

District I
625 N. French Dr., Hobbs, NM 88240
District II
301 W. Grand Avenue, Artesia, NM 88210
District III
000 Rio Brazos Road, Aztec, NM 87410
District IV
220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Form C-141
Revised October 10, 2003

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

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

Release Notification and Corrective Action

OPERATOR

Initial Report Final Report

Name of Company	Apache Corp.	Contact	Natalie Gladden
Address	P.O. Box 1849, Eunice, NM, 88231	Telephone No.	(575) 390-4186
Facility Name	NEDU Pilot Project Battery #1 (NEDU #165)	Facility Type	Production Facility
Surface Owner	McCasland	Mineral Owner	State of NM
		Lease No.	30-025-39915

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
D	2	21S	37E	1800	FNL	125	FWL	Lea

Latitude _____ Longitude _____

NATURE OF RELEASE

Type of Release	Produced water	Volume of Release	387 bbl	Volume Recovered	0 bbl
Source of Release	Injection line/junction box	Date and Hour of Occurrence	9/12/11	Date and Hour of Discovery	9/12/11
Was Immediate Notice Given?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom?	Geoffrey Leking		
By Whom?	Natalie Gladden	Date and Hour	9/12/11 343 pm		
Was a Watercourse Reached?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.			

If a Watercourse was Impacted, Describe Fully.*
DTW = 56'

Describe Cause of Problem and Remedial Action Taken.*
Injection line busted loose from the tee inside the junction box. Line was repaired.

Describe Area Affected and Cleanup Action Taken.*
The leak affected the pipeline right-of-way and an area of pasture land totaling 8,527 sq. ft. Impacted soils were removed to a NMOCD approved disposal facility. The excavation was completed from 6 ft. to 9 ft. deep. The west wall of the excavation extended to just within the affected area due to the proximity of an Apache pipeline. Representative soil samples were collected from the excavations and sent to a commercial laboratory for chloride analysis. The excavation was backfilled with clean 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>Natalie Gladden</i>	OIL CONSERVATION DIVISION	
Printed Name: Natalie Gladden	<i>Geoffrey Leking</i> Approved by District Supervisor: Environmental Specialist	
Title: EH&S Environmental Tech	Approval Date: <i>11/9/12</i>	Expiration Date: -
E-mail Address: Natalie.gladden@apachecorp.com	Conditions of Approval: -	Attached <input type="checkbox"/>
Date: <i>11/9/12</i> Phone: (575) 390-4186	11RP-6-14-3083	

Attach Additional Sheets If Necessary

JUN 17 2014
NSAD 1416 456 132 *R*



EXPLORING WHAT'S POSSIBLE

APACHE CORPORATION

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

NEDU Pilot Project Battery #1

Closure Report

API 30-025-39915

Release Date: September 12, 2011

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

Rice Environmental Consulting & Safety

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

May 16, 2012

Geoffrey Leking
New Mexico Energy, Minerals, & Natural Resources
Oil Conservation Division, Environmental Bureau – District 1
1625 N. French Dr.
Hobbs, NM 88240-9273

**RE: TERMINATION REQUEST
Apache – NEDU Pilot Project Battery #1 AD
UL/D sec. 2 T21S R37E
API No. 30-025-39915**

Mr. Leking:

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

Background and Previous Work

The site is an accidental discharge of produced water associated with the NEDU Pilot Project Battery #1. The injection line disconnected from a T joint within a junction box and released fluids into the Apache pipeline right-of-way and an area of pasture land located southeast of the junction. The line connection was repaired and NMOCD was immediately notified. An initial form C-141 was submitted by Apache Corporation on September 18, 2011 (Appendix A). The site is located north of Eunice, in unit letter 'D' of section 2, T21S, R37E in Lea County, New Mexico.

On September 9, 2011, RECS personnel initiated work on the NEDU Pilot Project Battery #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 analyses (Appendix C). Chloride ranged from 880 ppm (parts per million or mg/kg) to 2,120 ppm. TPH ranged from 49.8 ppm to 701 ppm.

The pasture area to the southeast was excavated to 9' below ground surface (bgs). On September 20, 2011, RECS personnel collected and field tested final samples from the excavation (Figure 2). The junction area and right-of-way to the south were excavated to 6' bgs. On September 21-22, 2011, RECS personnel similarly collected and field tested final samples from the excavation (Figure 3). Representative grab samples from the floor and walls of both excavations were submitted to a laboratory for chloride analysis. The floor samples did not exceed 176 ppm. The west wall of the excavations remained narrowly inside the affected area in order to maintain a

safe working distance from the Apache pipeline running to the south. Consequently, the west wall samples exceeded 48.0 ppm at four (4) sample points. In these 4 west wall samples, chloride ranged from 608 ppm to 3,920 ppm (Appendix C).

Impacted soils were removed from the excavation and transported to a NMOCD approved disposal facility. The excavation was backfilled with clean soil (<16.0 ppm chloride, Appendix C) and contoured to the surrounding area. See Appendix B for photographs of field activities.

Conclusion

According to the New Mexico Office of the State Engineer and the United States Geological Survey (USGS), depth to groundwater in the area approximated 56 ft bgs (Appendix D). Due to Apache's removal of all impacted soils possible while safely working in proximity to a pipeline, Apache submits the final C-141 (Appendix E) and respectfully requests the closure of the regulatory file for this site.

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

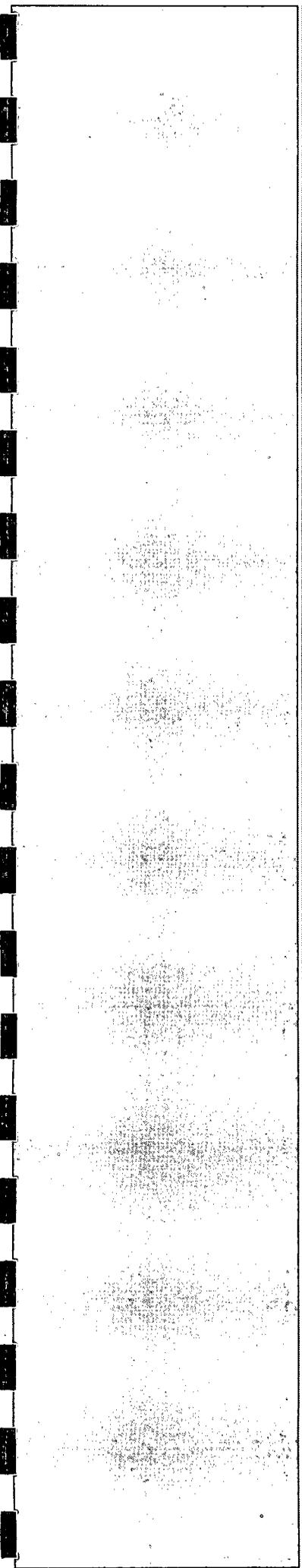
Sincerely,



Bruce Baker
Head Foreman
RECS
(575) 631-5157

Attachments:

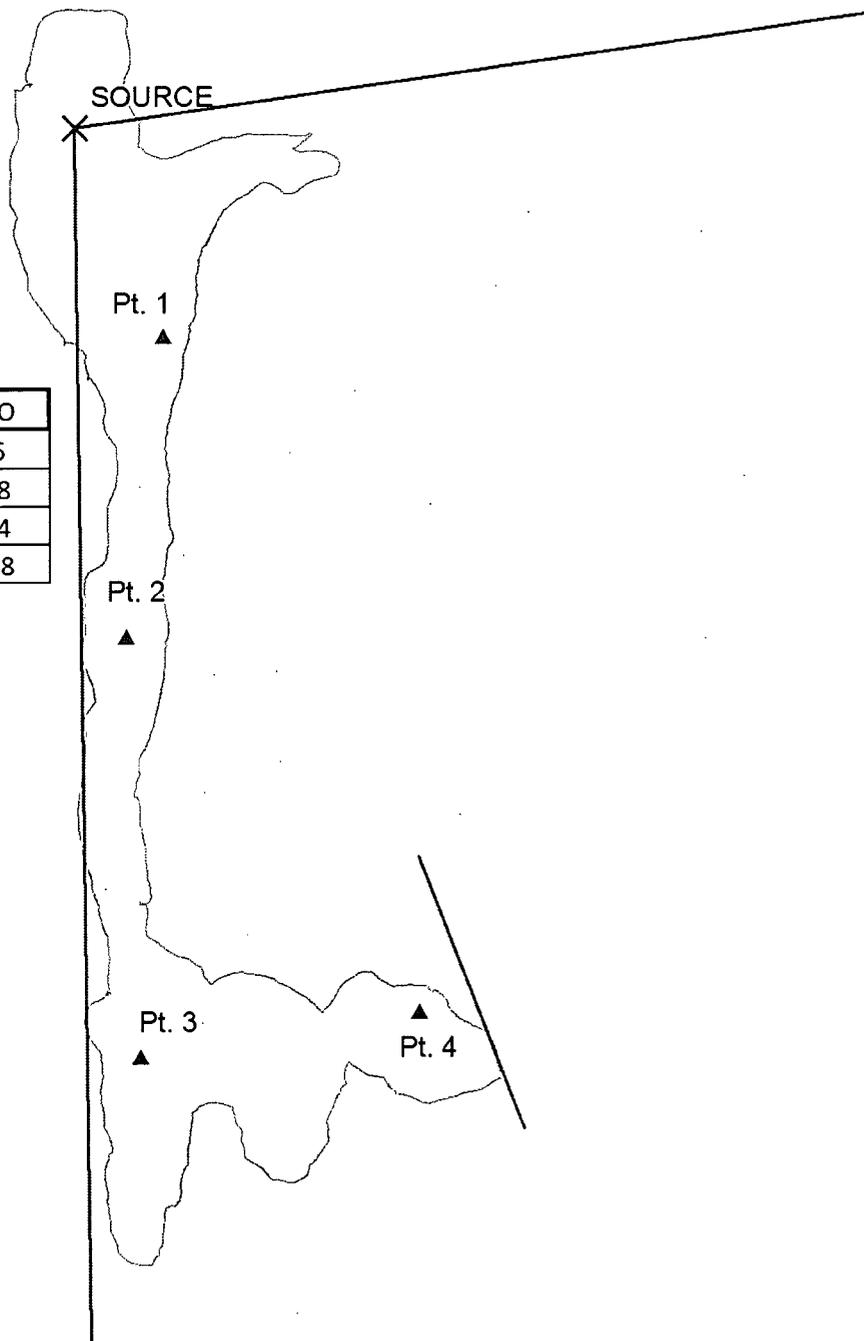
- Figure 1: Site Plat with Initial Sampling Lab Data
- Figure 2: Site Plat with Southeast Excavation Lab Data
- Figure 3: Site Plat with ROW Excavation Lab Data
- Appendix A: Initial Form C-141
- Appendix B: Site Photographs
- Appendix C: Laboratory Results
- Appendix D: Groundwater Study
- Appendix E: Final Form C-141



