,700
PT.2	80	15.4	229
PT.3	480	<10	282
PT.4	<16	<10	73.9
PT.5	48	<10	<10

Legend

- ▲ SAMPLE POINTS
- BERM
- x - x - FENCE LINE
- FLOW LINE
- ROAD
- STEEL LINE
- SURFACE POLY LINE
- SURFACE STEEL LINE
- UNDERGROUND PIPELINE
- SEPARATOR
- STAIN (15,869 sq ft)
- TANK

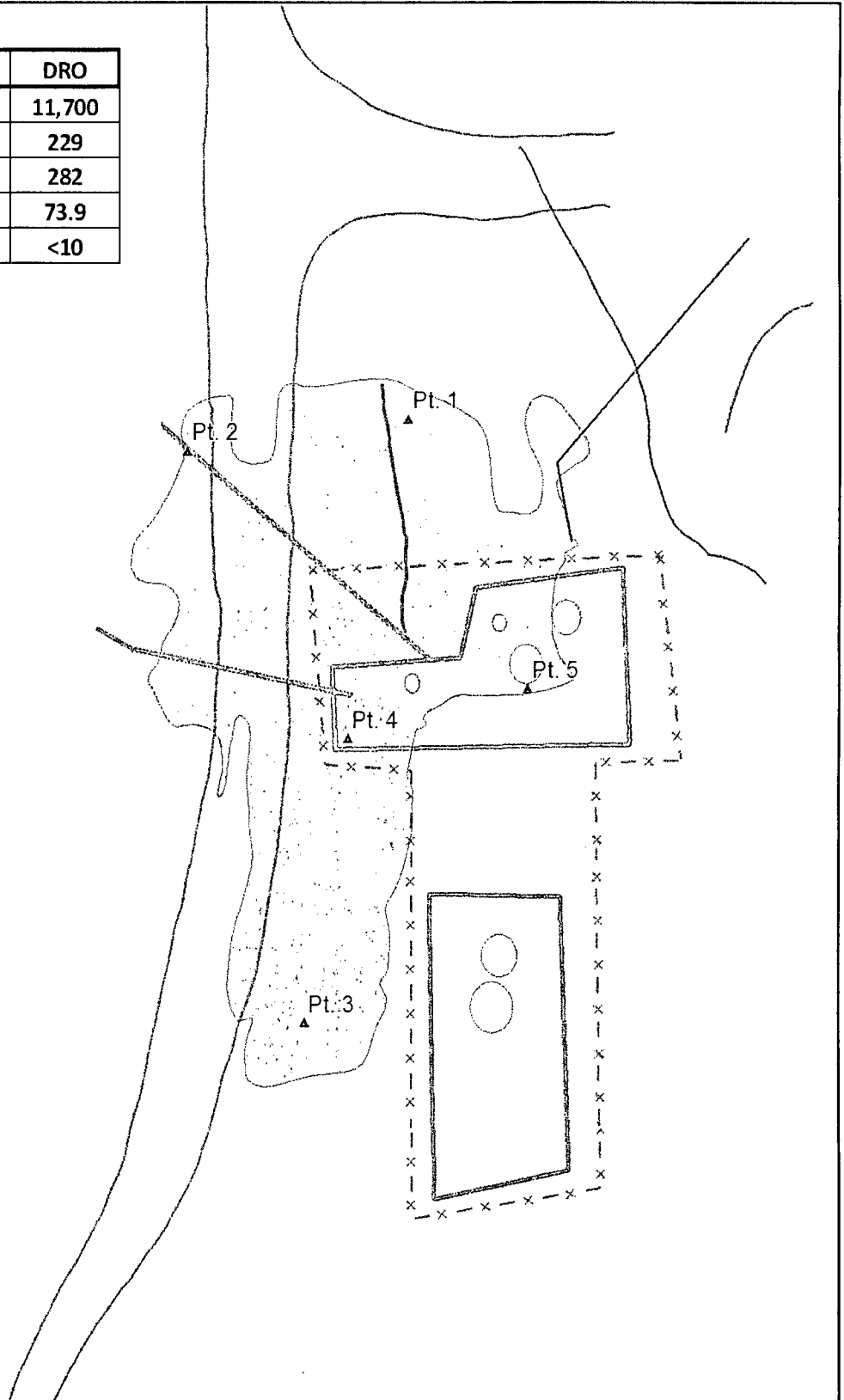


Figure 1



0 15 30 60
Feet

GPS date: 11/10/11 JK
Drawing date: 11/16/11
Drafted by: L. Weinheimer



**APACHE EBDU
SAT. #2 AD**

LEGALS: UL/C&D sec. 12
T-21-S R-37-E

Final Sampling Data

FINAL LAB DATA - NORTH SCRAPE

Sample Description	Cl-	GRO	DRO
North wall	80	<10	129
South wall	<16	<10	<10
East wall	<16	<10	<10
West wall	<16	<10	277
5 pt. bottom comp.	<16	<10	41.6

