

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	South Lusk 34 Federal #006	Facility Type	Production Facility

Surface Owner	BLM	Mineral Owner	State	Lease No.	30-025-37680
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LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
A	34	19S	32E	990	FNL	990	FEL	Lea

Latitude _____ Longitude _____

NATURE OF RELEASE

Type of Release	Drilling fluids/Brine Water	Volume of Release	>100 bbls	Volume Recovered	0 bbls
Source of Release	Illegal Dumping	Date and Hour of Occurrence	4/11/12	Date and Hour of Discovery	4/11/12
Was Immediate Notice Given?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom?			
By Whom?	Date and Hour				
Was a Watercourse Reached?	<input type="checkbox"/> Yes <input type="checkbox"/> No	If YES, Volume Impacting the Watercourse.			

If a Watercourse was Impacted, Describe Fully.*

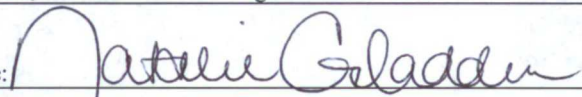
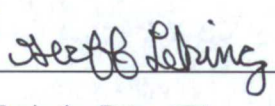
Describe Cause of Problem and Remedial Action Taken.*

An unknown party dumped drilling fluids (brine water). They backed up to the edge of this location pad and emptied their trucks in three different areas.

Describe Area Affected and Cleanup Action Taken.*

The leak affected 3 areas of pasture land totaling 16,006 sq. ft. The affected areas were delineated for depth of chloride impact. Impacted soils were removed to a NMOCD approved disposal facility. In two of the excavated areas, chloride was removed in total. In the last excavation, the soils with the highest chloride impact were removed and a plastic liner was installed as a barrier to downward migration of residual chloride. A former temporary monitoring well installed at the site indicated that no groundwater exists beneath the site. The excavations were 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: 		OIL CONSERVATION DIVISION	
Printed Name: Natalie Gladden		ENV SPECIALIST: Approved by District Supervisor: 	
Title: EH&S Environmental Tech	Approval Date: 6/11/12	Expiration Date: —	
E-mail Address: Natalie.gladden@apachecorp.com	Conditions of Approval:		Attached <input type="checkbox"/>
Date: _____	Phone: (575) 390-4186	LRP-6-12-2820	

* Attach Additional Sheets If Necessary

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

HOBBS OCD

APR 30 2012

RECEIVED

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	South East Lusk 34 Federal #6	Facility Type	Production Facility

Surface Owner	BLM	Mineral Owner	State	API No.	30-025- 37680 37681
---------------	-----	---------------	-------	---------	--------------------------------

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
A	34	19S	32E	990'	FNL	990'	FEL	Lea

Latitude _____ Longitude _____

NATURE OF RELEASE

Type of Release	Drilling fluids/Brine water	Volume of Release	>100	Volume Recovered	0
Source of Release	Illegal Dumping	Date and Hour of Occurrence	4/13/2012	Date and Hour of Discovery	4/13/12
Was Immediate Notice Given?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom?			
By Whom?	Date and Hour				
Was a Watercourse Reached?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.			

If a Watercourse was Impacted, Describe Fully.*

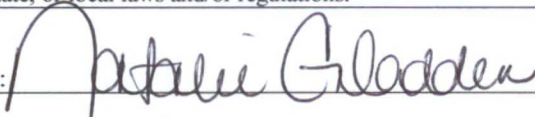
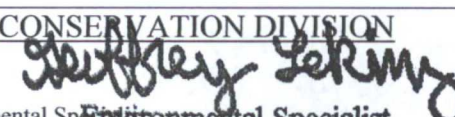
Describe Cause of Problem and Remedial Action Taken.*

An unknown party dumped drilling fluids (brine water). The backed up to the edge of this location pad and emptied their trucks in three different areas.

Describe Area Affected and Cleanup Action Taken.*

There is no ground water in this area. Site will be delineated and remediation will begin.

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  Approved by Environmental Specialist	
Printed Name: Natalie Gladden	Approval Date: 04/30/12	Expiration Date: 07/02/12
Title: EHS Environmental Tech	Conditions of Approval: SUMMIT FINAL C-141 BY 07/02/12	Attached <input type="checkbox"/>
E-mail Address: natalie.gladden@apachecorp.com	Date: 4/18/12 Phone: 575-390-4186	IRP-06-12-2820

* Attach Additional Sheets If Necessary

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Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
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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 South East Lusk 34 Federal #6	Facility Type Production Facility	
Surface Owner BLM	Mineral Owner State	API No. 30-025-37680

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
A	34	19S	32E	990'	FNL	990'	FEL	Lea

Latitude _____ Longitude _____

NATURE OF RELEASE

Type of Release Drilling fluids/Brine water	Volume of Release >100	Volume Recovered 0
Source of Release Illegal Dumping	Date and Hour of Occurrence 4/13/2012	Date and Hour of Discovery 4/13/12
Was Immediate Notice Given? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
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OIL CONSERVATION DIVISION

Signature: 	Approved by Environmental Specialist:	
Printed Name: Natalie Gladden		
Title: EHS Environmental Tech	Approval Date:	Expiration Date:
E-mail Address: natalie.gladden@apachecorp.com	Conditions of Approval:	Attached <input type="checkbox"/>
Date: 4/18/12 Phone: 575-390-4186		

* Attach Additional Sheets If Necessary



EXPLORING WHAT'S POSSIBLE

APACHE CORPORATION

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

Southeast Lusk 34 Federal #006

Closure Report

API 30-025-37680

Release Date: April 11, 2012

Unit Letter A, Section 34, Township 19S, Range 32E

Rice Environmental Consulting & Safety

P.O. Box 5630 Hobbs, NM 88241

Phone 575.393.4411 Fax 575.393.0293

May 14, 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 – Southeast Lusk 34 Federal #6 AD

UL/A sec. 34 T19S R32E

API No. 30-025-37680

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 illegal discharge of drilling fluids by an unknown party at the Apache Southeast Lusk 34 Federal #6. Fluids were located in three (3) areas off the south end of the well pad. An initial form C-141 was submitted by Apache Corporation on April 18, 2012 (Appendix A). The site is located north of U.S. Highway 62/180 west of Hobbs, near the Laguna Plata area in unit letter 'A', section 34, T19S, R32E in Lea County, New Mexico.

On April 11, 2012, RECS personnel initiated work on the Southeast Lusk 34 Federal #6 (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 analysis, and ranged from 8,400 ppm (parts per million or mg/kg) to 83,200 ppm (Appendix B). The samples from Pt.1, Pt.2, and Pt.3 were also analyzed for TPH (GRO/DRO) and ranged from <10.0 ppm to 845 ppm.

On April 17-18, 2012, RECS personnel collected and field tested samples from six (6) vertical sampling points throughout the leak areas. Representative grab samples were collected from the two (2) bottom most samples in each vertical. The samples were submitted to a laboratory for chloride and TPH analyses (Appendix B). Vertical 1 in the southwest leak area contained 80.0 ppm chloride at 3 ft. below ground surface (bgs), and Vertical 2 in the center leak area contained 64.0 ppm chloride at 2 ft. bgs (Figure 2). The remaining verticals were located in the southeast leak area (Figure 3). Vertical 3 contained 80 ppm chloride at 11 ft. bgs. Vertical 4 contained 160 ppm at 7 ft. bgs. Vertical 5 contained 96 ppm at 6 ft. bgs. Vertical 6 contained 208 ppm at 13 ft. bgs.

