



AE Order Number Banner

Report Description

This report shows an AE Order Number in Barcode format for purposes of scanning. The Barcode format is Code 39.



App Number: pKJ1603938910

x2

1RP - 4161

APACHE CORP

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	McDonald AC 1 #10	Facility Type	Injection Well
Surface Owner	Dasco Cattle Company	Mineral Owner	State of NM
		Lease No.	30-025-08930

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
K	16	22S	36E	1980	FSL	1980	FWL	Lea

Latitude _____ Longitude _____

NATURE OF RELEASE

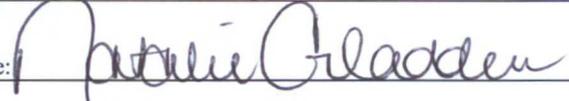
Type of Release	Brine Water	Volume of Release	400 bbl	Volume Recovered	350 bbl
Source of Release	Flowback	Date and Hour of Occurrence	11/3/11	Date and Hour of Discovery	11/3/11
Was Immediate Notice Given?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom?	Geoffrey Leking		
By Whom?	Natalie Gladden	Date and Hour	11/3/11 817 pm		
Was a Watercourse Reached?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.			

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*
During a workover on this well, the well flowed back and BOP did not hold. Fluid was recovered.

Describe Area Affected and Cleanup Action Taken.*
The leak affected the caliche pad surrounding the wellhead, 2 areas of pasture land, and a length of lease road to the south. Impacted soils were removed to a NMOCD approved disposal facility. Representative soil samples were collected from the excavation and sent to a commercial laboratory for chloride confirmation. The excavation was backfilled with clean caliche and topsoil and contoured to the surrounding area.

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

Signature:		<h1>APPROVED</h1>
Printed Name:	Natalie Gladden	
Title:	EH&S Environmental Tech	Approval Date: 2/8/16 Expiration Date:
E-mail Address:	Natalie.gladden@apachecorp.com	Conditions of Approval:
Date:	Phone: (575) 390-4186	Attached <input type="checkbox"/>

* Attach Additional Sheets If Necessary

12 461



EXPLORING WHAT'S POSSIBLE

DUPE

APACHE CORPORATION

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

McDonald AC 1 #10

Closure Report

API 30-025-08930

Release Date: November 3, 2011

Unit Letter K, Section 16, Township 22S, Range 36E

Rice Environmental Consulting & Safety

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

May 3, 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 – McDonald AC 1 #10 AD
UL/K sec. 16 T22S R36E
API No. 30-025-08930**

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 brine fluids associated with the McDonald AC 1 #10. During a workover procedure, the well flowed back and the blow out preventer failed to contain the overflow. Fluids were released onto the well pad, two areas of pasture land, and a lease road to the south. Standing fluids were recovered. An initial form C-141 was submitted by Apache Corporation on November 4, 2011 (Appendix A). The site is located southwest of Eunice, in unit letter 'K' of section 16, T22S, R36E in Lea County, New Mexico.

On November 4, 2011, RECS personnel initiated work on the McDonald AC 1 #10. Soil samples were collected from the site as excavation of the leak proceeded and field tested for chloride (Figure 1). Initial samples were submitted to a commercial laboratory for chloride analysis. The samples ranged from 1,760 ppm (parts per million or mg/kg) to 21,600 ppm (Appendix C).

On November 18, 2011, RECS personnel collected and field tested soil samples from the excavated areas (Figure 2). Representative grab samples were collected from the walls and bottoms of all excavations, and submitted to a commercial laboratory for chloride analysis. Chloride did not exceed 128 ppm in all samples (Appendix C).

Impacted soils were removed from the excavations and transported to a NMOCD approved disposal facility. The well pad and lease road excavations were backfilled with clean imported caliche and contoured to the surrounding area. The pasture area excavations were backfilled

with clean imported topsoil and similarly contoured. See Appendix B for photographs of field activities.

Conclusion

Due to the complete removal of impacted soils, Apache submits the final C-141 (Appendix D) and respectfully requests the closure of the regulatory file for this site.