Pt. 3 FIELD DATA

Sample Description	Cl-	PID
Pt. 3 @ 6"	145	2

Legend

- ▲ SAMPLE POINTS
- BERM
- x - x - FENCE LINE
- FLOW LINE
- ROAD
- STEEL LINE
- SURFACE POLY LINE
- SURFACE STEEL LINE
- UNDERGROUND PIPELINE
- //// SOUTH SCRAPE
- NORTH SCRAPE
- SEPARATOR
- STAIN (15,869 sq ft)
- TANK

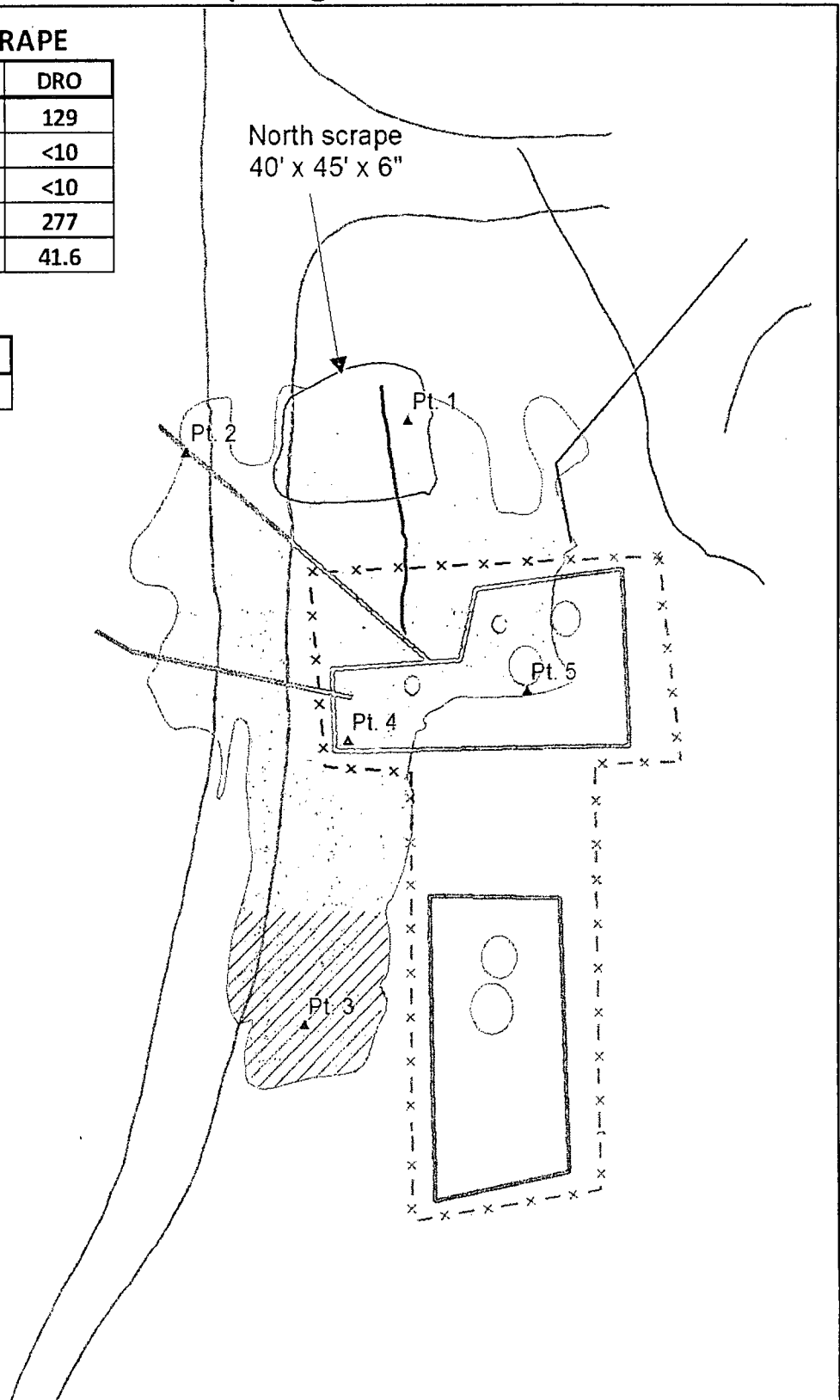


Figure 2



0 15 30 60 Feet

GPS date: 11/10/11 JK

Drawing date: 11/10/11

Drafted by: L. Weinheimer



APACHE EBDU SAT. #2 AD

LEGALS: UL/C&D sec. 12
T-21-S R-37-E

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
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
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

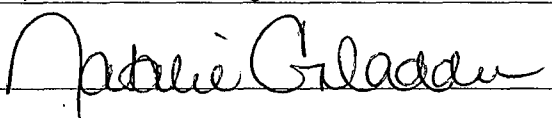
Name of Company Apache Corporation	Contact Natalie Gladden	
Address PO Box 1849, Eunice NM 88231	Telephone No. 575-390-4186	
Facility Name EBDU Sat #2	Facility Type Production Facility	
Surface Owner McNeil Ranch	Mineral Owner Federal	API No. 30-025-06548

