



EXPLORING WHAT'S POSSIBLE

# APACHE CORPORATION

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

## Geronimo 28 State #1

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# Closure Report

API 30-015-31829

Release Date: August 24, 2011

Unit Letter J, Section 28, Township 17S, Range 28E

# Rice Environmental Consulting & Safety

P.O. Box 2948 Hobbs, NM 88241

Phone 575.393.2967

**April 11, 2013**

Mike Bratcher  
New Mexico Energy, Minerals, & Natural Resources  
Oil Conservation Division, Environmental Bureau – District 2  
811 S. First St.  
Artesia, NM 88210

**RE: TERMINATION REQUEST  
Apache – Geronimo 28 State #1 AD  
UL/J sec. 28 T17S R28E  
API No. 30-015-31829**

Mr. Bratcher:

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 associated with the Geronimo 28 State #1. A water line ruptured and released fluids onto pasture land. The line was repaired and an initial form C-141 was submitted by Apache Corporation on August 26, 2011 (Appendix A). The site is located 11 miles east of Carlsbad, in unit letter 'J' of section 28, T17S, R28E in Eddy County, New Mexico.

On August 25, 2011, RECS personnel initiated work on the Geronimo 28 State #1 (Figure 1). Surface soil samples were collected and 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 19,600 ppm (parts per million or mg/kg) to 33,200 ppm. GRO ranged from <10.0 ppm to 473 ppm and DRO ranged from 54.3 ppm to 26,100 ppm.

The impacted area was excavated to 1 ft. below ground surface (bgs), however, a gas line and several flow lines running along the south edge of the area prevented safe excavation activities along the south wall. On August 30, 2011, RECS personnel collected and field tested representative grab samples from the north, west, and east walls and the floor of the excavation (Figure 2). The samples were submitted to a commercial laboratory for chloride and TPH analyses (Appendix C). Chloride did not exceed 240 ppm in all samples. TPH did not exceed 17.1 ppm in all samples.

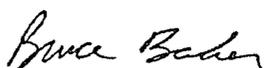
Impacted soils were removed from the excavation and transported to a NMOCD approved disposal facility with the exception of impacted soils near the south edge of the leak area. The excavation was backfilled with clean topsoil and contoured to the surrounding area. See Appendix B for photographs of field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

## Conclusion

According to the NM Office of the State Engineer and the U.S. Geological Survey, depth to groundwater in the area is approximately 88 ft. bgs (Appendix D). Due to the removal of the majority of impacted soils excepting the south edge by reason of excavation safety risks, and also due to the shallow depth of constituent impact throughout the affected area, 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.

Sincerely,



Bruce Baker  
Project Manager  
RECS  
(575) 631-5157

## Attachments:

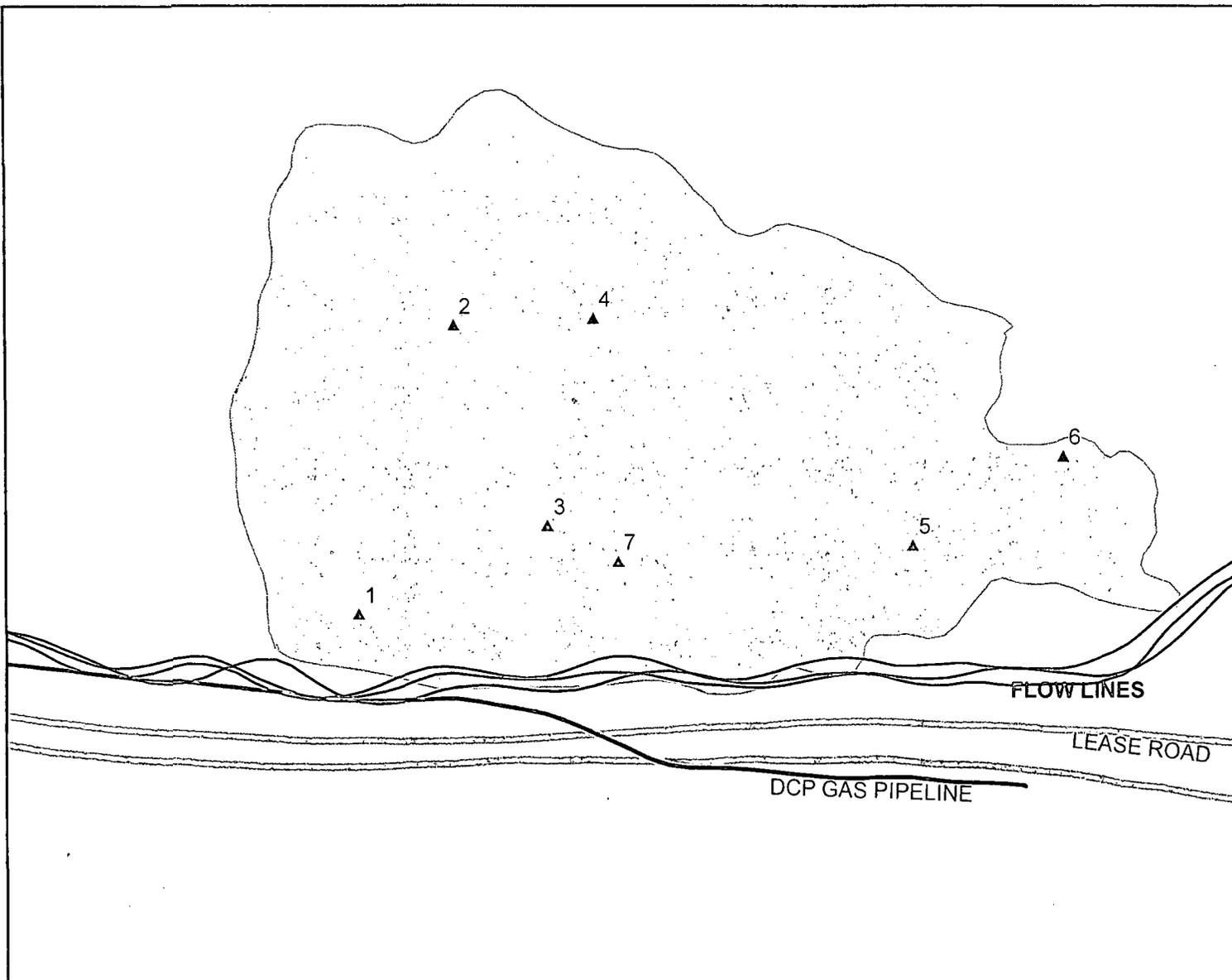
- Figure 1: Site Plat including Initial Sample Data
- Figure 2: Site Plat including Final Excavation Sample Data
- Appendix A: Initial Form C-141
- Appendix B: Site Photographs
- Appendix C: Laboratory Results
- Appendix D: Groundwater Study
- Appendix E: Final Form C-141



# Figures

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

# SITE PLAN



## Legend

- ▲ SAMPLE POINT
- BURIED PIPELINE
- FLOW LINE
- ══ LEASE ROAD
- ▨ AD IMPACT AREA (11,052 sq ft)

## INITIAL SAMPLING LAB DATA

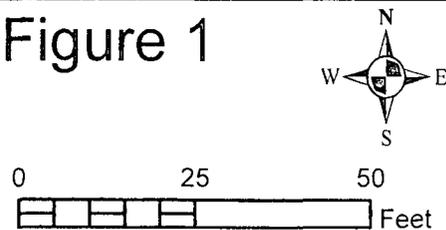
Sample Description	Cl-	GRO	DRO
Pt. 1	25,200	473	26,100
Pt. 2	19,600	96.2	1,800
Pt. 3	31,200	15.2	109
Pt. 4	19,600	233	14,400
Pt. 5	31,600	14.7	54.3
Pt. 6	32,000	<10	122
Pt. 7	33,200	16.8	294



## APACHE GERONIMO 28 State #1

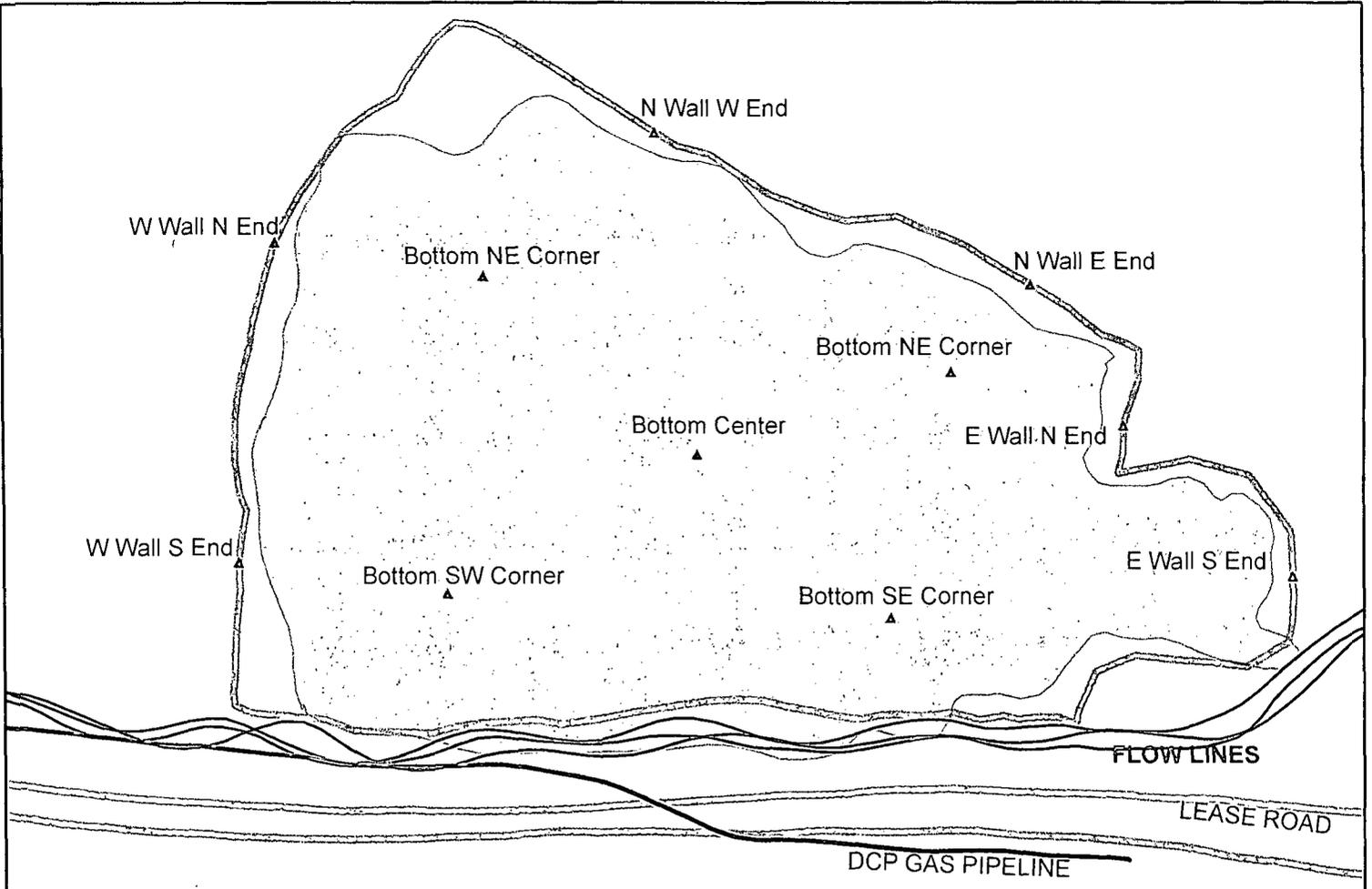
UL/O SECTION 28  
T-17-S R-28-E  
EDDY COUNTY, NM