Remediation of the leak proceeded according to discussion between RECS and NMOCD personnel on April 19, 2012 (Figure 5). Subsequently, the southwest area was excavated to 3 ft. bgs and the center area was excavated to 1 ft. bgs. The southeast area was excavated to 2 ft bgs. An area encompassing Verticals 3 and 6 was excavated to 4.5 ft. bgs, and a 20 mil reinforced plastic liner was installed in the bottom of the 4.5 ft. excavation (Figure 4).

Impacted soils, totaling 2,768 cubic yards, were removed to a NMOCD approved disposal facility. The excavations were backfilled with 3,000 cubic yards of clean soil (Appendix B) and contoured to the surrounding area. See Appendix C for photographs of field activities.

Conclusion

According to data obtained from the installation of a temporary groundwater monitoring well at the site in July 2011, no groundwater exists beneath the site (Appendix D). Due to the removal of impacted soils in the southwest and center excavations, and the removal of the most highly impacted soils in the southeast excavation and the installation of the migration barrier, 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,

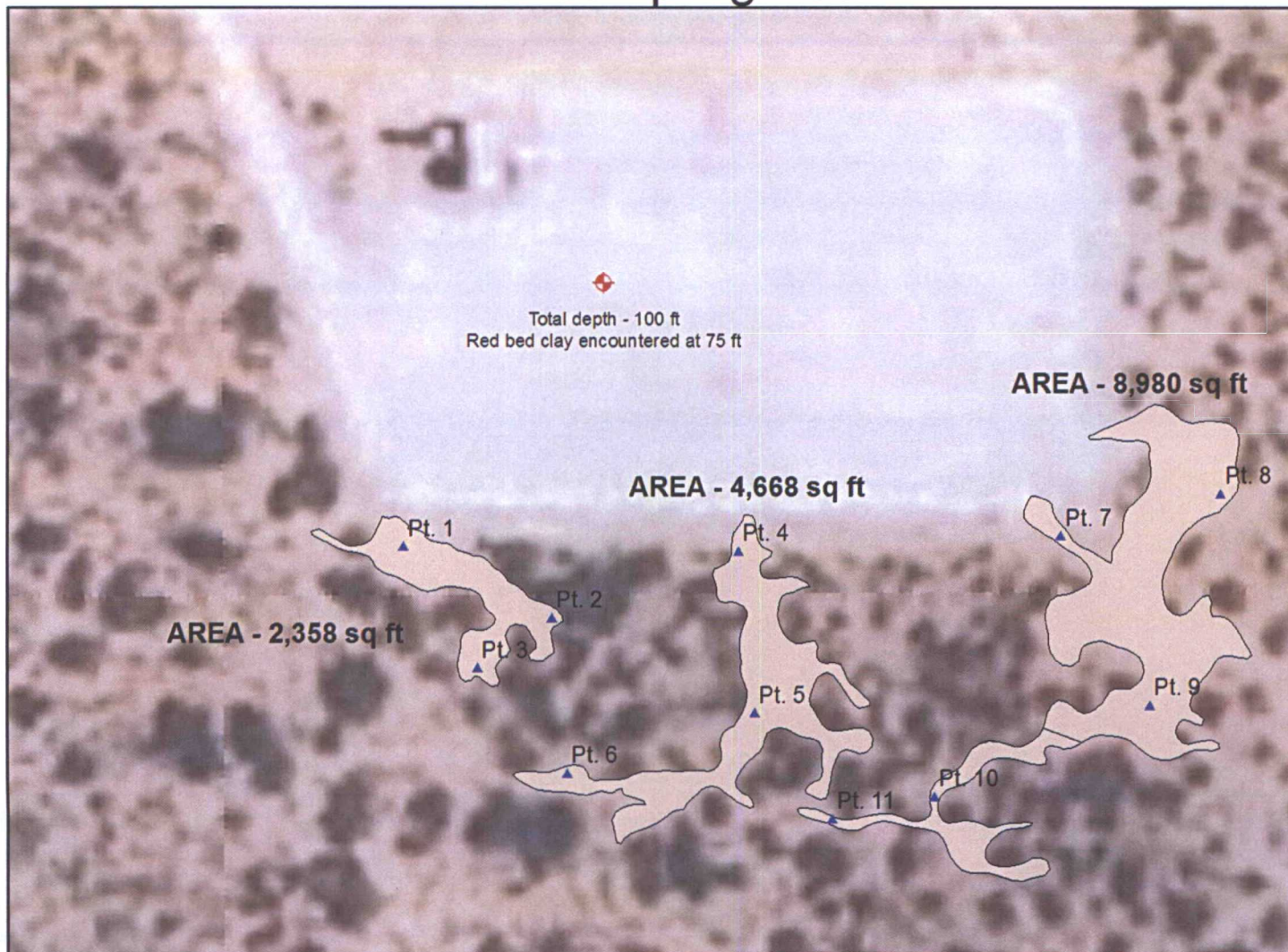


Bruce Baker
Head Foreman
RECS
(575) 631-5157

Attachments:

- Figure 1: Site Plat with Initial Lab Data
- Figure 2: Site Plat with Southwest and Center Vertical Data
- Figure 3: Site Plat with Southeast Vertical Data
- Figure 4: Site Plat with Southeast Liner Installation
- Figure 5: Site Plat with Final Excavation Areas
- Appendix A: Initial Form C-141
- Appendix B: Laboratory Results
- Appendix C: Site Photographs
- Appendix D: Temporary Monitoring Well Log, Letter of Groundwater Verification, and Plugging Report
- Appendix E: Final Form C-141

Initial Sampling Data



INITIAL SAMPLING LAB DATA

Sample Description	CI-	PID	GRO	DRO
PT.1 SURFACE	26,800	1,275	74	771
PT.2 SURFACE	19,600	5,000	<10	14.4
PT.3 SURFACE	10,800	4,651	<10	<10
PT.4 SURFACE	8,400	25		
PT.5 SURFACE	38,800	31.7		
PT.6 SURFACE	12,400	9.3		
PT.7 SURFACE	9,900	0.09		
PT.8 SURFACE	30,800	1.1		
PT.9 SURFACE	83,200	5.5		
PT.10 SURFACE	30,800	0.4		
PT.11 SURFACE	18,000	0.4		

Legend

- ▲ SAMPLE POINTS
- ◆ TEMPORARY MW - INSTALLED 7-25-11
- STAIN (16,006 sq ft)