LOCATION OF RELEASE

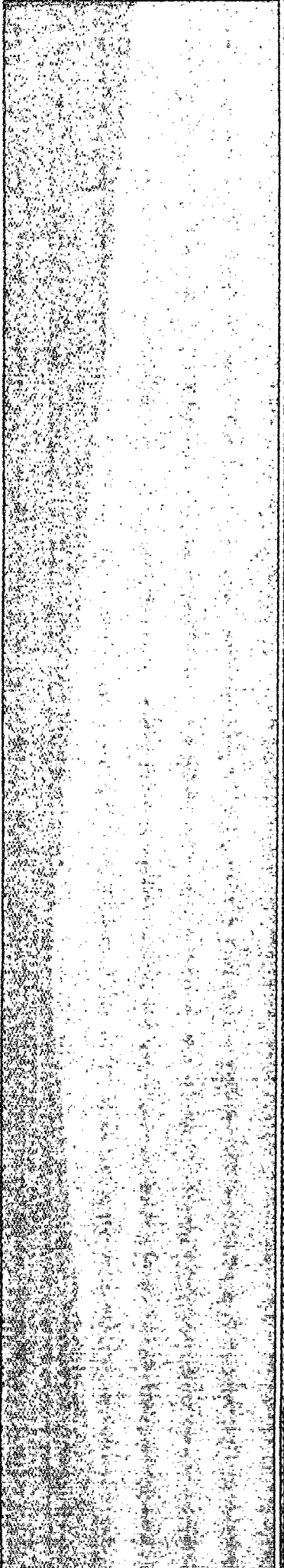
Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
C	12	21S	37E	990'	FNL	1650'	FWL	Lea

Latitude _____ Longitude _____

NATURE OF RELEASE

Type of Release Oil	Volume of Release 25	Volume Recovered 20
Source of Release Dump valve failure	Date and Hour of Occurrence 11/10/11 302pm	Date and Hour of Discovery 11/10/11 302pm
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Geoffrey Leking	
By Whom? Natalie Gladden	Date and Hour 11/10/11 401pm	
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.* Dump valve failure causing oil to be released out of vent line.		
Describe Area Affected and Cleanup Action Taken.* Contaminated soil will be excavated to below the allowable levels and site will be remediated according to the NMOCD Rules and Regulations for Spills.		
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 Environmental Specialist:	
Title: EHS Environmental Tech	Approval Date:	Expiration Date:
E-mail Address: natalie.gladden@apachecorp.com	Conditions of Approval:	Attached <input type="checkbox"/>
Date: 11/16/11 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