## Figure 1



GPS date: 8/25&29/11 DH  
 Drawing date: 8/30/11  
 Drafted by: T. Grieco, L. Weinheimer

# SITE PLAN



**FINAL EXCAVATION LAB DATA**

Sample Description	Cl-	GRO	DRO
Bottom Center	240	<10	<10
Bottom NW Corner	48	<10	<10
Bottom SE Corner	<16	<10	<10
Bottom NE Corner	<16	<10	<10
Bottom SW Corner	160	<10	17.1
W Wall S End	<16	<10	<10
W Wall N End	<16	<10	<10
N Wall E End	<16	<10	<10
E Wall N End	<16	<10	<10
N Wall W End	32	<10	<10
E Wall S End	<16	<10	<10

**Legend**

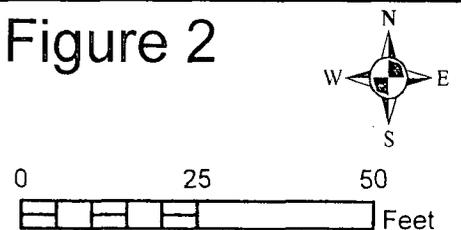
- ▲ FINAL SAMPLE POINTS
- BURIED PIPELINE
- FLOW LINE
- LEASE ROAD
- ▭ SCRAPED AREA (12,163 sq ft)
- ▭ AD IMPACT AREA (11,052 sq ft)



**APACHE  
GERONIMO 28  
State #1**

UL/O SECTION 28  
T-17-S R-28-E  
EDDY COUNTY, NM

**Figure 2**



GPS date: 8/25&29/11 DH  
 Drawing date: 8/30/11  
 Drafted by: T. Grieco, L. Weinheimer

# Appendix A

Initial Form C-141

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

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

State of New Mexico  
Energy Minerals and Natural Resources  
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 Geronimo 28 State #1	Facility Type Production well
Surface Owner Unknown	Mineral Owner St
API No. 30-015-31829	

**LOCATION OF RELEASE**

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
J	28	17S	28E	1500	FSL	1800	FEL	Lea

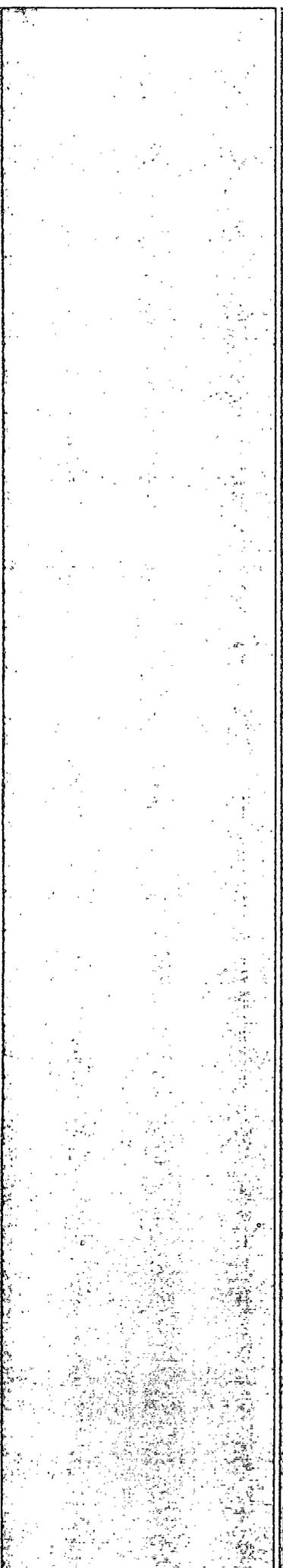
Latitude \_\_\_\_\_ Longitude \_\_\_\_\_

**NATURE OF RELEASE**

Type of Release Produced Water	Volume of Release 5	Volume Recovered 0
Source of Release Water line	Date and Hour of Occurrence 8/24/11	Date and Hour of Discovery 8/24/11 12pm
Was Immediate Notice Given? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	
If a Watercourse was Impacted, Describe Fully.*		
Describe Cause of Problem and Remedial Action Taken.* Waterline leak between the Red Lake Battery and the Geronimo well. Line was repaired and remediation began.		
Describe Area Affected and Cleanup Action Taken.* Site will be remediated to closure following the NMOCD Guidelines.		
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: 	<u>OIL CONSERVATION DIVISION</u>	
Printed Name: Natalie Gladden	Approved by Environmental Specialist:	
Title: EHS Environmental Tech	Approval Date:	Expiration Date:
E-mail Address: natalie.gladden@yahoo.com	Conditions of Approval:	Attached <input type="checkbox"/>
Date: 8/26/11 Phone: 575-390-4186		

Attach Additional Sheets If Necessary



# Appendix B

Site Photographs

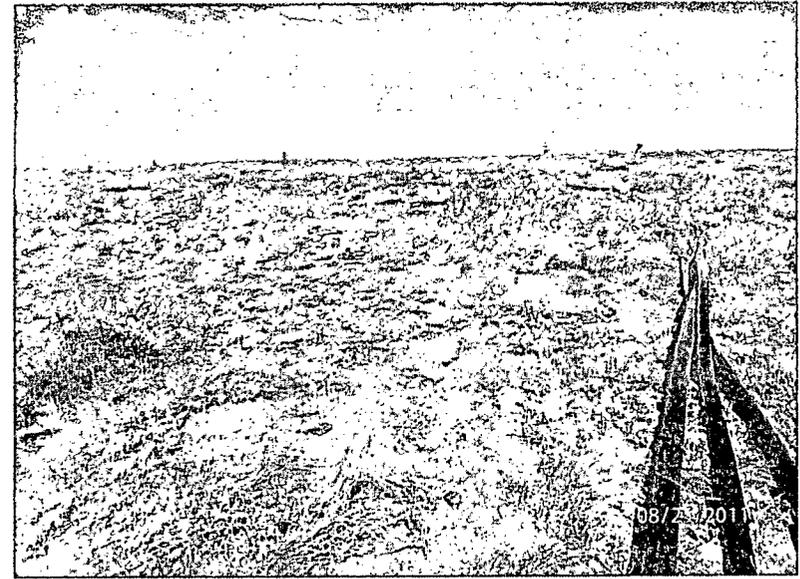
**RICE Environmental Consulting and Safety (RECS)**  
P.O. Box 2948 Hobbs, NM, 88241  
Phone 575.393.2967