APACHE SE LUSK 34 FEDERAL #6 AD

LEGALS: UL/A sec. 34
T-19-S R-32-E
LEA COUNTY, NM

DGW = NO GROUNDWATER

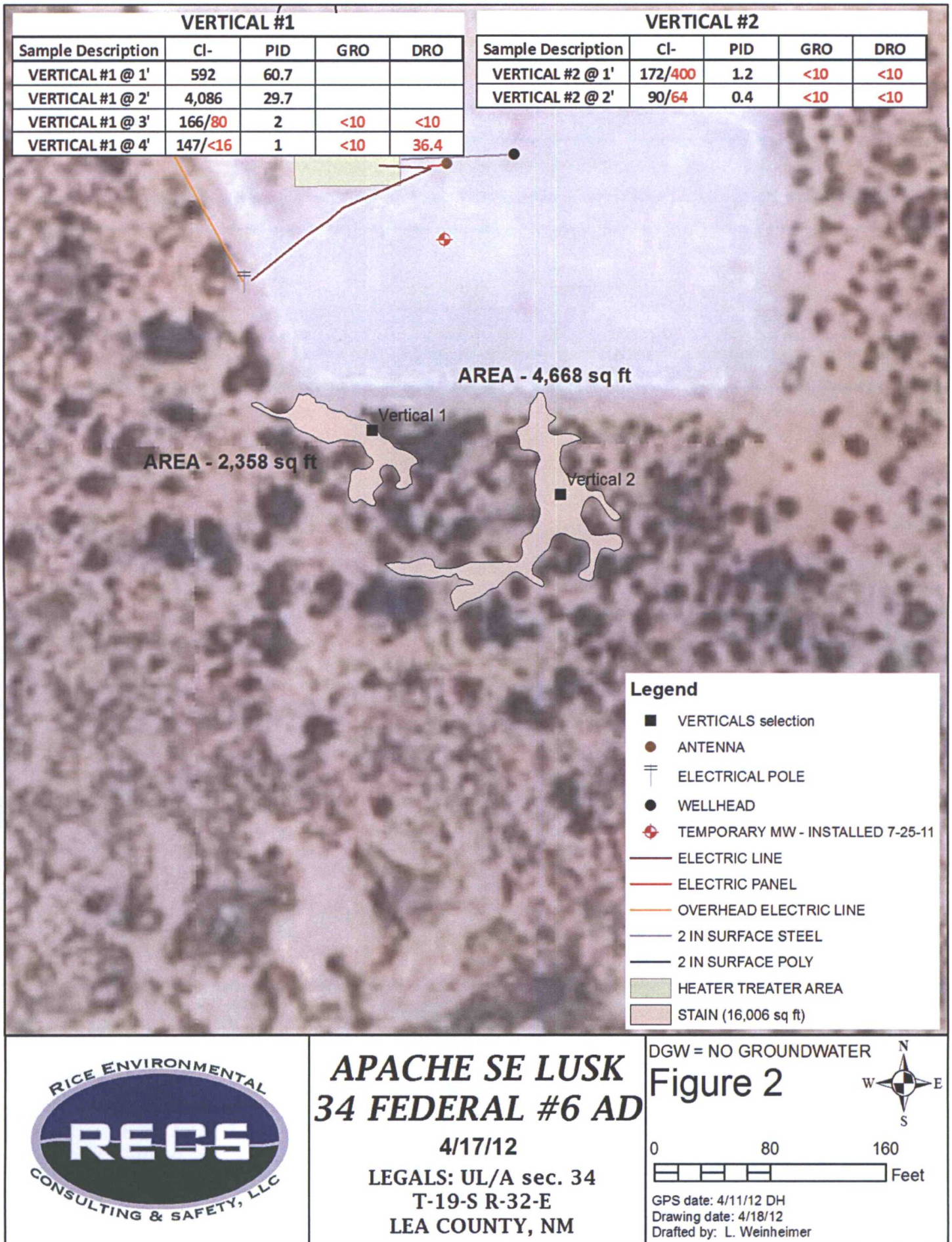
Figure 1

0 70 140
Feet

GPS date: 4/11/12 DH
Drawing date: 4/18/12
Drafted by: L. Weinheimer




Southwest and Center Vertical Data



SOUTHEAST VERTICAL DATA

VERTICAL #5

Sample Description	Cl-	PID	GRO	DRO
VERTICAL #5 @ 1'	1,451	1.7		
VERTICAL #5 @ 2'	799	1.4		
VERTICAL #5 @ 3'	744	1.4		
VERTICAL #5 @ 4'	929	3.4		
VERTICAL #5 @ 5'	283	3.2		
VERTICAL #5 @ 6'	115/96	3.5	<10	<10
VERTICAL #5 @ 7'	133/96	2.8	<10	<10

 Total depth - 100 ft
 Red bed clay encountered at 75 ft

AREA - 8,980 sq ft

VERTICAL #3

Sample Description	Cl-	PID	GRO	DRO
VERTICAL #3 @ 1'	5,541	3.4		
VERTICAL #3 @ 2'	3,737	2.3		
VERTICAL #3 @ 3'	3,848	1.3		
VERTICAL #3 @ 4'	4,857	1.9		
VERTICAL #3 @ 5'	2,723	2.3		
VERTICAL #3 @ 6'	1,317	4.6		
VERTICAL #3 @ 7'	3,028	4.2		
VERTICAL #3 @ 8'	3,472	4.4		
VERTICAL #3 @ 9'	1,743	0.5		
VERTICAL #3 @ 10'	281	0.6		
VERTICAL #3 @ 11'	83/80	3.9	<10	<10
VERTICAL #3 @ 12'	149/128	5.1	<10	<10




VERTICAL #4

Sample Description	Cl-	PID	GRO	DRO
VERTICAL #4 @ 1'	1,106	0.7		
VERTICAL #4 @ 2'	1,020	0.5		
VERTICAL #4 @ 3'	813	0.4		
VERTICAL #4 @ 4'	785	0.9		
VERTICAL #4 @ 5'	654	0.9		
VERTICAL #4 @ 6'	424	0.6		
VERTICAL #4 @ 7'	166/160	0.3	<10	<10
VERTICAL #4 @ 8'	138/32	0.4	<10	<10

VERTICAL #6

Sample Description	Cl-	PID	GRO	DRO
VERTICAL #6 @ 1'	1,106	719		
VERTICAL #6 @ 2'	1,324	329.1		
VERTICAL #6 @ 3'	2,992	26		
VERTICAL #6 @ 4'	1,315	12.5		
VERTICAL #6 @ 5'	1,229	2.3		
VERTICAL #6 @ 6'	460	2.4		
VERTICAL #6 @ 7'	380	1.7		
VERTICAL #6 @ 8'	680	7.5		
VERTICAL #6 @ 9'	376	8.4		
VERTICAL #6 @ 10'	298	4		
VERTICAL #6 @ 11'	275	5.6		
VERTICAL #6 @ 12'	175/400	2.1	<10	<10
VERTICAL #6 @ 13'	107/208	5.1	<10	<10