Figures

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

Site Plat



INITIAL SAMPLING LAB DATA

Sample Description	Cl-	GRO	DRO
Point #1 Surface	880	<10.0	76
Point #2 Surface	1520	13	688
Point #3 Surface	2120	62.5	284
Point #4 Surface	1420	<10.0	49.8

Legend

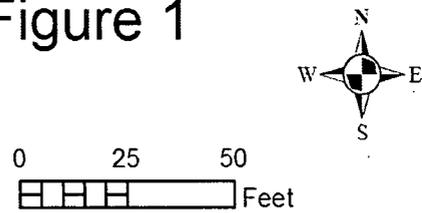
- ▲ SAMPLE POINT
- × SOURCE
- APACHE PIPELINE
- PLAINS PIPELINE
- IMPACT AREA (8,527 sq ft)
- Cl- INITIAL SAMPLING LAB DATA



APACHE NEDU PILOT PROJECT BATTERY 1 AD

UL/H SECTION 3
T-21-S R-37-E

Figure 1



GPS date: 9/12/11 KN
 Drawing date: 9/26/11
 Drafted by: T. Grieco, L. Weinheimer

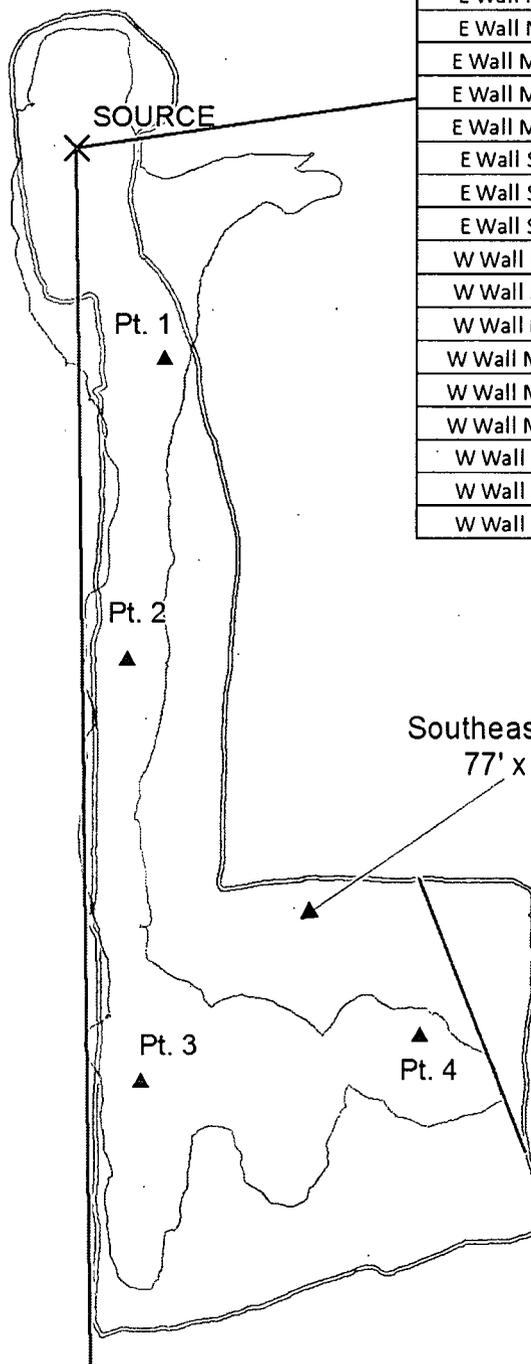
Site Plat

SOUTHEAST EXCAVATION LAB DATA

Sample Description	Cl-
NE Bottom	16
NW Bottom	<16
SE Bottom	16
SW Bottom	16
Middle Bottom	176
N Wall E. End @ 3'	<16
N Wall E. End @ 6'	<16
N Wall E. End @ 9'	48
N Wall Middle @ 3'	<16
N Wall Middle @ 6'	<16
N Wall Middle @ 9'	<16
N Wall West End @ 3'	<16
N Wall West End @ 6'	<16
N Wall West End @ 9'	<16
S Wall E End @ 3'	<16
S Wall E End @ 6'	<16
S Wall E End @ 9'	16
S Wall Middle @ 3'	<16
S Wall Middle @ 6'	<16
S Wall Middle @ 9'	<16
S Wall W End @ 3'	<16
S Wall W End @ 6'	<16
S Wall W End @ 9'	<16

SOUTHEAST EXCAVATION LAB DATA

Sample Description	Cl-
E Wall N End @ 3'	<16
E Wall N End @ 6'	<16
E Wall N End @ 9'	<16
E Wall Middle @ 3'	16
E Wall Middle @ 6'	<16
E Wall Middle @ 9'	16
E Wall S End @ 3'	<16
E Wall S End @ 6'	<16
E Wall S End @ 9'	16
W Wall N End @ 3'	704
W Wall N End @ 6'	576
W Wall N End @ 9'	448
W Wall Middle @ 3'	1040
W Wall Middle @ 6'	3920
W Wall Middle @ 9'	2320
W Wall S End @ 3'	16
W Wall S End @ 6'	16
W Wall S End @ 9'	16



Legend

- ▲ SAMPLE POINT
- × SOURCE
- APACHE PIPELINE
- PLAINS PIPELINE
- EXCAVATION
- IMPACT AREA (8,527 sq ft)
- CI- INITIAL SAMPLING LAB DATA



APACHE NEDU PILOT PROJECT BATTERY 1 AD

UL/H SECTION 3
T-21-S R-37-E

Figure 2

0 25 50

 Feet

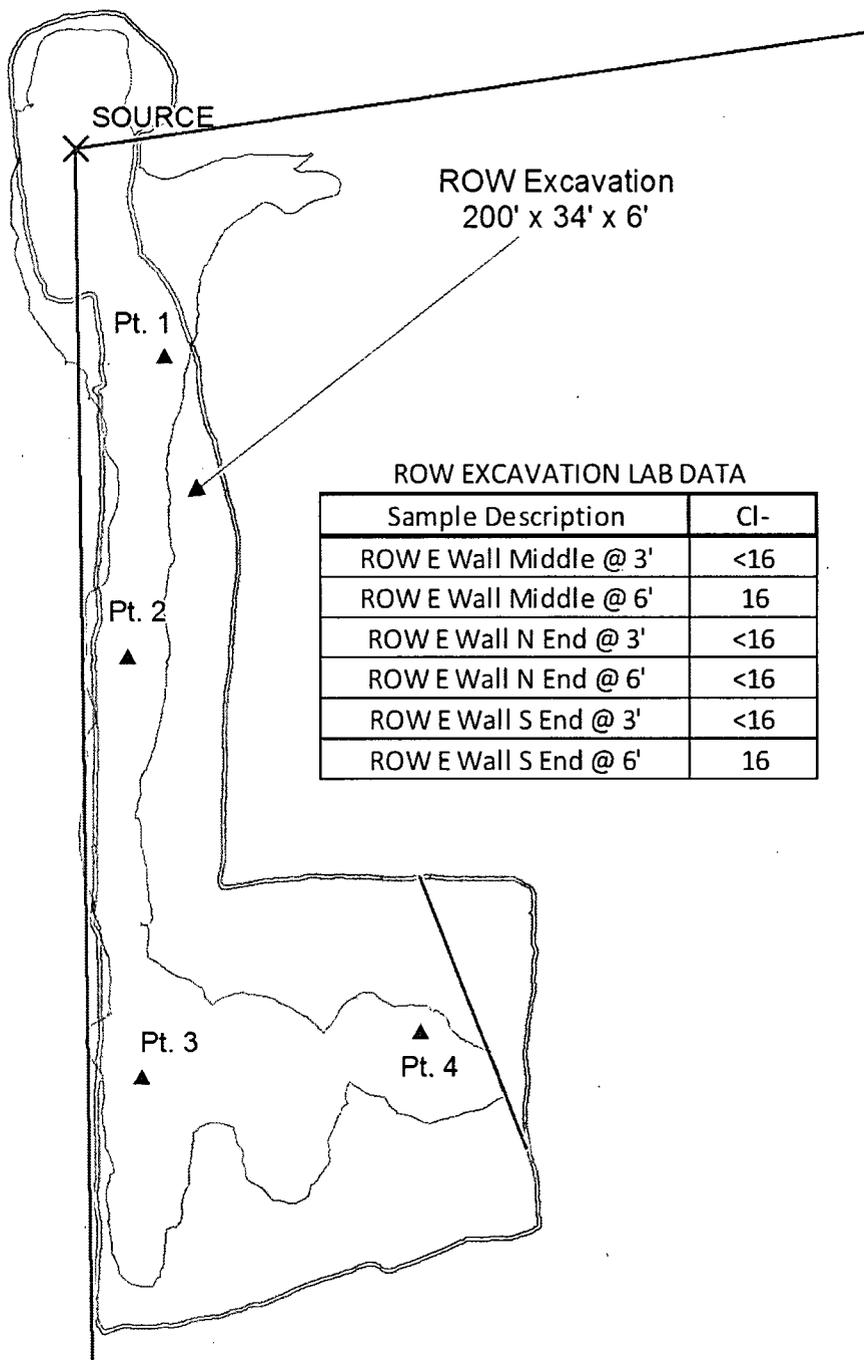


GPS date: 9/12/11 KN
 Drawing date: 9/26/11
 Drafted by: T. Grieco, L. Weinheimer

Site Plat

ROW EXCAVATION LAB DATA

Sample Description	Cl-
ROW N Wall Middle 3'	<16
ROW N Wall Middle 6'	<16
ROW N Bottom	<16
ROW S Bottom	16
ROW Middle Bottom	16
ROW W Wall S End 3'	992
ROW W Wall S End 6'	896
ROW W Wall Middle 3'	608
ROW W Wall Middle 6'	1170
ROW W Wall N End 3'	<16
ROW W Wall N End 6'	64



