



EXPLORING WHAT'S POSSIBLE



# APACHE CORPORATION

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

## Roadrunner Federal #1

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### Closure Report

2RP-1195

API 30-015-36440

Release Date: June 9, 2012

Unit Letter J, Section 5, Township 17S, Range 31E

# Rice Environmental Consulting & Safety

P.O. Box 5630 Hobbs, NM 88241

Phone 575.393.4411 Fax 575.393.0293

**June 3<sup>rd</sup>, 2013**

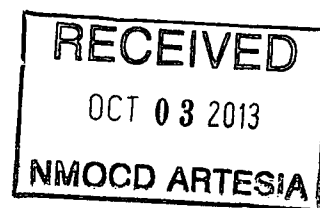
Mike Bratcher

New Mexico Energy, Minerals, & Natural Resources

Oil Conservation Division, Environmental Bureau – District 2

811 S. First St.

Artesia, NM 88210



**RE: TERMINATION REQUEST**

**Apache – Roadrunner Federal #1 AD**

**UL/J sec. 5 T17S R31E**

**API No. 30-015-36440**

**2RP-1195**

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 oil and produced water associated with the Roadrunner Federal #1. A ¼ inch valve on a pumping tee was opened by roaming livestock and released fluids onto a lease road and pasture land. The valve handle was removed and standing fluids were recovered. An initial form C-141 was submitted by Apache Corporation on June 25, 2012 (Appendix A). The site is located approximately 6 miles northeast of Loco Hills, in unit letter 'J' of section 5, T17S, R31E in Eddy County, New Mexico.

On June 11, 2012, RECS personnel initiated work on the Roadrunner Federal #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 B). Chloride ranged from 80 to 3,240 mg/kg, GRO ranged from 3,550 to 4,960 mg/kg, and DRO ranged from 21,000 to 33,700 mg/kg.

The leak area on the caliche pad was excavated to 1.5 ft. bgs (Figure 2). On June 28, 2012, RECS personnel collected and field tested a representative composite sample from the bottom of the 1.5 ft. excavation. This sample was taken to a commercial laboratory, which returned results of non-detect for chlorides and TPH.

The leak area in the pasture was excavated to 1 ft. bgs. On July 2, 2012, RECS personnel collected and field tested a representative composite sample from the bottom of the 1.5 ft.

excavation. The sample was taken to a commercial laboratory, which returned results of non-detect for chlorides and TPH.


Impacted soils were removed from the excavation and transported to a NMOCD approved disposal facility. The excavation in the pasture area was backfilled with clean imported topsoil and contoured to the surrounding area. The excavation on the well pad was backfilled with clean imported caliche and leveled. See Appendix C for photographs of field activities.

## **Conclusion**

Due to the complete removal of impacted soils, Apache submits the final C-141 (Appendix D) 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 Hack Conder at (575) 631-6432 if you have any questions or comments.

Sincerely,

A handwritten signature in black ink, appearing to read 'J.C.W.' followed by a long, horizontal, wavy line.