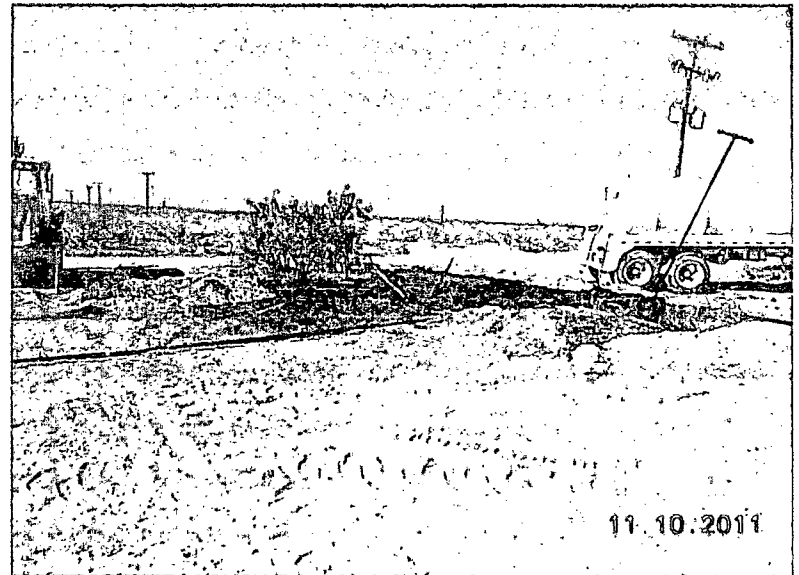
Apache EBDU Sat. #2 AD

Unit C&D, Section 12, T21S, R37E



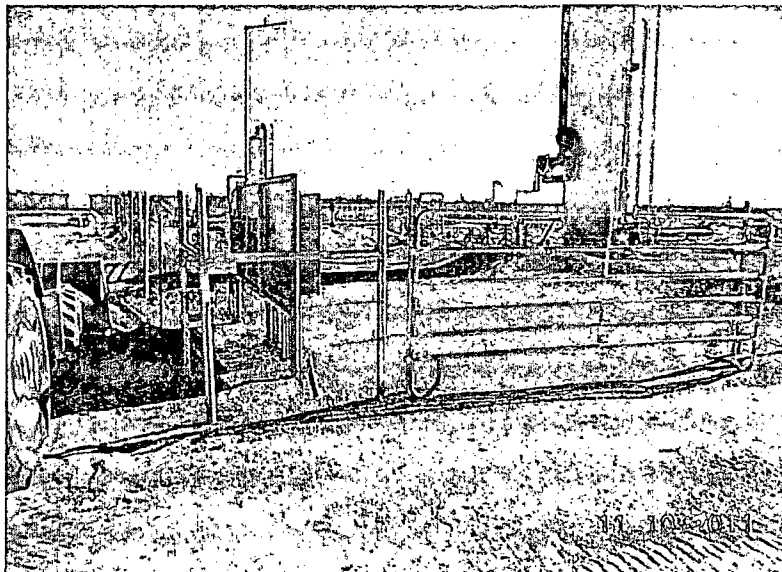
Site location sign

11/10/11



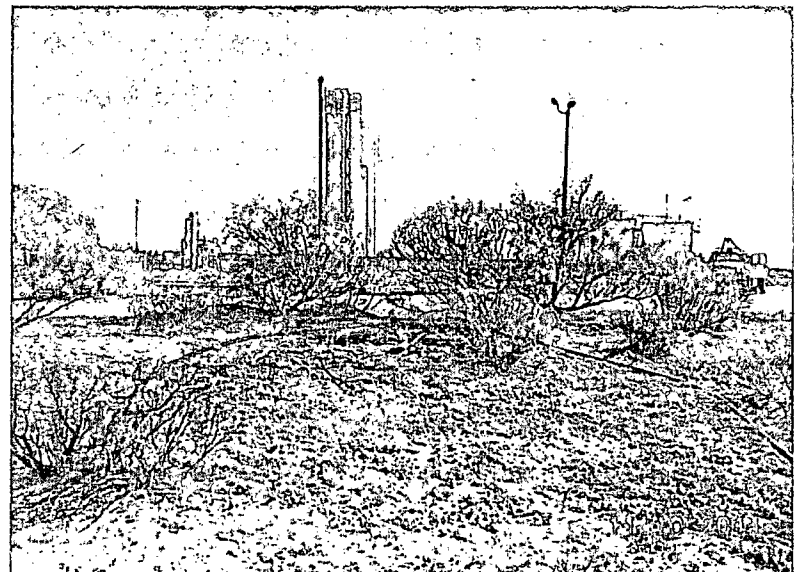
Stained area, facing northwest

11/10/11



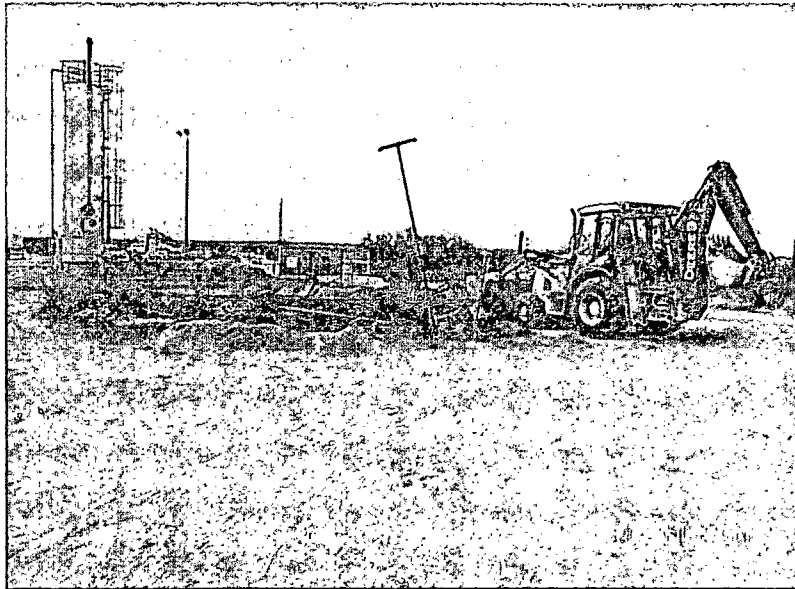
Stained area, facing southwest

11/10/11



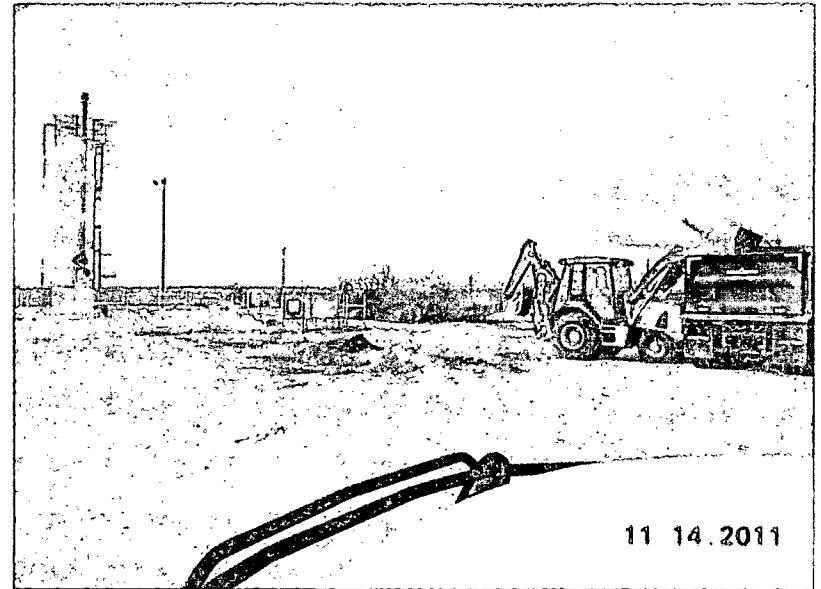
Stained area, facing west

11/10/11



Scraping site, facing west

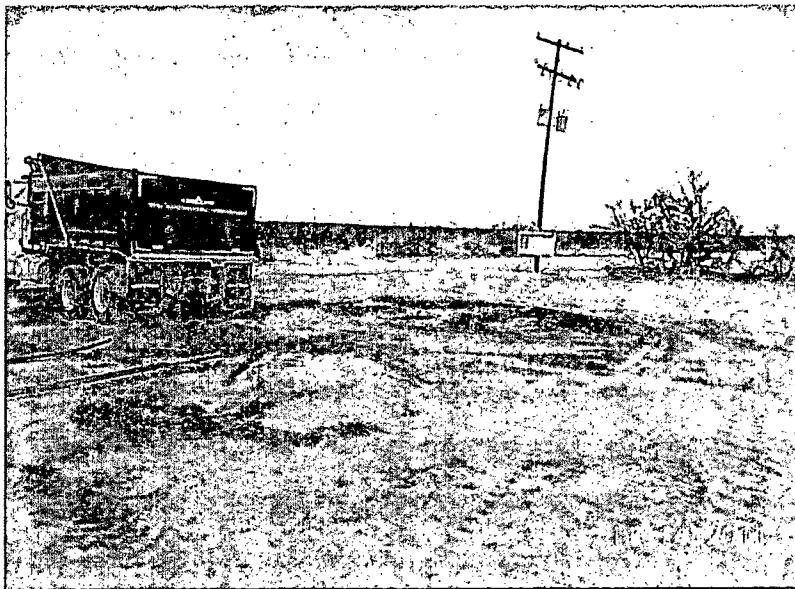
11/11/11



Exporting soil, facing southwest

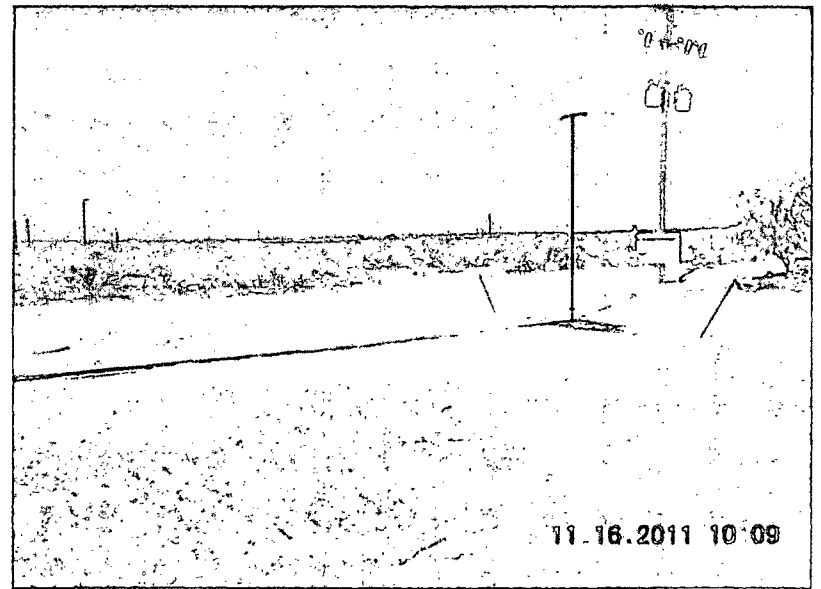
11 14.2011

11/14/11



Completed scrape, facing northwest

11/14/11



Completed site, facing northwest

11.16.2011 10:09

11/16/11

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

Analytical Results For:

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

 Received: 11/10/2011
 Reported: 11/16/2011
 Project Name: EBDU SAT. #2 A.D.
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

 Sampling Date: 11/10/2011
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: PT. 1 @ SURFACE (H102453-01)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	208	16.0	11/14/2011	ND	432	108	400	7.14	
TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	7870	100	11/15/2011	ND	208	104	200	5.33	
DRO >C10-C28	11700	100	11/15/2011	ND	223	111	200	4.11	

Surrogate: 1-Chlorooctane 217 % 55.5-154

Surrogate: 1-Chlorooctadecane 122 % 57.6-158

Sample ID: PT. 2 @ SURFACE (H102453-02)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	11/14/2011	ND	432	108	400	7.14	
TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	15.4	10.0	11/15/2011	ND	190	95.2	200	4.20	
DRO >C10-C28	229	10.0	11/15/2011	ND	204	102	200	6.29	

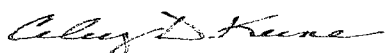
Surrogate: 1-Chlorooctane 143 % 55.5-154

Surrogate: 1-Chlorooctadecane 160 % 57.6-158

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: 11/10/2011
Reported: 11/16/2011
Project Name: EBDU SAT. #2 A.D.
Project Number: NONE GIVEN
Project Location: NOT GIVEN

Sampling Date: 11/10/2011
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: PT. 3 @ SURFACE (H102453-03)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	480	16.0	11/14/2011	ND	432	108	400	7.14	
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	11/15/2011	ND	190	95.2	200	4.20	
DRO >C10-C28	282	10.0	11/15/2011	ND	204	102	200	6.29	
Surrogate: 1-Chlorooctane		130 %	55.5-154						
Surrogate: 1-Chlorooctadecane		141 %	57.6-158						