ROW EXCAVATION LAB DATA

Sample Description	Cl-
ROW E Wall Middle @ 3'	<16
ROW E Wall Middle @ 6'	16
ROW E Wall N End @ 3'	<16
ROW E Wall N End @ 6'	<16
ROW E Wall S End @ 3'	<16
ROW E Wall S End @ 6'	16

Legend

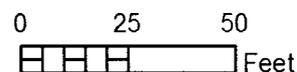
- ▲ SAMPLE POINT
- × SOURCE
- APACHE PIPELINE
- PLAINS PIPELINE
- EXCAVATION
- IMPACT AREA (8,527 sq ft)
- Cl- INITIAL SAMPLING LAB DATA



APACHE NEDU PILOT PROJECT BATTERY 1 AD

UL/H SECTION 3
T-21-S R-37-E

Figure 3



GPS date: 9/12/11 KN
Drawing date: 9/26/11
Drafted by: T. Grieco, L. Weinheimer

Appendix A

Initial Form C-141

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

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
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 NEDU Pilot Project Bty #1(NEDU #165)	Facility Type Production Facility
Surface Owner McCasland	Mineral Owner NM
API No. 30-025-39915	

LOCATION OF RELEASE

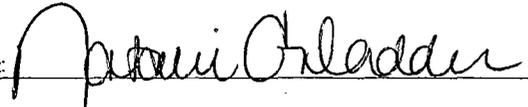
Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
D	2	21S	37E	1800'	FNL	125'	FWL	Lea

Latitude _____ Longitude _____

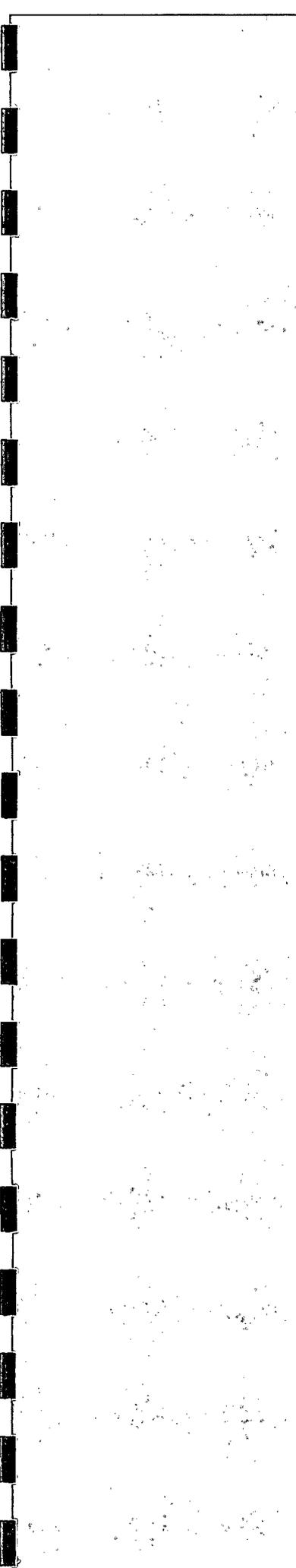
NATURE OF RELEASE

Type of Release Produced Water	Volume of Release 387	Volume Recovered 0
Source of Release Injection line/junction box	Date and Hour of Occurrence 9/12/11	Date and Hour of Discovery 09/12/11
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Geoffrey Leking	
By Whom? Natalie Gladden	Date and Hour 9/12/11 3:43pm	
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.* Injection line busted loose from the tee inside the junction box. Line was repaired.		
Describe Area Affected and Cleanup Action Taken.* NMOCD Guidelines will be followed to closure.		

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: 	OIL CONSERVATION DIVISION	
Printed Name: Natalie Gladden	Approved by Environmental Specialist:	
Title: EHS Environmental Tech	Approval Date:	Expiration Date:
E-mail Address: natalie.gladden@apachecorp.com	Conditions of Approval:	Attached <input type="checkbox"/>
Date: 9/18/11 Phone: 575-390-4186		

* Attach Additional Sheets If Necessary



Appendix B

Site Photographs

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

NEDU Pilot Project Battery #1

Unit Letter D, Section 2, T21S R37E



Initial release, facing south

9/12/2011



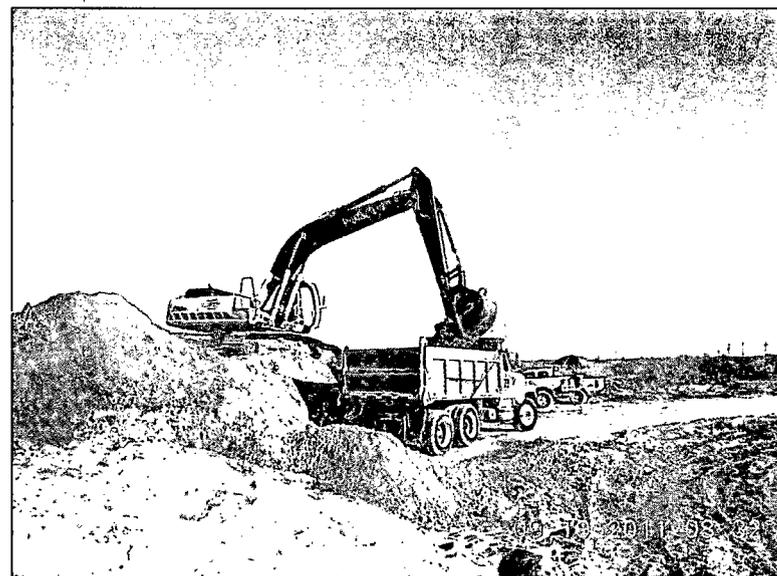
Initial release, south end, facing west

9/12/2011



Initial release, facing north

9/12/2011

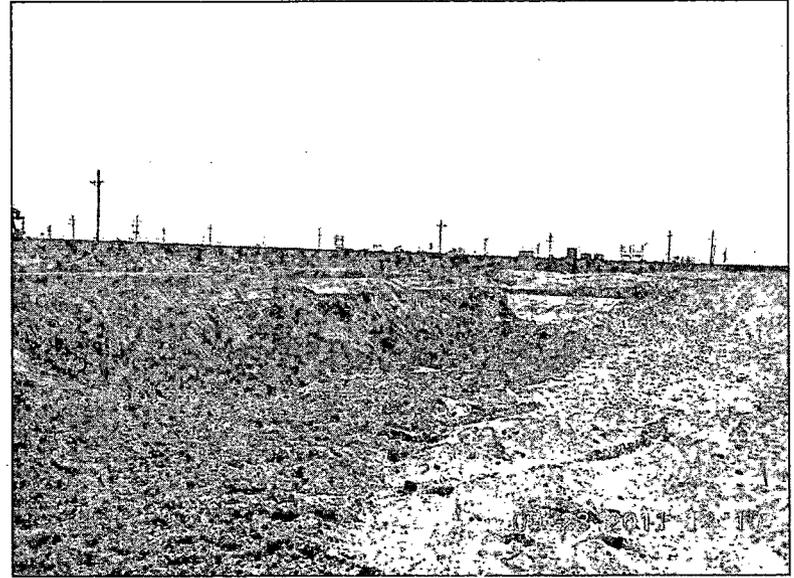


Exporting soil, facing north

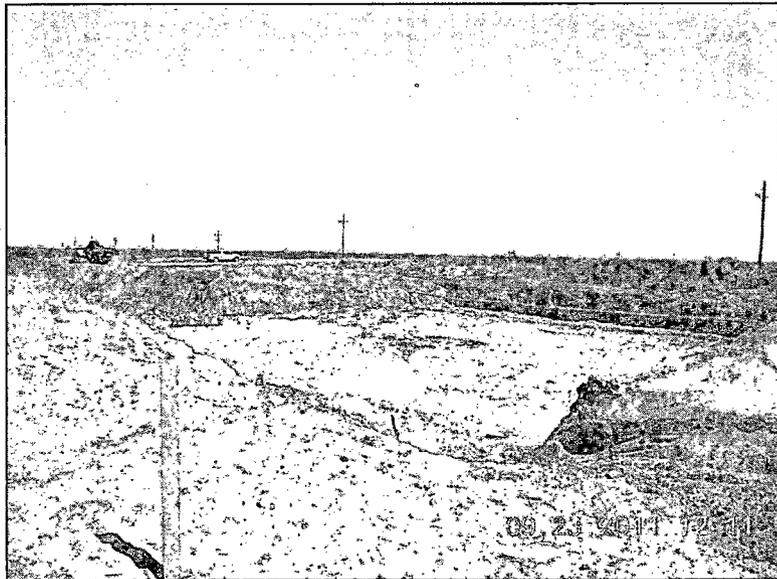
9/19/2011



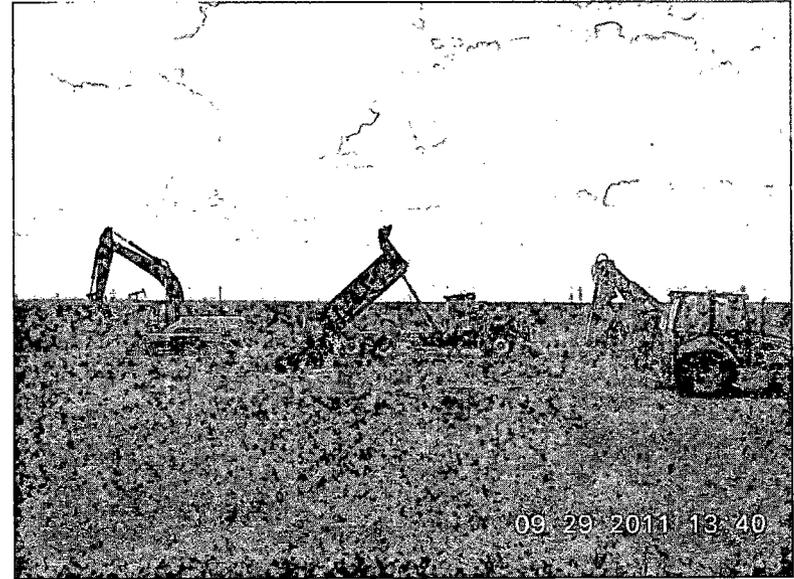
Final excavation at source, facing west 9/22/2011