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

Sincerely,

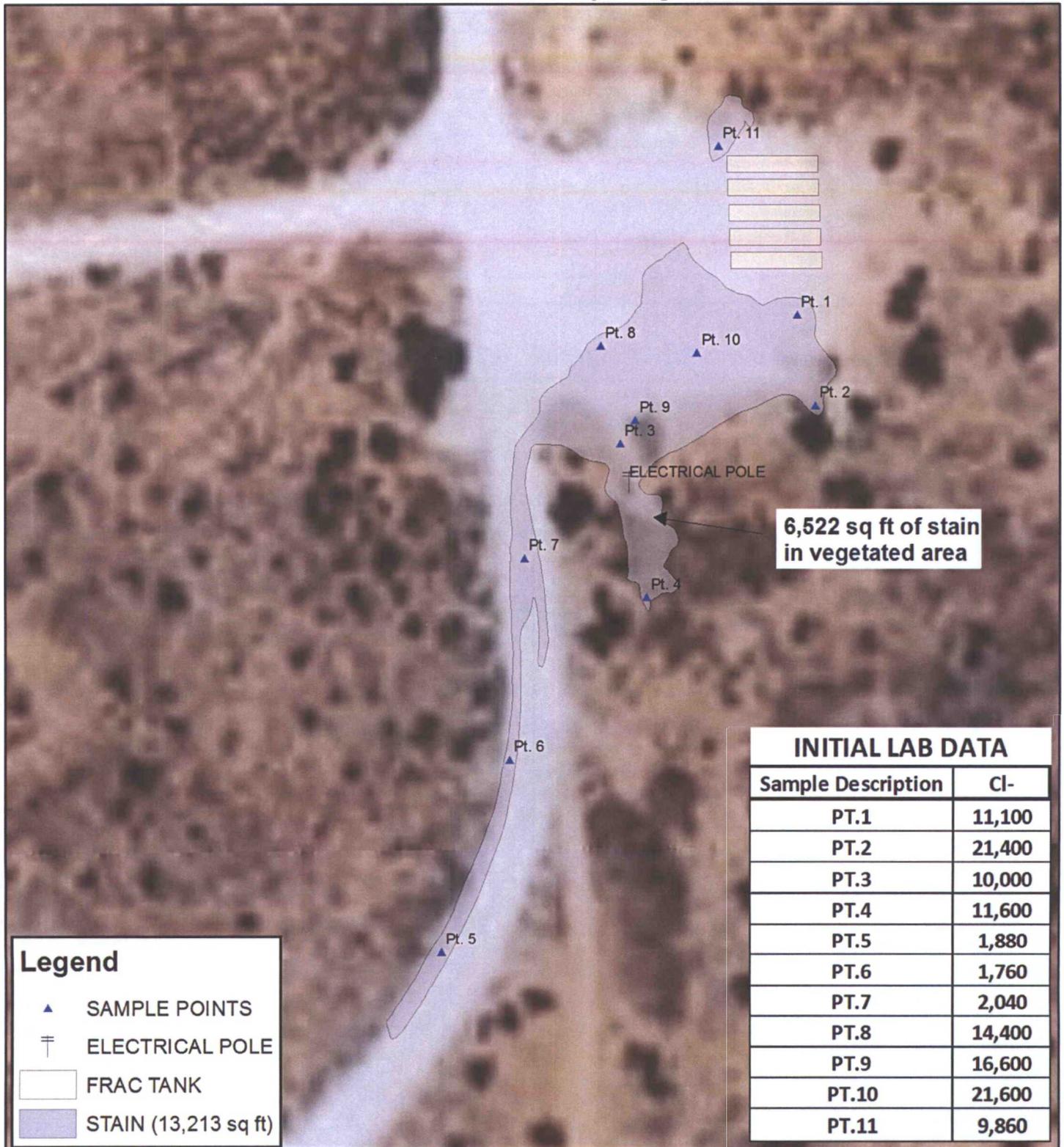


Bruce Baker
Head Foreman
RECS
(575) 631-5157

Attachments:

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

Initial Lab Sampling Data

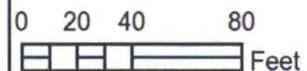


APACHE MCDONALD STATE AC 1 #10

Date: 11/4/11

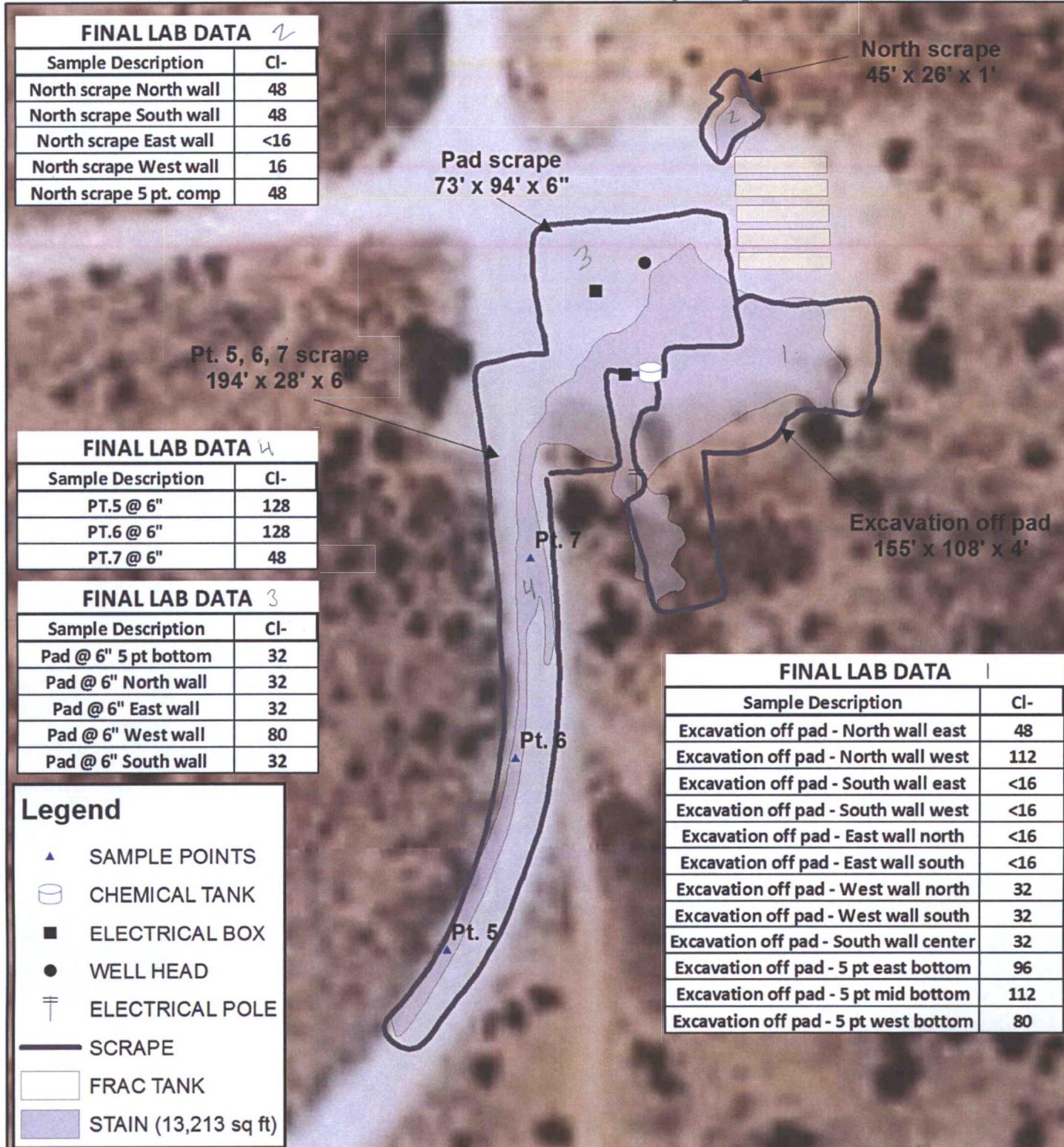
LEGALS: UL/K sec. 16
T-22-S R-36-E
LEA COUNTY, NM

