

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

AUG 03 2012

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 #718	Facility Type	Production Well

Surface Owner	Deck Estate	Mineral Owner	State of NM	Lease No.	30-025-34742
---------------	-------------	---------------	-------------	-----------	--------------

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
P	15	21S	37E	14	FSL	1098	FEL	Lea

Latitude _____ Longitude _____

NATURE OF RELEASE

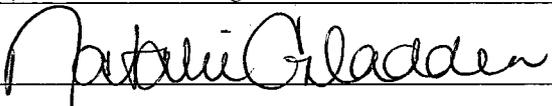
Type of Release	Hydrocarbons	Volume of Release	15 bbl	Volume Recovered	12 bbl
Source of Release	Back pressure valve	Date and Hour of Occurrence	08/19/11	Date and Hour of Discovery	08/19/11
Was Immediate Notice Given?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom?	Geoffrey Leking		
By Whom?	Natalie Gladden	Date and Hour	08/19/11 11:30 am by email		
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.*
Back pressure plugged up and blew out releasing 15 bbls of oil and recovered 12 bbls. Vacuum truck was called out to pick up standing fluid. Site was back-dragged until one-call was cleared, to keep the cattle away.

Describe Area Affected and Cleanup Action Taken.*
The leak affected the caliche pad surrounding the wellhead. Impacted soils were removed to a NMOCD approved disposal facility. Representative soil samples were collected from the excavation and sent to a commercial laboratory for chloride and TPH analysis. 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:	 Environmental Specialist
Title:	EH&S Environmental Tech	Approval Date:	08/03/12
E-mail Address:	Natalie.gladden@apachecorp.com	Expiration Date:	-
Date:	Phone: (575) 390-4186	Conditions of Approval:	-
		Attached	<input type="checkbox"/>
		IRP-06-14-3094	

* Attach Additional Sheets If Necessary

JUN 18 2014

MSAD 1416852101





EXPLORING WHAT'S POSSIBLE

HOBBS OCD

AUG 03 2012

RECEIVED

APACHE CORPORATION

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

NEDU #718

Closure Report

API 30-025-34742

Release Date: August 19, 2011

Unit Letter P, Section 15, Township 21S, Range 37E

Rice Environmental Consulting & Safety

P.O. Box 5630 Hobbs, NM 88241
Phone 575.393.4411 Fax 575.393.0293

April 20, 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 – NEDU #718 AD
UL/P sec. 15 T21S R37E
API No. 30-025-34742**

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 hydrocarbon fluids associated with the NEDU #718. A back pressure valve ruptured and released fluids onto the well pad. The valve was repaired, and standing fluids were recovered. An initial form C-141 was submitted by Apache Corporation on August 19, 2011 (Appendix A). The site is located north of Eunice, east from NM Highway 248 in unit letter 'P' of section 15, T21S, R37E in Lea County, New Mexico.

On August 19, 2011, RECS personnel initiated work on the NEDU #718. Soil samples were collected from the site as excavation of the leak proceeded and field tested for chloride (Figure 1). Headspace measurements were also taken in the field using a Photo Ionization Detector (PID). Excavation of the impacted area began, covering a lateral area of 2,077 ft².

On August 23, 2011, RECS personnel returned to the site and collected soil samples from the 2 ft. deep excavation (Figure 2). Representative grab samples were collected from the excavation walls and the excavation floor, and submitted to a commercial laboratory for chloride and TPH (GRO/DRO) analyses. Chloride did not exceed 224 ppm (parts per million or mg/kg) in the wall samples, or 112 ppm in the excavation floor samples. TPH did not exceed 37.4 ppm in all samples (Appendix C).

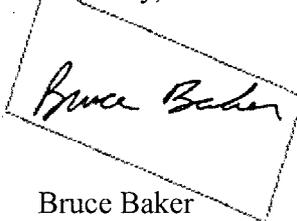
Impacted soils were removed from the excavation and transported to a NMOCD approved disposal facility. The excavation was backfilled with clean caliche and contoured to the surrounding area. See Appendix B for photographs of field activities.

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 53 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.

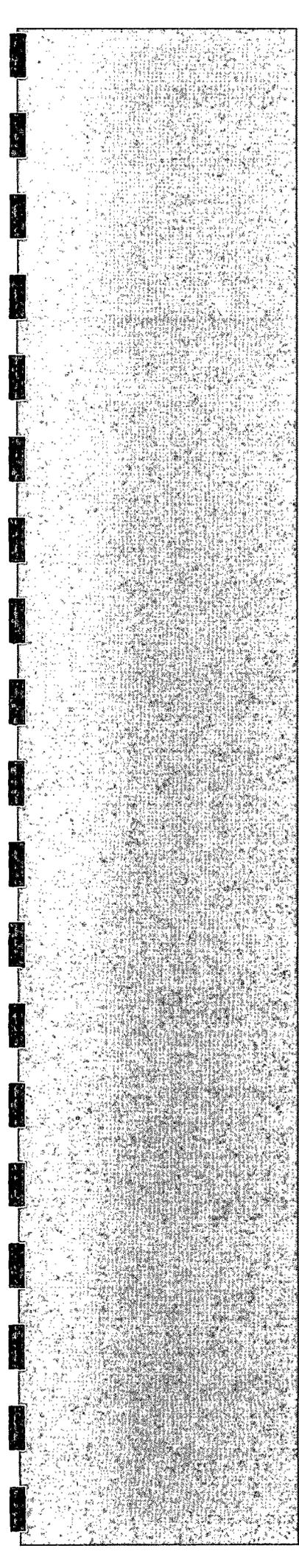
Sincerely,

A handwritten signature in cursive script, reading "Bruce Baker", enclosed within a rectangular box with a dashed border.