Legend

-  VERTICALS selection
-  TEMPORARY MW - INSTALLED 7-25-11
-  STAIN SOUTHEAST AREA



APACHE SE LUSK 34 FEDERAL #6 AD


4/17/12 - 4/18/12

LEGALS: UL/A sec. 34
 T-19-S R-32-E
 LEA COUNTY, NM

DGW = NO GROUNDWATER

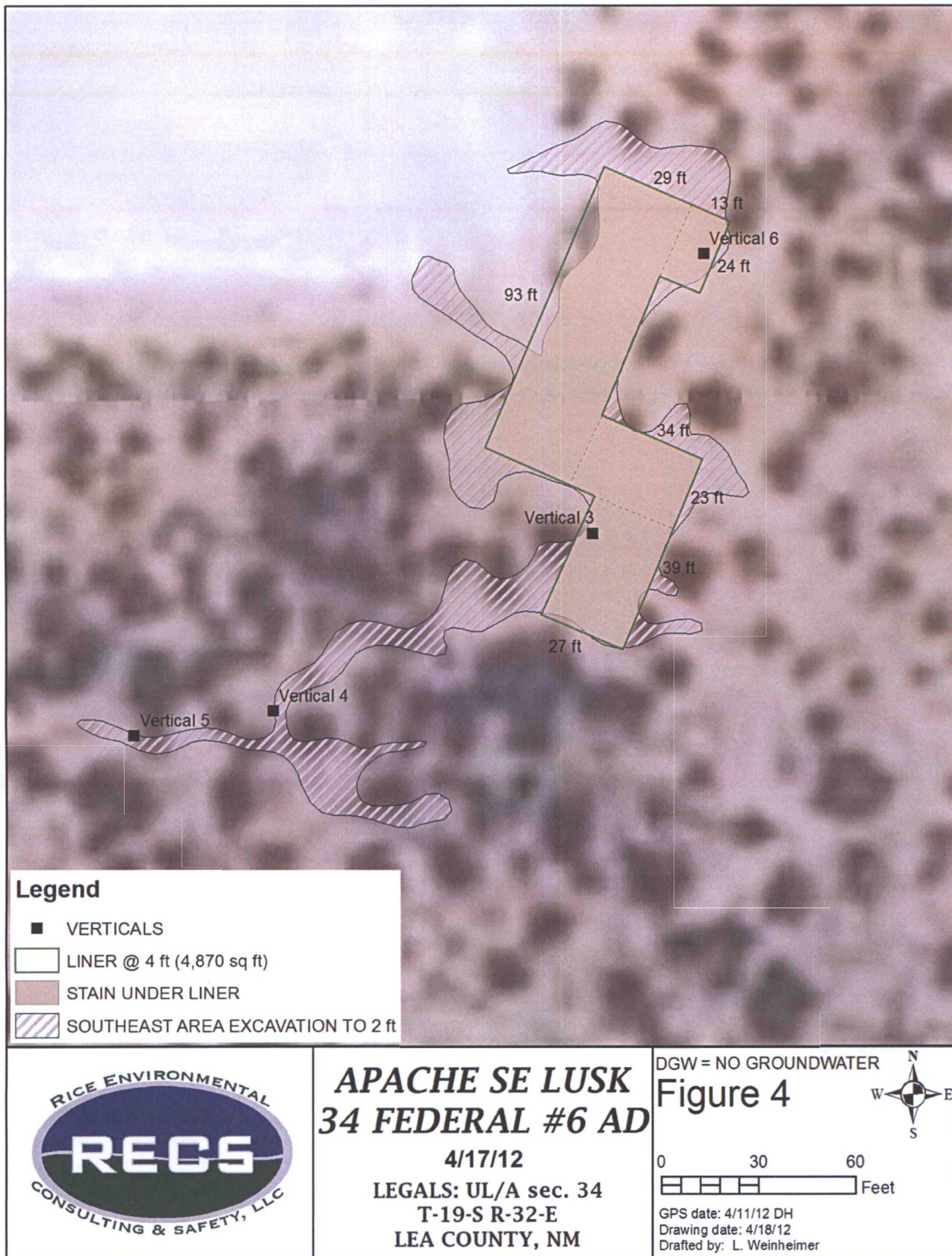
Figure 3



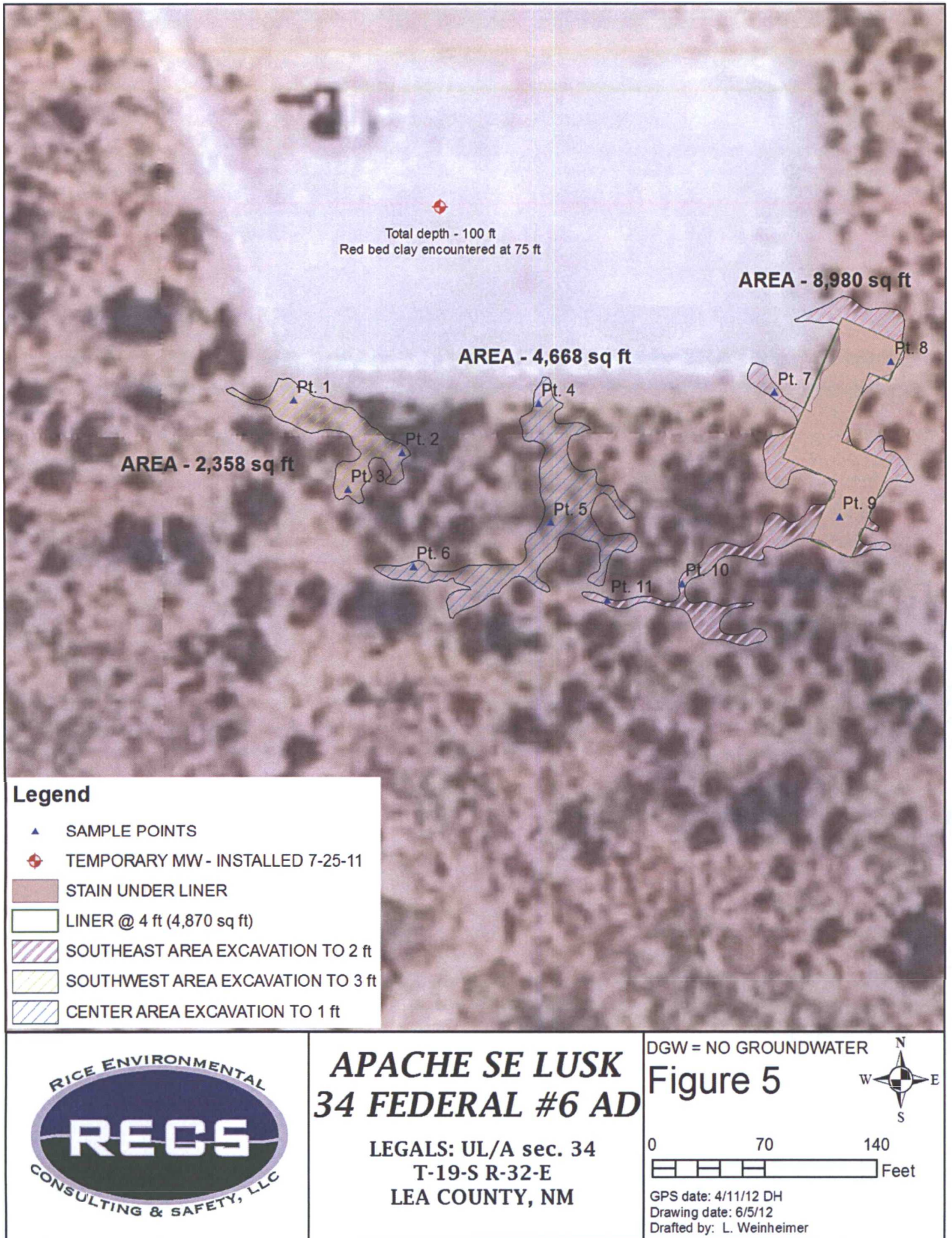
0 80 160
 Feet

GPS date: 4/11/12 DH
 Drawing date: 4/24/12
 Drafted by: L. Weinheimer

SOUTHEAST AREA - LINER INSTALLATION



Final Excavation Areas



Analytical Results For:

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

 Received: 04/13/2012
 Reported: 04/18/2012
 Project Name: S. E. LUSK 34 #6
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

 Sampling Date: 04/11/2012
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: PT. 1 SURFACE (H200856-01)

Chloride, SM4500Cl-B			mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	26800	16.0	04/17/2012	ND	432	108	400	7.69		
TPH 8015M			mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	74.0	50.0	04/17/2012	ND	183	91.5	200	0.212		
DRO >C10-C28	771	50.0	04/17/2012	ND	194	97.0	200	0.820		

Surrogate: 1-Chlorooctane 99.7 % 55.5-154

Surrogate: 1-Chlorooctadecane 105 % 57.6-158

Sample ID: PT. 2 SURFACE (H200856-02)

Chloride, SM4500Cl-B			mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	19600	16.0	04/17/2012	ND	432	108	400	7.69		
TPH 8015M			mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	04/17/2012	ND	183	91.5	200	0.212		
DRO >C10-C28	14.4	10.0	04/17/2012	ND	194	97.0	200	0.820		

Surrogate: 1-Chlorooctane 91.9 % 55.5-154

Surrogate: 1-Chlorooctadecane 93.8 % 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: 04/13/2012
 Reported: 04/18/2012
 Project Name: S. E. LUSK 34 #6
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

 Sampling Date: 04/11/2012
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: PT. 3 SURFACE (H200856-03)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	10800	16.0	04/17/2012	ND	432	108	400	7.69	
TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	04/17/2012	ND	183	91.5	200	0.212	
DRO >C10-C28	<10.0	10.0	04/17/2012	ND	194	97.0	200	0.820	