Figure 1



GPS date: 11/4/11 RP
Drawing date: 11/4/11
Drafted by: L. Weinheimer

Final Excavation Sampling Data



FINAL LAB DATA 2	
Sample Description	Cl-
North scrape North wall	48
North scrape South wall	48
North scrape East wall	<16
North scrape West wall	16
North scrape 5 pt. comp	48

FINAL LAB DATA 4	
Sample Description	Cl-
PT.5 @ 6"	128
PT.6 @ 6"	128
PT.7 @ 6"	48

FINAL LAB DATA 3	
Sample Description	Cl-
Pad @ 6" 5 pt bottom	32
Pad @ 6" North wall	32
Pad @ 6" East wall	32
Pad @ 6" West wall	80
Pad @ 6" South wall	32

FINAL LAB DATA 1	
Sample Description	Cl-
Excavation off pad - North wall east	48
Excavation off pad - North wall west	112
Excavation off pad - South wall east	<16
Excavation off pad - South wall west	<16
Excavation off pad - East wall north	<16
Excavation off pad - East wall south	<16
Excavation off pad - West wall north	32
Excavation off pad - West wall south	32
Excavation off pad - South wall center	32
Excavation off pad - 5 pt east bottom	96
Excavation off pad - 5 pt mid bottom	112
Excavation off pad - 5 pt west bottom	80

Legend

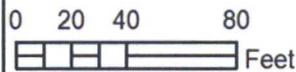
- ▲ SAMPLE POINTS
- CHEMICAL TANK
- ELECTRICAL BOX
- WELL HEAD
- ⊥ ELECTRICAL POLE
- SCRAPE
- FRAC TANK
- STAIN (13,213 sq ft)