Lara Weinheimer  
Project Scientist  
RECS  
(575) 441-0431

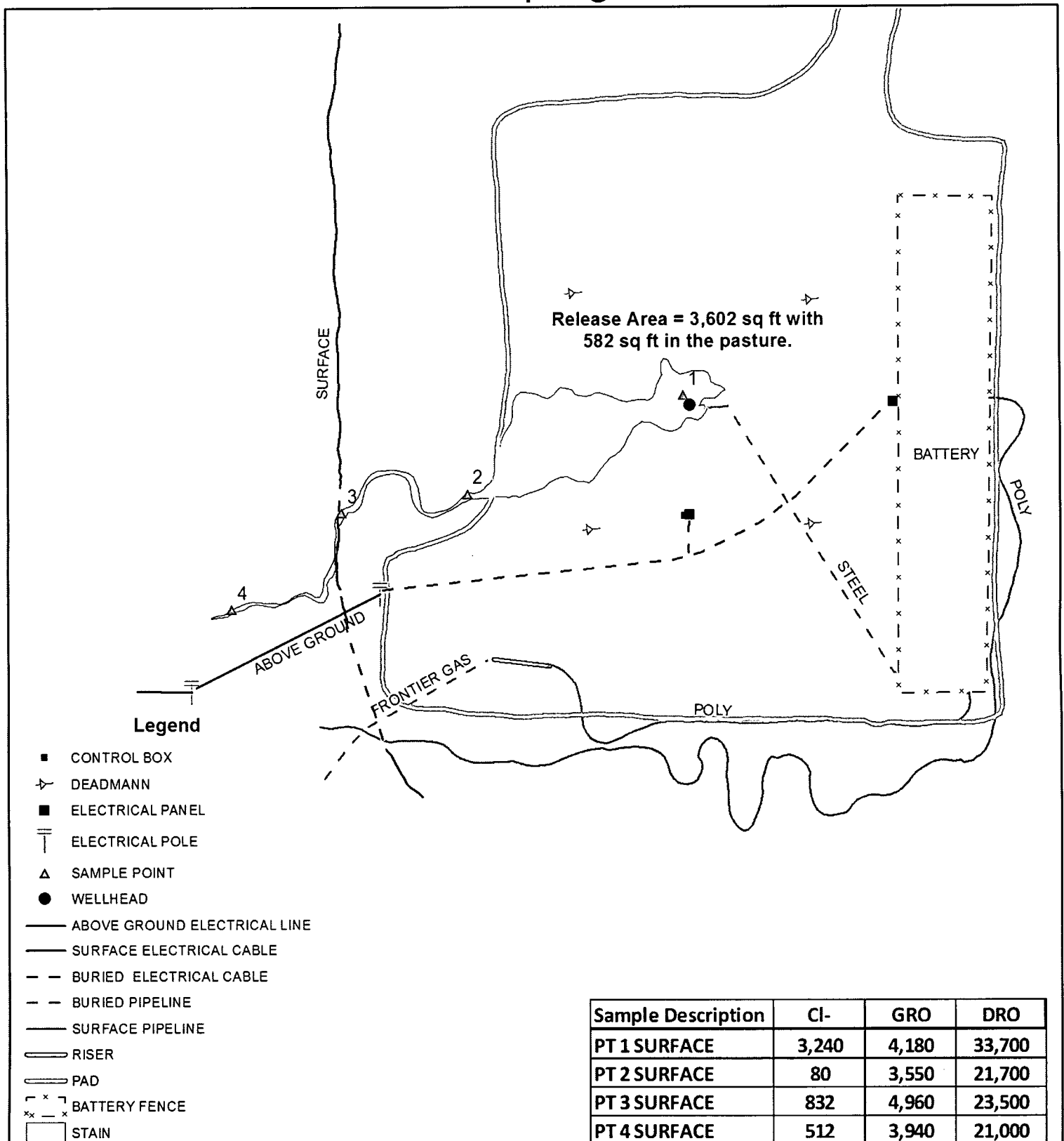
## **Attachments:**

- Figure 1: Site Plat with Initial Sampling Lab Data
- Figure 2: Site Plat with Final Sampling Lab Data
- Appendix A: Initial Form C-141
- Appendix B: Laboratory Analyses
- Appendix C: Photo Documentation
- Appendix D: Final Form C-141

# Figures

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

# Initial Sampling Data



## APACHE ROADRUNNER FEDERAL #1

UL/L SECTION 5  
T-17-S R-31-E  
EDDY COUNTY, NM

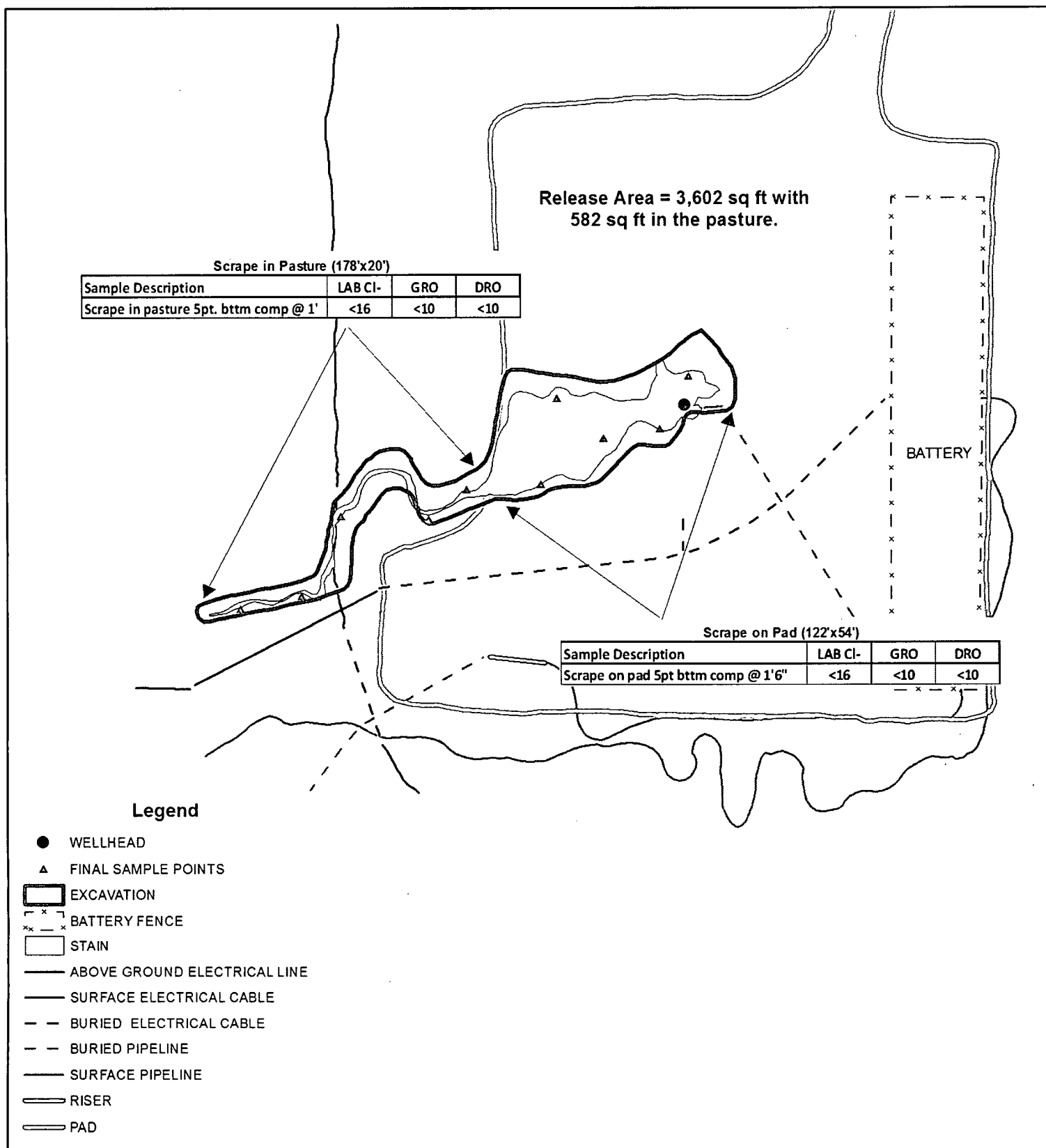
Figure 1



0 50 100  
Feet

GPS date: 6/11/12 by TG  
Drawing date: 10/5/12  
Drafted by: A.C. Ruth

# Final Sampling Data



## APACHE ROADRUNNER FEDERAL #1

UL/L SECTION 5  
T-17-S R-31-E  
EDDY COUNTY, NM

Figure 2



0 50 100  
Feet

GPS date: 6/11/12 by TG  
Drawing date: 10/5/12  
Drafted by: A.C. Ruth

# Appendix A

Initial 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

n JMW 1218037975

Name of Company Apache Corporation 873		OPERATOR	<input checked="" type="checkbox"/> Initial Report	<input type="checkbox"/> Final Report
Address PO Box 1849 Eunice NM 88231		Contact Natalie Gladden		
Facility Name Roadrunner Federal #1		Telephone No. 575-390-4186		
		Facility Type Producing well		
Surface Owner BLM		Mineral Owner State	Lease No. 30-015-36440	