**Geronimo 28 State #1**  
Unit Letter J, Section 28, T17S, R28E



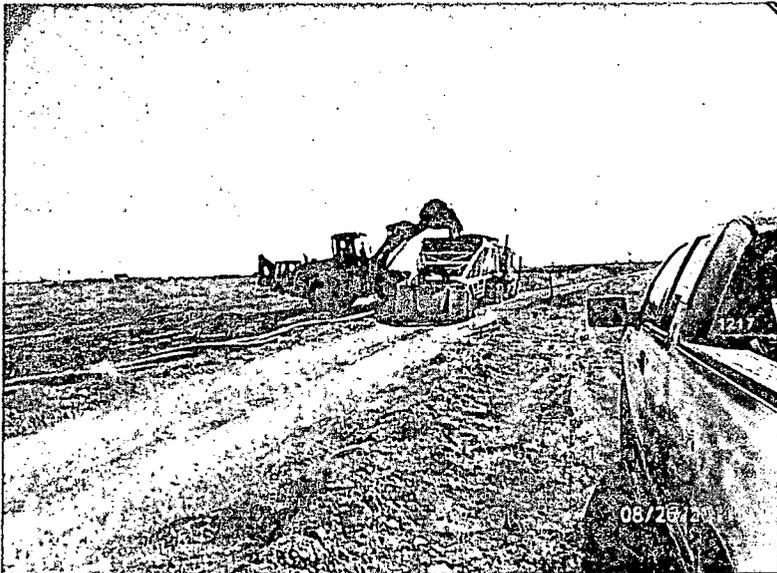
Initial release, facing north

8/25/2011



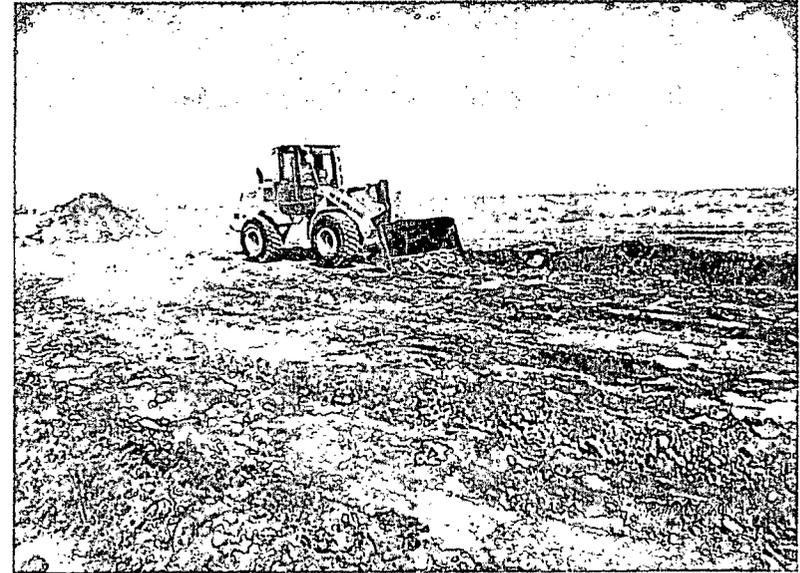
Initial release, facing west

8/25/2011



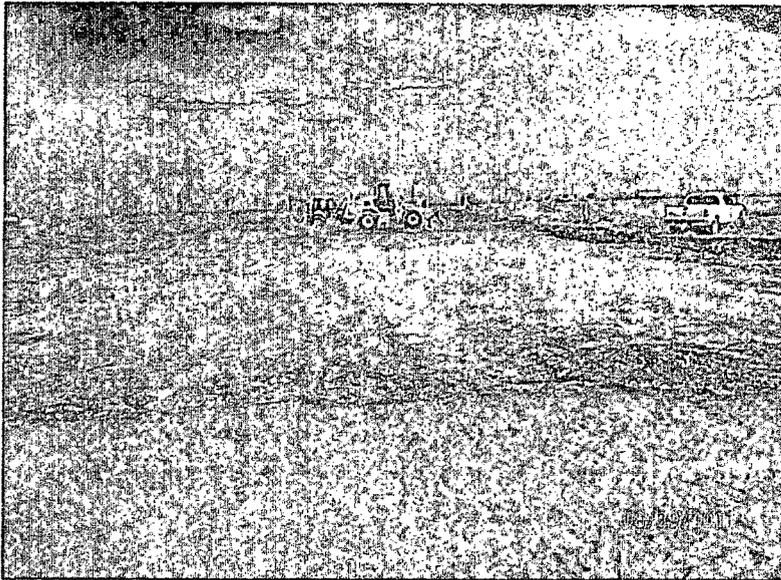
Exporting soil, facing northeast

8/26/2011

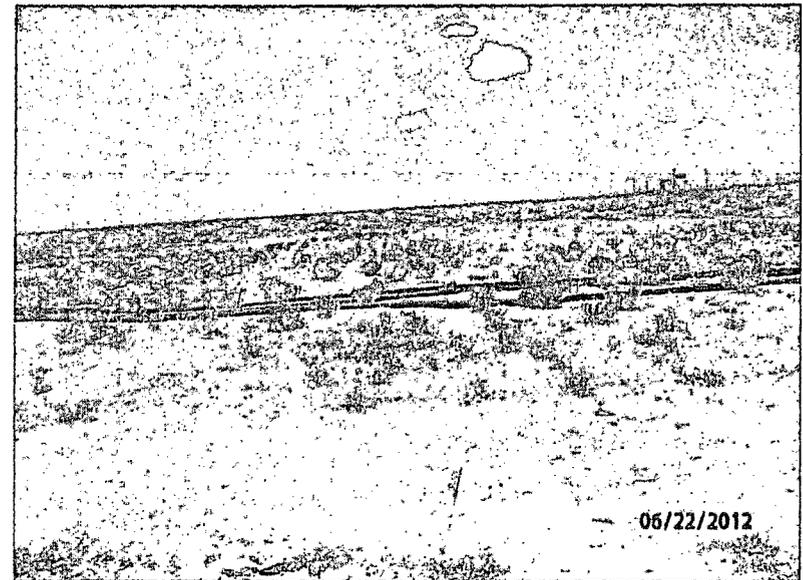


Scraping, facing northwest

8/26/2011



Excavation complete, facing east 8/29/2011



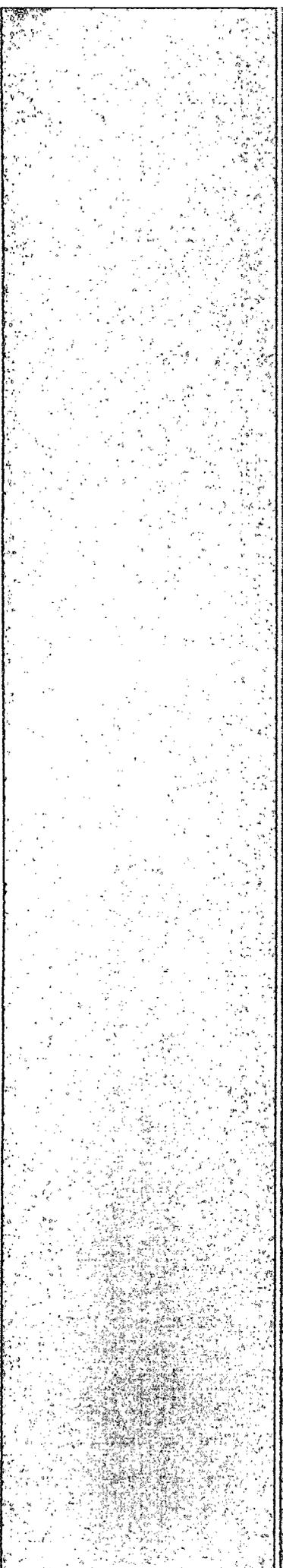
Site complete, facing north 6/22/2012



Site complete, facing northeast 6/22/2012



Site complete, facing southwest 6/22/2012



# Appendix C

## Laboratory Results

**RICE Environmental Consulting and Safety (RECS)**  
P.O. Box 2948 Hobbs, NM 88241  
Phone 575.393.2967 Fax 575.393.0293

August 29, 2011

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

RE: GERONOMO #1

Enclosed are the results of analyses for samples received by the laboratory on 08/26/11 8:03.

Cardinal Laboratories is accredited through Texas NELAP for:

Method SW-846 8021	Benzene, Toluene, Ethyl Benzene, and Total Xylenes
Method SW-846 8260	Benzene, Toluene, Ethyl Benzene, and Total Xylenes
Method TX 1005	Total Petroleum Hydrocarbons

Certificate number T104704398-08-TX. Accreditation applies to solid and chemical materials and non-potable water matrices.

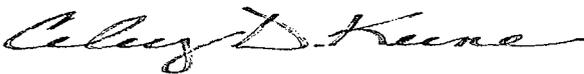
Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (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: 08/26/2011  
 Reported: 08/29/2011  
 Project Name: GERONOMO #1  
 Project Number: NONE GIVEN  
 Project Location: NOT GIVEN

 Sampling Date: 08/25/2011  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: PT. 1 (H101806-01)**

Chloride, SM4500Cl-B		mg/kg	Analyzed By: HM							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>Chloride</b>	<b>25200</b>	16.0	08/26/2011	ND	432	108	400	7.69		
TPH 8015M		mg/kg	Analyzed By: ab							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>GRO C6-C10</b>	<b>473</b>	50.0	08/28/2011	ND	206	103	200	0.766		
<b>DRO &gt;C10-C28</b>	<b>26100</b>	50.0	08/28/2011	ND	184	91.8	200	1.99		
<i>Surrogate: 1-Chlorooctane</i>	98.3 %	55.5-154								
<i>Surrogate: 1-Chlorooctadecane</i>	80.6 %	57.6-158								

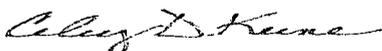
**Sample ID: PT. 2 (H101806-02)**

Chloride, SM4500Cl-B		mg/kg	Analyzed By: HM							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>Chloride</b>	<b>19600</b>	16.0	08/26/2011	ND	432	108	400	7.69		
TPH 8015M		mg/kg	Analyzed By: ab							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>GRO C6-C10</b>	<b>96.2</b>	50.0	08/28/2011	ND	206	103	200	0.766		
<b>DRO &gt;C10-C28</b>	<b>1800</b>	50.0	08/28/2011	ND	184	91.8	200	1.99		
<i>Surrogate: 1-Chlorooctane</i>	100 %	55.5-154								
<i>Surrogate: 1-Chlorooctadecane</i>	99.5 %	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:	08/26/2011	Sampling Date:	08/25/2011
Reported:	08/29/2011	Sampling Type:	Soil
Project Name:	GERONOMO #1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

**Sample ID: PT. 3 (H101806-03)**

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>31200</b>	16.0	08/26/2011	ND	432	108	400	3.64		
TPH 8015M		mg/kg		Analyzed By: ab						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>GRO C6-C10</b>	<b>15.2</b>	10.0	08/28/2011	ND	206	103	200	0.766		
<b>DRO &gt;C10-C28</b>	<b>109</b>	10.0	08/28/2011	ND	184	91.8	200	1.99		

*Surrogate: 1-Chlorooctane*      63.0 %      55.5-154

*Surrogate: 1-Chlorooctadecane*      79.1 %      57.6-158

**Sample ID: PT. 4 (H101806-04)**

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>19600</b>	16.0	08/26/2011	ND	432	108	400	3.64		
TPH 8015M		mg/kg		Analyzed By: ab						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>GRO C6-C10</b>	<b>233</b>	50.0	08/28/2011	ND	206	103	200	0.766		
<b>DRO &gt;C10-C28</b>	<b>14400</b>	50.0	08/28/2011	ND	184	91.8	200	1.99		

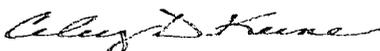
*Surrogate: 1-Chlorooctane*      97.1 %      55.5-154

*Surrogate: 1-Chlorooctadecane*      90.5 %      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: 08/26/2011  
 Reported: 08/29/2011  
 Project Name: GERONOMO #1  
 Project Number: NONE GIVEN  
 Project Location: NOT GIVEN

 Sampling Date: 08/25/2011  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: PT. 5 (H101806-05)**

Chloride, SM4500CI-B		mg/kg	Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>31600</b>	16.0	08/26/2011	ND	432	108	400	3.64	
TPH 8015M		mg/kg	Analyzed By: ab						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>GRO C6-C10</b>	<b>14.7</b>	10.0	08/28/2011	ND	206	103	200	0.766	
<b>DRO &gt;C10-C28</b>	<b>54.3</b>	10.0	08/28/2011	ND	184	91.8	200	1.99	

Surrogate: 1-Chlorooctane 77.0 % 55.5-154

Surrogate: 1-Chlorooctadecane 89.2 % 57.6-158

**Sample ID: PT. 6 (H101806-06)**

Chloride, SM4500CI-B		mg/kg	Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>32000</b>	16.0	08/26/2011	ND	432	108	400	3.64	
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	08/28/2011	ND	206	103	200	0.766	
<b>DRO &gt;C10-C28</b>	<b>122</b>	10.0	08/28/2011	ND	184	91.8	200	1.99	

Surrogate: 1-Chlorooctane 83.8 % 55.5-154

Surrogate: 1-Chlorooctadecane 90.6 % 57.6-158

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\*=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:	08/26/2011	Sampling Date:	08/25/2011
Reported:	08/29/2011	Sampling Type:	Soil
Project Name:	GERONOMO #1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

**Sample ID: PT. 7 (H101806-07)**

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>33200</b>	16.0	08/26/2011	ND	432	108	400	3.64		

TPH 8015M		mg/kg		Analyzed By: ab						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>GRO C6-C10</b>	<b>16.8</b>	10.0	08/28/2011	ND	206	103	200	0.766		
<b>DRO &gt;C10-C28</b>	<b>294</b>	10.0	08/28/2011	ND	184	91.8	200	1.99		

Surrogate: 1-Chlorooctane 79.8 % 55.5-154

Surrogate: 1-Chlorooctadecane 88.4 % 57.6-158

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\* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Notes and Definitions**

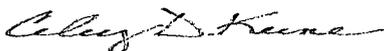
- ND Analyte NOT DETECTED at or above the reporting limit
- RPD Relative Percent Difference
- \*\* Samples not received at proper temperature of 6°C or below.
- \*\*\* Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C  
Samples reported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

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



# CARDINAL LABORATORIES

101 East Marland, Hobbs, NM 88240 2111 Beechwood, Abilene, TX 79603  
(505) 393-2326 FAX (505) 393-2476 (325) 673-7001 FAX (325)673-7020

## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: Apache		<b>BILL TO</b>		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: <i>Cerrillos # 7</i>		State: Zip:																			
Project Location:		Phone #:																			
Sampler Name: <i>Dick Hammis</i>		Fax #:																			
FOR LAB USE ONLY																					
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX					PRESERV.			SAMPLING									
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE	ICE / COOL	OTHER :	DATE	TIME							
H101806																					
-1	PT.1	1	1			✓					✓		8-25-11	11:00	✓	✓					
2	PT.2	1	1			✓					✓		8-25-11	11:05	✓	✓					
3	PT.3	1	1			✓					✓		8-25-11	11:10	✓	✓					
4	PT.4	1	1			✓					✓		8-25-11	11:15	✓	✓					
5	PT.5	1	1			✓					✓		8-25-11	11:20	✓	✓					
6	PT.6	1	1			✓					✓		8-25-11	11:25	✓	✓					
7	PT.7	1	1			✓					✓		8-25-11	11:30	✓	✓					

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Relinquished By: <i>Bob King</i>	Date: <i>8/24/11</i> Time: <i>7:13</i>	Received By: <i>[Signature]</i>	Phone Result: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Add'l Phone #:
Relinquished By: <i>[Signature]</i>	Date: <i>8/24/11</i> Time: <i>8:03</i>	Received By: <i>Jodi Benson</i>	Fax Result: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Add'l Fax #:
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Sample Condition Cool Intact <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No	Checked By: <i>[Signature]</i> (Initials)	REMARKS: email results Natalie.Gladden@usa.apachecorp.com; Zconder@rice-ecs.com; Bbaker@rice-ecs.com; hconder@rice-ecs.com; Lweinheimer@rice-ecs.com	

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

#26

September 02, 2011

NATALIE GLADDEN

APACHE - EUNICE

P. O. BOX 1849

EUNICE, NM 88231

RE: GERONIMO #1 A.D. FLOWLINE

Enclosed are the results of analyses for samples received by the laboratory on 08/30/11 8:05.