Surrogate: 1-Chlorooctane 90.9 % 55.5-154

Surrogate: 1-Chlorooctadecane 88.0 % 57.6-158

Sample ID: PT. 4 SURFACE (H200856-04)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	8400	16.0	04/17/2012	ND	432	108	400	7.69		

Sample ID: PT. 5 SURFACE (H200856-05)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	38800	16.0	04/17/2012	ND	432	108	400	7.69		

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: 04/13/2012
 Reported: 04/18/2012
 Project Name: S. E. LUSK 34 #6
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

 Sampling Date: 04/11/2012
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: PT. 6 SURFACE (H200856-06)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	12400	16.0	04/17/2012	ND	432	108	400	7.69		

Sample ID: PT. 7 SURFACE (H200856-07)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	9900	16.0	04/17/2012	ND	432	108	400	7.69		

Sample ID: PT. 8 SURFACE (H200856-08)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	30800	16.0	04/17/2012	ND	432	108	400	7.69		

Sample ID: PT. 9 SURFACE (H200856-09)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	83200	16.0	04/17/2012	ND	432	108	400	7.69		

Sample ID: PT. 10 SURFACE (H200856-10)

Chloride, SM4500Cl-B		mg/kg	Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	30800	16.0	04/17/2012	ND	432	108	400	7.69	

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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: 04/13/2012
Reported: 04/18/2012
Project Name: S. E. LUSK 34 #6
Project Number: NONE GIVEN
Project Location: NOT GIVEN

Sampling Date: 04/11/2012
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: PT. 11 SURFACE (H200856-11)**Chloride, SM4500Cl-B****mg/kg****Analyzed By: HM**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	18000	16.0	04/17/2012	ND	432	108	400	7.69	

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Celey D. Keene, Lab Director/Quality Manager

2012

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

ARDINAL 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

BILL TO				ANALYSIS REQUEST															
Company Name: Apache				P.O. #:		Company:		Chlorides		TPH 8015 M		BTX		Texas TPH		Complete Cations/Anions		TDS	
Project Manager: Natalie Gladden				Address:		Attn:		DATE		TIME									
City:				State: NM		Zip:													
Phone #:				Fax #:															
Project #:				Project Owner:															
Project Name: 5.15.12 34 #6																			
Project Location:																			
Sampler Name: D. L. Harris																			
FOR LAB USE ONLY																			
Lab I.D.				Sample I.D.															
Matrix				PRESERV		SAMPLING													
GROUNDWATER				ACID/BASE		ICE / COOL		OTHER:											
WASTEWATER				OTHER:															
SOIL																			
SLUDGE																			
# CONTAINERS																			
(G) RAB OR (C) OMP.																			
DATE				TIME															
4.13.12				4:35															

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Relinquished By: [Signature]	Date: 4.13.12	Time: 0715	Received By: [Signature]	Date: 4.13.12	Time: 0945
Relinquished By: [Signature]	Date: 4.13.12	Time: 0715	Received By: [Signature]	Date: 4.13.12	Time: 0945
Delivered By: (Circle One)	Sample Condition		Checked By: [Signature]		Initials: [Signature]
Sampler UPS - Bus - Other:	Cool / Intact		Yes <input type="checkbox"/> No <input type="checkbox"/>		Yes <input type="checkbox"/> No <input type="checkbox"/>
-50					
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

Analytical Results For:

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

 Received: 04/19/2012
 Reported: 04/23/2012
 Project Name: S. E. LUSK 34 FEDERAL #6 AD
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

 Sampling Date: 04/17/2012
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: VERTICAL #1 @ 3' (H200899-01)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	80.0	16.0	04/20/2012	ND	432	108	400	3.77		
TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	04/19/2012	ND	160	79.9	200	2.07		
DRO >C10-C28	<10.0	10.0	04/19/2012	ND	165	82.5	200	0.115		

Surrogate: 1-Chlorooctane 79.2 % 55.5-154

Surrogate: 1-Chlorooctadecane 75.0 % 57.6-158

Sample ID: VERTICAL #2 @ 1' (H200899-02)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	400	16.0	04/20/2012	ND	432	108	400	3.77		
TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	04/19/2012	ND	160	79.9	200	2.07		
DRO >C10-C28	<10.0	10.0	04/19/2012	ND	165	82.5	200	0.115		

Surrogate: 1-Chlorooctane 102 % 55.5-154

Surrogate: 1-Chlorooctadecane 102 % 57.6-158

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

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

 Received: 04/19/2012
 Reported: 04/23/2012
 Project Name: S. E. LUSK 34 FEDERAL #6 AD
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

 Sampling Date: 04/17/2012
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: VERTICAL #3 @ 11' (H200899-03)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	80.0	16.0	04/20/2012	ND	432	108	400	3.77		
TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	04/19/2012	ND	160	79.9	200	2.07		
DRO >C10-C28	<10.0	10.0	04/19/2012	ND	165	82.5	200	0.115		
Surrogate: 1-Chlorooctane	96.0 %	55.5-154								
Surrogate: 1-Chlorooctadecane	95.3 %	57.6-158								

Sample ID: VERTICAL #4 @ 7' (H200899-04)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	160	16.0	04/20/2012	ND	432	108	400	3.77		
TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	04/19/2012	ND	160	79.9	200	2.07		
DRO >C10-C28	<10.0	10.0	04/19/2012	ND	165	82.5	200	0.115		
Surrogate: 1-Chlorooctane		101 %	55.5-154							
Surrogate: 1-Chlorooctadecane		101 %	57.6-158							

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Analytical Results For:

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

 Received: 04/19/2012
 Reported: 04/23/2012
 Project Name: S. E. LUSK 34 FEDERAL #6 AD
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

 Sampling Date: 04/17/2012
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: VERTICAL #5 @ 6' (H200899-05)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	04/20/2012	ND	400	100	400	0.00	
TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	04/19/2012	ND	160	79.9	200	2.07	
DRO >C10-C28	<10.0	10.0	04/19/2012	ND	165	82.5	200	0.115	

Surrogate: 1-Chlorooctane 90.0 % 55.5-154

Surrogate: 1-Chlorooctadecane 89.5 % 57.6-158

Sample ID: VERTICAL #6 @ 12' (H200899-06)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	400	16.0	04/20/2012	ND	400	100	400	0.00		
TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	04/19/2012	ND	160	79.9	200	2.07		
DRO >C10-C28	<10.0	10.0	04/19/2012	ND	165	82.5	200	0.115		

Surrogate: 1-Chlorooctane 97.8 % 55.5-154

Surrogate: 1-Chlorooctadecane 97.4 % 57.6-158

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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

BILL TO										ANALYSIS REQUEST													
Company Name: Apache Project Manager: Natalie Gladden Address: City: State: NM Zip: Phone #: Fax #: Project #: Project Owner: Project Name: S.E. Lusk 34 Federal #6, A.D. Project Location: Sampler Name: Rick K. Horn										P.O. #: Company: Attn: Address: City: State: Zip: Phone #: Fax #: Project #: Project Owner: Project Name: S.E. Lusk 34 Federal #6, A.D. Project Location: Sampler Name: Rick K. Horn													
FOR LAB USE ONLY	Lab I.D.	Sample I.D.	(G) RAB OR (C) OMP	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	ACID/BASE:	ICE / COOL	OTHER:	PRESERV	DATE	TIME	Chlorides	TPH 8015 M	BTEX	Texas TPH	Complete Cations/Anions	TDS	
1	Vertical #1 @ 3'			1											4-17-12	1:45	✓	✓					
2	Vertical #2 @ 11'			1											4-17-12	1:55	✓	✓					
3	Vertical #3 @ 11'			1											4-17-12	2:05	✓	✓					
4	Vertical #4 @ 7'			1											4-17-12	3:45	✓	✓					
5	Vertical #5 @ 6'			1											4-17-12	3:55	✓	✓					
6	Vertical #6 @ 10'			1											4-18-12	19:00	✓	✓					