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
J	5	17S	31E	1650	FSL	1650	FEL	Eddy

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

NATURE OF RELEASE

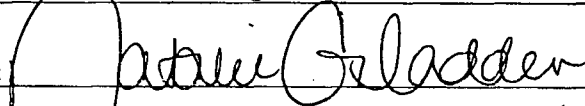
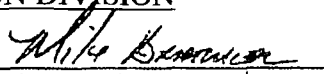
Type of Release Oil/Water	Volume of Release 22	Volume Recovered 5
Source of Release 1/4" valve	Date and Hour of Occurrence 06/09/12	Date and Hour of Discovery 06/09/12
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Mike Bratcher	
By Whom? Mike Bratcher	Date and Hour 06/15/2012 108pm	
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.* 1/4" valve on pumping tee was opened by a cattle rubbing on it. Valve handle has been removed. Vacuum trucks were called into recover standing fluid.		
Describe Area Affected and Cleanup Action Taken.* NMOCD/BLM rules will be followed to closure.		

RECEIVED

JUN 27 2012

NMOCD ARTESIA

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: 	Signed By
Title: EHS Environmental Tech	Approval Date: JUN 28 2012	Expiration Date:
E-mail Address: natalie.gladden@apachecorp.com	Conditions of Approval:	Attached <input type="checkbox"/>
Date: 6/25/12 Phone: 575-390-4186		

\* Attach Additional Sheets If Necessary

Remediation per OCD Rules &  
Guidelines. SUBMIT REMEDIATION  
PROPOSAL NOT LATER THAN:

7/28/12

2RP-1195

# Appendix B

## Laboratory Analyses

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

June 14, 2012

NATALIE GLADDEN

APACHE - EUNICE

P. O. BOX 1849

EUNICE, NM 88231

RE: ROADRUNNER FEDERAL 1 A.D.

Enclosed are the results of analyses for samples received by the laboratory on 06/12/12 7:58.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-11-3. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at [www.tceq.texas.gov/field/qa/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

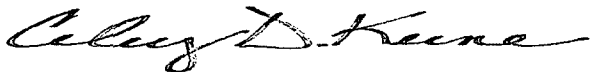
Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Celey D. Keene

Lab Director/Quality Manager

**Analytical Results For:**

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

Received: 06/12/2012  
Reported: 06/14/2012  
Project Name: ROADRUNNER FEDERAL 1 A.D.  
Project Number: NONE GIVEN  
Project Location: NOT GIVEN

Sampling Date: 06/11/2012  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: PT. 1 SURFACE (H201310-01)**

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>3240</b>	16.0	06/14/2012	ND	416	104	400	3.92	
TPH 8015M		mg/kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>GRO C6-C10</b>	<b>4180</b>	200	06/13/2012	ND	197	98.3	200	14.0	
<b>DRO &gt;C10-C28</b>	<b>33700</b>	200	06/13/2012	ND	195	97.4	200	19.4	
<hr/>									
Surrogate: 1-Chlorooctane	285 %	65.2-140							
Surrogate: 1-Chlorooctadecane	417 %	63.6-154							

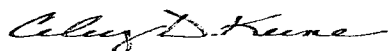
**Sample ID: PT. 2 SURFACE (H201310-02)**

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>80.0</b>	16.0	06/14/2012	ND	416	104	400	3.92	
TPH 8015M		mg/kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>GRO C6-C10</b>	<b>3550</b>	100	06/13/2012	ND	197	98.3	200	14.0	
<b>DRO &gt;C10-C28</b>	<b>21700</b>	100	06/13/2012	ND	195	97.4	200	19.4	
<hr/>									
Surrogate: 1-Chlorooctane	483 %	65.2-140							
Surrogate: 1-Chlorooctadecane	316 %	63.6-154							

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

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

Received: 06/12/2012  
Reported: 06/14/2012  
Project Name: ROADRUNNER FEDERAL 1 A.D.  
Project Number: NONE GIVEN  
Project Location: NOT GIVEN

Sampling Date: 06/11/2012  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: PT. 3 SURFACE (H201310-03)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	832	16.0	06/14/2012	ND	416	104	400	3.92		
TPH 8015M		mg/kg		Analyzed By: MS						S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	4960	100	06/13/2012	ND	197	98.3	200	14.0		
DRO >C10-C28	23500	100	06/13/2012	ND	195	97.4	200	19.4		
Surrogate: 1-Chlorooctane		334 %	65.2-140							
Surrogate: 1-Chlorooctadecane		330 %	63.6-154							

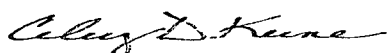
**Sample ID: PT. 4 SURFACE (H201310-04)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	512	16.0	06/14/2012	ND	416	104	400	3.92		
TPH 8015M		mg/kg		Analyzed By: MS						S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	3940	100	06/13/2012	ND	197	98.3	200	14.0		
DRO >C10-C28	21000	100	06/13/2012	ND	195	97.4	200	19.4		
Surrogate: 1-Chlorooctane	273 %	65.2-140								
Surrogate: 1-Chlorooctadecane	308 %	63.6-154								

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Notes and Definitions**

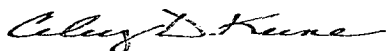
S-06	The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

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Cardinal Laboratories

\*=Accredited Analyte

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---

Celey D. Keene, Lab Director/Quality Manager



July 06, 2012

NATALIE GLADDEN

APACHE - EUNICE

P. O. BOX 1849

EUNICE, NM 88231

RE: ROADRUNNER FEDERAL 1 A.D.