APACHE MCDONALD STATE AC 1 #10

LEGALS: UL/K sec. 16
T-22-S R-36-E
LEA COUNTY, NM

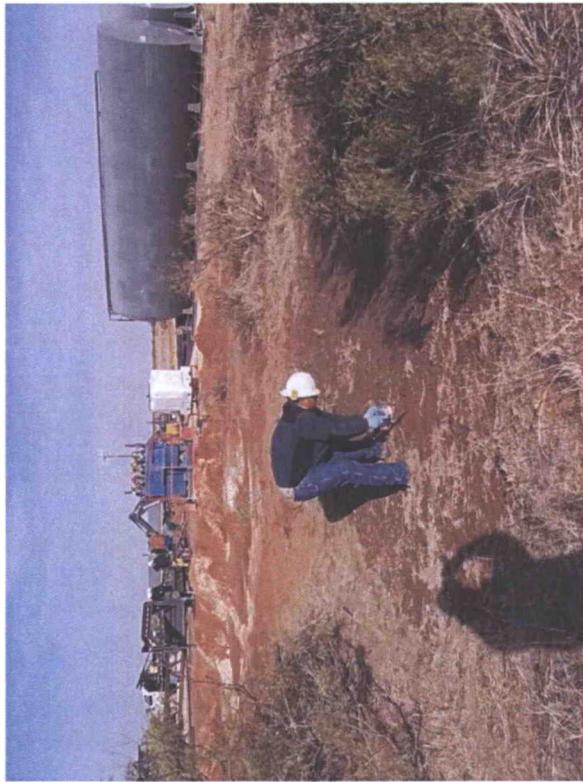
Figure 2



GPS date: 11/28/11 JK
Drawing date: 11/29/11
Drafted by: L. Weinheimer

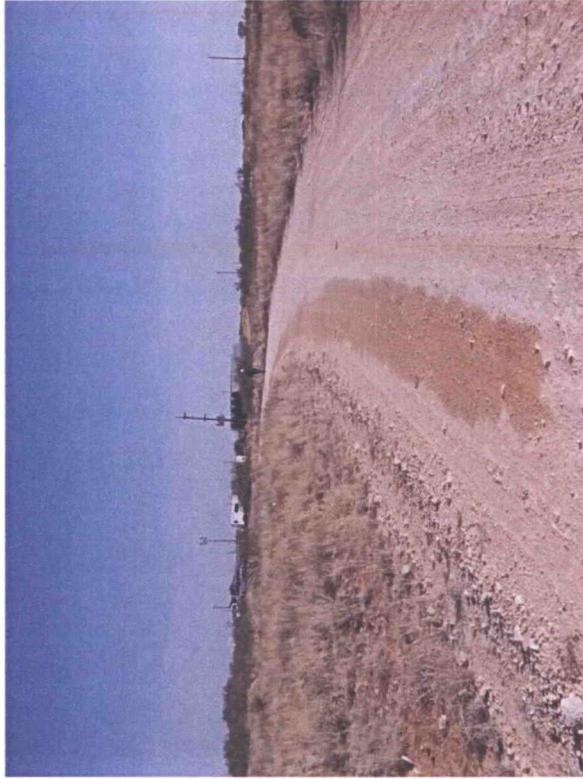
McDonald AC 1 #10

Unit Letter K, Section 16, T22S R36E



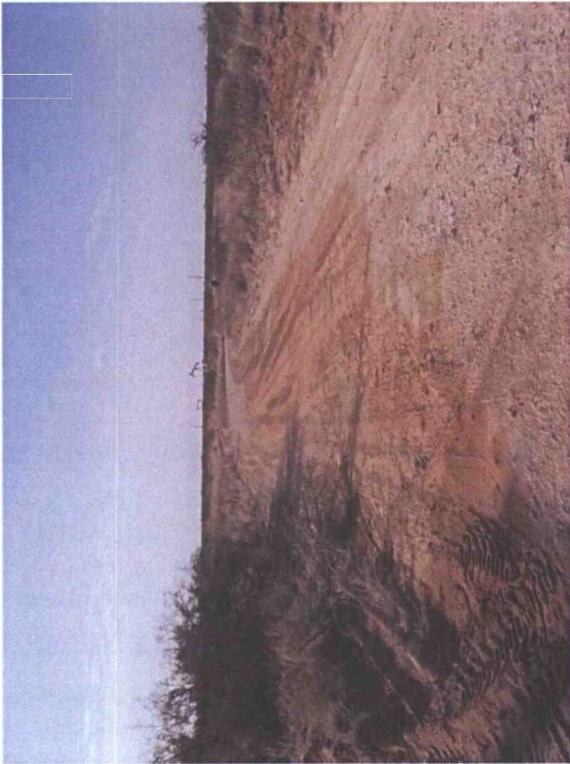
Initial sampling, facing north

11/4/2011

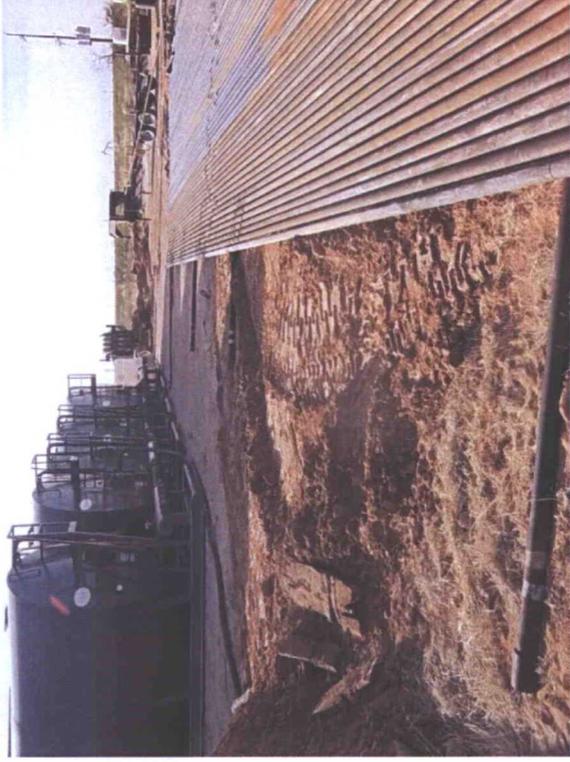