Sample ID: PT. 4 @ SURFACE (H102453-04)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	11/16/2011	ND	432	108	400	7.14	
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	11/15/2011	ND	190	95.2	200	4.20	
DRO >C10-C28	73.9	10.0	11/15/2011	ND	204	102	200	6.29	
Surrogate: 1-Chlorooctane		134 %	55.5-154						
Surrogate: 1-Chlorooctadecane		156 %	57.6-158						

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: 11/10/2011
Reported: 11/16/2011
Project Name: EBDU SAT. #2 A.D.
Project Number: NONE GIVEN
Project Location: NOT GIVEN

Sampling Date: 11/10/2011
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

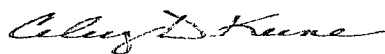
Sample ID: PT. 5 @ SURFACE (H102453-05)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	11/16/2011	ND	432	108	400	7.14	
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	11/15/2011	ND	190	95.2	200	4.20	
DRO >C10-C28	<10.0	10.0	11/15/2011	ND	204	102	200	6.29	
Surrogate: 1-Chlorooctane		131 %	55.5-154						
Surrogate: 1-Chlorooctadecane		157 %	57.6-158						

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



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Relinquished By: 		Date: 11-20-11	Received By: Jodi Henson	Phone Result: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Add'l Phone #:
		Time: 4:45		Fax Result: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Add'l Fax #:
Relinquished By:		Date:	Received By:	REMARKS: email results natalie.gladden@apachecorp.com Zconder@rice-ecs.com; Bbaker@rice-ecs.com; hconder@rice-ecs.com; Lweinheimer@rice-ecs.com	
		Time:			
Delivered By: (Circle One)			Sample Condition	CHECKED BY: (Initials)	
Sampler - UPS - Bus - Other:			Cool <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Intact <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		

#26

Analytical Results For:

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

 Received: 11/14/2011
 Reported: 11/16/2011
 Project Name: EBDU SAT. #2 A.D.
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

 Sampling Date: 11/14/2011
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: N. SCRAPE N. WALL (H102462-01)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	11/16/2011	ND	432	108	400	3.64	
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	11/16/2011	ND	208	104	200	5.33	
DRO >C10-C28	129	10.0	11/16/2011	ND	223	111	200	4.11	

Surrogate: 1-Chlorooctane 75.7 % 55.5-154

Surrogate: 1-Chlorooctadecane 89.7 % 57.6-158

Sample ID: N. SCRAPE S. WALL (H102462-02)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	11/16/2011	ND	432	108	400	3.64	
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	11/16/2011	ND	208	104	200	5.33	
DRO >C10-C28	<10.0	10.0	11/16/2011	ND	223	111	200	4.11	

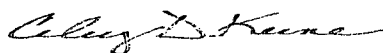
Surrogate: 1-Chlorooctane 84.8 % 55.5-154

Surrogate: 1-Chlorooctadecane 101 % 57.6-158

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: 11/14/2011
Reported: 11/16/2011
Project Name: EBDU SAT. #2 A.D.
Project Number: NONE GIVEN
Project Location: NOT GIVEN

Sampling Date: 11/14/2011
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: N. SCRAPE E. WALL (H102462-03)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	11/16/2011	ND	432	108	400	3.64	
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	11/16/2011	ND	208	104	200	5.33	
DRO >C10-C28	<10.0	10.0	11/16/2011	ND	223	111	200	4.11	
Surrogate: 1-Chlorooctane	79.5 %	55.5-154							
Surrogate: 1-Chlorooctadecane	93.3 %	57.6-158							

Sample ID: N. SCRAPE W. WALL (H102462-04)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	11/16/2011	ND	432	108	400	3.64	
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	11/16/2011	ND	208	104	200	5.33	
DRO >C10-C28	277	10.0	11/16/2011	ND	223	111	200	4.11	
Surrogate: 1-Chlorooctane	67.7 %	55.5-154							
Surrogate: 1-Chlorooctadecane	79.7 %	57.6-158							

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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: 11/14/2011
 Reported: 11/16/2011
 Project Name: EBDU SAT. #2 A.D.
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

 Sampling Date: 11/14/2011
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: 5 PT. BOTTOM (H102462-05)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	11/16/2011	ND	464	116	400	3.51	
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	11/16/2011	ND	208	104	200	5.33	
DRO >C10-C28	41.6	10.0	11/16/2011	ND	223	111	200	4.11	
Surrogate: 1-Chlorooctane		83.2 %	55.5-154						
Surrogate: 1-Chlorooctadecane		96.5 %	57.6-158						

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Celey D. Keene, Lab Director/Quality Manager

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

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

[illegible]

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

#26

Appendix D

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

EBDU Satellite #2

site name

C & D

12

T21S

R37E

Unit Letter

Section

Township

Range

Groundwater Depth: 52 ft

Compiled by: Amy C. Ruth

Date: 11/14/2011

Comments:

• = Wells of unknown use (USGS)

• = Non-production wells
(commercial, sanitation, domestic, stock)