Enclosed are the results of analyses for samples received by the laboratory on 07/03/12 9:50.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-11-3. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at [www.tceq.texas.gov/field/qa/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

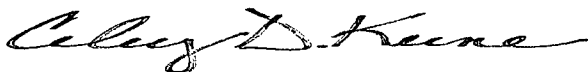
Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Celey D. Keene

Lab Director/Quality Manager

**Analytical Results For:**

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

Received: 07/03/2012  
Reported: 07/06/2012  
Project Name: ROADRUNNER FEDERAL 1 A.D.  
Project Number: NONE GIVEN  
Project Location: NOT GIVEN

Sampling Date: 06/28/2012  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: SCRAPE ON PAD 5 PT BTM COMP (H201499-01)**

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	07/05/2012	ND	400	100	400	3.92	
TPH 8015M		mg/kg		Analyzed By: AM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	07/06/2012	ND	184	92.1	200	2.79	
DRO >C10-C28	<10.0	10.0	07/06/2012	ND	192	95.8	200	3.92	
Surrogate: 1-Chlorooctane	75.1 %	65.2-140							
Surrogate: 1-Chlorooctadecane	94.3 %	63.6-154							

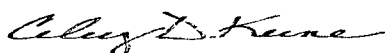
**Sample ID: SCRAPE IN PASTURE 5 PT BTM COMP (H201499-02)**

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	07/05/2012	ND	400	100	400	3.92	
TPH 8015M		mg/kg		Analyzed By: AM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	07/06/2012	ND	184	92.1	200	2.79	
DRO >C10-C28	<10.0	10.0	07/06/2012	ND	192	95.8	200	3.92	
Surrogate: 1-Chlorooctane	77.7 %	65.2-140							
Surrogate: 1-Chlorooctadecane	98.7 %	63.6-154							

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Notes and Definitions**

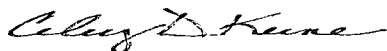
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received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

---

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

**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 the client for the 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 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 processors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By: <i>Natalie Gladden</i>	Date: 7-3-12 Time: 0800	Received By: <i>Natalie Gladden</i>	Phone Result: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Fax Result: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No REMARKS: email results Natalie.Gladden@USA.apacke.com.
Relinquished By: <i>Natalie Gladden</i>	Date: 7-3-12 Time: 0950	Received By: <i>Joel Henson</i>	Zconder@rice-ecs.com; Bbaker@rice-ecs.com; hconder@rice-ecs.com; Lweinheimer@rice-ecs.com
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Sample Condition Cool Intact -52 <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> No	CHECKED BY: (Initials) <i>CH</i>	

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

#26

July 12, 2012

NATALIE GLADDEN

APACHE - EUNICE

P. O. BOX 1849

EUNICE, NM 88231

RE: ROADRUNNER FEDERAL 1 A.D.

Enclosed are the results of analyses for samples received by the laboratory on 07/09/12 10:00.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-11-3. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at [www.tceq.texas.gov/field/qa/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

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

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Hope Moreno

Inorganic Technical Director

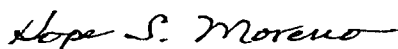
**Analytical Results For:**APACHE - EUNICE  
NATALIE GLADDEN  
P. O. BOX 1849  
EUNICE NM, 88231  
Fax To: 394-2425Received: 07/09/2012  
Reported: 07/12/2012  
Project Name: ROADRUNNER FEDERAL 1 A.D.  
Project Number: NONE GIVEN  
Project Location: NOT GIVENSampling Date: 07/06/2012  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson**Sample ID: IMPORTED SOIL (H201551-01)****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	07/10/2012	ND	416	104	400	3.92	

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.



Hope Moreno, Inorganic Technical Director

### Notes and Definitions

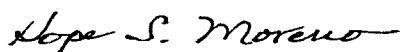
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received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

---

Cardinal Laboratories

\*=Accredited Analyte

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.



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Hope Moreno, Inorganic Technical Director



## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

**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 the client for the 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 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 or affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By: <i>[Signature]</i> Date: <i>7-9-12</i> Time: <i>0715</i>		Received By: <i>[Signature]</i> Date: <i>7-9-12</i> Time: <i>1000</i>		Phone Result: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Fax Result: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Add'l Phone #: _____ Add'l Fax #: _____ REMARKS: <i>email results Natchez to dave.usa@packerup.com.</i>	
Relinquished By: <i>[Signature]</i> Date: <i>7-9-12</i> Time: <i>1000</i>		Received By: <i>[Signature]</i> Date: <i>7-9-12</i> Time: <i>1000</i>		Zcorder@rice-ecs.com; Bbaker@rice-ecs.com; hconder@rice-ecs.com; Lweinheimer@rice-ecs.com	
Delivered By: (Circle One) Sampler - UPS - Bus - Other:		Sample Condition Cool <input checked="" type="checkbox"/> Intact <input type="checkbox"/> <i>-122</i> <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No		CHECKED BY: (Initials) <i>[Initials]</i>	