Initial release, facing north

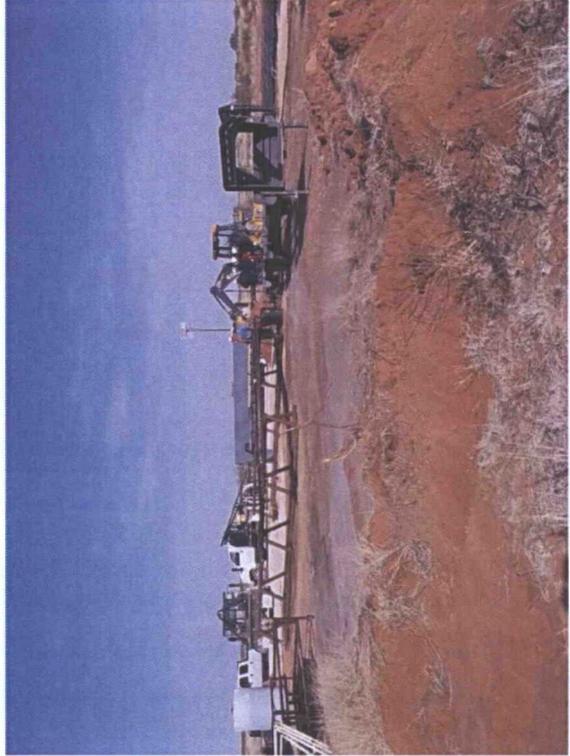
11/4/2011



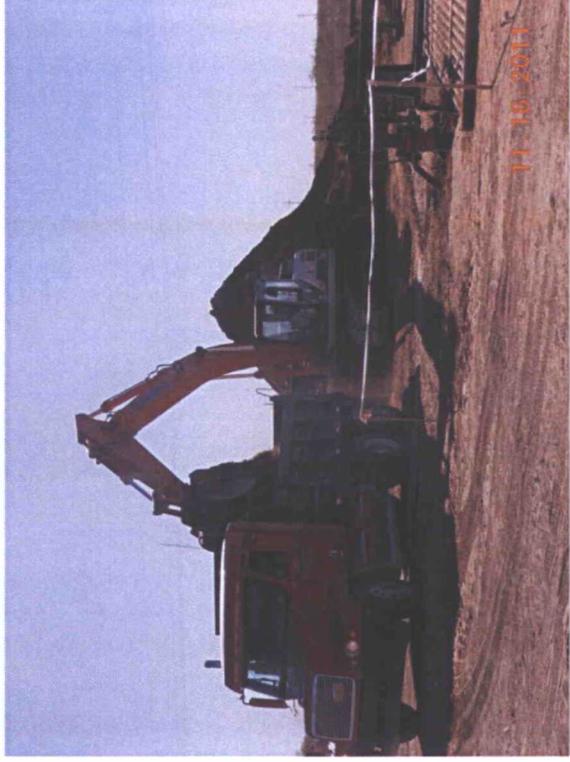
Initial release, facing south 11/4/2011



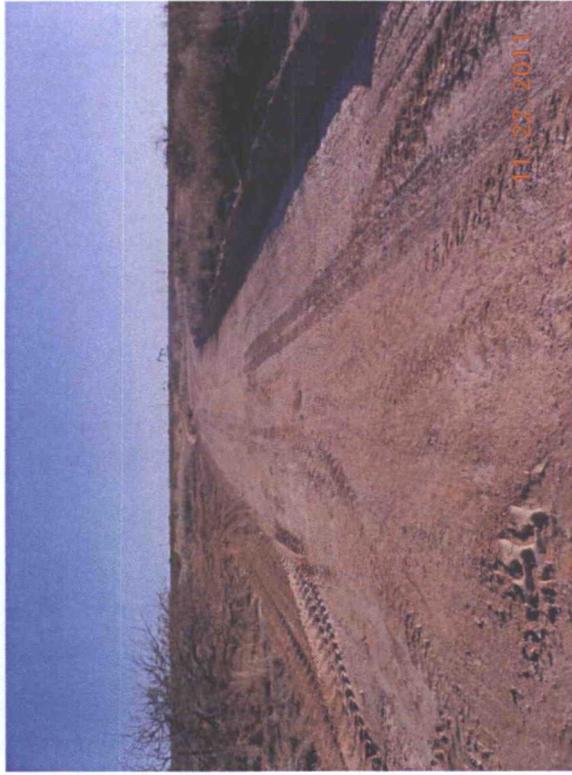
Initial release in north area, facing south 11/4/2011



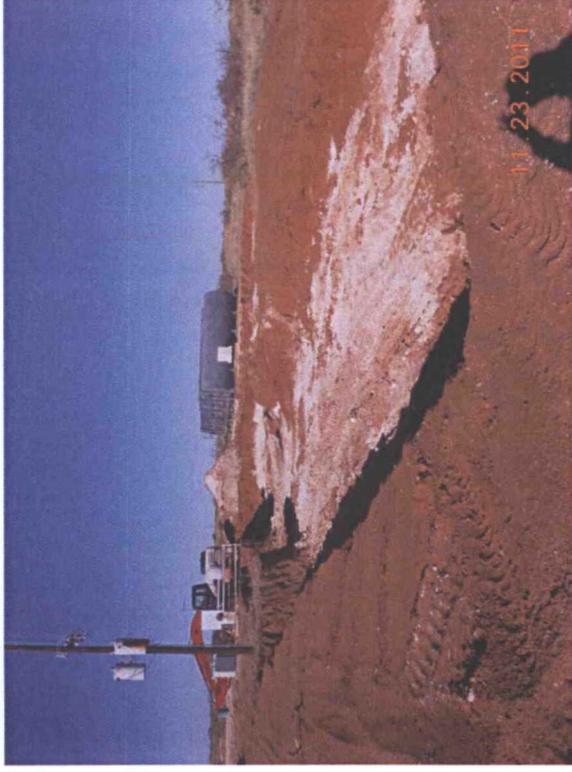
Initial release on well pad, facing northwest 11/4/2011



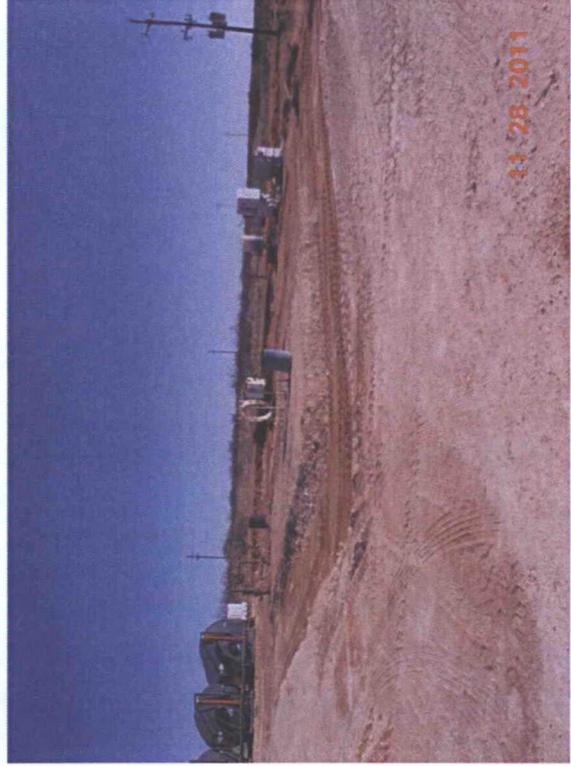
Excavating/exporting soil, facing southeast 11/16/2011