Cardinal Laboratories is accredited through Texas NELAP for:

Method SW-846 8021	Benzene, Toluene, Ethyl Benzene, and Total Xylenes
Method SW-846 8260	Benzene, Toluene, Ethyl Benzene, and Total Xylenes
Method TX 1005	Total Petroleum Hydrocarbons

Certificate number T104704398-08-TX. Accreditation applies to solid and chemical materials and non-potable water matrices.

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 (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:	08/30/2011	Sampling Date:	08/29/2011
Reported:	09/02/2011	Sampling Type:	Soil
Project Name:	GERONIMO #1 A.D. FLOWLINE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

**Sample ID: BOTTOM CENTER (H101829-01)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>Chloride</b>	<b>240</b>	16.0	08/31/2011	ND	400	100	400	7.69		
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	09/01/2011	ND	163	81.5	200	1.53		
DRO >C10-C28	<10.0	10.0	09/01/2011	ND	161	80.3	200	2.07		
<i>Surrogate: 1-Chlorooctane</i>	<i>92.9 %</i>	<i>55.5-154</i>								
<i>Surrogate: 1-Chlorooctadecane</i>	<i>94.8 %</i>	<i>57.6-158</i>								

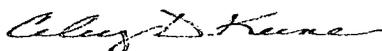
**Sample ID: BOTTOM NW CORNER (H101829-02)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>Chloride</b>	<b>48.0</b>	16.0	08/31/2011	ND	400	100	400	7.69		
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	09/01/2011	ND	163	81.5	200	1.53		
DRO >C10-C28	<10.0	10.0	09/01/2011	ND	161	80.3	200	2.07		
<i>Surrogate: 1-Chlorooctane</i>	<i>101 %</i>	<i>55.5-154</i>								
<i>Surrogate: 1-Chlorooctadecane</i>	<i>105 %</i>	<i>57.6-158</i>								

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\*=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:	08/30/2011	Sampling Date:	08/29/2011
Reported:	09/02/2011	Sampling Type:	Soil
Project Name:	GERONIMO #1 A.D. FLOWLINE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

**Sample ID: BOTTOM SE CORNER (H101829-03)**

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	08/31/2011	ND	400	100	400	7.69		
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	09/01/2011	ND	163	81.5	200	1.53		
DRO >C10-C28	<10.0	10.0	09/01/2011	ND	161	80.3	200	2.07		
<i>Surrogate: 1-Chlorooctane</i>	<i>94.0 %</i>	<i>55.5-154</i>								
<i>Surrogate: 1-Chlorooctadecane</i>	<i>95.4 %</i>	<i>57.6-158</i>								

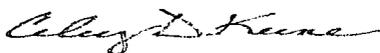
**Sample ID: BOTTOM NE CORNER (H101829-04)**

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	08/31/2011	ND	400	100	400	7.69		
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	09/01/2011	ND	163	81.5	200	1.53		
DRO >C10-C28	<10.0	10.0	09/01/2011	ND	161	80.3	200	2.07		
<i>Surrogate: 1-Chlorooctane</i>	<i>92.6 %</i>	<i>55.5-154</i>								
<i>Surrogate: 1-Chlorooctadecane</i>	<i>93.7 %</i>	<i>57.6-158</i>								

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\*=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:	08/30/2011	Sampling Date:	08/29/2011
Reported:	09/02/2011	Sampling Type:	Soil
Project Name:	GERONIMO #1 A.D. FLOWLINE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

**Sample ID: BOTTOM SW CORNER (H101829-05)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	160	16.0	08/31/2011	ND	400	100	400	7.69		
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	09/01/2011	ND	163	81.5	200	1.53		
DRO >C10-C28	17.1	10.0	09/01/2011	ND	161	80.3	200	2.07		

Surrogate: 1-Chlorooctane 75.0 % 55.5-154

Surrogate: 1-Chlorooctadecane 75.0 % 57.6-158

**Sample ID: W. WALL S. END (H101829-06)**

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	08/31/2011	ND	400	100	400	7.69		
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	09/01/2011	ND	163	81.5	200	1.53		
DRO >C10-C28	<10.0	10.0	09/01/2011	ND	161	80.3	200	2.07		

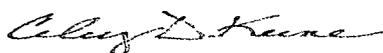
Surrogate: 1-Chlorooctane 99.9 % 55.5-154

Surrogate: 1-Chlorooctadecane 105 % 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:	08/30/2011	Sampling Date:	08/29/2011
Reported:	09/02/2011	Sampling Type:	Soil
Project Name:	GERONIMO #1 A.D. FLOWLINE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

**Sample ID: W. WALL N. END (H101829-07)**

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	08/31/2011	ND	400	100	400	7.69		
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	09/01/2011	ND	163	81.5	200	1.53		
DRO >C10-C28	<10.0	10.0	09/01/2011	ND	161	80.3	200	2.07		

Surrogate: 1-Chlorooctane 100 % 55.5-154  
 Surrogate: 1-Chlorooctadecane 103 % 57.6-158

**Sample ID: N. WALL E. END (H101829-08)**

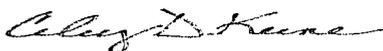
Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	08/31/2011	ND	400	100	400	7.69		
TPH 8015M		mg/kg		Analyzed By: ab						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	09/01/2011	ND	163	81.5	200	1.53		
DRO >C10-C28	<10.0	10.0	09/01/2011	ND	161	80.3	200	2.07		

Surrogate: 1-Chlorooctane 91.3 % 55.5-154  
 Surrogate: 1-Chlorooctadecane 94.8 % 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:	08/30/2011	Sampling Date:	08/29/2011
Reported:	09/02/2011	Sampling Type:	Soil
Project Name:	GERONIMO #1 A.D. FLOWLINE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

**Sample ID: E. WALL N. END (H101829-09)**

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	08/31/2011	ND	400	100	400	7.69		
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	09/01/2011	ND	163	81.5	200	1.53		
DRO >C10-C28	<10.0	10.0	09/01/2011	ND	161	80.3	200	2.07		
<i>Surrogate: 1-Chlorooctane</i>		<i>89.1 %</i>	<i>55.5-154</i>							
<i>Surrogate: 1-Chlorooctadecane</i>		<i>89.6 %</i>	<i>57.6-158</i>							

**Sample ID: N. WALL W. END (H101829-10)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<b>32.0</b>	16.0	08/31/2011	ND	400	100	400	7.69		
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	09/01/2011	ND	163	81.5	200	1.53		
DRO >C10-C28	<10.0	10.0	09/01/2011	ND	161	80.3	200	2.07		
<i>Surrogate: 1-Chlorooctane</i>		<i>99.0 %</i>	<i>55.5-154</i>							
<i>Surrogate: 1-Chlorooctadecane</i>		<i>101 %</i>	<i>57.6-158</i>							

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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:	08/30/2011	Sampling Date:	08/29/2011
Reported:	09/02/2011	Sampling Type:	Soil
Project Name:	GERONIMO #1 A.D. FLOWLINE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

**Sample ID: E. WALL S. END (H101829-11)**

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	08/31/2011	ND	400	100	400	7.69		

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	09/01/2011	ND	163	81.5	200	1.53		
DRO >C10-C28	<10.0	10.0	09/01/2011	ND	161	80.3	200	2.07		

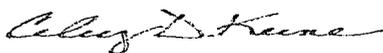
Surrogate: 1-Chlorooctane 94.0 % 55.5-154

Surrogate: 1-Chlorooctadecane 94.7 % 57.6-158

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Notes and Definitions**

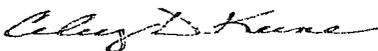
- ND Analyte NOT DETECTED at or above the reporting limit
- RPD Relative Percent Difference
- \*\* Samples not received at proper temperature of 6°C or below.
- \*\*\* Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C  
Samples reported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

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\*=Accredited Analyte

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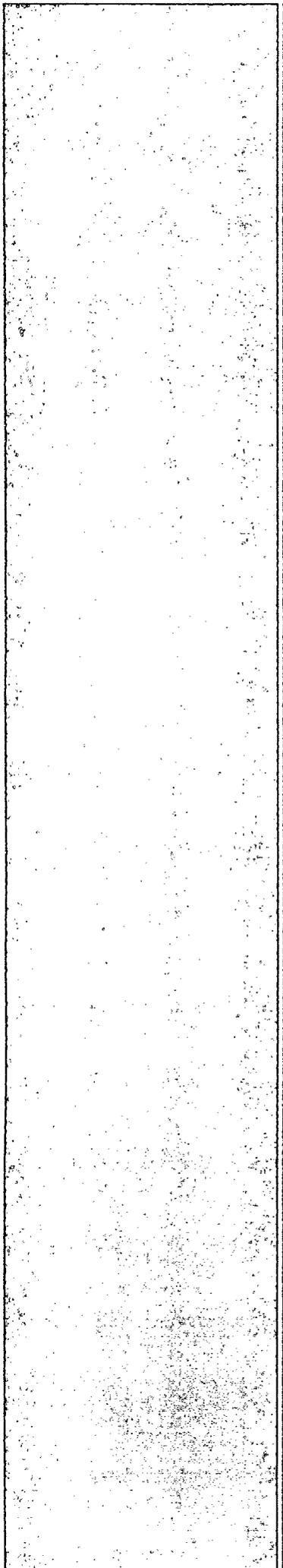


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Celey D. Keene, Lab Director/Quality Manager