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

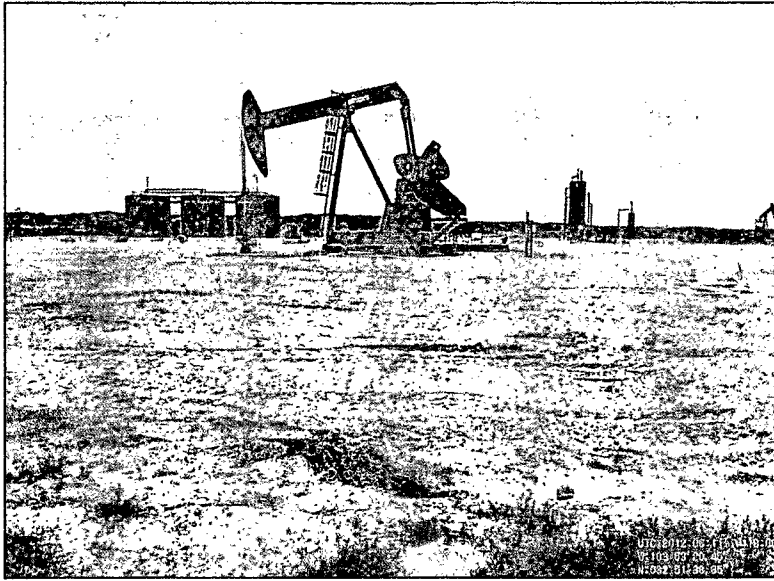
# Appendix C

## Photo Documentation

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

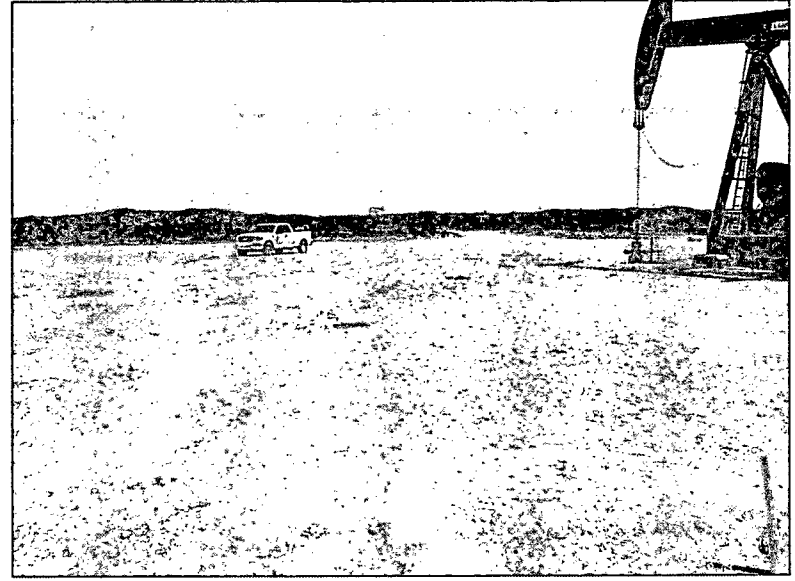
# Apache Roadrunner Federal #1 AD

Unit Letter L, Section 5, T17S, R31E



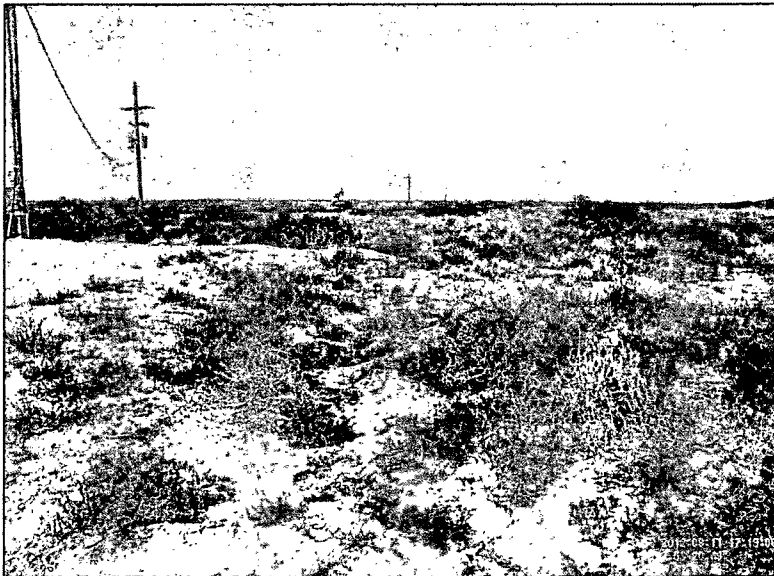
Initial release area, facing northeast

6/11/12



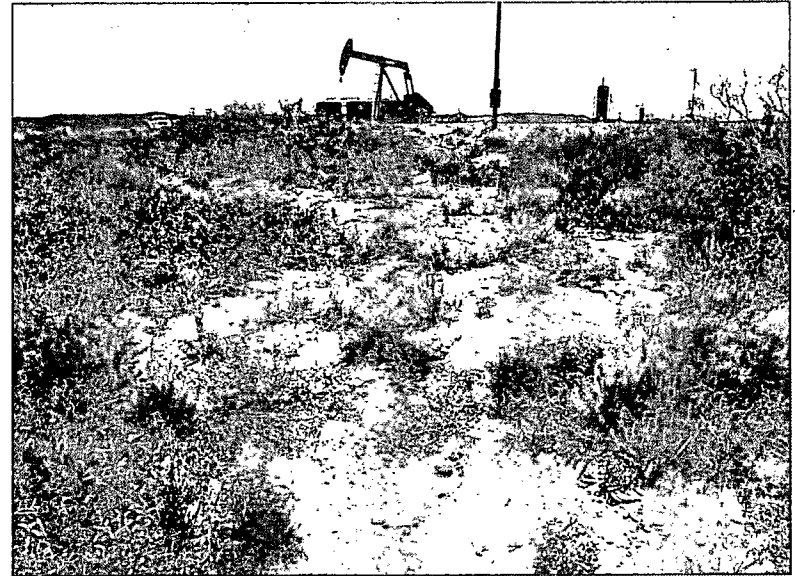
Initial release area, facing north

6/11/12



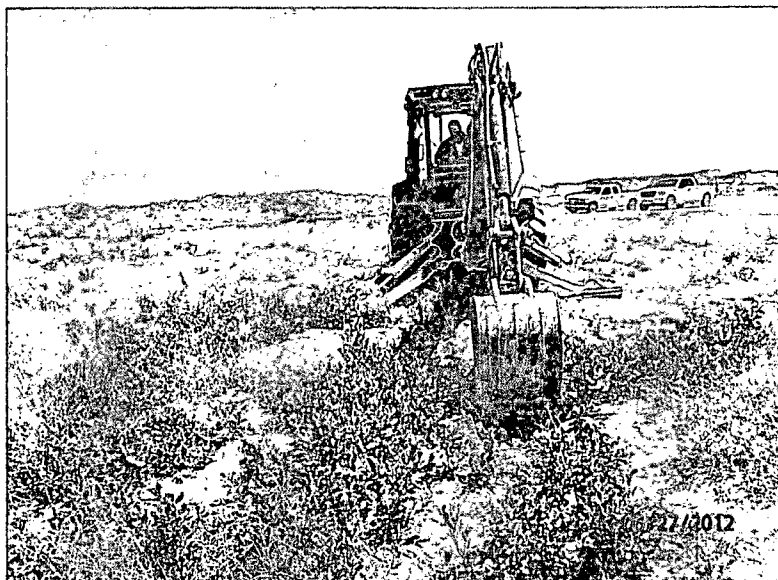
Initial release area, facing southwest

6/11/12



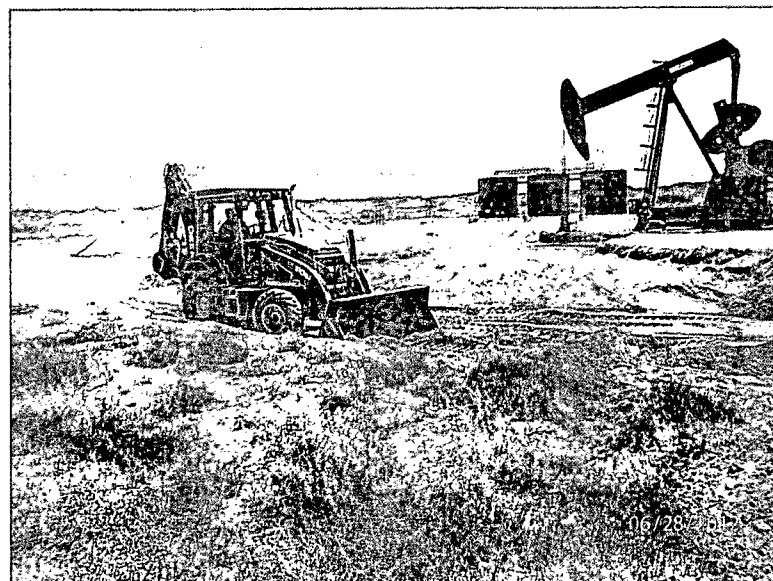
Initial release area, facing northeast

6/11/12



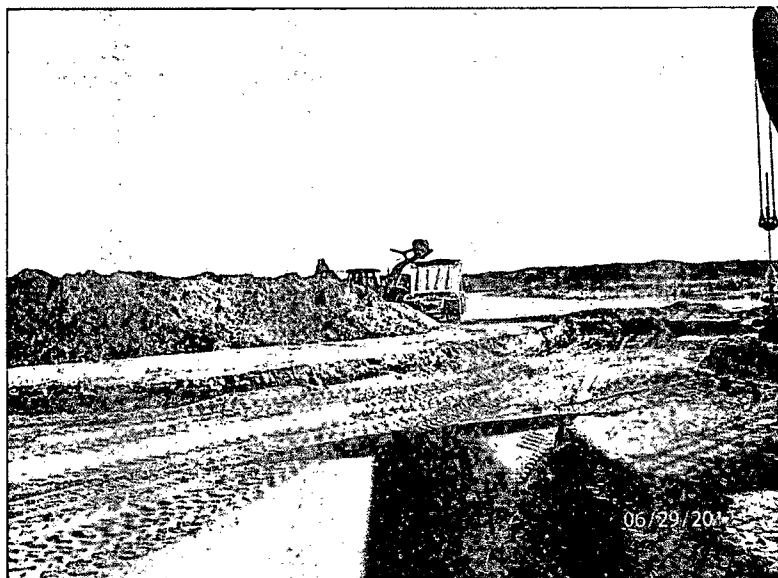
Digging vertical, facing east

6/27/12



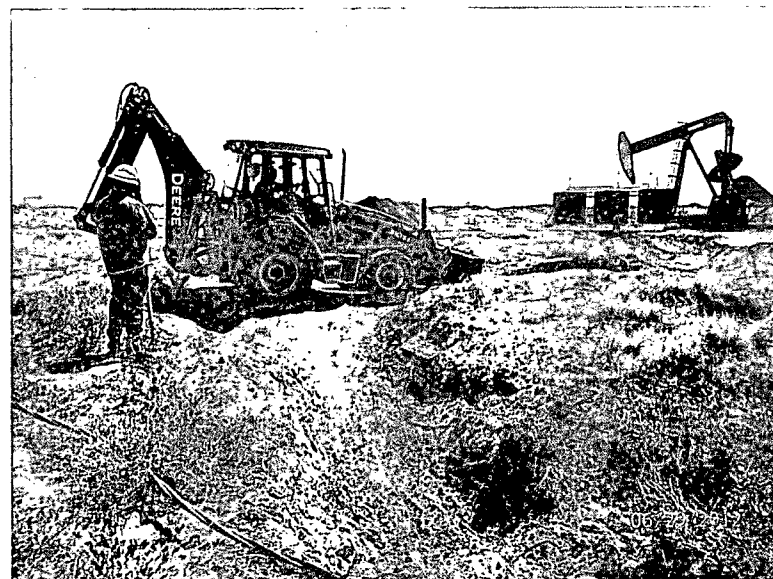
Scraping leak on pad, facing northeast