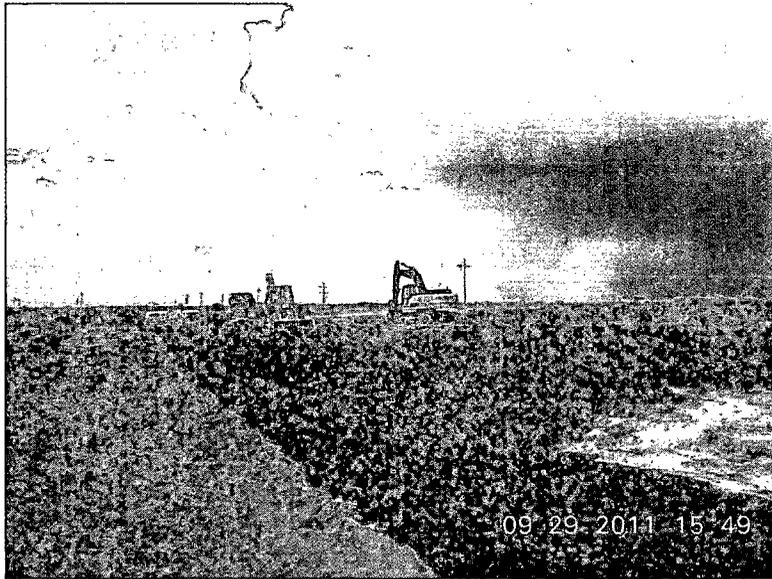
Final excavation, facing south 9/23/2011



Final excavation, facing north 9/23/2011

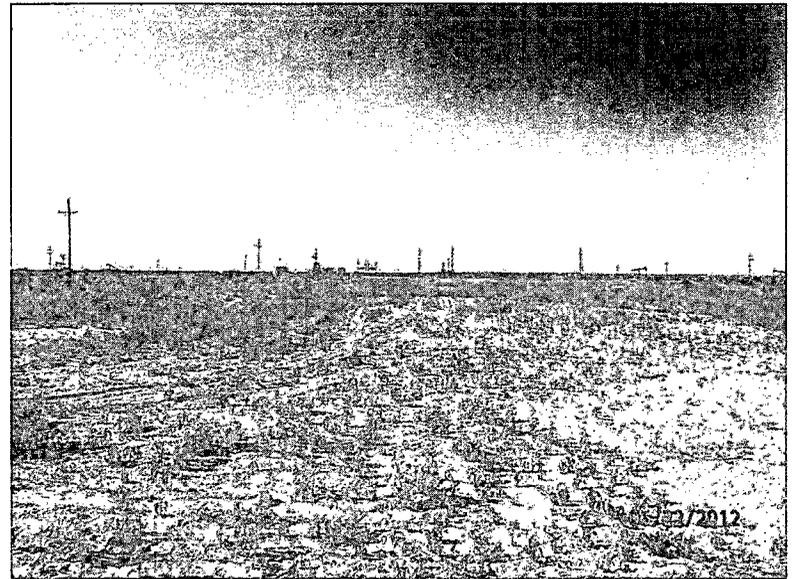


Importing backfill, facing west 9/29/2011



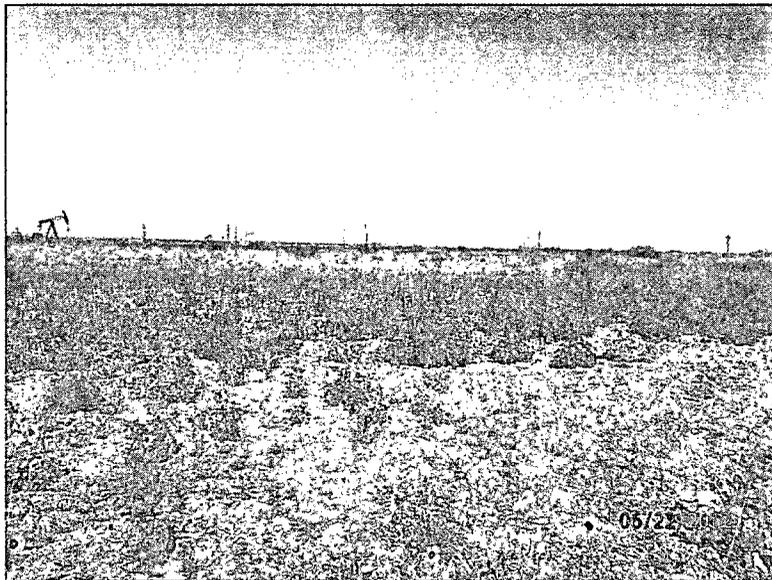
Backfilling excavation, facing north

9/29/2011



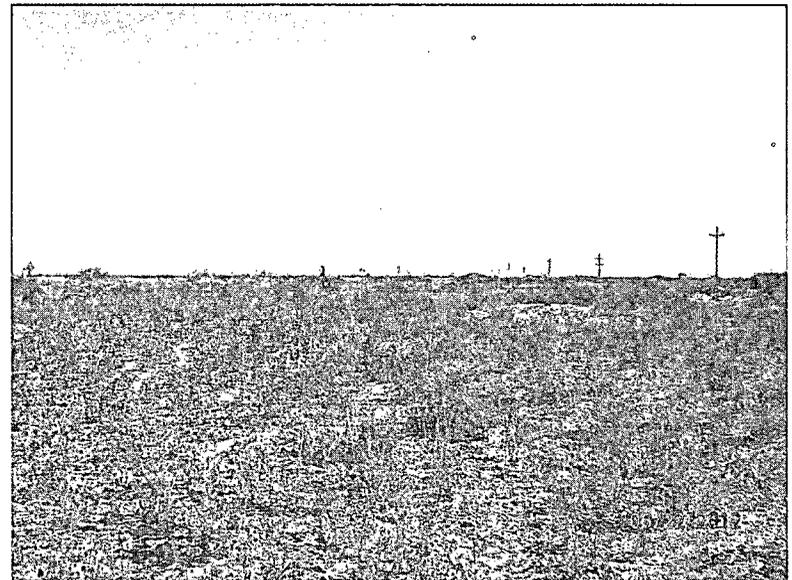
Site complete, facing south

6/22/2012



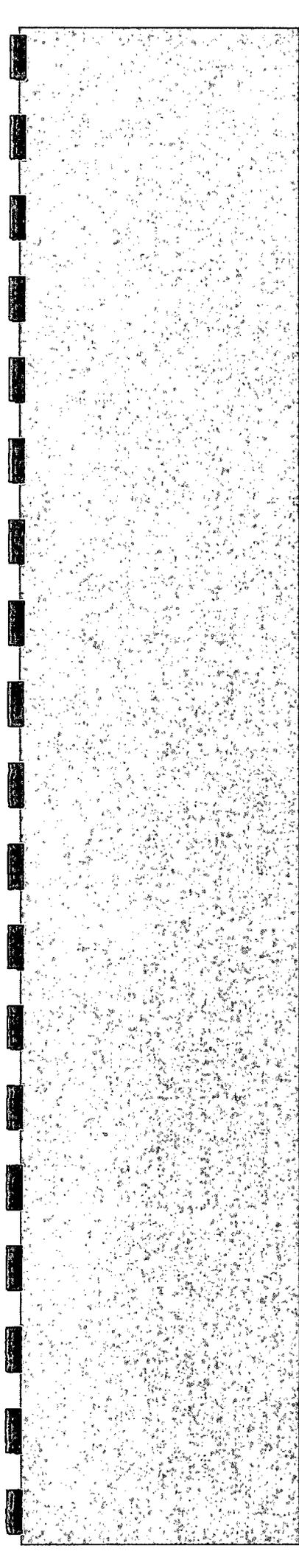
Site complete, facing east

6/22/2012



Site complete, facing north

6/22/2012



Appendix C

Laboratory Results

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

Analytical Results For:

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

Received:	09/12/2011	Sampling Date:	09/12/2011
Reported:	09/19/2011	Sampling Type:	Soil
Project Name:	NEDU PILOT PROJECT BATTERY #1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: POINT #1 SURFACE (H101936-01)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	880	16.0	09/13/2011	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	09/17/2011	ND	182	90.8	200	0.533		
DRO >C10-C28	76.0	10.0	09/17/2011	ND	183	91.7	200	1.13		

Surrogate: 1-Chlorooctane 122 % 55.5-154
 Surrogate: 1-Chlorooctadecane 116 % 57.6-158

Sample ID: POINT #2 SURFACE (H101936-02)

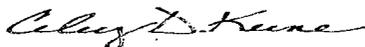
Chloride, SM4500CI-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	1520	16.0	09/13/2011	ND	432	108	400	3.64		
TPH 8015M		mg/kg		Analyzed By: ab						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	13.0	10.0	09/17/2011	ND	182	90.8	200	0.533		
DRO >C10-C28	688	10.0	09/17/2011	ND	183	91.7	200	1.13		

Surrogate: 1-Chlorooctane 116 % 55.5-154
 Surrogate: 1-Chlorooctadecane 104 % 57.6-158

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

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

Received:	09/12/2011	Sampling Date:	09/12/2011
Reported:	09/19/2011	Sampling Type:	Soil
Project Name:	NEDU PILOT PROJECT BATTERY #1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: POINT #3 SURFACE (H101936-03)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	2120	16.0	09/13/2011	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	62.5	10.0	09/17/2011	ND	182	90.8	200	0.533		
DRO >C10-C28	284	10.0	09/17/2011	ND	183	91.7	200	1.13		

Surrogate: 1-Chlorooctane 125 % 55.5-154
 Surrogate: 1-Chlorooctadecane 118 % 57.6-158

Sample ID: POINT #4 SURFACE (H101936-04)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	1420	16.0	09/13/2011	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	09/17/2011	ND	182	90.8	200	0.533		
DRO >C10-C28	49.8	10.0	09/17/2011	ND	183	91.7	200	1.13		

Surrogate: 1-Chlorooctane 116 % 55.5-154
 Surrogate: 1-Chlorooctadecane 114 % 57.6-158

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

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

Received:	09/22/2011	Sampling Date:	09/20/2011
Reported:	09/26/2011	Sampling Type:	Soil
Project Name:	NEDU PILOT PROJECT BATTERY #1	Sampling Condition:	Cool & Intact
Project Number:	SE EXCAVATION	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: NE BOTTOM (H102023-01)