Relinquished By: [Signature]

Relinquished By: [Signature]

Delivered By: (Circle One) [Signature]

Sampler - UPS - Bus - Other: [Signature]

Received By: [Signature]

Received By: [Signature]

Sample Condition: Cool ☒ Intact ☒

Checked By: [Signature]

Phone Result: ☐ Yes ☐ No **Add'l Phone #:**

Fax Result: ☐ Yes ☐ No **Add'l Fax #:**

REMARKS:

email results

Natalie.Gladden@usa.apachecorp.com;

Zcorder@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

Analytical Results For:

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

 Received: 04/20/2012
 Reported: 04/25/2012
 Project Name: S. E. LUSK 34 FEDERAL #6 AD
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

 Sampling Date: 04/17/2012
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: VERTICAL #1 @ 4' (H200909-01)

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	04/23/2012	ND	416	104	400	3.77		
TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	04/20/2012	ND	184	91.8	200	0.670		
DRO >C10-C28	36.4	10.0	04/20/2012	ND	196	98.1	200	1.38		

Surrogate: 1-Chlorooctane 93.5 % 55.5-154

Surrogate: 1-Chlorooctadecane 93.5 % 57.6-158

Sample ID: VERTICAL #2 @ 2' (H200909-02)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	04/23/2012	ND	416	104	400	3.77	
TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	04/20/2012	ND	184	91.8	200	0.670	
DRO >C10-C28	<10.0	10.0	04/20/2012	ND	196	98.1	200	1.38	

Surrogate: 1-Chlorooctane 73.9 % 55.5-154

Surrogate: 1-Chlorooctadecane 70.5 % 57.6-158

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Analytical Results For:

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

 Received: 04/20/2012
 Reported: 04/25/2012
 Project Name: S. E. LUSK 34 FEDERAL #6 AD
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

 Sampling Date: 04/17/2012
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: VERTICAL #3 @ 12' (H200909-03)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	128	16.0	04/23/2012	ND	416	104	400	3.77	
TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	04/20/2012	ND	184	91.8	200	0.670	
DRO >C10-C28	<10.0	10.0	04/20/2012	ND	196	98.1	200	1.38	
Surrogate: 1-Chlorooctane	78.0 %	55.5-154							
Surrogate: 1-Chlorooctadecane	76.7 %	57.6-158							

Sample ID: VERTICAL #4 @ 8' (H200909-04)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	04/23/2012	ND	416	104	400	3.77	
TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	04/23/2012	ND	152	76.2	200	7.36	
DRO >C10-C28	<10.0	10.0	04/23/2012	ND	146	72.9	200	4.39	
Surrogate: 1-Chlorooctane	78.0 %	55.5-154							
Surrogate: 1-Chlorooctadecane	74.5 %	57.6-158							

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

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

 Received: 04/20/2012
 Reported: 04/25/2012
 Project Name: S. E. LUSK 34 FEDERAL #6 AD
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

 Sampling Date: 04/17/2012
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: VERTICAL #5 @ 7' (H200909-05)

Chloride, SM4500Cl-B			mg/kg		Analyzed By: AP				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	04/23/2012	ND	416	104	400	3.77	
TPH 8015M			mg/kg		Analyzed By: MS				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	04/23/2012	ND	152	76.2	200	7.36	
DRO >C10-C28	<10.0	10.0	04/23/2012	ND	146	72.9	200	4.39	

Surrogate: 1-Chlorooctane 83.7 % 55.5-154

Surrogate: 1-Chlorooctadecane 80.3 % 57.6-158

Sample ID: VERTICAL #6 @ 13' (H200909-06)

Chloride, SM4500Cl-B			mg/kg		Analyzed By: AP				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	208	16.0	04/23/2012	ND	416	104	400	3.77	
TPH 8015M			mg/kg		Analyzed By: MS				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	04/23/2012	ND	152	76.2	200	7.36	
DRO >C10-C28	<10.0	10.0	04/23/2012	ND	146	72.9	200	4.39	

Surrogate: 1-Chlorooctane 84.9 % 55.5-154

Surrogate: 1-Chlorooctadecane 81.6 % 57.6-158

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Celey D. Keene, Lab Director/Quality Manager

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name: Apache		P.O. #:		BILL TO										ANALYSIS REQUEST									
Project Manager: Natalie Gladden		Company:																					
Address:		Attn:																					
City:		Address:																					
Phone #:		City:																					
Project #:		State:																					
Project Name: S.F. Lusk 34 Vertical #6		Zip:																					
Project Location:		Phone #:																					
Sampler Name: Darkston Harris		Fax #:																					
FOR LAB USE ONLY																							
Lab I.D.	Sample I.D.	(G) RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	SLUDGE	OTHER:	ACID/BASE:	ICE / COOL	OTHER:	PRESERV.	SAMPLING	DATE	TIME	Chlorides	TPH 8015 M	BTEX	Texas TPH	Complete Cations/Anions	TDS		
1200409														4-17-12	11:50	✓							
1	Vertical #1 C4	5-1		✓		✓								4-17-12	2:00	✓							
2	Vertical #2 C4	5-1		✓		✓								4-17-12	2:10	✓							
3	Vertical #3 C10	5-1		✓		✓								4-17-12	3:50	✓							
4	Vertical #4 C8	5-1		✓		✓								4-17-12	4:00	✓							
5	Vertical #5 C7	5-1		✓		✓								4-18-12	1:00	✓							
6	Vertical #6 C13	5-1		✓		✓																	

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Relinquished By: <i>Natalie Gladden</i>	Date: 4-20-12	Time: 0715	Received By: <i>Natalie Gladden</i>	Date: 4-20-12	Time: 0815
Relinquished By: <i>Natalie Gladden</i>	Date: 4-20-12	Time: 0815	Received By: <i>Natalie Gladden</i>	Date: 4-20-12	Time: 0815
Delivered By: (Circle One)	Sample Condition				
Sampler - UPS - Bus - Other:	Cool	Intact	Yes	No	Checked By: <i>Natalie Gladden</i>
	Yes	No	Yes	No	Initials

† 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: 04/27/2012
Reported: 05/01/2012
Project Name: S. E. LUSK 34 FEDERAL #6 AD
Project Number: NONE GIVEN
Project Location: NOT GIVEN

Sampling Date: 04/27/2012
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: IMPORTED SOIL (H200974-01)**Chloride, SM4500Cl-B****mg/kg****Analyzed By: HM**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	04/30/2012	ND	416	104	400	0.00	

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Celey D. Keene, Lab Director/Quality Manager

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Analytical Results For:

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

Received: 05/02/2012
Reported: 05/03/2012
Project Name: S. E. LUSK 34 FEDERAL #6 AD
Project Number: NONE GIVEN
Project Location: NOT GIVEN

Sampling Date: 05/01/2012
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: IMPORTED SOIL (H201002-01)

Chloride, SM4500Cl-B		mg/kg	Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	05/03/2012	ND	400	100	400	0.00	