6/28/12



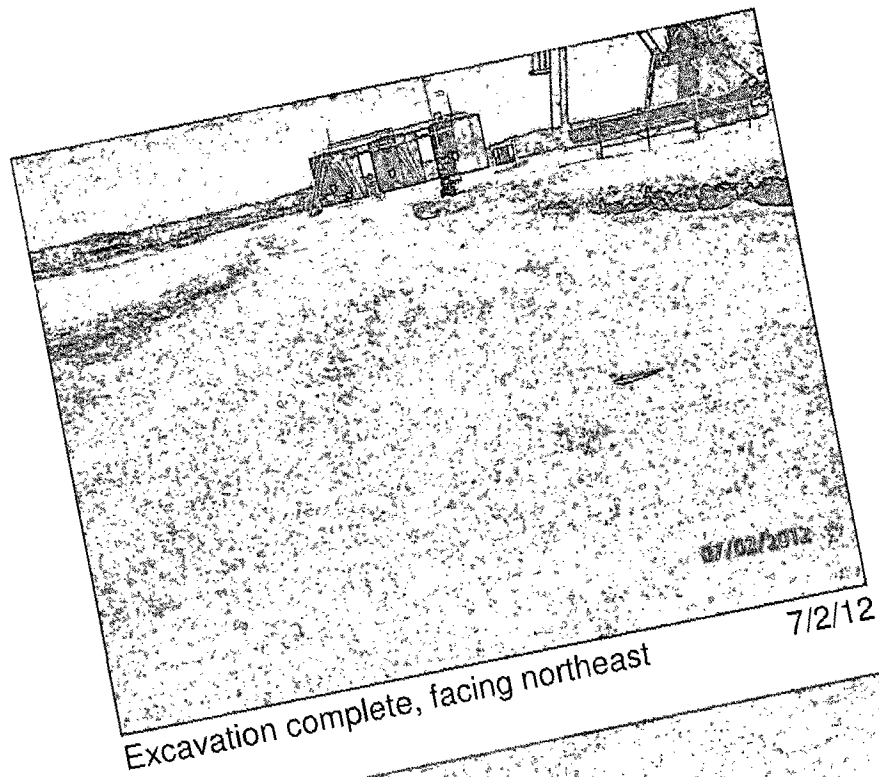
Exporting soil, facing north

6/29/12

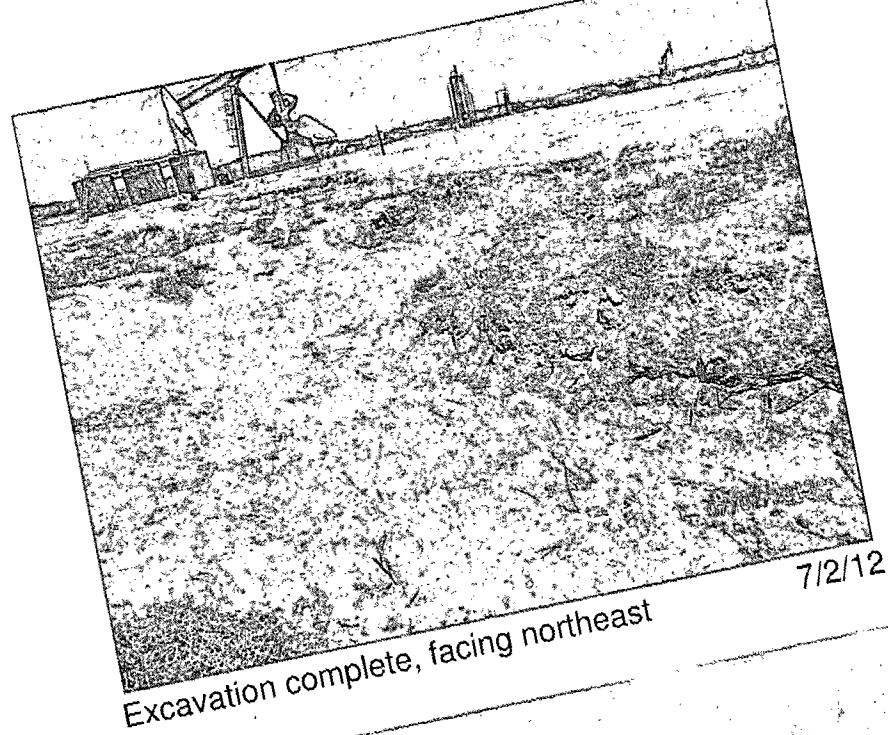


Excavating pasture, facing northeast

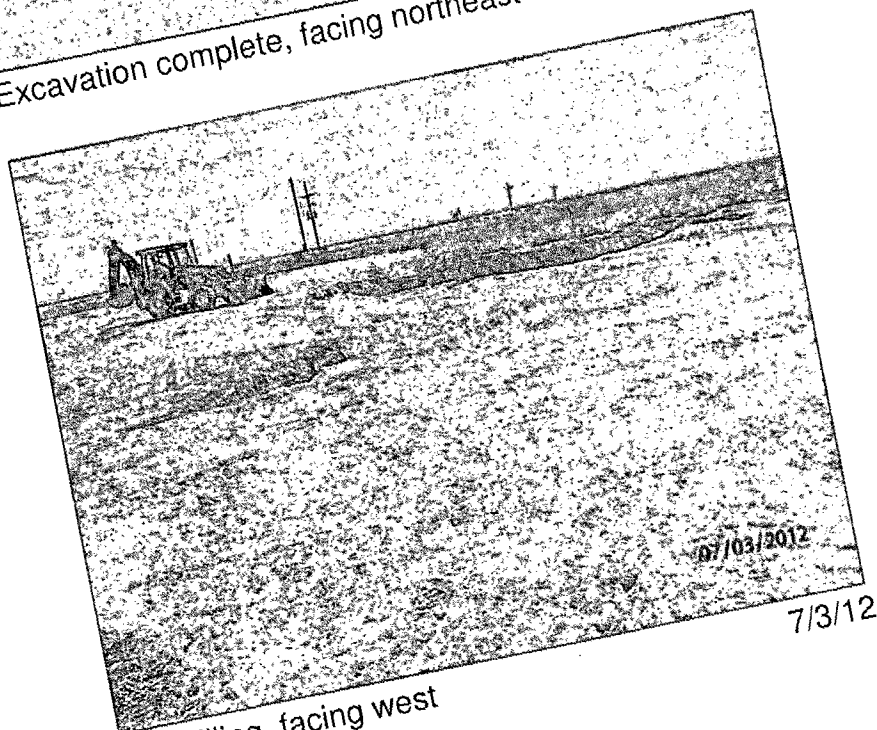
6/29/12



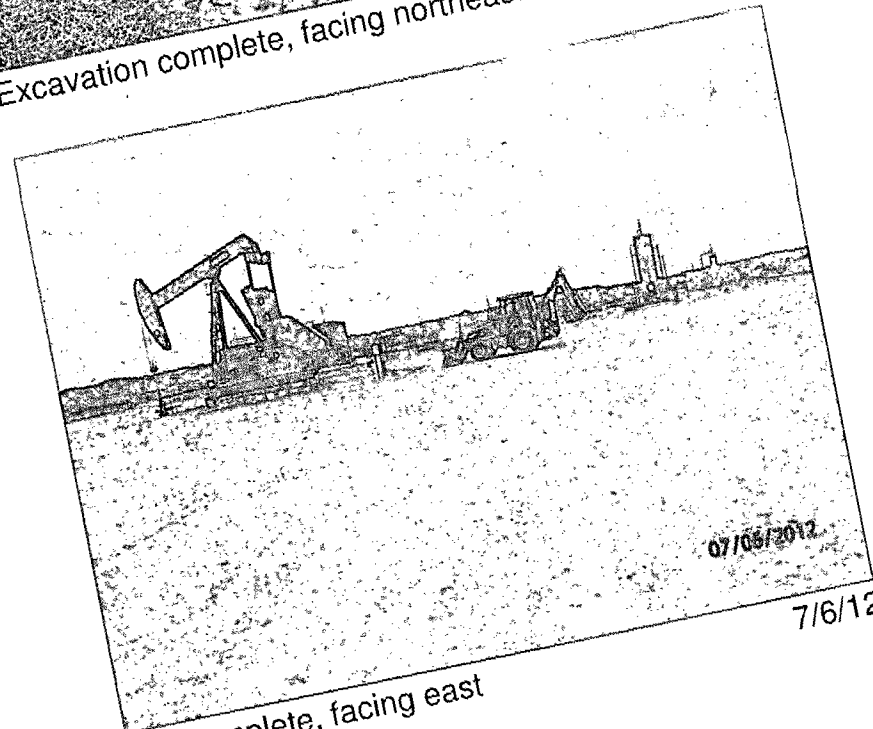
Excavation complete, facing northeast  
7/2/12



Excavation complete, facing northeast  
7/2/12



Backfilling, facing west  
7/3/12



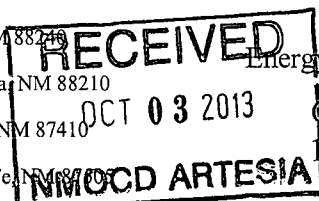
Site complete, facing east  
7/6/12

# Appendix D

Final 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.	(432) 631-6982
Facility Name	Roadrunner Federal #1	Facility Type	Production Well
Surface Owner	BLM	Mineral Owner	State
		API No.	30-015-36440

### LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
J	5	17S	31E	1650	FSL	1650	FEL	Eddy

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