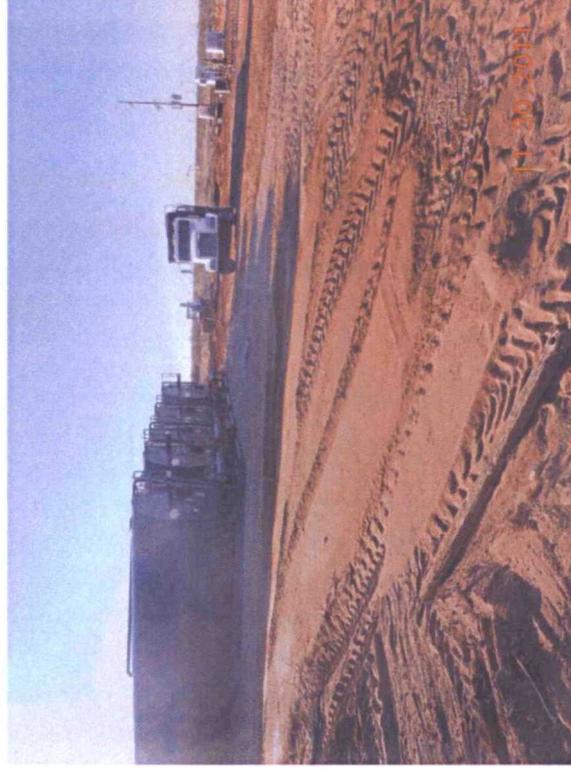
Scrape on road, facing south 11/22/2011



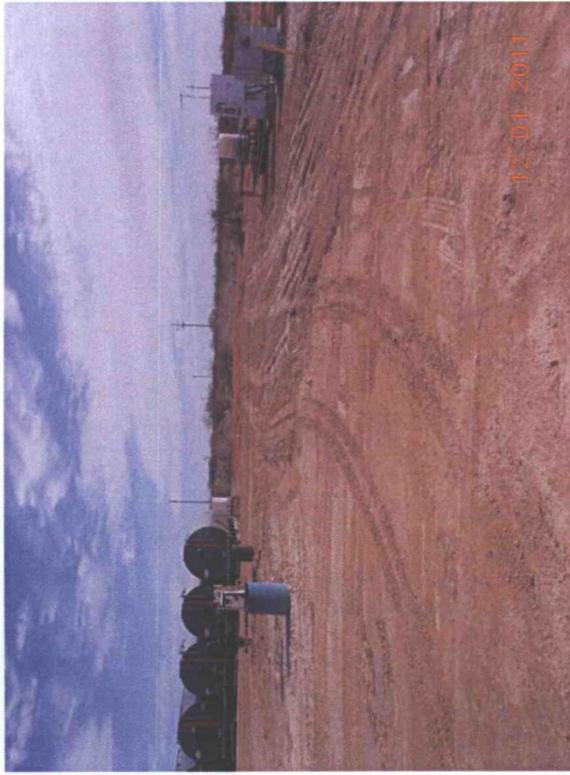
Area south of pad excavation, facing northeast 11/23/2011



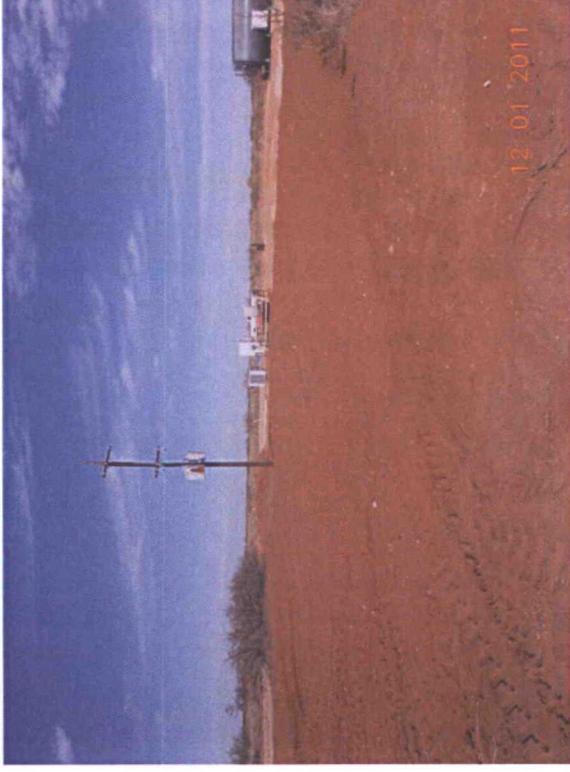
Excavation on well pad, facing southeast 11/28/2011



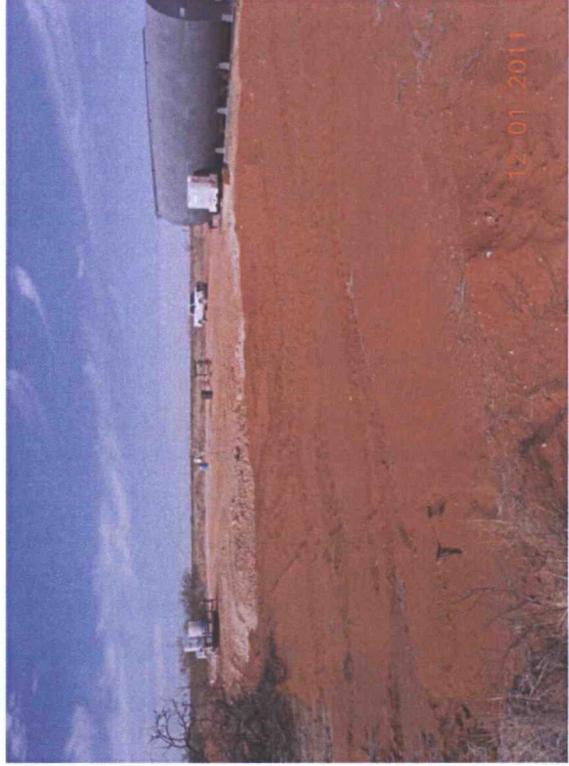
North scrape backfilled, facing south 11/30/2011



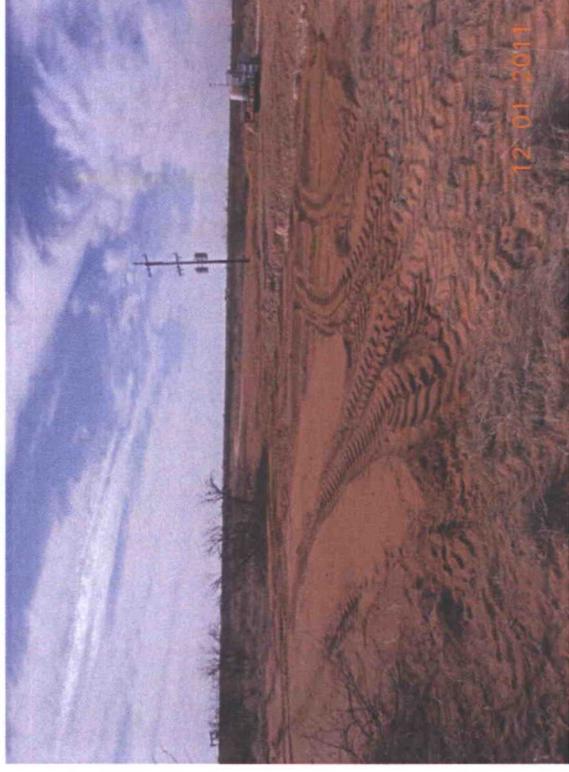
Well pad backfilled/watered, facing east 12/1/2011