Bruce Baker
Head Foreman
RECS
(575) 631-5157

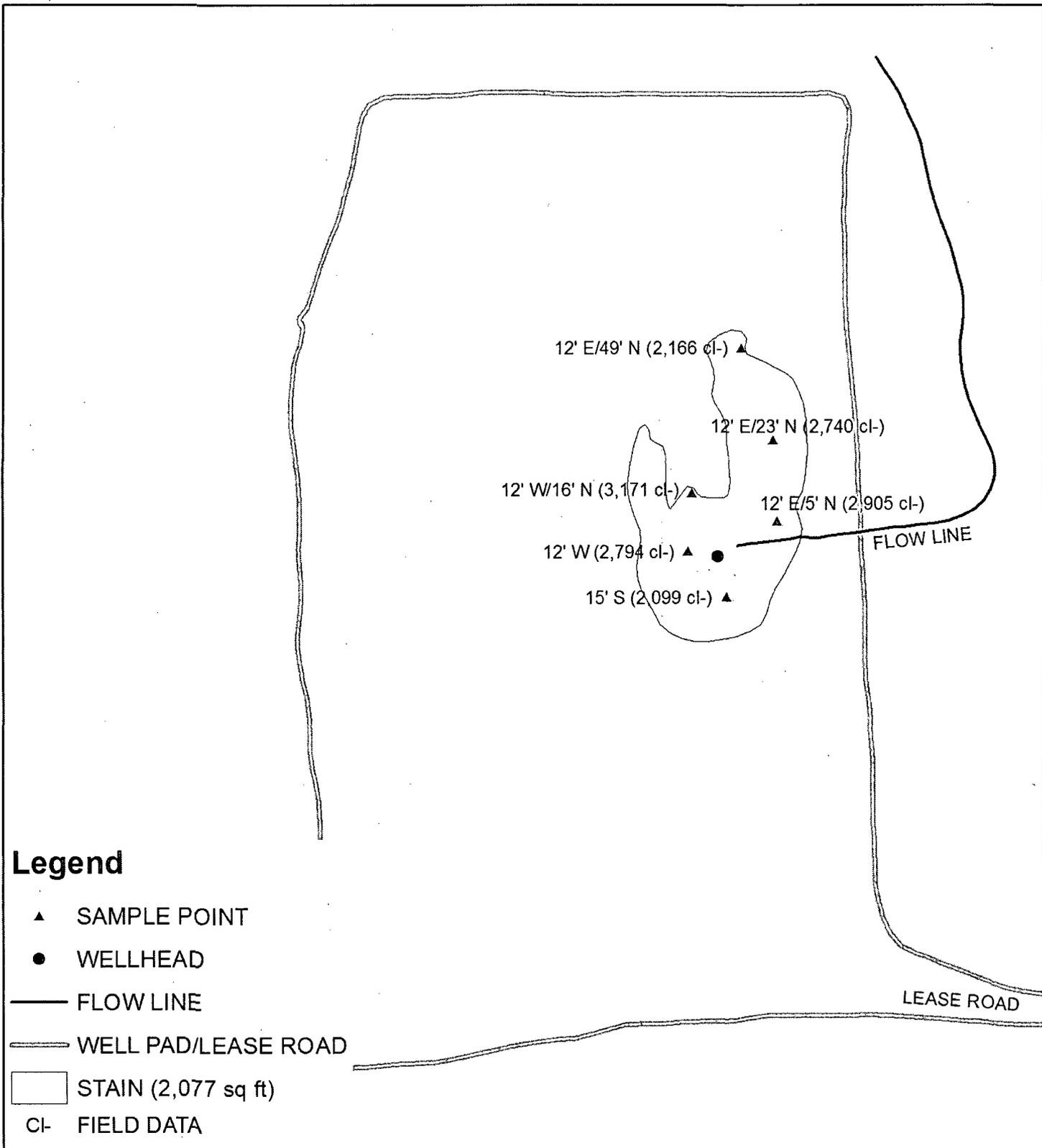
Attachments:

- Figure 1: Site Plat including Surface Field Data
- Figure 2: Site Plat including Final Excavation Lab 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



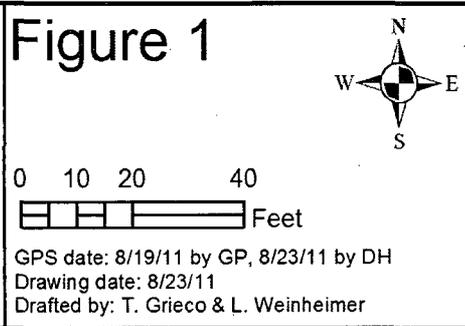
Figures

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



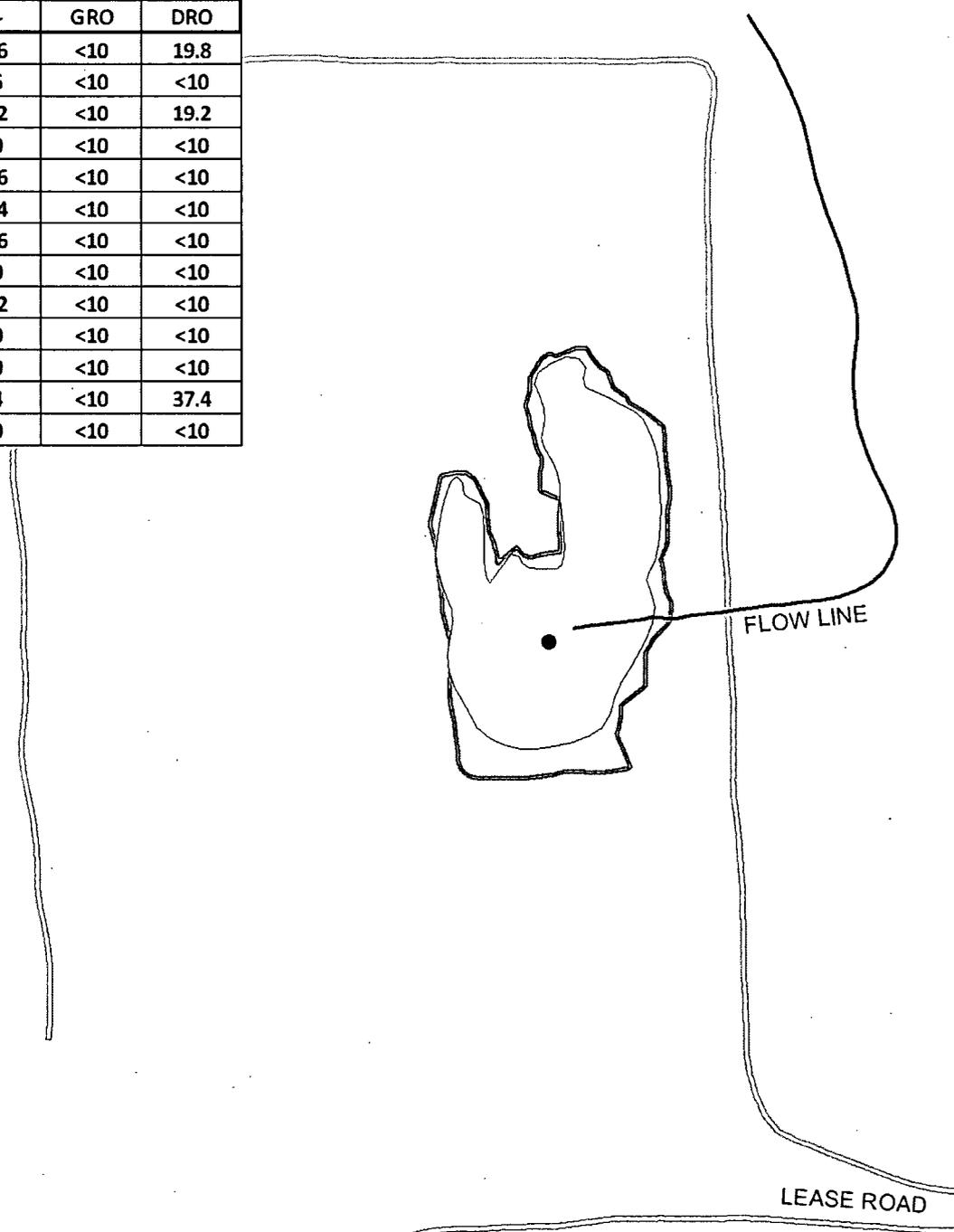
APACHE
NEDU #718 AD

UL/P SEC 15
 T-21-S R-37-E
 LEA COUNTY, NM



FINAL EXCAVATION LAB DATA

Sample Description	Cl-	GRO	DRO
W. WALL NORTH END	<16	<10	19.8
N. WALL EAST END	96	<10	<10
N. WALL WEST END	112	<10	19.2
S. WALL WEST END	80	<10	<10
S. WALL EAST END	<16	<10	<10
E. WALL NORTH END	224	<10	<10
E. WALL SOUTH END	<16	<10	<10
W. WALL SOUTH END	80	<10	<10
BOTTOM CENTER @ 2'	112	<10	<10
NW BOTTOM CORNER @ 2'	80	<10	<10
NE BOTTOM CORNER @ 2'	80	<10	<10
SE BOTTOM CORNER @ 2'	64	<10	37.4
SW BOTTOM CORNER @ 2'	80	<10	<10