### NATURE OF RELEASE

Type of Release	Oil/Water	Volume of Release	22 bbls	Volume Recovered	5 bbls
Source of Release	1/4" valve	Date and Hour of Occurrence	6/9/2012	Date and Hour of Discovery	6/9/2012
Was Immediate Notice Given?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom?	Mike Bratcher		
By Whom?	Natalie Gladden	Date and Hour	6/15/2012 1:08 pm		
Was a Watercourse Reached?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.			
If a Watercourse was Impacted, Describe Fully.*					
Describe Cause of Problem and Remedial Action Taken.* 1/4" valve on pumping tee was opened by cattle rubbing against it. Valve handle has been removed. Vacuum trucks were called in to recover standing fluids.					
Describe Area Affected and Cleanup Action Taken.* The leak affected a total area of 3,602 square feet including the well pad and 582 square feet of pasture land. Samples were collected and sent to a commercial lab for chloride and TPH analyses. The well pad leak area was excavated to 1.5 ft. and the pasture leak area was excavated to 1 ft. Impacted soils were removed to a NMOCD approved disposal facility. The well pad leak area was backfilled with clean imported caliche and leveled. The pasture excavation was backfilled with clean imported soil 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>		OIL CONSERVATION DIVISION			
Printed Name: Bruce Baker		Approved by District Supervisor:			
Title: Environmental Tech		Approval Date:		Expiration Date:	
E-mail Address: larry.baker@apachecorp.com		Conditions of Approval:		Attached <input type="checkbox"/>	
Date: 8-30-13		Phone: (432) 631-6982			

\* Attach Additional Sheets If Necessary