South of well pad backfilled, facing northwest 12/1/2011



Southeast of well pad backfilled, facing west 12/1/2011



Site complete, facing southwest 12/1/2011

Analytical Results For:

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

 Received: 11/04/2011
 Reported: 11/08/2011
 Project Name: MC DONALD AC #1 #10
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

 Sampling Date: 11/04/2011
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: PT. 1 (H102398-01)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	11100	16.0	11/07/2011	ND	448	112	400	3.51		

Sample ID: PT. 2 (H102398-02)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	21400	16.0	11/07/2011	ND	448	112	400	3.51		

Sample ID: PT. 3 (H102398-03)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	10000	16.0	11/07/2011	ND	448	112	400	3.51		

Sample ID: PT. 4 (H102398-04)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	11600	16.0	11/07/2011	ND	448	112	400	3.51		

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: 11/04/2011
 Reported: 11/08/2011
 Project Name: MC DONALD AC #1 #10
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

 Sampling Date: 11/04/2011
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: PT. 5 (H102398-05)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	1880	16.0	11/07/2011	ND	448	112	400	3.51		

Sample ID: PT. 6 (H102398-06)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	1760	16.0	11/07/2011	ND	448	112	400	3.51		

Sample ID: PT. 7 (H102398-07)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	2040	16.0	11/07/2011	ND	448	112	400	3.51		

Sample ID: PT. 8 (H102398-08)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	14400	16.0	11/07/2011	ND	448	112	400	3.51		

Sample ID: PT. 9 (H102398-09)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16600	16.0	11/07/2011	ND	448	112	400	3.51		

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* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

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

 Received: 11/04/2011
 Reported: 11/08/2011
 Project Name: MC DONALD AC #1 #10
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

 Sampling Date: 11/04/2011
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: PT. 10 (H102398-10)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	21600	16.0	11/07/2011	ND	448	112	400	3.51		

Sample ID: PT. 11 (H102398-11)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	9860	16.0	11/07/2011	ND	448	112	400	3.51		

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* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

BILL TO				ANALYSIS REQUEST			
Company Name: Apache Corp.	P.O. #:			Chlorides	TPH 8015 M	BTEX	Texas TPH
Project Manager: Natalie Gladden	Company:			Complete Cations/Anions			TDS
Address:	Address:						
City:	City:						
Phone #:	Phone #:						
State: <i>NM</i> Zip:	State:						
Fax #:	Fax #:						
Project #:	Project Owner:						
Project Name: <i>McAfee AC-HI #10</i>							
Project Location: <i>Zonder</i>							
Sampler Name: <i>Roberto Jara</i>							

Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	MATRIX						PRESERV	DATE	TIME
			WASTEWATER	GROUNDWATER	SOIL	OIL	SLUDGE	OTHER:			
H102995	-1	1	✓	✓	✓	✓	✓	✓	11-4-11	10:57 AM	
	2	1	✓	✓	✓	✓	✓	✓	11-4-11	10:19 AM	
	3	1	✓	✓	✓	✓	✓	✓	11-4-11	10:22 AM	
	4	1	✓	✓	✓	✓	✓	✓	11-4-11	10:25 AM	
	5	1	✓	✓	✓	✓	✓	✓	11-4-11	10:27 AM	
	6	1	✓	✓	✓	✓	✓	✓	11-4-11	10:31 AM	
	7	1	✓	✓	✓	✓	✓	✓	11-4-11	10:33 AM	
	8	1	✓	✓	✓	✓	✓	✓	11-4-11	10:37 AM	
	9	1	✓	✓	✓	✓	✓	✓	11-4-11	10:40 AM	
	10	1	✓	✓	✓	✓	✓	✓	11-4-11	10:57 AM	

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 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 interruption, loss of usage, 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>Roberto Jara</i>	Date: 11-4-11	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: 11-4-11	Received By: <i>[Signature]</i>	Fax Result: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Add'l Fax #: _____
Delivered By: <i>(Circite-Orre)</i>	Date: 11-4-11	Time: 3:15 pm	REMARKS: email results natalie.gladden@apachecorp.com Zonder@rice-ecs.com; Bbaker@rice-ecs.com; hconder@rice-ecs.com; Lweinheimer@rice-ecs.com	
Sampler - UPS - Bus - Other:	Sample Condition	CHECKED BY: <i>[Signature]</i>		
	Cool <input type="checkbox"/> Intact <input checked="" type="checkbox"/>	(Initials)		
	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>			
	2.52			

† 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: 11/28/2011
 Reported: 11/30/2011
 Project Name: MC DONALD AC #1 #10
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

 Sampling Date: 11/18/2011
 Sampling Type: Soil
 Sampling Condition: ** (See Notes)
 Sample Received By: Jodi Henson

Sample ID: N. SCRAPE N. WALL (H102555-01)

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	11/29/2011	ND	432	108	400	0.00		

Sample ID: N. SCRAPE S. WALL (H102555-02)

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	11/29/2011	ND	432	108	400	0.00		

Sample ID: N. SCRAPE E. WALL (H102555-03)

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	11/29/2011	ND	432	108	400	0.00		

Sample ID: N. SCRAPE W. WALL (H102555-04)

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	11/29/2011	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: 11/28/2011
 Reported: 11/30/2011
 Project Name: MC DONALD AC #1 #10
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

 Sampling Date: 11/18/2011
 Sampling Type: Soil
 Sampling Condition: ** (See Notes)
 Sample Received By: Jodi Henson

Sample ID: N. SCRAPE 5 PT. COMP (H102555-05)

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	11/29/2011	ND	432	108	400	0.00		

Sample ID: PT. 5 @ 6" (H102555-06)

Chloride, SM4500CI-B		mg/kg	Analyzed By: AP							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	128	16.0	11/29/2011	ND	432	108	400	0.00		

Sample ID: PT. 6 @ 6" (H102555-07)

Chloride, SM4500CI-B		mg/kg	Analyzed By: AP							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	128	16.0	11/29/2011	ND	432	108	400	0.00		