Legend

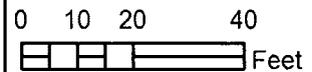
- WELLHEAD
- FLOW LINE
- - - WELL PAD/LEASE ROAD
- STAIN (2,077 sq ft)
- EXCAVATION



**APACHE
NEDU #718 AD**

UL/P SEC 15
T-21-S R-37-E
LEA COUNTY, NM

Figure 2



GPS date: 8/19/11 by GP, 8/23/11 by DH
Drawing date: 8/23/11
Drafted by: T. Grieco & L. Weinheimer

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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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 #718	Facility Type Production Well
Surface Owner Deck Estate	Mineral Owner State of NM
API No. 30-025-34742	

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
P	15	21S	37E	14	FSL	1098	FEL	Lea

Latitude _____ Longitude _____

NATURE OF RELEASE

Type of Release Hydrocarbon's	Volume of Release 15	Volume Recovered 12
Source of Release Back pressure valve	Date and Hour of Occurrence 08/19/11	Date and Hour of Discovery 08/19/2011
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 08/19/11 11:30am by email	
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.*

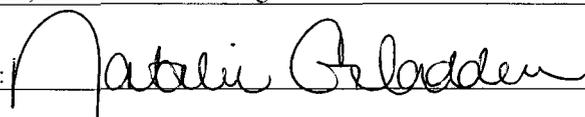
Describe Cause of Problem and Remedial Action Taken.*

Back pressure plugged up and blew out releasing 15bbls of oil and recovering 12bbls of oil. Vacuum truck was called out to pick-up standing fluid. Site was back-dragged until one-call was cleared, to keep the cattle away.

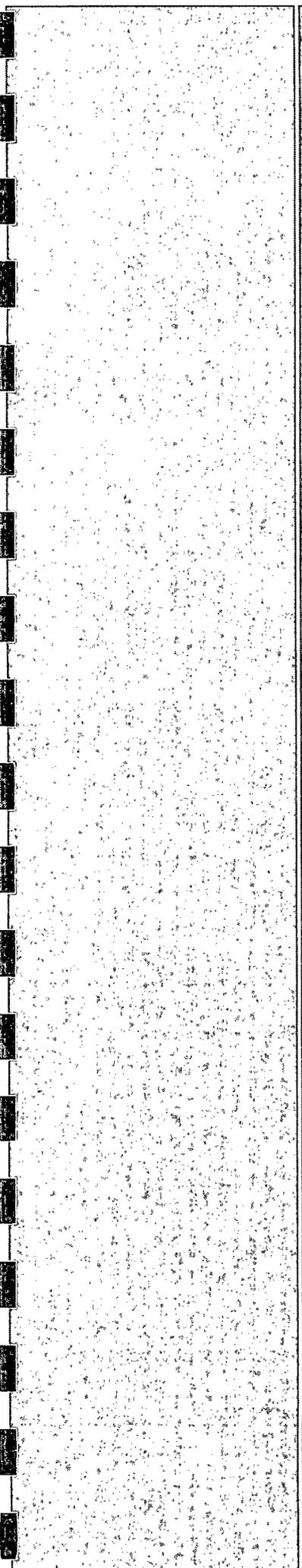
Describe Area Affected and Cleanup Action Taken.*

Site will be excavated and remediated to meet NMOCD Guidelines for Spills and Releases.

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: 08/19/2011 Phone: 575-390-4186		

* Attach Additional Sheets If Necessary

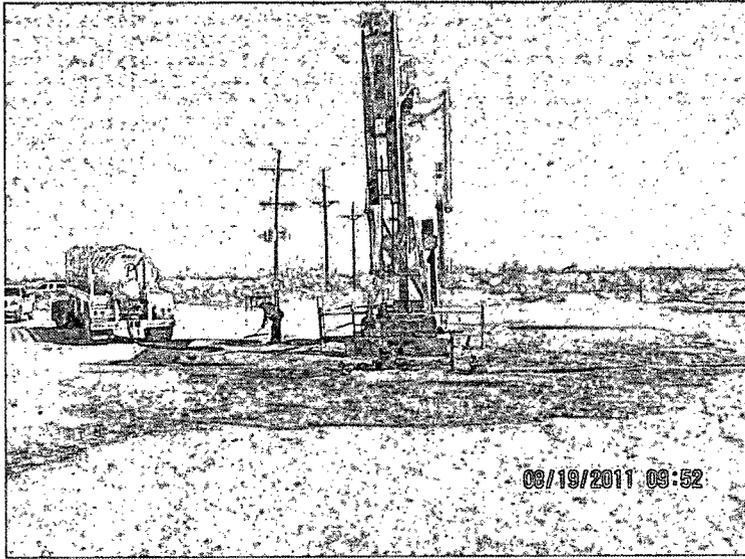


Appendix B

Site Photographs

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

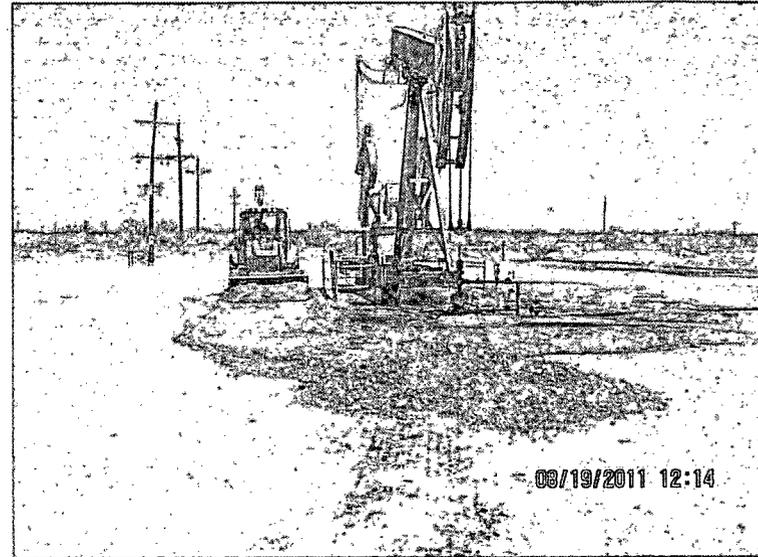
Apache NEDU # 718
Unit Letter P, Section 15, T21S R37E