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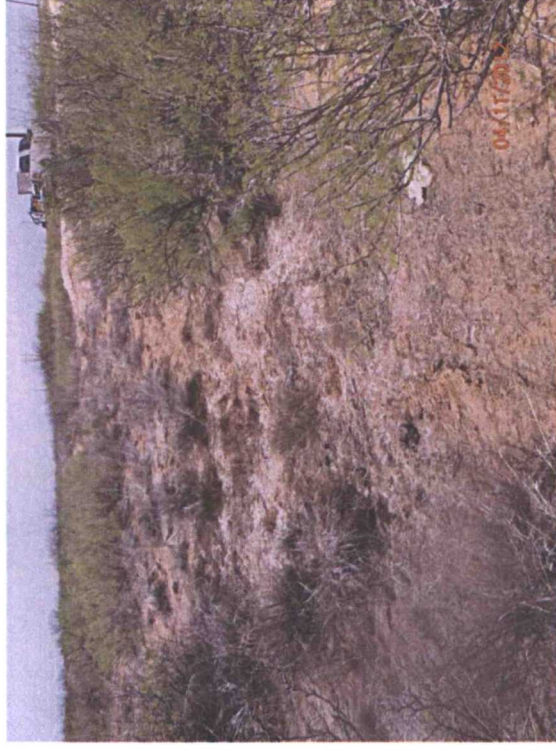
Apache Southeast Lusk 34 Federal #6

Unit A, Section 34, T19S, R32E



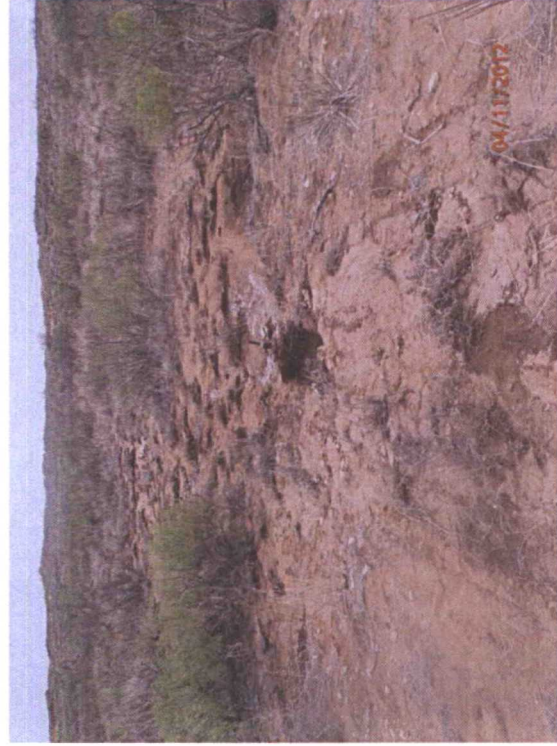
Site sign, facing east

4/11/2012



Initial southwest release area, facing northwest

4/11/2012



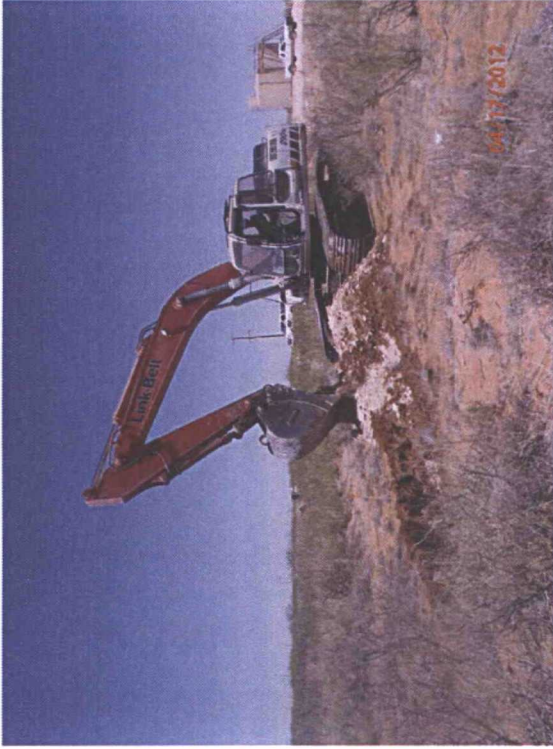
Initial center release area, facing south

4/11/2012

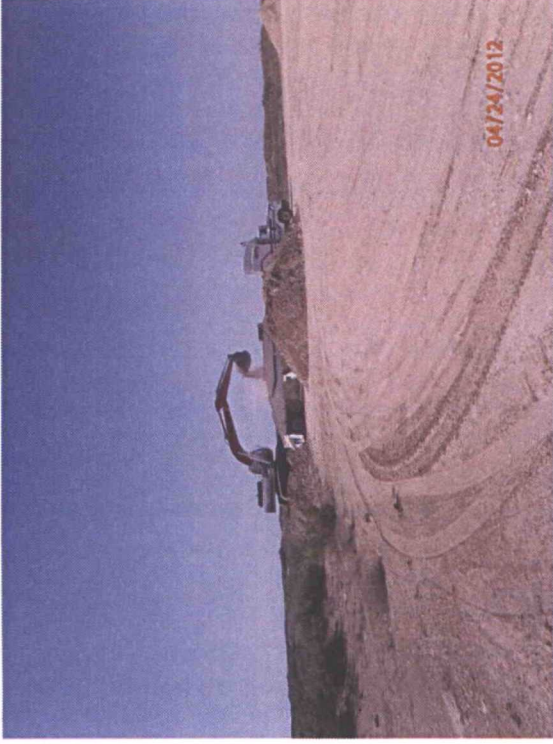


Initial southeast release area, facing northwest

4/11/2012



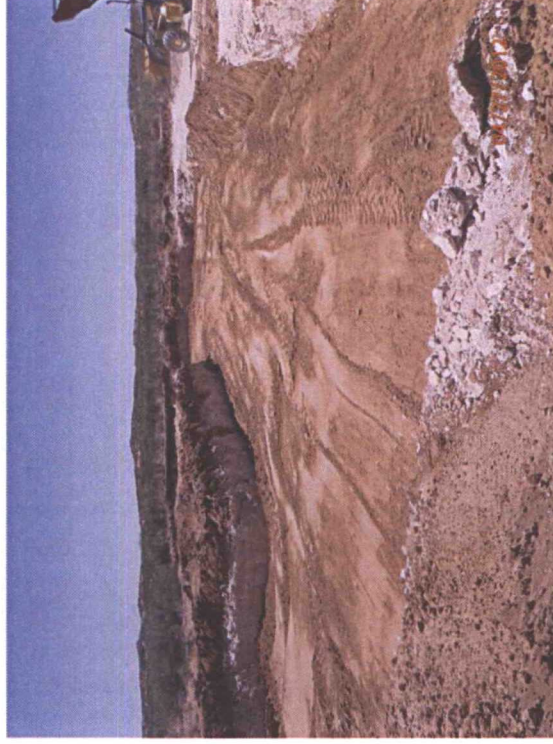
Digging vertical, facing northwest 4/17/2012



Exporting soil, facing south 4/24/2012



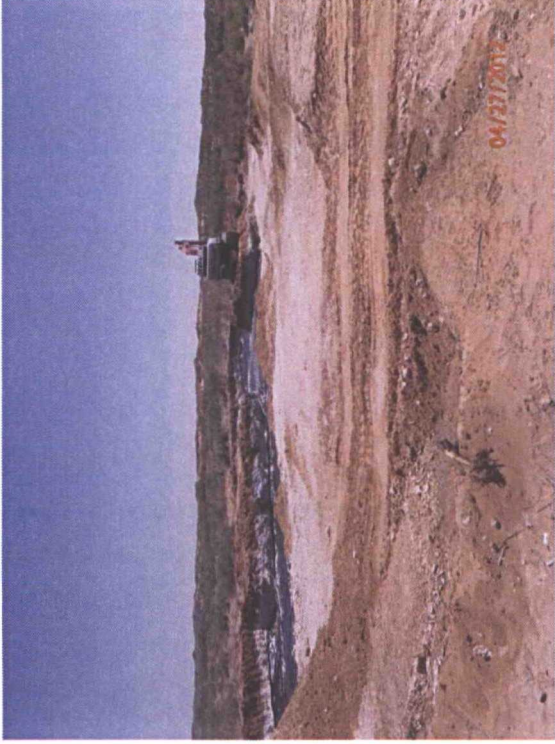
Southeast excavation ready for liner, facing south 4/24/2012