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	09/23/2011	ND	432	108	400	0.00	

Sample ID: NW BOTTOM (H102023-02)

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	09/23/2011	ND	432	108	400	0.00	

Sample ID: SE BOTTOM (H102023-03)

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	09/23/2011	ND	432	108	400	0.00	

Sample ID: SW BOTTOM (H102023-04)

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	09/23/2011	ND	432	108	400	0.00	

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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:	09/22/2011	Sampling Date:	09/20/2011
Reported:	09/26/2011	Sampling Type:	Soil
Project Name:	NEDU PILOT PROJECT BATTERY #1	Sampling Condition:	Cool & Intact
Project Number:	SE EXCAVATION	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: MIDDLE BOTTOM (H102023-05)

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	176	16.0	09/23/2011	ND	432	108	400	0.00		

Sample ID: N WALL E. END @ 3' (H102023-06)

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	09/23/2011	ND	432	108	400	3.64		

Sample ID: N WALL E END @ 6' (H102023-07)

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	09/23/2011	ND	432	108	400	3.64		

Sample ID: N WALL E END @ 9' (H102023-08)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	48.0	16.0	09/23/2011	ND	432	108	400	3.64		

Sample ID: N WALL MIDDLE @ 3' (H102023-09)

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	09/23/2011	ND	432	108	400	3.64		

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Analytical Results For:

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

Received:	09/22/2011	Sampling Date:	09/20/2011
Reported:	09/26/2011	Sampling Type:	Soil
Project Name:	NEDU PILOT PROJECT BATTERY #1	Sampling Condition:	Cool & Intact
Project Number:	SE EXCAVATION	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: N WALL MIDDLE @6' (H102023-10)

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	09/23/2011	ND	432	108	400	3.64	

Sample ID: N WALL MIDDLE @ 9' (H102023-11)

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	09/23/2011	ND	432	108	400	3.64	

Sample ID: N WALL W END @ 3' (H102023-12)

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	09/23/2011	ND	432	108	400	3.64	

Sample ID: N WALL W END @ 6' (H102023-13)

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	09/23/2011	ND	432	108	400	3.64	

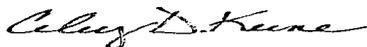
Sample ID: N WALL W END @ 9' (H102023-14)

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	09/23/2011	ND	432	108	400	3.64	

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Analytical Results For:

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

Received:	09/22/2011	Sampling Date:	09/20/2011
Reported:	09/26/2011	Sampling Type:	Soil
Project Name:	NEDU PILOT PROJECT BATTERY #1	Sampling Condition:	Cool & Intact
Project Number:	SE EXCAVATION	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: S WALL E END @ 3' (H102023-15)

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	09/23/2011	ND	432	108	400	3.64		

Sample ID: S WALL E END @ 6' (H102023-16)

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	09/23/2011	ND	432	108	400	3.64		

Sample ID: S WALL E END @ 9' (H102023-17)

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	09/23/2011	ND	432	108	400	3.64		

Sample ID: S WALL MIDDLE @ 3' (H102023-18)

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	09/23/2011	ND	432	108	400	3.64		

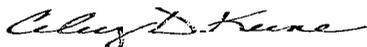
Sample ID: S WALL MIDDLE @ 6' (H102023-19)

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	09/23/2011	ND	432	108	400	3.64		

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Analytical Results For:

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

Received:	09/22/2011	Sampling Date:	09/20/2011
Reported:	09/26/2011	Sampling Type:	Soil
Project Name:	NEDU PILOT PROJECT BATTERY #1	Sampling Condition:	Cool & Intact
Project Number:	SE EXCAVATION	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: S WALL MIDDLE @ 9' (H102023-20)

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	09/23/2011	ND	432	108	400	3.64		

Sample ID: S WALL W END @ 3' (H102023-21)

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	09/23/2011	ND	432	108	400	3.64		

Sample ID: S WALL W END @ 6' (H102023-22)

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	09/23/2011	ND	432	108	400	3.64		

Sample ID: S WALL W END @ 9' (H102023-23)

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	09/23/2011	ND	432	108	400	3.64		

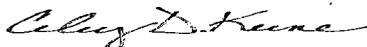
Sample ID: E WALL N END @ 3' (H102023-24)

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	09/23/2011	ND	432	108	400	3.64		

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Analytical Results For:

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

Received:	09/22/2011	Sampling Date:	09/20/2011
Reported:	09/26/2011	Sampling Type:	Soil
Project Name:	NEDU PILOT PROJECT BATTERY #1	Sampling Condition:	Cool & Intact
Project Number:	SE EXCAVATION	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: E WALL N END @ 6' (H102023-25)

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	09/23/2011	ND	432	108	400	3.64		

Sample ID: E WALL N END @ 9' (H102023-26)

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	09/23/2011	ND	432	108	400	3.64		

Sample ID: E WALL MIDDLE @ 3' (H102023-27)

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	09/23/2011	ND	432	108	400	3.64		

Sample ID: E WALL MIDDLE @ 6' (H102023-28)

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	09/23/2011	ND	432	108	400	3.64		

Sample ID: E WALL MIDDLE @ 9' (H102023-29)

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	09/23/2011	ND	432	108	400	3.64		

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Analytical Results For:

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

Received:	09/22/2011	Sampling Date:	09/20/2011
Reported:	09/26/2011	Sampling Type:	Soil
Project Name:	NEDU PILOT PROJECT BATTERY #1	Sampling Condition:	Cool & Intact
Project Number:	SE EXCAVATION	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: E WALL S END @ 3' (H102023-30)

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	09/23/2011	ND	432	108	400	3.64		

Sample ID: E WALL S END @ 6' (H102023-31)

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	09/23/2011	ND	432	108	400	3.64		

Sample ID: E WALL S END @ 9' (H102023-32)

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	09/23/2011	ND	432	108	400	3.64		

Sample ID: W WALL N END @ 3' (H102023-33)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	704	16.0	09/23/2011	ND	432	108	400	3.64		

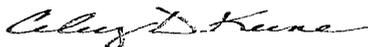
Sample ID: W WALL N END @ 6' (H102023-34)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	576	16.0	09/23/2011	ND	432	108	400	3.64		

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Analytical Results For:

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

Received:	09/22/2011	Sampling Date:	09/20/2011
Reported:	09/26/2011	Sampling Type:	Soil
Project Name:	NEDU PILOT PROJECT BATTERY #1	Sampling Condition:	Cool & Intact
Project Number:	SE EXCAVATION	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: W WALL N END @ 9' (H102023-35)

Chloride, SM4500Cl-B	mg/kg	Analyzed By: AP							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	448	16.0	09/23/2011	ND	432	108	400	3.64	

Sample ID: W WALL MIDDLE @ 3' (H102023-36)

Chloride, SM4500Cl-B	mg/kg	Analyzed By: AP							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1040	16.0	09/23/2011	ND	432	108	400	3.64	

Sample ID: W WALL MIDDLE @ 6' (H102023-37)

Chloride, SM4500Cl-B	mg/kg	Analyzed By: AP							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3920	16.0	09/23/2011	ND	432	108	400	3.64	

Sample ID: W WALL MIDDLE @ 9' (H102023-38)

Chloride, SM4500Cl-B	mg/kg	Analyzed By: AP							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2320	16.0	09/23/2011	ND	432	108	400	3.64	

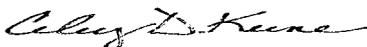
Sample ID: W WALL S END @ 3' (H102023-39)

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	09/23/2011	ND	432	108	400	3.64	

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Analytical Results For:

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

Received:	09/22/2011	Sampling Date:	09/20/2011
Reported:	09/26/2011	Sampling Type:	Soil
Project Name:	NEDU PILOT PROJECT BATTERY #1	Sampling Condition:	Cool & Intact
Project Number:	SE EXCAVATION	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: W WALL S END @ 6' (H102023-40)

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	09/23/2011	ND	432	108	400	3.64	

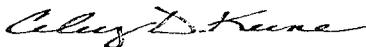
Sample ID: W WALL S END @ 9' (H102023-41)

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	09/23/2011	ND	432	108	400	3.64	

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Celey D. Keene, Lab Director/Quality Manager

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name: Apache		BILL TO		ANALYSIS REQUEST																								
Project Manager: Natalie Gladden		P.O. #:		Chlorides	TPH 8015 M	BTEX	Texas TPH	Complete Cations/Anions	TDS																			
Address:		Company:																										
City: State: NM Zip:		Attn:																										
Phone #: Fax #:		Address:																										
Project #: Project Owner:		City:																										
Project Name: <i>SE Excavation</i>		State: Zip:																										
Project Location: <i>NEDU Pilot Project Btry #1</i>		Phone #:																										
Sampler Name: Kyle Norman		Fax #:																										
FOR LAB USE ONLY																												
Lab I.D.	Sample I.D.	(GRAB OR (C)OMP. # CONTAINERS	MATRIX							PRESERV.			SAMPLING		DATE	TIME												
			GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	ACID/BASE:	ICE / COOL	OTHER:																	
<i>H1D2023</i>																												
<i>1</i>	<i>NE Bottom</i>	<i>G 1</i>			<i>✓</i>								<i>9-20-11</i>	<i>9:00</i>	<i>✓</i>													
<i>2</i>	<i>NW Bottom</i>	<i>G 1</i>			<i>✓</i>								<i>9-20-11</i>	<i>9:05</i>	<i>✓</i>													
<i>3</i>	<i>SE Bottom</i>	<i>G 1</i>			<i>✓</i>								<i>9-20-11</i>	<i>9:10</i>	<i>✓</i>													
<i>4</i>	<i>SW Bottom</i>	<i>G 1</i>			<i>✓</i>								<i>9-20-11</i>	<i>9:15</i>	<i>✓</i>													
<i>5</i>	<i>Middle Bottom</i>	<i>G 1</i>			<i>✓</i>								<i>9-20-11</i>	<i>9:20</i>	<i>✓</i>													
<i>6</i>	<i>N wall End @ 3'</i>	<i>G 1</i>			<i>✓</i>								<i>9-20-11</i>	<i>9:25</i>	<i>✓</i>													
<i>7</i>	<i>N wall End @ 6'</i>	<i>G 1</i>			<i>✓</i>								<i>9-20-11</i>	<i>9:30</i>	<i>✓</i>													
<i>8</i>	<i>N wall End @ 9'</i>	<i>G 1</i>			<i>✓</i>								<i>9-20-11</i>	<i>9:35</i>	<i>✓</i>													
<i>9</i>	<i>N wall Middle @ 3'</i>	<i>G 1</i>			<i>✓</i>								<i>9-20-11</i>	<i>9:40</i>	<i>✓</i>													
<i>10</i>	<i>N wall Middle @ 6'</i>	<i>G 1</i>			<i>✓</i>								<i>9-20-11</i>	<i>9:45</i>	<i>✓</i>													