08/19/2011 09:52

Initial release, facing north

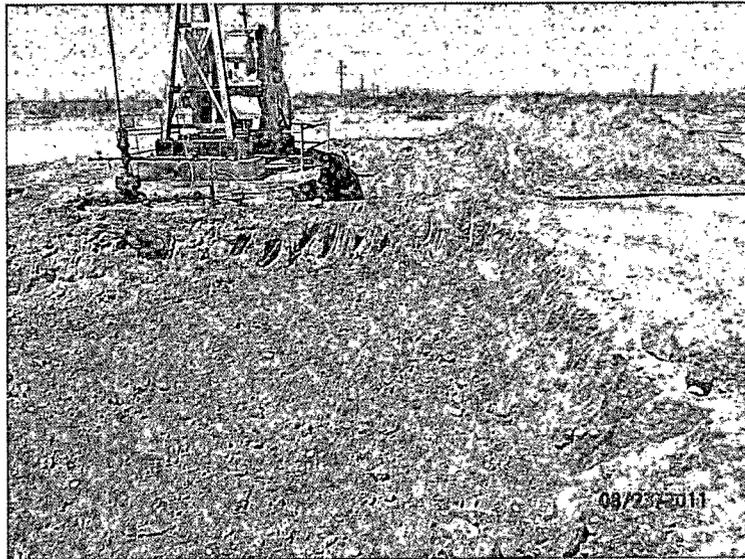
8/19/2011



08/19/2011 12:14

Excavating release area, facing north

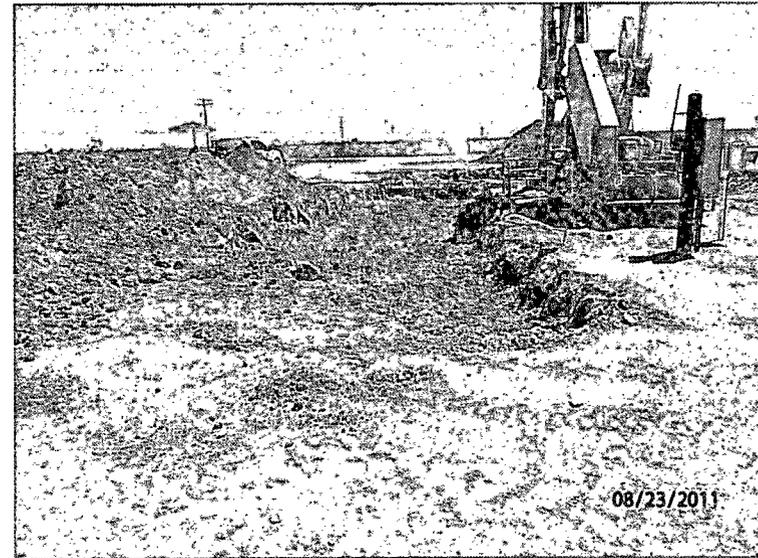
8/19/2011



08/23/2011

Final excavation, facing north

8/23/2011



08/23/2011

Final excavation, facing south

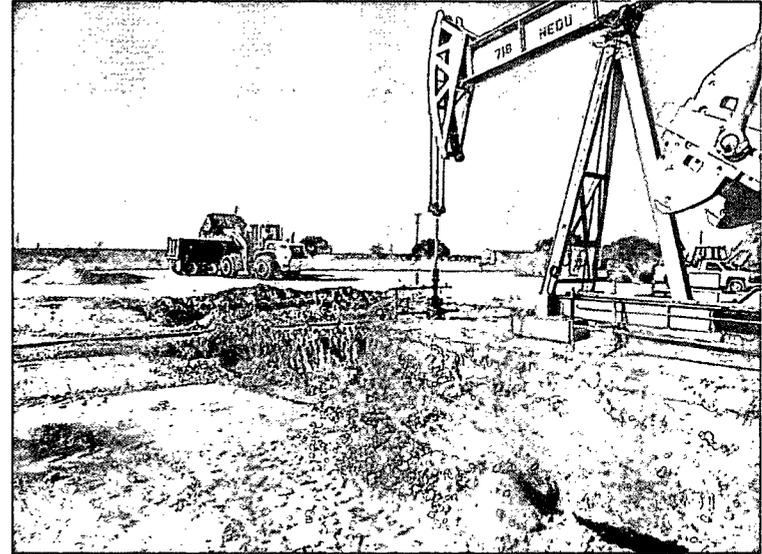
8/23/2011



08/23/2011

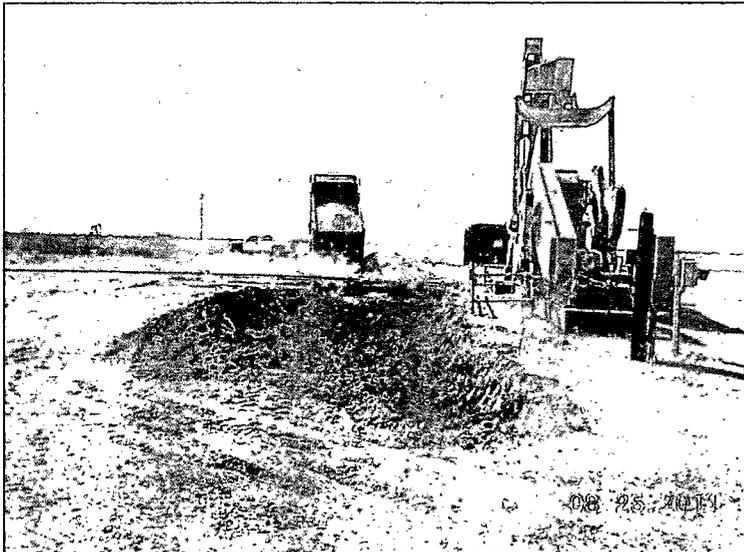
Final excavation, facing south

8/23/2011



Exporting soil, facing southwest

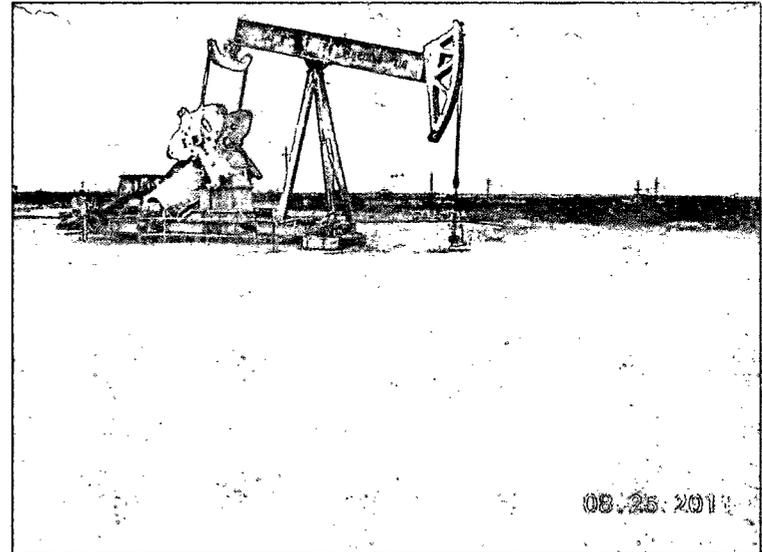
8/25/2011



08.25.2011

Importing caliche, facing south

8/25/2011



08.25.2011

Site complete, facing east

8/25/2011

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:	08/24/2011	Sampling Date:	08/23/2011
Reported:	08/29/2011	Sampling Type:	Soil
Project Name:	NEDU #718 A.D.	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: W. WALL NORTH END (H101796-01)

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	08/25/2011	ND	432	108	400	0.00		
TPH 8015M		mg/kg		Analyzed By: ab						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	08/27/2011	ND	202	101	200	0.963		
DRO >C10-C28	19.8	10.0	08/27/2011	ND	173	86.4	200	1.30		

Surrogate: 1-Chlorooctane 88.0 % 55.5-154
 Surrogate: 1-Chlorooctadecane 89.9 % 57.6-158

Sample ID: N. WALL EAST END (H101796-02)

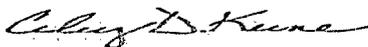
Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	96.0	16.0	08/25/2011	ND	432	108	400	0.00		
TPH 8015M		mg/kg		Analyzed By: ab						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	08/27/2011	ND	202	101	200	0.963		
DRO >C10-C28	<10.0	10.0	08/27/2011	ND	173	86.4	200	1.30		

Surrogate: 1-Chlorooctane 90.3 % 55.5-154
 Surrogate: 1-Chlorooctadecane 98.4 % 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: 08/24/2011
 Reported: 08/29/2011
 Project Name: NEDU #718 A.D.
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

 Sampling Date: 08/23/2011
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: N. WALL WEST END (H101796-03)