# Appendix D

## Groundwater Study

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

Apache  
Company

Geronimo 28 State #1

site name

J	28	17S	28E
Unit Letter	Section	Township	Range

Groundwater Depth: 88 ft

Compiled by: Amy C. Ruth Date: 10/9/2012

Comments: nearest well less than 2 miles NNE

☆ = Subject Site  
 ● = Non-production wells (commercial, sanitation, stock)  
 ● = Wells of unknown use (USGS)

	<p>16S 27E</p> <p>● 70' Domestic</p>	<p>16S 28E</p>	<p>16S 29E</p> <p>● 110' Domestic</p>	
	<p>● 30' Dom</p> <p>● 14' Dom</p> <p>● 86' Dom</p> <p>● 226' Dom/Mon</p> <p>● 194' Dom/Expl</p> <p>17S 27E</p> <p>● 80' Dom</p> <p>● 40' Prospect</p> <p>● 56'</p> <p>● 50' Stock</p> <p>● 120' Prospect</p>	<p>17S 28E</p> <p>☆</p> <p>● 78'</p>	<p>17S 29E</p>	
	<p>● 50' Prospect</p> <p>18S 27E</p> <p>● 17' Prospect</p> <p>● 65' Prospect</p> <p>● 100' Prospect</p> <p>● 97' Stk/Expl</p>	<p>18S 28E</p> <p>● 225'</p> <p>● 65'</p>	<p>18S 29E</p>	



# 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
<u>RA 00399</u>			ED	2	3	31	16S	27E		563583	3637879*			
<u>RA 02550</u>			ED	3	3	1	27	16S	27E	567884	3639835*	83		
<u>RA 02550 REPAR</u>			ED	3	3	1	27	16S	27E	567884	3639835*	180	70	110
<u>RA 04176</u>			XX	3	4	1	23	16S	27E	569885	3641470*	300		
												Average Depth to Water:	<b>70 feet</b>	
												Minimum Depth:	<b>70 feet</b>	
												Maximum Depth:	<b>70 feet</b>	

**Record Count: 4**

**PLSS Search:**

Township: 16S      Range: 27E

\*UTM location was derived from PLSS - see Help.

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# New Mexico Office of the State Engineer

## Active & Inactive Points of Diversion

(with Ownership Information)

WR File Nbr	Sub	Basin	Use	Diversion	Owner	County	POD Number	Code	Grant	Source	Q1	Q2	Q3	Q4	Sec	Twp	Rng	X	Y
RA 02550 REPAR		DOM			R.B. HORNER	ED	RA 02550 REPAR			Shallow	3	3	1	27	16S	27E		567884	3639835

(R=POD has been replaced and no longer serves this file; (quarters are 1=NW 2=NE 3=SW 4=SE)  
C=the file is closed) (quarters are smallest to largest) (NAD83 UTM in meters)

Record Count: 1

POD Search:

POD Number: RA 02550 REPAR

Sorted by: File Number

\*UTM location was derived from PLSS - see Help

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

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No records found.

PLSS Search:

Township: 16S      Range: 28E

---

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7/13/12 3:48 PM

Page 1 of 1

WATER COLUMN/AVERAGE  
DEPTH TO WATER



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

<u>RA 09342</u>			ED	4	4	3	19	16S	29E	582737	3640640*	220	110	110
-----------------	--	--	----	---	---	---	----	-----	-----	--------	----------	-----	-----	-----

Average Depth to Water: 110 feet

Minimum Depth: 110 feet

Maximum Depth: 110 feet

Record Count: 1

PLSS Search:

Township: 16S

Range: 29E

\*UTM location was derived from PLSS - see Help

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# New Mexico Office of the State Engineer

## Active & Inactive Points of Diversion

(with Ownership Information)

WR File Nbr	Sub	Basin	Use/Diversion	Owner	County	POD Number	Code	Grant	Source	Q1	Q2	Q3	Q4	Sec	Tws	Ring	X	Y	
RA 09342		DOM		RUSTY AND JOSIE VAN CUREN	ED	RA 09342			64164	4		19	16S	29E				582737	3640640*

(R=POD has been replaced and no longer serves this file. (quarters are 1=NW 2=NE 3=SW 4=SE)  
 C=the file is closed) (quarters are smallest to largest) (NAD83 UTM in meters)

Record Count: 1

POD Search:

POD Number: RA 09342

Sorted by: File Number

\*UTM location was derived from PLSS - see Help

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# 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 Code	Subbasin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Depth Well	Depth Water	Water Column
RA 01493			ED	2	1	27	17S	27E		568468	3630529*	876		
RA 01716 (D)	O		ED	4	4	3	16	17S	27E	566953	3632420*	1220	175	1045
RA 01716 S			ED	4	4	3	16	17S	27E	566953	3632420*	1200		
RA 02966			ED	4	4	4	05	17S	27E	566117	3635707*	80	30	50
RA 03279			ED	3	2	07	17S	27E		564020	3635011*	250	14	236
RA 03661			ED	3	2	3	32	17S	27E	565186	3628038*	330	140	190
RA 03664			CH	3	2	3	32	17S	27E	565186	3628038*	400	100	300
RA 03694			ED		4	17	17S	27E		565854	3632721*	300	90	210
RA 03616			CH		4	17	17S	27E		565854	3632721*	945	931	14
RA 04114			LE	4	4	3	16	17S	27E	566953	3632420*	1042	260	782
RA 04153			CH	4	4	3	16	17S	27E	566953	3632420*	1220	175	1045
RA 04320			ED		3	17	17S	27E		565053	3632719*	120	50	70
RA 04554			ED		1	23	17S	27E		569859	3631947*	220	40	180
RA 04561			ED	4	2	26	17S	27E		570871	3630142*	250		
RA 04786			ED	4	3	2	18	17S	27E	564133	3633277*	138	111	27
RA 06531			ED	4	1	4	17	17S	27E	565747	3632821*	200		
RA 06560			CH	2	1	2	20	17S	27E	565757	3632217*	133	80	53
RA 06635			ED	2	2	2	18	17S	27E	564531	3633852*	325	60	265
RA 07774			ED	3	2	1	11	17S	27E	569933	3635251*	100	50	50
RA 07844			ED	3	4	3	16	17S	27E	566753	3632420*	1300	180	1120
RA 07844 EXPL			ED		4	3	16	17S	27E	566854	3632521*	1300	180	1120
RA 08823			ED	1	1	3	17	17S	27E	564745	3633019*	348	60	288
RA 11691 POD1			ED	2	1	4	17	17S	27E	565800	3633029	150	0	150

\*UTM location was derived from PLSS - see Help

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Average Depth to Water: 143 feet

Minimum Depth: 0 feet

Maximum Depth: 931 feet

---

Record Count: 23

PLSS Search:

Township: 17S

Range: 27E



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*New Mexico Office of the State Engineer*  
**Active & Inactive Points of Diversion**  
(with Ownership Information)

---

No PODs found.

POD Search:

POD Number: RA 01716 D



# New Mexico Office of the State Engineer

## Active & Inactive Points of Diversion

(with Ownership Information)

WR File Nbr	Sub	Basin	Use	Diversion	Owner	County	POD Number	Code	Grant	Source	Sec	Tws	Rng	X	Y			
RA 04114		DOM			J. HIRAM MOORE	LE	RA-04114			Artesian	4	4	3	16	17S	27E	566953	3632420

(R=POD has been replaced and no longer serves this file. (quarters are 1=NW 2=NE 3=SW 4=SE)  
C=the file is closed) (quarters are smallest to largest) (NAD83 UTM in meters)

Record Count: 1

POD Search:

POD Number: RA 04114

Sorted by: File Number

\*UTM location was derived from PLSS - see Help

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# New Mexico Office of the State Engineer

## Active & Inactive Points of Diversion

(with Ownership Information)

WR File Nbr.	Sub-basin	Use	Diversion	Owner	County	POD Number	Code	Grant	Source	Q1	Q2	Q3	Q4	Soc	Tws	Rng	Y	
RA 04153		DOM		J. HIRAM MOORE	CH	RA 04153			Artesian	4	4	3	16	17S	27E		566953	3632420*

(R=POD has been replaced and no longer serves this file. (quarters are 1=NW 2=NE 3=SW 4=SE)  
 C=the file is closed) (quarters are smallest to largest) (NAD83 UTM in meters)

Record Count: 1

POD Search:

POD Number: RA 04153

Sorted by: File Number

\*UTM location was derived from PLSS - see Help

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# New Mexico Office of the State Engineer

## Active & Inactive Points of Diversion

(with Ownership Information)

WR File Nbr	Sub-basin	Use	Diversion	Owner	County	POD Number	Ed	Code	Grant	Source	Q	Q	Q	Q	Sec	Tws	Rng	X	Y
RA 07844		EXP		RIVERSIDE WATER USERS ASSOC.		RA 07844				Shallow	3	4	3	18	17S	27E			566753 3632420*
RA 07844 EXPL		EXP		RIVERSIDE WATER USERS ASSOC.		RA 07844 EXPL				Artesian	4	3	16	17S	27E				566954 3632521*

(R=POD has been replaced and no longer serves this file, (quarters are 1=NW 2=NE 3=SW 4=SE)  
 C=the file is closed) (quarters are smallest to largest) (NAD83-UTM in meters)

Record Count: 2

POD Search:

POD Number: RA 07844

Sorted by: File Number

\*UTM location was derived from PLSS - see Help

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# New Mexico Office of the State Engineer

## Active & Inactive Points of Diversion

(with Ownership Information)

WR File Nbr.	Sub.	basin	Use	Diversion	Owner	County	POD Number	Code	Grant	Source	Q1	Q2	Q3	Q4	Sec	Twp	Rng	X?	Y	
RA 02966		DOM			JIM HOOTEN	ED	RA 02966			Shallow 4	4	05	17S	27E					566117	3635707*

(R=POD has been replaced and no longer serves this file, (quarters are 1=NW 2=NE 3=SW 4=SE)  
 C=the file is closed) (quarters are smallest to largest) (NAD83 UTM in meters)

**Record Count:** 1

**POD Search:**

POD Number: RA 02966

**Sorted by:** File Number

\*UTM location was derived from PLSS - see Help

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# New Mexico Office of the State Engineer

## Active & Inactive Points of Diversion

(with Ownership Information)

WR File Nbr.	Sub. Basin	Use	Diversion	Owner	County	POD Number	Code	Grant	Source	Quarter	X	Y
RA-03279		DOM		3: EMIL P. BACH	ED	RA 03279			6416.4	3 2	07	17S 27E 564020 3635011

(R=POD has been replaced and no longer serves this file. (quarters are 1=NW 2=NE 3=SW 4=SE)  
 (C=the file is closed) (quarters are smallest to largest) (NAD83 UTM in meters)

**Record Count:** 1

**POD Search:**

**POD Number:** RA 03279

**Sorted by:** File Number

\*UTM location was derived from PLSS - see Help

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# New Mexico Office of the State Engineer

## Active & Inactive Points of Diversion

(with Ownership Information)