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Relinquished By: <i>[Signature]</i>		Date: <i>9-20-11</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>9:40</i>	Received By: <i>[Signature]</i>		Fax Result: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Add'l Fax #:
Delivered By: (Circle One)		Sample Condition		CHECKED BY: (Initials)		
Sampler - UPS - Bus - Other: <i>UPS</i>		Cool <input checked="" type="checkbox"/> Intact <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/>		<i>[Initials]</i>		
REMARKS: email results Natalie.Gladden@usa.apachecorp.com; Zconder@rice-ecs.com; Bbaker@rice-ecs.com; hconder@rice-ecs.com; Lweinheimer@rice-ecs.com <i>hnorman@rice-ecs.com</i>						

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

#26



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240
 (505) 393-2326 FAX (505) 393-2476

Company Name: <i>Apache</i>		BILL-TO				ANALYSIS REQUEST													
Project Manager: <i>Natalie Gladden</i>		P.O. #:				Chlorides													
Address:		Company:																	
City: State: Zip:		Attn:																	
Phone #: Fax #:		Address:																	
Project #: Project Owner:		City:																	
Project Name: <i>SE Excavation</i>		State: Zip:																	
Project Location: <i>NEDU Pilot Project Btry #1</i>		Phone #:																	
Sampler Name: <i>Hyle Norman</i>		Fax #:																	
FOR LAB USE ONLY																			
Lab I.D.	Sample I.D.	(Q)RAB OR (Q)OMP	# CONTAINERS	MATRIX					PRESERV.			SAMPLING							
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	ACID/BASE:	ICE / COOL	OTHER:	DATE	TIME					
<i>A102023</i>	<i>411 Wall Sand 29'</i>	<i>5</i>	<i>1</i>			<input checked="" type="checkbox"/>							<i>9-20-11</i>	<i>2:05</i>					

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Relinquished By: <i>[Signature]</i>	Date: <i>9-20-11</i>	Received By: <i>[Signature]</i>	Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Phone #:
	Time: <i>5:40</i>		Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Fax #:
Relinquished By:	Date:	Received By:	REMARKS: <i>Natalie.Gladden@usa.apachecorp.com</i> <i>Bacher@rice-eos.com</i> <i>Lweinheimer@rice-eos.com</i>	
Delivered By: (Circle One)	Sample Condition	CHECKED BY: <i>[Signature]</i>		
Sampler - UPS - Bus - Other:	Cool Intact <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> No <input type="checkbox"/> No			

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#26

Analytical Results For:

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

Received:	09/22/2011	Sampling Date:	09/21/2011
Reported:	09/23/2011	Sampling Type:	Soil
Project Name:	NEDU PILOT PROJECT BATTERY #1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: ROW N WALL MIDDLE 3' (H102022-01)

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	09/22/2011	ND	432	108	400	0.00		

Sample ID: ROW N WALL MIDDLE 6' (H102022-02)

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	09/22/2011	ND	432	108	400	0.00		

Sample ID: ROW N BOTTOM (H102022-03)

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	09/22/2011	ND	432	108	400	0.00		

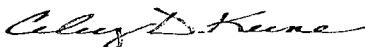
Sample ID: ROW SOUTH BOTTOM (H102022-04)

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	09/22/2011	ND	432	108	400	0.00		

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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:	09/22/2011	Sampling Date:	09/21/2011
Reported:	09/23/2011	Sampling Type:	Soil
Project Name:	NEDU PILOT PROJECT BATTERY #1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: ROW MIDDLE BOTTOM (H102022-05)

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	09/22/2011	ND	432	108	400	0.00	

Sample ID: ROW W WALL S END 3' (H102022-06)

Chloride, SM4500CI-B	mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	992	16.0	09/22/2011	ND	432	108	400	0.00	

Sample ID: ROW W WALL S END 6' (H102022-07)

Chloride, SM4500CI-B	mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	896	16.0	09/22/2011	ND	432	108	400	0.00	

Sample ID: ROW W WALL MIDDLE 3' (H102022-08)

Chloride, SM4500CI-B	mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	608	16.0	09/22/2011	ND	432	108	400	0.00	

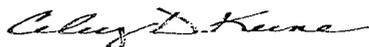
Sample ID: ROW W WALL MIDDLE 6' (H102022-09)

Chloride, SM4500CI-B	mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1170	16.0	09/22/2011	ND	432	108	400	0.00	

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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:	09/22/2011	Sampling Date:	09/21/2011
Reported:	09/23/2011	Sampling Type:	Soil
Project Name:	NEDU PILOT PROJECT BATTERY #1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: ROW W WALL N END 3' (H102022-10)

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	09/22/2011	ND	432	108	400	0.00	

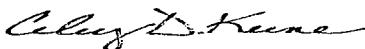
Sample ID: ROW W WALL N END 6' (H102022-11)

Chloride, SM4500CI-B	mg/kg	Analyzed By: HM							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	09/22/2011	ND	432	108	400	0.00	

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Celestine D. Keene, Lab Director/Quality Manager



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: Apache				BILL TO				ANALYSIS REQUEST											
Project Manager: Natalie Gladden				P.O. #:				Chlorides TPH 8015 M BTEX Texas TPH Complete Cations/Anions TDS											
Address:				Company:															
City:		State: NM Zip:		Attn:															
Phone #:		Fax #:		Address:															
Project #:		Project Owner:		City:															
Project Name:				State: Zip:															
Project Location: NEDA Aitor Project Battery #1				Phone #:															
Sampler Name: Kyle Norman				Fax #:															
FOR LAB USE ONLY																			
Lab I.D.	Sample I.D.	GRAB OR (COMP. # CONTAINERS)	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE					OTHER	ACID/BASE	ICE / COOL	OTHER	DATE	TIME		
H102022																			
1	BLW N wall Middle 3'	9	1		✓							9-21-11	9:00	✓					
2	BLW N wall Middle 6'	9	1		✓							9-21-11	9:10	✓					
3	BLW North Bottom	9	1		✓							9-21-11	9:20	✓					
4	BLW South Bottom	9	1		✓							9-21-11	9:50	✓					
5	BLW Middle Bottom	9	1		✓							9-21-11	9:55	✓					
6	BLW W wall Sand 3'	9	1		✓							9-21-11	10:10	✓					
7	BLW W wall Sand 6'	9	1		✓							9-21-11	10:30	✓					
8	BLW W wall Middle 3'	9	1		✓							9-21-11	10:40	✓					
9	BLW W wall Middle 6'	9	1		✓							9-21-11	10:50	✓					
10	BLW W wall Sand 3'	9	1		✓							9-21-11	11:00	✓					

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Relinquished By: Kyle Norman	Date: 9-22-11	Received By: Godi Henderson	Phone Result: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Add'l Phone #:
	Time: 8:40		Fax Result: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Add'l Fax #:
Relinquished By:	Date:	Received By:	REMARKS:	
	Time:		email results	
Delivered By: (Circle One)	Sample Condition	CHECKED BY: (Initials)	Natalie.Gladden@usa.apachecorp.com;	
Sampler - UPS - Bus - Other:	Cool Intact		Zconder@rice-ecs.com; Bbaker@rice-ecs.com;	
	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		hconder@rice-ecs.com; Lweinheimer@rice-ecs.com	

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#26

Analytical Results For:

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

Received:	09/22/2011	Sampling Date:	09/22/2011
Reported:	09/26/2011	Sampling Type:	Soil
Project Name:	NEDU PILOT PROJECT BATTERY #1	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: ROW E WALL MIDDLE @ 3' (H102029-01)

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	09/23/2011	ND	432	108	400	0.00		

Sample ID: ROW E WALL MIDDLE @ 6' (H102029-02)

Chloride, SM4500CI-B	mg/kg	Analyzed By: AP								
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16.0	16.0	09/23/2011	ND	432	108	400	0.00		

Sample ID: ROW E WALL N END @ 3' (H102029-03)

Chloride, SM4500CI-B	mg/kg	Analyzed By: AP								
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	09/23/2011	ND	432	108	400	0.00		

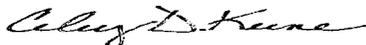
Sample ID: ROW E WALL N END @ 6' (H102029-04)

Chloride, SM4500CI-B	mg/kg	Analyzed By: AP								
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	09/23/2011	ND	432	108	400	0.00		

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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:	09/22/2011	Sampling Date:	09/22/2011
Reported:	09/26/2011	Sampling Type:	Soil
Project Name:	NEDU PILOT PROJECT BATTERY #1	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: ROW E WALL S. END @ 3' (H102029-05)

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	09/23/2011	ND	432	108	400	0.00		

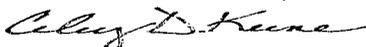
Sample ID: ROW E WALL S END @ 6' (H102029-06)

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	09/23/2011	ND	432	108	400	0.00		

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Celey D. Keene, Lab Director/Quality Manager