Southeast excavation padded for liner, facing south 4/27/2012



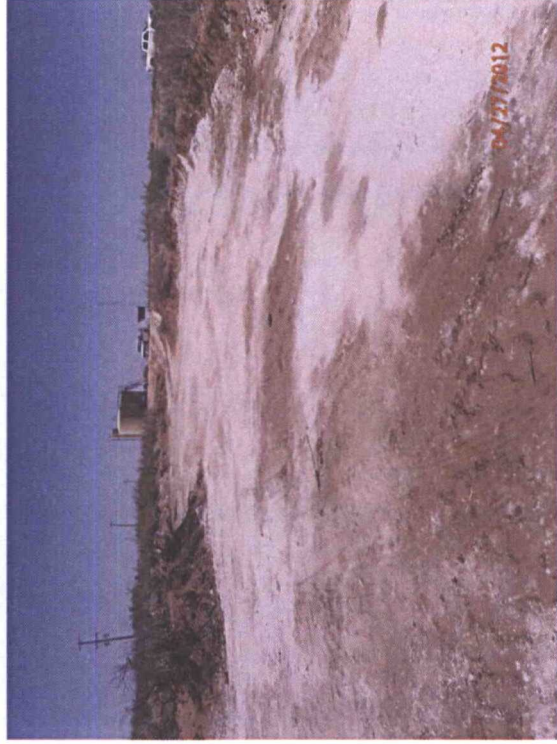
Liner at southeast excavation, facing south 4/27/2012



Final southeast excavation, facing south 4/27/2012



Final southwest excavation, facing northwest 4/27/2012



Final center excavation, facing north 4/27/2012



Backfilling with clean soil, facing northeast 4/27/2012





Southwest excavation backfilled, facing northwest 5/9/2012





Center excavation backfilled, facing northeast 5/9/2012



Southeast excavation backfilled, facing northwest 5/9/2012

Logger:	Kyle Norman				
Driller:	Harrison & Cooper, Inc.				
Drilling Method:	Air rotary		Company: Apache Corporation		
Start Date:	7/25/2011		Project Name:	Well ID:	
End Date:	7/25/2011		SE Lusk 34 Federal #6 AD Temp MW-1		
Comments:		Project Consultant: RECS		Location: UL/A sec. 34 T19S R32E	
Field testing did not occur on well. Samples were only taken to location of the red bed clay. All samples were from cuttings.		Lat: 32°37'16.505"N		County: Lea	
DRAFTED BY: L. Weinheimer		Long: 103°44'55.733"W		State: NM	
TD = 100 ft		GW = none			

Depth (feet)	Chloride field tests	LAB	PID	Description	Lithology	Well Construction
				NO SAMPLES TAKEN		
SS						
5 ft						
10 ft						
15 ft						
20 ft						
25 ft						
30 ft						
35 ft						
40 ft						

Depth (feet)	Chloride field tests	LAB	PID	Description	Lithology	Well Construction		
								annular space left open PLUGGED 7/28/2011
45 ft								
50 ft								
55 ft								
60 ft								
65 ft				RED BED CLAY				
80 ft								
85 ft								
90 ft								
95 ft								
100 ft								

Rice Environmental Consulting & Safety

P.O. Box 5630 Hobbs, NM 88241

Phone 575.393.4411 Fax 575.393.0293

August 2nd, 2011

Natalie Gladden

Apache Corp.

P.O. Box 1849

Eunice, New Mexico 88231

Re: Apache SE Lusk 34 Federal #6

Ms. Gladden,

On July 25th, 2011, RECS personnel drilled a temporary monitoring well at the Apache SE Lusk 34 Federal #6. On July 28th, 2011, I supervised RECS personnel checking for water accumulation within the borehole using a Heron depth to water meter. The meter indicated no water had accumulated within the borehole at the total depth of 100 ft.

Sincerely,



Bruce Baker

Head Foreman

Rice Environmental Consulting & Safety



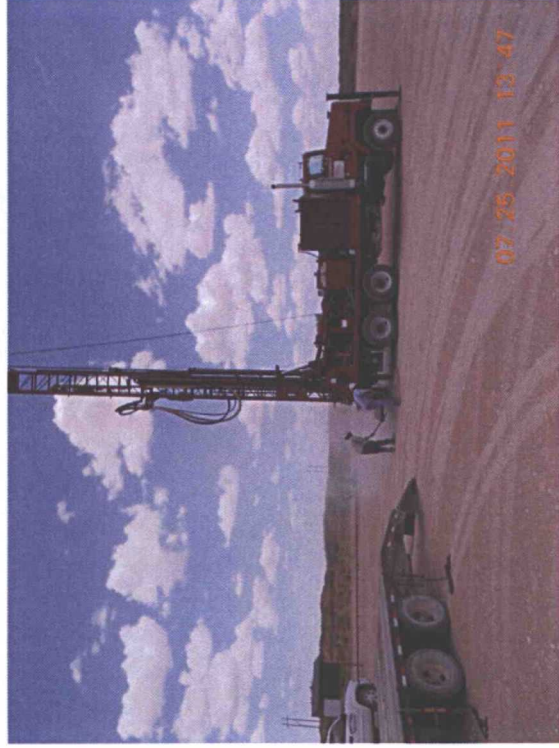
P.O. Box 5630
Hobbs, NM 88241
Phone: 575-393-4411

Monitor Well Plugging Report

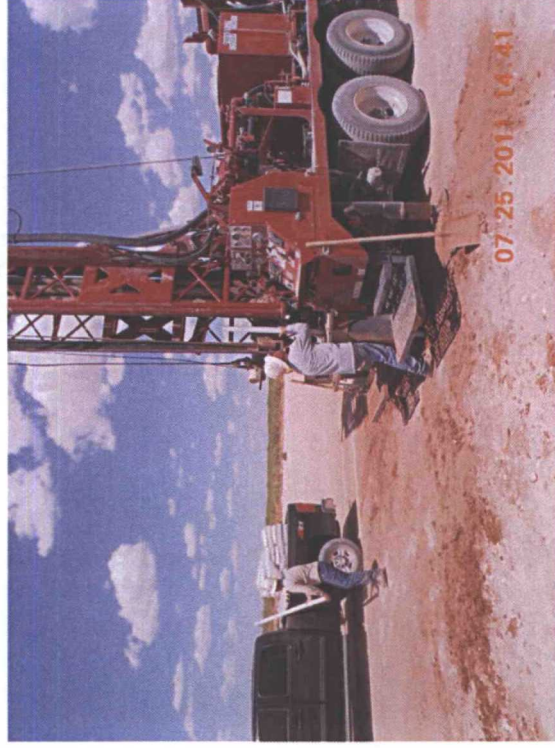
Client	Apache Corp.
Contractor	RECS
Date Completed	7/28/2011
Site	SE Lusk 34 Federal #6
County	Lea
Legal Description	UL/A sec. 34 T19S R32E
Well ID	Temp. MW-1
Casing Diameter	2"
Well Depth	100'
Casing Material	PVC
Plugging Material	Bentonite

Apache SE Lusk 34 Federal #6

Unit A, Section 34, T19S, R32E



Drilling temporary MW, facing southwest 7/25/2011



Installing casing in bore, facing west 7/25/2011



Temporary MW complete, facing southeast 7/25/2011



Plugging MW in total with bentonite 7/28/2011