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	112	16.0	08/25/2011	ND	432	108	400	0.00		
TPH 8015M		mg/kg		Analyzed By: ab						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	08/27/2011	ND	202	101	200	0.963		
DRO >C10-C28	19.2	10.0	08/27/2011	ND	173	86.4	200	1.30		

Surrogate: 1-Chlorooctane 93.6 % 55.5-154
 Surrogate: 1-Chlorooctadecane 101 % 57.6-158

Sample ID: S. WALL WEST END (H101796-04)

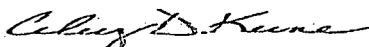
Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	80.0	16.0	08/25/2011	ND	432	108	400	0.00		
TPH 8015M		mg/kg		Analyzed By: ab						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	08/27/2011	ND	202	101	200	0.963		
DRO >C10-C28	<10.0	10.0	08/27/2011	ND	173	86.4	200	1.30		

Surrogate: 1-Chlorooctane 83.8 % 55.5-154
 Surrogate: 1-Chlorooctadecane 97.6 % 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:	08/24/2011	Sampling Date:	08/23/2011
Reported:	08/29/2011	Sampling Type:	Soil
Project Name:	NEDU #718 A.D.	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: S. WALL EAST END (H101796-05)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	08/25/2011	ND	432	108	400	0.00		
TPH 8015M		mg/kg		Analyzed By: ab						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	08/27/2011	ND	202	101	200	0.963		
DRO >C10-C28	<10.0	10.0	08/27/2011	ND	173	86.4	200	1.30		

Surrogate: 1-Chlorooctane 89.9 % 55.5-154
 Surrogate: 1-Chlorooctadecane 96.0 % 57.6-158

Sample ID: E. WALL NORTH END (H101796-06)

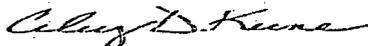
Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	224	16.0	08/25/2011	ND	432	108	400	0.00		
TPH 8015M		mg/kg		Analyzed By: ab						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	08/27/2011	ND	202	101	200	0.963		
DRO >C10-C28	<10.0	10.0	08/27/2011	ND	173	86.4	200	1.30		

Surrogate: 1-Chlorooctane 81.5 % 55.5-154
 Surrogate: 1-Chlorooctadecane 98.5 % 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: 08/24/2011
 Reported: 08/29/2011
 Project Name: NEDU #718 A.D.
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

 Sampling Date: 08/23/2011
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: E. WALL SOUTH END (H101796-07)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	08/25/2011	ND	432	108	400	0.00		
TPH 8015M		mg/kg		Analyzed By: ab						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	08/27/2011	ND	202	101	200	0.963		
DRO >C10-C28	<10.0	10.0	08/27/2011	ND	173	86.4	200	1.30		

Surrogate: 1-Chlorooctane 92.5 % 55.5-154
 Surrogate: 1-Chlorooctadecane 95.2 % 57.6-158

Sample ID: W. WALL SOUTH END (H101796-08)

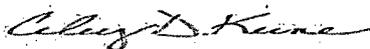
Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	80.0	16.0	08/25/2011	ND	432	108	400	0.00		
TPH 8015M		mg/kg		Analyzed By: ab						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	08/27/2011	ND	202	101	200	0.963		
DRO >C10-C28	<10.0	10.0	08/27/2011	ND	173	86.4	200	1.30		

Surrogate: 1-Chlorooctane 92.2 % 55.5-154
 Surrogate: 1-Chlorooctadecane 103 % 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: 08/24/2011
 Reported: 08/29/2011
 Project Name: NEDU #718 A.D.
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

 Sampling Date: 08/23/2011
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: BOTTOM CENTER @ 2' (H101796-09)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	112	16.0	08/25/2011	ND	432	108	400	0.00		
TPH 8015M		mg/kg		Analyzed By: ab						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	08/27/2011	ND	202	101	200	0.963		
DRO >C10-C28	<10.0	10.0	08/27/2011	ND	173	86.4	200	1.30		

Surrogate: 1-Chlorooctane 77.3 % 55.5-154
 Surrogate: 1-Chlorooctadecane 90.7 % 57.6-158

Sample ID: N. W. BTM CORNER @ 2' (H101796-10)

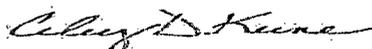
Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	80.0	16.0	08/25/2011	ND	432	108	400	0.00		
TPH 8015M		mg/kg		Analyzed By: ab						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	08/27/2011	ND	202	101	200	0.963		
DRO >C10-C28	<10.0	10.0	08/27/2011	ND	173	86.4	200	1.30		

Surrogate: 1-Chlorooctane 79.7 % 55.5-154
 Surrogate: 1-Chlorooctadecane 92.3 % 57.6-158

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*=Accredited Analyte

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Analytical Results For:

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

 Received: 08/24/2011
 Reported: 08/29/2011
 Project Name: NEDU #718 A.D.
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

 Sampling Date: 08/23/2011
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: N. E. BTTM CORNER @ 2' (H101796-11)

Chloride, SM4500CI-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	08/25/2011	ND	432	108	400	0.00		
TPH 8015M		mg/kg		Analyzed By: ab						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	08/27/2011	ND	202	101	200	0.963		
DRO >C10-C28	<10.0	10.0	08/27/2011	ND	173	86.4	200	1.30		
<i>Surrogate: 1-Chlorooctane</i>	<i>83.6 %</i>	<i>55.5-154</i>								
<i>Surrogate: 1-Chlorooctadecane</i>	<i>93.9 %</i>	<i>57.6-158</i>								

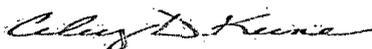
Sample ID: S. E. BTTM CORNER @ 2' (H101796-12)

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	64.0	16.0	08/25/2011	ND	432	108	400	0.00		
TPH 8015M		mg/kg		Analyzed By: ab						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	08/27/2011	ND	202	101	200	0.963		
DRO >C10-C28	37.4	10.0	08/27/2011	ND	173	86.4	200	1.30		
<i>Surrogate: 1-Chlorooctane</i>	<i>82.0 %</i>	<i>55.5-154</i>								
<i>Surrogate: 1-Chlorooctadecane</i>	<i>81.3 %</i>	<i>57.6-158</i>								

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Analytical Results For:

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

Received:	08/24/2011	Sampling Date:	08/23/2011
Reported:	08/29/2011	Sampling Type:	Soil
Project Name:	NEDU #718 A.D.	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: S.W. BTM CORNER @ 2' (H101796-13)

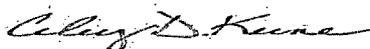
Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	80.0	16.0	08/25/2011	ND	432	108	400	0.00		
TPH 8015M		mg/kg		Analyzed By: ab						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	08/27/2011	ND	202	101	200	0.963		
DRO >C10-C28	<10.0	10.0	08/27/2011	ND	173	86.4	200	1.30		

<i>Surrogate: 1-Chlorooctane</i>	87.3 %	55.5-154
<i>Surrogate: 1-Chlorooctadecane</i>	96.8 %	57.6-158

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Celey D. Keene, Lab Director/Quality Manager



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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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