WR File Nbr	Sub	Basin	Use	Diversion	Owner	County	POD Number	Code	Grant	Source	64	10	4	2	Sec	Tws	Rng	X	Y
RA 03661			PRO		HUMBLE OIL & REFINING	ED	RA 03661			Shallow	3	2	3	32	17S	27E		565186	3628038

(R=POD has been replaced and no longer serves this file, (quarters are 1=NW 2=NE 3=SW 4=SE)  
C=the file is closed) (quarters are smallest to largest) (NAD83 UTM in meters)

Record Count: 1

POD Search:

POD Number: RA 03661

Sorted by: File Number

\*UTM location was derived from PLSS - see Help

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# New Mexico Office of the State Engineer

## Active & Inactive Points of Diversion

(with Ownership Information)

WR File Nbr.	Sub. (acre ft per annum)	Basin	Use	Diversion	Owner	County	POD Number	Code	Grant	Source	64164	Sec	Tws	Rng	X	Y
RA-03694		IDOM			C. M. BERRY	ED	RA-03694			Shallow	4	17	17S	27E	565854	3632721

(R=POD has been replaced and no longer serves this file. (quarters are 1=NW 2=NE 3=SW 4=SE)  
 C=the file is closed) (quarters are smallest to largest) (NAD83 UTM in meters)

Record Count: 1

POD Search:

POD Number: RA 03694

Sorted by: File Number

\*UTM location was derived from PLSS - see Help \*

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# New Mexico Office of the State Engineer

## Active & Inactive Points of Diversion

(with Ownership Information)

(R=POD has been replaced and no longer serves this file. (quarters are 1=NW 2=NE 3=SW 4=SE)  
 C=the file is closed) (quarters are smallest to largest) (NAD83 UTM in meters)

	(acre ft per annum)															
<b>WR File Nbr</b>	<b>Sub</b>	<b>Basin</b>	<b>Use</b>	<b>Diversion</b>	<b>Owner</b>	<b>County</b>	<b>POD Number</b>	<b>Code</b>	<b>Grant</b>	<b>Source</b>	<b>6416.4</b>	<b>Sec</b>	<b>Tws</b>	<b>Rng</b>	<b>X</b>	<b>Y</b>
RA 03816	DOM				R. D. COLLIER	CH	RA 03816			Artesian	4	17	17S	27E	565854	3632721

**Record Count:** 1

**POD Search:**

**POD Number:** RA 03816

**Sorted by:** File Number

\*UTM location was derived from PLSS; see Help.

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# New Mexico Office of the State Engineer

## Active & Inactive Points of Diversion

(with Ownership Information)

WR File Nbr	Sub	Basin	Use/Diversion	Owner	County	POD Number	Code	Grant	Source	Q1	Q2	Q3	Q4	Sec	Twp	Rng	X	Y
RA 04320		DGM		C.V. BROWN		ED RA 04320			Artesian	3	17	17S	27E				565053	3632719

(R=POD has been replaced and no longer serves this file, (quarters are 1=NW 2=NE 3=SW 4=SE)  
 C=the file is closed) (quarters are smallest to largest) (NAD83 UTM in meters)

Record Count: 1

POD Search:

POD Number: RA 04320

Sorted by: File Number

\*UTM location was derived from PLSS - see Help

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# New Mexico Office of the State Engineer

## Active & Inactive Points of Diversion

(with Ownership Information)

WR File Nbr	Sub #	Basin	Use	Diversion	Owner	County	POD Number	Code	Grant	Source	6416	4	Sec	Tws	Rng	X	Y	
RA 08823		DOM			3, HAMMOND, PHILLIP J.	ED	RA 08823			Shallow	1	1	3	17	17S	27E	564745	3633019

(R=POD has been replaced and no longer serves this file, (quarters are 1=NW 2=NE 3=SW 4=SE)  
 C=the file is closed) (quarters are smallest to largest) (NAD83 UTM in meters)

Record Count: 1

POD Search:

POD Number: RA 08823

Sorted by: File Number

\*UTM location was derived from PLSS - see Help

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# New Mexico Office of the State Engineer

## Active & Inactive Points of Diversion

(with Ownership Information)

WR File Nbr	Sub	Basin	Use	Diversion	Owner	County	POD Number	Code	Grant	Source	Q1	Q2	Q3	Q4	Sec	Tws	Rng	X	Y	
RA 11691		MON			INTEGRATED WATER SERVICES	ED	RA 11691.POD1			6416.4	2	1	4	17	17S	27E			565800	3633029

(R=POD has been replaced and no longer serves this file, (quarters are 1=NW 2=NE 3=SW 4=SE)  
 C=the file is closed) (quarters are smallest to largest) (NAD83-UTM in meters)

Record Count: 1

POD Search:

POD Number: RA 11691.POD1

Sorted by: File Number

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# New Mexico Office of the State Engineer

## Active & Inactive Points of Diversion

(with Ownership Information)

WR File Nbr	Sub	Basin	Use	Diversion	Owner	County	POD Number	Code	Grant	Source	Q1	Q2	Q3	Q4	Sec	Twp	Rng	Easting	Northing
RA 04554		PRO			LOWE DRILLING COMPANY	ED	RA.04554			Artesian	1	23	17S	27E				569859	3631947

(R=POD has been replaced and no longer serves this file; (quarters are 1=NW 2=NE 3=SW 4=SE)  
(C=the file is closed) (quarters are smallest to largest) (NAD83 UTM in meters)

Record Count: 1

POD Search:

POD Number: RA 04554

Sorted by: File Number

\*UTM location was derived from PLSS - see Help

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# New Mexico Office of the State Engineer

## Active & Inactive Points of Diversion

(with Ownership Information)

WR File Nbr	Sub	Basin	Use	Diversion	Owner	County	POD Number	Code	Grant	Source	Q	Sec	Tws	Rng	X	Y	
RA 04786			DOM		DAVE COLLIER	ED	RA 04786			Artesian	4	3	2	18	17S	27E	564133 3633277*

(R=POD has been replaced and no longer serves this file. (quarters are 1=NW 2=NE 3=SW 4=SE)  
 C=the file is closed) (quarters are smallest to largest) (NAD83 UTM in meters)

Record Count: 1

POD Search:

POD Number: RA 04786

Sorted by: File Number

\*UTM location was derived from PLSS - see Help

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# New Mexico Office of the State Engineer

## Active & Inactive Points of Diversion

(with Ownership Information)

WR File Nbr.	Sub	Basin	Use	Diversion	Owner	County	POD Number	Code	Grant	Source	6416	4	Sec	Tws	Rng	X	Y	
RA 06560		DOM			3. TONY HALL	CH	RA 06560			Shallow	2	1	2	20	17S	27E	565757	3632217

(R=POD has been replaced and no longer serves this file, (quarters are 1=NW 2=NE 3=SW 4=SE)  
 C=the file is closed) (quarters are smallest to largest) (NAD83 UTM in meters)

**Record Count:** 1

**POD Search:**

**POD Number:** RA.06560

**Sorted by:** File Number

\*UTM location was derived from PLSS. - see Help.

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# New Mexico Office of the State Engineer

## Active & Inactive Points of Diversion

(with Ownership Information)

WR File Nbr	Sub	Basin	Use	Diversion	Owner	County	POD Number	Code	Grant	Source	UTM X	UTM Y
RA07774		STK			3 BOGLE FARMS	ED	RA07774			Shallow	64104	3635251

(R=POD has been replaced and no longer serves this file. (quarters are 1=NW 2=NE 3=SW 4=SE)  
 C=(this file is closed) (quarters are smallest to largest) (NAD83 UTM in meters)

Record Count: 1

POD Search:

POD Number: RA 07774

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.



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

No records found.

**PLSS Search:**

Township: 17S      Range: 28E

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.

7/13/12 3:49 PM

Page 1 of 1

WATER COLUMN/ AVERAGE  
DEPTH TO WATER



# 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 6	Q 4	Q 2	Q 3	Sec	Tws	Rng	X	Y	Depth Well	Depth Water	Water Column
------------	----------	----------	--------	-----	-----	-----	-----	-----	-----	-----	---	---	------------	-------------	--------------

<u>RA 11807 POD1</u>				ED	1	2	3	22	17S	29E	587360	3631585	250		
													Average Depth to Water:	--	
													Minimum Depth:	--	
													Maximum Depth:	--	

Record Count: 1

PLSS Search:

Township: 17S      Range: 29E

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

(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 Code	Subbasin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Depth Well	Depth Water	Water Column
<u>RA 03714</u>			CH	4	4	2	08	18S	27E	566212	3625253*	381		
<u>RA 03917</u>			LE	4	1	2	10	18S	27E	569019	3625660*	130	50	80
<u>RA 04048</u>			LE	1	4	4	14	18S	27E	570841	3623030*	2096		
<u>RA 04211</u>			CH	3	1	28	18S	27E	566512	3620562*	120	100		20
<u>RA 04299</u>			ED	1	2	19	18S	27E	564062	3622523*	92			
<u>RA 05524</u>			ED	2	4	33	18S	27E	567721	3618532*	90	49		41
<u>RA 05660</u>			ED	3	4	31	18S	27E	564094	3618090*	305	65		240
<u>RA 05664</u>			ED	4	1	33	18S	27E	566914	3618936*		145		
<u>RA 06091</u>			ED	1	2	3	29	18S	27E	565211	3620222*	90	17	73

Average Depth to Water: **71 feet**

Minimum Depth: **17 feet**

Maximum Depth: **145 feet**

Record Count: 9

PLSS Search:

Township: 18S, Range: 27E

\*UTM location was derived from PLSS - see Help

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# New Mexico Office of the State Engineer

## Active & Inactive Points of Diversion

(with Ownership Information)

WR File Nbr	Sub	Basin	Use	Diversion	Owner	County	POD Number	Code	Grant	Source	Q	Q	Q	Q	X	Y
	(acre ft per annum)															
RA 03917		PRO			PAN AMERICAN PETROLEUM CORP.	LE	RA 03917			Artesian 4	1	2	10	18S	27E	569019 3625660*

(R=POD has been replaced and no longer serves this file, (quarters are 1=NW 2=NE 3=SW 4=SE)  
 C=the file is closed) (quarters are smallest to largest) (NAD83 UTM in meters)

Record Count: 1

POD Search:

POD Number: RA 03917

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.



# New Mexico Office of the State Engineer

## Active & Inactive Points of Diversion

(with Ownership Information)

WR File Nbr	Sub (basin, Use, IDiversion)	Owner	County	POD Number	Code	Grant	Source	Q	Q	Q	Sec	Tws	Rng	X	Y
RA 04211	PRO	JOHN H. TRIGG	CH	RA 04211			Shallow	3	1	28	18S	27E		566512	3620562

(R=POD has been replaced and no longer serves this file; (quarters are 1=NW 2=NE 3=SW 4=SE)  
 C=the file is closed) (quarters are smallest to largest) (NAD83 UTM in meters)

**Record Count:** 1

**POD Search:**

POD Number: RA 04211

**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.



# New Mexico Office of the State Engineer

## Active & Inactive Points of Diversion

(with Ownership Information)

WR File Nbr	Sub	basin	Use (Diversion)	Owner	County	POD Number	Code	Grant	Source	q	q	q	Sec	Tws	Rng	X	Y
RA 05524		STK		3 RAYMOND NETHERLIN	ED	RA 05524			Shallow	2	4	33	18S	27E		567721	3618532

(R=POD has been replaced and no longer serves this file, (quarters are 1=NW 2=NE 3=SW 4=SE)  
 C=the file is closed) (quarters are smallest to largest) (NAD83 UTM in meters)  
 q q q

Record Count: 1

POD Search:

POD Number: RA 05524

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.