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: Apache				BILL TO				ANALYSIS REQUEST																				
Project Manager: Natalie Gladden				P.O. #:				Chlorides TPH 8015 M BTEX Texas TPH Complete Cations/Anions TDS																				
Address:				Company:																								
City:		State: NM		Zip:		Attn:																						
Phone #:		Fax #:		Address:																								
Project #:		Project Owner:		City:																								
Project Name:				State:		Zip:																						
Project Location: <i>NEDU Pilot Project Battery #1</i>				Phone #:																								
Sampler Name: <i>Kyle Norman</i>				Fax #:																								
FOR LAB USE ONLY																												
Lab I.D.	Sample I.D.			GIRAB OR (COMP)	# CONTAINERS	GROUNDWATER	WASTEWATER											SOIL	OIL	SLUDGE	OTHER:	ACID/BASE:	ICE / COOL	OTHER:	DATE		TIME	
<i>H107029</i>	<i>1 BOW E wall Middle @ 3'</i>			<i>2</i>	<i>1</i>			<i>✓</i>							<i>9-22-11</i>		<i>10:00</i>		<i>✓</i>									
	<i>2 BOW E wall Middle @ 6'</i>			<i>2</i>	<i>1</i>			<i>✓</i>							<i>9-22-11</i>	<i>10:10</i>			<i>✓</i>									
	<i>3 BOW E wall N end @ 3'</i>			<i>2</i>	<i>1</i>			<i>✓</i>							<i>9-22-11</i>	<i>10:30</i>			<i>✓</i>									
	<i>4 BOW E wall N end @ 6'</i>			<i>2</i>	<i>1</i>			<i>✓</i>							<i>9-22-11</i>	<i>10:50</i>			<i>✓</i>									
	<i>5 BOW E wall S end @ 3'</i>			<i>2</i>	<i>1</i>			<i>✓</i>							<i>9-22-11</i>	<i>11:30</i>			<i>✓</i>									
	<i>6 BOW E wall S end @ 6'</i>			<i>2</i>	<i>1</i>			<i>✓</i>							<i>9-22-11</i>	<i>11:45</i>			<i>✓</i>									

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising hereunder based in contract or tort, shall be limited to the amount paid by the client for the analysis. 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 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>Kyle Norman</i>		Date: <i>9-22-11</i>		Received By: <i>Jodi Munson</i>		Phone Result: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Add'l Phone #:	
Time: <i>4:15</i>		Date:		Received By:		Fax Result: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Add'l Fax #:	
Relinquished By:		Date:		Received By:		REMARKS:	
Time:		Date:		Received By:		email results	
Delivered By: (Circle One)		Sample Condition		CHECKED BY:		Natalie.Gladden@usa.apachecorp.com;	
Sampler - UPS - Bus - Other:		Cool Intact		(Initials)		Zconder@rice-ecs.com; Bbaker@rice-ecs.com;	
		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<i>JSM</i>		hconder@rice-ecs.com; Lweinheimer@rice-ecs.com	

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

#26

Analytical Results For:

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

Received:	09/29/2011	Sampling Date:	09/29/2011
Reported:	10/03/2011	Sampling Type:	Soil
Project Name:	NEDU PILOT PROJECT BATTERY #1	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

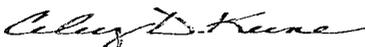
Sample ID: BACKFILL (H102092-01)

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	09/30/2011	ND	448	112	400	3.51	

Cardinal Laboratories

* = Accredited Analyte

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Celest 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

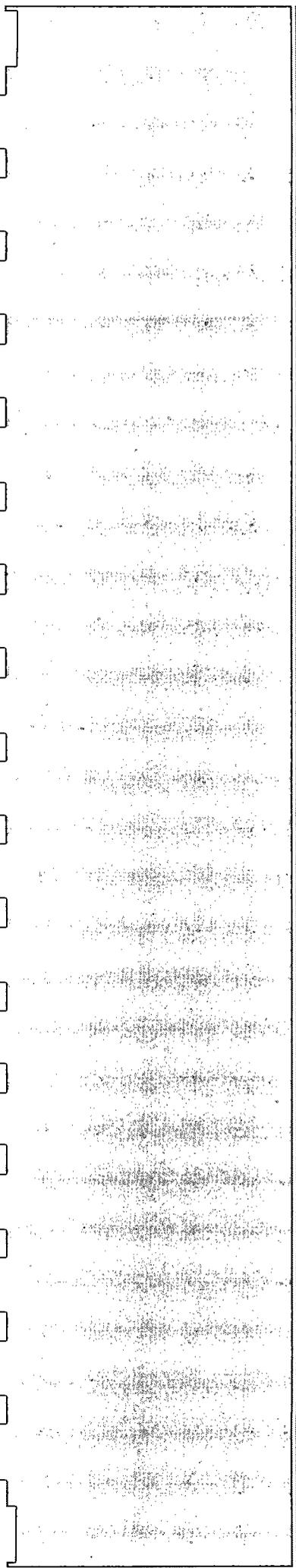
Company Name: Apache		BILL TO				ANALYSIS REQUEST																				
Project Manager: Natalie Gladden		P.O. #:				Chlorides	TPH 8015 M	BTEX	Texas TPH	Complete Cations/Anions	TDS															
Address:		Company:																								
City: State: NM Zip:		Attn:																								
Phone #: Fax #:		Address:																								
Project #: Project Owner:		City:																								
Project Name:		State: Zip:																								
Project Location: <i>NEDU Pilot Project Btry</i>		Phone #:																								
Sampler Name: <i>Kyle Norman</i>		Fax #:																								
FOR LAB USE ONLY																										
Lab I.D.	Sample I.D.	(C)IRAB OR (C)OMP.	# CONTAINERS	MATRIX								PRESERV		SAMPLING												
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:	ICE / COOL	OTHER :	DATE	TIME												
<i>H102092</i>	<i>-1 Back Fill</i>	<i>G</i>	<i>1</i>			<input checked="" type="checkbox"/>							<i>9-29-11</i>	<i>1:50</i>	<input checked="" type="checkbox"/>											

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 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>Kyle Norman</i>	Date: <i>9-29-11</i> Time: <i>4:12</i>	Received By: <i>Jodi Henson</i>	Phone Result: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Add'l Phone #:
Relinquished By:	Date:	Received By:	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 checked="" type="checkbox"/> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	CHECKED BY: (Initials) <i>JA</i>	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



Appendix D

Groundwater Study

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

Apache
Company

NEDU Pilot Project Battery #1

site name

H 3 T21S R37E
Unit Letter Section Township Range

Groundwater Depth: _____ 56 _____ ft

Compiled by: _____ Lara Weinheimer _____ Date: _____ 9/13/2011 _____

Comments: _____

○ = Wells of unknown use (USGS)

○

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

○ = section (1 sq. mile)

○

★ = Subject Site

				20S 37E
	33	34	35 ○ 52'	
	4 75' ⊙ 75' ⊙	○ 22'	3 ★	2 21S 37E
	58' ○ 9	10	11	



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

No records found.

PLSS Search:

Section(s): 33, 34, 35

Township: 20S

Range: 37E

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



New Mexico Office of the State Engineer

Water Column/Average Depth to Water

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

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

POD Number	Sub basin	Use	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Depth Well	Depth Water	Water Column
CP 00552	STK	LE	LE	2	4	04	21S	37E	672700	3598022*	90	75	15	
CP 00553	STK	LE	LE	2	4	04	21S	37E	672700	3598022*	90	75	15	

Average Depth to Water: 75 feet

Minimum Depth: 75 feet

Maximum Depth: 75 feet

Record Count: 2

PLSS Search:

Section(s): 2, 3, 4, 9, 10, 11 Township: 21S Range: 37E

*UTM location was derived from PLSS - see Help

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

USGS 323016103092001 21S.37E.03.31221

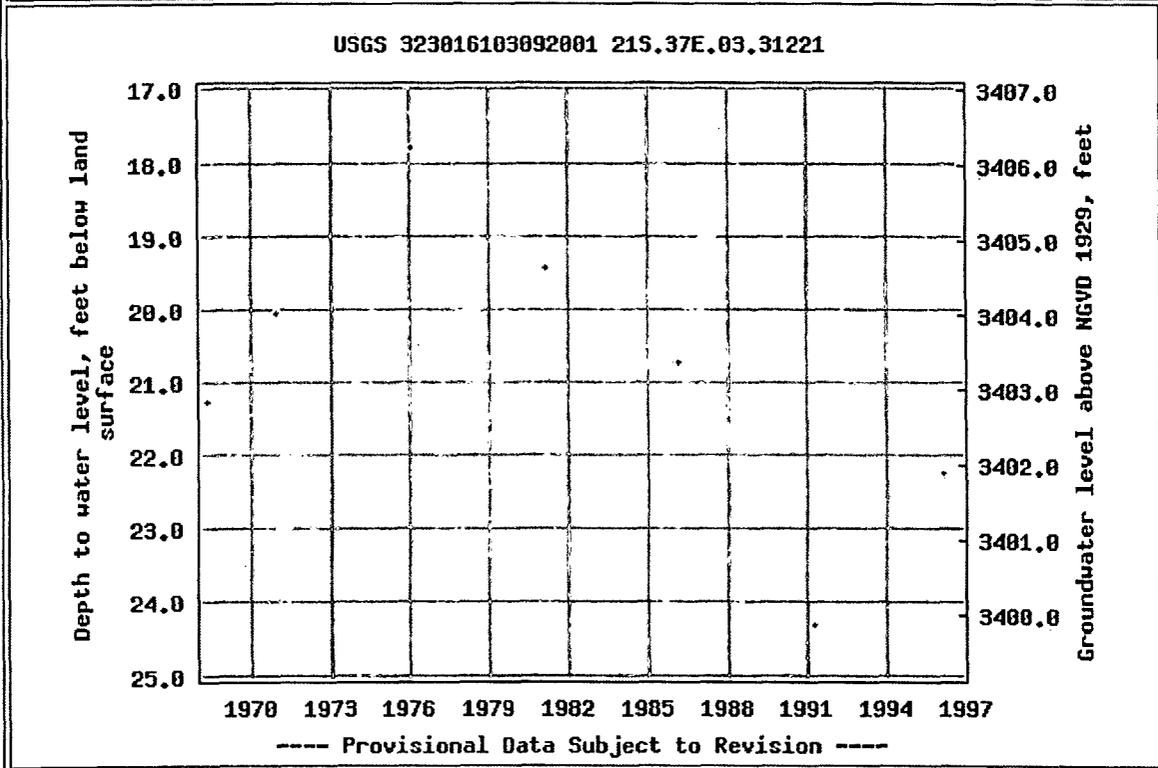
Available data for this site

Groundwater: Field measurements

Lea County, New Mexico
 Hydrologic Unit Code 13070007
 Latitude 32°30'40", Longitude 103°19'21" NAD27
 Land-surface elevation 3,424.10 feet above NGVD29
 The depth of the well is 36 feet below land surface.
 This well is completed in the Alluvium, Bolson Deposits
 and Other Surface Deposits (110AVMB) local aquifer.