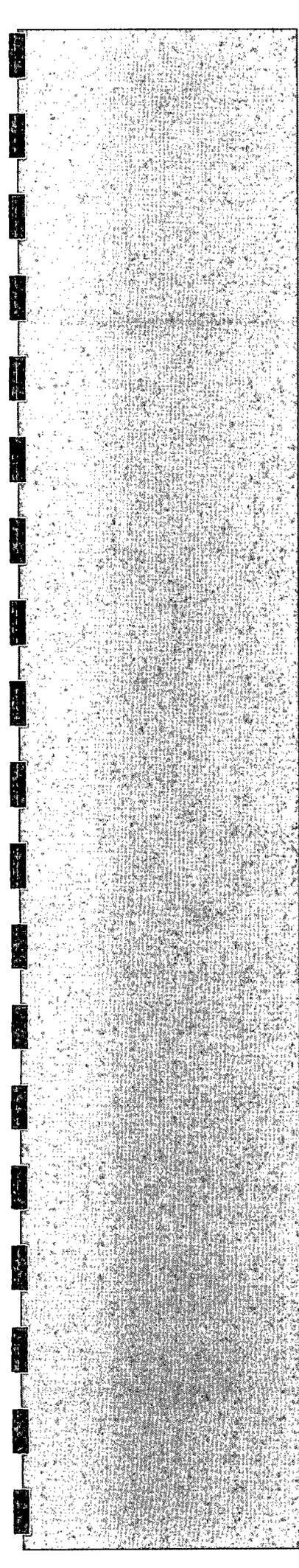
Company Name: Apache		BILL TO		ANALYSIS REQUEST												
Project Manager: Natalie Gladden		P.O. #:		Chlorides TPH 8015 M BTEX Texas TPH Complete Cations/Anions TDS												
Address:		Company:														
City: State: NM Zip:		Attn:														
Phone #: Fax #:		Address:														
Project #: Project Owner:		City:														
Project Name: N.E.O.U # 718 A.D.		State: Zip:														
Project Location:		Phone #:														
Sampler Name: Oak Harris		Fax #:														
FOR LAB USE ONLY																
Lab I.D.	Sample I.D.	# GRAB OR (C)OMP.	# CONTAINERS	MATRIX					PRESERV.		SAMPLING					
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER	ACID/BASE	ICE/COOL	OTHER	DATE	TIME		
H101796																
1	N. WALL North END	G	1			✓							8-23-11	11:00	✓	✓
	N. WALL West END	G	1			✓							8-23-11	11:05	✓	✓
2	N. WALL East END	G	1			✓							8-23-11	11:10	✓	✓
3	N. WALL West END	G	1			✓							8-23-11	11:15	✓	✓
4	S. WALL West END	G	1			✓							8-23-11	11:20	✓	✓
5	S. WALL East END	G	1			✓							8-23-11	11:25	✓	✓
6	E. WALL North END	G	1			✓							8-23-11	11:30	✓	✓
7	E. WALL South END	G	1			✓							8-23-11	11:35	✓	✓
8	W. WALL South END	G	1			✓							8-23-11	11:40	✓	✓

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Relinquished By: <i>Natalie Gladden</i>	Date: 8/24/11	Received By: <i>Aodi Henson</i>	Phone Result: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Add'l Phone #:
	Time: 4:20		Fax Result: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Add'l Fax #:
Relinquished By:	Date:	Received By:	REMARKS: email results Natalie.Gladden@usa.apachecorp.com; Zconder@rice-ecs.com; Bbaker@rice-ecs.com; hconder@rice-ecs.com; Lweinheimer@rice-ecs.com	
	Time:			
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Sample Condition Cool: Intact <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> No <input type="checkbox"/> No	CHECKED BY: (Initials) <i>GT</i>		

† 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

NEDU #718
site name

P 15 21S 37E
Unit Letter Section Township Range

Groundwater Depth: 53 ft

Compiled by: Amy C. Ruth Date: 4/24/2012

Comments: _____

○ = Wells of unknown use (USGS)

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

☆ = Subject Site

	9 ○ 58'	10	11	
	70' Stock ○	15	○ 28'	
	16	22 ☆	14	
	21	○ 44'	65' Stock ○ 65' Domestic ○	
		53' Domestic ○	23 ○ 46'	



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				
	Code	Subbasin	County	64	16	4	Sec			Tws	Range	Well	Water	Column
<u>CP 00014</u>			LE	1	3	2	23	21S	37E	675492	3593749*	84		
<u>CP 00212</u>			LE	2	2	1	14	21S	37E	675254	3595753*	46		
<u>CP 00224</u>			LE	4	3	3	23	21S	37E	674902	3592730*	96		
<u>CP 00235</u>			LE	2	2	1	23	21S	37E	675283	3594144*	81		
<u>CP 00236</u>			LE	3	1	2	23	21S	37E	675485	3593952*	83		
<u>CP 00238</u>			LE	3	3	2	23	21S	37E	675492	3593549*	81		
<u>CP 00239</u>			LE	1	1	2	23	21S	37E	675485	3594152*	89		
<u>CP 00240</u>			LE	4	2	1	23	21S	37E	675283	3593944*	72		
<u>CP 00241</u>			LE	4	2	1	23	21S	37E	675283	3593944*	76		
<u>CP 00251</u>			LE	2	3	4	22	21S	37E	674099	3592915*	103		
<u>CP 00252</u>			LE	4	2	4	22	21S	37E	674493	3593125*	106		
<u>CP 00554</u>			LE		2	2	16	21S	37E	672744	3595610*	80	70	10
<u>CP 00562</u>			LE	1	2	2	23	21S	37E	675887	3594159*	136	65	71
<u>CP 00700</u>			LE			2	23	21S	37E	675794	3593851*	75	65	10
<u>CP 00881</u>			LE		4	4	22	21S	37E	674402	3592824*	95	53	42

Average Depth to Water: 63 feet
Minimum Depth: 53 feet
Maximum Depth: 70 feet

Record Count: 15

PLSS Search:

Section(s): 9, 10, 11, 14, 15, 16, 21, 22, 23
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

Currently Active Points of Diversion

(with Ownership Information)

WR File Nbr.	Sub	Basin	Use	Diversion	Owner	County	POD Number	Grant	Source	Q	Q	Q	Sec	Tws	Rng	X	Y
CP 00554		STK			3 MILLARD DECK	LE	CP 00554		Shallow	2	2	16	21S	37E		672744	3595610

Record Count: 1

POD Search:

POD Number: CP 00554

Sorted by: File Number

*UTM location was derived from PLSS --see Help

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4/24/12 2:27 PM

Page 1 of 1

CURRENTLY ACTIVE POINTS OF DIVERSION



New Mexico Office of the State Engineer

Currently Active Points of Diversion

(with Ownership Information)

WR File Nbr	Sub basin	Use	Diversion	Owner	County	POD Number	Grant	(quarters are 1=NW 2=NE 3=SW 4=SE)		(quarters are smallest to largest) (NAD83 UTM in meters)					
								q	q	q	q	Source	6416 4	Sec	Tws
CP 00562	STK			3 JIMMIE D. WEIR	LE	CP 00562		Shallow	1	2	23	21S	37E	675887	3594159

Record Count: 1

POD Search:

POD Number: CP 00562

Sorted by: File Number

*UTM location was derived from PLSS - see Help

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New Mexico Office of the State Engineer

Currently Active Points of Diversion

(with Ownership Information)

WR File Nbr	Sub basin	Use	Diversion	Owner	County	POD Number	Grant	Source	Q1	Q2	Q3	Q4	Sec	Tws	Rng	X	Y		
CP 00700		MUL		3 WAYNE R WALKER	LE	CP 00700		Shallow	6416	4				2	23	21S	37E	675794	3593851*

Record Count: 1

POD Search:

POD Number: CP:00700

Sorted by: File Number

*UTM location was derived from PLSS - see Help.