# New Mexico Office of the State Engineer

## Active & Inactive Points of Diversion

(with Ownership Information)

WR File Nbr	Sub	Basin	Use	Diversion	Owner	County	POD Number	Code	Grant	Source	Q	Q	Q	Q	Sec	Twp	Rng	X	BY
RA 05664			EXP		YATES DRILLING COMPANY		RA 05664			Artesian	4	1	33	18S	27E			566914	3618936*
RA 05664	EXPL		OBS		YATES DRILLING COMPANY		RA 05664			Artesian	4	1	33	18S	27E			566914	3618936*

(R=POD has been replaced and no longer serves this file, (quarters are 1=NW 2=NE 3=SW 4=SE)  
 C=the file is closed) (quarters are smallest to largest) (NAD83 UTM in meters).  
 q,q,q,q

Record Count: 2

POD Search:

POD Number: RA 05664

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.



# New Mexico Office of the State Engineer

## Active & Inactive Points of Diversion

(with Ownership Information)

WR File No	Sub	Basin	Use/Diversion	Owner	County	POD Number	Code	Grant	Source	Sec	Tws	Range	TX	Y		
RA\05660		PRO		INC. READ & STEVENS	ED	RA 05660			Shallow	3	4	31	18S	27E	564094	3618090

(R=POD has been replaced and no longer serves this file. (quarters are 1=NW-2=NE 3=SW 4=SE)  
 C=the file is closed) (quarters are smallest to largest) (NAD83 UTM in meters)

Record Count: 1

POD Search:

POD Number: RA 05660

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.



# New Mexico Office of the State Engineer

## Active & Inactive Points of Diversion

(with Ownership Information)

WR File Nbr	Basin	Use	Diversion	Owner	County	POD Number	Code	Grant	Source	Q1	Q2	Q3	Q4	Sec	Tws	Ring	X	Y
RA 06091		PRO		O. YATES PETROLEUM CORPORATION	ED	RA 06091			Shallow	1	2	3	29	18S	27E		565211	3620222

(R=POD has been replaced and no longer serves this file. (quarters are 1=NW 2=NE 3=SW 4=SE)  
 C=the file is closed) (quarters are smallest to largest) (NAD83 UTM in meters)  
 q:q:q)

Record Count: 1

POD Search:

POD Number: RA 06091

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.



# 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 Well	Depth Water	Water Column	
	Code	Subbasin	County	64	16	4						Sec
<u>L 01142.POD1</u>	L	LE		2	4	15	18S	28E	578921	3623453*	80	
<u>L 01150.POD1</u>	L	LE		1	1	35	18S	28E	579344	3619433*	135	65 70
<u>RA 09588</u>		ED		1	2	33	18S	28E	576976	3619384*	300	

Average Depth to Water: 65 feet

Minimum Depth: 65 feet

Maximum Depth: 65 feet

**Record Count: 3**

**PLSS Search:**

Township: 18S

Range: 28E

\*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*  
**Active & Inactive Points of Diversion**  
(with Ownership Information)

No PODs found.

POD Search:

POD Number: RA 01150.POD1



# 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 Code	Subbasin	County	Q	Q	Q	Sec	Tws	Rng	X	Y	Depth Well	Depth Water	Water Column
------------	----------	----------	--------	---	---	---	-----	-----	-----	---	---	------------	-------------	--------------

<u>CP.00863</u>			ED	1	4	2	27	18S	29E	588341	3620768*	320		
												Average Depth to Water:	--	
												Minimum Depth:	--	
												Maximum Depth:	--	

**Record Count: 1**

**PLSS Search:**

Township: 18S      Range: 29E

\*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 325122104151001 17S.27E.11.12311

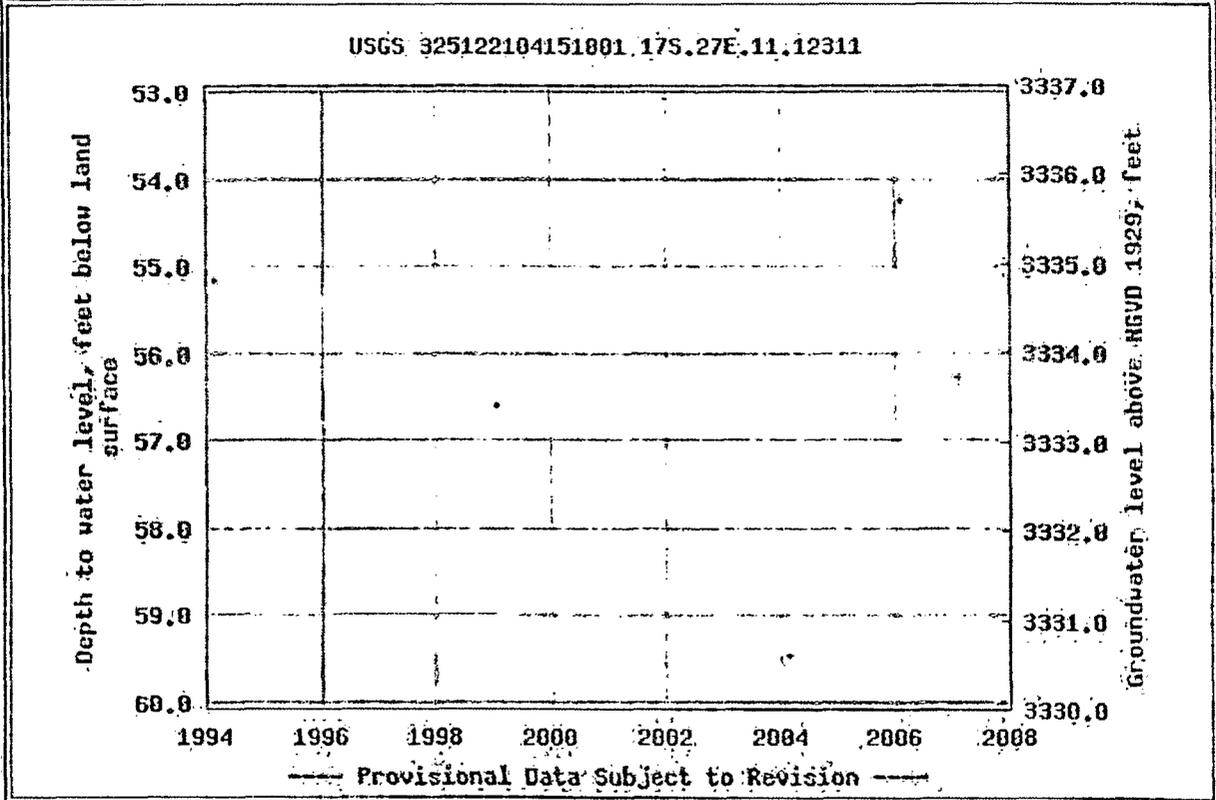
Available data for this site

Groundwater: Field measurements

Eddy County, New Mexico  
 Hydrologic Unit Code 13060011  
 Latitude 32°51'22", Longitude 104°15'10" NAD27  
 Land-surface elevation 3,390 feet above NGVD29  
 The depth of the well is 100.00 feet below land surface.  
 This well is completed in the Artesia Group (313ARTS)  
 local aquifer.

### Output formats

- 
- 
- 
- 



# USGS 324855104093101 17S.28E.22.34242

Available data for this site

Groundwater: Field measurements



[GO]

Eddy County, New Mexico  
 Hydrologic Unit Code 13060011  
 Latitude 32°48'55", Longitude 104°09'31" NAD27  
 Land-surface elevation 3,578 feet above NGVD29  
 The depth of the well is 95.00 feet below land surface.  
 This well is completed in the Alluvium, Bolson Deposits  
 and Other Surface Deposits (110AVMB) local aquifer.