Output formats

-
-
-
-



USGS 322937103094501 21S.37E.09.241211

Available data for this site

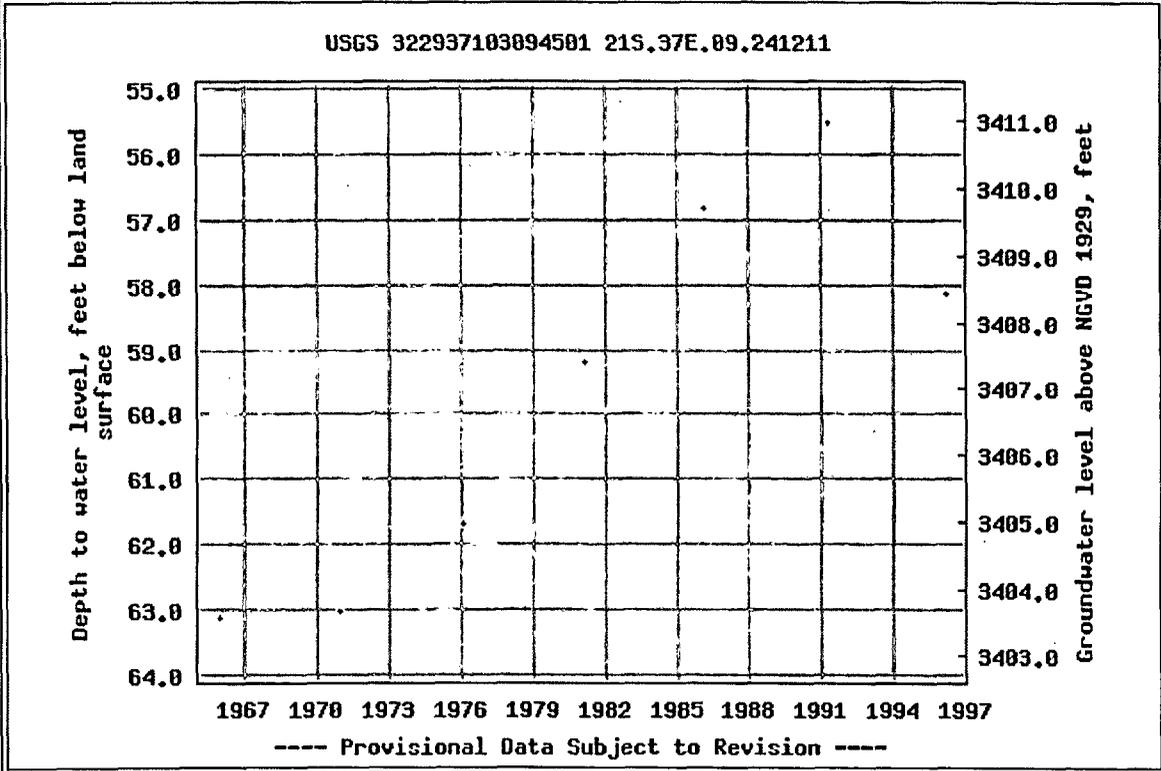
Groundwater: Field measurements

[GO]

Lea County, New Mexico
 Hydrologic Unit Code 13070007
 Latitude 32°29'49", Longitude 103°09'45" NAD27
 Land-surface elevation 3,466.60 feet above NGVD29
 The depth of the well is 90 feet below land surface.
 This well is completed in the Alluvium, Bolson Deposits
 and Other Surface Deposits (110AVMB) local aquifer.

Output formats

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



USGS 323114103130601 20S.37E.35.414234

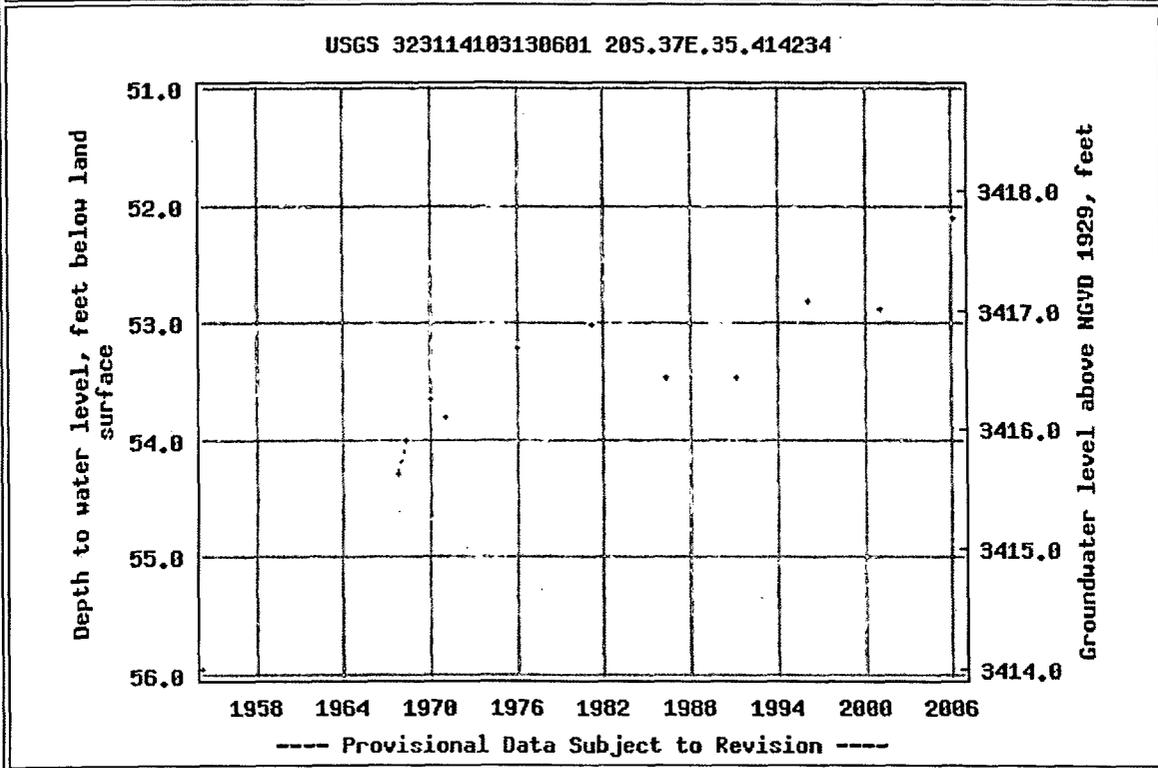
Available data for this site

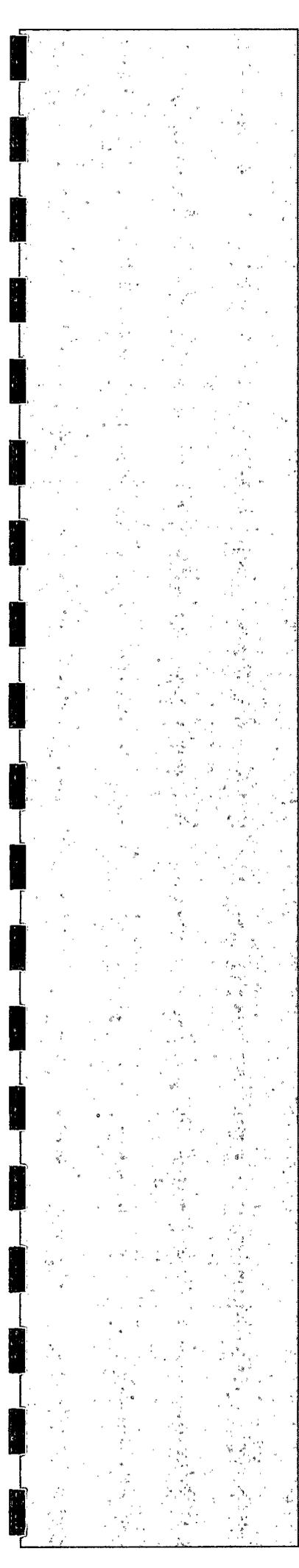
Groundwater: Field measurements

Lea County, New Mexico
 Hydrologic Unit Code 13070007
 Latitude 32°31'37", Longitude 103°13'06" NAD27
 Land-surface elevation 3,469.90 feet above NGVD29
 The depth of the well is 63 feet below land surface.
 This well is completed in the Alluvium, Bolson Deposits
 and Other Surface Deposits (110AVMB) local aquifer.

Output formats

-
-
-
-





Appendix E

Final Form C-141

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

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	Natalie Gladden
Address	P.O. Box 1849, Eunice, NM, 88231	Telephone No.	(575) 390-4186
Facility Name	NEDU Pilot Project Battery #1 (NEDU #165)	Facility Type	Production Facility
Surface Owner	McCasland	Mineral Owner	State of NM
		Lease No.	30-025-39915

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
D	2	21S	37E	1800	FNL	125	FWL	Lea

Latitude _____ Longitude _____

NATURE OF RELEASE

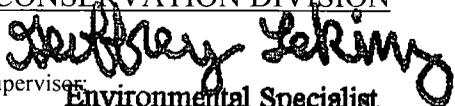
Type of Release	Produced water	Volume of Release	387 bbl	Volume Recovered	0 bbl
Source of Release	Injection line/junction box	Date and Hour of Occurrence	9/12/11	Date and Hour of Discovery	9/12/11
Was Immediate Notice Given?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom?	Geoffrey Leking		
By Whom?	Natalie Gladden	Date and Hour	9/12/11 343 pm		
Was a Watercourse Reached?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.			

If a Watercourse was Impacted, Describe Fully.*
DTW = 56'

Describe Cause of Problem and Remedial Action Taken.*
Injection line busted loose from the tee inside the junction box. Line was repaired.

Describe Area Affected and Cleanup Action Taken.*
The leak affected the pipeline right-of-way and an area of pasture land totaling 8,527 sq. ft. Impacted soils were removed to a NMOCD approved disposal facility. The excavation was completed from 6 ft. to 9 ft. deep. The west wall of the excavation extended to just within the affected area due to the proximity of an Apache pipeline. Representative soil samples were collected from the excavations and sent to a commercial laboratory for chloride analysis. The excavation was backfilled with clean 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: 	<u>OIL CONSERVATION DIVISION</u>	
Printed Name: Natalie Gladden	 Approved by District Supervisor: Environmental Specialist	
Title: EH&S Environmental Tech	Approval Date: 11/9/12	Expiration Date: -
E-mail Address: Natalie.gladden@apachecorp.com	Conditions of Approval: -	
Date: 11/9/12 Phone: (575) 390-4186	Attached <input type="checkbox"/> IRP-6-14-3083	

* Attach Additional Sheets If Necessary