★ = Subject Site

T21S R37E	2	1	77' • 6	T21S R38E
	11	★ 12	7	
	27' • 14	53' • 13	18	
				•



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

closed) (quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest) (NAD83 UTM in meters) (In feet)

POD Number	POD		Q Q Q				X	Y	Depth Depth Water	
	Code	Subbasin	County	64	16	4	Sec	Tws	Rng	Well Water Column
CP 00137			LE	2	2	1	13	21S	37E	676862 3595783* 65
CP 00197			LE	1	4	1	01	21S	37E	676611 3598599* 85
CP 00212			LE	2	2	1	14	21S	37E	675254 3595753* 46

Average Depth to Water: --

Minimum Depth: --

Maximum Depth: --

Record Count: 3

PLSS Search:

Section(s): 1, 2, 11, 12, 13, Township: 21S Range: 37E
14

*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): 6, 7, 18

Township: 21S

Range: 38E

USGS 322831103071901 21S.37E.13.13434

Available data for this site

Groundwater: Field measurements

Lea County, New Mexico

Hydrologic Unit Code 13070007

Latitude 32°28'45", Longitude 103°07'21" NAD27

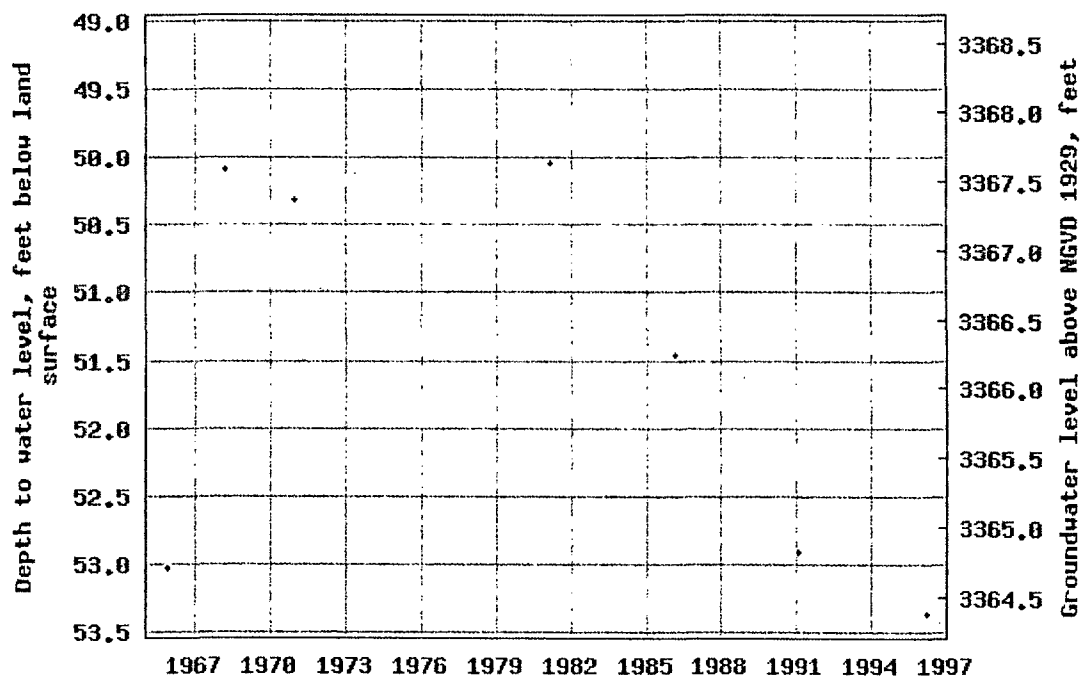
Land-surface elevation 3,417.70 feet above NGVD29

The depth of the well is 65 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 322831103071901 21S.37E.13.13434



---- Provisional Data Subject to Revision ----

USGS 322849103080601 21S.37E.14.12410

Available data for this site

Groundwater: Field measurements



[GO]