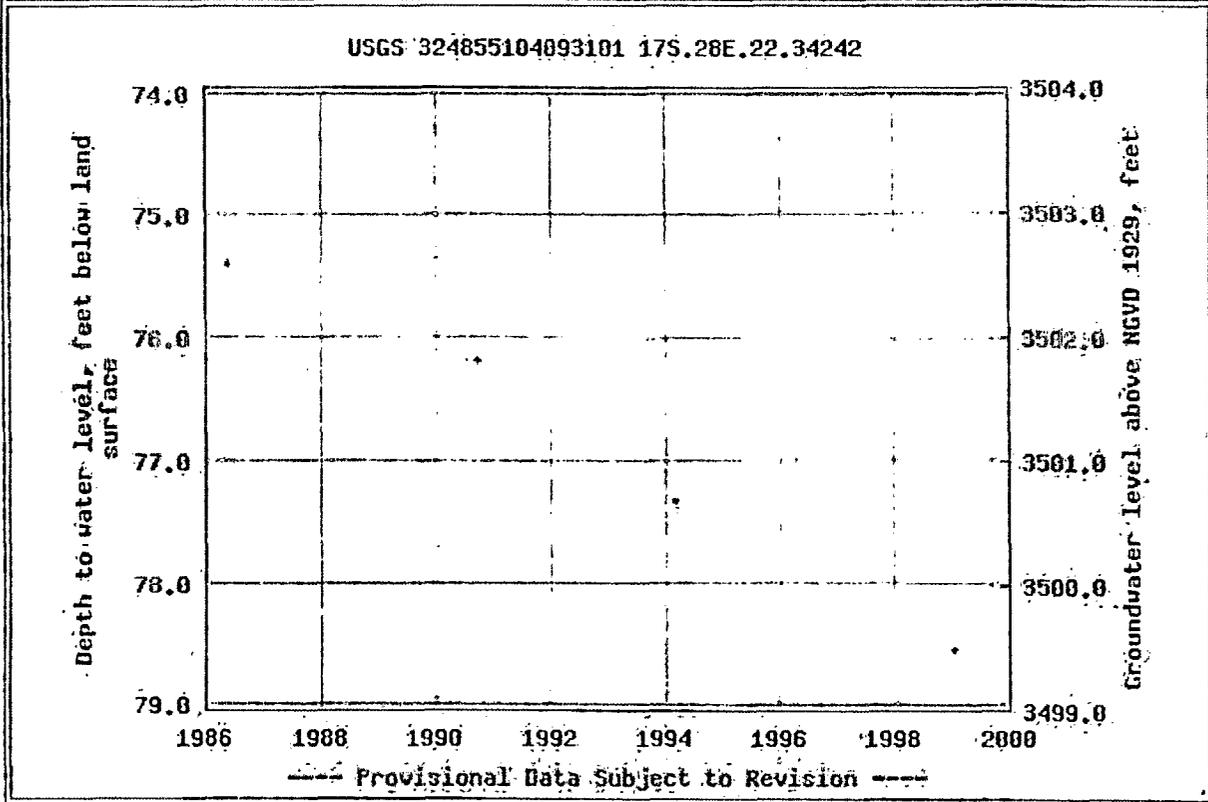
### Output formats

Table of data

Tab-separated data

Graph of data

Reselect period

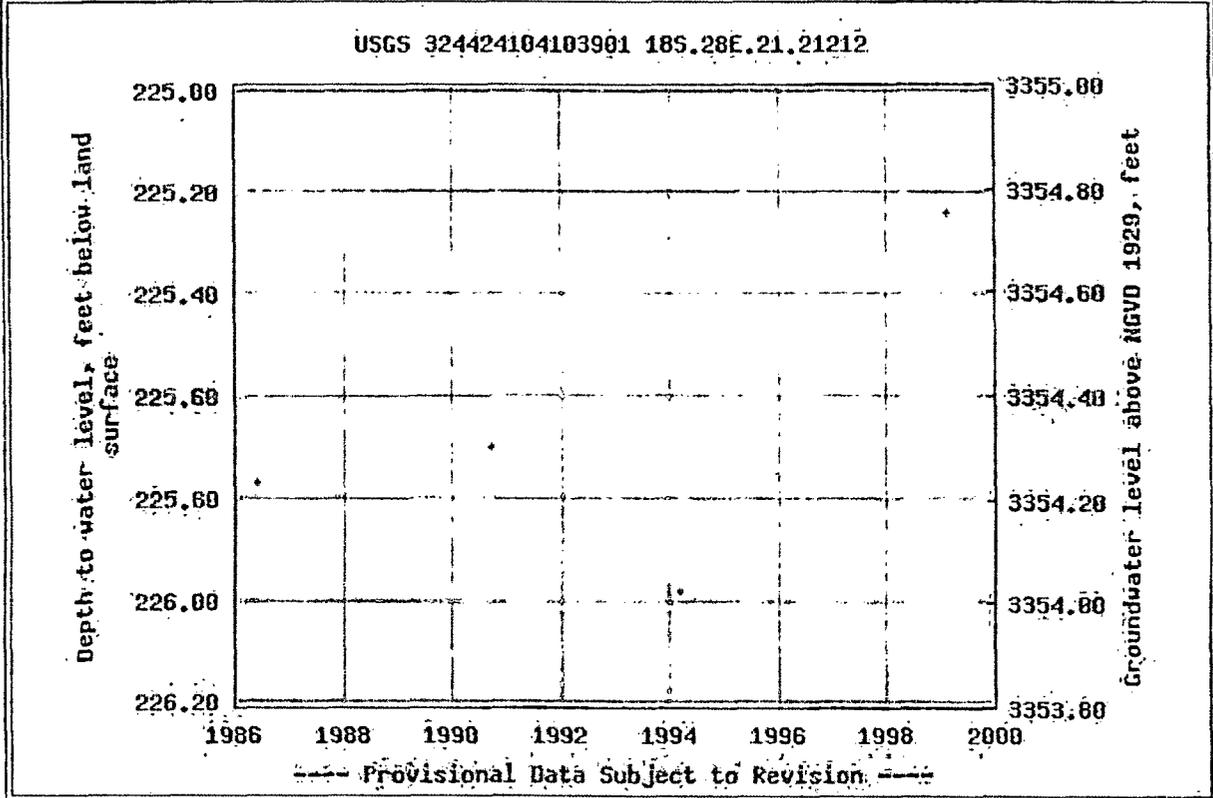


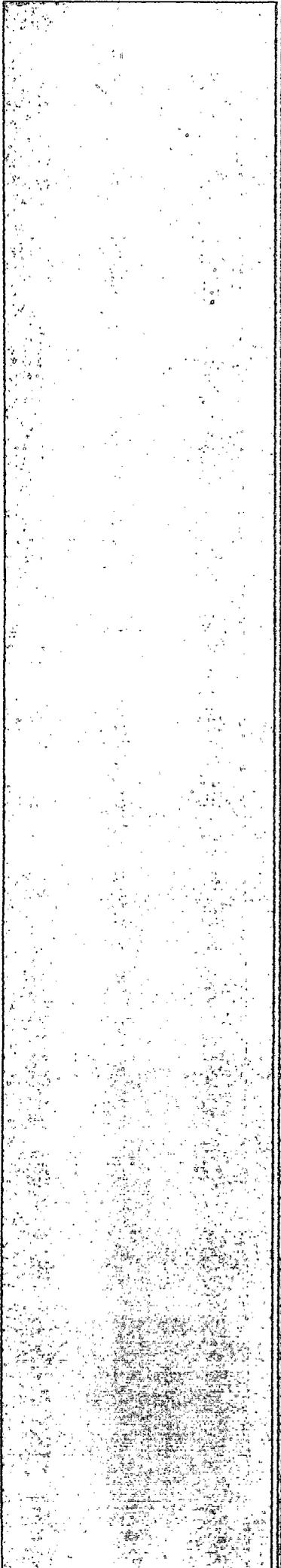
# USGS 324424104103901 18S.28E.21.21212

Available data for this site

Groundwater: Field measurements

<p>Eddy County, New Mexico                  Hydrologic Unit Code 13060011                  Latitude 32°44'24", Longitude 104°10'39" NAD27                  Land-surface elevation 3,580 feet above NGVD29                  The depth of the well is 250.00 feet below land surface.                  This well is completed in the Artesia Group (313ARTS) local aquifer.</p>	<p><b>Output formats</b></p> <p><input type="button" value="Table of data"/></p> <p><input type="button" value="Tab-separated data"/></p> <p><input type="button" value="Graph of data"/></p> <p><input type="button" value="Reselect period"/></p>
---	---





# Appendix E

Final Form C-141

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

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

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 Bruce Baker
Address PO BOX 1849, Eunice, NM 88231	Telephone No. (575) 394-1503
Facility Name Geronimo 28 State #1	Facility Type Production Well
Surface Owner Unknown	Mineral Owner State
API No. 30-015-31829	

**LOCATION OF RELEASE**

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
J	28	17S	28E	1500	FSL	1800	FEL	Eddy

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

**NATURE OF RELEASE**

Type of Release Produced Water	Volume of Release 5 bbls	Volume Recovered 0 bbls
Source of Release Water Line	Date and Hour of Occurrence 8/24/11	Date and Hour of Discovery 8/24/11 12 pm
Was Immediate Notice Given? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
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.\*

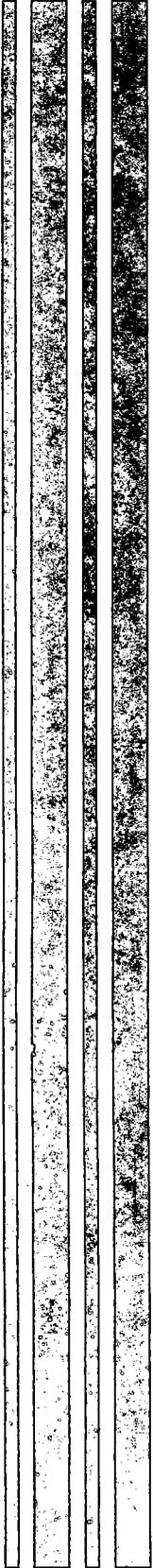
Describe Cause of Problem and Remedial Action Taken.\*  
Water line leaked between the Red Lake Battery and the Geronimo well. Line was repaired and remediation began.

Describe Area Affected and Cleanup Action Taken.\*  
The leak affected 11,052 ft<sup>2</sup> of pasture land adjacent to a lease road. Impacted soils were removed to a NMOCD approved disposal facility. Soil samples were collected from the 1 ft. deep excavation and sent to a commercial laboratory for confirmation of chloride and TPH. The site was backfilled with clean topsoil 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: <i>Bruce Baker</i>		<b>OIL CONSERVATION DIVISION</b>	
Printed Name: Bruce Baker		Approved by District Supervisor:	
Title: <i>Environmental Tech</i>		Approval Date:	Expiration Date:
E-mail Address: <i>Larry.baker@apachecorp.com</i>		Conditions of Approval:	
Date: <i>8-1-13</i>	Phone: (575) 394-1503	Attached <input type="checkbox"/>	

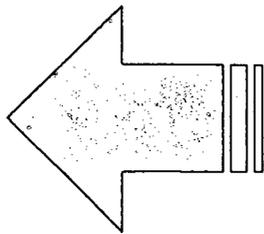
\* Attach Additional Sheets If Necessary



This is a Patch T type separator sheet.



Form Type = "Well file form"  
CODE128 type barcode

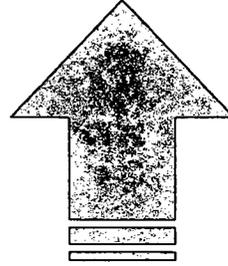


Landscape Feed  
*New Form Follows...*

This is a Patch T type separator sheet.



Form Type = "Well file form"  
CODE128 type barcode



Portrait Feed  
*New Form Follows...*

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

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	Bruce Baker
Address	PO BOX 1849, Eunice, NM 88231	Telephone No.	(575) 394-1503
Facility Name	Geronimo 28 State #1	Facility Type	Production Well

Surface Owner	Unknown	Mineral Owner	State	API No.	30-015-31829
---------------	---------	---------------	-------	---------	--------------

**LOCATION OF RELEASE**

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
J	28	17S	28E	1500	FSL	1800	FEL	Eddy

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

**NATURE OF RELEASE**

Type of Release	Produced Water	Volume of Release	5 bbls	Volume Recovered	0 bbls
Source of Release	Water Line	Date and Hour of Occurrence	8/24/11	Date and Hour of Discovery	8/24/11 12 pm
Was Immediate Notice Given?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom?			
By Whom?	Date and Hour				
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.\*  
Water line leaked between the Red Lake Battery and the Geronimo well. Line was repaired and remediation began.

Describe Area Affected and Cleanup Action Taken.\*  
The leak affected 11,052 ft<sup>2</sup> of pasture land adjacent to a lease road. Impacted soils were removed to a NMOCD approved disposal facility. Soil samples were collected from the 1 ft. deep excavation and sent to a commercial laboratory for confirmation of chloride and TPH. The site was backfilled with clean topsoil 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: <i>Bruce Baker</i>	<b>OIL CONSERVATION DIVISION</b>	
Printed Name: Bruce Baker	Approved by District Supervisor: <i>[Signature]</i>	
Title: <i>Environmental Tech</i>	Approval Date: <i>4/20/15</i>	Expiration Date: <i>N/A</i>
E-mail Address: <i>Larry.baker@apachecorp.com</i>	Conditions of Approval: <i>Filed</i>	Attached <input type="checkbox"/>
Date: <i>8-1-13</i> Phone: (575) 394-1503		

\* Attach Additional Sheets If Necessary

*2RP-2958*