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4/24/12 2:28 PM

Page 1 of 1

CURRENTLY ACTIVE POINTS OF DIVERSION



New Mexico Office of the State Engineer

Currently Active Points of Diversion

(with Ownership Information)

WR File Nbr	Sub basin	Use	Diversion	Owner	County	POD Number	Grant	Source	q q q	Sec	Tws	Rng	X	Y
CP 00881		DOM		3 RICHARD DON JONES	LE	CP 00881		Shallow	4	4	22	21S	37E	674402 3592824

(acre ft per annum)

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest) (NAD83 UTM in meters)

Record Count: 1

POD Search:

POD Number: CP 00881.

Sorted by: File Number

*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.

USGS 322738103075901 21S.37E.23.23333

Available data for this site

Groundwater: Field measurements

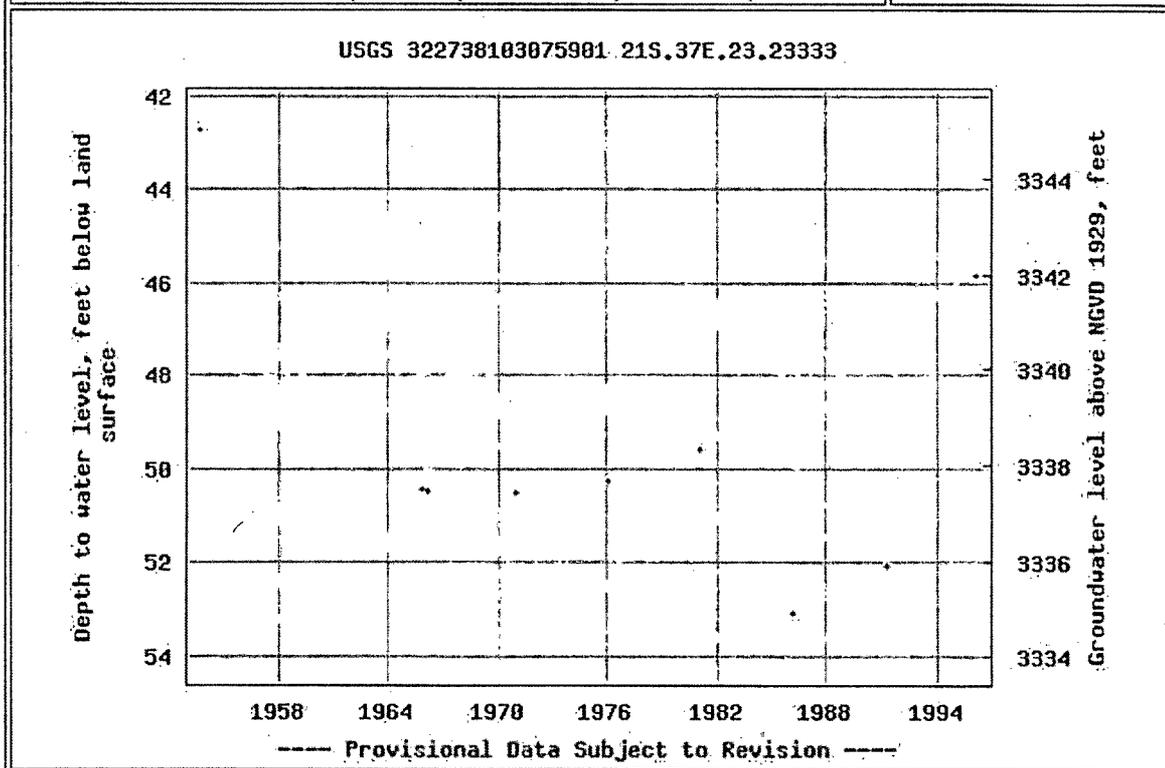


[GO]

Lea County, New Mexico
 Hydrologic Unit Code 13070007
 Latitude 32°27'53", Longitude 103°08'00" NAD27
 Land-surface elevation 3,387.90 feet above NGVD29
 The depth of the well is 81 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 322803103085701 21S.37E.22.211214

Available data for this site

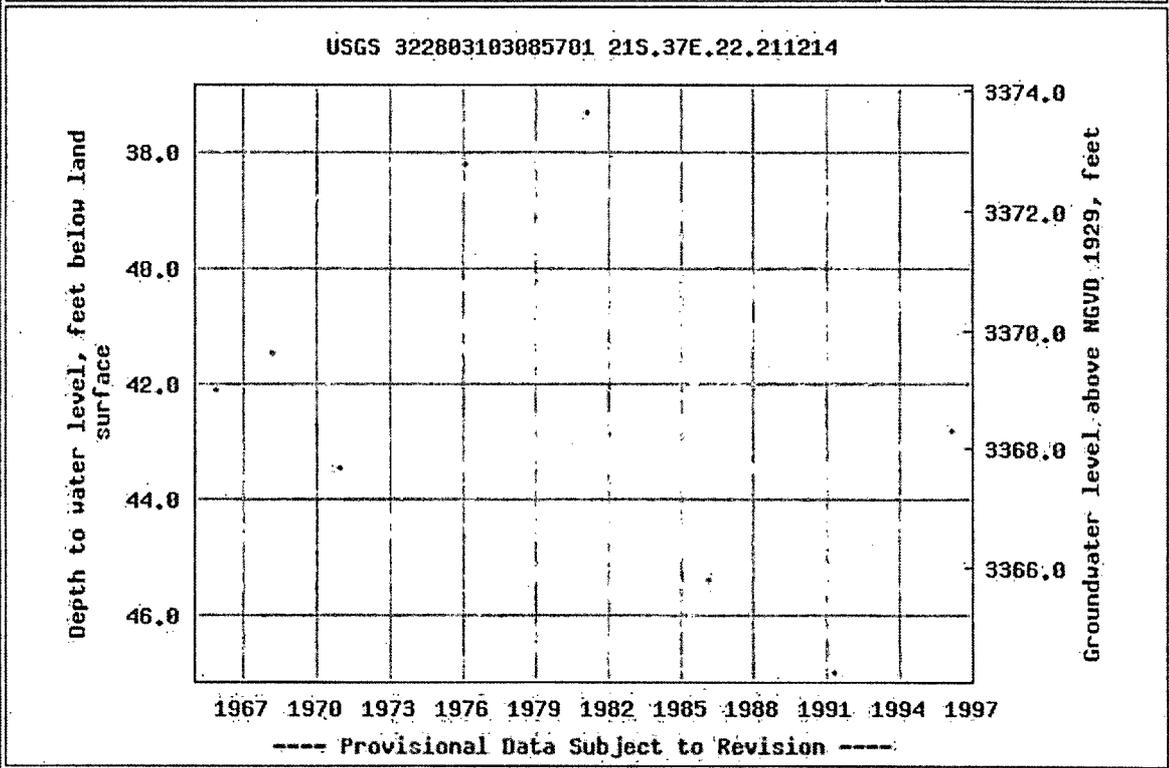
Groundwater: Field measurements

[GO]

Lea County, New Mexico
 Hydrologic Unit Code 13070007
 Latitude 32°28'15", Longitude 103°08'58" NAD27
 Land-surface elevation 3,411.10 feet above NGVD29
 The depth of the well is 80 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](#)





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 Search USGS

National Water Information System: Web Interface

[USGS Water Resources](#)

Data Category: Geographic Area:

News updated April, 2012

Groundwater levels for New Mexico

NM

Search Results -- 1 sites found

Search Criteria

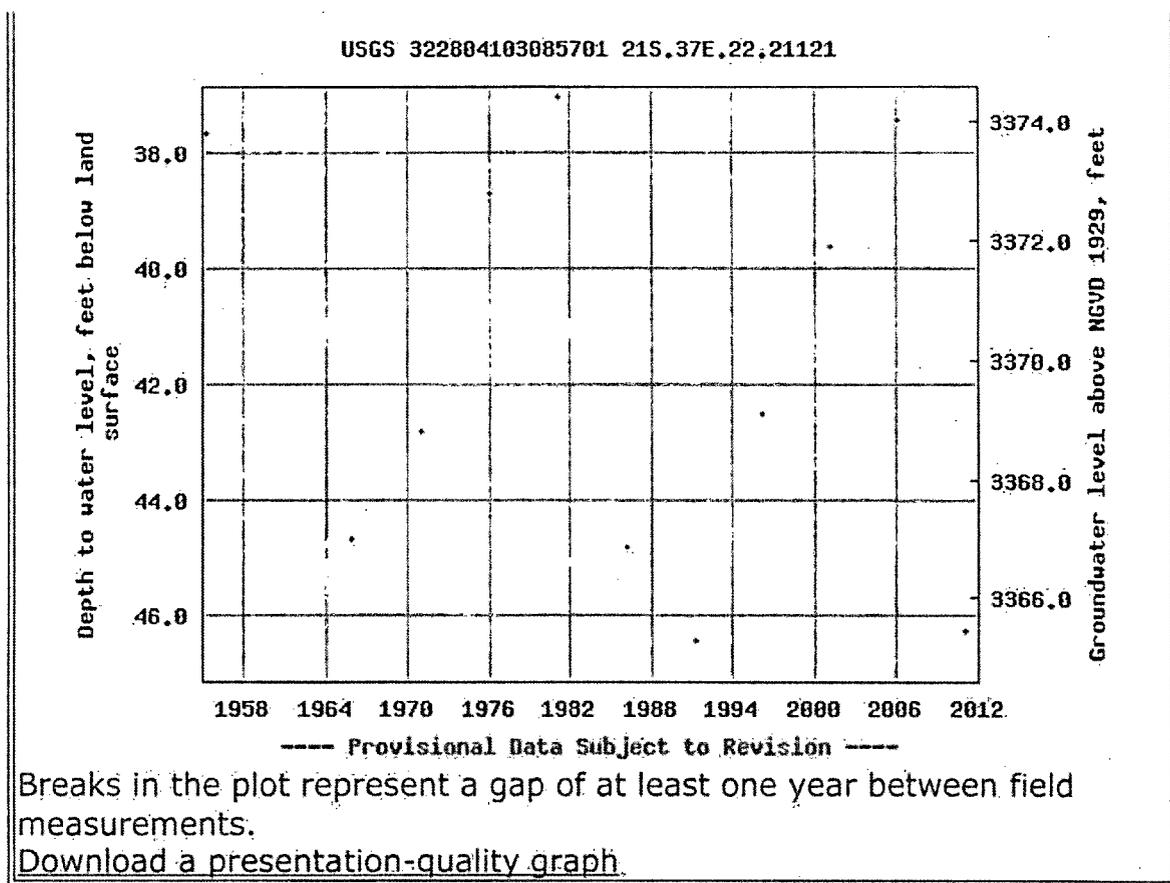
Agency code = usgs site_no list = • 322804103085701 Minimum number of levels = 1

[Save file of selected sites to local disk for future upload](#)

USGS 322804103085701 21S.37E.22.21121

Available data for this site

Lea County, New Mexico Hydrologic Unit Code 13070007 Latitude 32°28'16.8", Longitude 103°08'57.2" NAD83 Land-surface elevation 3,411.60 feet above NGVD29 The depth of the well is 80 feet below land surface. This well is completed in the Alluvium, Bolson Deposits and Other Surface Deposits (110AVMB) local aquifer:	Output formats <input type="button" value="Table of data"/> <input type="button" value="Tab-separated data"/> <input type="button" value="Graph of data"/> <input type="button" value="Reselect period"/>
[Empty area for data table/graph]	



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Title: Groundwater for New Mexico: Water Levels

URL: <http://nwis.waterdata.usgs.gov/nm/nwis/gwlevels?>



Page Contact Information: [New Mexico Water Data Maintainer](#)

Page Last Modified: 2012-04-24 16:30:35 EDT

0.28' 0.26' nadww01

USGS 322849103080601 21S.37E.14.12410

Available data for this site

Groundwater: Field measurements

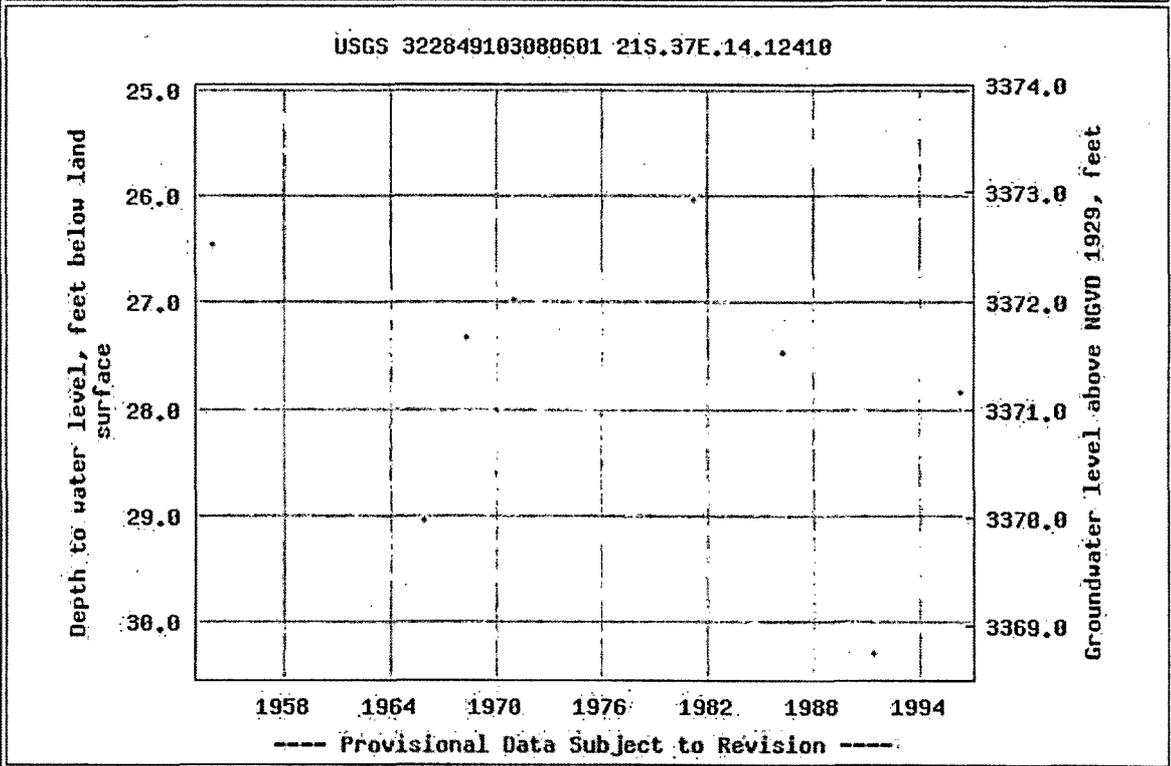


[GO]

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 322937103094501 21S.37E.09.241211

Available data for this site

Groundwater: Field measurements

[GO]

Lea County, New Mexico
 Hydrologic Unit Code 13070007
 Latitude 32°29'49", Longitude 103°09'45" NAD27
 Land-surface elevation 3,466.60 feet above NGVD29
 The depth of the well is 90 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](#)