Lea County, New Mexico

Hydrologic Unit Code 13070007

Latitude 32°29'01", Longitude 103°08'06" NAD27

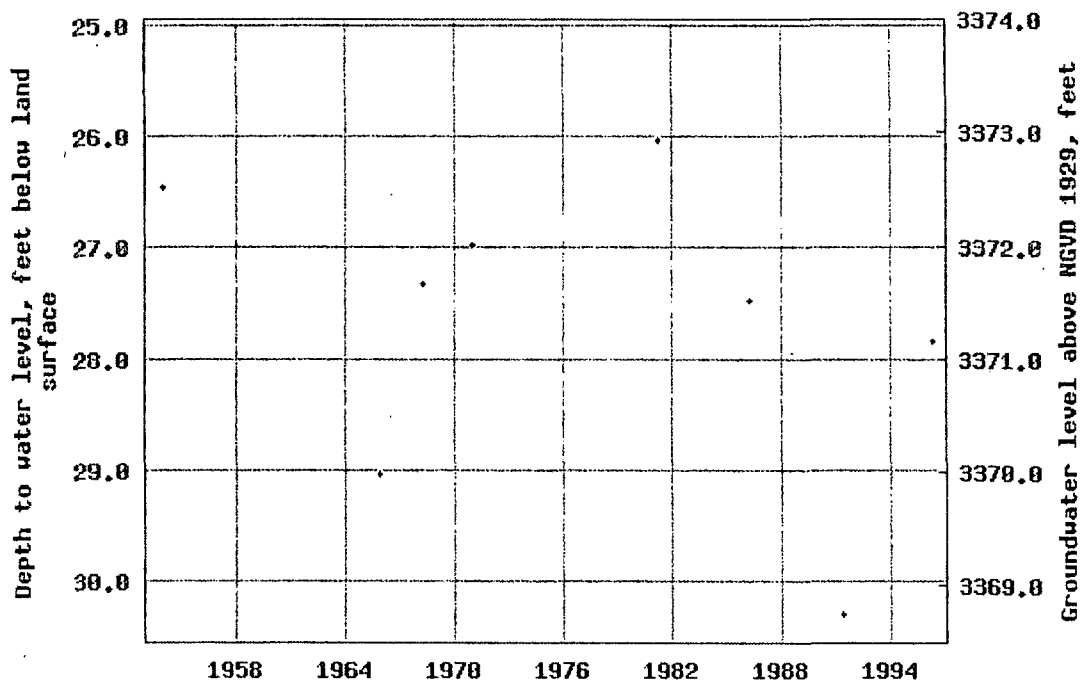
Land-surface elevation 3,399.00 feet above NGVD29

The depth of the well is 48 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 322849103080601 21S.37E.14.12410



---- Provisional Data Subject to Revision ----

USGS 323025103062501 21S.38E.06.131334

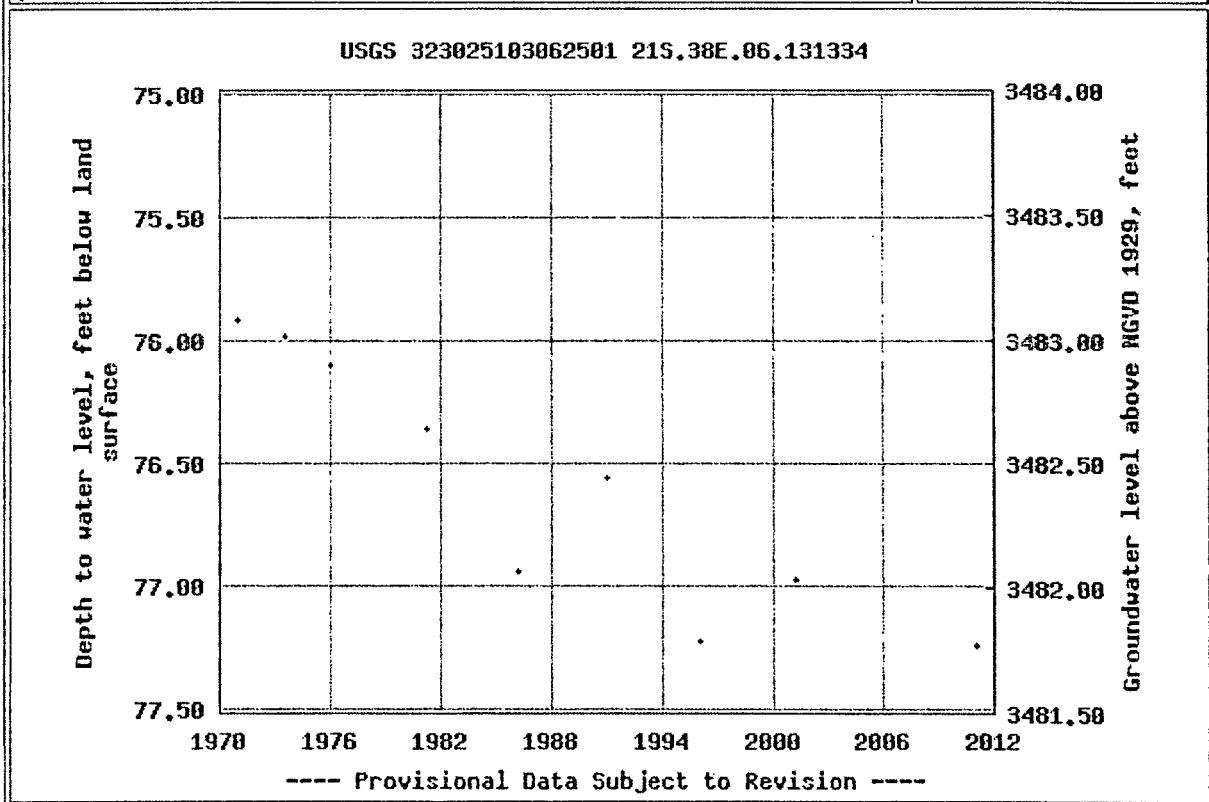
Available data for this site

Groundwater: Field measurements



[GO]

Lea County, New Mexico
 Hydrologic Unit Code 13070007
 Latitude 32°30'35.3", Longitude 103°06'26.1" NAD83
 Land-surface elevation 3,559.00 feet above NGVD29
 The depth of the well is 90 feet below land surface.
 This well is completed in the Ogallala Formation
 (121OGLL) local aquifer.

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

Appendix E

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