Sample ID: PT. 7 @ 6" (H102555-08)

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	11/29/2011	ND	432	108	400	0.00		

Sample ID: EXC OFF PAD N WALL E (H102555-09)

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	11/29/2011	ND	432	108	400	0.00		

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Analytical Results For:

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

 Received: 11/28/2011
 Reported: 11/30/2011
 Project Name: MC DONALD AC #1 #10
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

 Sampling Date: 11/28/2011
 Sampling Type: Soil
 Sampling Condition: ** (See Notes)
 Sample Received By: Jodi Henson

Sample ID: EXC OFF PAD N WALL W (H102555-10)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	112	16.0	11/29/2011	ND	432	108	400	0.00		

Sample ID: EXC OFF PAD S WALL E (H102555-11)

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	11/29/2011	ND	432	108	400	0.00		

Sample ID: EXC OFF PAD S WALL W (H102555-12)

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	11/29/2011	ND	448	112	400	0.00		

Sample ID: EXC OFF PAD E WALL N (H102555-13)

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	11/29/2011	ND	448	112	400	0.00		

Sample ID: EXC OFF PAD E WALL S (H102555-14)

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	11/29/2011	ND	448	112	400	0.00		

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Analytical Results For:

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

 Received: 11/28/2011
 Reported: 11/30/2011
 Project Name: MC DONALD AC #1 #10
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

 Sampling Date: 11/28/2011
 Sampling Type: Soil
 Sampling Condition: ** (See Notes)
 Sample Received By: Jodi Henson

Sample ID: EXC OFF PAD W WALL N (H102555-15)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	11/29/2011	ND	448	112	400	0.00		

Sample ID: EXC OFF PAD W WALL S (H102555-16)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	11/29/2011	ND	448	112	400	0.00		

Sample ID: EXC OFF PAD S WALL C (H102555-17)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	11/29/2011	ND	448	112	400	0.00		

Sample ID: EXC OFF PAD 5 PT. E. BOTTOM (H102555-18)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	96.0	16.0	11/29/2011	ND	448	112	400	0.00		

Sample ID: EXC OFF PAD 5 PT MID BOTTOM (H102555-19)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	112	16.0	11/29/2011	ND	448	112	400	0.00		

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Analytical Results For:

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

 Received: 11/28/2011
 Reported: 11/30/2011
 Project Name: MC DONALD AC #1 #10
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

 Sampling Date: 11/28/2011
 Sampling Type: Soil
 Sampling Condition: ** (See Notes)
 Sample Received By: Jodi Henson

Sample ID: EXC OFF PAD 5 PT W BOTTOM (H102555-20)

Chloride, SM4500Cl-B	mg/kg	Analyzed By: HM								
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	80.0	16.0	11/29/2011	ND	448	112	400	0.00		

Sample ID: PAD @ 6" 5 PT BOTTOM (H102555-21)

Chloride, SM4500Cl-B	mg/kg	Analyzed By: HM								
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	11/29/2011	ND	448	112	400	0.00		

Sample ID: PAD @ 6" N WALL (H102555-22)

Chloride, SM4500Cl-B	mg/kg	Analyzed By: HM								
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	11/29/2011	ND	448	112	400	0.00		

Sample ID: PAD @ 6" E WALL (H102555-23)

Chloride, SM4500Cl-B	mg/kg	Analyzed By: HM								
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	11/29/2011	ND	448	112	400	0.00		

Sample ID: PAD @ 6" W WALL (H102555-24)

Chloride, SM4500Cl-B	mg/kg	Analyzed By: HM								
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	80.0	16.0	11/29/2011	ND	448	112	400	0.00		

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Analytical Results For:

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

 Received: 11/28/2011
 Reported: 11/30/2011
 Project Name: MC DONALD AC #1 #10
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

 Sampling Date: 11/28/2011
 Sampling Type: Soil
 Sampling Condition: ** (See Notes)
 Sample Received By: Jodi Henson

Sample ID: PAD @ 6" S WALL (H102555-25)

Chloride, SM4500Cl-B

mg/kg

Analyzed By: HM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	11/29/2011	ND	448	112	400	0.00	

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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 Corp.		P.O. #:		ANALYSIS REQUEST	
Project Manager: Natalie Gladden		Company:		Chlorides	
Address:		Attn:		TPH 8015 M	
City:		Address:		BTEX	
Phone #:		City:		Texas TPH	
Project #:		State:		Complete Cations/Anions	
Project Name:		Phone #:		TDS	
Project Location: <i>Muscard St. Alc I B10</i>		Fax #:			
Sampler Name:		PRESERV			
FOR LAB USE ONLY		MATRIX		DATE	
Lab I.D.		# CONTAINERS		TIME	
H102555		(G)RAB OR (C)OMP.		11-28-11 10:40	
18		GROUNDWATER		11-28-11 10:45	
19		WASTEWATER		11-28-11 10:50	
20		SOIL		11-28-11 11:30	
21		SLUDGE		11-28-11 11:40	
22		OTHER:		11-28-11 11:45	
23		ICE/COOL		11-28-11 11:50	
24		ACID/BASE		11-28-11 11:55	
25		OTHER:			
Excavation of pad					
5ft. S. Bottom					
5ft. Mid Bottom					
5ft. W. Bottom					
Pad @ 10' 5ft Bottom					
" N. wall					
" E wall					
" W wall					
5ft. S. Bottom Skell					

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Relinquished By: *[Signature]* Date: 11/28/11 Received By: *[Signature]* Phone Result: Yes No Add'l Phone #: _____
 Time: 4:10 Fax Result: Yes No Add'l Fax #: _____

Relinquished By: _____ Date: _____ Time: _____
 Received By: _____ Date: _____ Time: _____

Delivered By: (Circle One) _____ Sample Condition: Cool Intact (Initials) _____
 Sampler - UPS - Bus - Other: _____

email results
 natalie.gladden@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